N-SERIES

OWNER'S AND DRIVER'S MANUAL Ⓔ

2025

N-SERIES

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ISUZU

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Keep this Owner's Manual in the vehicle for handy reference whenever needed.

- We recommend that you also read the separate instructions for the equipment on your vehicle that was installed by your Isuzu Dealer.
- Your Isuzu Dealer will be glad to answer any questions you may have about the information in this manual.
- Please leave this manual in the vehicle when you resell it – the next owner will need it.

Notes on Reading This Manual

- Please read this manual carefully, especially the instructions and information identified by the following symbol/letter combinations: DANGER, WARNING, CAUTION, ADVICE and NOTE. Among them, DANGER, WARNING and CAUTION are reminders to be especially careful. Failure to follow or wrongly following the associated instructions could result in personal injury or accidents. Please read them thoroughly.
- Throughout this manual, illustrations are primarily based on right-hand drive models. Unless illustrations for left-hand drive models are also shown, images symmetrically opposite to all illustrations shown apply to left-hand drive models.
- Due to differences in vehicle specifications, the illustration used for description may not match your vehicle.
- The contents of this manual are current at the date of issue, but may differ slightly from your vehicle due to specification changes or other modifications made thereafter.
- "Smoother" is an automated manual transmission system, which enables to start moving, shift gears and stop without clutch operation.
  In some regions, this product is marketed under the different name from "Smoother".
- This manual is applicable for vehicle in all countries except the USA and Canada.
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Symbols Used in This Manual

⚠ DANGER

Failure to follow these instructions identified by this symbol could result in death or serious injury to you and/or other people.

⚠ WARNING

Failure to follow these instructions identified by this symbol could result in a fire inside your vehicle in addition to death or serious injury to you and/or other people.

⚠ CAUTION

Failure to follow these instructions identified by this symbol could result in injuries or an accident.

ADVICE

Failure to follow these instructions identified by this symbol could cause malfunction or damage to your vehicle.

NOTE

This symbol identifies information that you need to know.
This symbol also identifies information that would be useful for operating the vehicle.

The following symbols are also used in this manual.

- [V] : Market-/type-specific equipment (Your vehicle may not have the equipment with this symbol.)
- [M/T] : Manual transmission model
- [SA] : Vehicle equipped with the Smoother system
- [DCT] : Vehicle equipped with the DCT (Dual Clutch Transmission) system
- [HB] : Vehicle equipped with the hydraulic brake system
- [FAB] : Vehicle equipped with the full-air brake system

Abbreviations

This manual uses the following abbreviations, as interpreted below.

Abbreviations	Description
ABS	Anti-lock Brake System
ACEA	Association des Constructeurs Europeens d'Automobiles (Association of European Automobile Constructors)
AEBS	Advanced Emergency Braking System
API	American Petroleum Institute
ASR	Anti-Slip Regulator
ASTM	American Society for Testing and Materials
BS	British Standards
BSM	Blind Spot Monitor
DCT	Dual Clutch Transmission
DIN	Deutsche Industrie Normen
DPD	Diesel Particulate Defuser
EBD	Electronic Braking force Distribution
EBS	Electronic Braking System
ECE	Economic Commission for Europe
EGR	Exhaust Gas Recirculation
ELR	Emergency Locking Retractor
ESC	Electronic Stability Control
ESS	Emergency Stop Signal
FMVSS	Federal Motor Vehicle Safety Standards
GVM	Gross Vehicle Mass
HSA	Hill Start Aid
ISO	International Organization for Standardization
JASO	Japanese Automobile Standards Organization
JIS	Japanese Industrial Standards
LDWS	Lane Departure Warning System
M/T	Manual Transmission
PM	Particulate Matter
PTO	Power Take-Off
r/min	revolutions per minute
SAE	Society of Automotive Engineers
SCR	Selective Catalytic Reduction
SRS	Supplemental Restraint System

Abbreviations	Description
SVS	Service Vehicle Soon
UN	United Nations
VDA	Verband der Automobilindustrie
VIN	Vehicle Identification Number
2WD	Two Wheel Drive
4WD	Four Wheel Drive

4 How to Use This Manual

Chapter title

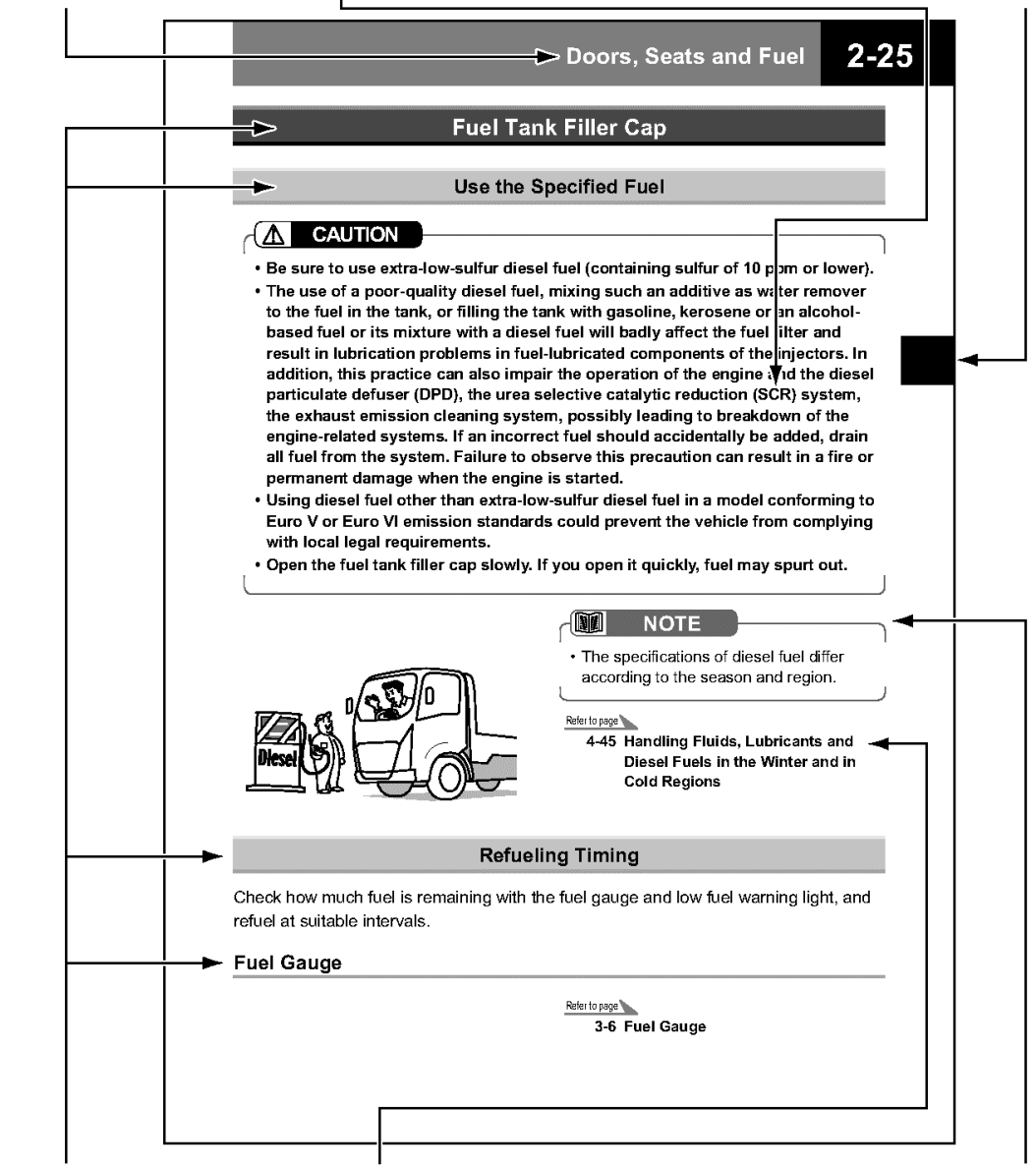
This shows the title of each chapter.

Abbreviations

Refer to page 2.

Chapter index

Use these for quick access to your desired chapter. They align with the titles on the cover.



Section title

These identify topics in each section.

Reference page

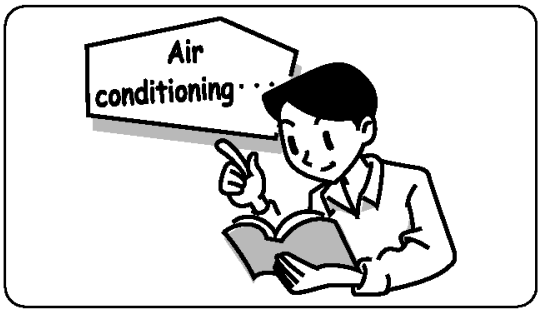
Refers you to a page (or pages) of this manual which should be read concerning the present topic. Read referenced pages as well as the present topic.

Symbols

DANGER CAUTION
WARNING ADVICE
NOTE

See page 1 for the meanings of these symbols.

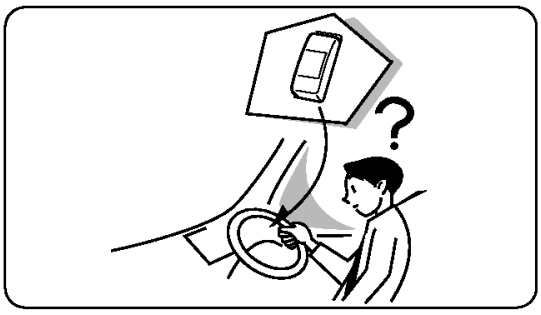
Note: This page is shown only as an example. It is not intended to give you information on your particular vehicle.



Use chapter/section titles as keys

➔ Page 6

Search for the page describing a specific topic by using the table of contents and the lists of titles at the start of each chapter.

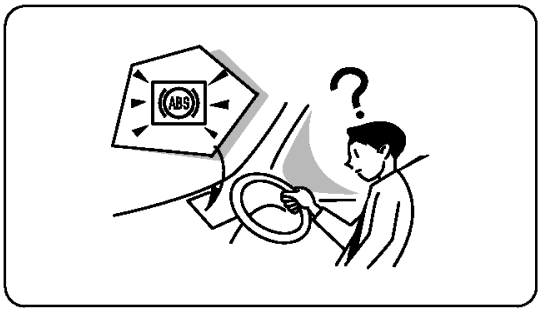


Use the pictorial indexes

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Pictorial Index

If you do not know the name of the switch or other device for which you need information, locate the page describing it by using the pictorial indexes.

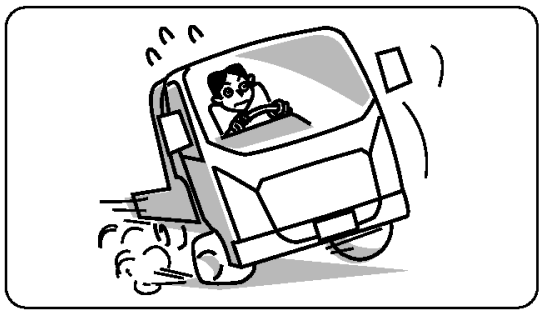


Use the warning/indicator light overview

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Warning/Indicator Light Overview

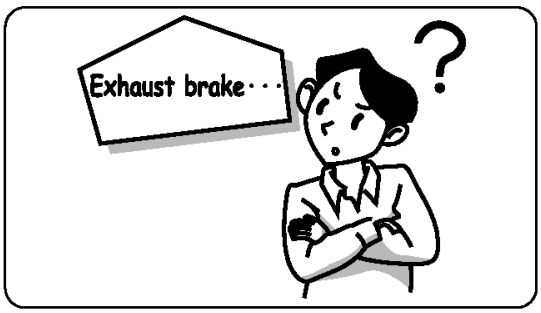
If a warning or indicator light is illuminated, you can use the warning/indicator light overview to find the page that provides information on the light.



If you have a problem with your vehicle

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In an Emergency



Use device names as keys

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Index

If you know the name of the switch or other device for which you need information, locate the page describing it by using the Index at the end of this manual.

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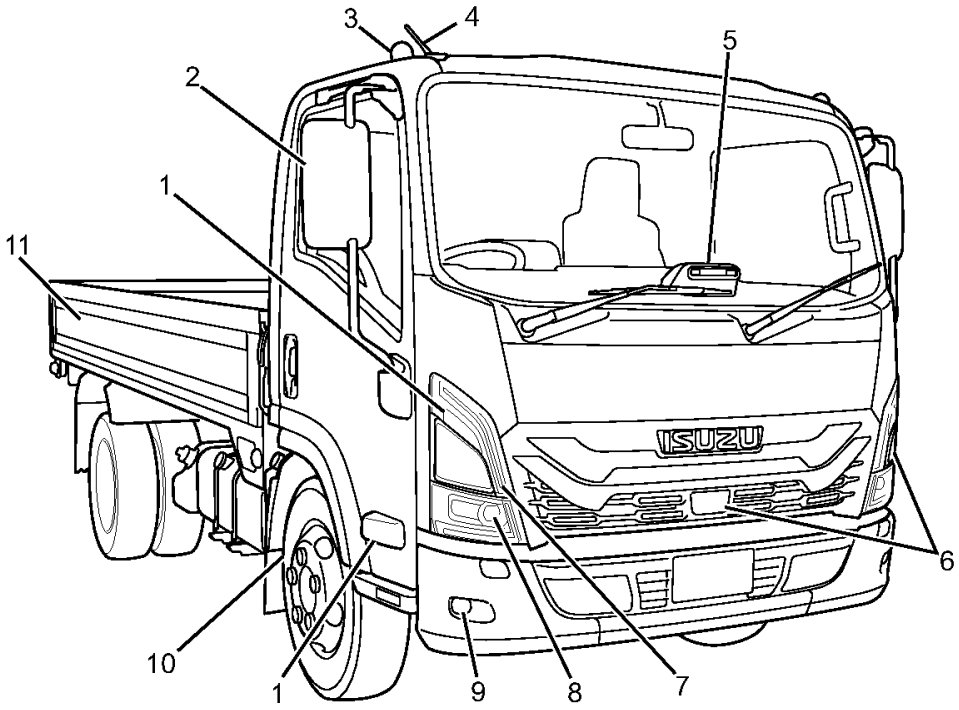
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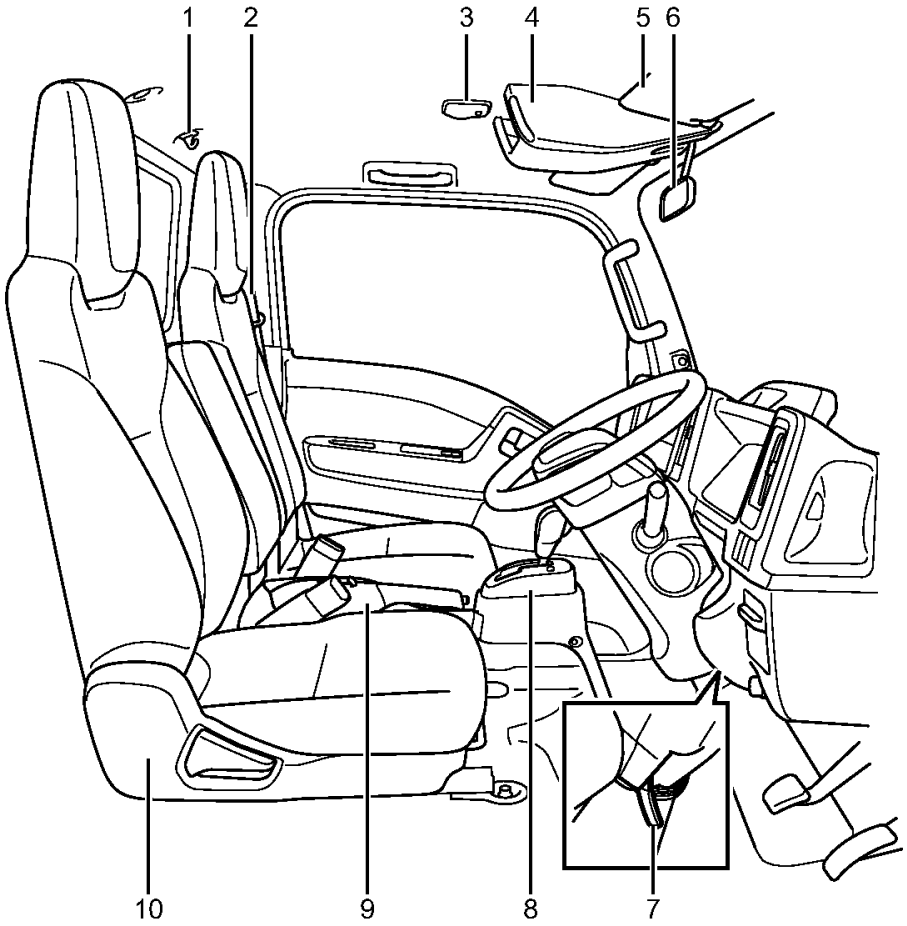


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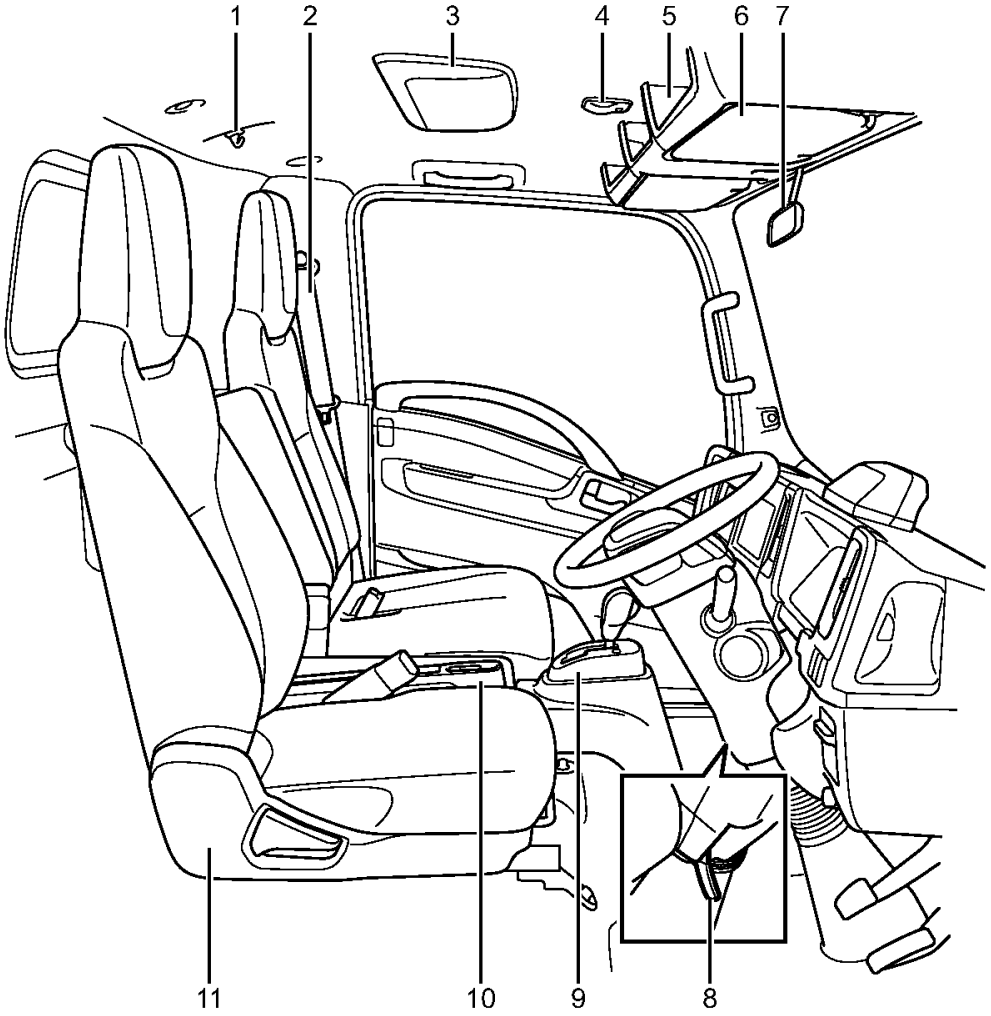
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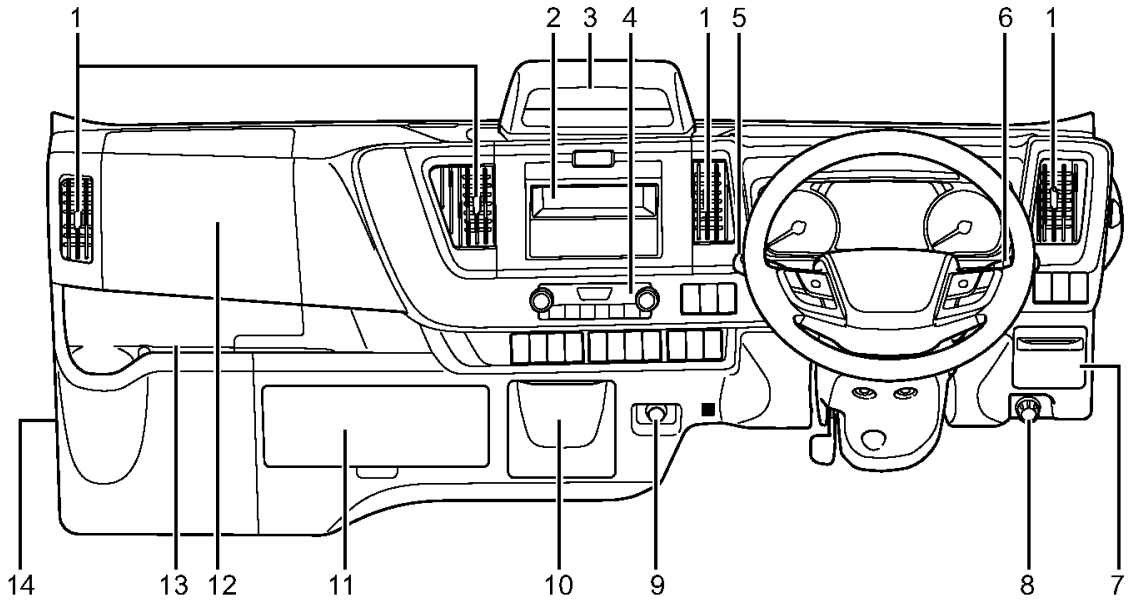
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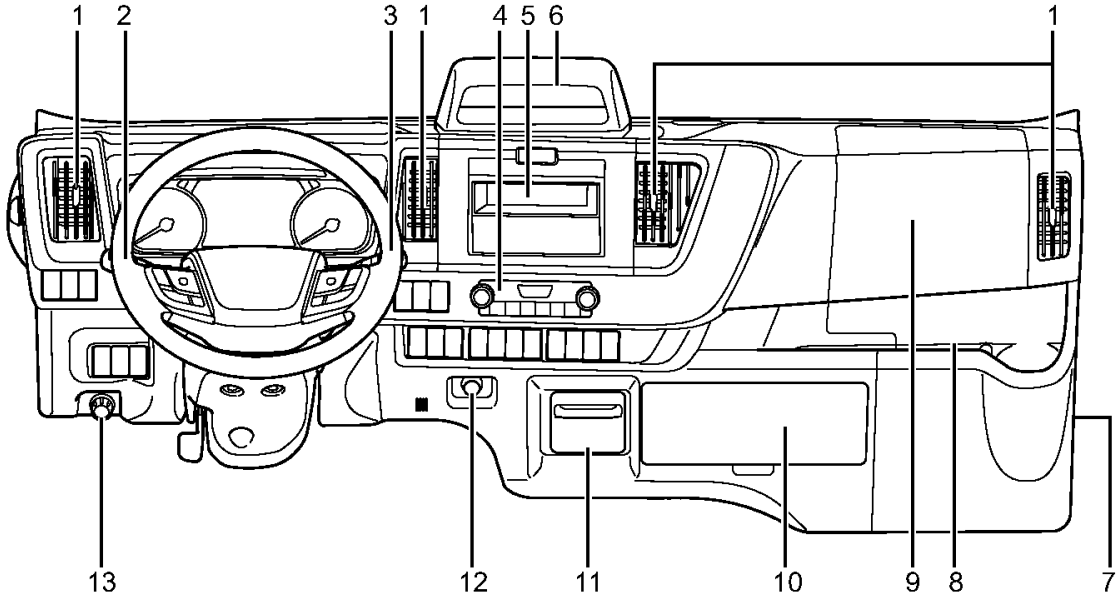
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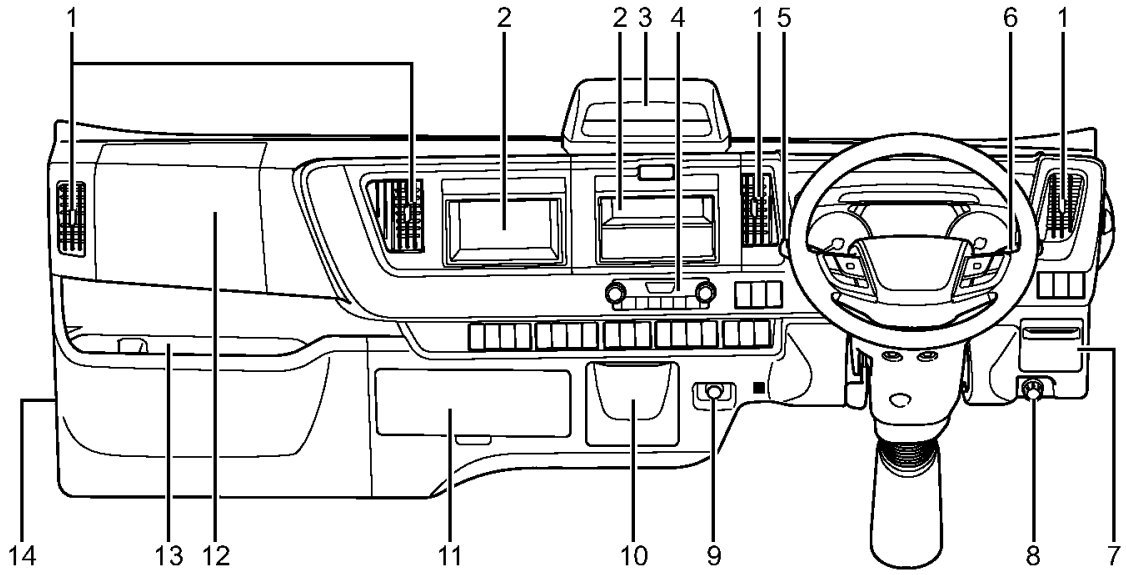
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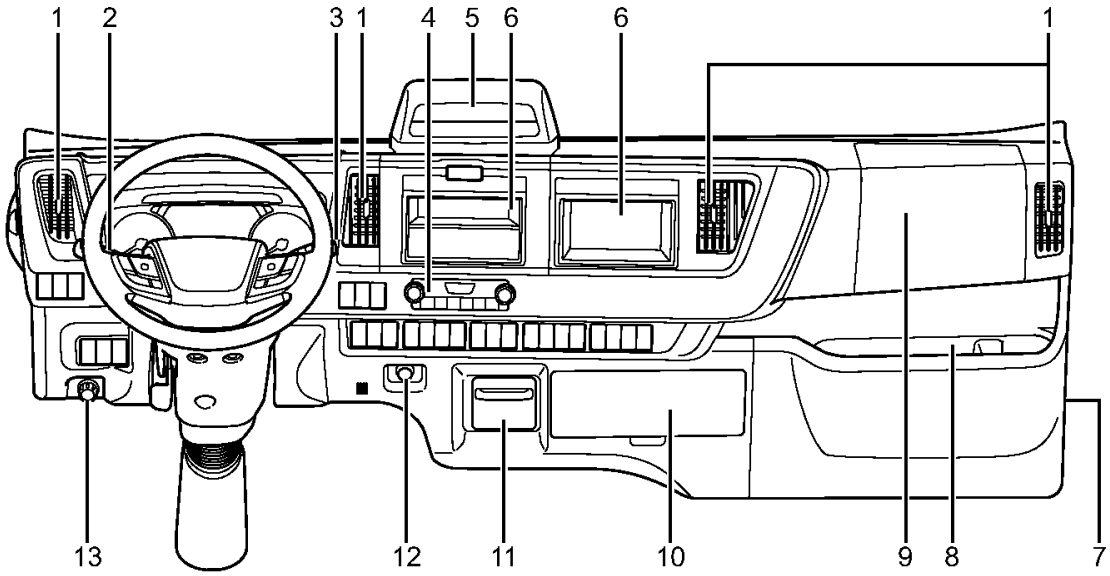
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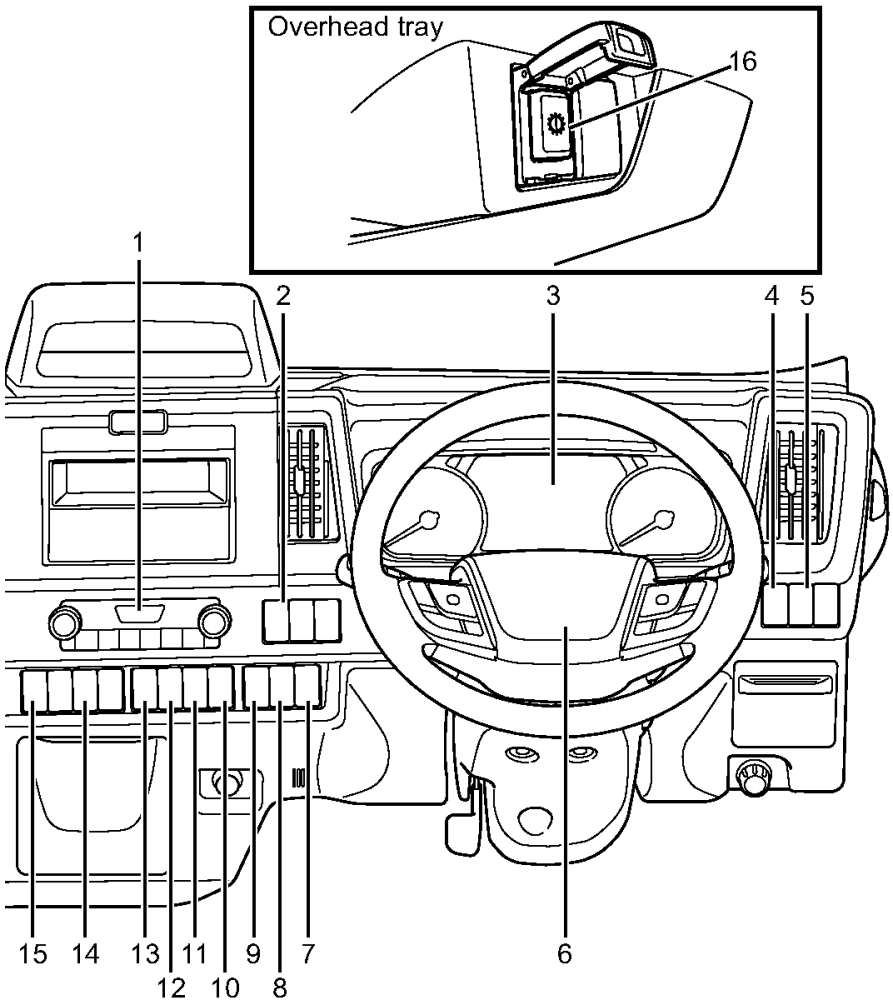


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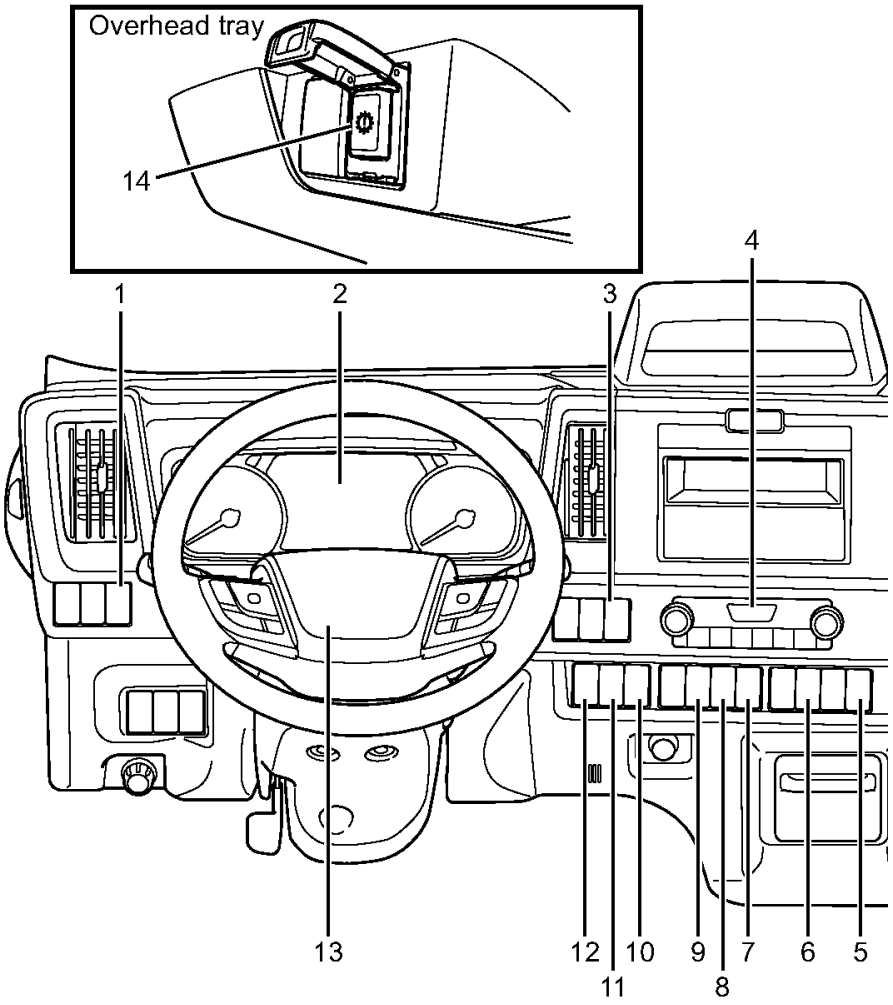
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	LDWS switch [V]	5-110
14	PTO switch [V]	4-270 4-272
15	USB power outlet [V]	6-33
16	DCT emergency switch [DCT]	4-140

Left-hand Drive

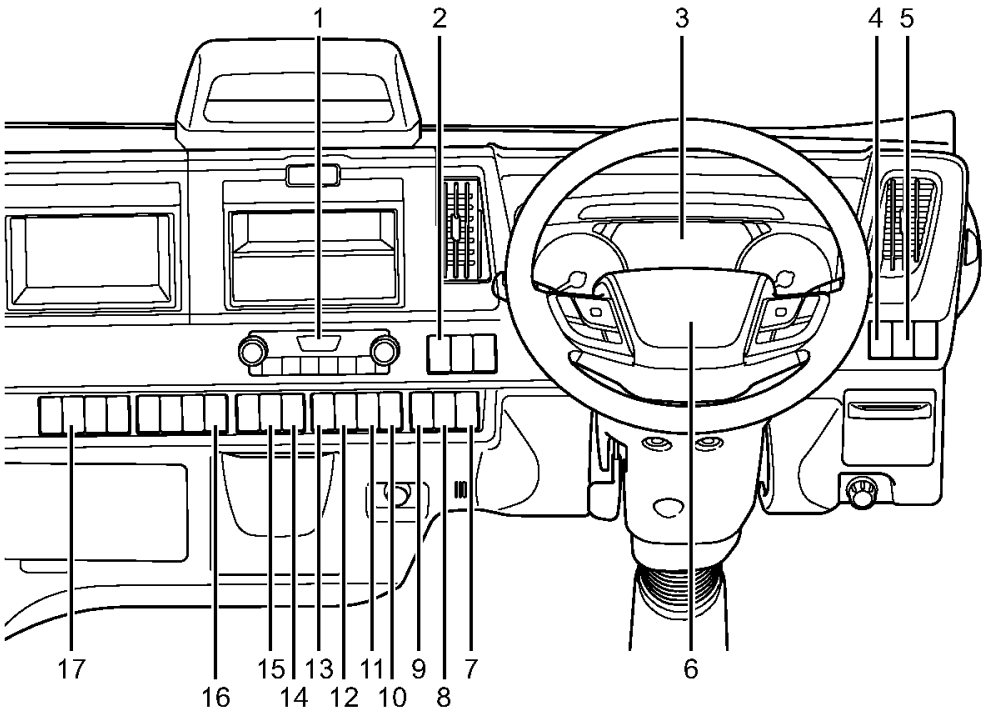


No.	Equipment	Page
1	Headlight leveling switch	4-150
2	Instruments, warning lights and indicator lights	3-2 3-8
3	ecostop cancel switch [V]	4-73
	Warm-up switch [V]	4-61
4	Hazard warning flasher switch	4-150
5	USB power outlet [V]	6-33
6	PTO switch [V]	4-270 4-272
7	LDWS switch [V]	5-110

No.	Equipment	Page
8	ESC OFF switch	4-206
9	Front blind spot monitor off switch [V]	5-33
10	Mirror heater switch [V]	2-49
11	Start assist switch [V]	4-156
12	DPD switch	4-244
13	Horn button	4-155
	Driver's SRS airbag [V]	1-14
14	DCT emergency switch [DCT]	4-140

Switch Layout (NNR/NPR/NPS/NQR/NQS Models)

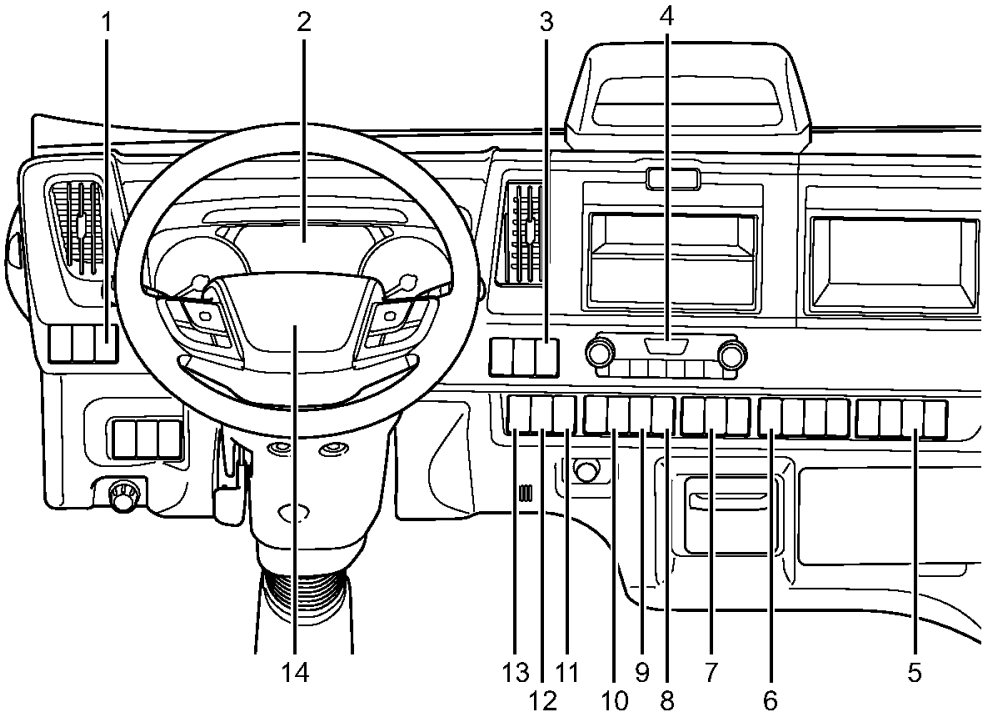
Right-hand Drive



No.	Equipment	Page
1	Hazard warning flasher switch	4-150
2	ecostop cancel switch [V]	4-73
3	Instruments, warning lights and indicator lights	3-2 3-8
4	Headlight leveling switch	4-150
5	Interior light switch [V]	6-29
6	Horn button	4-155
	Driver's SRS airbag	1-14
7	DPD switch	4-244
8	Start assist switch [V]	4-156
9	Mirror heater switch [V]	2-49
10	4WD switch [V]	4-232

No.	Equipment	Page
11	Front blind spot monitor off switch [V]	5-33
12	ESC OFF switch	4-206
13	HSA OFF switch [V]	4-166
	LDWS switch [V]	5-110
14	Transfer gear control switch [V]	4-234
15	PTO switch [V]	4-270 4-272
16	Smoother emergency switch [SA]	4-122
	DCT emergency switch [DCT]	4-140
17	USB power outlet [V]	6-33

Left-hand Drive

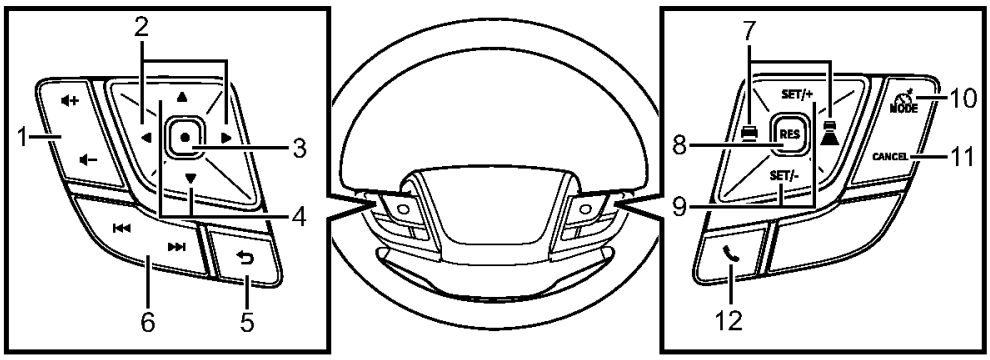


No.	Equipment	Page
1	Headlight leveling switch	4-150
2	Instruments, warning lights and indicator lights	3-2 3-8
3	ecostop cancel switch [V]	4-73
	Warm-up switch [V]	4-61
4	Hazard warning flasher switch	4-150
5	USB power outlet [V]	6-33
6	Smoother emergency switch [SA]	4-122
	DCT emergency switch [DCT]	4-140

No.	Equipment	Page
7	PTO switch [V]	4-270 4-272
8	LDWS switch [V]	5-110
9	ESC OFF switch	4-206
10	Front blind spot monitor off switch [V]	5-33
11	Mirror heater switch [V]	2-49
12	Start assist switch [V]	4-156
13	DPD switch	4-244
14	Horn button	4-155
	Driver's SRS airbag [V]	1-14

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Steering Wheel Switches

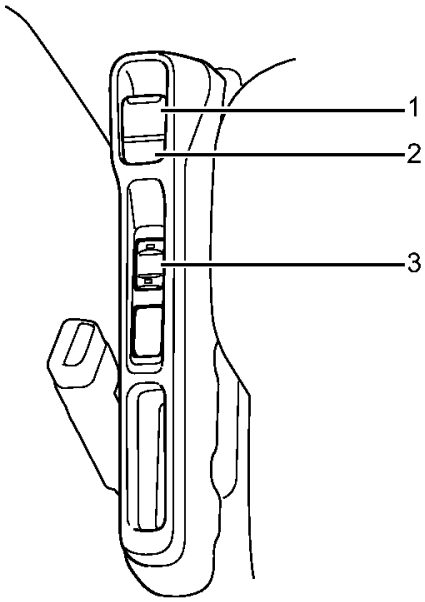


No.	Equipment	Page
1	Volume adjust button [V]	6-43* 6-68*
2	Right/left switch	3-45
3	Enter switch	
4	Up/down switch	
5	Return switch	
6	Tune/track button [V]	6-43*
7	Following distance setting switch [V]	5-23
8	Resume switch [V]	4-157 4-216 5-47 5-64
9	Set switch [V]	
10	Mode switch [V]	
11	Cancel switch [V]	
12	Off hook/on hook button [V]	6-68*

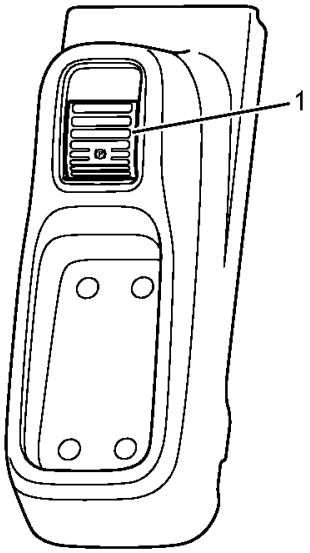
*: If a non-genuine Isuzu audio system is installed, refer to the separate instruction manual for the details of its operation.

Around Parking Brake

Hydraulic brake model



Full-air brake model



No.	Equipment	Page
1	Electric parking brake switch [V]	4-81
2	Auto brake hold switch [V]	4-178
3	Seat heater switch [V]	2-43

Introduction 0

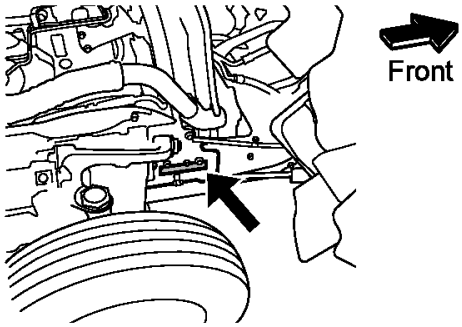
- Vehicle Identification Number (VIN) and Engine Number 0-2
- Caution and Other Labels in Your Vehicle 0-6
- Privacy Policy 0-14
- Vehicle Data Collection 0-17
- Preventing Breakdowns 0-17
- Operation of New Vehicle 0-18
- Statement of Compliance with UN R13 (ECE R13) 0-18

Vehicle Identification Number (VIN) and Engine Number

The VIN and engine number are necessary for registering your vehicle. They are also necessary when your vehicle undergoes official inspections. Provide your Isuzu Dealer with these numbers when you are having the vehicle repaired or are ordering replacement parts. The Dealer will be able to do the requested jobs more competently and quickly.

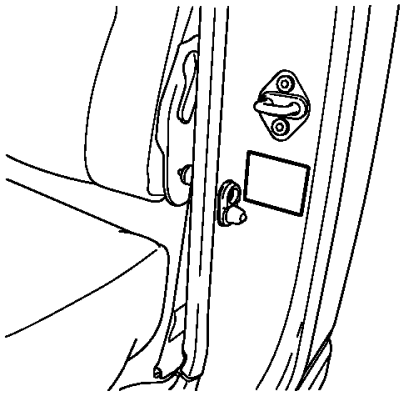
VIN

VIN location on frame



The VIN is stamped on the right-side front part of the frame.

ID plate



The ID plate at the lower part of the left-hand door striker indicates the VIN together with other information such as option codes.

ADVICE

- The location of the ID plate may differ depending on the market. For further details, ask your Isuzu Dealer.

The ID plate indicates the VIN. This single number contains multiple pieces of information including the vehicle and engine model codes as shown below.

ADVICE

- Interpretation of the VIN may differ depending on the market. For further details, please ask your Isuzu Dealer.

J	A	A	N	P	R	7	5	H	R	7	1	0	0	0	0	1
1			2			3		4	5	6						

No.	Description
1	World Manufacturer Identifier (WMI)
2	Vehicle model code NJR: 4 × 2 truck NJR model NKR: 4 × 2 truck NKR model NLR: 4 × 2 truck NLR model NMR: 4 × 2 truck NMR model NMS: 4 × 4 truck NMS model NNR: 4 × 2 truck NNR model NPR: 4 × 2 truck NPR model NPS: 4 × 4 truck NPS model N1R: 4 × 2 truck NQR model N1S: 4 × 4 truck NQS model
3	Engine code 75: 4HK1 Engine 88: 4JZ1 Engine
4	Wheelbase code
5	Model year code R: 2024 model S: 2025 model T: 2026 model V: 2027 model W: 2028 model X: 2029 model Y: 2030 model 1: 2031 model
6	Production sequential number

Option Codes

The ID plate also indicates option codes. These codes are three-digit, alphanumeric codes, each assigned to a particular component of the vehicle.
You will be able to use these codes to identify the model or type of engine, transmission, rear axle or other components when your vehicle needs inspection and other services.

Option Codes	Engine
LND	4JZ1-TCS
LNE	4JZ1-TCH
RDV	4HK1-TCC

Option Codes	Transmission
RSF	MZZ6U
RSM	MYY5T
RSR	MZZ6F
RSS	MYY5S
Y6N	MYY6Z
Y6Y	MYR9S
Y7B	MYR9R
Y7D	MZZ6T

Option Codes	Brake system
Z06	Full-air brake system

Option Codes	Rear axle
G73	Heavy-duty φ292 mm
6CP	Heavy-duty φ320 mm

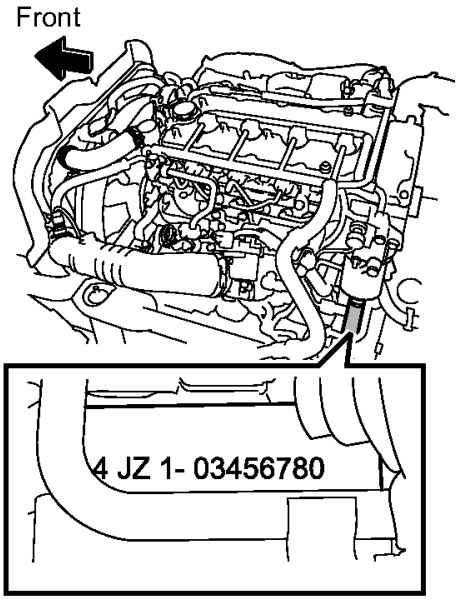
Option Codes	Other components
TLZ	Generator 24V-50A
KG2	Generator 24V-60A
8UF	Generator 24V-60A
8UG	Generator 24V-80A
K44	Generator 24V-90A
8GJ	Manual transmission
8GF	With Smoother
8XL	With DCT
6WC	PTO with lever
7GR	PTO with switch
JCQ	DPD with SCR
NT6	Model conforming to EuroVI emission standards
JFR	Model conforming to Japan post-post new long term regulation emission standard

ADVICE

- There are more option codes than those indicated above. Depending on the market, an option code may not be shown. For detailed specifications of your vehicle, please ask your Isuzu Dealer.

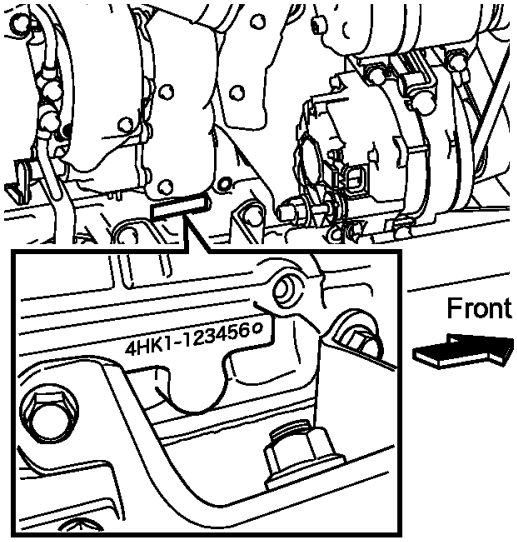
Engine Number

4JZ1 engine



The engine number is stamped on the left-side rear part of the engine block.

4HK1 engine

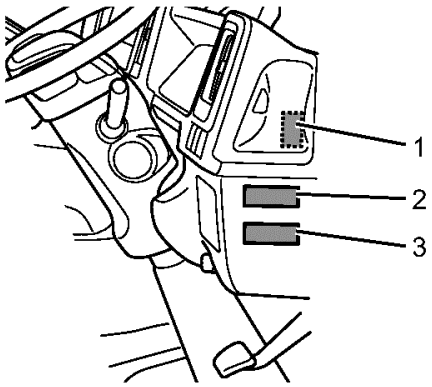


The engine number is stamped on the right-side front part of the engine block.

Caution and Other Labels in Your Vehicle

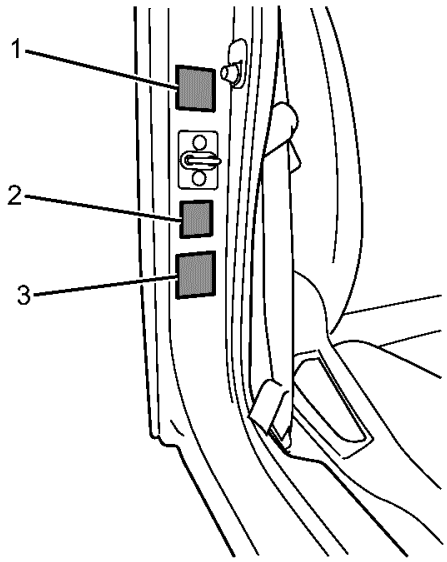
- The warning/caution labels in your vehicle indicate very important instructions and information that you should respect to ensure safe and proper use of the vehicle. Be sure to read them before using the vehicle.
- If any of these labels are peeling or illegible due to wear or scratches, please contact your Isuzu Dealer for a replacement.
- Some examples of warning/caution labels are indicated on the following pages, but there are many others not shown. Also, the contents of these labels may vary from model to model.
- The warning/caution labels indicated may be located differently in your vehicle.

Caution and Other Labels – Cab Interior

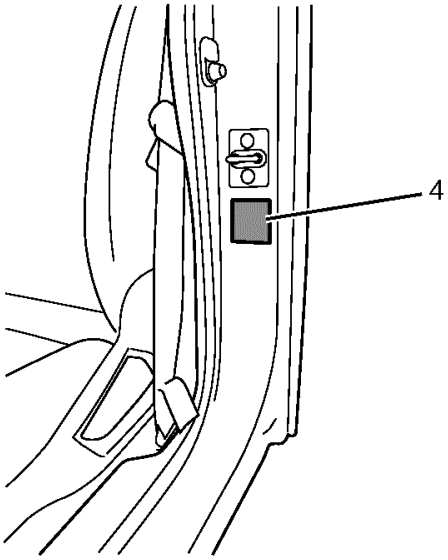


No.	Description
1	Brake fluid [HB]
2	PTO operation [V]
	Tipping operation [V]
3	Front propeller shaft lubrication [V]

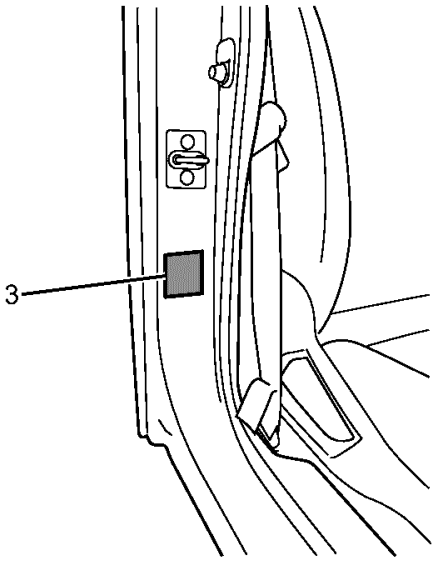
Right-hand drive model
Areas around the driver's door



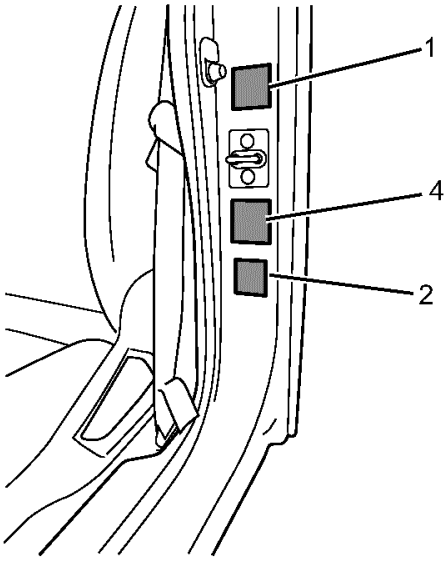
Areas around the passenger's door



Left-hand drive model
Areas around the passenger's door



Areas around the driver's door

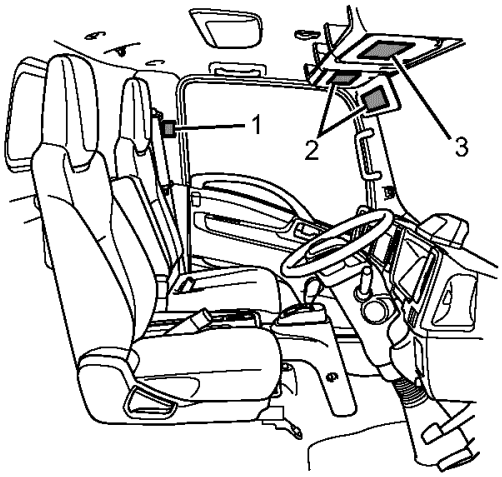


No.	Description
1	Tire air pressure [V]
2	Tire pressure monitoring system [V]
3	VIN plate [V]
4	ID plate [V]

NJR/NKR models



NLR/NMR/NMS/NNR/NPR/NPS/NQR/
NQS models



No.	Description
1	VIN plate [V]
2	Passenger's SRS airbag [V] *1
3	AdBlue®/HSA/Driver's SRS airbag/Passenger's SRS airbag/DPD/DCT/Smoother [V]



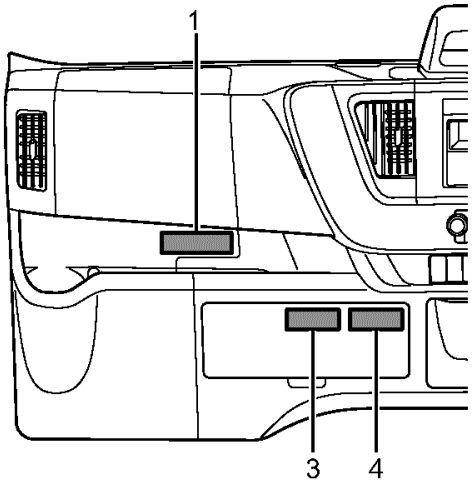
*1: If the vehicle has a passenger airbag, never fit a baby seat, child seat or junior seat facing rearward on a passenger seat. Failure to observe this precaution may result in serious injury to the child, or, in the worst case, death due to the impact during deployment of the passenger SRS airbag as a result of an accident, etc.

Refer to page

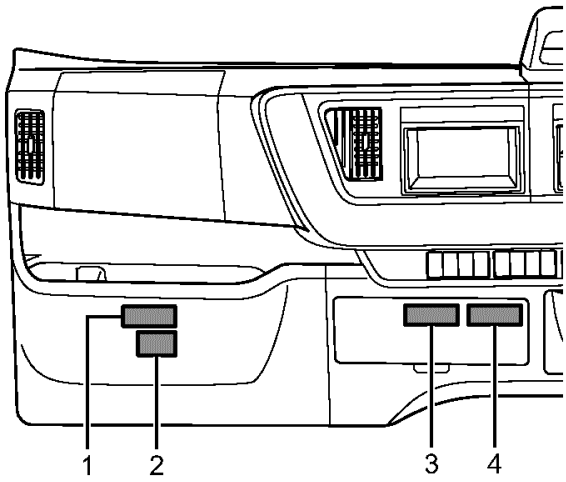
1-12 Precautions for Driving with Children

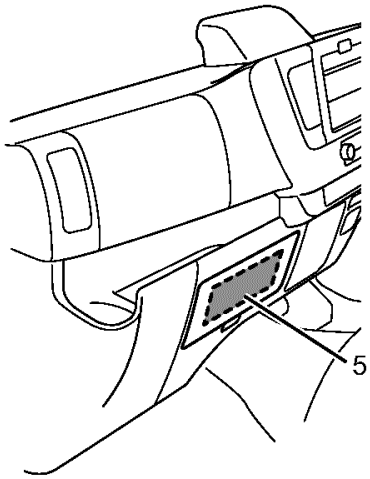
1-20 Using Seat Belts with Children

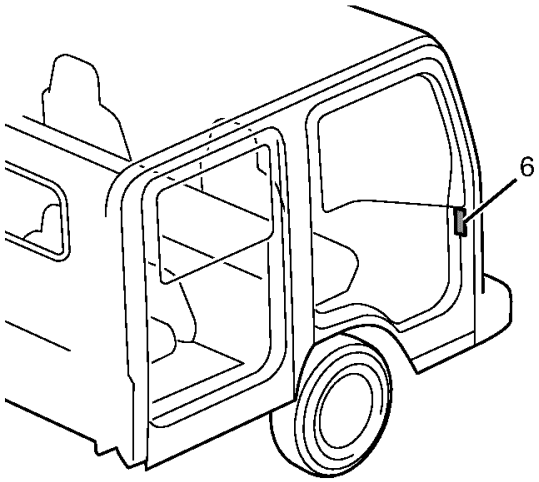
NJR/NKR/NLR/NMR/NMS models



NNR/NPR/NPS/NQR/NQS models

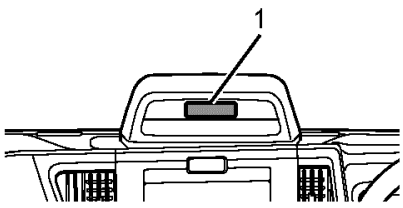




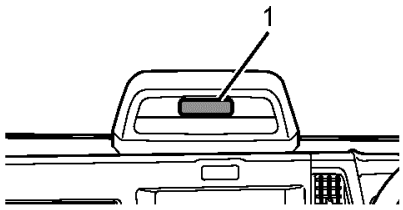


No.	Description
1	Engine maintenance lid [V]
2	Free wheel hub, tires for 4WD model [V]
3	Speed limit device [V]
4	4WD - 2WD selection [V]
5	Fuse
6	Cab number (crew cab model) [V]

NJR/NKR models



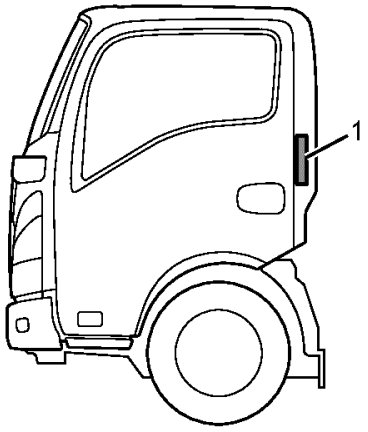
NLR/NMR/NMS/NNR/NPR/NPS/NQR/
NQS models



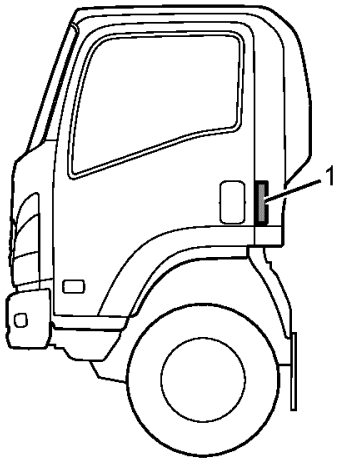
No.	Description
1	Camera [V]

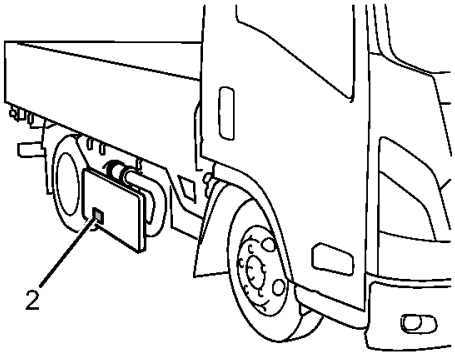
Caution and Other Labels – Cab Exterior

NJR/NKR models



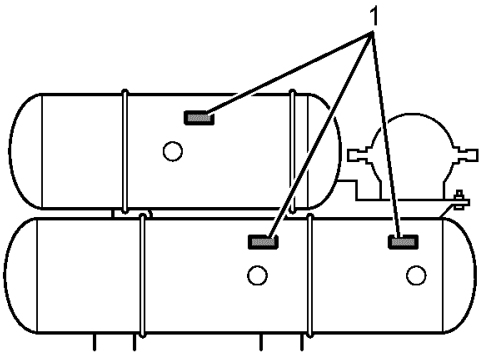
NLR/NMR/NMS/NNR/NPR/NPS/NQR/
NQS models



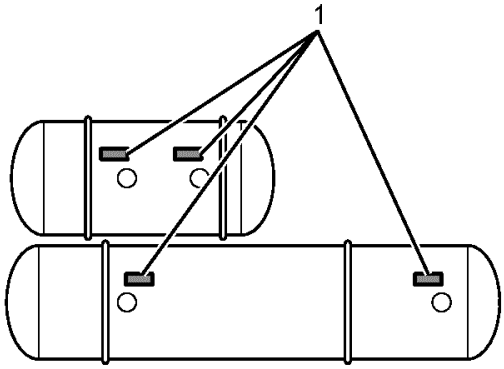


No.	Description
1	Cab tilt instruction [V]
2	Heat caution [V]

Single cab model

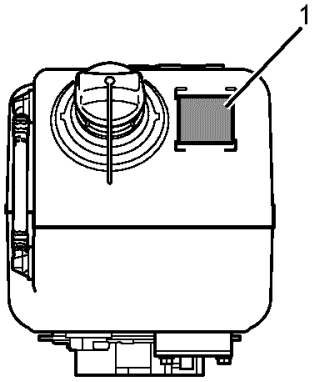


Crew cab model

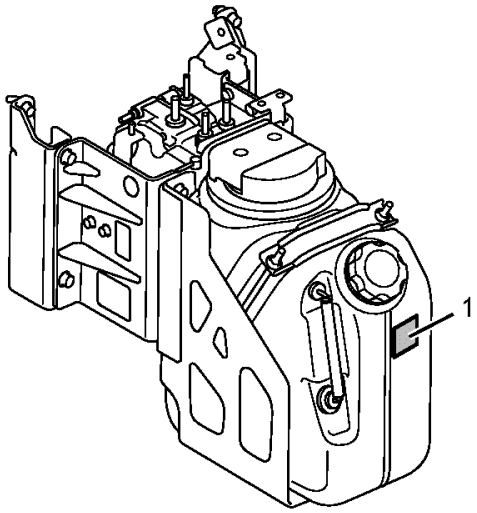


No.	Description
1	Air tank [V]

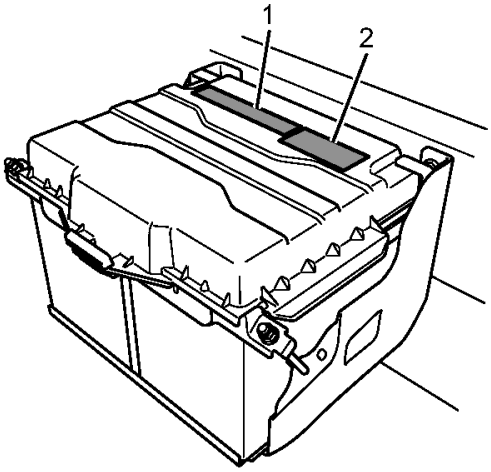
14 liters AdBlue® tank



16 liters AdBlue® tank

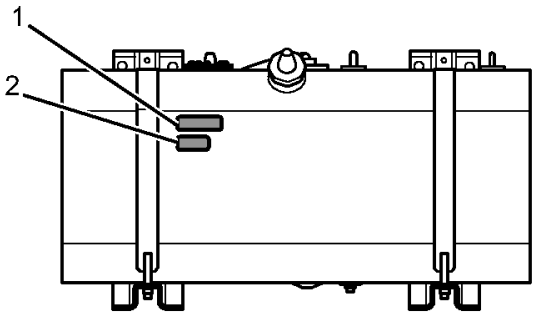


No.	Description
1	Urea SCR system



No.	Description
1	Battery terminal (clean and degrease at removal and installation) [V]
2	Battery terminal (remove negative-side terminal) [V]

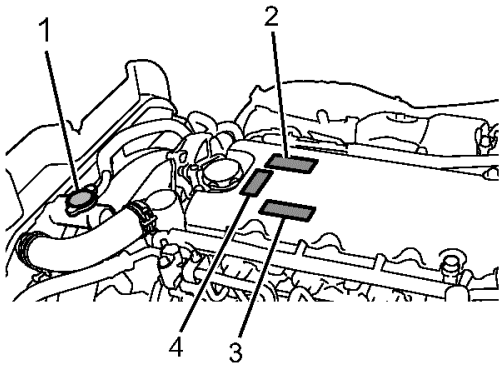
Caution and Other Labels – Fuel Tank



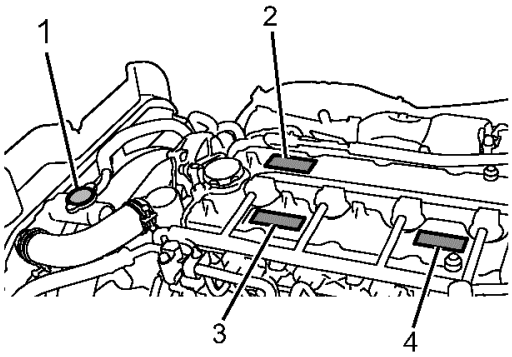
No.	Description
1	In compliance with UN R34 (ECE R34) [V]
2	Diesel fuel

Caution and Other Labels – Engine Compartment

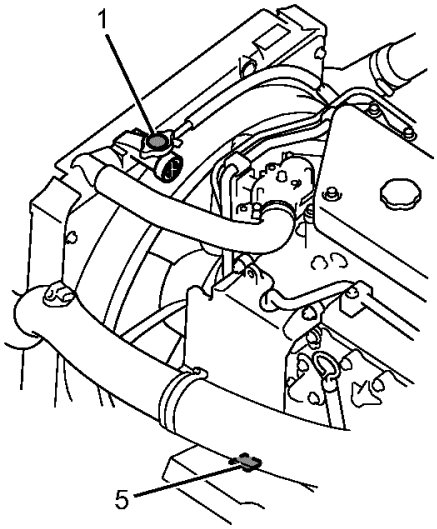
4JZ1 engine with cover



4JZ1 engine without cover



4HK1 engine



No.	Description
1	Radiator cap
2	Engine oil
3	Fuel filter
4	Engine oil level check (Model conforming to Japan post-post new long term regulation emission standards)
5	Engine control module

Privacy Policy

Isuzu Motors Limited shall comply with the laws and other standards and regulations related to personal data. This Privacy Policy is meant to help you understand our privacy practices, including what personal data we collect, what personal data we use, how we share your personal data, and how we protect it, as well as your individual rights.

What Personal Data We Collect

We collect the following types of personal data from our dealers:

Vehicle data (e.g., Vehicle Identification Number (VIN), device and service usage, vehicle configuration details, vehicle technical data, vehicle location data, vehicle operation data);

How We Use Personal Data

Purposes	Legal basis
To provide maintenance, repair, and other services to the owner or operator of the vehicle.	Necessary for the realization of the legitimate interests of the vehicle owner, the vehicle operator, and Isuzu (the specific interest is to operate the vehicle safely and efficiently).
To take recalls and other procedures provided for by laws and regulations	Necessary for the fulfillment of its obligations to which Isuzu is subjected under EU or Member State law relating to the safety of vehicles.
For research and development to improve the quality of vehicles & services	Necessary for the realization of Isuzu's legitimate interests (improvement of the quality of vehicles manufactured and sold by Isuzu)

How We Share Your Personal Data

We share your personal data within our group for the purposes described above.

Cross Border Transfer of Your Personal Data

We may transfer your personal data through the channels to, and store such data in, other countries, which may have different data protection laws and regulations than the country in which the data was provided. Your personal data may also be processed by staff working for Isuzu group companies, distributors or third-party service providers, operating outside the country where the data was collected.

In case the personal data, whose data subjects are located in the European Economic Area ("EEA"), are transferred to non-EEA countries, we will ensure such countries have adequate level of data protection required under GDPR. (For example, the European Commission has adopted adequacy decision on Japan, where our headquarter is located and majority of personal data is stored/processed.)
For transfers from the EEA to countries not considered adequate by the European Commission, we will take appropriate safeguard measures including: applying standard contractual clauses adopted by the European Commission, obtaining consent from the data subject, or performing data transfer agreed on contracts.

Retention of Your Personal Data

We will retain your personal data for as long as required to meet business needs for which it was collected, or to meet any legal or contractual obligations. Our retention periods are determined considering: the purpose for which we process your personal data, the nature, sensitivity and amount of the data, the potential risk of unauthorized use or disclosure of the data, the applicable laws or regulations.

Your Rights as the Data Subject

Data protection laws or regulations in each country may grant the rights of data subjects. In particular, those who live in the EEA have the following rights under the GDPR:

- Right of access;
  You have the right to access your own personal data which we process and related information including: our purposes of the processing, categories, recipients, or the criteria used to determine retention periods, and the source of the data, if not directly obtained from you. You may also request a copy of your personal data in an electric form, or provision of information orally as long as your identity is proven by other means.
- Right to rectification;
  You have the right to rectify any inaccurate personal data concerning you or provide supplementary information to complete the incomplete personal data that we process.
- Right to erasure;
  When your personal data are no longer necessary in relation to the purposes for which it was collected, or you withdraw the consent on which processing is based and where there is no other legal basis, or in certain cases, you have the right for your personal data to be erased.
- Right to restriction of processing;
  When you want us to establish accuracy of your personal data, or in certain cases, you have the right to restrict/suspend our processing of the data.

- Right to data portability; and
  Where we process your personal data based on your consent or the contract with you, you may ask us a copy of that information in a structured, commonly used and machine-readable form. You may also ask us to transmit your personal data directly to another data controller if technically possible.
- Right to object
  Where we process your personal data based on our legitimate interests, you have the right to object our processing of data including profiling or direct marketing that are conducted using those data. (We will include an unsubscribe button in any marketing emails so that you can easily raise unsubscribe request if you wish and we will promptly action that request.)
  If you wish to exercise any of your data privacy rights, please address our Enterprise Risk Management Department described in "Contact Us" section. We will complete your request within one month of the receipt unless there is any specific reason for delay.

Complain to a Supervisory Authorities

If you remain unsatisfied with our response to your request, you have the right to lodge a complaint with the data protection authority, in European countries you live, work or an infringement of the GDPR occurs.

Contact Us

We provide support in case you have any data privacy related questions or concerns, or wish to exercise any of your data privacy related rights. For such cases, please contact below:

<Data Protection Officer>
Nearest distributor
Please check the "Distributors Network" on the Isuzu Motors website.

Vehicle Data Collection

Your vehicle, like other modern motor vehicles, has a number of sophisticated computer systems that monitor and control several aspects of the vehicle's performance. Your vehicle uses on-board vehicle computers to monitor emission control components to optimize fuel economy, to monitor conditions for airbag deployment and, if so equipped, to provide anti-lock braking and to help the driver control the vehicle in difficult driving situations. Some information may be stored during regular operations to facilitate repair of detected malfunctions.
Isuzu may download and retrieve stored information for the purpose of diagnosing, servicing, or repairing your motor vehicle or improvement to future Isuzu motor vehicles.

Preventing Breakdowns

⚠ CAUTION

[Do not install electrical equipment on your own]

- **Inappropriate installation or removal of audio, radio or other electrical equipment can adversely affect other electrical equipment and cause a breakdown or fire. It can also cause unexpected, dangerous airbag deployment. Be sure to have electrical equipment installed or removed by your Isuzu Dealer.**

[Do not Modify the vehicle]

- **Attaching parts that are not suitable for the vehicle's performance and functions could lead to a breakdown or accident. For adjustments (for example, engine adjustments) and equipment installation, consult your Isuzu Dealer.**
- **If you wish to attach accessories to the vehicle, consult your Isuzu Dealer.**

ADVICE

[Do not climb onto the engine]

- Do not step on the engine or climb onto it. You could cause an engine failure by, for example, damaging the cylinder head cover or various connectors.

[Installation of radio equipment]

- Do not install any unauthorized radio set, or any radio set or antenna that does not comply with relevant standards. Noise from the radio set could cause electromagnetic interference with the vehicle's electronic equipment and other systems, resulting in a vehicle breakdown or in a malfunction of electronic equipment. Consult your Isuzu Dealer if you wish to install radio equipment.

[Electric welding]

- Careless electric welding of vehicle parts can cause welding current to flow back through the vehicle's ground circuit and damage electrical and electronic parts so that they do not function normally. Whenever electric welding is necessary, consult your Isuzu Dealer.

Operation of New Vehicle

The subsequent performance and the service life of your vehicle are under the direct influence of the care and treatment that your vehicle will receive during the initial break-in period. It is therefore always recommended that during the initial 1,000 km (600 miles) break-in period, the following few simple precautions are carefully observed.

1. It is recommended that the engine speed is restricted to the following.
   - 4JZ1 engine model: 2,400 r/min
   - 4HK1 engine model: 2,300 r/min
2. Avoid engine racing, abrupt starting and needless hard stops by popping the clutch.
3. Always let the engine idle until it becomes thoroughly warmed up.

Statement of Compliance with UN R13 (ECE R13)

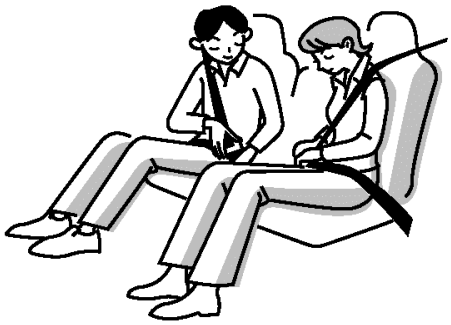
Information required by European brake regulation UN R13 (ECE R13) is disclosed on the following website.
URL: http://www.isuzu.co.jp/world/index.html

Passenger Safety 1

- Seat Belts 1-2
- Seat Belt with Pretensioner and SRS Airbag System [V] 1-9
- Carrying Children 1-19
- Carrying an Expecting Mother or a Person Who is Ill 1-21

1-2 Passenger Safety

Seat Belts



The protection provided by seat belts might be significantly reduced if they are not fastened properly; in certain cases, improperly fastened seat belts can even play a role in causing injury to the wearer.
Seat belts must be worn not only by the driver but also by the passenger(s) before the vehicle starts moving. You should be fully acquainted with the proper use of seat belts and important points to be respected as described in the following pages.
Familiarizing yourself with the correct use of seat belts is essential for your safety.

⚠ WARNING

- **Seat belts must always be fastened before starting to drive.**
- **A seat belt functions correctly only when the person fastens it while sitting upright and fully back on the seat.**
  Also, wearing a seat belt with the seatback excessively reclined could be very dangerous while driving. Wear your seat belt correctly by sitting up straight and well back in the seat.
- **Insert the latch plate securely into the buckle until it clicks. If it is not correctly inserted, there is a risk that the seat belt may come unfastened and result in an injury.**
- **Do not run the seat belt over your face, chin or neck.**
- **Wear the seat belt as low as possible around the hips, not around the waist. If it is fastened over the abdomen, a collision or sudden stop could result in extreme pressure being applied to the abdomen and causing serious injury.**
- **Remove any twists in the seat belt before fastening it. A seat belt with twists will not provide full protection because it cannot disperse shocks efficiently in the event of a collision or sudden stop.**
- **Too much slack could increase the amount of injury because the belt would not be able to properly restrain you in an accident.**
- **An expectant mother or a person who has a (chest or abdomen) condition should also wear a seat belt. However, depending on how it is used, there is a possibility of injury due to extreme pressure on the chest or abdomen, so check with a physician regarding precautions.**
- **Do not use one seat belt for more than one person. If worn by more than one person, the seat belt would not work effectively in a collision or sudden stop.**

WARNING (Continued)

WARNING (Continued)

- **Have seat belts inspected and, if necessary, replaced by the nearest Isuzu Dealer when the webbing becomes frayed or worn and/or when the buckle or other mechanical parts fail to work properly.**
- **Seat belts that have been subject to extreme forces, such as while being worn when an accident occurs, should be inspected, even if they appear normal, and if necessary, replaced by an Isuzu Dealer.**
- **Handle the seat belts and buckles so they are not pinched and damaged in the seat or door.**
- **Be careful to keep the buckles and retractors free of dust and foreign matter.**
- **Drivers are obligated to wear a seat belt and to have their passengers wear seat belts. Emergency vehicles and other special vehicles are exempted from the obligation to wear seat belts, but we recommend that seat belts be worn as much as possible.**
- **Do not use a seat belt for a small child if the seat belt is touching the child's neck or chin, or if it does not fit snugly over the child's hips because doing so could be dangerous. Instead, use a commercially available infant car seat, child restraint system, or junior car seat.**
- **Do not install an infant car seat, child restraint system, or junior car seat on the center seat. Use a child restraint system that fits the size of the child. Install an infant car seat, child restraint system, or junior car seat securely according to the manufacturer's instructions.**

Refer to page
2-34 Seats
10-145 Seat Belt Care

Precautions for Driving with Children

It is recommended to use commercially available protective equipment (such as a child restraint system) when transporting a child in the vehicle.

Refer to page
1-19 Carrying Children

⚠ WARNING

- **Do not use a seat belt for a small child if the belt is on or very close to the child's neck or chin. Also, do not use a seat belt if it does not fit snugly over the child's hips because restraining the child under those conditions could be dangerous in the event of a collision or sudden stop. Instead, use an appropriate child restraint system available on the market.**
- **Use a child restraint system that fits the size of the infant or child. Install the system according to the manufacturer's instructions.**

1-4 Passenger Safety

Precautions for Wearing Seat Belts



	Seat belt fastening cautions	Why?
A	Position the lap belt as low on your hips as possible.	The pressure applied by the seat belt in a collision would be dangerous if the belt is positioned incorrectly.
B	Position the shoulder belt so it is on your shoulder (not touching your neck, chin or face).	
C	Make sure the seat belt is not twisted when you put it on.	To ensure that the seat belt is fully effective.

Seat Belt Warnings/Indicators

Seat Belt Warning Light



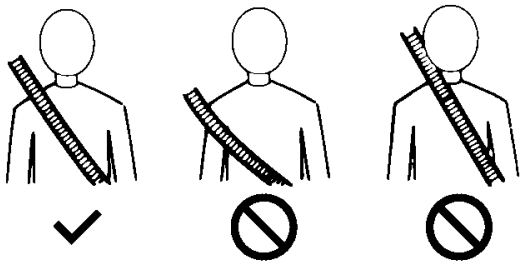
This warning light comes on when the driver or passenger is not wearing their seat belt while the starter switch is in the "ON" position. When the vehicle speed exceeds approximately 20 km/h (12 MPH), this warning light flashes. At this time, the warning buzzer sounds for approximately 90 seconds.

NOTE

- The warning light will go out and the warning buzzer will stop when the driver and passengers buckle the seat belt.
- The front seat belt warning operates when a passenger is in the passenger seat. However, when there is luggage on the passenger seat, the warning may operate even if there is no passenger.

Three-Point Seat Belts

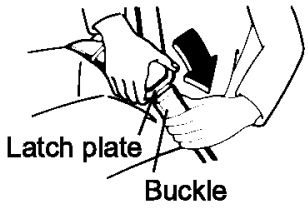
Every seat except the center seat on your vehicle is equipped with a three-point seat belt. The seat belt extends or retracts freely if the wearer moves slowly, but it locks and restrains the occupant during forward force caused by the occupant's body following a strong shock. Adjust the driver's shoulder belt for proper position by means of the shoulder anchor.

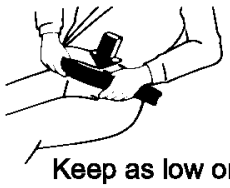


⚠ WARNING

- **The shoulder belt should be adequately positioned on your shoulder but should not touch your neck and/or face. The shoulder belt could harm you in a collision or sudden stop if it is in contact with your neck and/or face.**

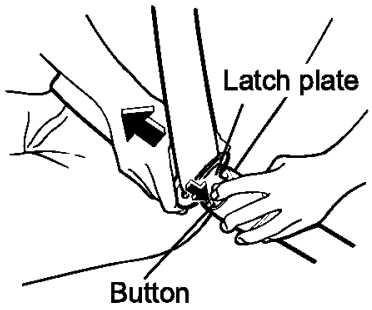
To Fasten





1. Sit on the seat in the correct driving position.
2. Pull out the seat belt holding the latch plate. After checking that there are no twists in the belt, insert the latch plate into the buckle until it clicks. And then, pull on the belt to confirm the latch plate is fastened.
3. To reduce the risk of sliding under the belt during a collision, position the belt across your lap as low on your hips as possible and adjust it to a snug fit by pulling the "shoulder" portion upward through the latch plate.
   The lap-shoulder belt is designed to lock during a sudden stop or impact. At other times it should move freely.

To Unfasten



Push the button on the buckle. As the belt automatically retracts, let it be taken up slowly by holding on to the latch plate until the belt is fully retracted.

CAUTION

- **If you repair any components around the steering wheel, instrument panel, center console and brake/clutch pedal or on the seat belts, or if you install an audio system or other equipment, the seat belt with pretensioner and SRS airbag system may be adversely affected, possibly causing the driver's seat belt (and the passenger's seat belt, if the vehicle is equipped with a passenger's airbag) to unintentionally retracts or the driver's airbag (and the passenger's airbag, if equipped) to suddenly deploys, resulting in injury. Be sure to have any repair or installation done by your Isuzu Dealer.**

ADVICE

- While being automatically retracted, the seat belt could damage a nearby window or interior trim unless the latch plate is properly held. Hold the latch plate to ensure that the belt is taken up slowly.
- Before closing the door, check that the retracted seat belt is taut. A slack belt could become trapped in the door or seat rail.
- When the passenger's seat belt is fully taken up (or not pulled out), check that the stopper is holding the belt in a fully taut state.
- If you cannot pull out the seat belt, let it go loose, and then slowly pull it out again. If you still cannot pull it out, give the seat belt one strong pull, let it go loose, and then slowly pull it out again.

NOTE

- The driver's seat belt and the passenger's seat belt (if the vehicle is equipped with a passenger's airbag) feature pretensioner and load limiter functions.
- The three-point seat belts are provided with an emergency locking retractor (ELR) function.

[ELR function]

- The ELR normally allows the seat belt to move in and out freely as the occupant moves. However, it locks the seat belt to restrain the occupant when a forward force resulting from a collision or sudden stop acts on the occupant.
- The ELR also locks the seat belt when the belt is pulled out quickly. If this happens, allow it to retract once and then pull it out slowly.

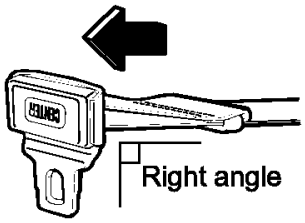
[Load limiter function]

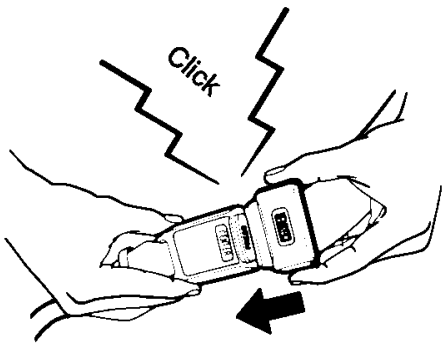
- The load limiter allows the seat belt to extend while maintaining the load working on the belt at a constant level. This helps alleviate the shock applied on the occupant's chest.

Refer to page
1-9 Seat Belt with Pretensioner and SRS Airbag System [V]

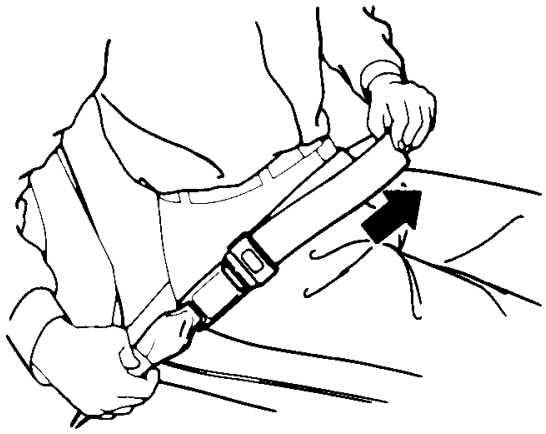
Two-Point Seat Belt (Center Seat)

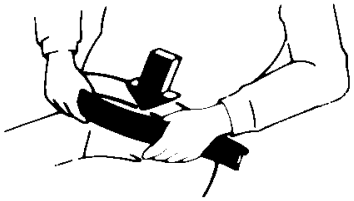
To Fasten





1. Sit on the seat in the correct position.
2. Pull out the latch plate side of the belt a little longer than necessary. (Placing the latch plate at right angles with the belt makes this easier.)
3. After checking that there are no twists in the belt, insert the latch plate into the buckle until it clicks.

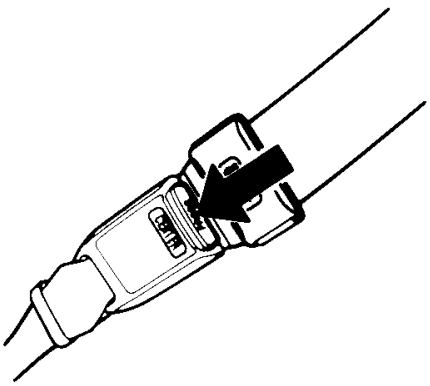


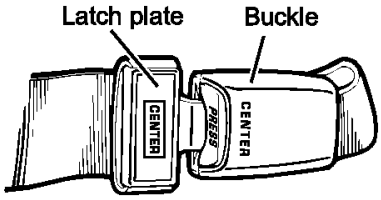


Keep as low on hip bone as possible

4. Position the seat belt across the lap as low as possible on the hips. Pull the fold-back end of the belt (upper side) until the belt is adjusted to a snug fit.

To Unfasten





Push the button on the buckle to unfasten the belt.

NOTE

[Center seat belt design to prevent incorrect fastening]

- The center seat belt (length-adjustable two-point belt) is designed so that it cannot be connected with any of the window-side seat belts (three-point seat belts with ELR).
  In addition, both the latch plate and buckle of the center seat belt are identified by "CENTER" marks to prevent incorrect fastening of the center seat belt.

Seat Belt with Pretensioner and SRS Airbag System [V]



The seat belt with pretensioner and supplemental restraint system (SRS) airbag system is activated, in the event of a frontal collision when the impact energy exceeds a certain level, to help mitigate the shock to the passengers by firmly restraining the bodies of the driver and passengers (models with passenger seat SRS airbag) in their seats with the seat belt with pretensioner and airbag. Be sure to observe the following instructions to prevent you and your passengers from suffering a serious or fatal injury due to impacts from the seat belt with pretensioner and SRS airbag.

⚠ WARNING

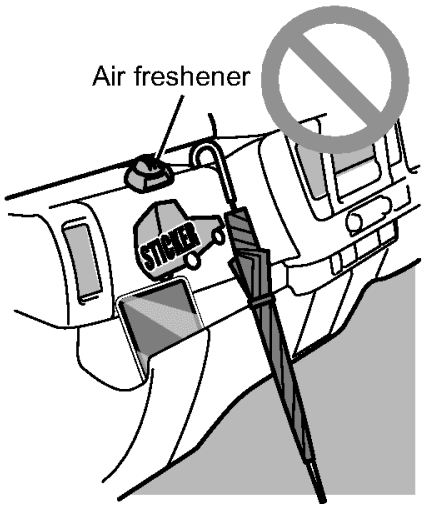
- **Before driving the vehicle, properly adjust your seat for proper driving position and wear the seat belt correctly. Do not sit closer than necessary to the steering wheel and do not lean over it. If your vehicle is equipped with a passenger's airbag, do not allow the passenger to put his/her hands or feet on the instrument panel and to sit with his/her face or chest close to it. When the airbags are activated, you or the passenger may suffer a burn on or serious injury to the arm or face.**
- **Do not apply excessive force to the pad or the upper part of the instrument panel, such as by strongly hitting them. Doing so could impair the normal operation of the SRS airbag.**
- **Do not drive the vehicle with something placed between you and airbag or held on your lap. If the airbag inflates, the objects may be thrown and hit your face. Doing so also hinders normal activation of the airbag, which is dangerous.**
- **If you make unauthorized modifications to the vehicle or install an unauthorized accessory, the seat belt with pretensioner and airbag may not operate correctly.**

WARNING (Continued)

WARNING (Continued)

- **If the steering wheel is changed to a non-standard one or a sticker is attached to the steering wheel pad, the system could malfunction or the sticker could fly off. Also, do not attach stickers to the upper surface of the instrument panel, and do not place objects, such as accessories or air fresheners around it, and do not lean an umbrella on it. Do not install any accessories on the windshield. They may prevent normal operation or fly off if the system is activated.**





- **Doing any of the following may require special precautions. Do not do any of the following by yourself. Be sure to consult your Isuzu Dealer before doing any of the following. Failure to do so may cause the seat belt with pretensioner and airbag to be unduly activated, causing serious injury or death to the occupant. Doing any of them improperly will adversely affect the operation of the system, causing a malfunction or failure.**
  - **Repair or replacement of the steering wheel, instrument panel, center console, dashboard and parts around the brake pedal.**
  - **Repair, replacement or disposal of the seat belt with pretensioner and airbag, or scrapping of a vehicle that has seat belt with pretensioner and airbag.**
  - **When audio equipment and accessories are installed or modification such as body mounting is carried out.**
  - **Modifying the vehicle front (bumper/frame), mounting equipment (snowplow) or other parts, modifying the frame, or changing the vehicle height. In addition, illegally modifying the vehicle or installing parts.**
  - **Repainting of vehicle front and cab panels.**
- **Do not touch the components of the SRS airbag immediately after the SRS airbag is inflated. The components become very hot and can cause serious injuries, such as burns.**

⚠ CAUTION

- **Have your vehicle inspected at the nearest Isuzu Dealer promptly if you encounter any of the following conditions.**
  - **The SRS airbag warning light does not go out or frequently flashes.**
  - **The seat belt with pretensioner and airbag are activated by an impact. (The SRS airbag warning light comes on.)**
  - **Your vehicle has received a significant level of frontal impact even when the impact has not activated the seat belt with pretensioner and airbag.**
  - **The seat belt is frayed or worn out.**
  - **The steering pad surface is cracked or otherwise damaged, or it receives a significant level of impact.**
  - **The instrument panel surface is cracked or otherwise damaged, or it receives a significant level of impact.**

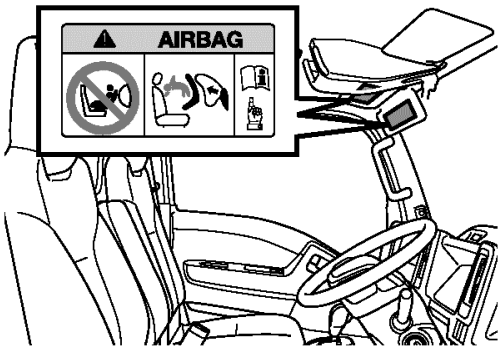
Refer to page
1-2 Seat Belts
2-34 Seats

Precautions for Driving with Children

Be sure to observe the following precautions when carrying a child in the vehicle. Otherwise the child may be fatally injured by the impact from an inflating airbag.
It is also recommended to use commercially available protective equipment (such as a child restraint system) when transporting a child in the vehicle.

⚠ WARNING

- **Do not drive with a child standing in front of the passenger's airbag or held on your lap. Doing so is dangerous because the child would receive a very strong impact by an inflating airbag.**
- **If the vehicle has a passenger airbag, never fit a baby seat, child seat or junior seat facing rearward on a passenger seat. Failure to observe this precaution may result in serious injury to the child, or, in the worst case, death due to the impact during deployment of the passenger SRS airbag as a result of an accident, etc.**
  This information is also on a warning label on the passenger side sun visor.



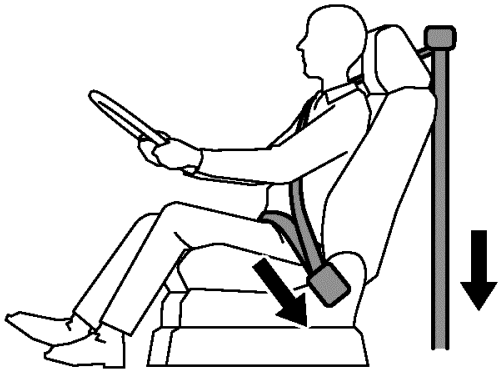
SRS Airbag System Warnings/Indicators

SRS Airbag Warning Light



If the SRS airbag warning light comes on, driver's seat belt with pretensioner and airbag (and passenger's seat belt with pretensioner and airbag, if equipped) may not function properly in the event of a collision.

Seat Belt with Pretensioner



When the vehicle receives an impact exceeding a certain level during a frontal collision, the pretensioner causes the seat belt to be retracted instantly and removes the slack in the seat belt to securely restrain the occupant in the seat, thus enhancing the seat belt's restraining effect.

Refer to page
1-2 Seat Belts

⚠ WARNING

- **The seat belt with pretensioner helps reduce the risk of a serious injury to the occupant should the vehicle receive a frontal impact exceeding a certain level. The maximum effect is achieved only if the seat belt is correctly worn.**
- **When the pretensioner is activated, it takes up the slack in the seat belt instantly. At this time, you may suffer a slight bruise or slight burn due to abrasion or rubbing.**

⚠ CAUTION

- **Do not remove or disassemble the seat belt. Accidental activation of the system may cause parts to fly off, causing an injury to you; or causing malfunction.**

ADVICE

- Once activated during a collision, the seat belt with pretensioner cannot be reused. The seat belt must be replaced immediately at the nearest Isuzu Dealer.

NOTE

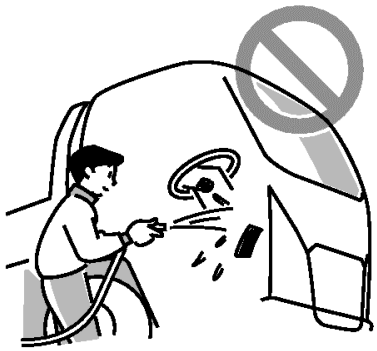
- Even if the pretensioner function fails, the seat belt still operate as a regular seat belt (with ELR).
- The pretensioner generates a sound at the moment it retracts the seat belt.
- When the seat belt with pretensioner and airbag system is activated by an impact, the seat belt warning light and the SRS airbag warning light come on.

Supplemental Restraint System (SRS) Airbag

The SRS airbag, when it inflates, helps to disperse and reduce the impact on the occupant's body, as a supplement to the seat belt with pretensioner.
This occurs when there is an with an impact exceeding a certain level.

⚠ WARNING

- **The airbag supplements the occupant protection effect of the seat belt by being activated together with the seat belt with pretensioner to reduce severity of injury to the occupant should the vehicle receive a frontal impact exceeding a certain level. The maximum effect is achieved only if the seat belt is correctly worn.**
- **The airbag does not replace the seat belt. Be sure to wear the seat belt.**
- **The airbag is instantly inflated with considerable force to reduce serious injury. If the airbag inflates, you may suffer a slight bruise or burn due to heat generated by rubbing.**
- **When the vehicle receives an impact exceeding a certain level, resulting in airbag deployment, deformation of the vehicle may cause the windshield to break.**
- **Immediately after the airbag is inflated, the metal portion that inflates the airbag gets hot. Do not touch it. Doing so may cause a serious injury such as a burn.**
- **Do not remove or disassemble the airbag. Doing so may cause a malfunction or inadvertent activation.**
- **Do not place anything near the airbag. You may suffer an injury when an object is thrown by the inflation force of the airbag.**
- **Do not take a rest using the steering wheel as a pillow or with your arms or legs resting on it. If the vehicle is stopped with the starter switch in the "ON" position and an impact greater than the airbag activation level occurs to the front of the vehicle, the airbag will injure you.**
- **Do not wet the airbag sensor with water or subject it to an impact. The system may malfunction; this is very dangerous.**



ADVICE

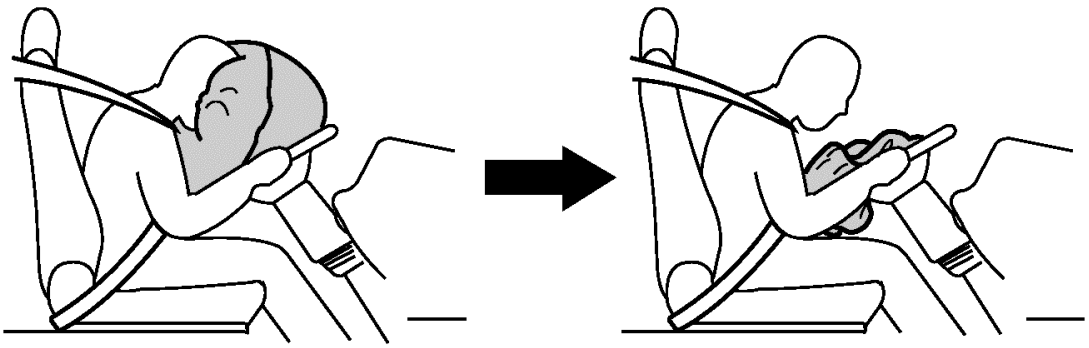
- When the airbag is inflated, a sound and white smoke are produced but this is not the result of a fire. This white smoke is not detrimental your health. However, if residue (gas and so on) adheres to your eyes and skin, rinse them with water as soon as possible. Although it is rare, a person with delicate skin may suffer from irritation.
- The airbag cannot be reused once it is inflated. Immediately replace it at the nearest Isuzu Dealer.

NOTE

- The airbag is quickly deflated after deployment and does not hinder visibility.
- When the seat belt with pretensioner and airbag are activated by an impact, the SRS airbag warning light comes on.

Deployment of SRS Airbag

When the vehicle collides head-on with an impact of a certain level or higher, the airbag system is activated and airbag instantly inflates. It is deflates quickly and does not hinder visibility.



When and How the Seat Belt with Pretensioner and SRS Airbag System Operates

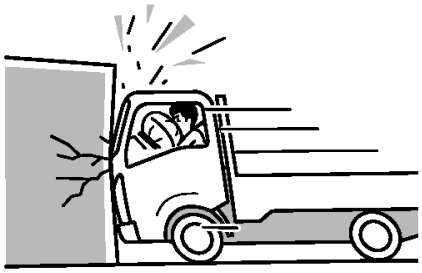
The seat belt with pretensioner and airbag system are activated when the vehicle receives an impact exceeding a certain level in the event of a frontal collision. Because the vehicle body absorbs part of impact energy, the system may not be activated due to reduction in the force of the impact or the intensity or direction of the impact received. However, even if the front of the vehicle is largely deformed by the collision, in some cases the impact on the seat is not severe. In such cases, the system may determine that the SRS airbag is not needed and not activate it.

When are the Seat Belt with Pretensioner and SRS Airbag System Activated?

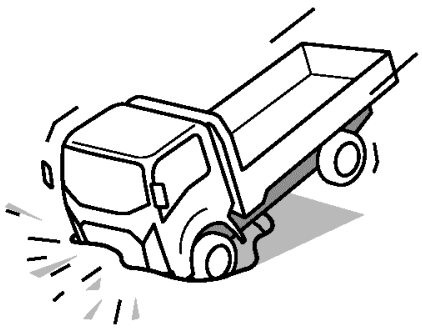
When the vehicle collides head-on against a parked/stopped vehicle or a moving vehicle with an impact of a certain level or higher



When the vehicle collides head-on against a solid wall with an impact of a certain level or higher



When are the Seat Belt with Pretensioner and SRS Airbag System Activated Other than in a Collision?



- When the vehicle falls into a pothole or groove in the road
- When the vehicle strongly collides against an obstacle such as a protruding object on the road
- When the vehicle collides against a curb at high speed
- When the vehicle becomes airborne and hits the ground, receiving a strong impact on the bottom of the vehicle

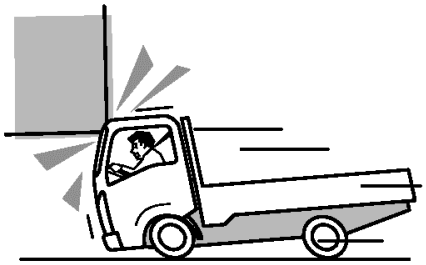
When are the Seat Belt with Pretensioner and SRS Airbag System Not Likely to Be Activated?

In the following cases, the seat belt with pretensioner and SRS airbag system are less likely to be activated even if they are working properly.

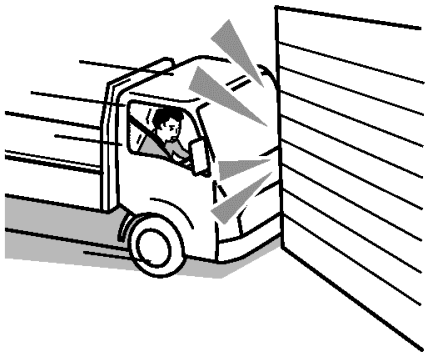
When the vehicle collides against a utility pole or standing tree



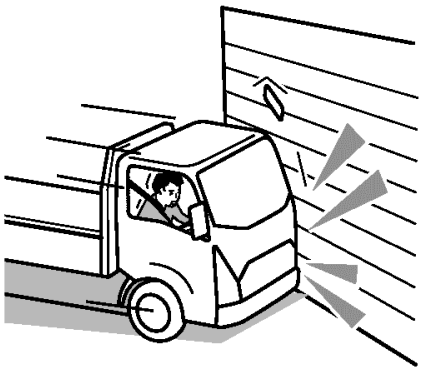
When the vehicle gets under an obstacle or vehicle



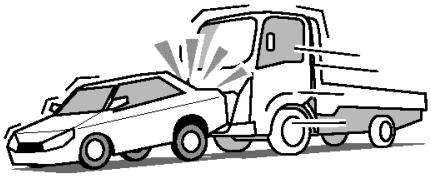
When the vehicle has an offset collision (one-sided collision)



When the vehicle has a frontal angle collision



When the vehicle collides with a passenger vehicle



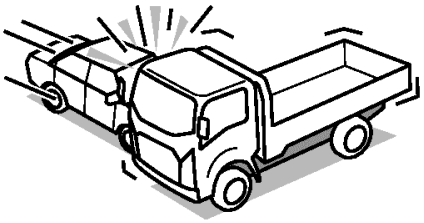
When are the Seat Belt with Pretensioner and SRS Airbag System Not Activated?

In the following cases, the seat belt with pretensioner and airbag system are not activated even if they are working properly.

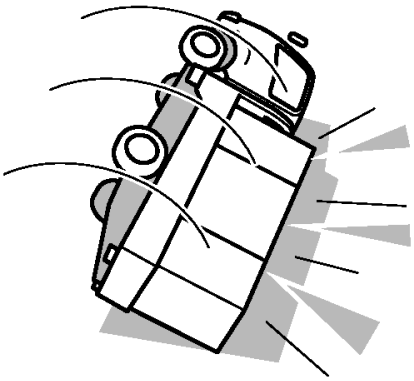
When the vehicle is hit from the rear



When the vehicle is hit from the side

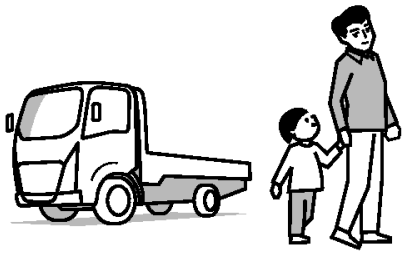


When the vehicle rolls onto its side or upside down



Carrying Children

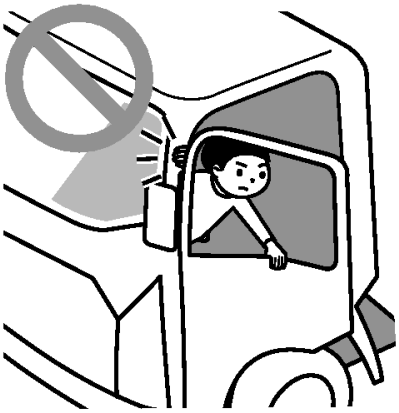
Never Leave a Child Alone in the Vehicle



⚠ WARNING

- **When you leave the vehicle, take the child with you. If you leave the child alone in the cab, the child could interfere with things, causing vehicle movement, a fire or some other accident. Also, the cab inside could become dangerously hot when heated by the sun.**

An Adult must Open, Close and Lock the Door for a Child

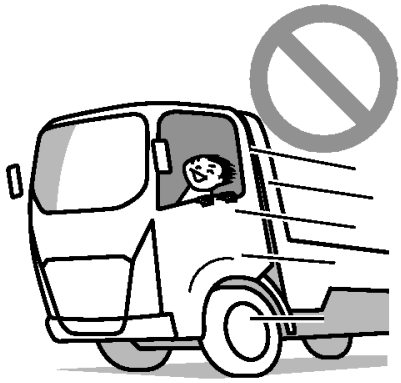


⚠ WARNING

- **To protect the child from the danger of getting his/her hands and head trapped, an adult must open, close and lock the door for the child. Be careful that the child does not interfere with the power window switches and get his/her hands or head trapped in the window. While a child is in the cab, be sure to control the power windows using the power window switches beside the driver's seat.**

Refer to page
2-26 Doors
2-49 Power Windows

Do not Allow a Child to Put His/Her Head or Hands Out of the Window



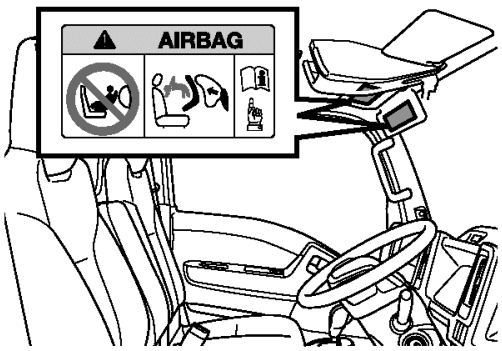
⚠ WARNING

- **Regardless of whether the vehicle is moving or stationary, you must never allow a child to put his/her head, hands, or other body parts out of the window. Allowing such behavior would be dangerous because the child could hit an obstacle.**

Using Seat Belts with Children

⚠ WARNING

- **The vehicle's seat belts are designed for adults. If a seat belt touches a child's neck or chin, or does not rest across his/her hips, use a baby seat, child seat or junior seat. If the seat belt were used as it is, it could apply intense pressure to the child's abdomen in the event of a collision. A small child who is not able to sit up by him/herself must be placed in a child seat.**
- **Do not fit a baby seat, child seat or junior seat on the center seat. It could hinder your driving.**
- **If the vehicle has a passenger airbag, do not fit a baby seat, child seat or junior seat facing rearward. If the baby seat, child seat or junior seat is facing rearward, the impact on the child seat during deployment of the passenger airbag could inflict life-threatening injuries on the child.**

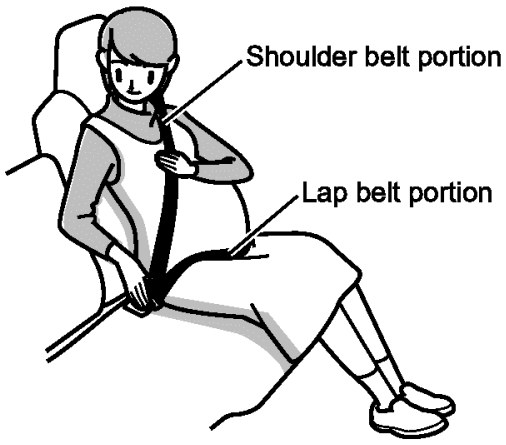


Refer to page
1-2 Seat Belts

NOTE

- The appropriate type of baby seat, child seat or junior seat and the proper installation for it depend upon the weight and height of the child.
  It may not be possible to correctly fit certain child seats depending on their shapes. Be sure to use a child seat that is suitable for the vehicle.
  - For detailed instructions, see the instruction manual supplied with the baby seat, child seat or junior seat.

Carrying an Expecting Mother or a Person Who is Ill



WARNING

- **An expectant mother or a person who is ill riding in the vehicle must also wear a seat belt. In light of the risk that the seat belt will apply pressure to the abdomen, chest and shoulders in the event of a collision, however, an expectant mother or person who is ill should get advice from a physician beforehand.**
  - **An expectant mother should use a three-point seat belt.**
  - **An expectant mother should position the lap belt snugly as low as possible on the hips (not across the abdomen). Also, she should fasten the shoulder belt so it rests on her chest, not on her abdomen.**
  - **Unless the seat belt is correctly worn, it may dig into the abdomen in the event of hard braking or a collision, harming not only the expectant mother but also the unborn child, putting them both in danger of serious injuries or death.**

Refer to page
1-2 Seat Belts

Doors, Seats and Fuel 2

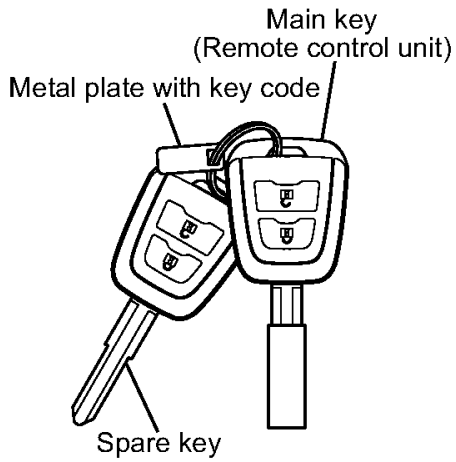
- Key 2-2
- Keyless Entry System [V] 2-12
- Passive Entry and Start System [V] 2-14
- Doors 2-26
- Grips and Steps 2-33
- Seats 2-34
- Fully Adjustable Steering 2-44
- Mirrors 2-45
- Windows 2-49
- Fuel Tank Filler Cap 2-56
- Cargo Bed [V] 2-60
- Tool Box [V] 2-68

Key

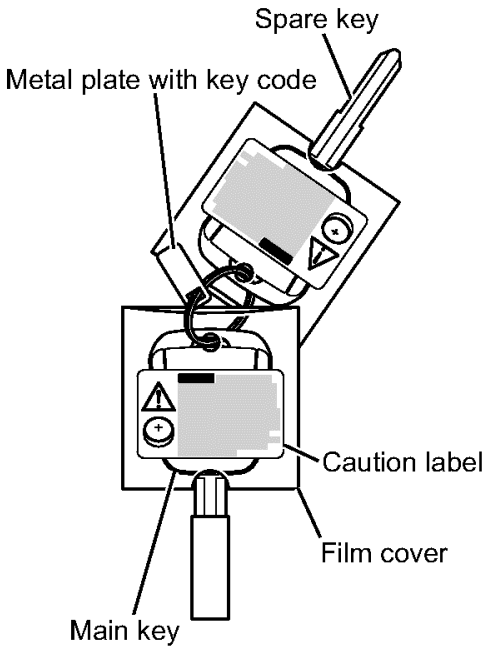
Types of Keys

Both sides of the key are identical, so you can insert the key in the starter switch without worrying about which way you insert it. The key code is indicated on a separate metal plate in order to prevent it from being acquired by an unauthorized person.

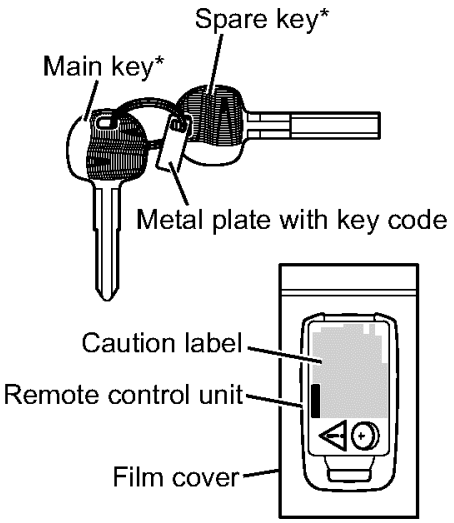
Keyless entry key (type 1)



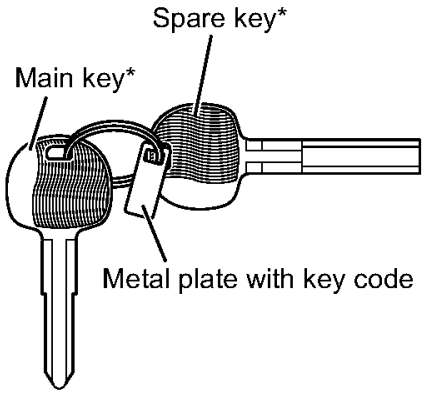
Keyless entry key (type 2)



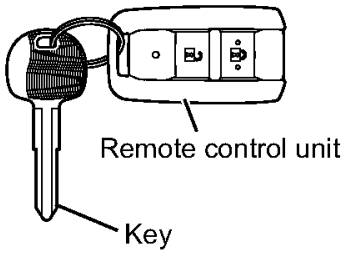
Passive entry and start system key



Key (model without passive entry and start system/keyless entry system)



*: All keys except those marked with asterisk are equipped with an immobilizer function.



NOTE

[Model with passive entry and start system]

- Please carry the key and remote control unit together in case the remote control unit's battery is dead or there is a malfunction.

Precautions for Keys

WARNING

[Model with passive entry and start system]

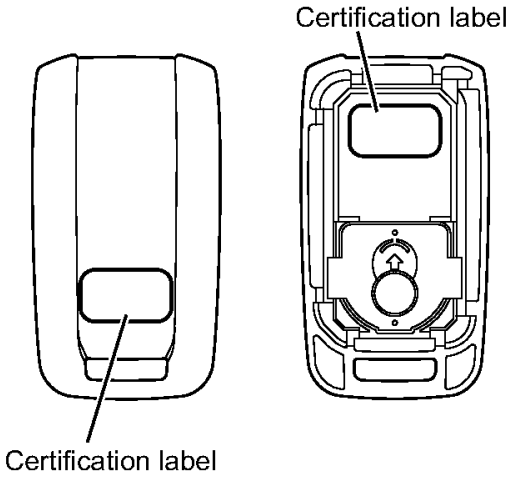
- **If you bring the remote control unit on board an aircraft, do not press the remote control unit buttons on board the aircraft. In addition, when storing the unit in a bag or the like, keep it in a way that the buttons cannot be easily pressed.**
- **If the buttons are pressed, radio waves will be transmitted and may interfere with aircraft operation.**

2-4 Doors, Seats and Fuel

CAUTION

[Model with keyless entry system/model with passive entry and start system]

- **The remote control unit conforms to the certification of Radio Law. Be sure to observe the following:**
  - **Do not disassemble the remote control unit, except when replacing the battery. Using a disassembled or modified unit is prohibited by law.**
  - **Do not remove the certification label. Using a remote control unit without the certification label is prohibited. (model with passive entry and start system only)**



[Model with passive entry and start system]

- **When the vehicle is not in use, keep the remote control unit at least 2 m (7 ft) away from the vehicle to prevent theft.**

ADVICE

- Should you lose the remote control unit, please contact your Isuzu Dealer.
- Do not disassemble the key with the immobilizer function, except when replacing the battery in the remote control unit.
- Do not leave the transponder key on the dashboard or any other surface where the key might be exposed to high temperatures (exceeding 60°C /140°F).
- Do not place a magnetic object close to the transponder key.

[Model with keyless entry system/model with passive entry and start system]

- Avoid getting water on the remote control unit, dropping it, hitting it against another object, or stepping on it; otherwise, the remote control unit could malfunction.
- Do not leave the remote control unit on the dashboard or any other surface where the unit might be exposed to high temperatures (exceeding 60°C/140°F). Doing so may result in shorter battery life or malfunction of the remote control unit.

[Model with passive entry and start system]

- Keep the remote control unit away from electric appliances, such as televisions or computers. Failure to do so may cause the battery to run down significantly.

Where is the Key Used?

Where	For what
Starter switch	Starting and stopping the engine
Front doors	Locking and unlocking the doors
Fuel tank filler cap	Locking and unlocking the filler cap

ADVICE

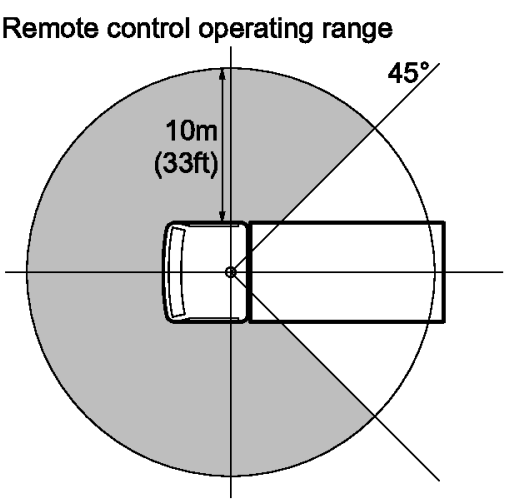
- Wipe off the key to remove any dirt or dust, etc. before using it.

NOTE

- To prevent theft, store the metal plate with key code in a safe place other than the vehicle.
- Should you lose the key, please give the key code to the nearest Isuzu Dealer. The Isuzu Dealer will be able to duplicate your key.
- If you resell the vehicle, be sure to hand over the plate with key code to the new owner together with the vehicle.

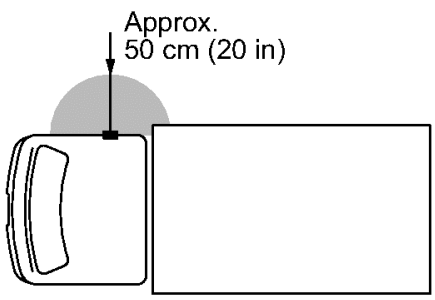
Operating Range of Remote Control Unit

Locking and Unlocking Doors with Remote Control Unit



The remote control unit works within a 10 m (33 ft) radius of the cab center as indicated in the figure (the actual distance over which the unit operates may vary depending on conditions).
The rear door of the crew cab vehicle cannot be locked or unlocked via a remote control.

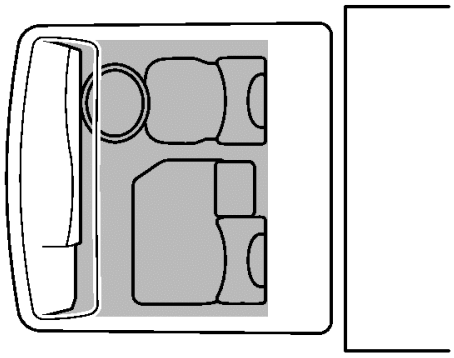
Locking and Unlocking Doors Using the Request Switch (Model with Passive Entry and Start System)



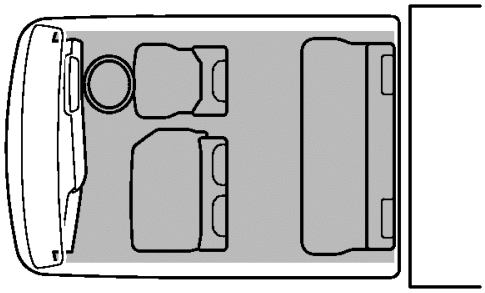
This can be operated when the remote control unit is within approximately 50 cm (20 in) of the driver side door handle.

Starting the Engine (Model with Passive Entry and Start System)

Single cab model



Crew cab model



The engine can be started when the remote control unit is within the operating range.

NOTE

- The operating range is the vehicle interior, excluding the instrument panel, glove compartment, floor, area behind the seats (driver side and passenger side, including the bed for full cab vehicles), and in various small article storage pockets, such as door pockets. There are some locations where it is difficult for the unit to operate depending on the surrounding environment. In this case, move the remote control unit to start the engine.
- When the remote control unit is within the operating range, the indicator light of the remote control unit flashes.

Replacing the Battery in Remote Control Unit

The battery has reached its end of life when the remote control unit works intermittently or does not work at all. For models with passive entry and start system, if the battery level warning light of the remote control unit illuminates or if the indicator light of the remote control unit does not come on, the battery level may also be low. Replace the battery as soon as this happens.

Refer to page
2-18 Remote Control Unit Low Battery Warning Light

⚠ WARNING

- **Do not ingest the battery. Doing so may cause physical impairment due to the chemical reaction.**
  This product (the remote control unit that comes with this product) has a lithium coin/button cell battery inside. If a lithium coin/button cell battery is ingested, it may cause severe internal damage within 2 hours and may result in death. If the battery is ingested or is suspected of being ingested, seek immediate medical attention.
- **Keep the new or used batteries out of reach of children.**
  If the battery compartment does not close securely, stop using the product and keep it out of reach of children.

⚠ CAUTION

- **Do not place the battery in direct sunlight, or near a fire or other sources of heat.**
- **When changing the battery, use only a battery of the same type as the original battery, or an equivalent. Otherwise, there is a risk of explosion.**
- **Be sure to install the battery with the "+" and "-" sides correctly oriented. Incorrect installation will result in leakage of chemicals from inside the battery or other operational problems.**

NOTE

- The warning mark (an exclamation mark in an equilateral triangle) indicated on the surface of or inside the remote control unit is intended to alert the user to the presence of important instructions in the owner's manual or workshop manual.
- Please comply with the collection system available in your country for the disposal of old batteries. In addition, take special care to prevent any danger to children.
  This symbol [crossed-out wheeled bin] provided in Regulation (EU) 2023/1542 of the European Parliament and of the Council indicates separate collection of waste batteries in the European Union countries.

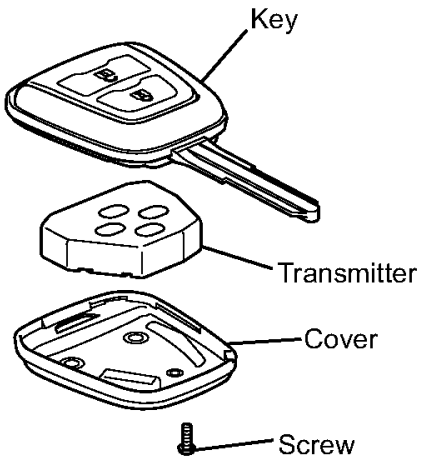


Replacing the Battery of the Keyless Entry Key

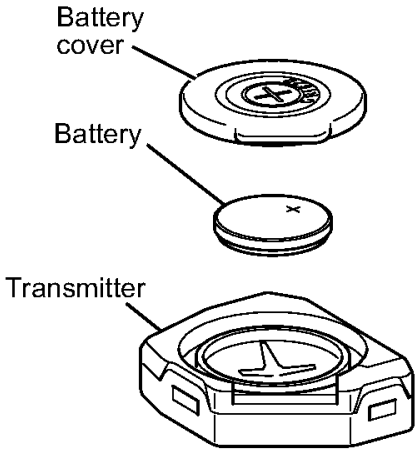
Battery used	Number of battery
Lithium battery Model number: CR1620 Voltage: DC3V	1

NOTE

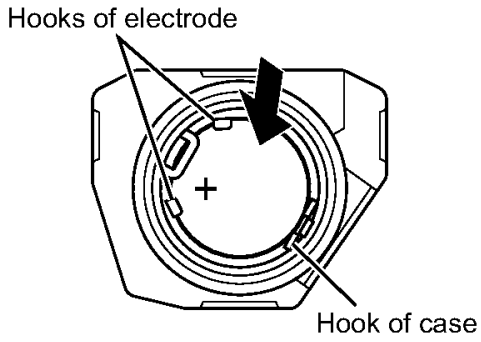
- The battery life varies depending on how the key is used.
- For the manufacturer, model name, country of origin, and lot number of the battery, refer to the battery itself.



1. Loosen the screw with a precision screwdriver and open the cover.
2. Remove the transmitter.



3. Open the battery cover and remove the battery.



4. Install the new battery. With its positive side up, place it with the edge under the hooks of the electrode (2 locations). Press the battery downward until it is fully seated in the housing so that the other edge fastens under the hook of the case.
5. Close the battery cover.

ADVICE

- When closing the transmitter cover, check that there is no dust, hair, or anything else caught underneath it. A poorly sealed remote control unit could become deteriorated.

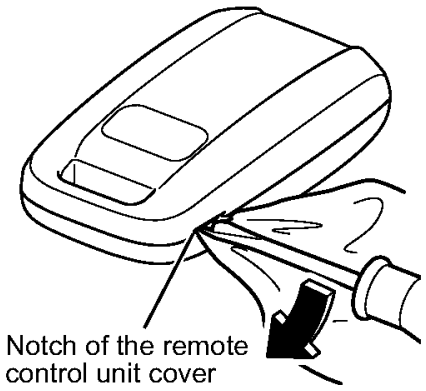
6. Fit the transmitter into the key and attach the cover with the screw.

Replacing the Battery of the Passive Entry and Start System Key

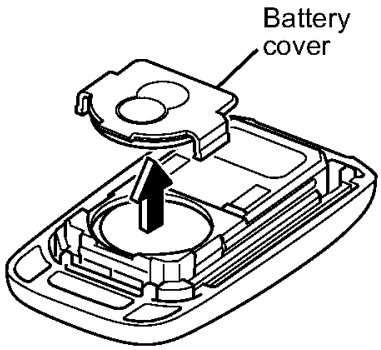
Battery used	Number of battery
Lithium battery Model number: CR2032 Voltage: DC3V	1

NOTE

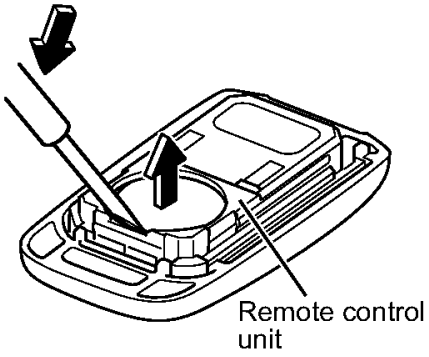
- For the manufacturer, model name, country of origin, and lot number of the battery, refer to the battery itself.
- The service life of the battery is approximately 2 years, depending on how it is used.



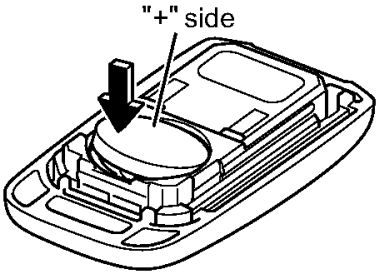
1. Pry open the remote control unit cover by inserting a flat head screwdriver or similar tool into the notch of the remote control unit cover. Wrap a piece of cloth or tape around the tip of the screwdriver so as not to damage the remote control unit cover.



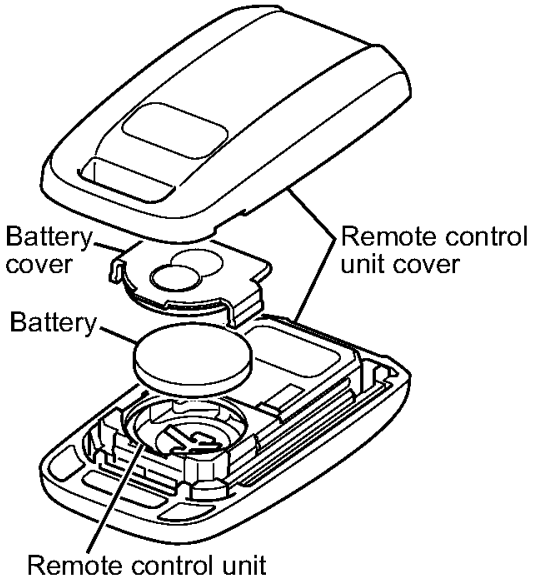
2. Remove the battery cover.



3. Insert a flat head screwdriver or similar tool into the recess of the remote control unit to remove the old battery.



4. Insert the new battery into the remote control unit with its positive side visible, as shown in the diagram on the left, and press battery downward until fully seated.



5. Install the remote control unit, battery, and battery cover in their original positions inside the remote control unit cover.

6. Close the remote control unit cover.

ADVICE

- When closing the remote control unit cover, check that there is no dust, hair, or anything else caught underneath it. A poorly sealed remote control unit could become deteriorated.

Key with Immobilizer Transponder Chip [V]

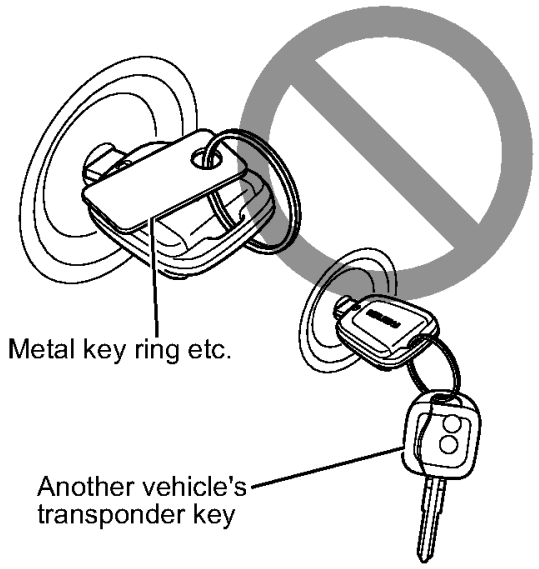
The key contains an immobilizer transponder chip.
The immobilizer anti-theft system allows the engine to be started only when it receives signals from the transponder of the pre-registered key.

When the Engine Cannot be Started

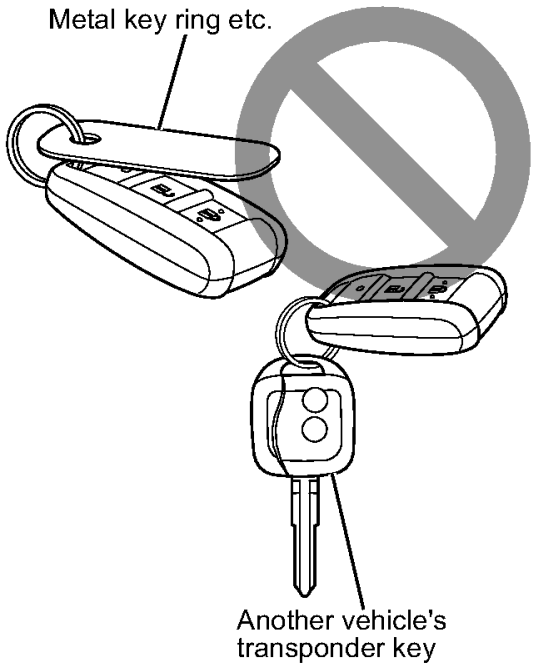
Even when using the pre-registered key, you might not be able to start the engine in the cases listed below. If the engine fails to start due to a metal key ring, remove the key ring and then try again; first turn the starter switch to the "ACC" or "LOCK" position, then turn to the "START" position to start the engine.

- There is a facility nearby that is emitting strong radio waves.
- A metallic object is touching or covering the handle of the key.
- Another vehicle's transponder key is near your key.

Keyless entry key



Passive entry and start system key



⚠ WARNING

- **Do not keep the starter switch in the "START" position for more than about 10 seconds. Operating the starter for too long might cause battery failure or might result in overheating and even a fire.**

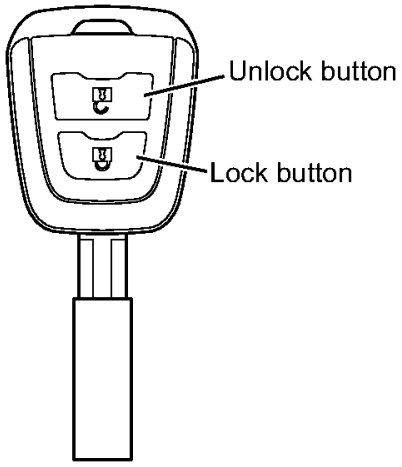
Keyless Entry System [V]

The keyless entry system allows you to lock/unlock the doors by simply pressing the remote control button rather than inserting the key into the lock.

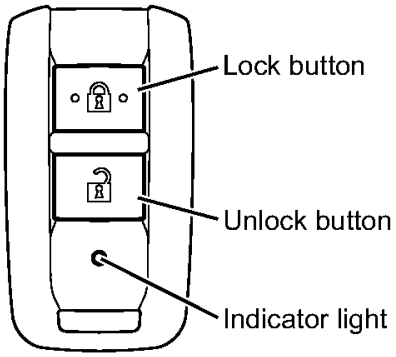
Refer to page
2-2 Key

Unlocking and Locking the Doors

Remote control unit (keyless entry key)



Remote control unit (passive entry and start system key)



Unlocking the doors

Press the door unlock button of the remote control unit for 1 second or longer. The vehicle's keyless entry system causes the right and left turn signal lights to simultaneously flash twice upon receiving the signals from the remote control unit. If the doors are unlocked while the dome light switch is between the "ON" and "OFF" positions, the dome light comes on for about 20 seconds.

Locking the doors

Press the door lock button of the remote control unit for 1 second or longer. The vehicle's keyless entry system causes the right and left turn signal lights to simultaneously flash once upon receiving the signals from the remote control unit. If the dome light is on while its switch is between the "ON" and "OFF" positions, the dome light goes out.

ADVICE

- After locking the doors using the remote control unit, be sure to check that they are locked by pulling the door handles.
- Repeatedly locking and unlocking the doors using the remote control unit 10 or more times in succession will trigger the protection circuit in the system, preventing the unit from working. If this happens, wait for a while. The system will then work normally.
- If the keyless entry system fails to operate normally, lock and unlock the doors using the key and have the system inspected by your Isuzu Dealer.

NOTE

- The lock or unlock buttons on the remote control unit must be fully pressed for more than 1 second to work.
- If you do not open any doors within about 30 seconds after pressing the unlock button to unlock the doors, the automatic locking function of the system will lock the doors again to prevent theft.
- While the dome light switch is between the "ON" and "OFF" positions, the light goes out when the door is locked while the dome light is illuminating.
- In areas near a TV tower, electric power plant, radio station, etc. or under any conditions involving strong electrical disturbances, the remote control unit operating range might change or the keyless entry system might not work.

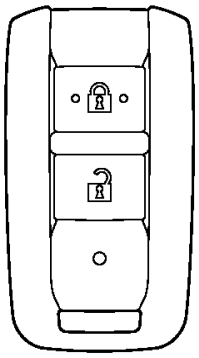
[Model without passive entry and start system]

- The keyless entry system does not operate in the following cases:
  - The starter switch is in the "ON" position.
  - The key is inserted in the starter switch.
  - One of the doors is open.

[Model with passive entry and start system]

- When the lock or unlock button is pressed, the indicator light on the remote control unit comes on.
- The keyless entry system does not operate in the following cases:
  - The starter switch is in the "ACC" or "ON" position.
  - The lock button is pressed while a door is open.

Passive Entry and Start System [V]



The passive entry and start system is a system that allows you to carry the remote control unit to lock and unlock the doors and start the engine without having to take out the key. It also works as the remote control unit for the keyless entry system. A key is provided to lock and unlock the doors in case the battery in the remote control unit runs out.

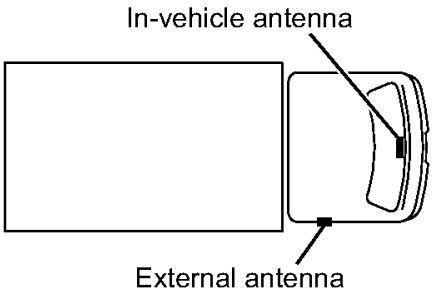
Refer to page
2-2 Key
2-12 Keyless Entry System [V]
4-50 Starting and Stopping the Engine

⚠ WARNING

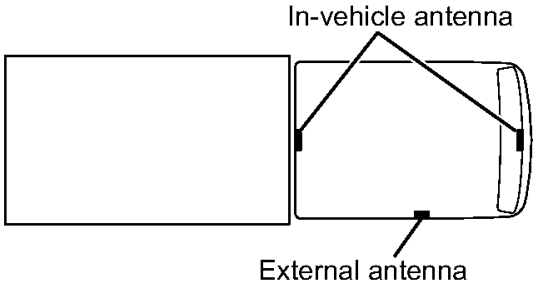
- **Persons with implantable cardiac pacemakers or implantable cardioverter defibrillators should not approach within 22 cm (9 in) of the antenna mounted on the vehicle. Radio waves transmitted by the passive entry and start system may affect the operation of the equipment. Persons using medical electronic devices should check with their doctor or medical device manufacturer to determine whether they can use the system. The passive entry and start system can be set to off by using the customization function.**

Refer to page
2-17 Customization Function

Single cab model



Crew cab model



ADVICE

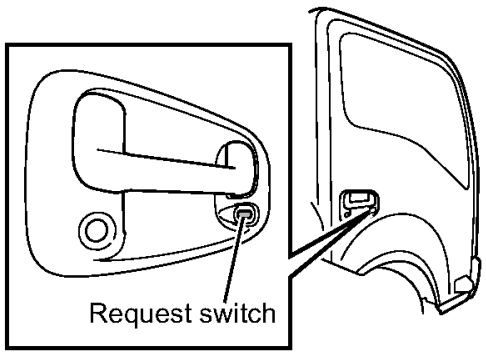
- If the operation of locking and unlocking is repeated 10 times or more, the system may activate the protection circuit and stop the operation. However, after a short time, locking and unlocking will be possible again.
- If a malfunction of the unit occurs, use the key to lock or unlock the doors and have the vehicle inspected at your Isuzu Dealer.

NOTE

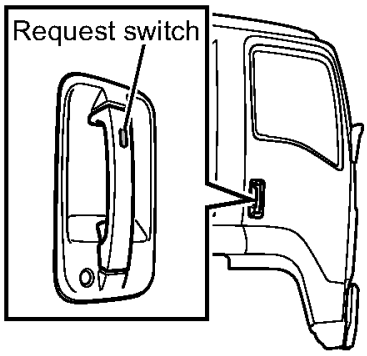
- As long as the remote control unit is within the operating range, anyone can do the following:
  - Lock and unlock the doors.
  - Start the engine.
- The remote control unit should be carried by the driver and should not be left in the vehicle.

Locking and Unlocking the Doors Using the Request Switch

NKR model



NLR/NMR/NMS/NNR/NPR/NQR/NQS models



This can be operated when you are carrying the remote control unit within the operating range of the remote control unit.

Refer to page
2-5 Operating Range of Remote Control Unit

Unlocking the door

When the door is locked, pressing the request switch on the door handle unlocks the door. At the same time, the left and right turn signal lights flash twice simultaneously. When the dome light switch is between the "ON" and "OFF" position, the dome light comes on for approximately 20 seconds.

Locking the door

When the door is unlocked, pressing the request switch on the door handle locks the door. At the same time, the left and right turn signal lights flash once simultaneously.

When the dome light switch is between the "ON" and "OFF" position, and the dome light is on, the dome light turns off.

ADVICE

- When the door is locked, be sure to pull the door handle to confirm that it is locked.

NOTE

- When a person carrying the remote control unit is in the operating range, anyone can lock and unlock the door by pressing the request switch.
- After locking, the door will not be unlocked for approximately 3 seconds, even if the request switch is pressed.
- After unlocking, the door will not be locked for approximately 2 seconds, even if the request switch is pressed.
- To open the door, press the request switch, confirm that the door is unlocked, and pull the door handle. Pulling the door handle while pressing the request switch may not unlock the door. If the door does not unlock, release the door handle, press the request switch again, confirm that the door is unlocked, and open the door.
- The remote control unit may not operate when it is near the ground or in a high position, even if it is within approximately 50 cm (20 in) of the door handle.
- The remote control unit may not operate if it is too close to the door or window.
- When you unlock the door using the remote control unit, the door will be automatically locked again if the door is not opened within 30 seconds.
- Use the key when the battery in the remote control unit runs down or when the vehicle's battery is flat.
- When using the remote control unit to lock or unlock the doors or start the engine, radio waves are transmitted from the vehicle to allow the system to verify the unit. Therefore, the passive entry and start system may not operate properly or may be unstable in the following cases:
  - There is a facility nearby that transmits strong radio waves.
  - The remote control unit is carried along with cell phones, radios, laptops or other communication devices.
  - The remote control unit is near or covered by metal objects.
- Pressing the request switch will not lock the door in the following cases:
  - The starter switch is in a position other than the "LOCK" position.
  - The remote control unit is in the vehicle.
  - The door is open.

Customization Function

The following feature settings of the passive entry and start system can be changed: Please consult your Isuzu Dealer about changing the settings.

Function	Default setting	Options
Passive entry and start system	On	On/Off
Answerback buzzer	Off	On/Off
Answerback buzzer volume	High	Low/Middle/High
Automatic door lock	Off	On/Off

Function when the automatic door lock is set to on

Function	Default setting	Options
Time until the automatic door lock is activated	10 seconds	1/3/5/10 seconds
Answerback buzzer of the automatic door lock	Off	On/Off

ADVICE

- When the automatic door lock is set to on, be sure to carry the remote control unit before leaving the vehicle. The key lock-in prevention function may not work depending on the surrounding radio wave conditions, the battery level of the remote control unit, or the position of the remote control unit. As a result, the remote control unit may be locked inside the vehicle.

NOTE

- For locking and unlocking the doors and starting the engine when the passive entry and start system is set to off, refer to "When the Passive Entry and Start System Does Not Work Properly".

[About the automatic door lock]

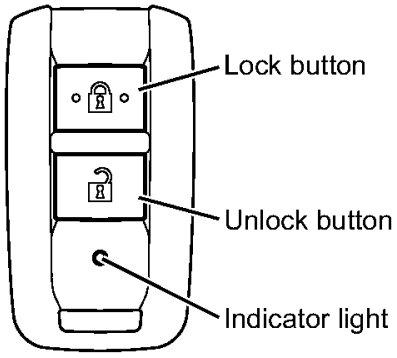
- When the starter switch is in the "LOCK" position, this function automatically locks the doors after a set amount of time has elapsed since all doors were closed.

Refer to page
11-27 When the Passive Entry and Start System Does Not Work Properly [V]

Power Saving Mode of the Remote Control Unit

When the vehicle will not be used for a long period of time, the remote control unit function can be deactivated by setting it in power saving mode, thereby reducing the consumption of the remote control unit battery.

Activating the Power Saving Mode



Press the unlock button twice while pressing the lock button on the remote control unit. The setting is complete when the indicator light on the remote control unit flashes 4 times. If the indicator light does not flash, do the operation again.

NOTE

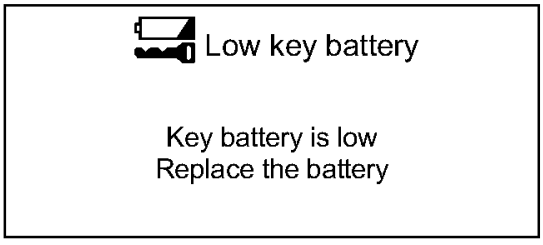
- Since the remote control unit function is deactivated in power saving mode, the passive entry and start system cannot be used. To use the passive entry and start system, turn off the power saving mode.

Deactivating the Power Saving Mode

Press the lock or unlock button on the remote control unit to deactivate the power saving mode.

Passive Entry and Start System Warnings/Indicators

Remote Control Unit Low Battery Warning Light



When the battery level in the remote control unit is low, the multi-information display will show this message for approximately 10 seconds when the engine is stopped. When "Low key battery" is displayed, replace the battery in the remote control unit.

Refer to page
2-6 Replacing the Battery in Remote Control Unit

ADVICE

- The battery level is checked approximately 20 minutes after engine is started. If the engine is repeatedly started and stopped for 20 minutes or less, the remote control unit low battery warning light may not illuminate even if the battery level is low.
- When the operation of the passive entry and start system is unstable or the indicator light of the remote control unit does not come on when the lock or unlock button is pressed, the battery level is low. Replace the battery.
- If this warning light comes on, replace the battery as soon as possible. If you continue to use the vehicle without replacing the battery, the battery in the remote control unit will run out and the passive entry and start system will not be able to open or close the doors or start the engine.

Refer to page
11-27 When the Passive Entry and Start System Does Not Work Properly [V]

Passive Entry and Start System Warning Light



This warning light comes on, flashes, or goes out when the starter switch is in the following positions:

"LOCK" position	Slow flashing (about every 2 seconds)
"ACC" position	Off
"ON" position	If the warning light comes on and goes out after about 3 seconds, it is normal (system check)

It also flashes (about every 1 second) in the following cases:

- With the starter switch in the "ACC" or "ON" position, the remote control unit is carried out of the vehicle and the door is closed. At the same time, three short beeps will sound.

Refer to page
2-21 Passive Entry and Start System Warnings

CAUTION

- **If the warning light does not go out with the starter switch in a position other than the "LOCK" position, if the light flashes frequently, or if the light does not flash with the starter switch in the "LOCK" position, have the vehicle checked and repaired immediately at your Isuzu Dealer.**

ADVICE

- For locking and unlocking the doors and starting the engine when the passive entry and start system does not work properly due to a dead battery or other issues, refer to "When the Passive Entry and Start System Does Not Work Properly".

Refer to page

11-27 When the Passive Entry and Start System Does Not Work Properly [V]

NOTE

- Slow flashing (about every 2 seconds) indicates that the immobilizer function (vehicle anti-theft device) is activated.

Passive Entry and Start System Warnings

In the following cases, the warning system operates and a buzzer sounds:

Check to see if the remote control unit is left in the vehicle

Multi-information display	Buzzer	Measures	Status
Door lock unavailable Key is in vehicle	Continuous beep*3	Carry the remote control unit outside the vehicle and lock the door again	**Key lock-in prevention alarm (when pressing the request switch)** While the remote control unit was left in the vehicle, locking the door was attempted by pressing the request switch (The door would not be locked).
			Key lock-in prevention alarm (when locking the door manually) While the remote control unit was left in the vehicle, locking the door was attempted by pressing the lock button on the driver side or passenger side door and closing the door with the door handle pulled up. The door would be automatically unlocked when the handle is released, and the left and right turn signal lights would flash twice. As a result, the door would not be locked.

*1: Inside the cab *2: Outside the cab *3: Inside and outside the cab

Refer to page
2-28 Locking the Door from Outside without Using the Key

Check to see if the starter switch is in the "ACC" or "ON" position

Multi-information display	Buzzer	Measures	Status
Door lock unavailable Put starter switch in LOCK position	Continuous beep*3	Turn the starter switch to the "LOCK" position and lock the door again	**Starter switch ON-position warning (when pressing the request switch)** While the starter switch was in the "ACC" or "ON" position, an attempt was made to lock the door by pressing the request switch (The door would not be locked).
—	Two short beeps*2		**Starter switch ON-position warning (when locking the door manually)** • While the starter switch was in the "ACC" or "ON" position, the lock button on the driver side door was pressed with the door opened. The door would be automatically unlocked, and the left and right turn signal lights would flash twice. • While the starter switch was in the "ACC" or "ON" position, an attempt was made to close the door after it was opened when it was previously locked. The door would be unlocked automatically, and the left and right turn signal lights would flash twice.
Key undetectable No key found in vehicle	Three short beeps*2 Continuous beep*1	Return the remote control unit to the inside of the vehicle or turn the starter switch to the "LOCK" position	**Remote control unit carried out warning** While the starter switch was in the "ACC" or "ON" position, the remote control unit was carried out of the vehicle and the door was closed.

*1: Inside the cab *2: Outside the cab *3: Inside and outside the cab

Check to see if the door is closed properly

Multi-information display	Buzzer	Measures	Status
Door lock unavailable Door is open	Continuous beep*3	Close the door properly and lock it again	**Door ajar warning** While the driver side or passenger side door had not been closed properly, an attempt was made to lock the door by pressing the request switch or operating the remote control unit.

*1: Inside the cab *2: Outside the cab *3: Inside and outside the cab

The remote control unit is not recognized

Multi-information display	Buzzer	Measures	Status
Authenticate key Hold key over starter switch	Continuous beep*1	Place the remote control unit against the starter switch ring	**Start operation without remote control unit warning** The starter switch cannot be turned to the "ON" position because the unit cannot be recognized due to the remote control unit's dead battery or due to the surrounding radio wave conditions.
Key collation complete Put starter switch in ON position	Two short beeps*1	Turn the starter switch to the "ON" position	**Immobilizer recognition completion alert** The remote control unit is recognized and the starter switch can be turned to the "ON" position.

*1: Inside the cab *2: Outside the cab *3: Inside and outside the cab

Refer to page
11-27 When the Passive Entry and Start System Does Not Work Properly [V]

The remote control unit battery is running down

Multi-information display	Buzzer	Measures	Status
Low key battery Key battery is low Replace the battery	Continuous beep*1	Replace the battery in the remote control unit	**Remote control unit (passive entry and start system unit) battery level warning** The battery in the remote control unit is running down.

*1: Inside the cab *2: Outside the cab *3: Inside and outside the cab

Refer to page
11-27 When the Passive Entry and Start System Does Not Work Properly [V]

The passive entry and start system has an abnormality

Multi-information display	Buzzer	Measures	Status
Key system abnormal Remote controller key system abnormal Contact the dealer	Continuous beep*1	Please contact the nearest Isuzu Dealer.	**Abnormal passive entry and start system warning** The passive entry and start system has an abnormality and does not work properly.

*1: Inside the cab *2: Outside the cab *3: Inside and outside the cab

ADVICE

[About the key lock-in prevention alarm]

- The buzzer may not sound depending on the surrounding radio wave conditions.
- The buzzer may not sound if the battery in the remote control unit is running down.
- The buzzer may not sound if the remote control unit is placed in the following locations:
  - On the instrument panel
  - In the glove compartment
  - In the small article storage pockets, such as the door pockets
  - Behind the seats (driver side and passenger side, including the bed for full cab vehicles)
  - On the floor
  - It is touching or being covered by metallic objects

[About the remote control unit carried out warning]

- Depending on the surrounding environment and radio wave conditions, the buzzer may sound even if the remote control unit is within the operating range. If this happens, change the carrying position of the remote control unit and operate it again.
- If the remote control unit is taken out of the vehicle through the opened window, the warning will not be activated.
- If the remote control unit is placed on the instrument panel or in various small article storage pockets, such as the glove compartment or door pockets, the warning may be activated depending on the radio wave conditions.
- If the starter switch is set to the "LOCK" position while the remote control unit is taken out of the vehicle, the starter switch cannot be operated. When operating the starter switch, make sure that you are carrying the remote control unit.

Doors

⚠ WARNING

- **Do not pull on the door handles while the vehicle is moving.**

⚠ CAUTION

- **Be sure to do the following whenever you leave the vehicle:**
  1) **Fully engage the parking brake.**
  2) **Stop the engine.**
  3) **Lock the doors.**
- **When you close the door after sitting behind the wheel, check that the door is fully closed. If the door is not properly closed, it may open while the vehicle is in motion.**
- **Before opening the door when climbing into or out of the cab, carefully check all areas around the vehicle for safety, especially the area at the rear of the vehicle. If you abruptly open the door, it may be struck by a vehicle, etc. coming from behind.**
- **Never leave the key in the vehicle.**
- **Tilt the cab only after fully closing the doors.**

Locking and Unlocking the Front Doors

Locking and Unlocking the Door Using the Remote Control Unit [V]

Refer to "Keyless Entry System".

Refer to page
2-12 Keyless Entry System [V]

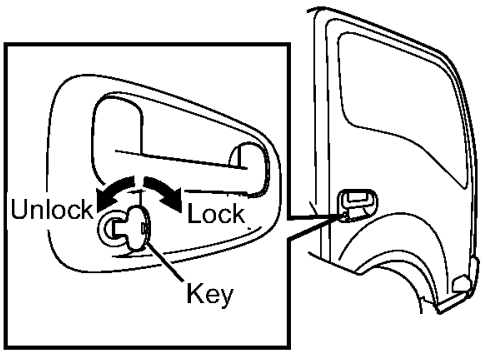
Locking and Unlocking the Doors Using the Request Switch [V]

Refer to "Passive Entry and Start System".

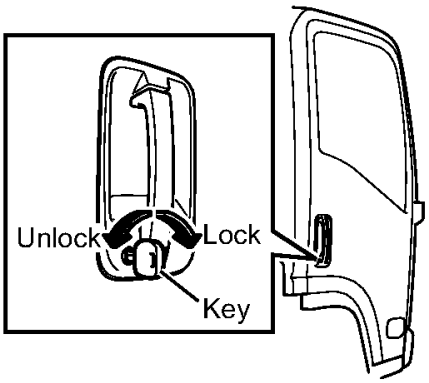
Refer to page
2-14 Passive Entry and Start System [V]

Locking and Unlocking the Door from Outside Using the Key

NJR/NKR models



NLR/NMR/NMS/NNR/NPR/NPS/NQR/
NQS models



Firmly insert the key.
Turn the key toward the front of the vehicle to lock the door and turn it toward the rear of the vehicle to unlock it.

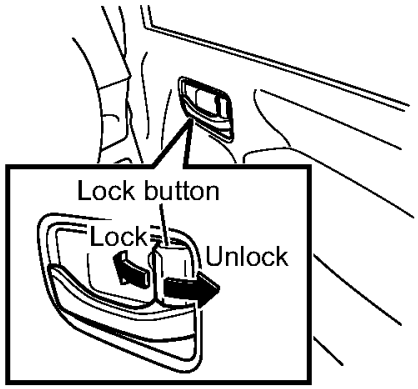
ADVICE

[Model with keyless entry system/model with passive entry and start system]

- The door cannot be locked or unlocked from the passenger side. Use the driver's side door or keyless entry system/passive entry and start system to lock and unlock the locks.

Refer to page
2-29 Power Door Lock (Central Door Lock)
2-12 Keyless Entry System [V]
2-14 Passive Entry and Start System [V]

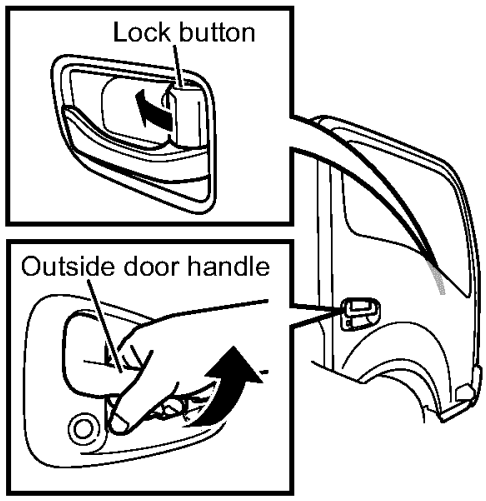
Locking and Unlocking the Door from Inside



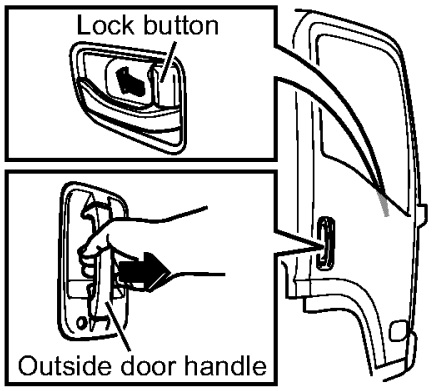
Push the lock button forward to lock the door; pull the lock button backward to unlock it.

Locking the Door from Outside without Using the Key

NJR/NKR models



NLR/NMR/NMS/NNR/NPR/NPS/NQR/
NQS models



First, push the lock button on the inside door handle forward and then close the door while keeping the outside door handle raised.

ADVICE

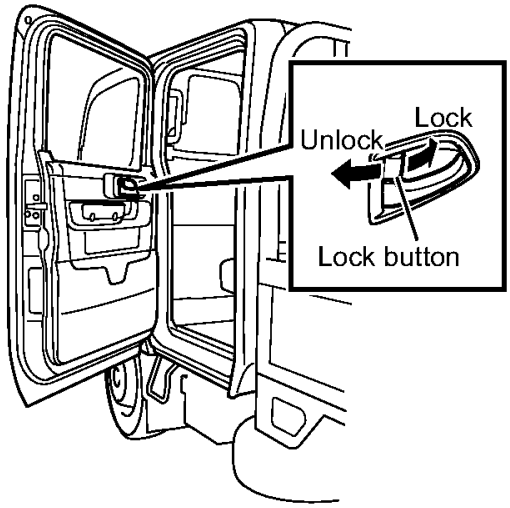
- Before closing the door, be sure to check that you have the key with you.

Key Left Inserted Warning [V]

Model without passive entry and start system

When the driver side door is opened with the key left inserted and the starter switch in the "ACC" or "LOCK" position, warning beeps will continue to sound to alert the drive that the key has been left inserted. The warning beeps stop sounding when the key is removed.

Locking and Unlocking the Rear Doors (Crew Cab Model)



Locking and Unlocking the Door from Inside

Push the door lock button forward to lock the door and pull the lock button backward to unlock it.

Locking the Door from Outside

Push the door lock button forward and then close the door; the door will be locked.

Power Door Lock (Central Door Lock)

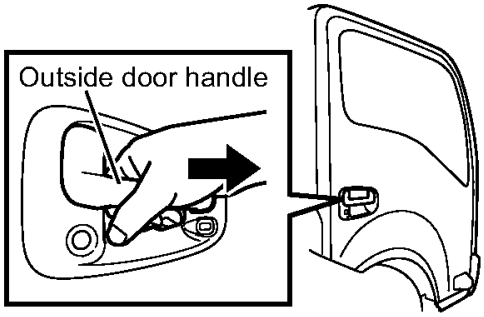
How the Power Door Lock System Operates

When you lock or unlock the driver's door using the key or by operating the lock button, the power door lock system will automatically lock or unlock all doors simultaneously.

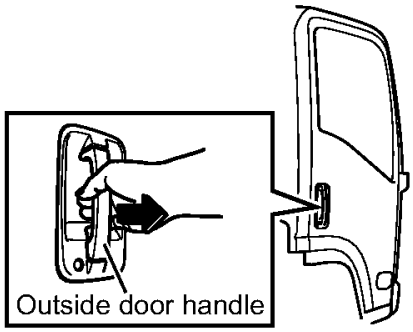
Opening and Closing the Front Doors

Opening the Door from Outside

NJR/NKR models



NLR/NMR/NMS/NNR/NPR/NPS/NQR/
NQS models



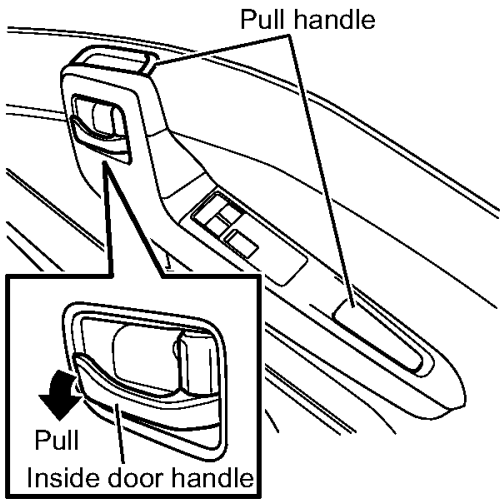
To open the door, pull the outside door handle.

ADVICE

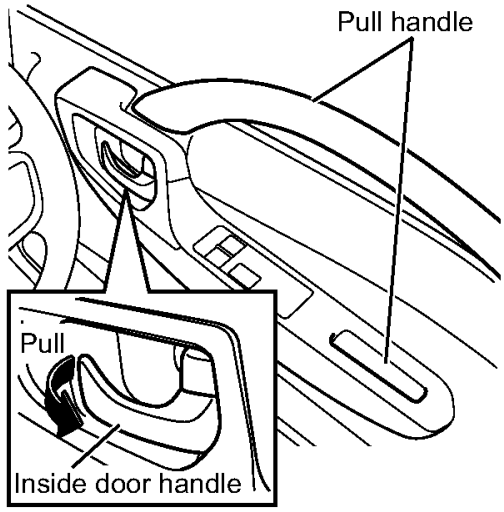
- When opening and closing the doors, operate them slowly without applying excessive force. Applying excessive force may result in damage to the door components.
- When a door is open, do not hang from it and do not hang heavy objects from it. Doing so may result in damage to the door components.

Opening and Closing the Door from Inside

NJR/NKR models



NLR/NMR/NMS/NNR/NPR/NPS/NQR/
NQS models



To open the door, pull the inside door handle.
To close the door, pull the pull handle.

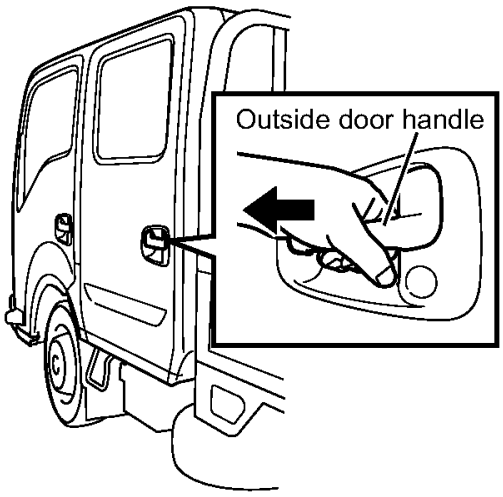
ADVICE

- Before leaving the vehicle, be sure to stop the engine and lock the doors. Never leave the key behind the door.

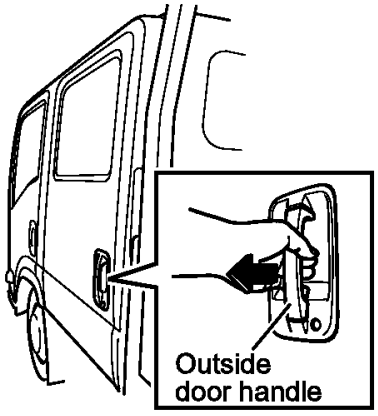
Opening and Closing the Rear Doors (Crew Cab Model)

Opening the Door from Outside

NJR model

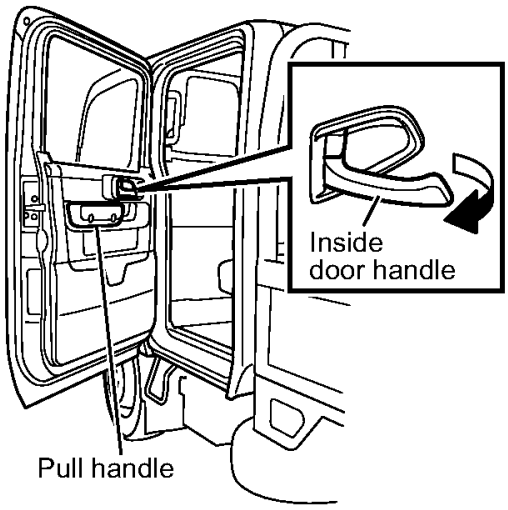


NMS/NNR/NPR/NPS/NQR/NQS models



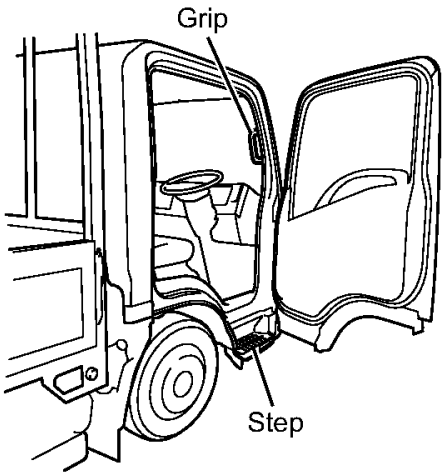
To open the door, pull the outside door handle.

Opening and Closing the Door from Inside



To open the door, pull the inside door handle.
To close the door, pull the pull handle.

Grips and Steps



Carefully check that the area around the vehicle is safe, hold the grip, and place your foot on the step when getting in or out of the vehicle.

⚠ CAUTION

- **When getting in or out of the vehicle, make sure you use the grip and step to always support yourself from at least 3 points. It is very dangerous to stand on the tire or wheel when getting in or out of the vehicle.**
  Furthermore, do not try to jump in or out of the vehicle, as doing so could cause unexpected accidents or injuries.
- **Getting in or out of the vehicle with oily or greasy hands or shoes could cause you to slip. Always thoroughly clean grease etc. from your hands and shoes before getting in or out of the vehicle.**
- **Rain and snow can cause the step to become very slippery. Therefore, always remove snow and ice from your shoes and the step, and be careful not to slip when getting in and out of the vehicle.**
- **Exercise caution when opening or closing doors, as strong winds or steep slopes may cause doors to open or close suddenly.**

ADVICE

- Do not hold parts other than the grip when getting in or out of the vehicle. Doing so may cause damage to the vehicle or injuries to yourself or others.

Seats

The driver's seat must be adjusted so that when you sit well back in the seat, you can fully depress the pedals without moving your back from the seatback, and you can operate the steering wheel easily and freely. After making adjustments, check that the seat is completely locked.
Adjusting the seat for a correct driving posture is a fundamental part of safe driving.

Make sure you can turn the steering wheel easily.



Make sure you do not need to move your shoulders off the seatback.

Make sure you can properly fasten the seat belt.

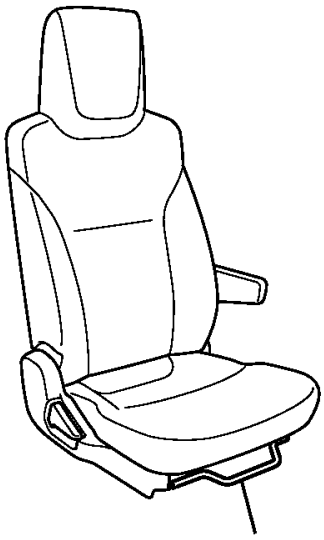
Make sure you can adequately press the pedals.

⚠ WARNING

- **Use caution when adjusting the seat, as failure to do so could cause injury.**
- **Never allow children to adjust their seats themselves; an adult should adjust the seat for occupants who are children.**
- **Adjust the seat only before you start driving. Adjusting the seat while the vehicle is in motion must be avoided not only because the unlocked seat will move back and forth unstably, preventing you from taking the correct position, but might also cause you to lose control of the vehicle, possibly resulting in an accident.**
- **Try to move the seat without unlatching it after making adjustments to check that it is completely locked. A loosely locked seat may move unexpectedly and your position might then become unstable; this could lead to an accident. Take the vehicle to your Isuzu Dealer for service if you find that your seat adjusters do not latch. In addition, the seat belt will not operate properly if the seatback is not completely locked.**
- **Driving with the seat excessively reclined could be very dangerous in a collision or sudden stop. Raise the seatback, and wear the seat belt correctly while sitting well back and straight up in the seat.**
- **Do not place a cushion or similar object between your back and the seatback. Doing so not only affects the stability of your driving position but also prevents the seat belt from working effectively in the event of a collision.**
- **Do not place any objects under the seat. If there are any objects under the seat, the seat could be locked in an improper position.**
- **Before making adjustments, check that the seat rails are free of anything that could obstruct the locking of the seat. Be careful that your hand or foot does not become trapped in the seat or rails when adjusting the seat.**
- **When you adjust the seat, be careful that the seat does not hit passengers or objects. Doing so could cause injury to passengers, or damage objects.**
- **Make sure not to hit a passenger or luggage with the seat when adjusting your seat.**

Driver's Seat

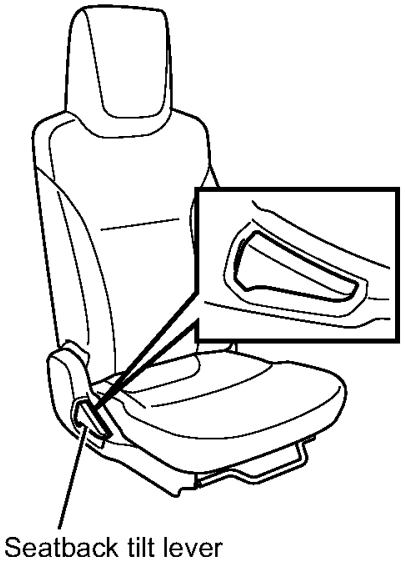
Forward/Backward Adjustment



Fore-aft position adjustment lever

While raising the lever, move the seat forward or backward. Release the lever when the seat is in the desired position. After making adjustments, try to move the seat back and forth to check that it is fully locked.

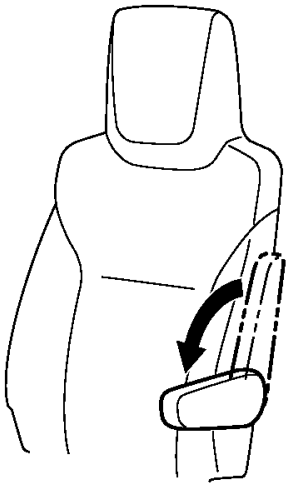
Reclining Adjustment



Seatback tilt lever

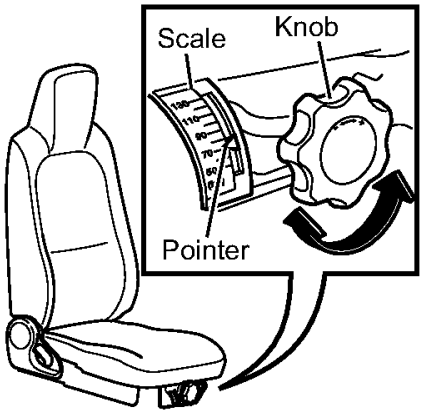
To recline the seatback, raise the seatback tilt lever and gently lean back to the desired position.
To move the seatback forward, lean forward with your back slightly clear of the seatback and raise the lever.
After making adjustments, check that the seatback is fully locked.

Armrest [V]



This is a folding armrest. Raise the armrest when it is not in use.

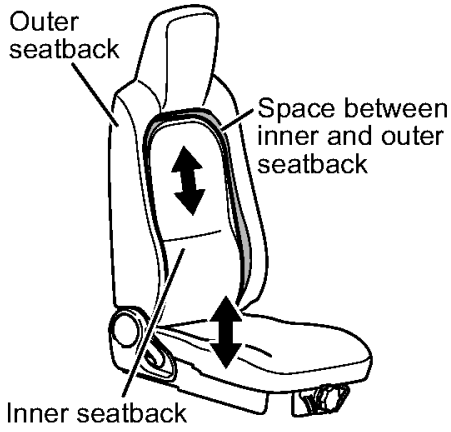
Suspension Adjustment [V]



Before sitting on the seat, use the knob to adjust the suspension to suit your weight. Turn the knob clockwise to move the pointer down the scale and counterclockwise to move it up the scale. The pointer should be alongside your weight on the scale.

ADVICE

- Avoid making any kind of contact with the pointer on the scale. Doing so may result in damage to the pointer, preventing appropriate weight adjustments from being possible.
- Avoid inserting fingers or objects between the inner and outer seatback, as doing so may prevent the seat suspension from operating properly.



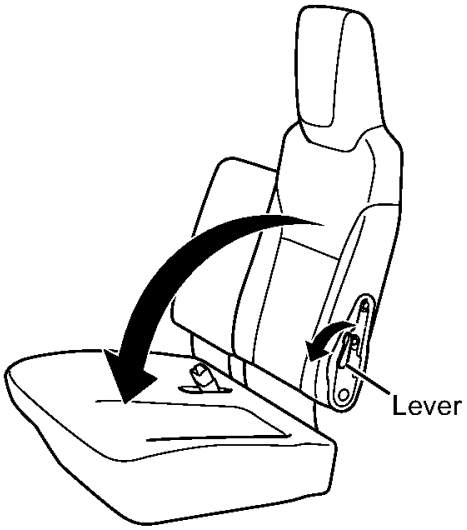
NOTE

- The range of adjustment is 50 - 130 kg. If your weight is outside this range, the suspension may not be fully effective. However, you will be able to sit in the correct position for driving.

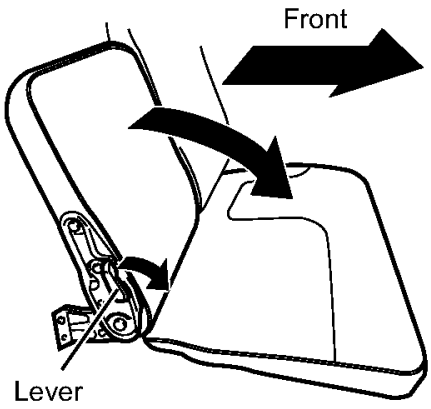
Passenger Seat/Center Seat [V]

You can tip the seatback forward if you pull forward the lever at the side of the seatback. Normally, you should keep the seatback in the raised position.

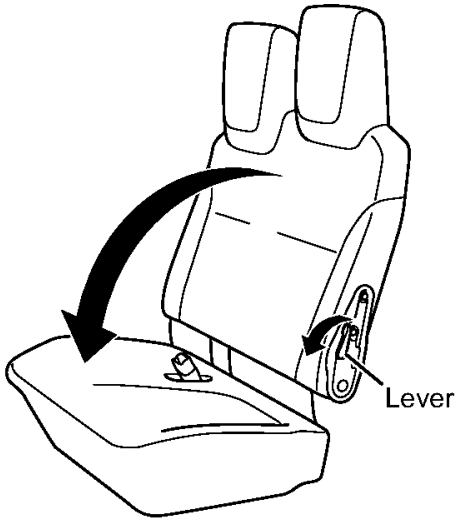
Passenger's seat (separate type)



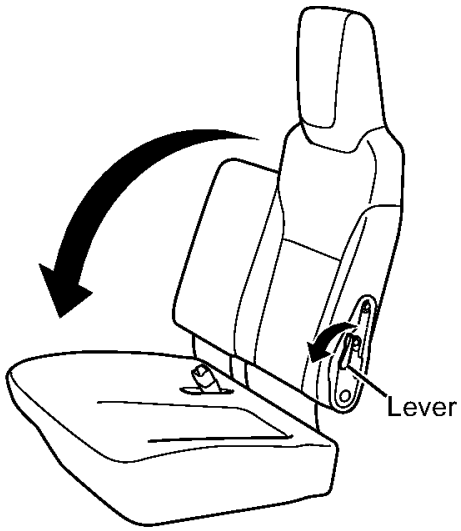
Center seat



Passenger's seat (integrated type, with center seat headrest)



Passenger's seat (integrated type, without center seat headrest)



⚠ CAUTION

- **Baggage must not be placed on the center seat. If the baggage falls on the floor when the vehicle is braked, it may prevent the driver from operating the pedals.**
- **Be careful that the seat belt is not pinched when reclining the seat or returning it upright.**

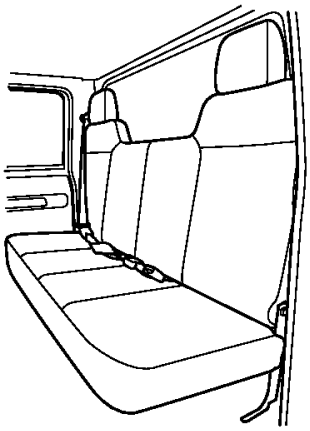
Rear Seats [V]

CAUTION

- **Do not drive with the seat cushion removed. The seat would not be stable, which could lead to an accident.**

NOTE

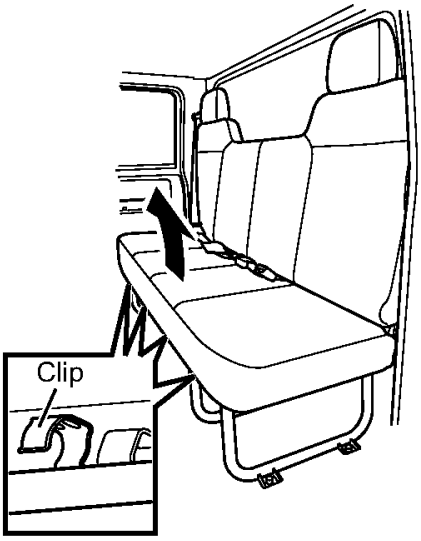
- The rear seat headrests are not adjustable.
- Do not use the rear seats with the headrests removed during driving.



Remove the rear seat to take out the tools or to put them back.
Do not remove the seat cushion except when taking out or stowing onboard tools.

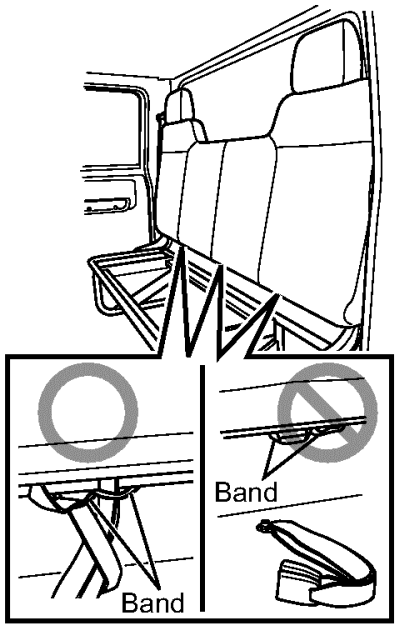
Refer to page
7-5 Tools

How to Remove the Rear Seat



CAUTION

- **When installing the seat cushion, make sure that the clips (4 places) on the underside of the seat cushion are securely fastened. If they are not securely fastened, then the seat will be unstable and may cause an unexpected accident while driving.**
- **When returning the seat cushion, make sure that the buckle and latch plate of the seat belt are not disengaged from the band on the back of the seat, and that the buckle and latch plate are protruding from the seat cushion.**



1. Pull up the front side of the seat cushion and remove the seat cushion.
2. When installing it, perform the removal procedure in reverse order.
   If the seat belt buckle or latch plate have become detached from the band on the back of the seat, refer to "When the Buckle or Latch Plate Has Become Detached" to return it to the seat cushion.

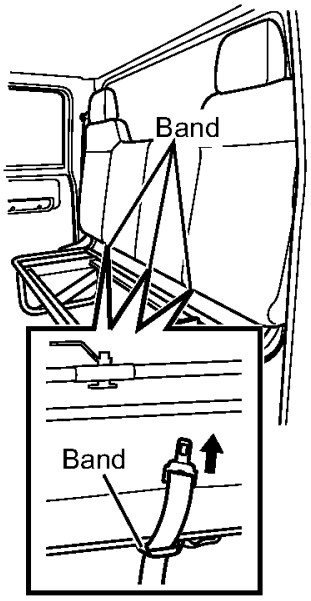
Refer to page
2-42 When the Buckle or Latch Plate Has Become Detached

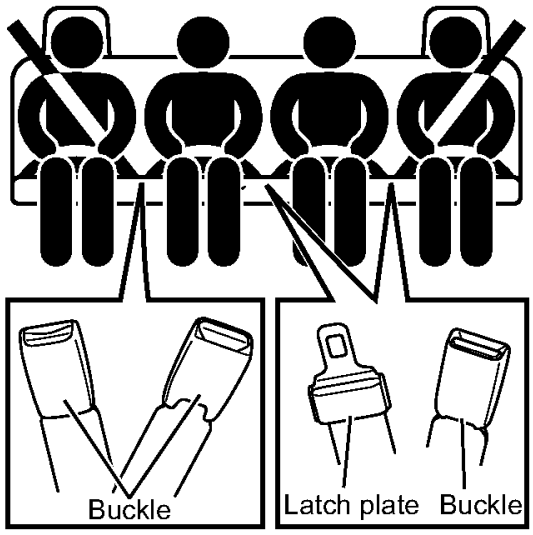
When the Buckle or Latch Plate Has Become Detached

Put the buckle and latch plate through the band at the bottom of the seatback and return the seat cushion to its original position. The positions through which to pass the buckles and latch plates varies according to the number of places to sit on the seat.

CAUTION

- **The buckles and latch plates must be installed in the correct arrangement. If you install the seat belts in the wrong arrangement or in the wrong positions, you will not be able to fasten the seat belts securely, which could lead to an injury.**



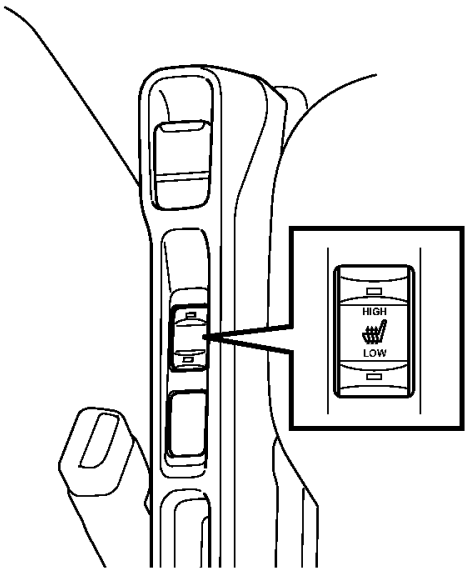


- In the driver side band, pass the buckle toward the outside of the vehicle, and the latch plate for the center seat toward the inside of the vehicle.
- In the center band, pass the latch plate for the center seat toward the right side of the vehicle, and the buckle for the center seat toward the left side of the vehicle.
- In the passenger side band, pass the buckle toward the outside of the vehicle and the buckle for the center seat toward the inside of the vehicle.

NOTE

- The buckle of the center seat has "CENTER" printed on it.

Seat Heater [V]



This is used to warm the driver's seat in cold weather. It can be used when the starter switch is in the "ON" position. The seat heater is operated by pressing the "HIGH" (strong) or "LOW" (weak) side. At this time, the indicator light on the pressed side comes on. To stop it, place the switch in the middle position.
HIGH: Use this when you want to quickly warm the seat. Switch to "LOW" after the seat has warmed up.
LOW: Use this to keep the seat warm.

CAUTION

- **Be aware that there is a risk of low temperature burns for the following people.**
  - **People with sensitive skin**
  - **People who are extremely tired**
- **To prevent overheating, use only genuine seat covers and do not cover the seats with blankets, cushions, or other things that have good heat retention.**

ADVICE

- Do not use the seat heater while the engine is stopped. The power consumption is very high, and could cause the battery to die.
- Do not place hard, heavy items on the seats, or pierce the seats with items with sharp projections, such as nails or needles. There is a chance that they could cause a disconnected wire in the heater.
- If water or juice is spilled on the seat, wipe it off quickly with a dry cloth.
- Do not spill water or juice on the switch.

NOTE

- The seat heater stops temporarily if it exceeds a certain temperature, then restarts when the temperature drops.

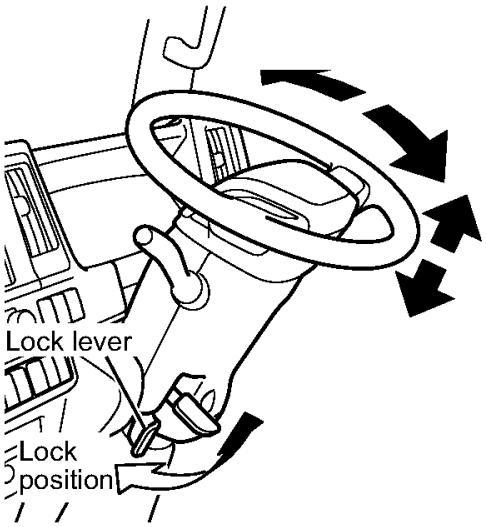
Fully Adjustable Steering

The steering wheel is adjustable up and down as well as forward and backward.

⚠ WARNING

- **After adjusting the steering wheel, try moving it up and down to make sure it is fully locked before you drive the vehicle.**
- **Adjust the steering wheel only when the vehicle is not in motion. Steering wheel adjustment on a moving vehicle is very dangerous, since a vertically moving steering wheel prevents the driver from properly controlling the vehicle.**

Adjusting the Steering Wheel Position



1. Lift the lock lever toward you to unlock the steering column.
2. Sit in the correct driving position, and then move the steering wheel up and down and forward and backward to select the optimum steering wheel position.
3. Firmly lock the steering wheel at the selected position by moving the lock lever to the lock position.

Mirrors

Sit in the correct driving position on the properly adjusted seat, and then check each mirror to ensure that it provides a proper view of the rear, the sides, the area just in front of the vehicle, and the area directly opposite to the driver's seat. Make adjustments if necessary and clean any dirty mirrors.

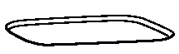
⚠ CAUTION

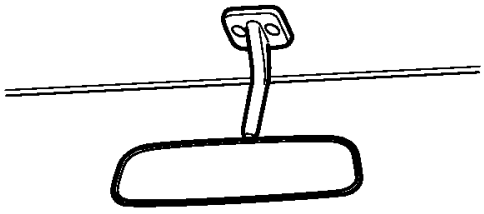
- **Adjust the mirrors when the vehicle is stationary, not while the vehicle is in motion.**

[Outside rearview mirrors]

- **When looking in the mirrors to see behind the vehicle while driving, your line of sight moves a lot, so be very careful that you are not distracted from the traffic ahead.**
- **Rearview mirrors may make the vehicle behind you appear farther away than it really is. Use these mirrors very carefully until you are able to correctly determine distances from the images.**
- **Keep the mirrors in mind when passing another vehicle on a narrow road, moving the vehicle into a garage or driving near pedestrians.**
- **There are blind spots that cannot be checked with the mirrors. Before pulling away, use not only the mirrors, but also look directly all around the vehicle to confirm that there are no people or obstacles.**
- **Do not drive with the mirrors folded.**
  Not being able to see behind with the mirrors may lead to an unexpected accident.
- **When driving in the rain, drops of water stick to the mirrors and reduce visibility to the rear. Before driving, use a towel to wipe off the drops of water.**

Inside Mirror [V]





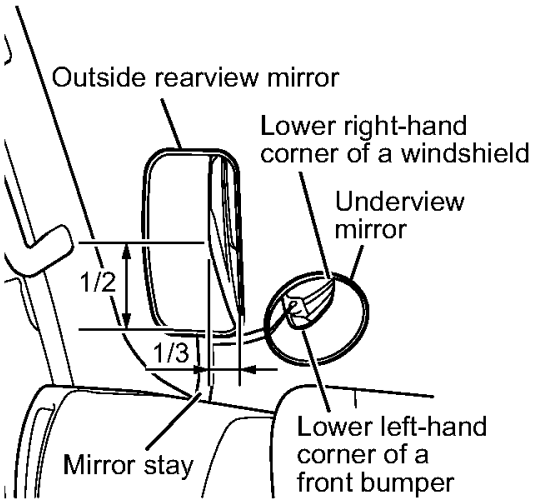
Adjustment

Move the mirror to a position where it provides a proper rear view.

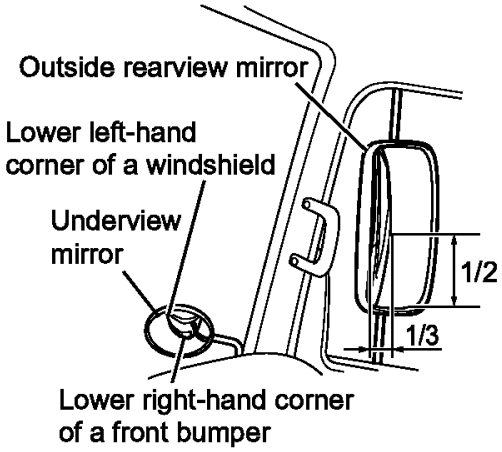
Outside Rearview Mirrors

After properly adjusting your seat for proper driving position, adjust the mirrors indicated below so that they provide adequate views for checking the rear, the side and the areas just in front and immediately to the side of the vehicle by moving each of the mirrors.

Pillar mirror



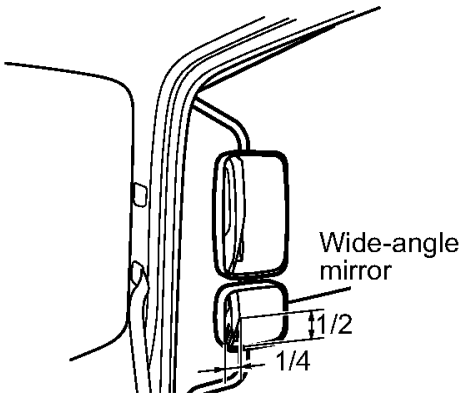
Door mounted mirror



Outside rearview mirror (pillar mirror type)
Lateral-direction: Adjust the mirror so that you can see an image of the vehicle's side within the inner one-third of the mirror. Vertical-direction: Adjust the mirror so that you see an image of the rear bottom corner of the door window halfway up the height of the mirror.

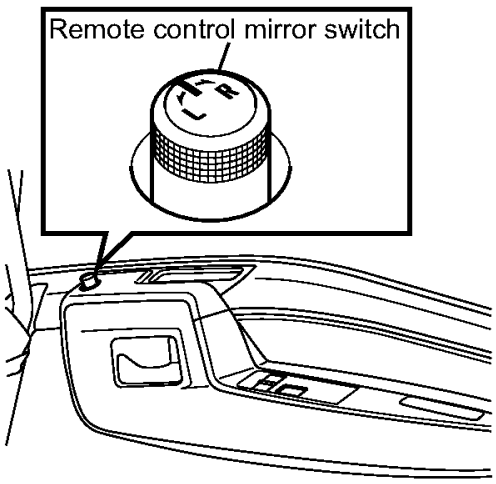
Outside rearview mirror (door mounted mirror type)
Lateral-direction: Adjust the mirror so that you can see the vehicle's side including the cargo bed within the inner one-third of the mirror.
Vertical-direction: Adjust the mirror so that you see the rear bottom corner of the vehicle halfway up the height of the mirror.

Underview mirror [V]
Adjust the mirror so that you see an image of the bumper's edge at the center of the mirror and the corner of the windshield along the upper edge of the mirror.



Wide-angle mirror [V]
(left-hand drive model only)
Lateral-direction: Adjust the mirror so that you can see the vehicle's side within the inner one-fourth of the mirror.
Vertical-direction: Adjust the mirror so that you see the rear bottom corner of the vehicle halfway up the height of the mirror.

Remote Control Mirror Switch [V]



The surface of the outside rearview mirror can be moved. This switch can be operated only when the starter switch is in the "ACC" or "ON" position.

Adjustment

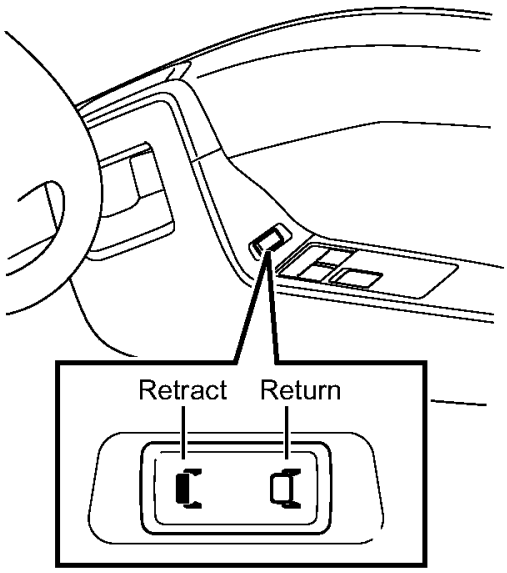
1. Turn the switch in the desired direction, "L (left)" or "R (right)".
2. Press the switch up, down, left, or right to adjust the angle of the outside rearview mirror.

ADVICE

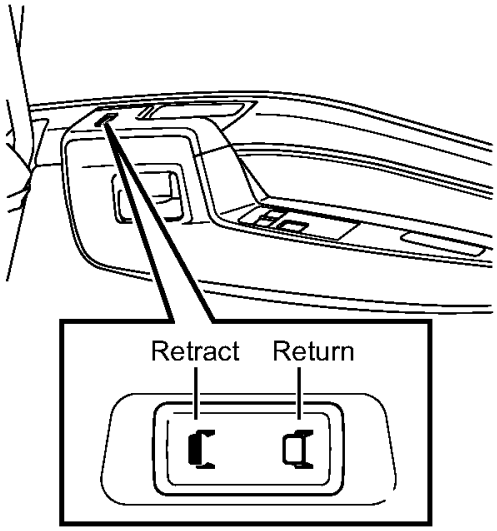
- Do not try to forcefully move the mirror surface by hand. Otherwise, the mirror motor may sustain damage.

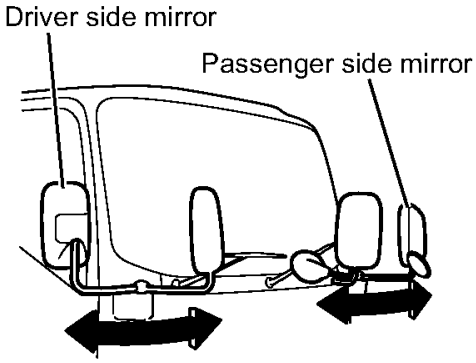
Retractable Power Mirror Switch [V]

NKR model



NMR/NMS/NPR/NPS models





The passenger side and driver's side mirrors retract inwards. Retract or return the mirrors to its position following the switch illustrations.

⚠ CAUTION

- **Do not operate the retractable power mirrors while driving as this is dangerous and could cause an accident.**
- **Do not touch the mirrors with a hand while the mirrors are moving. It could cause your hands to be pinched or a mirror malfunction.**
- **If the mirror hits an obstacle while moving, it may stop in that position. In such cases, remove the obstacle first then press the switch again.**

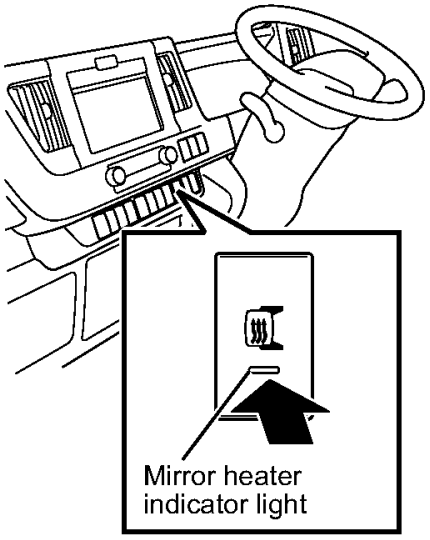
ADVICE

- When moving the mirror manually, do not use more force than necessary.
- Although the retractable power mirror can be moved manually as well, we recommend that you electrically move the mirror to prevent malfunction.
- If the mirror stay does not lock in its original position when operated manually, use the retractable power mirror switch to return it to its original position.

NOTE

- The retractable power mirror switch is active only when the starter switch is in the "ACC" or "ON" position.

Mirror Heater Switch [V]



Use the mirror heater to defrost the mirror surface. With the starter switch in the "ON" position, press the mirror heater switch to turn on the mirror heater. The mirror heater indicator light (amber) comes on. Press the switch again to turn it off. The mirror heater indicator light goes out.

ADVICE

- Do not use the mirror heater while the engine is not running. The mirror heater consumes a lot of electricity and could discharge the battery completely.
- Turn off the switch promptly after the mirror is defrosted.

Windows

Power Windows

The power windows operate only when the starter switch is in the "ON" position. Open each door window by pressing the power window switch; close each one by raising the switch.

WARNING

- **Before closing the windows, make sure that there is no risk of a hand, head or anything else being trapped in the moving window. Failure to do so could result in serious injury. This is especially true when a child is with you.**

ADVICE

- Do not apply excessive force or weight, such as by grabbing the door window to open or close the doors. If you do, the glass or internal components of the door could be damaged.
- If a door window is left open in rainy weather, water may get on the switches and cause a malfunction. Close the windows when it rains.

Window Switches on Driver's Door

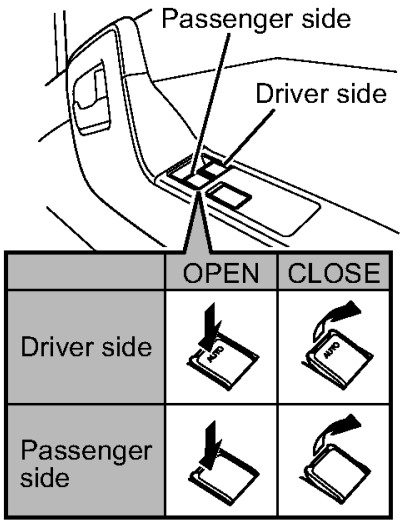
ADVICE

- Doing the following operations may activate the protection circuit to prevent the windows from moving, but operations will become possible again in a short time.
  - Opening and closing the door windows repeatedly
  - Continuing to operate a switch even though the window is fully open or closed

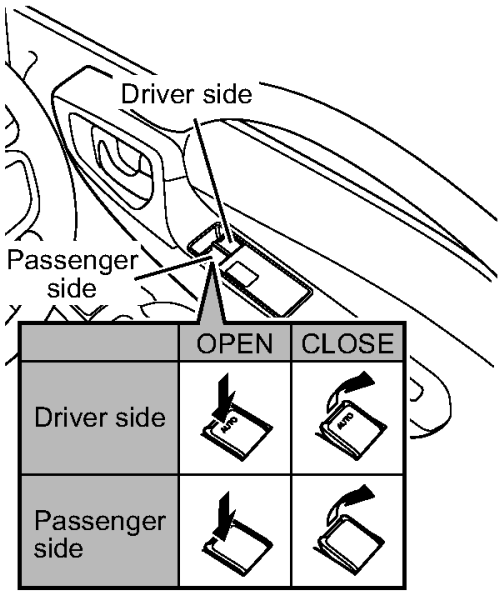
NOTE

- In cold weather, the door windows may temporarily not open in auto mode. If this happens, open them in manual mode.

NJR/NKR models



NLR/NMR/NMS/NNR/NPR/NPS/NQR/ NQS models



To open the driver's window

Lightly pressing the driver-side window switch will lower the driver's window until the switch is released (manual mode operation). When the switch is firmly pressed, the window will lower completely without the need to press the switch continuously (automatic mode operation). If you want to stop the automatic movement of the window before it lowers completely, pull the switch lightly.

To close the driver's window

Lightly pulling the driver-side window switch will cause the driver's window to move up until the switch is released.

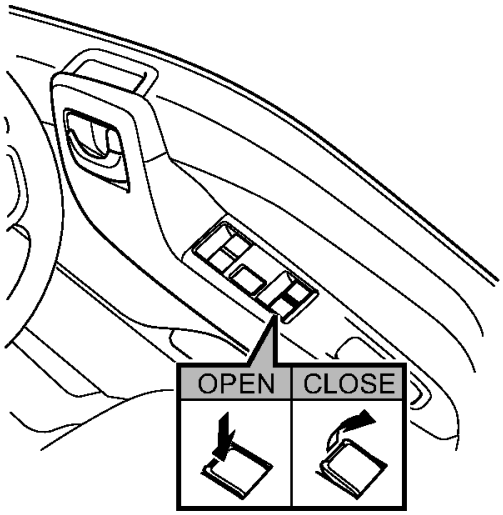
To open the passenger's window

The passenger's window continues to lower while the passenger-side switch on the driver's door is being pressed.

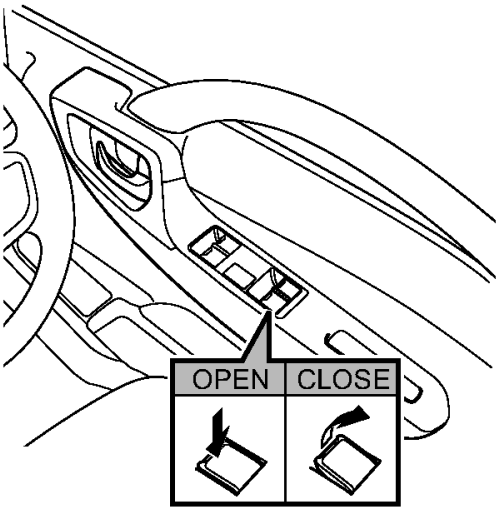
To close the passenger's window

The passenger's window continues to move up while the passenger-side switch on the driver's door is being pulled.

NJR model



NMS/NNR/NPR/NPS/NQR/NQS models



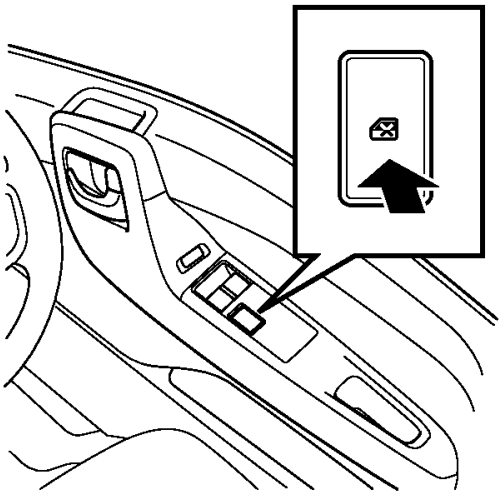
To open a rear window (crew cab model only)

The rear window continues to lower while the switch is being pressed.

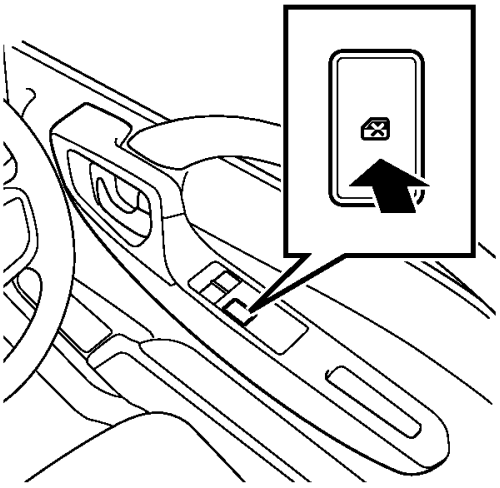
To close a rear window (crew cab model only)

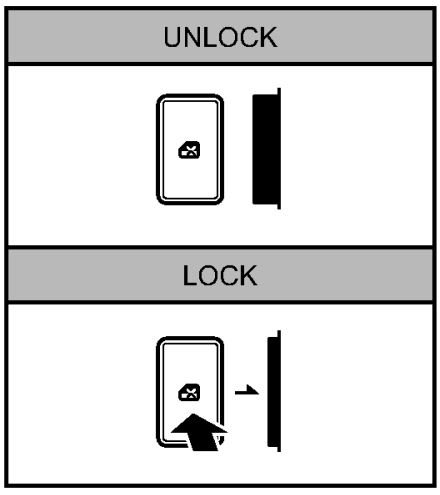
The rear window continues to move up while the switch is being pulled.

NJR/NKR models



NLR/NMR/NMS/NNR/NPR/NPS/NQR/
NQS models





To lock passenger's and rear power windows

If you push the power window lock switch, only the driver's window will be openable. To cancel the power window lock, push the switch again. Use the power window lock switch to lock the passenger's power window and rear power windows (crew cab model only). By doing so, you can prevent passengers from operating the power window(s).

⚠ CAUTION

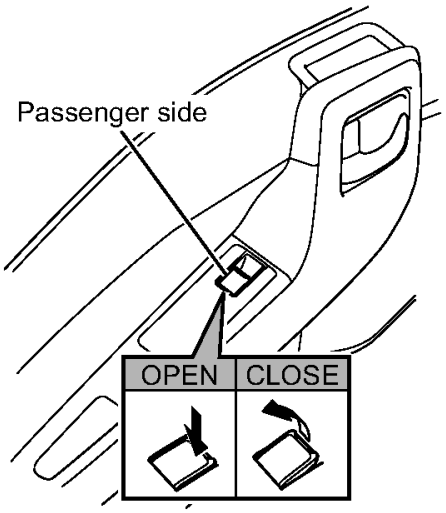
- **When children are riding in the vehicle, put the power window lock switch in the lock position. This can prevent accidents caused by children operating them incorrectly.**

Window Switches on Passenger's Door and Rear Doors

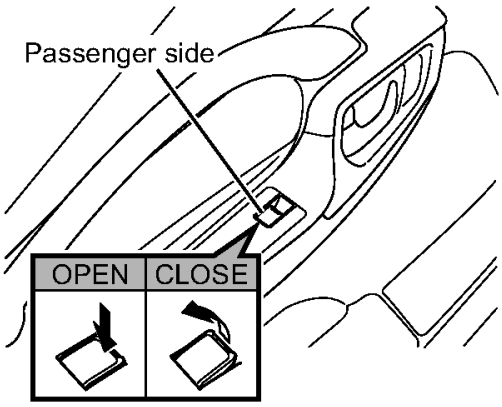
⚠ CAUTION

- **Be sure to warn passengers, especially in the case of a child, not to let any part of the body become trapped or caught in a moving window.**

NJR/NKR models



NLR/NMR/NMS/NNR/NPR/NPS/NQR/
NQS models

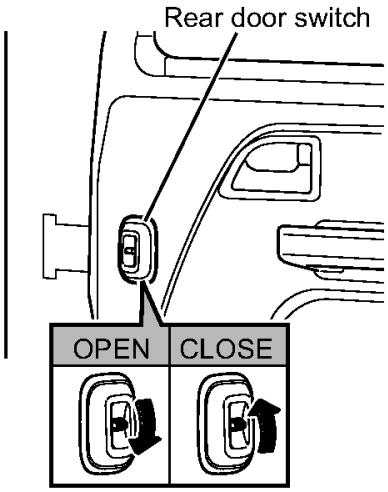


To operate the passenger's window

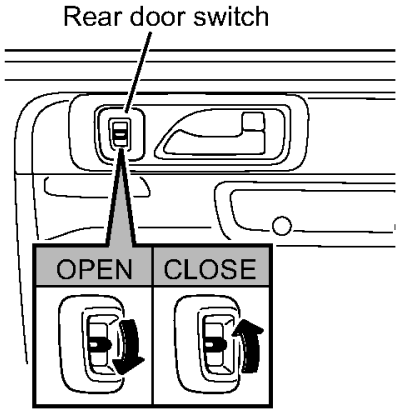
The power window switch on the passenger's door can raise and lower the passenger's side window.

The window continues to lower while the window switch is being pressed and continues to rise while the switch is being pulled. It will stop moving at any position when the switch is released.

NNR/NPR/NQR models



NJR/NMS/NPS/NQS models



To operate a rear window (crew cab model only)

The rear power window switches can raise and lower the rear door windows.

The window continues to lower while the window switch is being pushed down and continues to rise while the switch is being pushed up. It will stop moving at any position when the switch is released.

NOTE

- When the power window lock switch is in the "LOCK" position, it is not possible to open and close the rear windows.

Fuel Tank Filler Cap

Use the Specified Fuel

CAUTION

- **Be sure to use extra-low-sulfur diesel fuel (containing sulfur of 10 ppm or lower).**
- **The use of a poor-quality diesel fuel, mixing such an additive as water remover to the fuel in the tank, or filling the tank with gasoline, kerosene or an alcohol-based fuel or its mixture with a diesel fuel will badly affect the fuel filter and result in lubrication problems in fuel-lubricated components of the injectors. In addition, this practice can also impair the operation of the engine and the diesel particulate defuser (DPD), the urea selective catalytic reduction (SCR) system, the exhaust emission cleaning system, possibly leading to breakdown of the engine-related systems. If an incorrect fuel should accidentally be added, drain all fuel from the system. Failure to observe this precaution can result in a fire or permanent damage when the engine is started.**
- **Using diesel fuel other than extra-low-sulfur diesel fuel or low-sulfur diesel fuel in a model conforming to Japan post-post new long term regulation emission standards could prevent the vehicle from complying with local legal requirements. Using diesel fuel other than extra-low-sulfur diesel fuel in a model conforming to EuroVI emission standards could prevent the vehicle from complying with local legal requirements.**
- **Open the fuel tank filler cap slowly. If you open it quickly, fuel may spurt out.**



NOTE

- The specifications of diesel fuel differ according to the season and region.

Refer to page
4-47 Handling Fluids, Lubricants and Diesel Fuels in the Winter and in Cold Regions

Using Self-service Filling Stations

⚠ WARNING

[Be sure to obey the following instructions when refueling the vehicle]

- **Stop the engine and close the vehicle's doors and windows.**
- **Keep cigarettes and other flames away from the vehicle.**
- **Before opening the fuel tank filler cap, touch a metallic object to discharge static electricity from your body. If you have a static charge buildup on your body while refueling the vehicle, a spark caused by its discharge could ignite the fuel, resulting in burns.**
- **When filling, place the nozzle deeply into the fuel tank. If you try to fill more fuel by pulling out the nozzle from the fuel tank, the fuel may spill out, thus causing danger.**
- **All parts of the refueling procedure (from opening the fuel tank filler cap to completing the refueling and closing the fuel tank filler cap) must be performed by the same person.**
  Other people may be carrying static electricity. Do not allow them to approach the fuel filler.
  The person performing the refueling procedure must not return to the seat in the cab part-way through the procedure. He/she could pick up another charge of static electricity by doing so.
- **Obey all cautions posted in filling stations**

⚠ CAUTION

[Caution when refueling the vehicle]

- **Be careful not to inhale fuel vapor when refueling the vehicle.**

Refer to page
2-58 How to Refuel

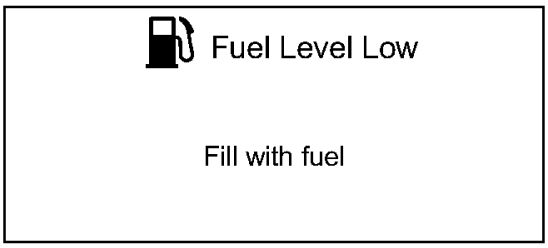
Refueling Timing

Check how much fuel is remaining with the fuel gauge and low fuel warning light, and refuel at suitable intervals.

Fuel Gauge

Refer to page
3-6 Fuel Gauge

Low Fuel Warning Light



This warning appears on the multi-information display when the fuel level in the tank becomes too low while the engine is running.

ADVICE

- If this warning appears on the multi-information display, add fuel at the earliest possible time.
- If the vehicle runs out of fuel, air bleeding procedure must be performed.

Refer to page
3-6 Fuel Gauge
11-14 When the Fuel Runs Out

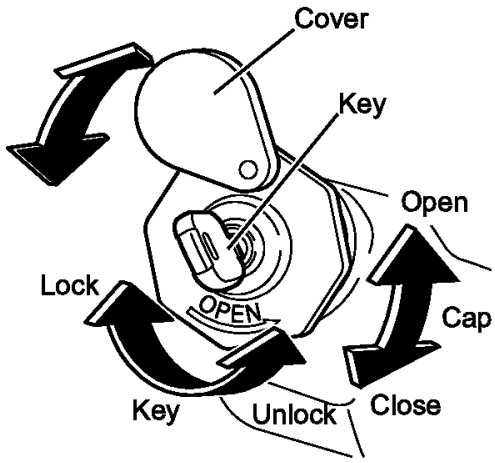
How to Refuel

WARNING

- **Be sure to place the starter switch in the "ACC" or "LOCK" position to shut down the engine before refueling the vehicle. Refueling while the engine is running could cause a fire in your vehicle.**
- **When refueling, never smoke or place any ignition source nearby. There is a risk of fire.**
- **Do not use any fuel tank filler cap that is not an Isuzu genuine part. The use of an improper fuel tank filler cap could cause fuel spillage in the event of an accident. The use of an improper fuel tank filler cap could also affect the fuel system and the emission control system.**

Refer to page
2-56 Use the Specified Fuel
2-57 Using Self-service Filling Stations

1. Eliminate static from your body before opening the fuel tank filler cap.



2. For a fuel tank filler cap with a key lock, open the cover, then firmly insert the key and turn it to the "OPEN" position.
3. Slowly turn the cap counterclockwise to open it.

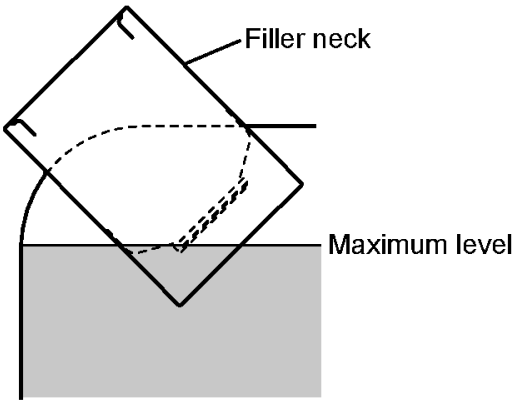
⚠ CAUTION

- **Be sure to slowly open the fuel tank filler cap. If you open it quickly, fuel may spurt out.**

4. Refuel the tank.

⚠ WARNING

- **Do not refuel beyond the maximum level of the fuel tank (if the vehicle is equipped with a flap).**



5. Securely screw the fuel tank filler cap onto the fuel tank.
6. Turn the key to the "CLOSE" position to lock the fuel tank filler cap.
7. Pull the key out, then make sure the fuel tank filler cap is securely closed.

⚠ WARNING

- **Be sure to wipe off the fuel that is spilled at refueling.**
- **If the fuel tank filler cap is not tightly closed, leaking fuel could start a fire while driving.**

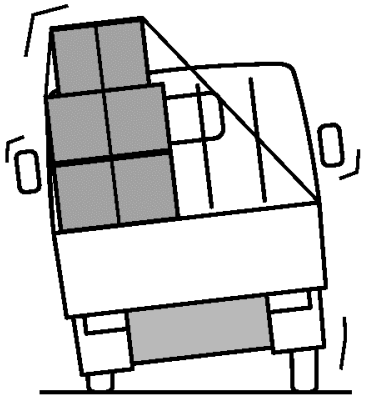
ADVICE

- When opening or closing the fuel tank filler cap, be sure to grasp the fuel tank filler cap itself, not the key. If you try to turn the fuel tank filler cap using the key, you could damage the key.
- Wipe off the key to remove any dirt or dust, etc. after pulling it out.

Cargo Bed [V]

Loading and Unloading

Load Cargo Correctly



WARNING

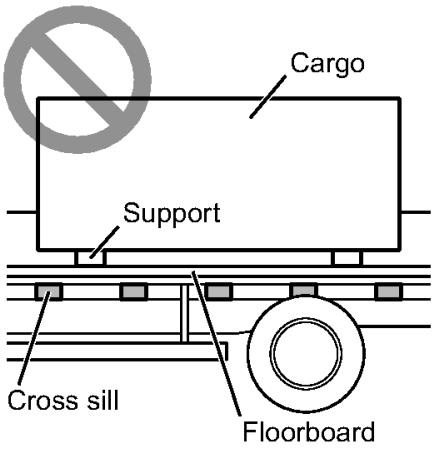
- **Overloading can result in an accident because it places too much strain on the wheel bolts with the result that they break and the wheels come off.**

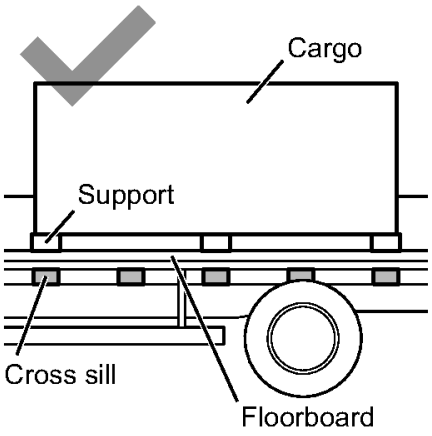
CAUTION

- **The weight of the payload must be limited within the gross vehicle mass (GVM) rating and distributed over the front and rear axles so as not to exceed the axle capacities.**
- **It is extremely dangerous to overload the vehicle or to load the vehicle with the cargo positioned on one side. Load the vehicle correctly, observing the maximum loading capacity.**
- **Incorrect loading can make the cargo unstable. It can also cause an overload condition confined to a small area, resulting in damage to the cargo bed and frame.**
- **Overloading places undue strain on vehicle parts. It can shorten the vehicle's service life and cause an accident.**

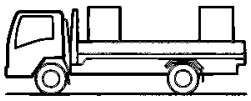
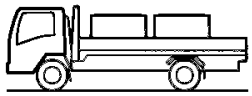
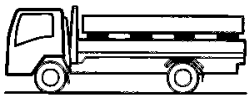
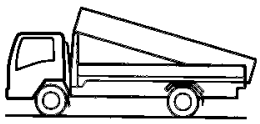
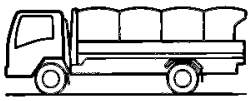
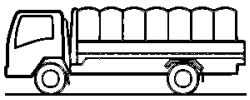
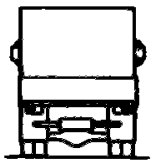
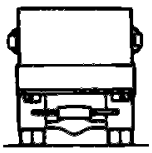
ADVICE

- When using supports under the cargo, place the supports on top of the cross sills. If supports are placed on areas without the cross sills, the floorboard may get damaged.

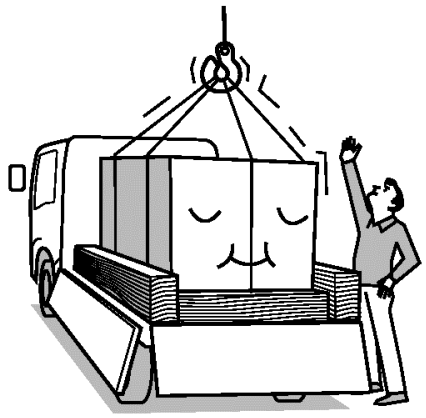




Loading Methods

Cargo loading caution	Incorrect	Correct
Do not place cargo only at the front or only at the rear. Distribute it evenly.		
When using supports under cargo, position them uniformly along the cargo.		
To the greatest extent possible, do not allow long cargo to protrude beyond the rear edge of the cargo bed. Rather, use supports to raise it at an angle. Avoid supporting it using just the front guard frame and the rear edge of the cargo bed.		
Use ropes and tarpaulins to secure the cargo so it does not fall off the cargo bed. Use rubber bands or bungee cords to prevent the tarpaulins from flapping in the wind. Securely fasten tarpaulins with rubber tiedowns, or similar means, so that they do not block the air inlet opening.		
Avoid loading cargo too high. It can cause the vehicle to tip sideways when it catches sidewinds and when turning the vehicle.		

Loading Heavy Cargo



CAUTION

- **When the cargo is heavy, take steps to prevent it from slipping and secure it with wire cables.**

Loading Farming Equipment



CAUTION

- **The frame may become deformed when farming equipment is loaded from the rear of the cargo bed. In addition, the frame may become deformed even when loading farming equipment that has a weight under the maximum loading capacity.**

NOTE

- When loading farming equipment, a device for securing the cargo bed is required. Use a car carrier or attach a rear support stand. If you have any questions, contact an Isuzu Dealer.

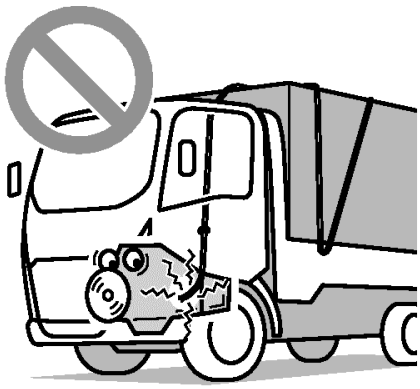
Do not Secure Cargo Too Tightly



ADVICE

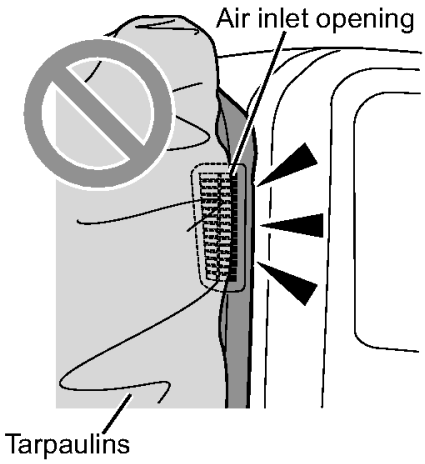
- To prevent cargo from falling off the cargo bed, it is essential to secure it with ropes and tarpaulins. However, securing it too tightly can damage the cargo bed's gates and front guard frame.

Make Sure There is No Flammable Material between the Cab and Cargo Bed



WARNING

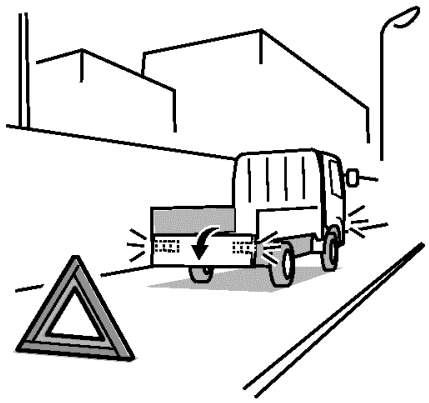
- **Be careful not to allow the ends of ropes or edges of tarpaulins to come lower than the heat protector at the back of the cab. During vehicle operation, the engine's heat could set them on fire. Carefully secure the ends of ropes and edges of tarpaulins.**



ADVICE

- Securely fasten tarpaulins with rubber tie-downs, or similar means, so that they do not block the air inlet opening. If the air inlet opening is blocked, then air intake is not possible, or in rainy weather a large amount of rainwater can get in due to the tarpaulins, resulting in engine problems, such as a lack of power, increased frequency of DPD regeneration due to increased soot emissions, and damage to parts due to high temperatures during DPD regeneration.

Unloading Cargo

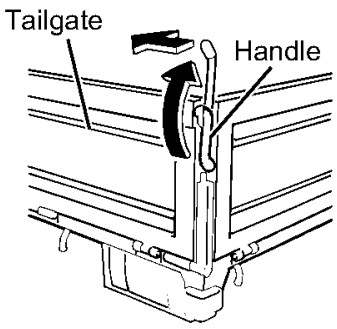


CAUTION

- **When you load or unload cargo at the roadside and the cargo bed's gates or other body parts obscure the taillights, stop lights, hazard warning flashers, turn signal lights and/or reflectors, be sure to warn other drivers and passersby by placing signs or emergency warning triangles where they are easy to see.**
- **When you load or unload cargo at the roadside, select a place where stopping and parking are allowed and other drivers and passersby will not be inconvenienced.**

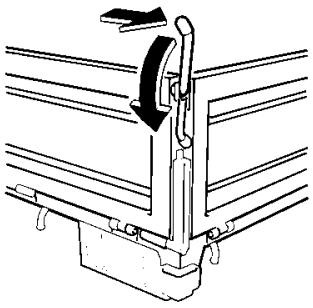
Flat Cargo Bed

How to Open the Tailgate



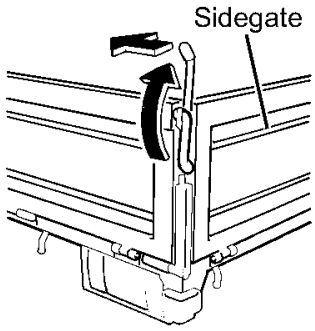
Turn the left and right handles upward, and then press inward to unlock and open the tailgate.

How to Close the Tailgate

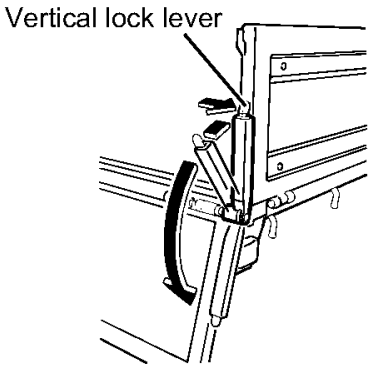


Close the tailgate, pull the left and right handles outward, and then turn them down to lock.

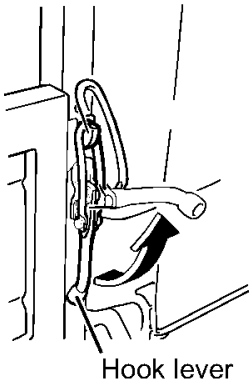
How to Open the Sidegates



1. Open the tailgate.

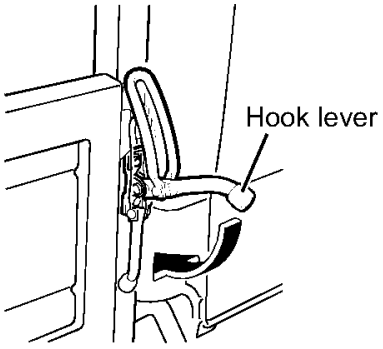


2. Push the vertical lock lever outward to unlock the vertical lock, and then lower the lever.



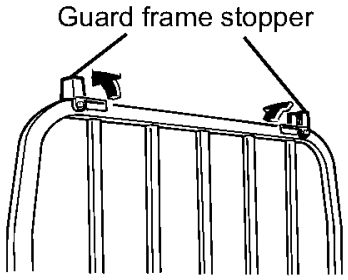
3. Unlock the hook lever lock on the cab side of the gates on both sides.

How to Close the Sidegates



Perform the opening procedure in reverse order.

Guard Frame Stoppers



This is used to prevent cargo from skidding when securing cargo on the guard frame.

⚠ CAUTION

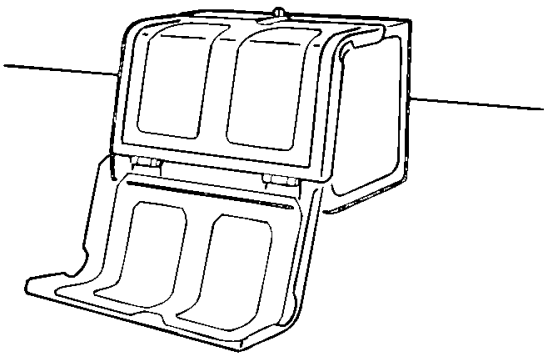
- **Do not put too much weight or force on the guard frame when securing cargo.**

Raise the guard frame stoppers.

Tool Box [V]

⚠ CAUTION

- **Securely close the tool box so the lid does not come open while the vehicle is moving.**



The tool box is located on the vehicle's outer chassis (either in the middle or near the rear).

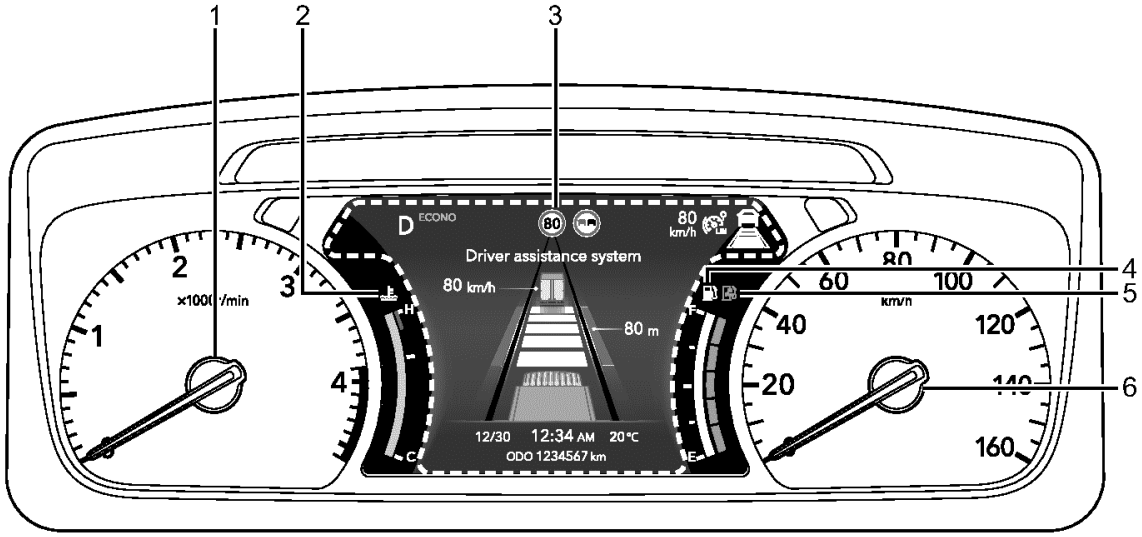
How to Read the Instruments 3

- Instruments Layout 3-2
- Speedometer 3-3
- Tachometer 3-3
- Air Pressure Gauge [FAB] 3-4
- Engine Coolant Temperature Gauge 3-5
- Fuel Gauge 3-6
- AdBlue® Level Gauge 3-7
- Instrument Panel Warning/Indicator Lights 3-8
- Understanding Warning/Indicator Lights 3-34
- Multi-information Display Functions 3-44

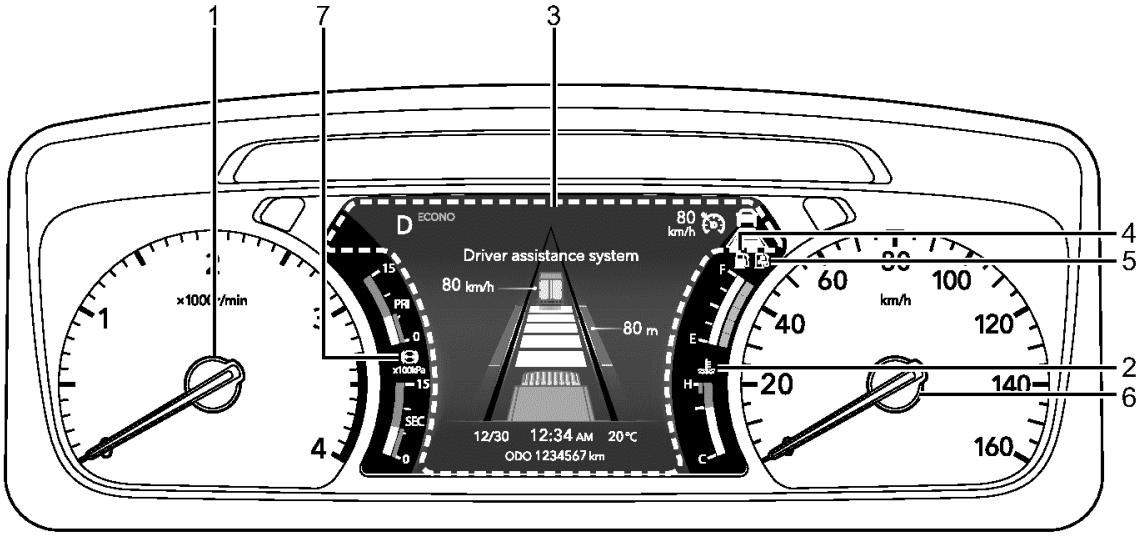
3-2 How to Read the Instruments

Instruments Layout

Hydraulic brake model

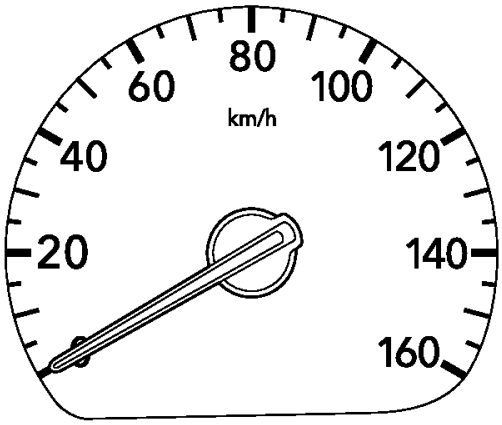


Full-air brake model



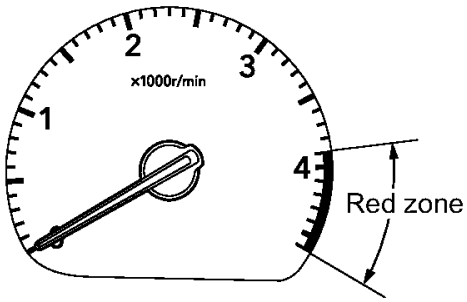
No.	Name	Reference page
1	Tachometer	3-3
2	Engine coolant temperature gauge	3-5
3	Multi-information display	3-44
4	Fuel gauge	3-6
5	AdBlue® level gauge	3-7
6	Speedometer	3-3
7	Air pressure gauge [FAB]	3-4

Speedometer



The speedometer indicates the vehicle speed in km/h.

Tachometer



The tachometer indicates the engine speed in revolutions per minute (r/min). (Graduation "1" on the scale indicates 1,000 r/min.) The red zone indicates a range of dangerous engine speeds beyond permissible levels. Do not drive your vehicle with the needle of the tachometer in the red zone.

The graduation and the red zone of tachometer are various depending on the models fitted.

Engine model	Red zone (r/min)
4HK1	3,300 - 4,000
4JZ1	3,900 - 4,600

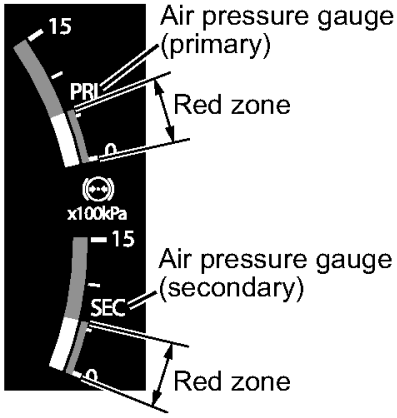
ADVICE

- Exercise extreme caution when shifting down on a steep downslope. The engine speed may easily exceed the critical speed, which can seriously damage the engine.

Refer to page
4-19 Driving Uphill or Downhill
4-100 Gearshift Lever

3-4 How to Read the Instruments

Air Pressure Gauge [FAB]



This gauge indicates the pressure of the compressed air in the air tank.

Proper air pressure range
780 - 890 kPa (8.0 - 9.1 kgf/cm²/**114 - 129 psi**)

If the gauges are in the red zone, "Low air pressure" will be shown on the multi-information display and the warning buzzer sounds (To stop the buzzer, engage the parking brake).
In such circumstances, immediately stop driving and engage the parking brake. Place the gearshift lever into "N" (model with a manual transmission); place the gearshift lever into "N", firmly press the brake pedal and confirm that the shift indicator shows "N" (model with a Smoother). Then, run the engine at idle to increase air pressure. If air pressure will not increase, or there is a great difference between the readings of the two gauges, or it takes time for the gauges to go up, contact the nearest Isuzu Dealer.

Refer to page
9-31 Checking Air Pressure [FAB]

Low air pressure

Low air pressure

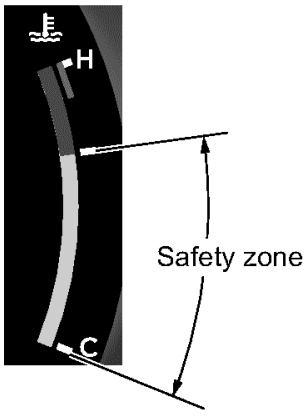
Fill with air

⚠ WARNING

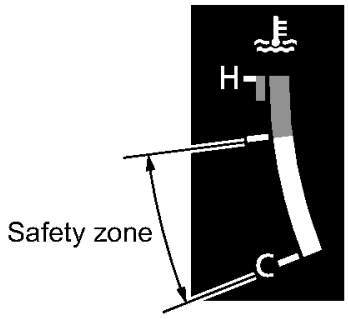
- **Do not drive your vehicle if the gauges are in the red zone or "Low air pressure" is shown on the multi-information display. Brakes are then not fully functional, and it is dangerous to operate the vehicle.**

Engine Coolant Temperature Gauge

Hydraulic brake model



Full-air brake model



Overheating

Stop in a safe place
Cool engine while idling

With the starter switch in the "ON" position, this gauge indicates the temperature of the engine coolant.
The display shows "C" for cool and "H" for hot. When the engine overheats, "Overheating" appears on the multi-information display and a warning buzzer sounds.
During operation, the gauge should stay in the safety zone.

ADVICE

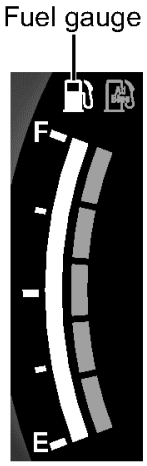
- If the gauge goes up above the upper limit of the safety zone and enters the "H" zone while you are driving, the engine is likely to overheat. Immediately pull safely off the road out of the way of any traffic and take the necessary actions to deal with engine overheating.
- If the gauge nears the "H" zone but is still in the safety zone, this is not a problem. But, check the engine coolant level in the reservoir at your next opportunity. Add engine coolant as required.
  The engine can seize up if it is stopped immediately after driving. Take appropriate actions for engine overheating.

Refer to page
10-12 Engine Coolant
11-25 When the Engine Overheats

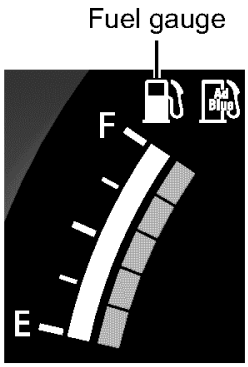
3-6 How to Read the Instruments

Fuel Gauge

Hydraulic brake model



Full-air brake model



With the starter switch in the "ON" position, this gauge indicates the approximate quantity of fuel remaining in the fuel tank. "F" means the tank is full while "E" means the tank is almost empty.

ADVICE

- If your vehicle has run out of fuel, air bleeding procedure must be performed.

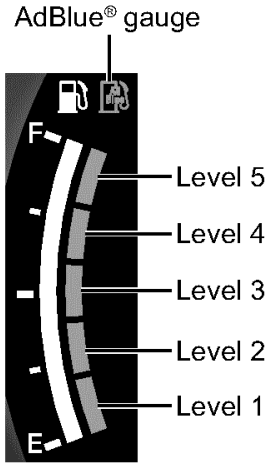
NOTE

- Make a habit of filling up the fuel tank well before it approaches empty.
- After filling up the fuel tank, it takes a while for the fuel gauge to stabilize after the starter switch is turned to the "ON" position.
- If the fuel tank is filled while the engine is off but the starter switch is in the "ON" position, the fuel gauge takes a while to show the correct reading. If so, turn the starter switch to the "LOCK" position and then to the "ON" position again.

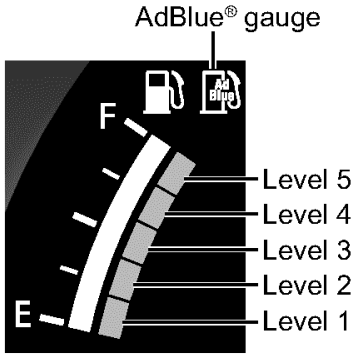
Refer to page
2-56 Fuel Tank Filler Cap
11-14 When the Fuel Runs Out

AdBlue® Level Gauge

Hydraulic brake model



Full-air brake model



This gauge indicates the approximate quantity of AdBlue® remaining in the AdBlue® tank. "F" means the tank is full and "E" means the tank is almost empty.
The amount of remaining AdBlue® is shown in 5 levels.

NOTE

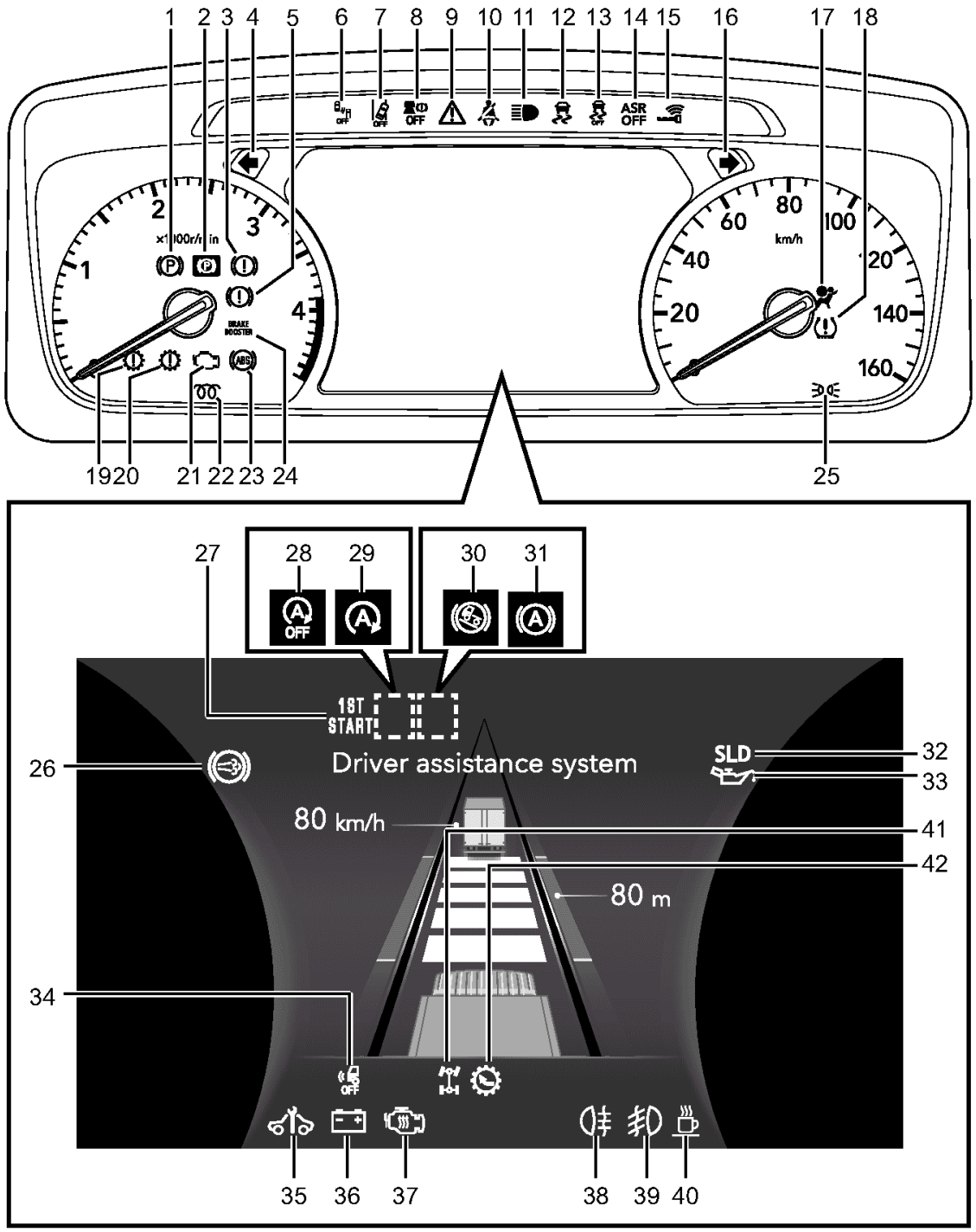
- The vehicle speed will be severely limited when the AdBlue® tank is empty, therefore be sure to add AdBlue® before the AdBlue® tank reaches empty.

AdBlue® tank usable capacity [Reference value]	
14 liter AdBlue® tank	**13.0 liters** (3.43 US gal./ **2.86 Imp gal.**)
16 liter AdBlue® tank	**12.9 liters** (3.41 US gal./ **2.84 Imp gal.**)

Refer to page
4-252 Handling of AdBlue®
4-252 Is a Specified AdBlue® Being Used?
4-262 Refilling AdBlue®

Instrument Panel Warning/Indicator Lights

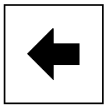
Warning/Indicator Light Overview

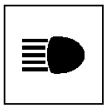
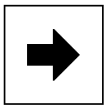


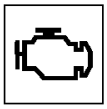
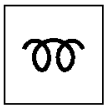
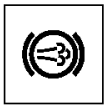
ADVICE

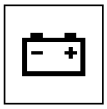
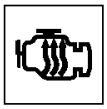
[What is operation check?]

- The lights turn on or flash during the systems checks when the starter switch is put in the "ON" position. If they remain on briefly or turn off after the engine starts, then the systems are normal. The warning lights/indicator lights with a "●" in the following table light at startup.
  If the light does not come on or does not turn off, there may be a problem with the system. Have the vehicle inspected at the nearest Isuzu Dealer.

No.	Symbol	Color	Name	Operation check	Page
1		Amber	Electric parking brake warning light [V]	●	4-86
2		Red	Parking brake warning light	—	4-78 4-85
3		Red	Brake system warning light	●	3-34
4		Green	Turn signal and hazard warning flasher indicator light - left	—	4-149
5		Amber	Brake system warning light [FAB]	●	3-34
6		Amber	BSM OFF indicator light [V]	●	5-31
7		Amber	LDWS OFF indicator light [V]	●	5-107
8		Amber	AEBS OFF indicator light [V]	●	5-17
9		Amber	Master warning light	●	3-41

No.	Symbol	Color	Name	Operation check	Page
10		Red	Seat belt warning light	—	1-4
11		Blue	High beam indicator light	—	4-148
12		Amber	ESC warning light	●	4-200
13		Amber	ESC OFF indicator light	●	4-205
14		Amber	ASR OFF indicator light	●	4-200
15		Red	Passive entry and start system warning light [V]	●	2-19
16		Green	Turn signal and hazard warning flasher indicator light - right	—	4-149
17		Red	SRS airbag warning light	●	1-12
18		Amber	Tire pressure monitoring system warning light [V]	●	4-283
19		Red	Smoother warning light [SA]	—	4-119
		Red	DCT warning light [DCT]	—	4-138
20		Amber	Smoother warning light [SA]	●	4-119
		Amber	DCT warning light [DCT]	●	4-138

No.	Symbol	Color	Name	Operation check	Page
21		Amber	Check engine warning light	●	3-39
22		Amber	Glow plug indicator light	—	4-57
23		Amber	ABS warning light	●	4-195
24		Red	Brake booster warning light [HB]	●	3-35
25		Green	Lights on indicator light	—	4-147
26		White/ Green/ Amber	Exhaust brake indicator light	—	4-192
27		Green	1st start mode indicator light [SA]	●	4-114
28		Amber	ecostop OFF indicator light [V]	—	4-65
29		Green	ecostop indicator light [V]	—	4-65
30		Green	HSA indicator light [V]	●	4-167
		Amber	HSA warning light [V]	●	4-166

No.	Symbol	Color	Name	Operation check	Page
31		Green	Auto brake hold indicator light [V]	●	4-180
		Amber	Auto brake hold warning light [V]	●	4-179
32		Green	SLD indicator light [V]	●	4-215
33		Red	Engine oil pressure warning light	●	3-36
34		Amber	Front blind spot monitor off indicator light [V]	●	5-32
35		Amber	SVS indicator light	●	3-40
36		Red	Generator warning light	●	3-38
37		Amber	Warm-up system indicator light [V]	—	4-62
38		Amber	Rear fog light indicator light [V]	—	4-152
39		Green	Front fog light indicator light [V]	—	4-151
40		Amber	Attention Assist warning light [V]	●	5-114
41		Green	4WD indicator light [V]	—	4-229

No.	Symbol	Color	Name	Operation check	Page
42		Green	Transfer LOW indicator light [V]	—	4-229

Multi-information Display

Warning and operation indicators

Main display	Color	Name	Description	Page
Regenratng DPD automtcly DPD automatic regeneration is performed	Green	Automatic regeneration of DPD in progress	DPD is being automatically regenerated.	4-239
Check selectable regen Checking selectable regeneration Please wait	Amber	Confirming selectable regeneration	System is checking if selectable regeneration of DPD is possible.	4-240
Regen DPD manually Stop the vehicle until regeneration is complete	Amber	Manual regeneration of DPD in progress	DPD is being manually regenerated.	4-240
DPD regeneration needed Stop in a safe place to perform DPD regeneration	Amber	Regeneration required warning light	Manual regeneration of DPD is needed.	4-240
DPD regeneration needed Stop in a safe place to perform DPD regeneration The engine may not be able to restart	Amber	Regeneration required warning light	Manual regeneration of DPD is needed.	4-240
Torque restricted Engine torque is restricted	Amber	Torque restricted	Engine torque is restricted. (Model conforming to EuroVI emission standards)	4-254
Vehicle speed restricted Vehicle speed is restricted	Amber	Vehicle speed restricted	Vehicle speed is restricted. (Model conforming to EuroVI emission standards)	4-255

Main display	Color	Name	Description	Page
Incorrect AdBlue AdBlue quality is abnormal Contact the dealer	Red	Incorrect AdBlue®	Quality of AdBlue® is abnormal. (Model conforming to EuroVI emission standards)	4-256
AdBlue level low Fill with specified AdBlue	Amber	AdBlue® level low	AdBlue® level is low and refilling is needed. (Model conforming to EuroVI emission standards)	4-253
Fill up AdBlue Fill with specified AdBlue Engine torque and vehicle speed are restricted if AdBlue is empty	Amber	Fill up AdBlue®	The remaining amount of AdBlue® is very low and refilling is needed. (Model conforming to EuroVI emission standards)	4-254
Critical emission fail Emission control system is abnormal Contact the dealer	Amber	Critical emission fail	There is an abnormality with the emission control system. (Model conforming to EuroVI emission standards)	4-256
AdBlue injection system AdBlue injection system is abnormal Contact the dealer	Amber	AdBlue® injection system	There is an abnormality with the urea SCR system. (Model conforming to EuroVI emission standards)	4-257
AdBlue dosing malfunction AdBlue is being consumed abnormally Contact the dealer	Amber	AdBlue® dosing malfunction	There is an abnormality with the AdBlue® consumption. (Model conforming to EuroVI emission standards)	4-258
Restart inhibited Engine cannot restart due to abnormal AdBlue quality Contact the dealer	Red	Restart inhibited	Quality of AdBlue® is abnormal and engine restart is prohibited. (Model conforming to Japan post-post new long term regulation emission standards)	4-261

Main display	Color	Name	Description	Page
Restart inhibited Engine cannot restart because AdBlue is empty Fill with specified AdBlue	Red	Restart inhibited	There is no AdBlue® remaining and engine restart is prohibited. (Model conforming to Japan post-post new long term regulation emission standards)	4-259
Incorrect AdBlue AdBlue quality is abnormal Contact the dealer	Red	Incorrect AdBlue®	Quality of AdBlue® is abnormal. (Model conforming to Japan post-post new long term regulation emission standards)	4-260
AdBlue level low Fill with specified AdBlue	Amber	AdBlue® level low	AdBlue® level is low and refilling is needed. (Model conforming to Japan post-post new long term regulation emission standards)	4-258
AdBlue injection system AdBlue injection system is abnormal Contact the dealer	Amber	AdBlue® injection system	There is an abnormality with the urea SCR system. (Model conforming to Japan post-post new long term regulation emission standards)	4-262
Fuel Level Low Fill with fuel	Amber	Fuel level low	Fuel level is low and refilling is needed.	2-58
Fuel filter Water has accumulated Drain the water from the fuel filter	Red	Water separator (pre-fuel filter)	Water needs to be drained from pre-fuel filter.	10-39
Overheating Stop in a safe place Cool engine while idling	Red	Overheating	Engine is overheated.	11-25

Main display	Color	Name	Description	Page
Release parking brake Depress brake pedal and move parking switch to release position	Amber	Release parking brake (electric parking brake)	An attempt is made to release the electric parking brake with the electric parking brake switch without depressing the brake pedal.	4-87
Parking brake error Depress brake pedal	Amber	Parking brake error	The vehicle starts moving while the parking brake is operating.	
Auto parkng brake active Parking brake is activated because driver is not detected in seat	Red	Auto parking brake active	The parking brake operates automatically because driver not seated conjunction.	
Parking brake applied Parking brake is operating	Red	Parking brake applied	Electric parking brake switch is pulled up while driving.	
Parking brake malfunction Abnormality is detected in electric parking brake system Contact the dealer	Amber	Parking brake malfunction	There is a malfunction in the electric parking brake system.	
Caution! Driver not seated HSA system is operating When releasing, apply the parking brake	Amber	Caution! Driver not seated (HSA)	A door is opened without pulling the parking brake while the HSA is activated.	4-167
Caution! HSA long operation HSA system is operating for a long time Apply the parking brake	Amber	Caution! HSA long operation	The vehicle is stopped a long time with the HSA activated.	4-167
Vehicle rolling Apply the parking brake	Amber	Vehicle rolling (HSA)	The vehicle starts moving during a stop using the HSA.	4-167

Main display	Color	Name	Description	Page
HSA abnormal Restart engine, if it appears again, contact the dealer	Amber	HSA abnormal	The HSA warning light or buzzer is activated for reasons other than those above.	4-167
Caution! Driver not seated AUTO HOLD is operating When you leave the seat, apply the parking brake	Amber	Caution, driver not seated (auto brake hold)	The door is opened without applying the parking brake while auto brake hold is engaged.	4-180
Vehicle rolling Apply the parking brake	Amber	Vehicle rolling (auto brake hold)	The vehicle is stopped and then starts moving while auto brake hold is engaged.	4-180
Depress brake pedal 	Amber	Depress brake pedal (auto brake hold)	The auto brake hold switch is pressed without depressing the brake pedal while auto brake hold is operating.	4-181
Parking brake operating 	Red	Parking brake operating (auto brake hold)	The auto brake hold continuously operated for a long time so switched to parking brake.	4-181
Brake hold system abnormal Stop in a safe place Restart engine if Brake Hold Error appears again Contact dealer	Amber	Auto brake hold system abnormal (auto brake hold)	The auto brake hold warning light or buzzer is activated other than those above.	4-181
Idling stop warning Put gearshift lever in neutral position and depress the clutch pedal	Amber	Idling stop warning (ecostop)	The driver shifts into gear while ecostop automatically stops the engine. (Manual transmission models)	4-65
Idling stop warning Start the engine by operating the key	Amber		The engine stalls, such as due to key operations, while ecostop automatically stops the engine.	

Main display	Color	Name	Description	Page
System abnormal Idling stop system is abnormal Contact the dealer	Amber	System abnormal (ecostop)	Abnormality in ecostop is detected.	4-65
System suspended Idling stop cannot operate because battery is charging	Amber	System suspended (ecostop)	The engine temporarily cannot be automatically stopped by ecostop.	4-65
System suspended Idling stop cannot operate because air conditioner has priority	Amber			
System suspended Idling stop cannot operate because brakes have priority	Amber			
System suspended Idling stop cannot operate because steering wheel is operating	Amber			
System suspended Idling stop cannot operate	Amber			

Main display	Color	Name	Description	Page
Engine restart Engine was restarted	White	Engine restart (ecostop)	The engine has been restarted.	4-65
Engine restart Engine was restarted due to battery charge	White			
Engine restart Engine was restarted because air conditioner has priority	White			
Engine restart Engine was restarted due to steering wheel operating	White			
Engine restart Engine is restarted because door was open	White		The driver side door is opened while the engine is automatically stopped by ecostop.	4-65
Engine restart Engine is restarted because seatbelt was not fastened	White		The driver side seat belt is unbuckled while the engine is automatically stopped by ecostop.	4-65
Driving advice When the clutch pedal is released, idling stop operates	White	Driving advice (ecostop)	The engine can be automatically stopped by ecostop.	4-65
Driving advice When the brake pedal is depressed, idling stop operates	White			

Main display	Color	Name	Description	Page
 Preparing PTO Preparing to operate PTO	White	Preparing PTO [SA]/[DCT]	The PTO is preparing to operate.	4-267
 PTO operating PTO is operating	Red	PTO operating [SA]/[DCT]	The PTO is operating.	4-267
 Deactivating PTO Deactivating operation of PTO	White	Deactivating PTO [SA]/ [DCT]	The PTO is deactivated.	4-267
 PTO operating Operating	Red	PTO operating [M/T]	The PTO is operating.	4-268
 Front Diff Oil Temp Rising Switch to 2WD	Red	Front differential gear oil temperature rising	The temperature of the front differential gear oil is abnormally high.	4-228
 Warning Cab is not locked Check that cab is locked	Red	Cab tilt	Cab tilt lock is not engaged.	7-27

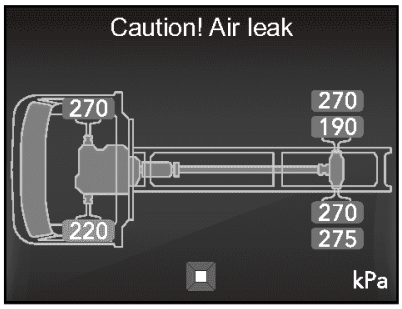
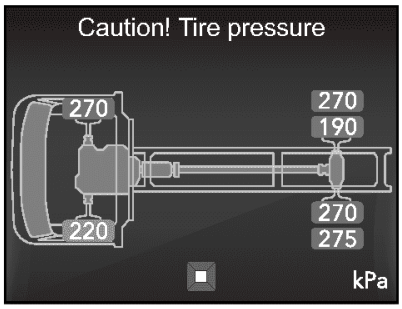
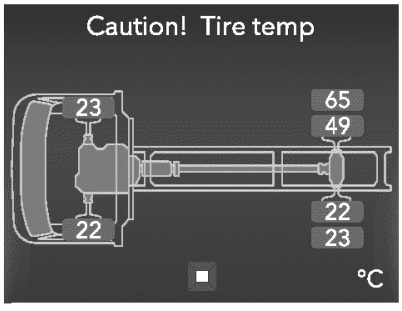
Main display	Color	Name	Description	Page
 Door lock unavailable Key is in vehicle	Amber	Door lock unavailable	While the remote control unit was left in the vehicle, locking the door was attempted.	2-21
 Door lock unavailable Put starter switch in LOCK position	Amber		While the starter switch was in the "ACC" or "ON" position, an attempt was made to lock the door.	2-22
 Door lock unavailable Door is open	Amber		While the driver side or passenger side door had not been closed properly, an attempt was made to lock the door.	2-23
 Key undetectable No key found in vehicle	Amber	Key undetectable	While the starter switch was in the "ACC" or "ON" position, the remote control unit was carried out of the vehicle and the door was closed.	2-22
 Authenticate key Hold key over starter switch	Amber	Authenticate key	The starter switch cannot be turned to the "ON" position because the unit cannot be recognized due to the remote control unit's dead battery or due to the surrounding radio wave conditions.	2-23
 Key collation complete Put starter switch in ON position	Amber	Key collation complete	The remote control unit is recognized and the starter switch can be turned to the "ON" position.	2-23
 Low key battery Key battery is low Replace the battery	Amber	Low key battery	The battery in the remote control unit is running down.	2-24

Main display	Color	Name	Description	Page
 Key system abnormal Remote controller key system abnormal Contact the dealer	Amber	Key system abnormal	The passive entry and start system has an abnormality and does not work properly.	2-24
 Comm system abnormal Stop in a safe place Contact the dealer	Amber	Communication system abnormal	There is an abnormality in communication between instruments and the related system.	3-42
 Hydraulic pressure failure Stop in a safe place Check the engine oil level and if there is no oil leakage, contact the dealer	Red	Hydraulic pressure failure	The engine oil pressure has fallen abnormally.	3-38
 Engine Oil Level Low Use level gauge to check engine oil level	Amber	Engine oil level (inspection)	The engine oil level is low or has exceeded the "Inspection MAX" position.	10-5
 Air cleaner inspection Air cleaner inspection Clean or replace it	Amber	Air cleaner element (inspection)	The cleaning interval is near.	10-33
 Clutch may slip Do not use half-clutch for a long time	Amber	Clutch may slip [M/T]	Half-clutch condition continues for a certain period of time.	4-100
 Clutch may slip Do not put your foot on clutch pedal while driving	Amber		Foot is left on clutch pedal while driving.	4-100

Main display	Color	Name	Description	Page
Improper gearshift This gearshift may lead to transmission malfunction	Amber	Improper gearshift [M/T]	Transmission is shifted to a gear position that is unsuitable for the driving speed.	4-100
T/M oil temp rising Release the accelerator pedal or return gearshift lever to N position	Amber	T/M oil temperature rising [SA]	The accelerator pedal is kept depressed while the brakes are being applied.	4-118
T/M oil temp rising Release accelerator pedal and depress the brake pedal	Amber		The vehicle is stopped on a slope with the accelerator pedal kept depressed.	
T/M oil temp rising Release accelerator pedal or drive in auto mode	Amber		• The vehicle continues to drive in unsuitable gear or slowly on uphill slope. • The vehicle is started and stopped too frequently.	
T/M oil temp rising While engine is running, put gearshift lever in the P or N position, and wait	Red		The temperature of the Smoother clutch oil is abnormally high.	

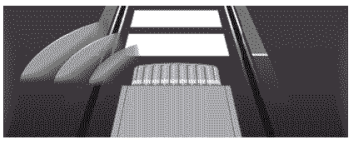
Main display	Color	Name	Description	Page
T/M oil temp rising Release the accelerator pedal or return gearshift lever to P position	Amber	T/M oil temperature rising [DCT]	The accelerator pedal is kept depressed while the brakes are being applied.	4-136
T/M oil temp rising Release accelerator pedal and depress the brake pedal	Amber		The vehicle is stopped on a slope with the accelerator pedal kept depressed.	
T/M oil temp rising Release accelerator pedal or drive in auto mode	Amber		The vehicle is started and stopped too frequently.	
T/M oil temp rising While engine is running, put gearshift lever in the P or N position, and wait	Red		• The temperature of the DCT clutch oil is abnormally high. • When the oil temperature rises while using a lever-type PTO or switch-type PTO	
T/M oil temp rising While engine is running, put gearshift lever in the P or N position, and wait	Amber		When the oil temperature rises while using a lever-type PTO or switch-type PTO	
Alert! Driver not seated Return the gearshift lever to N position and apply the parking brake	Amber	Alert! Driver not seated [SA]	The driver opens the door and is leaving the vehicle with the starter switch in the "ON" position and the transmission in gear.	4-118
Alert! Driver not seated Return the gearshift lever to P position and apply the parking brake	Amber	Alert! Driver not seated [DCT]	The driver opens the door and is leaving the vehicle with the starter switch in the "ON" position and the transmission in gear.	4-136

Main display	Color	Name	Description	Page
AMT emergency mode For models with HSA, when pulling away, press the HSA OFF switch to deactivate HSA	Amber	AMT emergency mode [SA]/ [DCT]	The Smoother/DCT emergency switch is pressed.	4-118 4-136
Shifting to R inhibited With the vehicle stopped, put the gearshift lever in R	White	Shifting to R inhibited [SA]/ [DCT]	The gearshift lever is moved to the "R" position while driving.	4-118 4-136
T/M abnormal Restart engine, if it appears again, contact the dealer	Amber/ Red	T/M abnormal [SA]/[DCT]	The Smoother/DCT system has failed.	4-119 4-136
Voltage drop	Red	Voltage drop	The battery voltage is low.	3-39
Overvoltage	Red	Overvoltage	The battery voltage is high.	
Caution!turn off the light Battery may go flat because forget to turn off the light	Amber	Caution! turn off the light	The door is opened while the starter switch is in the "LOCK" position and the lights on indicator light are lit.	4-147
Variable speed limiter Driver assistance mode changed	White	Variable speed limiter	The mode switch is pressed to change to the variable speed limiter mode.	4-218
Intelligent speed limiter Driver assistance mode changed	White	Intelligent speed limiter	The mode switch is pressed to change to the intelligent speed limiter mode.	5-102

Main display	Color	Name	Description	Page
Cruise control Driver assistance mode changed	White	Cruise control	The mode switch is pressed to change to cruise control mode.	4-158 5-76
Adaptive cruise control Driver assistance mode changed	White	Adaptive cruise control	The mode switch is pressed to change to adaptive cruise control/ full speed range adaptive cruise control mode.	5-56 5-76
Cruise control canceled Cruise control has been canceled	Amber	Cruise control canceled	The cancel switch is pressed to temporarily cancel cruise control mode.	4-159 5-57 5-77
	Red	Tire pressure	Tire air pressure suddenly drops.	4-284
	Amber	Tire pressure	There is too little or too much tire air pressure.	4-284
	Amber	Tire temperature	• The tires are hot. • Brakes are dragging or fading.	4-284

Main display	Color	Name	Description	Page
⚠ Front camera failure Contact the dealer	Amber	Front camera failure	There is an abnormality in the camera.	5-9
Front camera unavailable Camera cannot be used	Amber	Front camera unavailable	The camera is deactivated temporarily.	5-9
⚠ Front radar failure Contact the dealer	Amber	Front radar failure	There is an abnormality in the radar.	5-10
⚠ Right radar failure Contact the dealer	Amber	Right radar failure	There is an abnormality in the radar.	5-10
⚠ Left radar failure Contact the dealer	Amber	Left radar failure	There is an abnormality in the radar.	5-10
Front radar unavailable Radar cannot be used	Amber	Front radar unavailable	The radar stops temporarily.	5-9
Right radar unavailable Radar cannot be used	Amber	Right radar unavailable	The radar stops temporarily.	5-9
Left radar unavailable Radar cannot be used	Amber	Left radar unavailable	The radar stops temporarily.	5-9

Main display	Color	Name	Description	Page
Front radar is blocked Remove snow and dirt from the radar surface If it appears again, contact the dealer	Amber	Front radar is blocked	Dirt is detected on the radar.	5-10
Right radar is blocked Remove snow and dirt from the radar surface If it appears again, contact the dealer	Amber	Right radar is blocked	Dirt is detected on the radar.	5-10
Left radar is blocked Remove snow and dirt from the radar surface If it appears again, contact the dealer	Amber	Left radar is blocked	Dirt is detected on the radar.	5-10
⚠ Warning Brake!	Red	Driver attention alert (AEBS)	Obstacles in the forward direction are detected and the driver is encouraged to operate the brake.	5-13
Brake! 		Automatic braking activation warning (AEBS)	An obstacle is detected in the direction of travel and avoiding a collision is difficult, so the AEBS activates automatic braking.	5-13 5-14
ℹ Attention Keep distance from Preceding Vehicle	Amber	Distance warning (following distance warning)	The following distance with the preceding vehicle is too short.	5-20 5-77
Pedal misapplication! 	Amber	Front warning (mis-acceleration mitigation system)	There is an obstacle in the forward direction of travel, and the vehicle is accelerated more rapidly than needed.	5-42
Acceleration suppresed 	Amber	Acceleration restricted (mis-acceleration mitigation system)	The engine power is temporarily limited and then gradually restored.	5-44

Main display	Color	Name	Description	Page
Preceding vehicle start	White	Preceding vehicle start (preceding vehicle departure notification function)	The preceding vehicle has departed but your vehicle remains stopped.	5-36 5-78
	Amber/ Red	Blind spot monitor warning	The object of warning is to the front-left/front/ front-right.	5-28
No entry 	Amber	No entry (traffic sign recognition system)	The vehicle passes a no entry sign and then enters the restricted area.	5-91
Brake Hold	White	Brake hold	Vehicle stopped while following the preceding vehicle and using full speed range adaptive cruise control.	5-78
Attention Take a break?	Amber	Weaving attention	The vehicle is weaving.	5-114
EBS brake abnormal Stop in a safe place Contact the dealer	Red	EBS brake abnormal [FAB]	EBS, ABS, or ESC/ASR abnormality has occurred.	4-211
Low air pressure Fill with air	Red	Low air pressure [FAB]	The air pressure has dropped below the specified pressure level.	3-41

Maintenance alert messages

Indicate the maintenance period for each maintenance item. Be sure to set (reset) the replacement period after replacing any item.

This can also be confirmed from the "Maintenance alert info" on the multi-information display.

Refer to page
3-56 Maintenance alert

Main display	Color	Name	Description	Page
Maintenance alert Engine oil and filter Distance to replacement *,***km	Amber	Engine oil and filter	Distance remaining until the next engine oil and filter change is displayed.	10-6
Maintenance alert Engine oil and filter Distance to replacement −*,***km	Amber		This is displayed when the next engine oil and filter change has already been reached.	
Maintenance alert T/M oil & differential oil Distance to replacement *,***km	Amber	Transmission oil and differential gear oil	Distance remaining until the next transmission oil and differential gear oil change is displayed.	10-91 10-111
Maintenance alert T/M oil & differential oil Distance to replacement −*,***km	Amber		This is displayed when the next transmission oil and differential gear oil change has already been reached.	
Maintenance alert Clutch oil Distance to replacement *,***km	Amber	Smoother clutch oil [SA]	Distance remaining until the next clutch oil change is displayed.	10-96
Maintenance alert Clutch oil Distance to replacement −*,***km	Amber		This is displayed when the next clutch oil change has already been reached.	

Main display	Color	Name	Description	Page
Maintenance alert Clutch oil Distance to replacement ＊,＊＊＊km	Amber	DCT clutch oil [DCT]	Distance remaining until the next fuel filter change is displayed.	10-101
Maintenance alert Clutch oil Distance to replacement －＊,＊＊＊km	Amber		This is displayed when the next clutch oil change has already been reached.	
Maintenance alert Fuel filter Distance to replacement ＊,＊＊＊km	Amber	Fuel filter	Distance remaining until the next fuel filter change is displayed.	10-39
Maintenance alert Fuel filter Distance to replacement －＊,＊＊＊km	Amber		This is displayed when the next fuel filter change has already been reached.	
Maintenance alert Power steering fluid Distance to replacement ＊,＊＊＊km	Amber	Power steering fluid	Distance remaining until the next power steering fluid change is displayed.	10-118
Maintenance alert Power steering fluid Distance to replacement －＊,＊＊＊km	Amber		This is displayed when the next power steering fluid change has already been reached.	

Main display	Color	Name	Description	Page
Maintenance alert Tire rotation Distance to replacement ＊,＊＊＊km	Amber	Tire rotation	Distance remaining until the next tire rotation is displayed.	10-70
Maintenance alert Tire rotation Distance to replacement －＊,＊＊＊km	Amber		This is displayed when the next tire rotation has already been reached.	
Maintenance alert Starter Replace the starter －＊,＊＊＊Times	Amber	Starter	This is displayed when the next starter motor change has already been reached.	3-42

Fuel economy advice display

Main display	Color	Name	Page
Fuel economy advice Wait with the gearshift lever in N position	White	We recommend waiting with the gearshift lever in "N"	3-43

Understanding Warning/Indicator Lights

Warning and indicator lights not shown in this section are explained in the sections for each of the devices or functions. Refer to them from the "Instrument Panel Warning/ Indicator Lights".

Refer to page
3-8 Instrument Panel Warning/Indicator Lights

Brake System Warning Light

Hydraulic Brake Model



(Red)

The brake system warning light comes on while the engine is running (after startup) in the following situations:

- Drop in the level of brake fluid (due to brake wear or fluid leakage, etc.)
- Abnormality in the charging system (such as a generator malfunction or either loosening or splitting of the fan belt, etc.)
- Abnormality in the anti-lock brake system (ABS) or boost assist function.
  In this case, the ABS warning light will also come on.

Refer to page
4-195 ABS Warning Light

⚠ CAUTION

- **If this warning light comes on while the engine is running, immediately stop your vehicle at a safe place well clear of traffic and promptly contact the nearest Isuzu Dealer for inspection.**

Full-air Brake Model



(Amber/red)

This warning light comes on when the electronic braking system (EBS) has a problem.

CAUTION

- **When the brake system warning light is illuminated, it signals that an EBS malfunction has occurred.**
  In this case, although the feeling of the brakes will change considerably due to the inoperation of the EBS, the regular brakes will still operate normally. If the EBS malfunctions, firmly depress the brake pedal, stop the vehicle, and contact your nearest Isuzu Dealer.

NOTE

- In NQR models with EBS, if the ESC OFF switch is pressed for 5 seconds or more, the ESC operating status will be switched to Roller Testing Bench Mode which is used for testing braking force, and the brake system warning light will come on.

Refer to page
4-206 ESC OFF Switch
4-210 Electronic Braking System (EBS) [FAB]

Brake Booster Warning Light [HB]



The warning light and buzzer will come on simultaneously whenever:

- The brake booster's vacuum becomes insufficient, either during driving or when the starter switch is in the "ON" position.
- There is an abnormality in the charging system (such as a generator malfunction or either loosening or splitting of the fan belt, etc.).
- A problem occurs with the exhaust brake while it is being used. (The warning buzzer will stop sounding when the parking brake is engaged.)

The brake booster warning light and warning buzzer should come on to indicate low vacuum reserve for brake power assist.
If this happens while driving:

- Do not pump the brakes. The system is designed to stop the truck with reserve power assist if the pedal is held down. This reserve is greatly reduced each time you apply and release the brakes.
- Stopping distance may be longer.
- You may have to push much harder on the brake pedal.
  Have the vehicle repaired before you continue driving.
  The buzzer stops when the parking brake lever on a manual transmission vehicle is pulled up.

⚠ CAUTION

- **If the warning light and warning buzzer come on while the exhaust brake is being used, immediately pull off to a safe place well clear of traffic and take the following actions.**
  - **With the engine still running, turn off the exhaust brake switch. A problem in the exhaust brake system will be confirmed if the warning light goes out or the buzzer stops sounding in several seconds. Have your vehicle inspected by the nearest Isuzu Dealer.**
  - **If the warning light does not go out or the warning buzzer continues to sound, the problem will be in the brake booster for the foot (main) brake. Have your vehicle inspected by the nearest Isuzu Dealer immediately.**
- **Do not drive while the buzzer sounds, as the brakes and clutch are not operating to their full capacity.**

Refer to page
4-191 Exhaust Brake Switch

Engine Oil Pressure Warning Light



While the engine is running, this warning light comes on if the engine oil pressure, which lubricates the engine components, is abnormal. At the same time a buzzer sounds. (The warning buzzer will stop sounding when the parking brake is engaged.)

Also, for vehicles with ecostop, this warning light comes on when the engine is stopped by ecostop, but it goes out when the engine is restarted.
Immediately stop the vehicle in a safe place, stop the engine, perform checks and then take corrective action.

CAUTION

- **Do not drive the vehicle when the warning light is on. It could damage the engine.**

ADVICE

- If this warning light comes on while the engine is running, immediately pull off to a safe place well clear of traffic. Stop the engine immediately and check the engine oil level.
- The lubrication system may be faulty. Promptly have your vehicle inspected at the nearest Isuzu Dealer.

NOTE

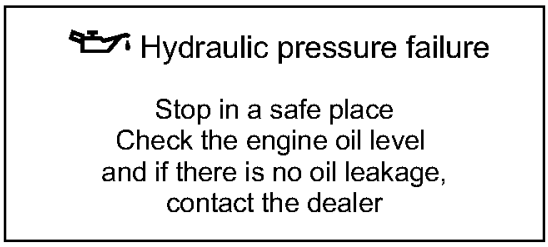
- In winter, when the engine oil temperature is low and the oil viscosity is high, the light might come on for a time. It will go out when the engine warms up.

Check and Corrective Action

1. Check the engine oil level.
2. If the engine oil level is too low, check for leaks and add oil.
3. When the oil level is normal and there are no oil leaks, the oil filter may be clogged. Replace the oil filter.
4. When the oil level is normal and the oil filter is not clogged, but there are oil leaks, contact the nearest Isuzu Dealer.

Refer to page
10-4 Engine Oil
10-8 Changing the Engine Oil and Oil Filter
10-5 Check Engine Oil Level Warning Light

Engine Oil Pressure Abnormal



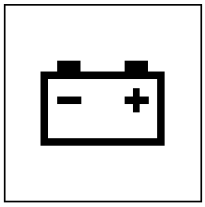
This message is displayed and at the same time a warning sounds if the engine oil pressure falls abnormally. (The buzzer stops while the parking brake is applied.)
If it appears on the multi-information display, stop the vehicle at a safe place immediately and perform inspection and take corrective action.

ADVICE

- If the warning message comes on while the engine is running, immediately pull the vehicle over in a safe place out of the way of traffic.
- There is a risk of a malfunction in the lubrication system, so immediately contact the nearest Isuzu Dealer for inspection.

Refer to page
10-4 Engine Oil

Generator Warning Light



This warning light comes on when, while the engine is running, there is a problem with the charging system (such as a loose or broken fan belt).
Immediately stop the vehicle in a safe place, perform checks and take corrective action.

CAUTION

- **Do not drive the vehicle when the warning light is on. The battery can be discharged.**

ADVICE

- If this warning light comes on while the engine is running, immediately pull off to a safe place well clear of traffic and promptly contact the nearest Isuzu Dealer for inspection.

NOTE

- Since disassembling is required to replace the fan belt, have it performed by the nearest Isuzu Dealer.

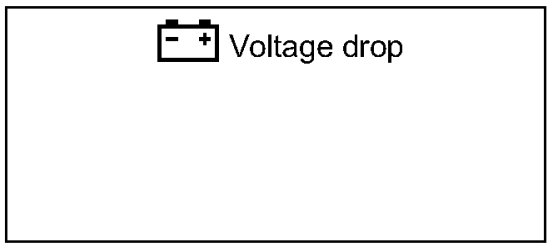
Check and Corrective Action

1. Check to see if the fan belt is broken or loose.
2. If the fan belt is loose, adjust the tension.
3. If there is no abnormality in the fan belt, contact the nearest Isuzu Dealer.

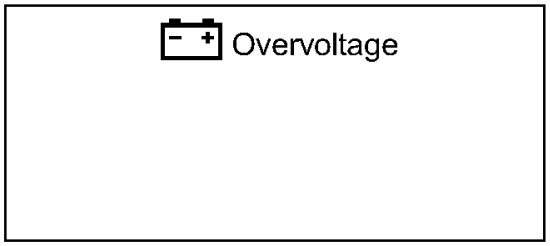
Refer to page
10-30 Fan Belt
10-127 Battery
11-12 When the Battery Goes Flat

Voltage drop/Overvoltage

Voltage drop



Overvoltage

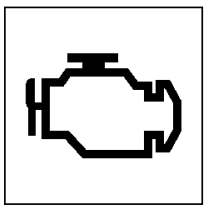


When the battery voltage is low or excessive, "Voltage drop" or "Overvoltage" appears on the multi-information display. The cause could be over-discharge of the battery or poor power generation by the generator. Contact the nearest Isuzu Dealer.

NOTE

- "Voltage drop" may appear on the multi-information display when the engine is started or immediately after being started, but this is not abnormal if it returns to normal after starting.

Check Engine Warning Light



The warning light comes on when the exhaust gas related equipment is abnormal.
It also comes on in the following cases. If it comes on, contact the nearest Isuzu Dealer.

- When the engine electronic control systems is abnormal and the engine is running (depending on the type of abnormality, after the engine is started, it may stay lit for 15 seconds and then turn off)

- When continuing to drive without performing a DPD regeneration
- When there is an abnormality with the urea SCR system or with quality of AdBlue®

Immediately stop the vehicle in a safe place, perform checks and take corrective action. Since checking and repairing the control system is required, immediately contact the nearest Isuzu Dealer.

⚠ CAUTION

- **If this warning light comes on and the engine stops, it is possible that the engine has entered protection mode. Turn the starter switch to the "LOCK" position and wait at least 60 seconds before proceeding to start the engine again.**
  Even if the vehicle is drivable, see the nearest Isuzu Dealer as soon as possible for service of the system.

ADVICE

- If this warning light comes on while the engine is running, avoid driving at high speeds and promptly have the vehicle inspected at the nearest Isuzu Dealer.
- If this warning light comes on either intermittently or continuously while driving, service is required. Even if the vehicle is drivable, and does not require towing, see your Isuzu Dealer as soon as possible for service of the system. Continued driving without having the system serviced could cause damage to the emission control system. It could also affect fuel economy and drivability.

Service Vehicle Soon (SVS) Indicator Light



The indicator light comes on when equipment other than the exhaust gas related equipment is abnormal.
It also comes on in the following case. If it comes on, contact the nearest Isuzu Dealer.

- When there is an abnormality in the system while the engine is running

If the indicator light comes on during operation, immediately contact the nearest Isuzu Dealer for inspection.

NOTE

- On a model equipped with a speed limit device, this indicator light normally will come on when the starter switch is turned to the "ON" position. And the indicator light keeps lighting for 15 seconds, and then will go off after flashing three times.

Master Warning Light



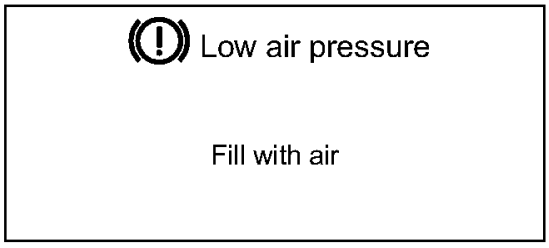
The warning light comes on when the advanced driver assistance system or auxiliary brake control is abnormal. If it comes on, contact the nearest Isuzu Dealer.

CAUTION

- **When the check engine warning light, Smoother warning light or DCT warning light comes on at the same time, the engine output may be restricted and changing gears may be impossible. The vehicle system may be malfunctioning, so immediately contact the nearest Isuzu Dealer.**

Refer to page
3-39 Check Engine Warning Light
4-119 When the Smoother Warning Light is On
4-138 When the DCT Warning Light is On

Low Air Pressure [FAB]



This message appears on the multi-information display and a buzzer sounds if air pressure drops below the specified level. When this message appears on, there is insufficient air pressure in the air tank and the brakes will not work properly. A warning buzzer will sound at this time.
Immediately stop the vehicle in a safe place, perform checks and take corrective action. The continuous beep will stop when the parking brake is engaged.

Refer to page
3-4 Air Pressure Gauge [FAB]

⚠ WARNING

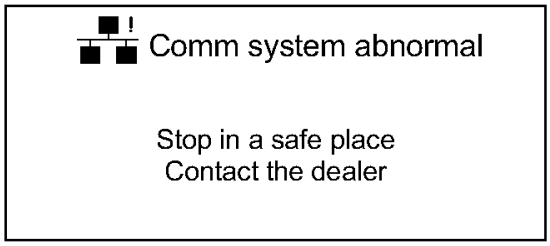
- **Do not drive the vehicle when this message appears on the multi-information display. Brakes are not fully functional, so the vehicle is in a dangerous condition to operate.**

Check and Corrective Action

- Run the engine at idle and raise the air pressure until the message goes out.
- When the message does not go out or when it takes longer than the specified time for the message to go out after an air pressure of **0 kPa** (0 kgf/cm²/**0 psi**) is reached, repair is required.
  Contact the nearest Isuzu Dealer.

Refer to page
9-31 Checking Air Pressure [FAB]

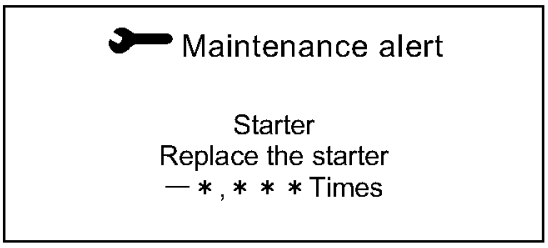
Communication System Failure



This is displayed on the multi-information display when there is an abnormality in communication between instruments and the related system.
At this time, the engine coolant temperature gauge stops, and the instrument warning function does not work properly.
Stop the vehicle in a safe place, stop the engine and start the engine again.
If the indication appears again, contact the nearest Isuzu Dealer.

Starter

Number of excessive starts



When the maintenance period of the starter motor has been exceeded, the number of excessive starts by the starter is displayed. It is displayed in amber when the starter switch is turned to the "ON" position, and it remains displayed until you press "Enter" on the multi-information display or start driving the vehicle.

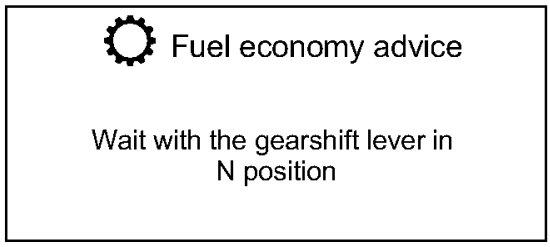
When "Starter: Replace the starter" is displayed, have the vehicle inspected/ serviced at the nearest Isuzu Dealer.

NOTE

- Checking and setting the maintenance period can be done from the "Maintenance alert" on the multi-information display.

Refer to page
3-59 Maintenance Alert

Fuel Economy Advice

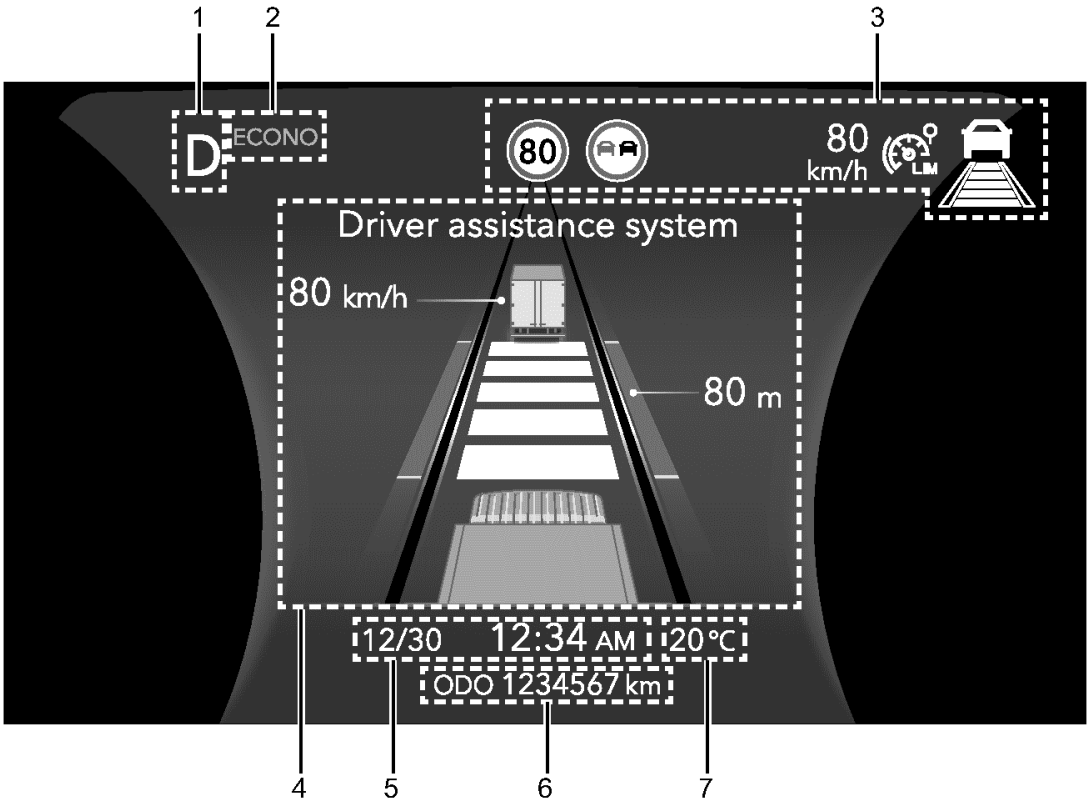


Wait with the gearshift lever in N position [DCT]

This message appears on the multi-information display and the warning buzzer sounds at the same time if the vehicle has remained in gear for a long time while being stopped by the parking brake. The message disappears when the parking brake is released or the gearshift lever is put in the gearshift lever is in the "P" or "N" position.

Multi-information Display Functions

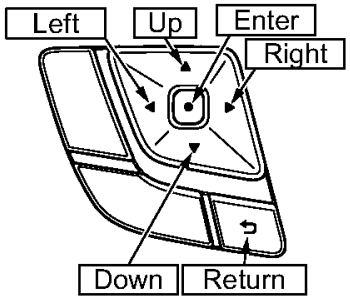
Various information related to driving is displayed on the multi-information display on the instrument panel.
When the screen is changed, maintenance information, settings such as clock/date or vehicle information can be checked.



No.	Name	Page
1	Shift indicator/transmission mode indicator [SA]/[DCT]	3-45
2	ECONO mode indicator [SA]/[DCT]	3-46
3	Drive assist display area [V]	3-47
4	Main display area	3-48
5	Date and clock	3-53
6	Odometer	3-53
7	External temperature gauge	3-53

Refer to page
3-45 Multi-information Display Screen Configuration

Multi-information Display Switches



Change the screen or select a function using the switches on the left side of the steering wheel.

Switch	Function
Enter	Use to confirm selections.
Left	Use to move the cursor or to adjust values.
Right	
Up	
Down	
Return	Use to return to the previous screen.

Multi-information Display Screen Configuration

Shift Indicator/Transmission Mode Indicator [SA]/[DCT]

DCT model

Shift indicator/
transmission mode indicator



Smoother model

Shift indicator/
transmission mode indicator



The transmission gear position, shift range, and transmission mode functions are displayed.

Smoother model

Refer to page
4-101 Model with Smoother [SA]

DCT model

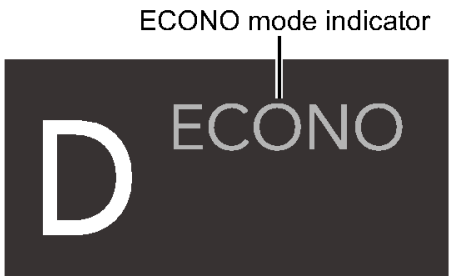
Refer to page
4-103 Model with DCT [DCT]

ECONO Mode Indicator [SA]/[DCT]

Smoother model



DCT model



ECONO mode operating status is displayed.

Smoother model

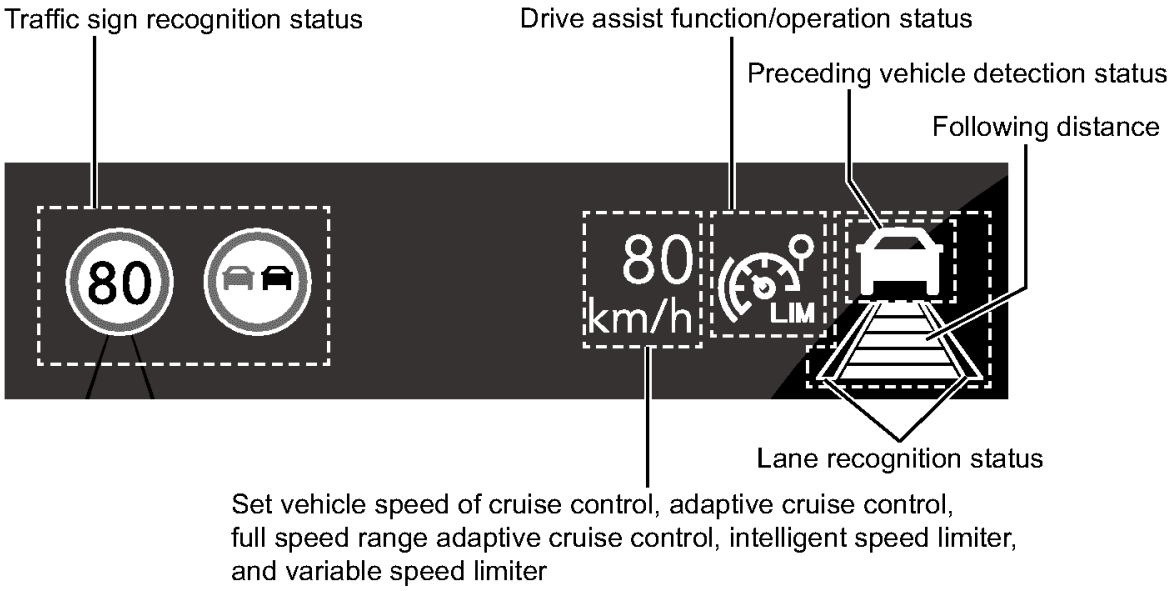
Refer to page
4-116 ECONO Mode Indicator

DCT model

Refer to page
4-135 ECONO Mode Indicator

Drive Assist Display Area [V]

This displays the operating conditions and settings of the drive assist system.



Drive assist functions	Display	Page
Traffic sign recognition system		5-87
Intelligent speed limiter		5-99
Cruise control		4-157
Adaptive cruise control/ Full speed range adaptive cruise control		5-47 5-64
Variable speed limiter		4-216
Preceding vehicle departure notification function*		5-36

Drive assist functions	Display	Page
Following distance warning		5-20
Lane departure warning system (LDWS)		5-106

*: The preceding vehicle icon is displayed only during full speed range adaptive cruise control.

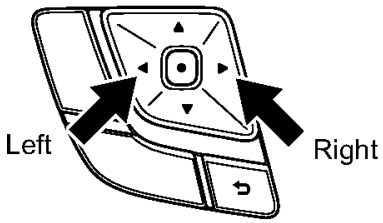
Main Display Area

Under normal conditions, pressing the "Right" or "Left" switch in the left side of the multi-information display switch changes the screen.
Selecting functions in each screen can be done by using the multi-information display switch.

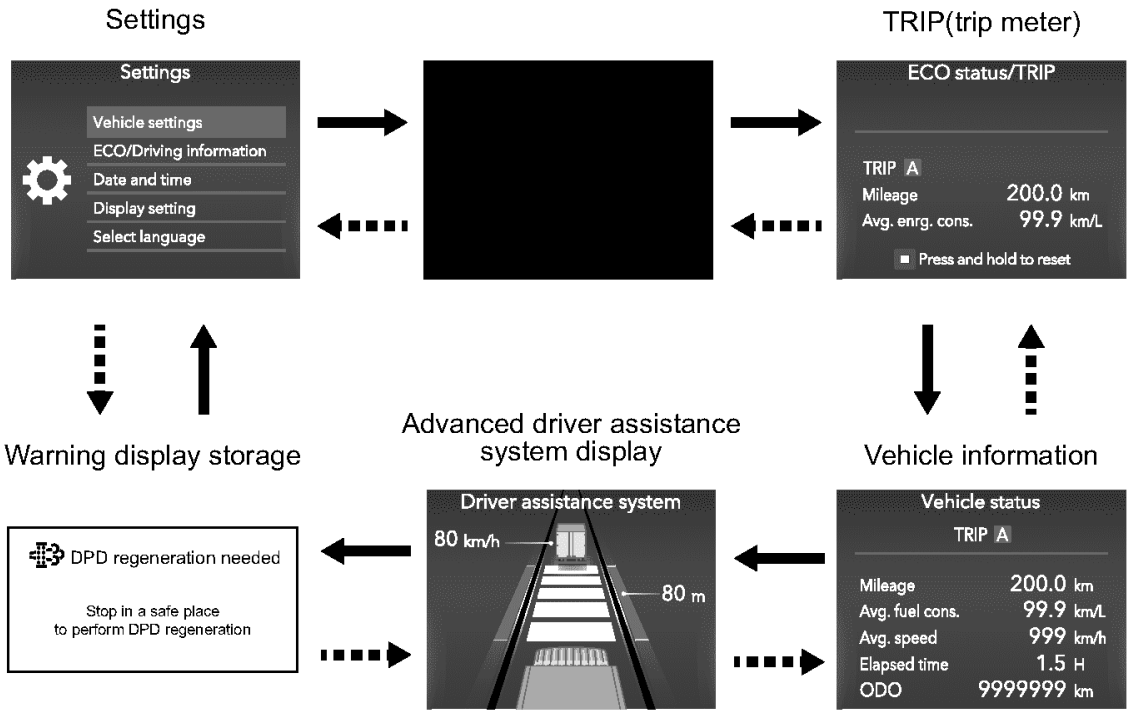
Refer to page
3-45 Multi-information Display Switches

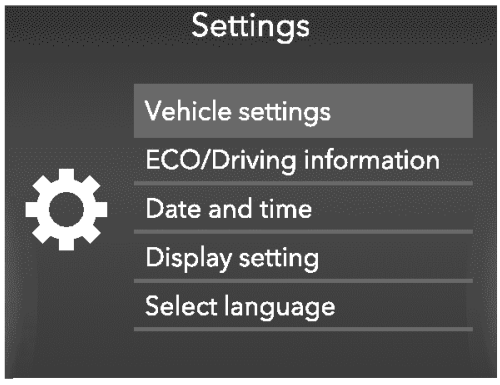
NOTE

- When the engine has been started, the screen that was displayed as when the starter switch was last set to the "LOCK" position is displayed.



Right	→
Left	←

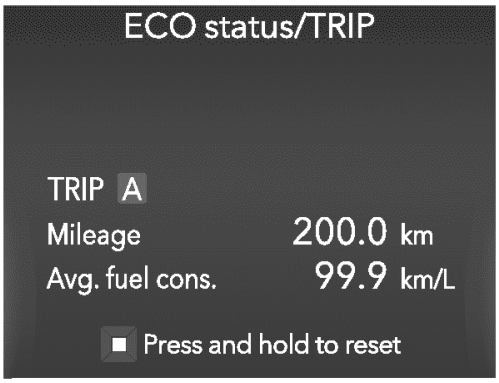




Setting

The vehicle's settings and condition can be checked.

Refer to page
3-54 Settings



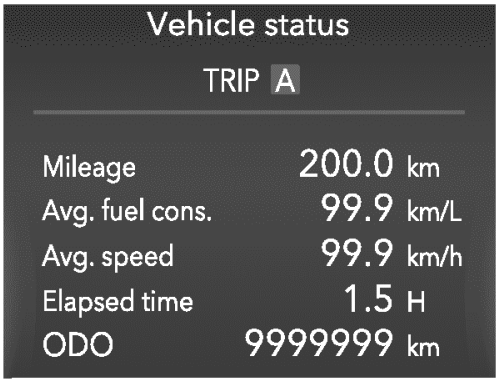
TRIP (trip meter)

TRIP (trip meter) is used to know the distance between designated points or the driving distance for within a certain period. The left side of the decimal point is kilometers, and the right side is 100 m units. You can also check the average fuel consumption for that trip.

You can check either of two types of trip meters, which are "TRIP A" and "TRIP B". Switch which one to use according to your plans.

Press "Up" or "Down" to switch between "TRIP A" and "TRIP B".

To reset "TRIP A" or "TRIP B", press and hold "Enter". Also, if the count exceeds 9999.9 km, it is automatically reset to "0".

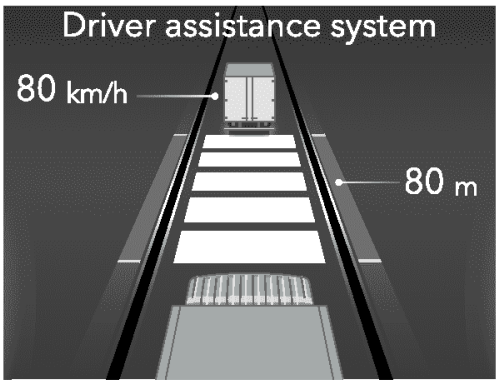


Vehicle information

The following vehicle information can be checked.

Vehicle information
Vehicle status
DPD accumulation level
Volt meter/hour meter
Tire pressure monitoring system

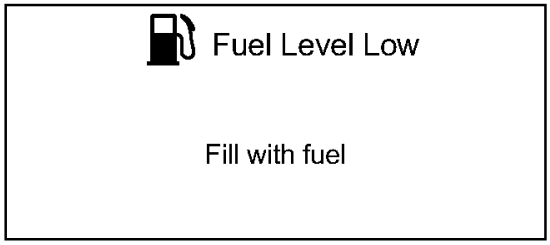
Refer to page
3-62 Vehicle Information



Advanced driver assistance system display

The operating conditions and warnings for the advanced driver assistance system are checked.

Advanced driver assistance system	Page
Blind spot monitor	5-25
Cruise control/adaptive cruise control/full speed range adaptive cruise control	4-157 5-47 5-64
Lane departure warning system	5-106

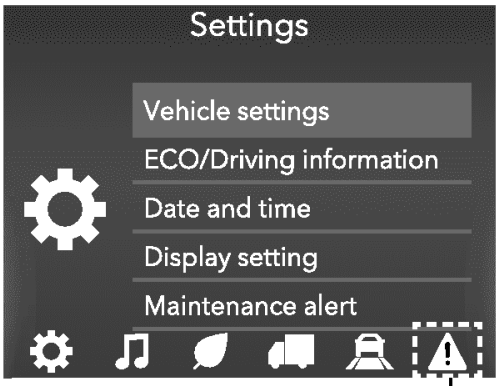


Warning display storage

Messages to the driver that have been hidden by pressing "Enter" when they appear on the multi-information display can be confirmed. If there are multiple hidden messages, press "Enter" to switch the displays.

NOTE

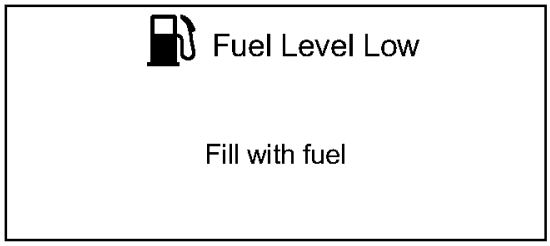
- If there are hidden messages, the warning display storage icon in the lower part of the main display area that is displayed by pressing the "Right" or "Left" switch on the normal screen will turn orange.
- After returning to the normal screen, maintenance displays cannot be checked in the "Warning display storage". They are displayed when the starter switch is turned to "ON".



When the system is operating or an abnormality occurs on the vehicle, or when the maintenance period is near, etc., a message is displayed for the driver.
Press "Enter" to hide the display and return to the normal screen.
Even after returning to the normal screen, the display can be checked in the "Warning display storage".

NOTE

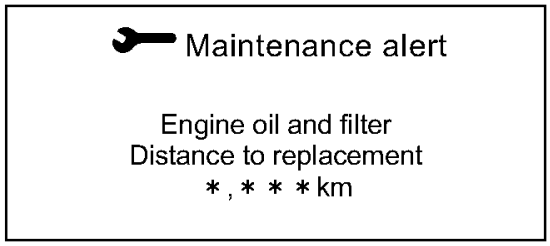
- Displays for notifying that an accident or malfunction may occur do not return to the normal screen, even if "Enter" is pressed.
- After returning to the normal screen, maintenance displays cannot be checked in the "Warning display storage". They are displayed when the starter switch is turned to "ON".



Warning/operation display

The operating state and abnormalities of each system are displayed in messages.

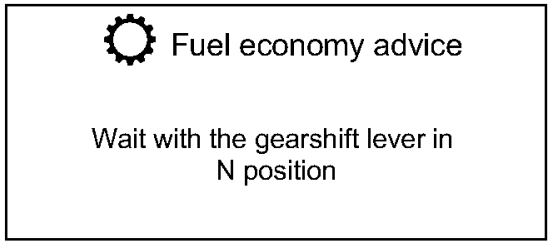
Refer to page
3-14 Warning and operation indicators



Maintenance display

Message is displayed when the maintenance period is near or is exceeded.

Refer to page
3-31 Maintenance alert messages

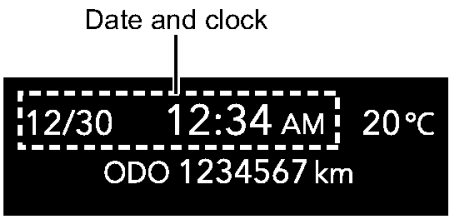


Fuel economy advice display

Advice on how to drive so as to save fuel is displayed.

Refer to page
3-43 Fuel Economy Advice

Date and Clock



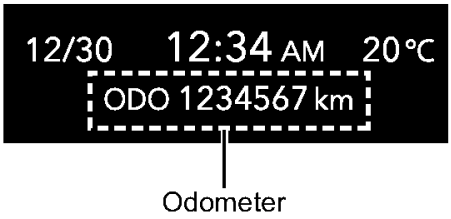
The date and time are displayed.
The "Setting" is used to adjust "Year", "Month", "Day", "Hour" or "Minute".

Refer to page
3-54 Settings

NOTE

- Warning and indicator lights may come on in the date and clock display area. The date and clock are not displayed at this time.

Odometer

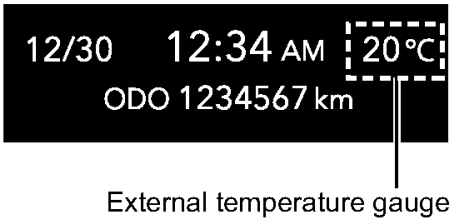


Total driving distance is displayed in km/miles. Distances in excess of 9,999,999 km/miles will not be counted.

NOTE

- Warning and indicator lights may come on in the odometer display area. The odometer is not displayed at this time.

External Temperature Gauge



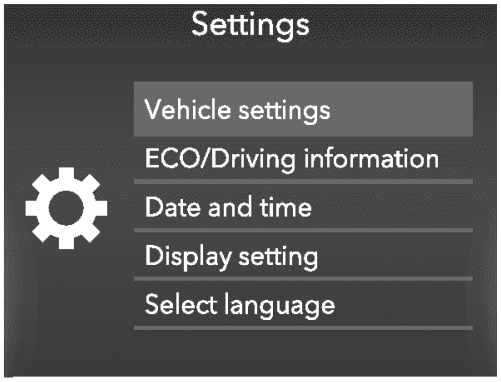
The external temperature is displayed.

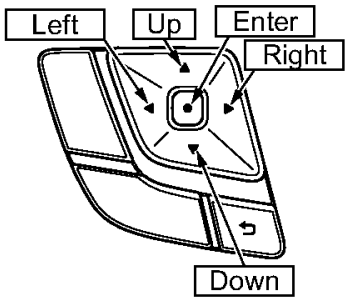
NOTE

- Warning and indicator lights may come on in the external temperature gauge display area. The external temperature is not displayed at this time.

Settings

The settings, such as if a device is on or off, and the vehicle condition can be checked. Use the multi-information display switches to do the settings. Select each item with "Up" or "Down" and confirm it with "Enter".





Vehicle settings

Transition screen		Page
Driver assist functions in front	Advanced Emergency Brake	5-11
	Following distance warning	5-20
	Misacceleration mitigation	5-41
	Preceding vehicle informations	5-36
	Traffic sign recognition	5-87
	Intelligent speed limiter	5-99
Driver assist functions for side	Lane departure warning	5-106
	Intersection warning	5-25
Driver monitoring	Attention assist	5-113
Brake	HSA settings	4-171 4-173
	Auto brake hold settings	4-185 4-188
	Electric parking brake	4-84
Auto air conditioner	Idling-stop conditions	6-20
	Compressor link	
	Auto air intake switching	
Transmission	PTO idle speed settings	4-269

Driving information

Transition screen		Page
TRIP A	Driving information	3-56
TRIP B	Driving information	

Date and time

Transition screen			Page
Date display	Time settings	Date/time settings	3-57

Display settings

Transition screen			Page
Lighting brightness			3-58
Unit	Speed	km/h	3-58
		mph	
	Distance	km	
		mi	
	Fuel Economy	km/L	
		l/100km	
		mpg(UK)	
		mpg(US)	
	Tire Pressure	kPa	
		bar	
		Psi	
	Temperature	°C	
		°F	
Select language			3-58

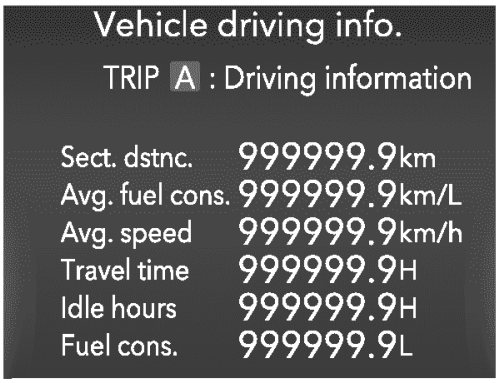
NOTE

- You can choose your language from 13 different languages.

Maintenance alert

Transition screen		Page
Maintenance alert info	ENG Oil & Filter	3-59
	Fuel filter	
	Transmission oil	
	Differential oil	
	Clutch oil	
	Power steering fluid	
	Tire rotation	
	Starter	
Maintenance alert settng	ENG Oil & Filter	3-61
	Fuel filter	
	Transmission oil	
	Differential oil	
	Clutch oil	
	Power steering fluid	
	Tire rotation	
	Starter	

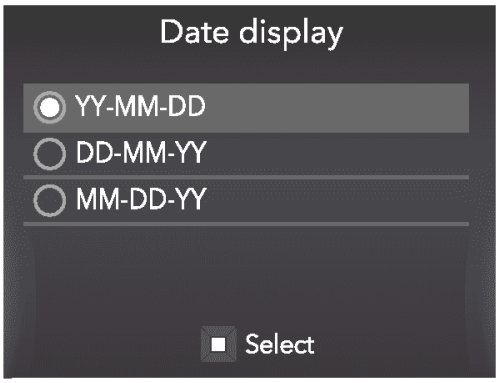
Driving Information



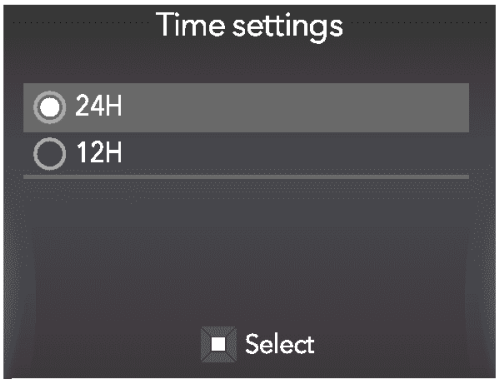
The driving conditions for the "TRIP A" or "TRIP B" section is displayed in numerical values.

Date and Time

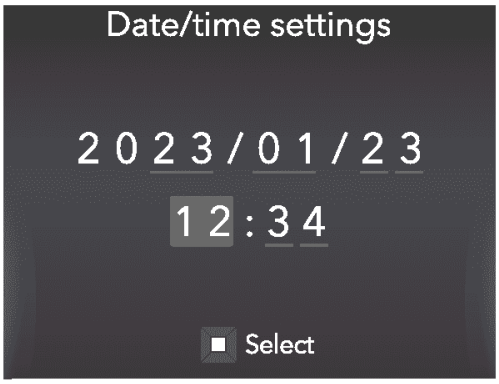
You can set the date and time.



1. On the date display screen, select the order of year, month, and day by pressing "Up" or "Down", and press "Enter" to confirm the selection.

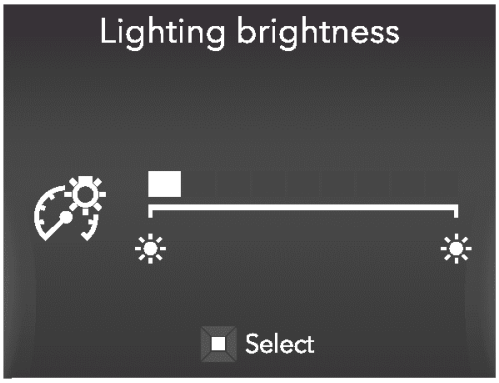


2. On the time settings screen, select the preferred time format by pressing "Up" or "Down", and press "Enter" to confirm the selection.



3. On the date/time settings screen, press "Up" or "Down" to select year, month, day, and time respectively, and press "Enter" to confirm the selection.

Display Settings

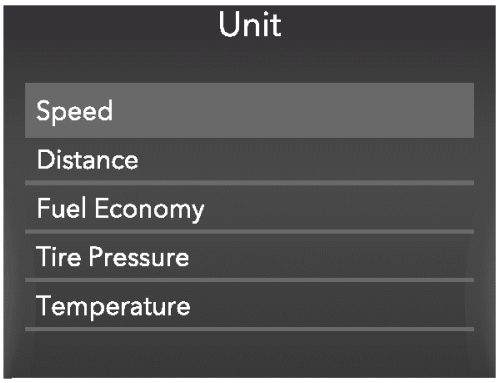


Dark Bright

Lighting brightness

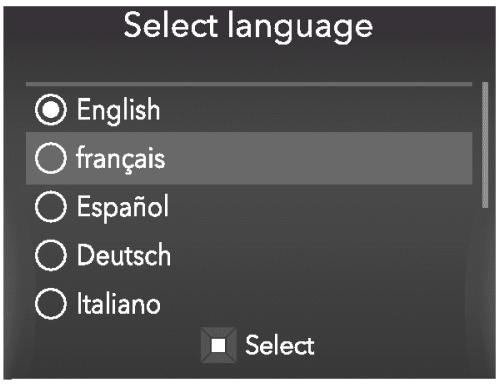
It is used to adjust brightness of the multi-information display. Press "Right" to make the display bright and press "Left" to make the display dark.

You can set the brightness of the screen respectively when the lights on indicator light is on and off.



Unit

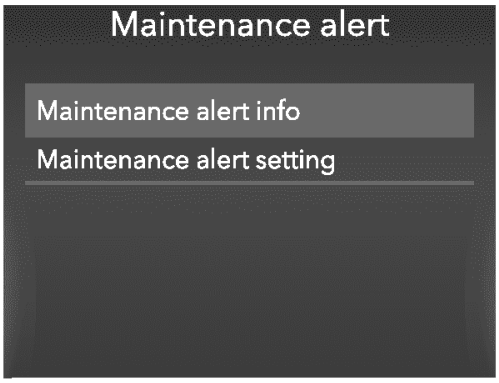
Use the multi-information display switches to select the unit in the multi-information display.



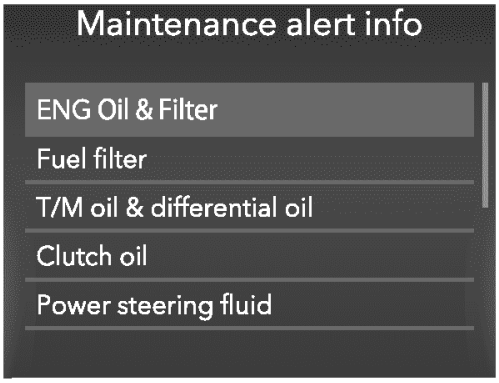
Select language

Use the multi-information display switches to select the language for the multi-information display.

Maintenance Alert



The maintenance periods can be checked and set.



Maintenance alert info

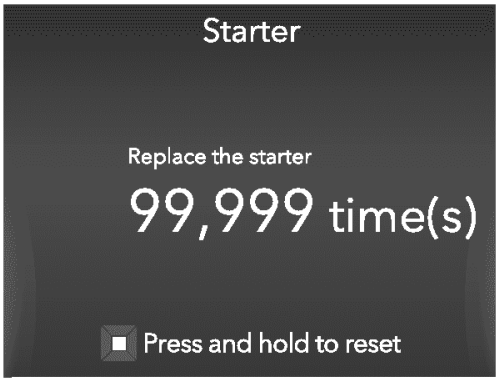
Select the item whose maintenance period you want to check by using "Up" and "Down", then press "Enter".

Distance remaining



Distance exceeded





Each maintenance item shows the distance remaining to or the distance exceeded from the maintenance period.
When a maintenance period is exceeded, the distance until maintenance shows "-(minus)" (distance exceeded). Have the vehicle inspected/serviced at the nearest Isuzu Dealer as soon as possible.

ADVICE

- The starter motor maintenance display shows the remaining number of times for starting the engine before the starter motor must be replaced or the excessive number of times that the engine has been started.



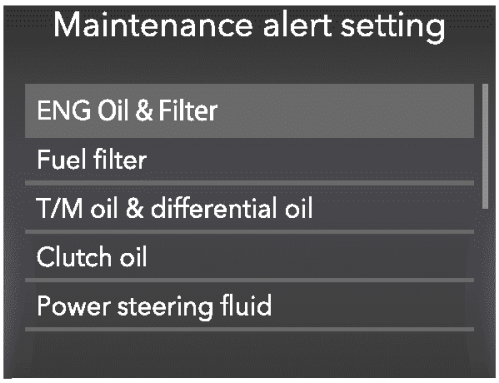
Pressing and holding the "Enter" button resets the distance until maintenance.

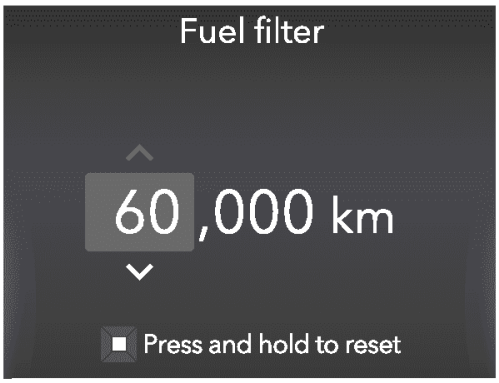
ADVICE

- The maintenance periods must be reset after the maintenance is done for the ENG Oil & Filter/Fuel filter/T/M oil & differential oil/Clutch oil/Power steering fluid/Tire rotation. If the maintenance period is not reset, it cannot display correctly.

Maintenance alert setting

Select the item whose maintenance period you want to set by using "Up" and "Down", then press "Enter".





Select the replacement period with "Up" or "Down" and confirm by pressing and holding "Enter".

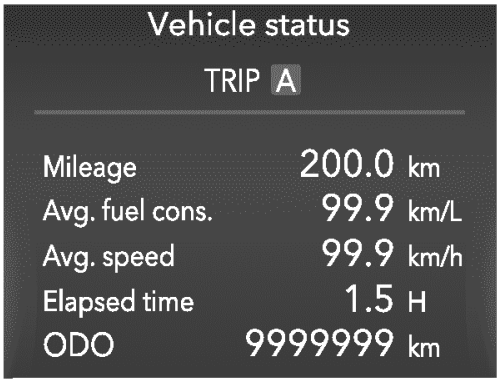
Refer to page
3-59 Maintenance alert info

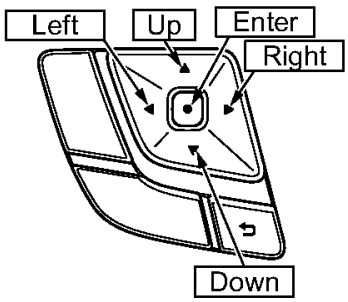
Setting range

Item		Default setting	Replacement period setting range
ENG Oil & Filter	4JZ1 engine model	40,000 km (25,000 miles)	40,000 km (25,000 miles) only
	4HK1 engine model	20,000 km (12,000 miles)	15,000 km to 30,000 km (9,000 to 19,000 miles)
Fuel filter	4JZ1 engine model	40,000 km (25,000 miles)	40,000 km (25,000 miles) only
	4HK1 engine model	45,000 km (28,000 miles)	45,000 km (28,000 miles) only
Transmission oil	Manual transmission model	40,000 km (25,000 miles)	20,000 km to 40,000 km (12,000 to 25,000 miles)
	Smoother model	45,000 km (28,000 miles)	45,000 km (28,000 miles) only
	DCT model	40,000 km (25,000 miles)	20,000 km to 40,000 km (12,000 to 25,000 miles)
Differential oil		45,000 km (28,000 miles)	20,000 km to 45,000 km (12,000 to 28,000 miles)
Clutch oil [SA]/[DCT]		45,000 km (28,000 miles)	45,000 km (28,000 miles) only
Power steering fluid		40,000 km (25,000 miles)	40,000 km (25,000 miles) only
Tire rotation		60,000 km (37,000 miles)	Not set, 5,000 km to 60,000 km (3,000 to 37,000 miles)
Starter		Set	"Set" only

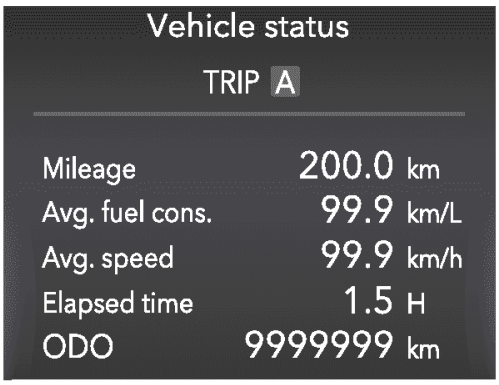
Vehicle Information

Press "Up" or "Down" on the multi-information display switch to change the screen.



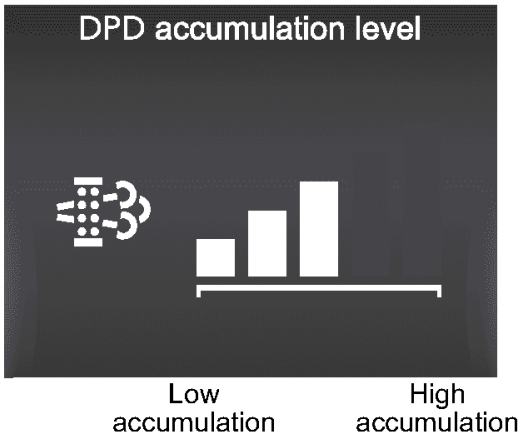


Vehicle Status



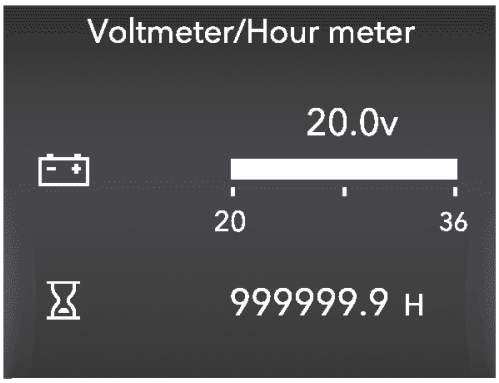
The vehicle status is displayed.
Press "Up" or "Down" to check the distance driven in either trip, "TRIP A" or "TRIP B".

DPD Accumulation Level



The state of the accumulated PM (particulate matter) that has collected inside the DPD is displayed.

Volt Meter/Hour Meter



Voltmeter
This shows the current state of the battery. Even if the voltmeter display is not selected, "Voltage drop" or "Overvoltage" is shown when the battery voltage is at either end.

Refer to page
3-39 Voltage drop/Overvoltage

NOTE

- "Voltage drop" may appear on the multi-information display when the engine is started or immediately after being started indicating the lower limit, but this is not abnormal if it returns to normal after starting.
- Because the power generation is controlled to improve fuel efficiency, the indication of the voltmeter may change significantly during driving, such as during acceleration or deceleration. However, this does not indicate a malfunction.

Hour meter

Operation time of the engine is shown on the multi-information display.

ADVICE

- The hour meter cannot be reset.

Tire Pressure Monitoring System

Refer to page
4-282 Tire Status Display

Driving Your Vehicle 4

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- Before Driving 4-3
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4-2 Driving Your Vehicle

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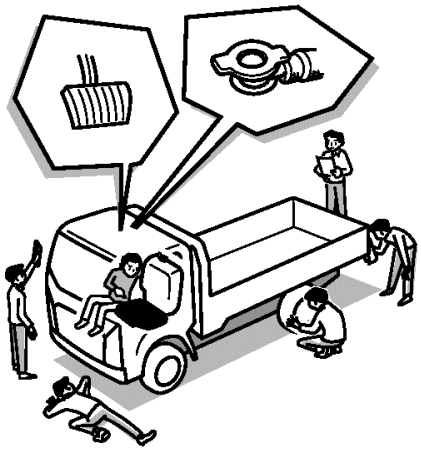
Driving Tips

Before Driving

Operation of New Vehicle

Refer to page
0-18 Operation of New Vehicle

Perform Daily (Pre-operation) Inspections



For safe and comfortable driving, keep record of the distances driven and the condition of the vehicle during operation. Perform inspections at appropriate intervals, and perform maintenance in accordance with the findings of the inspections. If an inspection reveals an abnormality or there was an abnormality the previous time the vehicle was driven, have the vehicle repaired by the nearest Isuzu Dealer before it is driven again.

⚠ WARNING

[Checking tires]

- **The tire pressure monitoring system is not a substitute for daily inspections. For models equipped with the tire pressure monitoring system too, be sure to check the tire air pressure as a part of daily inspections.**

Refer to page
9-3 Perform Daily (Pre-operation) Inspections Before Driving

4-4 Driving Your Vehicle

Get Plenty of Rest



If you drive when you are tired, you will get sleepy and lose concentration. Please get plenty of rest before you drive.

Correct Driving Posture

⚠ WARNING

- **Before driving, be sure to adjust the seat, steering wheel and mirrors to positions that give you a correct driving posture. Make sure the seat is securely retained by trying to rock it forward and backward, and put on the seat belt. All other passengers must wear seat belts.**

Refer to page

1-2 Seat Belts

2-34 Seats

2-45 Mirrors

If the Vehicle Has not Been Used for a Long Period

ADVICE

- When storing the vehicle over a long period of time, disconnect the cable at the negative terminal side.
- To disconnect the negative terminals, disconnect both terminals in order, first disconnect the negative terminal of the 12V battery, and then disconnect the negative terminal of the 24V battery.
- Replace the AdBlue® for vehicles that have not been used for a year or more. Failure to do so may result a failure of the urea SCR system.
- At least once a month, and before using the vehicle, perform the following inspections. Moving the vehicle without performing the inspections may cause engine seizures or other problems.
- Check the engine, transmission and transfer case for oil leakage, and make sure the oil is at the required levels. If there is insufficient oil, it will not adequately reach and lubricate components, and a breakdown will result.
- Start the engine and run it at idle for at least 5 minutes until the temperature indicated in the engine coolant temperature gauge becomes stable. Make sure that the engine produces no abnormal noise, and that the engine oil pressure warning light is not on. For 4WD models, stop the engine, check that there is no oil leakage in the transfer case and check that the oil is filled up to the specified level. In the case of a 4WD model, the inside of the transfer case is lubricated with oil when the vehicle is driven forward. Check that the oil is filled up to the specified level, then drive the vehicle approximately 50 meters (164 ft) forward at a speed of approximately 15 km/h (9 MPH) with the vehicle unloaded.
- For instructions on warming up the engine, refer to "Starting the Engine".

Refer to page
4-53 Starting the Engine

NOTE

[AdBlue®]

- AdBlue® is a registered trademark of Verband der Automobilindustrie (VDA).

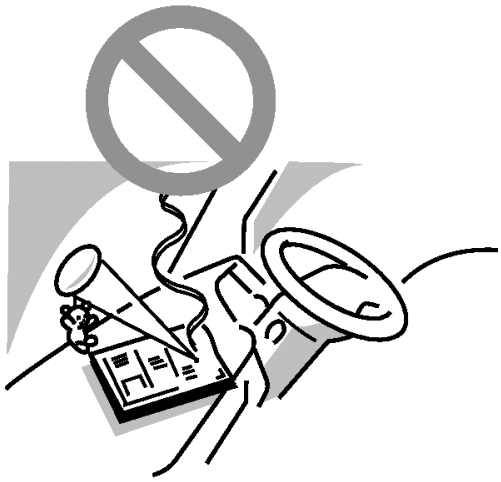
Do not Carry Fuel and Spray Cans in the Cab



WARNING

- **It is extremely dangerous to carry fuel and spray cans in the cab. If such a container were to ignite or rupture, it could cause a fire or explosion.**

Do not Attach Accessories to the Windshield or Windows



WARNING

- **Do not attach ornaments, films or other accessories to the windshield or windows. They would impair visibility. Also, any plastic suction cups used to attach accessories could cause a fire or other accident by acting as lenses.**

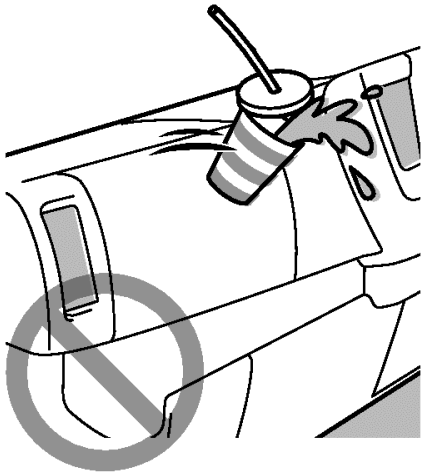
Keep the Floor around the Driver's Seat Clean and Tidy



⚠ WARNING

- **It is extremely dangerous to have empty cans, empty bottles or other items rolling around on the floor because they could get trapped under the brake pedal and prevent brake application.**
- **Do not use the dashboard pocket or the top of the dashboard as a place to put items that could roll, which could interfere with your driving.**

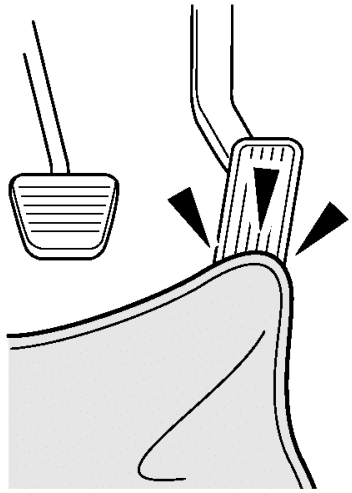
Do Not Spill Any Liquids on the Instrumental Panel



⚠ WARNING

- **Do not spill any liquids on the instrumental panel. They will drip onto the electrical components, such as the control units inside the instrumental panel, and may cause damage and malfunctions.**

Lay the Floor Mat Properly



CAUTION

- **A floor mat must be placed correctly. An incorrectly installed floor mat may hinder the free movement of each pedal.**

Choose Your Footwear Suitable for Driving



CAUTION

- **Choose footwear that ensures proper operation of pedals when driving the vehicle. Use of footwear unsuitable for driving may cause an accident.**

Do Not Press the Switch More Than Needed



⚠ CAUTION

- **The system may determine abnormal conditions exist and unintended operations may occur, such as warning lights lighting or the system being turned on and off.**

Using Tire Chains

Before the onset of winter, make preparations for use of tire chains by fitting the tire chains, adjusting their lengths and checking them for damage.

⚠ CAUTION

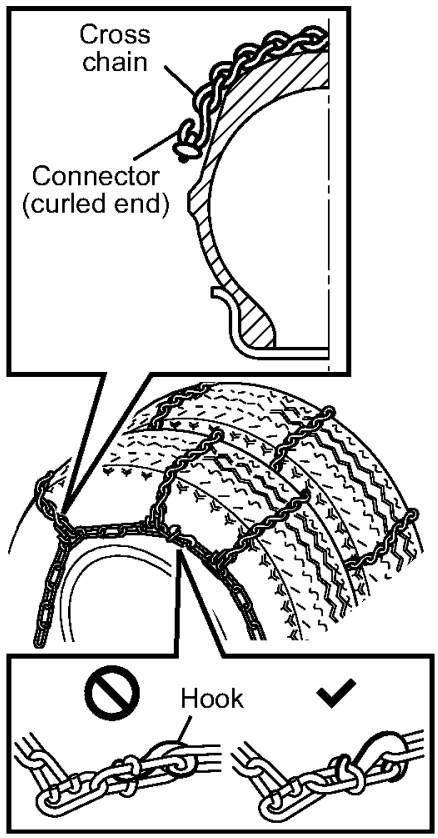
- **Fit the tire chains securely without looseness. If the vehicle is driven with the loosened tire chains, they may interfere with other components or come off, leading to an unexpected accident.**
- **If an abnormal sound is heard, it may indicate a possibility that a tire chain was cut or came off partially. Immediately pull off to a safe place, and check the fitting condition of the tire chains.**
- **The exhaust pipe and muffler are extremely hot when the engine is running, during DPD regeneration, and immediately after the vehicle is driven, so be careful not to touch them. The exhaust gas is also extremely hot during DPD regeneration, so do not work near it.**
- **Be careful not to hurt yourself on the edges of the vehicle while working with the tire chains.**

ADVICE

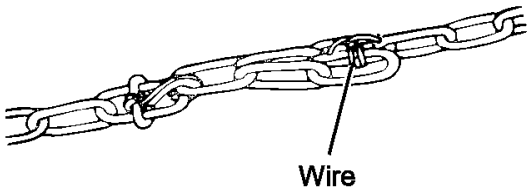
- Tire chains cannot be fitted on the front wheels. Make sure to fit the tire chains suitable for the tire size on the rear wheels.
- For triple chains, they may not be fitted depending on vehicle specifications, so please consult the nearest Isuzu Dealer for details.
- For dual tires, do not fit a single chain only on the outer tire. The chain may interfere with other components and adversely affect driving.
- The sidewalls of radial tires are prone to damage by tire chains. Be sure to use tire chains that are designed for radial tires, or use winter tires.
- When purchasing tire chains, fit them on the tires once and, if they are too long, adjust them to suit the tires.
- When the vehicle is fitted with tire chains, drive at speeds below 30 km/h (19 MPH) and avoid driving on surfaces other than snowy or frozen roads.
- For fitting and handling of tire chains, refer to the instruction manual attached to the tire chains.
- The tire pressure monitoring system may not operate correctly if tire chains are installed.

Refer to page
4-280 Tire Pressure Monitoring System [V]

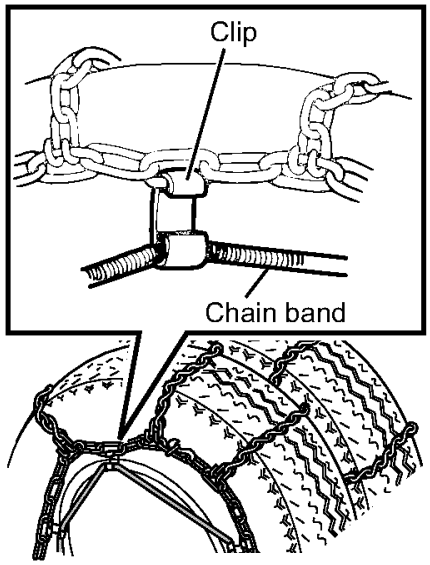
How to Fit a Tire Chain



1. Making sure the tire chain is not twisted, place it on the tire such that the curled ends are on the outside (the side that will make contact with the ground).
2. Pull both ends of the tire chain as far as possible. Couple the inner hooks first, and then couple the outer hooks.
3. The hook should be connected such that it is flat against the tire side face. Also, confirm that there is no twisting or bending in the chain.

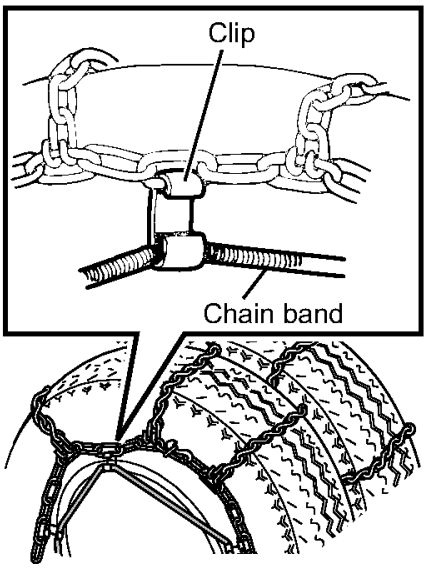


4. Retain any excess portion of chain with wire so it does not hit the vehicle's body or brake pipes.



5. Hook the clips over the chain band (with the clips pointing outward) such that the clips are evenly positioned around the band.
6. After fitting the tire chains and driving for a while, check whether the chains are loose or they have come unfastened.

How to Remove a Tire Chain



1. Remove the chain band and wires, and undo the outer hook first.
2. Move the vehicle and remove the chain.

When Driving

Pre-driving Check List

In addition to the daily (pre-operation) inspection items, it is recommended checking following items to ensure that the vehicle is ready for driving.

Refer to page
9-3 Perform Daily (Pre-operation) Inspections Before Driving

1. Before getting in the vehicle

Check item	Reference page
Look around the vehicle for thorough safety check.	4-15
Lay the floor mat properly.	4-8
Clean the floor around the driver's seat.	4-7

2. After getting in the vehicle

Check item	Reference page
Confirm that the doors are fully closed and locked.	2-26
Check for contamination, damage and obstruction of windows and mirrors.	2-45 10-127
Adjust the seat.	2-34
Adjust the steering wheel.	2-44
Adjust the mirrors.	2-45
Check for horn operation.	4-155
Fasten the seat belt.	1-2

3. Before starting the engine

Check item	Reference page
Confirm that each switch is set to "OFF".	28
Confirm that parking brake is applied.	4-75 4-79
Confirm the gearshift lever is in the "N" or "P" position.	4-100

4. When starting the engine

Check item	Reference page
Check whether the operation check of each warning and indicator light and gauges are performed correctly.	3-2 3-8
Check the fuel level.	3-6

5. After starting the engine

Check item	Reference page
Check the function of defroster.	6-11

6. Before pulling away

Check item	Reference page
Release the parking brake.	4-75 4-79
Check around the vehicle.	4-15

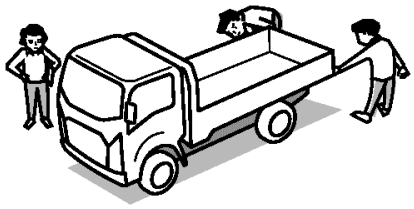
Others

If any of the following situations apply to you, please check according to the contents of the reference in addition to the items above.

Check item	Reference page
Driving on highways	4-22
Driving in winter and in cold regions	4-38
Using a vehicle that has not been used for a long period of time	4-5

Before Pulling Away

Check around the Vehicle



Before pulling away, perform a thorough safety check, making sure there are no children or obstructions around the vehicle.

⚠ WARNING

- **Before starting the engine, make sure there is no flammable material under or around the vehicle. The presence of any such material could lead to a fire. If there is any wood within 50 cm (approximately 20 in) from the vehicle's heat source, it would represent a severe hazard as the wood could deform or discolor from the heat or it could catch fire.**

Refer to page
4-53 Starting the Engine

Do not Forget to Release the Parking Brake

⚠ CAUTION

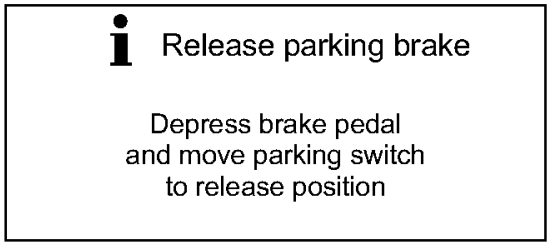
- **Pulling away with the parking brake still engaged can result in brake failure or a fire.**

[Model with electric parking brake]

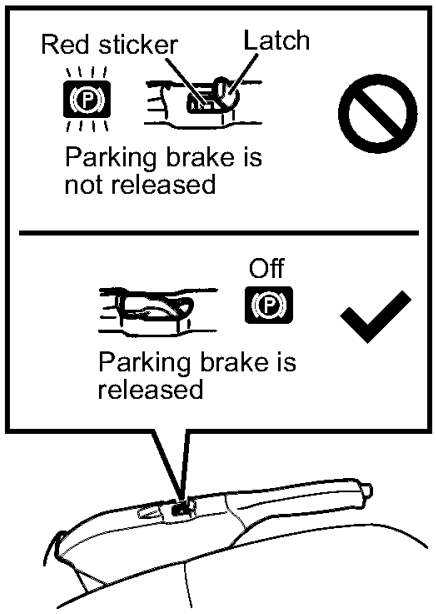
- **When the starter switch is in the "ACC" or "LOCK" position, the parking brake does not release even if the electric parking brake switch is pressed. Put the starter switch in the "ON" position before releasing the parking brake.**

Parking brake warning light





Model with folding parking brake lever



ADVICE

- Check that the parking brake warning light is not illuminated and "Release parking brake" is not displayed in multi-information display (model with electric parking brake) before pulling away.

[Model with electric parking brake]

- The parking brake is released about 1 second after the electric parking brake switch is pressed. Because of this, if you press the electric parking brake switch and immediately pull away, the parking brake remains engaged as you drive, which causes damage to the parking brake.

[Model with folding parking brake lever]

- The parking brake lever can be collapsed by pulling the latch when the parking brake is engaged.
- The red sticker under the latch (if equipped) on the parking brake lever should not be visible. Before pulling away, make sure the parking brake is not engaged by checking that the parking brake warning light is off.

Refer to page
4-75 Parking Brake Lever [V]
4-79 Electric Parking Brake (Model with Center Parking Brake) [HB]

Pulling Away in a Manual Transmission Model

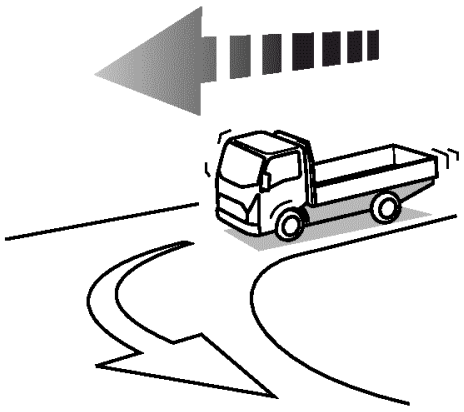
ADVICE

- Pull away gently in 1st gear. Pulling away in a high gear, pulling away rapidly or slipping the clutch for a long time while pulling away would damage the clutch.

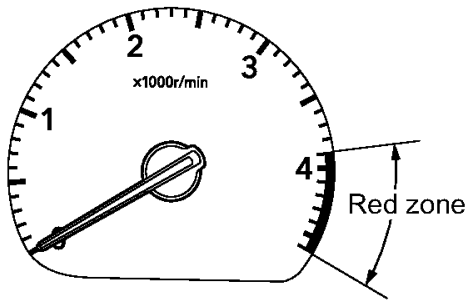
How to Drive Safely

Remember the following when driving the vehicle.

- Concentrate on driving safely, obeying all legally designated speed limits, road signs and traffic signals.
- Do not put your foot on the clutch pedal except when using the gearshift lever. Doing so would cause premature clutch wear.



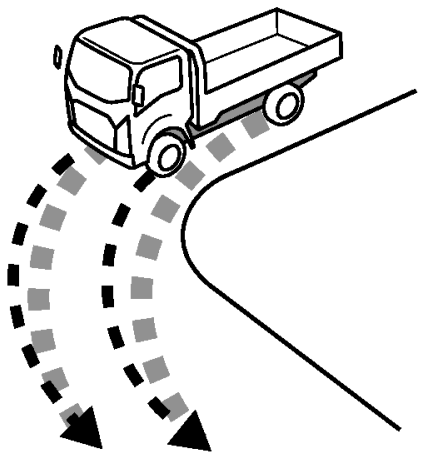
- Slow down sufficiently when approaching a curve. Applying the brakes or sharply turning the steering wheel while turning the curve could cause the cargo to shift, the tires to slip and the vehicle to tip onto its side.
- While driving, do not place your hand on the gearshift lever except when changing gears. Doing so could cause the transmission to fail.
- Avoid scraping the tire sidewalls against curbstones or driving over dips and protrusions in the road surface.
  You could damage the tires, resulting in a blowout or flat tire.



- Drive at a speed that does not cause the tachometer needle to enter the red zone.
  The graduation and the red zone of tachometer are various depending on the models fitted.

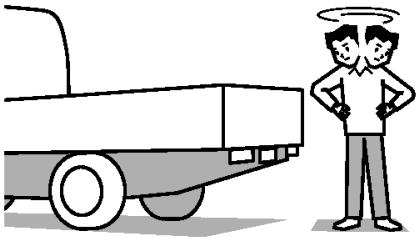
Refer to page
3-3 Tachometer

When Turning Right or Left



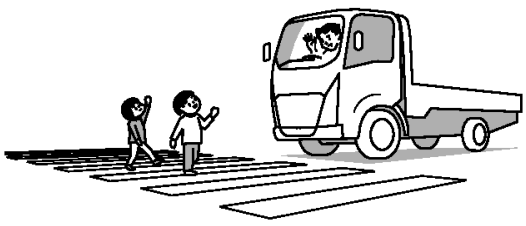
When turning, the rear wheels will follow tighter curves than the front wheels. Use the mirrors to confirm safety.

Reversing



If you cannot see the area behind your vehicle well enough to confirm it is safe to back up, get out of the vehicle and check behind it.

Pulling Away after a Temporary Stop



⚠ CAUTION

- **Make it a habit to look around and confirm that it is safe to pull away after a temporary stop (at traffic lights, for example).**

Be Sure to Have the Engine Running when the Vehicle is Moving

⚠ CAUTION

- **When the engine is not running, the power steering system does not work so the steering wheel is hard to turn. Also, the brake booster does not work so there is little braking ability. If you coast down a slope without the engine running, you would not be able to properly control the vehicle and could have an accident.**

If the Windshield Fogs Up



Refer to "Defogging" to clear fog from the front windshield and ensure a clear field of view.
Place the inside/outside air selector in the outside-air position. Also, use commercially available antifog spray.

Model with Heater/Manual Air Conditioner

Refer to page
6-10 Defogging

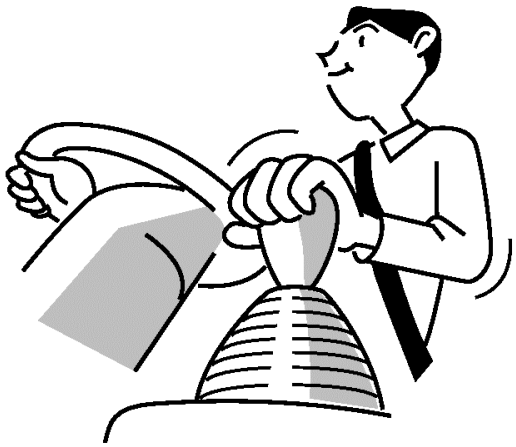
Model with Automatic Air Conditioner

Refer to page
6-18 Defogging

Driving Uphill or Downhill

When driving uphill or downhill, be sure to shift gears appropriately and observe the following precautions:

Refer to page
4-100 Gearshift Lever

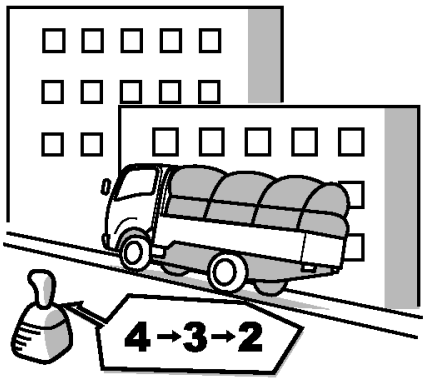


Downshifts are performed for two main purposes:

- For engine braking on a steep and/or long downward slope
- For responsiveness and economy on an uphill slope

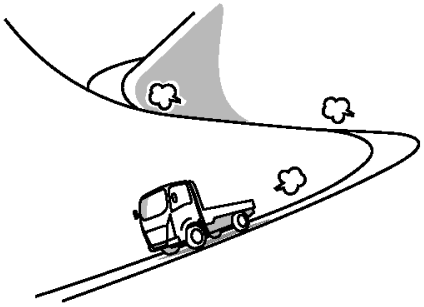
ADVICE

- Allowing the engine to overrun can result in engine damage. Do not allow the engine to overrun when downshifting.



Uphill

Shift down well ahead of time in order to avoid a heavy load to the engine.



Downhill

- Be careful not to drive too fast on a downhill road.
- Use the same gear(s) that you used to drive up the hill. Also, use the exhaust brake in order to avoid going too fast.
- Do not let the engine overrun.
- When going down on a steep slope, avoid driving the vehicle backward as much as possible. Drive it forward slowly on the down slope.
- Compared with forward movement, the braking distance of backward movement is longer, and the steering response of that is worse.
- If you must drive the vehicle backward, drive it very carefully and gradually by moving and stopping repeatedly in order to stop it any time.
- In models with Smoother or DCT, select the manual mode and downshift to the lower gear to use the engine brake.

Refer to page
4-191 Exhaust Brake Switch

⚠ CAUTION

- **Frequent use of the foot brakes can cause vapor lock and brake fade, resulting in reduced brake effectiveness. Even so, you should be very careful when using engine braking in a low gear because the engine is likely to over-rev.**
- **Do not adjust the exhaust brake valve.**

NOTE

[What is engine brake?]

- Engine brake is the braking effect that occurs when you release the accelerator pedal while driving. The lower the gear, the stronger the engine brake.

[What is the exhaust brake?]

- The exhaust brake is a system that closes the exhaust pipe and uses the force of the exhaust emissions to enhance the effectiveness of engine brake.

[What is vapor lock?]

- If the brakes overheat due to frequent use, the heat can cause the brake fluid to boil so that air bubbles are created in the brake fluid.
  Pressing the brake pedal simply compresses the air bubbles; pressure is not transmitted to the wheel cylinders, so the brakes' effectiveness sharply deteriorates. This phenomenon is called vapor lock.

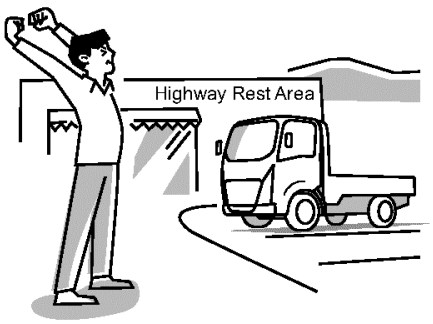
[What is brake fade?]

- Frequent use of the brakes can cause the brakes to overheat so that the frictional force of the brake linings decreases and the brakes become less effective than normal. This phenomenon is called brake fade.

[What is an engine overrun?]

- An engine overrun is an engine-speed increase that causes the tachometer needle to enter the red zone.

Take Breaks during Long Journeys



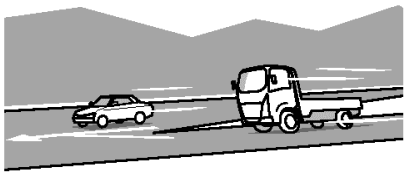
Driving long distances is tiring. Please take rest breaks from time to time.

Highways

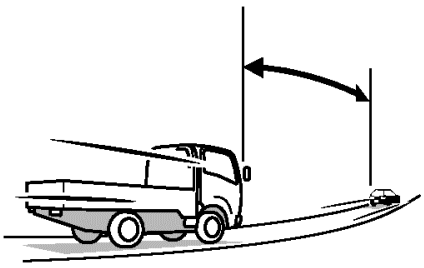
1. Speeds on highways are higher than those on regular roads, so there is more danger. Also, a breakdown on a highway represents a hazard to other vehicles and can cause an accident. Concentrate on safe driving. Remember to perform daily pre-operation inspections and use highway driving techniques.
   When performing daily pre-operation inspections, perform the checks shown in the table on the left with particularly great care.

Tires	• Check that there is ample tread depth.
Engine	• Check that engine coolant is not leaking from the radiator and other parts of the cooling system • Check that the engine coolant level is high enough • Check that the fan belt is properly tensioned and free of damage. • Check that the engine oil level is correct.
Fuel tank	• Check that the fuel level is high enough.

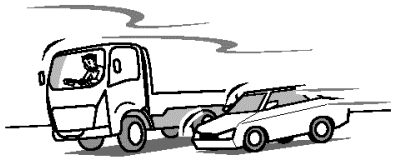
Refer to page
9-3 Perform Daily (Pre-operation) Inspections Before Driving



2. When merging with traffic on a highway, use the turn signal lights to indicate your intentions ahead of time. Speed up sufficiently when you are in the acceleration lane. Pay attention to vehicles behind you and to conditions in the lane you are joining. Merge in such a way that you do not obstruct vehicles in the lane.



3. Your sense of how fast you are traveling becomes distorted on long highway drives. Constantly keep an eye on the speedometer, and maintain a suitable headway distance.



4. During high-speed driving, even a little turn of the steering wheel causes a big movement of the vehicle. Turn the steering wheel slowly.

5. Excessive use of the brake pedal is extremely dangerous because it rapidly wears the brake linings and causes brake fade. Make effective use of the engine brake and the exhaust brake when you wish to decelerate.

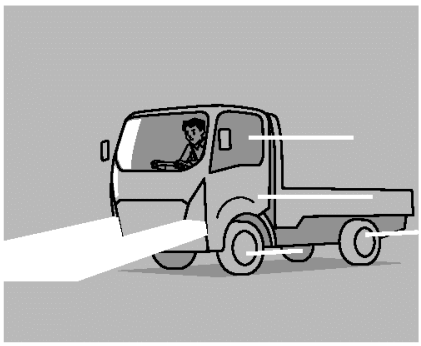
NOTE

[Brake fade]

- Frequent use of the brakes can cause the brakes to overheat so that the frictional force of the brake linings decreases and the brakes become less effective than normal. This phenomenon is called brake fade.

6. When you wish to turn off a highway, use the turn signal lights to indicate your intentions ahead of time. Paying attention to vehicles behind you, turn off the highway smoothly so as not to obstruct other vehicles.

Driving at Night



Nighttime driving is more dangerous than daytime driving because the field of view is narrower. Keep your speed down, and maintain an ample headway distance.

Nighttime Visibility



If there is an oil film on the windshield, the lights of oncoming traffic will be reflected in many directions, making it hard for you to see ahead. Use glass cleaner to clean the glass and the wiper blades.

NOTE

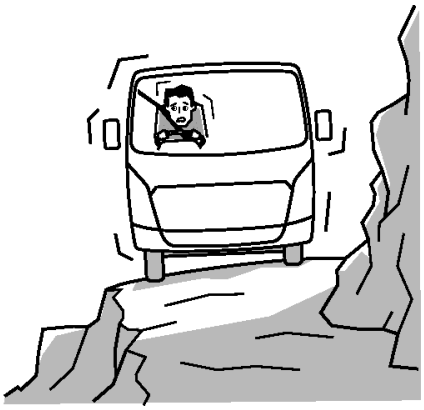
- Worn wiper blades cannot wipe the windshield clean and thus cannot maintain visibility. When the wiper blades become worn, replace them with new ones.

Refer to page
10-126 Wiper Rubber Insert Replacement

Roads That Need More Attention Than Usual

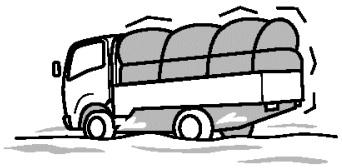
Be careful of the road conditions when driving following roads.

Narrow or Congested Roads



When passing or overtaking a vehicle on a narrow mountain road or on a narrow or congested urban road, pay careful attention to obstacles on either side and to the condition of the shoulder of the road.

Driving on Poor Road Surfaces (Sand or Mud)



If the vehicle gets stuck in mud, pressing the accelerator pedal more than necessary will simply dig the vehicle deeper into the mud and make it harder to extricate. Either put stones, tree branches or blankets under the tires to gain traction or repeatedly drive forward and backward to use the vehicle's momentum to extricate it.
When you cannot avoid driving through deep mud, using tire chains is an effective way to avoid getting stuck.
After driving on rough roads (sandy or muddy roads), be sure to check the tires and valves for any abnormalities.

ADVICE

- When driving in sand or mud, avoid hard braking, sudden acceleration and sharp turns of the steering wheel. Such actions could get the vehicle stuck and make it impossible to extricate.
- After driving through deep mud, any mud stuck to the vehicle can harm the steering, brakes and powertrain. Have the vehicle inspected at the nearest Isuzu Dealer.
- If you notice any abnormalities in the tires or valves, do not continue driving. Instead, replace the tires or contact the nearest Isuzu Dealer immediately.
- The vehicle speed sensors are fitted on the wheels. When removing mud and other incrustation, take great care not to damage the components.
- Do not use a sharp implement to remove mud. Sharp edges could damage rubber parts.

Refer to page
7-13 Handling the Jack
10-71 Changing the Wheels and Tires
10-80 Spare Tire [V]

NOTE

- When you want to free the vehicle from mud where the tires may slip slightly by increasing the engine speed, you can press the ESC OFF switch to disable just the anti-slip regulator (ASR).

Refer to page
10-140 Exterior Maintenance
4-193 Anti-lock Brake System (ABS)
4-199 Anti-Slip Regulator (ASR)

When Weather Conditions Are Bad

CAUTION

- **In bad weather, visibility is reduced and slippery road surfaces increase stopping distances. Drive more slowly than you would in good weather. Also, avoid sharp turns of the steering wheel and hard braking. Use engine brakes together with the foot brakes to decelerate. Using the exhaust brake on a slippery road surface could cause the tires to slip.**
- **If you cannot avoid driving on a flooded road, first check the depth of the water and then drive through the water at a slow, constant speed. There is a risk that water could get inside the engine from the air intake duct or exhaust pipe and cause engine damage (water hammering). Keep your speed down, and drive with great care.**

ADVICE

- There is a risk of hydroplaning, particularly where water tends to collect on the road surface. Drive at speeds that allow you to stay in complete control.

NOTE

[What is hydroplaning?]

- If a vehicle is driven at high speed on a road that is covered with water, a layer of water can form between the tires and road surface, causing the tires to lose their grip and slide across the water. This phenomenon is called hydroplaning. It is dangerous because it makes the steering wheel and brakes useless.

Driving in Fog



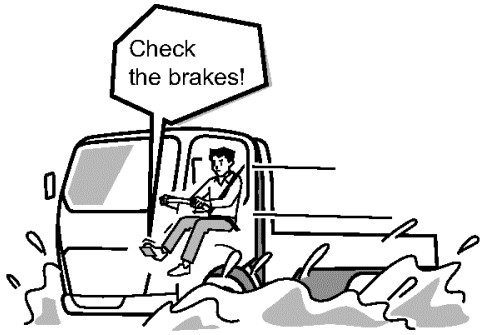
Turn on the fog lights and drive slowly, using the road's center line as a guide. It is dangerous only to follow the lights of the preceding vehicle because they can cause optical illusions. Drive with caution.

When Side Winds Are Strong

If the vehicle catches a sidewind and drifts sideways, firmly grip the steering wheel, decelerate to a speed that allows you to stay completely in control and make a directional correction. The vehicle may catch strong sidewinds in the following situations:

- emerging from a tunnel; driving over a bridge, driving on an embankment or driving through a cutting
- being overtaken by a large truck or bus
- overtaking a large truck or bus

After Driving on Flooded Roads and After Washing the Vehicle



⚠ CAUTION

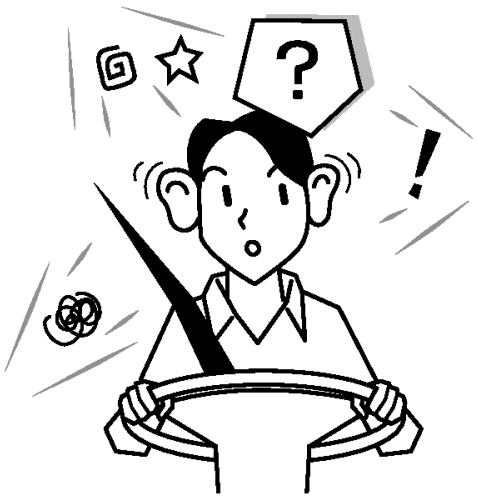
- **If the vehicle must be driven on a flooded road, is washed, or is parked in an area that becomes flooded, water can get into the brakes and reduce their effectiveness. If the brakes do not work well afterward, drive slowly and gently press the brake pedal several times until the brakes dry out and start working normally.**

ADVICE

- If the vehicle must be driven on a flooded road or is parked in an area that becomes flooded, promptly have your Isuzu Dealer perform a check for the following points:
  - Effectiveness of the brakes
  - Water-ingress or damage to drum brakes, disc brakes, or wheel parking brake chamber or other brake parts
  - Engine damage due to water-ingress
  - Shorting of electrical components
  - Oil level and degradation (cloudiness) of the engine, transmission, differential and transfer case
  - Greasing of each components (lubrication)
  - Water-ingress to clutch release bearing
    (When water ingress is suspected, replace the release bearing.)
  - Damage to other clutch parts

If You Notice Something Abnormal While Driving

If you notice something abnormal while driving, such as the following, take appropriate action.



- If you notice any abnormal noise, abnormal smell or abnormal vibration from any part of the vehicle, immediately stop the vehicle in a safe place and perform checks.
- If a warning light comes on or a buzzer sounds while you are driving, immediately stop the vehicle in a safe place and perform checks.
- If the underside of the vehicle receives a hard bump, stop in a safe place where the vehicle will not obstruct traffic and check for brake fluid leakage, fuel leakage and component damage. If any part of the vehicle is damaged or broken, promptly have the vehicle inspected and repaired by the nearest Isuzu Dealer.

Never Stop the Engine While Driving

⚠ WARNING

- **While driving, do not move the starter switch out of the "ON" position. The following could happen and be very dangerous.**
  - **Braking performance will decrease**
  - **Steering wheel and clutch will become stiff and difficult to operate**
  - **All electric circuits, including warning lights and indicators, will stop operating**
- **Placing the starter switch in the "LOCK" position while driving would be extremely dangerous because the key could come out, causing the steering wheel to lock so that you could not turn it.**

Refer to page
4-50 Starter Switch

Precautions on Using Handheld Devices

Do not Use a Mobile Telephone while Driving



⚠ CAUTION

- **Drivers should never use mobile telephones or car phones in any mode other than Hands Free while driving. Doing so is dangerous.**
- **Using a mobile telephone while driving could result in an accident because you would not be paying full attention to your surroundings.**
- **If you are driving and you wish to use a mobile telephone, first stop the vehicle in a safe place.**

Be Careful of Using Lighters Too

⚠ WARNING

- **Do not put a lighter whose operating mechanism is exposed into the glove compartment or anywhere else, and do not leave it fallen between the seats or on the floor. It could release gas when baggage is squeezed in or the seats are moved, which could result in a fire.**

Do Not Throw Cigarette Butts Out of the Vehicle

⚠ WARNING

- **Do not throw lit cigarettes or cigarette butts out of the vehicle. Discarded cigarettes and cigarette butts not only pollute the road and surroundings, but can also cause fires.**

Economical Driving



Driving too fast or driving so slowly that the engine knocks can lead to poor fuel economy. In vehicles with exhaust brake, driving with the exhaust brake switched on all the time or using the exhaust brake frequently to adjust your speed can also lead to poor fuel economy.
Drive at a constant speed as much as possible. When accelerating, increase your speed gently and slowly, and up-shift early. Warming up the engine for longer than necessary and revving the engine are a waste of fuel. Driving with the vehicle overloaded is also a waste of fuel.
Frequently check the tire pressures and make sure they are always correct.

Stopping and Parking

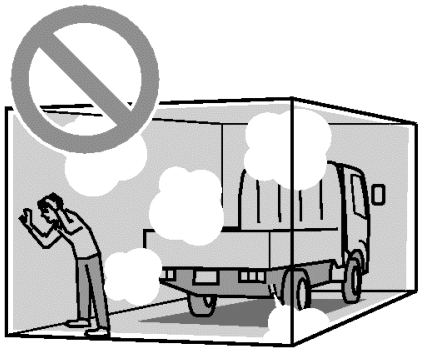
Choose a flat place where stopping and parking are permitted and where the vehicle will not obstruct traffic. Firmly apply the parking brake and make sure the vehicle does not move.

Refer to page
4-75 Parking Brake Lever [V]
4-79 Electric Parking Brake (Model with Center Parking Brake) [HB]

ADVICE

- Avoid parking for long periods with cargo on the vehicle.
- Remove all dirt from the vehicle's light lenses and reflectors to ensure that the vehicle can be seen from other vehicles.

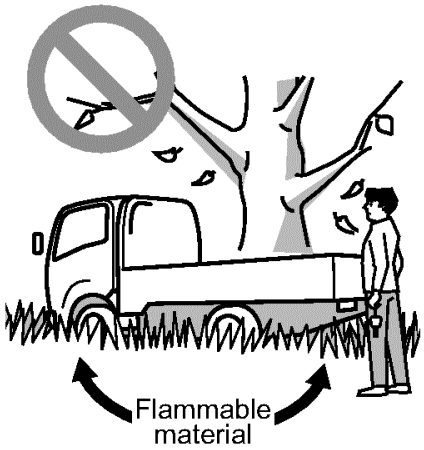
Be Careful about Exhaust Emissions



⚠ WARNING

- **Exhaust emissions contain carbon monoxide, which is colorless, odorless and poisonous. If you inhale exhaust emissions, you may suffer carbon monoxide poisoning.**
- **Do not keep the engine running for any length of time in a place that is poorly ventilated. It is particularly dangerous to run the engine in a garage or other indoor place that could easily fill with exhaust gases because you could suffer carbon monoxide poisoning.**
- **Inspect the exhaust pipe from time to time. If you notice any defect (for example, a damaged joint, or a hole or crack caused by corrosion), have checks and maintenance performed by the nearest Isuzu Dealer. Continuing to use the vehicle without having the defect repaired would be dangerous because exhaust gases could get into the cab and cause carbon monoxide poisoning.**
- **If exhaust gases get into the cab, completely open all of the windows and place the inside/outside air selector of the heater or air conditioner to outside air. Promptly have checks and maintenance performed by the nearest Isuzu Dealer. Continuing to use the vehicle without having the defect repaired would be dangerous because exhaust gases could get into the cab and cause carbon monoxide poisoning.**

Be Careful of Starting Fires and Being Burned

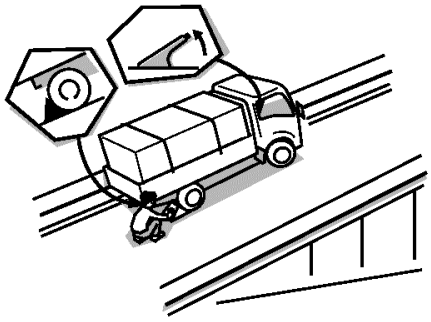


⚠ CAUTION

- **The exhaust pipe is extremely hot immediately after vehicle operation. Before parking, make sure the area is free of flammable material (for example, grass, waste paper, oil or old tires). Take particular care when parking in a garage.**
- **Use caution concerning hot exhaust gases while the engine is idling. Be particularly careful when the power take-off (PTO) is operating (if your vehicle is equipped with a PTO) or the diesel particulate defuser (DPD) is regenerating while the engine is idling.**
- **The DPD may automatically start regeneration when the vehicle is stopped and parked with the engine running. To prevent a fire, make sure there is no flammable material near the muffler, DPD, urea selective catalytic reduction (SCR) system, and exhaust pipe. Be careful not to get burned by hot exhaust gases.**
- **When the engine is running and immediately after vehicle operation, the diesel particulate defuser (DPD), urea selective catalytic reduction (SCR) system, silencer, and exhaust pipe are extremely hot. Be careful not to inadvertently touch them when working near them (for example, tilting the cab or operating an attachment). Otherwise, you could get burned.**

Refer to page
4-244 DPD Manual Regeneration Procedure
4-247 DPD Selectable Regeneration Procedure

Parking Safely on a Slope



CAUTION

- **Avoid parking your vehicle on a slope as much as possible and choose a level and flat place. If it is unavoidable to park your vehicle on a slope, be sure to set the parking brake fully, make sure that the vehicle does not move, and block the wheels with chocks for added safety. Also, leave the vehicle in gear to further ensure that it will not move.**
- **Leave the steering wheel turned such that the vehicle will be stopped by an obstruction (for example, the curb) in the unlikely event that it moves.**

Refer to page
4-113 Parking in Gear

Applying the Parking Brake

ADVICE

- Except in an emergency, do not apply the parking brake until the vehicle has come to a complete stop. Applying the parking brake before the vehicle has stopped can cause the tires to lock or the vehicle to spin, possibly causing an accident.

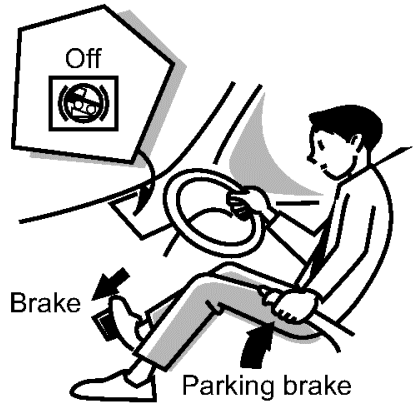
Refer to page
4-75 Parking Brake Lever [V]
4-79 Electric Parking Brake (Model with Center Parking Brake) [HB]

Do not Use the Hill Start Aid (HSA) or Auto Brake Hold for Parking

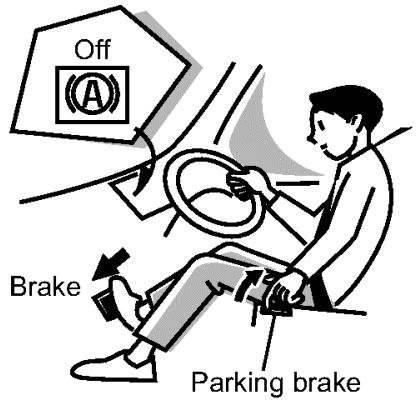
⚠ CAUTION

- **Hill Start Aid (HSA) or auto brake hold is device to stop the vehicle temporarily and cannot replace the parking brake. When parking, be sure to firmly apply the parking brake.**

Model with Hill Start Aid (HSA)



Model with auto brake hold



Refer to page
4-165 Hill Start Aid (HSA) [V]
4-176 Auto Brake Hold [V]

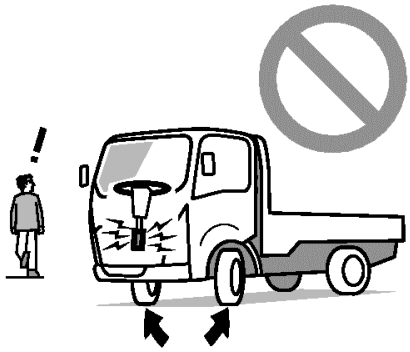
Do Not Park With Only With the Transmission in the "P" Position [DCT]

⚠ CAUTION

- **Do not park the vehicle by only placing the gearshift lever in the "P" position. If the vehicle were to be parked on a steep incline with only the gearshift lever placed in the "P" position, the weight placed on the gearshift lever would become heavy and possibly become unable to be operated. When parking the vehicle, always securely engage the parking brake.**

Refer to page
4-125 Dual Clutch Transmission (DCT) [DCT]

Do not Leave the Steering Wheel Fully Turned for a Long Time



⚠ WARNING

- **If you leave the steering wheel fully turned for a long time, the oil in the power steering oil pump would become extremely hot. This would cause poor lubrication, oil tank damage and seal deterioration, leading to power steering oil pump damage, power steering unit damage and power steering hose damage. As a result the steering wheel could become extremely hard to turn and a fire or other accident could occur.**

Napping in the Vehicle



⚠ WARNING

- **Before taking a nap in the vehicle, be sure to stop the engine and place the starter switch in the "LOCK" position. Otherwise, any unintended contact with the gearshift lever or accelerator pedal while you are asleep could cause the vehicle to move, resulting in an accident.**
  - **If you leave the engine running and unintentionally keep the accelerator pedal pressed while asleep, the engine and exhaust pipe could become abnormally hot, resulting in a fire.**
  - **If you leave the engine running while taking a nap with the vehicle parked in a place where exhaust gases could get into the cab (for example, a place that is poorly ventilated), you could suffer carbon monoxide poisoning.**

Stopping and Parking with the Engine Running

⚠ WARNING

- **When stopping and parking with the engine running, firmly apply the parking brake and do the following operations and checks. Unless you take these steps, any unintended pressure on the accelerator pedal could cause an accident.**
  - **For manual transmission models, be sure to place the gearshift lever in the "N" position to select neutral.**
  - **For Smoother models, be sure to place the gearshift lever in the "N" position and check that the shift indicator is showing "N".**
  - **For DCT models, be sure to place the gearshift lever in the "P" position and check that the shift indicator is showing "P".**

Do not Touch the Gearshift Lever while the Vehicle is Stationary with the Engine Idling

⚠ WARNING

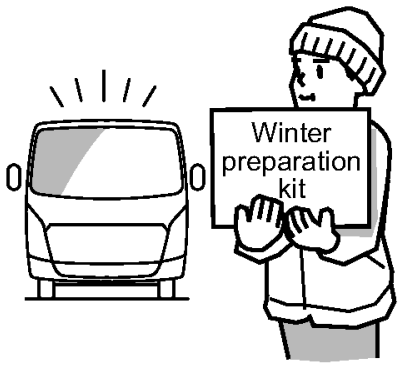
- **Do not touch the gearshift lever while the vehicle is stationary with the engine idling. If you touch the gearshift lever at this time, a gear could be selected and the vehicle could move even with the parking brake applied. The risk of knocking against the gearshift lever and causing an accident is particularly great when you move in or out of your seat.**

Leaving the Vehicle

⚠ WARNING

- **When leaving the vehicle, be sure to apply the parking brake, stop the engine and lock the doors. Do not leave valuables where they can be seen from outside the vehicle.**
- **If you are traveling with a child, do not leave the child alone in the vehicle. If the child touches the controls or equipment, an accident could occur. (For example, the vehicle could move or a fire could start.) Also, the cab inside could become dangerously hot in hot weather.**
- **Do not leave eyeglasses or a lighter in the vehicle. If the cab inside becomes hot, a lighter left there could explode and plastic eyeglass lenses or frames could deform or crack.**
- **Do not leave your vehicle unattended with the engine running. If the engine should overheat, you would not be there to react to the temperature warning light or gauge. This could result in costly damage to your vehicle and its contents.**

Driving in Winter and in Cold Regions



The following cautions apply to snowbound regions and to mountainous regions, ski resorts and other areas of extreme cold and/or snowfall. Please use them also for reference in winter in other regions.
For the sake of your vehicle, have your Isuzu Dealer make the winter preparations described hereafter. Also have these preparations made before driving to a cold region.

Refer to page
4-9 Using Tire Chains
10-4 Engine Oil
10-12 Engine Coolant
10-122 Windshield Washer Fluid
10-127 Battery

CAUTION

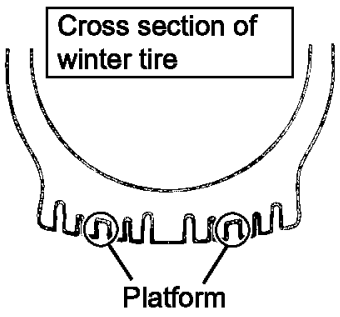
- **Do not cover the front of the radiator with newspapers, cardboard or any other flammable material to raise the engine coolant temperature.**
- **If you allow the engine to warm up but the engine coolant temperature does not rise, have the nearest Isuzu Dealer inspect the thermostat.**
- **If you park in a place where there is a lot of snowfall, snow accumulating around the vehicle could limit ventilation. Running the engine with the vehicle in such a situation could cause exhaust gases to enter into the cab, resulting in carbon-monoxide poisoning. Take preventive action by, for example, clearing the snow around the vehicle.**

ADVICE

- Overcooling of the engine not only accelerates wear of the vital engine parts but also deteriorates fuel economy.

Before Driving in Winter and in Cold Regions

Winter Tires

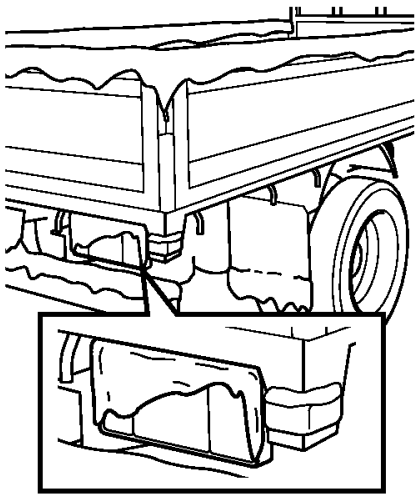


Use winter tires of the same sizes as the standard tires. Also, use wheels of the same size as those with the standard tires.
A winter tire has reached its wear limit when the tread grooves have worn to half of the depth of the new tire. At this time, platforms indicating that the tire can no longer give adequate performance on snow become visible in the grooves. Replace the tire with a new one.

⚠ CAUTION

- **Avoid sharp turns of the steering wheel and hard braking. Use the engine brake to decelerate. When applying the brakes on snowy or frozen road, lightly press the pedal several times rather than giving it one hard press. A single hard press of the pedal would be dangerous because it could cause the vehicle to slip or skid.**
- **If you use the exhaust brake on a slippery road when the vehicle is not loaded, the resulting hard deceleration can cause the back of the vehicle to swing sideways. Exercise caution.**
- **Avoid driving at high speeds on a dry road with winter tires.**
- **Comply with local legal requirements when using winter tires.**

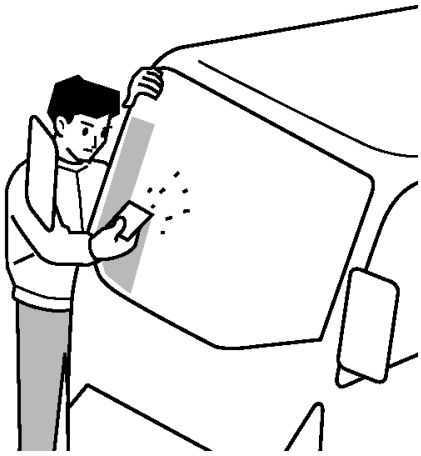
Taking Care of Lighting Equipment in Snowy Areas



⚠ CAUTION

- **Before driving, remove any snow or ice that may be stuck to the lighting equipment.**
- **While driving in snowy conditions, periodically remove any snow or ice that has stuck to the lighting equipment. Splashing water and snow may freeze and accumulate on the lamps while driving. This could reduce visibility from other vehicles and cause an unexpected accident.**

Removing Snow from the Glass and Underbody

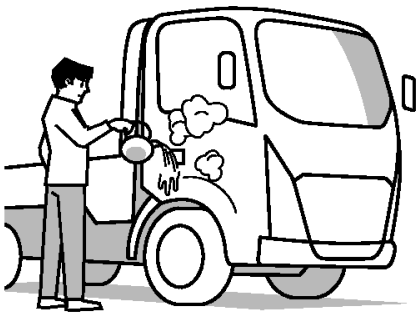


To maintain an adequate field of view, use a plastic scraper to remove snow and frost from the glass surfaces. By using a plastic scraper, you can remove the snow and frost without scratching the glass. At this time, check whether the wiper blades are frozen onto the glass.
Also, look under the vehicle and remove any lumps of ice that are stuck to the underbody. Be careful not to damage components.

ADVICE

- Do not use a sharp implement to remove snow. Sharp edges could damage rubber parts.

When Ice Prevents You from Putting the Key in the Door or Opening the Door



If you try to force the key into the door, you could bend it. And if you try to pull the door open with undue force, the rubber seal around the door could come unstuck or become damaged. Use warm water to melt the ice, then quickly wipe it away and open the door.
If the wipers, electric door mirrors, or power windows freeze up, also use warm water to melt the ice and then operate the system. Otherwise, you could damage the mechanism and drain the battery. After that, wipe the water away.

Getting In and Out of the Vehicle

The step can get icy in cold regions. Be careful not to slip when getting in and out of the vehicle.

Before Sitting in the Driver's Seat



Remove snow and ice from your shoes when getting into the vehicle. If you try to drive with snow on your shoes, your shoes would slip on the pedals and you would not be able to press the pedals properly, meaning that your driving would be inconsistent. Also, the cabin could become more humid, causing the glass to fog up.

Starting the Engine

The engine should go through a warm-up period to warm up the engine oil before placing engine under load. This will ensure proper lubrication of the engine.

NOTE

- For Smoother or DCT models, when the ambient temperature or the temperature inside the garage is lower than -25°C (-13°F), the transmission needs to be warmed up in addition to the engine. To start the engine and operate the transmission correctly, warm them up sufficiently.

Refer to page
4-61 Warm-Up System [V]
4-61 Warm-Up Switch [V]
4-62 Idling Control Knob [V]

Check the Accelerator Pedal Operation



When you start the engine, check that the accelerator pedal works smoothly.

Check the Fuel Level

Fuel consumption becomes higher when tire chains are used. Check how much fuel you need to reach your destination and top up the tank in advance.

Refer to page
4-47 Fuel

Precautions for Driving in Winter and Cold Regions

Driving on Snowy or Frozen Roads



CAUTION

- **On slippery roads, never accelerate rapidly, brake hard, decelerate rapidly or make sharp turns of the steering wheel.**
- **There is a risk of reduced grip between the tires and road surface and of increased braking distances. The danger of icy road surfaces is particularly great on bridges, in shady places and where there are puddles. Keep your speed down and be sure to use tire chains or winter tires on snowy or frozen road surfaces.**
- **Use lower gears to overcome the retardation effect of the engine. Apply the foot brakes lightly.**

Refer to page
4-9 Using Tire Chains

ADVICE

- For Smoother/DCT models, if the gear for starting is not 3rd gear, you can start in 3rd gear in manual-mode if you first hold down the brake pedal in the "M" position and move the gearshift lever to the "+ (upshift)" position.

NOTE

- When you want to free the vehicle from snow where the tires may slip slightly by increasing the engine speed, you can press the ESC OFF switch to disable just the anti-slip regulator (ASR).

Refer to page
4-199 Anti-Slip Regulator (ASR)
4-202 Electronic Stability Control (ESC)

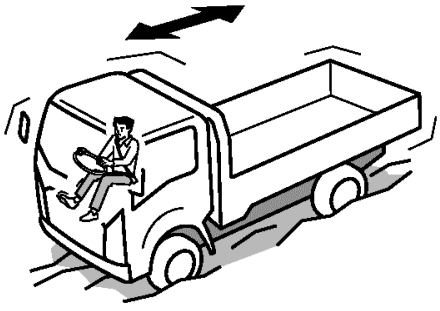
Pay Attention to the Way the Steering Wheel Turns and Feels



⚠ CAUTION

- On snowy roads, water and snow splashed up by the tires can freeze and accumulate inside the fenders, making the steering wheel hard to turn. From time to time, get out of the vehicle and remove any accumulated snow. Do not use a sharp implement to remove the snow. Sharp edges could damage rubber parts.

Check the Brakes from Time to Time



⚠ CAUTION

- When the vehicle is driven or parked on a snowy surface, ice can form on the brakes, decreasing their effectiveness. From time to time while you are driving, press the brake pedal lightly and check the brake's effectiveness. Pay attention to vehicles both ahead and behind you when checking the brakes in this way.
- Also, check the brake's effectiveness as soon as possible when starting to drive the vehicle after it has been parked. If the brakes do not work well, drive slowly and gently press the brake pedal several times until the brakes dry out and start working normally.

Parking in Winter and in Cold Regions

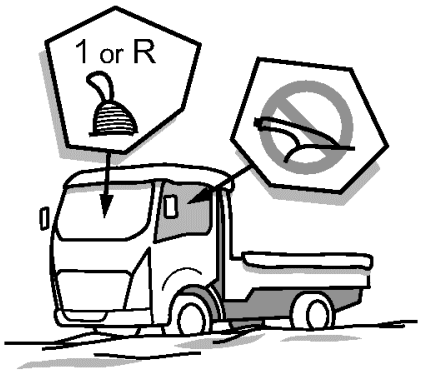
When snow collects around the wheels and lights, try to remove it before night falls.

⚠ CAUTION

- **Do not apply the parking brake in cold regions. If you leave the parking brake applied, the wires, brake shoes, and pads may freeze and become impossible to release. Also, set the automatic operation function of the electric parking brake to "OFF". The parking brake is automatically applied when the automatic operation function of the electric parking brake is left "ON".**
- **For parking in gear: If the vehicle has a manual transmission, place the gearshift lever in the "1 (1st gear)" or "R (reverse)" position. With Smoother model, make sure the shift indicator is showing "1 (1st gear)" or "R (reverse)".**
- **In DCT models, park the vehicle on a flat surface, make sure that the shift indicator indicates "P", and then stop the engine. Also, always remember to chock the wheels.**
- **In DCT models, parking while in gear is not possible. It is not mechanically possible, so never attempt to park while in gear.**
- **Park your vehicle in a garage whenever possible to prevent parts from freezing and to improve startability.**

[NPS/NQS models]

- **When parking after switching the range of the transfer, for safety reasons, make sure that driving power is being transmitted.**

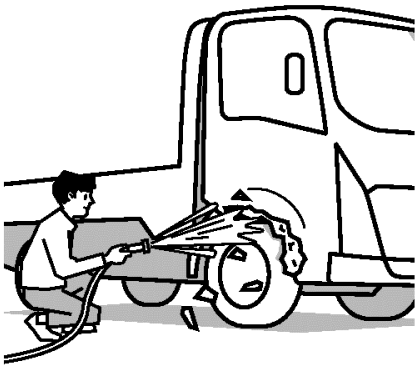


Refer to page
4-113 Parking in Gear
4-234 Switching HIGH and LOW Range [V]

NOTE

- When parking outdoors, take steps to prevent the engine from getting unnecessarily cold. For example, position the vehicle with the front end downwind.
- Do not park under trees or under the eaves of a building. Chunks of ice could fall on the vehicle if you park in such a place.
- If you park models with electric parking brake in gear, a warning buzzer will sound for about 30 seconds. This does not indicate an abnormality.

Cleaning the Vehicle after Driving on Snowy Roads



CAUTION

- **Remove snow that has stuck to the inside of the fenders and to the brake hoses. Otherwise, it may damage components. After driving on a salted road, wash the underside of the vehicle as soon as possible to prevent the salt from causing rust. Spraying water under high pressure is an effective way to get the salt off.**
- **After washing the vehicle, wipe the door openings dry.**

Refer to page
10-140 Washing

ADVICE

- The vehicle speed sensors are fitted on the wheels. When removing snow, ice and other incrustation, take great care not to damage the components.
- Do not use a sharp implement to remove snow. Sharp edges could damage rubber parts.

Refer to page
4-193 Anti-lock Brake System (ABS)

Handling Fluids, Lubricants and Diesel Fuels in the Winter and in Cold Regions

Fuel

CAUTION

- **For models conforming to Japan post-post new long term regulation emission standards, be sure to use low-sulfur diesel fuel (containing sulfur of 50 ppm or lower) or extra-low-sulfur diesel fuel (containing sulfur of 10 ppm or lower). In particular, an extra-low-sulfur content diesel fuel (10 ppm or less sulfur content) is recommended. For models conforming to EuroVI emission standards, be sure to use extra-low-sulfur diesel fuel (containing sulfur of 10 ppm or lower).**
- **The use of a poor-quality diesel fuel, mixing such an additive as water remover to the fuel in the tank, or filling the tank with gasoline, kerosene or an alcohol-based fuel or its mixture with a diesel fuel will badly affect the fuel filter and result in lubrication problems in fuel-lubricated components of the injectors. In addition, this practice can also impair the operation of the engine and the diesel particulate defuser (DPD), the urea selective catalytic reduction (SCR) system, the exhaust emission cleaning system, possibly leading to breakdown of the engine-related systems. If an incorrect fuel should accidentally be added, drain all fuel from the system. Failure to observe this precaution can result in the outbreak of fire or permanent damage when the engine is started.**
- **Using diesel fuel other than extra-low-sulfur diesel fuel or low-sulfur diesel fuel in a model conforming to Japan post-post new long term regulation emission standards could prevent the vehicle from complying with local legal requirements. Using diesel fuel other than extra-low-sulfur diesel fuel in a model conforming to EuroVI emission standards could prevent the vehicle from complying with local legal requirements.**
- **Open the fuel tank filler cap slowly. If you open it quickly, fuel may spurt out.**

If you drive to a cold region in winter while using diesel fuel for warmer regions that freezes at a relatively high temperature, the fuel may freeze. As the ambient temperature decreases, the fuel in the fuel tank and pipes may freeze like slush, making the engine hard to start.

NOTE

- The specifications of diesel fuel differ according to the season and region.
- When driving to a cold region, put just enough fuel to reach the destination in the tank. As soon as you reach the cold region, fill the tank with fuel that has a low freezing temperature.
- When taking the vehicle to a cold region on a ferry, board the ferry with only a minimal amount of fuel in the tank and then, after reaching the cold region, fill the tank with fuel that has a low freezing temperature.

Replacing the Engine Oil

The engine oil tends to harden with lowering temperatures. Use engine oil with a viscosity suited to ambient temperature.

Refer to page
10-8 Changing the Engine Oil and Oil Filter
8-22 Recommended Fluids, Lubricants and Diesel Fuels
8-26 Engine Oil and Gear Oil Viscosity Charts

Adding AdBlue® in Freezing Conditions

Be sure to add AdBlue® before finishing vehicle operations when the multi-information display shows that the AdBlue® level is at 0 or 1 under freezing conditions.

CAUTION

- **Do not warm up the AdBlue® tank using burners or heaters.**

ADVICE

- AdBlue® freezes at a temperature of -11°C (12°F). Since the urea SCR system is equipped with a heating function that utilizes the engine coolant or the electric heating wire, the engine will start even when AdBlue® is frozen.

Refer to page
4-252 Handling of AdBlue®
4-252 Is a Specified AdBlue® Being Used?
4-262 Refilling AdBlue®

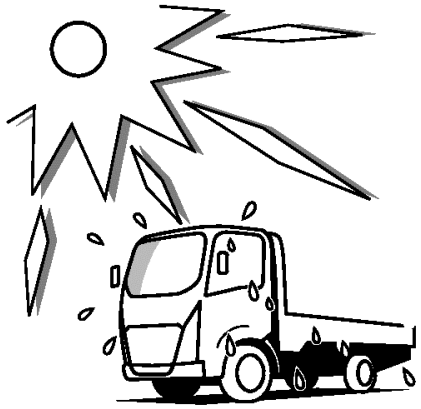
Engine Coolant in Cold Weather



To prevent the engine damage due to freezing of the engine coolant, mix the coolant and water at a ratio of 50/50. Replace damaged rubber hoses as the engine coolant becomes liable to leak even past minor cracks when the engine coolant solution is used.

Refer to page
10-17 Changing the Engine Coolant
10-13 Preparing Engine Coolant

Driving in Summer and in Hot Regions



The engine will be prone to overheating in an environment where the ambient temperature is high. To prevent the engine from overheating, pay attention to the following points:

- Use an appropriate concentration of coolant to prevent the engine from seizing due to overheating.

⚠ CAUTION

- **Do not put well water, river water or other hard water in the engine cooling system. It would hasten the formation of rust and scale.**

Refer to page
10-12 Engine Coolant



- If foreign matter (insects, mud, etc.) gets stuck in the radiator's air passages, the cooling system's performance will deteriorate. Check the air passages for clogging, and remove any foreign matter using water under low pressure.

Refer to page
10-29 Cleaning the Radiator, Intercooler and Condenser

ADVICE

- When the ambient temperature is high, evaporation of battery fluid will become quicker. Frequently check the battery fluid level and, when necessary, add more fluid.

Refer to page
10-127 Battery

Starting and Stopping the Engine

Starting and Stopping the Engine

Starter Switch

ADVICE

- After starting the engine, do not turn the starter switch to the "START" position. Otherwise, the starter motor may be damaged.
- Using electrical devices such as the audio system for an extended time period with the engine stopped can completely discharge the battery.

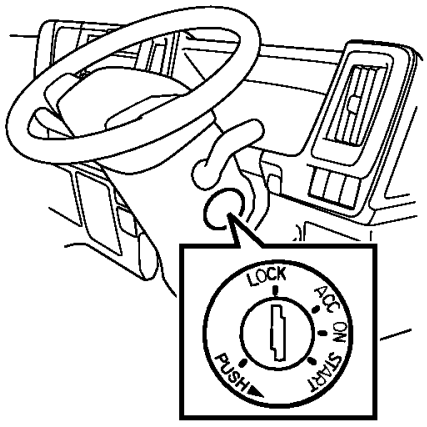
Model without Passive Entry and Start System

WARNING

- **While driving, never turn the starter switch to the "LOCK" position. The key could be removed from the switch, which then locks the steering wheel. This is extremely dangerous.**

ADVICE

- Using a key sticking with dirt or dust, etc. may possibly damage the starter switch. Make sure to wipe off any dirt or dust, etc. before inserting the key.



LOCK

In this position, the key can be inserted or removed.

Remove the key and turn the steering wheel until it locks. The steering wheel will be locked to help prevent theft.

To place the starter switch in the "LOCK" position, press and hold the key in the "ACC" position and then turn it to the "LOCK" position.

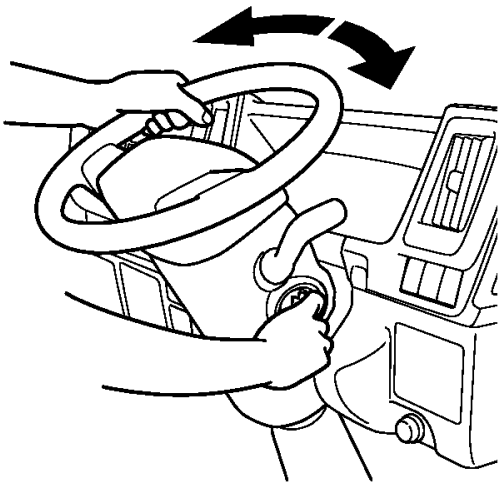
ACC
In this position, the audio and other accessories can be used with the engine stopped.

ON
The key stays in this position while the engine is running. This position is also used for preheating before starting the engine.

START
The engine is started in this position. Release the key as soon as the engine has started. The key automatically returns to the "ON" position.

NOTE

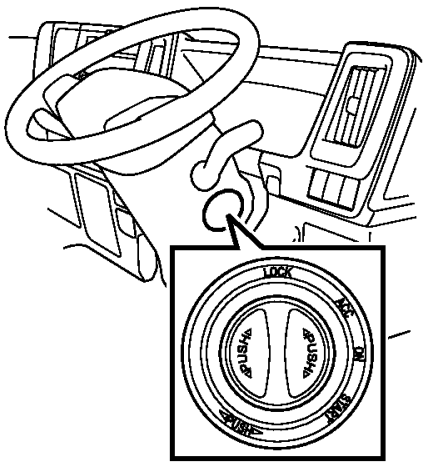
- If the key cannot be turned from the "LOCK" position to the "ON" position, lightly move the steering wheel clockwise and counterclockwise while trying to turn the key.



Model with Passive Entry and Start System

WARNING

- **While driving, never turn the starter switch to the "LOCK" position. Doing so locks the steering wheel. This is extremely dangerous.**



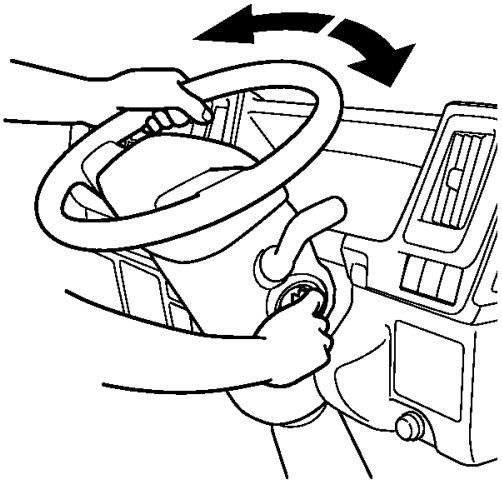
PUSH
When the starter switch is pressed, the passive entry and start system checks for the key, and once it is verified, the starter switch can be operated.

LOCK
In this position, the starter switch is locked. The steering wheel will be locked to help prevent theft.
To place the starter switch in the "LOCK" position, press and hold the key in the "ACC" position and then turn it to the "LOCK" position.

ACC
In this position, the audio and other accessories can be used with the engine stopped.

ON
The starter switch stays in this position while the engine is running. This position is also used for preheating before starting the engine.

START
The engine is started in this position. Release the starter switch as soon as the engine has started. The starter switch automatically returns to the "ON" position.



NOTE

- When the remote control unit battery has run out or when the passive entry and start system fails to recognize the remote control unit due to the surrounding radio waves conditions, the starter switch cannot be turned.
- When you cannot turn the switch from the "LOCK" position to the "ON" position, turn it while gently moving the steering wheel from side to side.

Refer to page
2-9 Replacing the Battery of the Passive Entry and Start System Key
11-27 When the Passive Entry and Start System Does Not Work Properly [V]

Starting the Engine

Make sure that the switches, including those for the windshield wiper, light control and air conditioner, are in the off position.
Turn the starter switch to the "ON" position to check that the warning and indicator lights turn on normally and the fuel level is proper.

WARNING

- **Do not keep the starter switch in the "START" position for more than about 10 seconds. Operating the starter for too long might cause battery failure or might result in overheating and even a fire.**

CAUTION

- **If your vehicle is equipped with a manual transmission, firmly engage the parking brake when you sit in the driver's seat before starting the engine. Also, be sure to start the engine while pressing the clutch pedal and after making sure that the gearshift lever is in the "N" position.**
- **If your vehicle is equipped with a Smoother system, firmly engage the parking brake when you sit in the driver's seat, check that the gearshift lever is in the "N" position and the shift indicator shows "N", and firmly press the brake pedal before starting the engine. Also, be sure the following when starting the engine.**
  - **After making sure the engine has started, place the gearshift lever to the "D" or "R" position from the "N" position. If you operate the gearshift lever when the engine is not running (starter switch is in the "ON" position), the starter motor turns on and off and the parts related to the starter motor such as the gear may be damaged.**
- **To start the engine in an DCT vehicle, sit in the driver's seat, firmly engage the parking brake, put the gearshift lever in the "P" position, confirm that the shift indicator shows "P", firmly press the brake pedal, and then start the engine. Also, when starting the engine, pay attention to the following.**
  - **Make sure that the engine has started before moving the gearshift lever from "N" or "P" to "D" or "R". If you operate the gearshift lever without confirming that the engine has started, the starter motor turns on/off, which could damage the ring gears and other parts related to the starter.**
  - **Although starting of the engine can be attempted in the "N" position, for safety reasons, it is recommended that starting be performed in the "P" position.**
- **Be sure to sit in the driver's seat to start the engine. If you lean through the window from outside of the vehicle to start the engine, the vehicle may start moving if the gearshift lever is in any position other position than "N". This is very dangerous. Never start the engine that way.**

ADVICE

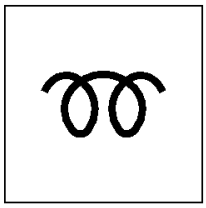
- At low ambient temperatures, a cold engine may emit more smoke (white smoke) than usual.
- If you place the warm-up switch in the "ON" position, the engine can be warmed up faster and the exhaust smoke can be reduced.
- In certain situations where the starter switch is placed in the "ON" position or the brake pedal is pressed several times during idling, the vacuum may be depleted and a warning buzzer may sound.

Refer to page
3-35 Brake Booster Warning Light [HB]
4-61 Warm-Up Switch [V]

Model without Passive Entry and Start System

1. In manual transmission models, place the gearshift lever in the "N" position, and fully depress the clutch pedal.
   In Smoother models, make sure that the gearshift lever is in the "N" position. And then firmly press the brake pedal.
   In DCT models, make sure that the gearshift lever is in the "P" position. And then firmly press the brake pedal.
2. When the starter switch is turned to the "ON" position, the glow plug indicator light comes on and it goes out in about 0.5 seconds when the engine is warm, or in about 4 seconds when the engine is cold.

Glow plug indicator light



ADVICE

- Do not step on the accelerator pedal before starting. When the accelerator pedal is pressed before the starter switch is turned on, the "START FUEL ENRICH SYSTEM" may not function correctly. Accordingly, starting becomes substantially more difficult.

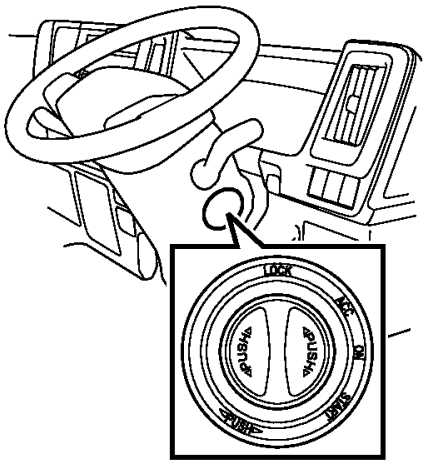
3. After confirming that the glow plug indicator light has gone out, turn the starter switch to the "START" position to start the engine.
4. If your vehicle is equipped with an idling control knob, use the knob to stabilize the engine speed when the engine runs rough during warm-up, regardless of the position of the warm-up switch.

CAUTION

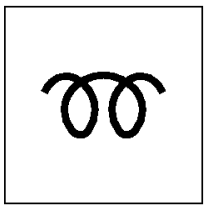
- **Do not leave the vehicle at this time.**

5. When your vehicle has warmed up, fully turn the idling control knob counterclockwise and run the engine at idle.

Model with Passive Entry and Start System



Glow plug indicator light



1. In manual transmission models, place the gearshift lever in the "N" position, and fully depress the clutch pedal.
   In Smoother models, make sure that the gearshift lever is in the "N" position. And then firmly press the brake pedal.
   In DCT models, make sure that the gearshift lever is in the "P" position. And then firmly press the brake pedal.
2. When turning the starter switch to the "ON" position while pressing it, the glow plug indicator light comes on and goes off after approximately 0.5 seconds (when the engine is warm) to 4 seconds (when it is cold).

NOTE

[When you cannot turn the starter switch]

- If the passive entry and start system fails to recognize the remote control key, such as when the remote control key is outside the operating range or when the battery has run out, the starter switch cannot be turned from the "LOCK" position.
- If the passive entry and start system fails to recognize the key when the starter switch is pressed, "Authenticate key" appears on the multi-information display and the buzzer sounds. At this time, check that you are carrying the remote control key.
- If "Authenticate key" appears on the multi-information display and the buzzer sounds even though you are carrying the remote control key, change the position of the key you are carrying and operate the starter switch again.

NOTE (Continued)

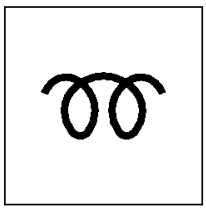
NOTE (Continued)

- If the engine cannot be started with the remote control key, refer to "When the Passive Entry and Start System Does Not Work Properly" to start the engine.

Refer to page
11-27 When the Passive Entry and Start System Does Not Work Properly [V]

3. After confirming that the glow plug indicator light has gone out, turn the starter switch to the "START" position to start the engine.
   Also, if the engine speed is unstable, regardless of the warm-up switch, turn the idling control knob to adjust it to be stable and let the engine warm up. After warming up, turn the idling control knob all the way to the left, and let the engine idle.

Glow Plug Indicator Light



This indicator light comes on when the starter switch is turned to the "ON" position and goes out when preheating is completed. When the indicator light has gone out, the engine may be started.

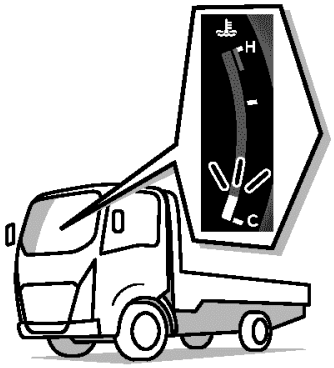
Refer to page
4-53 Starting the Engine

NOTE

[Preheating]

- Diesel engines are compression ignited, which makes them difficult to start when they are cold because the compression alone cannot create a temperature high enough for fuel to ignite. "Preheating" means warming the compressed air inside the combustion chambers to facilitate engine starting. Be sure to start the engine after the glow plug indicator light has gone out.

Allow the Engine to Warm Up after Starting



The engine is sufficiently warmed up when the needle of the engine coolant temperature gauge starts to move.

Refer to page
4-61 Warm-Up Switch [V]
4-62 Idling Control Knob [V]

WARNING

- **Running the engine in a poorly ventilated place can lead to carbon monoxide poisoning. Start and warm up the engine only in places that have good ventilation.**

ADVICE

- Do not rev the engine or quickly accelerate before the engine has sufficiently warmed up (in other words, when the engine is cold). Oil would not have adequately reached and lubricated components, so a breakdown would result.
- The exhaust pipe becomes extremely hot while the engine is idling. Before warming up the engine, make sure there is no flammable material (for example, grass, waste paper, oil or old tires) near the exhaust pipe.

NOTE

- If the outside air temperature and coolant temperature are low when the vehicle is stopped, a sufficient amount of air may not be supplied from the air conditioner. However, this is not a malfunction.

When the Engine Cannot be Started

⚠ CAUTION

- **When the engine does not start, wait for at least 2 seconds and then turn the starter switch again.**

[Model conforming to Japan post-post new long term regulation emission standards]

- **The engine cannot be restarted when the "Restart inhibited" warning is displayed and a continuous beep sounds. Take corrective actions according to the message shown on the multi-information display.**

Refer to page
4-259 Restart inhibited warning (AdBlue® is empty)
4-261 Restart inhibited warning (abnormal AdBlue® quality)

Stopping the Engine

Firmly apply the parking brake.
With the accelerator pedal released, turn the starter switch to the "ACC" or "LOCK" position.



ADVICE

- Do not shut down the engine immediately after driving the vehicle, doing so could cause it to seize, or some other damage. Before stopping the engine, run the engine at idle for approximately 3 minutes to cool it down after applying the parking brake and doing the following operations and checks.
  - For manual transmission models, be sure to place the gearshift lever in the "N" position to select neutral.
  - For Smoother models, be sure to place the gearshift lever in the "N" position and check that the shift indicator is showing "N".
  - For DCT models, be sure to place the gearshift lever in the "P" position and check that the shift indicator is showing "P".
- To prevent the battery from going dead, turn the starter switch to the "ACC" or "LOCK" position after stopping the engine. If you leave the vehicle for an extended period of time, place the starter switch in the "LOCK" position.

NOTE

- After driving with a heavy load, or after driving on a highway, let the engine idle for at least 3 minutes to cool it down. This allows the turbocharger to return to idle speed. Engine oil pressure is available for lubrication at this time and will prolong the life of the turbocharger bearings.
- Immediately after stopping the engine, you may hear a metallic plinking sound from the muffler. This sound occurs as the muffler cools down and contracts. It does not indicate an abnormality or breakdown.

Warm-Up System [V]

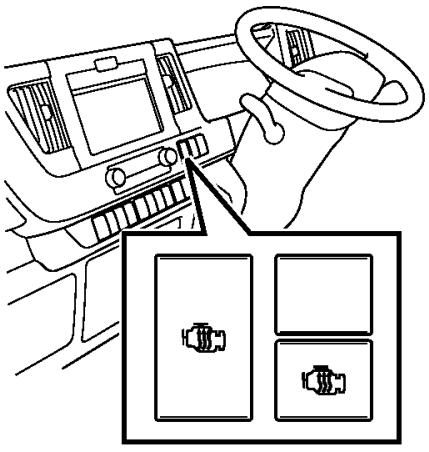
The warm-up system is a system that automatically increases the idling speed to warm the engine and improve heater operation when the engine is started in cold weather (outside temperature of approximately 5°C (41°F) or below). When the warm-up system is operated, the engine idle speed will increase to approximately 1,400 r/min. This does not indicate a failure. The warm-up system will automatically turn off when the outside air temperature increases (to approximately 10°C (50°F)) or when the engine is warmed. Also, the warm-up system will stop if any of the following occur during its operation.

- The brake pedal is depressed
- The clutch pedal is depressed (manual transmission models)
- The gearshift lever is placed in any position other than "N" (manual transmission models)

NOTE

- The engine idling speed is slowly decreased when the warm-up system is stopped by the operation of the brake pedal or clutch pedal.
- The engine idling speed is immediately decreased when the warm-up system is stopped by the operation of the gearshift lever.

Warm-Up Switch [V]



This switch is used to allow engine coolant to warm up faster at low temperatures to increase the efficiency of the heater and/or the defroster, or to increase the efficiency of the heater while the vehicle is parked.
Start the engine and press the warm-up switch. The warm-up system indicator light on the instrument panel comes on and the engine warms up faster.
After the engine has warmed up, press the switch again to turn the warm-up system off. The indicator light goes out.

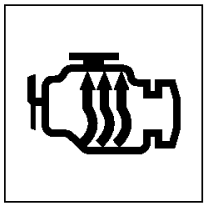
NOTE

- The warm-up system does not operate even if the warm-up switch is pressed when it is sufficiently warm, the engine is warm enough or the vehicle is already being driven.
- If your vehicle is equipped with an idling control knob, increasing the engine speed to 1,000 r/min or above using the knob deactivates the warm-up system, in this case the system then does not work even if the warm-up switch is pressed and the warm-up system indicator light comes on.

Refer to page
4-58 Allow the Engine to Warm Up after Starting

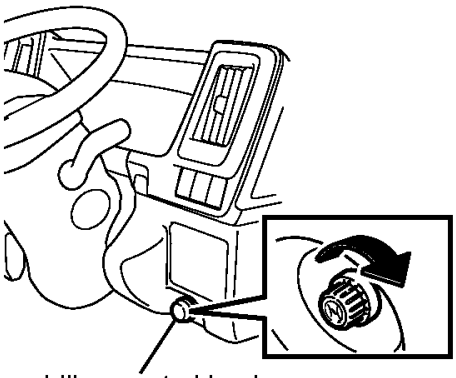
Warm-Up System Warnings/Indicators

Warm-Up System Indicator Light



This indicator light comes on when the warm-up switch is pressed. While this indicator is on, the engine is warmed up.

Idling Control Knob [V]



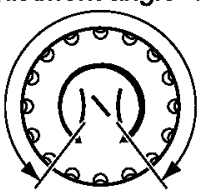
Idling control knob

This knob is used to warm up the engine. You can increase the engine speed by turning the knob clockwise without the need to use the accelerator pedal.
Turn the knob back fully counterclockwise after you have used it for engine warm-up and keep it in this position.

⚠ WARNING

- **Running the engine in a poorly ventilated place can lead to carbon monoxide poisoning. Choose a well ventilated place when starting and warming-up the engine. White smoke may be emitted for a short time during diesel particulate defuser (DPD) regeneration due to combustion of particulate matter (PM). Choose a well ventilated place to perform the manual regeneration.**
- **If you leave the idling control knob in a high speed position without returning it to the lowest speed position, the vehicle is likely to move suddenly during standing start or it will consume more fuel during subsequent driving or have a shortened clutch life.**
  Never forget to fully turn the idling control knob back to the lowest speed position before driving the vehicle.

Adjustment angle 300°



ADVICE

- The idling control knob has an operating range of 300 degrees. Do not try to turn the knob beyond this range. Otherwise, the vehicle may develop a problem.

NOTE

- Use the idling control knob to stabilize the engine speed at start when it runs rough.
- Turn the idling control knob fully counterclockwise when the DPD is manually regenerated in order to reduce the engine speed if the knob has been turned clockwise to increase the engine speed.

Refer to page
4-58 Allow the Engine to Warm Up after Starting
4-237 Diesel Particulate Defuser (DPD)

ecostop [V]

The ecostop is a system that safely starts and stops the engine in response to the driver's natural operating conditions, when it is expected that the vehicle will be stopped at traffic lights or in heavy traffic for a long period, without the need to operate the key. The system is environmentally friendly by aiming to lowering exhaust gas, idling noise and reducing fuel consumption.

CAUTION

- **To use the power take-off (PTO), press the ecostop cancel switch to deactivate ecostop, and check that the ecostop OFF indicator light in the instrument panel has come on.**

ecostop Operation

Operating Conditions

System operation becomes possible once all of the following conditions are met.

- The engine is sufficiently warmed up.
- The battery condition (charge level, voltage, battery temperature, etc.) is good.
- DPD regeneration is not in progress.
- PTO is not being used.
- The brake booster warning light is off.

NOTE

- Automatic engine stop does not operate when the turn signal lights are flashing due to turn signal switch or hazard warning flasher switch operation.

Engine Warm-up

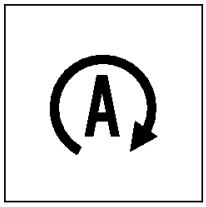
For 4HK1 engine models, the ecostop is operable when the coolant temperature is 60°C (140°F) or more and less than 95°C (203°F). If it is required to perform a complete warm-up using the warm-up switch etc., press the ecostop cancel switch and deactivate ecostop.

ADVICE

- To prevent theft, make sure to remove the key and lock the doors when leaving the vehicle.

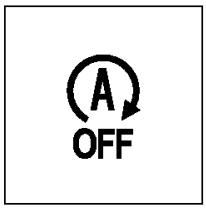
ecostop Warnings/Indicators

ecostop Indicator Light



This light comes on when the engine stops automatically because of ecostop, and goes out when the engine is started.

ecostop OFF Indicator Light



Pressing the ecostop cancel switch causes this light to come on once ecostop has been cleared. Also, the light flashes if there is a malfunction in the ecostop system.

ecostop Warning Displays

The ecostop indicator light, the ecostop OFF indicator light, multi-information display indication, and the warning buzzer inform the ecostop conditions as shown under the following conditions.

Indicator light	Multi-information display	Warning buzzer	Cause/ Conditions	Action
 Comes on	Idling stop warning Put gearshift lever in neutral position and depress the clutch pedal	Three beeps	The driver shifts into gear while ecostop automatically stops the engine. (Manual transmission models)	Put the gear in neutral and start again.
Off	Idling stop warning Start the engine by operating the key	Continuous beep	The engine stalls, such as due to key operations, while ecostop automatically stops the engine.	Restart the engine using the starter switch.

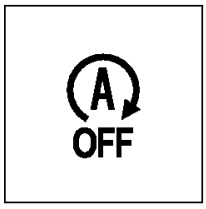
Indicator light	Multi-information display	Warning buzzer	Cause/ Conditions	Action
A OFF Flashes	A System abnormal Idling stop system is abnormal Contact the dealer	—	An ecostop malfunction is detected.	Press the ecostop cancel switch to deactivate ecostop, and immediately have the vehicle inspected at the nearest Isuzu Dealer.
Off	A System suspended Idling stop cannot operate because battery is charging	—	The engine temporarily cannot be automatically stopped by ecostop.	—
	A System suspended Idling stop cannot operate because air conditioner has priority			
	A System suspended Idling stop cannot operate because brakes have priority			
	A System suspended Idling stop cannot operate because steering wheel is operating			
	A System suspended Idling stop cannot operate			

Indicator light	Multi-information display	Warning buzzer	Cause/ Conditions	Action
Off	Engine restart Engine was restarted	—	The engine has been restarted.	—
	Engine restart Engine was restarted due to battery charge			
	Engine restart Engine was restarted because air conditioner has priority			
	Engine restart Engine was restarted due to steering wheel operating			
	Engine restart Engine is restarted because door was open	Three beeps	The driver side door is opened while the engine is automatically stopped by ecostop.	Close the door. Also, take the key out when you leave the vehicle.
	Engine restart Engine is restarted because seatbelt was not fastened		The driver side seat belt is unbuckled while the engine is automatically stopped by ecostop.	Fasten your seat belt. Also, take the key out when you leave the vehicle.
	Driving advice When the clutch pedal is released, idling stop operates	—	The engine can be automatically stopped by ecostop.	Do operations according to what is shown on the multi-information display.
	Driving advice When the brake pedal is depressed, idling stop operates			

Automatically Stopping and Restarting the Engine

Manual Transmission Models

ecostop OFF indicator light

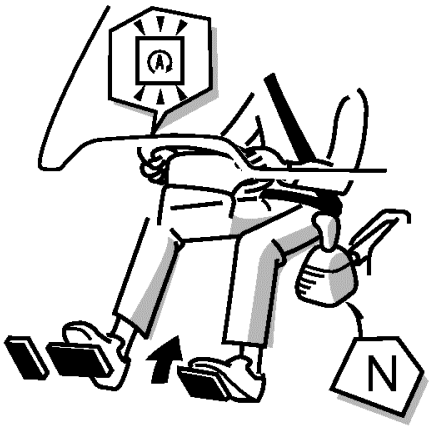


1. With the starter switch in the "ON" position, make sure the ecostop OFF indicator light in the multi-information display is not illuminated or flashing.

NOTE

- After the engine starts, ecostop system operation is available at any time.

2. After driving at a speed faster than 10 km/h (6 MPH), stop the vehicle.



3. Once the clutch pedal is released, when the brake pedal is kept held down and the gear is in "N", the engine automatically stops and the ecostop indicator light comes on.

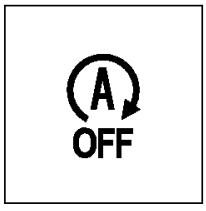
NOTE

- The engine oil pressure warning light comes on when the engine is stopped by ecostop, but it goes out when the engine is restarted.

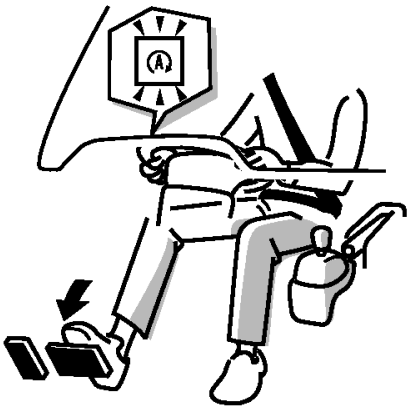
4. In the engine automatic stopped state, firmly depressing the clutch pedal while the brake pedal is kept held down restarts the engine and the ecostop indicator light goes out.

DCT Models

ecostop OFF indicator light



1. With the starter switch in the "ON" position, make sure the ecostop OFF indicator light in the multi-information display is not illuminated or flashing.



NOTE

- After the engine starts, ecostop system operation is available at any time.

2. After driving at a speed faster than 10 km/h (6 MPH), stop the vehicle. If you keep depressing the brake pedal firmly with your right foot, the engine stops automatically and the ecostop indicator light turns on.

NOTE

- The engine oil pressure warning light comes on when the engine is stopped by ecostop, but it goes out when the engine is restarted.

[When auto brake hold is operating]

- If the auto brake hold indicator light is on in the multi-information display while the engine is stopped by ecostop, the engine will not restart even if you remove your foot from the brake pedal.

3. With the engine automatically stopped, doing the following operations restarts the engine and turns off the ecostop indicator light.
   - Your foot is removed from the brake pedal. (when the vehicle has no auto brake hold or if auto brake hold is turned off)
   - The brake pedal is strongly depressed or the accelerator pedal is depressed. (when auto brake hold is operating)

NOTE

- In cases such as below, the automatic engine start operates even without the brake pedal being released.
  - The gearshift lever is placed in "N" or "R".

[This symptom is not abnormal]

- While the engine has been automatically stopped, the brake pedal may move and you may hear sounds as the brake force is adjusted to prevent the vehicle from moving.

Engine Stopping Operation

- The automatic engine stop function is canceled when start off operations are performed before the engine automatically stops. To operate the automatic engine stop again, drive the vehicle at a speed of 10 km/h (6 MPH) or more.
- Before automatic engine stop operates, if the turn signal switch or hazard warning flasher switch is operated, or if there is vehicle movement, the automatic engine stop may be interrupted.

Air Conditioner during Engine Stop

- When there is an ecostop automatic engine stop while the air conditioner is being used, ventilation is provided by fan operation alone. Approximately 1 minute after the automatic engine stop, the fan stops and ventilation is suspended.

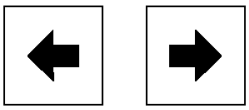
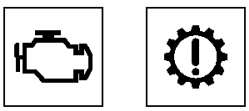
Automatic Engine Start Operation

- The starter may not operate when automatic start operations are performed immediately after an automatic engine stop. This is because operating the starter while the engine is oscillating can cause damage to the starter and ring gear, and so, to prevent starter equipment damage, time is allowed for the engine to come to a complete stop. As such, automatic engine start operations should be performed again after the engine has come to a complete stop.
- The automatic engine start does not operate if automatic engine restart operations are ceased before the engine automatically starts. In this case, reperform the automatic engine start operations and start the engine.
- For the safe operation of the vehicle, operate the gearshift lever only after ensuring that the engine start has completely finished. Operating the gearshift lever before the engine start has completely finished interrupts the engine start.

Automatic Engine Stop is not Operating

Under the following condition, even if the automatic engine stop operations are performed, automatic engine stop does not operate.

Refer to page
4-70 Engine Stopping Operation

Condition	Details
The engine coolant temperature is too low or too high. 	When the coolant temperature is less than 60°C (140°F) or 95°C (203°F) or more, automatic engine stop does not operate. (4HK1 engine models)
The engine speed is too high.	When the engine speed is 1,200 r/min or more, the automatic engine stop does not operate.
The PTO is being used.	When the PTO switch is "ON", the automatic engine stop does not operate.
The brake booster warning light is on. 	If the brake booster has insufficient vacuum, the engine does not stop automatically.
The brake pedal is not kept firmly depressed. (DCT models)	If firm depression of the brake pedal is not maintained when the vehicle has been stopped, automatic engine stop does not operate.
The turn signal indicator lights are flashing. 	The engine does not stop automatically if the turn signal switch or the hazard warning flasher switch was operated so that the turn signal indicator lights are flashing.
The check engine warning light or the DCT warning light is on. 	The engine may not stop automatically. The engine, DCT, and other vehicle systems may be malfunctioning. Immediately contact your Isuzu Dealer for inspection. If the DCT warning light comes on, refer to "When There is an DCT Failure" also.
The battery is not in good condition.	The system monitors the battery condition (charge level, voltage, battery temperature, etc.) and if it determines that the battery condition is not good, then the engine does not stop automatically.
The vehicle is not driven faster than 10 km/h (6 MPH) after the engine is started.	If the vehicle speed does not reach 10 km/h (6 MPH) while driving after the engine is started, then the engine does not stop automatically.
The driver side seat belt is not fastened.	If the driver side seat belt is not fastened, then the engine does not stop automatically.

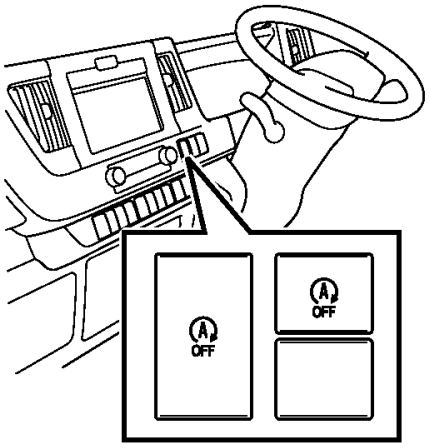
Condition	Details
The steering wheel is being turned sharply.	If the vehicle is stopped as the steering wheel is turned sharply, then the engine does not stop automatically.
The AEBS is activated.	If the AEBS are activated to stop the vehicle, then the engine does not stop automatically.
Immediately after the vehicle is driven under a high load.	If the vehicle is driven under a heavy load, such as driving up a hill, then the engine may not stop automatically until a certain period of time elapses.
The vehicle is stopped on a slope. (DCT models)	To prevent sudden forward or rearward movement at start off, automatic engine stop does not operate on a slope.
DPD regeneration is in progress.  Regenratng DPD automtcly DPD automatic regeneration is performed  Regen DPD manually Stop the vehicle until regeneration is complete	DPD regeneration is prioritized and automatic engine stop does not operate.
The DCT emergency switch is pressed. (DCT models)	If the DCT emergency switch is pressed while the engine is running, then the engine does not stop automatically.
	If the DCT emergency switch is pressed while the engine has been automatically stopped, then the engine does not start automatically. Restart the engine manually by operating the starter switch.
The ABS is not active. (Vehicles in which the ABS function can be turned off) (NPS/NQS models)	If the transfer gear control switch is set to "LOW" range in 4WD mode, the engine does not stop automatically.

NOTE

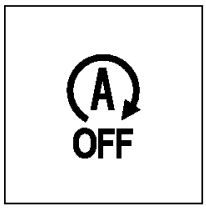
- The engine does not stop automatically unless the vehicle is driven faster than 10 km/h (6 MPH) again, even after recovering from the conditions shown in the table.
- The engine does not stop automatically until about 10 to 15 minutes have passed after DPD regeneration.

Refer to page
4-138 When There is a DCT Failure
10-127 Battery

ecostop Cancel Switch



ecostop OFF indicator light



Pressing the switch while the engine is operating cancels ecostop. The ecostop OFF indicator light comes on at the same time. Pressing again brings ecostop back on, and the ecostop OFF indicator light goes out.

NOTE

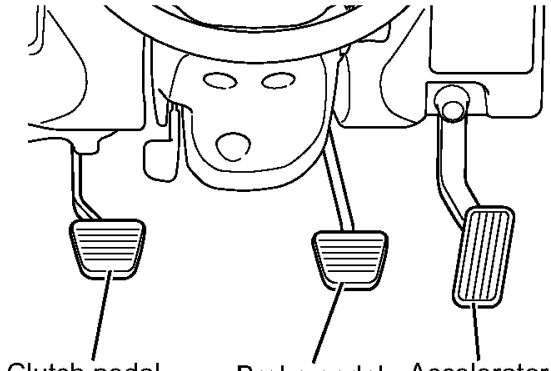
- Pressing the ecostop cancel switch while the engine has been automatically stopped by ecostop cancels the ecostop system and the engine restarts.

Refer to page
4-68 Automatically Stopping and Restarting the Engine
4-53 Starting the Engine

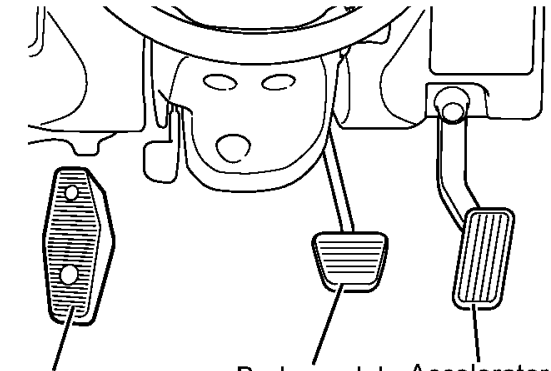
Operating the Vehicle

Pedals

Manual transmission model



Smoother model/DCT model



Sit in a correct driving position on the seat and operate the brake pedal and accelerator pedal with your right foot. To avoid accidentally pressing the wrong pedal, check the pedal positions and practice putting your foot on the desired pedal.

⚠ WARNING

- **A can or bottle rolling on the floor may prevent brake pedal operation if it is caught under the pedal. This is very dangerous.**
- **A floor mat must be placed correctly. An incorrectly installed floor mat may hinder the free movement of each pedal.**

ADVICE

- Do not race the engine; engine components as well as fuel economy may be badly affected.
- If your vehicle has a manual transmission, do not drive with your foot resting on the clutch pedal. If you rest your foot on the clutch pedal while driving, the clutch could partially disengage without you realizing it, causing the clutch plates to wear and the clutch to slip. Also, do not slip the clutch as a way to hold the vehicle in position (instead of using the brakes) on, for example, an uphill road.

Overriding accelerator with brakes (4JZ1 engine models)

Depressing the accelerator pedal and brake pedal at the same time may suppress engine output.

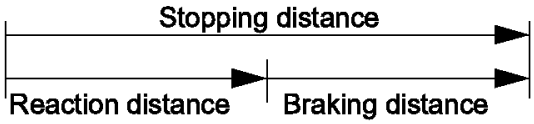
Brake Operation



The brakes give strong braking force with only light pressure on the pedal. Do not press the brake pedal hard except in the event of an emergency.

1. Braking distances vary according to the vehicle speed and road conditions. First, slow down sufficiently using the engine brake and the exhaust brake.
2. Press the brake pedal and keep it pressed until the desired stopping point to bring the vehicle to a halt.

Stopping Distance



The vehicle's stopping distance consists of a reaction distance (from the point where the driver senses danger and presses the pedal to the point where the brakes start to work) and a braking distance (from the point where the brakes start to work to the point where the vehicle comes to a halt). When driving, bear the stopping distance in mind. Maintain a speed and headway distance that allow you to stop safely even if a hazard occurs.

Parking Brake Lever [V]

When parking or stopping your vehicle, pull the parking brake lever and make sure that the vehicle does not start moving.

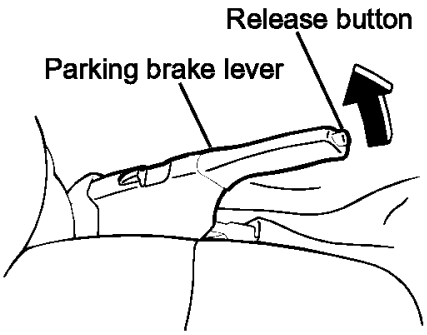
Refer to page
4-30 Stopping and Parking

⚠ CAUTION

- **Do not use the parking brake while the vehicle is in motion except in an emergency.**
- **Applying the parking brake before the vehicle has stopped can cause the tires to lock or the vehicle to spin, possibly causing an accident.**
- **Be careful not to drive the vehicle with the parking brake lever still pulled up. Unless the parking brake is fully released during driving, a fault and/or a fire may be caused.**
- **After using the parking brake during driving, be sure to check if any failure has been caused.**
- **Do not get or step on the parking brake lever. The parking brake lever may be damaged, resulting in a malfunction.**

Operation of Parking Brake

Model with Center Parking Brake [HB]



To set the parking brake

When parking the vehicle, fully apply the parking brake lever without pressing the release button. The parking brake warning light in the instrument panel will come on when the lever is pulled up.

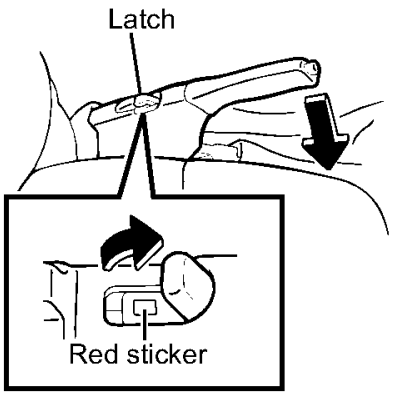
To release the parking brake

Press the release button while raising the lever a little and then lower the lever. The parking brake warning light in the instrument panel will go out.

⚠ CAUTION

- **Illumination of the parking brake warning light does not mean that the parking brake is fully applied. The parking brake lever must be fully pulled up.**

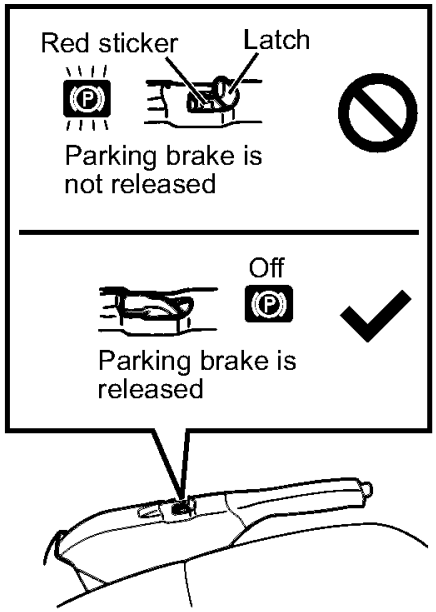
Refer to page
4-78 Parking Brake Warning Light



Operating procedure for vehicles with a folding parking brake lever [V]

The parking brake lever can be lowered with the parking brake still engaged.

1. Engage the parking brake and lift up the latch.
2. Lower the parking brake lever. At this time, the parking brake warning light in the instrument panel will remain on while the red sticker under the latch is visible.
3. When releasing the parking brake, pull the parking brake lever up to its original position once. While continuing to pull the parking brake lever up slowly, press the release button and then lower the lever. At this time, the parking brake warning light in the instrument panel will turn off simultaneously.

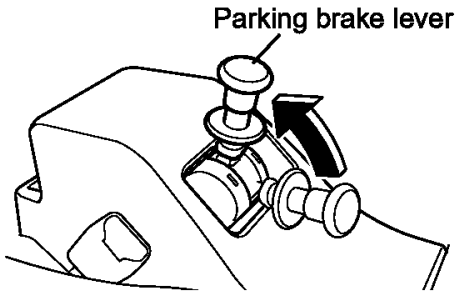


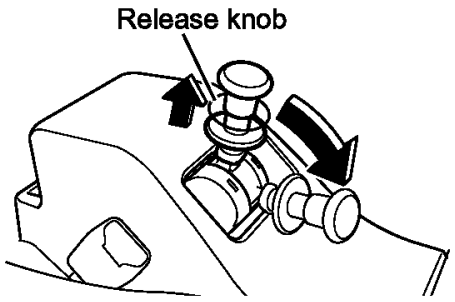
⚠ CAUTION

- **When the red sticker under the latch is visible even though the parking brake lever is lowered, it means that the parking brake is still engaged. When pulling away, make sure that the red sticker under the latch is not visible. Also, make sure that the parking brake warning light in the instrument panel has gone out.**

Refer to page
4-45 Parking in Winter and in Cold Regions

Model with Wheel Parking Brake [FAB]





To set the parking brake

Pull the parking brake lever from the fully released position to the lever locked position. The parking brake warning light will then come on. Make sure that you hear the air being released from the system.

⚠ CAUTION

- **Illumination of the parking brake warning light does not mean that the parking brake is fully applied. The parking brake lever must be fully pulled up.**

Refer to page
4-78 Parking Brake Warning Light

To release the parking brake

Lower the parking brake lever while raising the release knob. The parking brake warning light will then go out.

⚠ CAUTION

- **If the parking brake warning light remains on when the parking brake lever is lowered, a brake failure or a drop in air pressure may be the cause. Check the air pressure for correct level.**

Parking Brake Warnings/Indicators

Parking Brake Warning Light



This warning light comes on when the parking brake lever is pulled up.

Parking Brake Warning Buzzers

In the following cases, the buzzer sounds an alert.

Warning light	Warning buzzer	Details	Action
 (comes on)	Continuous beep	**Warning for parking brake still applied** When driving while the parking brake is applied	Stop the vehicle and disengage the parking brake before driving the vehicle again.
—	Continuous beep	**Warning for parking brake not applied** When starter switch turned to "ACC" or "LOCK" position without applying the parking brake	Apply the parking brake.

Electric Parking Brake (Model with Center Parking Brake) [HB]

This system uses a motor to engage and release the parking brake. In addition to manual operation of the switch, the electric parking brake can be operated and released by certain operations, such as of the gearshift lever or accelerator pedal. The electric parking brake can be engaged regardless of the starter switch position.

⚠ WARNING

- **Do not operate the parking brake while the vehicle is raised on jacks or outriggers. There is a risk that the vehicle may start moving because of a change in the vehicle's attitude when it is lowered.**
- **The vehicle may start moving if there is a large change in the vehicle's attitude after the parking brake is engaged. Securely immobilize the vehicle when it is put on a vehicle transporter, such as a car carrier, or on a boat, such as a ferry.**
- **If the parking brake warning light flashes, or if the electric parking brake warning light comes on, or if "Parking brake malfunction" appears on the multi-information display, then there is an abnormality in the electric parking brake system. Stop the vehicle in a safe location and immediately contact the nearest Isuzu Dealer. Also, if you must park, avoid slopes and choose a level place to park. For DCT models, put the gearshift lever in "P". For manual transmission models and Smoother models, park in gear and chock the wheels.**

CAUTION

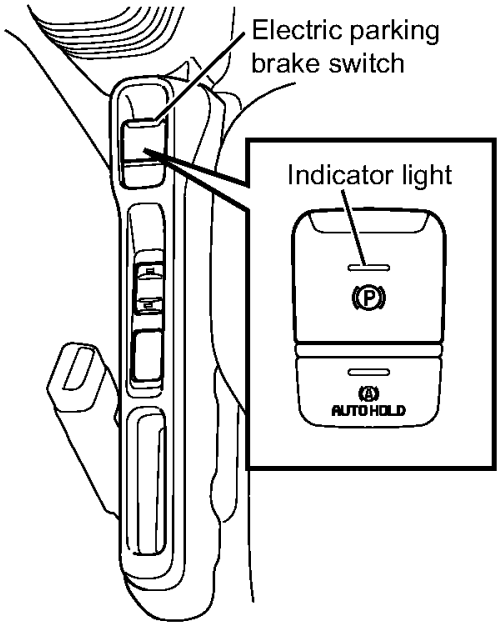
- **Do not use while driving, except for emergencies.**
- **Engaging the parking brake before the vehicle stops may cause the wheels to lock or destabilize the vehicle attitude (such as causing it to slide sideways), resulting in an unexpected accident. Also, it could result in damage to the vehicle.**
- **Be careful not to drive while the parking brake is on. Not fully releasing the parking brake while driving could result in damage or fire.**
- **If it is used while driving, be sure to inspect the vehicle for any damage.**

NOTE

- Put the starter switch in the "ON" position before releasing the parking brake.
- When the starter switch is in the "ACC" or "LOCK" position, the parking brake does not release even if the electric parking brake switch is pressed. At this time, the parking brake warning light comes on. The parking brake warning light turns off after about 35 seconds.
- In the following cases, there may be a motor sound or rumbling sound, but this does not indicate an abnormality.
  - When the electric parking brake switch is operated
  - After applying the parking brake when stopped, such as on a steep slope
  - When the parking brake is applied or released automatically
- When the battery is flat or the electric parking brake fails and you cannot release the parking brake, you can release it manually.

Refer to page
4-30 Stopping and Parking
11-22 When the Center Parking Brake Cannot be Released [HB]

How to Operate the Electric Parking Brake



When applying the parking brake
Lifting up the electric parking brake switch engages the parking brake. The electric parking brake warning light on the instrument panel and the indicator light on the switch flash until the parking brake is applied. As the parking brake is applied, the warning light and indicator light stay on.

When releasing the parking brake
Pressing the electric parking brake switch while depressing the brake pedal releases the parking brake. The electric parking brake warning light on the instrument panel and the indicator light on the switch flash until the parking brake is released. As the parking brake is released, the warning light and indicator turn off.

Apply	Release
	

Parking brake warning light

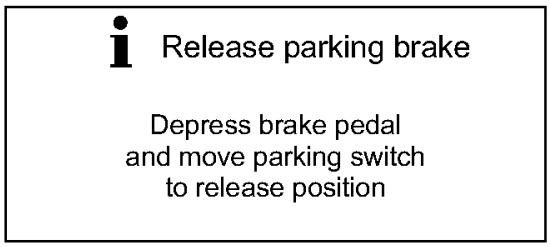


⚠ WARNING

- **If the electric parking brake does not engage or release even though the parking brake switch is operated, immediately contact the nearest Isuzu Dealer.**
- **Do not place anything around the electric parking brake switch. Objects may interfere with the switch, causing the parking brake to be applied or released unintentionally.**

ADVICE

- Check that the parking brake warning light is off before pulling away. The parking brake is released about 1 second after the electric parking brake switch is pressed. Because of this, if you press the switch and immediately pull away, the parking brake remains engaged as you drive, which causes damage to the parking brake.
- Repeatedly operating the electric parking brake switch continuously for more than 20 seconds causes the electric parking brake warning light to flash, and the parking brake remains engaged and cannot be released. This is caused by the motor's protective circuit and is not abnormal. After a short time, the electric parking brake warning light goes off, and you can release the parking brake.



NOTE

- To release the parking brake, depress the brake pedal as you move the electric parking brake switch to the release position. If you do not step on the brake pedal as you move the electric parking brake switch to the release position, "Release parking brake" appears on the multi-information display and the parking brake will not be released.

Applying and Releasing the Electric Parking Brake Automatically

When the starter switch is in the "ON" position, applying and releasing the electric parking brake becomes automatic in conjunction with certain operations, such as of the gearshift lever.

WARNING

- **Never use the automatic function of the electric parking brake as a substitute for the daily parking brake operations. This function is designed to reduce accidents caused by the driver forgetting to apply the parking brake. Relying on functions for parking safety may result in serious injury or, in the worst case, death.**

When the Parking Brake Operates Automatically

When stopped, the parking brake operates automatically in conjunction with the following operations. The electric parking brake warning light on the instrument panel and the indicator light on the electric parking brake switch flash until the parking brake is applied. As the parking brake is applied, the warning light and indicator light stay on.

Starter switch conjunction

Parking brake warning light	Electric parking brake switch indicator	Multi-information display indication	Operating conditions
 On	On	—	When the starter switch is moved from the "ON" position to the "ACC" or "LOCK" position

Driver not seated conjunction

Buzzer sounds	Multi-information display indication	Operating conditions
Long repeated beep (approx. 6 seconds)	Auto parkng brake active Parking brake is activated because driver is not detected in seat	If the driver side seat belt is unbuckled and the driver side door is opened*

*: The driver not seated conjunction does not operate if the gearshift lever is in the "R" position.

Gearshift lever conjunction

Parking brake warning light	Electric parking brake switch indicator	Multi-information display indication	Operating conditions
 On	On	—	The gearshift lever is moved to the "P" position

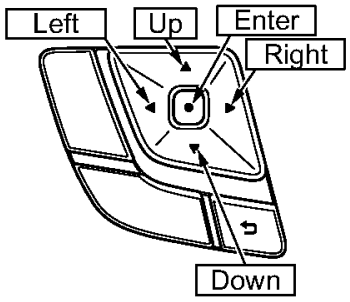
When the Parking Brake Releases Automatically

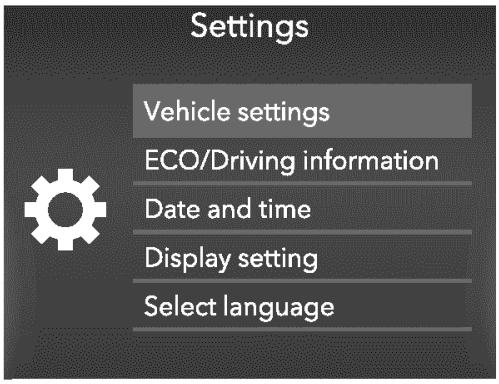
When the following conditions are met when the vehicle starts moving, the parking brake is released in conjunction with depressing the accelerator pedal. The electric parking brake warning light on the instrument panel and the indicator light on the electric parking brake switch flash until the parking brake is released. As the parking brake is released, the warning light and indicator turn off.

- Driver side door is closed
- Driver side seat belt is buckled
- Engine is running
- Gearshift lever is in "D", "M" or "R" position (except for manual transmission models)
- Clutch is engaged when gearshift lever is not in "N" position (manual transmission models)

Settings for Automatic Operation of the Electric Parking Brake

From the "Vehicle settings" screen on the multi-information display, you can change the settings for automatic operation of the electric parking brake.





1. Press "Left" or "Right" on the multi-information display switch to switch the screen and display the settings screen. If a message to the driver is displayed, press "Enter" to return to the normal screen, and then switch to the settings screen.

Refer to page
3-48 Main Display Area

2. In the setting screen, select in order, "Vehicle settings" → "Brake" → "Electric parking brake" → "Automatic key off".

3. Press "Up" or "Down" to switch the automatic operation of the electric parking brake through the following selections. Press "Enter" to select.

Displayed name	Description
OFF	Turns the automatic operation function of the electric parking brake off.
ON	Turns the automatic operation function of the electric parking brake on.
Link OFF when driver not seated	Turns the automatic operation function of the electric parking brake on, except for driver not seated conjunction.

NOTE

- For safety reasons, when the starter switch is turned to the "ON" position, automatic operation will be switched to the "ON".

Electric Parking Brake Warning/Indicators

Parking Brake Warning Light



The warning light comes on when the parking brake is applied while the starter switch is in the "ON" position. When the starter switch is in the "ACC" or "LOCK" position, the warning light comes on by pulling the electric parking brake switch or pressing it for about 35 seconds. Also, the warning light flashes when there is an abnormality in the electric parking brake system. Stop the vehicle in a safe location and immediately contact the nearest Isuzu Dealer.

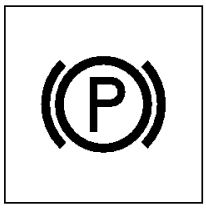
WARNING

- **If this warning light comes on when the starter switch is turned to the "ON" position, and goes out after approximately 3 seconds, the parking brake has been released. Either engage the parking brake or depress the foot brake.**
- **If the parking brake warning light does not come on or turns off when the electric parking brake switch is operated, then there is an abnormality in the electric parking brake system. Immediately contact the nearest Isuzu Dealer.**

NOTE

- A warning light comes on for about 35 seconds when the starter switch is turned to the "ACC" or "LOCK" position while the parking brake is applied, but this is not a malfunction.

Electric Parking Brake Warning Light



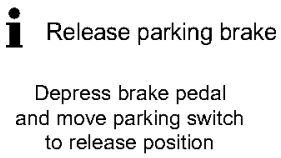
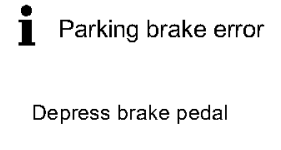
The warning light comes on when there is an abnormality in the electric parking brake system. If it comes on, contact the nearest Isuzu Dealer.

NOTE

- If the electric parking brake switch is repeatedly and continuously operated for more than 20 seconds, a notification is issued that the protective circuit is activated. The warning light flashes when the parking brake is applied, but goes out after a short while.

Electric Parking Brake Warning Displays

In the following cases, the multi-information display appears and a buzzer sounds an alert.

Warning light	Multi-information display	Warning buzzer	Details	Action
 *1 (comes on)	—	Continuous beep	**Warning for parking brake still applied** When driving while the parking brake is applied	Stop the vehicle and disengage the parking brake before driving the vehicle again.
—			**Warning for parking brake not applied** When starter switch turned to "ACC" or "LOCK" position without applying the parking brake	Apply the parking brake.
—		—	**Forgot to depress brake pedal warning** When an attempt is made to release the electric parking brake with the electric parking brake switch without depressing the brake pedal	Press the electric parking brake switch while depressing the brake pedal.
 *1 (comes on)		Long, repeated beeps	**Vehicle movement warning** When vehicle starts moving while parking brake is operating	Firmly depress the brake pedal to stop the vehicle.

Warning light	Multi-information display	Warning buzzer	Details	Action
 *1 (flashes → come on)	 Auto parkng brake active Parking brake is activated because driver is not detected in seat	Long, repeated beeps (approx. 6 seconds)	**Warning for parking brake operated (driver not seated)** When the parking brake operates automatically because driver not seated conjunction	—
 *1 (comes on)	 Parking brake applied Parking brake is operating	Long, repeated beeps	**Warning for parking brake operating (while driving)** When electric parking brake switch is pulled up while driving	Stop the vehicle and disengage the parking brake before driving the vehicle again.
 *2 (comes on)	 Parking brake malfunction Abnormality is detected in electric parking brake system Contact the dealer	—	**Electric parking brake malfunction warning** When there is a malfunction in the electric parking brake system	Stop the vehicle in a safe location and immediately contact the nearest Isuzu Dealer.

*1: Parking brake warning light

*2: Electric parking brake warning light

NOTE

- A warning may be activated if you forget to apply the parking brake while parking with the transmission in gear, but this is not a malfunction.

Electric Parking Brake (Model with Wheel Parking Brake) [FAB]

This system engage and release the parking brake. In addition to manual operation of the switch, the electric parking brake can be operated and released by certain operations, such as of the starter switch or accelerator pedal. The electric parking brake can be engaged regardless of the starter switch position.

⚠ WARNING

- **If the parking brake warning light flashes, or if the electric parking brake warning light comes on, then there is an abnormality in the electric parking brake system. Stop the vehicle in a safe location and immediately contact the nearest Isuzu Dealer. Also, if you must park, avoid slopes and choose a level place to park. Park in gear and chock the wheels.**

Refer to page
11-19 When the Wheel Parking Brake Stops Working [FAB]

⚠ CAUTION

- **Do not use while driving, except for emergencies.**
- **Engaging the parking brake before the vehicle stops may cause the wheels to lock or destabilize the vehicle attitude (such as causing it to slide sideways), resulting in an unexpected accident. Also, it could result in damage to the vehicle.**
- **Be careful not to drive while the parking brake is on. Doing so could cause a parking brake malfunction or fire.**
- **If it is used while driving, be sure to inspect the vehicle for any damage.**

ADVICE

- When the parking brake does not work even when the electric parking brake switch is pulled up, the parking brake has malfunctioned even if the warning light turns on or off normally. Contact the nearest Isuzu Dealer immediately.
- If the parking brake warning light remains on and the brake cannot be released even when the electric parking brake switch is pressed, this may be due to a brake malfunction or low air pressure. Check that the air tank air pressure is normal.
  - When the brake system warning light (red) is on and the multi-information display shows "Low air pressure", the parking brake cannot be released because the air pressure is low. In this case, start the engine and adjust the air pressure until the needle on the air pressure gauge passes the red zone, then release the parking brake.
  - If there is an abnormality in the air pressure, contact the nearest Isuzu Dealer immediately.
- If you need to move your vehicle (due to blocking traffic, for example), release the parking brake and move to a safe place when the air pressure is normal. After that, place wheel chocks in front of and behind the tires and contact the nearest Isuzu Dealer.

Refer to page
3-4 Air Pressure Gauge [FAB]
3-34 Brake System Warning Light
4-85 Parking Brake Warning Light

NOTE

- Put the starter switch in the "ON" position before releasing the parking brake.
- When the starter switch is in the "ACC" or "LOCK" position, the parking brake does not release even if the electric parking brake switch is pressed.
- When the battery is flat or the electric parking brake fails and you cannot release the parking brake, you can release it manually.

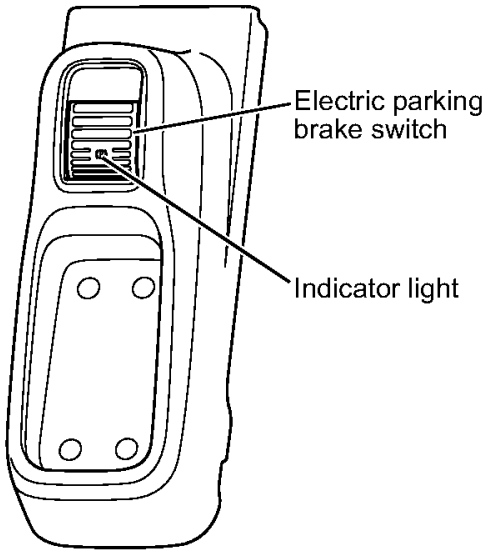
Refer to page
4-30 Stopping and Parking
11-20 When the Wheel Parking Brake Cannot be Released [FAB]

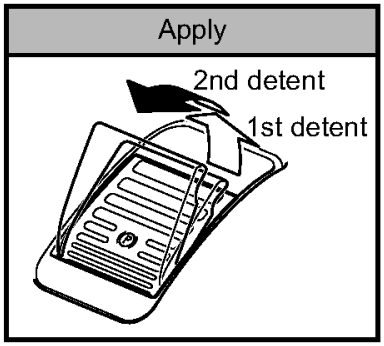
How to Operate the Electric Parking Brake

⚠ WARNING

- **If the electric parking brake does not engage or release even though the parking brake switch is operated, immediately contact the nearest Isuzu Dealer.**
- **Do not place anything around the electric parking brake switch. Objects may interfere with the switch and cause unintentional engagement or disengagement of the parking brake or result in the system determining that there is a malfunction.**

When Applying the Parking Brake





Parking brake warning light

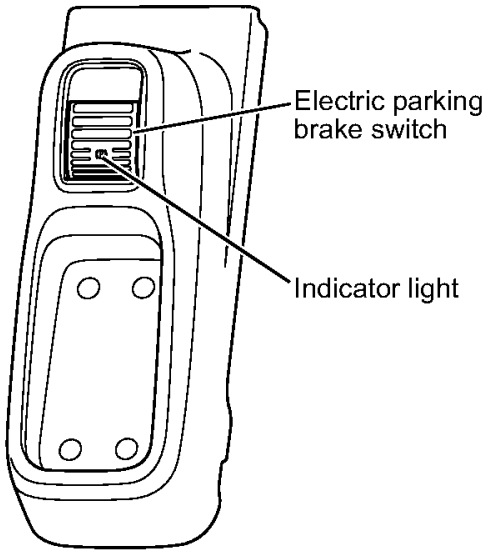


Pull the electric parking brake switch all the way up to apply the parking brake. When the parking brake is applied, the parking brake warning light will come on and the switch indicator light will turn red.

ADVICE

- When the electric parking brake switch is not pulled beyond the first position, braking is temporarily applied according to how far it is pulled and the brake is released when the switch is released. This function is used when starting on a slope. When applying the parking brake, pull the electric parking brake switch firmly up to the second position and make sure that the parking brake warning light is on and the electric parking brake switch indicator light is lit in red.

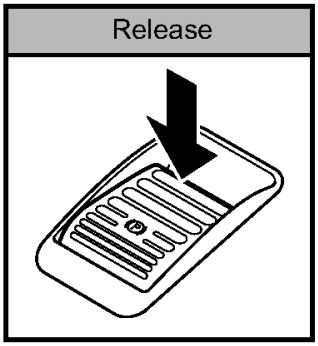
When Releasing the Parking Brake



To release the parking brake, press the electric parking brake switch while depressing the brake pedal. When the parking brake is released, the parking brake warning light will go out and the switch indicator light will light up in white.

ADVICE

- Check that the parking brake warning light is off before pulling away. The parking brake is released about 1 second after the electric parking brake switch is pressed. Because of this, if you press the switch and immediately pull away, the parking brake remains engaged as you drive, which causes damage to the parking brake.

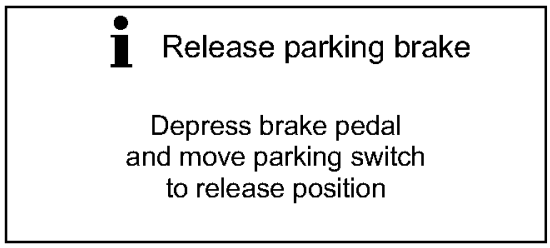


Parking brake warning light



NOTE

- If you do not step on the brake pedal as you move the electric parking brake switch to the release position, "Release parking brake" appears on the multi-information display and the parking brake will not be released.



Applying and Releasing the Electric Parking Brake Automatically

WARNING

- **Never use the automatic function of the electric parking brake as a substitute for the daily parking brake operations. This function is designed to reduce accidents caused by the driver forgetting to apply the parking brake. Relying on functions for parking safety may result in serious injury or, in the worst case, death.**

CAUTION

- **Do not use the automatic disengagement function on flat road surfaces or downhill slopes. This function is designed to prevent unintended vehicle sliding when starting on a slope. The vehicle may move unexpectedly on flat road surfaces or downhill slopes, depending on how the accelerator pedal is pressed.**

When the Parking Brake Operates Automatically

When stopped, the parking brake operates automatically in conjunction with the following operations. When the parking brake is applied, the parking brake warning light comes on and the electric parking brake switch indicator light turns red.

Starter switch conjunction

Parking brake warning light	Electric parking brake switch indicator	Multi-information display indication	Operating conditions
 On	Lit in red	—	When the starter switch is moved from the "ON" position to the "ACC" or "LOCK" position

Driver not seated conjunction

Buzzer sounds	Multi-information display indication	Operating conditions
Long repeated beep (approx. 6 seconds)	 Auto parkng brake active Parking brake is activated because driver is not detected in seat	If the driver side seat belt is unbuckled and the driver side door is opened*

*: The driver not seated conjunction does not operate if the gearshift lever is in the "R" position or while the vehicle is being driven.

ADVICE

- Do not operate the starter switch interlock while pressing the electric parking brake switch with the brake pedal depressed. The vehicle will enter maintenance mode for brake inspection and maintenance, and the parking brake will be released even if the starter switch is in the "ACC" or "LOCK" position. The maintenance mode will be deactivated if the electric parking brake switch is pulled up to the second position for more than 2 seconds or if the vehicle is driven at a speed of approximately 10 km/h (6 MPH) or more.

When the Parking Brake Releases Automatically

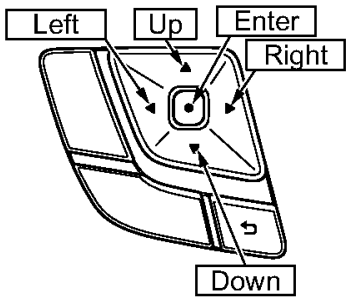
When the vehicle starts moving, the parking brake is released in conjunction with depressing the accelerator pedal. When the parking brake is released, the parking brake warning light goes out and the electric parking brake switch indicator light turns white.

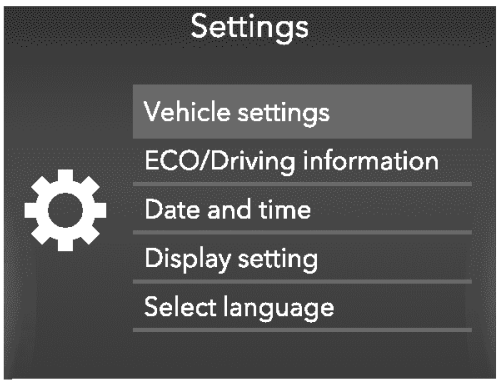
NOTE

- When the gearshift lever is not in the position for the vehicle to start moving, the parking brake will not disengage even if you depress the accelerator pedal.

Settings for Automatic Operation of the Electric Parking Brake

From the "Vehicle settings" screen on the multi-information display, you can change the settings for automatic operation of the electric parking brake.





1. Press "Left" or "Right" on the multi-information display switch to switch the screen and display the settings screen. If a message to the driver is displayed, press "Enter" to return to the normal screen, and then switch to the settings screen.

Refer to page
3-48 Main Display Area

2. In the setting screen, select in order, "Vehicle settings" → "Brake" → "Electric parking brake" → "Activation when not seated in P".

3. Press "Up" or "Down" to switch the automatic operation of the electric parking brake through the following selections. Press "Enter" to select.

Displayed name	Description
Link OFF when driver not seated	Automatic operation of the parking brake in conjunction with the driver exiting the seat is turned off.
Link ON when driver not seated	Automatic operation of the parking brake in conjunction with the driver exiting the seat is turned on.

Electric Parking Brake Warning/Indicators

Parking Brake Warning Light



The warning light comes on when the parking brake is applied while the starter switch is in the "ON" position. Also, the warning light flashes when there is an abnormality in the electric parking brake system. Stop the vehicle in a safe location and immediately contact the nearest Isuzu Dealer.

⚠ WARNING

- **If the parking brake warning light does not come on or turns off when the electric parking brake switch is operated, then there is an abnormality in the electric parking brake system. Immediately contact the nearest Isuzu Dealer.**

⚠ CAUTION

- **If the parking brake warning light is flashing and you continue to drive slowly at approximately 5 km/h (3 MPH) or less (creeping or going downhill, for example) while depressing the brake pedal, the parking brake may be applied unintentionally, causing the vehicle to come to a sudden stop. If the parking brake warning light is flashing, immediately park the vehicle in a safe place and contact the nearest Isuzu Dealer.**

NOTE

- The parking brake warning light comes on for about 30 seconds when the starter switch is turned to the "ACC" or "LOCK" position while the parking brake is applied, but this is not a malfunction.

Refer to page
11-19 When the Wheel Parking Brake Stops Working [FAB]
11-20 When the Wheel Parking Brake Cannot be Released [FAB]

Electric Parking Brake Warning Light



The warning light comes on when there is an abnormality in the electric parking brake system. If it comes on, contact the nearest Isuzu Dealer.

Refer to page
11-19 When the Wheel Parking Brake Stops Working [FAB]
11-20 When the Wheel Parking Brake Cannot be Released [FAB]

Electric Parking Brake Warning Displays

In the following cases, the electric parking brake system calls attention by lighting the warning light, displaying a message on the multi-information display, and sounding the warning buzzer.

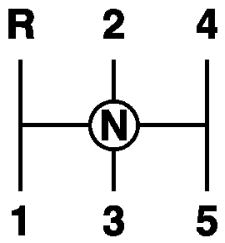
Warning light	Multi-information display	Warning buzzer	Details	Action
 (comes on)	 Parking brake applied Parking brake is operating	Long, repeated beeps	**Warning for parking brake operating** When electric parking brake switch is pulled up	Stop the vehicle and disengage the parking brake before driving the vehicle again.

Warning light	Multi-information display	Warning buzzer	Details	Action
 (comes on)	Parking brake applied Parking brake is operating	Continuous beep	**Warning for parking brake operating (while driving)** When electric parking brake switch is pulled up while driving	Stop the vehicle and disengage the parking brake before driving the vehicle again.
—	—		**Warning for parking brake not applied** When the parking brake does not engage even if you change the starter switch to the "ACC" or "LOCK" position (when in maintenance mode)	Apply the parking brake.
—	Release parking brake Depress brake pedal and move parking switch to release position	—	**Forgot to depress brake pedal warning** When an attempt is made to release the electric parking brake with the electric parking brake switch without depressing the brake pedal	Press the electric parking brake switch while depressing the brake pedal.
 (comes on)	Auto parkng brake active Parking brake is activated because driver is not detected in seat	Long, repeated beeps (approx. 6 seconds)	**Warning for parking brake operated (driver not seated)** When the parking brake operates automatically because driver not seated conjunction	—

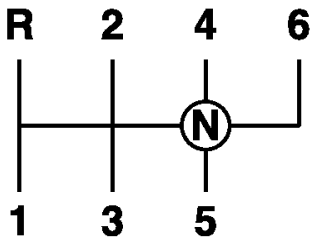
Gearshift Lever

Manual Transmission Model [M/T]

MYY model, 5-speed



MYY or MZZ model, 6-speed



A manual transmission model requires fully depressing the clutch pedal when making a gearshift.
When the gearshift lever is placed into "R (reverse)", the back up lights come on and, in a model with back up warning, a buzzer will also sound.

ADVICE

- Make a shift into the reverse gear from a forward gear or into a forward gear from the reverse gear only when the vehicle has come to a complete stop. Otherwise, the transmission may be damaged.

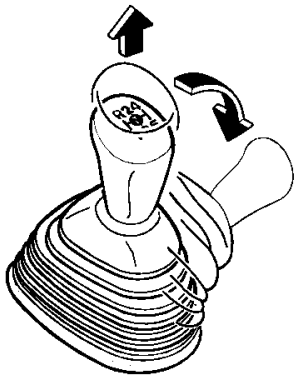
Manual Transmission Warnings/Indicators

The following is shown on the multi-information display according to the conditions.

multi-information display	Warning buzzer	Details	Action
Clutch may slip Do not use half-clutch for a long time	Two short beeps	**Half-clutch warning** When half-clutch condition continues for a certain period of time	Gradually engage the clutch or decelerate and stop the vehicle
Clutch may slip Do not put your foot on clutch pedal while driving	Two short beeps	**Foot on clutch pedal warning** When foot is left on clutch pedal while driving	Take your foot off the clutch pedal

multi-information display	Warning buzzer	Details	Action
Improper gearshift This gearshift may lead to transmission malfunction	Two short beeps	**Change gears caution warning** When transmission is shifted to a gear position that is unsuitable for the driving speed	— (Display disappears when gear change is complete)

How to Collapse the Gearshift Lever [V]



The gearshift lever can be collapsed in the direction of the passenger side. Pull up the end of the gearshift lever and collapse it in the direction of the passenger side.

⚠ CAUTION

- **When collapsing the gearshift lever, stop the engine and engage the parking brake.**

Model with Smoother [SA]

Gear position changes can be made by moving the gearshift levers.

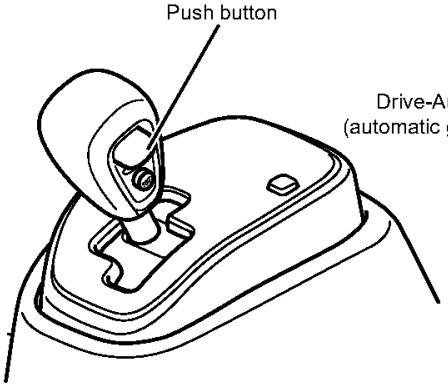
Refer to page
4-105 Smoother Model [SA]

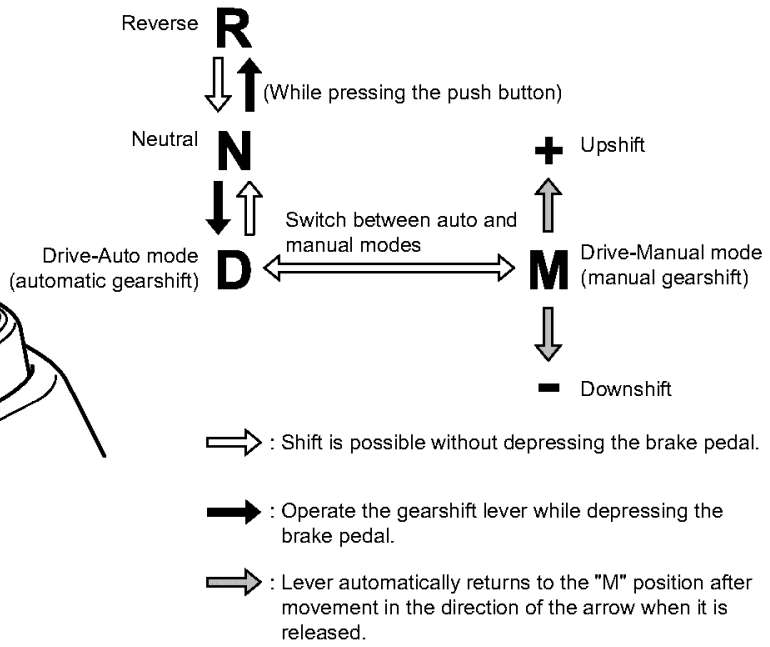
⚠ WARNING

- **When operating the gearshift lever while the vehicle is stationary, fully depress the brake pedal until the shift indicator light stops flashing and stays on steady. While the shift indicator light is flashing, the gear is still being shifted and creeping force is not yet available from the Smoother. If you release the brake pedal before the indicator light shines steady, the vehicle may move down a slope, possibly causing an accident.**

NOTE

- While the engine is not running, you cannot shift gears by moving the gearshift lever. Start the engine before you can change the gear.
- When the vehicle is stationary with the engine running, the shift lock function works for safety. You cannot move the gearshift lever from "N" into "D" or "R" without depressing the brake pedal.
  When starting the vehicle, be sure to operate the gearshift lever while keeping the brake pedal depressed.





Shift indicator

Gearshift lever position		Shift indicator display in instrument panel	Gear position
R		R	**Reverse** Used when backing up the vehicle.
N		N	**Neutral** Used when starting the engine.
D		D1~D6	**Drive-Auto mode (automatic shifting)** The system automatically selects an optimum gear according to the vehicle speed.
M	+	1 ~ 6	**Drive-Manual mode (manual gearshift)** Manually selecting the "+" (upshift) or the "-" (downshift) position allows the driver to select the desired gear.
	−		

Model with DCT [DCT]

Gear position changes can be made by moving the gearshift levers.

Refer to page
4-125 Dual Clutch Transmission (DCT) [DCT]

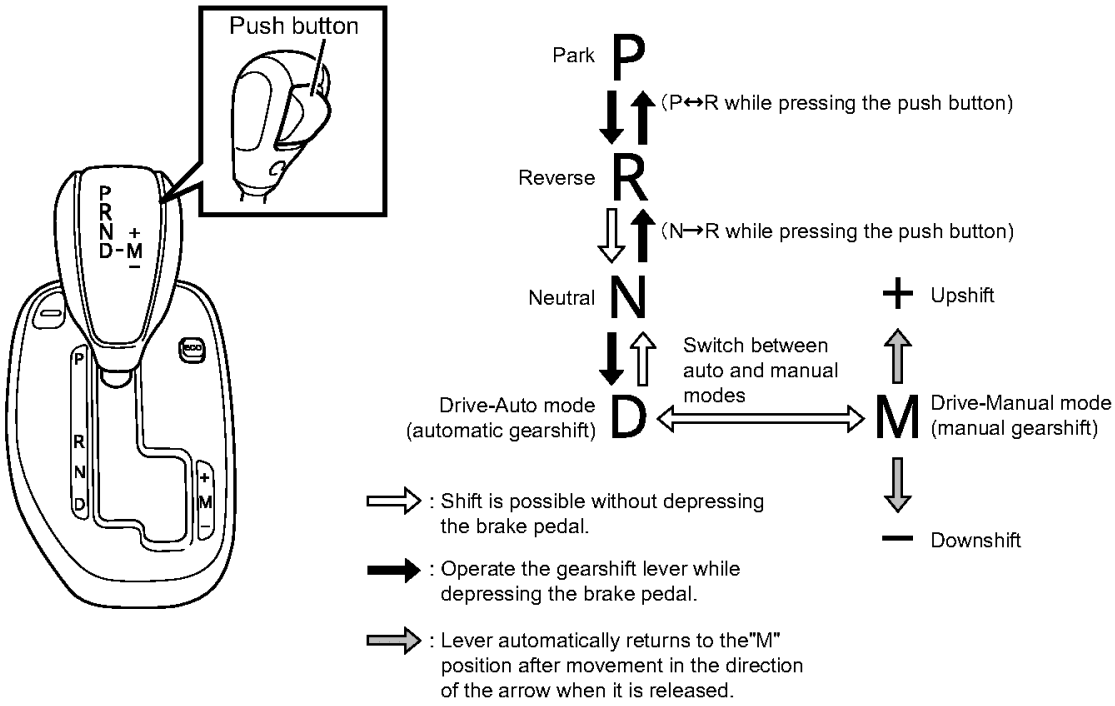
WARNING

- **When operating the gearshift lever while the vehicle is stationary, fully depress the brake pedal until the shift indicator light stops flashing and stays on steady. While the shift indicator light is flashing, the gear is still being shifted and creeping force is not yet available from the DCT. If you release the brake pedal before the indicator light shines steady, the vehicle may move down a slope, possibly causing an accident.**
- **When pulling away, be sure to visually check the gearshift lever position and the shift indicator for safety reasons.**
- **If you always operate the gearshift lever while pressing the push button, it is possible to accidentally shift the lever to the "P" or "R" position in some cases.**
- **Get in the habit of shifting the gearshift lever from the "N" to "D" or "D" to "N" position without pressing the push button. Incorrect operation may cause a serious accident.**

NOTE

- While the engine is not running, you cannot shift gears by moving the gearshift lever. Start the engine before you can change the gear.
- When the vehicle is stationary with the engine running, the shift lock function works for safety. You cannot move the gearshift lever from "P" into "D" or "R" without depressing the brake pedal.
  When starting the vehicle, be sure to operate the gearshift lever while keeping the brake pedal depressed.

Refer to page
4-142 Shift Lock Function



Shift indicator

Gearshift lever position		Shift indicator display in instrument panel	Gear position
P		P	**Park** Used when parking or when starting the engine.
R		R	**Reverse** Used when backing up the vehicle.
N		N	**Neutral** The driving force of the engine is not transmitted so the vehicle does not move forward or backward. Although it is possible to start the engine in this position, for safety reasons it is best to make a habit of starting the engine while in the "P" position.
D		D	**Drive-Auto mode (forward/automatic shifting)** The system automatically selects an optimum gear according to the vehicle speed.
M	+	M1~M9	**Drive-Manual mode (forward/manual shifting)** Shift to the desired gear by operating + (upshift), - (downshift).
	–		

Smoother Model [SA]

Smoother is an automated manual transmission based on the structure of a manual transmission, with fluid coupling and automatic gearbox.
On a Smoother model, the driver does not use a clutch pedal when pulling away, changing gears or stopping; he/she uses only the gearshift lever, accelerator pedal, and brake pedal. In addition, a Smoother model allows the driver to drive the vehicle with the gears changed automatically. Be sure to learn the characteristics of the Smoother model and how to correctly operate it. When the vehicle is stationary, remember to keep the brake pedal firmly pressed and, if necessary, place the gearshift lever in the "N" position before applying the parking brake.

⚠ WARNING

- **Fully depress the brake pedal to prevent the vehicle from moving even if it is stopped on a level road, and place the gearshift lever into "N" and securely set the parking brake as needed.**
- **Immediately after engine startup, while the air conditioner is running, and during DPD regeneration, the engine speed automatically rises, making creep stronger than it is at other times. Keep the brake pedal firmly pressed.**

NOTE

- If the vehicle is equipped with an idling control knob, the clutch engagement shock may become significant when the engine speed is increased using the idling control knob. Therefore, when placing the gearshift lever into a position other than "N", therefore, turn the idling control knob fully counterclockwise.
- You can utilize the creeping effect of the transmission to move your vehicle smoothly in a traffic jam or in a narrow space by controlling the speed without using the accelerator pedal but by using only the brake pedal.
- When driving down a slope, select a low gear in manual mode suitable for the slope gradient to use the engine brake.

[Creep]

- With the engine running and a gear position other than "N" selected, power reaches the wheels even when the accelerator pedal is not pressed, causing the vehicle to tend to move. This phenomenon is called creep. The higher the engine speed, the stronger the creep and the greater the vehicle's tendency to move.

How to Use Smoother

⚠ WARNING

- **When you move the gearshift lever to a position other than "N", creep will cause the vehicle to move. When pulling away, be sure to keep the brake pedal pressed as you operate the gearshift lever.**
- **Do not operate the gearshift lever while pressing the accelerator pedal. Doing so is dangerous because the vehicle would suddenly move.**

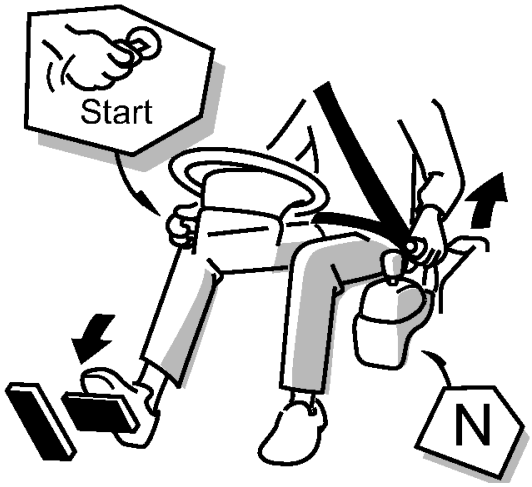
⚠ CAUTION

- **Before starting the engine, make sure that the gearshift lever is in the "N" position and that the shift indicator indicates "N". Then fully depress the brake pedal with the parking brake engaged and start the engine. When doing so, pay attention to the following.**
  - **Make sure that the engine has started before moving the gearshift lever from "N" to "D" or "R". If you operate the gearshift lever without confirming that the engine has started, the starter motor turns on/off, which could damage the ring gears and other parts related to the starter.**
- **When moving the gearshift lever from "N" into "D" or "R", be sure to depress the brake pedal.**
- **Never leave the driver seat with the gearshift lever placed in "D", "M" or "R" while the engine is running. The vehicle may start moving. When leaving the driver seat, be sure to securely set the parking brake and place the gearshift lever into "N".**

ADVICE

- Even if you plan to move only a short distance, adopt the correct driving position and make sure you can firmly press the brake and accelerator pedals.
- When you reverse, you twist to look rearward so pedal operation becomes difficult. Firmly press the brake pedal while twisting your body. Also, get in the habit of immediately returning the gearshift lever to the "N" position after reversing. When pulling away, visually check the gearshift lever position and the shift indicator.
- When repeatedly shifting between forward and reverse gears for a multiple-point turn or a K-turn, firmly press the brake pedal and confirm that the vehicle is completely stopped before shifting.
- On a Smoother model, standing starts are typically performed in 2nd gear. If you need extra-strong traction for pulling away (for example, when the vehicle is loaded), you can select a standing start in 1st gear by holding down the brake pedal and then placing the 1st start switch in the "ON" position or placing the gearshift lever in the "M" position and moving it in the "-" (downshift) direction. (The method using the gearshift lever yields a gear shift in manual mode.)

To Start Your Vehicle - on Normal Roads





1. Fully depress the brake pedal. After making sure the gearshift lever is placed in "N" and the parking brake lever is fully pulled up, place the starter switch into the "ON" position.
2. Start the engine while fully pressing the brake pedal with your right foot. Place the gearshift lever into "D" for forward movement or into "R" for backward movement. The clutch disengages automatically upon operation of the gearshift lever, the gear is changed, and then the clutch is re-engaged automatically. The gear is then controlled in the auto mode (automatic gearshift).
3. Make sure that the shift indicator indicates "2" or "R", release the parking brake, release the brake pedal, and then slowly press the accelerator pedal. The vehicle starts moving as you depress the accelerator pedal further.

ADVICE

- For models with the electric parking brake, check that the parking brake warning light is off before pulling away. The electric parking brake switch must be pressed for about 1 second to release the parking brake. Because of this, if you press the electric parking brake switch and immediately pull away, the parking brake remains engaged as you drive, which causes damage to the parking brake.

NOTE

- When starting the engine after parking with a gear engaged, make sure that the shift indicator indicates "N". Then, place the gearshift lever into "D" for forward movement and "R" for backward movement.
- While the engine is not running, you cannot shift gears by moving the gearshift lever. You must start the engine before you can shift gears.
- When the vehicle is stopped with the engine running, the shift lock function works for safety. You cannot move the gearshift lever from "N" to "D" or "R" without depressing the brake pedal. When starting the vehicle, be sure to operate the gearshift lever while keeping the brake pedal depressed.

Refer to page
4-124 Shift Lock Function

To Start Your Vehicle - on a Steep Slope

1. Firmly depress the brake pedal and make sure the parking brake lever is fully pulled up.
2. Place the gearshift lever into the "D" position for forward movement or "R" position for backward movement while fully depressing the brake pedal with your right foot. (When strong traction is required to start the vehicle, change to 1st start mode.)
3. Make sure that the shift indicator indicates "2" or "R", check the surrounding area to make sure it is safe to move the vehicle, ease your right foot pressure off the brake pedal, and slowly press the accelerator pedal.
4. After you feel the vehicle start moving, slowly release the parking brake lever and start the vehicle.

WARNING

- **When you move the gearshift lever to "D" or "R", creep will cause the vehicle to move. When starting the vehicle, be sure to operate the gearshift lever with the brake pedal depressed.**
- **When moving a Smoother equipped vehicle from a standstill, you must control the speed using only the accelerator pedal. Operate the accelerator pedal carefully.**
- **Do not operate the gearshift lever while depressing the accelerator pedal. The vehicle may make a sudden start, possibly causing an accident.**
- **The gear is in the process of being shifted while the shift indicator is flashing. The vehicle may roll down a slope because driving force is not transmitted to the wheels.**
  Be sure to keep the brake pedal depressed until you see the shift indicator comes on steady.

ADVICE

- When the vehicle is stopped, do not keep depressing the accelerator pedal with the gearshift lever placed in the "D", "M" or "R" position while depressing the brake pedal. Doing so may cause a failure.
- When stopping the vehicle on a slope, be sure to fully apply the brakes. Keeping the vehicle stopped by depressing the accelerator pedal to produce a strong creeping effect may cause a failure.

NOTE

- The vehicle normally starts off in the 2nd gear. When strong torque is required to start up when the vehicle is heavily loaded, press the 1st start switch to enable the vehicle to start in 1st gear.
- You can also shift into 1st gear when the vehicle is stopped by depressing the brake pedal, placing the gearshift lever into "M" and moving the lever towards "– (downshift)".
- When stopping the vehicle to wait for a traffic light, it is recommended that you place the gearshift lever into "N" for improved fuel economy.

Refer to page
4-114 1st Start Mode

To Change Gears - Auto Mode

D 1 ~ D 6

- When you change the gearshift lever from "N" into "D", shifting takes place in the automatic mode. Check that "D" is displayed on the upper left of the shift indicator.
- In Smoother models with kick down function, if the accelerator pedal is depressed further after being almost fully depressed, it will enable forcible shifting into a lower gear (kick down). Please use this function when rapid acceleration is necessary to overtake other vehicles or climb steep slopes, etc.

CAUTION

- **If you are using the auto mode on a steep uphill slope, the vehicle may automatically shift up and down making it difficult to drive. In this case, use the manual mode to maintain the same gear.**

NOTE

- On a continuous steep uphill slope or in a traffic jam, it may be easier for you to drive using the manual mode keeping the vehicle in a particular gear rather than using the auto mode. It is recommended that you drive your vehicle under the above conditions using the manual mode.
- Driving in the ECONO mode can improve fuel economy.
- In Smoother models with kick down function, if the accelerator pedal is depressed further while driving in ECONO mode, the ECONO mode can be temporarily deactivated.

Refer to page
4-116 ECONO Mode

To Shift Gears - Manual Mode

1 ~ 6

- When changing the gear in the manual mode, place the gearshift lever into the "M" position and move the lever towards the "+ (upshift)" or "-- (downshift)" direction as necessary to select the desired gear. Check that the desired gear is displayed on the shift indicator.
- The clutch is automatically disengaged upon operation of the gearshift lever. When the shift has completed, the clutch is automatically re-engaged. You can make both upshifts and downshifts in a similar manner.
- Gears are not automatically shifted in the manual mode. To return to the auto mode, place the gearshift lever into the "D" position. Make sure that "D" is displayed on the upper left of the shift indicator.

ADVICE

- Shift into the gear appropriate for the vehicle speed. If an inappropriate gear shift position is selected, a warning buzzer will sound and the shift will not occur.
- Driving using an inappropriate gear in the manual mode will result in a failure of the transmission system. You are alerted to an inappropriate gear selection by a warning buzzer and the transmission is automatically shifted down into an appropriate gear.
- Strongly depressing the accelerator pedal immediately after shifting gears not only prevents the vehicle from running smoothly but also causes a failure of the transmission. Operate the accelerator pedal gradually.

NOTE

- When it is necessary to make fine speed control of the vehicle as when reversing it onto a platform, you can utilize the creeping effect of the transmission to move the vehicle smoothly using only the brake pedal, not using the accelerator pedal.
- When the vehicle is not running, the transmission gear is not shifted even if you shift to the auto mode (by shifting the lever from "M" to "D" position). The gear is shifted automatically only after the vehicle has started.
- In Smoother models with kick down function, if the accelerator pedal is depressed further after being almost fully depressed in Manual mode, it will not be possible to forcibly shift into a lower gear. Please shift into a lower gear using the gearshift lever.

To Stop the Vehicle

1. Press the brake pedal with your right foot to slow down and stop the vehicle. No special gear shifting is required.
   After the vehicle has stopped, the gear is automatically shifted into the starting gear in both the manual mode and auto mode.
2. While the vehicle is stopped, place the gearshift lever into the "N" position. When the vehicle must be stationary for several minutes, set the parking brake.

CAUTION

- **When leaving the driver's seat, be sure to firmly set the parking brake and place the gearshift lever into the "N" position, make sure that the shift indicator displays "N".**

ADVICE

- When the vehicle is stopped, do not keep depressing the accelerator pedal with the gearshift lever placed in "D", "M" or "R" while depressing the brake pedal. Doing so may cause a failure.
- When stopping the vehicle on a slope, be sure to fully apply the brakes. Keeping the vehicle stopped by depressing the accelerator pedal to produce a strong creeping effect may cause a failure.

NOTE

- When stopping the vehicle to wait for a traffic light, it is recommended that you place the gearshift lever into the "N" position for improved fuel economy.

When Parking Your Vehicle

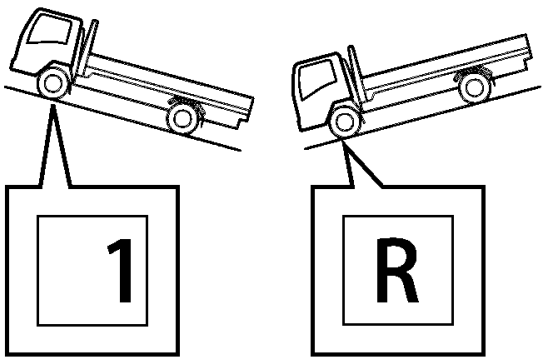


1. Set the parking brake while depressing the brake pedal with your right foot.
2. Place the gearshift lever into the "N" position, make sure that the shift indicator displays "N" before slowly easing your right foot off the brake pedal.
3. Stop the engine.

CAUTION

- **Avoid parking on hills whenever possible and instead choose flat locations to stop your vehicle. When parking on hills cannot be avoided, engage the parking brake to ensure the vehicle does not move and apply chock blocks to the wheels for extra safety.**
- **To minimize damage in the rare event that the vehicle were to move, turn the wheels to face an obstacle such as the curb.**

Parking in Gear



When it is necessary to park your vehicle when it is cold outside with the transmission in 1st or reverse gear, follow the steps below.

1. Place the gearshift lever into the "M" position while fully depressing the brake pedal with your right foot, and move the lever towards the "– (downshift)" direction or place the gearshift into the "R (reverse)" position. Make sure the shift indicator displays "1" or "R".
2. Stop the engine and slowly ease your right foot off the brake pedal.
3. Make sure the vehicle does not move. Be sure to block the wheels with chocks.

CAUTION

- **Parking the vehicle in gear is a means of assisting the vehicle's parking system and is not a method of parking in and of itself. When parking, always engage the parking brake. When it is not possible to engage the parking brake for whatever reason, avoid parking on inclines and always apply chock blocks to the wheels.**

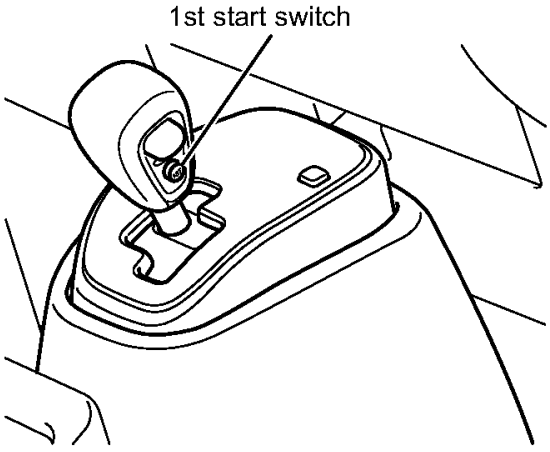
NOTE

- When starting the engine after parking it with the transmission in gear, first place the gearshift lever into the "N" position and then start the engine with the brake pedal depressed. The shift indicator first displays "1" or "R" but the indication changes to "N" after the engine is started.
  After parking the vehicle with the transmission in "R", you will hear a beep when moving the starter switch to the "ON" position. This is normal.
- Make sure that the shift indicator displays "N" when the engine is started after the vehicle has been parked with the transmission in gear before performing the next operation.

Actions that Can Lead to a Breakdown with a Smoother Vehicle

Action that can lead to a breakdown	Breakdown symptom
• Stopping the vehicle on an uphill road with the gearshift lever in a position other than "N", the accelerator pedal pressed, and the brakes not applied • Pressing the accelerator pedal and brake pedal at the same time • Continuously driving in an inappropriate gear • Repeatedly performing abrupt standing starts and stops	• The Smoother clutch oil overheats.
• Operating the gearshift lever with the accelerator pedal pressed and the engine speed high	• The transmission gears or clutch are overloaded.
• Placing the starter switch in the "ACC" or "LOCK" position while driving • Keeping the gearshift lever in the "N" position on a long downward slope (this is dangerous due to the lack of engine brake)	• The transmission is not properly lubricated.

1st Start Mode



1st start mode indicator light



The vehicle normally moves off from a standstill in 2nd gear. Use the 1st start mode when you need powerful torque to start the vehicle, for example, when it is heavily loaded.

When you press the 1st start switch in auto mode (i.e., when the vehicle is stopped and either the foot brake or parking brake is applied), the 1st start mode indicator light comes on, indicating that the transmission has switched to 1st start mode. Return the transmission to the normal start mode (2nd start mode) by pressing the 1st start switch again.

CAUTION

- **The transmission shifts when you press the 1st start switch while the vehicle is stationary. Fully depress the brake pedal before pressing the switch and keep depressing the brake pedal until the shift indicator changes from flashing to steady illumination. While the shift indicator is flashing, the gear is being shifted and the transmission creeping effect does not work. If you release the brake pedal while the indication is still flashing, the vehicle may move down a slope, causing an accident.**

NOTE

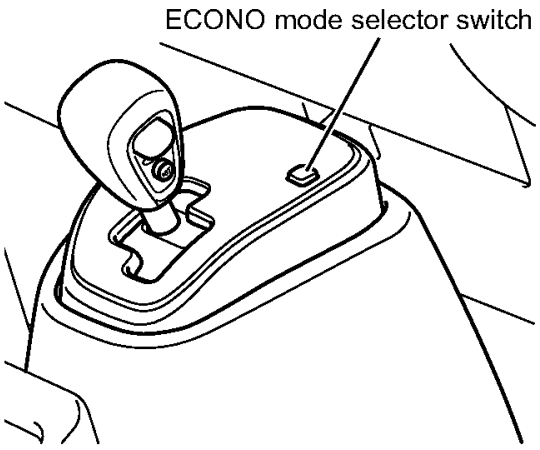
- When you select the manual mode, the vehicle does not start with the 1st gear.
- If you shift the lever from "D" to "M" position when starting the vehicle with the 1st gear, the 1st start mode indicator light goes out. This light comes on only when you shift the lever from the "M" to "D" position again.
- When you shift the lever from "M" to "D" position and when the 1st start mode indicator light comes on again, the transmission may not be shifted to the 1st gear. If you need to start the vehicle with the 1st gear, press the 1st start switch again.
- When you place the starter switch in the "LOCK" or "ACC" position and restart the engine, the mode returns to the normal start mode (2nd start mode).

1st Start Mode Indicator Light



This indicator light comes on when the 1st start mode is selected.

ECONO Mode



You can improve fuel economy if you select the ECONO mode when the vehicle is driven with the transmission in the auto mode (automatic gearshift mode). In ECONO mode, the ECONO mode indicator appears on the multi-information display and disappears when the mode is deactivated. When you press the ECONO mode selector switch, the ECONO mode is selected and the ECONO mode indicator is displayed on the multi-information display.



NOTE

- ECONO mode is automatically selected when the engine is started.
- When in manual mode, you cannot switch to ECONO mode.
- When ECONO mode is selected in auto mode, the ECONO mode indicator turns off when you go into manual mode (shifting from "D" to "M"). When manual mode is changed again to auto mode (shifting from "M" to "D"), ECONO mode is set and the ECONO mode indicator turns on again.

ECONO Mode Indicator



This indicator turns on when in ECONO mode.

Temporary Deactivation of ECONO Mode (Smoother Models with Kick Down Function)

In Smoother models with kick down function, if the accelerator pedal is depressed further after being almost fully depressed, the ECONO mode will be temporarily deactivate. Please use this function when more drive power is necessary, such as on slopes. It is possible to reactivate ECONO mode by letting up on the accelerator pedal.

ADVICE

- Firmly engage the parking brake and stop the engine before checking changes in accelerator pedal depression force.

NOTE

- The ECONO mode cannot be selected while the transmission is in manual mode. When the transmission is changed to manual mode (the gearshift lever is moved from "D" to "M"), while ECONO mode is active, the ECONO mode indicator light will go out. When the transmission is changed from manual mode back to auto mode (the gearshift lever is moved from "M" to "D"), the ECONO mode resumes and the ECONO mode indicator light comes on again.
- If the ECONO mode has been selected, it remains active when you restart the engine even if you have turned the starter switch to "LOCK" or "ACC".
- In Smoother models with kick down function, an ECONO mode failure may have occurred if ECONO mode cannot be deactivated even though the accelerator pedal has been depressed further when in ECONO mode. Please contact the nearest Isuzu Dealer.

Smoother Warnings/Indicators

In the following cases, the Smoother warning light, multi-information display, and warning buzzer are activated as an alarm.

When the Alarm is Given Only by the Warning Buzzer

Condition	Multi-information display indication	Warning buzzer	Corrective action
When trying to shift into an under-run gear level (manual mode)	—	Long, repeated beeps	Put the gearshift lever in the "D" position and drive in a suitable gear level (no shifting).

Condition	Multi-information display indication	Warning buzzer	Corrective action
When trying to shift into an over-run gear level (manual mode)	—	Continuous beep	Put the gearshift lever in the "D" position and drive in a suitable gear level (no shifting).
The engine is overrunning.	—	Continuous beep	Use the brakes to reduce vehicle speed or upshift to a suitable gear level to reduce engine speed.

When Warning Buzzer and Multi-information Display Indicate an Alarm has Occurred

Condition	Multi-information display indication	Warning buzzer	Corrective action
The accelerator pedal is kept depressed while the brakes are being applied.	T/M oil temp rising Release the accelerator pedal or return gearshift lever to N position	Long, repeated beeps	Release the accelerator pedal or return the gearshift lever to the "N" position.
The vehicle is stopped on a slope with the accelerator pedal kept depressed.	T/M oil temp rising Release accelerator pedal and depress the brake pedal	Long, repeated beeps	Release the accelerator pedal and apply the brakes.
The vehicle continues to drive in unsuitable gear or slowly on uphill slope.*1	T/M oil temp rising Release accelerator pedal or drive in auto mode	Long, repeated beeps	Let up on the accelerator pedal or downshift to a suitable gear level and drive in auto mode.
The vehicle is started and stopped too frequently.	T/M oil temp rising Release accelerator pedal or drive in auto mode	Long, repeated beeps	Stop the vehicle at a safe place, return the gearshift lever to the "N" position and run the engine at idle to cool it down.

Condition	Multi-information display indication	Warning buzzer	Corrective action
The temperature of the Smoother clutch oil is abnormally high.	T/M oil temp rising While engine is running, put gearshift lever in the P or N position, and wait	Long, repeated beeps	Stop the vehicle in a safe place, put the gearshift lever in the "N" position, and then idle the engine to cool it down until the "T/M oil temp rising" display (red) goes out.
The driver opens the door and is leaving the vehicle with the starter switch in the "ON" position and the transmission in gear.	Alert! Driver not seated Return the gearshift lever to N position and apply the parking brake	Long, repeated beeps	Return the gearshift lever to the "N" position.
The gearshift lever is moved to the "R" position while driving.	Shifting to R inhibited With the vehicle stopped, put the gearshift lever in R	Three long beeps	Return the gearshift lever from the "R" position, stop the vehicle, and then shift the gearshift lever to the "R" position.
The vehicle is stopped by pulling up the parking brake lever with the transmission in gear for a long time.	Fuel economy advice Wait with the gearshift lever in N position	Short, repeated beeps	Return the gearshift lever into the "N" position.

*1: To prevent failure due to increased oil temperature, the gears are automatically downshifted to a suitable gear level, even while driving in manual mode.

When the Smoother Warning Light is On



Smoother warning light

In the following cases, this warning light (amber or red) comes on. Take corrective actions according to the description.

Condition	Multi-information display indication	Warning buzzer	Corrective action
The Smoother emergency switch is pressed.	AMT emergency mode For models with HSA, when pulling away, press the HSA OFF switch to deactivate HSA	—	After moving the vehicle to a safe place, press the Smoother emergency switch again to cancel emergency mode.
The Smoother system has failed.	T/M abnormal Restart engine, if it appears again, contact the dealer	Continuous beep	Stop the vehicle at a safe place and have your vehicle inspected at the nearest Isuzu Dealer promptly. For details, refer to "If the Smoother System Fails".
		Short, repeated beeps	
		—	

Refer to page
4-122 If the Smoother System Fails

How to Adjust Partial Clutch Engagement of Smoother

Adjust the partial clutch position of the Smoother in the following cases.

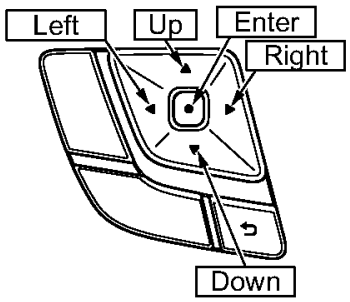
- If clutch engagement is too fast or too slow when you start the vehicle.
- The timing of clutch engagement does not agree with your preference.

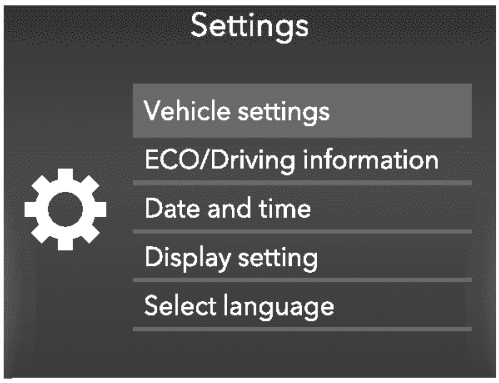
Adjustment

⚠ CAUTION

- **Make partial clutch engagement adjustments when the engine is running at idle.**
- **Have the initial adjustment of the Smoother system performed at your Isuzu Dealer.**

1. With the engine running, pull up the parking brake lever and place the gearshift lever into the "N" position.





2. Press "Left" or "Right" on the multi-information display switch to switch the screen and display the settings screen. If a message to the driver is displayed, press "Enter" to return to the normal screen, and then switch to the settings screen.

Refer to page
3-48 Main Display Area

3. On the setting screen, select in order, "Vehicle settings" → "Transmission" → "Gearshift adjustment" to open the adjustment screen.

4. If you feel the clutch slip, press "Right" on the multi-information display switch. If you feel the clutch engages abruptly, press "Left" on the multi-information display switch.
   Refer to the following table for the operation counts.

Condition	Operation count
Fine adjustment is required.	Press "Right" or "Left" once.
When you feel the clutch slip.	Press "Right" 2 to 3 times.
When you feel the clutch engage abruptly.	Press "Left" 2 to 3 times.

NOTE

- The range shown for the adjustment bar is 5 levels each on the "Fast" and "Slow" sides.

5. Confirm the setting by pressing the "Enter" switch.

If the Smoother System Fails

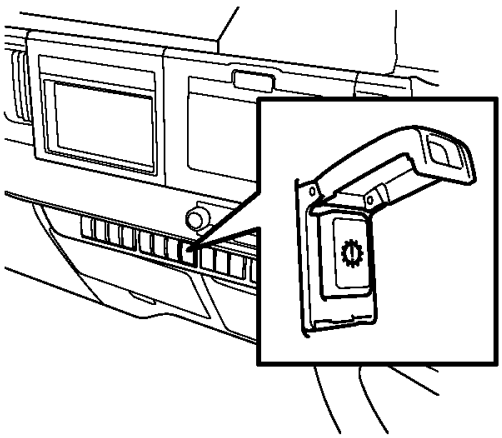
Should the Smoother warning light come on and remain on or flash during driving, stop the vehicle at a safe place. If the warning light does not go out, have the vehicle inspected at the nearest Isuzu Dealer.

Refer to page
4-119 When the Smoother Warning Light is On

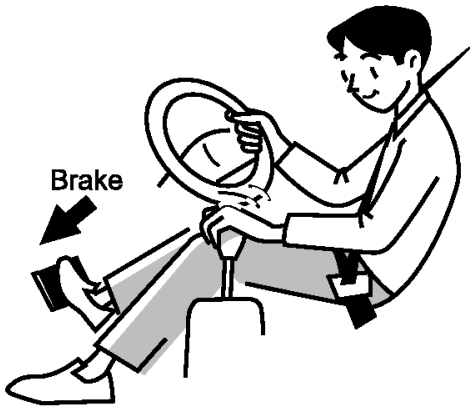
⚠ CAUTION

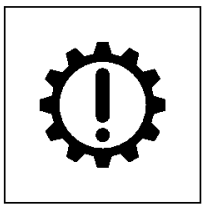
- **If this Smoother warning light comes on, the following conditions may occur. Also, vehicle movement during regular operation may become abnormal, such as difficulty during speed adjustments at very low speeds, or the inability to pull up to loading platforms correctly. In such cases, operate the vehicle while paying close attention to your surroundings and promptly have it inspected at the nearest Isuzu Dealer.**
  - **Creeping does not occur**
  - **Shifting up or down cannot be performed**
  - **The timing for the clutch is faster or slower than usual**
- **A vehicle with a Smoother system cannot pushed to start the engine or to turn the starter motor. If the engine stalls and cannot be restarted, place the gearshift lever into the "N" position and make sure that the shift indicator displays "N". Then push the vehicle to move it to a safe place. If the shift indicator displays any position other than "N", press the Smoother emergency switch to the "ON" position and place the gearshift lever into the "N" position. Then push the vehicle to a safe place.**

How to Use the Smoother Emergency Switch



Use the Smoother emergency switch if a failure to the Smoother system's electrical system occurs and move the vehicle to a safe place. After moving to a safe place, promptly contact the nearest Isuzu Dealer.
Normally, keep the emergency switch off and do not touch it during driving.





(flashes)

AMT emergency mode

For models with HSA,
when pulling away,
press the HSA OFF switch
to deactivate HSA

1. Fully pull up the parking brake lever, turn the starter switch to the "LOCK" or "ACC" position while fully pressing the brake pedal and make sure that the gearshift lever is in "N".
2. Turn the starter switch to the "ON" position.
3. Open the cover of the Smoother emergency switch, press the switch and confirm that the Smoother warning light flashes and "AMT emergency mode" appears in the multi-information display.
4. Start the engine while fully depressing the brake pedal. Release the parking brake and then place the gearshift lever into "D" or "M" for a forward movement or into "R" for a backward movement. Make sure that the shift indicator displays "1" when the gearshift lever is placed in a forward movement position and "R" when the lever is in the backward movement position.
5. Release the brake pedal and slowly depress the accelerator pedal to start the vehicle.

CAUTION

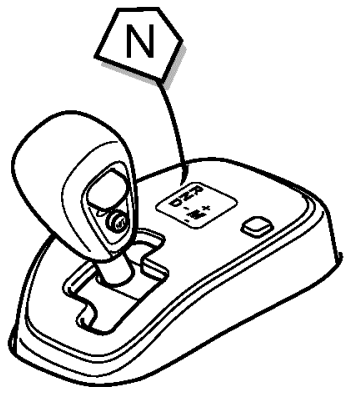
- **Do not open the cover of the emergency switch normally.**
- **The Smoother emergency switch must be used only in an emergency. Normally, turn the switch off and never operate the switch while driving.**
- **After you have moved the vehicle to a safe place using the emergency switch, promptly turn off the emergency switch, return the gearshift lever to "N", and close the cover.**
- **Turning the Smoother emergency switch on displays "AMT emergency mode" in the multi-information display.**
- **When the emergency switch is turned on with the gearshift lever in any position other than "N", the vehicle may suddenly start moving. When turning the emergency switch to the "ON" position, be sure to keep the brake pedal depressed.**
- **When the emergency switch is turned on, the engine can be started even with the gearshift lever in a position other than "N".**
  When the engine is started with the transmission in gear, the vehicle may suddenly start moving. To prevent this, firmly set the parking brake and fully depress the brake pedal with your right foot when starting the engine.
- **When the emergency switch is turned on, the shift lock function does not work. If you fail to depress the brake pedal when moving the gearshift lever from "N" into "D" or "R", the vehicle will suddenly start moving. Operate the gearshift lever only after holding the brake pedal fully depressed.**

NOTE

- When the emergency switch is on and the gearshift lever is in the "D" or "M" position, the transmission does not shift to any gear other than the 1st.

Shift Lock Function

During Vehicle Start-up



You cannot move the gearshift lever from "N" to other positions without depressing the brake pedal. Be sure to operate the gearshift lever while keeping the brake pedal depressed.

When the Gearshift Lever Cannot Be Moved From "N" to Other Positions

When the gearshift lever cannot be moved from "N" to other positions, refer to the following advice.

ADVICE

- Make sure the brake pedal is fully depressed.
- If the brake pedal is not fully depressed, the shift lock function will continue to operate, preventing the gearshift lever from being moved from "N" to other positions.

Dual Clutch Transmission (DCT) [DCT]

DCT models do not require clutch pedal operation so they can be moved, shifted, and stopped by simply using the gearshift lever, accelerator, and brake. Fully understand the characteristics of DCT models and make a habit of operating them correctly. While the vehicle is stopped, be sure to firmly depress the brake pedal, and when needed, put the gearshift lever in the "P" or "N" position and apply the parking brake.

⚠ WARNING

- **While the vehicle is stopped, firmly depress the brake pedal to prevent the vehicle from moving, and when needed, put the gearshift lever in the "P" or "N" position and securely engage the parking brake.**
- **Immediately after engine startup, while the air conditioner is running in models with the air conditioning system, and during DPD regeneration, the engine speed automatically rises, making creep stronger than it is at other times. Keep the brake pedal firmly pressed.**

NOTE

- DCT stands for "Dual Clutch Transmission".
- For vehicles with an idling control knob, increasing the engine speed with the idling control knob may increase the shock of engaging the clutch. Return the idling control knob all the way to the left when shifting the gearshift lever to the "D", "M" or "R" position.
- You can utilize the creeping effect of the transmission to move your vehicle smoothly in a traffic jam or in a narrow space by controlling the speed without using the accelerator pedal but by using only the brake pedal.

[Creep]

- When the gearshift lever is in the "D", "M", or "R" position while the engine is running, and drive power is being transmitted even though the accelerator pedal is not depressed refers to the phenomenon in which the vehicle seems ready to go. Also, the creep phenomenon becomes stronger as the engine speed increases so the force to move the vehicle increases.

[NPS/NQS models]

- When parking after switching the range of the transfer, for safety reasons, make sure that driving power is being transmitted.

How to Use DCT

WARNING

- **Never place the gearshift lever in the "P" position while driving. Placing the gearshift lever in the "P" position will cause abnormal noises and vibrations to be generated, and could possibly result in serious damage to the transmission or in a vehicle accident.**
  Make sure that the vehicle has come to a complete stop before placing the gearshift lever in the "P" position.
- **The car starts moving due to the creep phenomenon when the gearshift lever is in the "D", "M", or "R" position. When pulling away, be sure to keep the brake pedal depressed as you shift the gearshift lever.**
- **Do not operate the gearshift lever while pressing the accelerator pedal. Doing so is dangerous because the vehicle would suddenly move.**

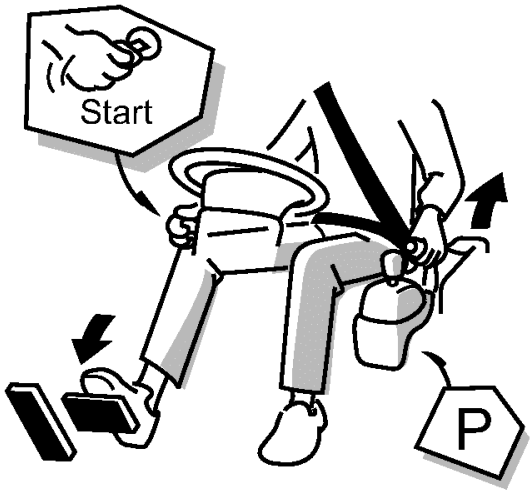
⚠ CAUTION

- **Before starting the engine, make sure that the gearshift lever is in the "P" position and that the shift indicator indicates "P". Then fully depress the brake pedal with the parking brake engaged and start the engine. When doing so, pay attention to the following.**
  - **Make sure that the engine has started before moving the gearshift lever from "P" to "D" or "R". If you operate the gearshift lever without confirming that the engine has started, the starter motor turns on/off, which could damage the ring gears and other parts related to the starter.**
- **When moving the gearshift lever from "P" or "N" into "D" or "R", be sure to depress the brake pedal.**
- **Do not leave the driver seat while the engine is running and the gearshift lever is in the "D", "M", or "R" position. The vehicle may start moving. Before leaving the driver seat, be sure to securely engage the parking brake and put the gearshift lever in the "P" position.**

ADVICE

- Even if you plan to move only a short distance, adopt the correct driving position and make sure you can firmly press the brake and accelerator pedals.
- When you reverse, you twist to look rearward so pedal operation becomes difficult. Firmly press the brake pedal while twisting your body. Also, get in the habit of immediately returning the gearshift lever to the "P" or "N" position after reversing. When pulling away, visually check the gearshift lever position and the shift indicator.
- When repeatedly shifting the gearshift lever from forward to reverse and then from reverse to forward while doing a 3-point turn, always firmly press the brake pedal each time and confirm that the vehicle has completely stopped before shifting the gears again.
- When the gearshift lever of an DCT vehicle is in the "D" position, it automatically switches to the optimum starting gear, 1st to 3rd gear, depending on the gradient of the road on which the vehicle is stopped.
  If you need high drive power, such as when the vehicle is loaded, you can switch to 1st or 2nd gear by depressing the brake pedal, shifting the gearshift lever into the "M" position to do a "- (downshift)". (When the gearshift lever is operated to change gears, the shift is done in manual mode.)

To Start Your Vehicle - on Normal Roads



1. Depress the brake pedal firmly and confirm that the gearshift lever is in the "P" position and that the shift indicator shows "P". Make sure that the parking brake is securely engaged and then put the starter switch in the "ON" position.
2. Start the engine while fully pressing the brake pedal with your right foot. Place the gearshift lever into "D" or "M" for forward movement or into "R" for backward movement. The clutch disengages automatically upon operation of the gearshift lever, the gear is changed, and then the clutch is re-engaged automatically. The gear is then controlled in the auto mode (automatic gearshift).

D / R

3. Confirm that the shift indicator shows a gear for pulling away ("D" or "M" for forward or "R" for reverse), release the parking brake, release the brake pedal, and slowly depress the accelerator pedal. The vehicle starts moving according to how much the accelerator pedal is depressed.

⚠ WARNING

- **When pulling away, be sure to visually check the gearshift lever position and the shift indicator for safety reasons. If you always operate the gearshift lever while pressing the push button, it is possible to accidentally shift the lever to the "P" or "R" position in some cases.**
- **Get in the habit of shifting the gearshift lever from the "N" to "D" or "D" to "N" position without pressing the push button. Incorrect operation may cause a serious accident.**
- **Carefully operate the accelerator pedal because the speed is controlled only using the accelerator pedal when starting or accelerating the vehicle.**

ADVICE

- For models with the electric parking brake, check that the parking brake warning light is off before pulling away. The electric parking brake switch must be pressed for about 1 second to release the parking brake. Because of this, if you press the electric parking brake switch and immediately pull away, the parking brake remains engaged as you drive, which causes damage to the parking brake.

NOTE

- While the engine is not running, you cannot shift gears by moving the gearshift lever. Start the engine before you can change the gear.
- When the vehicle is stopped with the engine running, the shift lock function works for safety. You cannot move the gearshift lever from "P" into "D" or "R" without depressing the brake pedal. When starting the vehicle, be sure to operate the gearshift lever while keeping the brake pedal depressed.

Refer to page
4-142 Shift Lock Function

To Start Your Vehicle - on a Steep Slope

1. Firmly depress the brake pedal and make sure the parking brake lever is fully pulled up.
2. While firmly depressing the brake pedal with your right foot, put the gearshift lever to "D" to go forward or "R" to reverse. (If you need more drive power when pulling away, switch to manual mode and select 1st or 2nd gear.)
3. Confirm that the shift indicator shows a gear for pulling away ("D" for forward or "R" for reverse), check the safety of the surroundings, take your right foot off the brake pedal and slowly depress the accelerator pedal.
4. After you feel the vehicle start moving, slowly release the parking brake lever and start the vehicle.

⚠ WARNING

- **In DCT models, the pulling away speed is adjusted by operating the accelerator only. Operate the accelerator carefully.**
- **Do not operate the gearshift lever while depressing the accelerator pedal. The vehicle may make a sudden start, possibly causing an accident.**
- **The gear is in the process of being shifted while the shift indicator is flashing. The vehicle may roll down a slope because driving force is not transmitted to the wheels.**
  Be sure to keep the brake pedal depressed until you see the shift indicator comes on steady.

ADVICE

- When the vehicle is stopped, do not keep depressing the accelerator pedal with the gearshift lever placed in the "D", "M" or "R" position while depressing the brake pedal. Doing so may cause a failure.
- When stopping the vehicle on a slope, be sure to fully apply the brakes. Keeping the vehicle stopped by depressing the accelerator pedal to produce a strong creeping effect may cause a failure.

NOTE

- When the gearshift lever is in the "D" position, it automatically switches to the optimum starting gear, 1st to 3rd gear, depending on the gradient of the road on which the vehicle is stopped.
- If you need high drive power, due to cargo, etc., depress the brake pedal when the vehicle is stopped, shift the gearshift lever to the "M" position and do a "- (downshift)" operation, then select 1st or 2nd gear and start driving the vehicle.
- In models without ecostop, when stopping the vehicle to wait for traffic lights, it is recommended that the gearshift lever be placed into "N", for improved fuel economy. In models with ecostop, when the engine stops automatically because of ecostop, leave the gearshift lever in "D". Moving the gearshift to a position other than "D" causes the engine to restart.

Refer to page
4-64 ecostop [V]

To Change Gears - Auto Mode

D

- When you change the gearshift lever from "P" or "N" into "D", shifting takes place in the automatic mode. Check that "D" is displayed on the shift indicator.

CAUTION

- **If you are using the auto mode on a steep uphill slope, the vehicle may automatically shift up and down making it difficult to drive. In this case, use the manual mode to maintain the same gear.**
- **When the vehicle is being driven on downhill roads and the accelerator pedal is being depressed to accelerate, the exhaust brake may operate automatically to protect the transmission. If the vehicle speed decreases, the exhaust brake releases automatically.**

NOTE

- On a continuous steep uphill slope or in a traffic jam, it may be easier for you to drive using the manual mode keeping the vehicle in a particular gear rather than using the auto mode. It is recommended that you drive your vehicle under the above conditions using the manual mode.
- Driving in the ECONO mode can improve fuel economy.

Refer to page
4-134 ECONO Mode

To Shift Gears - Manual Mode

M 1 ~ M 9

- When changing the gear in the manual mode, place the gearshift lever into the "M" position and move the lever towards the "+ (upshift)" or "- (downshift)" direction as necessary to select the desired gear. Check that the desired gear is displayed on the shift indicator.
- When the gearshift lever is shifted the clutch automatically disengages and the gear position changes, then the clutch automatically engages, such that both upshift and downshift can be done by the same operation.
- Gears are not automatically shifted in the manual mode. To return to the auto mode, place the gearshift lever into the "D" position. Make sure that "D" is displayed on the shift indicator.

ADVICE

- Shift into the gear appropriate for the vehicle speed. If an inappropriate gear shift position is selected, a warning buzzer will sound and the shift will not occur.
- Continuing to drive in manual mode using an unsuitable gear level may cause a malfunction. In this case, the gear is automatically downshifted to a suitable gear level.
- Strongly depressing the accelerator pedal immediately after shifting gears not only prevents the vehicle from running smoothly but also causes a failure of the transmission. Operate the accelerator pedal gradually.

NOTE

- When it is necessary to make fine speed control of the vehicle as when reversing it onto a platform, you can utilize the creeping effect of the transmission to move the vehicle smoothly using only the brake pedal, not using the accelerator pedal.
- When the vehicle is not running, the transmission gear is not shifted even if you shift to the auto mode (by shifting the lever from "M" to "D" position). The gear is shifted automatically only after the vehicle has started.

To Stop the Vehicle

1. Press the brake pedal with your right foot to slow down and stop the vehicle. No special gear shifting is required.
   After the vehicle has stopped, the gear is automatically shifted into the starting gear in both the manual mode and auto mode.
2. While the vehicle is stopped, place the gearshift lever into the "P" or "N" position. When the vehicle must be stationary for several minutes, set the parking brake.

CAUTION

- **When leaving the driver's seat, be sure to firmly set the parking brake and place the gearshift lever into the "P" position, make sure that the shift indicator displays "P".**

ADVICE

- When the vehicle is stopped, do not keep depressing the accelerator pedal with the gearshift lever placed in the "D", "M" or "R" position while depressing the brake pedal. Doing so may cause a failure.
- When stopping the vehicle on a slope, be sure to fully apply the brakes. Keeping the vehicle stopped by depressing the accelerator pedal to produce a strong creeping effect may cause a failure.

NOTE

- In models without ecostop, when stopping the vehicle to wait for traffic lights, it is recommended that the gearshift lever be placed into "N", for improved fuel economy. In models with ecostop, when the engine stops automatically because of ecostop, leave the gearshift lever in "D". Moving the gearshift to a position other than "D" causes the engine to restart.

Refer to page
4-64 ecostop [V]

When Parking Your Vehicle

P

1. Set the parking brake while depressing the brake pedal with your right foot.
2. Put the gearshift lever in the "P" position and confirm that the shift indicator shows "P", then slowly remove your right foot from the brake pedal.
3. Stop the engine.

CAUTION

- **Avoid parking on hills whenever possible and instead choose flat locations to stop your vehicle. When parking on hills cannot be avoided, engage the parking brake to ensure the vehicle does not move and apply chock blocks to the wheels for extra safety.**
  Park with the parking brake engaged and with the gearshift lever in the "P" position.
- **To minimize damage in the rare event that the vehicle were to move, turn the wheels to face an obstacle such as the curb.**
- **Do not park the vehicle by only placing the gearshift lever in the "P" position. If the vehicle were to be parked on a steep incline with only the gearshift lever placed in the "P" position, the weight placed on the gearshift lever would become heavy and possibly become unable to be operated. When parking the vehicle, always securely engage the parking brake.**

[NPS/NQS models]

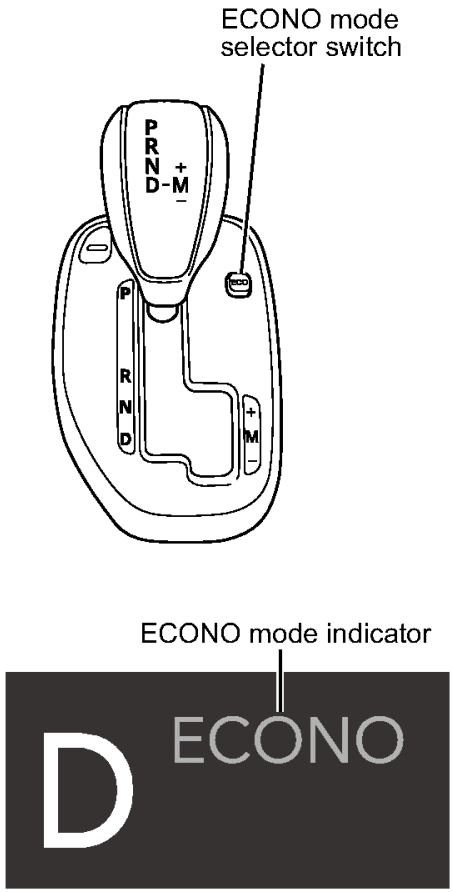
- **When parking after switching the range of the transfer, for safety reasons, make sure that driving power is being transmitted.**

Refer to page
4-234 Switching HIGH and LOW Range [V]

Action that Can Lead to a Breakdown with an DCT Vehicle

Action that can lead to a breakdown	Breakdown symptom
• While on an uphill slope with the gearshift lever in the "D" or "M" position, keeping the vehicle stopped by depressing the accelerator as a substitute for braking • Pressing the accelerator pedal and brake pedal at the same time • Continuously driving in an inappropriate gear • Repeated excessive starting and stopping	• The DCT clutch oil overheats.
• Operating the gearshift lever with the accelerator pedal pressed and the engine speed high	• The transmission gears or clutch are overloaded.
• Turning off the starter switch while driving • Keeping the gearshift lever in the "N" position on a long downward slope (this is dangerous due to the lack of engine brake)	• Causing poor lubrication of the transmission.

ECONO Mode

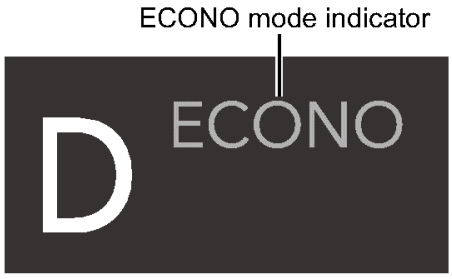


Setting the ECONO mode to improve the running fuel efficiency while driving in auto mode (automatic shifting).
Pressing the ECONO mode selector switch cancels the ECONO mode and turns off the ECONO mode indicator in the multi-information display.
Canceling ECONO mode allows you to drive with more power.

NOTE

- When in manual mode, you cannot switch to ECONO mode.
  When ECONO mode is selected in auto mode, the ECONO mode indicator turns off when you go into manual mode (shifting from "D" to "M").
  When manual mode is changed again to auto mode (shifting from "M" to "D"), ECONO mode is set and the ECONO mode indicator turns on again.

ECONO Mode Indicator



This indicator turns on when in ECONO mode.

DCT Warnings/Indicators

In the following cases, the DCT warning light, multi-information display, and warning buzzer are activated as an alarm.

When the Alarm is Given Only by the Warning Buzzer

Condition	Multi-information display indication	Warning buzzer	Corrective action
When trying to shift into an under-run gear level (manual mode)	—	Long, repeated beeps	Put the gearshift lever in the "D" position and drive in a suitable gear level (no shifting).
When trying to shift into an over-run gear level (manual mode)	—	Long, repeated beeps	Put the gearshift lever in the "D" position and drive in a suitable gear level (no shifting).
An upshift or downshift operation is performed to shift to an unsuitable starting gear level (manual mode)	—	Long, repeated beeps	Select a suitable starting gear level or put the gearshift lever in the "D" position and then start.
The engine is overrunning.	—	Continuous beep	Use the brakes to reduce vehicle speed or upshift to a suitable gear level to reduce engine speed.

When Warning Buzzer and Multi-information Display Indicate an Alarm has Occurred

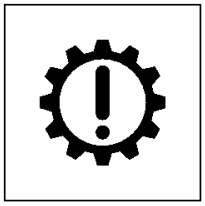
Condition	Multi-information display indication	Warning buzzer	Corrective action
The accelerator pedal is kept depressed while the brakes are being applied.	T/M oil temp rising Release the accelerator pedal or return gearshift lever to P position	Long, repeated beeps	Release the accelerator pedal or return the gearshift lever to the "P" position.
The vehicle is stopped on a slope with the accelerator pedal kept depressed.	T/M oil temp rising Release accelerator pedal and depress the brake pedal	Long, repeated beeps	Release the accelerator pedal and apply the brakes.
The vehicle continues to drive in unsuitable gear or slowly on uphill slope.*1	T/M oil temp rising Release accelerator pedal or drive in auto mode	Long, repeated beeps	Let up on the accelerator pedal or downshift to a suitable gear level and drive in auto mode.
The vehicle is started and stopped too frequently.	T/M oil temp rising Release accelerator pedal or drive in auto mode	Long, repeated beeps	Stop the vehicle at a safe place, return the gearshift lever to the "P" or "N" position and run the engine at idle to cool it down.
The temperature of the DCT clutch oil is abnormally high.	T/M oil temp rising While engine is running, put gearshift lever in the P or N position, and wait (Red)	Long, repeated beeps	Stop the vehicle in a safe place, put the gearshift lever in the "P" or "N" position, and then idle the engine to cool it down until the "T/M oil temp rising" display (red) goes out.
When the oil temperature rises while using a lever-type PTO or switch-type PTO	T/M oil temp rising While engine is running, put gearshift lever in the P or N position, and wait (Amber)	—	If you continue to use the PTO, keep an eye on the oil temperature warning light. If this message appears frequently, review the PTO idle speed setting.

Condition	Multi-information display indication	Warning buzzer	Corrective action
When the oil temperature rises abnormally while using a lever-type PTO or switch-type PTO	T/M oil temp rising While engine is running, put gearshift lever in the P or N position, and wait (Red)	Long, repeated beeps	Stop using the PTO and run the engine in cold air until the "T/M oil temp rising" display (red) turns off.
The driver opens the door and is leaving the vehicle with the starter switch in the "ON" position and the transmission in gear.	Alert! Driver not seated Return the gearshift lever to P position and apply the parking brake	Long, repeated beeps	Return the gearshift lever to the "P" position.
When the gearshift lever is placed in the "P" position without checking the drive power after changing the transfer gear control switch position	Alert! Driver not seated Return the gearshift lever to P position and apply the parking brake	Continuous beep	Put the gearshift lever in the "D" position, and check that drive power is being transmitted. Then put the gearshift lever in the "P" position.
The DCT emergency switch is pressed.	AMT emergency mode For models with HSA, when pulling away, press the HSA OFF switch to deactivate HSA	—	After moving the vehicle to a safe place, press the DCT emergency switch again to cancel emergency mode.
The gearshift lever is moved to the "R" position while driving.	Shifting to R inhibited With the vehicle stopped, put the gearshift lever in R	Three long beeps	Return the gearshift lever from the "R" position, stop the vehicle, and then shift the gearshift lever to the "R" position.

*1: To prevent failure due to increased oil temperature, the gears are automatically downshifted to a suitable gear level, even while driving in manual mode.

Refer to page
4-269 PTO Idle Speed Setting [SA]/[DCT]

When the DCT Warning Light is On



DCT warning light
In the following cases, this warning light (amber or red) comes on. Take corrective actions according to the description.

Condition	Multi-information display indication	Warning buzzer	Corrective action
The DCT system has failed.	T/M abnormal Restart engine, if it appears again, contact the dealer	—	Stop the vehicle at a safe place and have your vehicle inspected at the nearest Isuzu Dealer promptly. For details, refer to "When There is an DCT Failure".

Refer to page
4-138 When There is a DCT Failure

When There is a DCT Failure

If the DCT warning light (amber or red) comes on while driving, stop the vehicle in a safe place. If the warning light does not go off, contact the nearest Isuzu Dealer for an inspection.

Refer to page
4-138 When the DCT Warning Light is On

⚠ CAUTION

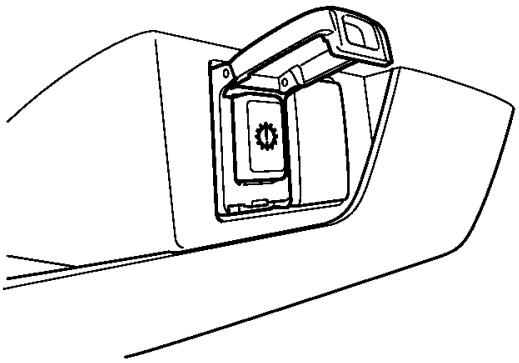
- **If the DCT warning light comes on, the following conditions may occur.**
  - **Creeping does not occur.**
  - **Shifting up or down cannot be performed.**
  - **The timing for the clutch is faster or slower than usual.**

If this happens, the vehicle movement during regular operation may become abnormal, such as difficulty during speed adjustments at very low speeds, or the inability to pull up to loading platforms correctly. In such cases, operate the vehicle while paying close attention to your surroundings and promptly have it inspected at the nearest Isuzu Dealer.

- **DCT models cannot be moved by being pushed or by the starter motor. If the engine stalls and cannot be restarted, put the gearshift lever in the "N" position, confirm that the shift indicator shows "N", and then push it to a safe place to evacuate.**

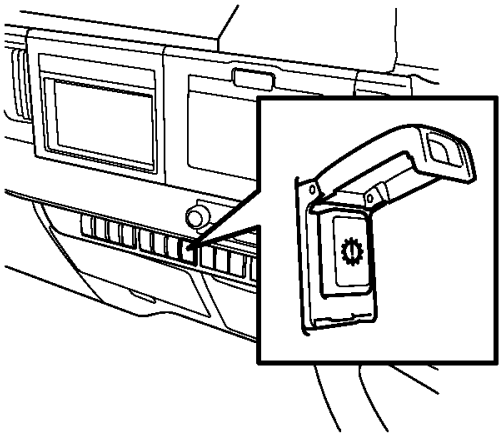
How to Use the DCT Emergency Switch

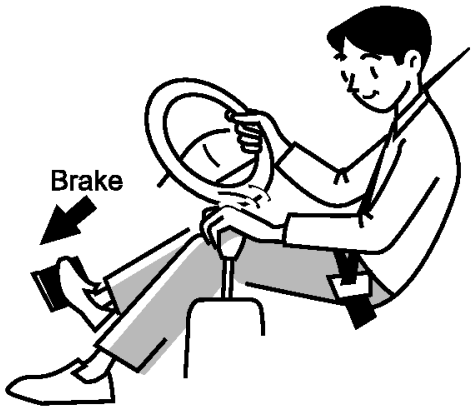
NJR/NKR/NLR/NMR/NMS models



Use the DCT emergency switch if a failure to the DCT system's electrical system occurs and move the vehicle to a safe place. After moving to a safe place, promptly contact the nearest Isuzu Dealer.
Normally, keep the emergency switch off and do not touch it during driving.

NNR/NPR/NPS/NQS models





1. With the parking brake securely engaged, while your right foot is firmly pressed on the brake pedal, put the starter switch in the "LOCK" position, and confirm that the gearshift lever is in the "P" position.
2. Turn the starter switch to the "ON" position.
3. Open the cover of the DCT emergency switch, press the switch and confirm that "AMT emergency mode" appears in the multi-information display.

AMT emergency mode

For models with HSA,
when pulling away,
press the HSA OFF switch
to deactivate HSA

4. Start the engine while fully depressing the brake pedal. Release the parking brake and then place the gearshift lever into "D" or "M" for a forward movement or into "R" for a backward movement. Make sure that the shift indicator displays "D" or "M2" when the gearshift lever is placed in a forward movement position and "R" when the lever is in the backward movement position.
5. Release the brake pedal and slowly depress the accelerator pedal to start the vehicle.

⚠ CAUTION

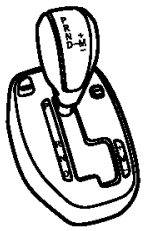
- **Do not open the cover of the DCT emergency switch normally.**
- **The DCT emergency switch must be used only in an emergency. Normally, turn off the emergency switch. Never operate the emergency switch while driving.**
- **After you have moved the vehicle to a safe place using the DCT emergency switch, promptly turn off the emergency switch, return the gearshift lever to the "P" position, and close the cover.**
- **Turning the DCT emergency switch on displays "AMT emergency mode" in the multi-information display.**
- **When the DCT emergency switch is turned on with the gearshift lever in any position other than "P" or "N", the vehicle may suddenly start moving. When turning the emergency switch on, be sure to keep the brake pedal depressed.**
- **When the DCT emergency switch is turned on, the engine can be started even with the gearshift lever in a position other than "P".**
  When the engine is started with the transmission in gear, the vehicle may suddenly start moving. To prevent this, firmly set the parking brake and fully depress the brake pedal with your right foot when starting the engine.

NOTE

- When the DCT emergency switch is on, and the gearshift lever is in the "D" or "M" position, then gear level is fixed at 2nd gear and shifting is not possible.

Shift Lock Function

During Vehicle Start-up



You cannot move the gearshift lever from "P" to other positions without depressing the brake pedal. Be sure to operate the gearshift lever while keeping the brake pedal depressed.

When Parking



Make sure to place the gearshift lever in the "P" position when parking the vehicle.
The key cannot be removed unless the gearshift lever is securely placed in the "P" position (key interlock system).

NOTE

[Correctly understanding the shift lock function]

- The shift lock function is a safety function in DCT models to prevent accidental operations. Understand them correctly and always drive safely.

When the Gearshift Lever Cannot Be Moved From "P" to Other Positions

If the gearshift lever cannot be shifted from position "P" to any other position after the engine is started, refer to the following advice.

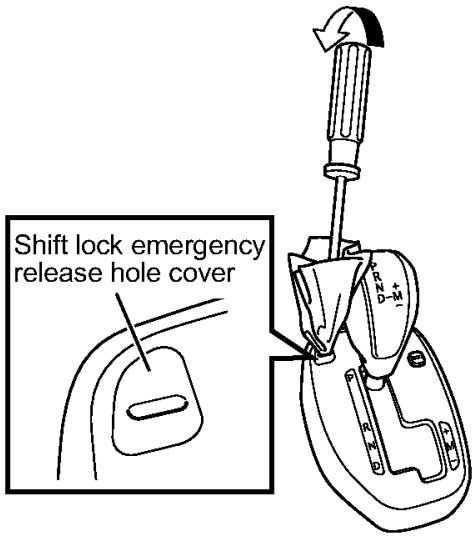
ADVICE

- Make sure the brake pedal is fully depressed.
- If the brake pedal is not depressed, the shift lock function is activated and you cannot shift from the "P" position to any other position.
- Make sure the vehicle is not parked on an incline.
- When moving the gearshift lever from the "P" position while on a slope, the lever operation may feel heavy.

Refer to page
11-18 When the Gearshift Lever Cannot be Moved From the "P" Position [DCT]

Releasing the Shift Lock in an Emergency

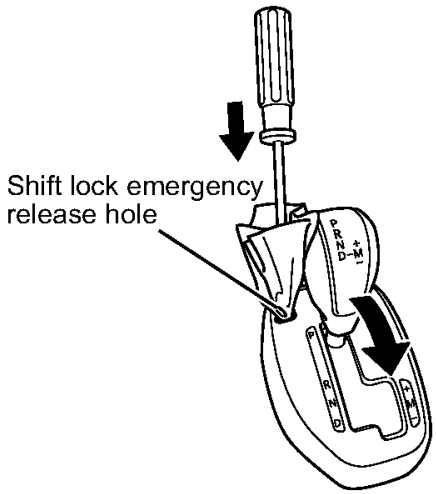
If the gearshift lever cannot be shifted from the "P" position to another position even after depressing the brake, checking the condition of where you are parked and doing the operations as advised, then perform the following operations.



1. Make sure that the parking brake is securely engaged.
2. Remove the shift lock emergency release hole cover with a flat head screwdriver.

ADVICE

- To not damage the gearshift lever, cover the screwdriver with cloth before you start working.



3. As you push a flat-head screwdriver all the way into the shift lock emergency release hole, operate the gearshift lever.

ADVICE

- Be sure to put the shift lock emergency release cover that you removed back in its original position so you do not lose it.

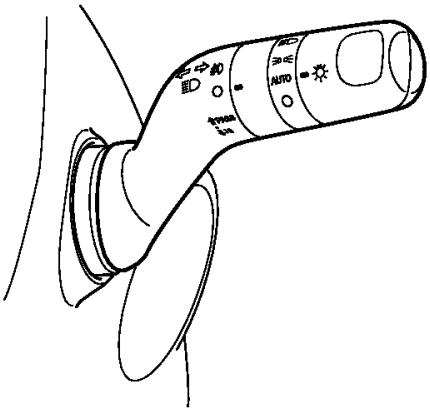
⚠ WARNING

- **If the gearshift lever cannot be moved from "P" to other positions after performing the previously mentioned procedure a number of times, it is likely that the shift lock function is faulty. Immediately contact the nearest Isuzu Dealer for inspection.**

Driving Systems

Exterior Lights

Light Control Switch



Turning the light control switch to the position indicated in the table causes the relevant lights to illuminate.
If they do not light correctly, then inspect and replace the lights.

Refer to page
10-135 Lighting Equipment

ADVICE

- Even if the starter switch is in the "OFF" position, rotating the knob to the "≡D" or "≡DC≡" position makes the headlight or taillight come on.
- With the light control switch in the "AUTO" position, the lights go out automatically when the engine is stopped.
- The light control switch can be used when the starter switch is placed in the "LOCK" or "ACC" position. Do not operate the combination lights for an extended time period with the engine stopped. Otherwise, the battery may go dead, making it impossible to restart the engine.

Name	Position			
	O	AUTO [V]	≡DOE	≡D
Headlight	Off	On / Off*2	Off	On
Clearance light			On	
Tail light				
License plate light				
Roof-mounted clearance light [V]				
Lights on indicator light				
Daytime running light*1 [V]	On		On	Off

*1: The daytime running light will come on when the following conditions are met.
1) The engine has been started.
2) The light control switch is "O (off)" position, "AUTO" (with the headlight off) position (if equipped) or "≡D" position (model with "AUTO" position).
3) The parking brake has been released.
4) The front fog lights are turned off (model with "AUTO" position).

*2: When the light control switch is in the "AUTO" position, the lights come on or go out automatically depending on the brightness outside the vehicle.

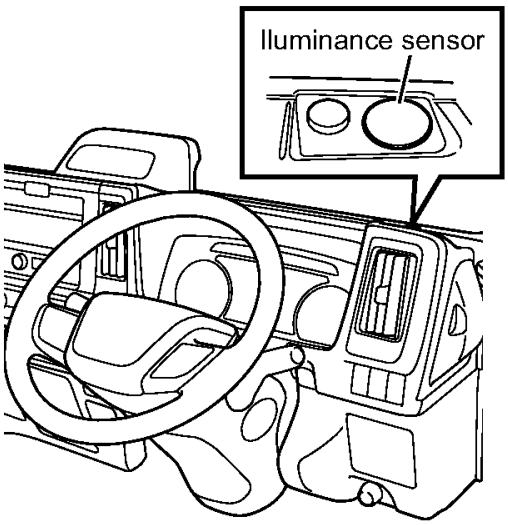
NOTE

- When the light control switch is in the "AUTO" position, the lights come on whenever the outside of the vehicle becomes dark (such as inside a long tunnel or in indoor parking lot, etc.). Then, the lights may not go out immediately after the outside of the vehicle becomes bright again. In this case, the lights will go out when the light control switch is turned to the "O (off)" position.
- Even when the visibility is poor due to fog, snow, etc., if the outside of the vehicle is bright with the daylight or due to other conditions, the lights may not come on even when the light control switch is in the "AUTO" position. If the lights do not come on, turn on the lights manually for safety.

NOTE (Continued)

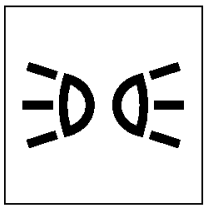
NOTE (Continued)

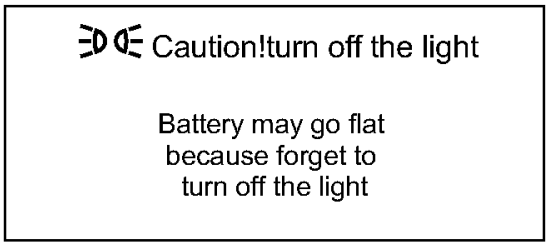
- Do not cover the illuminance sensor. If the illuminance sensor is covered, the lights may not come on properly even when the light control switch is in the "AUTO" position.



- If an abnormality occurs in the illuminance sensor and the light control switch is set to the "AUTO" position, the headlights will automatically come on regardless of the brightness of the outside. In this case, contact the nearest Isuzu Dealer.

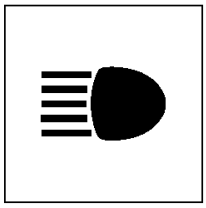
Lights On Indicator Light





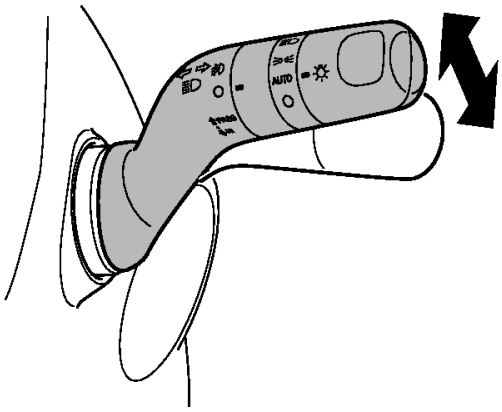
This indicator light comes on when the light control switch is turned to the "≡D◐≡" or "≡D" position and when the tail light is illuminated with the light control switch in the "AUTO" position.
In addition, when the door is opened with the starter switch in the "LOCK" position while the lights on indicator light is illuminating, the "Caution! turn off the light" message is displayed, and continuous short beeps sound.

High Beam Indicator Light



This indicator light comes on when high beam is selected or the headlights are cycled between high and low beams (passing signal).

Switching between High Beam and Low Beam

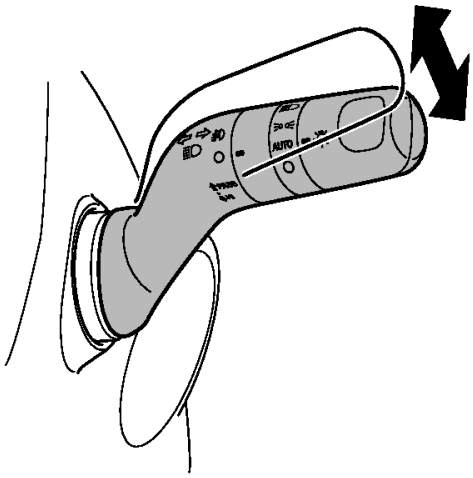


With the headlights on, move the lever forward and backward to switch between the high beam and low beam.
Moving the lever forward selects high beam; moving the lever backward selects low beam.
While the headlights are on high beam, the high beam indicator light on the instrument panel remains on.

NOTE

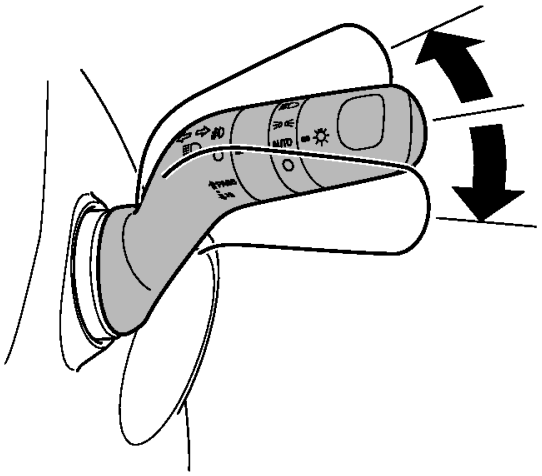
- Use low beam whenever there are vehicles ahead in the same lane or oncoming vehicles in the opposite lane.

Switching between High and Low Beams (Flash-to-Pass Signal)



By lightly pulling the light control switch lever and releasing it, the high beam comes on and off. At the same time, the high beam indicator light on the instrument panel comes on and off. Use this function as a signal for flash-to-pass a vehicle or other purposes.

Turn Signal Switch



When turning left or right, move the lever up or down to flash the turn signal light.
If they do not light correctly, then inspect and replace the lights.

Refer to page
10-135 Lighting Equipment

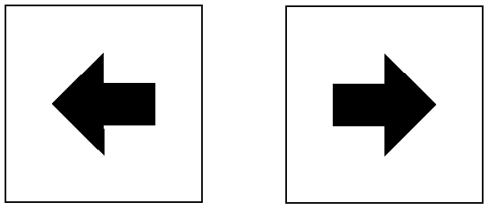
ADVICE

- The turn signal lights come on even when the starter switch is in the "LOCK" or "ACC" position. Do not operate the turn signal lights for an extended time period with the engine stopped. Otherwise, the battery may go dead, making it impossible to start the engine.

NOTE

- If the steering wheel is only turned a small amount, turn off the signal manually. Lightly press and hold the lever up or down when overtaking or changing lanes. The turn signal light continues flashing as long as the lever is held up or down. The lever moves back to neutral as soon as it is released.

Turn Signal and Hazard Warning Flasher Indicator Light

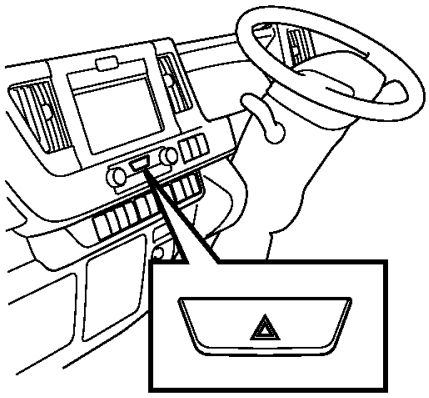


Either of these indicator lights flashes when the turn signal switch is operated with the starter switch in the "ON" position.
Both indicator lights flash when the hazard warning flasher switch is operated irrespective of the position of the starter switch.

ADVICE

- These indicator lights will not flash if the bulbs are blown, or may flash abnormally if bulbs of incorrect wattage are used.

Hazard Warning Flasher Switch

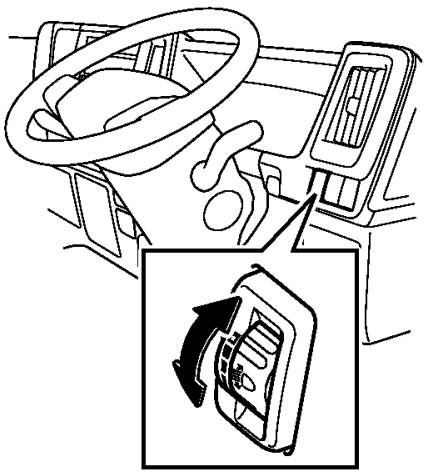


The hazard warning flasher is used to signal other vehicles that your vehicle is stationary on the road because of an accident or component failure.
With the starter switch in any position, when this switch is pressed, all of the turn signal lights and the turn signal indicator lights flash to signal an emergency. To turn off the hazard lights, press the switch again.

ADVICE

- Do not leave the hazard warning flasher operating for an extended time period with the engine stopped. Otherwise, the battery may go dead, making it impossible to restart the engine.

Headlight Leveling Switch [V]

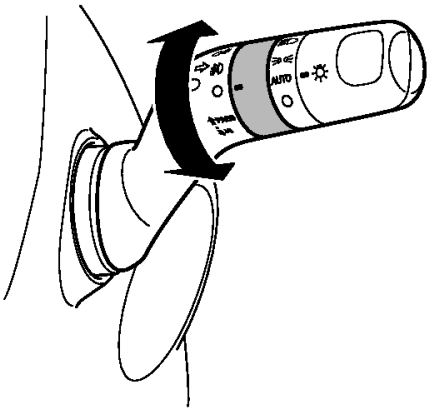


The headlight aim can be adjusted at four different angles. When the cargo load causes the headlights to aim upwards, this feature can be used to lower the aiming angle.
When your vehicle is not loaded with cargo, the switch should be set at the uppermost position. ("0" position)

CAUTION

- **Do not lower the aiming angle too much.**
  Otherwise, the illuminated range may be so reduced that you may be involved in an accident.

Front Fog Light Switch [V]



When this switch is turned to the "≢D" position with the light control switch positioned in "≡DC≡" or "≡D", or when this switch is in the "AUTO" position with the lights on indicator light on, the front fog lights come on and the front fog indicator light comes on. To turn off the lights, return the switch to "O" (off) position. Use this feature in low visibility such as in fog.

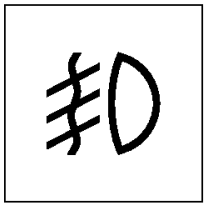
Refer to page
4-147 Lights On Indicator Light

⚠ WARNING

- **When replacing a fog light bulb, do not use one of a larger wattage than the specified wattage. Otherwise, the wiring may be burned.**

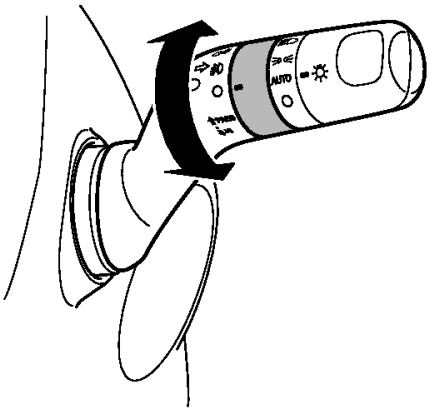
Refer to page
10-135 Lighting Equipment

Front Fog Light Indicator Light



This indicator light stays on while the front fog lights are on.

Rear Fog Light Switch [V]



When this switch is turned to the "⫶D" position with the headlights or the front fog lights on, the rear fog lights come on and the rear fog indicator light comes on. When the switch is released, it will return to the "≢D" position automatically.
To turn off the lights, return the switch to "O" (off) position. Use this feature in low visibility such as in fog.

⚠ WARNING

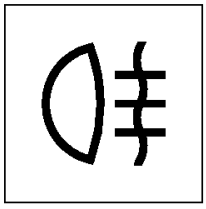
- **When replacing a fog light bulb, do not use one of a larger wattage than the specified wattage. Otherwise, the wiring may be burned.**

NOTE

- The rear fog lights will turn off if the light control switch is placed in the "O (off)" position or if the starter switch is placed in a position other than "ON" when the rear fog lights are illuminated. The rear fog lights will not come on even if the starter switch is again placed in the "ON" position and the headlights and front fog lights are turned on. To turn on the rear fog lights, return this switch to "⫶D" position again.

Refer to page
10-135 Lighting Equipment

Rear fog Light Indicator Light

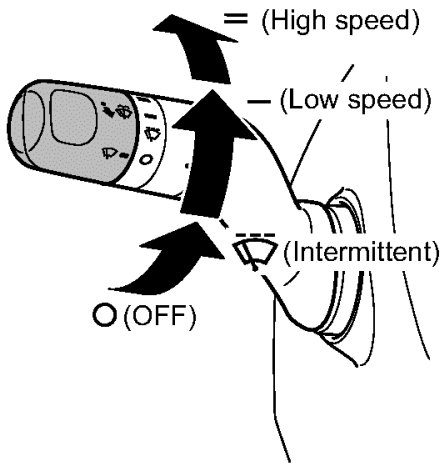


This indicator light stays on while the rear fog lights are on.

Windshield Wiper and Windshield Washer Switch

To use the windshield wiper and washer switches, the starter switch must be in the "ON" position.

Windshield Wiper Switch



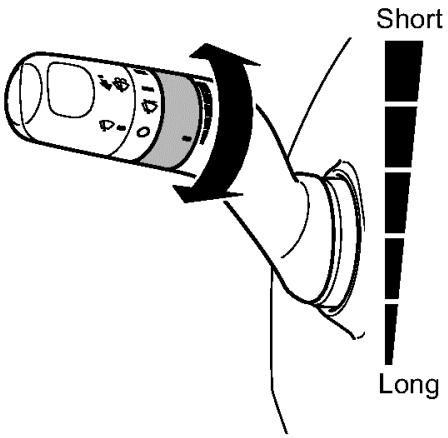
ADVICE

- The safety system may work to stop the wiper when excessive load is applied on the motor. In this case, turn the switch to the off position and, a few minutes later, check to see if the wiper is back to normal operation. If the wiper frequently stops operation, refrain from using it and contact the nearest Isuzu Dealer.
- Before operating the wiper, ensure that the wiper rubber is not stuck on to the windshield. If the wiper rubber is stuck to the windshield and you still operate the wiper, the wiper may break or the wiper motor may fail.
- Do not operate the wiper on a dry windshield surface. Otherwise, the windshield surface may sustain damage. Always use the windshield washer when wiping a dry glass surface.

The windshield wiper switch has the following positions, which correspond to the states of the wiper.

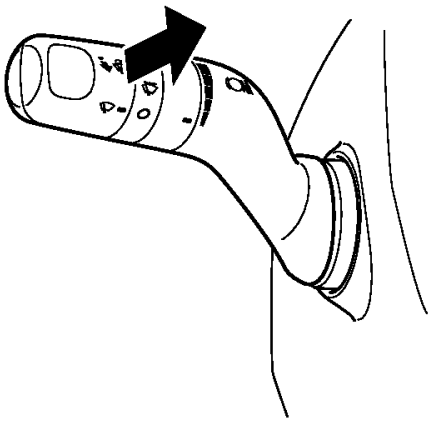
Lever position	O		–	=
Wiper state	Stopped	Intermittent (Light rain)	Low speed (Moderate rain)	High speed (Heavy rain)

Windshield Wiper Adjustment



This switch is used to adjust the operation intervals when the windshield wiper switch is in the "(Intermittent)" position.

Windshield Washer Switch



Windshield washer fluid is sprayed over the windshield when the windshield washer switch is pulled. At the same time, the windshield wiper operates.
The windshield washer is used when wiping the windshield clean.

⚠ CAUTION

- **At extremely low temperatures, washer fluid may freeze on the windshield after being sprayed, obstructing your forward view. In such a case, warm up the windshield with defroster before using the windshield washer.**

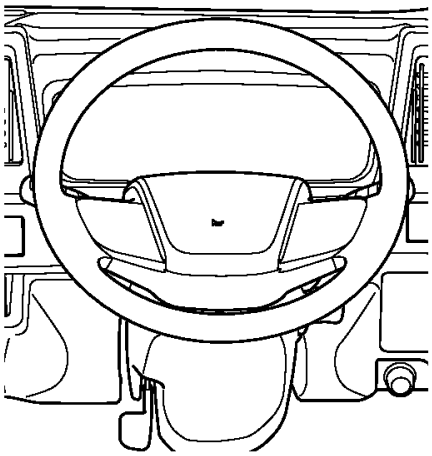
Refer to page
6-11 Defrosting

ADVICE

- If windshield washer fluid does not come out in sufficient quantity, immediately release the switch. Otherwise, the windshield surface may sustain damage.
- Do not hold the switch pressed for more than 30 seconds. Otherwise, the washer pump may sustain damage.
- If windshield washer fluid does not come out, release the windshield washer switch immediately. Otherwise the motor may seize up.
- When the vehicle is used in a cold-climate region, use washer fluid with appropriate concentration for the season to prevent frozen fluid.

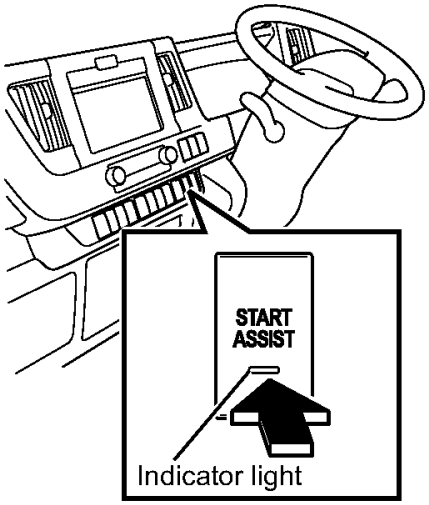
Refer to page
10-122 Windshield Washer Fluid

Horn Button



To sound the horn, press the pad with a horn symbol on the steering wheel.

Start Assist Switch [V]



This switch turns on and off the start assist function. When the switch is pressed, the indicator light on the switch lights up and the start assist function is ready to activate. Press the switch again to turn off the indicator light and cancel the start assist function.

WARNING

- **Cancel the start assist function when driving downhill or in traffic jams. If the start assist function is activated when pulling away, there is a risk of suddenly moving forward, which is extremely dangerous.**

NOTE

[Start assist function]

- When pulling away, as you shift the gearshift lever to a forward gear, the idle speed automatically increases to assist starting.

Cruise Control [V]

The cruise control is a system that allows you to drive, maintaining a fixed speed (about 30 km/h (20 MPH) or more), without depressing the accelerator pedal. It is used on expressways where starting and stopping is rare.

⚠ WARNING

- **Do not use the system in the following situations because doing so is dangerous:**
  - **On roads where there is heavy traffic, such as urban areas**
  - **On sharp curves or steep slopes**
  - **In slippery road conditions, such as when the road is frozen or covered with snow**
  - **When it is necessary to frequently accelerate and decelerate due to traffic conditions**
  - **When driving repeatedly up or down steep slopes**
  - **When merging onto or exiting highways or when driving through toll booths**
- **When it is raining, foggy, snowy or in any adverse weather, the traffic conditions often change significantly. In such situations, we ask drivers to drive safely on their own. Do not use the cruise control.**

⚠ CAUTION

[Model with Speed Limit Device]

- **An upper speed limit that exceeds the set speed of the speed limit device cannot be set.**

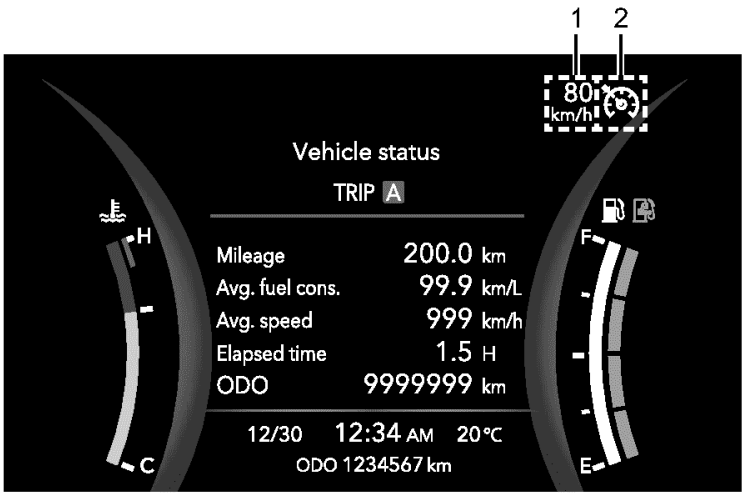
Refer to page
4-215 Speed Limit Device [V]

NOTE

- The maximum speed of the vehicle varies by your country.

Details of Cruise Control on Multi-information Display

When the cruise control is turned on, the multi-information display automatically changes to the following screen.



No.	Name	Indication details
1	Set vehicle speed	This indicates the set speed and the maximum cruising speed of cruise control.
2	Cruise control main display	This displays the system settings and operating status of cruise control.

The following cruise control shows the following in the multi-information display according to the conditions.

Name	Multi-information display		Display details
	Main display area	Drive assist display area	
Cruise control mode	Cruise control Driver assistance mode changed	—	When switching to the cruise control
Cruise control mode OFF	—	(Gray)	When the cruise control mode is off

Name	Multi-information display		Display details
	Main display area	Drive assist display area	
Standby	—	 (White)	When the cruise control is in a standby state
Cruise control active	—	 (Green)	Cruise control active
Cruise control temporarily deactivated (override)	—	 (Green, flashes)	When the accelerator pedal is depressed while the cruise control is active and the cruise driving is temporarily deactivated
Cruise control temporarily deactivated	 Cruise control canceled Cruise control has been canceled	 (White)	When cruise control is operating and the cancel switch is pressed to temporarily cancel cruising
Cruise control deactivated	 Cruise control canceled Cruise control has been canceled	 (Gray)	When the cruise control is deactivated

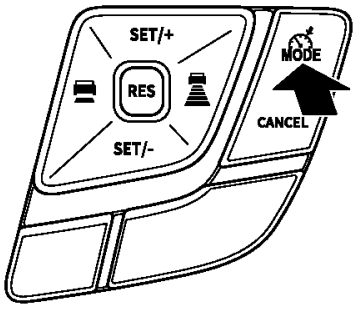
Buzzer Sounds During Cruise Control

During cruise control, the following buzzers will sound.

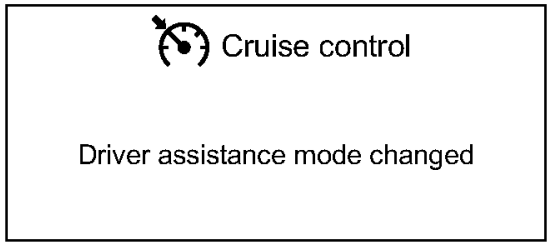
Name	Warning	Description
Operation refusal sound	Two short beeps	Requested operation could not be made
Operation sound	One short beep	Requested operation was made
Failure sound	Two short beeps	A device abnormality was detected
Canceling sound	Two short beeps	Deactivating the cruise control

Starting the Cruise Control

Setting Cruise Control While Driving

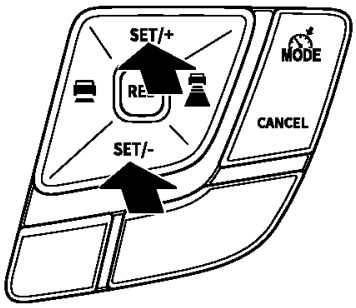


1. Press the mode switch and confirm that "Cruise control" appears in the multi-information display. If "Intelligent speed limiter" appears, press the mode switch again to switch to cruise control mode. If a set vehicle speed has been registered, then pressing the resume switch at this time starts cruise control driving.





2. Depress the accelerator pedal to adjust to your desired speed (about 30 km/h (20 MPH) or more). Once the vehicle reaches a speed that can be set, cruise control icon comes on in white on the multi-information display.



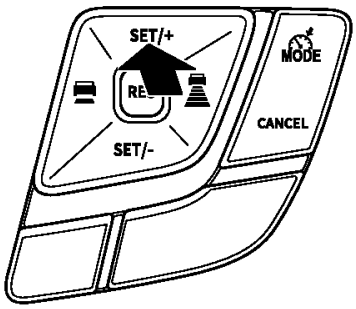
3. Press the "+" or "-" side of the set switch to set the vehicle speed and cruise control starts. The set vehicle speed is displayed in multi-information display.

NOTE

- The vehicle speed setting for cruise control cannot be set while the vehicle is stopped.

Changing the Set Vehicle Speed

To Accelerate

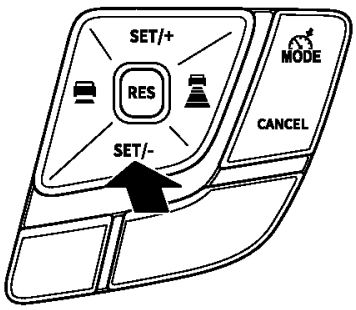


Pressing the "+" side of the set switch increases the vehicle speed set for the cruise control that is displayed in the multi-information display.
By pressing and immediately releasing the switch, the set vehicle speed can be increased by 1 km/h (1 MPH) per operation.
By holding down the switch, the set vehicle speed can be increased in increments of 5 km/h (5 MPH).

NOTE

- When you want to increase the speed quickly, depress the accelerator pedal, then after accelerating to the desired speed, press the set switch.

To Decelerate



Pressing the "-" side of the set switch decreases the vehicle speed set for the cruise control that is displayed in the multi-information display.
By pressing and immediately releasing the switch, the set vehicle speed can be decreased by 1 km/h (1 MPH) per operation.
By holding down the switch, the set vehicle speed can be decreased in increments of 5 km/h (5 MPH).

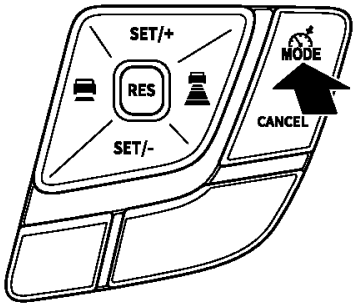
NOTE

- When you want to decrease the speed quickly, depress the brake pedal to temporarily cancel cruise control, then after decelerating to the desired speed, press the set switch.

Accelerating during Cruise Control Driving

If you want to accelerate temporarily to pass another vehicle while driving using the cruise control, depress the accelerator pedal. When you release the accelerator pedal, the speed returns to the original set vehicle speed.

Deactivating the Cruise Control



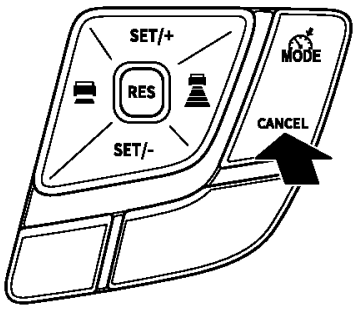
Press the mode switch to deactivate the function. At this time, a warning buzzer sounds and the cruise control icon on the multi-information display goes off.

NOTE

- Deactivate the cruise control by pressing the mode switch when the function is not to be used.

Temporarily Deactivating the Cruise Control

Temporarily Deactivating and Reactivating the Cruise Control



If the cancel switch is pressed, the cruise control will be temporarily deactivated. At this time, the cruise control icon comes on in white on the multi-information display and "Cruise control canceled" will be displayed for a few seconds.

Cruise control canceled

Cruise control has been canceled

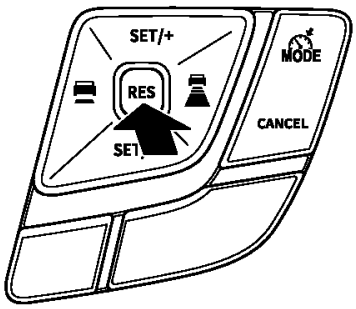
In addition, the function will also be deactivated in the following cases:

- When the brake pedal is depressed
- When the clutch pedal is depressed (manual transmission models)
- When the parking brake is applied
- When the exhaust brake is applied
- When any of the following warnings occur: Check engine warning light, brake system warning light
- When the gearshift lever is placed in any position other than the "D" position
- When entering into a steep uphill/downhill
- When ASR or ESC is activated

NOTE

- If the engine or engine related equipment malfunctions, then the cruise control is completely deactivated and the master warning light turns on. When the master warning light turns on then the cruise control mode cannot be selected and the equipment cannot be operated until the starter switch is temporarily put in the "LOCK" position.
- Deactivate the cruise control by pressing the mode switch when the function is not to be used.

Reactivating the Cruise Control



If the cruise control is deactivated, the cruise control setting used before the deactivation will be recovered by pressing and then releasing the resume switch. Once the resume switch is released, cruise control icon will come on in green on the multi-information display.
Also, cruise control does not return even when the conditions to temporarily deactivate it are removed.

Refer to page
4-160 Setting Cruise Control While Driving

Auxiliary Brake Function

Automatic activation of the auxiliary brake (exhaust brake) during cruise control driving suppresses an increase in the speed on a downhill slope, decreasing the need for the driver to apply the regular brake pedal.

⚠ CAUTION

- **The maximum slope angle at which the system can control the vehicle speed increase is different depending on the load the vehicle is carrying.**

Automatic Activation and Automatic Release of Auxiliary Brake

- The auxiliary brake is engaged when the vehicle speed exceeds the set speed on a downhill slope.
- The auxiliary brake is disengaged when the vehicle slows down close to the set speed.

Hill Start Aid (HSA) [V]

Model without electric parking brake

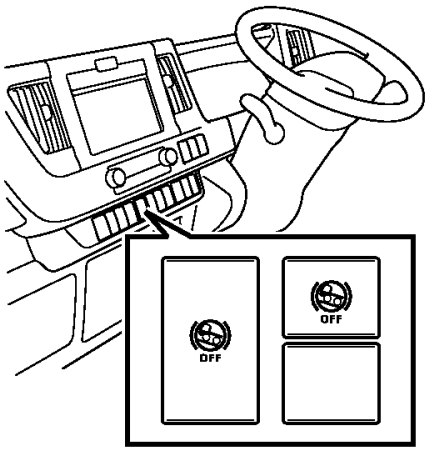
When the HSA is not activated, the service brake system retains a certain level of hydraulic pressure (braking pressure) only while the brake pedal is being depressed. When HSA is activated, the system retains the braking pressure that is produced when the brake pedal is depressed during a stop even after the brake pedal is released. The vehicle is then held stopped for the period of time until the HSA is deactivated. (The HSA works only while the engine is in operation.)

⚠ CAUTION

- **When leaving the driver's seat, be sure to firmly set the parking brake.**
- **Since the HSA no longer provides braking pressure if the starter switch is turned to the "ACC" or the "LOCK" position, the HSA OFF switch is pressed, or the fuse for the HSA circuit is removed while the HSA is activated, the vehicle will move down a slope and a very dangerous situation may result.**
- **If the vehicle rolls while the HSA is activated, either push the brake pedal further down or ensure that the parking brake is fully applied.**
- **Use the parking brake when stopping the vehicle with a gradient of 10% or higher if the vehicle is loaded up to the rating limit.**
- **When stopping the vehicle for a long time, set the parking brake rather than relying on the HSA.**
- **If you suspect a problem with the HSA, press the HSA OFF switch to turn it off. Normal braking will be restored.**
- **When the parking brake lever is pulled up while the HSA is activated, the HSA is automatically canceled.**
- **Even while the HSA stays activated, the stop lights go out when you release the brake pedal.**
- **When the engine is not in operation (except when an engine with ecostop is stopped automatically by ecostop) or the battery voltage is low, do not use the HSA because its ability to retain the brakes applied is decreased.**
- **When the vehicle stops after strong braking or due to the wheels being locked, the HSA may temporarily not operate. If this happens, use the parking brake or keep depressing the brake pedal to hold the vehicle in place.**
- **In the case of NPS/NQS models for Australia and New Zealand, when the transfer gear control switch is set to "LOW" range in 4WD mode, the HSA will not operate regardless of the position of the HSA OFF switch.**
- **In the case of NPS/NQS models for Australia and New Zealand, if the transfer gear control switch is set to "LOW" range in 4WD mode while HSA is operating, HSA will be deactivated.**

Refer to page
4-45 Parking in Winter and in Cold Regions

HSA OFF Switch



Press this switch when deactivating the HSA.
The HSA stops working.
Pressing the switch again activates the HSA.

⚠ CAUTION

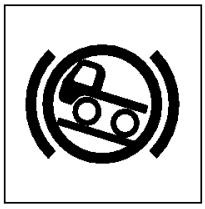
- **Deactivate the HSA on a snowy, icy or otherwise slippery road. When the wheels are locked on a slippery road, the HSA may activate, keeping the wheels locked.**
- **In the case of NPS/NQS models for Australia and New Zealand, when the transfer gear control switch is set to "LOW" range in 4WD mode, the HSA will not operate regardless of the position of the HSA OFF switch.**
- **In the case of NPS/NQS models for Australia and New Zealand, if the transfer gear control switch is set to "LOW" range in 4WD mode while HSA is operating, HSA will be deactivated.**

ADVICE

- Deactivating the HSA returns the brake system to normal operation. The hydraulic pressure of the brake is not retained when you release the brake pedal.

HSA Warnings/Indicators

HSA Warning Light (Amber)



When the HSA is operating, the warning light color will change to amber when:

- the driver seat is left vacant
- HSA operation has continued for an extended period of time
- there are any vehicle movements

The warning light color will also change to amber when:

- an HSA failure occurs

Refer to page
4-166 HSA Warnings/Indicators

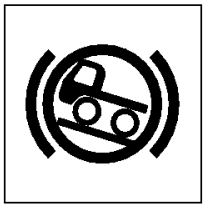
ADVICE

- If there is a problem with the HSA, disengage the system and have the vehicle inspected at the nearest Isuzu Dealer as soon as possible.

NOTE

- Operation can be considered to be normal if the HSA warning light (amber) and HSA indicator light (green) illuminate in that order and then turn off approximately 3 seconds after the starter switch is placed in the "ON" position.

HSA Indicator Light (Green)



This indicator light comes on when the hill start aid (HSA) system is in operation.

NOTE

- Operation can be considered to be normal if the HSA warning light (amber) and HSA indicator light (green) illuminate in that order and then turn off approximately 3 seconds after the starter switch is placed in the "ON" position.

HSA Warning Displays

In the following cases, the HSA warning light (amber) turns on, and the multi-information display appears and a buzzer sounds an alert.

Multi-information display	Warning light	Buzzer	Detail	Action
Caution! Driver not seated HSA system is operating When releasing, apply the parking brake	On	Long, repeated beeps	**Door open warning** A door is opened without pulling the parking brake while the HSA is activated.	Apply the parking brake and then open the door.

Multi-information display	Warning light	Buzzer	Detail	Action
Caution! HSA long operation HSA system is operating for a long time Apply the parking brake	On	Long, repeated beeps	**Too long activation warning** The vehicle is stopped a long time with the HSA activated.	Either engage the parking brake to stop or depress the brake pedal more.
Vehicle rolling Apply the parking brake	On	Continuous beep	**Vehicle movement warning** The vehicle starts moving during a stop using the HSA.	
HSA abnormal Restart engine, if it appears again, contact the dealer	On	— (When HSA is not operating) Long, repeated beeps (When HSA is operating)	**Failure warning** When the HSA warning light or buzzer is activated for reasons other than those above	Stop the vehicle safely and deactivate the HSA using the HSA OFF switch.

CAUTION

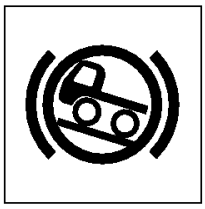
- **When a failure warning is issued, immediately stop the vehicle in a safe place, engage the parking brake, and place the starter switch into the "LOCK" position. If the HSA warning light (amber) still illuminates when the starter switch is placed in the "ON" position again, this means that the HSA itself has malfunctioned. Press the HSA OFF switch to deactivate the HSA, and have your vehicle inspected at the nearest Isuzu Dealer as soon as possible.**

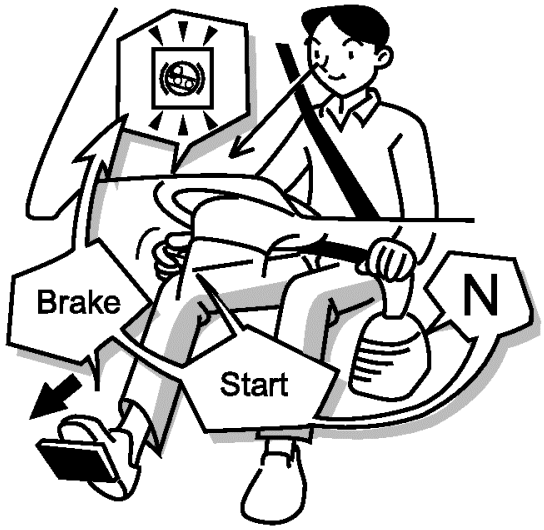
NOTE

- A buzzer sounds when you open the door without pulling the parking brake lever with HSA activated.

How to Use HSA

HSA warning light (amber)/
HSA indicator light (green)





1. Place the starter switch into the "ON" position.
   Confirm that the HSA warning light (amber) and HSA indicator light (green) illuminate in that order and then turn off after approximately 3 seconds.
2. Start the engine.

NOTE

- In models with ecostop, the HSA also operates during automatic engine stops.

3. Release the parking brake and fully depress the brake pedal for at least 1 second. Confirm activation of the HSA by checking that the HSA indicator light (green) in the instrument panel comes on.
   When the HSA OFF switch remains "ON", the HSA indicator light (green) does not come on.

Refer to page
4-166 HSA OFF Switch

4. Pull the parking brake lever. Confirm deactivation of the HSA by checking that the HSA indicator light (green) in the instrument panel goes out.

CAUTION

- **If the HSA indicator light (green) flashes or remains off or the buzzer continues to sound, the HSA system may have a problem. Deactivate the HSA and have your vehicle inspected at the nearest Isuzu Dealer as soon as possible.**
- **An HSA failure may have occurred if the HSA warning light (amber) illuminates or the warning buzzer continues to sound. Stop the vehicle in a safe place to inspect the vehicle and perform the necessary corrective actions. If the failure cannot be remedied, press the HSA OFF switch to deactivate the HSA, and have your vehicle inspected at the nearest Isuzu Dealer as soon as possible.**

Refer to page
4-166 HSA Warnings/Indicators

To Activate the HSA

1. Stop the vehicle.

NOTE

- The HSA can be activated regardless of the position of the gearshift lever.

2. Fully depress the brake pedal for at least 1 second. At this time the HSA indicator light (green) in the instrument panel comes on, indicating that the HSA is activated.

CAUTION

- **The HSA is a device to retain the vehicle in a stopped position for a short time and cannot replace the parking brake. When leaving the vehicle, be sure to set the parking brake. If the door should be opened with the HSA activated, a buzzer sounds to alert you.**
- **If the brake pedal is not pressed down sufficiently when on a steep downslope, the vehicle may move. In such a case, depress the brake pedal down further.**
- **The HSA is activated about 1 second after the brake pedal is depressed. Keep fully depressing the brake pedal during this period.**
- **When the vehicle stops after strong braking or due to the wheels locking, the HSA may temporarily not operate. If this happens, use the parking brake or keep depressing the brake pedal to hold the vehicle in place.**
- **If the HSA system is not working normally, deactivate the HSA and have it inspected at the nearest Isuzu Dealer as soon as possible.**

Refer to page
4-166 HSA Warnings/Indicators

NOTE

[This symptom is not abnormal]

- When the HSA is operating, the brake pedal may move and you may hear sounds as the brake force is adjusted to prevent the vehicle from moving.

To Deactivate the HSA



The HSA cancels its operation and releases the brakes in any of the following cases.

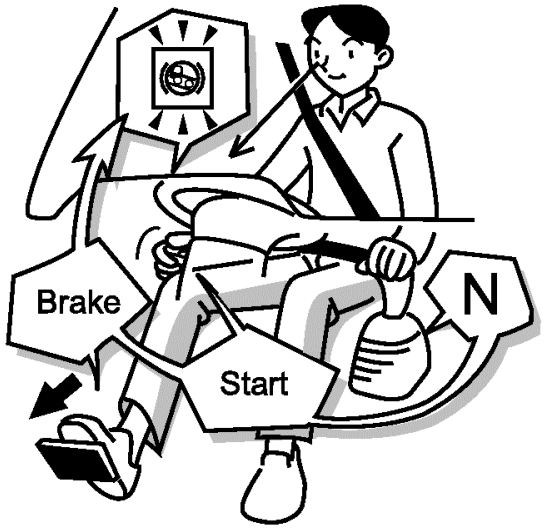
- When the gearshift lever is placed into a position other than "N" and the clutch is engaged while the engine is running.
- When the parking brake lever is pulled up.
- When the HSA OFF switch is pressed into the "ON" position.
- When the starter switch is placed into the "ACC" or "LOCK" position.

Adjustment of HSA

Make a fine adjustment of HSA in the following cases.

- If the brakes drag when restarting the vehicle.
- When the vehicle moves down a slope when the HSA is activated.
- When the brakes are not released when desired.

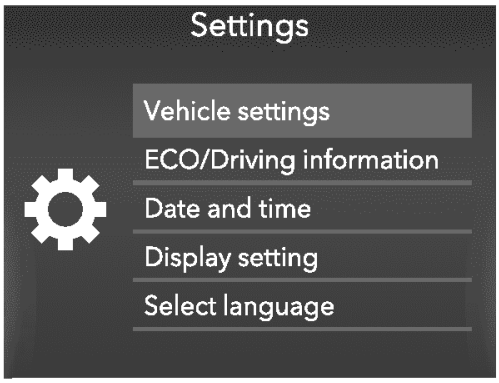
Adjustment



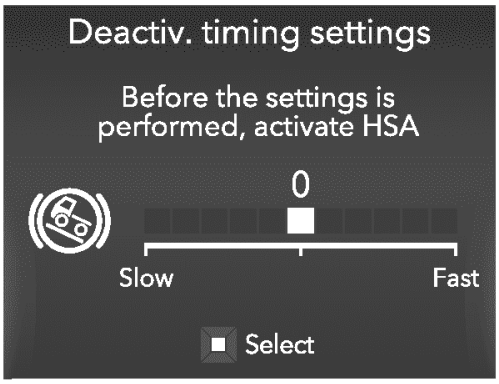
1. Pull the parking brake lever, make sure the gearshift lever is placed in the "N" position and then start the engine. At this time make sure that the HSA OFF switch is placed in "OFF" and that HSA is enabled.
2. Fully depress the brake pedal and release the parking brake lever. Check that the HSA indicator light (green) comes on and then depress the clutch pedal and place the gearshift lever into a position other than "N".

3. Press "Left" or "Right" on the multi-information display switch to switch the screen and display the settings screen. If a message to the driver is displayed, press "Enter" to return to the normal screen, and then switch to the settings screen.

Refer to page
3-48 Main Display Area



4. On the setting screen, select in order, "Vehicle settings" → "Brake" → "HSA settings" → "Deactiv. timing settings" to open the adjustment screen.



5. If the timing of brake release is too slow and dragging of the brake is felt when starting the vehicle, press the "Right" multi-information display switch. If the timing of brake release is too early and the vehicle moves down on a slope when starting the vehicle, press the "Left" multi-information display switch. Every time the switch is pressed, a buzzer sounds.
   Refer to the following table for the operation counts.

Situation	Operation count
Fine adjustment is required.	Press "Right" or "Left" once or twice.
Brakes seem to be dragging.	Press "Right" 2 to 3 times.
Vehicle tends to move down on a slope.	Press "Left" 2 to 3 times.
Brakes are dragging.	Press "Right" 3 to 5 times.
Vehicle moves down on a slope.	Press "Left" 3 to 5 times.

NOTE

- The range shown for the adjustment bar is 5 levels each on the "Fast" and "Slow" sides, but you can adjust it until the buzzer sounds.

6. Confirm the setting by pressing the "Enter" switch.

CAUTION

- **If the fine adjustment is made on either the "Fast" side or "Slow" side excessively, the HSA may not be activated or canceled properly. Adjust it to an appropriate release timing position for the braking force.**

NOTE

- If the braking force release timing is still very misadjusted even after adjusting it to the "Fast" or "Slow" side 5 times (level 5 on the adjustment bar) or more, make the initial adjustment of the HSA.

Refer to page
4-173 Initial Adjustment of HSA

Initial Adjustment of HSA

ADVICE

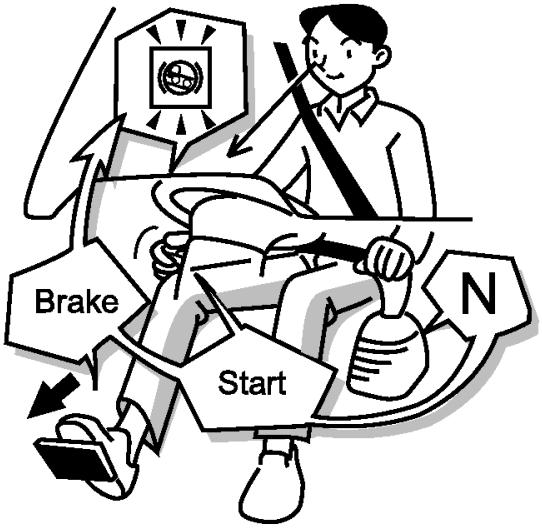
- Adjustment is not possible during a malfunction warning. Press the HSA OFF switch to release the HSA, and then contact the nearest Isuzu Dealer.

Refer to page
4-166 HSA Warnings/Indicators

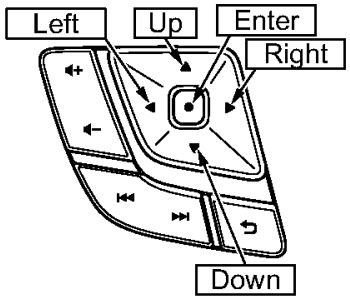
Make an initial adjustment of the HSA in the following cases.

- The clutch is replaced or play of the clutch pedal is adjusted.
- The HSA releases the brakes much too slowly or much too quickly when the vehicle is started.
- The control unit of the HSA is replaced.

Adjustment

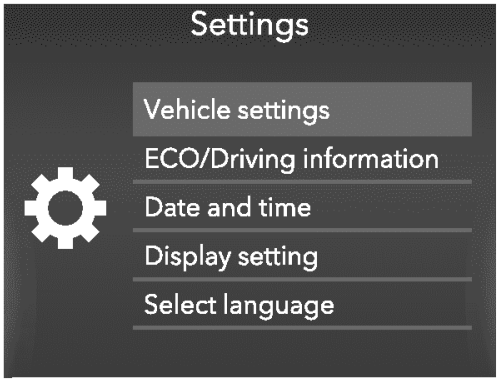


1. Pull the parking brake lever, make sure the gearshift lever is placed in the "N" position and then start the engine.

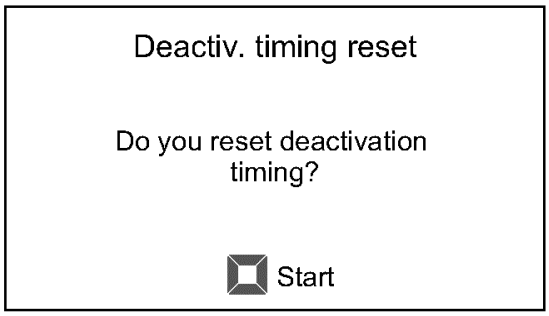


2. Press "Left" or "Right" on the multi-information display switch to switch the screen and display the settings screen. If a message to the driver is displayed, press "Enter" to return to the normal screen, and then switch to the settings screen.

Refer to page
3-48 Main Display Area



3. On the setting screen, select in order, "Vehicle settings" → "Brake → "HSA settings" → "Deactiv. timing reset" to open the reset screen.

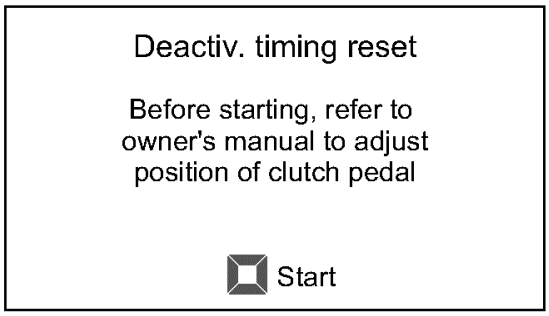


4. Press "Enter" on the multi-information display switch. When this happens, the buzzer sounds and the HSA warning light (amber) turns on.

NOTE

- If the release timing cannot be reset, then return to step 4 and reset it again. If the release timing cannot be reset even after doing the reset procedure again, contact the nearest Isuzu Dealer.

5. Disengage the clutch and place the gearshift lever in 2nd gear.



6. Slowly release the clutch pedal and when the engine speed drops 30 to 50 r/min from the idle speed, press "Enter" on the multi-information display switch. The buzzer then stops sounding.

7. Shift the gearshift lever into neutral and slowly engage the clutch pedal. The correct initial adjustment value may not be stored unless the clutch pedal is engaged slowly.

⚠ CAUTION

- **Failing to correctly store the initial adjustment values may result in the HSA not operating correctly as follows. Be sure to return the clutch pedal slowly.**
  - **HSA cannot be finely adjusted.**
  - **HSA does not operate.**
  - **HSA is released too quickly and the vehicle rolls back.**
  - **HSA is released too slowly and the brakes drag.**

8. Operate the HSA once and then pull away. At this time, if the brake release timing is not correct, adjust the HSA.

Refer to page
4-171 Adjustment of HSA

⚠ CAUTION

- **Be sure to make an adjustment of the HSA after adjusting clutch pedal play.**
- **If the amount of free play in the clutch pedal exceeds the standard value, the HSA may not be able to operate and release normally. Refer to "Checking the Clutch Pedal Free Play and Stroke" to inspect and adjust it.**

Refer to page
10-87 Checking the Clutch Pedal Free Play and Stroke

Auto Brake Hold [V]

Model with electric parking brake

Normally, the foot brake maintains the braking force only while the brake pedal is depressed. However, when auto brake hold is activated, the braking force when the brake pedal is depressed to stop the vehicle is maintained even after your foot is removed from the brake pedal, so that the vehicle is temporarily stopped. This makes it easier to operate the parking brake and to move your foot from the brake pedal to the accelerator pedal.

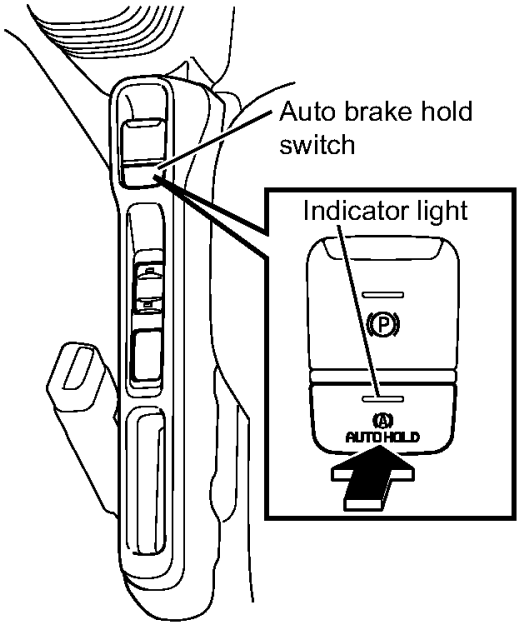
⚠ WARNING

- When leaving the driver seat, be sure to securely engage the parking brake.
- When the starter switch is turned to the "ACC" or "LOCK" position while auto brake hold is operating, pulling out the fuse releases the holding force of the brake and the vehicle will roll down a slope.
- If the vehicle starts rolling downhill while auto brake hold is operating, press down more on the brake pedal or firmly apply the parking brake. Depressing the brake pedal even more will release the auto brake hold, so continue to depress the brake pedal.
- Be sure to securely engage the parking brake when the vehicle is stopped on a constant gradient of 10% or more.
- If the vehicle will be stopped for a long time, securely engage the parking brake.
- If you feel something wrong with auto brake hold, then while depressing the brake pedal, press the auto brake hold switch to release it. The normal brake state returns.
- When the parking brake is applied while auto brake hold is operating, auto brake hold is released.
- Even if auto brake hold is operating, the brake light does not turn on when your foot is removed from the brake pedal.
- Auto brake hold does not operate when the engine is stopped.
- Auto brake hold does not operate when the engine is stopped (except when an engine with ecostop is stopped automatically by ecostop).
- If you brake strongly or the tires lock when the vehicle is stopped, auto brake hold may temporarily not operate. In this case, use the parking brake or continue to depress the brake pedal to keep the vehicle stopped.
- In the case of NPS/NQS models for Australia and New Zealand, when the transfer gear control switch is set to "LOW" range in 4WD mode, auto brake hold will not operate regardless of the position of the auto brake hold switch.
- In the case of NPS/NQS models for Australia and New Zealand, if the transfer gear control switch is set to "LOW" range in 4WD mode while auto brake hold is operating, auto brake hold will be deactivated.

Refer to page
4-45 Parking in Winter and in Cold Regions

Auto Brake Hold Switch

Turning On and Off the Auto Brake Hold



This switch turns the auto brake hold system on/off.
To switch the auto brake hold system off while the system is operating, press the button while depressing the brake pedal. When auto brake hold turns off, the switch indicator light turns off. Pressing it again turns on auto brake hold.

When system is operable
When the following conditions are met, auto brake hold is operable, and the switch indicator light turns on.

- Auto brake hold system is on.
- Vehicle doors are closed and driver side seat belt is buckled.
- Auto brake hold warning light (amber) is not on.

⚠ CAUTION

- **Release auto brake hold on slippery roads such as snowy or icy roads. If the tires lock up on such a road, auto brake hold may be activated and the tires may stay locked.**
- **In the case of NPS/NQS models for Australia and New Zealand, when the transfer gear control switch is set to "LOW" range in 4WD mode, auto brake hold will not operate regardless of the position of the auto brake hold switch.**
- **In the case of NPS/NQS models for Australia and New Zealand, if the transfer gear control switch is set to "LOW" range in 4WD mode while auto brake hold is operating, auto brake hold will be deactivated.**

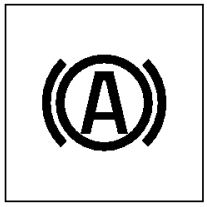
Depress brake pedal

NOTE

- After the engine has been started, auto brake hold will have the same settings as when the starter switch was last set to the "LOCK" position.
- Auto brake hold does not turn off if the auto brake hold switch is pressed without depressing the brake pedal while auto brake hold is operating. When this happens, "Depress brake pedal" appears on the multi-information display and a buzzer sounds.

Auto Brake Hold Warning/Indicators

Auto Brake Hold Warning Light (Amber)



When auto brake hold is activated, the warning light (amber) turns on if the driver is away from their seat, the vehicle starts moving, or if auto brake hold malfunctions.

ADVICE

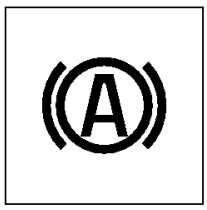
- If there is a problem with auto brake hold, release auto brake hold and immediately contact the nearest Isuzu Dealer for inspection.

NOTE

- Normally, when the starter switch is in the "ON" position, the auto brake hold warning light (amber) and auto brake hold indicator light (green) turn on in this order, then turn off after approximately 3 seconds.

Refer to page
4-180 Auto Brake Hold Warning Displays

Auto Brake Hold Indicator Light (Green)



The indicator light (green) turns on when auto brake hold is operating, and turns off when auto brake hold is released.

NOTE

- Normally, when the starter switch is in the "ON" position, the auto brake hold warning light (amber) and auto brake hold indicator light (green) turn on in this order, then turn off after approximately 3 seconds.

Auto Brake Hold Warning Displays

In the following cases, the auto brake hold warning light (amber) turns on, and the multi-information display appears and a buzzer sounds an alert.

Multi-information display	Warning light	Warning buzzer	Detail	Action
Caution! Driver not seated AUTO HOLD is operating When you leave the seat, apply the parking brake	On	Long, repeated beeps	**Door open warning** When the door is opened without applying the parking brake while auto brake hold is engaged *1	Apply the parking brake and then open the door.
Vehicle rolling Apply the parking brake	On	Continuous beep	**Movement warning** When the vehicle is stopped and then starts moving while auto brake hold is engaged	Either engage the parking brake to stop or depress the brake pedal more.

Multi-information display	Warning light	Warning buzzer	Detail	Action
Depress brake pedal 	Off	One beep	**Forgot to depress brake pedal warning** When the auto brake hold switch is pressed without depressing the brake pedal while auto brake hold is operating	Depress the brake pedal.
Parking brake operating 	Off	—	**Electric parking brake activated warning** When the electric parking brake is activated due to prolonged operation of the auto brake hold	Release the parking brake when starting the vehicle.
 Brake hold system abnormal Stop in a safe place Restart engine if Brake Hold Error appears again Contact dealer	On	— (When auto brake hold is not operating)	**Failure warning** When the auto brake hold warning light or buzzer is activated for reasons other than those above	Stop in a safe place, then release auto brake hold.
	On	Long, repeated beeps (When auto brake hold is operating)		

*1: Only when "Automatic key off" of "Electric parking brake" is set to "OFF" or "Link OFF when driver not seated" in "Vehicle settings"

Refer to page
4-84 Settings for Automatic Operation of the Electric Parking Brake

CAUTION

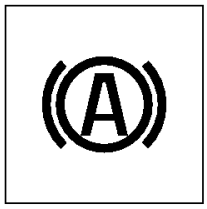
- **When the failure warning is activated, stop the vehicle immediately in a safe place, apply the parking brake and put the starter switch in the "LOCK" position. The auto brake hold unit has failed if the auto brake hold warning lamp (amber) turns on even though the starter switch has been turned to the "ON" position again.**
  If you are driving, press the auto brake hold switch to turn off auto brake hold, and immediately contact the nearest Isuzu Dealer for inspection.

NOTE

- If a door is opened and a buzzer sounds while auto brake hold is operating, the parking brake is not applied automatically. Apply the parking brake before leaving your seat.

How to Use Auto Brake Hold

Auto brake hold warning light (amber)/ indicator light (green)



1. Turn the starter switch to the "ON" position. At this time, confirm that the auto brake hold warning light (amber) and auto brake hold indicator light (green) turn on in this order, then turn off after approximately 3 seconds.

Refer to page
4-180 Auto Brake Hold Indicator Light (Green)

2. Start the engine.

NOTE

- In models with ecostop, auto brake hold also operates during automatic engine stops.

3. Confirm that the auto brake hold switch indicator light turns on.

Refer to page
4-178 Auto Brake Hold Switch

4. For DCT models, operate the gearshift lever from the "P" position to the "D", "M", or "N" position.

NOTE

- In manual transmission models, you can activate auto brake hold when the gearshift lever is in the or "N" position or when the clutch pedal is depressed.
- In Smoother models, you can activate auto brake hold when the gearshift lever is in the "D" or "N" position.

5. Release the parking brake and depress the brake pedal firmly for about 1 second or more. At this time, confirm that the auto brake hold is operating, and the auto brake hold indicator light (green) turns on in the multi-information display.
6. Pull up the electric parking brake switch. At this time, confirm that the auto brake hold is released, and the auto brake hold indicator light (green) turns off in the multi-information display.

CAUTION

- **If the auto brake hold indicator light (green) does not turn on when the auto brake hold function is operating, the auto brake hold unit may be malfunctioning. Release the auto brake hold by depressing the brake pedal and then press the auto brake hold switch, immediately contact the nearest Isuzu Dealer for inspection.**
- **If the auto brake hold warning light (amber) turns on or the buzzer sounds continuously, the auto brake hold unit may be malfunctioning. Stop the vehicle in a safe location to inspect and repair it. If it does not return to normal, depress the brake pedal as you press the auto brake hold switch to release auto brake hold, and immediately contact the nearest Isuzu Dealer for inspection.**

Refer to page
4-179 Auto Brake Hold Warning/Indicators

How to Activate

1. Stop the vehicle.

2. Depress the brake pedal firmly for about 1 second or more. At this time, auto brake hold is operating, and the auto brake hold indicator light (green) turns on in the multi-information display.

CAUTION

- **Auto brake hold is a mechanism for temporarily stopping, and it is not a substitute for the parking brake. When leaving the vehicle, be sure to engage the parking brake. If you happen to open the door while auto brake hold is operating, a buzzer sounds an alert.**
- **On steep slopes, if you do not depress the brake pedal enough, the vehicle may start moving. Apply the parking brake or depress the brake pedal even more firmly. Depressing the brake pedal even more will release the auto brake hold, so continue to depress the brake pedal.**
- **Auto brake hold is activated about 1 second after you depress the brake pedal. At this time, keep the brake pedal firmly depressed.**
- **If there is a problem with the auto brake hold unit, release auto brake hold and immediately contact the nearest Isuzu Dealer for inspection.**
- **If you brake strongly or the tires lock when stopping the vehicle, auto brake hold may temporarily not operate. In this case, use the parking brake or continue to depress the brake pedal to keep the vehicle stopped.**

Refer to page
4-179 Auto Brake Hold Warning/Indicators

NOTE

[This symptom is not abnormal]

- When auto brake hold is operating, the brake pedal may move and you may hear sounds as the brake force is adjusted to prevent the vehicle from moving.

How to Release

In any of the following conditions, auto brake hold is released by and brake operations are possible.

- When the gearshift lever is in any position other than "N" and the clutch is engaged while the engine is running (manual transmission models)
- When starting by depressing the accelerator pedal (except manual transmission models)
- When the brake pedal is depressed again (except manual transmission models)
- When the auto brake hold switch is pressed to off while the brake pedal is being depressed.

NOTE

While auto brake hold is operating, if any of the following operating conditions are met, auto brake hold is released and the parking brake is applied. When you pull away, release the parking brake.

- When the electric parking brake switch is pulled up
- If auto brake hold continues for a long time
  - "Parking brake operating" is displayed in the multi-information display.
- If the driver side seat belt is unbuckled and the door is opened (Electric parking brake automatic operation function*)
- If the starter switch is set to "ACC" or "LOCK" position (Electric parking brake automatic operation function*)
- The gearshift lever is moved to the "P" position (Electric parking brake automatic operation function*) (except manual transmission models)

*: Depending on the settings of the automatic operation function, the electric parking brake may not operate. For details, see "Electric Parking Brake".

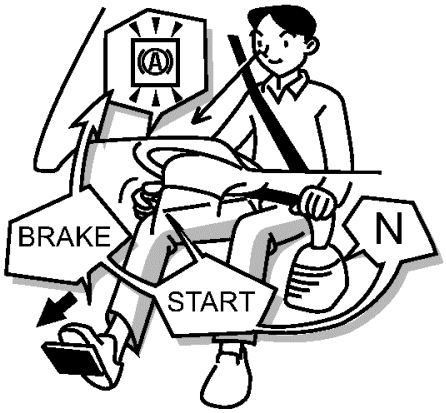
Refer to page
4-79 Electric Parking Brake (Model with Center Parking Brake) [HB]

Adjustment of Auto Brake Hold

Make a fine adjustment of auto brake hold in the following cases.

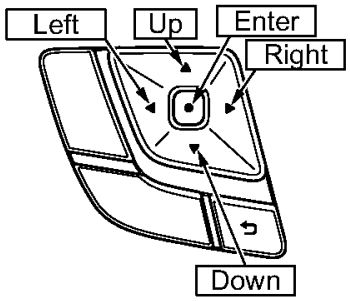
- If the brakes drag when restarting the vehicle.
- When the vehicle moves down a slope when the auto brake hold is activated.
- When the brakes are not released when desired.

Adjustment



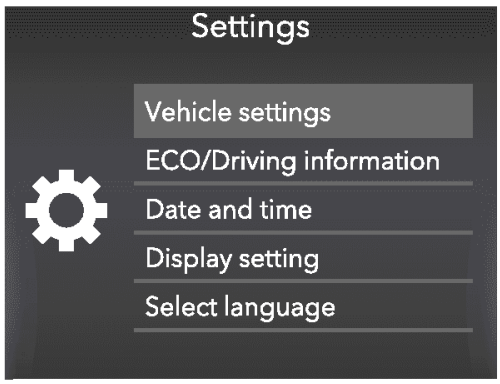
1. Apply the parking brake, make sure that the gearshift lever is in the "N" position (except DCT models) or in the "P" position (DCT models), and then start the engine. At this time make sure that the auto brake hold switch indicator light turns on and that auto brake hold is enabled.

2. For models with manual transmission, firmly depress the clutch pedal and shift the gearshift lever to a position other than "N".
   For models without manual transmission, firmly depress the brake pedal and shift the gearshift lever to "D". And then release the parking brake. At this time, confirm that the auto brake hold indicator light (green) is turned on.

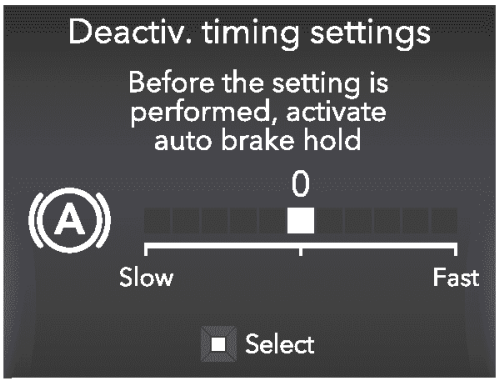


3. Press "Left" or "Right" on the multi-information display switch to switch the screen and display the settings screen. If a message to the driver is displayed, press "Enter" to return to the normal screen, and then switch to the settings screen.

Refer to page
3-48 Main Display Area



4. On the setting screen, select in order, "Vehicle settings" → "Brake → "Auto brake hold settings" → "Deactiv. timing settings" to open the adjustment screen.



5. If the timing of brake release is too slow and dragging of the brake is felt when starting the vehicle, press the "Right" multi-information display switch. If the timing of brake release is too early and the vehicle moves down on a slope when starting the vehicle, press the "Left" multi-information display switch. Every time the switch is pressed, a buzzer sounds.
   Refer to the following table for the operation counts.

Situation	Operation count
Fine adjustment is required.	Press "Right" or "Left" once or twice.
Brakes seem to be dragging.	Press "Right" 2 to 3 times.
Vehicle tends to move down on a slope.	Press "Left" 2 to 3 times.
Brakes are dragging.	Press "Right" 3 to 5 times.
Vehicle moves down on a slope.	Press "Left" 3 to 5 times.

NOTE

- The range shown for the adjustment bar is 5 levels each on the "Fast" and "Slow" sides, but you can adjust it until the buzzer sounds.

6. Confirm the setting by pressing the "Enter" switch.

CAUTION

- **If the fine adjustment is made on either the "Fast" side or "Slow" side excessively, the auto brake hold may not be activated or canceled properly. Adjust it to an appropriate release timing position for the braking force.**

NOTE

- If the braking force release timing is still very misadjusted even after adjusting it to the "Fast" or "Slow" side 5 times (level 5 on the adjustment bar) or more, take the following measures.
  - For manual transmission models, do the initial adjustment of the auto brake hold.
  - For Smoother models or DCT models, contact your Isuzu Dealer for inspection.

Refer to page
4-188 Initial Adjustment of Auto Brake Hold [M/T]

Initial Adjustment of Auto Brake Hold [M/T]

ADVICE

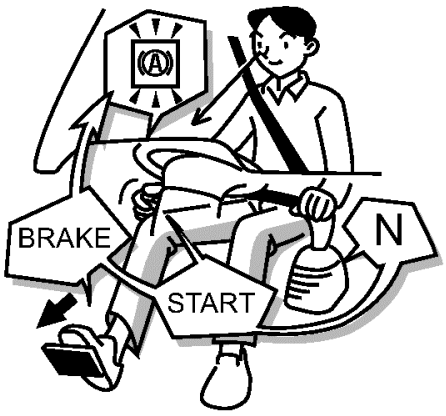
- Adjustment is not possible during a malfunction warning. Press the auto brake hold switch to release the auto brake hold function, and then contact the nearest Isuzu Dealer.

Refer to page
4-180 Auto Brake Hold Warning Displays

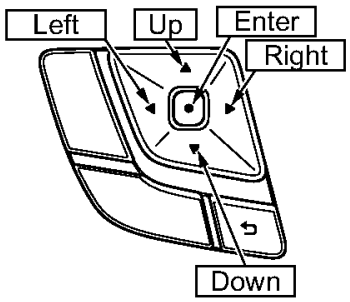
If your vehicle has a manual transmission, make an initial adjustment of the auto brake hold in the following cases.

- The clutch is replaced or play of the clutch pedal is adjusted.
- The auto brake hold releases the brakes much too slowly or much too quickly when the vehicle is started.
- The control unit of the auto brake hold is replaced.

Adjustment

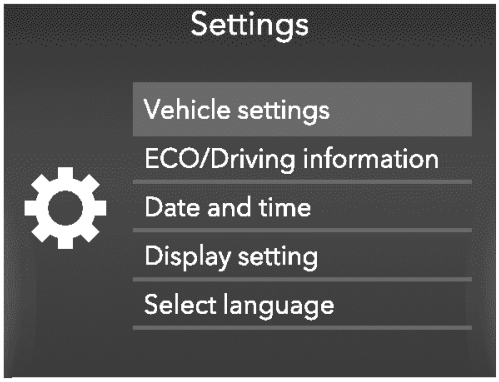


1. Apply the parking brake, make sure the gearshift lever is placed in the "N" position and then start the engine.

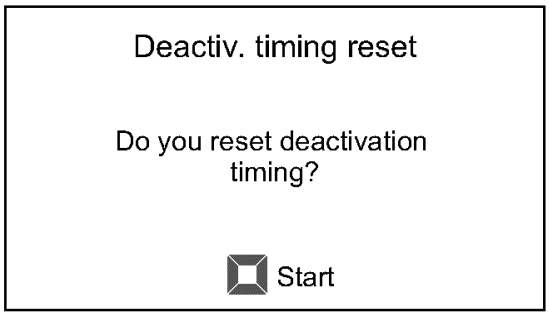


2. Press "Left" or "Right" on the multi-information display switch to switch the screen and display the settings screen. If a message to the driver is displayed, press "Enter" to return to the normal screen, and then switch to the settings screen.

Refer to page
3-48 Main Display Area



3. On the setting screen, select in order, "Vehicle settings" → "Brake → "Auto brake hold settings" → "Deactiv. timing reset" to open the reset screen.

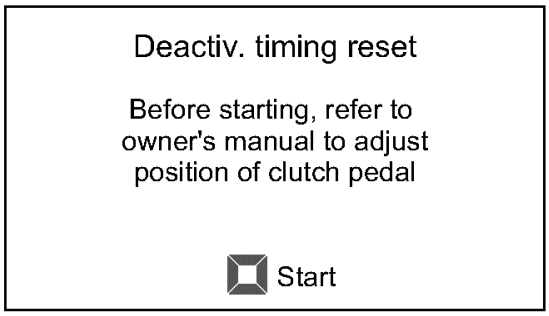


4. Press "Enter" on the multi-information display switch. When this happens, the buzzer sounds and the auto brake hold warning light (amber) turns on.

NOTE

- If the release timing cannot be reset, then return to step 4 and reset it again. If the release timing cannot be reset even after doing the reset procedure again, contact the nearest Isuzu Dealer.

5. Disengage the clutch and place the gearshift lever in 2nd gear.



6. Slowly release the clutch pedal and when the engine speed drops 30 to 50 r/min from the idle speed, press "Enter" on the multi-information display switch. The buzzer then stops sounding.

7. Shift the gearshift lever into neutral and slowly engage the clutch pedal. The correct initial adjustment value may not be stored unless the clutch pedal is engaged slowly.

CAUTION

- **Failing to correctly store the initial adjustment values may result in the auto brake hold system not operating correctly as follows. Be sure to return the clutch pedal slowly.**
  - **Auto brake hold cannot be finely adjusted.**
  - **Auto brake hold does not operate.**
  - **Auto brake hold is released too quickly and the vehicle rolls back.**
  - **Auto brake hold is released too slowly and the brakes drag.**

8. Operate auto brake hold once and then pull away. At this time, if the brake release timing is not correct, adjust auto brake hold.

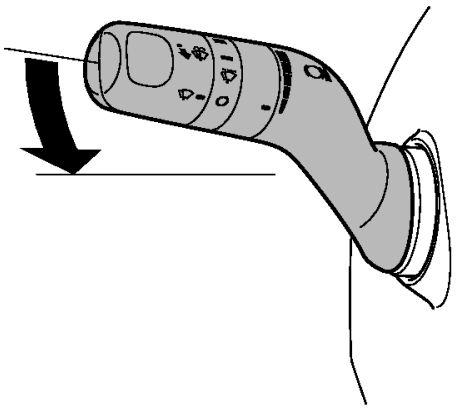
Refer to page
4-185 Adjustment of Auto Brake Hold

CAUTION

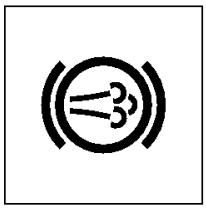
- **Be sure to make an adjustment of the auto brake hold after adjusting clutch pedal free play.**
- **If the amount of free play in the clutch pedal exceeds the standard value, the auto brake hold may not be able to operate and release normally. Refer to "Checking the Clutch Pedal Free Play and Stroke" to inspect and adjust it.**

Refer to page
10-87 Checking the Clutch Pedal Free Play and Stroke

Exhaust Brake Switch



Exhaust brake indicator light



To apply the exhaust brake while driving, pull the lever backward. The exhaust brake indicator light comes on. The indicator light comes on white while not operating and comes on green while operating. To disengage the exhaust brake, press the accelerator pedal or the clutch pedal. Releasing the pedal reengages the exhaust brake.

- If your vehicle is equipped with Smoother or DCT, the exhaust brake is disengaged during gear shifting or when the engine speed is reduced before the vehicle comes to a stop. The exhaust brake reengages when gear shifting is completed or when the engine speed increases sufficiently.

⚠ CAUTION

- **It is extremely dangerous to apply the exhaust brake on slippery roads (with their surfaces being wet, frozen, or covered with compacted snow) as the tires can skid.**

[DCT models]

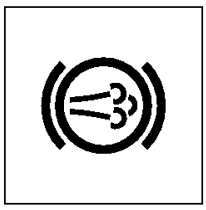
- **When the vehicle is being driven on downhill roads and the accelerator is being depressed to accelerate, the exhaust brake may operate automatically to protect the transmission. If the vehicle speed decreases, the exhaust brake releases automatically.**

ADVICE

- If a warning buzzer sounds when the exhaust brake is in operation, promptly pull the vehicle over safely and contact the nearest Isuzu Dealer for inspection.
- The exhaust brake indicator light flashes if there is a problem with the exhaust brake system. Have your vehicle inspected at the nearest Isuzu Dealer as soon as possible.
- When the warm-up system is on, the exhaust brake valve closes, but there is no braking effect when the gearshift lever is in the "N" position.

Exhaust Brake Warnings/Indicators

Exhaust Brake Indicator Light



The indicator light comes on in green while operating and comes on in white while not operating. Also, it comes on in amber in the following cases:

- When there is an abnormality in the exhaust brake system
- When there is an abnormality with the exhaust throttle system

ADVICE

- If the exhaust brake indicator light comes on in amber, immediately have the vehicle inspected at an Isuzu Dealer.

Conditions for Inoperable Exhaust Brake

Under the following conditions, the exhaust brake does not engage even if the exhaust brake indicator light comes on.

- The accelerator pedal or the clutch pedal (manual transmission models) is pressed.
- The gearshift lever is in the "N" position.
- The vehicle is traveling at 5 km/h (3 MPH) or lower speeds.
- Immediately after starting when the outside air temperature is low.

NOTE

- The exhaust brake may disengage during ABS operation even when the exhaust brake switch is in the "ON" position and the exhaust brake indicator light is on. The exhaust brake may disengage temporarily as the vehicle passes over a bump even when the brake pedal is not depressed. When this happens, the exhaust brake indicator light changes from green to white temporarily.
- It is advisable to operate the exhaust brake when descending a slope or when stop-and-go driving is involved.
- If you start a DCT model without depressing the accelerator pedal, the exhaust brake will not operate.

Anti-lock Brake System (ABS)

Wheels may be locked and slip during sudden braking or braking on a slippery road surface such as a snowy road. ABS is a device to prevent the wheels from locking by detecting a slippery condition during braking and to secure directional stability and handling stability of the vehicle. ABS is only to assist in slippery conditions and will not prevent an accident if you exceed safe driving speeds for road conditions. Always drive safely.

⚠ CAUTION

- **The braking distance on slippery road surfaces is longer than that on a normal dry paved road even with an ABS-equipped vehicle. In addition the braking distance can be slightly longer in deep snow and on a gravel road when ABS is activated. Therefore, always keep in mind the road condition and tire condition (type of tires and worn condition), observe safe driving habits and drive the vehicle while keeping a proper distance between vehicles.**
- **ABS does not prevent accidents if you do not drive safely. Drive the vehicle at a safe speed.**
- **Install tires of the specified size, same brand and same tread design (including winter tires) on all wheels. If different tires are installed, the braking distance becomes longer and directional control stability of the vehicle decreases. This is very dangerous.**
- **Steering during sudden braking (when the ABS is working) will feel slightly different than it does when the brakes are not applied. Operate the steering wheel carefully keeping this in mind.**
- **For full-air brake models, ABS operation consumes the brake system air. When the air pressure drops and the air pressure warning light and the buzzer are activated, immediately stop the vehicle at a safe place and wait for the required air pressure to be recovered before driving.**
- **In the case of NPS/NQS models for Australia and New Zealand, the ABS warning light will come on and the ABS will not be active when the transfer gear control switch is set to "LOW" range in 4WD mode.**
  When the ABS warning light is illuminated, there is a possibility that wheels may lock up and the vehicle may lose directional and handling stability if excessive brake pedal force is applied, particularly when road surface conditions are slippery.
  Take extra caution when operating the vehicle.

ADVICE

- Driving in sand or on a muddy road may adversely affect the brakes and ABS sensors. Wash the vehicle to remove sand and mud after operating the vehicle in sandy or muddy conditions.
- Before washing the vehicle, provide necessary protection to prevent water from being splashed on the ABS components (sensors and actuators). Especially when using high-pressure washing, be careful not to allow water to be directly sprayed onto the ABS components and their harness connectors.

NOTE

[These are not signs of ABS malfunction]

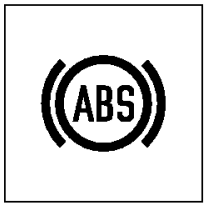
- Soon after you start the engine and the vehicle starts moving, the sound of motor or valve working may be heard from the rear of the vehicle or underside of the cab. This sound is from a self-check by the ABS system and is normal. In addition, in models with hydraulic brakes, you may also feel some vibration if the brake pedal is pressed at this time.
- When ABS is operating, vibration is felt on the brake pedal (hydraulic brake model) and steering wheel and you may hear the system operating. This is normal when ABS is properly operating.
- If ABS is activated while the exhaust brake is in operation, the exhaust brake may release.
- ABS is more likely to be activated when the brake is applied during cornering or driving over a bump. This is because inside wheels or wheels that have gone over a bump tend to lock.
- ABS is not activated immediately after starting the vehicle. It is activated only when the vehicle speed reaches approx. 10 km/h (6 MPH). ABS operation is inactive when the vehicle speed reduces to approx. 5 km/h (3 MPH).

ABS Operation and Abnormal Warnings

Operation of the ABS

When ABS is activated, slight vibration is generated on the brake pedal (hydraulic brake model) and steering wheel, and an operating sound can be heard from the ABS equipment.

ABS Warning Light



This warning light comes on together with the brake system warning light whenever there is a problem in the anti-lock brake system (ABS). In this case, the ABS stops working but the brakes still function as ordinary service brakes.

Refer to page
3-34 Brake System Warning Light

⚠ CAUTION

- **If this warning light comes on while driving, immediately stop your vehicle at a safe place well clear of traffic and take the following actions.**
  - **Stop the engine.**
  - **Restart the engine. Check if the ABS warning light comes on and then goes out. If it does, there is no problem. The ABS operates normally.**
  - **Move the vehicle slowly forward. Gradually increase the speed to 15 km/h (9 MPH). If the light goes off, the ABS is normal.**
- **If the indicator light does not come on or go out, or comes on repeatedly, have the vehicle inspected/serviced at the nearest Isuzu Dealer as soon as possible.**
- **Even if a problem has occurred with the ABS, the regular brakes will still work normally. However, ABS will not operate.**
- **In the case of NPS/NQS models for Australia and New Zealand, the ABS warning light will come on and the ABS will not be active when the transfer gear control switch is set to "LOW" range in 4WD mode.**
  When the ABS warning light is illuminated, there is a possibility that wheels may lock up and the vehicle may lose directional and handling stability if excessive brake pedal force is applied, particularly when road surface conditions are slippery.
  Take extra caution when operating the vehicle.

ADVICE

- If the ABS warning light does any of the following, the ABS may be faulty. Please contact the nearest Isuzu Dealer.
  - If the ABS warning light comes on during driving
  - The light does not come on when the starter switch is placed into the "ON" position

Mechanical Brake Assist System [V]

The mechanical brake assist system assists the driver when the brake pedal cannot be adequately depressed, such as in case of an emergency. This system assists with braking operations in emergencies by increasing the force and the speed at which the brake pedal is depressed by the driver to quicken the braking effect.

Precautions for Driving an ABS-Equipped Vehicle

ABS is not a device that enables driving and stopping under conditions exceeding safe driving limits. Always drive safely.

⚠ CAUTION

- When braking suddenly, continue pressing brake pedal hard so that the ABS can take effect.
- When braking suddenly, do not pump the brakes (pushing and releasing the brake pedal little by little). Pumping brakes will increase the braking distance.
- The braking distance on slippery road surfaces is longer than that on a normal dry paved road even with an ABS-equipped vehicle. When ABS is activated in the following road surface conditions, the braking distance may be slightly longer compared to that of vehicles not equipped with an ABS. Therefore, always be aware of the road and tire condition (tire type and wear condition), observe safe driving habits and drive the vehicle while keeping a safe following distance.
  - When driving on a gravel road, or a road with a deep snow covering.
  - When tire chains are used.
  - When driving over road joints or bumps such as light reflectors on the road.
  - When driving on a bumpy road, stone-paved road or track.
  - When driving over an iron plate or manhole lid.
- ABS does not work for wheel skid during a standing start, acceleration and cornering which do not involve braking. On a very slippery icy road, tires may lose grip and steering wheel operation may not be able to control the vehicle's direction, resulting in very unstable driving. Always drive the vehicle observing a safe speed well matched with both road surface and tire conditions, and avoid sudden braking.
- If powerful engine braking is applied on a very slippery icy road, the drive wheels may be locked (the ABS then does not work), resulting in loss of vehicle control. If this happens with a manual transmission vehicle, disengage the clutch or place the gearshift lever into the "N" position to prevent engine braking from acting on the drive wheels. Then, drive the vehicle with the gearshift lever placed in an appropriate gear.
- For full-air brake models, ABS operation consumes the brake system air. When the air pressure drops and the air pressure warning light and the buzzer are activated, immediately stop the vehicle at a safe place and wait for the required air pressure to be recovered before driving.
- When ABS is activated, a slight vibration (especially when the road surface is different between right and left wheels) and pulling may be felt on the brake pedal (hydraulic brake model) and steering wheel. In addition, an operating sound is produced from the ABS actuators. This does not indicate any abnormal condition. Stay calm and operate the steering wheel properly.

Hydraulic Brake Assist Function [V]

This function assists the pressurization of the brake fluid and secures the necessary braking force. Two functions are available depending on the conditions for operation. The brake assist function does not enable driving/stopping under conditions exceeding safe limits. It is your responsibility to drive safely.

Failure Assist Function

This function assists the pressurization of the brake fluid and secures the necessary braking force when the brake booster function is reduced.

High G Assist Function

This function assists the pressurization of the brake fluid and secures the necessary braking force when a high braking force beyond the limit of the brake booster is required during emergency braking or loading.

CAUTION

- **In the case of NPS/NQS models for Australia and New Zealand, the high G assist function will not function when the transfer gear control switch is set to "LOW" range in 4WD mode.**

NOTE

- When the hydraulic brake assist function is operating, vibrations may be felt from the brake pedal and steering wheel, and operational sounds may also be heard. This is normal when the hydraulic brake assist function is operating properly.

Electronic Braking force Distribution (EBD)

EBD is a function that uses the ABS to distribute braking force ideally between the front and rear wheels in order to compensate for changes in load conditions or any shift of the load due to acceleration or deceleration, thus preventing premature locking of the rear wheels.

CAUTION

- **If a problem should occur with the EBD function, the ABS warning light and the brake system warning light will come on simultaneously.**
- **The rear wheels will lock more easily if there is a problem with the EBD function. Have it checked and serviced at the nearest Isuzu Dealer as soon as possible.**
- **For full-air brake models, EBD operation consumes the brake system air. When the air pressure drops and the air pressure warning light and the buzzer are activated, immediately stop the vehicle at a safe place and wait for the required air pressure to be recovered before driving.**

NOTE

- When the EBD operates, the brake pedal may push back slightly or you may hear a sound similar to that generated by the ABS when operational. Neither of them indicate any abnormal condition.

Anti-Slip Regulator (ASR)

ASR is a device that helps prevent the drive wheels from spinning and improve vehicle motion stability when driving on a snowy or otherwise slippery road surface. The ASR is automatically activated when the engine is started. You may cancel the ASR operation using the ESC OFF switch.

CAUTION

- **When ASR is activated, the ESC warning light comes on. The road surface at this time is very slippery. If the indicator light comes on, drive carefully and reduce the speed sufficiently before negotiating a curve.**
- **Even with the ASR-equipped model, when driving on a snowy or icy road, carefully drive the vehicle, installing tire chains or winter tires.**
- **ASR is not a device to drastically improve the vehicle starting performance. Carefully operate the accelerator pedal when moving on an icy slope.**
- **When tire chains are installed, it may be easier for you to start the vehicle to move on an icy slope if the ASR is canceled. Be aware, however, that ASR deactivation will result in reduced stability of vehicle operation.**
- **In the case of NPS/NQS models for Australia and New Zealand, the ASR will not function when the transfer gear control switch is set to "LOW" range in 4WD mode.**

NOTE

- When using a speed tester or brake tester, press the ESC OFF switch to cancel the ASR device.

[This is not a sign of ASR malfunction]

- You may notice minimal vibrations or operating sound when starting and accelerating the vehicle on a slippery road. This sound is generated when ASR is operating.
- The engine speed may suddenly decrease, but this is because the ASR device is operating.

Refer to page
4-206 ESC OFF Switch

ASR Warnings/Indicators

ESC Warning Light



When the ASR is operating, the ESC warning light flashes. And this warning light comes on whenever there is a problem in the ASR.

Refer to page
4-204 ESC Warning Light

ASR OFF Indicator Light



The ASR OFF function is normal if the indicator light goes out.
When you wish to cancel the ASR OFF after the engine is started, press the ESC OFF switch for approximately 1 second, and the ASR OFF indicator light in the meter will turn on.
When the ASR OFF indicator light does any of the following, the ASR OFF function may be faulty. Please contact the nearest Isuzu Dealer.

- When the ASR OFF indicator light comes on during driving (when the ASR or the ESC is not canceled).

- The ASR OFF indicator light does not turn on when the starter switch is turned to the "ON" position.

ADVICE

- When the ESC is canceled, the ASR will be canceled as well.

Refer to page
4-202 Electronic Stability Control (ESC)

Precautions for Driving an ASR-equipped Vehicle

ASR is not a device that enables driving under conditions exceeding safe limits. Always drive safely.

CAUTION

- **The ASR does not increase the road grip of tires although it improves the starting and accelerating performance on a slippery road surface when compared to a model without ASR. On an icy or otherwise slippery road, the grip of tires decreases which also reduces steering control, resulting in unstable vehicle behavior. Always drive the vehicle observing a safe speed well matched to the road surface and tire conditions, and also avoid speeding.**
- **Even if ASR is equipped, avoid sudden operation of the accelerator pedal, clutch pedal (manual transmission models) and steering wheel. Especially when starting the vehicle on a slippery road, start up slowly as you would in a vehicle without ASR.**

NOTE

- When you drive up a slippery, long slope by increasing the engine speed, where the tires may slip, or when you want to dislodge the vehicle from a deep snowy road or mud, you can press the ESC OFF switch to disable the ASR system.

Refer to page
4-206 ESC OFF Switch

Electronic Stability Control (ESC)

The ESC improves safety and a vehicle's stability. The ESC controls the engine power and applies the brakes to the wheels that need it in order to suppress wheelspin when starting or accelerating on slippery road surfaces, maintain drive power, prevent skidding to the side and improve vehicle stability. The ESC has various sensors that detect rapid changes in the vehicle conditions while driving. The anti-slip regulator (ASR) suppresses wheelspin when starting or accelerating. The ASR is included in the ESC. The ESC is automatically activated when the engine is started. However, by using the ESC OFF switch, the ESC can be canceled (operation stopped status) or only the function of the ASR can be canceled (operation stopped status).

⚠ CAUTION

- When the ESC is activated, the ESC warning light flashes.
- The ESC warning light will also flash when only the ASR function is operating.
- When the ESC warning light is flashing, the road surface is slippery or acceleration is too fast. Loosen pressure on the accelerator pedal and drive conservatively.
- The ESC warning light may also flash when fully depressing the accelerator pedal on roads that are not slippery such as dry asphalt roads. This is a normal condition that predicts slipping and operates control.
- Even with an ESC-equipped model, when driving on a snowy or icy road, install tire chains or winter tires, and carefully drive the vehicle. The ESC is not a device for drastically improving the vehicle stability when driving or starting performance, so drive carefully on snowy or icy roads.
- When tire chains are installed, it may be easier for you to start the vehicle to move on an icy slope if just the ASR is canceled. Be aware, however, that ASR deactivation will result in reduced vehicle stability.
- Install tires of the specified size, same brand, same type and same tread design (including winter tires) on all wheels. In addition, do not install or use tires with significantly varying degrees of wear. If tires other than the specified size, different types, or tires with significantly varying degrees of wear are used, the ESC may not operate properly.
- If the tire diameter is different such as when installing tire chains or a spare tire, the ESC may not operate properly.
- If suspension-related parts, brake-related parts, or engine-related parts are replaced with parts other than Isuzu genuine parts or modified, the ESC may not operate properly.
- Be sure to consult with your Isuzu Dealer for replacement or repair of the steering wheel or steering-related parts. There is a sensor on the steering wheel that detects driving operation conditions, and the ESC may not operate properly if the steering wheel center position is misaligned.
- In the case of NPS/NQS models for Australia and New Zealand, the ESC will not function when the transfer gear control switch is set to "LOW" range in 4WD mode.

NOTE

[These are not signs of ESC malfunction]

- Immediately after the engine is started, a motor sound may be heard from the engine compartment. This sound is from a self-check by the ESC. In addition, you may also feel some vibration if the brake pedal is pressed at this time.
- When the ESC is operating, the brake pedal movement may wiggle or feel tight. In addition, the vehicle body may vibrate or you may hear operating sounds. This is normal for ESC operation.v
- The ESC will not operate immediately after starting until the vehicle reaches approximately 15 km/h (9 MPH).

ESC Warnings/Indicators

ESC Warning Light



This warning light comes on whenever there is a problem in the electronic stability control (ESC) or when the vacuum pressure decreases. When the ESC is operating, the ESC warning light flashes.
The ESC warning light will also flash when only the anti-slip regulator (ASR) function is operating inside the ESC system.
When the ESC warning light does any of the following, the ESC may be faulty. Please contact the nearest Isuzu Dealer.

- When the ESC warning light remains on while driving.
- The ESC warning light does not turn on when the starter switch is turned to the "ON" position.

NOTE

- When the ESC warning light is on, the ESC/ASR will not operate, but this has no effect on normal driving.
- In hydraulic brake models, the ESC warning light may turn on when vacuum pressure decreases. In this case, there is no problem as long as the ESC warning light goes out quickly or after the engine has been restarted. If the warning light does not go out or comes on repeatedly, have the vehicle inspected/serviced at the nearest Isuzu Dealer as soon as possible.
- The ESC warning light may turn on when the battery cables are disconnected or the battery voltage is low. The ESC function turns off while the ESC warning light is on, but the ESC warning light will turn off by driving the vehicle normally for a while, then the ESC function will resume. If the ESC warning light remains on even after driving for a while, contact the nearest Isuzu Dealer.
- In NQR models with EBS, if the ESC OFF switch is pressed for 5 seconds or more, the ESC operating status will be switched to Roller Testing Bench Mode which is used for testing braking force, and the brake system warning light will come on.

Refer to page
4-206 ESC OFF Switch

ESC OFF Indicator Light



When you wish to cancel the ESC after the engine is started, press the ESC OFF switch for approximately 5 seconds to cancel the ESC and cause the ESC OFF indicator light in the meter to turn on.
When the ESC OFF indicator light does any of the following, the ESC function may be faulty. Please contact the nearest Isuzu Dealer.

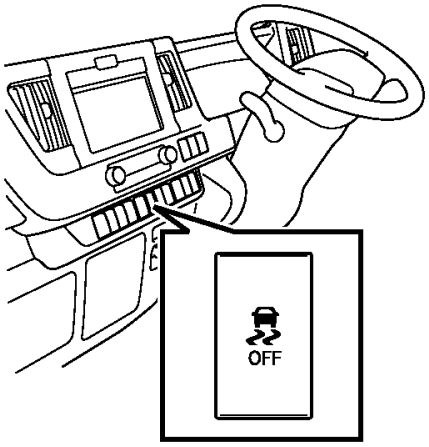
- When the ESC OFF indicator light comes on during driving (when the ESC is not canceled).
- The ESC OFF indicator light does not turn on when the starter switch is turned to the "ON" position.

Refer to page
4-206 ESC OFF Switch

ESC OFF Switch

When getting unstuck from mud or fresh snow with the ESC and ASR operating, the engine output may not rise even when the accelerator pedal is depressed, making getting unstuck difficult. In times like this, pressing the ESC OFF switch will make getting unstuck easier. The ESC can be turned off using the ESC OFF switch, or just the ASR (function for suppressing tire spinning when starting or accelerating) in the ESC system can be turned off.

When Canceling the ASR



ASR OFF indicator light



When the ESC is active after the engine is started, press the ESC OFF switch for approximately 1 second to cancel the ASR and cause the ASR OFF indicator light in the meter to turn on. When the switch is pressed again for approximately 1 second, the ASR function turns back on.

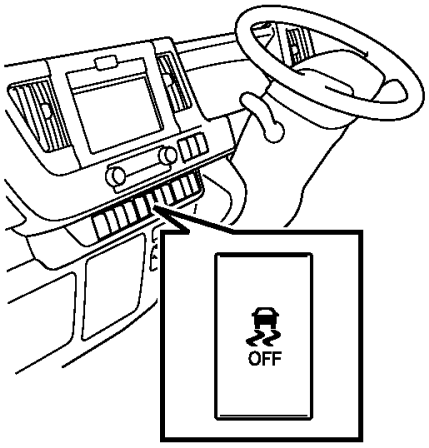
ADVICE

- When you turn off the ASR, it will not be available to assist you in slippery driving conditions. Always use caution when driving on slippery roads.
- Be sure to enable the ASR during normal driving.
- Even when the ASR is off, partial brake control will operate. The ESC warning light will flash during operation.

NOTE

- If the ASR is off when the engine is turned off, it is automatically re-enabled when you restart the engine.

When Canceling the ESC



ESC OFF indicator light



When the ESC is active after the engine is started, press the ESC OFF switch for approximately 5 seconds to cancel the ESC and cause the ESC OFF indicator light in the meter to turn on. When the switch is pressed again for approximately 1 second, the ESC function turns back on.

ADVICE

- When you turn off the ESC, it will not be available to assist you in slippery driving conditions. Always use caution when driving on slippery roads.
- Be sure to enable the ESC during normal driving.
- When the ESC is turned off, the ASR will also be turned off, thus be careful when driving on slippery roads.

NOTE

- If the engine is turned off and then restarted again while the ESC is off, the ESC will be automatically reactivated.

ESC Operation Check, Operation, Error

ESC warning light



ASR OFF indicator light



ESC OFF indicator light



ESC operation check

When the starter switch is turned to the "ON" position, the ESC warning light, ASR OFF indicator light, and ESC OFF indicator light turn on and then go out after approximately 3 seconds or after the engine is started.

When the ESC is operational

When the ESC is operating, the ESC warning light flashes.

ESC faulty

When the ESC warning light does any of the following, the ESC may be faulty. Please contact the nearest Isuzu Dealer.

- The ESC warning light remains on while driving.
- The ASR OFF indicator light and ESC OFF indicator light turn on while driving (when the ESC OFF switch is not operated).
- The ESC warning light, ASR OFF indicator light, and ESC OFF indicator light do not turn on when the starter switch is turned to the "ON" position.

NOTE

- If the ESC is faulty, it does not interfere with normal driving. However, the ESC will not function.

Precautions for Driving an ESC-equipped Vehicle

⚠ CAUTION

- **The ESC is not a device that enables driving under conditions exceeding safe limits. Always drive safely.**
- **Always concentrate on driving safely and do not be overconfident just because the vehicle is equipped with the ESC, so do not drive too fast and turn the steering wheel too sharply.**
- **The ESC does not increase the road grip of tires although it controls slipping and sliding of vehicles and improves the vehicle stability on a slippery road surface during starting and acceleration when compared to a model without ESC. On an icy or otherwise slippery road, the grip of the tires decreases which also reduces steering control, resulting in unstable vehicle behavior. Always drive the vehicle observing a safe speed well matched to the road surface and tire conditions, and also avoid speeding.**
- **The ESC is a system for maintaining drive power and vehicle stability. Turn the system on even when it is not needed. When the system is turned off, drive carefully at a safe speed well matched to the road surface.**
- **Even if ESC is equipped, avoid sudden operation of the accelerator pedal, clutch pedal (manual transmission models) and steering wheel. Especially when starting the vehicle on a slippery road, start up slowly as you would in a vehicle without ESC.**
- **When the ESC is activated, the ESC warning light flashes.**
- **The ESC warning light will also flash when only the ASR function is operating.**
- **When the ESC warning light is flashing, the road surface is slippery or acceleration is too fast. Loosen pressure on the accelerator pedal and drive conservatively.**
- **The ESC warning light may also flash when fully depressing the accelerator pedal on roads that are not slippery such as dry asphalt roads. This is a normal condition that predicts slipping and operates control.**
- **Even with an ESC-equipped model, when driving on a snowy or icy road, carefully drive the vehicle, and install tire chains or winter tires.**
- **When tire chains are installed, it may be easier for you to start the vehicle to move on an icy slope if just the ASR is canceled. Be aware, however, that ASR deactivation will result in reduced vehicle stability.**
- **Do not install a commercially available limited slip differential (LSD). The ESC may not operate properly.**

NOTE

- If there is significant wear or degradation on parts related to the suspension, tires, brakes, etc., the ESC warning light may turn on. In such cases, the ESC may not function properly.
- The ESC warning light may turn on when the vehicle is on a turntable at the entrance of a parking garage or on a moving object, etc. In such cases, re-start the engine after the vehicle has left the turntable.
- The ESC warning light may turn on when driving on roads with extreme inclines (the banks seen on race tracks, etc.). In such cases, the ESC may not function properly, so do not drive on such roads.
- The ESC warning light may turn on when the battery cables are disconnected or the battery voltage is low. The ESC function turns off while the ESC warning light is on, but the ESC warning light will turn off by driving the vehicle normally for a while, then the ESC function will resume. If the ESC warning light remains on even after driving for a while, contact the nearest Isuzu Dealer.

Electronic Braking System (EBS) [FAB]

EBS (Electronic Brake System) is a system that adds electronic signals to the brake air control system (sent by the brake pedal when it is depressed) in order to improve air brake responsiveness. The EBS maintains the same brake feel regardless of whether the vehicle is loaded or not and is a device that enhances driver operability and safety.

⚠ CAUTION

- **The EBS is not a device to counteract unsafe driving practices. Always maintain a safe speed as well as a safe distance between yourself and other vehicles.**
- **All tires installed to the vehicle should be of the specified size, as well as be of the same brand and with the same tread design (this includes winter tires). Installing different types of tires to the vehicle is dangerous and could result in reduced braking ability and unstable vehicle operability.**

EBS Operation Check, Operation, Malfunction

Brake system warning light



EBS Operation Check

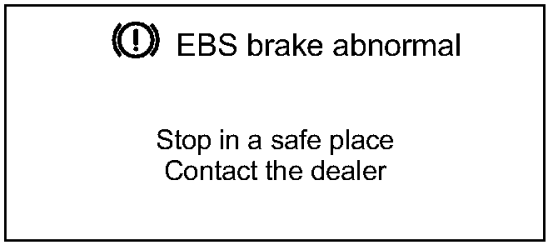
When the starter switch is turned to the "ON" position, the brake system warning light comes on before going out approximately 3 seconds later. The EBS is normal if the warning light goes out.
If the warning light does not come on even when the starter switch is turned to the "ON" position, it may be possible that the bulb has burned out or there is an EBS malfunction.

EBS Operation

When EBS is operating, operating sounds can be heard from the EBS components.

EBS Malfunction

If "EBS brake abnormal" is shown on the multi-information display and the brake system warning light comes on or flashes during driving, the EBS, ESC or ABS/ASR may be malfunctioning. Please contact the nearest Isuzu Dealer.



Brake system warning light



NOTE

- Even if the EBS has malfunctioned, the regular brakes will still operate normally. Because the EBS will be inoperable at this time, it will be necessary for the brake pedal to be depressed more strongly than normal in order to achieve the required brake force.

Precautions for Driving an EBS-equipped Vehicle

The EBS is not so versatile that it enables driving under conditions that exceed safe limits. Always drive safely.

⚠ WARNING

- **If the starter switch is turned to the "ON" position (engine start-up) on a slope, etc., the EBS may be affected due to a battery voltage decrease, resulting in the vehicle moving down the slope. After either pulling the parking brake lever or fully depressing the brake pedal, turn the starter switch to the "ON" position (engine start-up).**

⚠ CAUTION

- **Although models with EBS may have enhanced brake responsiveness when compared to models without EBS, the EBS is not a device to counteract unsafe driving practices. Always drive the vehicle while observing a safe speed.**
- **In models with EBS, the EBS is activated when the brake pedal is depressed, regardless of whether the starter switch is turned to the "LOCK" position. Even if the starter switch is turned to the "ON" position with the brake pedal depressed, emissions from the EBS device are not vented. (In this case, the EBS system operation check will not be performed.)**
  If exhaust sounds cannot be heard from the EBS system when the brake pedal is depressed and released, the EBS exhaust port may be frozen or blocked by snow or ice which must be removed. In addition, ice may form and clog the exhaust port if the vehicle is washed in cold weather, causing brake functionality to stop. When this occurs, remove the ice immediately.
- **If battery voltage becomes low, EBS operation may be affected. Periodically inspect the battery.**
- **In models equipped with EBS, the vehicle's computer detects loading conditions, making it unnecessary for drivers to adjust how they depress the brake pedal, regardless of whether or not the vehicle is loaded or empty. However, as with vehicles not equipped with an EBS system, braking distance will be increased if the brake pedal is not sufficiently depressed when the vehicle is empty.**
- **The EBS will not function to its full capacity if the driver pumps the brake pedal instead of depressing it fully. Pumping the brakes will also lead to a decrease in brake performance caused by an increase in air. ("Pumping" the brakes is defined as continually depressing the brakes at a rate of once or more each second.)**

CAUTION (Continued)

CAUTION (Continued)

- **In models equipped with EBS, it may be difficult to notice brake fading because the brake pedal stroke does not change under any circumstances. When driving down a long downhill slope or on an expressway, refrain from using the foot brake frequently and use engine brake and auxiliary brake.**

Refer to page
4-191 Exhaust Brake Switch

ADVICE

- When installing an electronic device such as a radio, pay attention to the installation position and routing so that EBS functionality is not affected. Also, when installing, please contact the nearest Isuzu Dealer.

How to Make the EBS Function Correctly

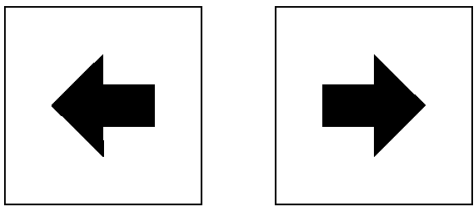
Using the brake pedal stroke amount together with the vehicle deceleration rate, the EBS calculates loading conditions and determines the braking strength. If loading conditions change, the EBS recalculates the weight. This recalculation will be completed only after the vehicle has been brought to a complete stop from a speed of 30 km/h (19 MPH) or more a total of 3 to 4 times without the brakes being pumped.

CAUTION

- **When the brake system warning light is illuminated, it signals that an EBS malfunction has occurred. In this case, although the feeling of the brakes will change considerably due to the in operation of the EBS, the regular brakes will still operate normally. If the EBS malfunctions, firmly depress the brake pedal, stop the vehicle, and contact your nearest Isuzu Dealer.**

Emergency Stop Signal (ESS)

Hazard warning flasher indicator light



To mitigate rear-end collisions, the emergency stop signal (ESS) is a system that quickly alerts the vehicle behind by flashing the hazard lights at high frequency when you brake suddenly to greatly reduce speed while driving at approximately 50 km/h (31 MPH) or more. After the high-speed flashing ends, the hazard lights flash at the normal interval if it is determined necessary to continue alerting the vehicle behind.
While the emergency stop signal is operating, the hazard warning flasher indicator lights flash.

CAUTION

- **In the case of NPS/NQS models for Australia and New Zealand, the ESS will not function when the transfer gear control switch is set to "LOW" range in 4WD mode.**

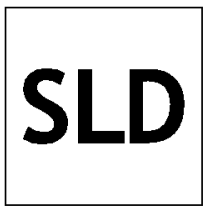
NOTE

- When braking on a slippery road causes the ABS to operate, the emergency stop signal may also operate.
- If the following operations are done while the hazard lights are flashing at regular intervals, after having finished flashing at high speed, the emergency stop signal is canceled and the hazard lights go out.
  - When driving with an accelerator opening of 20% or more
  - When either the left or right turn signal indicator light or hazard lights are operating
  - If the starter switch is set to the "LOCK" position

Speed Limit Device [V]

Characteristics of the Speed Limit Device

SLD indicator light



The speed limit device restricts excessive speed to prevent a serious accident. The SLD indicator light comes on, on the multi-information display, for approximately 15 seconds when the starter switch is turned to the "ON" position.
The speed limit device sticker is attached to the fuse box cover front side.

CAUTION

- **The speed limit device does not control braking, so it is possible for the vehicle to exceed the set speed on downhill slopes.**
- **If the tire size is changed, the speed limit device may not work normally. Have adjustments made by your Isuzu Dealer.**
- **The speed limit device is standard equipment for vehicles subject to legal speed limits. It can also be set according to your needs by your Isuzu Dealer.**
- **On vehicles that are not equipped with a speed limit device, the SLD indicator light does not come on and the vehicle speed is not limited.**

NOTE

- The speed limit device restricts the vehicle's speed by controlling the fuel injection volume. It prevents the speed from exceeding a certain, predetermined level regardless of the pressure on the accelerator pedal.
- To set the speed limit device, or to check or change the set speed, contact your Isuzu Dealer.

Variable Speed Limiter [V]

The vehicle speed upper limit (in a range of 30 km/h (20 MPH) or more), can be set freely. While the speed limit device is working, the vehicle speed is automatically controlled.

CAUTION

- **The variable speed limiter does not respond to the changes in the surrounding and the road environment. Always pay attention to the speed and keep a sufficient following distance from the vehicle ahead.**
- **When the variable speed limiter icon is displayed in the multi-information display, check the set vehicle speed upper limit before starting to drive.**
- **If the vehicle is stopped or if a vehicle speed of 30 km/h (20 MPH) or less is set, then 30 km/h (20 MPH) is set automatically.**
- **When any other person drives the vehicle, always deactivate the variable speed limiter. Driving a vehicle without knowing that this function is on may cause unexpected trouble.**
- **In case of driving on an expressway or a limited-access road, do not set a speed lower than the specified minimum speed. Otherwise, the vehicle cannot be driven according to the road conditions, which may cause an unexpected accident.**

[Model with Speed Limit Device]

- **An upper speed limit that exceeds the set speed of the speed limit device cannot be set.**

NOTE

- The maximum speed of the vehicle varies by your country.

Refer to page
4-215 Speed Limit Device [V]

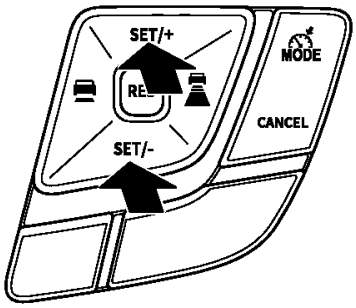
Switches of the Variable Speed Limiter

NOTE

- The mode switch, "+" and "-" of the set switches, the resume switch, and cancel switch are shared with the cruise control.
- The intelligent speed limiter and variable speed limiter cannot be turned on at the same time. Please change the settings according to your purpose. Refer to "Switching the Intelligent Speed Limiter and Variable Speed Limiter" for details.

Refer to page
5-105 Switching the Intelligent Speed Limiter and Variable Speed Limiter

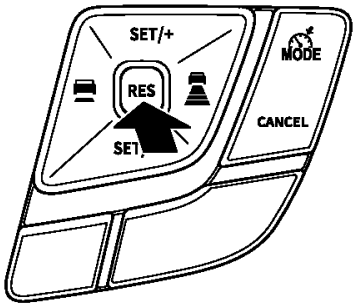
Set Switch



This switch is used to set the vehicle speed upper limit or adjust the vehicle speed upper limit.

Refer to page
4-220 Setting the Desired Vehicle Speed Upper Limit (While Driving)
4-221 Setting the Desired Vehicle Speed Upper Limit (While Stopped)
4-222 Changing the Vehicle Speed Upper Limit

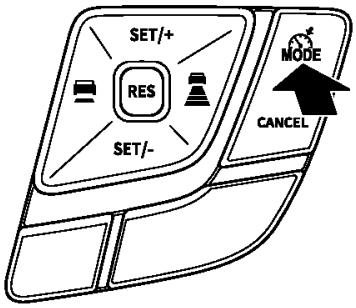
Resume Switch



This switch is used for resuming the variable speed limiter setting after the setting has been canceled.

Refer to page
4-222 Changing the Vehicle Speed Upper Limit
4-224 Resuming the Variable Speed Limiter

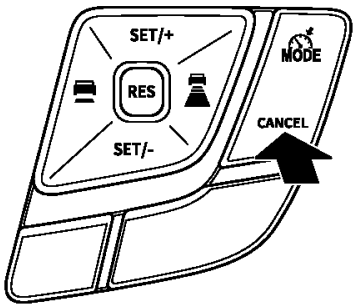
Mode Switch



This switch is used to cancel the variable speed limiter setting.

Refer to page
4-223 Canceling the Variable Speed Limiter

Cancel Switch



This switch is used to cancel the variable speed limiter setting.

Refer to page
4-223 Canceling the Variable Speed Limiter

Variable Speed Limiter Warnings/Indicators

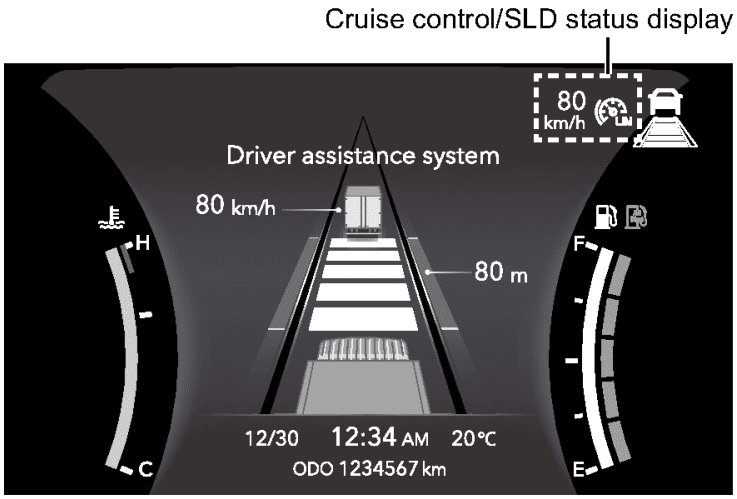
Variable Speed Limiter Warnings



If the vehicle is driven faster than the speed limit that was set, the variable speed limiter icon flashes on the multi-information display. The flashing continues until the vehicle speed is reduced to below the set maximum speed. While checking the surrounding conditions, use the brake pedal, etc., to decelerate.

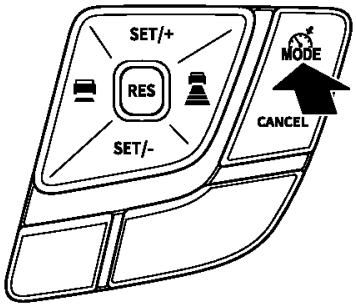
Details of Variable Speed Limiter on Multi-information Display

The following variable speed limiter information is shown on the multi-information display depending on the conditions.



Main display area/ Drive assist display area	Name	Display details
 (Gray)	Variable speed limiter - inoperative	If the starter switch is set to the "ON" position
 (White)	Variable speed limiter - standby	When the variable speed limiter is in standby (when cancel switch is operated)
 (Green)	Variable speed limiter - operating	The variable speed limiter is in operation (vehicle speed upper limit is set).
	Set vehicle speed was exceeded	When your vehicle exceeds the set vehicle speed (the icon flashes)
	Variable speed limiter - temporarily canceled	The variable speed limiter has been temporarily deactivated by the accelerator pedal being further depressed when almost fully depressed (the icon flashes)
Variable speed limiter Driver assistance mode changed	Variable speed limiter mode	Press the mode switch, to change to the variable speed limiter mode

Setting the Desired Vehicle Speed Upper Limit (While Driving)

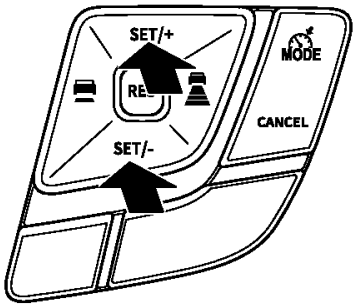




1. Press the mode switch to change to the variable speed limiter mode. At this time, the variable speed limiter icon appears on the multi-information display. Also, "Variable speed limiter" appears for a few seconds.

LIM Variable speed limiter

Driver assistance mode changed



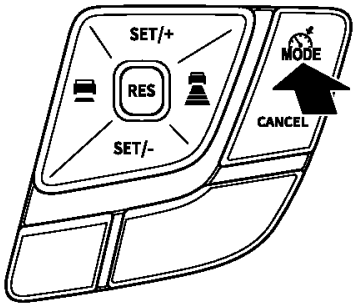


2. Adjust the depression on the accelerator pedal, and when the desired speed (approximately 30 km/h (20 MPH) or more) is reached, press the "+" or "-" of the set switch.
   The vehicle speed when the switch is pressed is set as the vehicle speed upper limit. The set vehicle speed is displayed in the multi-information display.
   After this setting, the vehicle speed is automatically controlled not to exceed the set vehicle speed even when the accelerator pedal is continuously depressed.

NOTE

- If a vehicle speed lower than 30 km/h (20 MPH) is set, 30 km/h (20 MPH) is automatically set.

Setting the Desired Vehicle Speed Upper Limit (While Stopped)



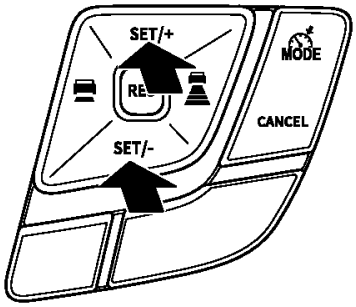
1. Press the mode switch to change to the variable speed limiter mode. At this time, the variable speed limiter icon appears on the multi-information display. Also, "Variable speed limiter" appears for a few seconds.

Refer to page
4-217 Mode Switch



Variable speed limiter

Driver assistance mode changed



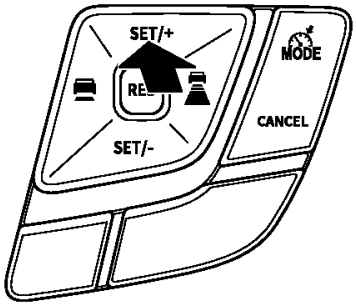
2. Press the "+" or "-" of the set switch. At this time, 30 km/h (20 MPH) is set as the vehicle speed upper limit. At the same time, the set vehicle speed appears in the multi-information display.
When setting a speed higher than 30 km/h (20 MPH), change the speed according to the procedure under "Changing the Vehicle Speed Upper Limit".



Refer to page
4-222 Changing the Vehicle Speed Upper Limit

Changing the Vehicle Speed Upper Limit

Setting a Higher Vehicle Speed Upper Limit



Pressing the "+" side of the set switch increases the vehicle speed, and the vehicle speed upper limit that is displayed in the multi-information display also increases.
By holding down the "+" side of the set switch, the set vehicle speed can be increased in increments of 5 km/h (5 MPH). Stop operating the switch when the desired speed is indicated.

Finely adjusting for a higher vehicle speed upper limit

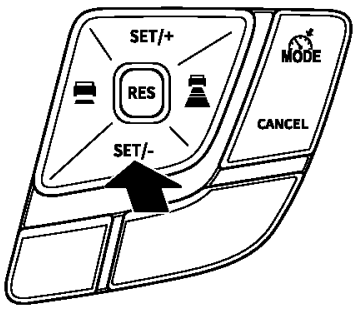
Operate and then immediately release the "+" side of the set switch. The vehicle speed upper limit increases by 1 km/h (1 MPH) for each operation.

NOTE

- Changing the vehicle speed upper limit is also possible when the vehicle is stopped.

Refer to page
4-221 Setting the Desired Vehicle Speed Upper Limit (While Stopped)

Setting a Lower Vehicle Speed Upper Limit



Pressing the "-" side of the set switch decreases the vehicle speed, and the vehicle speed upper limit that is displayed in the multi-information display also decreases.
By holding down the "-" side of the set switch, the set vehicle speed can be decreased in increments of 5 km/h (5 MPH). Stop operating the switch when the desired speed is indicated.

Finely adjusting for a lower vehicle speed upper limit

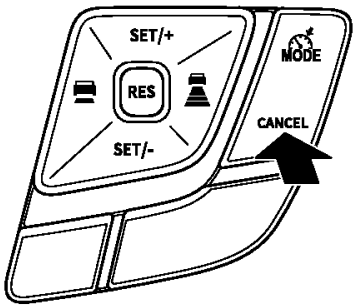
Operate and then immediately release the "-" side of the set switch. The vehicle speed upper limit decreases by 1 km/h (1 MPH) for each operation.

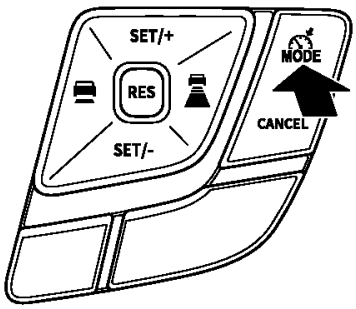
NOTE

- Any speed lower than 30 km/h (20 MPH) cannot be set.
- Changing the vehicle speed upper limit is also possible when the vehicle is stopped.

Refer to page
4-221 Setting the Desired Vehicle Speed Upper Limit (While Stopped)

Canceling the Variable Speed Limiter





This is canceled when the following procedure is performed.

- When the cancel switch is operated
- If the starter switch is set to "ACC" or "LOCK" position
- When the mode switch is pressed

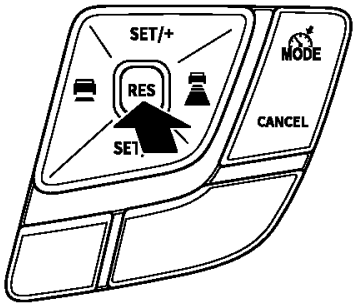
Refer to page
4-218 Cancel Switch
4-217 Mode Switch

- While the variable speed limiter is in operation and the accelerator pedal is fully-depressed, and then it is depressed further again (return the accelerator pedal and it resumes).

ADVICE

- If the variable speed limiter is not used, be sure to cancel it by operating the cancel switch.

Resuming the Variable Speed Limiter



When the resume switch is operated, the vehicle speed upper limit is set to what it was before being canceled. At the same time, the variable speed limiter icon appears on the multi-information display.



ADVICE

- The vehicle speed upper limit is stored in the memory even after the variable speed limiter is canceled and the starter switch is set to the "LOCK" position. When the operation is started by using the resume switch for the next operation, the vehicle speed is controlled under this vehicle speed upper limit.

Four Wheel Drive (4WD) Model [V]

Driving of 4WD Model

Four-wheel drive does not make it possible to drive a vehicle absolutely everywhere. Exercise caution when using the accelerator pedal, steering wheel and brake pedal. Concentrate on driving safely, paying attention to the condition and slope angle of the road surface.

NOTE

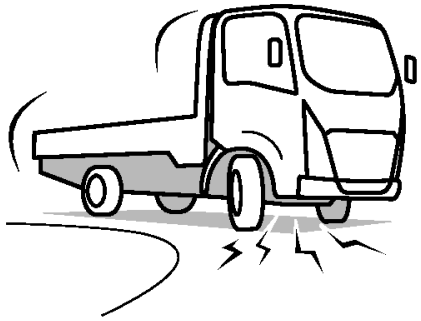
[NMS Model]

- The part-time 4WD model allows selecting either two wheel drive (2WD) mode or 4WD mode using the 4WD switch.

[NPS/NQS Models]

- The part-time 4WD model allows selecting either two wheel drive (2WD) mode or 4WD mode using the 4WD switch. In addition, the transfer gear control switch also provided on the part-time 4WD model allows you to change between the "HIGH (high-speed)" range and "LOW (low-speed)" range.

Characteristics Specific to a 4WD Vehicle



Tight corner braking phenomenon

When the 4WD mode is selected with a part-time 4WD vehicle (NPS/NQS models) , you will experience a condition similar to that when brakes are applied when you make a turn on a dry, paved road while fully turning the steering wheel.

This phenomenon is unique to a 4WD vehicle and is caused by a rotational speed difference between the front and rear wheels at a curve. So this is not an abnormal condition. If this phenomenon occurs, either return the steering wheel to the straight-ahead position, or change to the 2WD mode. The phenomenon will then disappear.

Driving on Snow-covered or Icy Roads



On a snow-covered or icy road, drive at a constant speed and keep your speed low enough to stay completely in control.

When applying the brakes, lightly push the pedal several times rather than giving it one hard push. A single hard push of the pedal would be dangerous because it could cause the vehicle to slip, making the steering wheel useless.

NMS model

It's most effective to use 4WD.

NPS/NQS models

It's most effective to use 4WD.

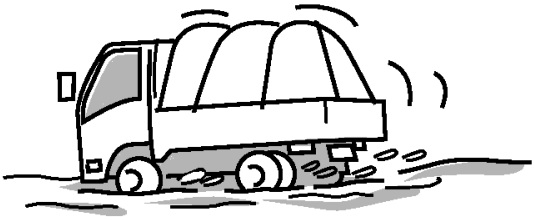
When a larger driving force is required, use the "LOW" range.

ADVICE

- Use tire chains and winter tires on snow-covered or icy roads.

Refer to page
4-9 Using Tire Chains
4-39 Winter Tires

Driving in Sand or Mud



When driving in sand or mud, go as slowly as possible, avoiding hard braking, sudden acceleration and sharp turns of the steering wheel.
It is difficult to ascertain the condition of the road surface when you are driving on sand or mud, so there is a risk of getting stuck. When necessary, get out of the vehicle and check the condition of the road surface.

NOTE

- When you cannot avoid driving through deep mud, using tire chains is an effective way to avoid getting stuck.

Driving through Water

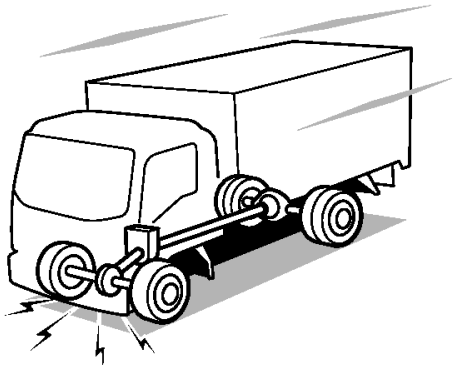


The vehicle is not completely impervious to water. Avoid driving through water.

ADVICE

- If you cannot avoid driving through water, first check the depth of the water and then drive through the water at a slow, constant speed. There is a risk that water will get into the engine's cylinders and cause engine damage (water hammering).
- If the vehicle must be driven through water, promptly have your Isuzu Dealer perform a check for the following points:
  - Effectiveness of the brakes
  - Water-ingress or damage to drum brakes, disc brakes, or wheel parking brake chamber
  - Engine damage due to water-ingress
  - Shorting of electrical components
  - Oil level and degradation (cloudiness) of the engine, transmission, differential and transfer case
  - Greasing of each components (lubrication)
  - Water-ingress to clutch release bearing
    (When water ingress is suspected, replace the release bearing.)
  - Damage to other clutch parts

Driving on Dry Road Surfaces



Drive the vehicle in the 2WD mode. Driving the vehicle on a dry, paved road in the 4WD mode will cause premature wear of front wheel tires, a decrease in fuel economy, generation of abnormal noise and decreased life of the front drivetrain system.

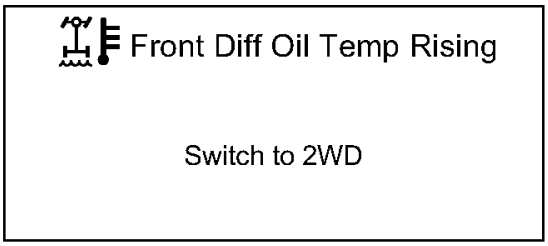
U-turn on Sharp Slopes



When making a U-turn on a sharp slope, the vehicle is in danger of turning over the moment it crosses the slope. Drive carefully selecting the road surfaces so that the tires on the higher side of the slope may not run on any convex part of the slope surface.

4WD Warnings/Indicators

Front Differential Gear Oil Temperature Rising

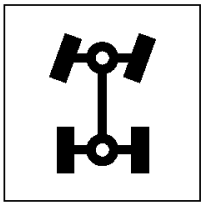


The indicator light comes on if an abnormality occurs in the front differential while driving in 4WD mode and the differential oil becomes hot.

⚠ CAUTION

- **When the light comes on, immediately shift to 2WD mode, and check the size, brand and wear of each tire.**
- **If the tires of different size or different wear condition are used, excessive load will be applied to the front differential. Therefore, be sure to install the tires of the same size and of the same brand on all four wheels. Even if the size is the same, do not install tires of significant difference in wear.**
  In addition, if you drive in 4WD mode on a dry and paved road, drive train failure or premature wear of tires will result. On such road, be sure to drive in 2WD mode.

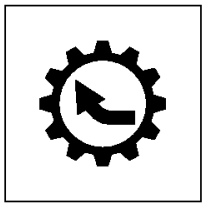
4WD Indicator Light



This indicator light comes on when the 4WD switch is placed in the "ON" position.

Refer to page
4-232 Switching between 2WD and 4WD

Transfer LOW Indicator light [V]



This indicator light comes on when the transfer gear control switch is pressed on the "LOW (low-speed)" range side.
When you switch to "HIGH (high-speed)" range, the indicator light goes out.

Refer to page
4-234 Switching HIGH and LOW Range [V]

Part-time 4WD Model

Viscous Type Torque Split 4WD (NMS Model)

A viscous type torque split 4WD model can be switched between 2WD and 4WD using the 4WD switch.

No.	Basic Operation	Reference page
1	Set the knobs on the left and right freewheel hubs to the "LOCK" position.	4-231
2	Place the 4WD switch in the "ON" position and make sure that the 4WD indicator light is on.	4-232

Rigid Type 4WD (NPS/NQS Models)

A rigid type 4WD model can be switched between 2WD and 4WD using the 4WD switch. In addition, the transfer gear control switch changes between the "HIGH" and "LOW" ranges.

No.	Basic Operation	Reference page
1	Set the knobs on the left and right freewheel hubs to the "LOCK" position.	4-231
2	Place the 4WD switch in the "ON" position and make sure that the 4WD indicator light is on.	4-232
3	Press the "HIGH" side or "LOW" side of the transfer gear control switch.	4-234

Freewheel Hub

The freewheel hubs are devices that allow the front wheels and the drive shaft to be manually connected and disconnected.

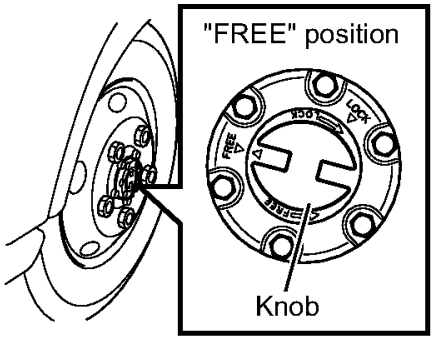
CAUTION

- **Whenever driving in 4WD mode, confirm that the knobs on the freewheel hubs are set to the "LOCK" position.**
- **Do not press the 4WD switch when driving with the knobs on the freewheel hubs in the "FREE" position. Doing so could cause the transfer case to fail.**

ADVICE

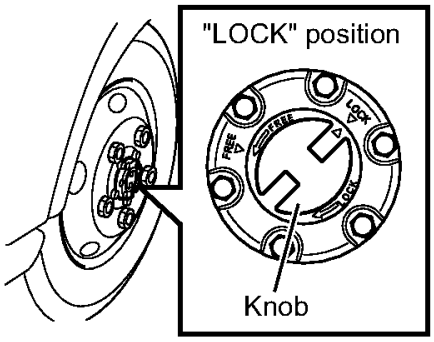
- Do not set the knobs midway between the "FREE" and "LOCK" positions.
- In order to ensure sufficient lubrication of the front-wheel drive system, drive approximately 20 km (12 miles) every month with the left and right freewheel hubs in the "LOCK" position.
- The knob of the left and right freewheel hubs can become hot after driving.
- Whenever setting the freewheel hub in the "FREE" or "LOCK" position, always do so on both sides of the vehicle.

"FREE" Position



When a freewheel hub's knob is in the "FREE" position, the wheel is disconnected from the drive shaft.
This position should be used for driving in 2WD mode.

"LOCK" Position



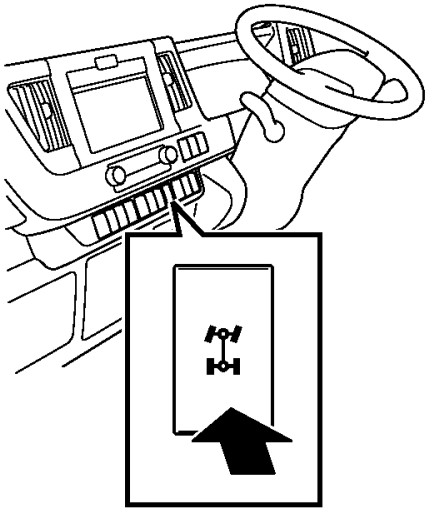
When a freewheel hub's knob is in the "LOCK" position, the wheel is connected to the drive shaft for 4WD operation.
This position must be used for driving in 4WD mode.

NOTE

- Whenever driving in 4WD mode, ensure that the knobs on the left and right freewheel hubs are set to the "LOCK" position. (Even when the 4WD switch is turned "ON", driving in 4WD mode is possible only when the knobs on the freewheel hubs are set to the "LOCK" position.)
- If the left and right freewheel hubs are set to the "FREE" position and the front wheels are disconnected from the drive shaft during driving in 2WD mode, rotation of the front wheels will not be transferred to the front drive system. As a result, vibration, noise and friction levels can be reduced for more economic driving.

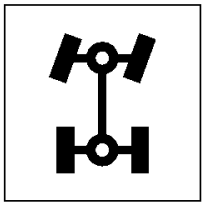
Switching between 2WD and 4WD

4WD Switch



Use the 4WD switch to select 2WD or 4WD. Before performing the switching operation, make sure that the freewheel hub lever is in the "LOCK" position, and then do so when the vehicle is stopped or moving straight at low speeds. When driving in 2WD mode, the 4WD indicator light goes off, and when driving in 4WD mode, the 4WD indicator light comes on. When switching is not complete, the 4WD indicator light may flash intermittently. Move the vehicle slowly back and forth and try operating the 4WD switch again.

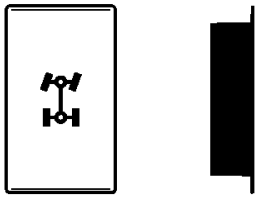
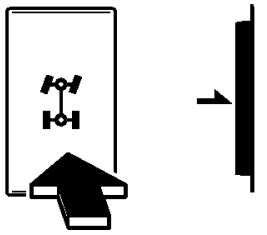
4WD indicator light



⚠ CAUTION

- **Driving in 4WD mode on dry, well-paved roads can accelerate wearing of the front tires and reduce fuel efficiency. As this action can also increase vehicle noise levels and lead to drive system damage, 2WD should always be used under these driving conditions.**
- **Whenever driving in 4WD mode, confirm that the knobs on the freewheel hubs are set to the "LOCK" position.**
- **Do not press the 4WD switch when driving with the knobs on the freewheel hubs in the "FREE" position. Doing so could cause the transfer case to fail.**

Guidelines for switching between 2WD (rear-wheel drive) and 4WD (four-wheel drive)

Drive mode	4WD switch	4WD indicator light	Usage conditions
2WD		Off	During normal driving on an ordinary road or highway.
4WD		 On	When driving on snow-covered, icy, steep or other roads that cannot easily be negotiated with 2WD.

NOTE

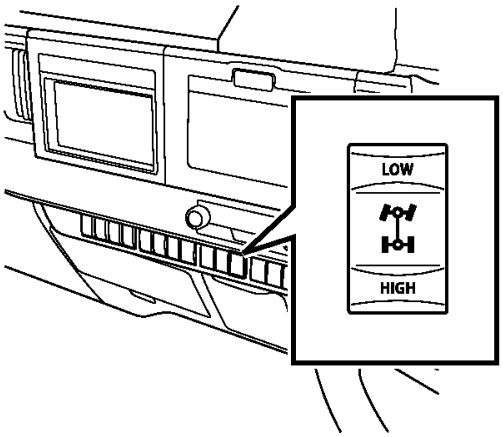
[NPS/NQS models]

- When the transfer gear control switch is placed in the "LOW" position, the 4WD mode is not canceled even if you place the 4WD switch in the "OFF" position. When canceling the 4WD mode, bring the vehicle to a stop, depress the clutch pedal if using a manual transmission model, or put the gearshift lever in the "N" position if using an DCT model, place the transfer gear control switch into the "HIGH" position, and then place the 4WD switch into the "OFF" position.

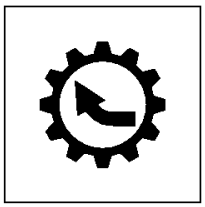
Refer to page
4-234 Switching HIGH and LOW Range [V]

Switching HIGH and LOW Range [V]

Transfer gear control switch



Transfer LOW indicator light



NPS/NQS models

This switch is used to change between the "HIGH" range (high speed) and the "LOW" range (low speed) of the transfer case. Select either gear appropriately depending on driving conditions.

1. Make sure that the vehicle is stopped and depress the clutch pedal (manual transmission models) or place the gearshift lever to the "N" position (DCT models).

NOTE

[Manual transmission models]

- The clutch pedal must be depressed before the transfer gear control switch can become active.

[DCT models]

- The transfer gear control switch will not operate when the gearshift lever is in any position other than "N".

2. Press the "HIGH" side or "LOW" side of the switch. When the "LOW" side of the switch is pressed, the transfer LOW indicator light comes on.

HIGH	Press this side for driving on a snowy road, icy road, steep slope or rough terrain.
LOW	Press this side for driving on a steep slope or muddy terrain where an extremely high torque is needed.

3. Be sure to carry out the following operations on a flat surface and check that range switching is complete.
   - For vehicles with manual transmission, put the vehicle in gear and release the clutch to check that drive power is being transmitted.
   - For DCT models, make sure the gearshift lever is in the "D" position to check that drive power is being transmitted.

   If the range change is not complete, do the operation again from step 1.

⚠ CAUTION

- **Do not perform the range change operation on a slope.**
- **After switching, for safety reasons, try driving the vehicle on a flat surface before driving it on slopes, etc. If range switching is not complete, driving power may not be transmitted.**
- **In DCT models, when parking after switching the transfer range, for safety reasons, place the vehicle on a flat surface, put the gearshift lever in the "D" position, check that driving power is being transmitted, then put the gearshift lever in the "P" position and park. Also, always remember to chock the wheels. If drive power is not being transmitted, the vehicle may move even if the gearshift lever is in the "P" position, which is dangerous. If the gearshift lever is shifted to the "P" position without checking the drive power, the multi-information display will show a seat exiting warning and a warning buzzer will sound.**
- **In the case of NPS/NQS models for Australia and New Zealand, when the transfer gear control switch is set to "LOW", the transfer LOW indicator light, the ESC warning light, the brake system warning light and the AEBS OFF indicator light come on. In this case, the ABS, ASR, ESC, ESS, high G assist function, adaptive cruise control, auto brake hold, HSA and AEBS system will not function. When the ESC warning light and the brake system warning light are illuminated, there is a possibility that wheels may lock up and the vehicle may lose directional and handling stability if excessive brake pedal force is applied particularly when road surface conditions are slippery.**
  Take extra caution when operating the vehicle.

Refer to page
4-45 Parking in Winter and in Cold Regions
4-112 When Parking Your Vehicle
4-118 When Warning Buzzer and Multi-information Display Indicate an Alarm has Occurred

ADVICE

- Do not operate the transfer gear control switch while driving.

NOTE

- If the 4WD switch is placed in the "OFF" position, pressing the "LOW" side of the transfer gear control switch does not put the vehicle into the 4WD mode.
- Switching to the "LOW" range can only be done in 4WD mode.

[DCT models]

- When an DCT model is driven in the "LOW" range, automatic upshift of the gear will not occur in auto mode even if the gearshift lever is in the "D" position. If you want to shift the gear up, switch to manual mode. In addition, downshift of the gear will occur automatically even if the gearshift lever is in the "D" or "M" position.
- The transfer gear control switch will not operate when the gearshift lever is in any position other than "N".

[Manual transmission models]

- The clutch pedal must be depressed before the transfer gear control switch can become active.

Aftertreatment System

Diesel Particulate Defuser (DPD)

The DPD purifies particulate matter (PM) in exhaust gases. The DPD collects PM in the DPD filter and when PM is collected in the filter to the predetermined level, the DPD automatically burns PM (regeneration the filter). We recommend that you observe the following instructions to keep the DPD in order.

Refer to page
3-62 Vehicle Information

⚠ WARNING

- **The DPD, urea selective catalytic reduction (SCR) system, and exhaust pipe are extremely hot while the engine is running, during DPD filter regeneration (PM combustion), and immediately after vehicle operation. Be careful not to inadvertently touch them. Otherwise, you could be burned.**
- **Any grass, waste paper or other flammable material near the vehicle could catch fire.**
- **Before doing maintenance work on the vehicle, shut down the engine and allow it to cool down. Otherwise, you could be burned.**
- **White smoke may be produced during manual regeneration; do not perform manual regeneration in a poorly ventilated indoor place.**

Refer to page
4-32 Be Careful about Exhaust Emissions

⚠ CAUTION

- **Using diesel fuel other than extra-low-sulfur diesel fuel in a model conforming to Euro VI emission standards could prevent the vehicle from complying with local legal requirements.**
  Using diesel fuel other than extra-low-sulfur diesel fuel or low-sulfur diesel fuel in a model conforming to Japan post-post new long term regulation emission standards could prevent the vehicle from complying with local legal requirements.

ADVICE

- Use Isuzu genuine engine oil compatible with the DPD. Using oil other than Isuzu genuine engine oil compatible with the DPD would shorten the time between DPD filter cleaning and could deteriorate fuel consumption.
- For models conforming to Japan post-post new long term regulation emission standards, be sure to use low-sulfur diesel fuel (containing sulfur of 50 ppm or lower) or extra-low-sulfur diesel fuel (containing sulfur of 10 ppm or lower). In particular, an extra-low-sulfur content diesel fuel (10 ppm or less sulfur content) is recommended.
  For models conforming to Euro VI emission standards, be sure to use extra-low-sulfur diesel fuel (containing sulfur of 10 ppm or lower).
  If you fill the vehicle with poor-quality fuel, water-removing additive or other additive, gasoline, kerosene or alcohol-based fuel, it could harm the fuel filter, prevent proper movement of fuel-lubricated parts in the injectors and adversely affect engine components, possibly resulting in a breakdown.
- Do not modify the DPD, urea SCR, or exhaust pipe.
  Changing the alignment, length or diameter of the exhaust pipe would adversely affect the exhaust system's exhaust emission reduction function. If any modification is necessary to install a component to the rear of the vehicle, consult your Isuzu Dealer.
- If the vehicle is left in gear during regeneration, the regeneration time could be extended, possibly having an effect on fuel consumption. Leave the transmission in neutral when idling the vehicle for extended periods of time.

Refer to page
10-4 Engine Oil

NOTE

- Although the DPD filter automatically undergoes regeneration (burning of the accumulated PM) when a certain amount of PM has accumulated, driving conditions can prevent completion of regeneration. In this case, "DPD regeneration needed" (amber) is displayed and a warning sounds at the same time. Perform manual regeneration in accordance with the proper procedure. This is to restore DPD function and is normal.
- If the vehicle is stationary with the engine idling during DPD regeneration, the exhaust brake or exhaust throttle operates. Operating sounds will be heard when the exhaust brake or exhaust throttle is activated or deactivated. The sounds do not indicate a fault.
- Combustion of PM during DPD regeneration can cause white smoke to be briefly emitted from the exhaust pipe. The white smoke does not indicate a fault. Do not perform manual regeneration in any poorly ventilated indoor place.
- In vehicles with ecostop, idling stop does not activate while DPD regeneration is in progress, and for about 10 to 15 minutes after regeneration. This is not a malfunction.
- When a new vehicle has been driven a certain distance, it can emit white smoke during DPD regeneration. The white smoke does not indicate a fault. The vehicle may not emit white smoke during its initial operation when new.
- Although white smoke may be emitted from the muffler body when the DPD is regenerated for the first time, this does not indicate a malfunction.
- Owing to the exhaust emission reduction function, the exhaust gases emitted by the exhaust pipe smell different from those emitted by the exhaust pipes of earlier diesel vehicles.
- The exhaust brake may automatically be activated in order to prevent emission of white smoke if the engine idles continuously over an extended period of time.
- A long continuous idling can cause white smoke to be briefly emitted from the exhaust pipe. The white smoke does not indicate a fault.
- The DPD may start operating and the engine speed may increase after a long continuous idling or driving with low speed.

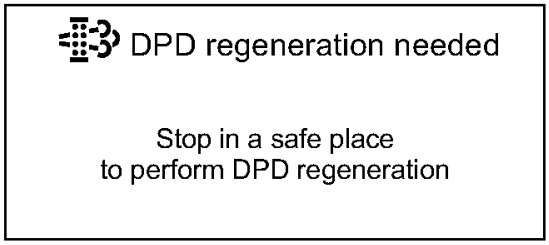
DPD Warnings/Indicators

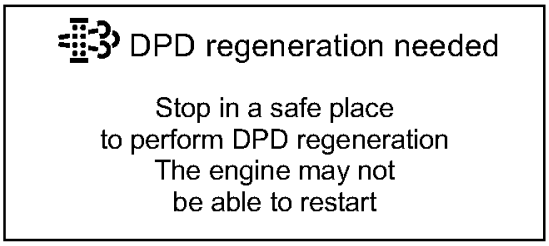
Regenerating DPD automatically display

Refer to page
4-242 Automatic Regeneration of DPD

Regenratng DPD automtcly

DPD automatic
regeneration is performed



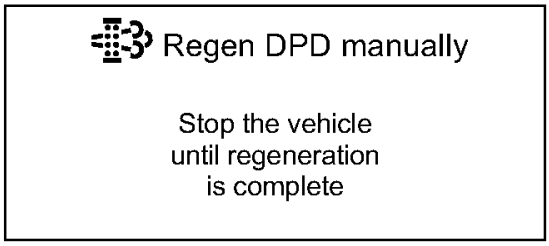


DPD regeneration needed display

DPD regeneration needs to be performed if the "Stop in a safe place to perform regeneration" message appears and a warning sounds at the same time. After you finish driving and park, follow the "DPD Manual Regeneration Procedure" to do regeneration.

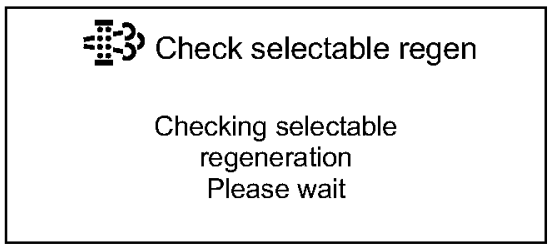
If you continue driving while this is displayed, then "The engine may not be able to restart" appears and a warning sounds at the same time. If you continue driving in this condition, the DPD may malfunction. Stop immediately in a safe place and perform the regeneration operation.

Refer to page
4-244 DPD Manual Regeneration Procedure



Regenerating DPD manually display

When the "Regen DPD manually" display (amber) appears, then DPD is being manually regenerated.



Check selectable regeneration display

Push the DPD switch until the "Check selectable regen" display (amber) appears on the multi-information display. While the display remains on, the system is checking if selectable regeneration can be performed. If the system determines that selectable regeneration can be performed, the display changes to the "DPD regeneration needed". If it does not change to the "DPD regeneration needed" display, selectable regeneration does not need to be performed.

ADVICE

- Continuing driving without performing the regeneration will cause the check engine warning light to come on. The DPD then must be repaired at the nearest Isuzu Dealer.
- If your vehicle is a PTO-equipped model, check that the "DPD regeneration needed" display (amber) is not displayed when you use the PTO for an extended time period.

Refer to page
3-39 Check Engine Warning Light

NOTE

- Depending on load conditions during prolonged idling or PTO continuous operation, DPD regeneration may be initiated automatically. In this case, the "Regenratng DPD automtcly" display (green) or the "Regen DPD manually" display (amber) may appear. This is not an abnormality.
- Automatic regeneration occurs during normal driving. However the following driving conditions may cause automatic regeneration to be incomplete, so the "DPD regeneration needed" display (amber) appears and an alarm sounds at the same time. Perform the manual regeneration according to the procedure.
  - When the vehicle is driven only at low speeds below 15 km/h (9 MPH).
  - When the engine is frequently started and stopped.
  - When the engine is always stopped before it finishes warming up.
  - When there are frequent long periods of idling operation (more than one hour).

Refer to page
3-44 Multi-information Display Functions

DPD Warning Buzzers

In the following cases, the buzzer sounds an alert.
Immediately do a regeneration operation according to the manual regeneration procedure for the DPD.

Multi-information display	Warning buzzer	Condition
DPD regeneration needed Stop in a safe place to perform DPD regeneration	Three short beeps	When the manual regeneration procedure is necessary
DPD regeneration needed Stop in a safe place to perform DPD regeneration The engine may not be able to restart	Three short beeps	When continuing to drive without doing the manual regeneration procedure

Automatic Regeneration of DPD

Regenratng DPD automtcly

DPD automatic regeneration is performed

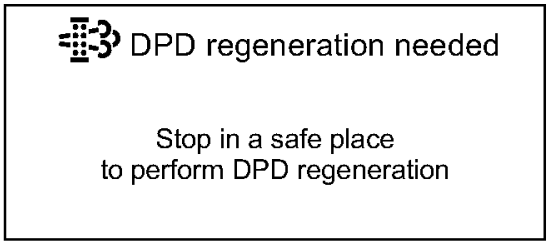
When the "Regenratng DPD automtcly" display (green) appears, then DPD is being automatically regenerated.
Regeneration starts automatically and when regeneration is complete, it turns off. You do not need to operate the DPD switch.
If you stop the engine while automatic regeneration is in progress, then regeneration is interrupted, but when you restart the engine regeneration restarts automatically.
If this situation is repeated, then automatic regeneration cannot be completed, so the "DPD regeneration needed" display (amber) appears and an alarm sounds at the same time. Not stopping the engine during automatic regeneration is preferable because otherwise manual regeneration will be required.

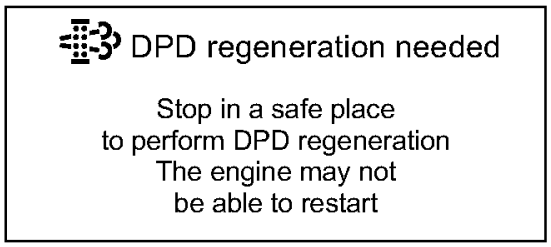
ADVICE

- Continuing driving without performing the manual regeneration will cause the check engine warning light to come on. The DPD then must be repaired at the nearest Isuzu Dealer.

NOTE

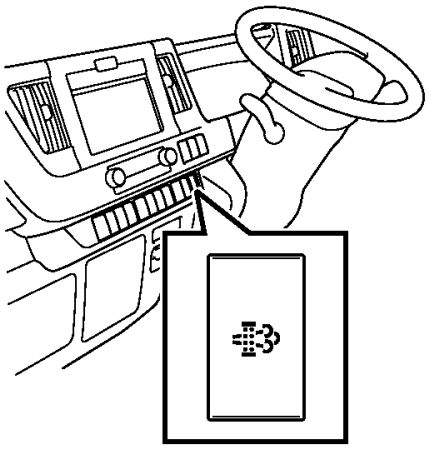
- The engine speed may increase and the exhaust brake may activate while the vehicle is stopped with the engine idling. When this occurs, the DPD is automatically regenerated. This does not indicate a failure.
- The system generates a sound during the automatic regeneration and its cancellation. This does not indicate a failure.
- Depending on load conditions during prolonged idling or PTO continuous operation, DPD regeneration may be initiated automatically. In this case, the "Regenratng DPD automtcly" display (green) or the "Regen DPD manually" display (amber) may appear in the multi-information display. This is not an abnormality.
- Automatic regeneration occurs during normal driving. However the following driving conditions may cause automatic regeneration to be incomplete, so the "DPD regeneration needed" display (amber) appears and an alarm sounds at the same time. Perform the manual regeneration according to the procedure.





- When the vehicle is driven only at low speeds below 15 km/h (9 MPH).
- When the engine is frequently started and stopped.
- When the engine is always stopped before it finishes warming up.
- When there are frequent long periods of idling operation (more than one hour).

DPD Switch



The DPD switch is used to manually burn PM (regenerate the filter).
DPD regeneration needs to be performed if the "DPD regeneration needed" display (amber) appears and a warning sounds at the same time. After you finish driving and park, follow the "DPD Manual Regeneration Procedure" to do regeneration.
If you continue driving in this state too long, the DPD may fail. Stop immediately in a safe place and perform the regeneration operation.
Furthermore, follow the "DPD Selectable Regeneration Procedure" to do regeneration when performing selectable regeneration.

Refer to page
4-244 DPD Manual Regeneration Procedure
4-247 DPD Selectable Regeneration Procedure

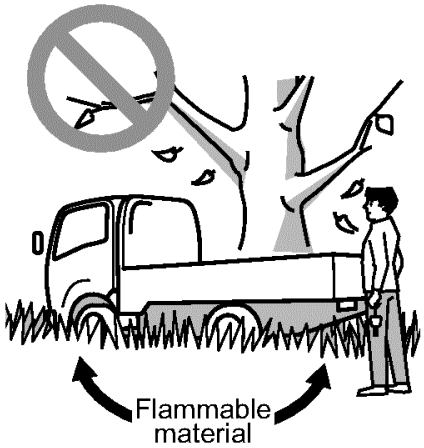
DPD regeneration needed

Stop in a safe place
to perform DPD regeneration

DPD regeneration needed

Stop in a safe place
to perform DPD regeneration
The engine may not
be able to restart

DPD Manual Regeneration Procedure



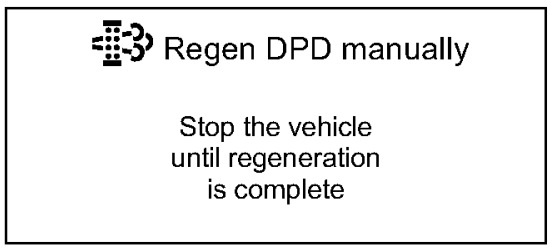
1. Stop the vehicle at a safe place free of flammable materials such as grass or wastepaper.

⚠ CAUTION

- **To prevent a fire, make sure that there is no flammable material near the muffler, DPD, urea selective catalytic reduction (SCR) system, and exhaust pipe. Remember that the temperature of exhaust gases is high enough to burn you.**
- **For vehicles whose exhaust pipe outlet is in front of the right rear wheels, be careful of the following when using wheel chocks.**
  - **Position the wheel chocks so they are not subject to the exhaust gas.**
  - **If they must be positioned in front of the right rear wheel, then use wheel chocks that are highly heat resistant, such as metal ones. The wheel chocks may be very hot after DPD regeneration is finished. When you remove the wheel chocks, use protective tools (work gloves, etc.) and be careful not to burn yourself.**

2. In a manual transmission model, place the gearshift lever into the "N" position and firmly engage the parking brake.
   In a Smoother model, place the gearshift lever into the "N" position, confirm the "N" indication and securely pull the parking brake.
   In an DCT model, place the gearshift lever into the "P" position, confirm the "P" indication and securely pull the parking brake.
   If the engine stops automatically in models with ecostop, restart the engine by operating the starter switch.
3. Run the engine at idle. Return the idling control knob fully counterclockwise to decrease the engine speed when the engine speed has been increased using the idling control knob.
4. If your vehicle is a PTO-equipped model, disengage the PTO. Return the PTO switch and external accelerator control.
5. Press the DPD switch.

Refer to page
4-244 DPD Switch



6. The "DPD regeneration needed" display (amber) changes to the "Regen DPD manually" display (amber), and the engine speed automatically increases as regeneration starts.
7. Do not leave the vehicle during the regeneration. Regeneration normally completes in about 20 to 25 minutes.

8. When the "Regen DPD manually" display (amber) goes out, regeneration is completed. Normal driving is then possible.

ADVICE

- If your vehicle is a PTO-equipped model, check that the "DPD regeneration needed" display (amber) is not displayed when you use the PTO for an extended time period.

NOTE

- The time needed to complete regeneration differs depending on the outside temperature.
- The exhaust brake or exhaust throttle is activated during DPD regeneration. The exhaust brake or exhaust throttle starting to operate or being disengaged will produce a sound, but this does not indicate a failure.
- During regeneration, white smoke may be temporarily produced from the exhaust pipe. This results from combustion of PM, it does not indicate a failure.
- Manual regeneration will complete earlier immediately after driving than when the engine is cold.
- The engine coolant temperature may rise during manual regeneration.

Interruption of Manual Regeneration

If you must interrupt regeneration for an unavoidable reason, press the DPD switch again.
The "Regen DPD manually" display (amber) changes to the "DPD regeneration needed" display (amber). Then, you can drive the vehicle. If you interrupt regeneration, you need to perform regeneration again. Perform manual regeneration beginning with Step 1 as soon as possible.

ADVICE

- Continuing driving without performing the manual regeneration will cause the check engine warning light to come on. The DPD then must be repaired at the nearest Isuzu Dealer.

NOTE

- Manual regeneration will be interrupted in the following operation.
  - Accelerator is ON.
  - Gear-in (with Smoother)
  - Vehicle speed is ON.
- Operation noise in these cases is bigger than interrupting by pressing the DPD switch. This does not indicate a failure.

DPD Selectable Regeneration Procedure

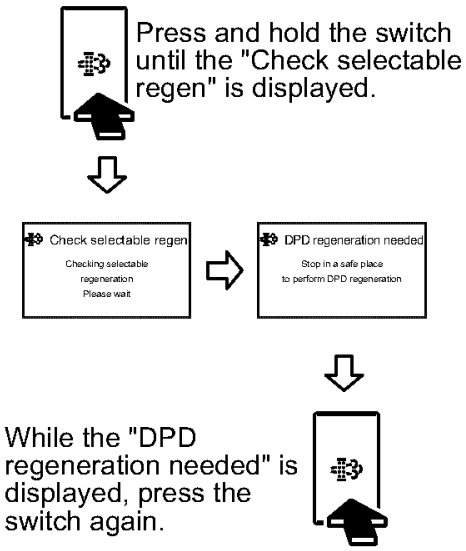
This is a function that initiates manual regeneration of the DPD at any time before PM accumulates in the DPD filter and the "Regenratng DPD automtcly" display (green) or "DPD regeneration needed" display (amber) appears.
Perform the manual regeneration of the DPD during breaks between operation or when the engine (coolant temperature) and exhaust pipe are still warm such as when the day's operation is finished.

CAUTION

- **Perform the selectable regeneration until it is completed without interruption.**
- **Do not leave the vehicle during the regeneration.**
- **To prevent a fire, make sure that there are no flammables near the muffler, DPD, urea SCR, and exhaust pipe.**
- **Remember that the temperature of exhaust gases is high enough to burn you.**
- **For vehicles whose exhaust pipe outlet is in front of the right rear wheels, be careful of the following when using wheel chocks.**
  - **Position the wheel chocks so they are not subject to the exhaust gas.**
  - **If they must be positioned in front of the right rear wheel, then use wheel chocks that are highly heat resistant, such as metal ones. The wheel chocks may be very hot after DPD regeneration is finished. When you remove the wheel chocks, use protective tools (work gloves, etc.) and be careful not to burn yourself.**

1. Stop the vehicle at a safe place free of flammable material such as grass or wastepaper.
2. While the engine is idling, put the gearshift lever in the "N" position, for manual transmission models and Smoother models, or "P" position for DCT models, and then apply the parking brake firmly. If the engine of a vehicle with ecostop stops automatically, restart the engine by operating the starter switch.

3. With the engine idling, ensure that the gearshift lever is placed in the "N" position for a manual transmission model or place the gearshift lever in the "N" position for a model with Smoother. Then, confirm that the gearshift indicator shows "N" and fully engage the parking brake. If your vehicle is equipped with an DCT, place the gearshift lever in the "P" position. Then, confirm that the gearshift indicator shows "P" and fully engage the parking brake. Then, firmly engage the parking brake. When the engine speed is increased by operating the idling control knob, return the engine speed to the normal idling state.
   Make sure that the operation of PTO is stopped if your vehicle is equipped with a PTO.



4. Press and hold the DPD switch until "Check selectable regen" (amber) appears in the multi-information display. The "Check selectable regen" display (amber) changes to "DPD regeneration needed" display (amber).

Refer to page
4-244 DPD Switch

5. Press the DPD switch again.
6. The "DPD regeneration needed" display (amber) changes to the "Regen DPD manually" display (amber), and the engine speed automatically increases as regeneration starts.
7. Do not leave the vehicle during regeneration. Regeneration normally completes in about 20 to 25 minutes.
8. When the "Regen DPD manually" display (amber) goes out, regeneration is completed. Normal driving is then possible.

ADVICE

- When the PM level in the DPD filter is lower than the preset level, the "Check selectable regen" display (amber) does not change to the "Regen DPD manually" display (amber) even if the DPD switch is kept pressed. In either case, the DPD does not require regeneration, so it ignores the DPD switch operation.
- Repeating selectable regeneration of DPD frequently can adversely affect the engine, so avoid excessive use.
- Should the selectable regeneration be interrupted due to restart of driving, the "Regen DPD manually" display (amber) changes to the "DPD regeneration needed" display (amber). In this case, stop the vehicle safely immediately, press the DPD switch again, and wait until the selectable regeneration is completed. Do not continue driving or using the PTO.

NOTE

- The time needed to complete regeneration differs depending on the outside temperature.
- The exhaust brake or exhaust throttle is activated during DPD regeneration. The exhaust brake or exhaust throttle starting to operate or being disengaged will produce a sound, but this does not indicate a failure.
- During regeneration, white smoke may be temporarily produced from the exhaust pipe. This results from combustion of PM, it does not indicate a failure.
- Regeneration is finished earlier immediately after driving than when the engine is cold.
- The engine coolant temperature may rise during regeneration.

DPD Regeneration during Prolonged Idling and during Use of the PTO

NOTE

- DPD regeneration may be initiated automatically during prolonged idling. At such times, the "Regenratng DPD automtcly" display (green) or the "Regen DPD manually" display (amber) comes on but this is normal and does not indicate a failure.
- If the "Regenratng DPD automtcly" display (green) appears, then you do not need to operate the DPD switch. Normal driving is also possible.
- If the "Regen DPD manually" display (amber) appears, then while driving it will change to the "DPD regeneration needed" display (amber), and regeneration will be interrupted.
  Regeneration is also interrupted when the PTO is connected or when PTO work is stopped after continuous PTO operation.
  Initiate manual regeneration by following the "DPD Manual Regeneration Procedure".

Refer to page
4-244 DPD Manual Regeneration Procedure

Inspection and Maintenance of DPD

Performing regular inspections and maintenance prevents damage. Be sure to perform inspections and maintenance at regular intervals. Also, quickly rectify any fault in the vehicle (even a small fault) to prevent it from becoming more serious.
If a symptom shown in the following table occurs, perform inspections and take corrective action in accordance with the table.
If you are unable to perform a repair, the corrective action shown in the table does not eliminate a symptom or you cannot locate a fault, contact the nearest Isuzu Dealer.

Symptom	Cause	Corrective action	Reference page
White exhaust smoke	Engine not sufficiently warming up	Allow the engine to warm up.	4-62 4-61
	Too much engine oil	Correct the oil level.	9-11
	Engine control system faulty	◎	—
	Fuel system faulty	◎	—
	Continuous idling for a long period (more than 2 hours)	With the vehicle stationary in a place where it will not obstruct traffic, hold down the accelerator pedal and check that white smoke is not emitted.	—
Black exhaust smoke	Engine control system faulty	◎	—
	Air cleaner clogged	Clean or replace the element.	10-34 10-37
	Air inlet opening disconnected	◎	—
	Fuel system faulty	◎	—
	Exhaust system clogged	◎	—
	DPD faulty	◎	—

ADVICE

- Any item for which there is a ◎ in the "Corrective action" column requires repairs and adjustments. Contact the nearest Isuzu Dealer.

Urea Selective Catalytic Reduction (SCR)

The urea SCR system reduces nitrogen oxides (NOx) in exhaust emissions. The system uses AdBlue® as a reducing agent and hydrolyzes it into ammonia (NH3) using the heat from exhaust emissions. The nitrogen oxides (NOx) are then reduced to nitrogen and water and purified by the generated ammonia.

CAUTION

- **Do not touch any water discharged from the muffler. In case of contact with skin, wash off thoroughly with water.**

ADVICE

- Do not modify the exhaust pipe or muffler, or change the location of any items including the AdBlue® tank. Doing so could affect exhaust emission reduction capabilities. If any modifications or relocation is necessary, consult your nearest Isuzu Dealer.

NOTE

- Do not continue driving the vehicle if the remaining amount of AdBlue® is small or if there is an abnormality in the urea SCR system. Driving the vehicle with the urea SCR system not operating properly may violate the regulatory requirements of your country.
- Exhaust emissions from the tailpipe have a smell different from those emitted from vehicles without urea SCR systems due to the exhaust emission reduction functions of the exhaust system.

[Urea SCR]

- Urea SCR stands for "Urea Selective Catalytic Reduction". In this technology, urea is used as the selective catalytic reducing agent.

[AdBlue®]

- AdBlue® is an aqueous solution especially for use with urea SCR systems.
- AdBlue® freezes at a temperature of -11°C (12°F). Since the urea SCR system is equipped with a heating function that utilizes the engine coolant or the electric heating wire, the engine will start even when AdBlue® is frozen.
- AdBlue® is a registered trademark of Verband der Automobilindustrie (VDA).

Refer to page
4-32 Be Careful about Exhaust Emissions

Handling of AdBlue®

AdBlue® is a clear, colorless, and harmless aqueous solution. It is normal for AdBlue® to emit an odor in some circumstances.

⚠ CAUTION

- **AdBlue® is harmless to the human body even if touched. However, it may cause inflammation in rare circumstances depending on its constitution. In such cases, take the following actions.**
  - **In the case of contact with skin, wash off with water. Failure to do so may result in irritation for those with sensitive skin.**
  - **In the case of accidental ingestion, drink one or two glasses of water or milk and consult your physician immediately.**
  - **In the case of contact with eyes, immediately wash out with large amounts of water for at least 15 minutes and consult your physician.**

Is a Specified AdBlue® Being Used?

Use AdBlue® specified by Isuzu.

- Use AdBlue® that is compliant with the DIN (Deutsche Industrie Normen) 70070 or the ISO (International Organization for Standardization) 22241 standard defined for AUS 32.

Storing AdBlue®

Seal the AdBlue® container to prevent evaporation and store it indoors or in places that are well ventilated and not exposed to direct sunlight.
When stored, the expiration date of AdBlue® varies depending on the temperature of the storage location. Contact your Isuzu Dealer for details.

NOTE

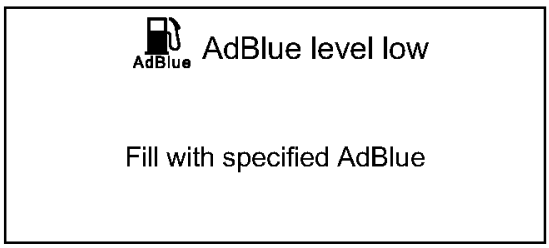
- Even if frozen, AdBlue® retains the same quality as when thawed and is usable as is.
- When storing or carrying AdBlue®, use the container in which the AdBlue® was contained when purchased. If not, use a dedicated polyethylene tank (PE) or stainless steel container that is free from any adhesion of foreign materials such as water or dust.

AdBlue® Level Display

Refer to page
3-7 AdBlue® Level Gauge

SCR System Warnings/Indicators

Model Conforming to Euro VI Emission Standards



AdBlue® level low warning
This warning message appears on the multi-information display when the remaining AdBlue® reaches level 1.
Set the starter switch to the "LOCK" position and add AdBlue® up to the full level.
Afterward, set the starter switch to the "ON" position and check if the warning on the multi-information display has turned off.

CAUTION

- **This vehicle consume AdBlue® to comply with emission regulation. Therefore, it may be a criminal offence to use a vehicle that does not consume AdBlue®.**
  If this vehicle use continuously in case of ignoring this warning, the engine torque will reduce.
  When the engine torque has been reduced, engine torque will not recover, if the amount of AdBlue® added is too little. Add at least 5.0 liters (1.32 US gal./ 1.1 Imp gal.) of AdBlue®.

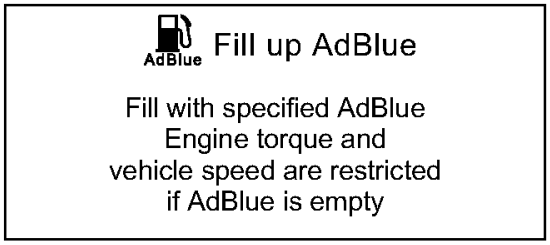
ADVICE

- Engine torque will be restricted if the level of AdBlue® is low. Vehicle speed will also be restricted if there is no AdBlue®.

Refer to page
4-252 Handling of AdBlue®
4-252 Is a Specified AdBlue® Being Used?
4-262 Refilling AdBlue®

AdBlue® refill warning

If the vehicle continues to operate without AdBlue® being added even after the AdBlue® level low warning is illuminated on the multi-information display with the remaining amount of AdBlue® at very low level.



CAUTION

- **This vehicle consume AdBlue® to comply with emission regulation. Therefore, it may be a criminal offence to use a vehicle that does not consume AdBlue®.**
  If this vehicle use continuously in case of ignoring this warning, the engine torque will reduce.
  When the engine torque has been reduced, engine torque will not recover, if the amount of AdBlue® added is too little. Add at least 3.0 liters (0.79 US gal./0.66 Imp gal.) of AdBlue®.

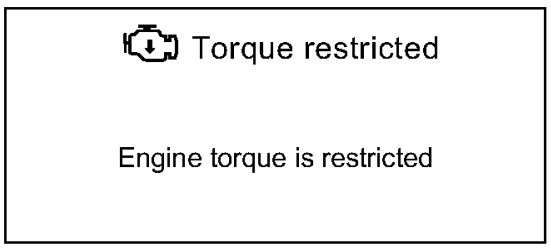
ADVICE

- Engine torque will be restricted if the level of AdBlue® is low. Vehicle speed will also be restricted if there is no AdBlue®.

Refer to page
4-252 Handling of AdBlue®
4-252 Is a Specified AdBlue® Being Used?
4-262 Refilling AdBlue®

Engine torque restricted warning

This warning will be indicated on the multi-information display when the vehicle continues to be driven without having the AdBlue® refilled, despite the AdBlue® level low warning being displayed.



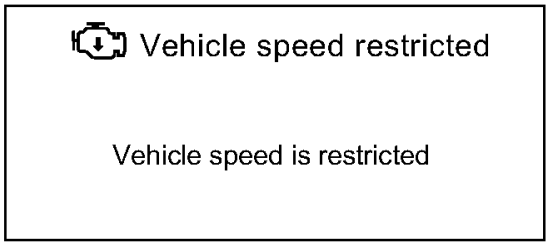
CAUTION

- **When this warning appears, engine torque is restricted to 75% of its maximum output.**

ADVICE

- Add at least **5.0 liters** (1.32 US gal./**1.10 Imp gal.**) of AdBlue® when this warning light is displayed.

Refer to page
4-252 Handling of AdBlue®
4-252 Is a Specified AdBlue® Being Used?
4-262 Refilling AdBlue®



Vehicle speed restricted warning

This warning will be indicated on the multi-information display when the vehicle continues to be driven without having the AdBlue® refilled and the amount of AdBlue® remaining becomes level 0, despite the engine torque reduction warning light being displayed.

CAUTION

- **When this warning light appears, maximum vehicle speed is restricted to 20 km/h (12 MPH).**

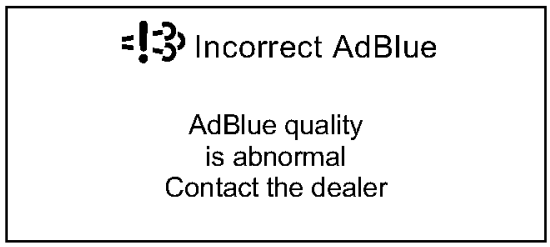
ADVICE

- Add at least **7.0 liters** (1.85 US gal./**1.54 Imp gal.**) of AdBlue® when this warning light is displayed.

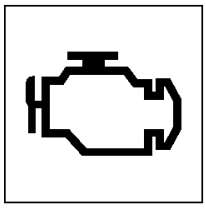
Refer to page
4-252 Handling of AdBlue®
4-252 Is a Specified AdBlue® Being Used?
4-262 Refilling AdBlue®

Incorrect AdBlue® warning

If liquids, etc., other than the specified AdBlue® are added or the AdBlue® is diluted with liquids such as water, the "Incorrect AdBlue" warning will be displayed on the multi-information display and the check engine warning light will illuminate at the same time.



Check engine warning light



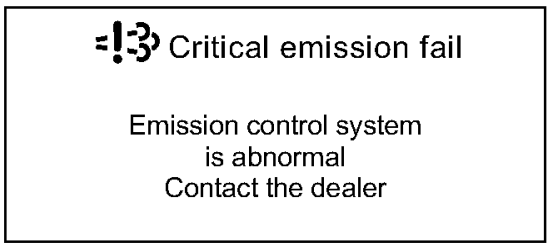
ADVICE

- If the vehicle continues to be operated without the appropriate actions being taken even after the "Incorrect AdBlue" warning is displayed, the urea SCR system may be damaged. Immediately contact the nearest Isuzu Dealer for inspection and repair.
- If this vehicle continues to be operated without appropriated action being taken even after this warning, engine torque will be reduced.
  Moreover, if this vehicle continues to be operated in condition reduced torque, the vehicle speed will be restricted at max 20 km/h (12 MPH).

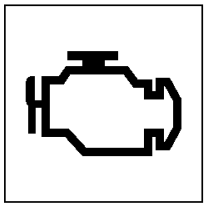
Refer to page
4-252 Handling of AdBlue®
4-252 Is a Specified AdBlue® Being Used?

Critical emission fail warning

When there is an abnormality with the emission control system, this warning will be indicated on the multi-information display and the check engine warning light will illuminate also at the same time. If the vehicle continues to be operated without the appropriate actions being taken even after this warning is displayed, the emission control system may be damaged.
Have the emission control system inspected/serviced immediately at the nearest Isuzu Dealer.



Check engine warning light



ADVICE

- If this vehicle continues to be operated without appropriated action being taken even after this warning, engine torque will be reduced.
  Moreover, if this vehicle continues to be operated in condition reduced torque, the vehicle speed will be restricted at max 20 km/h (12 MPH).

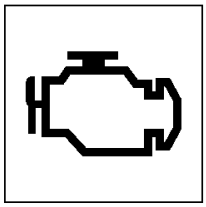
AdBlue® injection system warning

When there is an abnormality with the urea SCR system, this warning will be indicated on the multi-information display and the check engine warning light will illuminate also at the same time.

AdBlue injection system

AdBlue injection
system is abnormal
Contact the dealer

Check engine warning light



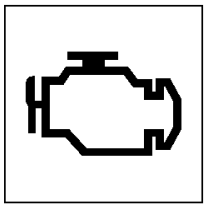
ADVICE

- If the vehicle continues to be operated without the appropriate actions being taken even after the "AdBlue injection system" warning is displayed, the urea SCR system may be damaged. Have the urea SCR system inspected/serviced immediately at the nearest Isuzu Dealer.
- If this vehicle continues to be operated without appropriated action being taken even after this warning, engine torque will be reduced.
  Moreover, if this vehicle continues to be operated in condition reduced torque, the vehicle speed will be restricted at max 20 km/h (12 MPH).

AdBlue dosing malfunction

AdBlue is being consumed abnormally
Contact the dealer

Check engine warning light



AdBlue® dosing malfunction warning
When there is an abnormality with the AdBlue® consumption, this warning will be indicated on the multi-information display and the check engine warning light will illuminate also at the same time.

ADVICE

- If the vehicle continues to be operated without the appropriate actions being taken even after the "AdBlue dosing malfunction " warning is displayed, the urea SCR system may be damaged. Immediately contact the nearest Isuzu Dealer for inspection and repair.
- If this vehicle continues to be operated without appropriated action being taken even after this warning, engine torque will be reduced.
  Moreover, if this vehicle continues to be operated in condition reduced torque, the vehicle speed will be restricted at max 20 km/h (12 MPH).

Model Conforming to Japan Post-Post New Long Term Regulation Emission Standards

AdBlue level low

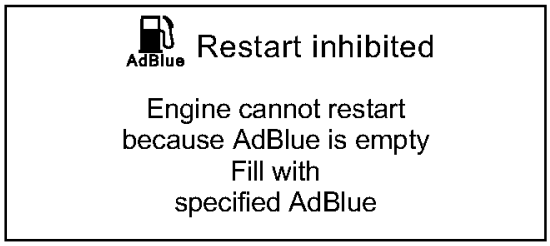
Fill with specified AdBlue

AdBlue® level low warning
This warning message appears on the multi-information display when the remaining AdBlue® reaches level 1.
Set the starter switch to the "LOCK" position and add AdBlue® up to the full level.
Afterward, set the starter switch to the "ON" position and check if the warning on the multi-information display has turned off.

ADVICE

- Add at least 5.0 liters (1.32 US gal./1.10 Imp gal.) of AdBlue® when this warning appears.

Refer to page
4-252 Handling of AdBlue®
4-252 Is a Specified AdBlue® Being Used?
4-262 Refilling AdBlue®



Restart inhibited warning (AdBlue® is empty)

After "AdBlue level low" appears on the multi-information display, if you continue to drive without refilling AdBlue® such that the remaining AdBlue® reaches level 0, then "Restart inhibited" (AdBlue® is empty) and "AdBlue level low" are alternately displayed on the multi-information display and a continuous beep sounds at the same time. The engine cannot be restarted if the engine is stopped while this message is displayed. To restart the engine, turn the starter switch to the "LOCK" position and refill AdBlue® tank. After refilling, turn the starter switch to the "ON" position and confirm that the message on the multi-information display has disappeared and the beep has stopped.

CAUTION

- **Once "Restart inhibited" (AdBlue® is empty) has been displayed, then refilling with too small amount of AdBlue® may not deactivate "Restart inhibited" (AdBlue® is empty).**
  Add at least 5.0 liters (1.32 US gal./1.10 Imp gal.) of AdBlue®.

ADVICE

- If the vehicle continues to be operated without the appropriate actions being taken even after "Restarted Inhibited" (AdBlue® is empty) is displayed, the urea SCR system will be damaged. Have the AdBlue® refilled immediately.

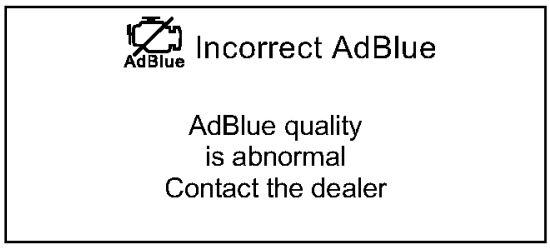
NOTE

- If the engine stalls while "Restart inhibited" (AdBlue® is empty) is displayed, leave the starter switch in the "START" position, without returning it to the "ACC" or "LOCK" position, to restart the engine. If the starter switch is turned to the "ACC" or "LOCK" position, the engine cannot be restarted.

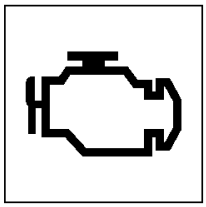
Refer to page
4-252 Handling of AdBlue®
4-252 Is a Specified AdBlue® Being Used?
4-262 Refilling AdBlue®

Incorrect AdBlue® warning

If liquids, etc., other than the specified AdBlue® are added or the AdBlue® is diluted with liquids such as water, the "Incorrect AdBlue" warning will be displayed on the multi-information display and the check engine warning light will illuminate at the same time.



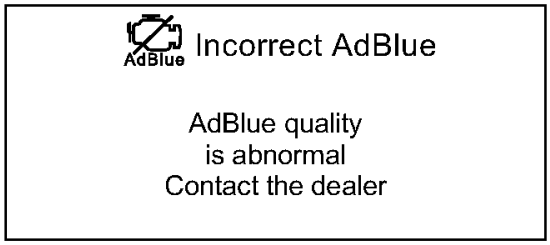
Check engine warning light

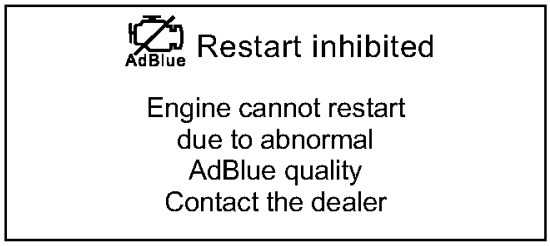


ADVICE

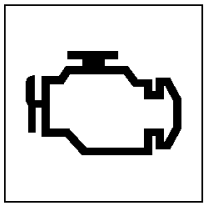
- If the vehicle continues to be operated without the appropriate actions being taken even after the "Incorrect AdBlue" warning is displayed, the urea SCR system may be damaged. Immediately contact the nearest Isuzu Dealer for inspection and repair.

Refer to page
4-252 Handling of AdBlue®
4-252 Is a Specified AdBlue® Being Used?





Check engine warning light



Restart inhibited warning (abnormal AdBlue® quality)

After "Restart inhibited" (Abnormal AdBlue® Quality) appears on the multi-information display and the check engine warning light turns on, then in a short time "Incorrect AdBlue" and "Restart inhibited"(Abnormal AdBlue® Quality) are alternately displayed on the multi-information display and a continuous beep sounds at the same time. The engine cannot be restarted if the engine is stopped while this message is displayed.

ADVICE

- When the "Incorrect AdBlue" warning is displayed, the urea SCR system must be inspected. Have your vehicle inspected/ serviced immediately at the nearest Isuzu Dealer.

NOTE

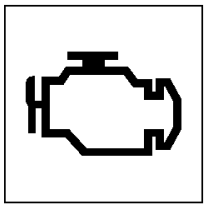
- If the engine stalls while "Restart inhibited" (Abnormal AdBlue® Quality) is displayed, leave the starter switch in the "START" position, without returning it to the "ACC" or "LOCK" position, to restart the engine. If the starter switch is turned to the "ACC" or "LOCK" position, the engine cannot be restarted.

Refer to page
4-256 Incorrect AdBlue® warning

AdBlue injection system

AdBlue injection system is abnormal Contact the dealer

Check engine warning light



AdBlue® injection system warning

When there is an abnormality with the urea SCR system, this warning will be indicated on the multi-information display and the check engine warning light will illuminate also at the same time. If you continue to drive while "AdBlue injection system" is displayed without taking appropriate measures, the urea SCR system will malfunction. A continuous beep will sound shortly after this message is displayed.

ADVICE

- If the vehicle continues to be operated without the appropriate actions being taken even after the "AdBlue injection system" warning is displayed, the urea SCR system may be damaged. Have the urea SCR system inspected/serviced immediately at the nearest Isuzu Dealer.

Refilling AdBlue®

WARNING

- **Do not put anything other than AdBlue® in the AdBlue® tank. Refill the AdBlue® tank with AdBlue® specified by Isuzu.**
- **Adding liquids, etc., other than AdBlue® may result in a malfunction of the urea SCR system.**
- **When refilling AdBlue®, doing any of the following may cause a fire or malfunction of the urea SCR system.**
  - **Diluting with water or other liquids**
  - **Adding gasoline or diesel fuel**
- **If liquids, etc., other than the specified AdBlue® have been accidentally added, the urea SCR system must be inspected. Have the urea SCR system inspected/ serviced at your Isuzu Dealer.**

CAUTION

- **AdBlue® rarely emits an odor when the tank cap is opened. Do not attempt to smell the tank from the supply inlet.**

ADVICE

- Remember to add AdBlue® early so that the tank is always fully filled with AdBlue®.
- Make sure that the inside the AdBlue® tank is not contaminated by materials such as dirt when opening the AdBlue® tank cap. Contaminants such as dirt may clog the AdBlue® filter or change the quality of the AdBlue®, possibly resulting in a malfunction of the urea SCR system.
- Do not fill with AdBlue® over the "F" line on the level gauge. Doing so may result in leakage of AdBlue® from the breather hose during driving. In addition, if AdBlue® freezes, sensors may be damaged.
- AdBlue® spilled on the vehicle body or frame, etc., may cause rust. In such cases, wipe it off and wash with water.
- Do not step or ride on the AdBlue® tank. Doing so may result in damage to the AdBlue® tank, pipe, and sensors.
- The urea SCR system will continue to operate for approximately 3 minutes after the starter switch is set to the "LOCK" position. Wait for 3 minutes or more before removing the battery or power line for inspection or repair.

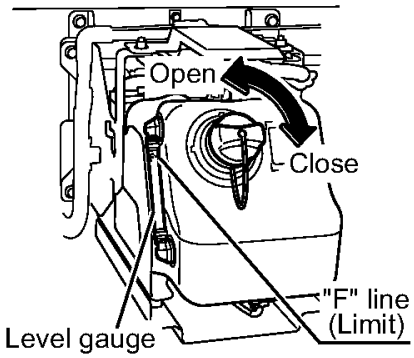
NOTE

- The level gauge, mounted in front of the AdBlue® tank, is intended to prevent oversupply and overflow of AdBlue®, not to measure the remaining amount of AdBlue®. Even when the surface level of the AdBlue® reaches the lower end of the level gauge, the AdBlue® amount display on the instrument panel still indicates levels 4 or 5. Check the remaining amount of AdBlue® on the AdBlue® amount display, not using the level gauge.
- Operating noises may be heard from the AdBlue® tank or supply module after the engine stops. This is the sound of AdBlue® returning from the pipe to the AdBlue® tank and is normal.
- It is normal for white powder deposits to form when AdBlue® adheres and dries in such places as the supply inlet. Wipe off to prevent it from entering the AdBlue® tank.
- After AdBlue® is added, it takes time before the amount of AdBlue® is displayed correctly after the starter switch is set to the "ON" position.
- To refill AdBlue® in cold weather, refer to "Adding AdBlue® in Freezing Conditions".

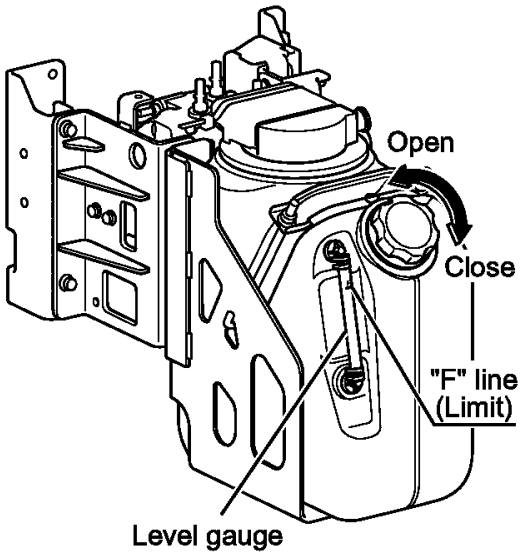
Refer to page
4-48 Adding AdBlue® in Freezing Conditions

How to Add AdBlue®

14 liter AdBlue® tank



16 liter AdBlue® tank



1. Set the starter switch to the "LOCK" position and stop the engine.
2. Slightly loosen the cap of the AdBlue® tank and wipe off any dust or dirt adhered to the cap or supply inlet.
3. Turn the tank cap slowly to open the tank.
4. Add AdBlue® up to the "F" line while viewing the level gauge mounted in front of the AdBlue® tank.

ADVICE

[Model with 14 liter AdBlue® tank]

- If the AdBlue® does not pour in smoothly as you refill it, then there may be a clog in the AdBlue® inlet filter on the AdBlue® tank. If you notice that the AdBlue® does not pour in smoothly, then have the AdBlue® inlet filter inspected at your Isuzu Dealer.

NOTE

[Model with 14 liter AdBlue® tank]

- The AdBlue® inlet filter acts to remove any dirt that gets mixed into the urea fluid tank.

5. Turn the tank cap to securely install it to the AdBlue® tank.
6. Confirm that the tank cap is securely installed.

AdBlue® tank usable capacity [Reference value]	
14 liter AdBlue® tank	**13.0 liters** (3.43 US gal./**2.86 Imp gal.**)
16 liter AdBlue® tank	**12.9 liters** (3.41 US gal./**2.84 Imp gal.**)

Refer to page
4-252 Handling of AdBlue®
4-252 Is a Specified AdBlue® Being Used?

Disposing of AdBlue®

Do not dispose of AdBlue® or its empty containers into lakes, seas, rivers, or other such places.
Dispose of in an appropriate way complying with local legal requirements.

Special Equipment

Power Take-Off (PTO) [V]

PTO is a device that is used to provide engine power to special equipment directly from the engine or through the transmission.
This manual describes an operation of PTO, but for an operation of special equipment other than the PTO lever and PTO switch, consult **[Instruction Manual for Special Equipment]**.

When Operating the PTO

⚠ CAUTION

- **Make sure that there are no persons or objects around and above the vehicle before operating PTO.**
- **Operate PTO on a level surface.**
- **Before operating the PTO and special equipment, put the gearshift lever in the "N" position for manual transmission models, then firmly depress the brake pedal with your right foot, and securely engage the parking brake.**
  For Smoother models, put the gearshift lever in the "N" position and keep the brake pedal firmly depressed with your right foot.
  For DCT models, put the gearshift lever in the "P" position and keep the brake pedal firmly depressed with your right foot.
- **While operating the PTO, especially during DPD regeneration, the DPD, urea SCR, muffler, exhaust pipe, and exhaust gas are very hot. There is a risk of burns, so be careful not to touch them. Also, be very careful of people walking near the vehicle, as well as flammable things, such as greenery, dried grass, and waste paper. They could cause burns or fire.**
- **Do not operate PTO and/or special equipment while the vehicle is moving.**
- **To use the PTO, press the ecostop cancel switch to deactivate ecostop, and check that the ecostop OFF indicator light in the instrument panel has come on.**
- **For operation of special equipment, consult the separate [Instruction Manual for Special Equipment].**

ADVICE

- The PTO of the Smoother model cannot be engaged when the engine speed is 800 r/min or higher to prevent a failure of the system. However, in models with DPD, the PTO can be engaged at engine speeds of up to 1,200 r/min during diesel particulate defuser (DPD) regeneration or upon startup of a cold engine (when the quick-warm system is activated). The PTO cannot be engaged during fast idle control immediately after cold engine startup or when the engine speed is increased with the idling control knob. Wait until engine warm up completes or return the idling control knob to the lowest setting before operating the PTO.

NOTE

- Refer to "DPD Regeneration during Prolonged Idling and during Use of the PTO" regarding DPD regeneration while using the PTO.

[Fast idle control]

- A supplementary function to warm up the engine by automatically increasing the idling speed while the engine is cold.

Refer to page
4-249 DPD Regeneration during Prolonged Idling and during Use of the PTO

PTO Warnings/Indicators

Smoother Model/DCT Model

Multi-information display	Warning buzzer	Display details
Preparing PTO Preparing to operate PTO	Long, repeated beeps	When the PTO switch is pressed, it will be displayed on the multi-information display and a buzzer will sound. While this message is displayed, operate the dump lever and PTO control lever.
PTO operating PTO is operating	Short, slow beeps	While the PTO is operating, the message appears on the multi-information display and a buzzer sounds.
Deactivating PTO Deactivating operation of PTO	Long, repeated beeps	When the PTO switch is pressed, it will be displayed on the multi-information display and a buzzer will sound. While this message is displayed, operate the dump lever and PTO control lever to deactivate the PTO.

Multi-information display	Warning buzzer	Display details
T/M oil temp rising While engine is running, put gearshift lever in the P or N position, and wait	Long, repeated beeps	When the oil temperature rises abnormally while using a lever-type PTO or switch-type PTO, the message appears on the multi-information display and a buzzer sounds. Stop using the PTO and run the engine in cold air until the "T/M oil temp rising" indicator light (red) turns off.
T/M oil temp rising While engine is running, put gearshift lever in the P or N position, and wait	—	When the oil temperature rises while using a lever-type PTO or switch-type PTO, the message appears on the multi-information display. If you continue to use the PTO, keep an eye on the oil temperature warning light. If this message appears frequently, review the PTO idle speed setting.

Manual Transmission Model

Multi-information display	Warning buzzer	Display details
PTO operating Operating	—	While the PTO is operating, the message appears on the multi-information display.

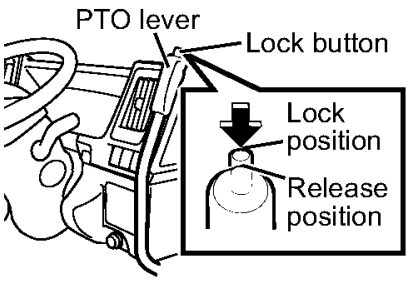
PTO Idle Speed Setting [SA]/[DCT]

Smoother models/DCT models

The PTO idle speed setting is for vehicles equipped with a transmission PTO so that when the load on the gearing is large and the idling rpm is not stable when the PTO is connected. Be sure to contact an Isuzu Dealer to change the settings.

Lever-type PTO [SA]/[DCT]

Operation of Lock Button



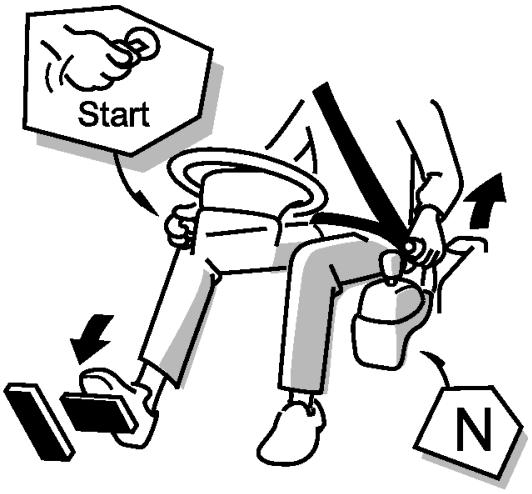
Releasing the lock button with the PTO lever in either of the off or on position causes the lever to be fixed in that position.
Be sure to press and hold the lock button when operating the PTO lever.

⚠ CAUTION

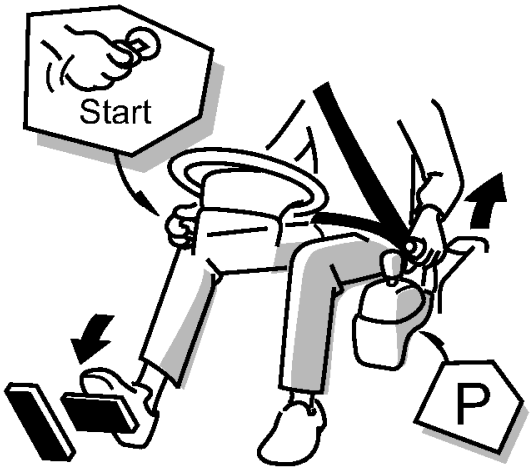
- **When operating the PTO lever, move the lever after unlocking has been confirmed. The lever may break if the lock button is pressed when force is being applied to the lever.**

To Engage the PTO

Smoother models

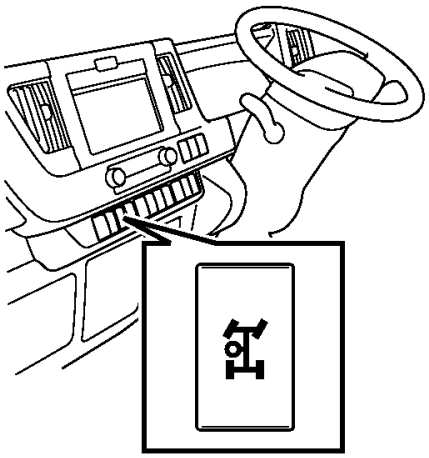


DCT models

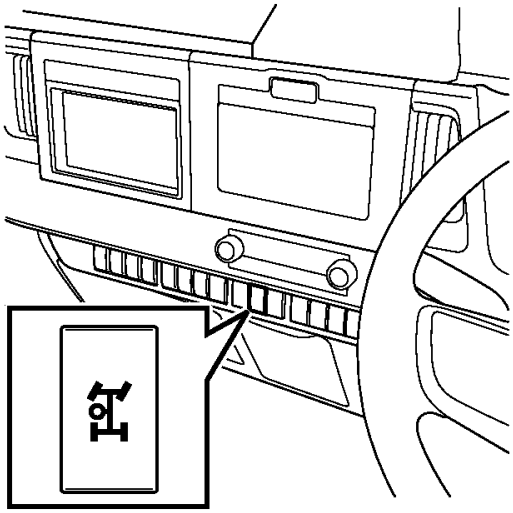


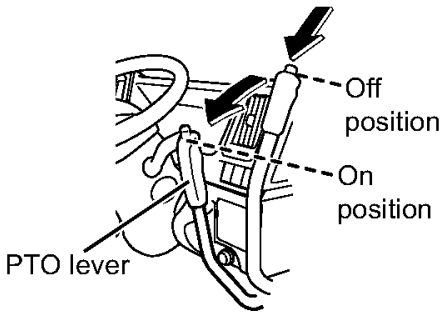
1. Fully pull up the parking brake lever, and with the vehicle at a complete stop, set the gearshift lever in the "N" (Smoother models) or "P" (DCT models) position. Then, start the engine.

NJR/NKR/NLR/NMR/NMS models



NNR/NPR/NPS/NQR/NQS models





2. Press the PTO switch. While the buzzer is making short, repeated beeps, press the lock button on the PTO lever and lower the lever to engage the PTO. If the PTO lever is lowered while the buzzer is sounding, "Preparing PTO" appears on the multi-information display until it is connected to the PTO.

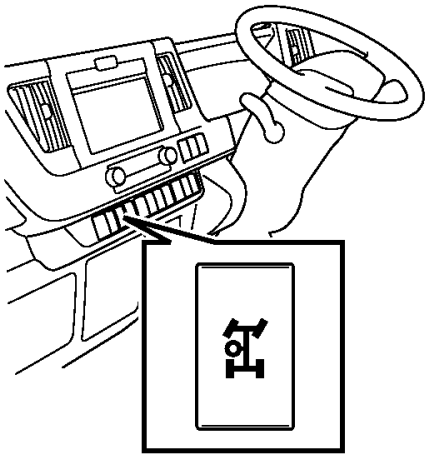
⚠ CAUTION

- **When operating the PTO lever, move the lever after unlocking has been confirmed. The lever may break if the lock button is pressed when force is being applied to the lever.**

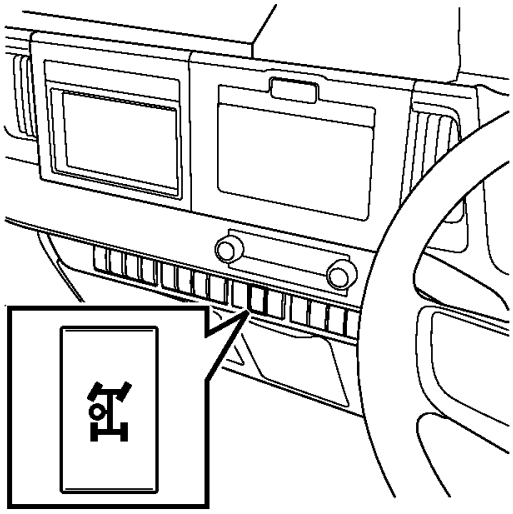
3. The buzzer pattern will change to short, slow beeps, and the clutch will automatically engage. At the same time, "PTO operating" appears on the multi-information display.
4. Operate the special equipment by following the special equipment's instructions.

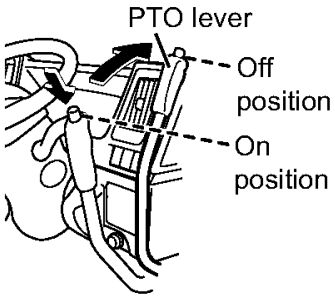
To Disengage the PTO

NJR/NKR/NLR/NMR/NMS models



NNR/NPR/NPS/NQR/NQS models





Press the PTO switch. While the buzzer is making short, repeated beeps, press the lock button on the PTO lever and move the lever from the on position to the off position.

⚠ CAUTION

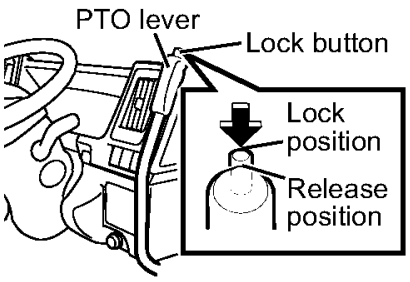
- **When operating the PTO lever, move the lever after unlocking has been confirmed. The lever may break if the lock button is pressed when force is being applied to the lever.**
- **Before starting the vehicle, you should confirm the following.**
  - **The special equipment is in a safe condition for driving.**
  - **The PTO lever and the PTO switch are in the off position.**

NOTE

- Press the PTO switch and then operate the PTO lever within approximately 10 seconds.
- If it is not possible to operate the PTO lever within approximately 10 seconds, press the PTO switch once again, and then operate the lever.

Lever-type PTO [M/T]

Operation of Lock Button

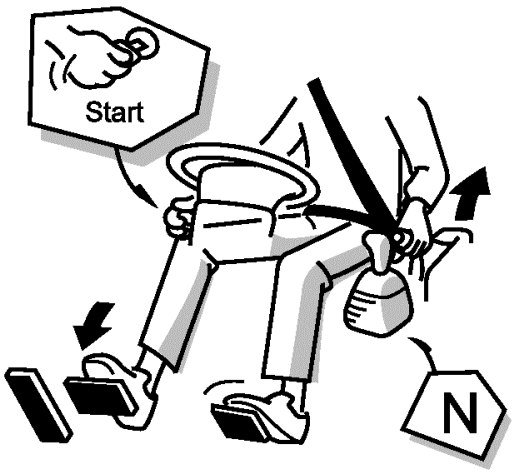


Releasing the lock button with the PTO lever in either of the off or on position causes the lever to be fixed in that position.
Be sure to press and hold the lock button when operating the PTO lever.

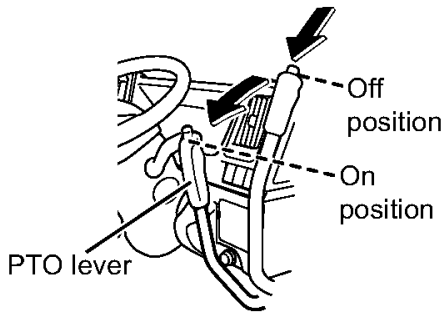
⚠ CAUTION

- **When operating the PTO lever, move the lever after unlocking has been confirmed. The lever may break if the lock button is pressed when force is being applied to the lever.**

To Engage the PTO



1. Fully pull up the parking brake lever, and with the vehicle at a complete stop, set the gearshift lever in the "N" position. Then, start the engine.



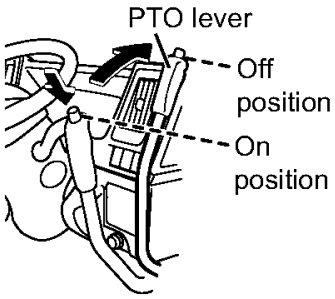
2. Depress the clutch pedal fully, and after waiting for a short time, lower the PTO lever while pressing the lock button in order to engage the PTO.
At this time, "PTO operating" appears on the multi-information display.

CAUTION

- **When operating the PTO lever, move the lever after unlocking has been confirmed. The lever may break if the lock button is pressed when force is being applied to the lever.**

3. Slowly remove your foot from the clutch pedal.
4. Operate the special equipment by following the special equipment's instructions.

To Disengage the PTO



1. While depressing the clutch pedal, press the lock button on the PTO lever and move the lever from the on position to the Off position.

CAUTION

- **When operating the PTO lever, move the lever after unlocking has been confirmed. The lever may break if the lock button is pressed when force is being applied to the lever.**

2. Slowly remove your foot from the clutch pedal.

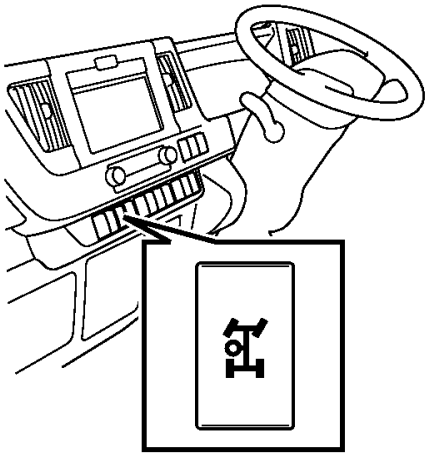
CAUTION

- **Before starting the vehicle, you should confirm the following.**
  - **The special equipment is in a safe condition for driving.**
  - **The PTO lever is in the off position.**

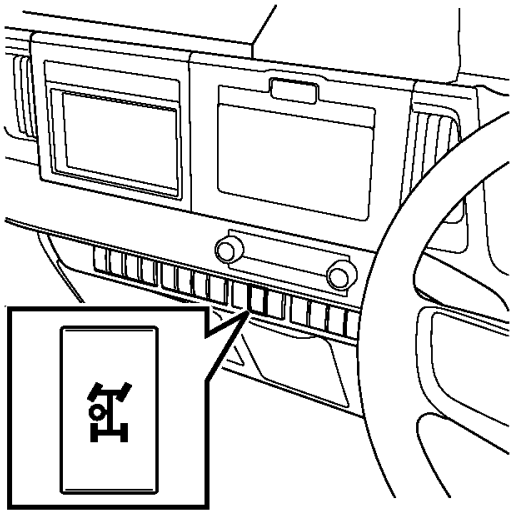
Switch-type PTO [DCT]

To Engage the PTO

NJR/NKR/NLR/NMR/NMS models



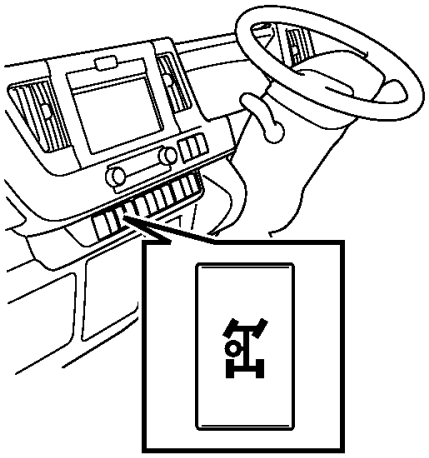
NNR/NPR/NPS/NQR/NQS models



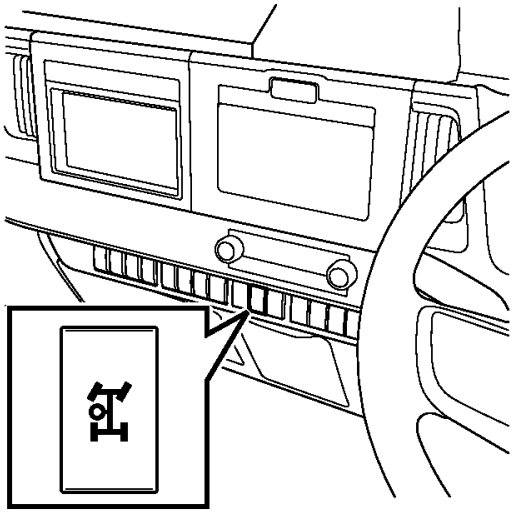
1. Fully pull up the parking brake lever, and with the vehicle at a complete stop, set the gearshift lever in the "P" position. Then, start the engine.
2. Press the PTO switch. The warning buzzer will begin making long, repeated beeps, "Preparing PTO" appears on the multi-information display until it is connected to the PTO.
3. The buzzer pattern will change to short, slow beeps, and the clutch will automatically engage. At the same time, "PTO operating" appears on the multi-information display.
4. Operate the special equipment by following the special equipment's instructions.

To Disengage the PTO

NJR/NKR/NLR/NMR/NMS models



NNR/NPR/NPS/NQR/NQS models



When you press the PTO switch, the buzzer will start to sound with long, repeated beeps. At the same time, the message "Deactivating PTO" will appear on the multi-information display. Once it disappears, the buzzer will stop sounding.

CAUTION

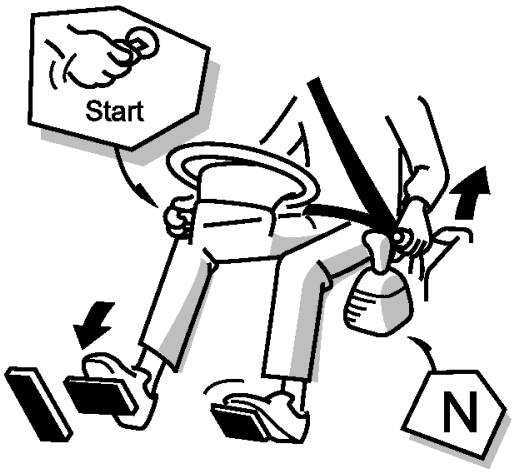
- **Before starting the vehicle, you should confirm the following.**
  - **The special equipment is in a safe condition for driving.**
  - **"Deactivating PTO" has disappeared.**

Switch-type PTO [M/T]

NOTE

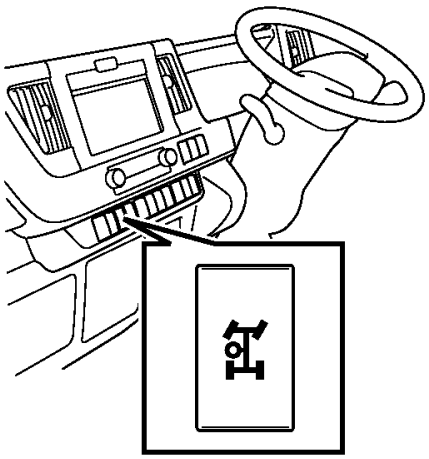
- To protect the engine, depending on the type of vehicle, if the PTO switch is turned to "ON" while the air conditioner is operating, the air conditioner will stop.

To Engage the PTO



1. Fully pull up the parking brake lever, and with the vehicle at a complete stop, set the gearshift lever in the "N" position. Then, start the engine.

NJR/NKR/NLR/NMR/NMS models

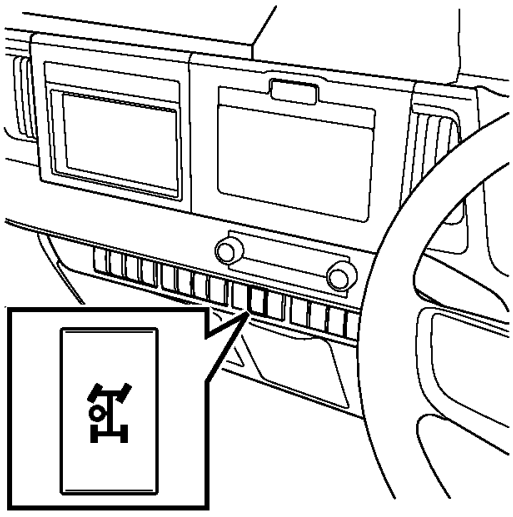


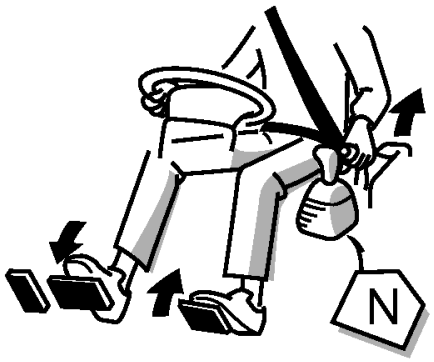
2. Depress the clutch pedal fully, and after waiting for a short time, press the PTO switch.
   At this time, "PTO operating" appears on the multi-information display.

ADVICE

- If the PTO switch is set to the on position immediately after pressing down the clutch pedal, a gear grinding noise may occur or the PTO may not engage. Operating the switch before the vehicle has come to a complete stop can also have the same consequences.

NNR/NPR/NPS/NQR/NQS models

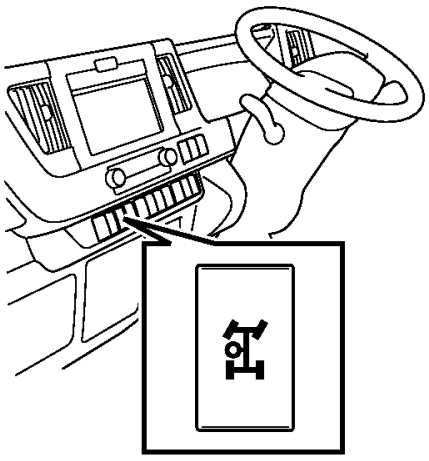




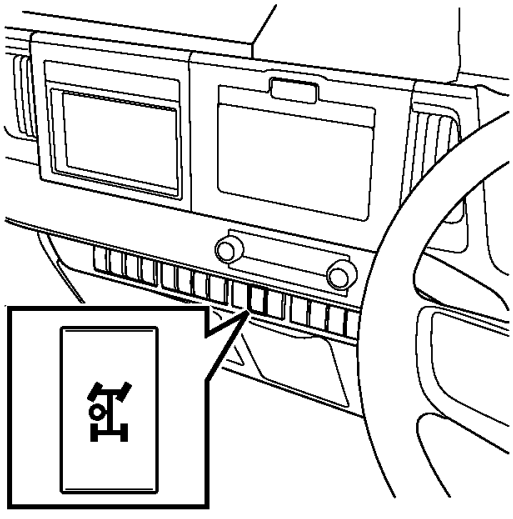
3. Slowly remove your foot from the clutch pedal.
4. Operate the special equipment by following the special equipment's instructions.

To Disengage the PTO

NJR/NKR/NLR/NMR/NMS models



NNR/NPR/NPS/NQR/NQS models



1. Press the PTO switch while depressing the clutch pedal. At this time, make sure that the "PTO operating" message on the multi-information display disappears and the PTO drive has stopped.
2. Slowly remove your foot from the clutch pedal.

⚠ CAUTION

- **Before starting the vehicle, you should confirm the following.**
  - **The special equipment is in a safe condition for driving.**
  - **"PTO operating" has disappeared.**

Driving and Vehicle Monitoring Equipment

Tire Pressure Monitoring System [V]

This mechanism uses sensors to measure tire pressure and temperature, so when it detects an abnormality it alerts the driver with a warning light and multi-information display.

⚠ WARNING

- **The tire pressure monitoring system is not a substitute for daily checks. Be sure to check the tire pressure as a part of daily inspections.**
- **Depending on the driving conditions, the information displayed on the multi-information display may not indicate the correct location of a tire with an abnormality. When the tire pressure monitoring system warning is activated, check all tires, including those where the warning does not occur, and take the appropriate measures.**

ADVICE

- If you need to replace tires or wheels, or if you need to install or remove parts related to the tire pressure monitoring system (such as the tire pressure sensor and receiver), contact the nearest Isuzu Dealer.

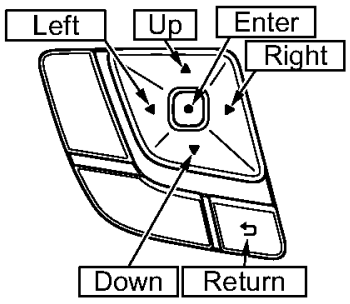
NOTE

- The tire pressure monitoring system measures air pressure through tire pressure sensors installed inside each wheel that communicate with the on-board computer.
- Each tire pressure sensor has a unique ID code, and registering the ID code in the computer makes it possible to measure the air pressure. Consult the nearest Isuzu Dealer about registration.
- In the following cases, the tire pressure monitoring system does not operate.
  - When using tires that do not have tire pressure sensors
- In the following cases, the tire pressure monitoring system may not operate suitably.
  - If non-genuine Isuzu wheels are used
  - When tire chains or other after-market parts are installed
  - When a lot of snow, ice, etc. is stuck to the vehicle (especially around the tires)
  - When mud, snow, ice, etc. remains stuck on for a long time
  - When the tires or area around the receiver is modified
  - When a commercially available tire repair sealant is used
  - When communication devices, such as mobile phones and wireless devices, or laptops are near the tire pressure sensors or receivers
  - When in areas subject to strong radio interference, such as near a TV tower, electric power plant, or radio station
- In the following cases, the auto location function may not correctly judge the location.
  - When the distance that the vehicle has run after the engine started is too short
  - When the vehicle has run at low speeds or moved backward most of the time after the engine has started
  - When the tire pressure sensors are not installed properly
- In the following cases, the auto location function may take time to judge the location.
  - When the vehicle is stopped frequently
  - When the vehicle is stationary for a long time
  - When the vehicle is running on rough roads
- While the vehicle is stationary, the function may not recognize signals from the tire pressure sensors.

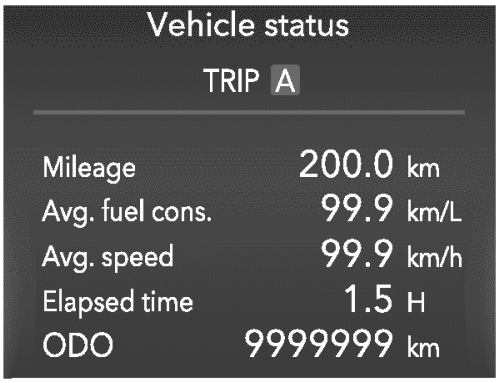
Checking the Tire Air Pressure and Temperature

The air pressure and temperature of each tire can be checked from the tire status display screen on the multi-information display.

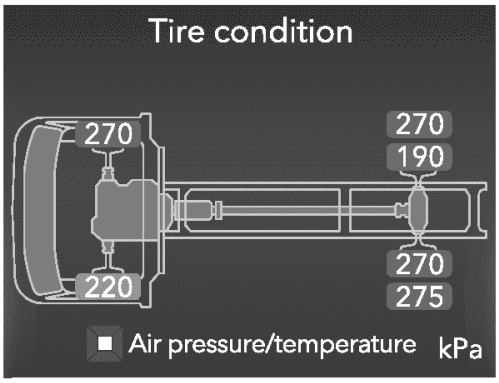
Tire Status Display



Vehicle Information



[Example of Display]



How to Display

1. Press the "Left" or "Right" switch on the multi-information display switch to switch the screen to the vehicle information screen.
   When a message for the driver is shown, press the "Enter" switch to display the normal screen, then switch it to the vehicle information screen.

Refer to page
3-48 Main Display Area

2. Press the "Up" or "Down" switch on the multi-information display switch to switch the screen to the tire status display screen.

Switching the Screen

Press the "Enter" switch to switch between the air pressure display screen and the temperature display screen. Press the "Return" switch to return to the previous screen.

When there is an abnormality with the tires, a warning appears on the top of the tire status display screen.

NOTE

- Before viewing the air pressure display screen, wait for 5 minutes or more after turning the starter switch to the "ON" position. If you view the screen before 5 minutes have passed, the air pressure may not be indicated correctly.
- While the vehicle is stationary, the function may not correctly recognize signals from the tire pressure sensors. When this happens, move the tires slightly.
- Drive the vehicle for 10 minutes or more at a speed of 30 km/h (19 MPH) or more after replacing a tire. The tire pressure sensors recognize the tire mounting position automatically.
- If you inspected the abnormal tire indicated on the screen and found no abnormality with the tire air pressure and temperature, the tire mounting position may not be recognized correctly. Drive the vehicle for 10 minutes or more at a speed of 30 km/h (19 MPH) or more to make sure the tire mounting position is recognized again. If this operation does not improve the condition, please contact the nearest Isuzu Dealer.

Tire Pressure Monitoring System Warnings/Indicators

Tire Pressure Monitoring System Warning Light



This warning light illuminates in the following cases. Check the warning message on the multi-information display and take the appropriate measures.

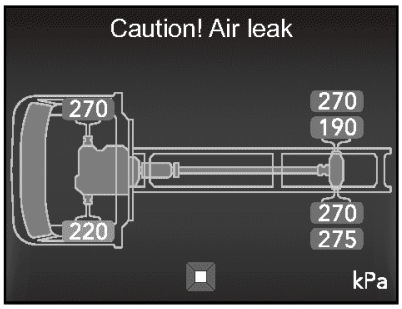
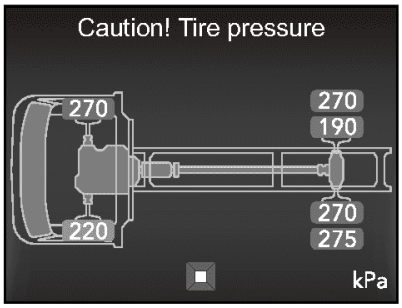
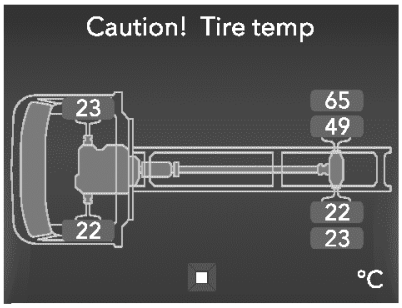
- When the tire air pressure is low
- When the tire air pressure is too high
- When the tire temperature is high

If the warning light comes on without displaying a warning message on the multi-information display or if the warning light flashes for 1 minute and then illuminates, the sensor battery level is low or the tire pressure monitoring system has malfunctioned. Immediately have the vehicle inspected at the nearest Isuzu Dealer.

Refer to page
10-67 Wheels and Tires

Details for Tire Pressure Monitoring System on Multi-information Display

The following is shown on the multi-information display according to the conditions.

Multi-information display	Details	Procedure
	When tire air pressure suddenly drops	Immediately stop the vehicle in a safe place and inspect the tires.
	When there is too little or too much tire air pressure	Stop the vehicle in a safe place and adjust the tires to normal air pressure.
	When the tires are hot When brakes are dragging or fading	Immediately stop the vehicle in a safe place and inspect the tires and running gear.

ADVICE

- When the tires need to be replaced, contact the nearest Isuzu Dealer.

Refer to page
10-67 Wheels and Tires

NOTE

- When the warning of the tire pressure monitoring system is activated, the screen located in the main area of the multi-information display switches to the tire status display screen automatically.

Advanced Driver Assistance System 5

- Before Using the Advanced Driver Assistance System 5-2
- Advanced Emergency Braking System (AEBS) [V] 5-11
- Following Distance Warning [V] 5-20
- Blind Spot Monitor (BSM) [V] 5-25
- Preceding Vehicle Departure Notification Function [V] 5-36
- Mis-Acceleration Mitigation System [V] 5-41
- Adaptive Cruise Control [V] 5-47
- Full Speed Range Adaptive Cruise Control [V] 5-64
- Traffic Sign Recognition System [V] 5-87
- Intelligent Speed Limiter [V] 5-99
- Lane Departure Warning System (LDWS) [V] 5-106
- Attention Assist [V] 5-113

5-2 Advanced Driver Assistance System

Before Using the Advanced Driver Assistance System

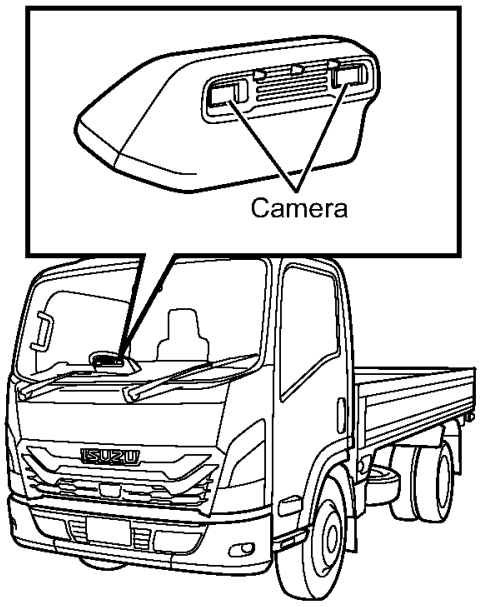
The advanced driver assistance system is a driving support system with multiple functions to assist driver judgement to reduce fatigue to make driving safer and more comfortable. It increases operating performance and driving safety based on information detected by its cameras and radar sensors.

⚠ WARNING

- **The ADAS is not an autonomous driving/collisions avoidance system. When driving, always pay attention to your surroundings and drive safely.**
- **You are responsible for controlling your vehicle at all times. The system is designed to be an aid and does not relieve you of your responsibility to drive with due care and attention. Failure to follow this instruction could result in the loss of control of your vehicle, personal injury or death.**

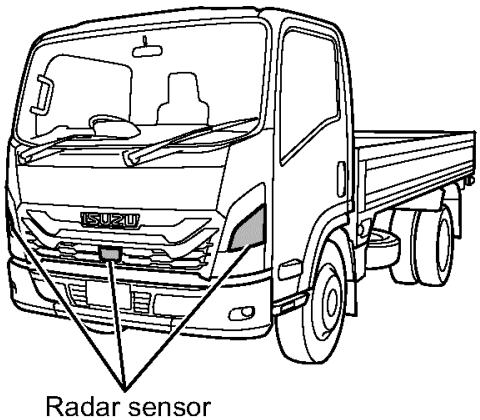
NOTE

- ADAS stands for Advanced Driver Assistance System.



Camera installation position

The camera is equipped on top of the dashboard.



Radar sensor

Radar sensor installation position

Radar sensors are installed under the left and right front turn signal indicator lights, and on the front of the vehicle.

Radar sensors are installed in the positions shown below.

- Under the left and right front turn signal indicator lights
- Front of the vehicle

ADAS Installed in Your Vehicle

Advanced Emergency Braking System (AEBS) [V]

The advanced emergency braking system (AEBS) uses a camera to detect the preceding vehicle and the stopping vehicle at the end of a line of cars in traffic jams or similar situations, and prompts the driver to avoid the danger. When the vehicle is closely approaching the other vehicles, the system prompts the alert by warning buzzers and an indication on the multi-information display. Moreover, in the situations where the collision cannot be avoided, the system automatically applies brakes to reduce the collision speed to mitigate the damage.

It also assists the driver to apply the brakes when turning right or left at intersections, which reduces the risk of collision with crossing pedestrians.

Refer to page
5-11 Advanced Emergency Braking System (AEBS) [V]

Following Distance Warning [V]

This system uses a camera to detect the following distance with vehicles located in the forward direction and alerts the driver when the proximity of these vehicles becomes unsafe using audible warnings and multi-information display messages, encouraging the driver to avoid danger.

Refer to page
5-20 Following Distance Warning [V]

5-4 Advanced Driver Assistance System

Blind Spot Monitor (BSM) [V]

The blind spot monitor is a system that uses radar sensors to inform the driver of the presence of nearby moving objects to help check around the vehicle when starting or stopping, when turning right or left, and when entering an intersection.
The BSM indicator lights on the front pillars, a warning buzzer, and multi-information display alert the driver according to how the moving object is approaching.

Refer to page
5-25 Blind Spot Monitor (BSM) [V]

Preceding Vehicle Departure Notification Function [V]

The preceding vehicle departure notification function notifies the driver with warning buzzers and an indication on the multi-information display if the vehicle remains stopped after the preceding vehicle has departed.

Refer to page
5-36 Preceding Vehicle Departure Notification Function [V]

Mis-Acceleration Mitigation System [V]

The mis-acceleration mitigation system restricts engine output so that the vehicle starts moving slowly if the system determines the accelerator pedal is depressed more than needed, such as by accident, while the vehicle is stopped and the camera recognizes an obstacle in front of the vehicle, in an attempt to mitigate collision damage. The driver is also alerted to be careful by a warning sound and an indicator on the multi-information display to avoid danger.

Refer to page
5-41 Mis-Acceleration Mitigation System [V]

Adaptive Cruise Control [V] / Full Speed Range Adaptive Cruise Control [V]

In addition to the cruise control function, the adaptive cruise control and full speed range adaptive cruise control includes accelerating, decelerating and braking functions by means of engine, auxiliary brake and other systems to maintain the set distance to the preceding vehicle when it is detected by camera.

Refer to page
5-47 Adaptive Cruise Control [V]
5-64 Full Speed Range Adaptive Cruise Control [V]

Traffic Sign Recognition System [V]

The traffic sign recognition system supports safe driving by showing traffic signs, which are recognized by the camera, on the multi-information display to prevent the driver from overlooking traffic signs. If the system determines that a recognized traffic sign is being violated, it notifies the driver with a warning buzzer and indicators on the multi-information display.

Refer to page
5-87 Traffic Sign Recognition System [V]

Intelligent Speed Limiter [V]

This system limits the speed according to the speed limits posted for each road. The maximum speed of your vehicle can be set in a range from approximately 30 km/h (20MPH) to the speed set for the speed limit device according to limits detected by the camera using traffic sign recognition system.

Refer to page
5-99 Intelligent Speed Limiter [V]

Lane Departure Warning System (LDWS) [V]

The lane departure warning uses a camera installed in the vehicle to detect the vehicle position with respect to a lane. When the vehicle deviates from the lane, it prompts warning buzzers and an indication on the multi-information display, contributing to suppresses accidents caused by inattentive driving and drowsy driving.

Refer to page
5-106 Lane Departure Warning System (LDWS) [V]

Attention Assist [V]

The attention assist detects when the vehicle is weaving on a road that has lane markers, and alerts the driver with an indicator on the multi-information display and a warning sound.

Refer to page
5-113 Attention Assist [V]

5-6 Advanced Driver Assistance System

Precautions for ADAS

Be careful of the following points to use the Advanced Driver Assistance System correctly.

⚠ CAUTION

- **Observe the following in order to prevent failure or malfunction of the camera.**
  - **The windshield should always be clean. The performance may decrease if the windshield is scratched, cracked or if rain drops, dew drops, ice, or snowflakes are on the windshield.**
  - **When cleaning the inside of the windshield, cover the camera with a sheet of paper, a plastic bag, masking tape, or by other means. When doing so, be careful that the covering material does not touch the lens of the camera.**
  - **If the windshield fogs, use the heater or A/C to defog.**
  - **Inspect your windshield wipers regularly to ensure they completely wipe the windshield when in operation. If the wipers leave portions of the windshield unwiped, the camera system may not be able to properly detect objects in front of the vehicle and thus may not function properly.**
  - **Do not subject the camera to strong impacts.**
  - **Do not change the mounting position of, remove, or disassemble the camera. If the camera is removed, have it inspected/repaired at your Isuzu Dealer.**
  - **Do not cover the heat vent at the bottom of the camera.**
  - **Do not place any objects on the top of the dashboard, in front of or on the camera. They may cause damage to the camera, stop the camera operation, or reflect off the windshield and be erroneously recognized as objects in the road.**
  - **Do not apply stickers, etc., to the area of the windshield in front of the camera lenses.**
  - **Do not make the camera dirty or damage it.**
  - **Do not expose the camera to any liquids.**
  - **Do not clean the camera lenses.**
  - **Do not use any glass coating agents.**
  - **Do not replace the windshield with anything other than a genuine Isuzu windshield. Replacing the windshield with anything other than a genuine Isuzu part may prevent the system from operating normally. Please note that Isuzu cannot guarantee the performance of any non-genuine windshield glass.**
  - **To repair or replace the windshield, contact your nearest Isuzu Dealer.**

CAUTION (Continued)

CAUTION (Continued)

- **To prevent the radar sensors from malfunctioning or failing, always observe the following.**
  - **Always keep the covers of the radar sensors clean.**
  - **Do not use lacquer thinner or benzine, etc., to clean the covers of the radar sensors. Detection performance may be decreased due to deformation, etc.**
  - **Do not apply stickers to or paint the radar sensor covers. Doing so may result in decreased detection performance.**
  - **Do not place items in front of the radar sensors. Doing so would result in radio waves being blocked, preventing objects located in the forward direction from being detected.**
  - **Do not subject the radar sensors to powerful impacts. If an impact misaligns the position or direction of the radar sensors, the system may not operate correctly. If they are subjected to a strong impact, have them inspected/ repaired at the nearest Isuzu Dealer.**
  - **Any irregularities to the radar sensors' installation conditions (changes to mounting direction, etc.) may prevent objects ahead from being detected correctly. Do not disassemble or adjust the installation of the radar sensors.**
  - **If it is necessary to adjust the radar sensors, have them inspected/repaired at the nearest Isuzu Dealer.**
  - **Do not touch the technical standards compliance mark stamped on the main body of the radar sensors.**

Refer to page
10-143 Interior Maintenance

NOTE

[Manual transmission models]

- If the engine speed drops extremely, this function may stop temporarily. After stopping, the function resumes after a few seconds.

When There is a Problem in the ADAS

The following ADAS stop operating if the camera temporarily stops or has a problem.

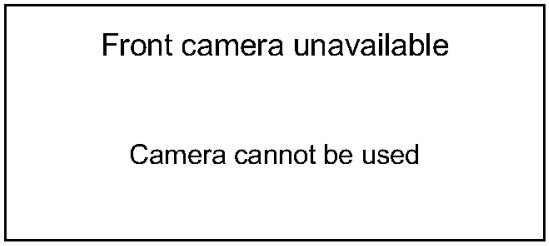
- Advanced emergency braking system (AEBS) [V]
- Following distance warning [V]
- Preceding vehicle departure notification function [V]
- Mis-acceleration mitigation system [V]
- Adaptive cruise control [V]
- Full speed range adaptive cruise control [V]
- Traffic sign recognition system [V]
- Intelligent speed limiter [V]
- Lane departure warning system (LDWS) [V]

• Attention assist [V]

Next, the ADAS stops operating when the radar sensors stop temporarily or are abnormal.
• Blind spot monitor [V]

If the cameras or radar sensors have an abnormality or stop temporarily, the following indicators appear on the multi-information display.

Front Camera Unavailable Warning



This message appears on the multi-information display and the camera temporarily stops in the following conditions.

[Conditions under which displayed]
• The camera lenses are dirty.
• The windshield (inside and/or outside) is dirty.
• The front side of the camera is blocked by an object.
• The camera is too hot or too cold.
• The power supply voltage of the camera system is low.

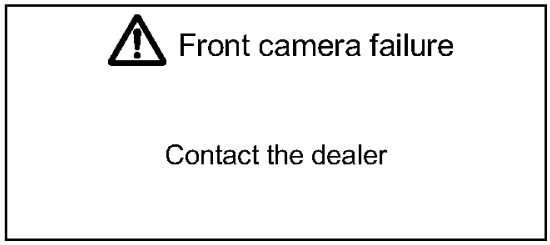
[Take this action]
• Do not attempt to clean the camera lenses. Contact your nearest Isuzu Dealer.
• Clean the windshield (inside and/or outside).
• Remove the object blocking the camera view.
• Wait until the camera reaches its operating temperature.
• Wait until the supply voltage reaches the voltage that enables the camera to operate.

If this message is displayed on the multi-information display, even after taking the above measures, immediately have the vehicle inspected/serviced at the nearest Isuzu Dealer.

NOTE

- Under circumstances where it is difficult for the camera to obtain parallax images (e.g. in the dark, backlight, strong sunlight, rain, snow, fog), the "Front camera unavailable" warning message may be displayed.
- When driving on snow covered roads, "Front camera unavailable" will be shown in the multi-information display when the windshield has been blocked by snow. However, this does not indicate a failure.
- In the following conditions, even when the camera is temporarily halted, the "Front camera unavailable" message may not be displayed:
  - The vehicle speed is 15 km/h (9 MPH) or less
  - The movement of the target cannot be recognized during a turn
  - It is hard to recognize the target due to poor visibility caused by rain, snow, or other similar reasons at a vehicle speed of 15 km/h (9 MPH) or more

Front Camera Failure Warning

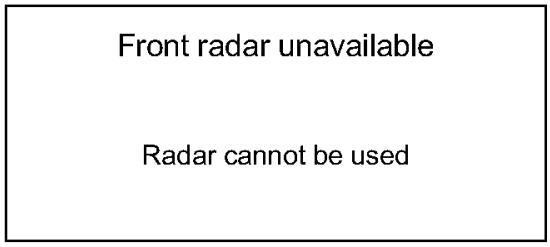


When the camera system malfunctions, this message appears on the multi-information display.

[Conditions under which displayed]
The system has malfunctioned.

[Take this action]
Contact your nearest Isuzu Dealer.

Radar Unavailable Warning [V]



This message appears on the multi-information display and the radar sensors temporarily stop in the following conditions. "Front/Right/Left radar unavailable" appears according to the location of the radar sensor that has a problem.

[Conditions under which displayed]
The temperature around the radar sensors becomes extremely high.

[Take this action]
Wait until the radar sensors reach a temperature at which they can be used.

If this message is displayed on the multi-information display, even after taking the above measures, immediately have the vehicle inspected/serviced at the nearest Isuzu Dealer.

Radar Failure Warning [V]



This message appears on the multi-information display if the radar sensor system malfunctions.
"Front/Right/Left radar failure" appears according to the location of the radar sensor that has a problem.

[Conditions under which displayed]
- The system has malfunctioned.
- The battery voltage is below or above specifications.

[Take this action]
Check whether the battery voltage is normal.

If the display does not turn off even though conditions are normal, immediately have the vehicle inspected/serviced at the nearest Isuzu Dealer.

Radar is Blocked Warning [V]



This message appears on the multi-information display in the following conditions.
"Front/Right/Left radar is blocked" appears according to the location of the radar sensor that has a problem.

[Conditions under which displayed]
- The front, left, or right radar sensor is dirty.
- Driving on snow covered roads or in an environment where there is nothing around for a long time

[Take this action]
Wipe any dirt, water droplets, or snow from the radar sensor.

If this message is displayed on the multi-information display, even after taking the above measures, immediately have the vehicle inspected/serviced at the nearest Isuzu Dealer.

Master Warning Light



Refer to page
3-41 Master Warning Light

Advanced Emergency Braking System (AEBS) [V]

This system autonomously applies the brakes when the camera detects objects (mostly other vehicles) in the forward direction with which your vehicle could possibly collide to mitigate the damage caused by the collision.

Refer to page
5-6 Precautions for ADAS

⚠ WARNING

- **Limits of the AEBS**
  - **Do not overly rely on the AEBS. When driving, always pay attention to your surroundings and drive safely.**
- **In order to use safely**
  - **Objects located in the forward direction may not be detected correctly or objects located on the side of the road may detected erroneously if cargo loading is performed unevenly (only on one side, only to the front or rear), if the vehicle attitude is excessively tilted, or depending upon surrounding road conditions. The AEBS may not function effectively in such circumstances.**
  - **The AEBS is not for avoiding collisions by compensating driver operation or for bringing the vehicle to a safe stop. Do not overly rely on this system and always drive safely.**
- **Consult your Isuzu Dealer when performing either of the following, as they will result in changes to the vehicle attitude and require special procedures to be taken. If the vehicle is driven without the required procedures being taken, the AEBS may not operate correctly or may malfunction.**
  - **Changing the tire sizes**
  - **Replacing leaf springs**

5-12 Advanced Driver Assistance System

CAUTION

- **In the following cases, be sure to cancel the AEBS.**
  - **When towed**
  - **When loaded to a carrier car**
  - **When using a speed tester or brake tester**
  - **The vehicle passes through a road, being in contact with a hanging banner/ flag, pendulous branches, bushes, etc.**
  - **The tire air pressure is not appropriate**
  - **Worn tires or tires with a significant difference in wear are installed**
  - **Tires that are not the designated size are installed**
  - **An object that blocks the camera's field of view is installed**
  - **Tire chains are installed**
  - **When the running of your vehicle is unstable due to an accident or a malfunction**
- **In the case of NPS/NQS models for Australia and New Zealand, the AEBS will not function when the transfer gear control switch is set to "LOW" range in 4WD mode.**

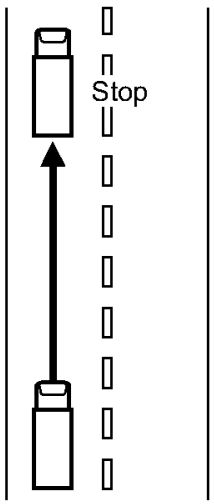
NOTE

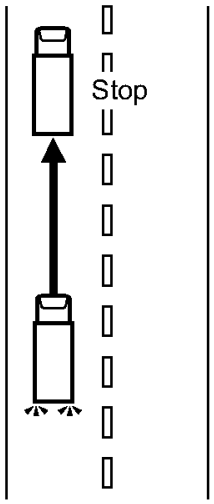
- AEBS stands for "Advanced Emergency Braking System".

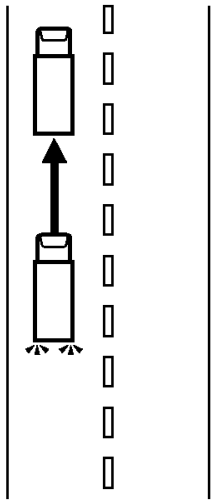
Operation of the AEBS

AEBS operation flow is shown below.

Operation When Going Straight

1. Driver attention alert	
AEBS detects obstacles located in the forward direction and sounds a warning to alert the driver.	
Multi-information display ⚠ Warning Brake!	
Warning Buzzer Short, repeated beeps	
Brake Lamps Off	

2. Warning brake activation (Model for Australia, New Zealand and Hong Kong (GVW 8,000 kg [17,640 lb] or more))	
AEBS automatically operates the brake gently when the relative speed is 50 km/h (31 MPH) or more, the distance between the vehicles becomes even shorter, and it determines that there is a high chance of a collision.	
Multi-information display Brake! ⚠	
Warning Buzzer Short, repeated beeps	
Brake Lamps Come on	

3. Autonomous brake	
AEBS determines that there is a strong possibility of collision due a further decrease in following distance and autonomously operates the brakes.	
Multi-information display Brake! ⚠	
Warning Buzzer Rapidly repeated beep	
Brake Lamps Come on	

⚠ CAUTION

- **If a warning is issued when you try to overtake a vehicle in the forward direction, you must not further reduce the distance from the vehicle; otherwise, the emergency brakes may be applied.**

NOTE

- You may hear a noise while the AEBS is operating. This is caused by controlling and does not indicate a malfunction.

Operating Conditions of the AEBS

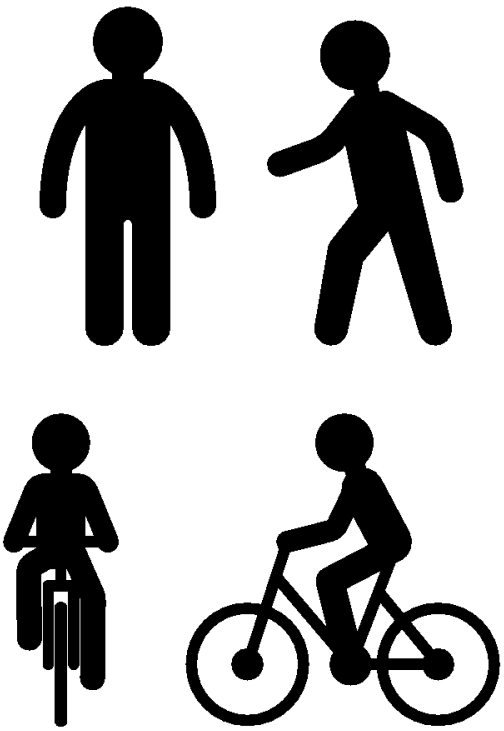
Operating Conditions When Going Straight

When going straight, all of the following conditions must be met for the AEBS to operate:

- The starter switch is in the "ON" position.
- The AEBS setting is not off.
- The vehicle is traveling in the forward direction at a speed of approximately 10 km/h (6 MPH) or more.
- "Front camera failure" and "Front camera unavailable" are not shown in the multi-information display.
- The AEBS OFF indicator light is not on.
- The transfer gear control switch is placed in the "HIGH" position.(NPS/NQS models)

Refer to page
5-16 Setting the AEBS
5-18 When the AEBS May Not Operate Correctly

Recognizing Pedestrians and Bicycles



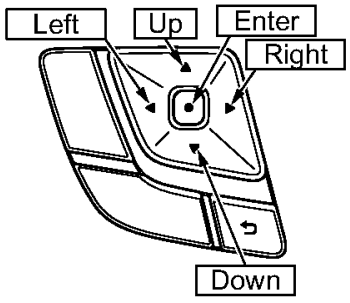
The AEBS recognizes pedestrians and bicycles based on their size, form, and movement.
Recognition is only possible when the contours of the pedestrian's head and shoulders are clear, and the right-left balance is symmetrical.

⚠ WARNING

- **The AEBS cannot always recognize pedestrians or people riding bicycles. In the following situations, it may not recognize pedestrians or bicycles.**
  - **When a pedestrian is walking in a group.**
  - **When a pedestrian/bicycle rider is near a wall or another obstacle.**
  - **When a pedestrian/bicycle rider is holding an umbrella or something similar.**
  - **When the color of the pedestrian's/bicycle rider's clothes is similar to the background and they blend into the landscape.**
  - **When a pedestrian is carrying large luggage.**
  - **When a pedestrian is slouching, crouching, or lying down.**
  - **When a pedestrian/bicycle rider is in a dark place.**
  - **When a pedestrian runs out from the side.**
  - **When the bicycle is a special shape, such as a child's bicycle, is carrying a large load, or is carrying multiple people**
  - **When the pedestrian's/bicycle's height is less than 1 m (3 ft) or more than 2 m (6 ft)**
  - **When the outline of a pedestrian's/bicycle rider's body is vague, such as when the pedestrian/rider is wearing a raincoat or long skirt**
  - **When a pedestrian/bicycle rider is moving very fast**
  - **When a pedestrian is pushing a stroller, wheelchair, bicycle, etc.**

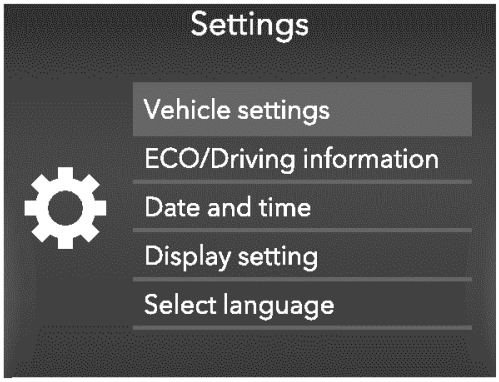
Setting the AEBS

Turning On and Off the AEBS



1. Press "Left" or "Right" on the multi-information display switch to switch the screen and display the settings screen. If a message to the driver is displayed, press "Enter" to return to the normal screen, and then switch to the settings screen.

Refer to page
3-48 Main Display Area



2. On the setting screen, select in order, "Vehicle settings" → "Driver assist functions in front" → "Advanced Emergency Brake".
3. Press the "Up" or "Down" of multi-information display switches to select ON/OFF, and then confirm by pressing "Enter".

NOTE

- The AEBS will always turn on after the engine is started.

AEBS OFF Indicator Light



The indicator light comes on when the AEBS is set to off. Also, it comes on if the AEBS stops due to an AEBS malfunction.

NOTE

- After the engine stops due to engine stalling, it is not abnormal if the AEBS OFF indicator light comes on momentarily when the engine is restarted.

Stopping or Automatic Deactivation of AEBS Operation

The AEBS will not operate or will be automatically deactivated under the following conditions. At this time, the system will not operate even when the possibility of a collision occurring exists.

- When the turn signal switch is operated (except when turning right or left in an intersection or during emergency braking)
- When accelerator pedal is released and then depressed forcefully
- When the brake pedal is depressed (excluding when the emergency brake is applied)
- When an AEBS abnormality is detected
- For approximately 10 seconds after the engine is started
- When the AEBS operates 3 times by the time the engine is turned off after the engine is started
- When the transfer gear control switch is placed in the "LOW" position (NPS/NQS models for Australia and New Zealand)

5-18 Advanced Driver Assistance System

NOTE

- If the AEBS operates 3 times after the engine is started and then automatically deactivates, "Front camera unavailable" will be displayed on the multi-information display. When the engine is restarted, the AEBS turns on.

When the AEBS May Not Operate Correctly

The AEBS is one of the advanced driver assistance systems. It may not operate correctly if the system has a problem. Also, it cannot always recognize pedestrians and bicycles.

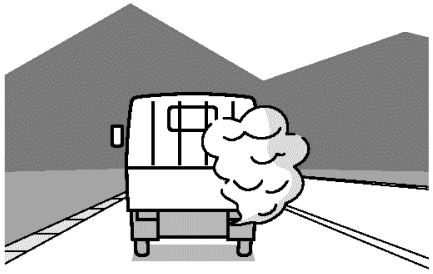
Refer to page
5-7 When There is a Problem in the ADAS
5-15 Recognizing Pedestrians and Bicycles

In the following situations, the AEBS may not operate normally.

- When driving on sharp curves or undulating roads
- When driving slippery roads that are icy or snow covered
- When pedestrians suddenly run out into the street
- When other vehicles suddenly cut in front of your vehicle
- When obstacles located in the forward direction are difficult to detect due to bad weather (rainstorms, blizzards, snow)
- When vehicle movement is unstable (skidding, etc.)
- When the steering wheel is turned sharply
- When the condition of the suspension is abnormal
- When the headlight is not illuminating at night or in a tunnel
- When the taillight of the vehicle in the forward direction does not illuminate at night or in a tunnel
- When a vehicle or pedestrian is outside of illumination range of the headlight
- When receiving strong light (reflective light such as sunlight, and high beam) from the front
- It is difficult to recognize the rear most surface of the vehicle ahead (a truck with no load (no side or rear gates), a load sticking out, a low vehicle height, a special shape, etc.)
- When the camera is partially covered with snow or other similar substances, if the covered area is narrow, the camera may not recognize that it is covered. In this case, the camera cannot capture or recognize the image of the covered area.

In the following situations, the AEBS may operate even when there is no possibility of collision.

- When the vehicle suddenly comes in close proximity to another vehicle in the forward direction
- When a vehicle traveling in a straight line comes to a curve or turn in which an obstacle is located in the forward direction
- When the vehicle is turning at an intersection, etc., and comes in close proximity with an opposing vehicle
- When the existence of a road shoulder is minimal and the vehicle is driven in close proximity with structures such as a guard railing or windbreak wall
- When passing through narrow tunnels, under railway bridges or overpasses, or when going through highway toll stations
- When the condition of the suspension is abnormal
- When driving the vehicle onto a ferry or on a ship
- When driving on a road where the inclination changes steeply
- During a heavy snow or blizzard
- When passing through vapor or smoke
- When the exhaust gases of the vehicles in the forward direction are clearly visible such as when cold



In the following situations, sufficient braking power may not be possible and the system may not be fully effective.

- When braking force is insufficient because the brake parts are extremely cold, hot, wet, etc.
- When the maintenance conditions of the vehicle are not good, such as worn brake parts and/or tires, and low tire air pressure
- When driving on slippery road surfaces or gravel roads
- When the intersection has a special shape

Following Distance Warning [V]

This system measures the distance to the preceding vehicle on the same lane using cameras, and alerts the driver with a warning buzzer and multi-information displays when the vehicle gets too close to the preceding vehicle.

Refer to page
5-6 Precautions for ADAS

⚠ WARNING

- **The following distance warning aims at reducing the mental burden of drivers, and is not a device to avoid collisions that requires applying emergency brakes. When driving, always pay attention to your surroundings and drive safely.**

Operation of the Following Distance Warning

i Attention

Keep distance
from Preceding Vehicle

The following distance warning starts operating at the previously set volume and warning distance when the vehicle starts being driven, and then continues operating while the vehicle is driven.
When the vehicle is approaching a preceding vehicle and the driver needs to operate the brakes, "Attention" is displayed on the multi-information display and three short beeps.

⚠ CAUTION

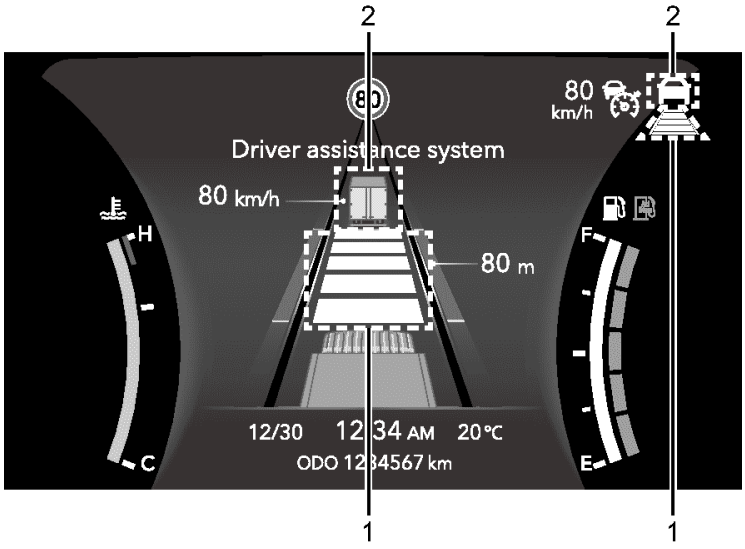
- **If a warning is issued when you try to overtake the vehicle in front of you, you must not get any closer to that vehicle. Otherwise, the emergency brakes may be applied.**
- **The following distance warning is not displayed and the warning does not sound in the following situations.**
  - **When the brake pedal is depressed**
  - **While your own vehicle is stopped**
  - **When the preceding vehicle is driving toward your own vehicle**
  - **When the following distance is too far and the preceding vehicle cannot be identified**
  - **When your own vehicle is not approaching the preceding vehicle**
  - **When driving on sharp curves**
  - **When your own vehicle is being reversed**

Refer to page
5-24 When the Following Distance Warning May Not Operate Correctly

Following Distance Warning Warnings/Indicators

Details of Following Distance Warning on Multi-information Display

You can check the display of the main display area when "Advanced driver assistance systems display" is selected.



No.	Name	Display details
1	Following distance to preceding vehicle	This displays the following distance to the preceding vehicle.
2	Preceding vehicle detection status	This displays the detection status of the preceding vehicle.

When the following distance warning is operating, the following is shown on the multi-information display according to the conditions.

Name	Multi-information display		Display details
	Main display area	Drive assist display area	
Following distance warning in operation [vehicle located in forward direction]	—		Following distance warning operation when a vehicle is detected in the forward direction

Name	Multi-information display		Display details
	Main display area	Drive assist display area	
Following distance warning in operation [no vehicle located in forward direction]	—		Following distance warning operation when no vehicle is detected in the forward direction
Following distance warning	Attention Keep distance from Preceding Vehicle		When the following distance with vehicles in the forward direction is too short

Buzzer Sounds during Following Distance Warnings

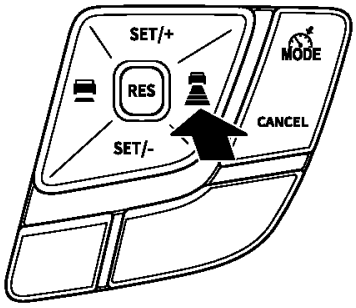
During following distance warnings, the following buzzers will sound from the instrument.

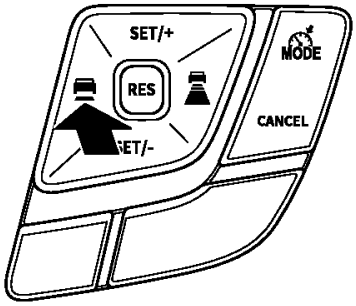
Name	Warning buzzer	Condition
Operation refusal sound	Two short beeps	Requested operation could not be made
Operation sound	One short beep	Requested operation was made
Failure sound	Two short beeps	A device abnormality was detected
Following distance warning	Three short beeps	A following distance warning was issued

Setting the Following Distance

When Setting the Desired Following Distance

Following distance setting switch





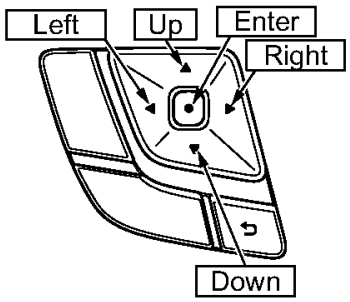
The following distance can be adjusted by pressing the side of the following distance switch (to increase the following distance) or the side (to decrease the following distance), either the closer side or farther side can be pressed.

NOTE

- When the following distance setting switch is operated, a short beep sound can be heard.
- If the following distance is at the minimum and you operate the side, or if the following distance setting is at the maximum and you operate the side, rather than the normal switch operation sound, the operation rejected buzzer sounds.
- Following distance at which the warning sounds may vary depending on differences in speed with the vehicle in the forward direction.
- After the engine has been started, following distance warning has the same settings as when the starter switch was last set to the "LOCK" position.

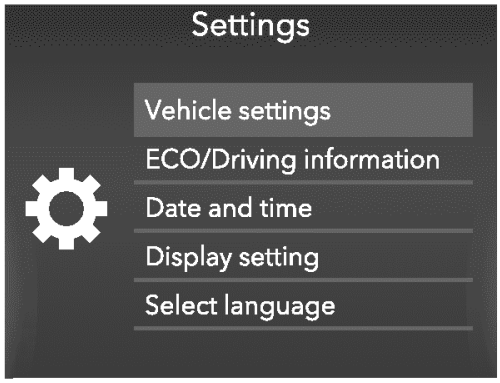
Adjusting the Following Distance Warning Volume

From the "Vehicle settings" screen on the multi-information display, you can adjust the volume of the following distance warning.



1. Press "Left" or "Right" on the multi-information display switch to switch the screen and display the settings screen. If a message to the driver is displayed, press "Enter" to return to the normal screen, and then switch to the settings screen.

Refer to page
3-48 Main Display Area



2. On the setting screen, select in order, "Vehicle settings" → "Driver assist functions in front" → "Following distance warning" → "Volume settings".
3. Press the "Up" or "Down" multi-information display switches, and then confirm by pressing "Enter". The volume can be adjusted to 4 levels, "Mute" (no sound), "Low", "Medium", and "High".

NOTE

- When the warning volume is set to "Mute" and the cruise control , adaptive cruise control or full speed range adaptive cruise control is activated, the warning volume changes to "High".

When the Following Distance Warning May Not Operate Correctly

The following distance warning is one of the advanced driver assistance systems. It may not operate correctly if the system has a problem.

Refer to page
5-7 When There is a Problem in the ADAS

Blind Spot Monitor (BSM) [V]

The blind spot monitor is a system that uses radar sensors to inform the driver of the presence of nearby moving objects to help check around the vehicle when starting or stopping, when turning right or left, and when entering an intersection.
The BSM indicator lights on the front pillars, a warning buzzer, and multi-information display alert the driver according to how the moving object is approaching.

Refer to page
5-6 Precautions for ADAS

WARNING

- **This system helps the driver check around the vehicle. It does not judge whether to turn left or right, or to enter an intersection, it does not avoid contact with vehicles or obstacles. Do not overly rely on this system and always drive safely.**
- **Because the system may not operate, depending on the situation, always visually check areas to the rear, ahead, on the sides, and other surrounding areas for safety when driving the vehicle. To rely entirely on the system may cause a serious accident.**

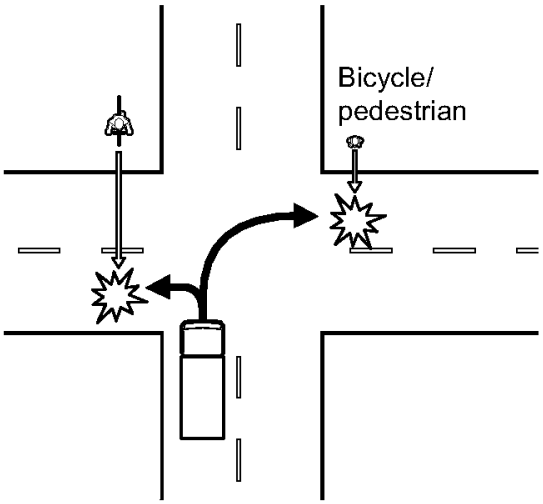
NOTE

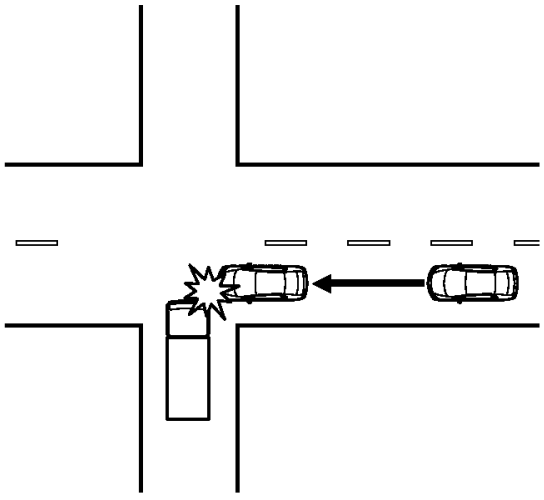
- BSM stands for "Blind Spot Monitor".

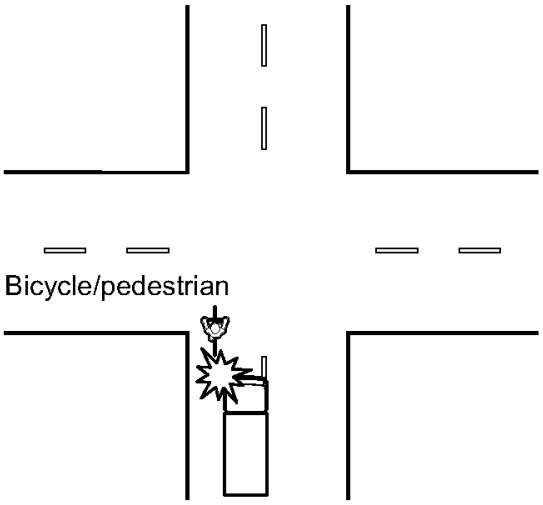
Operation of the Blind Spot Monitor

Operational Flow of Blind Spot Monitor

This shows the operational flow and warnings for the blind spot monitor.

1. Intersection warning (when turning right or left)	
When turning left or right at an intersection, the driver is warned to prevent a collision with pedestrians and bicycles approaching from the right and left.	
	**Object of warning** Bicycles and pedestrians **Own vehicle's speed** About 4 to 22 km/h (2.5 to 13 MPH) **Speed subject to warnings** About 5 to 20 km/h (3 to 12 MPH)

2. Intersection warning (when encountering a vehicle)	
At intersections with poor visibility, the driver is warned to prevent a collision with vehicles approaching from the left or right.	
	**Object of warning** Motorcycles and automobiles **Own vehicle's speed** About 0 to 10 km/h (0 to 6 MPH) **Speed subject to warnings** About 20 to 60 km/h (12 to 37 MPH)

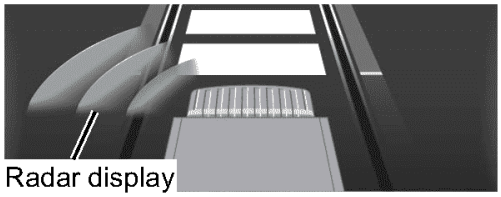
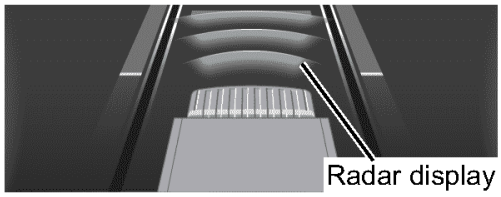
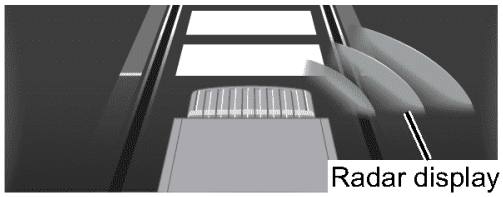
3. Front blind spot monitor [V]	
The driver is warned to prevent a collision with pedestrians and bicycles approaching from a blind corner.	
	**Object of warning** Bicycles and pedestrians **Own vehicle's speed** 0 to 10 km/h (0 to 6 MPH) **Speed subject to warnings** Bicycle: 0 to 10 km/h (0 to 6 MPH) Pedestrian: 3 to 5 km/h (1.8 to 3 MPH)

NOTE

- Blind spot monitor does not warn against stationary objects. (Only the front blind spot monitor issues warnings for stationary objects.)
- Blind spot monitor does not issue warnings while reversing.

Details of Blind Spot Monitor on Multi-information Display

The following is shown on the multi-information display when the blind spot monitor is operating.

Multi-information display	Details
 Radar display	When the object of warning is to the front left
 Radar display	When the object of warning is to the front
 Radar display	When the object of warning is to the front right

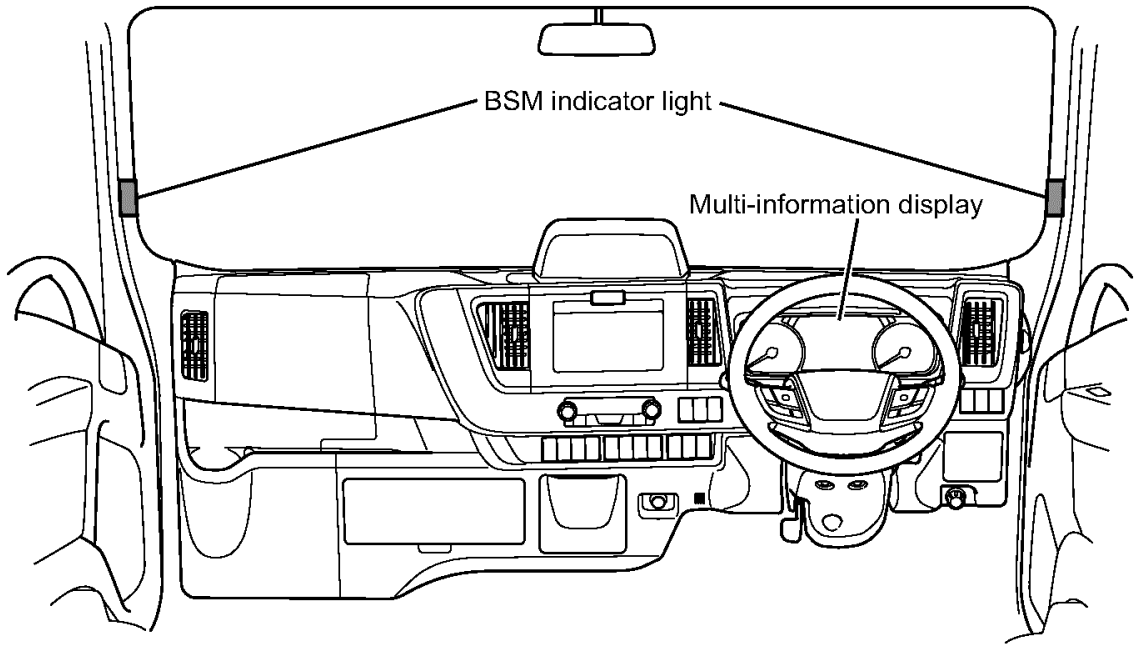
When the radar sensors detect a moving object, the radar display (amber) is displayed. If the risk of a collision increases, the warning is by the radar display (red).

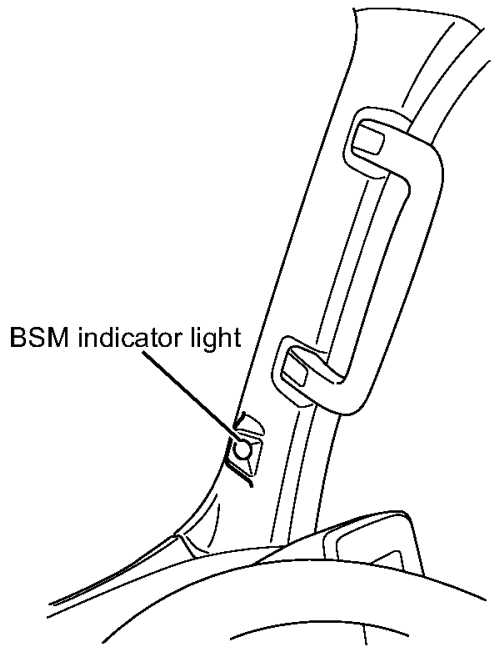
NOTE

- When the blind spot monitor operates, the screen displayed in the main display area of the multi-information display automatically changes to the radar display.

BSM Indicator Light

When the radar sensors detect vehicles in the detection area, the BSM indicator lights come on. If the risk of a collision increases more, the BSM indicator lights flash and a warning sounds at the same time.
The BSM indicator lights are installed on the left and right front pillars and they come on according to the position and direction of the moving object.





NOTE

- In the following situations, the BSM indicator lights may be difficult to see.
  - When in strong sunlight
  - When the headlights of the vehicle behind are shining on them
- The BSM indicator lights do not turn when the moving object is to the front.

Blind Spot Monitor Warning Buzzer

The following warnings are sounded when the blind spot monitor is activated.

Name	Warning buzzer	Details
Blind spot monitor warning	Three short beeps	When there is a high possibility of collision

Operating Conditions of the Blind Spot Monitor

All of the following conditions must be met for operation.

- The starter switch is in the "ON" position.
- The BSM OFF indicator light is not on.
- The front blind spot monitor off indicator light is not on.

NOTE

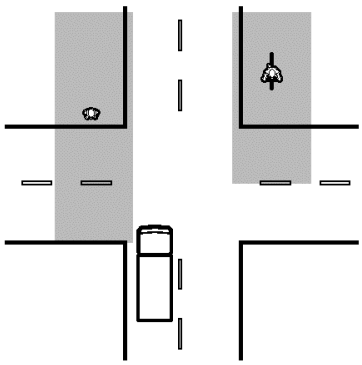
- If the detection function of the radar sensors is reduced, the system temporarily stops operating and the BSM OFF indicator light and front blind spot monitor off indicator light turn on. If conditions improve, but they do not turn off, contact the nearest Isuzu Dealer.

Refer to page
5-34 When the Blind Spot Monitor Does Not Operate Normally

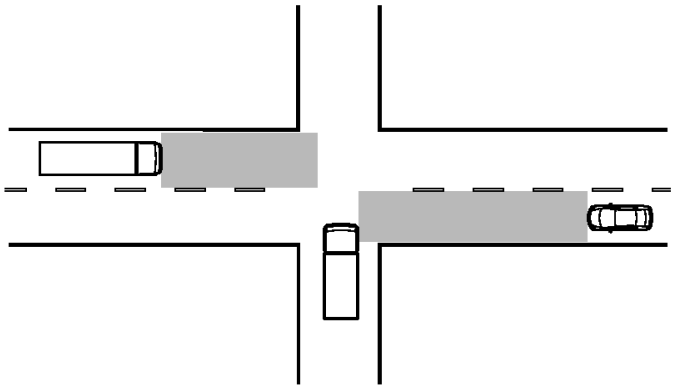
Radar Sensor Detection Range

The radar sensors detect moving objects in the areas shown in the following figure.

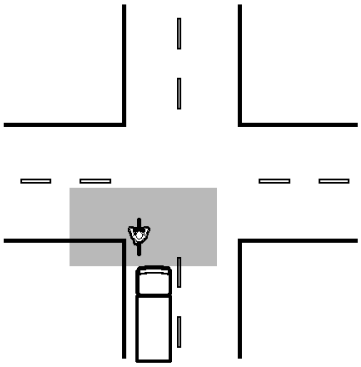
When turning right or left at an intersection



When going straight through an intersection



When pulling away



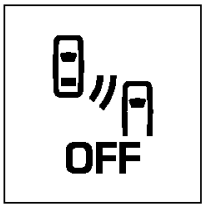
Details of Blind Spot Monitor on Multi-information Display

Refer to page
5-28 Details of Blind Spot Monitor on Multi-information Display

BSM Indicator Light

Refer to page
5-29 BSM Indicator Light

BSM OFF Indicator Light



The indicator light comes on when the blind spot monitor is abnormal.
If the light does not go off or does not come on even when the starter switch is in the "ON" position, contact your nearest Isuzu Dealer.

Front Blind Spot Monitor Off Indicator Light



The indicator light comes on when the forward warning is canceled or the blind spot monitor is abnormal.
When this light does not turn off, when the light turns on without deactivating the forward warning function, or when the light does not come on even though the starter switch is put in the "ON" position, contact the nearest Isuzu Dealer.

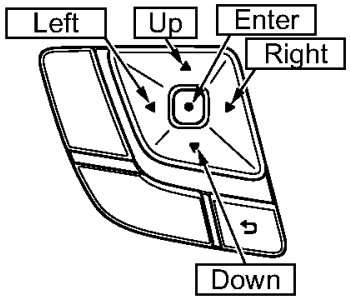
Turning On and Off the Blind Spot Monitor Function

NOTE

- Blind spot monitor will always turn on after the engine is started.
- In the following cases, the system temporarily stops operating and the BSM OFF indicator light and front blind spot monitor off indicator light turn on. If conditions improve, but the BSM OFF indicator light and the front blind spot monitor off indicator light still do not turn off, contact the nearest Isuzu Dealer.
  - When there is excessive snow, ice, or mud on the corner panel near the radar sensor or on the radar sensor cover
  - When driving on snow covered roads or in an environment where there is nothing around for a long time
  - When the radar sensor mounting positions have shifted significantly

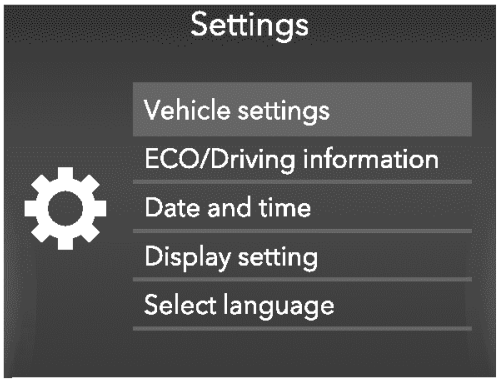
Turning On and Off the Intersection Warning [V]

From the "Vehicle settings" screen on the multi-information display, you can switch the warning function of the intersection warning between on and off. When the warning function is off, the BSM indicator light does not flash, the warning buzzer does not sound, and there is no warning from the radar display (red) on the multi-information display even if the possibility of a collision increases.



1. Press "Left" or "Right" on the multi-information display switch to switch the screen and display the settings screen. If a message to the driver is displayed, press "Enter" to return to the normal screen, and then switch to the settings screen.

Refer to page
3-48 Main Display Area



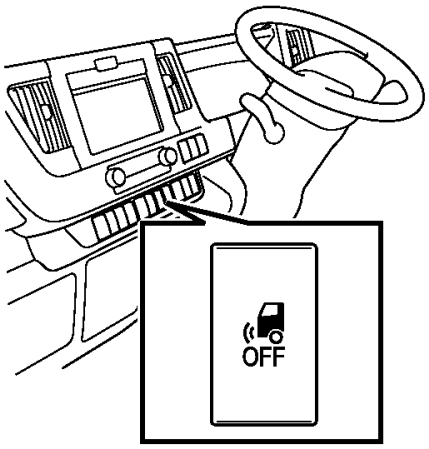
2. On the setting screen, select in order, "Vehicle settings" → "Driver assist functions for side" → "Intersection warning".
3. Press "Up" or "Down" to switch the warning function of the intersection warning between ON/OFF. Press "Enter" to select.

NOTE

- When the system temporarily stops operations, the multi-information display may not be able to switch on and off.
- Even if the warning function is off, when the radar sensors detect a moving object in the detection area, the BSM indicator lights come on and radar display on the multi-information display (amber) notifies the driver.

Turning On and Off the Front Blind Spot Monitor [V]

Front blind spot monitor off switch



Press and hold (about 1 second) the front blind spot monitor off switch to turn off the forward warning. At this time, the front blind spot monitor off indicator light turns on.
To turn it on, briefly press the front blind spot monitor off switch. At this time, the front blind spot monitor off indicator light turns off.

Front blind spot monitor off indicator light



When the Blind Spot Monitor Does Not Operate Normally

The blind spot monitor is one part of the advanced driver assistance systems. It does not operate normally if there is a system abnormality.

Refer to page
5-7 When There is a Problem in the ADAS

In the following situations, the detection function of the radar sensors may be reduced and the blind spot monitor may not operate properly.

- When a strong impact applied to the radar sensors or around the radar sensors misaligns the position or direction of the radar sensors
- When parts near the radar sensors are deformed or damaged
- When mud, snow, ice, and/or other similar substances are on the radar sensors or around the radar sensors
- When weather conditions are bad (rain, fog, snow, etc.)
- When the temperature around the radar sensors becomes extremely high
- When the vehicle is steeply inclined
- When there is a height difference between your vehicle and objects in the detection area
- When driving on steep slopes
- When the battery voltage is below or above specifications
- When the radar sensors or radar sensor covers have been painted
- When the size of the tires has been changed
- When driving on slippery road surfaces, such as icy or snowy roads
- When radio interference is received from a radio source, such as radar sensors installed in adjacent vehicles

The radar sensors may not detect or may find it difficult to detect the following objects, even though they are within the detection range.

- Vehicles whose shapes do not effectively reflect the radar sensors' radio waves (sports cars etc.)
- Pedestrians, bicycles, motorcycles, or automobiles in the detection range that are driving at approximately the same speed as your vehicle
- Obstacles or pedestrians, bicycles, motorcycles, or vehicles rushing out from the side of the road

In the following situations, the blind spot monitor may be activated even though there is no risk of collision.

- When driving beside traffic signs or parked cars
- When there is a guardrail, concrete wall, or fence close to your vehicle
- When an object heading on a course that intersects that of your vehicle decelerates and stops
- When your vehicle is stopped and an object is turning toward your vehicle
- When approaching a preceding vehicle and the radar sensor mistakes the preceding vehicle for a bicycle
- When approaching a structure on the side of the road as you are turning right or left at an intersection

Preceding Vehicle Departure Notification Function [V]

The preceding vehicle departure notification function notifies the driver with warning buzzers and an indication on the multi-information display if the own vehicle remains stopped after the preceding vehicle has departed. When the vehicle stopped after the preceding vehicle stopped (the distance to the preceding vehicle is approximately 14 meters or less, and your vehicle has been stopped for a certain period of time), the system continues to recognize the preceding vehicle. Then if the preceding vehicle moves forward for approximately 5 meters or more but your vehicle does not start off, this function operates.

Refer to page
5-6 Precautions for ADAS

⚠ WARNING

- **Limitation in preceding vehicle departure notification function**
  - **Do not rely entirely on the preceding vehicle departure notification function. When starting off the vehicle, be sure to carefully check the safety in the surrounding area.**
- **The preceding vehicle departure notification function does not include the function to recognize the traffic lights and road signs. Follow the indication of the traffic lights and road signs for safe driving.**

Operation of the Preceding Vehicle Departure Notification Function

Preceding vehicle departure notification

Preceding vehicle start

When not driving with full speed range adaptive cruise control

When the preceding vehicle moved forward for approximately 5 m but your vehicle does not start off, "Preceding vehicle start" is displayed on the multi-information display and the one short beeps.

When driving with full speed range adaptive cruise control

After following and then stopping behind a preceding vehicle, when the preceding vehicle pulls away, "Preceding vehicle start" is displayed on the multi-information display and the one short beeps. Press the resume switch or depress the accelerator pedal to pull away.

Refer to page
5-40 When the Preceding Vehicle Departure Notification Function May Not Operate Correctly
5-67 To start off the vehicle again after stopping following the preceding vehicle

Preceding Vehicle Departure Notification Function Warnings/ Indicators

Details of Preceding Vehicle Departure Notification Function on Multi-information Display

When the preceding vehicle departure notification function is operating, the following is shown on the multi-information display.

Name	Multi-information display		Display details
	Main display area	Drive assist display area*	
Preceding vehicle not detected	—		When the preceding vehicle is not detected
Preceding vehicle detected	—		When the preceding vehicle is detected
Preceding vehicle pulling away	Preceding vehicle start		When the vehicle is at a standstill and then the preceding vehicle has departed but the vehicle does not depart

*: The preceding vehicle icon is displayed only during adaptive cruise control, full speed range adaptive cruise control, following distance warning, or while AEBS is operating.

NOTE

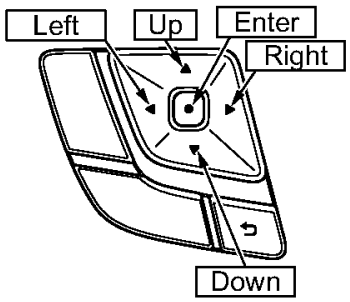
- A buzzer sounds when the preceding vehicle is not detected and when detected. The timing of the buzzer sounding can be changed on the multi-information display.

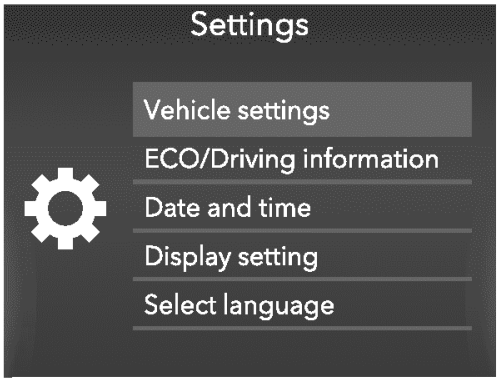
Refer to page
5-39 Setting the Timing of the Preceding Vehicle Detection Sound

Setting of Preceding Vehicle Departure Notification Function

Turning On and Off the Preceding Vehicle Departure Notification Function

The preceding vehicle departure notification function can be turned on and off using the multi-information display switch.





1. Press "Left" or "Right" on the multi-information display switch to switch the screen and display the settings screen. If a message to the driver is displayed, press "Enter" to return to the normal screen, and then switch to the settings screen.

Refer to page
3-48 Main Display Area

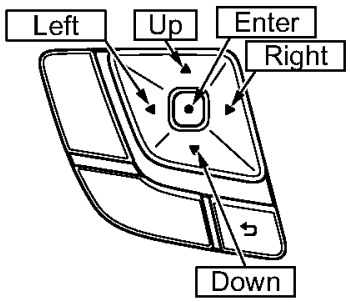
2. On the setting screen, select in order, "Vehicle settings" → "Driver assist functions in front" → "Preceding vehicle informations" → "Vehicle start information".
3. Press the "Up" or "Down" of multi-information display switches to select ON/OFF, and then confirm by pressing "Enter".

NOTE

- After starting the engine, the setting of the preceding vehicle departure notification function will be the same as when the starter switch was previously set to the "LOCK" position.

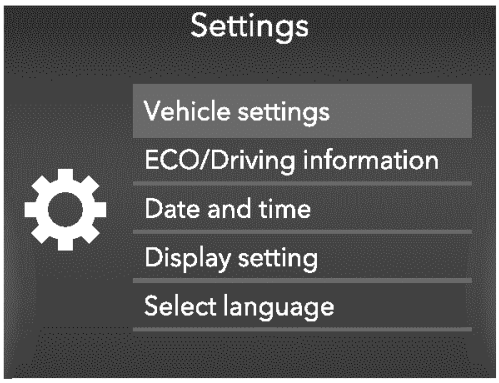
Setting the Timing of the Preceding Vehicle Detection Sound

You can set the preceding vehicle detection sound by using the multi-information display switch.



1. Press "Left" or "Right" on the multi-information display switch to switch the screen and display the settings screen. If a message to the driver is displayed, press "Enter" to return to the normal screen, and then switch to the settings screen.

Refer to page
3-48 Main Display Area



2. On the setting screen, select in order, "Vehicle settings" → "Driver assist functions in front" → "Preceding vehicle informations" → "Vehicle detection sound".
3. Press the "Up" or "Down" multi-information display switches to select the settings "OFF", "detected", and "detected & lost", and then confirm by pressing "Enter".

Operation Stop and Automatic Deactivation of Preceding Vehicle Departure Notification Function

The preceding vehicle departure notification function does not operate or is automatically deactivated under the following conditions. At this time, the system does not operate even when the preceding vehicle departed.

- When the preceding vehicle departure notification function has been canceled on the setting screen of the multi-information display

- When the gearshift lever is moved to the "R" position
- When the parking brake is engaged
- When the driver depresses the accelerator pedal or shifts into gear to pull away

When the Preceding Vehicle Departure Notification Function May Not Operate Correctly

The preceding vehicle departure notification function is one of the advanced driver assistance systems. It may not operate correctly if the system has a problem.

Refer to page
5-7 When There is a Problem in the ADAS

In the following cases, the function may operate even though the preceding vehicle is not starting off, or may not operate even though the preceding vehicle is starting off.

- When a motor bike or the like cuts in between the your vehicle and the preceding vehicle
- When the preceding vehicle is difficult to detect due to severe weather (such as rainstorms, blizzards, or snow)
- When driving through a sharp curve or a road with ups and downs
- When the stereo camera stopped recognizing the preceding vehicle

Mis-Acceleration Mitigation System [V]

When the system determines the accelerator pedal is depressed more than needed, such as by accident, while the vehicle is stopped and recognizes an obstacle in front of the vehicle, the system restricts engine output so that the vehicle starts moving slowly, which mitigates collision damage. It does not operate on steep slopes.

Refer to page
5-6 Precautions for ADAS

⚠ WARNING

- **Limits of the Mis-Acceleration Mitigation System**
  - **Do not rely entirely on the mis-acceleration mitigation system. When pulling away, check the positions of the gearshift lever and pedals and the surrounding safety before operating the vehicle.**
- **The mis-acceleration mitigation system does not keep the vehicle stopped.**
- **The mis-acceleration mitigation system does not enable the vehicle to start moving slowly in all situations. Also, it is not intended to be used for avoiding collisions.**
- **The mis-acceleration mitigation system operates when an obstacle in the forward direction is recognized. It does not operate if no object can be seen, such as a cliff.**
- **Do not intentionally depress the accelerator pedal more than needed when the vehicle is near an obstacle. A collision may occur if you rely only on the mis-acceleration mitigation system to adjust the acceleration.**
- **If the vehicle is trapped within a railroad crossing, the stereo camera may recognize the boom barrier as an obstacle and the mis-acceleration mitigation system may be activated. To push the boom barrier and go forward, stay calm, and continue depressing the accelerator pedal or press the cancel switch to deactivate the mis-acceleration mitigation system operation.**
- **Do not perform the operation test of the mis-acceleration mitigation system by yourself. The mis-acceleration mitigation system may not operate depending on the surrounding situation, which may lead to an unexpected accident.**

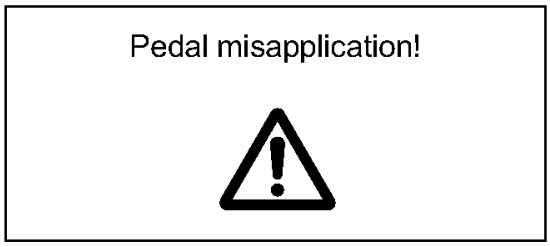
ADVICE

- Be sure to set the mis-acceleration mitigation system to off in the following cases.
  - When the vehicle is being towed
  - When the vehicle is transported by a car carrier
  - When the vehicle passes through a vinyl curtain, etc.
  - When the vehicle drives on a riverbed, in overgrown bushes or woods

Refer to page
5-43 Setting the Mis-Acceleration Mitigation System

Operation of the Mis-Acceleration Mitigation System

Pedal misapplication warning



When the system determines that the accelerator pedal is depressed more than necessary to start up the vehicle when it is stopped or driving slowly (less than 10 km/h (6 MPH)) while the camera has recognized obstacle in front of the vehicle, the system restricts the engine output.
Also, the multi-information display shows "Pedal misapplication!" and it is prioritized over other indications. At this time, the warning buzzer sounds.

Refer to page
5-45 When the Mis-Acceleration Mitigation System Does Not Operate Normally

NOTE

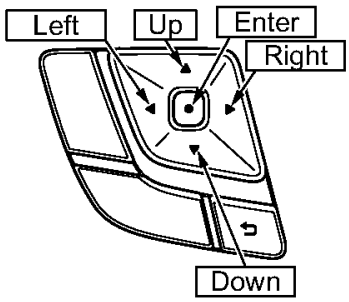
- To cancel the mis-acceleration mitigation system while it is operating, press the cancel switch.

Refer to page
5-43 Temporarily Deactivating the Mis-Acceleration Mitigation System

Setting the Mis-Acceleration Mitigation System

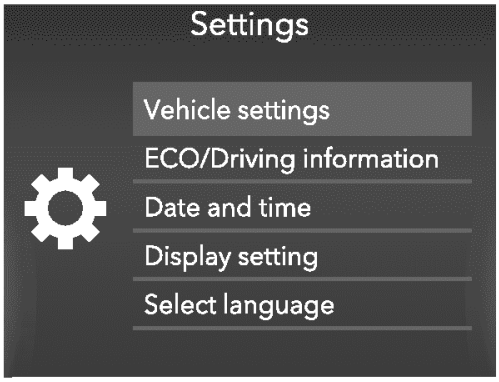
Turning On and Off the Mis-Acceleration Mitigation System

From the "Vehicle settings" screen on the multi-information display, you can switch the mis-acceleration mitigation system between on and off.



1. Press "Left" or "Right" on the multi-information display switch to switch the screen and display the settings screen. If a message to the driver is displayed, press "Enter" to return to the normal screen, and then switch to the settings screen.

Refer to page
3-48 Main Display Area

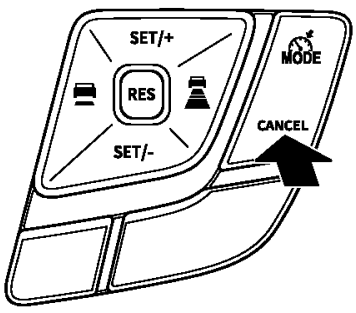


2. On the setting screen, select in order, "Vehicle settings" → "Driver assist functions in front" → "Misacceleration Mitigation".
3. Press "Up" or "Down" on the multi-information display switch to switch the mis-acceleration mitigation system between on and off. Press "Enter" to select.

NOTE

- Even if it is turned off in the vehicle settings, the mis-acceleration mitigation system is turned on again when the engine is restarted.

Temporarily Deactivating the Mis-Acceleration Mitigation System



When the mis-acceleration mitigation system is operating, pressing the cancel switch turns off the mis-acceleration mitigation system. If you continue driving while it is off, then turning off the accelerator automatically reactivates the mis-acceleration mitigation system.

⚠ CAUTION

- **The cancel switch will turn "OFF" the mis-acceleration mitigation systemonly temporarily. To keep the system "OFF" while the vehicle is operated, change the settings for the system in the multi-information display.**

Refer to page

5-43 Setting the Mis-Acceleration Mitigation System

Stopping Operation and Automatic Deactivation of Mis-Acceleration Mitigation System

The mis-acceleration mitigation system does not operate or is automatically deactivated under the following conditions. At this time, the system will not operate even when the possibility of a collision occurring exists.

- When the setting is turned off in the multi-information display
- When the cancel switch has been pressed to cancel the mis-acceleration mitigation system
- When the accelerator pedal is released
- When the turn signal switch is operated
- When the steering wheel is operated suddenly or violently
- Approximately 10 seconds after starting the engine
- When starting or driving slowly on a steep uphill or downhill slope
- When the system has malfunctioned
- When the gearshift lever is moved to the "P", "R", or "N" position

When "Acceleration suppresed" is Displayed in the Multi-information Display



In the following cases, when the mis-acceleration mitigation system is automatically canceled, the vehicle may start suddenly. To prevent this, the engine power is temporarily limited, but is gradually restored. When this happens, "Acceleration suppresed" appears on the multi-information display.

- When the system has temporarily malfunctioned
- When the accelerator pedal is depressed for 3 seconds or more

- When your vehicle speed exceeds approximately 20 km/h (12 MPH) while the system is operating
- When the preceding vehicle separates from your own vehicle
- When the preceding vehicle is gone
- When the preceding vehicle is replaced by a new preceding vehicle

When the Mis-Acceleration Mitigation System Does Not Operate Normally

The mis-acceleration mitigation system is one part of the advanced driver assistance system. It does not operate normally if there is a system abnormality.

Refer to page
5-7 When There is a Problem in the ADAS

The mis-acceleration mitigation system may not operate due to the following conditions.

- The distance between your vehicle and an obstacle, a difference between your vehicle and an obstacle in speeds or positions in the lateral direction (such as when the obstacle is not in front of your vehicle)
- Conditions for the stereo camera to recognize obstacles

In the following situations, the mis-acceleration mitigation system is very likely to not operate.

- When obstacles located in the forward direction are difficult to detect due to bad weather (such as rainstorms, blizzards, or snow)
- When visibility is not adequate due to sand or smoke
- When approaching an obstacle in the dim light of early evening or morning, or at night
- When approaching an obstacle in a dark place, such as an indoor parking lot
- When there is an obstacle outside the range of the headlights' illumination
- When the vehicle is subject to strong light from the forward direction (backlight from sunlight, high beam, etc.)
- When the windshield is foggy, or when snow, frost, dust, and/or other similar substances are on the windshield
- When there is an abnormal condition with the windshield, such as scratches or cracks
- When the windshield is not sufficiently wiped during or after using the windshield washer
- When the stereo camera cannot properly recognize an obstacle because it is blocked by raindrops, water drops from the windshield washer, or wiper blades
- When a load on the roof, such as a ladder or other long objects, blocks the stereo camera's field of view
- When the height of an obstacle is low (low walls, low guardrails, low-height vehicles, small animals, small children, etc.)
- When an obstacle is smaller than the stereo camera recognition limits for size
- A pedestrian crouching or lying down, etc.
- When the nearest surface or rear surface of an obstacle or vehicle ahead is small
- When the vehicle gets too close to an obstacle
- When the vehicle is 4 m (13 ft) or more away from an obstacle
- When the obstacle is a fence, or a wall with a uniform pattern (such as a striped pattern or bricks) or wall or shutter with no pattern, etc.
- When the obstacle is a glass/mirror wall or door, etc.
- When the obstacle, such as a vehicle, a motorcycle, a bicycle, or a pedestrian, cuts in front of your vehicle or jumps out from the side
- When your vehicle changes lanes at start-up and comes close to just behind an obstacle
- When driving on sharp curves or steep slopes
- When the vehicle is tilted due to a heavy load
- When the obstacle is shaped like a pole, such as a road sign, street light, utility pole, or tree
- When only a part of the obstacle is within the detection range of the stereo camera
- When the system determines that the driver has performed operations to avoid a collision based on the state of steering wheel operations

In the following situations, the mis-acceleration mitigation may operate even when there is no possibility of collisions.

- Before a parking lot or railway crossing barrier is completely raised up
- When passing through a cloud of water vapor or smoke
- In bad weather (such as rainstorms, blizzards, or snow)
- When there is an obstacle or vehicle at a curve or intersection

Adaptive Cruise Control [V]

This system assists driving operations by allowing the driver to drive, without depressing the accelerator pedal, at a fixed speed following a preceding vehicle. While it is operating, press and hold the mode switch to change between cruise control mode and adaptive cruise control mode.

Cruise control

The cruise control is a system that allows you to drive, maintaining a fixed speed (about 30 km/h (20 MPH) or more), without depressing the accelerator pedal. It is used on expressways where starting and stopping is rare.

Refer to page
4-157 Cruise Control [V]

Adaptive cruise control

This system uses cameras to detect the distance to and speed difference with the preceding vehicle in the same lane when the vehicle is traveling at a speed of 30 km/h (20 MPH) or more. It maintains the proper following distance, and automatically accelerates and decelerates the vehicle. In addition, when the preceding vehicle is not in the same lane, it keeps the vehicle at a set speed constantly to achieve the following effects:

- Mitigate driver's stress by reducing the necessary braking operation
- Improve the fuel efficiency by reducing the weaving of the vehicle
- Mitigate the collision accident by means of automatic following distance control, decelerating the vehicle and warning the driver.

Use this system only on expressways and controlled-access road.

Refer to page
5-6 Precautions for ADAS

⚠ WARNING

- This system is not intended to prevent collisions. Do not rely entirely on the system and drive safely.
- Adaptive cruise control is intended to assist a certain part of the driver's operation. It is not an autonomous driving system. Do not rely entirely on the system. Always drive safely.
- This system is limited due to the following mechanical restrictions. Do not overly rely on this system and always drive safely while maintaining an adequate following distance.
  - Smaller objects, such as motorcycles, may not be detected.
  - Depending on the curves in the road, steering wheel operation, or the location of the vehicle within the lane, vehicles in adjacent lanes or objects in the areas around the road may be momentarily detected.
  - On uphill or downhill slopes, vehicles in the forward direction may not be detected under certain circumstances.
  - Vehicles in the forward direction may not be correctly detected when in tunnels or if there are obstacles on the road shoulder such as sound insulation walls.
  - When the preceding vehicle is stopping at a traffic light or at the end of a line of cars in a traffic jam, the vehicle may not be detected properly.
- Do not use the system in the following situations because doing so is dangerous:
  - On roads where there is heavy traffic, such as urban areas
  - On sharp curves or steep slopes
  - In slippery road conditions, such as when the road is frozen or covered with snow
  - When it is necessary to frequently accelerate and decelerate due to traffic conditions
  - When driving repeatedly up or down steep slopes
  - When merging onto or exiting highways or when driving through toll booths
- When it is raining, foggy, snowy or in any adverse weather, the traffic conditions often change significantly. In such situations, we ask drivers to drive safely on their own. Do not use the adaptive cruise control and cruise control.

⚠ CAUTION

- In the case of NPS/NQS models for Australia and New Zealand, the adaptive cruise control will not function when the transfer gear control switch is set to "LOW" range in 4WD mode.

[Model with Speed Limit Device]

- An upper speed limit that exceeds the set speed of the speed limit device cannot be set.

Refer to page
4-215 Speed Limit Device [V]

NOTE

- The maximum speed of the vehicle varies by your country.

Operation of the Adaptive Cruise Control

Adaptive cruise control operates differently depending on whether there is a preceding vehicle.

Refer to page
5-63 When the Adaptive Cruise Control Does Not Operate Properly

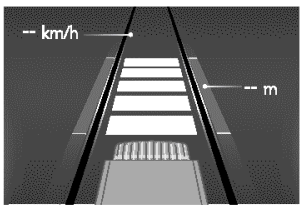
When There is No Preceding Vehicle

Cruise control icon



Without depressing the accelerator pedal, the automatic cruising is performed at the set speed.

Advanced driver assistance system designated screen

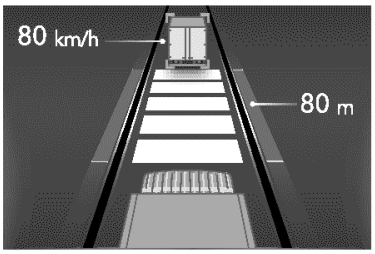


When There is a Preceding Vehicle

Cruise control icon



Advanced driver assistance system designated screen



The preceding vehicle is followed as shown below while maintaining an appropriate distance from the preceding vehicle.

- When the preceding vehicle is slower than the set vehicle speed, your vehicle automatically decelerates to match the speed of the preceding vehicle.

When the accelerator pedal is depressed to overtake the preceding vehicle or to shorten the following distance, the pedal operation is prioritized. This time, the cruise control icon in the multi-information display flashes.
If the accelerator pedal is released, it returns to the cruising state, and the cruise control icon in the multi-information display changes from flashing to remaining on.

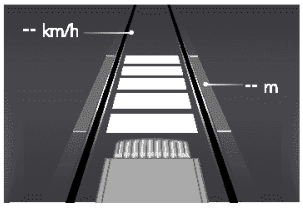
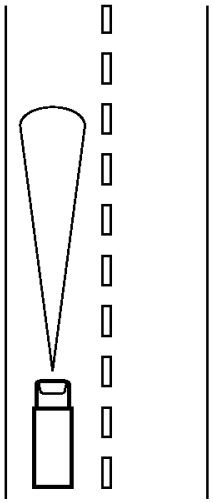
NOTE

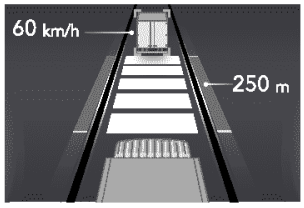
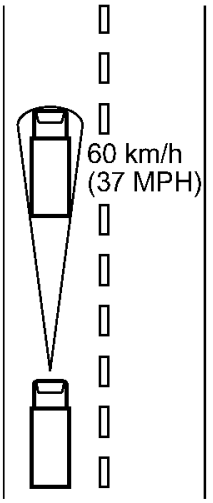
- The following distance warning function activates a warning if the following distance suddenly shrinks, such as if the preceding vehicle suddenly decelerates or another vehicle cuts in. Depress the brake pedal to keep a safe following distance.

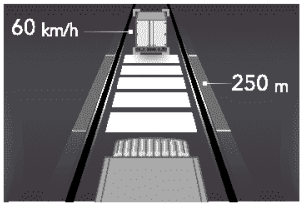
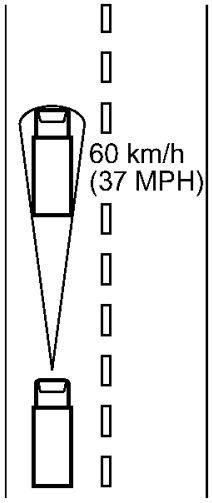
When the Preceding Vehicle is No Longer Detected

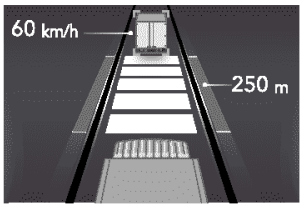
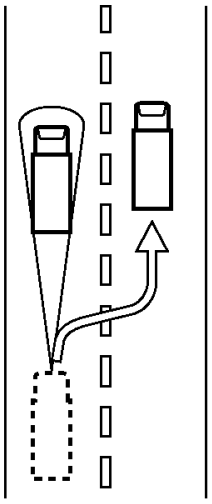
When the preceding vehicle disappears from view, the vehicle accelerates up to the set speed and performs the normal cruising driving.

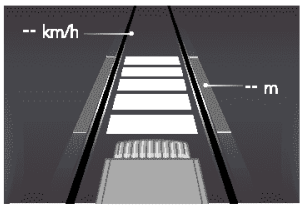
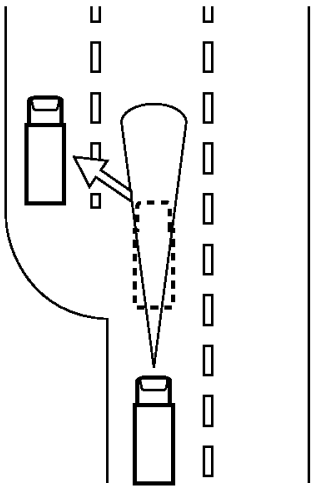
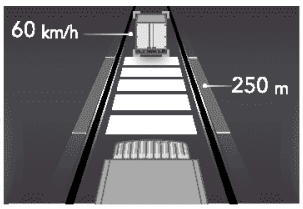
Example of Operation When Driving with Adaptive Cruise Control (Set Vehicle Speed of 75 km/h (47 MPH))

1. Traveling at a constant speed [when there is no preceding vehicle]	
Constantly travels at a set speed 75 km/h (47 MPH)	
Multi-information display Drive assist display area  Main display area  	
Vehicle speed 75 km/h (47 MPH)	

2. Decelerated traveling [when a preceding vehicle which travels at a lower speed than the set vehicle speed appears]	
Decelerates from the set vehicle speed 75 km/h (47 MPH) to the preceding vehicle's speed 60 km/h (37 MPH)	
Multi-information display Drive assist display area  Main display area  	
Vehicle speed 75 km/h (47 MPH)→ 60 km/h (37 MPH)	

3. Driving following the preceding vehicle [when there is a preceding vehicle 60 km/h (37 MPH)]	
Maintains the following distance and follows the vehicle according to its speed	
Multi-information display Drive assist display area  Main display area  	
Vehicle speed 60 km/h (37 MPH)	

4. Driving with priority on the accelerator pedal operation [when overtaking the preceding vehicle]	
Accelerates with priority on pedal operation, and when the pedal is released, constantly travels at the set vehicle speed 75 km/h (47 MPH)	
Multi-information display Drive assist display area  Main display area  	
Vehicle speed Accelerates by pedal operation to faster than 75 km/h (47 MPH) →75 km/h (47 MPH)	

5. Accelerated traveling [when the preceding vehicle disappears]	
Accelerates to the set vehicle speed 75 km/h (47 MPH) and travels at the speed constantly	
Multi-information display Drive assist display area  Main display area  	
↑	
Multi-information display Drive assist display area  Main display area  	
Vehicle speed 60 km/h (37 MPH)→ 75 km/h (47 MPH)	

Systems/Functions Operating in Conjunction with Adaptive Cruise Control

Following Distance Warning

When the adaptive cruise control operates, the following distance warning also operates accordingly.
Regardless of the volume setting of the following distance warning, the volume is automatically set to "High" while using adaptive cruise control.

Refer to page
5-20 Following Distance Warning [V]

⚠ WARNING

- **If the "Attention" is displayed while driving with adaptive cruise control activated, your vehicle may get too close to the preceding vehicle and there is a risk of collision. Operate the brake pedal to have sufficient inter-vehicular distance appropriate to the traffic condition.**

⚠ CAUTION

- **The following distance warning while the adaptive cruise control operates is not activated in the following situations**
  - **When the preceding vehicle is traveling toward the vehicle**
  - **When the following distance is too far and the preceding vehicle cannot be identified**
  - **When the vehicle is not approaching the preceding vehicle**
  - **When driving on sharp curves**

Automatic Foot Brake/Auxiliary Brake Function

Automatic Operation/Release of the Foot Brake and Auxiliary Brake

This function automatically activates the foot brake and auxiliary brake during traveling with the adaptive cruise control to maintain a proper following distance and reduces the driver's burden.

⚠ CAUTION

- **Depending on the vehicle's loading condition, the effectiveness of the automatic foot brake/auxiliary brake may be insufficient, and thus sufficient deceleration may not be achieved. If the following distance is shortened, depress the brake pedal to decelerate the vehicle and maintain the proper following distance.**

LDWS While the Adaptive Cruise Control is Active

The lane departure warning system (LDWS) is automatically turned on when the adaptive cruise control is started with the LDWS off.

Refer to page
5-106 Lane Departure Warning System (LDWS) [V]

AEBS While the Adaptive Cruise Control is Active

The advanced emergency braking system (AEBS) is automatically turned on when the adaptive cruise control is started with the AEBS off.

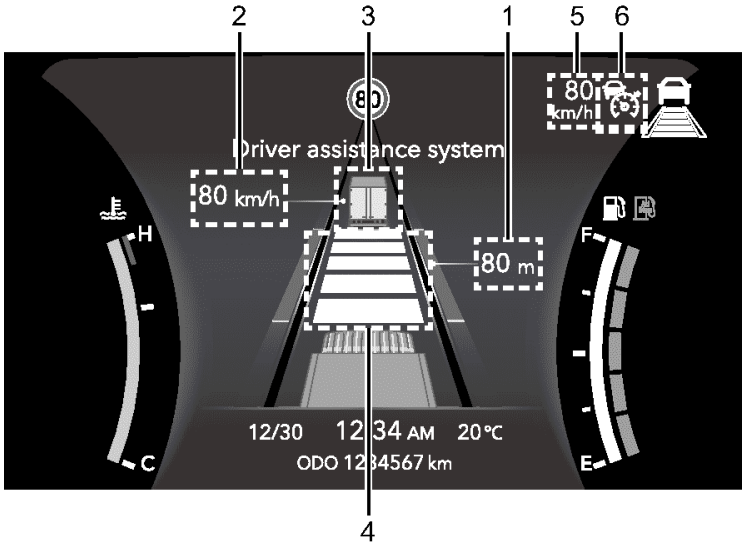
⚠ CAUTION

- **When driving in adaptive cruise control, if the AEBS is turned off in the setting menu on the multi-information display, then the adaptive cruise control is deactivated.**

Refer to page
5-16 Setting the AEBS

Details of Adaptive Cruise Control on Multi-information Display

You can check the display of the main display area when "Advanced driver assistance systems display" is selected.



No.	Name	Display details
1	Following distance with the preceding vehicle*	This indicates the following distance with the preceding vehicle.
2	Preceding vehicle speed*	This indicates the speed of the preceding vehicle.
3	Preceding vehicle detected state*	This indicates the detected state of the preceding vehicle.
	State of control by adaptive cruise control*	If there is a preceding vehicle, then the green frame indicates the adaptive cruise control is in control
4	Following distance setup*	This indicates the set condition of the following distance with the preceding vehicle in 5 levels.
5	Set vehicle speed	This indicates the set speed of cruise control.
6	Adaptive cruise control main display	This displays the system settings and operating status of cruise control or adaptive cruise control.

*: Only when adaptive cruise control, following distance warning or AEBS is operating

NOTE

- Even when the vehicle is following the preceding vehicle, there may be a difference between the indicated preceding vehicle speed in the multi-information display and the vehicle speed displayed on the speedometer.

The adaptive cruise control shows the following in the multi-information display according to the conditions.

Name	Multi-information display		Display details
	Main display area	Drive assist display area	
Cruise control mode	 Adaptive cruise control Driver assistance mode changed	—	When switching to the adaptive cruise control
Cruise control mode off	—	 (Gray)	When the adaptive cruise control is off
Standby	—	 (White)	When the adaptive cruise control is in a standby state
Adaptive cruise control active [No preceding vehicle]	—	 (Green)	Adaptive cruise control active when no preceding vehicle is detected
Adaptive cruise control active [Preceding vehicle detected]	—	 (Green)	Adaptive cruise control active when the preceding vehicle is detected
Cruise control temporarily deactivated (override)	—	 (Green, flashes)	When the accelerator pedal is depressed while the adaptive cruise control is active and the cruise driving is temporarily deactivated

Name	Multi-information display		Display details
	Main display area	Drive assist display area	
Cruise control temporarily deactivated	Cruise control canceled Cruise control has been canceled	 (White)	When the adaptive cruise control is operating and the cancel switch is pressed to temporarily cancel cruising
Following distance warning display	Attention Keep distance from Preceding Vehicle	—	• When the following distance warning is activated while the adaptive cruise control is activated • When the following distance with the preceding vehicle is too short
Cruise control deactivated	Cruise control canceled Cruise control has been canceled	 (Gray)	When the adaptive cruise control is deactivated

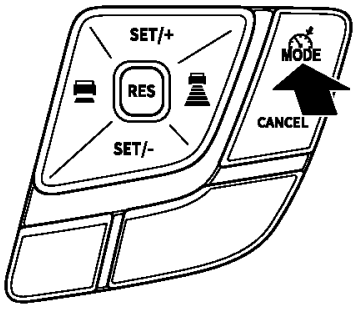
Buzzer Sounds During Adaptive Cruise Control

During adaptive cruise control, the following buzzers will sound.

Name	Warning buzzer	Description
Operation refusal sound	Two short beeps	Requested operation could not be made
Operation sound	One short beep	Requested operation was made
Failure sound	Two short beeps	A device abnormality was detected
Following distance warning sound	Three short beeps	A following distance warning was issued
Canceling sound	Two short beeps	Deactivating the adaptive cruise control

Starting the Adaptive Cruise Control

Setting Adaptive Cruise Control While Driving



Adaptive cruise control

Driver assistance mode changed

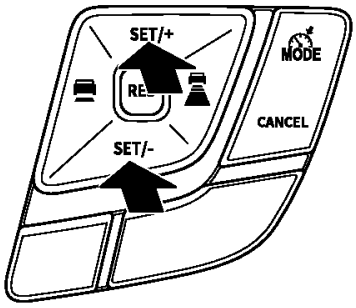
1. Press the mode switch and confirm that "Adaptive cruise control" (adaptive cruise control) appears in the multi-information display. If "Intelligent speed limiter" appears, press the mode switch again to switch to cruise control mode. If a set vehicle speed has been registered, then pressing the resume switch at this time starts cruise control driving.

NOTE

- Press and hold the mode switch to change between adaptive cruise control and cruise control. There is a buzzer sound when they are switched. The cruise control mode cannot be switched while driving.



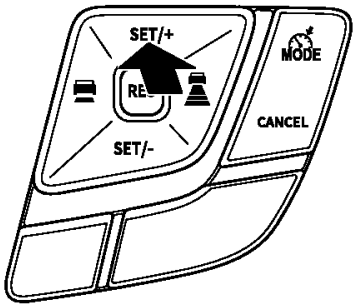
2. Depress the accelerator pedal to adjust to your desired speed. Once the vehicle reaches a speed that can be set, cruise control icon comes on in white on the multi-information display.



3. Press the "+" or "-" side of the set switch to set the vehicle speed and adaptive cruise control starts. The set vehicle speed is displayed in multi-information display.

Changing the Set Vehicle Speed

To Accelerate

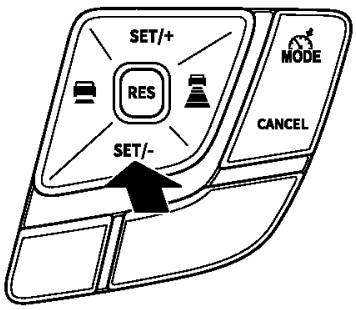


Pressing the "+" side of the set switch increases the vehicle speed set for the cruise control that is displayed in the multi-information display.
By pressing and immediately releasing the switch, the set vehicle speed can be increased by 1 km/h (1 MPH) per operation.
By holding down the switch, the set vehicle speed can be increased in increments of 5 km/h (5 MPH).

NOTE

- When you want to increase the speed quickly, depress the accelerator pedal, then after accelerating to the desired speed, press the set switch.

To Decelerate

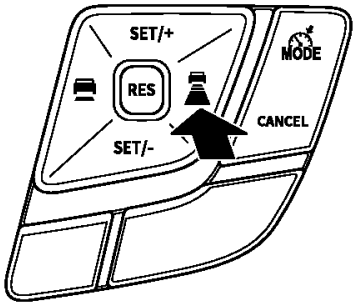


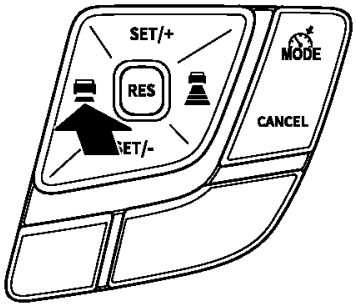
Pressing the "-" side of the set switch decreases the vehicle speed set for the adaptive cruise control that is displayed in the multi-information display.
By pressing and immediately releasing the switch, the set vehicle speed can be decreased by 1 km/h (1 MPH) per operation.
By holding down the switch, the set vehicle speed can be decreased in increments of 5 km/h (5 MPH).

NOTE

- When you want to decrease the speed quickly, depress the brake pedal to temporarily cancel cruise control, then after decelerating to the desired speed, press the set switch.

Setting the Desired Following Distance for Adaptive Cruise Control

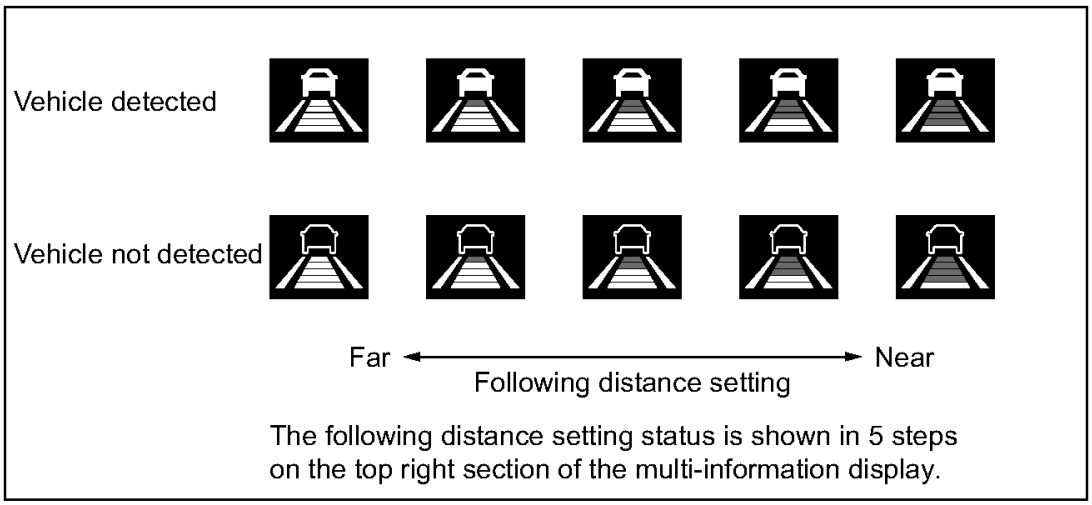




It is possible to adjust the following distance by pressing the " " side (extend following distance) or the " " side (shorten following distance) of the following distance setting switch.

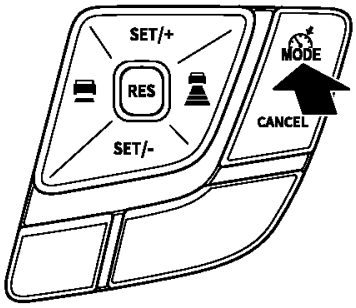
NOTE

- When the following distance setting of the adaptive cruise control is changed, the warning distance setting for the following distance warning is also changed accordingly.



The following distance setting status is shown in 5 steps on the top right section of the multi-information display.

Deactivating the Adaptive Cruise Control

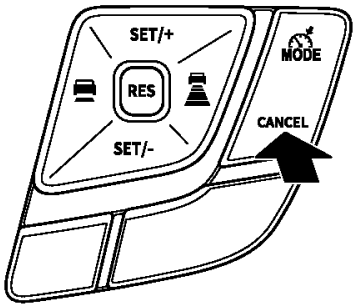


Press the mode switch to deactivate the function. At this time, a warning buzzer sounds and the cruise control icon on the multi-information display goes off.

NOTE

- Deactivate the cruise control by pressing the mode switch when the function is not to be used.

Temporarily Deactivating the Adaptive Cruise Control



Cruise control canceled

Cruise control has been canceled

If the cancel switch is pressed, the adaptive cruise control will be temporarily deactivated. At this time, the adaptive cruise control icon comes on in white on the multi-information display and "Cruise control canceled" will be displayed for a few seconds.

In addition, the function will also be deactivated in the following cases:

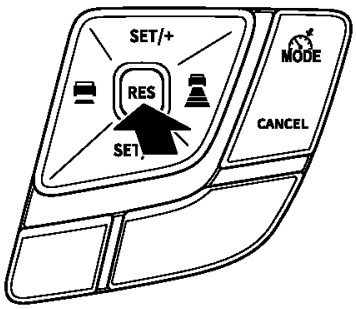
- When the brake pedal is depressed
- When the parking brake is applied
- When the exhaust brake is applied
- When any of the following warnings occur: Front camera malfunction warning, check engine warning light, brake system warning light
- When the preceding vehicle disappears
- When the gearshift lever is placed in any position other than the "D" position
- When both the turn signal switch and the steering wheel are operated while traveling at a low speed (such as when turning right or left) (Only while adaptive cruise control is active)
- When entering into a steep uphill/downhill
- When ASR or ESC is activated

When you want to overtake the preceding vehicle, depress the accelerator pedal to temporarily cancel the cruise mode. At this time, the cruise icon flashes green.

NOTE

- If the engine or engine related equipment malfunctions, the adaptive cruise control is completely deactivated and the master warning light comes on. When the master warning light turns on, the cruise control mode cannot be selected and the equipment cannot be operated until the starter switch is put in the "LOCK" position once.
- Deactivate the adaptive cruise control by pressing the mode switch when the function is not to be used.

Reactivating the Adaptive Cruise Control



If the adaptive cruise control is temporarily deactivated, the adaptive cruise control setting used before the deactivation will be recovered by pressing and then releasing the resume switch. Once the resume switch is released, adaptive cruise control icon will come on in green on the multi-information display.
Also, the system will return to cruise control driving when the temporary deactivation condition is no longer met.

When the Adaptive Cruise Control Does Not Operate Properly

The adaptive cruise control is one part of the advanced driver assistance system. It does not operate normally if there is a system abnormality.

Refer to page
5-7 When There is a Problem in the ADAS

- Depending on the vehicle's load conditions, or on the degree of the inclination of a road, sufficient decelerating may not be achieved. If the inter-vehicular distance is shortened, use the foot brake to maintain the safe following distance.
- Sufficient deceleration may not be possible when the deceleration of the preceding vehicle is large, or when another vehicle cuts in front of the vehicle. Do not rely entirely on the system. Always keep sufficient following distance appropriate for the traffic conditions and drive safely.
- The system may not detect the preceding vehicle properly when the vehicle position is extremely tilted due to uneven loads placed on the vehicle (the loads are placed too much only on one side, in the front or rear).

Full Speed Range Adaptive Cruise Control [V]

This system assists driving operations by allowing the driver to drive, without depressing the accelerator pedal, at a fixed speed following a preceding vehicle. While it is operating, press and hold the mode switch to change between cruise control mode and full speed range adaptive cruise control mode.

Cruise control

The cruise control is a system that allows you to drive, maintaining a fixed speed (about 30 km/h (20 MPH) or more), without depressing the accelerator pedal. It is used on expressways where starting and stopping is rare.

Refer to page
4-157 Cruise Control [V]

Full speed range adaptive cruise control

This system detects the distance to and the speed difference of the preceding vehicle on the same lane by means of cameras. It maintains the proper following distance, and automatically accelerates, decelerates and stops the vehicle. In addition, when the preceding vehicle is not in the same lane, it keeps the vehicle at a set speed constantly to achieve the following effects:

- Mitigate driver's stress by reducing the necessary braking operation
- Improve the fuel efficiency by reducing the weaving of the vehicle
- Mitigate the collision accident by means of automatic following distance control, stopping the vehicle and warning the driver.

Use this system only on expressways and controlled-access road.

Refer to page
5-6 Precautions for ADAS

⚠ WARNING

- This system is not intended to prevent collisions. Do not rely entirely on the system and drive safely.
- Full speed range adaptive cruise control is intended to assist a certain part of the driver's operation. It is not an autonomous driving system. Do not rely entirely on the system. Always drive safely.
- This system is limited due to the following mechanical restrictions. Do not overly rely on this system and always drive safely while maintaining an adequate following distance.
  - Smaller objects, such as motorcycles, may not be detected.
  - Depending on the curves in the road, steering wheel operation, or the location of the vehicle within the lane, vehicles in adjacent lanes or objects in the areas around the road may be momentarily detected.
  - On uphill or downhill slopes, vehicles in the forward direction may not be detected under certain circumstances.
  - Vehicles in the forward direction may not be correctly detected when in tunnels or if there are obstacles on the road shoulder such as sound insulation walls
  - When the preceding vehicle is stopping at a traffic light or at the end of a line of cars in a traffic jam, the vehicle may not be detected properly.
- Do not use the system in the following situations because doing so is dangerous:
  - On roads where there is heavy traffic, such as urban areas
  - On sharp curves or steep slopes
  - In slippery road conditions, such as when the road is frozen or covered with snow
  - When it is necessary to frequently accelerate and decelerate due to traffic conditions
  - When driving repeatedly up or down steep slopes
  - When merging onto or exiting highways or when driving through toll booths
- When it is raining, foggy, snowy or in any adverse weather, the traffic conditions often change significantly. In such situations, we ask drivers to drive safely on their own. Do not use the full speed range adaptive cruise control and cruise control.

⚠ CAUTION

[Model with Speed Limit Device]

- An upper speed limit that exceeds the set speed of the speed limit device cannot be set.

Refer to page
4-215 Speed Limit Device [V]

NOTE

- The maximum speed of the vehicle varies by your country.

Operation of the Full Speed Range Adaptive Cruise Control

Full speed range adaptive cruise control operates differently depending on whether there is a preceding vehicle.

Refer to page
5-86 When the Full Speed Range Adaptive Cruise Control Does Not Operate Properly

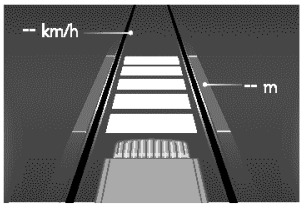
When There is No Preceding Vehicle

Cruise control icon



Without depressing the accelerator pedal, the automatic cruising is performed at the set speed.

Advanced driver assistance system designated screen

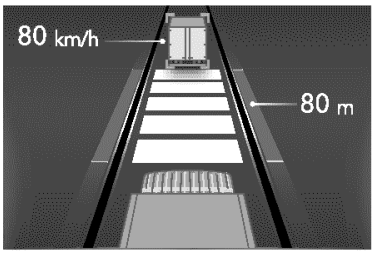


When There is a Preceding Vehicle

Cruise control icon



Advanced driver assistance system designated screen



The preceding vehicle is followed as shown below while maintaining an appropriate distance from the preceding vehicle.

- When the preceding vehicle is slower than the set vehicle speed, your vehicle automatically decelerates to match the speed of the preceding vehicle.
- When the preceding vehicle stops, the vehicle also decelerates and stops according to the preceding vehicle.
- After the preceding vehicle starts again, if the driver operates the vehicle to start again, the vehicle also starts and resumes cruise driving.

When the accelerator pedal is depressed to overtake the preceding vehicle or to shorten the following distance, the pedal operation is prioritized. This time, the cruise control icon in the multi-information display flashes.
If the accelerator pedal is released, it returns to the cruising state, and the cruise control icon in the multi-information display changes from flashing to remaining on.

NOTE

- The following distance warning function activates a warning if the following distance suddenly shrinks, such as if the preceding vehicle suddenly decelerates or another vehicle cuts in. Depress the brake pedal to keep a safe following distance.

To start off the vehicle again after stopping following the preceding vehicle

If the vehicle stops following the preceding vehicle, "Brake Hold" is displayed on the multi-information display.
If either of the following operations are performed after the preceding vehicle has started off, traveling following the preceding vehicle with the full speed range adaptive cruise control resumes.

- Slightly depress the accelerator pedal
- Operate the resume switch

If the operation for starting off again is not performed, "Preceding vehicle start" is displayed on the multi-information display to alert the driver.

Vehicles with ecostop do idling stop when they are stopped while following a preceding vehicle. The engine restarts when the preceding vehicle starts moving, or when the vehicle itself is restarted.
If the full speed range adaptive cruise control is canceled while doing idling stop, idling stop is canceled at the same time and the engine restarts.

Refer to page
4-64 ecostop [V]

⚠ WARNING

- **Always check the safety of the surrounding area before performing the operation for starting off again.**
- **Do not leave the driver's seat while the vehicle is stationary following the preceding vehicle.**

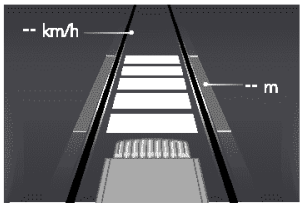
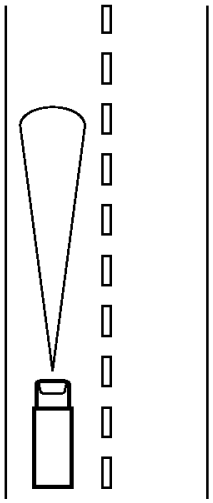
NOTE

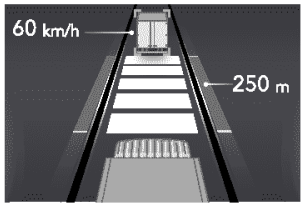
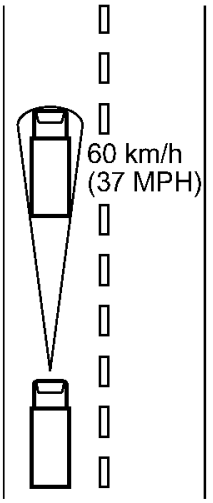
- When "Brake Hold" is displayed on the multi-information display, the brake is applied and the brake lights illuminate. At this time, even if the driver depresses the brake pedal, the full speed range adaptive cruise control will not be deactivated.
- When starting off the vehicle again by operating the resume switch, the vehicle will not start off unless a certain distance from the preceding vehicle is achieved.
- When the full speed range adaptive cruise control is temporally deactivated while "Brake Hold" is displayed on the multi-information display, the vehicle's stopped state is retained, but it is not possible to start off with the resume switch. Depress the accelerator pedal to start off the vehicle. In addition, when the following operation is performed after deactivating the full speed range adaptive cruise control while the vehicle is stationary following the preceding vehicle, the vehicle's stopped state will be canceled.
  - Depressing the accelerator pedal to start off the vehicle
  - Applying the parking brake
  - Depressing the brake pedal
  - Operating the gearshift lever
  - When the mode switch has been pressed to change the cruise mode
  - Depressing the cancel switch
- When the vehicle is stopped following the preceding vehicle, and if the preceding vehicle started off again within 3 seconds after that, the traveling following the preceding vehicle resumes without performing any restarting operation.

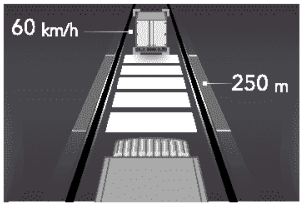
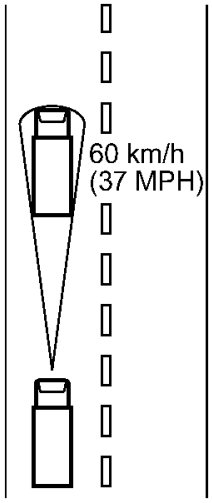
When the Preceding Vehicle is No Longer Detected

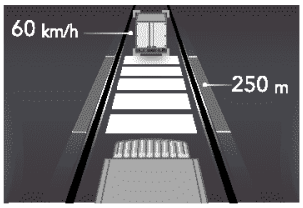
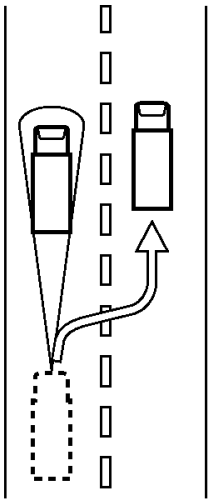
When the preceding vehicle disappears from view, the vehicle accelerates up to the set speed and performs the normal cruising driving.

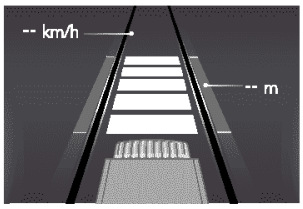
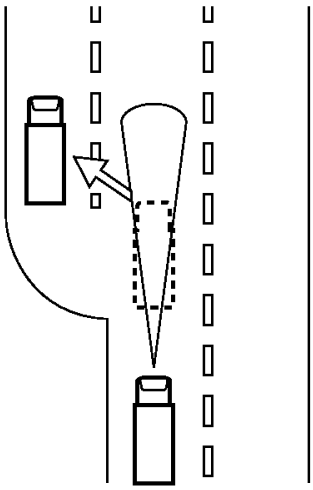
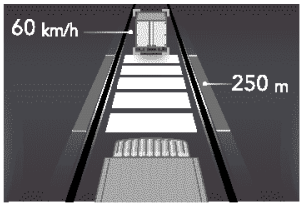
Example of Operation When Driving with Full Speed Range Adaptive Cruise Control (Set Vehicle Speed of 75 km/h (47 MPH))

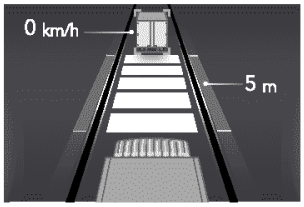
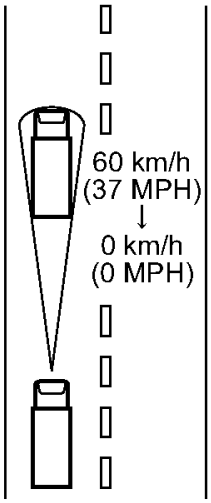
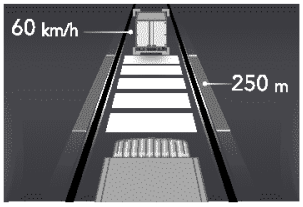
1. Traveling at a constant speed [when there is no preceding vehicle]	
Constantly travels at a set speed 75 km/h (47 MPH)	
Multi-information display Drive assist display area  Main display area  	
Vehicle speed 75 km/h (47 MPH)	

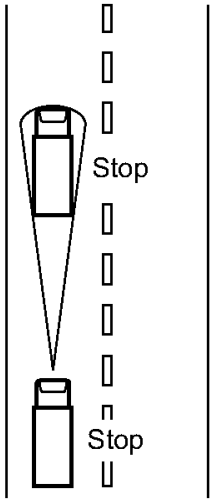
2. Decelerated traveling [when a preceding vehicle which travels at a lower speed than the set vehicle speed appears]	
Decelerates from the set vehicle speed 75 km/h (47 MPH) to the preceding vehicle's speed 60 km/h (37 MPH)	
Multi-information display Drive assist display area  Main display area  	
Vehicle speed 75 km/h (47 MPH)→ 60 km/h (37 MPH)	

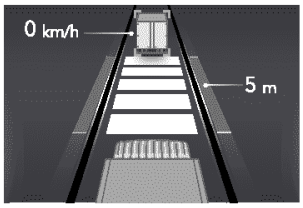
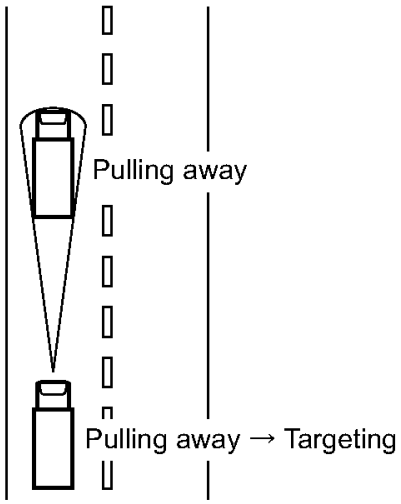
3. Driving following the preceding vehicle [when there is a preceding vehicle 60 km/h (37 MPH)]	
Maintains the following distance and follows the vehicle according to its speed	
Multi-information display Drive assist display area  Main display area  	
Vehicle speed 60 km/h (37 MPH)	

4. Driving with priority on the accelerator pedal operation [when overtaking the preceding vehicle]	
Accelerates with priority on pedal operation, and when the pedal is released, constantly travels at the set vehicle speed 75 km/h (47 MPH)	
Multi-information display Drive assist display area  Main display area  	
Vehicle speed Accelerates by pedal operation to faster than 75 km/h (47 MPH) →75 km/h (47 MPH)	

5. Accelerated traveling [when the preceding vehicle disappears]	
Accelerates to the set vehicle speed 75 km/h (47 MPH) and travels at the speed constantly	
Multi-information display Drive assist display area  Main display area  	
↑	
Multi-information display Drive assist display area  Main display area  	
Vehicle speed 60 km/h (37 MPH)→ 75 km/h (47 MPH)	

6. Stopping by following the preceding vehicle [when stopping following the preceding vehicle]	
The vehicle decelerates and stops following the preceding vehicle.	
Multi-information display Drive assist display area  Warning/operation display Brake Hold Main display area  	
↑	
Multi-information display Drive assist display area  Main display area  	
Vehicle speed 60 km/h (37 MPH)→ 0 km/h (0 MPH)	

7. The vehicle is stopped	
Both the preceding vehicle and the vehicle are stopped	
Multi-information display Drive assist display area  Warning/operation display Brake Hold	
Vehicle speed 0 km/h (0 MPH)	

8. Starting off the vehicle again and traveling following the preceding vehicle [when the preceding vehicle has departed]	
After the preceding vehicle has departed, the vehicle also starts off when the accelerator pedal is depressed or the resume switch is operated, and resumes traveling following the preceding vehicle.	
Multi-information display Drive assist display area  Warning/operation display Preceding vehicle start Main display area  	
Vehicle speed Resumes traveling following the preceding vehicle according to the speed of the preceding vehicle.	

Systems/Functions Operating in Conjunction with Full Speed Range Adaptive Cruise Control

Following Distance Warning

When the full speed range adaptive cruise control operates, the following distance warning also operates accordingly.
Regardless of the volume setting of the following distance warning, the volume is automatically set to "High" while using full speed range adaptive cruise control.

Refer to page
5-20 Following Distance Warning [V]

⚠ WARNING

- **If the "Attention" is displayed while driving with full speed range adaptive cruise control activated, your vehicle may get too close to the preceding vehicle and there is a risk of collision. Operate the brake pedal to have sufficient inter-vehicular distance appropriate to the traffic condition.**

⚠ CAUTION

- **The following distance warning while the full speed range adaptive cruise control operates is not activated in the following situations**
  - **When the preceding vehicle is traveling toward the vehicle**
  - **When the following distance is too far and the preceding vehicle cannot be identified**
  - **When the vehicle is not approaching the preceding vehicle**
  - **When driving on sharp curves**

Automatic Foot Brake/Auxiliary Brake Function

Automatic Operation/Release of the Foot Brake and Auxiliary Brake

This function automatically activates the foot brake and auxiliary brake during traveling with the full speed range adaptive cruise control to maintain a proper following distance and reduces the driver's burden.

⚠ CAUTION

- **Depending on the vehicle's loading condition, the effectiveness of the automatic foot brake/auxiliary brake may be insufficient, and thus sufficient deceleration may not be achieved. If the following distance is shortened, depress the brake pedal to decelerate the vehicle and maintain the proper following distance.**

LDWS While the Full Speed Range Adaptive Cruise Control is Active

The lane departure warning system (LDWS) is automatically turned on when the full speed range adaptive cruise control is started with the LDWS off.

Refer to page
5-106 Lane Departure Warning System (LDWS) [V]

AEBS While the Full Speed Range Adaptive Cruise Control is Active

The advanced emergency braking system (AEBS) is automatically turned on when the full speed range adaptive cruise control is started with the AEBS off.

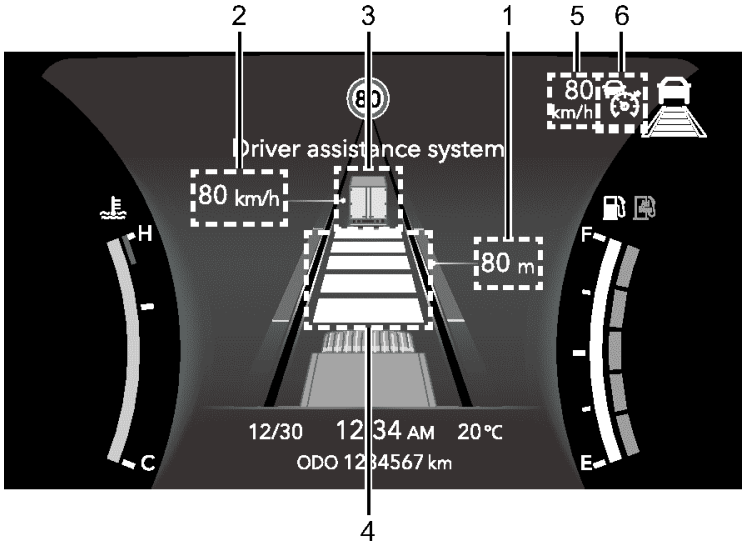
⚠ CAUTION

- **When driving in full speed range adaptive cruise control, if the AEBS is turned off in the setting menu on the multi-information display, then the full speed range adaptive cruise control is deactivated.**

Refer to page
5-16 Setting the AEBS

Details of Full Speed Range Adaptive Cruise Control on Multi-information Display

You can check the display of the main display area when "Advanced driver assistance systems display" is selected.



No.	Name	Display details
1	Following distance with the preceding vehicle*	This indicates the following distance with the preceding vehicle.
2	Preceding vehicle speed*	This indicates the speed of the preceding vehicle.
3	Preceding vehicle detected state*	This indicates the detected state of the preceding vehicle.
	State of control by full speed range adaptive cruise control*	If there is a preceding vehicle, then the green frame indicates the full speed range adaptive cruise control is in control
4	Following distance setup*	This indicates the set condition of the following distance with the preceding vehicle in 5 levels.
5	Set vehicle speed	This indicates the set speed of cruise control.
6	Adaptive cruise control main display	This displays the system settings and operating status of cruise control or full speed range adaptive cruise control.

*: Only when full speed range adaptive cruise control, following distance warning or AEBS is operating

NOTE

- Even when the vehicle is following the preceding vehicle, there may be a difference between the indicated preceding vehicle speed in the multi-information display and the vehicle speed displayed on the speedometer.

The full speed range adaptive cruise control shows the following in the multi-information display according to the conditions.

Name	Multi-information display		Display details
	Main display area	Drive assist display area	
Cruise control mode	 Adaptive cruise control Driver assistance mode changed	—	When switching to the full speed range adaptive cruise control
Cruise control mode off	—	 (Gray)	When the full speed range adaptive cruise control is off

Name	Multi-information display		Display details
	Main display area	Drive assist display area	
Standby	—	 (White)	When the full speed range adaptive cruise control is in a standby state
Adaptive cruise control active [No preceding vehicle]	—	 (Green)	Full speed range adaptive cruise control active when no preceding vehicle is detected
Adaptive cruise control active [Preceding vehicle detected]	—	 (Green)	Full speed range adaptive cruise control active when the preceding vehicle is detected
Cruise control temporarily deactivated (override)	—	 (Green, flashes)	When the accelerator pedal is depressed while the full speed range adaptive cruise control is active and the cruise driving is temporarily deactivated
Cruise control temporarily deactivated	 Cruise control canceled Cruise control has been canceled	 (White)	When the full speed range adaptive cruise control is operating and the cancel switch is pressed to temporarily cancel cruising
Following distance warning display	Attention Keep distance from Preceding Vehicle	—	• When the following distance warning is activated while the full speed range adaptive cruise control is activated • When the following distance with the preceding vehicle is too short
Idling-stop	—		When doing idling stop while stopped as following a preceding vehicle using full speed range adaptive cruise control

Name	Multi-information display		Display details
	Main display area	Drive assist display area	
Keeping vehicle stopped	Brake Hold	—	When the vehicle stops following the preceding vehicle while the full speed range adaptive cruise control is active
Preceding vehicle pulling away	Preceding vehicle start	—	When the vehicle stops following the preceding vehicle while the full speed range adaptive cruise control is active, then the preceding vehicle starts
Cruise control deactivated	Cruise control canceled Cruise control has been canceled	(Gray)	When the full speed range adaptive cruise control is deactivated

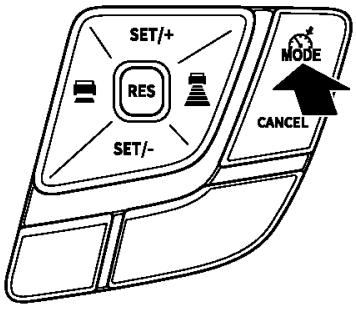
Buzzer Sounds During Full Speed Range Adaptive Cruise Control

During full speed range adaptive cruise control, the following buzzers will sound.

Name	Warning buzzer	Description
Operation refusal sound	Two short beeps	Requested operation could not be made
Operation sound	One short beep	Requested operation was made
Failure sound	Two short beeps	A device abnormality was detected
Following distance warning sound	Three short beeps	A following distance warning was issued
Canceling sound	Two short beeps	Deactivating the full speed range adaptive cruise control

Starting the Full Speed Range Adaptive Cruise Control

Setting Full Speed Range Adaptive Cruise Control While Driving



Adaptive cruise control

Driver assistance mode changed

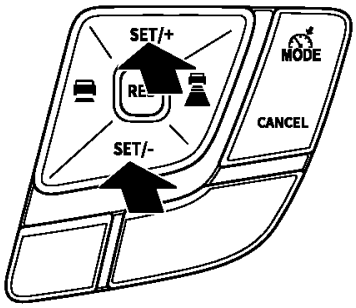
1. Press the mode switch and confirm that "Adaptive cruise control" (full speed range adaptive cruise control) appears in the multi-information display. If "Intelligent speed limiter" appears, press the mode switch again to switch to cruise control mode.
   If a set vehicle speed has been registered, then pressing the resume switch at this time starts cruise control driving.

NOTE

- Press and hold the mode switch to change between full speed range adaptive cruise control and cruise control. There is a buzzer sound when they are switched. The cruise control mode cannot be switched while driving.

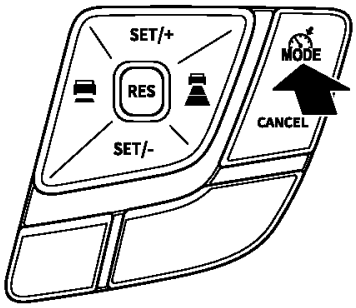


2. Depress the accelerator pedal to adjust to your desired speed. Once the vehicle reaches a speed that can be set, cruise control icon comes on in white on the multi-information display.



3. Press the "+" or "-" side of the set switch to set the vehicle speed and full speed range adaptive cruise control starts. The set vehicle speed is displayed in multi-information display.

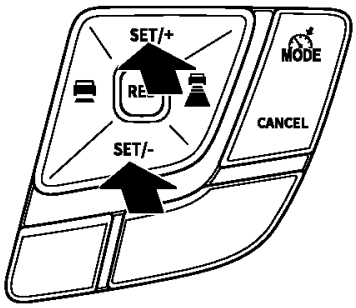
Setting Full Speed Range Adaptive Cruise Control While Stopped



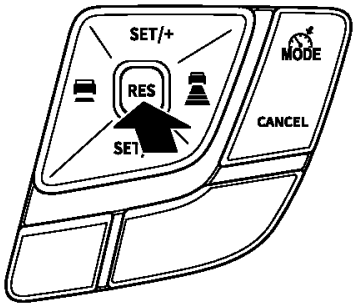
1. Press the mode switch and confirm that "Adaptive cruise control" (full speed range adaptive cruise control) appears in the multi-information display. If "Intelligent speed limiter" appears, press the mode switch again to switch to cruise control mode.



2. While a preceding vehicle is present, depress the brake pedal and cruise control icon comes on in white on the multi-information display.



3. Use one of the following methods to set the desired vehicle speed.
   - Press the "+" or "-" side of the set switch to set the vehicle speed to 30 km/h (20 MPH).
   - Press the resume switch to set the vehicle speed that was previously set.



Once the vehicle speed is set, "Brake Hold" appears in the multi-information display, and full speed range adaptive cruise control starts.

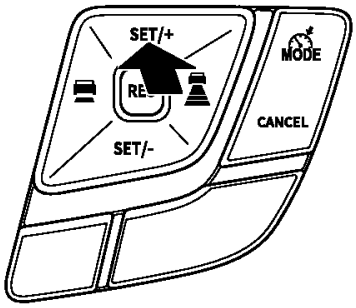
4. When full speed range adaptive cruise control is operating, after the preceding vehicle pulls away, press the resume switch or depress the accelerator pedal to pull away and start following the preceding vehicle.

NOTE

- The vehicle speed setting for cruise control cannot be set while the vehicle is stopped.

Changing the Set Vehicle Speed

To Accelerate

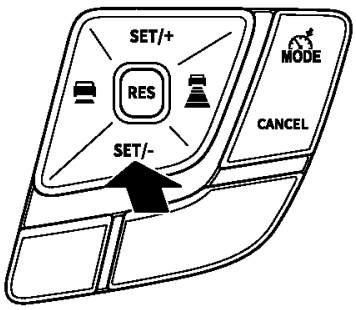


Pressing the "+" side of the set switch increases the vehicle speed set for the cruise control that is displayed in the multi-information display.
By pressing and immediately releasing the switch, the set vehicle speed can be increased by 1 km/h (1 MPH) per operation.
By holding down the switch, the set vehicle speed can be increased in increments of 5 km/h (5 MPH).

NOTE

- When you want to increase the speed quickly, depress the accelerator pedal, then after accelerating to the desired speed, press the set switch.

To Decelerate

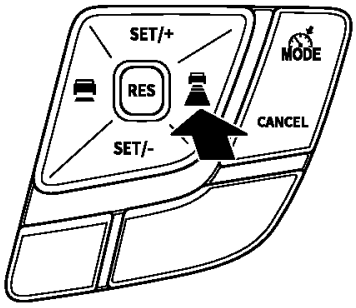


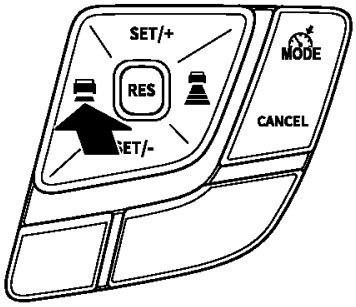
Pressing the "-" side of the set switch decreases the vehicle speed set for the full speed range adaptive cruise control that is displayed in the multi-information display.
By pressing and immediately releasing the switch, the set vehicle speed can be decreased by 1 km/h (1 MPH) per operation.
By holding down the switch, the set vehicle speed can be decreased in increments of 5 km/h (5 MPH).

NOTE

- When you want to decrease the speed quickly, depress the brake pedal to temporarily cancel cruise control, then after decelerating to the desired speed, press the set switch.

Setting the Desired Following Distance for Full Speed Range Adaptive Cruise Control

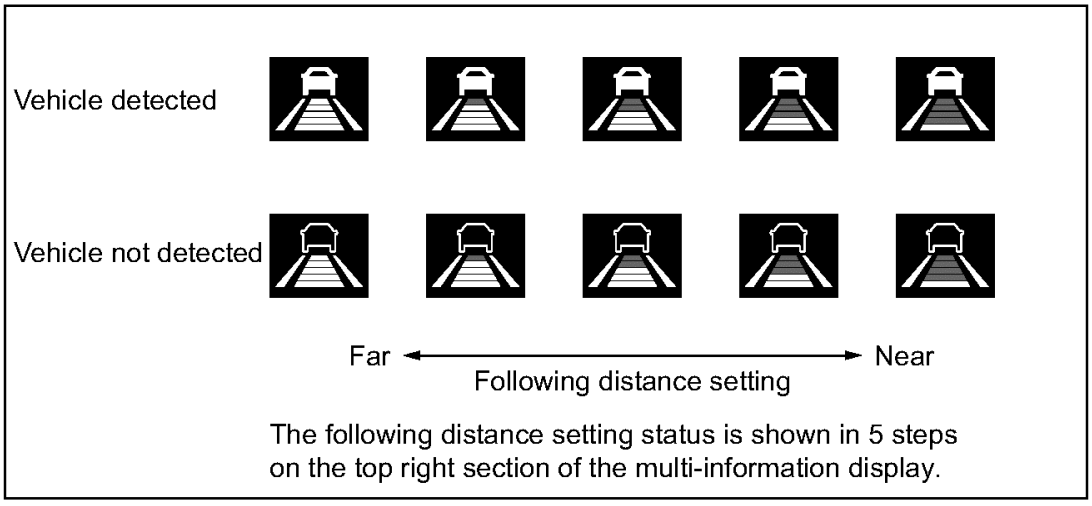




It is possible to adjust the following distance by pressing the " " side (extend following distance) or the " " side (shorten following distance) of the following distance setting switch.

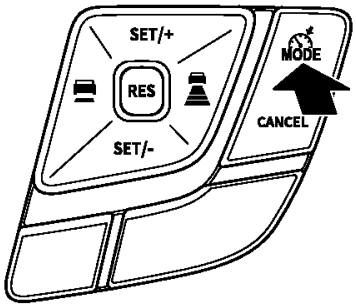
NOTE

- When the following distance setting of the full speed range adaptive cruise control is changed, the warning distance setting for the following distance warning is also changed accordingly.



The following distance setting status is shown in 5 steps on the top right section of the multi-information display.

Deactivating the Full Speed Range Adaptive Cruise Control

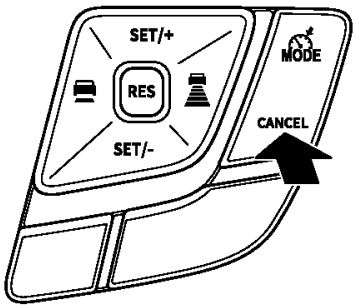


Press the mode switch to deactivate the function. At this time, a warning buzzer sounds and the cruise control icon on the multi-information display goes off.

NOTE

- Deactivate the cruise control by pressing the mode switch when the function is not to be used.

Temporarily Deactivating the Full Speed Range Adaptive Cruise Control



Cruise control canceled

Cruise control has been canceled

If the cancel switch is pressed, the full speed range adaptive cruise control will be temporarily deactivated. At this time, the full speed range adaptive cruise control icon comes on in white on the multi-information display and "Cruise control canceled" will be displayed for a few seconds.

In addition, the function will also be deactivated in the following cases:

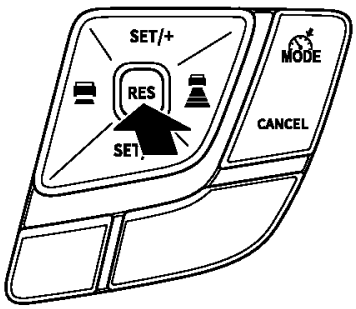
- When the brake pedal is depressed (except while the vehicle is stationary following the preceding vehicle)
- When the clutch pedal is depressed (manual transmission models)
- When the parking brake is applied
- When the exhaust brake is applied
- When any of the following warnings occur: Front camera malfunction warning, check engine warning light, brake system warning light
- When the preceding vehicle disappears (while the vehicle is stationary following the preceding vehicle, etc.)
- When the driver side door is opened (only while the vehicle is stationary following the preceding vehicle)
- When the driver side seat belt is unfastened (only while the vehicle is stationary following the preceding vehicle)
- When the gearshift lever is placed in any position other than the "D" position
- When both the turn signal switch and the steering wheel are operated while traveling at a low speed (such as when turning right or left) (Only while full speed range adaptive cruise control is active)
- When entering into a steep uphill/downhill
- When ASR or ESC is activated

When you want to overtake the preceding vehicle, depress the accelerator pedal to temporarily cancel the cruise mode. At this time, the cruise icon flashes green.

NOTE

- If the engine or engine related equipment malfunctions, the full speed range adaptive cruise control is completely deactivated and the master warning light comes on. When the master warning light turns on, the cruise control mode cannot be selected and the equipment cannot be operated until the starter switch is put in the "LOCK" position once.
- Deactivate the full speed range adaptive cruise control by pressing the mode switch when the function is not to be used.

Reactivating the Full Speed Range Adaptive Cruise Control



If the full speed range adaptive cruise control is temporarily deactivated, the full speed range adaptive cruise control setting used before the deactivation will be recovered by pressing and then releasing the resume switch. Once the resume switch is released, full speed range adaptive cruise control icon will come on in green on the multi-information display.
Also, the system will return to cruise control driving when the temporary deactivation condition is no longer met.

Refer to page
5-80 Setting Full Speed Range Adaptive Cruise Control While Stopped

When the Full Speed Range Adaptive Cruise Control Does Not Operate Properly

The full speed range adaptive cruise control is one part of the advanced driver assistance system. It does not operate normally if there is a system abnormality.

Refer to page
5-7 When There is a Problem in the ADAS

- Depending on the vehicle's load conditions, or on the degree of the inclination of a road, sufficient decelerating may not be achieved. If the inter-vehicular distance is shortened, use the foot brake to maintain the safe following distance.
- Sufficient deceleration may not be possible when the deceleration of the preceding vehicle is large, or when another vehicle cuts in front of the vehicle. Do not rely entirely on the system. Always keep sufficient following distance appropriate for the traffic conditions and drive safely.
- The system may not detect the preceding vehicle properly when the vehicle position is extremely tilted due to uneven loads placed on the vehicle (the loads are placed too much only on one side, in the front or rear).

Traffic Sign Recognition System [V]

The traffic sign recognition system supports safe driving by showing traffic signs, which are recognized by the camera, on the multi-information display to prevent the driver from overlooking traffic signs. If the system determines that a recognized traffic sign is being violated, it notifies the driver with a warning buzzer and indicators on the multi-information display.

Refer to page
5-6 Precautions for ADAS

WARNING

- **The traffic sign recognition system is a system that supports safe driving. During bad weather or if there is a problem with a road sign, the system may not be able to recognize the road sign or may display a road sign that is different from the actual situation. The driver must take responsibility to confirm the actual road signs, because a failure to confirm road signs could lead to an unexpected accident.**
- **If the camera cannot detect traffic signs, or if the camera temporarily stops or malfunctions, then the traffic sign recognition system does not operate.**

NOTE

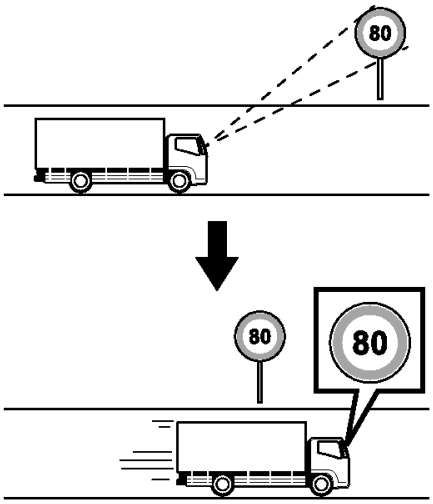
- The traffic sign recognition system is available only in Korea, Europe, Australia and New Zealand. The traffic sign recognition system is not available in other regions because it cannot identify road signs there.
  Contact the nearest Isuzu Dealer for details.

Operation of the Traffic Sign Recognition System

The speed limit sign icon appears in the multi-information display when the starter switch is turned to the "ON" position.

Refer to page
5-97 When the Traffic Sign Recognition System Does Not Operate Normally

Speed Limit Signs



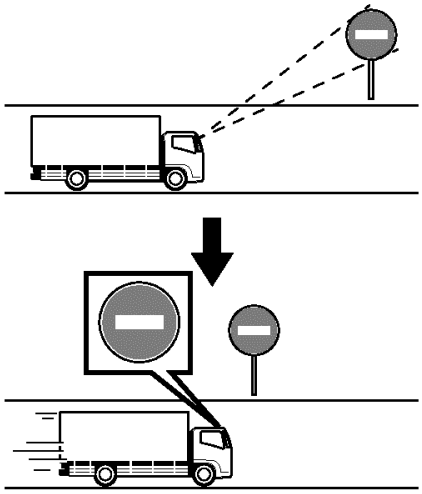
When the camera recognize a speed limit sign in your lane while driving, the sign appears on the multi-information display after it is passed. The buzzer sounds when the sign is displayed. In the following cases, the display of the signs is terminated.

- Driving a certain distance or passing of a certain period of time after passing the sign
- When the camera recognize a new speed limit sign
- When an auxiliary sign indicating the end of regulation by the recognized sign is passed
- When turning right or left at an intersection
- When the gearshift lever is moved to the "R" position
- When the parking brake is being operated

NOTE

- If there are two speed limit signs beside each other, the supplementary sign is recognized and the sign closest to your own vehicle is targeted.

No Entry



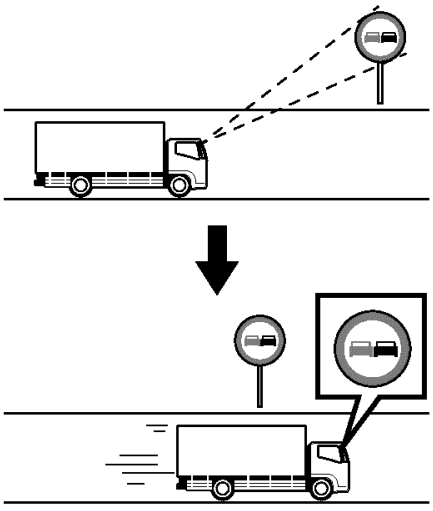
When the camera recognizes a no entry sign while driving, the sign appears on the multi-information display before it is passed. In the following cases, the display of the signs is terminated.

- When a no entry sign is passed
- When turning right or left at an intersection
- When the gearshift lever is moved to the "R" position
- When a no overtaking sign or a stop sign is recognized
- When the parking brake is being operated

NOTE

- A no entry sign is recognized while at a vehicle speed of approximately 40 km/h (25 MPH) or less.

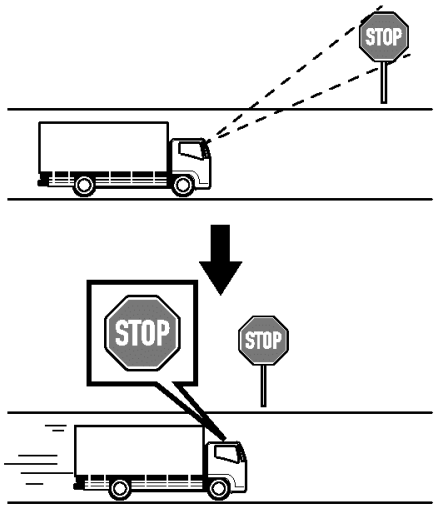
No Overtaking



When the camera recognizes a no overtaking sign while driving, the sign appears on the multi-information display after it is passed. In the following cases, the display of the signs is terminated.

- Driving a certain distance or passing of a certain period of time after passing the sign
- When an auxiliary sign indicating the end of regulation by the recognized sign is passed
- When a stop sign or a no entry sign is recognized
- When turning right or left at an intersection
- When the gearshift lever is moved to the "R" position
- When the parking brake is being operated

Stopping Temporarily



When the camera recognizes a stop sign while driving, the sign appears on the multi-information display before it is passed. In the following cases, the display of the signs is terminated.

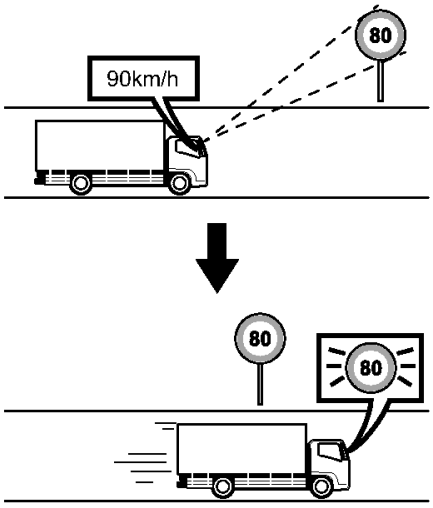
- Driving a certain distance after passing a sign
- When turning right or left at an intersection
- When the gearshift lever is moved to the "R" position
- When a no entry sign or a no overtaking sign is recognized
- When the parking brake is being operated

NOTE

- A stop sign is recognized while at a vehicle speed of approximately 40 km/h (25 MPH) or less.

Warnings by Traffic Sign Recognition Function

Warning of Exceeding the Maximum Speed Limit



When the speed limit detected by the camera is exceeded while driving, the "Speed limit sign" displayed on the multi-information display flashes and a buzzer sounds at the same time. While checking the surrounding conditions, use the brake pedal, etc., to decelerate to within the range of the legal speed limit.
In the following situations, the warning of exceeding the maximum speed limit is terminated.

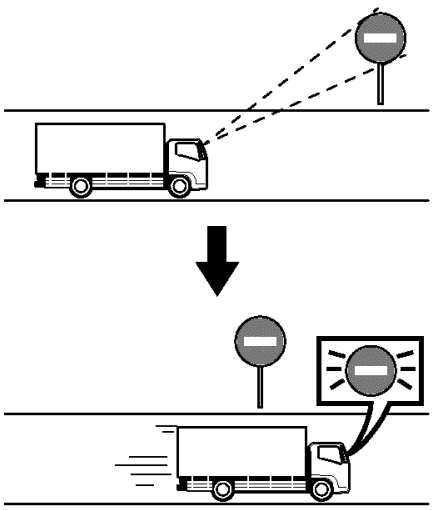
- The vehicle decelerates to below the speed limit on the traffic sign
- When the "Speed limit sign" is updated so the vehicle is driving below the updated speed limit
- When the "Speed limit sign" display ends

NOTE

- When the camera recognizes that the speed limit is lower than the actual display, the speed limit warning may activate even though the speed of your vehicle is within the legal range.

Multi-information display	Warning buzzer	Conditions
Display area 1  (Flashing)	Continuous beep	If your vehicle speed exceeds the speed of the traffic sign detected by the camera

No Entry Warning

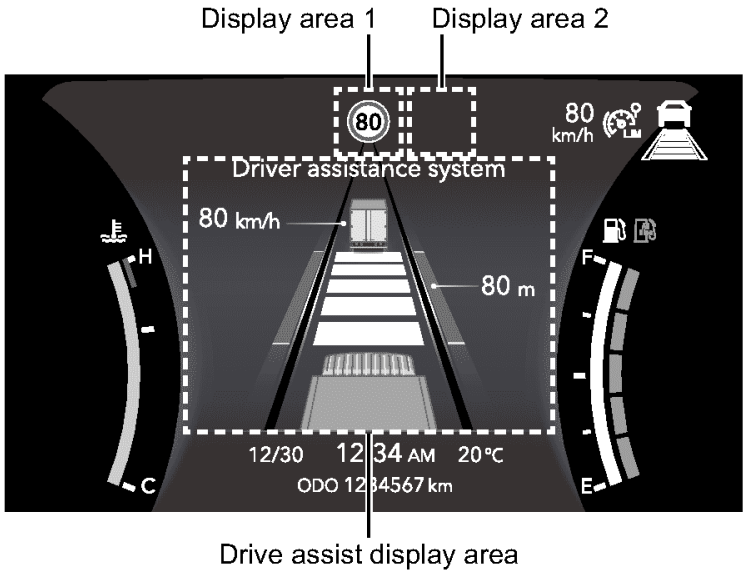


When a no entry sign recognized by the camera is passed while driving, then "No entry" flashes and "No entry" is displayed on the multi-information display and a warning buzzer sounds at the same time. The warning ends after a certain period of time.

Multi-information display	Warning buzzer	Conditions
Display area 2  (Flashing)	One short beep	When the vehicle passes a no entry sign and then enters the restricted area
Drive assist display area No entry 		

Description of Traffic Sign Recognition System on the Multi-information Display

You can check the display of the driver assistance display area when "Advanced driver assistance systems display" is selected.



Name	Display area 1	Display area 2	Drive assist display area
Traffic sign recognition on	-- (Red)	—	—
Traffic sign recognition off	-- (Gray)	—	—
Traffic sign recognition abnormality	-- (Amber)	—	—
Speed limit signs	80	—	—

Name	Display area 1	Display area 2	Drive assist display area
No entry	—		No entry 
No overtaking	—		—
Stopping temporarily	—		—

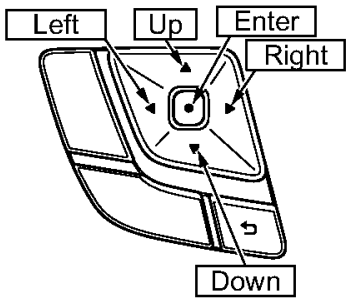
NOTE

- Up to two traffic signs are displayed on the normal screen.
- If the engine is stopped while a traffic sign is displayed, the sign does not reappear when you restart the engine.

Setting the Traffic Sign Recognition System

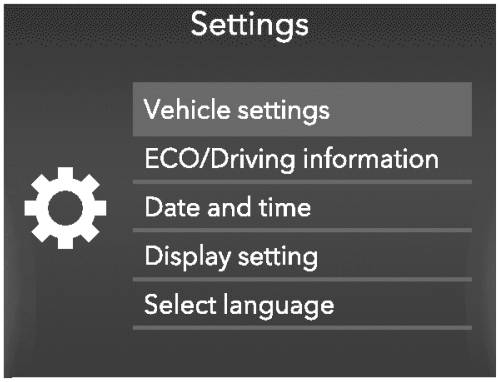
Turning On and Off the Traffic Sign Recognition System

From the "Vehicle settings" screen on the multi-information display, you can deactivate traffic sign recognition.



1. Press "Left" or "Right" on the multi-information display switch to switch the screen and display the settings screen. If a message to the driver is displayed, press "Enter" to return to the normal screen, and then switch to the settings screen.

Refer to page
3-48 Main Display Area



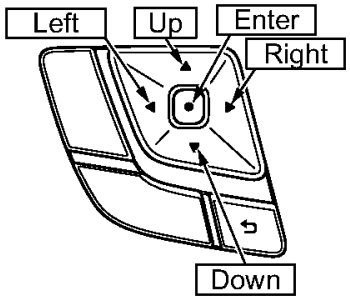
2. On the setting screen, select in order, "Vehicle settings" → "Driver assist functions in front" → "Traffic sign recognition" → "Traffic signs ON/OFF".
3. Press "Up" or "Down" on the multi-information display switch to switch the traffic sign recognition function between on and off. Press "Enter" to select.

NOTE

- Traffic sign recognition system always turns on after the engine is started.
- When the system temporarily stops operations, the multi-information display may not be able to switch on and off.
- When traffic sign recognition system is set to off, the other traffic sign recognition settings cannot be operated.

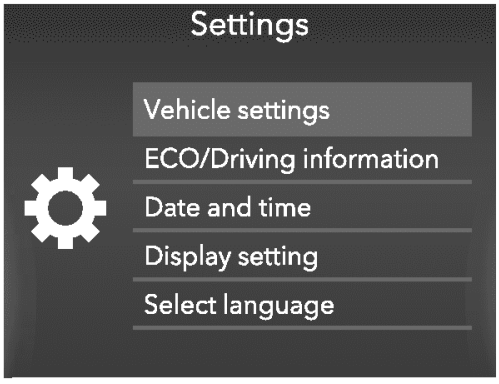
Changing the Notification Method for the Warning of Exceeding the Maximum Speed

You can use the multi-information display switch to change the notification method for the warning of exceeding the maximum speed.



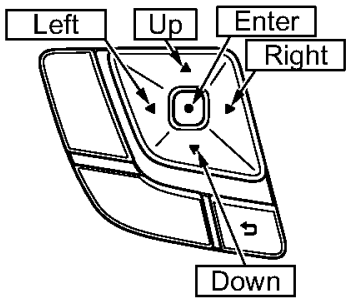
1. Press "Left" or "Right" on the multi-information display switch to switch the screen and display the settings screen. If a message to the driver is displayed, press "Enter" to return to the normal screen, and then switch to the settings screen.

Refer to page
3-48 Main Display Area



2. On the setting screen, select in order, "Vehicle settings" → "Driver assist functions in front" → "Traffic sign recognition" → "Speed limit alert".
3. Adjust the "Up" or "Down" multi-information display switches, and then confirm by pressing "Enter". You can adjust it to 3 levels, "OFF", "Alert display only", and "Alert display and sound".

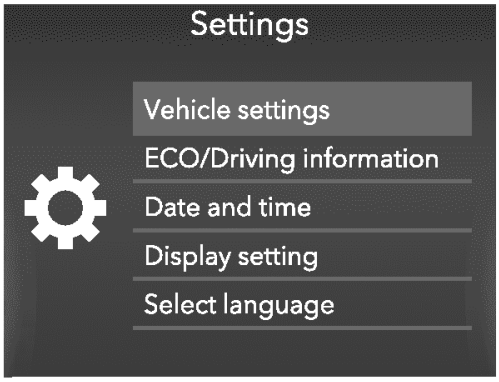
Setting the Warning Speed for Warning of Exceeding the Maximum Speed



You can use the multi-information display switch to adjust the speed to be exceeded to cause the warning of exceeding the maximum speed. When the speed of your own vehicle exceeds the recognized speed limit sign, a warning sounds.

1. Press "Left" or "Right" on the multi-information display switch to switch the screen and display the settings screen. If a message to the driver is displayed, press "Enter" to return to the normal screen, and then switch to the settings screen.

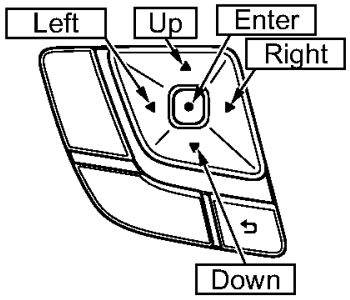
Refer to page
3-48 Main Display Area



2. On the setting screen, select in order, "Vehicle settings" → "Driver assist functions in front" → "Traffic sign recognition" → "Alert speed".
3. Adjust the "Up" or "Down" multi-information display switches, and then confirm by pressing "Enter". The speed over the limit at which warning sounds can be adjusted to 3 levels "2 km/h", "5 km/h", or "10 km/h".

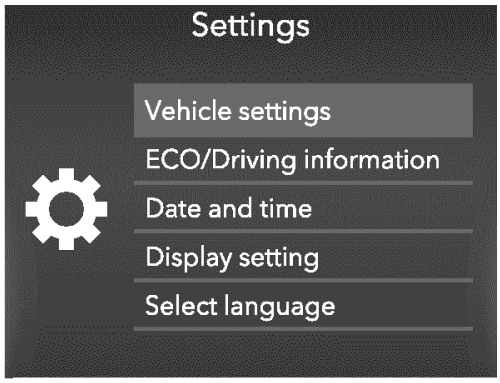
Turning On and Off the Speed Limit Sign Notification Sound

You can use the multi-information display switch to set the notification sound when a speed limit sign is recognized.



1. Press "Left" or "Right" on the multi-information display switch to switch the screen and display the settings screen. If a message to the driver is displayed, press "Enter" to return to the normal screen, and then switch to the settings screen.

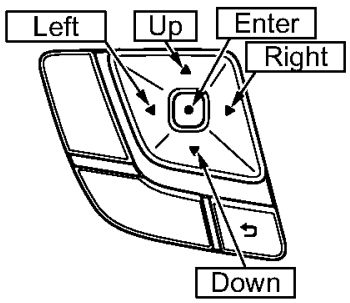
Refer to page
3-48 Main Display Area



2. On the setting screen, select in order, "Vehicle settings" → "Driver assist functions in front" → "Traffic sign recognition" → "Sound of Speed limit update".
3. Press "Up" or "Down" on the multi-information display switch to switch the notification sound between ON/OFF. Press "Enter" to select.

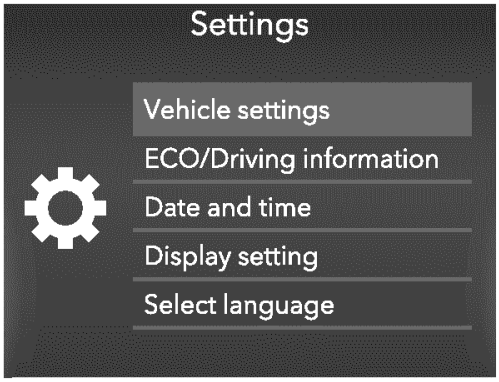
Changing the Notification Method for the No Entry Warning

You can use the multi-information display switch to change the notification method for the no entry warning.



1. Press "Left" or "Right" on the multi-information display switch to switch the screen and display the settings screen. If a message to the driver is displayed, press "Enter" to return to the normal screen, and then switch to the settings screen.

Refer to page
3-48 Main Display Area



2. On the setting screen, select in order, "Vehicle settings" → "Driver assist functions in front" → "Traffic sign recognition" → "No entry alert".
3. Adjust the "Up" or "Down" multi-information display switches, and then confirm by pressing "Enter". You can adjust it to 3 levels, "OFF", "Alert display only", and "Alert display and sound".

When the Traffic Sign Recognition System Does Not Operate Normally

The traffic sign recognition system is one part of the advanced driver assistance systems. It does not operate normally if there is a system abnormality.

Refer to page
5-7 When There is a Problem in the ADAS

In the following situations, the traffic sign recognition system may not operate properly because the camera cannot recognize a traffic sign accurately.

- When a traffic sign is dirty due to mud, sand, etc.
- When a traffic sign is hidden by trees, other vehicles, etc.
- When part of a traffic sign has different brightness due to shadows or other factors
- When a traffic sign is bent or distorted
- When a traffic sign is too high or too low
- When a traffic sign is too large or small
- When a traffic sign (including electric traffic signs) is too bright or too dark
- When something similar in shape and color to a traffic sign is in a recognizable position (traffic signs not targeted to be recognized, or sign boards, etc.)
- When the time for the camera to recognize traffic signs is short
- When the system incorrectly judges the driving situation (turning, changing lanes, etc.)
- When a traffic sign is located just after a road junction on an expressway or just before where adjacent lanes merge
- When, on the back of the preceding vehicle, there is a sticker (which is similar in color or shape to a traffic sign, or is reflective, etc.) that prevents recognition of traffic signs
- When a speed limit sign on a side road is within the recognition range of the camera
- When driving in a rotary (roundabout)
- When the camera recognizes objects on the instrument panel cluster which are reflected off the windshield
- When the vehicle is tilted because of rough roads
- When tire air pressure is not appropriate
- When special tires are installed
- When driving through or near parking area exits or expressway tollbooths
- When driving on sharp curves
- When the surrounding brightness rapidly changes, such as when entering or exiting a tunnel
- When the headlight beams are misaligned or their light is weak, because the lenses are dirty
- When the windshield is dirty or foggy
- When there is condensation on the windshield and/or camera
- When the vehicle is subject to strong light from the forward direction (backup lights, high beam, etc.)
- When strong light is reflected on the road
- When a traffic sign is located outside the range of your headlights, such as at night or in a tunnel
- When driving in poor weather conditions (rain, snow, or fog)

Intelligent Speed Limiter [V]

The intelligent speed limiter is a system that limits the speed according to the speed limits posted for each road. The maximum speed of your vehicle can be set in a range from approximately 30 km/h (20MPH) to the speed set for the speed limit device according to limits detected by the camera using traffic sign recognition system.

Refer to page
5-6 Precautions for ADAS
5-87 Traffic Sign Recognition System [V]

⚠ WARNING

- **Set the vehicle speed within an appropriate speed range for road conditions and environment, and observe the speed limit.**
- **If a vehicle speed lower than the speed while driving is set, the system decelerates the vehicle. Always check the surrounding area to be safe when using the system.**

⚠ CAUTION

- **When the intelligent speed limiter icon is displayed in the multi-information display, check the set vehicle speed upper limit before starting to drive.**
- **When any other person drives the vehicle, always deactivate the intelligent speed limiter. Driving a vehicle without knowing that this function is on may cause unexpected trouble.**
- **In case of driving on an expressway or a limited-access road, do not set a speed lower than the specified minimum speed. Otherwise, the vehicle cannot be driven according to the road conditions, which may cause an unexpected accident.**

[Model with Speed Limit Device]

- **An upper speed limit that exceeds the set speed of the speed limit device cannot be set.**

Refer to page
4-215 Speed Limit Device [V]

NOTE

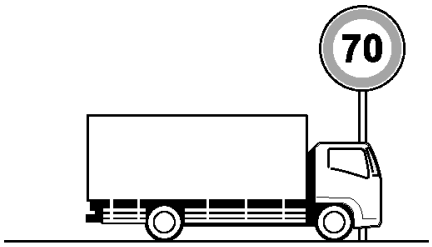
- The intelligent speed limiter does not operated if traffic sign recognition system cannot be used.
- The system is temporarily deactivated when the accelerator pedal is depressed strongly and the vehicle accelerates. When the vehicle speed reaches the set speed or less, the system reactivates.
- On a downhill slope, the vehicle speed may exceed the set speed.
- The maximum speed of the vehicle varies by your country.

Operation of the Intelligent Speed Limiter

The intelligent speed limiter uses traffic sign recognition system or the steering wheel switch to set and change the upper speed limit.

Refer to page
5-106 When the Intelligent Speed Limiter Does Not Operate Normally

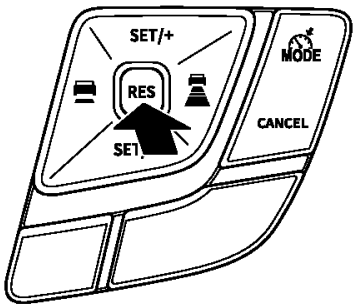
Setting Vehicle Speed Upper Limit (Traffic Sign Recognition System)





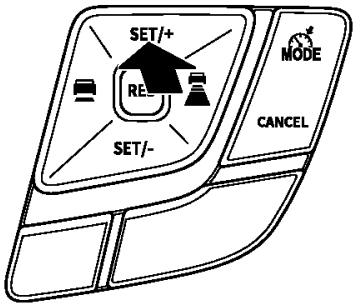
1. If the camera recognizes a speed limit sign when the speed limit device is set while driving, the speed limit sign mark appears on the multi-information display after passing the sign, and the "RES" icon (white) turns on under the speed limit sign mark.
2. When the resume switch is pressed, the vehicle speed upper limit is set. Also, "RES" on the multi-information display turns green.

Changing Vehicle Speed Upper Limit (Traffic Sign Recognition System)

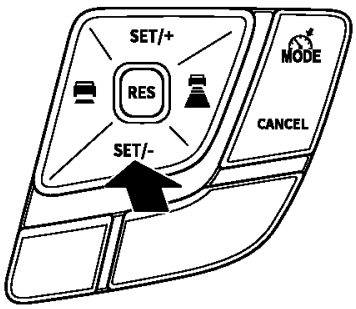


If a speed limit sign that is different from the set vehicle speed upper limit is recognized, then after passing the sign, the "RES" icon (white) turns on under the speed limit sign mark on the multi-information display.
Pressing the resume switch while "RES" is displayed changes the vehicle speed upper limit. Also, "RES" on the multi-information display turns green.

Changing Vehicle Speed Upper Limit (Set By Switch)



Pressing the "+" side of the set switch increases the vehicle speed, and the vehicle speed upper limit that is displayed in the multi-information display also increases.
By holding down the "+" side of the set switch, the set vehicle speed can be increased in increments of 5 km/h (5 MPH). Stop operating the switch when the desired speed is indicated.
Operate and then immediately release the "+" side of the set switch. The vehicle speed upper limit increases by 1 km/h (1 MPH) for each operation.



Pressing the "-" side of the set switch decreases the vehicle speed, and the vehicle speed upper limit that is displayed in the multi-information display also decreases.
By holding down the "-" side of the set switch, the set vehicle speed can be decreased in increments of 5 km/h (5 MPH). Stop operating the switch when the desired speed is indicated.
Operate and then immediately release the "-" side of the set switch. The vehicle speed upper limit decreases by 1 km/h (1 MPH) for each operation.

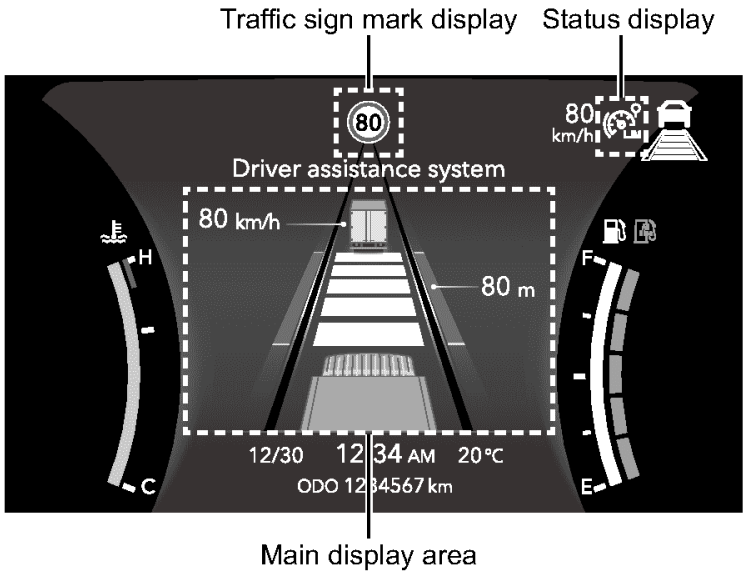
NOTE

- Changing the vehicle speed upper limit is also possible when the vehicle is stopped.

Intelligent Speed Limiter Warnings/Indicators

Details of Intelligent Speed Limiter on Multi-information Display

You can check the display of the main display area when "Advanced driver assistance systems display" is selected.



Name	Multi-information display			Display details
	Traffic sign mark	Status display	Main display area	
Intelligent speed limiter off	*	—	—	When the intelligent speed limiter is off
Intelligent speed limiter on	*	LIM (White)	Intelligent speed limiter Driver assistance mode changed	• If the starter switch is set to the "ON" position • The intelligent speed limiter turns on when no speed limit sign is detected

Name	Multi-information display			Display details
	Traffic sign mark	Status display	Main display area	
Speed limit setting	*	 (Green)	—	When a vehicle speed upper limit is set
Request to change speed limit	 (White)	 (Green)	—	When a speed limit sign is recognized and the driver is requested to change the upper speed limit
Approval to change speed limit	 (Green)	 (Green)	—	Request to change the upper speed limit has been approved by the driver ("RES" turns green)
Set vehicle speed was exceeded	*	 (Flashing)	—	When your vehicle exceeds the set vehicle speed (the icon in the status display area flashes)
Intelligent speed limiter temporarily canceled	*		—	The intelligent speed limiter has been temporarily deactivated by the accelerator pedal being further depressed when almost fully depressed (the icon in the status display area flashes)

*: The sign mark is displayed according to the operating status of traffic sign recognition system.

Warning of the Intelligent Speed Limiter

Intelligent speed limiter icon

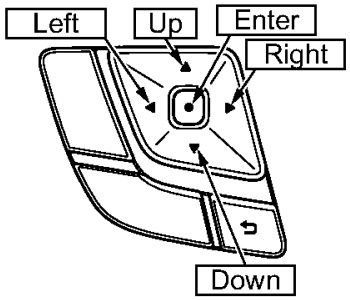


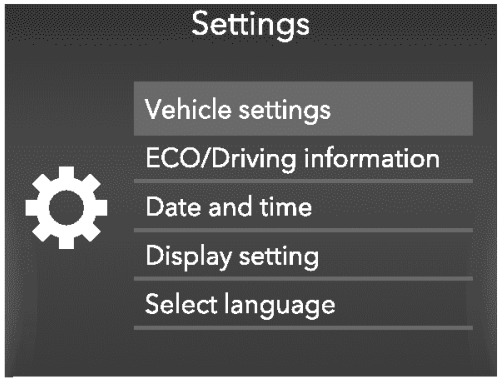
If the vehicle is driven faster than the speed limit that was set, the status display area icon flashes on the multi-information display. The flashing continues until the vehicle speed is reduced to below the set speed limit.
While checking the surrounding conditions, use the brake pedal, etc., to decelerate.

Setting the Intelligent Speed Limiter

Turning ON and OFF the Intelligent Speed Limiter

You can set the intelligent speed limiter to on/off by the multi-information display switch.





1. Press "Left" or "Right" on the multi-information display switch to switch the screen and display the settings screen. If a message to the driver is displayed, press "Enter" to return to the normal screen, and then switch to the settings screen.

Refer to page
3-48 Main Display Area

2. On the setting screen, select in order, "Vehicle settings" → "Driver assist functions in front" → "Intelligent speed limiter".
3. Press the "Up" or "Down" multi-information display switches to select ON/OFF, and then confirm by pressing "Enter".

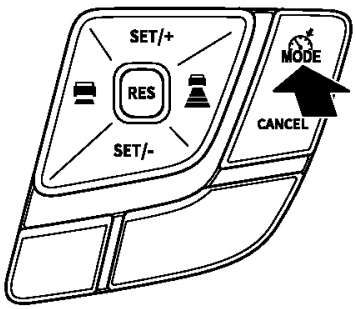
NOTE

- When the intelligent speed limiter is turned off, it switches to the variable speed limiter.

Refer to page
4-216 Variable Speed Limiter [V]

Deactivating the Intelligent Speed Limiter

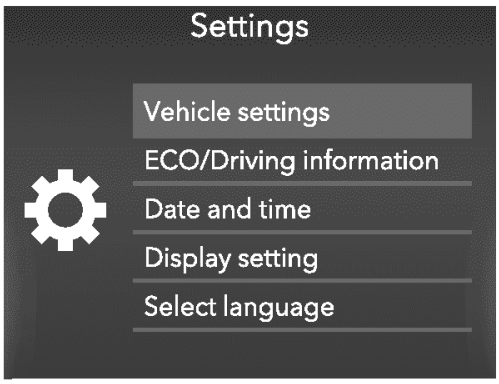
Mode switch



This is canceled when one of the following procedures is performed.

- If the starter switch is set to "ACC" or "LOCK" position
- When the mode switch is pressed
- While the intelligent speed limiter is in operation and the accelerator pedal is fully-depressed, and then it is depressed further again (return the accelerator pedal and it resumes)

Switching the Intelligent Speed Limiter and Variable Speed Limiter



By turning the intelligent speed limiter ON/OFF on the multi-information display, you can switch between the intelligent speed limiter and the variable speed limiter.
When the intelligent speed limiter is set to "ON", the intelligent speed limiter is activated.
When the intelligent speed limiter is set to "OFF", the variable speed limiter is activated.

NOTE

- The intelligent speed limiter and variable speed limiter cannot be turned on at the same time. Change the settings according to your purpose.

Refer to page
4-216 Variable Speed Limiter [V]
5-104 Turning ON and OFF the Intelligent Speed Limiter

When the Intelligent Speed Limiter Does Not Operate Normally

The intelligent speed limiter is one part of the advanced driver assistance systems. It does not operate normally if there is a system abnormality.

NOTE

- When "Front camera unavailable" is displayed, then traffic sign linked speed limit device is canceled, and it automatically switches to the variable speed limiter. After cleaning the windshield (outside), redo the settings from the multi-information display.

Refer to page
4-216 Variable Speed Limiter [V]
5-7 When There is a Problem in the ADAS

Lane Departure Warning System (LDWS) [V]

When the LDWS detects that the vehicle has deviated from the lane, it will alert the driver by audible warnings and indications on the multi-information display.
This system operates at speeds of approximately 60 km/h (37 MPH) and above.

Refer to page
5-6 Precautions for ADAS

WARNING

- **The LDWS is designed to support driving within the lanes, and is not meant as a substitute for paying attention to the road or keeping your hands on the wheel. Always keep your hands on the steering wheel and drive safely.**

NOTE

- LDWS stands for "Lane Departure Warning System".

Operating Conditions of the LDWS

All of the following conditions must be met for the LDWS to operate:

- The LDWS OFF indicator light is not on.
- "Front camera failure" and "Front camera unavailable" are not shown in the multi-information display.
- The vehicle speed is above approximately 60 km/h (37 MPH).
- Lane markers can be recognized during vehicle operation.

NOTE

- LDWS does not operate for approximately 10 seconds after the engine is started.
- If the vehicle is parked in the sun for an extended period of time, the LDWS may not operate immediately after the vehicle is started, but this is normal. The camera will resume operation once the temperature around the camera has returned to a normal level.
- After the LDWS operates, the function will be temporarily halted. The function will recover a few seconds after it is halted.
- LDWS warnings will be temporarily disabled in the following cases.
  - One of the turn signals is on
  - The steering wheel is turned with a force appropriate for making a lane change
  - When driving on sharp curves
  - The vehicle speed is below approximately 60 km/h (37 MPH)
  - The lane markers cannot be detected while driving

Refer to page
5-107 LDWS OFF Indicator Light
5-112 When the LDWS May Not Operate Correctly

LDWS Warnings/Indicators

LDWS OFF Indicator Light



The light will come on when the LDWS function is stopped or when there is an LDWS malfunction.
If the light does not turn off, stays illuminated even though the LDWS has not been turned off, or does not illuminate when the starter switch is turned to the "ON" position, contact your nearest Isuzu Dealer.

NOTE

- After the engine stops due to engine stalling, it is not abnormal if the LDWS OFF indicator light comes on momentarily when the engine is restarted.

Details of LDWS on Multi-information Display

Depending on the LDWS status, the following will be shown on the multi-information display.

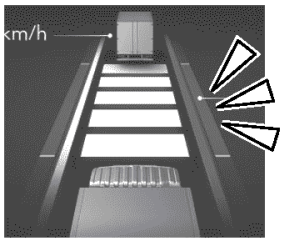
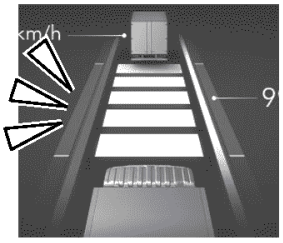
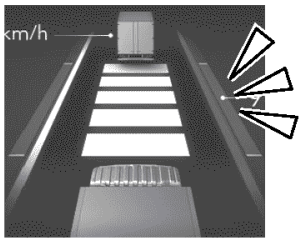
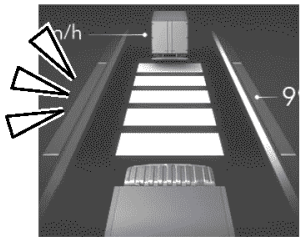
Name	Multi-information display Drive assist display area*1	Indication details
LDWS off		When the LDWS function has been turned off using the LDWS switch.
LDWS on		The LDWS is operating.
Warning display		When the lane departure warning system senses that the vehicle is departing its lane and issues a warning (either the left or right warning sounds)
Vehicle lane cannot be detected		When the camera cannot detect the vehicle lane or the vehicle speed is below approximately 60 km/h (37 MPH).

*1: The preceding vehicle icon is displayed only during full speed range adaptive cruise control, following distance warning, or while AEBS is operating.

Refer to page
3-44 Multi-information Display Functions
5-36 Preceding Vehicle Departure Notification Function [V]

Warning of the LDWS

When the LDWS detects the vehicle deviating from a lane, it alerts the driver with messages in the multi-information display and warning sounds.

Warning timing	Multi-information display		Warning buzzer	Condition
	Main display area*	Drive assist display area		
Fast			Rapidly repeated beeps	Warning buzzer sounds when the vehicle tire in contact with right lane marker.
			Rapidly repeated beeps	Warning buzzer sounds when the vehicle tire in contact with left lane marker.
Standard			Rapidly repeated beeps	Warning buzzer sounds when the vehicle tire crossed right lane marker.
			Rapidly repeated beeps	Warning buzzer sounds when the vehicle tire crossed left lane marker.

*: You can check the display of the main display area when "Advanced driver assistance systems display" is selected.

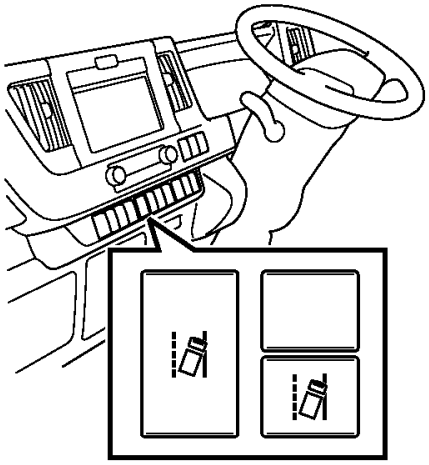
NOTE

- The warning will sound if the driver changes lanes without operating the turn signal switch.

Setting of the LDWS

Turning On and Off the LDWS

LDWS switch



Use the LDWS switch to turn the LDWS off. Pressing and holding the LDWS switch switches the lane departure warning between on and off. When the LDWS is stopped, the LDWS OFF indicator light comes on.

NOTE

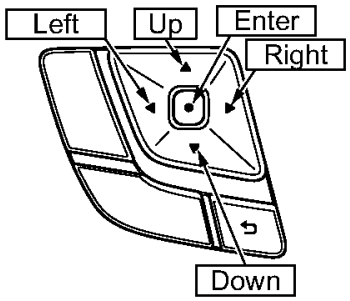
- If the engine is stopped and restarted while the LDWS is stopped, then the lane departure warning will be activated at the previously set warning timing.

LDWS OFF indicator light



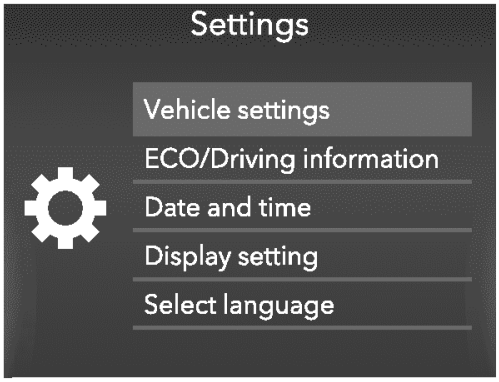
Changing the Warning Timing of LDWS

From the "Vehicle settings" screen on the multi-information display, you can switch the timing for the lane departure warning.



1. Press "Left" or "Right" on the multi-information display switch to switch the screen and display the settings screen. If a message to the driver is displayed, press "Enter" to return to the normal screen, and then switch to the settings screen.

Refer to page
3-48 Main Display Area



2. In the settings screen, select in order, "Vehicle settings" → "Driver assist functions for side" → "Lane departure warning" → "Warning timing".
3. Press "Up" or "Down" to switch the timing of the lane departure warning to "Fast" or "Standard", and then press "Enter" to select.

NOTE

- When the engine is stopped while "Fast" or "Standard" is selected for the warning timing, then the warning timing that is set before the engine is stopped is maintained.

When the LDWS May Not Operate Correctly

The LDWS is one of the advanced driver assistance systems. It may not operate correctly if the system has a problem.

Refer to page
5-7 When There is a Problem in the ADAS

The system may not be able to recognize lanes and therefore may not function properly under the following conditions:

- Lane markers are blurred or dirty
- Lane markers are hard to detect due to rain, snow, fog, reflective light, etc.
- Lane markers can not be easily recognized due to being faded from road construction, or due to shadows, snow, puddles, etc.
- Lane markers are drawn close to each other
- Lane markers are excessively narrow or wide
- Driving on forked roads, on-ramps/off-ramps, or sharp curves
- Driving across lane markers because of lane restrictions due to construction or within temporary markers that have been drawn for construction purposes
- Driving on twisting or rough roads
- Driving outside of main highway lanes such as when in the cruising or passing lanes (e.g. on the shoulder, etc.)
- The speed to cross the road lane markers is low
- Headlight illumination is weak or unfocused due to dirty headlight lenses, etc.
- Sudden or continuous changes in brightness occur
- The vehicle is tilted significantly due to unevenly loaded cargo, incorrectly adjusted tire pressure, etc.

Attention Assist [V]

The attention assist detects when the vehicle is weaving within the lane markers and alerts the driver with a multi-information display and a buzzer.

Refer to page
5-6 Precautions for ADAS

WARNING

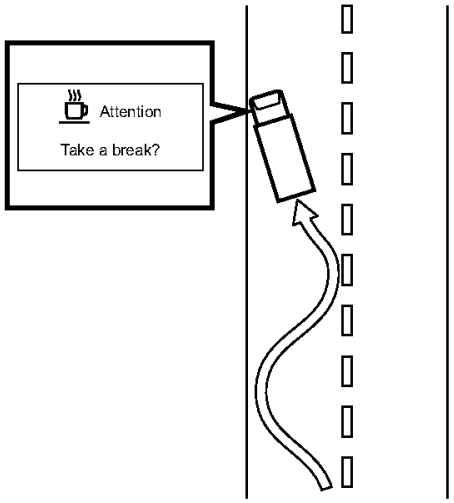
- **The driver is responsible for safe driving. While driving, always check the surrounding area to assure safety.**
- **The attention assist does not operate in all situations. Also, it does not automatically correct the vehicle's weaving. Depending on the attention assist to do the driving may lead to an unexpected accident.**
- **If the stereo camera cannot detect the lane markers, or if the stereo camera is temporarily stops or malfunctions, then attention assist does not operate.**

NOTE

- Whether the vehicle is weaving or not is recognized based on the drive data in the past few minutes. Weaving cannot be recognized immediately after the vehicle starts weaving. Also, the system may continue operating even after the vehicle has stopped weaving.
- The attention assist is a function to raise the driver's alertness. If your ability to concentrate on driving is impaired, because you are tired or cannot focus, we recommend taking a rest.

Operation of the Attention Assist

Attention assist warning



The system issues a warning when the vehicle is weaving while driving at about 65 km/h (40 MPH) or more. At this time, a warning message is displayed on the multi-information display. At the same time, a buzzer sounds.

NOTE

- When the vehicle speed falls below approximately 60 km/h (37 MPH), operations stop. After that, when the vehicle speed exceeds approximately 65 km/h (40 MPH), it reactivates.

Refer to page
5-115 When the Attention Assist Does Not Operate Properly

Attention Assist Warnings/Indicators

Attention Assist Warning Light



(Amber)

This warning light comes on when there is an abnormality with the Attention Assist.

NOTE

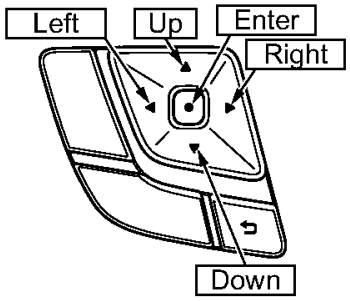
- The Attention Assist warning light does not come onwhile the Attention Assist is turned off.

Refer to page
5-115 Turning On and Off the Attention Assist

Setting of the Attention Assist

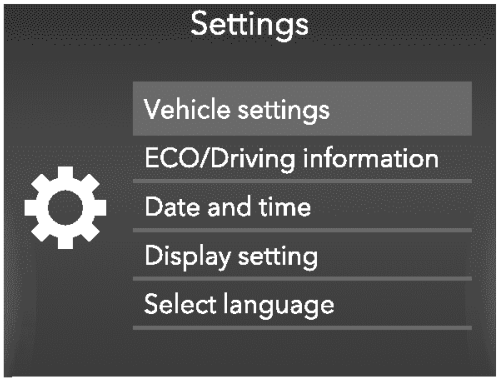
Turning On and Off the Attention Assist

You can set the attention assist to on/off by the multi-information display switch.



1. Press "Left" or "Right" on the multi-information display switch to switch the screen and display the settings screen. If a message to the driver is displayed, press "Enter" to return to the normal screen, and then switch to the settings screen.

Refer to page
3-48 Main Display Area



2. On the setting screen, select in order, "Vehicle settings" → "Driver monitoring" → "Attention assist".
3. Press the "Up" or "Down" of multi-information display switches to select ON/OFF, and then confirm by pressing "Enter".

NOTE

- Even if Attention Assist is turned off, it is turned on again when the engine is restarted.

When the Attention Assist Does Not Operate Properly

The attention assist is one part of the advanced driver assistance system. It does not operate normally if there is a system abnormality.

Refer to page
5-7 When There is a Problem in the ADAS

In the following situations, attention assist may not operate normally.

- When driving on continuous curves
- When the vehicle speed fluctuates extremely
- Immediately after changing lanes

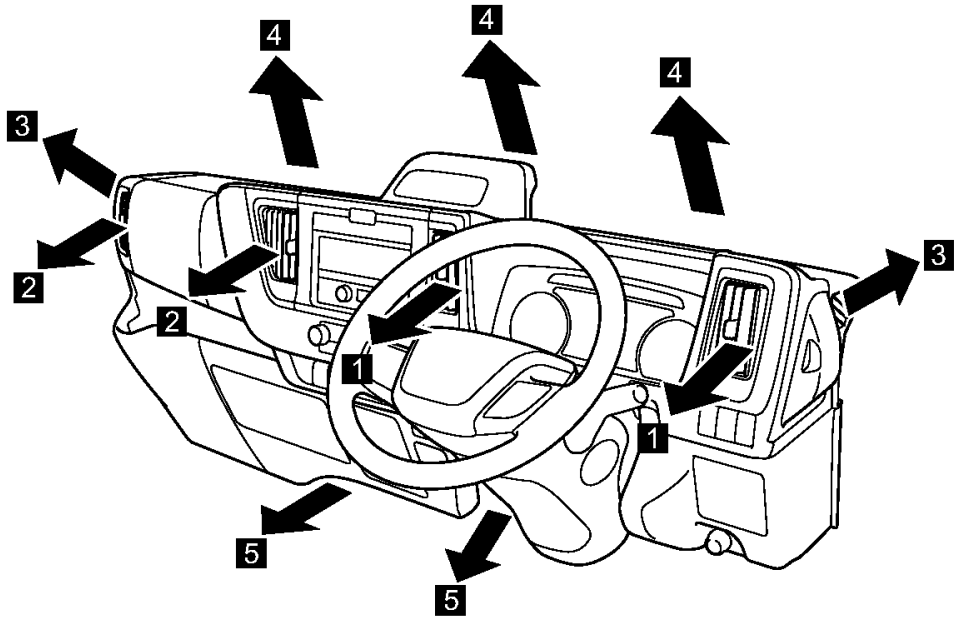
Comfort and Convenience 6

- Front Air Outlets 6-3
- Rear Air Outlets [V] 6-4
- Heater/Manual Air Conditioner [V] 6-5
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- Rear Cooler [V] 6-23
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6-2 Comfort and Convenience

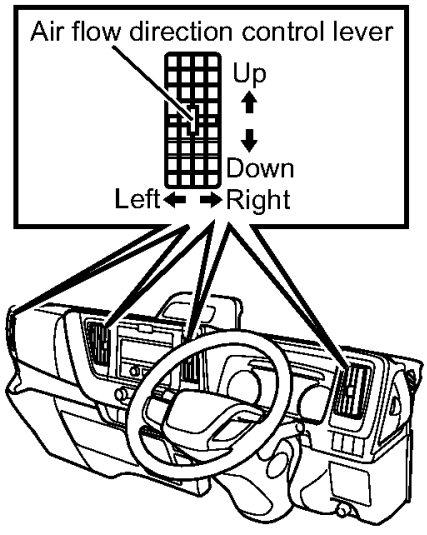
- Rear Tray [V] 6-41
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- Handsfree Operation [V] 6-68
- Using the Audio System [V] 6-78
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Front Air Outlets



No.	Outlet	Features
1	Driver side outlet	Air flow direction is adjustable with the lever.
2	Passenger side outlet	Air flow direction is adjustable with the lever.
3	Door windows outlet	Air is delivered towards the door windows.
4	Windshield outlet	Air is delivered towards the windshield.
5	Foot outlet	Air is delivered towards the feet.

Air Flow Direction Control Lever

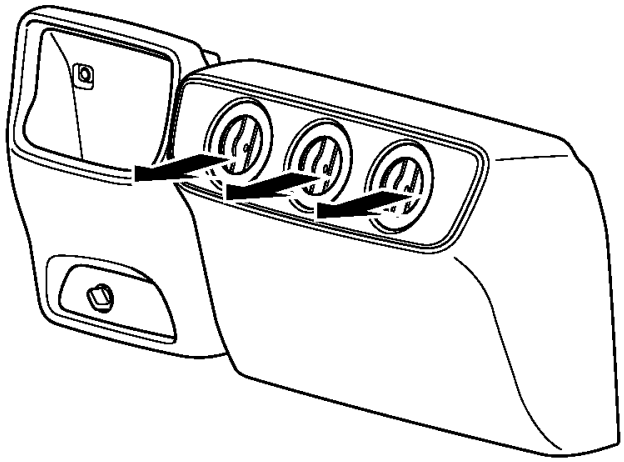


Use the control lever to adjust the airflow direction from the outlet. To close the outlet, move the lever down.

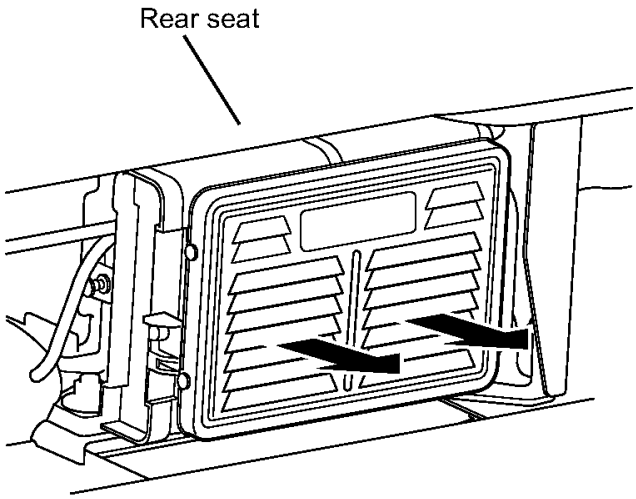
Rear Air Outlets [V]

Crew cab model

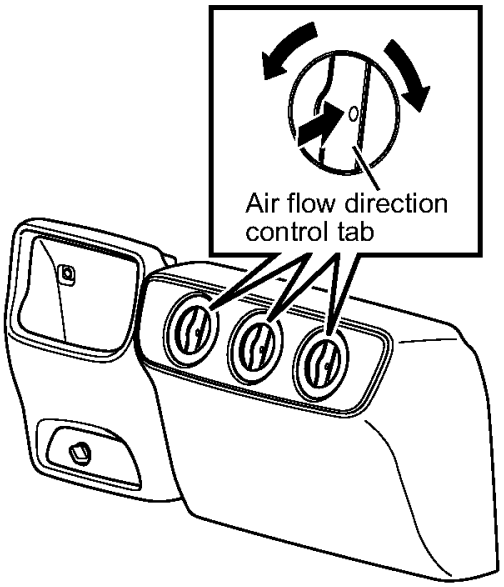
Rear cooler



Rear heater



Air Flow Direction Control Tab (Rear Cooler)



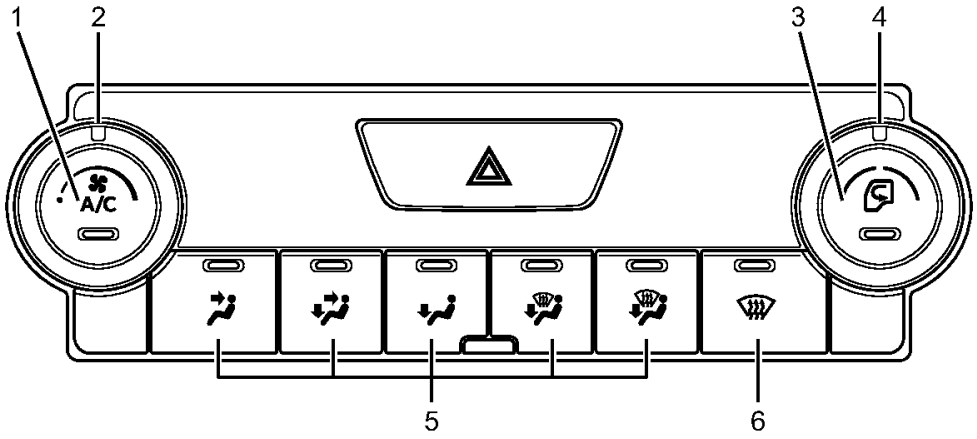
Open by pressing the center section of the tab. Turn the air outlet clockwise or counterclockwise to adjust the air flow direction.

Heater/Manual Air Conditioner [V]

NOTE

- With some mounted equipment, when the PTO switch is turned on while the air conditioner is operating, the air condition may be stopped to protect the engine. When using the air conditioner, turn the PTO switch off while operating the air conditioner.

How to Use the Controls



No.	Name
1	Air conditioning (A/C) switch
2	Fan speed control dial
3	Inside/outside air selector switch
4	Temperature control dial
5	Outlet selector switches
6	Defroster switch

1. Air Conditioning (A/C) Switch

Press this switch to use the air conditioner. At this time, the pilot lamp of the switch illuminates to show that the air conditioner is activated. The air conditioner also performs dehumidification while heating.

NOTE

- Even if the A/C switch is turned on, the air conditioning system will not operate when the fan speed control dial is placed in the stop position. Make sure that the fan speed control dial is in a position other than the stop position.
- Even in seasons when the air conditioning system is not used, occasionally operate the system for a few minutes with the engine running at a low speed in order to keep the system's components lubricated.

2. Fan Speed Control Dial

Use this dial to adjust the A/C airflow.

3. Inside/Outside Air Selector Switch

Switch	Purpose	
Off	Outside air ventilation	To ventilate the cab's interior (This position should be normally selected.)
On	Inside air recirculation	To prevent dusty or otherwise contaminated outside air from entering the cab (such as in a tunnel or in congested traffic)

NOTE

- Extended use of the inside air recirculation position causes the windshield and windows to fog up easily, making visibility poor.

4. Temperature Control Dial

Use this dial to adjust the cab interior temperature according to your preference. Turning the adjustment knob counterclockwise lowers the outlet air temperature, and turning the knob clockwise raises the temperature.

5. Outlet Selector Switches

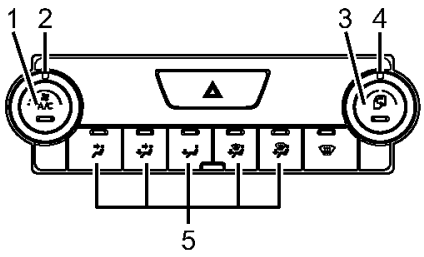
Switch	Purpose	Outlet
	Face	Air flows through outlets 1 and 2.
	Bi-level	Air flows through outlets 1, 2 and 5.
	Foot	Air flows through outlet 5.
	Foot and defroster 1	Air flows through outlet 5 and some through outlets 3 and 4.
	Foot and defroster 2	Air flows through outlet 5 and air of a greater volume than in first position "  " flows through outlets 3 and 4.

6. Defroster Switch

Switch	Purpose	Outlet
On	Defroster	Air flows through outlets 3 and 4.

Ventilation

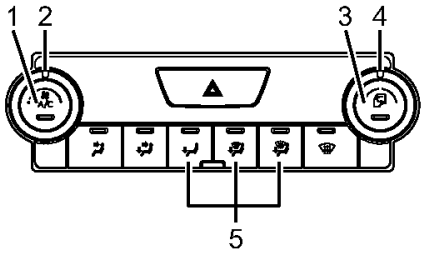
Outside Air Ventilation

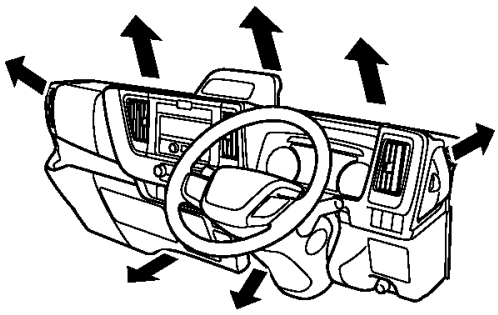


Set air conditioning (A/C) switch (1) to "off". Select any one of the positions on outlet selector switch (5) according to your preference. Set inside/outside air selector switch (3) to "off". Adjust temperature control dial (4) to the preferred position depending on the season and climate.
Use fan speed control dial (2) to select the preferred airflow.

How to Use the Heater

Normal Heating





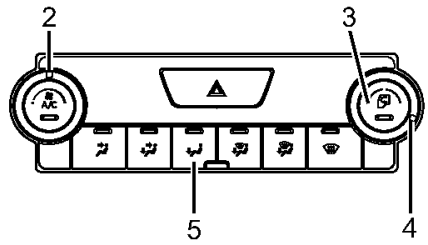
Set "", "", or "" on outlet selector switch (5) to "ON". You can defog the windshield while warming the feet by setting the "" switch to "on".
Set inside/outside air selector switch (3) to "off".
Adjust temperature control dial (4) and fan speed control dial (2) to the preferred positions.
A vehicle with an air conditioner (A/C) performs dehumidification and heating when air conditioning (A/C) switch (1) is set to "on".

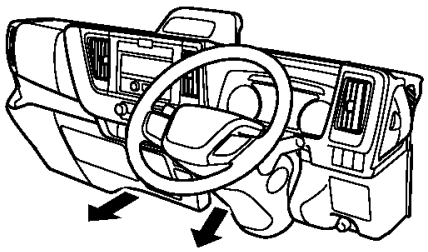
NOTE

- As the heater uses the heat from the engine coolant, its heating effect is weak when the engine coolant temperature is low. Turn on the warm-up switch to increase the heat.

Refer to page
4-61 Warm-Up Switch [V]

Maximum Heating





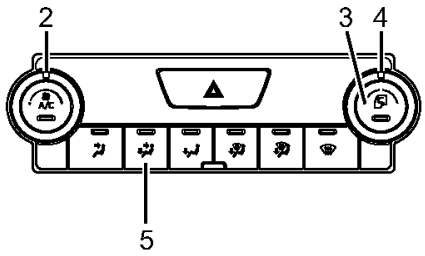
Set "" on outlet selector switch (5) and inside/outside air selector switch (3) to "on", and turn temperature control dial (4) fully towards the heating direction.
Set fan speed control dial (2) to the "maximum speed" position.
Turn on the warm-up switch if equipped.

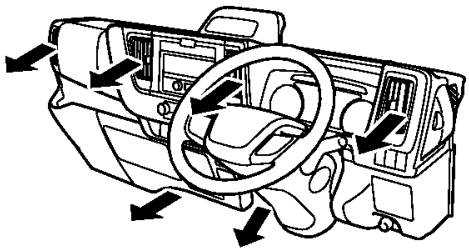
Refer to page
4-61 Warm-Up Switch [V]

NOTE

- Extended use of inside air recirculation causes the windshield and windows to fog up easily, making visibility poor.
- Turn the warm-up switch "ON" to facilitate warming up.

Bi-level Heating

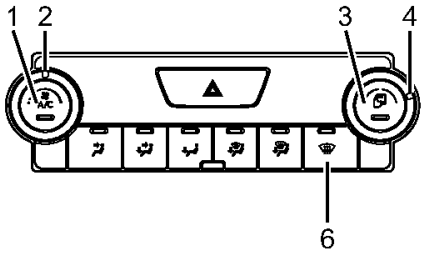


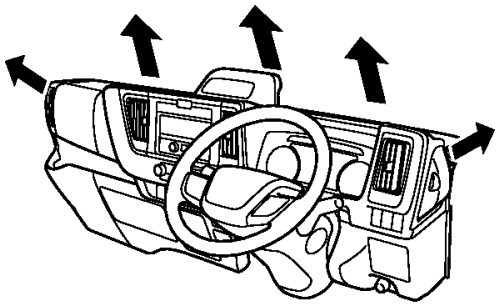


Set "" on outlet selector switch (5) to "on".
Set inside/outside air selector switch (3) to "off".
Set temperature control dial (4) to the middle position.
Adjust fan speed control dial (2) as desired.

Defogging and Defrosting the Windshield

Defogging



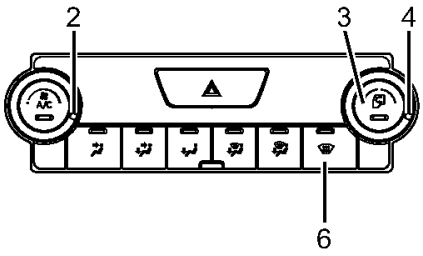


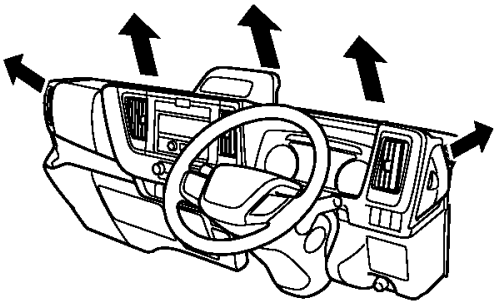
Set defroster switch (6) to "on".
Set inside/outside air selector switch (3) to "off".
Turn temperature control dial (4) to the preferred position towards the heating direction. For defogging in summer, adjust temperature control dial (4) as desired.
Set fan speed control dial (2) to the "on" position.
In vehicles with air conditioners (A/C), defogging is performed very effectively with the dehumidifying effect.

NOTE

- When using the air conditioner with defroster switch (6) set "on", do not set the temperature control dial close to the maximum cooling position. Doing so may cause the outside of the windshield to fog up, impeding forward visibility.

Defrosting





Set defroster switch (6) to "on".
Set inside/outside air selector switch (3) to "on".
Turn temperature control dial (4) fully towards the heating direction.
Set fan speed control dial (2) to the "maximum speed" position.
Turn on the warm-up switch if equipped.

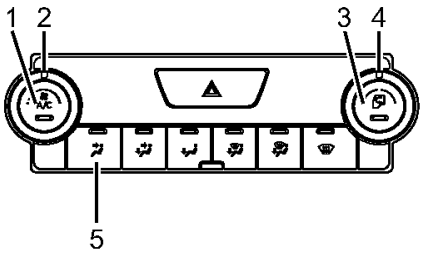
Refer to page
4-61 Warm-Up Switch [V]

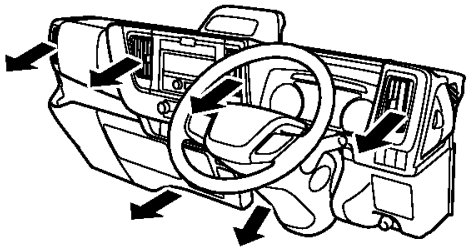
NOTE

- After defrosting, set inside/outside air selector switch (3) to "off". Failure to do so will cause the windshield to fog up easily, impeding forward visibility.

Cooling

Normal/Moderate Cooling



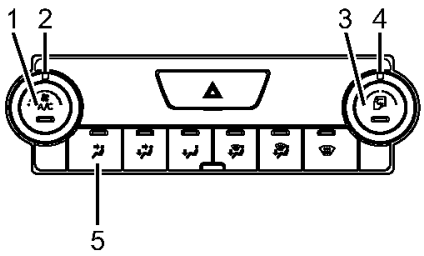


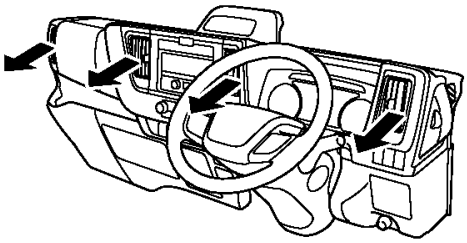
This setting is suitable for extended periods of cooling or moderate cooling.
Set air conditioning (A/C) switch (1) to "on".
Set " " on outlet selector switch (5) (or " " for moderate cooling) to "on".
Adjust temperature control dial (4) to the preferred position depending on the season and climate.
Adjust fan speed control dial (2) as desired.

NOTE

- When using the air conditioner (A/C) while idling in the sun, set inside/outside air selector switch (3) to "on".

Maximum Cooling





Set " " on outlet selector switch (5) to "on".
Set air conditioning (A/C) switch (1) to "on".
Set inside/outside air selector switch (3) to "ON".
Turn temperature control dial (4) fully towards the cooling direction.
Set fan speed control dial (2) to the "maximum speed" position.

NOTE

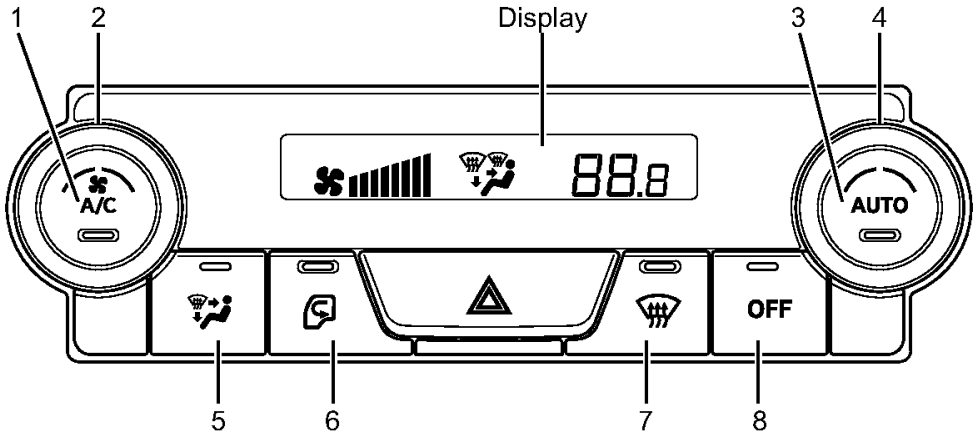
- If the vehicle has been parked in direct sunlight for a long time, open the windows or doors to ventilate the interior of the cab and release the heat before operating the air conditioner (A/C).
- Extended use of maximum cooling makes the air in the cab polluted. Use the inside/outside air selector switch (3) to operate outside air ventilation or open a window for ventilation at frequent intervals.
- During cooling operation, mist may come out of the air outlets due to the quick cooling of humid air. This does not indicate a problem.

Automatic Air Conditioner [V]

NOTE

- With some mounted equipment, when the PTO switch is turned on while the air conditioner is operating, the air condition may be stopped to protect the engine. When using the air conditioner, turn the PTO switch off while operating the air conditioner.

How to Use the Controls



No.	Name
1	Air conditioning switch (A/C switch)
2	Fan speed control dial
3	Automatic air conditioning switch (AUTO switch)
4	Temperature control dial
5	Outlet selector switch (MODE switch)
6	Air selector switch
7	Defroster switch
8	Automatic air conditioning off switch (OFF switch)

1. Air Conditioning Switch (A/C Switch)

Use this switch to turn the air conditioning on or off. If the A/C switch is pressed during fully automatic mode operation, the A/C switch indicator light turns off. Pressing it again will cause the system to return to the fully automatic mode.

2. Fan Speed Control Dial

Use this dial when manually selecting the fan speed. Turning the dial counterclockwise reduces the fan speed and turning it clockwise increases the fan speed. The fan speed can be adjusted through 8 levels.

Fan speed	Low	Medium	Fast	Maximum
Displayed symbol				

NOTE

- Even in seasons when the air conditioning system is not used, occasionally operate the system for a few minutes with the engine running at a low speed in order to keep the system's components lubricated.

3. Automatic Air Conditioning Switch (AUTO Switch)

Press this switch to use the air conditioning system in the fully automatic mode. When the switch is pressed, the system automatically selects the most suitable air outlets, fan speed and all other air conditioning parameters.

NOTE

- The last setting has priority over the previous setting for every control.

4. Temperature Control Dial

Use the temperature control dial for setting the desired interior temperature. The display will show the set temperature. Each turn by one notch makes a change of 0.5°C (1°F). The adjustable temperature range is between 18.5°C (65°F) and 31.5°C (85°F).
If you set the temperature at "LO", the system invariably sets the control for maximum cooling; if you set it at "HI", the system sets the control for maximum heating.

5. Outlet Selector Switch (MODE Switch)

The air outlet will change each time you press this switch. The outlet now selected will be shown on the display.

Displayed symbol	Purpose	Outlet
	Face	Air flows through outlets 1 and 2.
	Bi-level	Air flows through outlets 1, 2 and 5.
	Foot	Air flows through outlets 5.
	Foot and defroster 1	Air flows through outlets 5 and some through outlets 3 and 4.
	Foot and defroster 2	Air flows through outlets 5 and air of a greater volume than in position " " flows through outlets 3 and 4.

6. Air Selector Switch

Use this switch to change between ventilation of outside air and recirculation of the interior air. When you press the switch, the air selector switch indicator light comes on if inside air recirculation is selected.

Indicator light	Purpose	
Off	Outside air ventilation	This setting should normally be selected. (Use this setting to ventilate cab interior.)
On	Inside air recirculation	Use this position to prevent dusty or otherwise contaminated outside air from entering the cab (such as in a tunnel or in congested traffic).

NOTE

- Extended use of the inside air recirculation position causes the windshield and windows to fog up easily, making visibility poor.

7. Defroster Switch

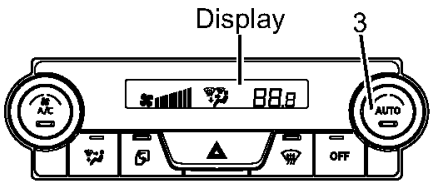
Use this switch for defogging or defrosting the windshield. Pressing the switch causes the display to show the " " symbol, and the defroster switch indicator light comes on. The air conditioning will turn on in this case. Pressing the switch again will return the display to the setting previous to " ".

Displayed symbol	Purpose	Outlet
	Defroster	Air flows through outlets 3 and 4.

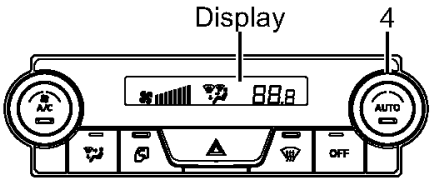
8. Automatic Air Conditioning Off Switch (OFF Switch)

Press this switch to stop both the fan and air conditioning.

Automatic Air Conditioning Mode



1. Press the AUTO switch (3). The air conditioning system will turn on. The AUTO switch (3) indicator light comes on, and automatically selects the air outlets and fan speed most suitable for the conditions in the cab's interior. The selected air outlets will be those corresponding to either the " ", " ", " " or " " mode.

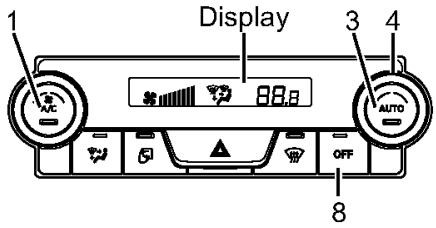


2. Use the temperature control dial (4) to set the interior temperature to the preferred level. The display will show the set temperature. Each turn by one notch makes a change of 0.5°C (1°F). The adjustable temperature range is between 18.5°C (65°F) and 31.5°C (85°F). If you set the temperature at "LO", the system invariably sets the control for maximum cooling; if you set it at "HI", the system sets the control for maximum heating.

NOTE

- Although the temperature can be set in the range of 18.5°C (65°F) to 31.5°C (85°F), the number displayed shows an approximate temperature. You may thus need finer adjustments for the preferred temperature.
- As the heater uses the heat from the engine coolant, its heating effect is weak when the engine coolant temperature is low.
- When you want to increase the effect of the heater, turn the warm-up switch "ON".

Refer to page
4-61 Warm-Up Switch [V]



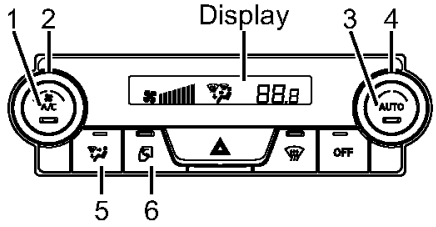
3. To turn off the air conditioning system, press the A/C switch (1). To turn off both the fan and air conditioning system, press the OFF switch (8).

NOTE

- If you operate a certain control (excluding the temperature control dial (4), A/C switch (1) and AUTO switch (3)) when the system is operating in the fully automatic mode, the AUTO switch (3) indicator light goes out and the setting you have made with the control will be shown on the display. Although your preferred setting remains for that particular control where you set it, the system continues automatic control for all other parameters.
- To return to the fully automatic air conditioning mode, press the AUTO switch (3).

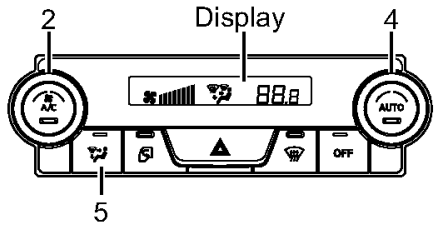
Manual Air Conditioning Mode

Outside Air Ventilation



Press the A/C switch (1) to turn off the air conditioning system. The AUTO switch (3) indicator light goes out.
Select the desired temperature with the temperature control dial (4) and select the desired air outlets with the MODE switch (5).
Press the air selector switch (6). The air selector switch (6) indicator light goes out.
Adjust the fan speed with the fan speed control dial (2) as desired.

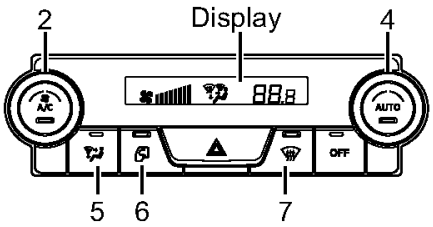
Maximum Heating

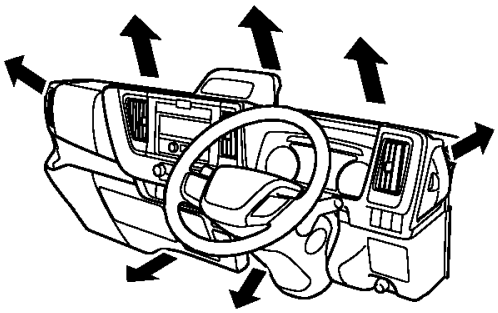


Turn the temperature control dial (4) to the maximum heating temperature ("HI") and set the fan speed control dial (2) for the maximum setting. Select the desired air outlets with the MODE switch (5).
Turn on the warm-up switch as needed.

Refer to page
4-61 Warm-Up Switch [V]

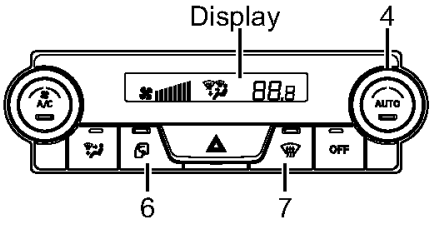
Defogging

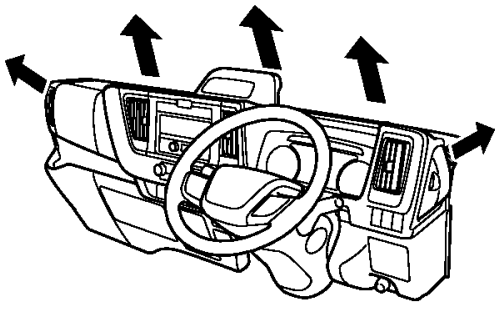




Press the defroster switch (7) to turn the defroster on. The display will show the "" sign and the defroster switch (7) indicator light comes on. The air conditioning system starts operating.
Turn the temperature control dial (4) to the desired setting.
Turn the fan speed control dial (2) to the desired setting. The efficiency of defogging will be lower when the air selector switch (6) indicator light is on (inside air recirculation) than when the air selector switch (6) indicator light is off (outside air ventilation).
Press the MODE switch (5) to select the desired air outlets. If you press the switch so that the "" sign appears on the display, you can defog the windshield while warming your feet as well.

Defrosting





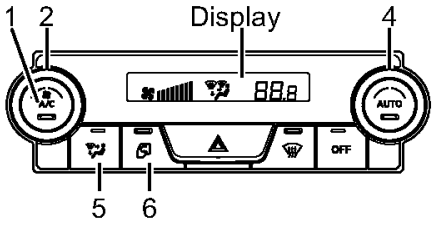
Press the defroster switch (7) to turn the defroster on. The display shows the "" sign and the defroster switch (7) indicator light comes on. Turn the temperature control dial (4) to the maximum temperature position ("HI").
Press the air selector switch (6). The air selector switch (6) indicator light comes on.
Turn the warm-up switch "ON".

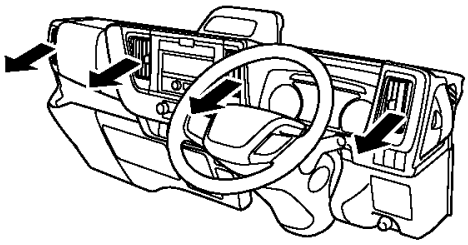
Refer to page
4-61 Warm-Up Switch [V]

⚠ CAUTION

- **After defrosting, make sure to press the air selector switch (6) so that the air selector switch (6) indicator light is off (outside air ventilation).**
  Failure to do so will cause the windshield to fog up, deteriorating forward visibility.

Maximum Cooling





Turn the temperature control dial (4) to the maximum cooling position ("LO") and turn the fan speed control dial (2) to the highest speed setting. Select the desired air outlets with the MODE switch (5) and press the air selector switch (6). Make sure the air selector switch (6) indicator light is on (inside air recirculation).
You must press the A/C switch (1) before doing the above operation to turn the air conditioning system on.

NOTE

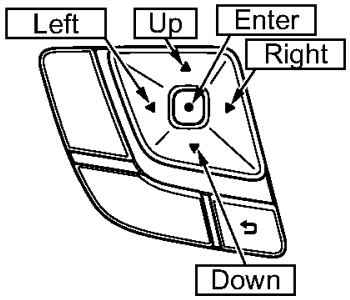
- After prolonged parking in the direct sunlight, open the windows or doors to ventilate the cab's interior and release the heat before turning the air conditioning system on.
- Prolonged use of the air conditioning system in the maximum cooling setting will make the interior air become stale. Occasionally press the air selector switch (6) to select outside air ventilation or open the windows to allow fresh air into the cab.
- During cooling operation, mist may come out of the air outlets. This results from quick cooling of humid air, and does not indicate any problem.

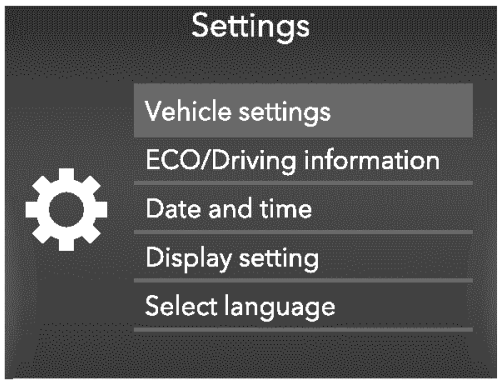
Various Settings for the Automatic Air Conditioner

The various settings of the automatic air conditioner can be changed from the "Vehicle settings" screen on the multi-information display.

Setting Idling-Stop Conditions

Turn this "ON" to give priority to air conditioning rather than idling stop.





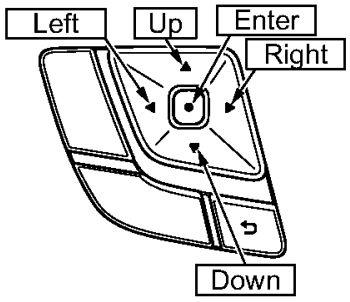
1. Press "Left" or "Right" on the multi-information display switch to switch the screen and display the settings screen. If a message to the driver is displayed, press "Enter" to return to the normal screen, and then switch to the settings screen.

Refer to page
3-48 Main Display Area

2. In the setting screen, select in order, "Vehicle settings" → "Auto air conditioner" → "Idling-stop conditions".
3. Adjust "Up" or "Down" on the multi-information display switch to switch between ON/OFF. Press "Enter" to select.

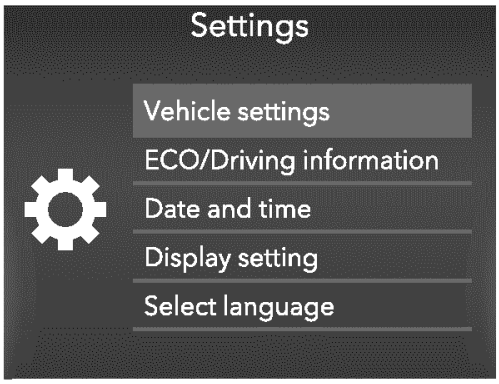
Setting Compressor Link

Turn this "ON" if you want to optimize air conditioning by linking the AUTO (automatic) switch operations with the compressor. Turn this "OFF" to prioritize fuel efficiency performance over air conditioning.



1. Press "Left" or "Right" on the multi-information display switch to switch the screen and display the settings screen. If a message to the driver is displayed, press "Enter" to return to the normal screen, and then switch to the settings screen.

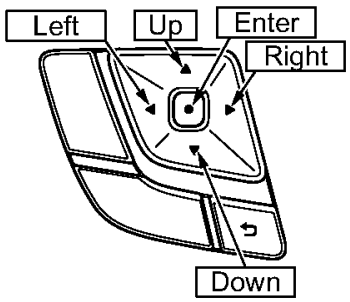
Refer to page
3-48 Main Display Area



2. In the setting screen, select in order, "Vehicle settings" → "Auto air conditioner" → "Compressor link".
3. Adjust "Up" or "Down" on the multi-information display switch to switch between ON/OFF. Press "Enter" to select.

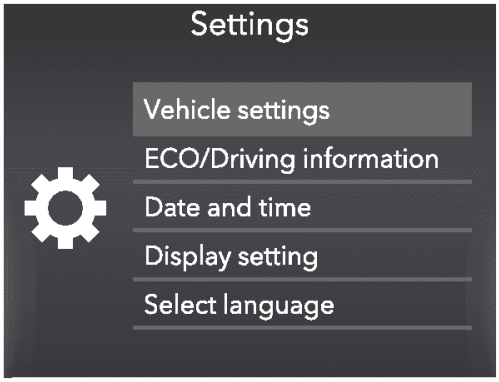
Setting Auto Air Intake Switching

Set this to "ON" when you want to automatically switch between introducing outside air or circulating inside air, while using full auto mode.



1. Press "Left" or "Right" on the multi-information display switch to switch the screen and display the settings screen. If a message to the driver is displayed, press "Enter" to return to the normal screen, and then switch to the settings screen.

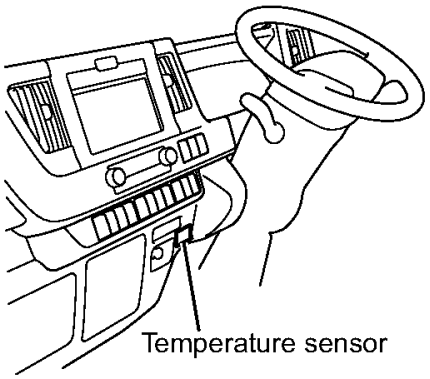
Refer to page
3-48 Main Display Area

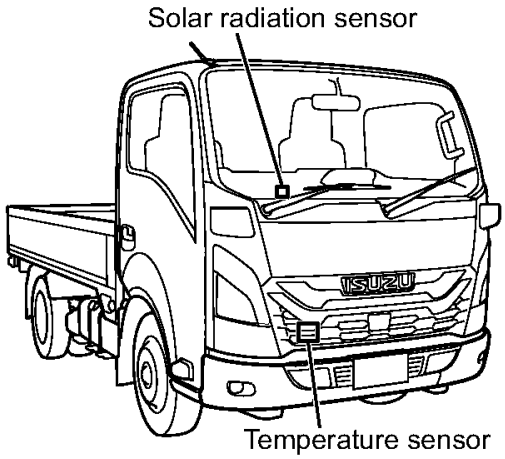


2. In the setting screen, select in order, "Vehicle settings" → "Auto air conditioner" → "Auto air intake switching".
3. Adjust "Up" or "Down" on the multi-information display switch to switch between ON/OFF. Press "Enter" to select.

Temperature Sensors

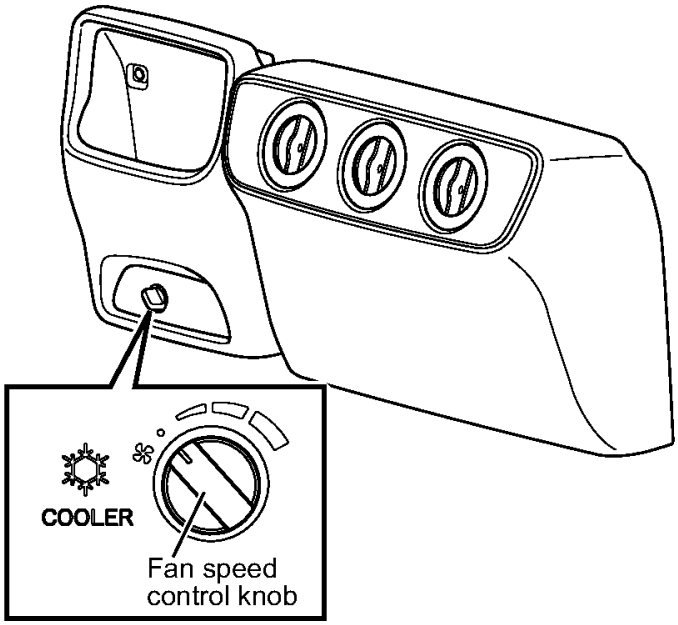
The air conditioning system uses a sun sensor, room temperature sensor and outside air temperature sensor to ensure effective and comfortable air conditioning. Do not place anything on the sensors or get them wet. Air conditioning control will become inaccurate.





Rear Cooler [V]

How to Use the Controls

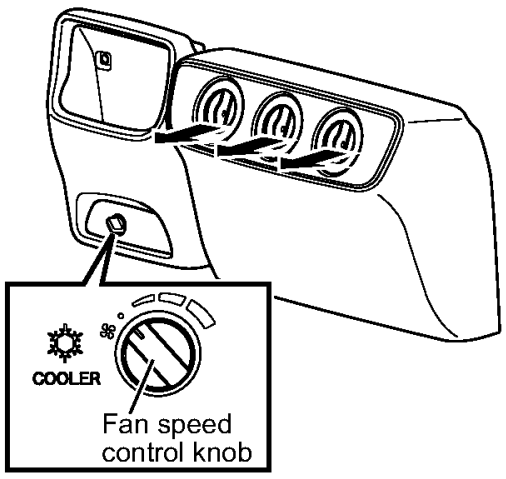


Cooling

Press the A/C switch for front air conditioner to the "ON" position.

Refer to page
6-5 Heater/Manual Air Conditioner [V]
6-13 Automatic Air Conditioner [V]

Adjust the fan speed control knob as desired.

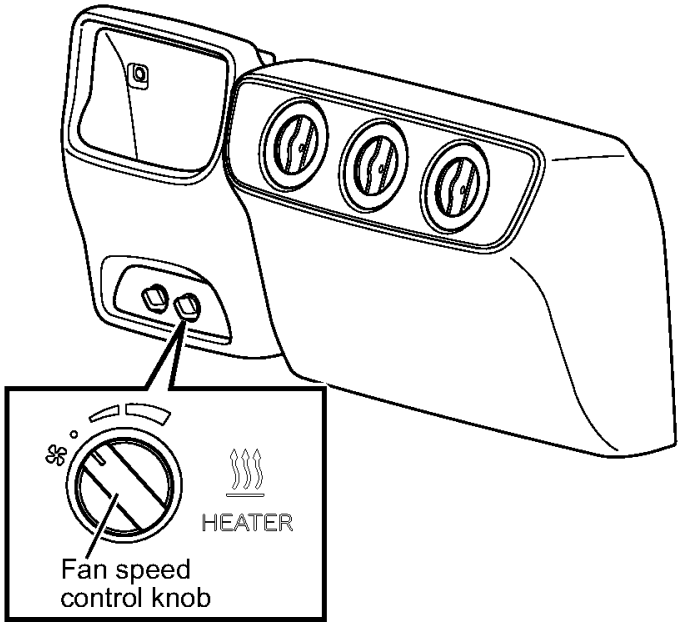


NOTE

- When the A/C switch for the front air conditioner is set to the "OFF" position, the cooling system does not operate (air comes out of the air outlets, but cool air does not). Even when using the rear cooler only, set the A/C switch for the front air conditioner to the "ON" position.

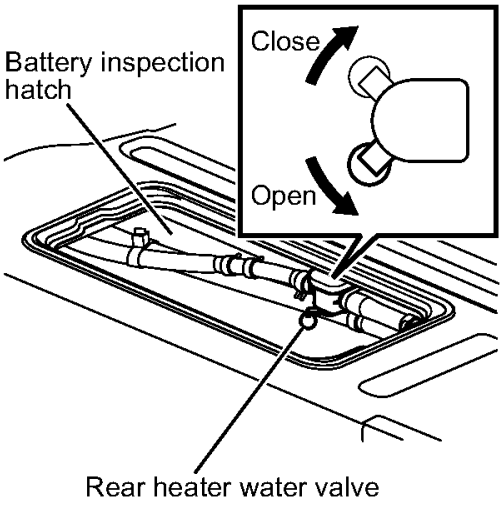
Rear Heater [V]

How to Use the Controls

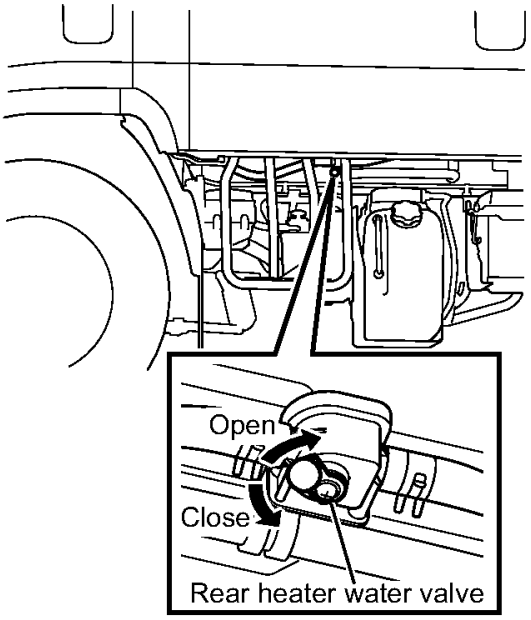


Heating

Model with battery inspection hatch



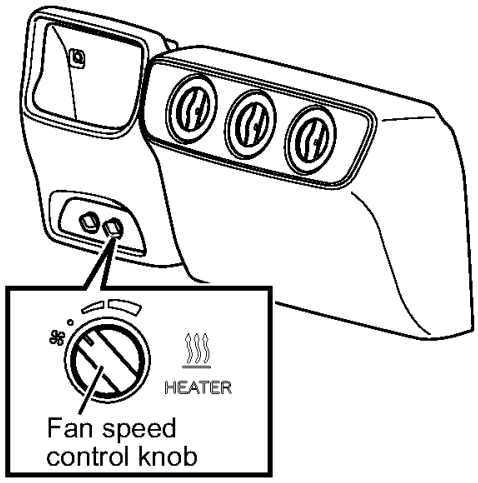
Model without battery inspection hatch

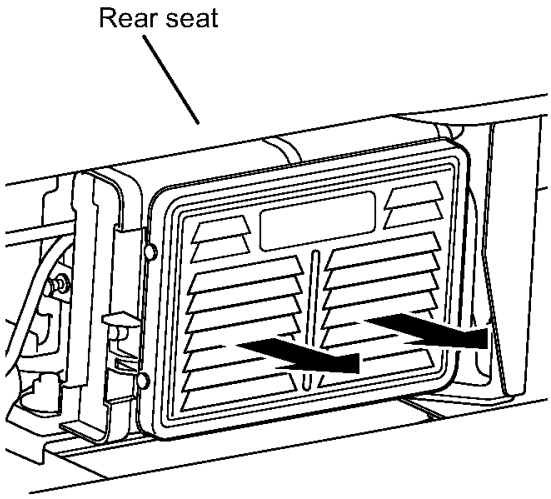


When using the rear heater, open the battery inspection hatch (if equipped) or approach from the left side of the vehicle and move the rear heater water valve lever to the outside of the vehicle (open position) .
When not using the rear heater, move the lever to the inside of the vehicle (closed position).

Refer to page
7-25 Rear Inspection Hatches (Crew Cab Model)

Adjust the fan speed control knob as desired.





Air Conditioning Filters

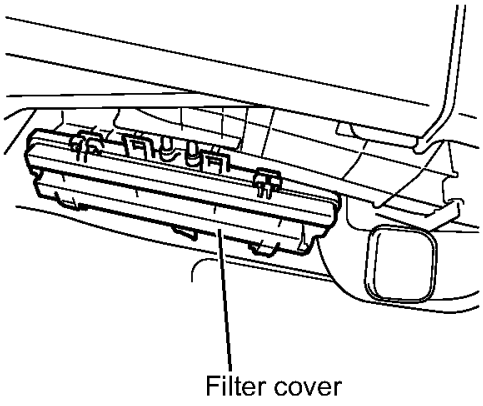
Cleaning the Air Conditioning Filters

The air conditioning filters should be removed and cleaned according to the Maintenance Schedule.

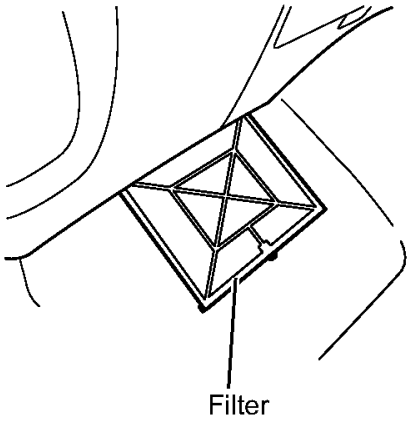
Refer to page
8-2 Maintenance Schedule

Removing the Filter

Front air conditioner and rear cooler



1. Remove the filter cover from the lower part of the passenger side instrument panel.

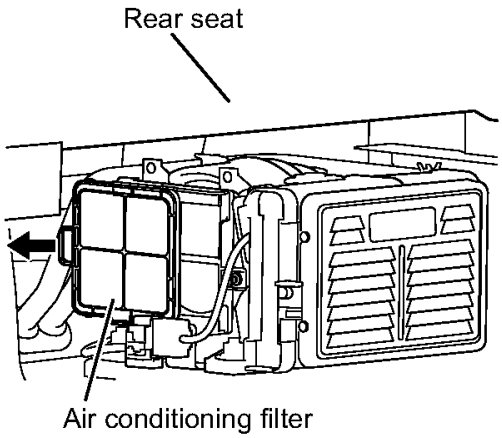


2. Pull out the filter.
3. Clean dust and dirt from the surface of the filter using a vacuum cleaner or other tools.

ADVICE

- Do not use hard brushes, as they can damage the filter.

Rear heater



1. Pull out the filter.
2. Clean dust and dirt from the surface of the filter using a vacuum cleaner or other tools.

ADVICE

- Do not use hard brushes, as they can damage the filter.

Installing the Filter

1. Install the filter in the reverse order to removal.

ADVICE

- Ensure that the filter is returned securely to its original position. Failure to observe this precaution can lead to rattling during travel.
- The vehicle must not be used with the filter removed or incorrectly installed. Failure to observe this precaution can lead to air conditioning system damage as a result of dust, dirt and the like entering the system.

Refrigerant

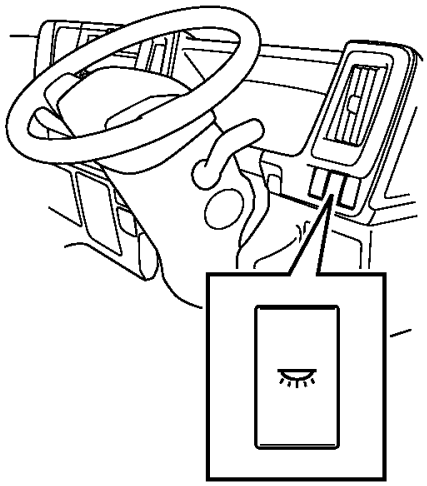
The air conditioning system will not be able to cool the cab interior effectively if the refrigerant level is low. Accordingly, the refrigerant level must be topped up whenever necessary.
Please contact your Isuzu Dealer whenever refrigerant must be added.

ADVICE

- Operating the air conditioning while the refrigerant level is too low leads not only to poor cooling performance but also to air conditioning system damage.
- This vehicle uses the refrigerant HFC-134a (R-134a) in the air conditioning system. No other type of refrigerant can be used. In order to protect the environment, care must be taken to ensure that refrigerant gas is never released into open air. When refrigerant must be replaced, therefore, please contact your Isuzu Dealer or other service facility equipped with a gas recovery installation system.

Interior Lights

Interior Light Switch [V]



Press the interior light switch to turn on the interior light. Press the switch again to turn off the interior light.

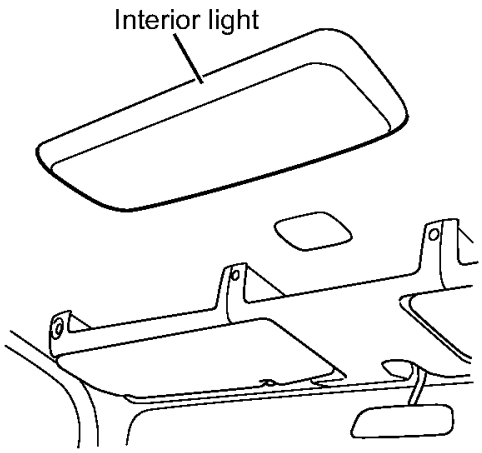
NOTE

- Do not leave the interior light switch in the on position. Leaving the fluorescent light or dome light on for extended periods, especially with the engine shut off, will deplete the battery.

Interior Light [V]

CAUTION

- **Do not use the interior light while driving. The bright interior will be reflected off the windows, making the outside road and traffic conditions difficult to recognize; this could lead to an accident.**

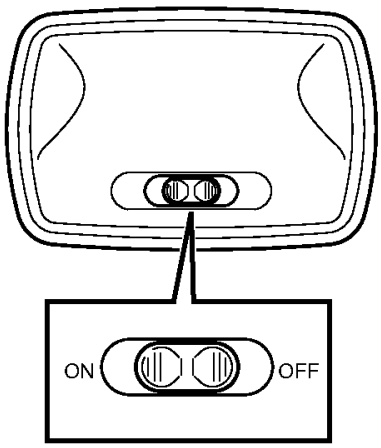


The fluorescent light operates regardless of the starter switch position.
Use the interior light switch to turn it on and off.

ADVICE

- Do not use the fluorescent light while the engine is not in operation. As the light consumes a lot of electricity, this can discharge the battery.

Dome Light



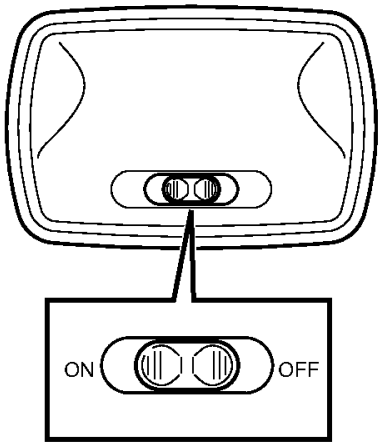
The dome light operates regardless of the starter switch position.

"ON"	The light stays on regardless of the doors being open or closed.
Between "ON" and "OFF"	The light turns on when any of the doors are opened, and turns off when closed
"OFF"	The light stays off regardless of the doors being open or closed.

NOTE

- To prevent the light from being left on and discharging the battery, be sure to completely close the doors.

Rear Dome Light (Crew Cab Model)



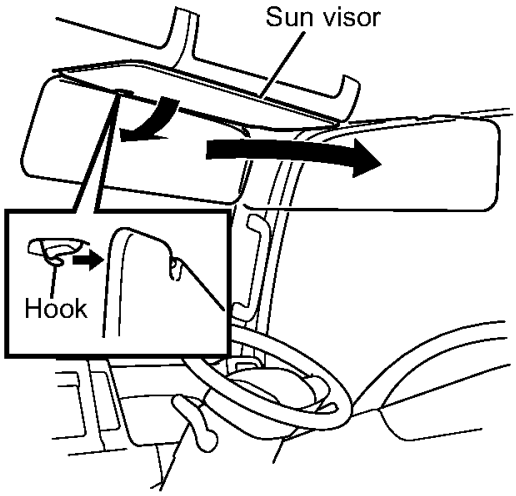
The rear dome light operates regardless of the starter switch position.

"ON"	The light stays on regardless of the doors being open or closed.
Between "ON" and "OFF"	The light turns on when any of the doors are opened, and turns off when closed
"OFF"	The light stays off.

NOTE

- To prevent the light from being left on and discharging the battery, be sure to completely close the doors.

Sun Visor

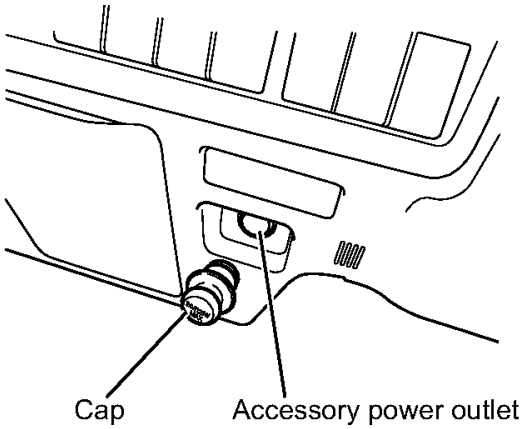


The sun visor protects your eyes in strong sunlight. Use it when sunlight is too bright. To reduce side glare, unhook the sun visor and swing it around to the side.

CAUTION

- **For safety, make sure to fold up the sun visor after use.**

Accessory Power Outlet (24V) [V]



The accessory power outlet can be used when the starter switch is in the "ACC" or "ON" position.
Use the accessory power outlet to supply power to commercially available vehicle accessories, etc. Remove the cap to use.

⚠ WARNING

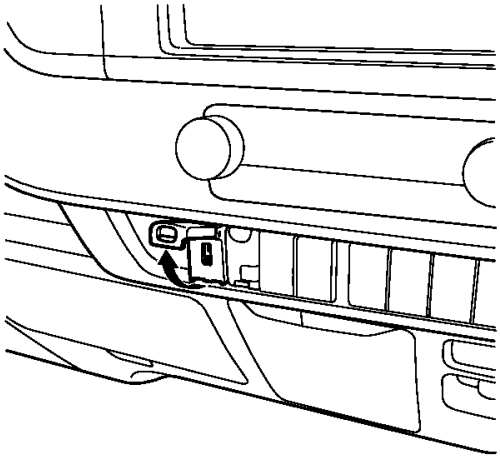
- **The maximum allowable load of the accessory power outlet is 120W (5A). If you subject the accessory power outlet to more than the allowable load, the wiring may overheat and cause a fire. Use the accessory power outlet within the allowable load.**
- **The power source for the accessory power outlet is 24V. If electrical equipment other than 24V are connected, a malfunction due to overheating or fire may occur.**
- **Be sure to insert the plug of the electrical appliance all the way into the accessory power outlet. Using an appliance when the plug is not completely inserted could cause abnormal heat generation and may result in the vehicle's fuses blowing.**
- **Do not insert the cigarette lighter into the accessory power outlet. Doing so could generate heat.**

ADVICE

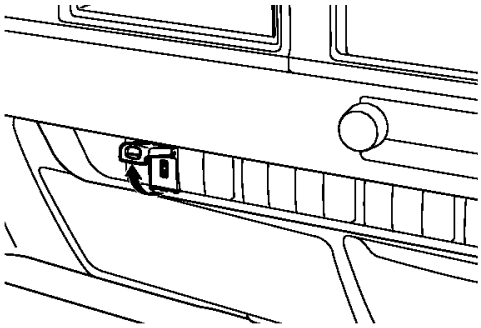
- Using the accessory power outlet for a long period of time while the engine is stopped will drain the battery.
- When not in use, be sure to attach the cap. If foreign matter enters the accessory power outlet, or if water or drinks contact it, it could be damaged. Also, do not insert fingers or any metallic objects into the accessory power outlet.
- As the internal part of the accessory power outlet may become deformed depending on the size of the plug used, do not attempt to force the plug into the accessory power outlet. In this case, replace the accessory power outlet.
- When inserting or removing the plug of an electrical appliance, turn the electrical appliance off or place the starter switch in the "LOCK" position.

USB Power Outlet [V]

NJR/NKR/NLR/NMR/NMS models



NNR/NPR/NPS/NQR/NQS models



The USB power outlet can be used when the starter switch is in the "ACC" or "ON" position. The power outlet is to be used for operating or charging compatible mobile devices or electronics. Refer to the owner's manuals of those products before using. Open the cover to use. Close the cover when not in use.

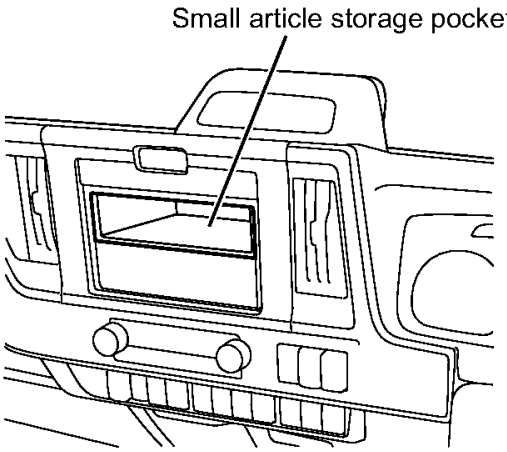
ADVICE

- A-Type USB terminals can be used with the power outlet. Do not attempt to insert other types of USB terminals.
- The maximum rating for power outlet is 5.0 V/2.4 A. Before using, check that the equipment to be used is compatible by referring to its owner's manual, etc.
- It can only be used as a power output and not for transmitting data (including video and music data).
- After charging is complete, promptly disconnect all mobile devices and electronics.
- Do not connect USB hubs. Doing so could result in damage.
- Do not spill liquids on the power outlet, nor attempt to insert metals or other foreign objects. Doing so may result in an electric shock or damage.
- When using for extended periods with the engine stopped, take care as the auxiliary battery may go flat.
- Do not connect damaged equipment or products.
- Damage to connected equipment or products, as well as any damage of or loss of data are not covered by warranty.
- When using USB cables, make sure that your legs do not get caught by the cables.

NOTE

- Make sure that the connected USB cables, mobile devices, and electronics do not interfere with vehicle operation.

Small Article Storage Pocket

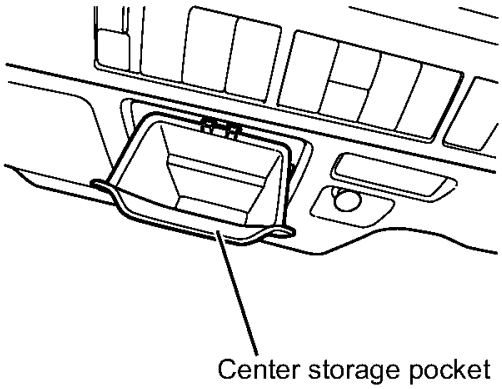


Use the storage pockets for storing small articles.

CAUTION

- **Do not leave eyeglasses or lighters inside the cab. Lighters may explode and plastic lenses or frames may deform or crack if the interior temperature becomes very hot.**

Center Storage Pocket [V]

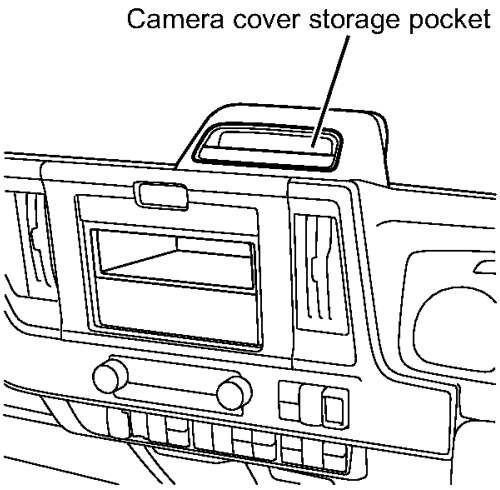


Use the storage pockets for storing small articles.

CAUTION

- **Do not leave eyeglasses or lighters inside the cab. Lighters may explode and plastic lenses or frames may deform or crack if the interior temperature becomes very hot.**

Small Article Storage Pocket in Camera Cover

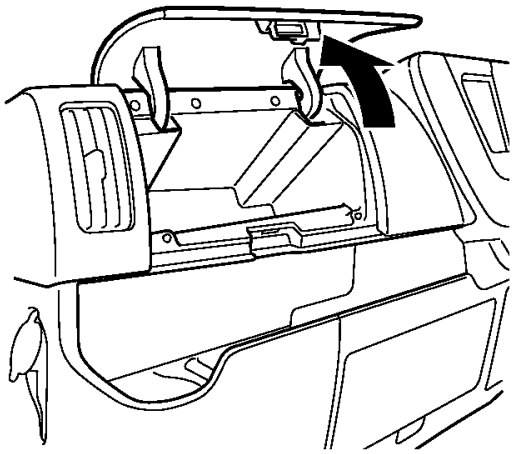


Use the storage pockets for storing small articles.

⚠ CAUTION

- **Do not leave eyeglasses or lighters inside the cab. Lighters may explode and plastic lenses or frames may deform or crack if the interior temperature becomes very hot.**
- **Do not put anything in the camera cover pocket while driving. There is a risk of the things flying out if there is a sudden shock, such as abrupt braking.**

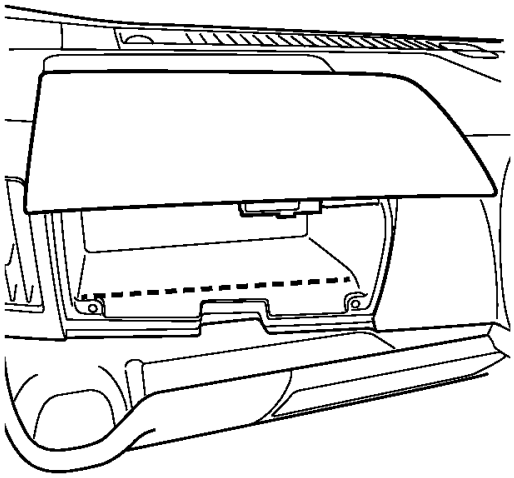
Glove Compartment [V]



Open the lid by pulling it up.

⚠ CAUTION

- **For safety, close the glove compartment during driving. There is a risk of injury from the open lid or items stored in the glove compartment.**
- **Do not leave eyeglasses or lighters inside the cab. Lighters may explode and plastic lenses or frames may deform or crack if the interior temperature becomes very hot.**

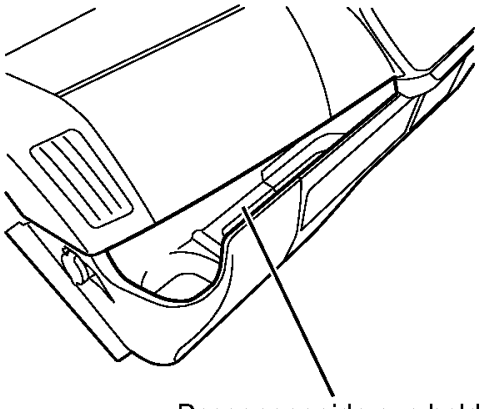


ADVICE

- When closing the glove compartment lid, do not allow stored items to pass the line shown in the illustration. The glove compartment lid may break if it is closed when items inside have passed the line and are sticking out from the box.
- Do not place items such as vehicle registration documents or owner's manuals in the glove compartment, but store them in the seatback pocket located on the back side of the driver seat.

Refer to page
6-37 Seatback Pocket

Passenger Side Cup Holder and Storage Pocket



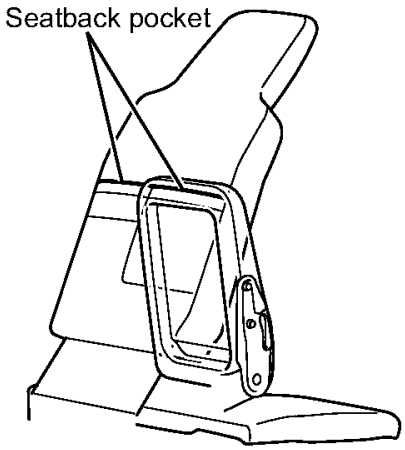
Passenger side cup holder and storage pocket

Use the storage pockets for storing small articles and as a cup holder.

CAUTION

- **Do not leave eyeglasses or lighters inside the cab. Lighters may explode and plastic lenses or frames may deform or crack if the interior temperature becomes very hot.**

Seatback Pocket

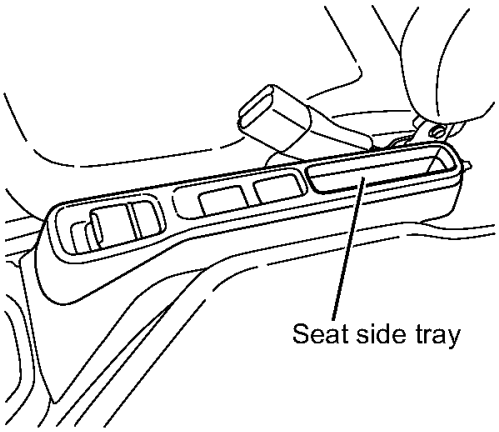


The seatback pocket is located on the back side of the passenger's seatback. Use it for storing items such as vehicle registration documents or owner's manuals.

ADVICE

- Store the owner's manual inside the small seatback pocket and the vehicle registration documents inside the large seatback pocket. Storing these items in the incorrect pockets or forcing them into the same single pocket may damage the vehicle due to excessive pressure on the seatback trim.

Seat Side Tray [V]



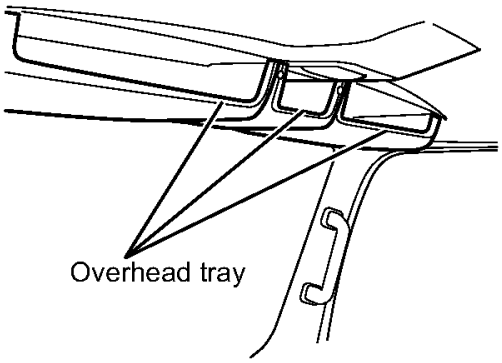
Model with electric parking brake

Use the tray for storing small articles.

CAUTION

- **Do not leave eyeglasses or lighters inside the cab. Lighters may explode and plastic lenses or frames may deform or crack if the interior temperature becomes very hot.**

Overhead Tray [V]

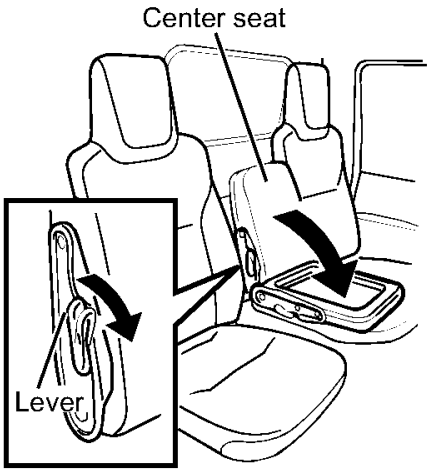


Use the overhead trays as shelves.

⚠ CAUTION

- **Do not use either overhead tray to hold an object weighing more than 2 kg (71 oz) or an object that may fly out or fall down during vehicle operation. Doing so would be dangerous.**
- **Items may fly out or fall down when the cab is lowered after being tilted.**
- **Do not leave eyeglasses or lighters inside the cab. Lighters may explode and plastic lenses or frames may deform or crack if the interior temperature becomes very hot.**

Seatback Tray [V]



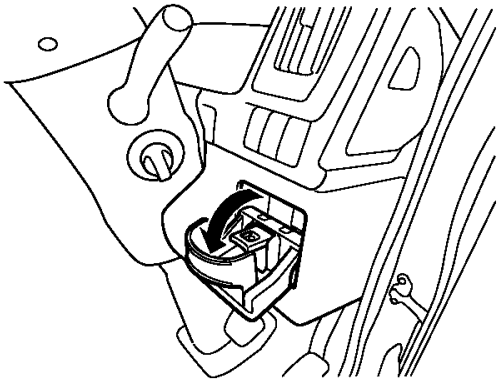
If you pull forward the lever and tilt the seatback of the center seat forward, you can use the seatback as a tray.

⚠ CAUTION

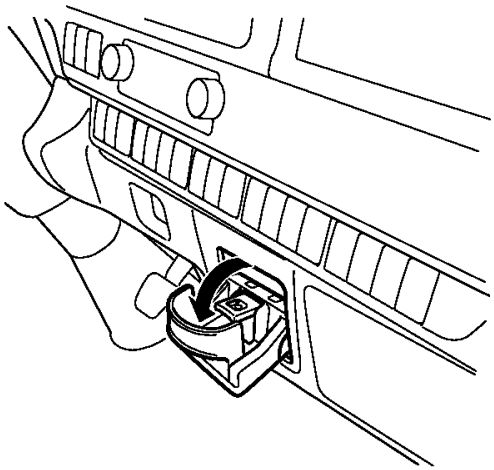
- **Do not leave eyeglasses or lighters inside the cab. Lighters may explode and plastic lenses or frames may deform or crack if the interior temperature becomes very hot.**
- **When tilting the seatback, make sure the seat belt does not become trapped in the seat.**

Cup Holder [V]

Right-hand drive model



Left-hand drive model



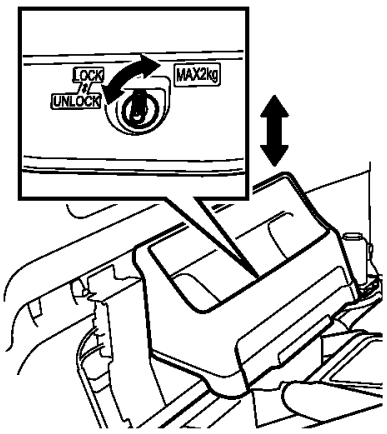
Pull the cup holder towards you to open it.

⚠ CAUTION

- **Do not place a cup that is too full in the cup holder. Spillages could cause damage to the radio and other electrical circuits. If there is a spill, wipe it up immediately with a dry cloth.**
- **Do not tilt the cab with a filled cup in the cup holder.**
- **There may be a danger of the cup holder breaking if the weight on each holder exceeds 0.75 kg (26 oz).**

Back Panel Tray [V]

Use the tray for storing small articles. Alternatively, the tray can also be removed.



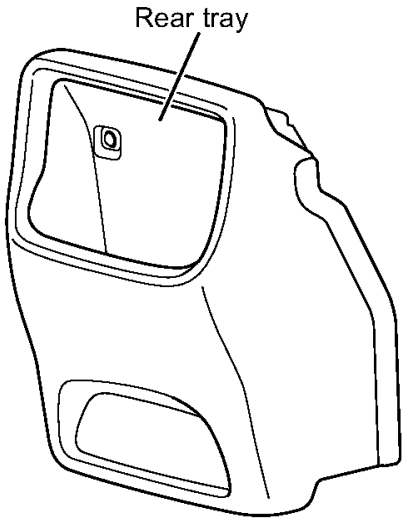
Removal and installation

1. Turn the knob to the "UNLOCK" position.
2. Remove the back panel tray by lifting up the three tabs.
3. To install, perform the same sequence of operations in reverse. Install the back panel tray by attaching all the tabs, and then turn the knob to the "LOCK" position.

⚠ CAUTION

- **Do not use back panel tray to hold an object weighing more than 2 kg (71 oz) or an object that may fly out during vehicle operation. Doing so would be dangerous.**
- **Items may fly out or fall down when the cab is lowered after being tilted.**
- **Do not leave eyeglasses or lighters inside the cab. Lighters may explode and plastic lenses or frames may deform or crack if the interior temperature becomes very hot.**

Rear Tray [V]



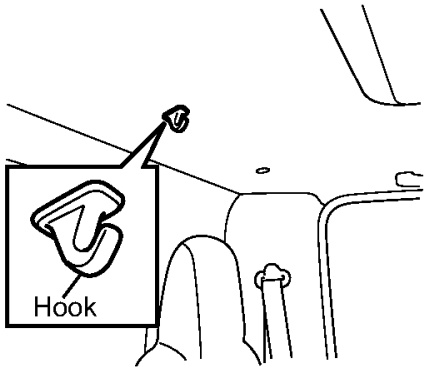
Crew cab model

Use the tray for storing small articles.

⚠ CAUTION

- **Do not use either rear tray to hold an object weighing more than 1.5 kg (53 oz) or an object that may fly out during vehicle operation. Doing so would be dangerous.**
- **Items may fly out or fall down when the cab is lowered after being tilted.**
- **Do not leave eyeglasses or lighters inside the cab. Lighters may explode and plastic lenses or frames may deform or crack if the interior temperature becomes very hot.**

Coat Hook [V]



Use this to hang clothing.

Radio with USB/Bluetooth® [V]

CAUTION

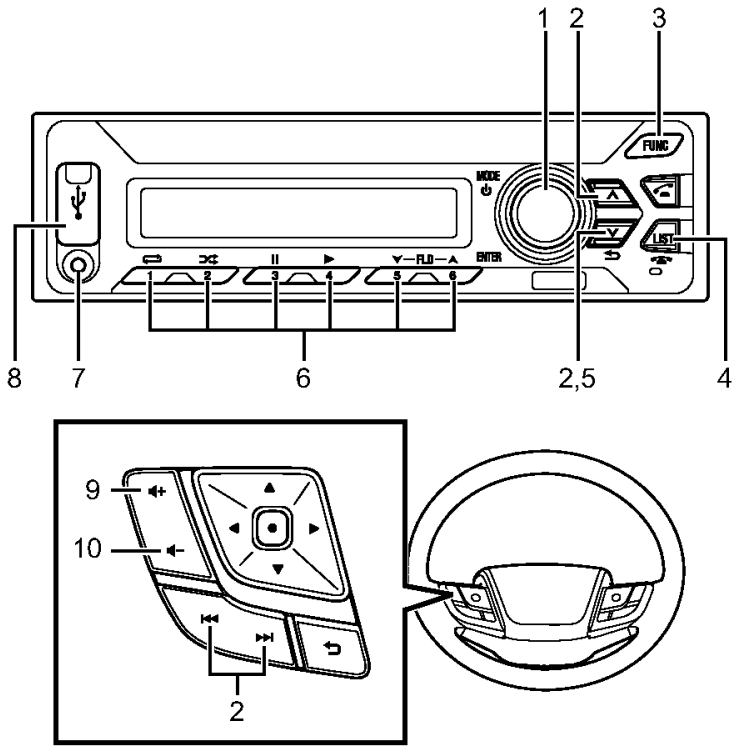
- **Do not adjust the player while the vehicle is in motion. Adjusting the player while the vehicle is moving could cause an accident.**
- **Keep the volume low enough that sounds outside of the vehicle can be heard. If outside sound cannot be heard, accidents may be harder to avoid.**
- **Do not install a radio equipment antenna near the vehicle's radio antenna. This could cause unwanted noise on the radio.**

ADVICE

- Do not use the radio for a long time when the engine is stopped. This may cause the battery to run out.
- Do not allow water to come into contact with the player. It may cause damage to the player.
- Do not disassemble or apply oil to the radio.

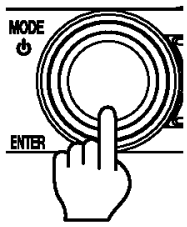
Control Panel

The USB/Bluetooth® player can be used when the starter switch is in the "ACC" or "ON" position.



No.	Name
1	Mode switch Power/enter button Volume adjust knob
2	Tune/track button
3	FUNC button
4	LIST button
5	Back button
6	Preset button
7	Mini jack
8	USB terminal
9	Volume up button
10	Volume down button

Turning the Power On

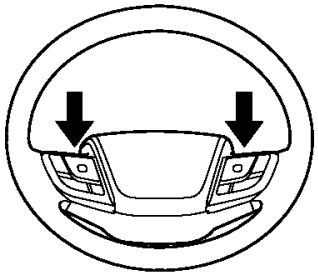


Press the "power" button to turn the power on. Press and hold it for 1 second or more to turn the power off.

NOTE

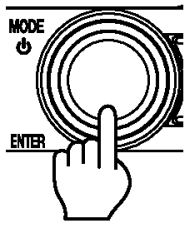
- If the "power" button is pressed while listening to music in audio mode, the power is turned off. When you press the "power" button again, the audio system returns to the mode it was in just before it was turned off.

Steering Wheel Switch

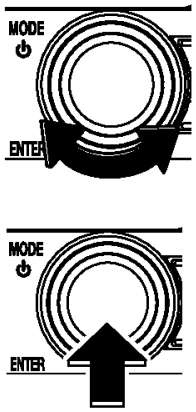


Some audio functions can be operated with the switches on the left and right of the steering wheel.

Switching the Audio Modes

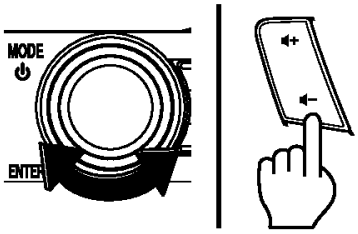


1. Press the "mode" switch.



2. Turn the "mode" switch to select the audio mode of your choice, and then press the "enter" button.
   The audio mode changes in the following order:
   FM1 ↔ FM2 ↔ FM3 ↔ USB*1 ↔ BT-AUDIO ↔ AUX*2 ↔ AM1 ↔ AM2 ↔ FM1...
   *1 These modes are skipped when the USB is not connected.
   *2 This mode is skipped when an auxiliary player is not connected.

Adjusting the Volume



Turn the "volume adjust" knob clockwise or counterclockwise to adjust the volume.
Turn clockwise: Increase the volume.
Turn counterclockwise: Decrease the volume.

If you want to adjust the volume of music playing from a connected external device, you can do so by using the "volume up" or "volume down" buttons on the steering wheel.
Volume up button: Press the button to increase the volume.
Volume down button: Press the button to decrease the volume.

CAUTION

- **Turning the power on or off with the volume set to maximum will damage the equipment and your hearing. Set the volume to a moderate level.**

ADVICE

- The "volume adjust" knob keeps on turning until you stop. However, the volume itself is limited, and even if you keep on turning the "volume adjust" knob clockwise or counterclockwise, the volume is kept to a certain degree.
- When the gearshift lever is moved to the "R" (reverse) position, the system will automatically mute the sound.

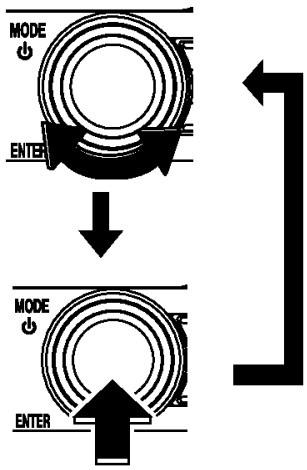
Function Setting Mode

Various sound adjust modes may be fine-tuned by following the procedures below.

Adjusting Bass



1. Press the "FUNC" button.

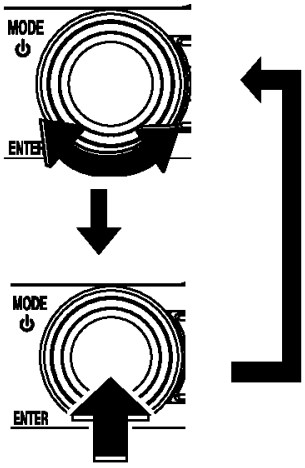


2. Turn the "mode" switch to select "SOUND", and then press the "enter" button.
3. Turn the "mode" switch to select "BASS", and then press the "enter" button.
4. Turn the "mode" switch clockwise or counterclockwise to adjust the level, and then press the "enter" button.
   Turn clockwise: Emphasizes low frequency sounds.
   Turn counterclockwise: Softens low frequency sounds.

Adjusting Treble



1. Press the "FUNC" button.

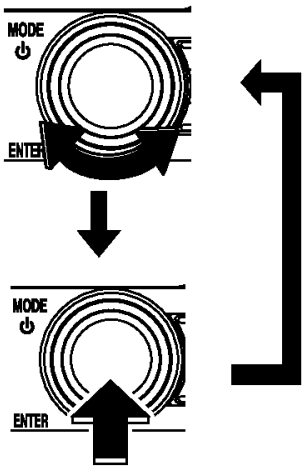


2. Turn the "mode" switch to select "SOUND", and then press the "enter" button.
3. Turn the "mode" switch to select "TREBLE", and then press the "enter" button.
4. Turn the "mode" switch clockwise or counterclockwise to adjust the level, and then press the "enter" button.
   Turn clockwise: Emphasizes high frequency sounds.
   Turn counterclockwise: Softens high frequency sounds.

Adjusting Fader



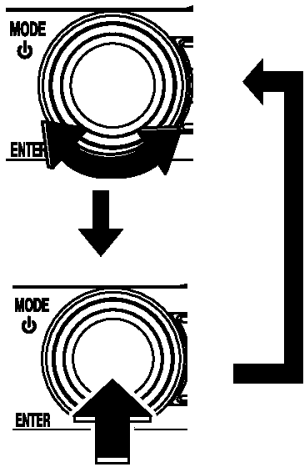
1. Press the "FUNC" button.



2. Turn the "mode" switch to select "SOUND", and then press the "enter" button.
3. Turn the "mode" switch to select "FADER", and then press the "enter" button.
4. Turn the "mode" switch clockwise or counterclockwise to adjust the level, and then press the "enter" button.
   Turn clockwise: Emphasizes front speakers.
   Turn counterclockwise: Emphasizes rear speakers.

Adjusting Balance

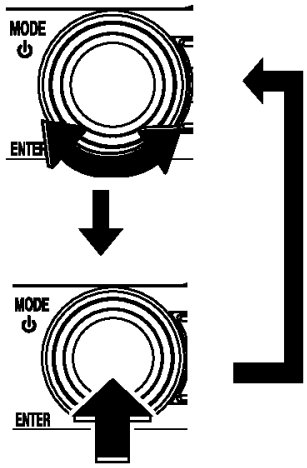




1. Press the "FUNC" button.
2. Turn the "mode" switch to select "SOUND", and then press the "enter" button.
3. Turn the "mode" switch to select "BALANCE", and then press the "enter" button.
4. Turn the "mode" switch clockwise or counterclockwise to adjust the level, and then press the "enter" button.
   Turn clockwise: Emphasizes right speakers.
   Turn counterclockwise: Emphasizes left speakers.

Switching the Clock Modes



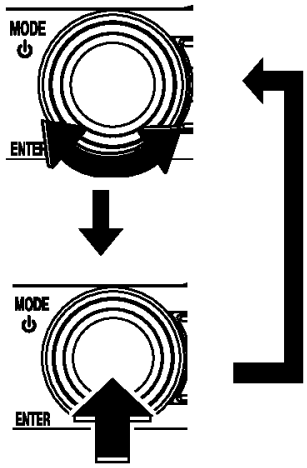


1. Press the "FUNC" button.
2. Turn the "mode" switch to select "CLOCK", and then press the "enter" button.
3. Turn the "mode" switch clockwise or counterclockwise to select the clock mode, and then press the "enter" button.
   OFF (clock display Off) ↔ ON (clock display On) ↔ SET (time settings)

NOTE

- Time is not reset when clock mode is turned off.

Setting the Time



1. Select "SET" in the clock mode.
2. Turn the "mode" switch to set the clock time (hour), and then press the "enter" button.
   Turn clockwise: Move 1 hour forward.
   Turn counterclockwise: Move 1 hour backward.
3. Turn the "mode" switch to set the clock time (minute), and then press the "enter" button.
   Turn clockwise: Move 1 minute forward.
   Turn counterclockwise: Move 1 minute backward.

NOTE

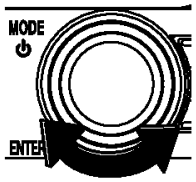
- To return to the clock time (hour) setting mode, press the "Back" button while setting the clock time (minute).

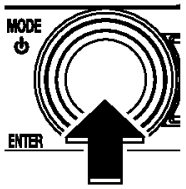
Registering a Bluetooth® Device

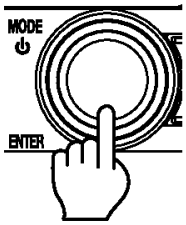
Connecting a Bluetooth® device (mobile phone or Bluetooth® compatible audio player) to this unit allows you to operate them from the unit and talk in handsfree mode or listen to music. When a Bluetooth® connection is established, " ᛒ " appears on the display window.



1. Press the "FUNC" button.







2. Turn the "mode" switch to select "BLUETOOTH", and then press the "enter" button.
3. When "PAIRING" appears on the display window, press the "enter" button. If the Bluetooth® device has already been registered in this unit, turn the "mode" switch to select "PAIRING".
4. After "CAR AUDIO", and then 4-digit passkey appears on the display window, operate the Bluetooth® device to enter the passkey.
   See the instruction manual enclosed with your portable device on how to operate it.
   When the registration of the Bluetooth® device in this unit is completed, "CONNECTED" appears on the display window. If "FAILED" appears on the display window after the passkey is entered, try registering again.

CAUTION

- **Do not register the Bluetooth® device while driving. Park the vehicle in a secure location before carrying out the registration**

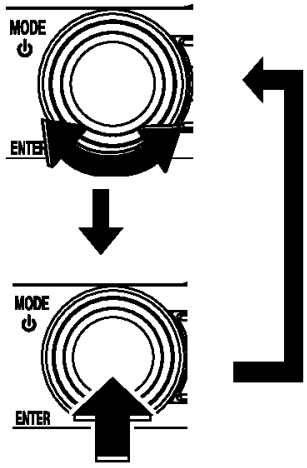
NOTE

- Up to 5 Bluetooth® devices can be registered on the unit. If it exceeds the limit of registrations and "DEL DEVICE?" appears on the display window, you must delete the registered Bluetooth® device.

Connect to the Bluetooth® Device Automatically



1. Press the "FUNC" button.



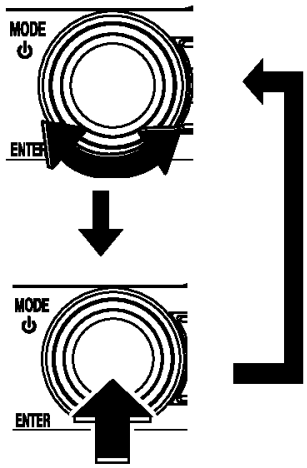
2. Turn the "mode" switch to select "BLUETOOTH", and then press the "enter" button.
3. Turn the "mode" switch to select "A.CONNECT", and then press the "enter" button.
4. Turn the "mode" switch to switch ON/OFF, and then press the "enter" button.
   CONNECT ON: Turn on the automatic connection.
   CONNECT OFF: Turn off the automatic connection.

Initializing the Bluetooth® Settings

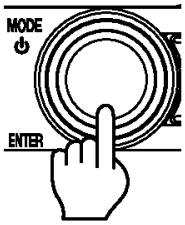
You can initialize the Bluetooth® settings or histories stored in this unit.



1. Press the "FUNC" button.



2. Turn the "mode" switch to select "BLUETOOTH", and then press the "enter" button.
3. Turn the "mode" switch to select "RESET DATA", and then press the "enter" button.



4. When "RESET DATA ?" appears on the display window, press the "enter" button. When the initialization process begins, "PLEASE WAIT" appears on the display window.
   When the initialization is completed, "COMPLETED" appears on the display window.

CAUTION

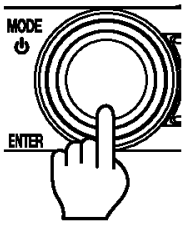
- **Do not initialize the settings while driving. Park your vehicle in a secure location and then initialize them.**

NOTE

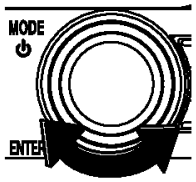
- The initialized Bluetooth® settings or histories are unrecoverable once the "RESET DATA" function has been complited. Be careful when initializing them.
- When you dispose of your vehicle, make sure to delete all personal data that are registered in your audio system. You should delete the following Handsfree/ Bluetooth® Audio data from the system:
  - History of outgoing/incoming/missed calls
  - Handsfree setting
  - Bluetooth® phone data
  - Portable device data
  - Portable device connection setting

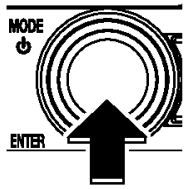
Tuner Mode Operation

Turning on the Radio

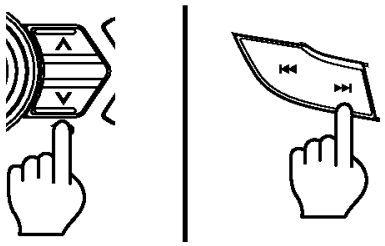


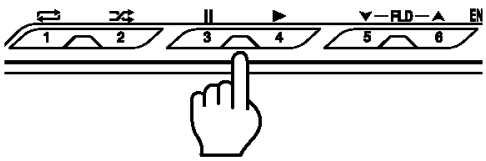
1. Press the "mode" switch.





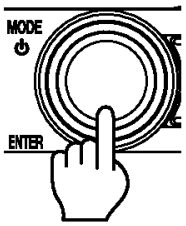
2. Turn the "mode" switch to select "FM1", "FM2", "FM3", "AM1" or "AM2", and then press the "enter" button.





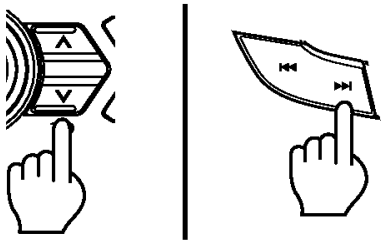
3. Follow one of the procedures below to tune:
   Press the "tune" button.
   Press the "preset" button.

Turning off the Radio



Press the "power" button for 1 second or more. To turn on the radio, press the switch again.

Tuning



Manual tuning:
Press the "tune" button for less than 1 second.
Each time the button is pressed, the frequency steps up (or down) to select the station of your choice.

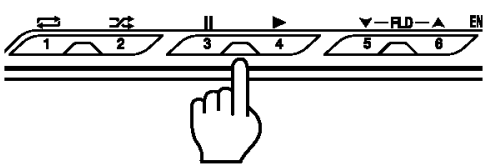
Automatic tuning:
Press the "tune" button for less than 2 seconds but more than 1 second.
The radio starts searching for stations, and stops when it finds a station.
Press and hold down the "tune" button for more than 2 seconds. The radio keeps searching for stations within its available frequency band.
To cancel, press the button again.

NOTE

- When the "tune" button (" ∧ ") is pressed, the radio is tuned to the higher frequency range (step up), and to the lower frequency range (step down) when pressing the "tune" button (" ∨ ").
- In both cases, if the radio cannot find stations, it continues searching.

Storing the Stations (PRESET)

Your favorite stations can be tuned by one touch operation if they are stored in the "preset" buttons.
Maximum of 30 stations can be memorized and stored:
12 in AM (6 each for AM1 and AM2.), and 18 in FM (6 each for FM1, FM2 and FM3.)

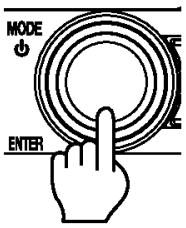


1. Select the radio mode to be stored from "FM1", "FM2", "FM3", "AM1" or "AM2".
2. Tune in the station of your choice.
3. Press and hold down the "preset" buttons you want to store in, for more than 2 seconds.
   When the station is stored, the "preset" button number and station frequency appear on the display window.

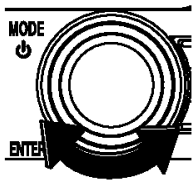
USB Operation

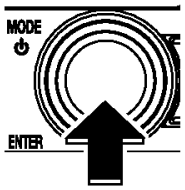
Playing Music Files in the USB Memory (When the USB Memory is not yet Connected)

When the USB Memory is connected to the "USB terminal" users can listen to music in the USB Memory.



1. Connect the USB Memory to the "USB terminal".
2. Press the "mode" switch.





3. Turn the "mode" switch to select "USB", and then press the "enter" button. The music file starts playing.

Playing Music Files in the USB Memory (When the USB Memory is Connected)

1. Press the "mode" switch.
2. Turn the "mode" switch to select "USB", and then press the "enter" button. The music file starts playing.

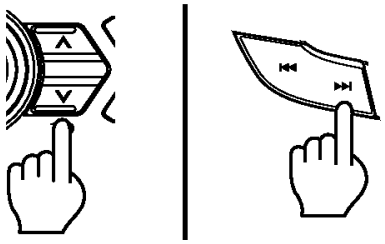
⚠ CAUTION

- **Do not connect, operate or remove the USB Memory while driving.**

NOTE

- Do not remove the USB Memory or switch the motor control switch to ACC OFF when the USB Memory is being accessed (playback). This may damage the data. We recommend making a backup of your data in case you accidentally delete it.
- Depending on the USB Memory used (non-brand products, USB Memories which have been damaged due to external factors), there may be cases where connection is not possible, or where the operation is unstable.
- When the USB mode is switched to other modes and then switched back again, the main unit returns to the music file played last.

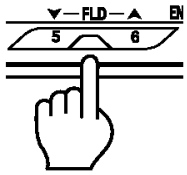
File Selection



Press the "Track" button ("∧∨") to select the music file of your choice.

∧	Advance to the next file.
∨	Return to the beginning of the file being played. To return to the previous file, press the button again.

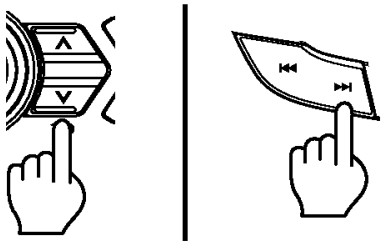
Selecting the Folder



Press the "5" or "6" button to select the MP3/WMA folder.

▲	Advance to the next folder.
▼	Return to the previous folder.

Fast Forwarding/Fast Reversing



Press and hold the "Track" button ("∧∨") to fast forward or fast reverse the music file.

∧	Fast forward
∨	Fast reverse. To stop fast forward or fast reverse, release the button.

Repeat Playback



Press the "1" button to repeat the same file being played. " ⇄ " appears on the display window.
To cancel, press the button twice. " ⇄ " disappears.
Press the "1" button twice to repeat the same folder being played. After the player has played the last file, it starts playing the first file of the same folder.
"FLD ⇄ " appears on the display window.
To cancel, press the button again. "FLD ⇄ " disappears.

Random Playback

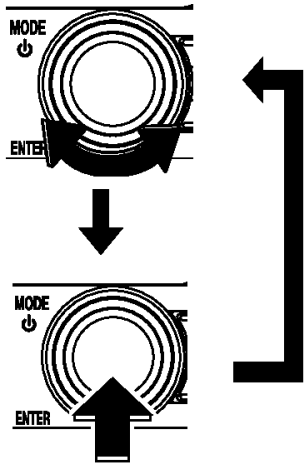


Press the "2" button to play all files in the USB Memory in random order.
" ⇄ " appears on the display window.
To cancel, press the button twice. " ⇄ " disappears.
Press the "2" button twice to play the files from the folder being played in the USB Memory in random order.
After the player has played the last file, it starts playing the first file of the same folder.
"FLD ⇄ " appears on the display window.
To cancel, press the button again. "FLD ⇄ " disappears.

Selecting the Music File from the Category List



1. Press the "LIST" button for less than 1 second. "LIST" appears on the display window.
   To cancel the category selection mode, press the "LIST" button again or press the "Back" button.



2. Turn the "mode" switch to select the category of your choice, and then press the "enter" button. The category changes in the following order: .
   PLAYING ↔ FOLDER ↔ FILE ↔ PLAYING...

3. Turn the "mode" switch to select the folder or file of your choice from the list, and then press the "enter" button.
   When the file is selected, the player starts playing the file.
   When "FOLDER" is selected, select the file in the folder to start playback.
   To return to the list selection or category selection mode, press the "Back" button for less than 1 second.
   To cancel the category selection mode, press and hold down the "Back" button for more than 1 second.

Go Back to the First Position (Home Jump)

You can go back to the first file of the first folder on the USB Memory being played from any position of it. This function is called "Home Jump"

For example: If Home Jump is used when playing File 5 in Folder 4, it goes back to File 1 in Folder 1 and starts playing.

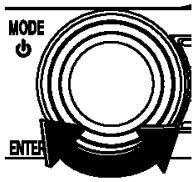


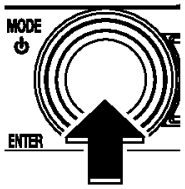
Press and hold down the "5" button for more than 1 second.

Display the Text Information



1. Press and hold down the "LIST" button for more than 1 second.





2. Turn the "mode" switch to select the display item of your choice, and then press the "enter" button.
   The display item changes in the following order.
   FL/TR NO (Folder number/File number) ↔ TIME (Playback time) ↔ FOLDER (Folder name) ↔ FILE (File name) ↔ ALBUM (Album title)* ↔ TRACK (Track title) ↔ ARTIST (Artist name) ↔ FL/TR NO...
   * It is not displayed during the WMA file playback.

NOTE

- If the text information is too long to fit into the display window, press and hold down the "FUNC" button for more than 1 second to switch to the next page.
- Texts recorded with characters other than alphanumeric characters and symbols will appear as "*" (asterisks).
- If there is no text information stored in a music file, "NO TITLE" appears on the display.

If "ERROR" Appears in the Display

The following messages appear (blink) in the display window according to the status.

Message	Description
READING	This message appears when reading the file format of the USB devices.
USB ERROR 1	This message appears when the player cannot operate for some reason. Disconnect the USB device from the audio system.
USB ERROR 2	This message appears when the connected USB device is disabled. Connect another USB device.
USB ERROR 3	This message appears when the USB hub is connected. Remove the USB hub from the audio system.
NO MUSIC	This message appears when a blank USB device or the USB device that does not contain files with playback extensions is connected.
READ ERROR	This message appears if a problem is detected in the USB device. Disconnect the USB device, and check the USB device itself.
NO SUPPORT	This message appears when the USB device contains no MP3/WMA data (including MP3/WMA extension files) or contains only SKIP FILEs.

Bluetooth® Audio Operation

Connecting a Bluetooth® compatible audio player or mobile phone (henceforth "portable device") to this unit allows you to operate them from the system and listen to music.
In addition, as the connection between the unit and the portable device is wireless, users will not face problems associated with cable connections.
This unit supports Bluetooth®. Bluetooth® is a wireless data system which allows users to listen to music without the need to connect the portable device with wires.
If the portable device is not Bluetooth®-compatible, this function is not available.

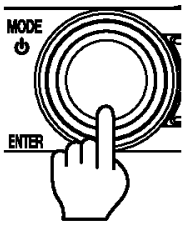
⚠ CAUTION

- **Do not connect the portable device while driving.**

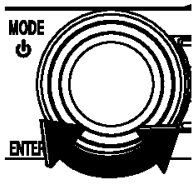
ADVICE

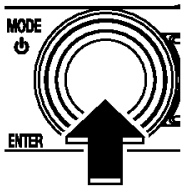
- Do not leave the portable device inside the vehicle. (The interior of the vehicle may become too hot under extreme hot weather.)
- Do not set the portable device too close to this unit. When the device and the unit are too close to each other, sound quality may deteriorate and connection problems may arise.

Playing Music



1. Press the "mode" switch.





2. Turn the "mode" switch to select "BT-AUDIO", and then press the "enter" button.
   The music on the Bluetooth®-compatible portable device that is connected will start.
   When the registered device is not connected, the display window shows "NO CONNECT".

NOTE

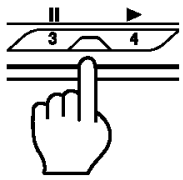
- First connect the portable device to the unit before performing the following operation. See "Registering a Bluetooth® Device".
- Bluetooth® audio operation is subject to portable device compatibility.
- Operation of the portable device via this unit differs depending on the specifications of the portable device.
- Depending on the Bluetooth®-compatible portable device that is connected to this unit, the music will not start and may be paused.
- When the player is connected to an AVRCP Ver.1.0-compatible portable device, "STREAMING" appears on the display window and the functions of your devices may be partially limited.

Refer to page
6-49 Registering a Bluetooth® Device

Stop Playback

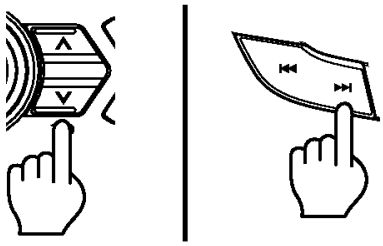
Switch to another audio mode.

Pausing the Music



Press the "3" button to pause the music.
To resume, press the "4" button.

Track Selection



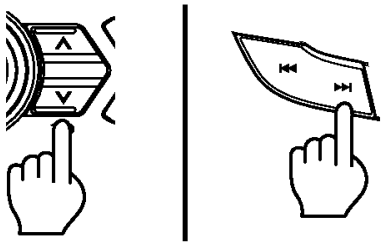
Press the "track" button ("∧∨") to select the track of your choice.

∧	Advance to the next track.
∨	Return to the beginning of the track being played. To return to the previous track, press the button again.

NOTE

- Operation of the portable device via this unit differs depending on the specifications of the portable device.

Fast Forwarding/Fast Reversing



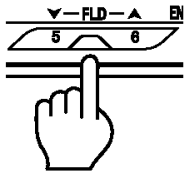
Press and hold the "track" button ("∧∨") to fast forward or fast reverse the track.

∧	Fast forward
∨	Fast reverse. To stop fast forward or fast reverse, release the button.

NOTE

- Operation of the portable device via this unit differs depending on the specifications of the portable device.

Selecting the Album



Press the "5" or "6" button to select an album.

▲	Advance to the next album.
▼	Return to the previous album.

NOTE

- Operation of the portable device via this unit differs depending on the specifications of the portable device.

Repeat Playback

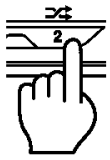


Press the "1" button to repeat the same track being played. " 🔁 " appears on the display window.
To cancel, press the button twice. " 🔁 " disappears.
Press the "1" button twice to repeat the same album being played. After the player has played the last file, it starts playing the first file of the same album.
"FLD 🔁 " appears on the display window.
To cancel, press the button again. "FLD 🔁 " disappears.

NOTE

- Operation of the portable device via this unit differs depending on the specifications of the portable device.

Random Playback



Press the "2" button to play all tracks in the Bluetooth® Audio in random order.
" 🔀 " appears on the display window.
To cancel, press the button twice. " 🔀 " disappears.

Press the "2" button twice to playback tracks on the album being played in random order. After the player has played the last track, it starts playing the first track of the same album.
"FLD ⇄ " appears on the display window. To cancel, press the button again. "FLD ⇄ " disappears.

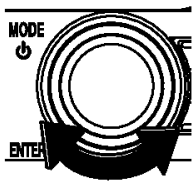
NOTE

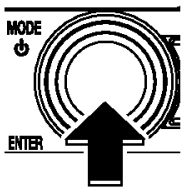
- Operation of the portable device via this unit differs depending on the specifications of the portable device.

Display Text Information



1. Press and hold down the "LIST" button for more than 1 second.





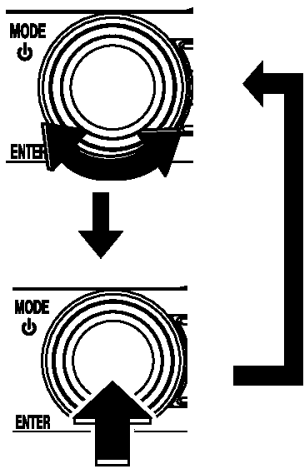
2. Turn the "mode" switch to select the display item of your choice, and then press the "enter" button.
The display item changes in the following order.
TR NO/TIME (Track number/Playback time) ↔ ALBUM (Album title) ↔ TRACK (Track title) ↔ ARTIST (Artist name) ↔ TR NO/TIME...

NOTE

- If the text information is too long to fit into the display window, press and hold down the "FUNC" button for more than 1 second to switch to the next page.
- Texts recorded with characters other than alphanumeric characters and symbols will appear as "*" (asterisks).
- If there is no text information stored in a music file, "NO TITLE" appears on the display window.

Displaying the Registered Portable Device





1. Press the "FUNC" button.
2. Turn the "mode" switch to select "BLUETOOTH", and then press the "enter" button.
3. Turn the "mode" switch to select "LIST AUDIO", and then press the "enter" button.
4. Turn the "mode" switch to select device name, and then press the "enter" button.
5. Turn the "mode" switch to select the display item of your choice, and then press the "enter" button.
   SELECT: Connect the registered portable device.
   "SEARCHING" appears on the display window.
   DISCONNECT: Disconnect the registered portable device. When "DISCONNECT?" appears on the display window, press the "enter" button.
   DELETE: Delete the registered portable device.
   When "DELETE?" appears on the display window, press the "enter" button.
   METHOD: Switch the connection method. Select "FROM VEHICLE", to connect the portable device by operating from the unit. Select "FROM AUDIO", to connect the unit from the portable device.

If "ERROR" Appears in the Display

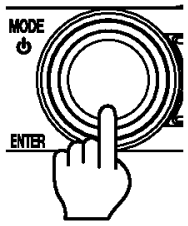
The following message appear (blink) in the display window according to the status.

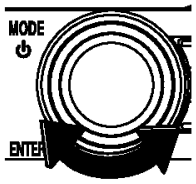
Message	Description
NO CONNECT	This message appears when the unit is not connected to the portable device.

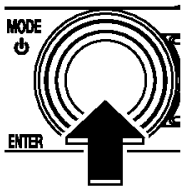
AUX Operation

By connecting the 3.5 mm headphone jack of your own portable audio device to the "Mini jack", you can listen to your own music through this unit.

1. Use a mini plug cable, and connect the portable audio device to the "mini jack".
2. Press the "mode" switch.

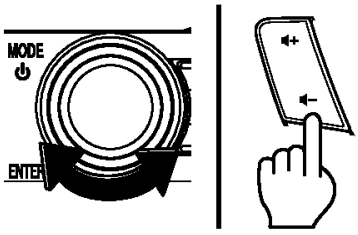






3. Turn the "mode" switch to select "AUX", and then press the "enter" button.
   Connecting a mini plug cable to the "mini jack" also establishes the AUX mode and enable you to use the portable audio device.
   When the mini plug cable is disconnected from the main unit, the AUX mode is canceled.

Adjusting the Volume



Turn the "volume adjust" knob clockwise or counterclockwise to adjust the volume.
Turn clockwise: Increase the volume.
Turn counterclockwise: Decrease the volume.

You can do so by using the "volume up" or "volume down" buttons on the steering wheel.
Volume up button: Press the button to increase the volume.
Volume down button: Press the button to decrease the volume.

CAUTION

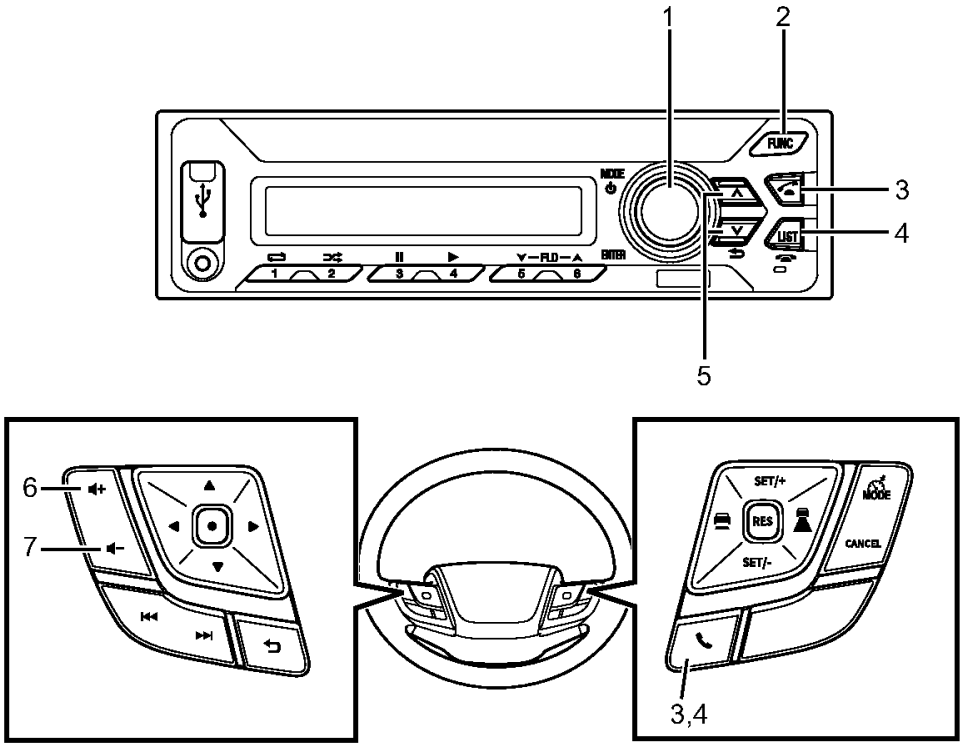
- **Either place the portable audio device and mini plug cable somewhere where they do not interfere with driving or temporarily secure them at a location where they are not in the way. They could impede driving and cause a traffic accident.**
- **Make sure not to touch the terminals of the mini plug cable.**
- **Do not connect, operate or remove the portable audio device while driving.**

NOTE

- The volume set by adjustment in the AUX mode is effective in the AUX mode only.
- To power the portable audio device, use the battery or other power source supplied with the device.
- The AUX device cannot be controlled from the main unit.
- Reduce the AUX volume to prevent speaker damage.

Handsfree Operation [V]

This unit supports Bluetooth®. Bluetooth® is a wireless data system by which you can call without your mobile phone being connected with a cable or placed on a cable.
If your mobile phone does not support Bluetooth®, this unit cannot function.



No.	Name
1	Mode switch Enter button Volume adjust knob
2	FUNC button
3	Off hook button
4	On hook button
5	Level adjust buttons
6	Volume up button
7	Volume down button

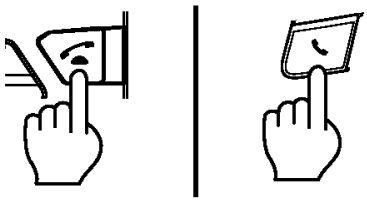
NOTE

- First connect the mobile phone to the unit before performing the following operation. See "Registering a Bluetooth® Device".
- Do not leave your mobile phone in the vehicle. The temperature inside the vehicle may be high and damage the phone.
- In the following conditions, the system may not function.
  - The mobile phone is turned off.
  - The current position is outside the communication area.
  - The mobile phone is not connected.
  - The mobile phone has a low battery.

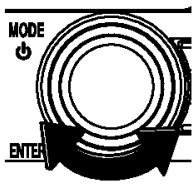
Refer to page
6-49 Registering a Bluetooth® Device

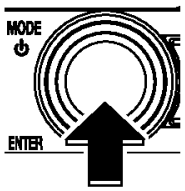
Operating the Handsfree System

Making a Phone Call by Entering a Phone Number

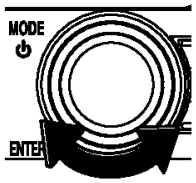


1. Press the "off hook" button.

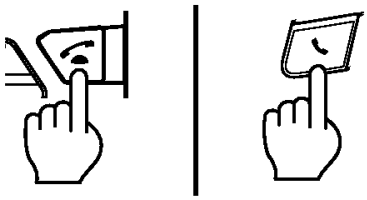


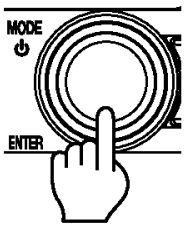


2. Turn the "mode" switch to select "ENTER NUMBER", and then press the "enter" button.
   "INPUT NUMBER" appears on the display window.



3. Turn the "mode" switch to select a phone number.
   You can enter phone numbers by one digit at a time.
   Numeric character (0-9) and symbols (*, #, +) are available. You can use the symbols (+) only for the first digit.
   "Level adjust" button (∧): Advance to the next digit.
   "Level adjust" button (∨): Delete the entered digit and return to the previous digit.



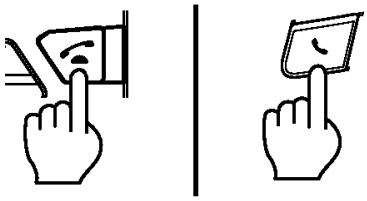


4. After entering the phone number, press the "off hook" button or the "enter" button.
   "CALLING" appears on the display window and a call is made to the selected phone number.
   When the person receives the call, you can talk in handsfree mode.

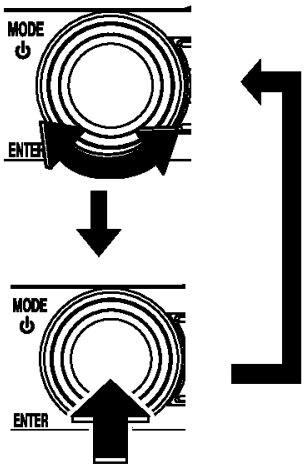
⚠ CAUTION

- **Do not enter a phone number while driving. Park your vehicle in a secure location and then enter the phone number.**

Making a Phone Call Using Missed Call History



1. Press the "off hook" button.

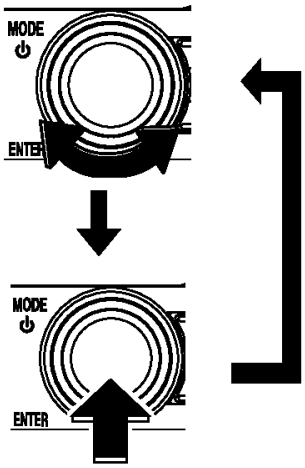


2. Turn the "mode" switch to select "MISSED", and then press the "enter" button.
   The phone number of the previous missed call appears on the display window.
3. Turn the "mode" switch to select the phone number of your choice, and then press "enter" button.
   "CALLING" appears on the display window and a call is made to the selected phone number.
   You can also make a call by pressing the "off hook" button.
   When the person receives the call, you can talk in handsfree mode.

Making a Phone Call Using Incoming Call History



1. Press the "off hook" button.

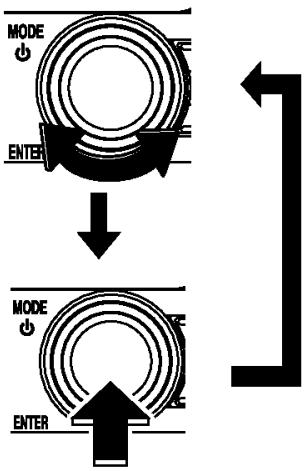


2. Turn the "mode" switch to select "INCOMING", and then press the "enter" button.
   The phone number of the person who made the previous incoming call appears.
3. Turn the "mode" switch to select the phone number of your choice, and then press the "enter" button.
   "CALLING" appears on the display window and a call is made to the selected phone number.
   You can also make a call by pressing the "off hook" button.
   When the person receives the call, you can talk in handsfree mode.

Making a Phone Call Using Outgoing Call History



1. Press the "off hook" button.

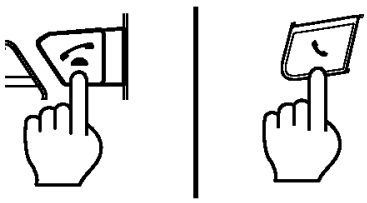


2. Turn the "mode" switch to select "OUTGOING", and then press the "enter" button.
   The person (phone number) you called appears on the display window.
3. Turn the "mode" switch to select the person (phone number) of your choice, and then press the "enter" button.
   "CALLING" appears on the display window and a call is made to the selected phone number.
   You can also make a call by pressing the "off hook" button.
   When the person receives the call, you can talk in handsfree mode.

Answering a Call

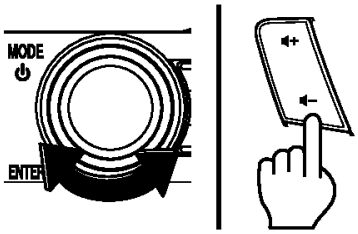
When your phone set receives a call, "INCOMING", followed by the phone number appears on the display window.

- Only the number appears on the display window.
- If there is a private call, "UNAVAILABLE" appears on the display window.
- You can refuse a call by pressing the "on hook" button when a call is incoming.
- This unit supports the in-band ring tone (transfers the ring tone from your phone to the main unit). If the in-band ring tone is not supported your phone, the unit use the built-in ring tone.



Press the "off hook" button and use handsfree to talk.
When you have finished the call, press the "on hook" button.

Setting the Volume



Call volume:
Turn the "volume adjust" knob during a call.
- Turn clockwise: Increase the volume.
- Turn counterclockwise: Decrease the volume. The adjusted volume value is saved.

Ringtone volume:
Turn the "volume adjust" knob during an incoming call.
- Turn clockwise: Increase the volume.
- Turn counterclockwise: Decrease the volume. The adjusted volume value is saved.

If you want to adjust the volume of a phone while sending, talking, or receiving, you can do so for call volume and ring volume by using the "volume up" and "volume down" buttons on the steering wheel.
Volume up button: Press the button to increase the volume.
Volume down button: Press the button to decrease the volume.

NOTE

- The volume and microphone gain setting of each mobile phone is different according to its specification.

Setting the Sensitivity of the Built-In Microphone

If your voice is too low or difficult to hear for the person you are talking to, or there is an echo or howling, you can adjust the microphone sensitivity.



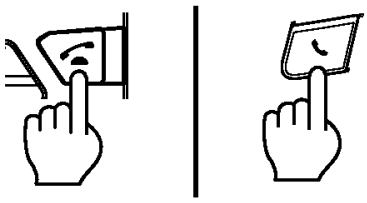
Press the "Level adjust" buttons during a call.
"Level adjust" button (" ∧ "): Increase the sensitivity. (The sound transmission is more effective.)
"Level adjust" button (" ∨ "): Decrease the sensitivity. (The sound transmission is less effective.)
The setting can be adjusted within the range of 0 to MAX (10). (Default: 5)

NOTE

- "MIC LEVEL" appears on the display while buttons are operated. "MIC LEVEL" disappears in 2 seconds after the operation is completed, and the display returns to its original state.

Talking on the Mobile Phone (Private Mode)

You can switch phone calls from this unit (handsfree mode) to the mobile phone.



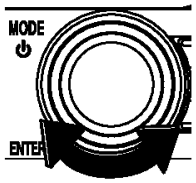
Press and hold down the "off hook" button for more than 1 second during a call.

Entering Tone Numbers

You can transmit tone numbers during a call.



1. Press the "FUNC" button during a call.



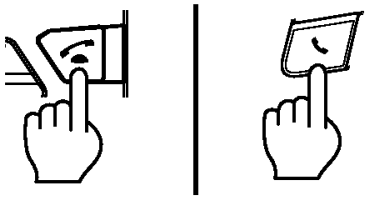
2. Turn the "mode" switch to select the tone number. You can enter phone numbers by one digit at a time.
   Numeric character (0-9) and symbols (*, #, +) are available. You can use the symbols (+) only for the first digit.



3. Press the "level adjust" button (" ∧ "). The selected tone numbers are transmitted. You will move on to the next step and select the tone numbers again if necessary.

Talking during Call Waiting

When the display window indicates the phone call in progress, the Call Waiting feature enables you to receive and answer a second phone call while placing the first call on hold.



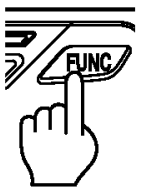
Press the "off hook" button when the ring tone starts during a call.

- While placing the phone call in progress on hold, you will be connected to the second caller.
- Press the "on hook" button when you wish to turn off the Call Waiting feature.
- When the Call Waiting feature is turned off, you will be connected to the first caller on hold.
- Pressing the "off hook" button again enables you to switch between callers on Call Waiting.

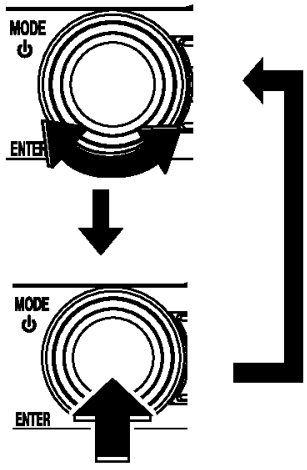
NOTE

- This function is available only when your phone is compatible with the Call Waiting feature.

Displaying the Registered Mobile Phone



1. Press the "FUNC" button.



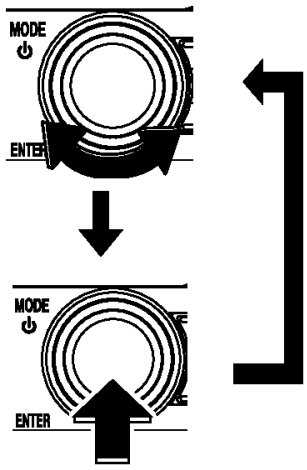
2. Turn the "mode" switch to select "BLUETOOTH", and then press the "enter" button.
3. Turn the "mode" switch to select "LIST PHONE", and then press the "enter" button.
4. Turn the "mode" switch to select mobile phone name, and then press the "enter" button.

5. Turn the "mode" switch to select the display item of your choice, and then press the "enter" button.
   SELECT: Connect the registered mobile phone. "SEARCHING" appears on the display window.
   DISCONNECT: Disconnect the registered mobile phone. When "DISCONNECT?" appears on the display window, press the "enter" button.
   DELETE: Delete the registered mobile phone.
   When "DELETE?" appears on the display window, press the "enter" button.

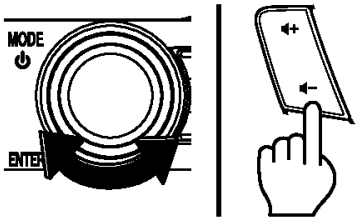
Adjusting the Handsfree Volume



1. Press the "FUNC" button.



2. Turn the "mode" switch to select "BLUETOOTH", and then press the "enter" button.
3. Turn the "mode" switch to select "HF SOUND", and then press the "enter" button.
4. Turn "mode" switch to select an adjustment item, and then press "enter" button.
   CALL VOLUME: Adjust the call volume.
   RINGTONE: Adjust the ringtone volume.



5. Turn the "volume adjust" knob.
   Turn clockwise: Increase the volume.
   Turn counterclockwise: Decrease the volume. The adjusted volume value is saved.
   To adjust the volume during an incoming call or during a call, see "Setting the Volume".

Refer to page
6-73 Setting the Volume

Using the Audio System [V]

⚠ CAUTION

- **Do not adjust the radio or audio player while the vehicle is in motion. Adjusting the radio or audio player while the vehicle is moving could cause an accident.**
- **Keep the volume low enough that sounds outside of the vehicle can be heard. If outside sound cannot be heard, accidents may be harder to avoid.**
- **Do not install a radio equipment antenna near the vehicle's radio antenna. This could cause unwanted noise on the radio or while playing a audio.**

ADVICE

- Do not use the radio or audio player for a long time when the motor is off. This may cause the battery to discharge.
- Take care not to spill liquids, etc. on the radio or audio player.
- Do not disassemble or apply oil to radio or audio player.

Certification

Radio Certification in South Korea

해당무선설비는전파혼신가능성이있으므로인명안전과관련된서비스는할수
없습니다.
이기기는가정용(B급) 전자파적합기기로서주로가정에서사용하는것을목적으로
하며, 모든지역에서사용할수있습니다.

Radio Certification in Taiwan

取得審驗證明之低功率射頻器材，非經核准，公司、商號或使用者均不得擅自變更
頻率、加大功率或變更原設計之特性及功能。
低功率射頻器材之使用不得影響飛航安全及干擾合法通信；經發現有干擾現象時，
應立即停用，並改善至無干擾時方得繼續使用。
前述合法通信，指依電信管理法規定作業之無線電通信。
低功率射頻器材須忍受合法通信或工業、科學及醫療用電波輻射性電機設備之干擾。

Commodity Inspection Act in Taiwan

商品名稱:車用音響
型號:TN0041A
額定電壓:12V
額定輸入電流:3.0A
生產國別:泰國
進口者名稱:台北合眾汽車有限公司
進口者地址:臺北市萬華區西藏路 352 號 1 樓
進口者電話:02-8791-3829 #1886

設備名稱：車用音響，型號（型式）：TN0041A

單元	限用物質及其化學符號					
	鉛 (Pb)	汞 (Hg)	鎘 (Cd)	六價鉻 (Cr+ 6)	多溴聯苯 (PBB)	多溴二苯醚 (PBDE)
面板	-	○	○	○	○	○
外殼	○	○	○	○	○	○
電路板	-	○	○	○	○	○
內部零件 (天線,機殼擰緊)	○	○	○	○	○	○

備考1.〝超出0.1 wt %〞及〝超出0.01 wt %〞係指限用物質之百分比含量超出百分比含量基準值。

備考2.〝○〞係指該項限用物質之百分比含量未超出百分比含量基準值。

備考3.〝 - 〞係指該項限用物質為排除項目。

Radio Certification in Ukraine

справжнім DENSO TEN Limited заявляє, що тип радіообладнання відповідає Технічному регламенту радіообладнання;

моделі: TN0041A

повний текст декларації про відповідність доступний на веб-сайті за такою адресою:

https://www.denso-ten.com/support/regulation/ua_doc/

типу радіообладнання	смузі радіочастот	максимальну потужність випромінювання
Bluetooth	2402 - 2480 MHz	2402 - 2480 MHz

Importer information

Importer name	Address
KOMTRANSKOMPLEKT LLC	292, Rizdviana str., 18036, Cherkasy, Ukraine

Radio

Usually, a problem with radio reception does not mean there is a problem with your radio - it is just the normal result of conditions outside the vehicle.
For example, nearby buildings and terrain can interfere with FM reception. Power lines or telephone wires can interfere with AM signals.
And of course, radio signals have a limited range. The farther you are from a station, the weaker its signal will be. In addition, reception conditions change constantly as your vehicle moves.
Here are some common reception problems that probably do not indicate a problem with your radio.

FM Transmissions

Fading and drifting stations - Generally, the effective range of FM is about 40 km (25 miles). Once outside this range, you may notice fading and drifting, which increase with the distance from the radio transmitter. They are often accompanied by distortion.
Multi-path - FM signals are reflective, making it possible for two signals to reach your antenna at the same time. If this happens, the signals will cancel each other out, causing a momentary flutter or loss of reception.
Static and fluttering - These occur when signals are blocked by buildings, trees, or other large objects. Increasing the bass level may reduce static and fluttering.

Station swapping - If the FM signal you are listening to is interrupted or weakened, and there is another strong station nearby on the FM band, your radio may tune in the second station until the original signal can be picked up again.

AM Transmissions

Fading - AM broadcasts are reflected by the upper atmosphere - especially at night. These reflected signals can interfere with those received directly from the radio station, causing the radio station to sound alternately strong and weak.
Station interference - When a reflected signal and a signal received directly from a radio station are very nearly the same frequency, they can interfere with each other, making it difficult to hear the broadcast.
Static - AM is easily affected by external sources of electrical noise, such as high tension power lines, lightning, or electrical motors. This results in static.

USB Devices

USB Memory Standards

Compatible file system :	FAT16/32
Audio format that is playable :	MP3/WMA Compatibility : USB2.0 (Full speed)
Compatible Device:	USB mass storage class

This system is not compatible with external hard drive units (pocket hard disk drives). Connections using HUB, etc. are not supported.

Playable MP3 File Standards

Supported standards:		MPEG-1 Audio Layer III, MPEG-2 Audio Layer III
Supported sampling frequencies:	MPEG-1:	32, 44.1, 48 (kHz), MPEG-2: 16, 22.05, 24 (kHz)
Supported bit rate:	MPEG1:	32, 40, 48, 56, 64, 80, 96, 112, 128, 160, 192, 224, 256, 320 (kbps)
	MPEG2:	8, 16, 24, 32, 40, 48, 56, 64, 80, 96, 112, 128, 160 (kbps)

Variable bit rate (VBR) is supported.
Does not support free format.
Digital Rights Management (DRM) is not supported.
Supported channel modes: stereo, joint stereo, dual channel, monaural

Playable WMA File Standards

Supported standards:	WMA Ver. 7, WMA Ver. 8, WMA Ver. 9
Supported sampling frequencies:	32, 44.1, 48 (kHz)
Supported bit rates:	Ver. 7, 8: CBR 48, 64, 80, 96, 128, 160, 192 (kbps)
Ver. 9 (9.1/9.2):	CBR 48, 64, 80, 96, 128, 160, 192, 256, 320 (kbps) Only compatible with 2-channel playback

Variable bit rate (VBR) is supported.
Lossless compression is not supported.

ID3 Tag/WMA Tag

MP3/WMA files have an "ID3 Tag/WMA Tag" that allows the input of information so that data such as song title and artist can be saved.
This player supports ID3 Ver. 1.0, 1.1, 2.2, 2.3 and WMA tags.

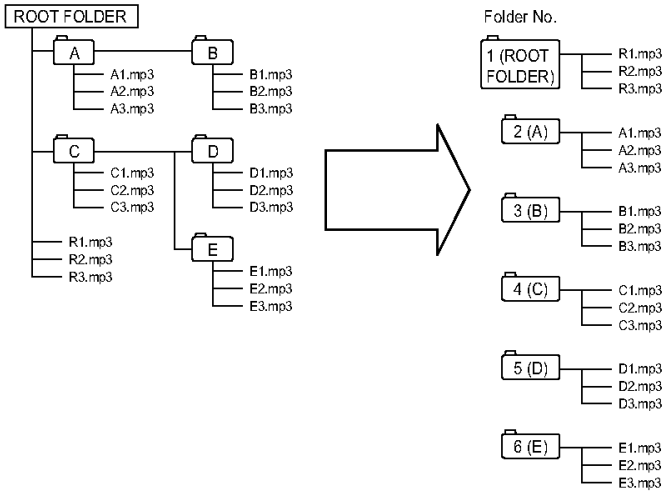
Display Order of MP3/WMA File/Folder Names

Names of MP3/WMA folders and files within the same level are displayed in the following order.

1. MP3/WMA folders displayed first, by ascending order of numbers, letters.
   The files stored just below the root of the disc will be stored in the "ROOT FOLDER".
2. Files displayed next, by ascending order of numbers, letters.
   It is assumed here that a disc has already been loaded into the unit.

[Example of MP3/WMA file structure]

This unit reconfigures the folders created by a user as shown below.



NOTE

- The following operations are based on the sample MP3/WMA file structure given above.
- Normally, tracks in "ROOT FOLDER" will be played in order from the first file.

Bluetooth®

The Bluetooth® word mark and logos are registered trademarks owned by Bluetooth SIG, Inc. and any use of such marks by DENSO TEN Limited (the maker of certain radios installed in Isuzu vehicles) is under license. Other trademarks and trade names are those of their respective owners.

Compatible Bluetooth® Specifications:	Bluetooth® Specification Ver.5.1 + EDR
Compatible Profiles:	Hands Free Profile (HFP) Ver.1.7.2 Advanced Audio Distribution Profile (A2DP) Ver.1.3.2 Audio/Video Remote Control Profile (AVRCP) Ver.1.6.2

Bluetooth® Handsfree/Audio operation is subject to mobile phone compatibility. Bluetooth® Handsfree performance can be influenced by mobile phone network, handset and driving condition.

The functions of the system may be partially limited depending on the model of your mobile phone.
Operation of the portable device via this unit differs depending on the specifications of the portable device.

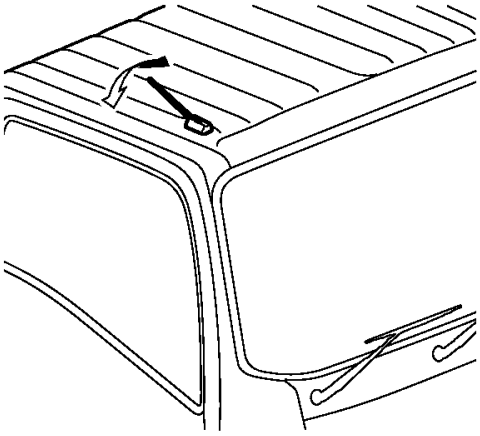
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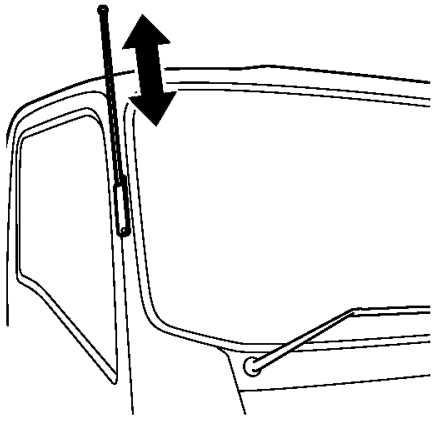
- Other company names and product names appearing on this manual are the trademarks and registered trademarks of their respective companies.

Antenna

Type 1



Type 2



ADVICE

- To prevent breaking the antenna, lower it when passing through areas with low clearance or through a car wash.

NOTE

[Radio reception]

- Since the position of the antenna changes as the vehicle moves, the strength of radio signals may change, and the best reception may not be maintained due to the influence of obstacles, trains, traffic lights, etc.
- Compared with AM signals, FM signals are of better quality and compatible with stereo broadcasting. However, due to the nature of FM signals, conditions in which the quality of signals received in a moving vehicle may not be sustainable.

The directness of FM signal transmission

- As FM signals are more strongly directional than AM signals, they are blocked easily by large objects such as mountains and buildings and as such their reception area is much narrower than AM signals.

Sound loss

- FM signals are reflected easily by objects, so when driving through built-up areas, the sound may be interrupted or disturbed by noise.

Sound distortion

- Simultaneous reception of direct signals from the radio station and reflected signals from buildings may cause flutter or noise disturbance.

Before Inspection and Maintenance 7

- Precautions for Checking and Adjustments 7-2
- Discarded Parts, Oils and Other Liquids 7-3
- Isuzu Genuine Oils and Grease 7-4
- Tools 7-5
- Handling the Jack 7-13
- Inspection Hatches [V] 7-22
- Tilting the Cab [V] 7-26

7-2 Before Inspection and Maintenance

Precautions for Checking and Adjustments

⚠ WARNING

- **Select a place with a solid and level surface to perform the checking and maintenance work. Make sure to chock the wheels. It would be very dangerous if the vehicle started to move.**
- **Pull firmly on the parking brake lever and put the transmission in neutral.**
  - **For manual transmission models, securely engage the parking brake and place the gearshift lever in the "N" position.**
  - **For Smoother models, securely engage the parking brake, place the gearshift lever in the "N" position and make sure the shift indicator displays "N".**
  - **For DCT models, securely engage the parking brake, place the gearshift lever in the "P" position and make sure the shift indicator displays "P".**
- **Be sure to stop the engine and put the starter switch in the "LOCK" position. And then take out the key.**
- **When performing work on the electrical system, begin by turning the starter switch to the "LOCK" position, wait at least 3 minutes, and then disconnect the negative cable from the negative terminal on battery. If the negative cable is disconnected within 3 minutes, the engine control module may malfunction.**
- **To disconnect the negative terminals, disconnect both terminals in order, first disconnect the negative terminal of the 12V battery, and then disconnect the negative terminal of the 24V battery.**
- **To prevent personal injury, keep hands, tools and clothing clear of the engine cooling fan when the engine is running.**
- **When raising the vehicle, use a suitable jack, not the one provided on the vehicle.**
- **After raising the vehicle and before going underneath to perform work, make sure the vehicle is supported with jack stands.**
- **Do not perform work near an open flame or other heat sources.**
- **Immediately after driving, the engine, DPD, urea SCR, muffler, exhaust pipe, radiator, and other parts are very hot. Be careful not to burn yourself. Inspect the engine and other parts when they have cooled.**
- **When working on the fuel line or fuel filter, remove the fuel tank filler cap. The fuel system is under pressure and the fuel will overspill unless the pressure is relieved, possibly leading to combustion or a fire.**
- **Do not let the engine run in poorly ventilated garages or sheds. This could cause carbon monoxide poisoning.**

Refer to page
7-13 Handling the Jack

ADVICE

- Use only appropriate tools.
- Do not leave the removed parts or tools in the engine compartment. They could damage the equipment if caught in the belts or other moving components.
- Dirty water, dirt and other impurities seriously impair the effectiveness of the oil, grease and fluids, and damage the parts. Exercise all due caution to prevent waste or other refuse from coming in contact with parts or materials that have been removed when changing or replenishing them.
- Confirm that all systems and components are normal after performing the work.
- Inspections and maintenance enable you to use the vehicle with peace of mind. They also extend the vehicle's service life.

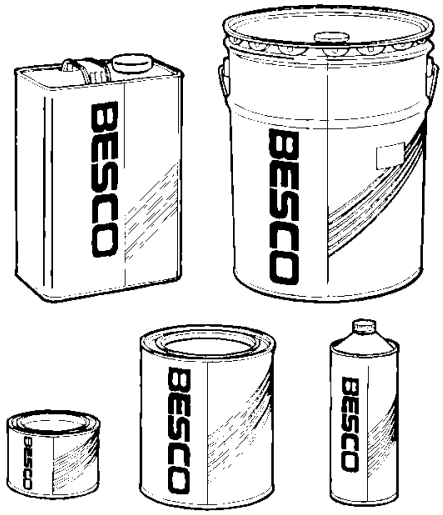
Discarded Parts, Oils and Other Liquids

CAUTION

- **Discarded parts, oil, grease and fluids could have an adverse effect on the environment. It is difficult to dispose of these, so have your Isuzu Dealer handle all checks and replacements.**

When changing oils, filters, engine coolant or other liquids, be sure to have a container ready in advance for their disposal.
Use methods conforming to legal requirements for discarding or disposing of parts, oils, filters or engine coolant after change or replacement.

Isuzu Genuine Oils and Grease



Periodically replenishing and changing the oil and grease is extremely important for maintaining your vehicle's performance and preventing malfunctions.
Isuzu Motors guarantees the quality and performance of the Isuzu genuine oils and grease. We recommend the use of Isuzu genuine oils and grease for maintenance and service of your vehicle.

⚠ CAUTION

- **Flames or other heat sources near spilled oil can cause a fire. Make sure to clean up all oil spills.**

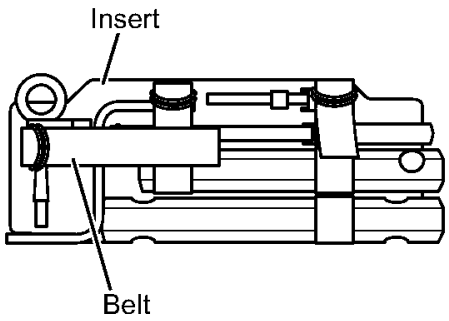
Tools

ADVICE

- It is recommended that you familiarize yourself with the contents and use of the various tools and the jack before using them.
- After finishing work with the tools, return them to the correct storage location and ensure that they will not move while the vehicle will be in motion.
- Triangle reflectors must always be kept inside the vehicle.

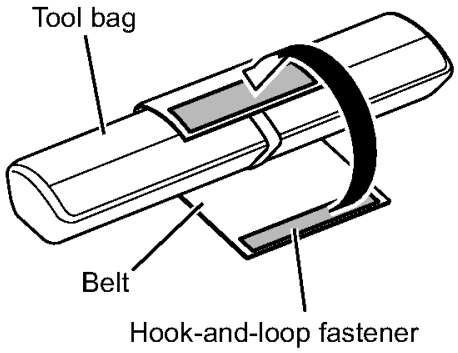
[NJR/NKR models (single cab model)]

- After using tools, refer to the “How to Store Tools” section and place the tools firmly into their inserts.



[NJR/NKR models (crew cab model) and NLR/NMR/NMS/NNR/NPR/NPS/NQR/NQS models]

- When installing tools, affix the hook and loop fastener of the belt attached to the floor trim to firmly secure the tool bag.



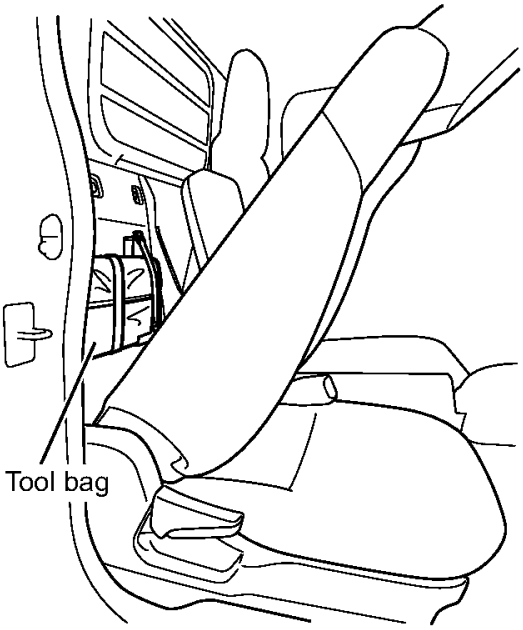
Refer to page
7-9 How to Store Tools

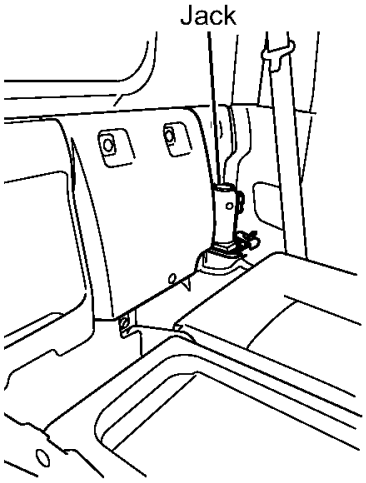
Storage Location in Single Cab Model

The tools are stored behind the driver's and passenger's seats. Tilt the seatbacks forward to take out the tools.

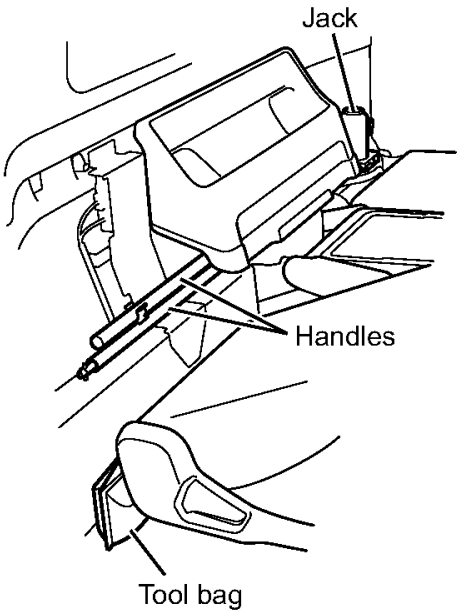
Refer to page
2-36 Driver's Seat
2-39 Passenger Seat/Center Seat [V]

NJR/NKR models

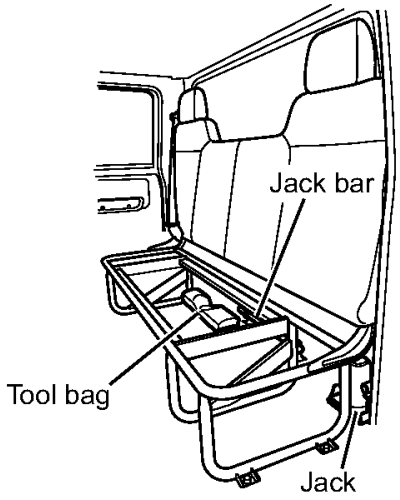




NLR/NMR/NMS/NNR/NPR/NPS/NQR/
NQS models



Storage Location in Crew Cab Model



The tools are stored under the rear seat. To take out the tools, remove the seat cushion.

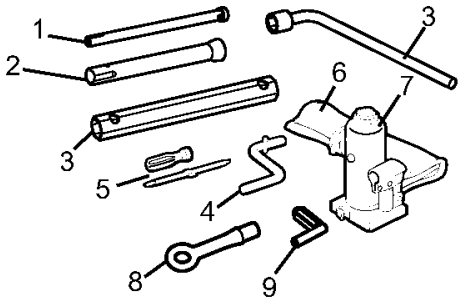
Refer to page
2-40 Rear Seats [V]

Tools Carried in Your Vehicle

NJR/NKR Models (Single Cab Model)

Models with spare tire carrier (type 1)

Illustration of the spare tire carrier top shape as shown.

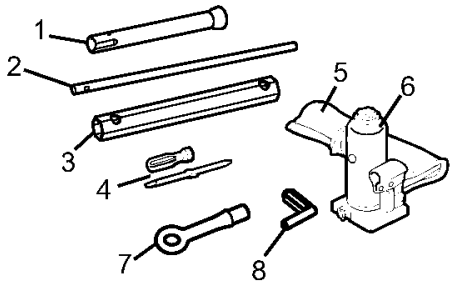


No.	Tool name
1	Jack bar/Spare tire carrier handle
2	Wheel nut wrench handle
3	Wheel nut wrench
4	Spare tire carrier handle
5	Screwdriver (with switchable Phillips and flat heads)
6	Tool bag
7	Jack
8	Towing hook
9	Electric parking brake release lever

7-8 Before Inspection and Maintenance

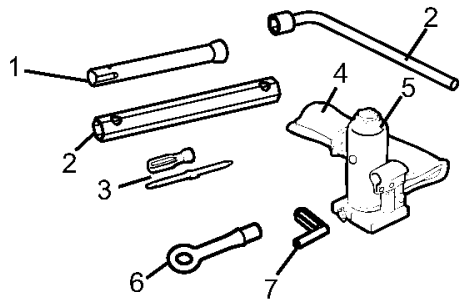
Models with spare tire carrier (type 2)

◐ Illustration of the spare tire carrier top shape as shown.



No.	Tool name
1	Jack bar/Spare tire carrier handle/ Wheel nut wrench handle
2	Spare tire carrier handle
3	Wheel nut wrench
4	Screwdriver (with switchable Phillips and flat heads)
5	Tool bag
6	Jack
7	Towing hook
8	Electric parking brake release lever

Models without spare tire carrier



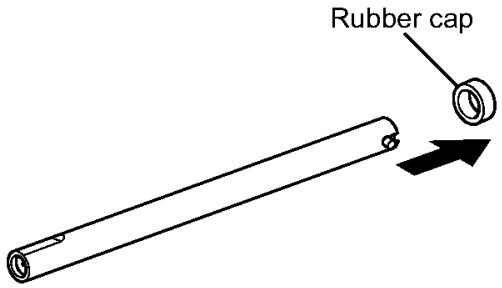
No.	Tool name
1	Wheel nut wrench handle
2	Wheel nut wrench
3	Screwdriver (with switchable Phillips and flat heads)
4	Tool bag
5	Jack
6	Towing hook
7	Electric parking brake release lever

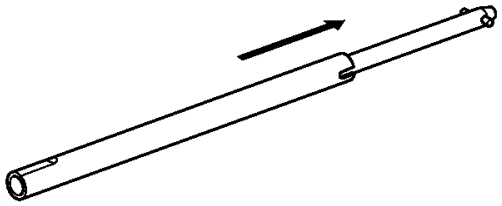
ADVICE

- Be sure to carry all of the provided tools in the vehicle.

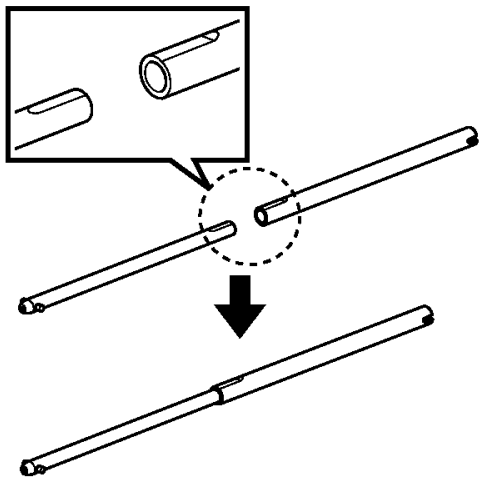
Assembling the jack bar/spare tire carrier handle/wheel wrench handle

1. Remove the jack bar/spare tire carrier handle/wheel wrench handle from the tool bag.
2. Remove the rubber cap.

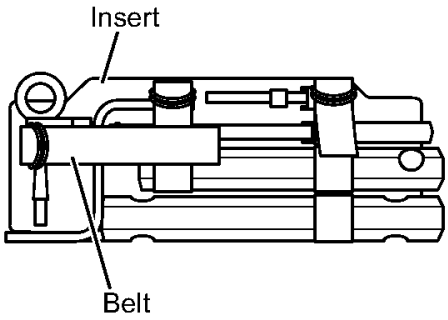




3. Remove the handle stored inside the jack bar/spare tire carrier handle/wheel wrench handle.



4. Align the flat parts and slot them together.



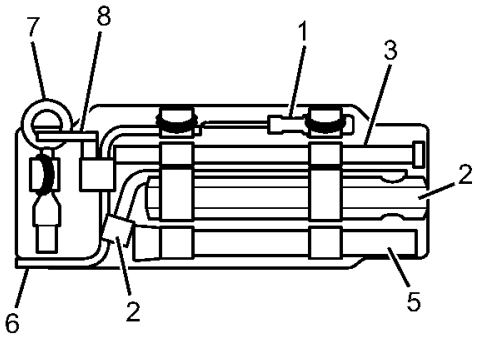
How to Store Tools

After using the tools, fix them inside their inserts by using the belts to secure them inside the tool bag.

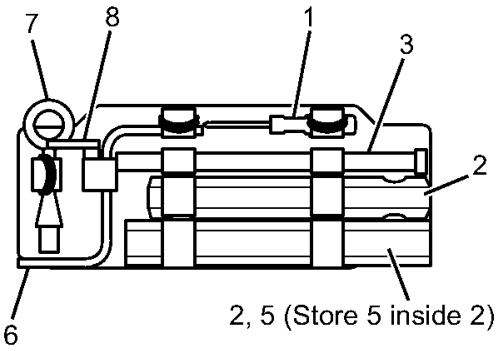
ADVICE

- If there is no insert or the tools are inserted in the wrong orientation, the tool bag may become deformed and interfere with the seat, thereby making the seat uncomfortable or causing the seat to not be aligned properly.

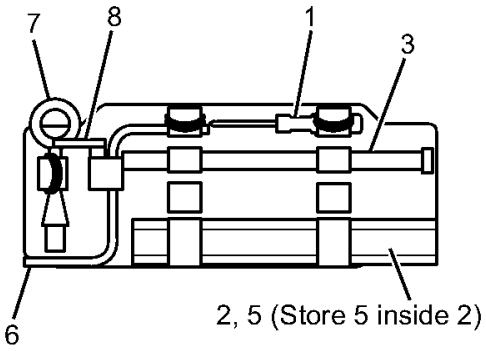
Model with spare tire (type 1)



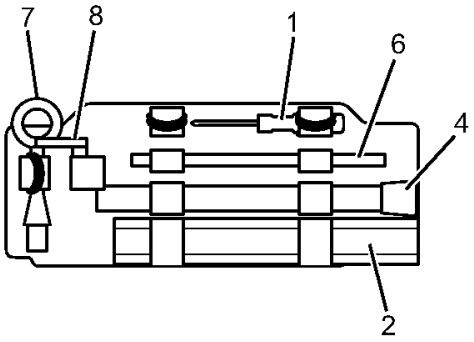
Model with spare tire (type 2)



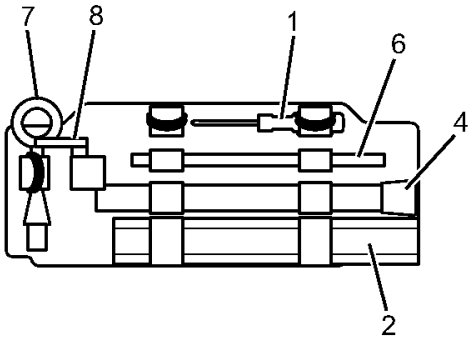
Model with spare tire (type 3)



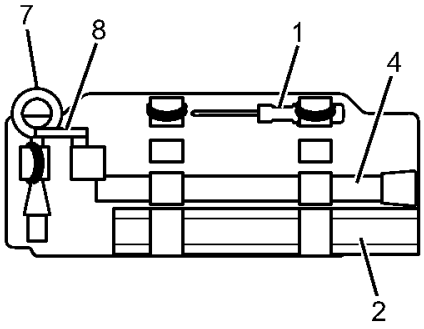
Model with spare tire (type 4)



Model without spare tire (type 1)



Model without spare tire (type 2)

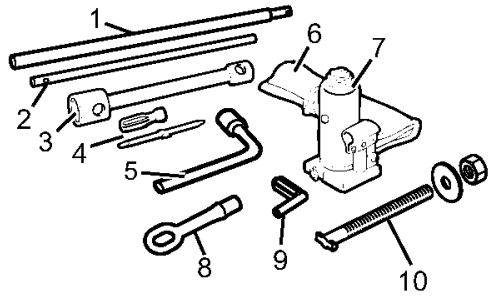


No.	Tool name
1	Screwdriver (with switchable Phillips and flat heads)
2	Wheel nut wrench
3	Jack bar/Spare tire carrier handle
4	Jack bar/Spare tire carrier handle/Wheel nut wrench handle
5	Wheel nut wrench handle
6	Spare tire carrier handle
7	Towing hook
8	Electric parking brake release lever

NJR/NKR Models (Crew Cab Model) and NLR/NMR/NMS/NNR/NPR/NPS/NQR/NQS Models

Models with spare tire carrier (type 1)

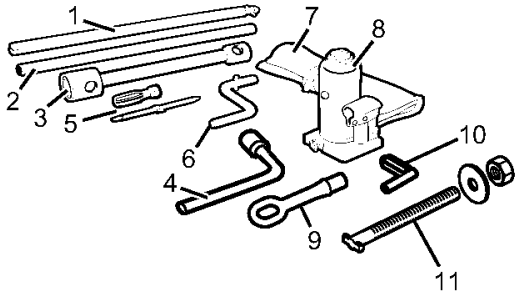
Ⓘ Illustration of the spare tire carrier top shape as shown.



No.	Tool name
1	Jack bar/Spare tire carrier bar/Wheel nut wrench handle
2	Spare tire carrier handle
3	Wheel nut wrench
4	Screwdriver (with switchable Phillips and flat heads)
5	Wheel nut wrench
6	Tool bag
7	Jack
8	Towing hook
9	Electric parking brake release lever
10	Release bolt: 2 pieces [FAB]

Models with spare tire carrier (type 2)

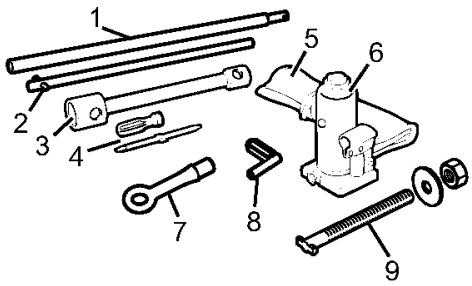
Ⓘ Illustration of the spare tire carrier top shape as shown.



No.	Tool name
1	Jack bar/Spare tire carrier bar
2	Wheel nut wrench handle
3	Wheel nut wrench
4	Wheel nut wrench
5	Screwdriver (with switchable Phillips and flat heads)
6	Spare tire carrier handle
7	Tool bag
8	Jack
9	Towing hook
10	Electric parking brake release lever
11	Release bolt: 2 pieces [FAB]

7-12 Before Inspection and Maintenance

Models without spare tire carrier



No.	Tool name
1	Jack bar/Spare tire carrier bar
2	Spare tire carrier handle
3	Wheel nut wrench
4	Screwdriver (with switchable Phillips and flat heads)
5	Tool bag
6	Jack
7	Towing hook
8	Electric parking brake release lever
9	Release bolt: 2 pieces [FAB]

ADVICE

- Be sure to carry all of the provided tools in the vehicle.

Handling the Jack

⚠ WARNING

- **Raising the vehicle with a jack could lead to an accident when carried out on soft or inclined surfaces. Ensure that you always carry out this operation on flat, solid surfaces.**
- **Always apply the parking brake fully and correctly chock the wheels before jacking the vehicle. Applying only the parking brake is insufficient to prevent the vehicle from moving; when a rear wheel is jacked up, the vehicle blocked only by the parking brake could move, creating a very dangerous situation.**
- **Ensure that there are no people or objects present in the vehicle before it is jacked up.**
- **In order to ensure safety, doors should never be opened and the engine should never be started during a jack-up operation. In addition, you should never have any part of your body below the vehicle at this time, nor allow anybody else to do so. Failure to observe this precaution could lead to an accident if the jack were to slip.**
- **If the underside of the vehicle is to be worked on after jacking up, jack stands must be used to support the vehicle.**
- **The jack must only be used at one of the specified jacking points. In addition, you must confirm that it makes good contact with the specified point.**
- **In order to provide extra safety should the jack slip, once a spare tire has been removed, it should be placed under the vehicle near the jack.**
- **Before starting a jacking operation, ensure that the jack and the jacking point to be used are clear of dirt, oil and grease. Failure to observe this precaution could lead to an accident should the dirt or oil cause the jack to slip.**
- **The jack provided with your vehicle must be used only for changing tires and fitting or removing tire chains. In order to ensure safety, furthermore, only one wheel should be jacked up at a time.**
- **If using a two-stage, extension type jack and the stop mark (yellow) becomes visible, stop raising the vehicle. Failure to observe this precaution can result in jack breakage.**
- **Do not use more than one jack at any one time.**
- **The jack supplied with your vehicle is specifically for that vehicle. Do not use it on another vehicle and never use another vehicle's jack.**
- **Turn the bleeder screw slowly. Turning it quickly will cause the vehicle to drop and the jack may slip off.**

ADVICE

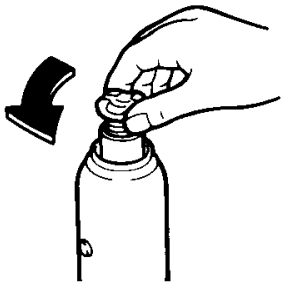
- Depending on the vehicle model, the jack may not fit under the vehicle when there is a flat tire. Roll the tire up onto a piece of wood or other material to jack up the vehicle. When doing this for a vehicle equipped with a tire pressure monitoring system, if you do not lay down a piece of wood that is wider than the width of the rim, then the tire air pressure sensor could be damaged.

Operating the Jack

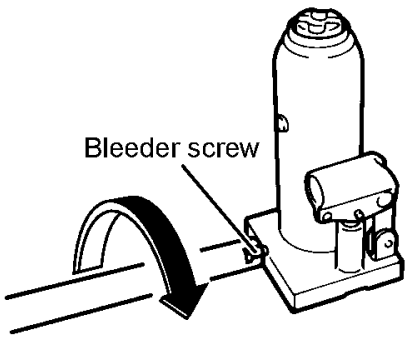
Raising the Vehicle

1. Place the jack immediately below the jacking point and ensure that it is upright.
   The jack must be placed on a flat, solid surface.

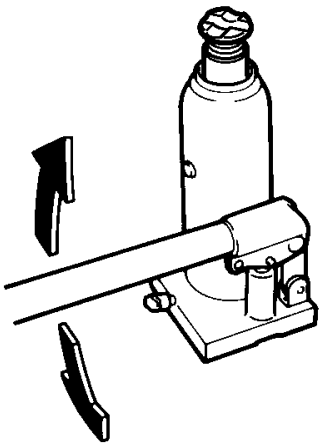
Refer to page
7-16 Front Wheel Jacking Points
7-19 Rear Wheel Jacking Points
7-20 Jacking When a Front Tire is Flat



2. Turn the head of the jack to extend it to the height of the jacking point. Turn it counterclockwise to extend.

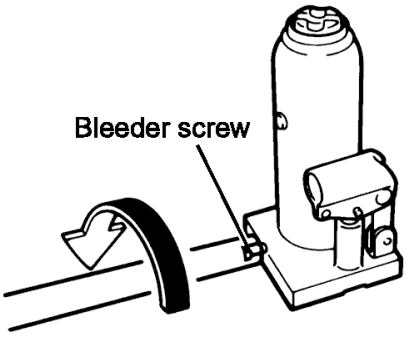


3. Insert the jack handle into the socket. Before jacking up, use the notched end of the jack handle to turn the bleeder screw fully clockwise.



4. Move the jack handle gently up and down to extend it slightly.
5. Confirm that the jack is in good contact with the jacking point, and then continue to raise the vehicle.

Lowering the Vehicle



1. Line up the jack handle end notch with the bleeder screw.
2. Slowly turn the bleeder screw counterclockwise to lower the vehicle.

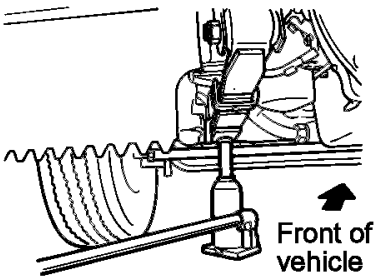
ADVICE

- Do not turn the bleeder screw counterclockwise more than two turns. Doing so may result in leakage of liquid from inside the jack.

3. When the vehicle has been fully lowered, turn the bleeder screw as far as it will go in the clockwise direction.
4. Turn the jack head fully clockwise.

Front Wheel Jacking Points

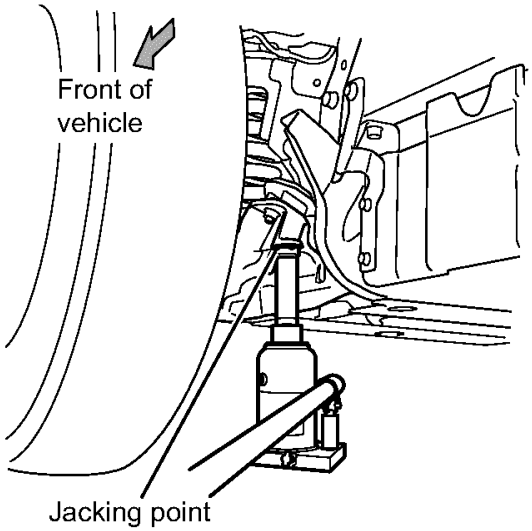
All Except Model with Independent Front Suspension (2WD)



Apply the jack to the leaf spring.

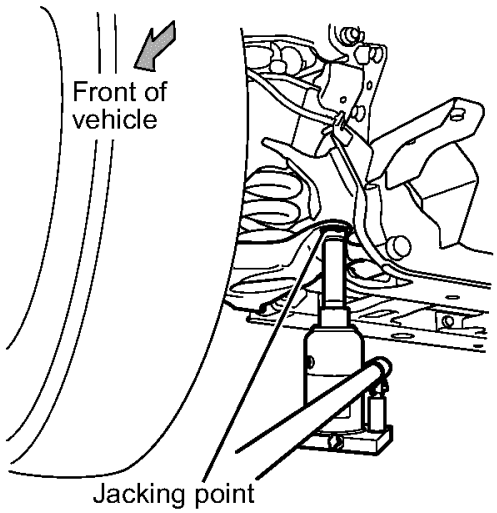
Model with Independent Front Suspension (Coil Spring Type) (2WD)

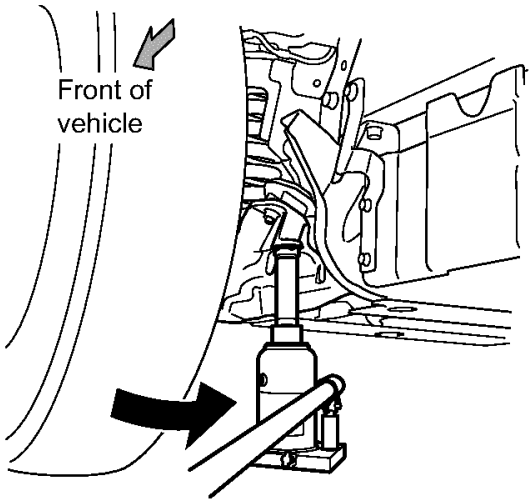
NJR/NKR/NLR/NMR models



Apply the jack to the jacking point behind the lower link.

NPR model

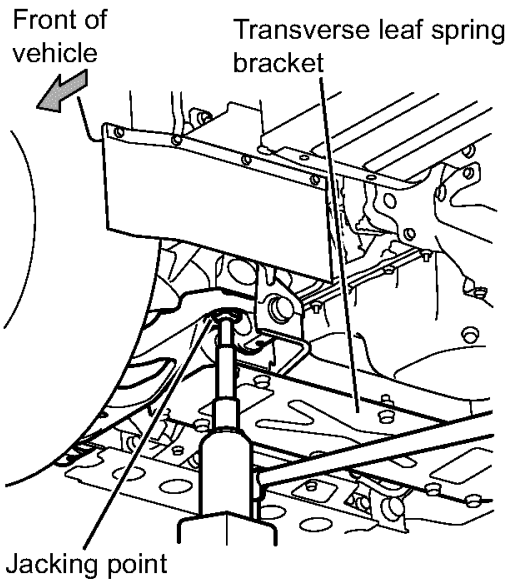




ADVICE

- Never turn the steering wheel sharply while the vehicle is jacked up. There is a risk of the jack coming off.

Model with Independent Front Suspension (Transverse Leaf Spring Type) (2WD)

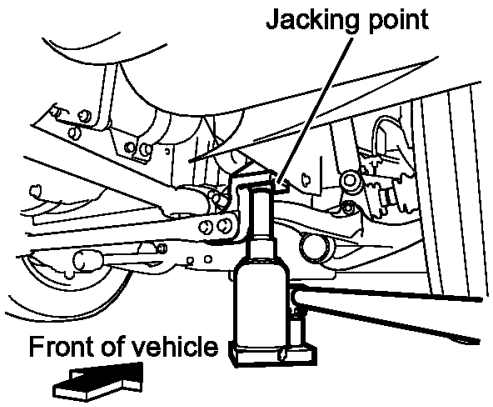


Apply the jack to the jacking point behind the lower link.

ADVICE

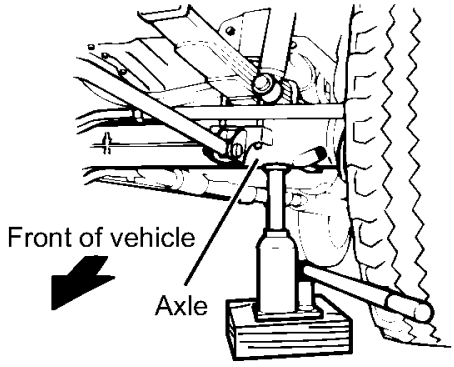
- Do not jack up at the bottom of the transverse leaf spring bracket. The transverse leaf spring bracket may become deformed.

NMS Model (4WD)



Apply the jack to the jacking point of the bracket.

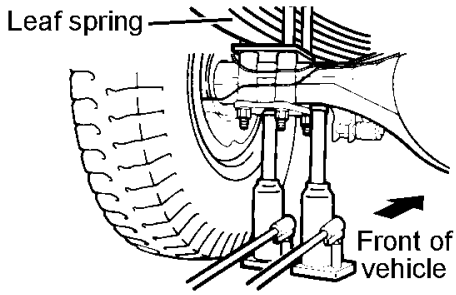
NPS/NQS Models (4WD)



Apply the jack to the bottom of the axle.

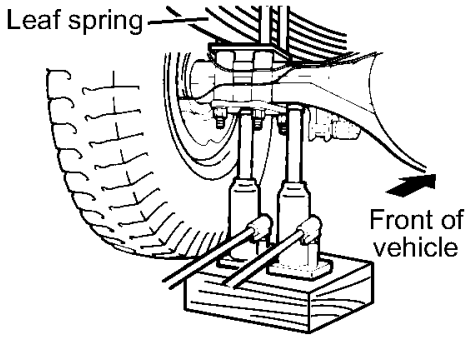
Rear Wheel Jacking Points

Over-slung Leaf Spring Suspension Model



Apply the jack to the bottom of the leaf spring or axle case.

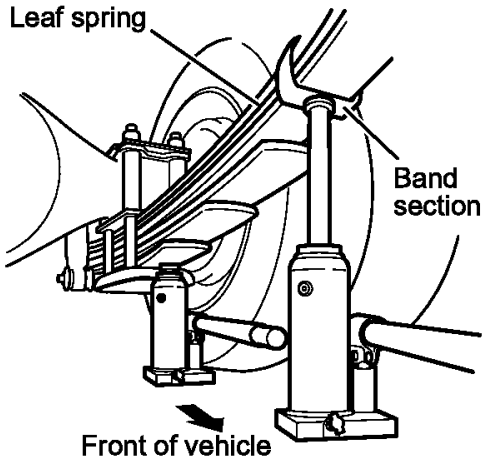
NPS/NQS Models (4WD)



ADVICE

- If the jack stroke is insufficient, place the wood or the equivalent under the jack.
- The wood shall be thick and hard with sufficient width bigger than jack base.
- The jack cannot be placed under the front axle depending on the condition of the vehicle (flat tire, etc.).

Under-slung Leaf Spring Suspension Model

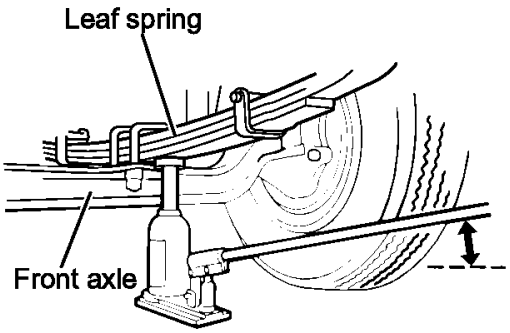


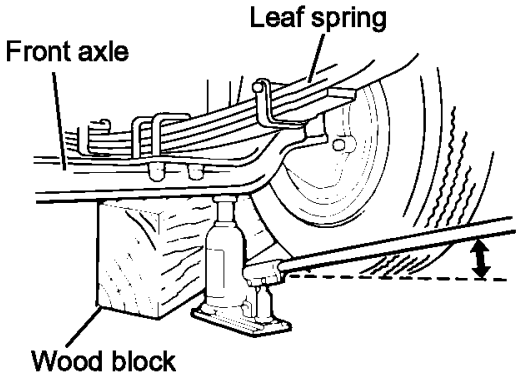
Apply the jack to the bottom of the leaf spring or to the band-section rivet at the front of the vehicle.

Jacking When a Front Tire is Flat

WARNING

- **Position the jack as close as possible to the front axle.**
- **The wood block should be as thick as possible in order to improve stability.**
- **As the bottom of the leaf spring is curved, special care must be taken during the jacking operation. Slipping of the jack can lead to extremely dangerous situations such as entrapment beneath the vehicle.**





Jacking cannot be performed using the normal jacking points in the case of a flat front tire. You must use the following procedures using a wood block or the equivalent.

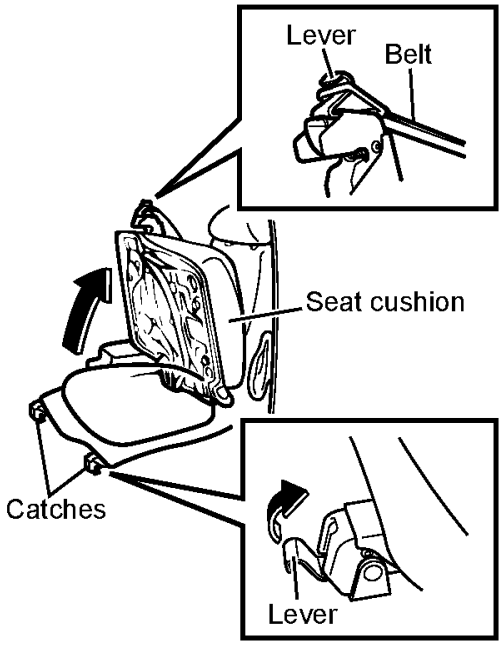
1. Apply wheel chocks in front of and behind the rear wheels.
2. Apply the jack to the bottom of the leaf spring in front of the front axle, and jack up the vehicle.
3. Insert the wood block under the front axle.
4. Lower the jack slightly to confirm whether the front axle is being supported securely by the wood block. If so, continue lowering the jack.
5. Next, move the jack to the specified jacking point and jack up the vehicle to the necessary height for wheel removal.

Refer to page
7-16 Front Wheel Jacking Points

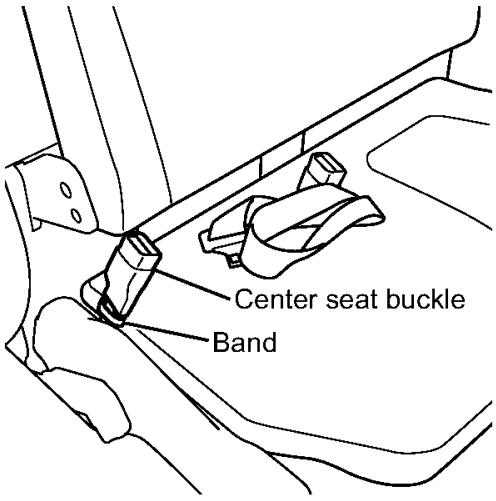
Inspection Hatches [V]

Engine Maintenance Lid

Opening



Normal usage position



1. Lift the catch levers located at the front of the passenger's seat cushion to release the lock.
2. Lift up the seat cushion and attach the belt extending from behind the seatback to the left catch lever to hold the cushion in the raised position.

⚠ CAUTION

- **When opening the inspection hatch, be careful that the seat belt does not fall into the inspection hatch.**
- **When opening the inspection hatch, make sure that the seat belt buckle of the center seat is in the normal use position. If the inspection hatch is opened while the buckle is caught behind the seat, etc., the band may be cut and the buckle may be pinched in the inspection hatch and damaged.**

Closing

1. Detach the belt from the catch lever and lower the seat cushion to a point approximately 30 cm (12 in) above its original position. Allow the seat cushion to drop into place, and then secure it using the catch levers.
2. Gently push and pull the seat cushion to make sure that it has been securely locked in place.

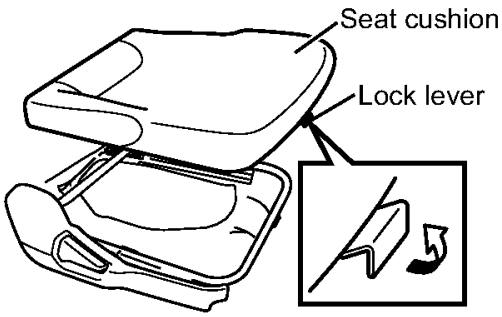
⚠ CAUTION

- **Take care to avoid jamming fingers, hands or any other part of your body, or the seatbelt when returning the seat cushion to its original position. In addition, confirm that the seat cushion is firmly locked. A seat with an improperly locked cushion will be unstable during driving, possibly causing an accident.**

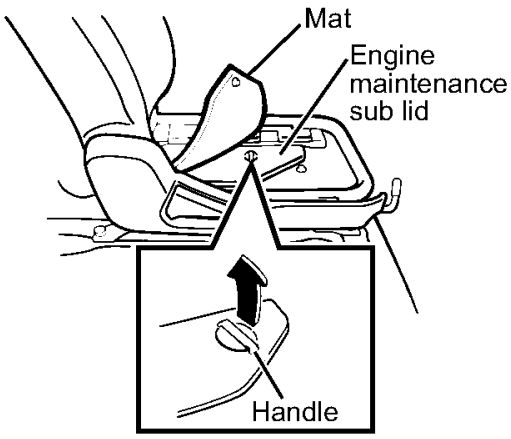
Engine Maintenance Sub Lid

Opening

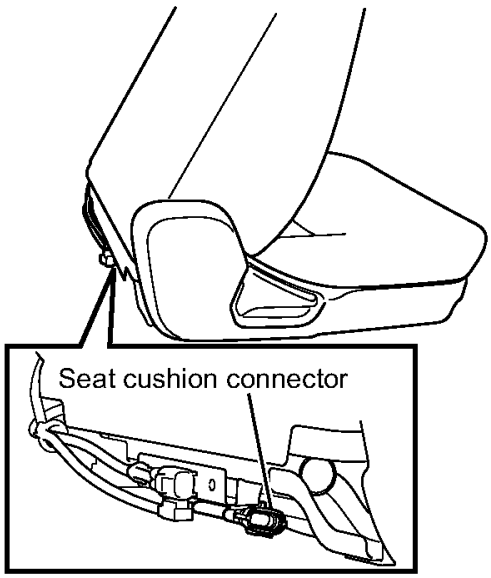
Models without seat heaters



1. Unlock the driver's seat cushion by lifting the lock lever (red) while pulling toward you. Then remove the cushion.



2. Lift up the mat, and then remove the engine maintenance sub lid by pulling the handle.



Models with seat heaters

1. Slide the driver seat forward and tilt the seatback forward.
2. Disconnect the seat cushion connector.
3. Raise the seatback and lift up the seat cushion to remove it.
4. Slide the driver seat backward and remove the cover of the inspection hatch.

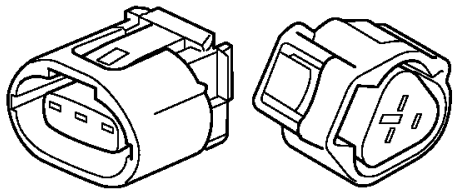
CAUTION

- **Removing the seat cushion before removing the connector may damage the connector.**
- **When installing the cushions, be careful that the seat belt buckle is not pinched.**
- **When removing and installing the cushion, be careful not to damage the connectors.**

NOTE

- The shape of the seat cushion connector varies depending on model specifications.

Seat cushion connector



Closing

To close it, reverse the opening procedure.

CAUTION

[Models with seat heaters]

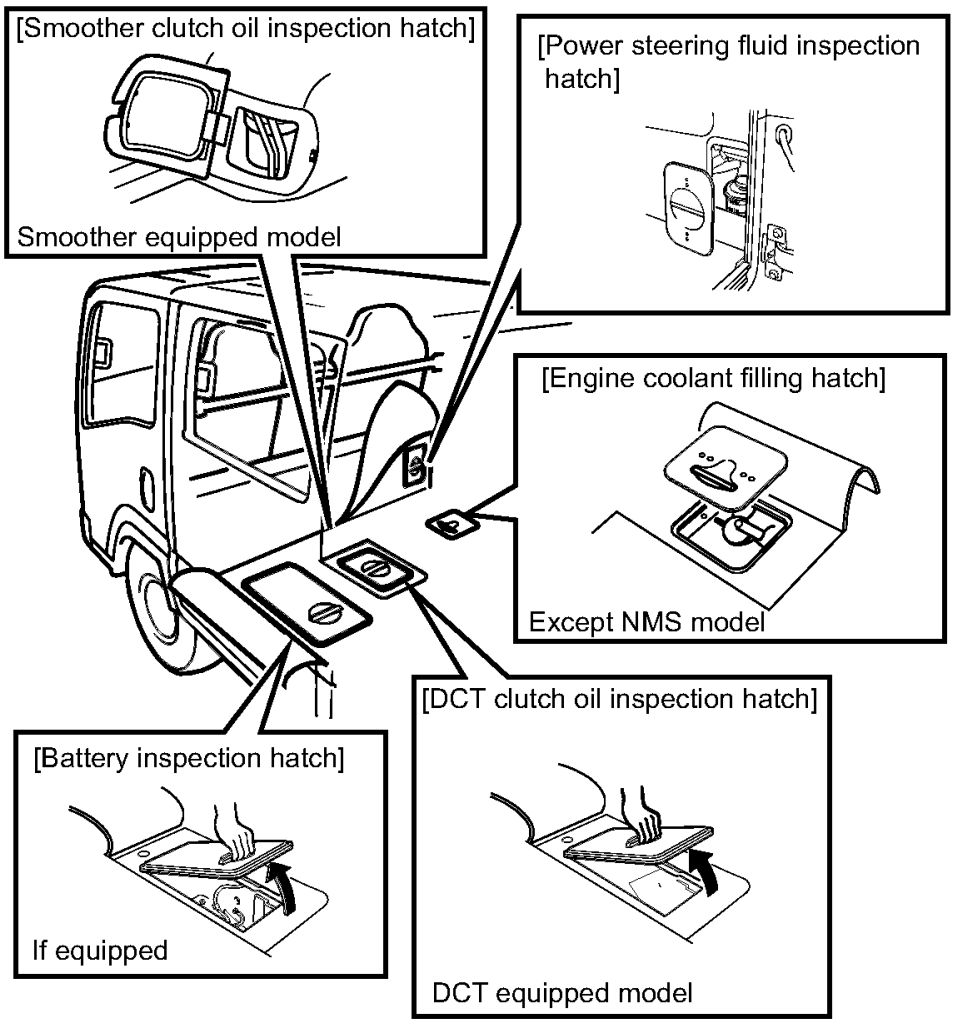
- **After closing the inspection hatch, confirm that the connector is securely installed.**

1. Reinstall the engine maintenance sub lid and place the mat over it.

2. Place the seat cushion with its rear end first and press it down.

Rear Inspection Hatches (Crew Cab Model)

All rear inspection hatches are located in the floor in the vicinity of the rear seat. To open an inspection hatch, lift the floor mat first, and then grip the handle on the hatch to raise the hatch.



Refer to page
10-12 Engine Coolant
10-95 Smoother Clutch Oil [SA]
10-100 DCT Clutch Oil [DCT]
10-118 Power Steering Fluid
10-127 Battery

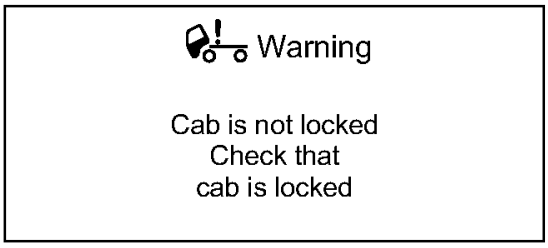
Tilting the Cab [V]

⚠ WARNING

- **Strictly adhere to the instructions below and follow the cab tilting procedure specified in this manual. Otherwise, it may result in death, injury, or property damage.**
- **Tilt the cab only on a level surface.**
- **Check the areas in front of and above the cab for sufficient clearance when tilting the cab indoors. (Particular care is required if your vehicle is equipped with an air deflector.)**
- **Pull firmly on the parking brake lever and put the transmission in neutral.**
  - **For manual transmission models, securely engage the parking brake and place the gearshift lever in the "N" position.**
  - **For Smoother models, securely engage the parking brake, place the gearshift lever in the "N" position and make sure the shift indicator displays "N".**
  - **For DCT models, securely engage the parking brake, place the gearshift lever in the "P" position and make sure the shift indicator displays "P".**
- **Tilt the cab only with the engine turned off.**
- **Do not tilt the cab when objects are placed on or in the instrument panel, seats, cup holders or floor surface.**
- **When tilting the cab, close the left and right doors securely. You should avoid opening or closing the doors when the cab is tilting.**
- **When you must unavoidably open or close a tilted cab's door, securely support the weight of the door while opening or closing it. It is dangerous to release the door from your hand when it is being opened or closed. The door could hit you or someone and cause an injury, or the door could be damaged. Confirm that the door is completely closed after closing it.**
- **Make sure everything has been removed from the roof rack.**
- **Remove anything on the bumper surface (including ice and snow) before tilting the cab. Otherwise, the bumper, lights, and other parts may be damaged.**
- **Confirm that people are not near the vehicle or inside the cab when tilting the cab.**
- **During the cab tilting operation, be very careful that your hands, legs, or other body parts are not caught.**
- **The handle and lever will be very hot immediately after driving. Pay careful attention.**
- **The silencer, exhaust pipe, urea selective catalytic reduction (SCR) system, and diesel particulate defuser (DPD) will be very hot immediately after driving. Use all due caution to avoid accidentally touching these when doing a cab tilt operation.**
- **Confirm that the lock lever for the tilt support is fully engaged in the lock position after the cab is tilted.**
- **After lowering the cab, make sure the cab is securely locked.**

Cab Tilt Warnings/Indicators

Cab Tilt Warning



This warning display appears on the multi-information display and at the same time a buzzer sounds when the starter switch is turned to the "ON" position and if the cab is not fully locked.
If the warning display and warning sound do not turn off even after you have checked that the cab is locked, do not drive the vehicle, have it inspected at an Isuzu Dealer.

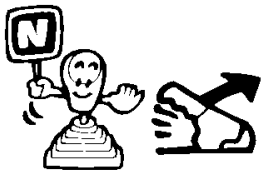
⚠ WARNING

- **After lowering the cab, make sure the cab is securely locked.**
- **If you continue driving with the warning message is displayed, the cab may tilt from vibration. This is extremely dangerous. Ensure that the cab is securely locked.**

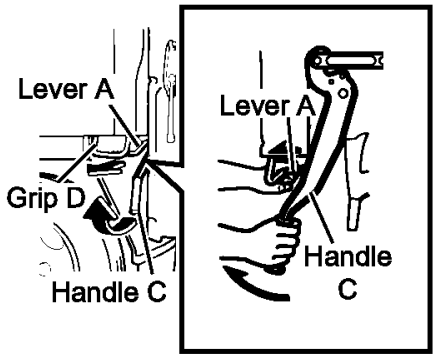
Tilting Up the Cab

⚠ WARNING

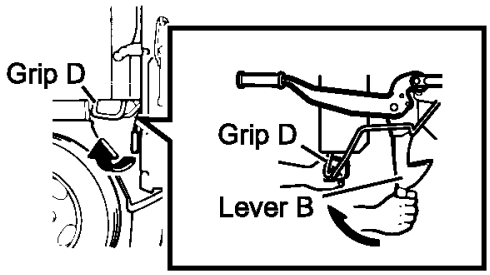
- **Do not touch the lock (E) on the cab support while the cab is tilted. If you touch it, the lock will release. Refer to Step 4 and be sure to follow the instructions given.**



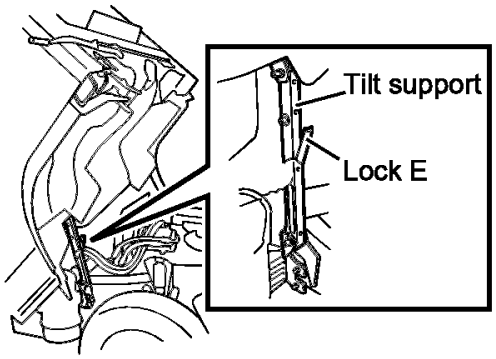
1. Securely engage the parking brake, and place the gearshift lever in the "N" position for manual transmission models and Smoother models or "P" position for DCT models.
   Then, close all doors fully.



2. Holding the grip (D), pull the lever (A) toward you, and then raise the handle (C).



3. Holding the grip (D), pull the lever (B) toward you to raise the cab.



4. When you have raised the cab, support the cab with the grip (D) and confirm that the tilt support's lock (E) has been securely engaged.

⚠ WARNING

- **If the lock (E) has not been fully engaged, there is a danger that the cab may accidentally fall.**

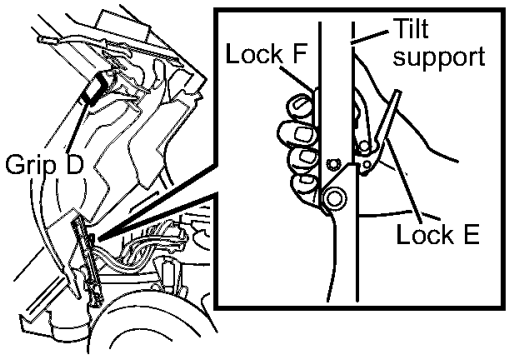
Lowering the Cab

⚠ WARNING

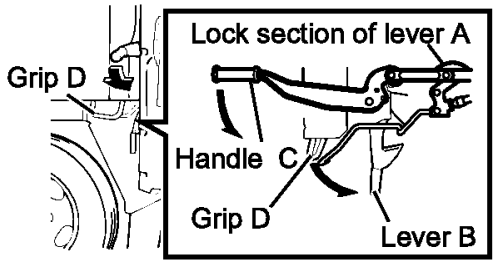
- **After lowering the cab, make sure the cab is securely locked.**

⚠ CAUTION

- **Note that when a load is present inside or outside the cab, it will lower faster.**



1. Hold the grip (D), and while supporting the cab, squeeze in on lock (E) and lock (F) at the same time and pull the tilt support toward the back of the vehicle and fold it.



2. Holding the grip (D), drop the cab with enough force to ensure that the lever (B) engages, and then confirm that this lever has engaged securely.
3. Pull down the handle (C) until the lock section of the lever (A) is securely locked.
4. Perform both of the following procedures 1) and 2), and then confirm that the cab is securely locked.
   1) After operating the handle (C), pull the lever (B) and raise the grip (D) and make sure that the cab cannot be lifted up.
   2) Place the starter switch in the "ON" position and make sure that the cab tilt warning is not displayed on the multi-information display and a warning buzzer does not sound.

Warning

Cab is not locked
Check that
cab is locked

Refer to page
7-27 Cab Tilt Warning

Maintenance Data 8

- Inspection and Maintenance 8-2
- Greasing Chassis Components 8-17
- Recommended Fluids, Lubricants and Diesel Fuels 8-22

8-2 Maintenance Data

Inspection and Maintenance

For safe and economy driving, we recommend that you have your vehicle inspected and serviced regularly according to the schedule indicated in this chapter.

Maintenance Schedule

To drive your vehicle safely and at minimum cost, it is essential to have your vehicle regularly inspected and serviced at your Isuzu Dealer as per the specified maintenance schedule.
Contact your Isuzu Dealer for inspection that requires disassembly and/or special equipment.

Letters Used to Indicate Maintenance Service Types

I : Inspect then clean, adjust, repair, or replace as necessary
A: Adjust
R: Replace
T: Tighten to the specified torque
L: Lubricate

ADVICE

- When inspecting the items listed below, also inspect the routine inspection items as well.

Maintenance Schedule

NKR88/NLR88/NMR88/NNR88/NPR88 models (4JZ1 engine model) for Australia and New Zealand

I: Inspect then clean, adjust, repair, or replace as necessary A: Adjust R: Replace

T: Tighten to the specified torque L: Lubricate

Service interval									Odometer reading or months, whichever comes first	Severe*1	Reference page
x1,000 km	25	50	75	100	125	150	175	200			
x1,000 miles	15	31	46	62	77	93	108	124			
ENGINE											
Engine oil*2	R	R	R	R	R	R	R	R	or every 12 months	-	10-4
Engine oil filter*2	R	R	R	R	R	R	R	R	or every 12 months	-	10-4
Fuel filter element	-	R	-	R	-	R	-	R	or every 12 months	X	10-38
Pre-fuel filter	-	R	-	R	-	R	-	R	or every 12 months	X	10-38
Fuel line system	-	I	-	I	-	I	-	I	or every 24 months	-	-
Air cleaner element	I	R	I	R	I	R	I	R	or every 24 months: R	X	10-32
Valve clearance	Every 12 months: I									-	-
Drive belt damage	I	I	I	I	I	I	I	I	or every 12 months	-	9-12
Engine coolant	Every 12 months: I Every 24 months: R (when Isuzu recommended coolant is used)									-	10-12
Engine cooling system	Every 24 months: I									-	-
Starter	When "Replace the starter" is displayed on the multi-information display: R									-	-

Service interval									Odometer reading or months, whichever comes first	Severe*1	Reference page
x1,000 km	25	50	75	100	125	150	175	200			
x1,000 miles	15	31	46	62	77	93	108	124			
EXHAUST SYSTEM											
Damage to or looseness of the exhaust system such as exhaust pipe, exhaust brake, exhaust throttle, silencer, and their mountings	I	I	I	I	I	I	I	I	or every 12 months	X	-
DPD exhaust pressure check or filter cleaning	-	-	-	I	-	-	-	I	or every 12 months	-	10-53
DPD differential pressure sensor rubber hose	-	I	-	I	-	I	-	I	or every 12 months	-	10-53
PM sensor	Every 250,000 km (155,000 miles): R								or every 180 months	-	-
Nitrogen oxides (NOx) sensor	Every 300,000 km (186,000 miles): R								-	-	-
O2 sensor	Every 250,000 km (155,000 miles): R								or every 180 months	-	-
BRAKE											
Brake fluid	-	R	-	R	-	R	-	R	or every 24 months	-	10-56
Brake fluid level and fluid leak in brake system	I	I	I	I	I	I	I	I	or every 12 months	X	9-23
Brake pad for wear	I	I	I	I	I	I	I	I	-	X	10-62
Brake rotor for wear and damage	I	I	I	I	I	I	I	I	or every 12 months	-	10-62
Parking brake cable looseness and damage	I	I	I	I	I	I	I	I	or every 12 months	-	-
Wear of parking brake shoe lining and parking brake drum	-	I	-	I	-	I	-	I	or every 24 months	-	-
Brake pedal stroke and free play	I	I	I	I	I	I	I	I	or every 12 months	-	9-28

Service interval									Odometer reading or months, whichever comes first	Severe*1	Reference page
x1,000 km	25	50	75	100	125	150	175	200			
x1,000 miles	15	31	46	62	77	93	108	124			
TRANSMISSION/CLUTCH											
Transmission oil (MYY model)	I	R	I	R	I	R	I	R	or every 24 months: R	X	10-90
Transmission oil (MYR model)	I	R	I	R	I	R	I	R	or every 24 months: R	X	10-90
Gear control cable	A	A	A	A	A	A	A	A	or every 12 months	-	-
Gear control mechanism looseness	I	I	I	I	I	I	I	I	or every 24 months	-	-
[M/T] Clutch system function	I	I	I	I	I	I	I	I	or every 12 months	-	9-37
[M/T] Clutch fluid	I	R	I	R	I	R	I	R	or every 12 months: I or every 24 months: R	-	10-88
[DCT] DCT clutch oil	I	R	I	R	I	R	I	R	or every 24 months: R	X	10-100
DRIVELINE/AXLE/TIRE											
Differential gear oil	I	R	I	R	I	R	I	R	or every 24 months: R	X	10-110
Propeller shaft, propeller shaft center bearing, universal joints and sliding sleeves	L	L	L	L	L	L	L	L	or every 12 months	X	8-17
Propeller shaft spline wear	-	I	-	I	-	I	-	I	or every 24 months	-	-
Loose propeller shaft joints, propeller shaft bearings, and other related components	I	I	I	I	I	I	I	I	or every 12 months	-	-
King pin (model with rigid front suspension)	L	L	L	L	L	L	L	L	or every 12 months	X	8-17
Wheel nuts and wheel bolts	T	T	T	T	T	T	T	T	or every 12 months	-	10-67
Wheel alignment	I	I	I	I	I	I	I	I	or every 24 months	-	-

Service interval									Odometer reading or months, whichever comes first	Severe*1	Reference page
x1,000 km	25	50	75	100	125	150	175	200			
x1,000 miles	15	31	46	62	77	93	108	124			
STEERING											
Power steering fluid	-	R	-	R	-	R	-	R	or every 24 months	-	10-118
Oil leaks from power steering system	I	I	I	I	I	I	I	I	or every 12 months	-	10-118
Power steering hose	-	-	R	-	-	R	-	-	or every 48 months	-	-
Steering mechanism functionality	I	I	I	I	I	I	I	I	or every 12 months	-	-
Looseness in or damage to power steering system mounting	I	I	I	I	I	I	I	I	or every 12 months	X	-
Looseness in or damage to steering mechanism	-	I	-	I	-	I	-	I	or every 24 months	-	-
SUSPENSION											
Leaf spring damage	I	I	I	I	I	I	I	I	or every 12 months	-	9-20
Shock absorber mounting looseness	I	I	I	I	I	I	I	I	or every 12 months	-	-
Looseness in or damage to suspension mounting	I	I	I	I	I	I	I	I	or every 12 months	-	-
AIR CONDITIONER											
Air conditioner blower filter	Every 12 months: I*3									-	6-26

Remarks:

*1 Your vehicle needs to be maintained more often if it is driven in severe conditions. Refer to page 8-14.

*2 When “engine oil and filter maintenance alerts” is displayed in the multi-information display at less than 25,000 km (15,000 miles), perform maintenance according to the indicated interval.

*3 If the air conditioner blower filter is dirty, clean it as needed.

NMS88/NPS88/NQS88 models (4JZ1 engine model) for Australia and New Zealand

I: Inspect then clean, adjust, repair, or replace as necessary A: Adjust R: Replace

T: Tighten to the specified torque L: Lubricate

Service interval									Odometer reading or months, whichever comes first	Severe*1	Reference page
x1,000 km	20	40	60	80	100	120	140	160			
x1,000 miles	12	24	37	49	62	75	87	99			
ENGINE											
Engine oil*2	R	R	R	R	R	R	R	R	or every 12 months	-	10-4
Engine oil filter*2	R	R	R	R	R	R	R	R	or every 12 months	-	10-4
Fuel filter element	-	R	-	R	-	R	-	R	or every 12 months	X	10-38
Pre-fuel filter	-	R	-	R	-	R	-	R	or every 12 months	X	10-38
Fuel line system	-	I	-	I	-	I	-	I	or every 24 months	-	-
Air cleaner element	I	R	I	R	I	R	I	R	or every 24 months: R	X	10-32
Valve clearance	Every 12 months: I									-	-
Drive belt tension and damage	I	I	I	I	I	I	I	I	or every 12 months	-	9-12
Engine coolant	Every 12 months: I Every 24 months: R (when Isuzu recommended coolant is used)									-	10-12
Engine cooling system	Every 24 months: I									-	-
Starter	When "Replace the starter" is displayed on the multi-information display: R									-	-

Service interval									Odometer reading or months, whichever comes first	Severe*1	Reference page
x1,000 km	20	40	60	80	100	120	140	160			
x1,000 miles	12	24	37	49	62	75	87	99			
EXHAUST SYSTEM											
Damage to or looseness of the exhaust system such as exhaust pipe, exhaust brake, exhaust throttle, silencer, and their mountings	I	I	I	I	I	I	I	I	or every 12 months	X	-
DPD exhaust pressure check or filter cleaning	-	-	-	-	I	-	-	-	or every 12 months	-	10-53
DPD differential pressure sensor rubber hose	I	I	I	I	I	I	I	I	or every 12 months	-	10-53
PM sensor	Every 240,000 km (149,000 miles): R								or every 180 months	-	-
Nitrogen oxides (NOx) sensor	Every 300,000 km (186,000 miles): R								-	-	-
BRAKE											
Brake fluid	-	R	-	R	-	R	-	R	or every 24 months	-	10-56
Brake fluid level and fluid leak in brake system	I	I	I	I	I	I	I	I	or every 12 months	X	9-23
Brake pad for wear	I	I	I	I	I	I	I	I	-	X	10-62
Brake rotor for wear and damage	I	I	I	I	I	I	I	I	or every 12 months	-	10-62
Parking brake cable looseness and damage	I	I	I	I	I	I	I	I	or every 12 months	-	-
Wear of parking brake shoe lining and parking brake drum	-	I	-	I	-	I	-	I	or every 24 months	-	-
Brake pedal stroke and free play	I	I	I	I	I	I	I	I	or every 12 months	-	9-28

Service interval									Odometer reading or months, whichever comes first	Severe*1	Reference page
x1,000 km	20	40	60	80	100	120	140	160			
x1,000 miles	12	24	37	49	62	75	87	99			
TRANSMISSION/CLUTCH											
Transmission and transfer case oil (MYY/ MZZ models)	I	R	I	R	I	R	I	R	or every 24 months: R	X	10-90
Transmission and transfer case oil (MYR model)	I	R	I	R	I	R	I	R	or every 24 months: R	X	10-90
Gear control cable	-	A	-	A	-	A	-	A	or every 12 months	-	-
Gear control mechanism looseness	-	I	-	I	-	I	-	I	or every 24 months	-	-
[M/T] Clutch fluid	I	R	I	R	I	R	I	R	or every 12 months: I or every 24 months: R	-	10-88
[M/T] Clutch system function	I	I	I	I	I	I	I	I	or every 12 months	-	9-37
[DCT] DCT clutch oil	I	R	I	R	I	R	I	R	or every 24 months: R	X	10-100
DRIVELINE/AXLE/TIRE											
Differential gear oil	I	R	I	R	I	R	I	R	or every 24 months: R	X	10-110
Propeller shaft, propeller shaft center bearing, universal joints and sliding sleeves	L	L	L	L	L	L	L	L	or every 12 months	X	8-17
Front propeller shaft, double cardan joints and sliding sleeves	L	L	L	L	L	L	L	L	or every 12 months	X	8-17
Propeller shaft spline wear	I	I	I	I	I	I	I	I	or every 24 months	-	-
Loose propeller shaft joints, propeller shaft bearings, and other related components (both at the front and rear)	I	I	I	I	I	I	I	I	or every 12 months	-	-
Front and rear wheel hub bearing grease (NPS/NQS models)	-	R	-	R	-	R	-	R	or every 24 months	-	8-17
Wheel nuts and wheel bolts	T	T	T	T	T	T	T	T	or every 12 months	-	10-67
Wheel alignment	-	I	-	I	-	I	-	I	or every 24 months	-	-

Service interval									Odometer reading or months, whichever comes first	Severe*1	Reference page
x1,000 km	20	40	60	80	100	120	140	160			
x1,000 miles	12	24	37	49	62	75	87	99			
STEERING											
Power steering fluid	-	R	-	R	-	R	-	R	or every 24 months	-	10-118
Oil leaks from power steering system	I	I	I	I	I	I	I	I	or every 12 months	-	10-118
Power steering hose	-	-	-	R	-	-	-	R	or every 48 months	-	-
Steering mechanism functionality	I	I	I	I	I	I	I	I	or every 12 months	-	-
Looseness in or damage to power steering system mounting	I	I	I	I	I	I	I	I	or every 12 months	X	-
Looseness in or damage to steering mechanism	-	I	-	I	-	I	-	I	or every 24 months	-	-
SUSPENSION											
Leaf spring damage	I	I	I	I	I	I	I	I	or every 12 months	-	9-20
Shock absorber mounting looseness	I	I	I	I	I	I	I	I	or every 12 months	-	-
Looseness in or damage to suspension mounting	I	I	I	I	I	I	I	I	or every 12 months	-	-
AIR CONDITIONER											
Air conditioner blower filter	Every 12 months: I*3									-	6-26

Remarks:

*1 Your vehicle needs to be maintained more often if it is driven in severe conditions. Refer to page 8-15.

*2 When “engine oil and filter maintenance alerts” is displayed in the multi-information display at less than 20,000 km (12,000 miles), perform maintenance according to the indicated interval.

*3 If the air conditioner blower filter is dirty, clean it as needed.

NPR75/NQR75 models (4HK1 engine model) for Australia and New Zealand

I: Inspect then clean, adjust, repair, or replace as necessary A: Adjust R: Replace

T: Tighten to the specified torque L: Lubricate

Service interval									Odometer reading or months, whichever comes first	Severe*1	Reference page
x1,000 km	25	50	75	100	125	150	175	200			
x1,000 miles	15	31	46	62	77	93	108	124			
ENGINE											
Engine oil	R	R	R	R	R	R	R	R	or every 12 months	X	10-4
Engine oil filter	R	R	R	R	R	R	R	R	or every 12 months	X	10-4
Fuel filter	-	R	-	R	-	R	-	R	or every 12 months	X	10-38
Fuel line system	-	I	-	I	-	I	-	I	or every 24 months	-	-
Air cleaner element	-	I	-	I	-	I	-	I	-	-	10-32
Valve clearance	Every 12 months: I									-	-
Drive belt tension and damage	I	I	I	I	I	I	I	I	or every 12 months	-	9-12
Engine coolant	Every 12 months: I Every 24 months: R (when Isuzu recommended coolant is used)									-	10-12
Engine cooling system	Every 24 months: I									-	-
EXHAUST SYSTEM											
Damage to or looseness of the exhaust system such as exhaust pipe, exhaust brake, exhaust throttle, silencer, and their mountings	I	I	I	I	I	I	I	I	or every 12 months	-	-
DPD exhaust pressure check or filter cleaning	-	-	-	I	-	-	-	I	or every 12 months	-	10-53
DPD differential pressure sensor rubber hose	-	I	-	I	-	I	-	I	or every 12 months	-	10-53
AdBlue® filter	-	-	-	-	-	-	-	R	-	X	10-53
PM sensor	Every 250,000 km (155,000 miles): R								or every 180 months	-	-
Nitrogen oxides (NOx) sensor	Every 300,000 km (186,000 miles): R								or every 180 months	-	-

Service interval									Odometer reading or months, whichever comes first	Severe*1	Reference page
x1,000 km	25	50	75	100	125	150	175	200			
x1,000 miles	15	31	46	62	77	93	108	124			
BRAKE											
Brake fluid	-	R	-	R	-	R	-	R	or every 24 months	-	10-56
Brake fluid level and fluid leak in brake system	I	I	I	I	I	I	I	I	or every 12 months	X	9-23
Brake pad for wear	I	I	I	I	I	I	I	I	-	X	10-62
Brake rotor for wear and damage	I	I	I	I	I	I	I	I	or every 12 months	-	10-62
Parking brake cable looseness and damage	I	I	I	I	I	I	I	I	or every 12 months	-	-
Wear of parking brake shoe lining and parking brake drum	-	I	-	I	-	I	-	I	or every 24 months	-	-
Brake pedal stroke and free play	I	I	I	I	I	I	I	I	or every 12 months	-	9-28
TRANSMISSION/CLUTCH											
Transmission oil (MZZ model)	I	R	I	R	I	R	I	R	or every 24 months: R	X	10-90
Gear control cable	A	A	A	A	A	A	A	A	or every 12 months	-	-
Gear control mechanism looseness	I	I	I	I	I	I	I	I	or every 24 months	-	-
[M/T] Clutch system function	I	I	I	I	I	I	I	I	or every 12 months	-	9-37
[M/T] Clutch fluid	I	R	I	R	I	R	I	R	or every 12 months: I or every 24 months: R	-	10-88
[SA] Smoother clutch oil	I	R	I	R	I	R	I	R	or every 24 months	X	10-95
DRIVELINE/AXLE/TIRE											
Differential gear oil	I	R	I	R	I	R	I	R	or every 24 months: R	X	10-110
Propeller shaft, propeller shaft center bearing, universal joints and sliding sleeves	L	L	L	L	L	L	L	L	or every 12 months	X	8-17
Propeller shaft spline wear	-	I	-	I	-	I	-	I	or every 24 months	-	-
Loose propeller shaft joints, propeller shaft bearings, and other related components	I	I	I	I	I	I	I	I	or every 12 months	-	-

Service interval									Odometer reading or months, whichever comes first	Severe*1	Reference page
x1,000 km	25	50	75	100	125	150	175	200			
x1,000 miles	15	31	46	62	77	93	108	124			
King pin (model with rigid front suspension)	L	L	L	L	L	L	L	L	or every 12 months	X	8-17
Wheel nuts and wheel bolts	T	T	T	T	T	T	T	T	or every 12 months	-	10-67
Wheel alignment	I	I	I	I	I	I	I	I	or every 24 months	-	-
STEERING											
Power steering fluid	-	R	-	R	-	R	-	R	or every 24 months	-	10-118
Oil leaks from power steering system	I	I	I	I	I	I	I	I	or every 12 months	-	10-118
Power steering hose	-	-	R	-	-	R	-	-	or every 48 months	-	-
Steering mechanism functionality	I	I	I	I	I	I	I	I	or every 12 months	-	-
Looseness in or damage to power steering system mounting	I	I	I	I	I	I	I	I	or every 12 months	X	-
Looseness in or damage to steering mechanism	-	I	-	I	-	I	-	I	or every 24 months	-	-
SUSPENSION											
Leaf spring damage	I	I	I	I	I	I	I	I	or every 12 months	-	9-20
Shock absorber mounting looseness	I	I	I	I	I	I	I	I	or every 12 months	-	-
Looseness in or damage to suspension mounting	I	I	I	I	I	I	I	I	or every 12 months	-	-
AIR CONDITIONER											
Air conditioner blower filter	Every 12 months: I*2									-	6-26

Remarks:

*1 Your vehicle needs to be maintained more often if it is driven in severe conditions. Refer to page 8-16.

*2 If the air conditioner blower filter is dirty, clean it as needed.

Schedule for Severe-condition Operations

NKR88/NLR88/NMR88/NNR88/NPR88 models (4JZ1 engine model) for Australia and New Zealand

Driving condition

A: Operations involving frequent starts and stops B: Driving on rough roads, mountain roads or uphill roads

C: Driving in dusty areas D: Driving on snow-covered or seashore roads

E: Low travel distance high engine load (Ex. Concrete pump truck, electric power supply truck, fire truck)

Item	Distance covered or engine operation time	Condition	Reference page
Fuel filter element	Replace every 1,000 hours	E	10-38
Pre-fuel filter	Replace every 1,000 hours	E	10-38
Air cleaner element	Inspect every 10,000 km (6,000 miles) Replace every 20,000 km (12,000 miles)	C	10-32
Damage to or looseness of the exhaust system such as exhaust pipe, exhaust brake, exhaust throttle, silencer, and their mountings	Inspect every 10,000 km (6,000 miles)	A, B, D	-
Brake fluid level and fluid leak in brake system	Inspect every 5,000 km (3,000 miles)	D	9-23
Brake pad for wear	Inspect every 5,000 km (3,000 miles)	A, B	10-62
Transmission oil (MYY model)	Replace every 20,000 km (12,000 miles)	B, C	10-90
Transmission oil (MYR model)	Replace every 20,000 km (12,000 miles)	B, C	10-90
[DCT] DCT clutch oil	Replace every 20,000 km (12,000 miles)	B, C	10-100
Differential gear oil	Replace every 20,000 km (12,000 miles)	B	10-110
Propeller shaft, propeller shaft center bearing, universal joints and sliding sleeves	Grease every 10,000 km (6,000 miles)	B	8-17
King pin (model with rigid front suspension)	Grease every 10,000 km (6,000 miles)	B, C, D	8-17
Looseness in or damage to power steering system mounting	Inspect every 10,000 km (6,000 miles)	B	-

NMS88/NPS88/NQS88 models (4JZ1 engine model) for Australia and New Zealand

Driving condition

A: Operations involving frequent starts and stops B: Driving on rough roads, mountain roads or uphill roads

C: Driving in dusty areas D: Driving on snow-covered or seashore roads

E: Low travel distance high engine load (Ex. Concrete pump truck, electric power supply truck, fire truck)

Item	Distance covered or engine operation time	Condition	Reference page
Fuel filter element	Replace every 1,000 hours	E	10-38
Pre-fuel filter	Replace every 1,000 hours	E	10-38
Air cleaner element	Inspect every 10,000 km (6,000 miles) Replace every 20,000 km (12,000 miles)	C	10-32
Damage to or looseness of the exhaust system such as exhaust pipe, exhaust brake, exhaust throttle, silencer, and their mountings	Inspect every 10,000 km (6,000 miles)	A, B, D	-
Brake fluid level and fluid leak in brake system	Inspect every 5,000 km (3,000 miles)	D	9-23
Brake pad for wear	Inspect every 5,000 km (3,000 miles)	A, B	10-62
Transmission and transfer case oil (MYY/MZZ models)	Replace every 20,000 km (12,000 miles)	B, C	10-90
Transmission and transfer case oil (MYR model)	Replace every 20,000 km (12,000 miles)	B, C	10-90
[DCT] DCT clutch oil	Replace every 20,000 km (12,000 miles)	B, C	10-100
Differential gear oil	Replace every 20,000 km (12,000 miles)	B	10-110
Propeller shaft, propeller shaft center bearing, universal joints and sliding sleeves	Grease every 10,000 km (6,000 miles)	B	8-17
Front propeller shaft, double cardan joints and sliding sleeves	Grease every 5,000 km (3,000 miles)	B	8-17
Looseness in or damage to power steering system mounting	Inspect every 10,000 km (6,000 miles)	B	-

NPR75/NQR75 models (4HK1 engine model) for Australia and New Zealand

Driving condition

A: Operations involving frequent starts and stops B: Driving on rough roads, mountain roads or uphill roads

C: Driving in dusty areas D: Driving on snow-covered or seashore roads

E: Low travel distance high engine load (Ex. Concrete pump truck, electric power supply truck, fire truck)

F: Driving at average speeds of less than 30 km/h (19 MPH) G: Model with PTO

Item	Distance covered or engine operation time	Condition	Reference page
Engine oil	Replace every 15,000 km (9,000 miles)	F, G	10-4
	Replace every 500 hours	E	
Engine oil filter	Replace every 15,000 km (9,000 miles)	F, G	10-4
	Replace every 1,000 hours	E	
Fuel filter	Replace every 1,000 hours	E	10-38
AdBlue® filter	Replace every 4,000 hours	E	10-53
Brake fluid level and fluid leak in brake system	Inspect every 5,000 km (3,000 miles)	D	9-23
Brake pad for wear	Inspect every 5,000 km (3,000 miles)	A, B	10-62
Transmission oil (MZZ model)	Replace every 15,000 km (9,000 miles)	B, C	10-90
[SA] Smoother clutch oil	Replace every 15,000 km (9,000 miles)	B, C	10-95
Differential gear oil	Replace every 15,000 km (9,000 miles)	B	10-110
Propeller shaft, propeller shaft center bearing, universal joints and sliding sleeves	Grease every 5,000 km (3,000 miles)	B	8-17
King pin (model with rigid front suspension)	Grease every 10,000 km (6,000 miles)	B, C, D	8-17
Looseness in or damage to power steering system mounting	Inspect every 10,000 km (6,000 miles)	B	-

Greasing Chassis Components

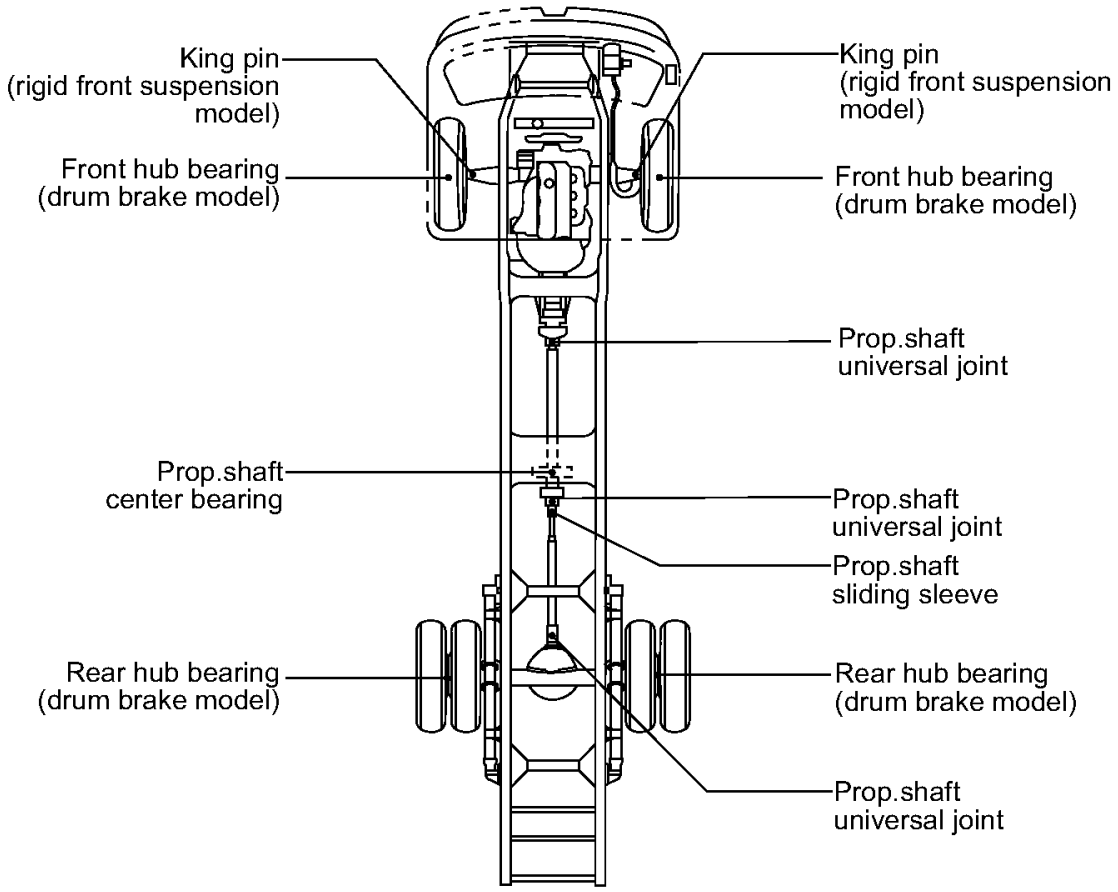
ADVICE

- The type (characteristics) of the grease specified for use with a chassis component differs from that of the grease specified for use with another component. Be sure to use only the specified grease for each component and perform greasing according to the Maintenance Schedule.
- For points with the grease fittings, be sure to apply grease from the grease fittings.
- If mud, dust, or any other dirt adheres to the grease fittings, remove the dirt before lubricating.

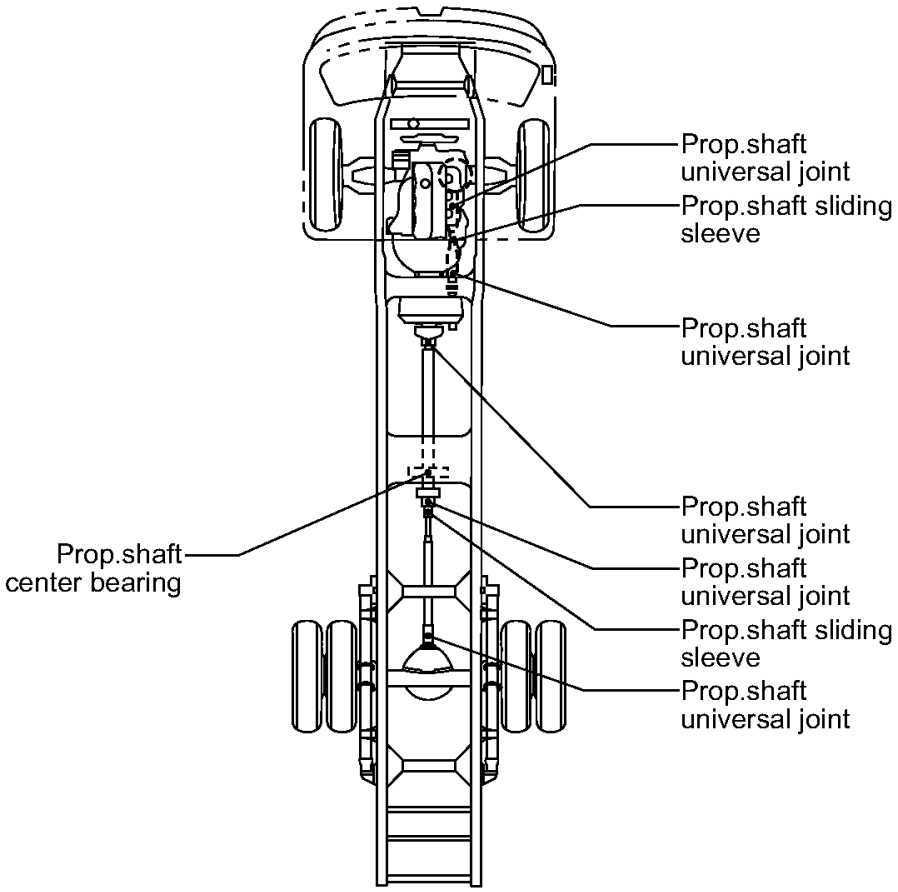
Refer to page
8-2 Maintenance Schedule
8-22 Recommended Fluids, Lubricants and Diesel Fuels

Overview

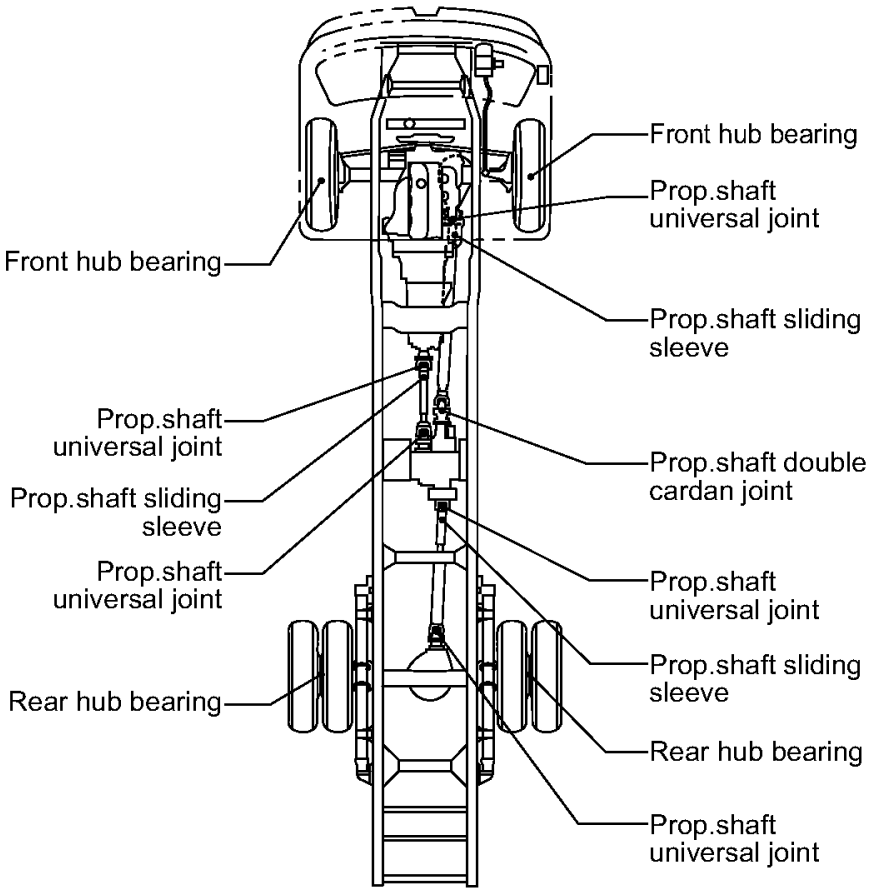
NJR/NKR/NLR/NMR/NNR/NPR/NQR models



NMS model

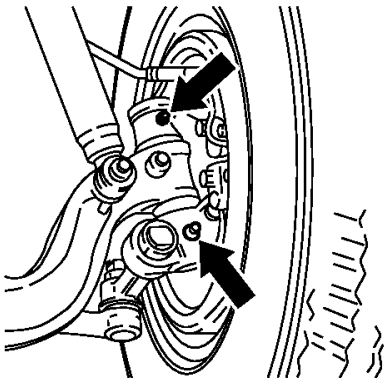

Prop.shaft universal joint
Prop.shaft sliding sleeve
Prop.shaft universal joint
Prop.shaft universal joint
Prop.shaft center bearing
Prop.shaft universal joint
Prop.shaft sliding sleeve
Prop.shaft universal joint

NPS/NQS models

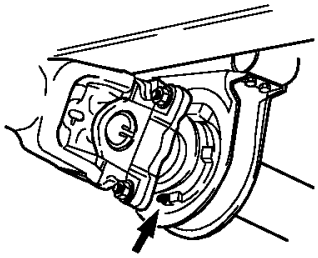
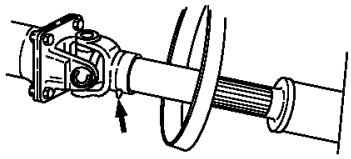


Details

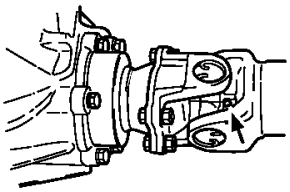
King pins (left and right)

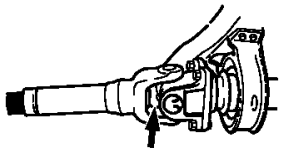


2 points each
Rigid axle suspension

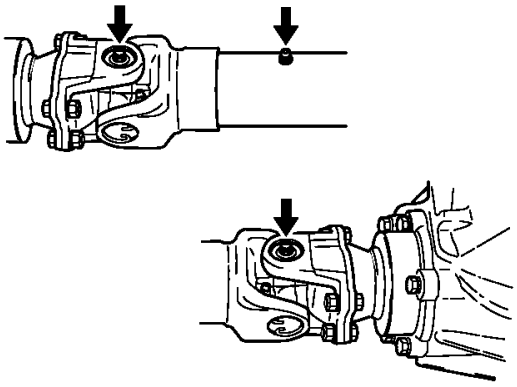
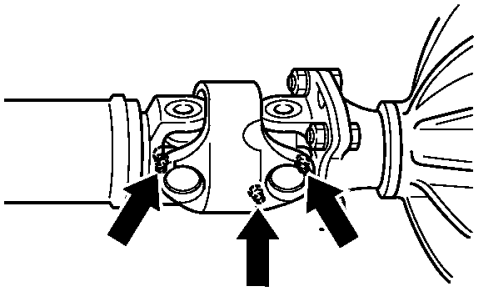
Propeller shaft center bearing	Propeller shaft splines
	

Propeller shaft universal joint





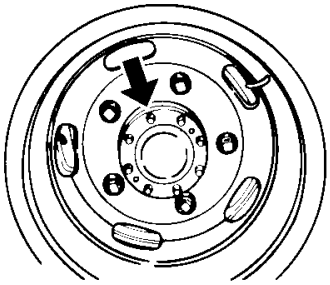
Single-piece propeller shaft: 2 points; Two-piece propeller shaft: 3 points

Front propeller shaft universal joint and sliding sleeve (NMS model)	Front propeller shaft double cardan joint (NPS/NQS models)
	
Universal joint: 2 points Sliding sleeve: 1 point	3 points

ADVICE

- Each of propeller shaft universal joint must be greased heavily until grease oozes at the 4 needle bearing oil seal locations. After greasing, wipe off excess grease.

Wheel hub bearing



Model with drum brake, NPS/NQS models
As disassembly and reassembly will be required in order to replace front and rear bearing grease, have these operations performed by your Isuzu Dealer.

Recommended Fluids, Lubricants and Diesel Fuels

It is extremely important to select correct lubricants and diesel fuels so that your Isuzu vehicle demonstrates its full performance over years.
Top up the lubricants in accordance with the Maintenance Schedule specified for your vehicle. Use Isuzu genuine lubricants or those recommended in the list below.
The lubricant change intervals specified in the Maintenance Schedule and the terms and conditions of the new vehicle warranty assume the use of Isuzu genuine or Isuzu recommended lubricants listed below.
Also, select the viscosity appropriate for the temperature at which your vehicle operates.

Refer to page
8-26 Engine Oil and Gear Oil Viscosity Charts

LUBRICATION	MAKE	BRAND	GRADE		
			API	ACEA	JASO
* Diesel engine crankcase with DPD (low ash oil)	**ISUZU**	**BESCO CLEAN (5W-30)**	—	—	—
	ISUZU	**BESCO CLEAN (10W-30)**	—	—	—
	ISUZU	**BESCO CLEAN SUPER (10W-40)**	—	—	—
	Chevron/Texaco/Caltex	Delo 400 XLE (15W-40)	CK-4	E6/E9	DH-2
	Chevron/Texaco/Caltex	Delo 400 SLK (10W-40), (15W-40)	CK-4	E9	—
	ExxonMobil	Delvac Ultra Ultimate Protection V1 (5W-40)	CK-4	E11	DH-2
	ExxonMobil	Delvac 1 ESP (5W-40)	CK-4	E11	DH-2
	ExxonMobil	Delvac Modern Advanced Protection (10W-40)	CK-4	E8/E11	DH-2
	ExxonMobil	Delvac Modern Full Protection (15W-40)	CK-4	E11	DH-2
	Shell	Rimula R5LE (10W-40)	CK-4	E9	DH-2
	Shell	Rimula R6LM (10W-40)	CK-4	E9	DH-2
	TotalEnergies	Rubia Optima 1100 HZX (10W-40), (15W-40)	CK-4	E11	—
Manual transmission/ Transfer case	**ISUZU**	**BESCO TRANSAXLE (5W-30)**	—	—	—
	bp/Castrol	Vecton 15W-40 CI-4/E7 (15W-40)	CI-4	E7	DH-1
	Chevron/Texaco/Caltex	Delo 400 SLK (15W-40)	CK-4	E11	—
	Chevron/Texaco/Caltex	Delo Gold Ultra (15W-40)	CI-4	E7	DH-1
	ExxonMobil	Delvac Modern Full Protection (15W-40)	CK-4	E9	DH-2
	ExxonMobil	Delvac Modern Super Defense (15W-40)	CI-4	E7	DH-1
	Shell	Rimula R4X (15W-40)	CI-4	E7	DH-1
	Shell	Rimula R4L (15W-40)	CK-4	—	—
	TotalEnergies	Rubia Optima 1100 HZX (15W-40)	CK-4	E11	—
	TotalEnergies	Rubia TIR 7400 HZX (15W-40)	CI-4	E7	—
Smoother clutch oil/DCT clutch oil	**ISUZU**	**BESCO ATF III**	—	—	—

LUBRICATION	MAKE	BRAND	GRADE		
			API	ACEA	JASO
Differential gear	**ISUZU**	**BESCO GEAR SH (80W-90), (90), (140)**	**GL-5**	—	—
	bp/Castrol	Transmax Axle 80W-90 (80W-90)	GL-5	—	—
	Chevron/Texaco/Caltex	Delo Gear EP-5 (80W-90), (85W-140)	GL-5/MT-1	—	—
	Chevron/Texaco/Caltex	Gear Oil GL-5 (80W-90), (85W-140)	GL-5	—	—
	Elf	Tranself Syn FE (75W-90)	GL-5/MT-1	—	—
	ExxonMobil	Delvac 1 Gear Oil (75W-90)	GL-5/MT-1	—	—
	ExxonMobil	Mobilube S (80W-90)	GL-5/MT-1	—	—
	Shell	Spirax S6 AXME (75W-90)	GL-5/MT-1	—	—
	Shell	Spirax S3 AX (80W-90)	GL-5	—	—
	TotalEnergies	Traxium Dual 9 FE (75W-90)	GL-5/MT-1	—	—
	TotalEnergies	Traxium Axle 9 (80W-90)	GL-5/MT-1	—	—
	TotalEnergies	Traxium Axle 7 (80W-90), (85W-90), (85W-140)	GL-5	—	—
Power steering	**ISUZU**	**BESCO ATF III**	—	—	—
	bp/Castrol	Transmax ATF Dex/Merc Multivehicle	—	—	—
	bp/Castrol	Transmax ATF DEXRON®-VI MERCON® LV Multivehicle (Dexron® VI)	—	—	—
	Chevron/Texaco/Caltex	Texamatic 1888	—	—	—
	Chevron/Texaco/Caltex	Havoline Full Synthetic Multi-Vehicle ATF (Dexron® VI)	—	—	—
	ExxonMobil	ATF Multi-Vehicle (Dexron® VI)	—	—	—
	ExxonMobil	Dexron VI ATF (Dexron® VI)	—	—	—
	ExxonMobil	Multipurpose ATF	—	—	—
	Shell	Spirax S3 ATF MD3	—	—	—
	TotalEnergies	Fluidmatic DVI MV (Dexron® VI)	—	—	—
	TotalEnergies	Fluidmatic DIII MV	—	—	—
Center bearing/ King pins (Multi purpose grease)	**ISUZU**	**BESCO L2 GREASE (No.2), L3 GREASE (No.3)**	—	—	—
	Chevron/Texaco/Caltex	Starplex EP 2 (No.2)	—	—	—
	Shell	Gadus S3 V220C 2 (No.2)	—	—	—
	TotalEnergies	Multis Complex EP 2 (No.2) / EP 3 (No.3)	—	—	—
Propeller shaft sliding yoke/ Universal joint/ Double cardan joint/ Brake camshaft (Multi purpose grease containing molybdenum disulfide)	**ISUZU**	**BESCO ONE LUBER Mo GREASE (No.2)**	—	—	—
	Chevron/Texaco/Caltex	Multifak EP 2 M3 (No.2)	—	—	—
	Shell	Gadus S2 V220AD 2 (No.2)	—	—	—
	TotalEnergies	Multis Complex HV 2 Moly (No.2)	—	—	—

*: We recommend you to use a low ash content engine oil that is suitably compatible with the DPD.

COOLANT	MAKE	BRAND*
Engine cooling system	**ISUZU**	**BESCO LLC SUPER TYPE E, AS**
	Chevron/Texaco/Caltex	Delo XLC Antifreeze/Coolant
	Chevron/Texaco/Caltex	Havoline Xtended Life Antifreeze/Coolant
	Arteco	Havoline XLC
	BASF	Glysantin G34
	TotalEnergies	Glacelf Auto Supra
	TotalEnergies	Coolelf Auto Supra -37°C

*: Use Isuzu recommended coolant, or ISUZU ENGINEERING STANDARD - MATERIAL ISC-C73-004 (Ethylene glycol based Organic Acid Technology (OAT) Extended Life Antifreeze/Coolant and free of nitrites, amines, borates, silicates.) or equivalent.

ADVICE

- Use a mixture of tap water and engine coolant at a ratio of 50/50.

Refer to page
10-13 Preparing Engine Coolant

FLUID	MAKE	BRAND	GRADE*
Clutch and brake fluid reservoir	**ISUZU**	**BESCO BRAKE FLUID SUPER**	**DOT 3**
	AC Delco	Supreme 11	DOT 3

*: This material meets FMVSS 116 or SAE J1703 requirements.

DIESEL FUEL / APPLICABLE STANDARD (Sulfur content below 50 ppm)	
Deutsche Industrie Normen (DIN)	Based on EN590 : 2004
American Society for Testing and Materials (ASTM)	Based on D975-04c No.1-D S15 or No.2-D S15 (below 15 ppm)
British Standards (BS)	Based on EN590 : 2004

DIESEL FUEL / APPLICABLE STANDARD (Sulfur content below 10 ppm)	
Deutsche Industrie Normen (DIN)	Based on EN590 : 2009
British Standards (BS)	Based on EN590 : 2009

CAUTION

- **For models conforming to Euro VI emission standards, be sure to use extra-low-sulfur diesel fuel (containing sulfur of 10 ppm or lower).**
  For models conforming to Japan post-post new long term regulation emission standards, be sure to use low-sulfur diesel fuel (containing sulfur of 50 ppm or lower) or extra-low-sulfur diesel fuel (containing sulfur of 10 ppm or lower).
- **In particular, an extra-low-sulfur content diesel fuel (10 ppm or less sulfur content) is recommended.**

CAUTION (Continued)

CAUTION (Continued)

- **If you supply the vehicle with poor-quality fuel, water-removal additive or other additive, gasoline, kerosene or alcohol-based fuel, it could harm the fuel filter, prevent proper movement of fuel-lubricated parts in the injectors and adversely affect engine components, possibly resulting in a breakdown. If you accidentally put the wrong fuel in the tank, drain it all out. Starting the engine with the wrong fuel in the tank could result in a fire and engine damage.**
- **Open the fuel tank filler cap slowly. If you open it quickly, fuel may spurt out.**

ADVICE

- Oils, brake fluid, battery fluid and engine coolant have lubrication, cooling and rust prevention functions. If these liquids deteriorate through loss or contamination, it will cause a decline in the performance of the parts and such problems as seizure or malfunctioning. Replenish or change these liquids when performing the checks (daily and periodic checks) as required by the relevant regulations or in accordance with the Maintenance Schedule (when either the specified driving distance or period of time, whichever comes first, has expired).

Refueling Using Fuels that Contain Biodiesel Fuel (Fatty Acid Methyl Esters (FAME))

Models for Australia

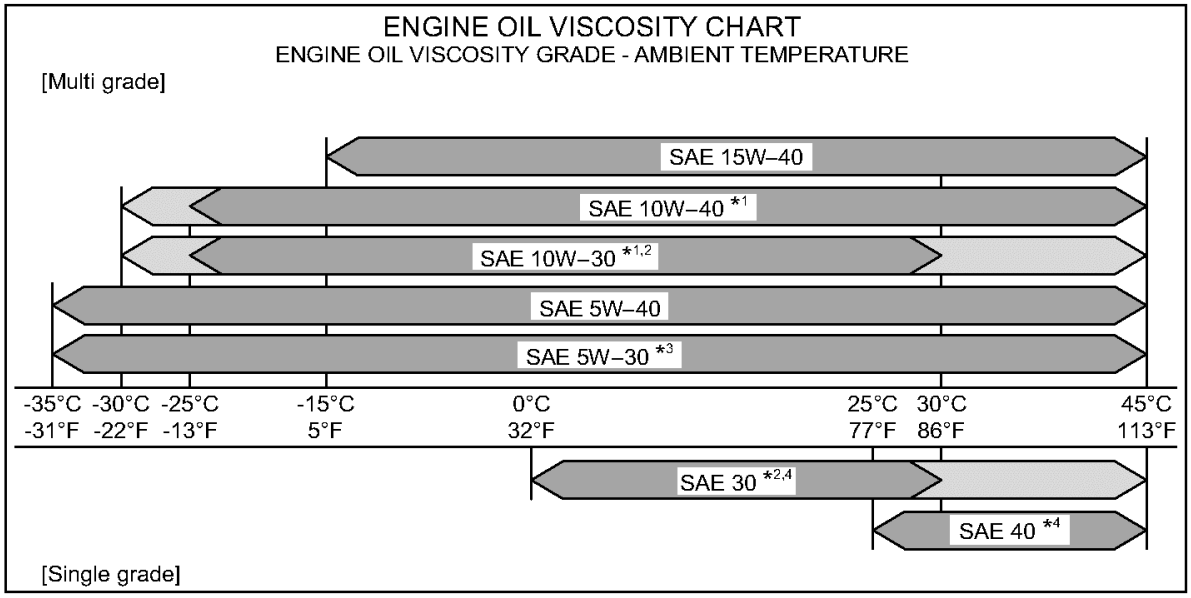
- You can use standard type diesel fuels that meet EN590. A standard type diesel fuel means the fuel that contains biodiesel fuel (FAME) which meets EN14214.
- Using diesel fuels that do not meet EN590, or using fuels that contain FAME which does not meet EN14214 may, in the worst case, cause a serious engine failure.
- Do not leave the diesel fuel that contains FAME unused in the vehicle for a long period of time. FAME contents may block up the fuel system, causing a serious engine failure.
- The vehicle is covered under the vehicle warranty given if the fuel that meets EN590 is used. However, if the vehicle is left unused for a long period of time, the characteristics of the fuel may change, causing a vehicle failure. The vehicle warranty is not applicable in such cases.

NOTE

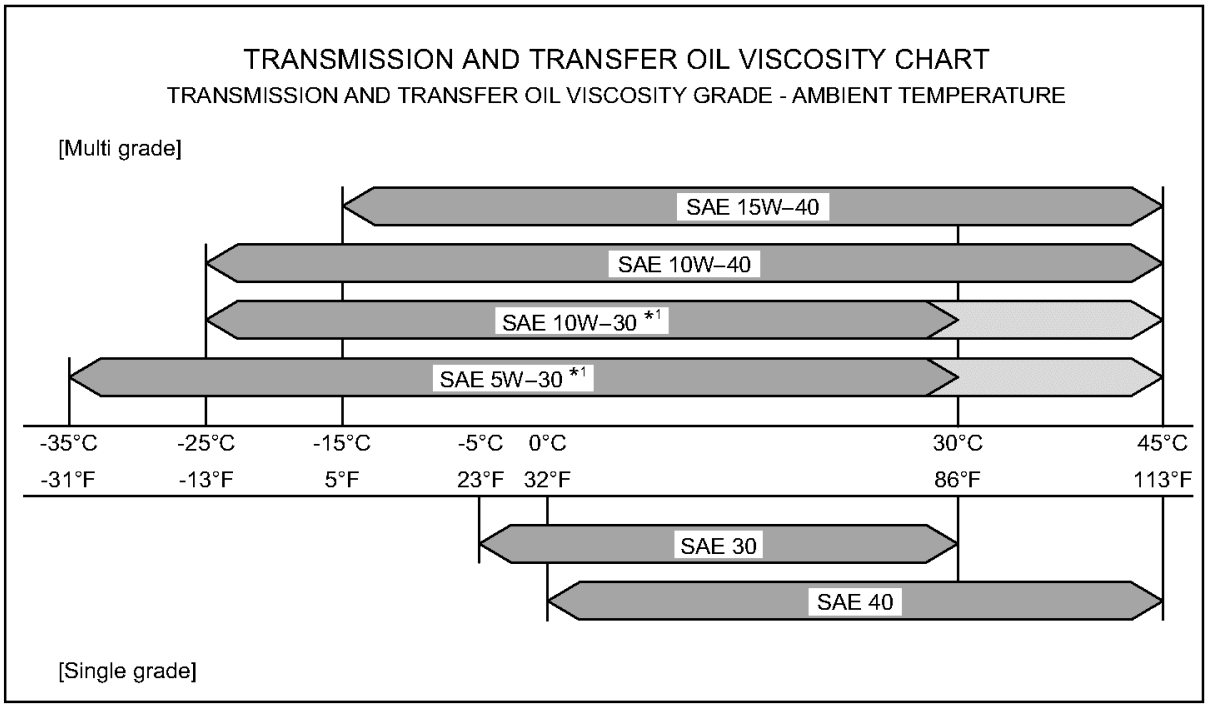
- When changing from 0% FAME diesel to the fuel that contains FAME which meets EN590, there may be a negative impact on performance when pulling away and driving in general.

Engine Oil and Gear Oil Viscosity Charts

Select appropriate engine and gear oils in accordance with the tables below. It is also important to select the viscosity appropriate for the temperature at which your vehicle operates. Use the following tables for making correct selections.



*1: When starting aids (oil pan heater, block heater, etc.) are used, grade 10W-xx oils can be used at an ambient temperature as low as -30°C (-22°F).
*2: Use is possible at ambient temperatures of up to 45°C (113°F) in the case of Isuzu genuine oils or other recommended oils of grade xxW-30.
*3: In the case of grade 5W-30 oil, only Isuzu genuine oil can be used.
*4: Single grade oils are only applied to engines that conform to Euro II emission standard and other less severe emission standards.

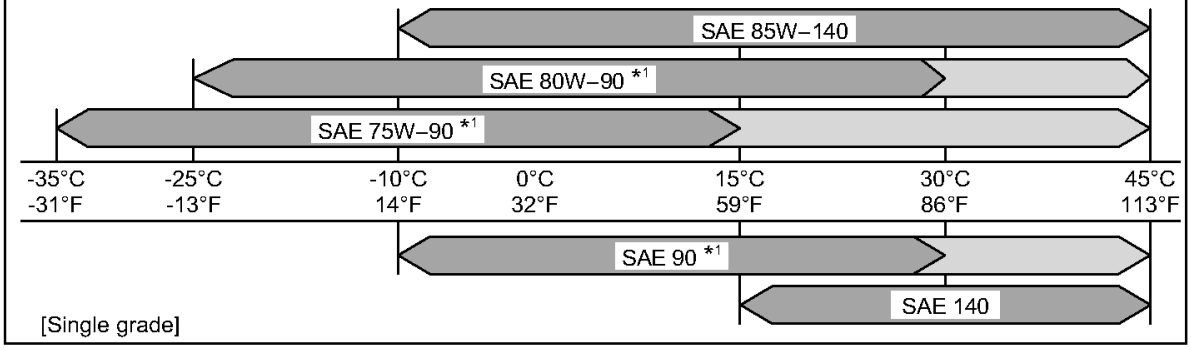


*1: Use is possible at ambient temperatures of up to 45°C (113°F) in the case of Isuzu genuine oils of grade xxW-30.

GEAR OIL (front and rear axle) VISCOSITY CHART (Isuzu production components)

GEAR OIL (front and rear axle) VISCOSITY GRADE - AMBIENT TEMPERATURE

[Multi grade]



[Single grade]

*1: Use is possible at ambient temperatures of up to 45°C (113°F) in the case of Isuzu genuine oils or other recommended oils of grade xxW-90.

Daily Checks 9

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9-2 Daily Checks

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- Checking Brake Effectiveness 9-37
- Checking Condition of the Engine at Low Speeds and during Acceleration 9-38

Perform Daily (Pre-operation) Inspections Before Driving



This section summarizes how to perform daily (pre-operation) inspections.
Check your vehicle daily before starting the day's operation to ensure safe, trouble-free operation.
For safe and comfortable driving, keep record of the distances driven and the condition of the vehicle during operation.
Perform inspections at appropriate intervals, and perform maintenance in accordance with the findings of the inspections.
If the checks reveal an abnormality or if there are components that showed abnormalities during the previous operation, have the vehicle repaired by your Isuzu Dealer before using the vehicle.
Refer to "Maintenance and Care" for information about what to do after daily inspections or simple vehicle maintenance and care other than daily inspections.

Refer to page
10-1 Maintenance and Care

Daily Check (Preoperational Check) Items

Daily (Pre-operation) Inspection Item List

1. Checking components that showed abnormalities during the previous operation

Check item	Reference page
Components that showed abnormalities during the previous operation	9-5

2. Checks performed during a walk around the vehicle

Check item	Reference page
Engine coolant level	9-5
Contamination, damage and obstruction of lights and reflectors	9-8
Power steering fluid level	9-9
Windshield washer fluid level	9-9
Look underneath the vehicle for evidence of leaks (oil, engine coolant, fuel, brake fluid and power steering fluid etc.)	9-9
Engine oil level	9-10
Fan belt looseness and damage	9-12
Cab is lowered and cab tilt handle is locked	9-13
Air pressure of tires	9-14
Cracks and other damage of tires	9-17
Abnormal wear of tires	9-17
Tread depth of tires	9-17
Disc wheel mounting condition	9-19
Leaf spring damage and mounting	9-20
Water collecting in the air tanks [FAB]	9-20
Air dryer function [FAB]	9-21
Battery fluid level	9-22
Brake fluid level (For a manual transmission model, brake fluid doubles as clutch fluid.)	9-23 (9-24)
Illumination and flashing of lights	9-25

3. Checks performed after the engine startup

Check item	Reference page
Engine startability, abnormal noise and color of exhaust gases	9-26
Steering wheel free play and looseness	9-26
Windshield washer fluid spray condition and windshield wiper effectiveness	9-27
Brake pedal free play and stroke	9-28 9-29
Clutch pedal free play and stroke [M/T]	9-30
Exhaust sound from brake valve [FAB]	9-31
Increase in air pressure [FAB]	9-31
Parking brake lever stroke	9-33

4. Checks performed while driving the vehicle

Check item	Reference page
Clutch system function [M/T]	9-37
Brake effectiveness	9-37
Condition of the engine at low speeds and during acceleration	9-38

Checking Components that Showed Abnormalities during Previous Operation

Check the components that showed abnormalities during the previous operation. Have any abnormalities repaired by your Isuzu Dealer before using the vehicle.

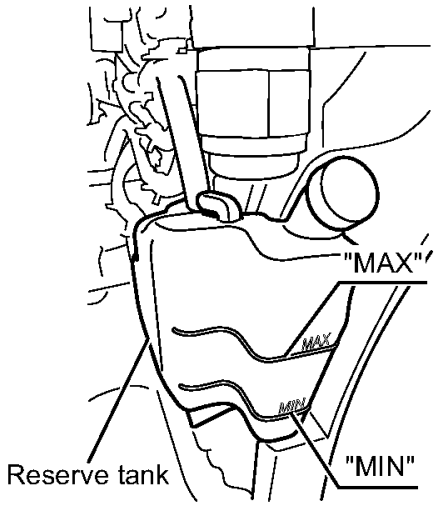
Checking the Engine Coolant

The reserve tank is located behind the front-right wheel. When the engine has cooled down, make sure that the fluid level in the reserve tank is no lower than the "MIN" line. In addition, carefully remove the radiator cap and check that the engine coolant is full to the filler neck. Check the engine coolant level only when it is cold.

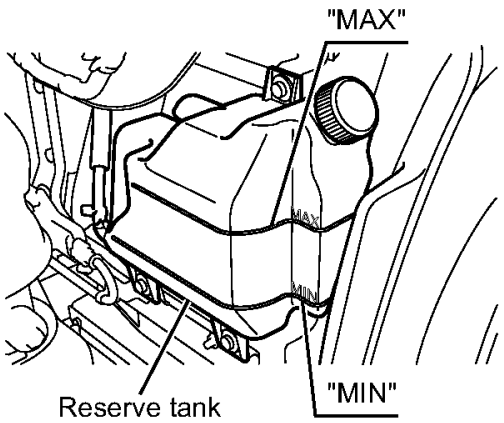
Refer to page
10-15 Adding the Engine Coolant

Single cab model

NJR/NKR/NLR/NMR/NMS models

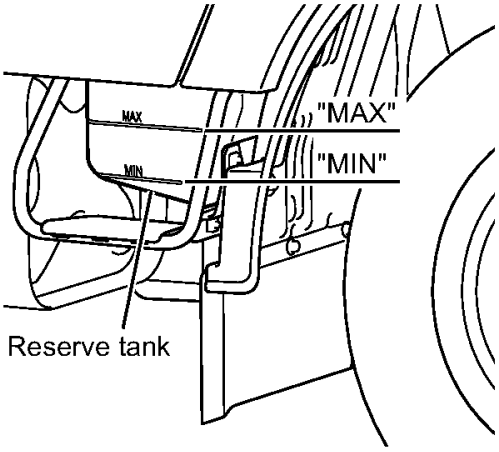


NNR/NPR/NPS/NQR/NQS models

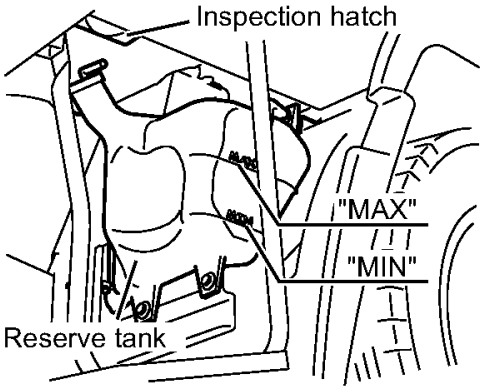


Crew cab model

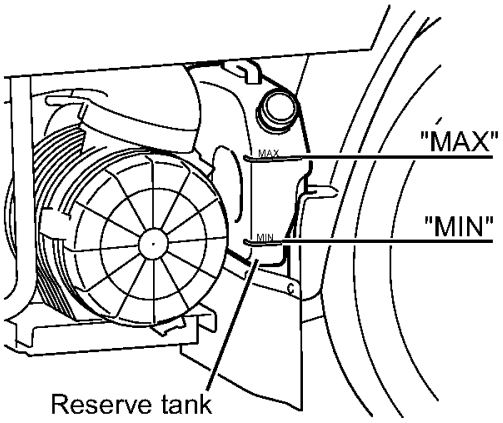
NJR model

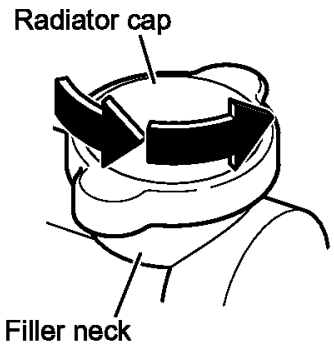


NNR/NPR/NPS/NQR/NQS models



NMS model





⚠ CAUTION

- **The radiator cap is a double-action type that must be opened and closed in two turning motions. When removing the cap, take care not to damage the cap or filler.**
  - **Turn the cap slowly to the left until it reaches a stop. Do not press down while turning the cap.**
  - **Wait until any remaining pressure (indicated by a hissing sound) is relieved, then press down on the cap and continue turning it to the left.**

Also, check to make sure there are no leaks from the radiator or radiator hose. Check for fluid or stains on the ground showing leaks where the vehicle is parked. Contact your Isuzu Dealer when you discover leaks.

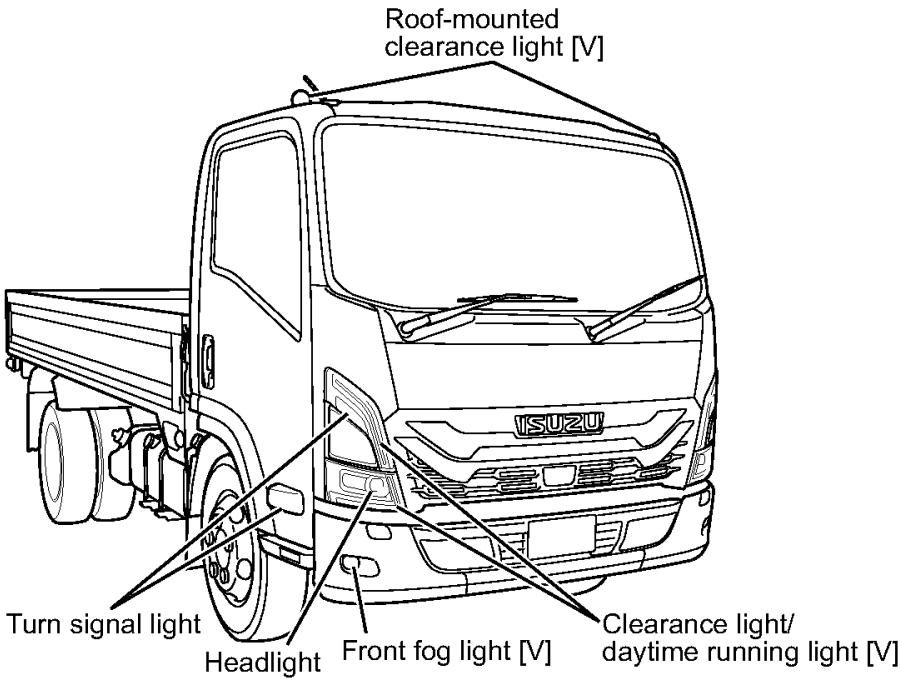
⚠ CAUTION

- **Using the vehicle when there are leaks can lead to engine seizure.**

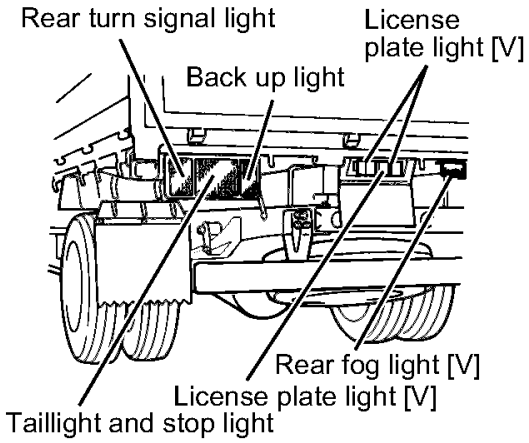
Checking for Damage or Dirt on Reflectors and Lights

Examine the lights and reflectors for dirt, discoloration, damage, and looseness.
Clean them if they are dirty.
If they are damaged, they must be replaced. Contact the nearest Isuzu Dealer.

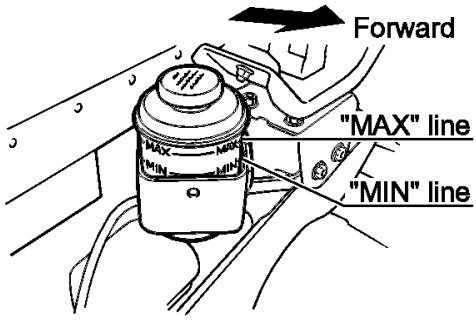
Front



Rear



Checking the Power Steering Fluid Level



The fluid level is correct if it is between the "MAX" and "MIN" lines on the reserve tank. If the level is lower than the "MIN" line, add fluid up to the "MAX" line.
The reserve tank is located at the rear of the engine compartment on the right. When you have finished checking the fluid level, securely install the cap and cover.

Refer to page
7-25 Rear Inspection Hatches (Crew Cab Model)

Checking the Windshield Washer Fluid Level

Check the level of fluid in the windshield washer tank.
Add fluid if there is not enough.

Refer to page
10-122 Windshield Washer Fluid

Checking for Leaking Liquids Under the Vehicle

Check for fuel, water, oil or other fluid leaks by looking at the surface beneath the vehicle after it has been parked for a while. If you notice diesel fumes or fluid at any time, have the cause found and corrected at once. If you are unable to perform a repair, contact the nearest Isuzu Dealer.

Checking the Engine Oil

ADVICE

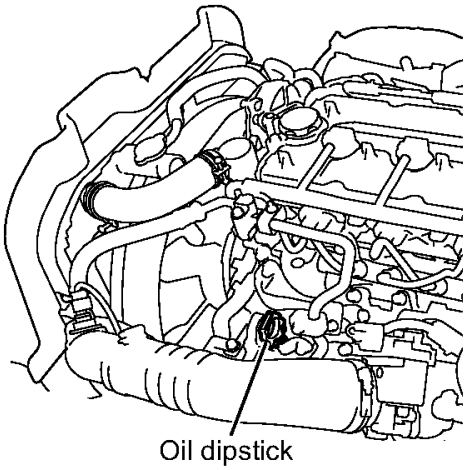
- The engine oil performs the following important functions:
  - It prevents engine parts from becoming worn.
  - It cools engine parts.
  - It seals the combustion chambers and prevents rust.
  - It cleans engine parts. Replace the engine oil at regular intervals.
- Any oil level above the "Inspection MAX" mark on the oil dipstick may cause engine malfunctions. Change the oil whenever its level exceeds the "Inspection MAX" mark.
- Fuel will gradually become mixed with the engine oil, thinning it out. Be sure to change the oil at the specified intervals.

NOTE

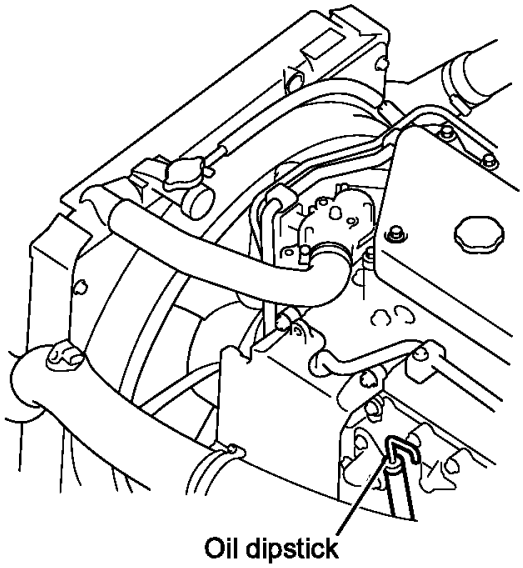
- Perform all engine oil level checks on a level surface before starting the engine.
- The oil level cannot be checked correctly when the engine is running.
- Fuel will gradually become mixed with the engine oil, and the engine oil level will rise beyond the original level. This does not indicate an engine malfunction.
- Wait for at least 30 minutes after stopping the engine when measuring the oil level after the engine has been operated.

Park the vehicle on a level surface and check the engine oil level before starting or at least 30 minutes after turning off the engine. To check the oil level, remove the oil dipstick, wipe off the end with a clean cloth, reinsert it and then gently remove it.
If the oil level is between the "Inspection MAX" and "MIN" marks, the oil is at the correct level. Also check to see if there are any oil leaks.

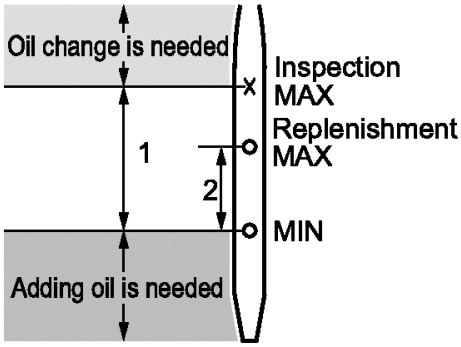
4JZ1 engine model



4HK1 engine model



Checking the Engine Oil Level



1. Remove the oil dipstick and wipe off any oil on the oil dipstick.
2. Reinsert the oil dipstick fully and then gently remove it. If the oil level is between the "Inspection MAX" and "MIN" marks (range 1), the oil is at the correct level.
3. If the oil level is too low, add oil to the "Replenishment MAX" mark (range 2). If the oil level is beyond the "Inspection MAX" level, then the oil needs to be changed.

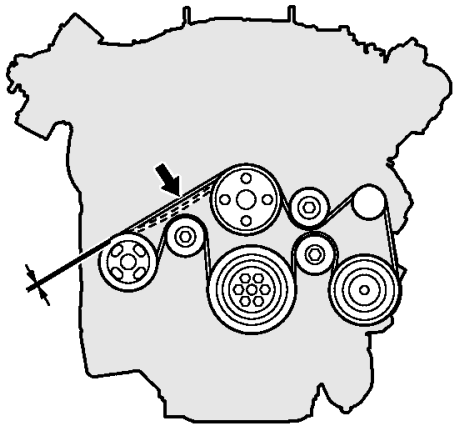
Refer to page
10-7 Adding the Engine Oil
10-8 Changing the Engine Oil and Oil Filter

4. Reinstall the oil dipstick into position after checking the oil level.

ADVICE

- If the oil dipstick is deformed, accurate measurement of the oil level may not be possible.

Checking the Fan Belt



4JZ1 engine model

Press the center of the span between pulleys by hand and check whether the belt deflects a little.

Also, check the belt for damage.

If there is cracking or damage, replace the belt.

Contact the nearest Isuzu Dealer when replacing it, because disassembly is necessary.

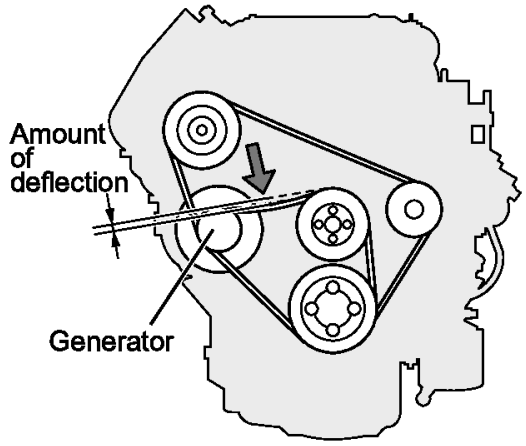
CAUTION

- **Contact the nearest Isuzu Dealer when replacing the belt, because disassembly is necessary.**

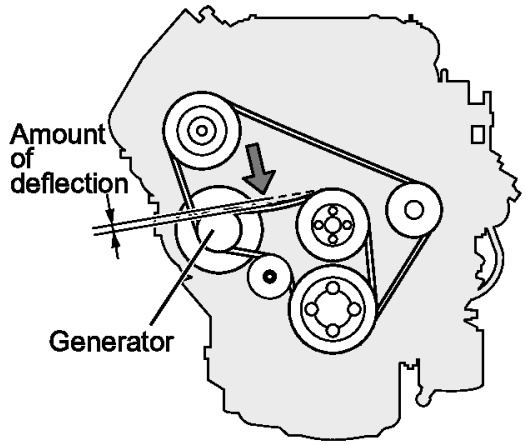
NOTE

- The belt is self-adjusting, so adjustment is not required.

Engine with 50A/60A generator



Engine with 80A/90A generator



4HK1 engine model

Press the center of the span between pulleys (see the figure) of the belt with a force of **98 N** (10.0 kgf/**22 lb**) and check the amount of deflection. The amount of deflection must fall within the standard value range indicated below. Otherwise, adjust the tension.
When inspecting by vibration frequency, place and hold the sensor mike surface parallel to the belt 10 mm (0.39 in) from the center of the span between pulleys (indicated by the arrow) and tap the belt with a handle of screwdriver etc. to make the belt vibrated and measure the value. Measure the value 2 or 3 times and calculate the average value. The average value must be within the standard value range indicated below. Otherwise, adjust the tension.
Also check the fan belt for cracks or other damage. If there are cracks or damage or if the inspected value is not within the standard value range, replace the belt.

Generator	Standard value [amount of deflection]		Standard value [vibration frequency]
50A/60A	New belt	5 - 7 mm (0.20 - 0.28 in)	208 - 232 Hz
	When reused	6 - 8 mm (0.24 - 0.31 in)	178 - 190 Hz
80A/90A	New belt	5 - 7 mm (0.20 - 0.28 in)	187 - 209 Hz
	When reused	6 - 8 mm (0.24 - 0.31 in)	161 - 173 Hz

Checking the Cab is Lowered and Cab Tilt Handle is Locked

Confirm the cab is lowered and cab tilt handle is securely locked in the lowered position. Refer to "Lowering the Cab".

Refer to page
7-28 Lowering the Cab

Checking Tires

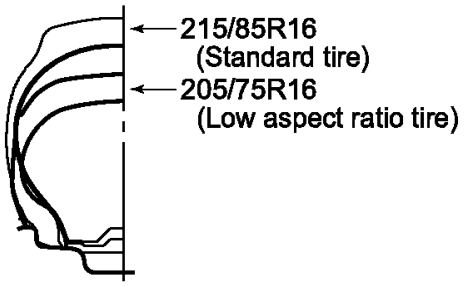
Checking the Air Pressure

⚠ WARNING

- **The tire pressure monitoring system is not a substitute for daily inspections. For models equipped with the tire pressure monitoring system too, be sure to check the tire air pressure as a part of daily inspections.**
- **Insufficiently inflated or worn-out tires are highly dangerous as they easily skid and can even burst. Should they burst, the tires may burn and this could cause a fire in the vehicle.**
- **If you drive on under-inflated or flat tires, the wheel bolts will be placed under excessive stress. Under such conditions, the bolts may break and the wheel may detach from the vehicle, possibly causing an accident.**

⚠ CAUTION

- **Too low or too high a tire air pressure not only affects the ride or causes damage to the cargo but also causes abnormal heat buildup, premature wear, a tire puncture, or may even cause the tire to burst.**
- **Over-inflated tires result in a harsh ride and are likely to cause damage to the cargo. Under-inflated tires build up heat and could burst. Always keep the tires of your vehicle adjusted at the standard air pressures.**



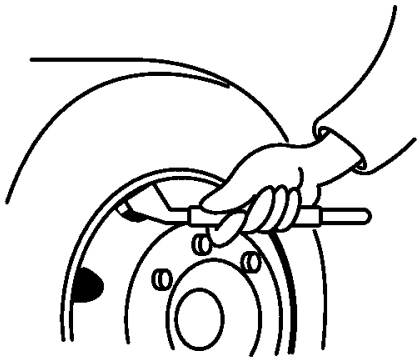
ADVICE

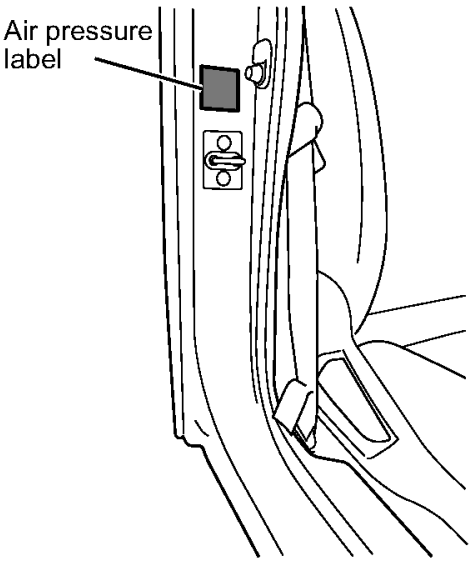
[Use of Low Aspect Ratio Tires]

- Low aspect ratio tires for truck applications (aspect ratio at 70% or 75%) have an air volume 20% to 30% smaller than that of standard tires. When air begins to leak, therefore, low aspect ratio tires adversely affect vehicle operation much faster than standard tires. Check air pressure of low aspect ratio tires more often than standard tires using a tire air pressure gauge.

NOTE

- It is not easy to visually identify an under-inflated dual-wheel tire or low aspect ratio tire (aspect ratio at 70% or 75%). Always use a tire air pressure gauge to check the air pressure of any tire.
- There should not be a difference in air pressure between the inside and outside tires on a dual-tire wheel.
- If your vehicle is equipped with aluminum wheels, use an extension attached to the inner tire valve together with a standard tire air pressure gauge or use a special air pressure gauge when checking the air pressure of a dual-wheel's inner tire. This facilitates checking.





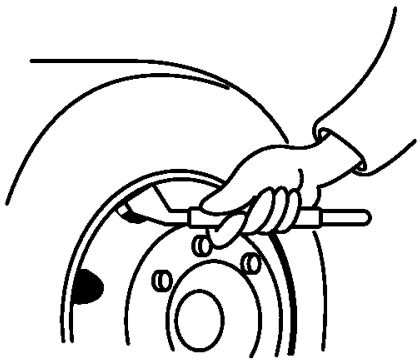
Use an appropriate tire air pressure gauge when measuring the air pressure of a tire. Tire air pressure should be measured when the tire is cold, or before the vehicle is driven. (After driving, tire air pressure increases by about 10%.)

As the tire air pressure varies depending on the vehicle model and tire size, refer to the air pressure label on the driver's door opening frame if the air pressure label is attached or the tire air pressure tables on the following pages if the air pressure label is not attached.

Tire Size and Tire Air Pressure

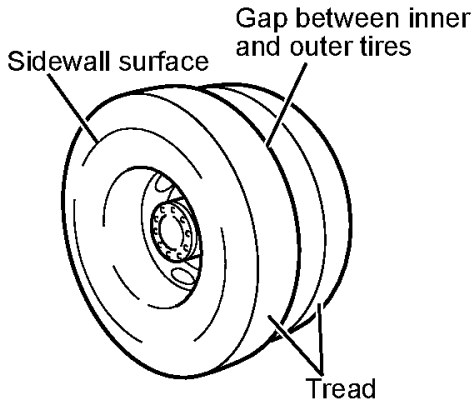
Vehicle model	Tire size		Tire air pressure kPa (kgf/cm²/psi)	
	Front	Rear	Front	Rear
NJR88	195/75R16C	195/75R16C	525 (5.25/76)	525 (5.25/76)
	195/75R15	195/75R15	600 (6.00/87)	600 (6.00/87)
	195/75R15	175/80R14	600 (6.00/87)	450 (4.50/64)
NKR88	205/75R16C	205/75R16C	475 (4.75/69)	475 (4.75/69)
	205/85R16	205/85R16	600 (6.00/87)	600 (6.00/87)
NLR88	195/75R16C 107/105	195/75R16C 107/105	475 (4.75/69)	475 (4.75/69)
	195/75R16C 110/108	195/75R16C 110/108	525 (5.25/76)	525 (5.25/76)
	205/75R16C	205/75R16C	475 (4.75/69)	475 (4.75/69)
NMR88	205/75R16C	205/75R16C	525 (5.25/76)	525 (5.25/76)
	7.00R16-10	7.00R16-10	525 (5.25/76)	525 (5.25/76)
	195/85R16	195/85R16	600 (6.00/87)	600 (6.00/87)
	205/85R16	205/85R16	600 (6.00/87)	600 (6.00/87)
NMS88	205/85R16	205/85R16	600 (6.00/87)	600 (6.00/87)
NNR88	195/85R16	195/85R16	600 (6.00/87)	600 (6.00/87)
	195/85R16	185/80R15	600 (6.00/87)	450 (4.50/64)
NPR88	195/85R16	195/85R16	600 (6.00/87)	600 (6.00/87)
	205/85R16	205/85R16	600 (6.00/87)	600 (6.00/87)
	215/75R17.5	215/75R17.5	700 (7.00/102)	700 (7.00/102)
	205/75R17.5	205/75R17.5	750 (7.50/109)	750 (7.50/109)
NPR75	215/85R16	215/85R16	600 (6.00/87)	600 (6.00/87)
	215/75R16C	215/75R16C	525 (5.25/76)	525 (5.25/76)
	215/75R17.5	215/75R17.5	700 (7.00/102)	700 (7.00/102)
	205/75R17.5	205/75R17.5	750 (7.50/109)	750 (7.50/109)
NPS88	225/80R17.5	225/80R17.5	700 (7.00/102)	700 (7.00/102)
	225/90R17.5	225/90R17.5	700 (7.00/102)	700 (7.00/102)
NQR75	215/75R17.5	215/75R17.5	700 (7.00/102)	700 (7.00/102)
	225/70R19.5	225/70R19.5	660 (6.60/95)	660 (6.60/95)
NQR90	215/75R17.5	215/75R17.5	700 (7.00/102)	700 (7.00/102)
	225/75R17.5	225/75R17.5	700 (7.00/102)	700 (7.00/102)
NQS88	225/80R17.5	225/80R17.5	700 (7.00/102)	700 (7.00/102)
	225/90R17.5	225/90R17.5	700 (7.00/102)	700 (7.00/102)

Spare Tire Air Pressure



Keep the air pressure of the spare tire slightly higher than the standard pressure. Adjust the pressure correctly when you use it.
Tires heat up while driving, and their air pressures become higher accordingly. If you must wait until right after driving to adjust the air pressure, determine the target pressure for adjustment by adding about 20 kPa (0.2 kgf/cm²/3 psi) to the standard pressure.

Checking for Cracks and Other Damage



Check the tread and sidewall surfaces of each tire for cracks or other damage. Especially check the tread for nails or other metal pieces embedded in grooves and also the gap between the inner and outer tires of a dual-tire wheel for pebbles lodged in it.

ADVICE

- When checking tires, pay special attention to: low air pressure; pebbles or nails in tread grooves; cracks or other damage on tire surfaces; uneven wear; and pebbles lodged in the gap between tires of dual-wheel tires.

Checking Tread Depth and Abnormal Wear

⚠ WARNING

- **Using worn-out tires is dangerous because they might have an increased chance of getting punctured or bursting while driving.**

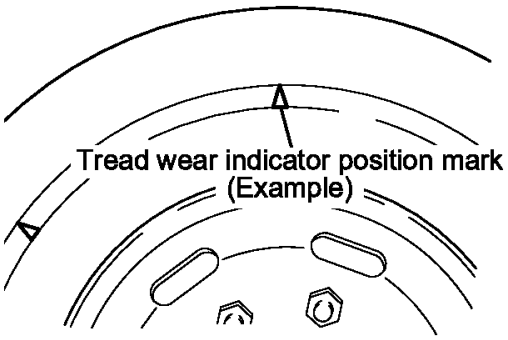
⚠ CAUTION

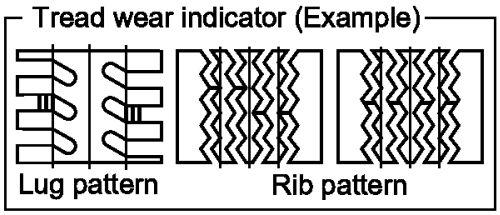
- **Tires with excessively shallow tread grooves will increase the chance of skidding and, when driving at high speeds, hydroplaning.**

NOTE

[What is Hydroplaning?]

- Hydroplaning occurs when a vehicle is running at high speeds on a wet road and a layer of water forms between the road surface and tires causing the tires to float on it. Hydroplaning prevents the driver from steering correctly and from slowing down the vehicle with the brake pedal.





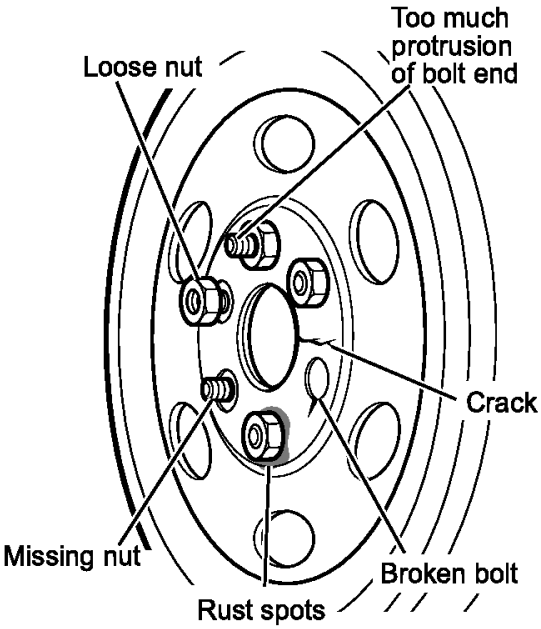
Check all tires to see if tread wear indicators appear on their treads and also check their entire tread for its depth with a depth gauge to make sure that the grooves are deeper than the specified depth.
A tire with tread wear indicators appearing must be changed.

Refer to page
10-71 Changing the Wheels and Tires

Also, check the tires for uneven or otherwise abnormal wear.

Checking the Disc Wheel Mounting Condition

Visual Checking of Wheel Installation Condition



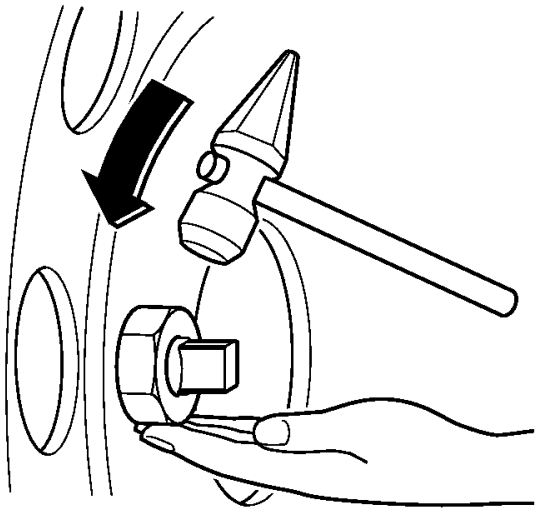
Visually check the condition of installation of each disc wheel.

1. Check that there are no missing wheel bolts and wheel nuts.
2. Check each disc wheel to see if there is any rust seepage from wheel bolts or nuts. Also check the disc wheel for cracks or other damage.
3. Check the end of each wheel bolt for proper length of protrusion from the wheel nut. The protrusion should be uniform among all bolts on a wheel and among all wheels.

⚠ CAUTION

- **Any abnormality in wheel installation is likely to lead to loose or missing wheel nuts and/or broken wheel bolts.**

Checking Wheel Installation Condition with an Inspection Hammer



Place your fingers on the bottom of each wheel nut and tap the top flat portion of the nut with an inspection hammer or small hammer in the tightening direction.
There may be some defect in a nut or its bolt if the vibration you feel by the fingers is different from the other nuts or if the sound it produces is not clear.

⚠ CAUTION

- **If you detect any abnormal condition with a wheel nut and bolt during this inspection, it is likely that the nut is loose or the bolt is broken.**

Tires Used for Long Term

Tires are made of rubber whose property changes gradually by aging as time goes on (even when it is stored fitted on the rim like a spare tire). Tires must receive an aging check after being used for up to 5 to 7 years if they are to be used continuously.

Checking the Leaf Springs

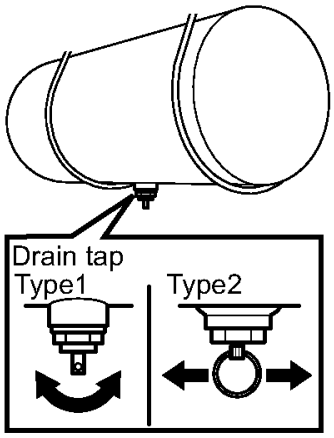
Checking the Leaf Spring Damage

Check the leaf springs for damage, cracks and whether the related parts of the leaf springs are dislodged. Check the cushion rubber for damage.
Damaged parts must be replaced with new ones as soon as possible.
If there is a problem, contact the nearest Isuzu Dealer for inspection or replacement.

Checking the Leaf Spring Mounting

Check the spring brackets for looseness, cracks and damage. Check the spring pins and shackle pins for looseness in the axial and perpendicular directions.
Damaged parts must be replaced with new ones as soon as possible.
If there is a problem, contact the nearest Isuzu Dealer for inspection or replacement.

Checking the Air Tanks [FAB]



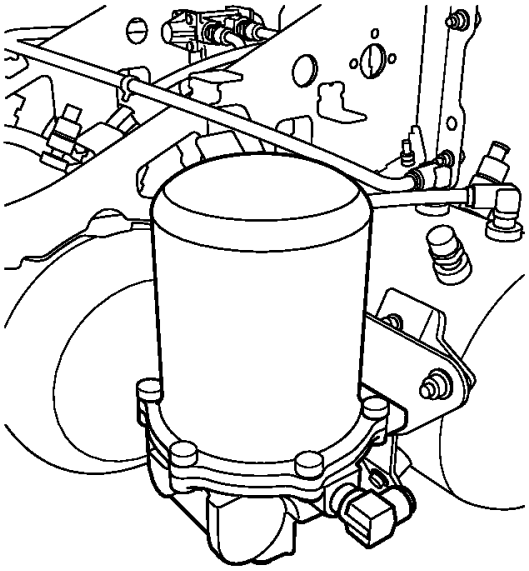
Air tanks may contain water. You must drain them by operating the drain taps (by pushing or pulling) at the bottom of the air tank to discharge water.
After discharging water, check that air is not leaking from each drain tap.
If a large volume of water drains from an air tank, the desiccant of the air dryer may have deteriorated. If desiccant replacement is necessary, have it performed by the nearest Isuzu Dealer.

⚠ WARNING

- **Water collecting in the air tank may cause moisture to freeze inside the air piping in winter. This is very dangerous because the air compressor may fail and as a result, sufficient braking forces may no longer be available.**

Refer to page
9-21 Checking the Air Dryer [FAB]

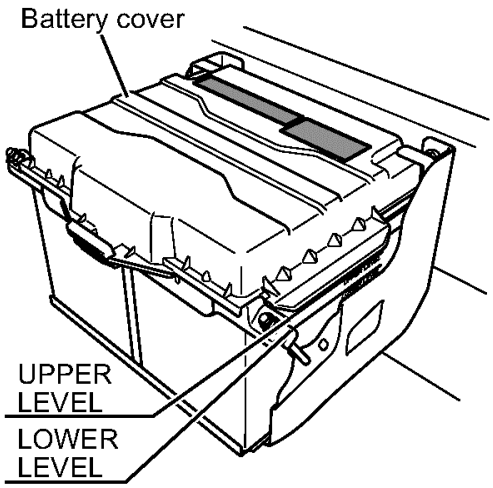
Checking the Air Dryer [FAB]

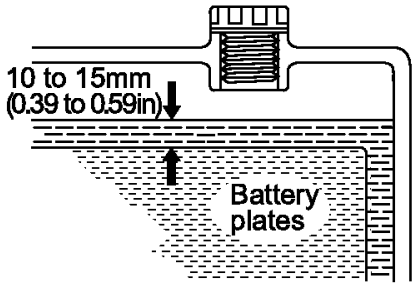


Change the desiccant and the filter's rubber parts of the air dryer at the intervals specified by the Maintenance Schedule.
Take care to ensure that the drain port is not blocked or obstructed by foreign material.
The air dryer removes moisture and oil that is present in the vehicle's air piping by means of an inside desiccant.
If water and oil is discharged when the drain tap on the air tank is opened for checking, the desiccant has deteriorated and needs be changed. Desiccant replacement requires disassembling of the relevant components, so you should have it done by the nearest Isuzu Dealer.

Checking the Battery Fluid Level

Single Cab Model

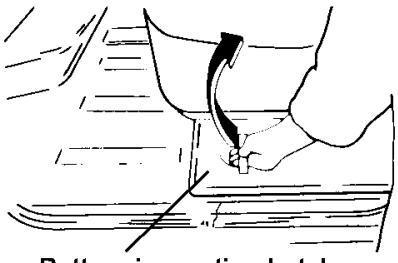




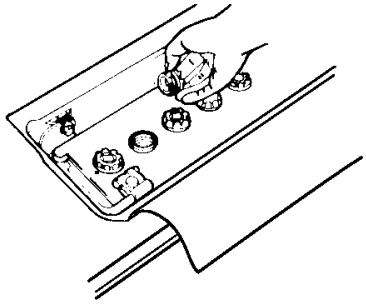
The battery is located almost exactly at the center of the outside chassis member. Remove the battery cover and confirm whether the level of fluid inside the battery case is within the specified range.
The surface of the battery fluid should be between the "UPPER LEVEL" and "LOWER LEVEL" lines. If the surface of the fluid cannot easily be seen, rock the vehicle gently.
If no level marks are indicated on the case, a range between 10 and 15 mm (0.39 to 0.59 inches) from the top of the battery plates is considered appropriate.

Refer to page
10-132 Filling Battery Fluid

Crew Cab Model



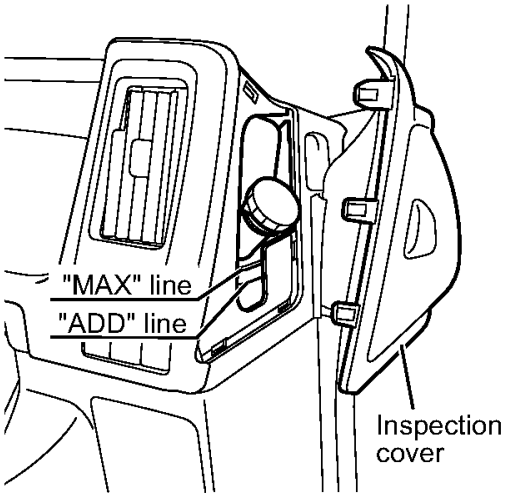
Battery inspection hatch



Open the battery inspection hatch located under the left side of the rear seat to check the battery fluid level.
Remove the cap and look inside. The level of fluid is sufficient if the surface is just below the opening.

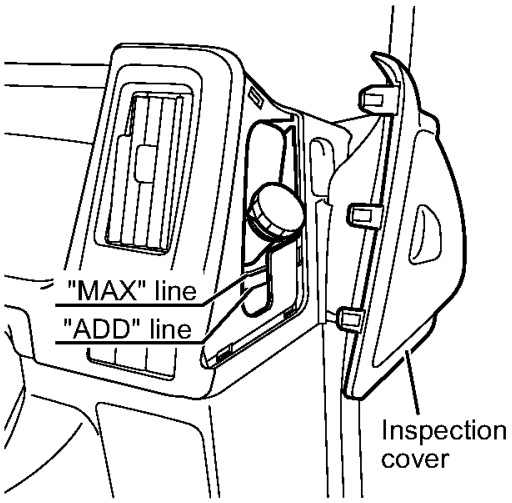
Refer to page
7-25 Rear Inspection Hatches (Crew Cab Model)
10-132 Filling Battery Fluid

Checking the Brake Fluid Level [HB]



Remove the inspection cover on the driver side of the instrument panel by turning it with your fingers. Check that the fluid level in the reserve tank is between the "MAX" and "ADD" lines.
If the fluid surface cannot easily be seen, rock the vehicle gently.
If the level of brake fluid has dropped below the "ADD" line, remove the cap and add fluid. Take care to avoid filling beyond the "MAX" line.
Tighten the cap securely after the fluid has been added.

Checking the Clutch Fluid Level [M/T]



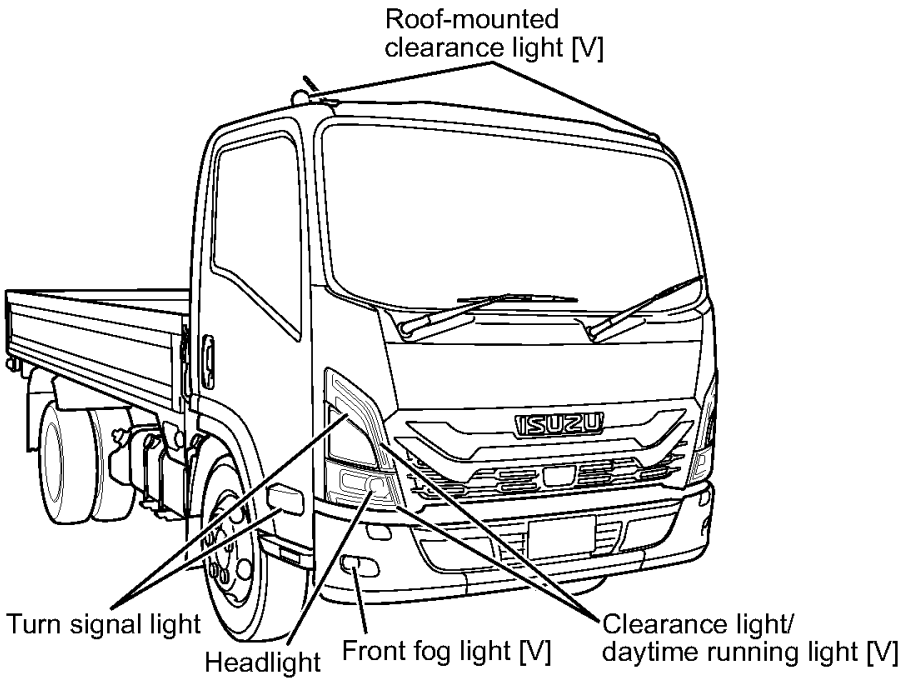
Remove the inspection cover on the driver side of the instrument panel by turning it with your fingers.
Confirm that the fluid level in the reserve tank is between the "MAX" and "ADD" lines.
If the fluid surface cannot easily be seen, rock the vehicle gently.
If the level of clutch fluid has dropped below the "ADD" line, remove the clutch fluid tank cap and add fluid. Add the specified clutch fluid up to the "MAX" line.

Checking Exterior Light Operation

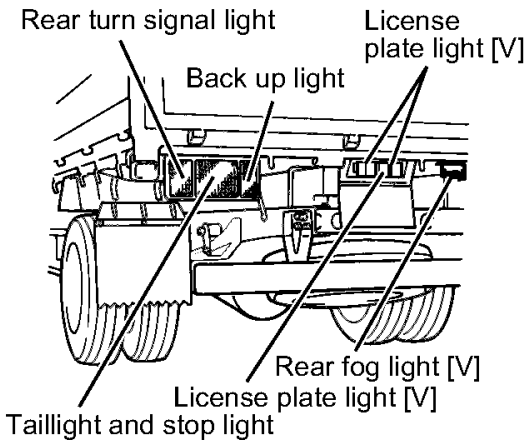
Turn the starter switch to the "ON" position, and then check the way in which the headlights, turn signal lights, and other exterior lights come on and flash.
In addition, depress the brake pedal to confirm whether the stop lights come on, and shift the transmission to "R" position to confirm whether the back up lights come on.
If lights do not light or flash, refer to "Lighting Equipment" to inspect and replace lights.

Refer to page
10-135 Lighting Equipment

Front



Rear



Checking the Engine for Startability, Abnormal Noises and Color of Exhaust Gases

1. Make sure the parking brake is securely engaged. Step firmly on the brake pedal.
2. Make sure the transmission is in neutral.

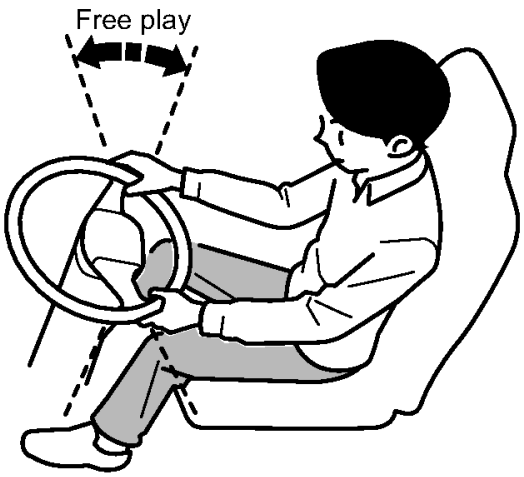
⚠ CAUTION

- **If your vehicle is equipped with the Smoother/DCT, the engine will not start unless the transmission is actually in neutral.**
- **For safety, firmly press the brake pedal before starting the engine.**

3. Turn the starter switch to start the engine.
   Check that the engine starts quickly with no abnormal noises. Also, make sure that there is no abnormal exhaust gases.

Refer to page
4-53 Starting the Engine

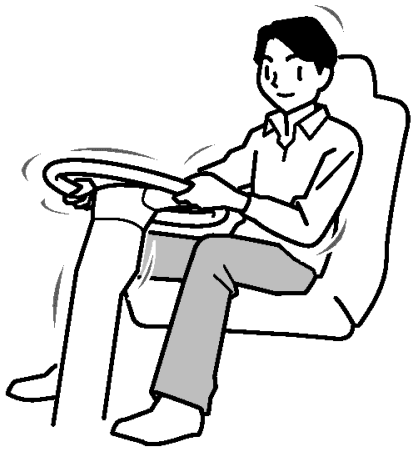
Checking the Steering Wheel Free Play and Looseness



Steering wheel free play

1. Let the engine idle.
2. Place the steering wheel in the straight forward position.
3. Then gently turn it to the left and right by hand, and check for free play until the tires start moving.

Free play (measured at the periphery of the steering wheel)
10 - 50 mm (0.39 - 1.97 in)



Steering wheel looseness

Grasp the steering wheel with both hands, and move it in the axial direction and also up and down, and left and right to see if here is any looseness.

Also, drive the vehicle and check for abnormal shaking of the steering wheel, steering pull, sluggish steering, or inability to return to the straight forward position.

⚠ CAUTION

- **If the steering parts have excess play or looseness or if any abnormal condition is noted, have the steering system checked at the nearest Isuzu Dealer immediately.**

ADVICE

- Be alert for any changes in steering action. An inspection or service is needed when: the steering wheel is harder to turn or has too much free play, or when there are strange sounds when turning or parking.

Checking Windshield Wipers and Windshield Washer

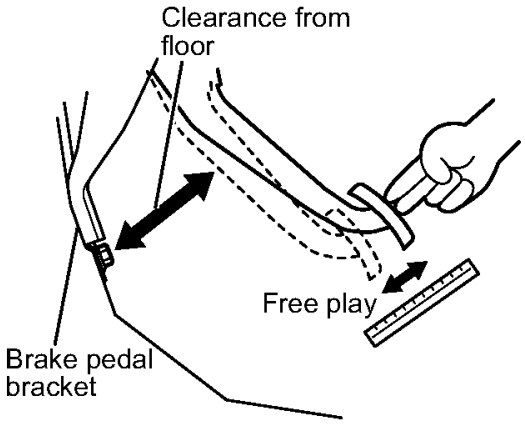
Spray windshield washer fluid and then operate the windshield wipers to check for any poorly wiped areas. In addition, confirm that each of the "(intermittent)", " – (low speed)", and " = (high speed)" functions operate normally. At this time, also check the windshield washer's spraying condition.

If the wiper blades need to be replaced, refer to "Windshield Wiper Blade Replacement".

Refer to page
10-124 Windshield Wiper Blade Replacement

Checking the Brake Pedal Free Play and Stroke

Hydraulic Brake Model



Shut off the engine and depress the brake pedal about 10 times strongly, then check the brake pedal for free play by lightly pushing it by hand until you feel resistance. Next, start the engine, and wait at least 1 minute. Then depress the brake pedal and measure the clearance of the pedal from the floor (that is, the distance between the brake pedal bracket and the brake pedal arm).

Brake pedal free play (measured at the tip of pedal)
3 - 7 mm (0.12 - 0.28 in)

Brake type	Brake size (front/rear)	Clearance between brake pedal and brake pedal bracket (with **490 N** [50 kgf/**110 lb**] applied to the brake pedal)
Front disc brake and rear drum brake model	φ275/φ240	25 mm (0.98 in) or more
4-wheel disc brake model	φ275/φ275	20 mm (0.79 in) or more
	φ293/φ293	35 mm (1.38 in) or more (NJR/NKR models)
		45 mm (1.77 in) or more (NLR/NMR/NMS/NNR/NPR models)
	φ310/φ310 φ363/φ348	45 mm (1.77 in) or more

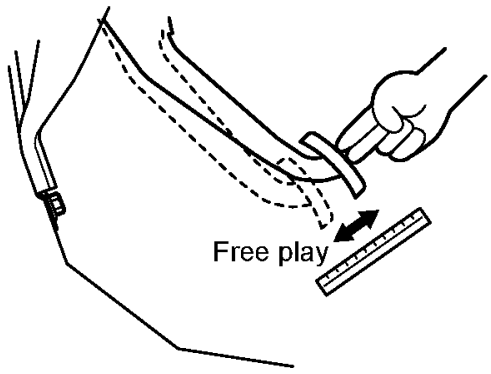
ADVICE

- If, after continued pressing of the brake pedal, the clearance slowly decreases or the pedal action feels spongy, air may be trapped in the brake hydraulic circuit. Have your vehicle inspected at the nearest Isuzu Dealer as soon as possible.

NOTE

- To check the clearance of the pedal from the floor, start the engine, depress the accelerator pedal a few times, and use the first pressing of the brake pedal to measure the clearance. The clearance cannot be correctly measured after pressing the pedal two or more times in succession.
- Before checking the free play of the brake pedal, stop the engine and press the pedal 4 or 5 times in succession.

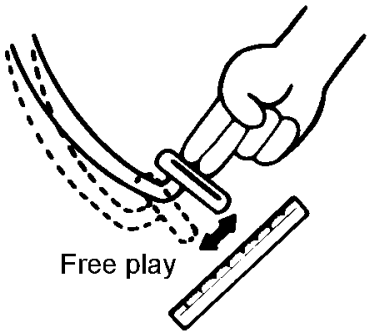
Full-air Brake Model



Press the brake pedal with two fingers to check that the pedal free play is proper and the pedal moves smoothly without abnormal interference.

Brake pedal free play (measured at the tip of pedal)
11 - 19 mm (0.43 - 0.75 in)

Checking the Clutch Pedal Free Play and Stroke [M/T]

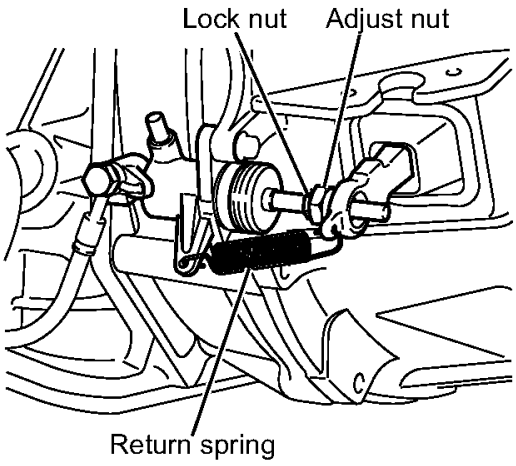


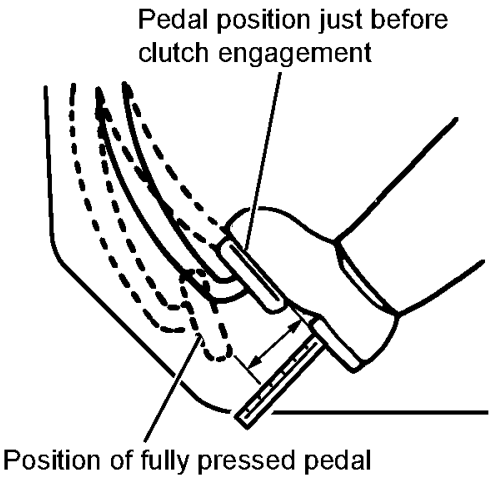
1. Lightly press the clutch pedal by hand until you feel a slight resistance. The distance of the pedal movement to this point is the free play.

Clutch pedal free play [Reference value]	
Manual adjustment type*	15 - 25 mm (0.59 - 0.98 in)
Automatic adjustment type*	5 - 15 mm (0.20 - 0.59 in)

*: The clutch slave cylinder with a return spring, an adjust nut, and a lock nut all on one side of the transmission is a manual adjustment type. The clutch slave cylinder without those parts is automatic adjustment type.

[Manual adjustment type]





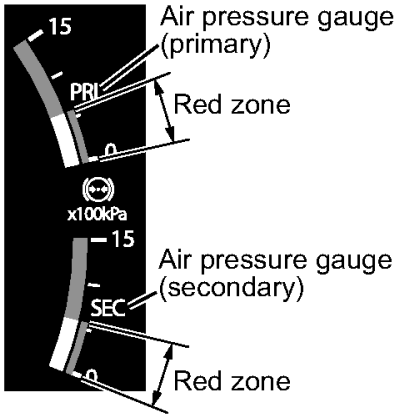
2. Make sure that the parking brake lever is pulled completely. Start and run the engine at idle and then press the clutch pedal fully.
3. Move the gearshift lever to the 1st position and then release the pedal slowly. The clutch pedal is normal if the distance from the fully pressed position to the position just before the clutch engages is 20 mm (0.79 in) or more.

Checking the Exhaust Sound from Brake Valve [FAB]



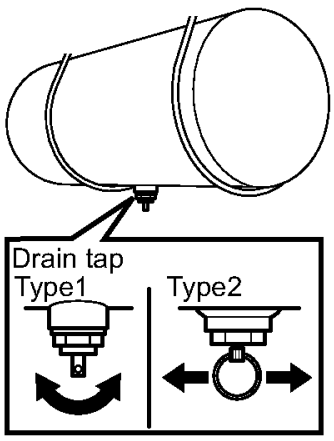
Release the brake pedal after stepping on it to check that an air release sound comes from the exhaust hole at the brake valve and the pedal fully returns to the released position.

Checking Air Pressure [FAB]



1. Check the air pressure gauge to see that the primary and secondary air systems are charged with air to proper pressures.

Proper air pressure range
780 - 890 kPa (8.0 - 9.1 kgf/cm²/**114 - 129 psi**)



2. Next, check the rate at which the air pressure rises. After confirming that the parking brake lever is fully pulled, operate the drain taps (by pushing or pulling) at the bottom of the air tank to let all the air in the air tank be discharged.

Air pressure warning light



3. Start and run the engine at idle. The brake air systems are in order if the time taken for the air pressure warning light to go out matches the time indicated in the following table for your particular vehicle.

Time taken before air pressure warning light goes out

Time (minutes)
12

The time taken before the air pressure warning light goes out may somewhat vary depending on the temperature and other environmental conditions. However, you should contact the nearest Isuzu Dealer if air pressure does not increase at all, the time taken before reaching a proper pressure is significantly different from that indicated in the table, or the needles of the air pressure gauge indicate considerably different pressures.

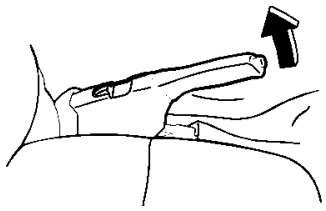
⚠ WARNING

- **Do not operate the vehicle while any of the pressure gauge needles are in the red zone or the air pressure warning light is on. Brakes are then not fully functional, and it is dangerous to operate the vehicle.**

Checking the Parking Brake

Model without Electric Parking Brake

Model with Center Parking Brake [HB]



Parking brake warning light (red)

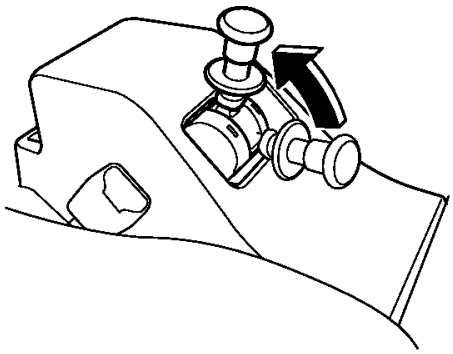


Pull the parking brake lever slowly from the fully released position while counting the clicks produced as the lever engages ratchet plate notches to check that it can be raised the proper amount and the lever is held firmly. If the number of notches is not within the standard value range below, adjust it to the standard value. Also, on a dry sloping road, check that the parking brake can hold the vehicle stationary.

Lever stroke*
6 to 8 notches

*: Number of notches before parking brake is set when lever is pulled slowly from released position with pull force of about 147 N (15 kgf/33 lb).

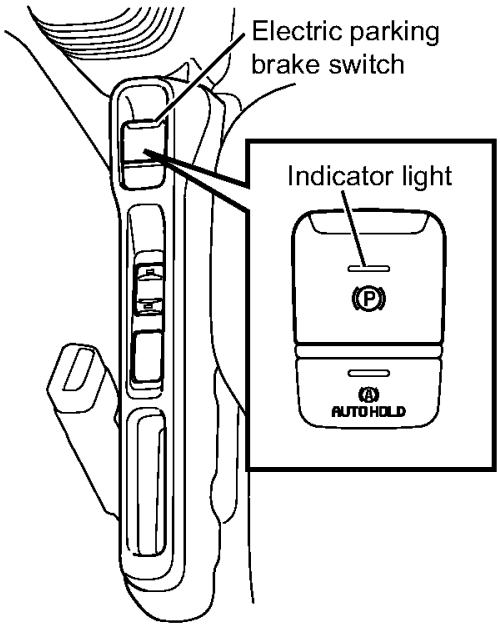
Model with Wheel Parking Brake [FAB]

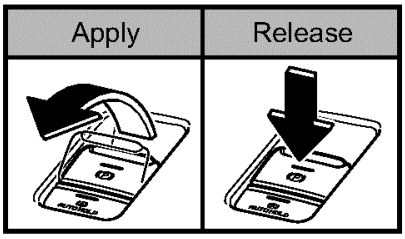


Pull the parking brake lever from the fully released position to the lever locked position to check that the air exhaust sound is heard and the lever stays in position. Also, on a dry sloping road, check that the parking brake can hold the vehicle stationary.

Model with Electric Parking Brake

Model with Center Parking Brake [HB]



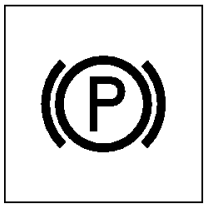


1. Stop the vehicle in a place with flat and firm ground, and chock the wheels so the vehicle cannot move.
2. Lift up the electric parking brake switch to operate the parking brake. Also, check that the motor makes sounds at the same time.

Parking brake warning light (red)



Electric parking brake warning light (amber)



3. When the parking brake is operated, check that the parking brake warning light comes on and that the electric parking brake warning light goes off.
4. Check that the vehicle can remain stopped on a dry inclined surface. If there is no inclined roadway: For manual transmission models, while the parking brake is engaged, depress the brake pedal and clutch pedal, and then put the gearshift lever into 1st gear. In that condition, release the brake pedal, and then slowly release the clutch pedal to confirm that the parking brake is holding. For models except manual transmissions, while the parking brake is engaged, depress the brake pedal and put the gearshift lever in the "D" position. In that condition, slowly release the brake pedal and check that the parking brake is holding.

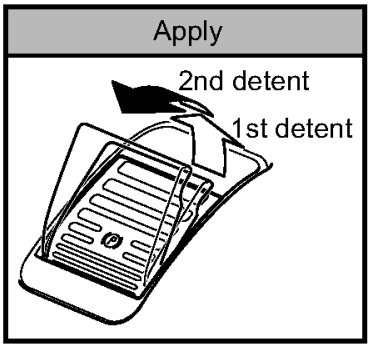
⚠ CAUTION

- **When checking the effectiveness of the parking brake, be careful that the vehicle does not suddenly move while doing so. Sudden vehicle movement could lead to an accident.**
- **The electric parking brake has an automatic release function, so do not depress the accelerator pedal during the inspection. Depressing the accelerator pedal activates the automatic release function. Also, when inspecting the parking brake, be sure to chock the wheels. Unintentionally releasing the brake could lead to an accident.**

Refer to page
4-82 Applying and Releasing the Electric Parking Brake Automatically

Model with Wheel Parking Brake [FAB]

1. Stop the vehicle in a place with flat and firm ground, and chock the wheels so the vehicle cannot move.



2. Pull up the electric parking brake switch to activate the parking brake. At that time, check to see if exhaust sound is coming from the air valve at the rear of the vehicle.

Parking brake warning light (red)



Electric parking brake warning light (amber)



3. When the parking brake is operated, check that the parking brake warning light comes on and that the electric parking brake warning light goes off.
4. Check that the vehicle can remain stopped on a dry inclined surface. If there is no inclined roadway: For manual transmission models, while the parking brake is engaged, depress the brake pedal and clutch pedal, and then put the gearshift lever into 1st gear. In that condition, release the brake pedal, and then slowly release the clutch pedal to confirm that the parking brake is holding. For models except manual transmissions, while the parking brake is engaged, depress the brake pedal and put the gearshift lever in the "D" position. In that condition, slowly release the brake pedal and check that the parking brake is holding.

⚠ CAUTION

- **The electric parking brake has an automatic release function, so do not depress the accelerator pedal during the inspection. Depressing the accelerator pedal activates the automatic release function. Also, when inspecting the parking brake, be sure to chock the wheels. Unintentionally releasing the brake could lead to an accident.**

Refer to page
4-82 Applying and Releasing the Electric Parking Brake Automatically

Checking the Clutch System Function [M/T]

While idling, inspect for abnormal noise when the clutch pedal is depressed, and whether the clutch pedal feels abnormally heavy. Also, inspect whether the gearshift lever can easily be shifted into 1st gear and reverse.
Check also that the clutch engages smoothly without any slip when the vehicle starts to move slowly. If there is a problem, contact the nearest Isuzu Dealer.

⚠ CAUTION

- **Release the clutch pedal carefully to prevent the vehicle from starting too suddenly.**

Checking Brake Effectiveness

While driving on a dry road, check that stopping performance corresponds to how hard the brake pedal is depressed and that the vehicle does not pull to either side.

⚠ CAUTION

- **A brake performance check should be performed on a wide road with good visibility while paying adequate attention to the traffic behind and the surroundings.**

ADVICE

- If your vehicle's brakes squeak during normal driving or braking, the cause may be one of the following.
  - Brake pad wear
    Brake pads are about to wear out. If this happens, have your vehicle inspected at the nearest Isuzu Dealer as soon as possible.
  - Adherence of sand, grit or mud
    If sand, grit or mud adheres to the brakes, a screeching sound may be emitted upon contact with rotating components. If this happens, wash the vehicle to remove all such adhering matter. If cleaning alone does not eliminate the squeaking sound, have your vehicle inspected at the nearest Isuzu Dealer as soon as possible.

Checking Condition of the Engine at Low Speeds and during Acceleration



1. Make sure the transmission is in neutral and the parking brake is securely engaged.
2. Turn the starter switch to start the engine, and run it to warm up.

Refer to page
4-53 Starting the Engine

3. Check that the engine is running at a speed within the standard idle speed range.

Refer to page
4-62 Idling Control Knob [V]

NOTE

- During regeneration of the diesel particulate defuser (DPD), the engine idle speed may increase.

Refer to page
4-237 Diesel Particulate Defuser (DPD)

4. Drive the vehicle, making sure the accelerator pedal does not stick when gradually accelerating, the engine speed rises smoothly and it does not knock.

Maintenance and Care 10

Engine-related Maintenance and Care

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10-2 Maintenance and Care

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- Front Axle Differential Gear Oil [V] 10-106
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Engine-related Maintenance and Care

Engine Conditions

Checking the Engine for Startability, Abnormal Noises and Color of Exhaust Gases

Refer to page
9-26 Checking the Engine for Startability, Abnormal Noises and Color of Exhaust Gases

Checking Condition of the Engine at Low Speeds and during Acceleration

Refer to page
9-38 Checking Condition of the Engine at Low Speeds and during Acceleration

Engine Oil

Engine oil and the oil filter are important factors in engine performance and lifespan. Be sure to use only the specified oil and oil filters. The engine oil level must be checked and the oil should be changed regularly according to the Maintenance Schedule.

Refer to page
8-2 Maintenance Schedule

ADVICE

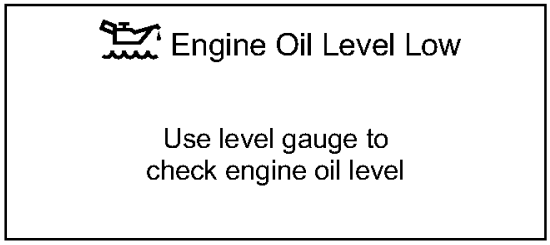
- Engine oil lubricates and cools the engine's internal components. The quality of the oil is degraded and the quantity of oil is reduced by evaporation, discharge and combustion during the engine's operation. Continually using the same oil without checking the level, or without replenishing and changing it could cause seizure or damage to the engine. Add or change the oil when the quality of the oil has been degraded or the quantity is reduced, even if this occurs before expiration of the specified intervals in the Maintenance Schedule, which will differ depending on the conditions of use.

NOTE

- When particulate matter (PM) has accumulated to a preset level in the diesel particulate defuser (DPD) filter, the filter is automatically regenerated through combustion. To make this regeneration (combustion) possible, a small amount of fuel is injected into the engine combustion chamber after firing. This causes fuel to gradually become mixed with the engine oil, and the engine oil level will rise beyond its original level. This does not indicate a malfunction of the engine.

Engine Oil Warnings/Indicators

Check Engine Oil Level Warning Light

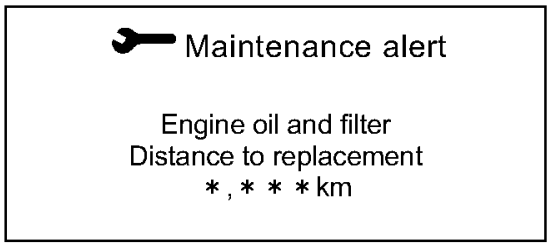


This message is displayed on the multi-information display when the engine oil level is low or exceeds the "Inspection MAX" position. When the check engine oil level warning light is indicated on the display, check the engine oil level using the oil dipstick.

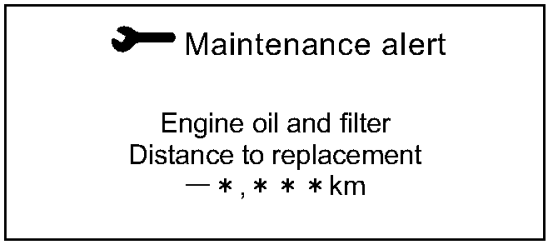
Refer to page
9-10 Checking the Engine Oil
10-8 Changing the Engine Oil and Oil Filter

Engine Oil and Filter Maintenance Alerts

Remaining distance



Excess distance



This message appears on the multi-information display when the next replacement interval for the engine oil and filter is near or has already been reached. When the time for maintenance is approaching, the message is displayed in amber when the starter switch is turned to the "ON" position. It remains on the display until "Enter" in the multi-information display switch is pressed once or the vehicle is started.
When this message comes on, have the vehicle inspected/serviced at your Isuzu Dealer.

NOTE

- Checking and setting the maintenance period can be done from the "Maintenance alert" on the multi-information display.

Refer to page
3-59 Maintenance Alert
10-8 Changing the Engine Oil and Oil Filter

Checking the Engine Oil Level

Refer to page
9-10 Checking the Engine Oil

Adding the Engine Oil

WARNING

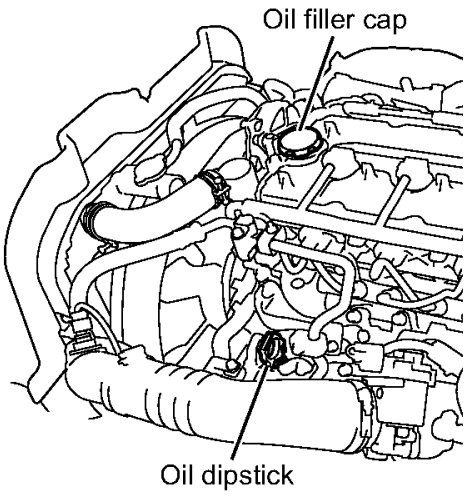
- **When adding oil, be careful not to spill any, but keep a workshop rag handy just in case there are any spills. If any oil should spill onto the engine, carefully wipe it away. If this precaution is not taken, the spilled oil could ignite and a fire could spread.**
- **Do not leave flammable items, such as rags or gloves, in the engine compartment. They could cause a fire.**
- **The engine oil is hot after driving, so when changing the oil after driving, be careful not to be scalded.**

ADVICE

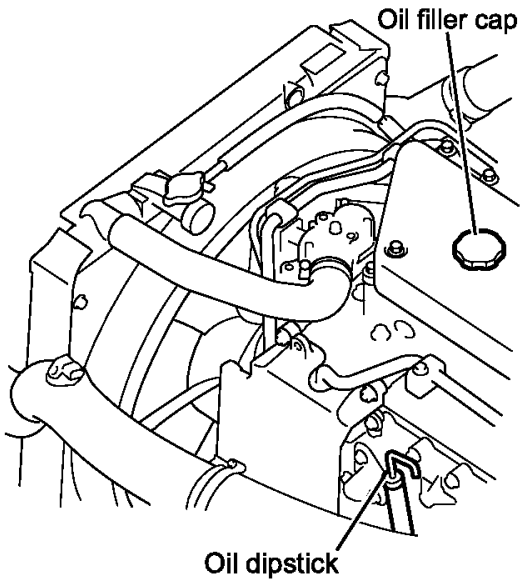
- Prevent dirt from entering the filler port when adding the oil. If foreign matter mixes with the oil, it could damage the engine.
- Adding oil above the "Inspection MAX" mark on the oil dipstick could result in faulty engine operation. Be sure to check the oil level by using the oil dipstick.
- Failure to use DPD compatible oil could result in engine or DPD breakdown, or in poor fuel efficiency. Be sure to use DPD compatible engine oil.

When the engine oil level is near the "MIN" mark on the oil dipstick, remove the oil filler cap and add the oil. Remove the oil dipstick at this time. Use only the specified engine oil.

4JZ1 engine model



4HK1 engine model



Changing the Engine Oil and Oil Filter

WARNING

- **Hot engine oil can cause severe skin burns. Allow the engine to cool before draining the engine oil.**

ADVICE

- Use the oil quantities indicated below only as guidelines when changing the engine oil. After changing the oil, make sure the oil is at the required level.
- Failure to use DPD compatible oil could result in engine or DPD breakdown, or in poor fuel efficiency. Be sure to use DPD compatible engine oil.

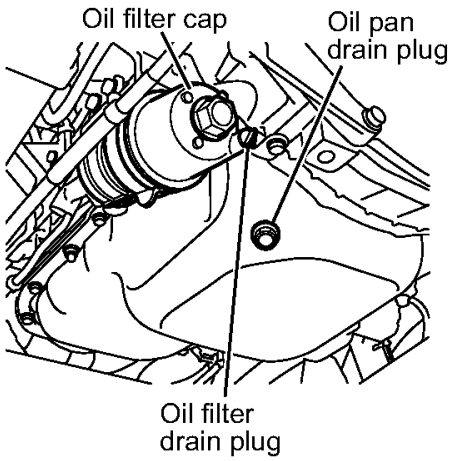
Quantity of engine oil to be changed

Engine model	Oil quantity [Reference value]	
	When changing oil only	When changing oil and filter
4JZ1	—	**8.3 liters** (2.19 US gal./**1.83 Imp gal.**)
4HK1	**9.5 liters** (2.51 US gal./**2.09 Imp gal.**)	**11.5 liters** (3.04 US gal./**2.53 Imp gal.**)

Refer to page
8-22 Recommended Fluids, Lubricants and Diesel Fuels

Changing the Engine Oil (4JZ1 Engine Model)

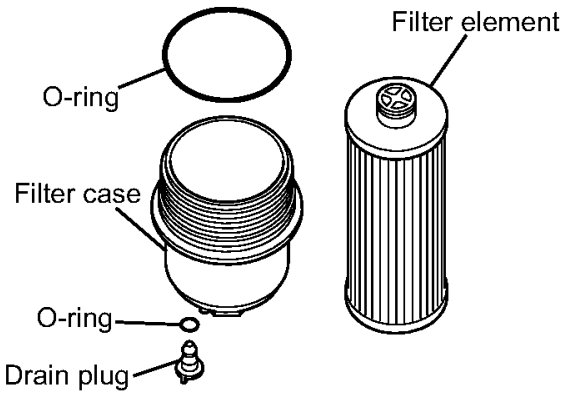
1. Clean around the oil filler cap so that foreign matter does not enter. Remove the oil filler cap.



2. Place a container for receiving the oil beneath the oil pan and the oil filter. Remove the oil pan drain plug and the oil filter drain plug to discharge the oil into the container.

ADVICE

- Drained oil must be disposed of in a method conforming to the regulatory requirements in your country.



3. Remove the oil filter cap by turning it counterclockwise using a socket wrench. Next, remove the filter element.
4. To ensure that the new oil filter makes good contact, wipe the filter mounting surface clean using a workshop rag.
5. Replace the three O-rings and filter element with new parts. Tighten the center bolt using the socket wrench.

Oil filter center bolt tightening torque
20 N·m (2.0 kgf·m/**15 lb·ft**)

ADVICE

- When installing the oil filter, be careful not to let the O-rings catch other parts. This may cause oil leakage.

6. Reinstall and tighten the oil pan drain plug and oil filter drain plug.

Drain plug tightening torque
83 N·m (8.5 kgf·m/**61 lb·ft**)

ADVICE

- The dirt on the plug must be wiped off before reinstalling it.
- Tighten the oil filter drain plug by hand. Tightening with pliers or any other tools could damage it.

7. Remove the oil dipstick and carefully fill the specified oil into the oil filler.
8. Install the oil dipstick and the oil filler cap. Start the engine 5 minutes after refilling it with the new oil and let it idle. While the engine is idling, check to see if any oil leaks around the oil filter or drain plug.

ADVICE

- Avoid revving up the engine, as it could damage the engine.

9. Shut off the engine. Then, after waiting at least 30 minutes, check the oil level using the oil dipstick.

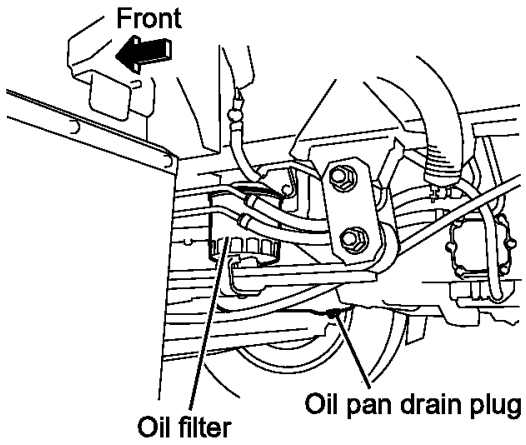
WARNING

- **Bringing flames or other heat sources near spilled engine oil could cause a fire. Make sure to wipe it all up.**
- **Do not leave flammable items, such as rags or gloves in the engine compartment beneath the cab. They could be the cause of a fire. Also, do not forget your tools.**

ADVICE

- Avoid revving up the engine, as it could damage the engine.
- Do not fill the engine with oil above the "MAX" mark on the oil dipstick. Overfilling could damage the engine.

Changing the Engine Oil (4HK1 Engine Model)



1. Clean around the oil filler cap so that foreign matter does not enter. Remove the oil filler cap.
2. Place a container for receiving the oil beneath the oil pan and the oil filter.
3. Remove the oil pan drain plug to discharge the oil into the container.

ADVICE

- Drained oil must be disposed of in a method conforming to the regulatory requirements in your country.

4. Use the special oil filter wrench to remove the oil filter.
5. Lightly coat the gasket of the new oil filter with clean engine oil.
6. Install the new oil filter. After the filter gasket comes in contact with the surface to which it will be attached, use the special oil filter wrench and tighten it by 1 1/4 (one and a quarter) turns.

ADVICE

- When installing the oil filter, make sure the gasket is not caught in the screw threads. This could cause oil leaks.

7. Make sure that the oil pan drain plug is securely tightened.

Drain plug tightening torque
83 N·m (8.5 kgf·m/**61 lb·ft**)

ADVICE

- The dirt on the plug must be wiped off before reinstalling it.

8. Remove the oil dipstick and carefully fill the specified oil into the oil filler.
9. Install the oil dipstick and the oil filler cap. Start the engine 5 minutes after refilling it with the new oil and let it idle. While the engine is idling, check to see if any oil leaks around the oil filter or drain plug.

ADVICE

- Avoid revving up the engine, as it could damage the engine.

10. Shut off the engine. Then, after waiting at least 30 minutes, check the oil level using the oil dipstick.

WARNING

- **Bringing flames or other heat sources near spilled engine oil could cause a fire. Make sure to wipe it all up.**
- **Do not leave flammable items, such as rags or gloves in the engine compartment beneath the cab. They could cause a fire. Also, do not forget your tools.**

ADVICE

- Avoid revving up the engine, as it could damage the engine.
- Do not fill the engine with oil above the "Replenishment MAX" mark on the oil dipstick. Overfilling could damage the engine.

Engine Coolant

The engine cooling system is a device for keeping the engine temperature at an appropriate level.
The engine coolant must be changed according to the Maintenance Schedule.

Refer to page
8-2 Maintenance Schedule

WARNING

- **Check, replenish or change the engine coolant only after the engine has sufficiently cooled down.**
- **Do not loosen or remove the cap of the radiator or reserve tank cap when the engine coolant is still hot. Hot vapor or boiling water may burst out and cause a burn. Cover the cap with a cloth, etc. and remove it gradually after the engine is fully cooled down and the temperature of the engine coolant becomes low.**



WARNING (Continued)

WARNING (Continued)

- **When removing the radiator cap or reserve tank cap, use a thick cloth to cover the cap and turn it slowly.**
- **Engine coolant is toxic and must not be ingested. If the engine coolant is mistakenly ingested, immediately vomit it and seek prompt medical attention.**
- **If the engine coolant gets in your eyes, rinse it off immediately with a large amount of water for 15 minutes or longer. Also, if still abnormality such as irritation is felt, seek medical attention.**
- **If the engine coolant gets on your skin, rinse it off using a soap with a large amount of water. Also, if abnormality is seen, seek medical attention.**
- **Engine coolant is flammable, and therefore, it must be kept away from flames and other heat sources. Engine coolant also could ignite if it comes in contact with a hot surface, such as the exhaust manifold. Exercise caution to prevent this from happening.**

ADVICE

- Replace the engine coolant periodically.
  If the engine coolant is not replaced periodically, rust is generated due to degradation of the engine coolant, which may cause a failure such as water leakage, clogging of the radiator or heater core, or damage to the urea SCR system.

NOTE

- Engine coolant is fluid which is made by mixing coolant and water at an appropriate concentration.

Preparing Engine Coolant

To prevent the engine damage due to freezing of the engine coolant and to protect the cooling system from corrosion, mix the Isuzu recommended coolant and water to be at 50% concentration.
For other than Isuzu genuine coolant (Arteco/BASF, etc.), it is recommended to use directly "50/50 Pre-diluted" product which is already diluted to 50% concentration.

Refer to page
8-22 Recommended Fluids, Lubricants and Diesel Fuels
10-17 Engine Coolant Quantity

⚠ WARNING

- **Coolant is toxic and must not be ingested. If the coolant is mistakenly ingested, immediately vomit it and seek prompt medical attention.**
- **If the coolant gets in your eyes, rinse it off immediately with a large amount of water for 15 minutes or longer. Also, if still abnormality such as irritation is felt, seek medical attention.**
- **If the coolant gets on your skin, rinse it off using a soap with a large amount of water. Also, if abnormality is seen, seek medical attention.**
- **For storage, close the cap securely and keep it in a place inaccessible to children.**
- **Coolant is flammable, and therefore, it must be kept away from flames and other heat sources. Coolant also could ignite if it comes in contact with a hot surface, such as the exhaust manifold. Exercise caution to prevent this from happening.**

⚠ CAUTION

- **Use only an Isuzu recommended coolant.**
- **Using any coolant other than that Isuzu recommended could cause damage to the engine, radiator or heater core. In particular, use of coolants containing borate salts or silicates may result in engine, urea selective catalytic reduction (SCR) system, or radiator corrosion, causing engine coolant leaks and other problems.**

ADVICE

- Isuzu does not guarantee the use of the engine or vehicle at the outside temperature of -30°C (-22°F) or below.
- If the engine or vehicle is used at the outside temperature of -30°C (-22°F) or below, the coolant concentration of 55% is recommended.
- To dilute the coolant, use distilled water or deionized water.
- Do not use the coolant at any coolant concentration other than that specified. If the coolant concentration is 60% or higher, overheating is likely to occur, while if it is 50% or lower, anti-corrosion function is not provided sufficiently.
- Using coolant at any coolant concentration other than that specified may reduce anti-freezing performance, and engine coolant may freeze.
- If the engine coolant decreases rapidly, go immediately to the nearest Isuzu Dealer for a check or repair.

Checking the Engine Coolant Level

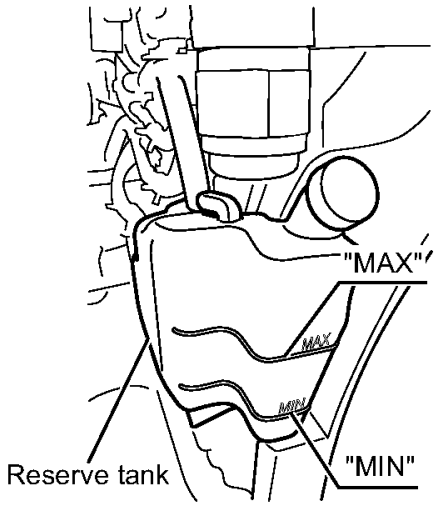
Refer to page
9-5 Checking the Engine Coolant

Adding the Engine Coolant

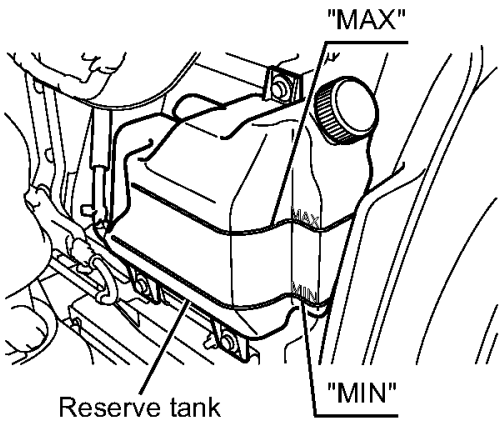
When the engine coolant level in the reserve tank is below the "MIN" line, open the tank cap and fill to near the "MAX" line with engine coolant. Tighten the cap securely after the engine coolant has been replenished.

Single cab model

NJR/NKR/NLR/NMR/NMS models

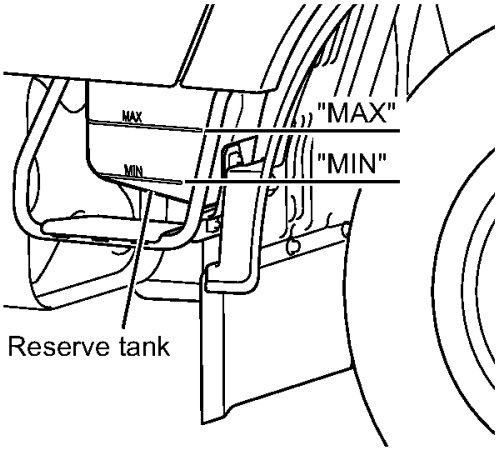


NNR/NPR/NPS/NQR/NQS models

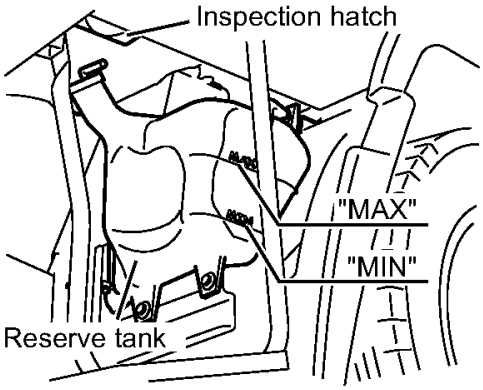


Crew cab model

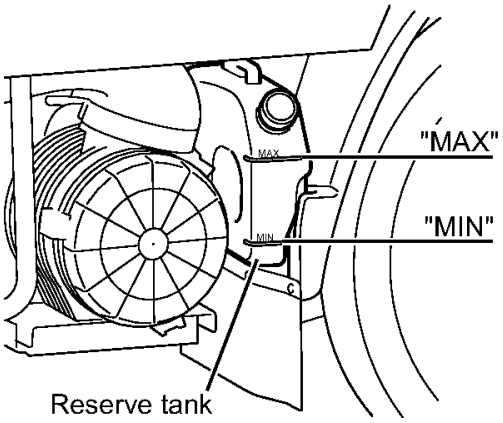
NJR model



NNR/NPR/NPS/NQR/NQS models



NMS model



ADVICE

- Do not overfill the reserve tank.
- Check the reserve tank to determine engine coolant level. In situations, however, where the level in the reserve tank rises or falls suddenly, open the radiator cap and check the level within the radiator itself.
- When the engine is still hot, take care to prevent engine coolant from contact with the exhaust manifold. Any such contact could result in exhaust manifold damage.
- If the level of engine coolant changes rapidly, have your vehicle inspected at your Isuzu Dealer.

Changing the Engine Coolant

When changing the engine coolant, also clean the radiator cap, radiator, intercooler and engine coolant passages.

Refer to page
10-29 Cleaning the Radiator, Intercooler and Condenser

CAUTION

- **Do not start the engine when engine coolant has been drained from the radiator. This could cause the engine to seize up.**

ADVICE

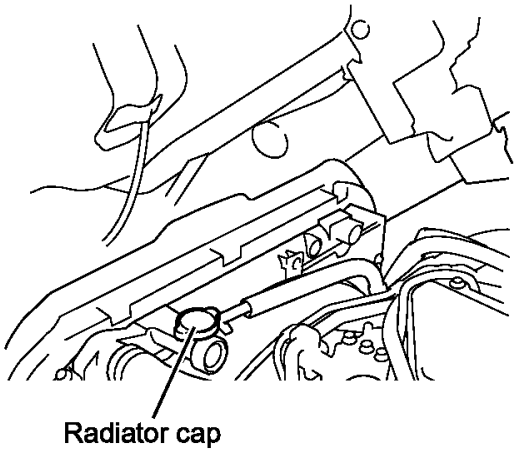
- Tighten the radiator drain plug by hand. Tightening with pliers or some other tool could damage it.
- Drained engine coolant must be disposed of in a method conforming to the regulatory requirements in your country.

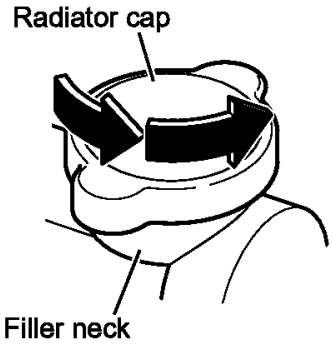
Engine Coolant Quantity

The quantity of engine coolant is indicated below for your use as a guideline when changing the engine coolant. After changing the engine coolant, check that the engine coolant is up to the specified level.

Engine model	Vehicle model	Engine coolant quantity [Reference value]
4JZ1	NJR (single cab)/ NKR/NLR/NMR	**12.4 liters** (3.28 US gal./**2.73 Imp gal.**)
	NJR (crew cab)	**12.8 liters** (3.38 US gal./**2.82 Imp gal.**)
	NMS (single cab)	**12.7 liters** (3.36 US gal./**2.79 Imp gal.**)
	NMS (crew cab)	**13.0 liters** (3.43 US gal./**2.86 Imp gal.**)
	NNR/NPR/NPS/NQS	**13.4 liters** (3.54 US gal./**2.95 Imp gal.**)
4HK1	—	**18.7 liters** (4.94 US gal./**4.11 Imp gal.**)

Draining the Cooling System





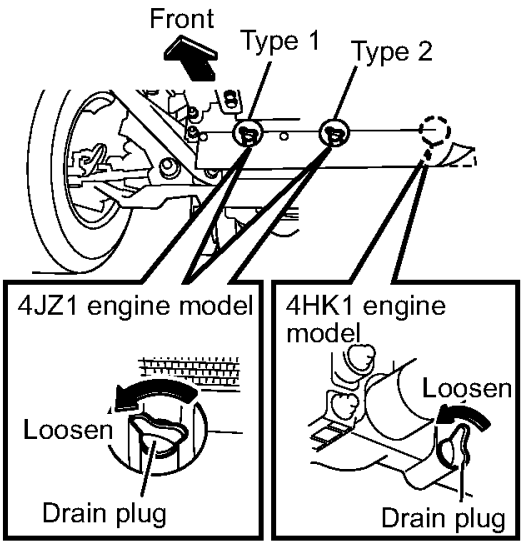
1. Confirm that the engine has fully cooled down before starting work.
2. Remove the radiator cap.

⚠ CAUTION

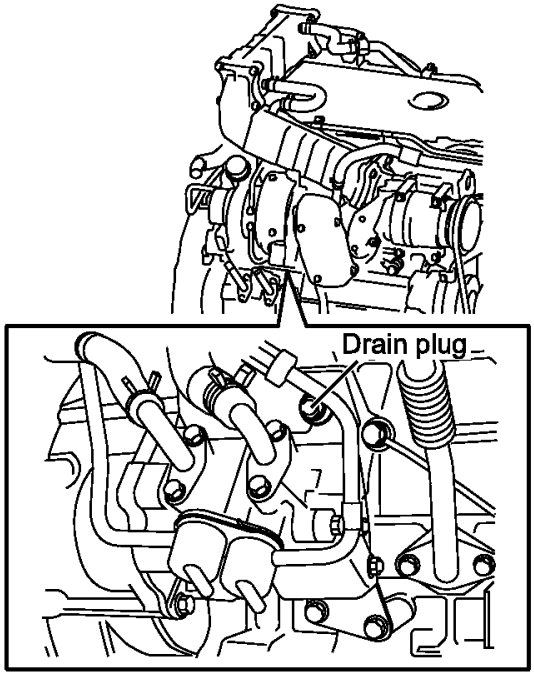
- **The radiator cap is a double-action type that must be opened and closed in two turning motions. When removing the cap, take care not to damage the cap or filler.**
  - **Turn the cap slowly to the left until it reaches a stop. Do not press down while turning the cap.**
  - **Wait until any remaining pressure (indicated by a hissing sound) is relieved, then press down on the cap and continue turning it to the left.**

3. Open the drain plugs on the radiator and the engine to let the engine coolant run out.
   Drain the engine coolant from the reserve tank as well.

Radiator drain plug



Engine drain plug (4HK1 engine model)



4. Tighten the drain plugs on the radiator and the engine.
   For the 4HK1 engine, replace the gasket of the engine drain plug with a new one before installing it.

Engine	Engine drain plug tightening torque
4HK1	**22.1 N·m** (2.3 kgf·m/**17 lb·ft**)

Cleaning the Radiator Core and Intercooler Core

Cooling efficiency is compromised when there is dirt or dust plugging air passages in the radiator core and intercooler core. It also could cause corrosion of the core. Periodically wash the core with water.

Refer to page
10-29 Cleaning the Radiator, Intercooler and Condenser

ADVICE

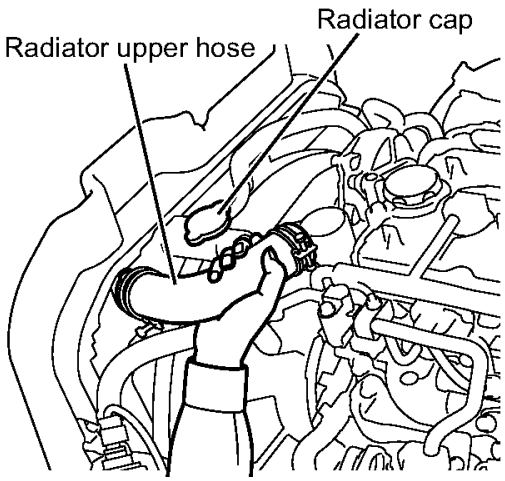
- When cleaning the radiator core and intercooler core, do not crush or damage the fins.

Cleaning the Engine Coolant Passages

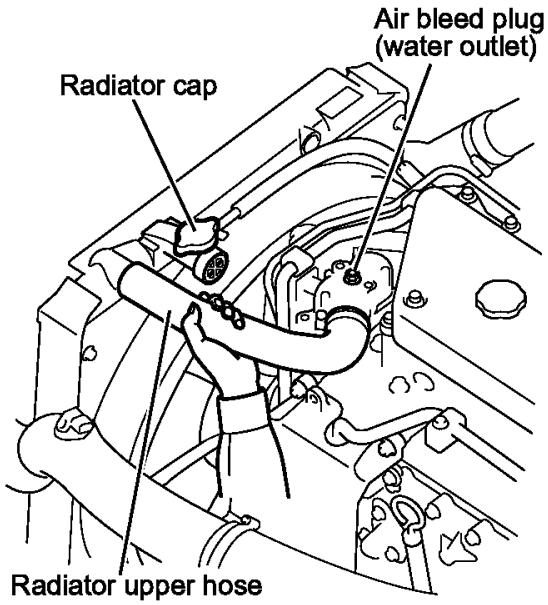
1. Remove the air bleed plug from the water outlet above the engine cover (if equipped). After that, refill the radiator with tap water up to the top of the opening.

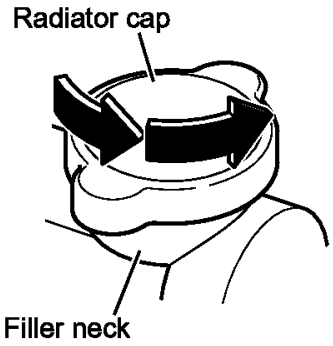
Engine	Water outlet air bleed plug tightening torque
4HK1	**18.6 - 28.4 N·m** (1.9 - 2.9 kgf·m/**14 - 21 lb·ft**)

4JZ1 engine model



4HK1 engine model

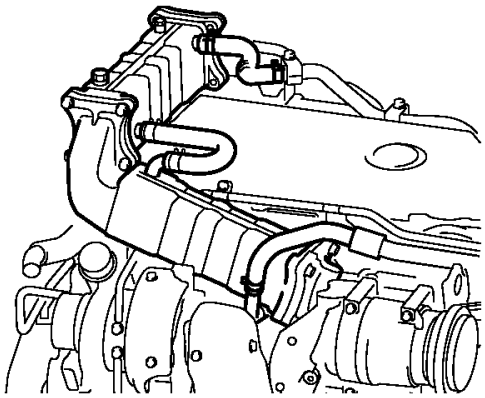




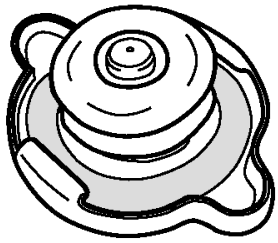
⚠ CAUTION

- **The radiator cap is a double-action type that must be opened and closed in two turning motions. When removing the cap, take care not to damage the cap or filler.**
  - **Turn the cap slowly to the left until it reaches a stop. Do not press down while turning the cap.**
  - **Wait until any remaining pressure (indicated by a hissing sound) is relieved, then press down on the cap and continue turning it to the left.**

2. Squeeze the radiator upper hose two or three times by hand. If air is discharged from the hose and the level of the water goes down when squeezing it, add tap water to the top of the radiator filler opening from the radiator cap section. Repeat until the level of the water no longer goes down.



3. Disconnect the hose from the intake manifold side of the EGR cooler (if equipped) above the cylinder head to bleed the air. After air bleeding completes, connect the hose. If the water level has decreased, pour tap water from the radiator cap.

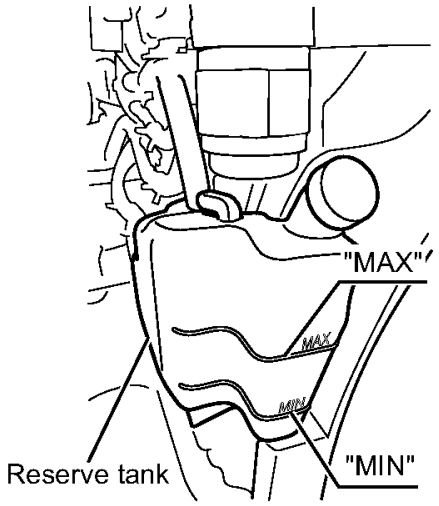


4. Check and clean the radiator cap. Replace the cap if there is anything abnormal with it.
5. Securely fasten the radiator cap.

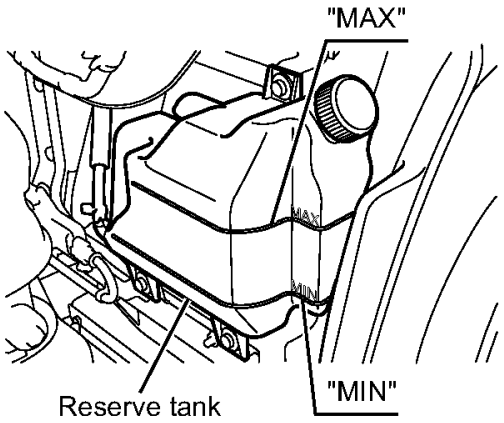
6. Refill the reserve tank with tap water to the "MAX" line.

Single cab model

NJR/NKR/NLR/NMR/NMS models

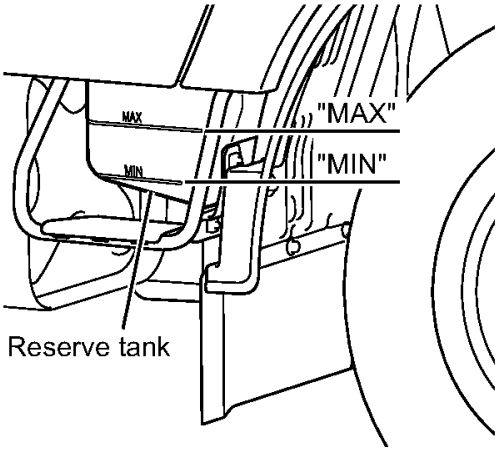


NNR/NPR/NPS/NQR/NQS models

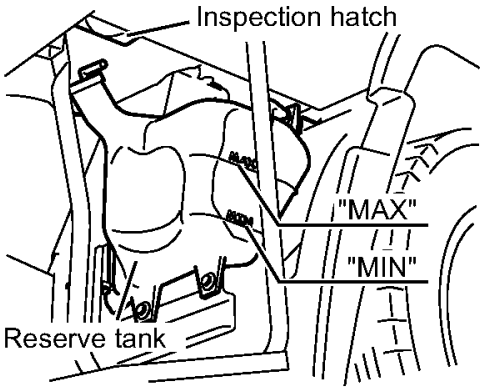


Crew cab model

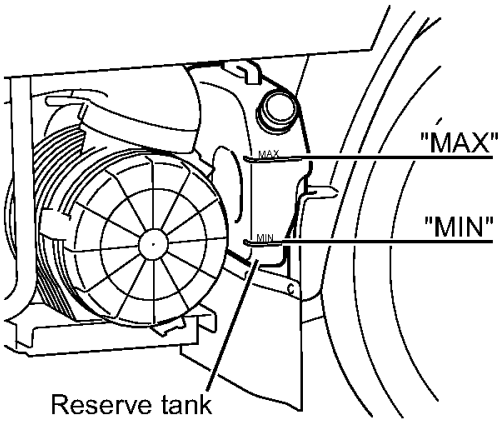
NJR model



NNR/NPR/NPS/NQR/NQS models



NMS model



7. Close the cap of the reserve tank.
8. Start the engine and let it idle for 20 minutes. Stop the engine, wait until it cools down, and then drain out the water.

Refer to page
10-18 Draining the Cooling System

Filling the Cooling System

⚠ CAUTION

- **A failure to correctly fill the engine cooling system in changing or topping up engine coolant may sometimes cause the engine coolant to overflow from the filler neck even before the engine and radiator are completely full.**
- **If the engine runs under this condition, the shortage of engine coolant may possibly result in engine overheating. To avoid such trouble, the following precautions should be taken when refilling with the engine coolant.**

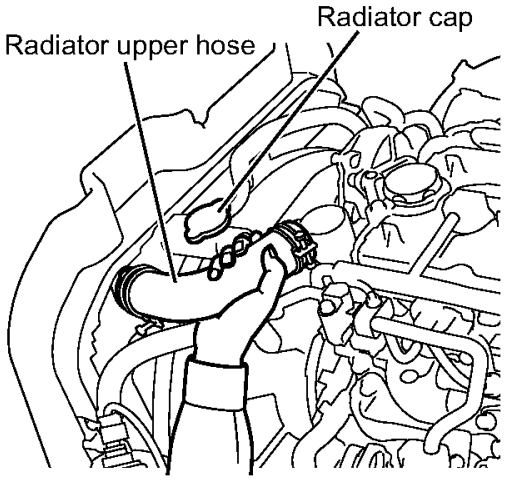
1. Confirm that the engine has fully cooled down before starting work.
2. Tighten the drain plugs on the radiator and the engine.
   For the 4HK1 engine, replace the gasket of the engine drain plug with a new one before installing it.

Engine	Engine drain plug tightening torque
4HK1	**22.1 N·m** (2.3 kgf·m/**17 lb·ft**)

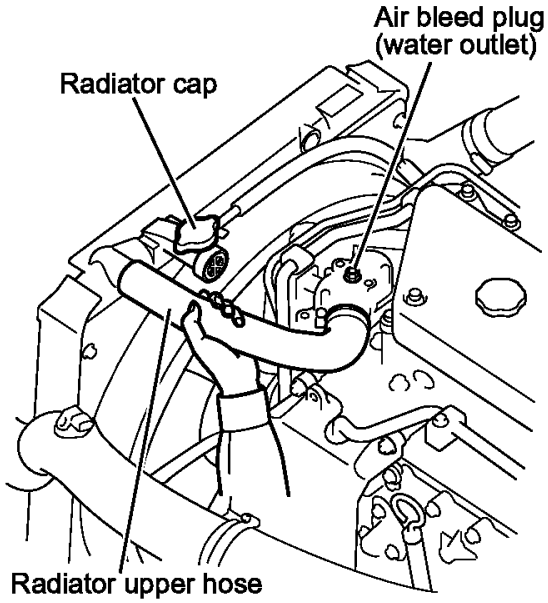
3. Remove the air bleed plug from the water outlet above the engine cover (if equipped). After that, pour engine coolant in the specified concentration. After filling with engine coolant, replace the gaskets of both air bleed plugs with new ones and tighten the air bleed plugs.

Engine	Water outlet air bleed plug tightening torque
4HK1	**18.6 - 28.4 N·m** (1.9 - 2.9 kgf·m/**14 - 21 lb·ft**)

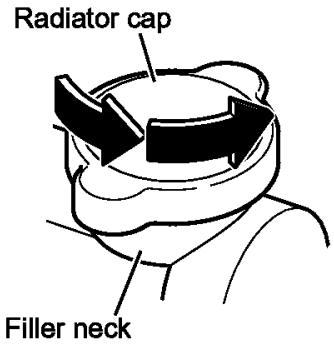
4JZ1 engine model



4HK1 engine model



4. Squeeze the radiator upper hose two or three times.
   If this action results in air being discharged from the hose and the level of engine coolant goes down, add engine coolant up to the top of the radiator filler opening from the radiator cap section.
   Repeat until the level of the engine coolant no longer decreases.



⚠ CAUTION

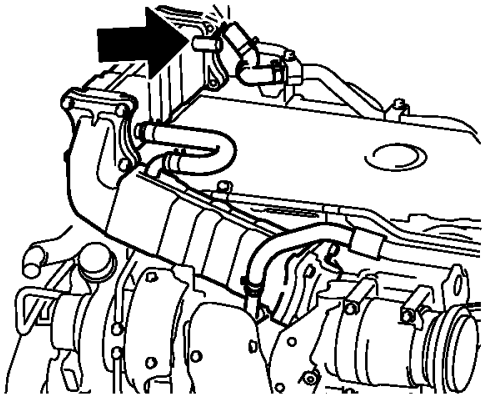
- **The radiator cap is a double-action type that is opened and closed in two turning motions. When removing the cap, take care not to damage the cap or filler.**
  - **Turn the cap slowly to the left until it reaches a stop. Do not press down while turning the cap.**
  - **Wait until any remaining pressure (indicated by a hissing sound) is relieved, then press down on the cap and continue turning it to the left.**
- **Refill with engine coolant slowly to avoid air being mixed in.**

5. If the vehicle is not equipped with an air bleed plug and exhaust gas recirculation (EGR) cooler, close the radiator cap.
For 4HK1 engines with an EGR cooler, if there are no air bleed plugs, disconnect the hose from the intake manifold side of the EGR cooler above the cylinder head to bleed the air. After the bleeding of air is complete, reconnect the hose. If the engine coolant level has decreased, refill with engine coolant up to the radiator inlet from the radiator cap section, and then close the radiator cap.
For 4HK1 engines with an EGR cooler, if there are air bleed plugs, close the radiator cap before performing the following operation.
Remove both air bleed plugs (A and B) from the EGR cooler above the cylinder head and refill with engine coolant from the air bleed plug hole. Air bleed plug (B) is used for bleeding air.
After filling with engine coolant, replace the gasket of air bleed plug with a new one and tighten the air bleed plug.

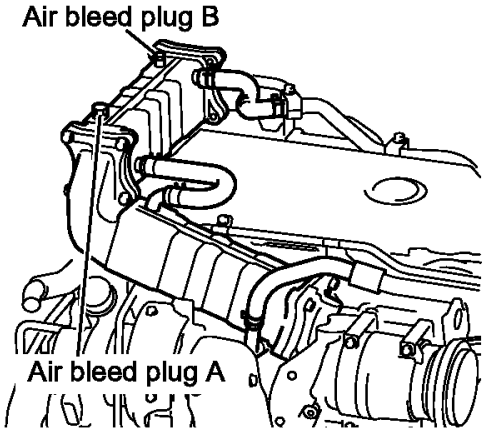
Engine	Water outlet air bleed plug tightening torque
4HK1	**18.6 - 28.4 N·m** (1.9 - 2.9 kgf·m/**14 - 21 lb·ft**)

EGR cooler air bleed plugs tightening torque	
Air bleed plug A	**34.2 - 48.2 N·m** (3.5 - 4.9 kgf·m/**25 - 35 lb·ft**)
Air bleed plug B	**20.6 - 31.4 N·m** (2.1 - 3.2 kgf·m/**15 - 23 lb·ft**)

EGR cooler without air bleed plugs



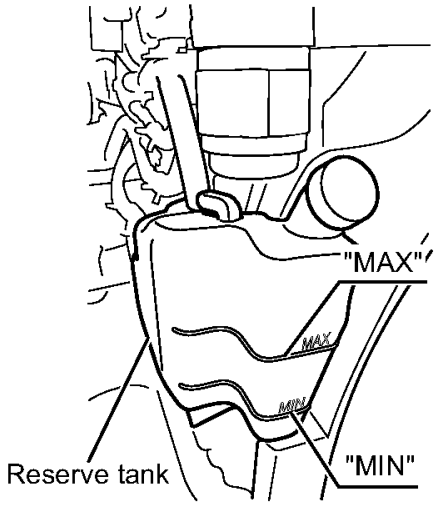
EGR cooler with air bleed plugs



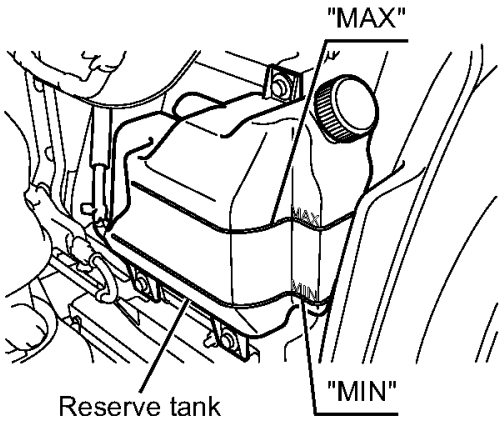
6. Fill the reserve tank with engine coolant to the "MAX" line. Close the cap of the reserve tank.

Single cab model

NJR/NKR/NLR/NMR/NMS models

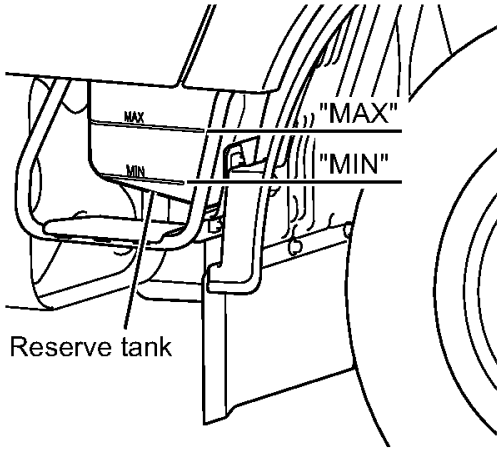


NNR/NPR/NPS/NQR/NQS models

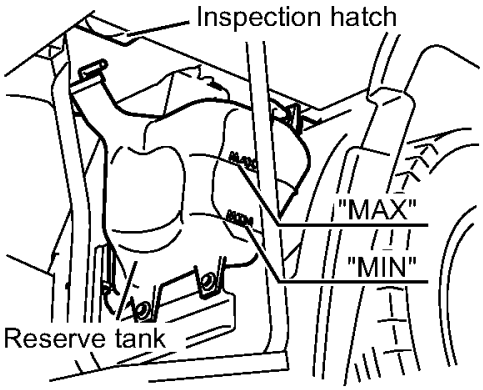


Crew cab model

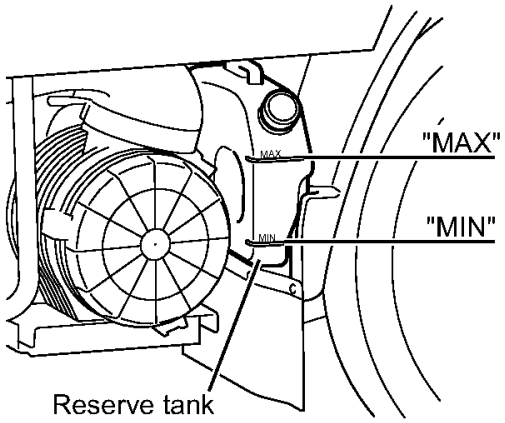
NJR model



NNR/NPR/NPS/NQR/NQS models

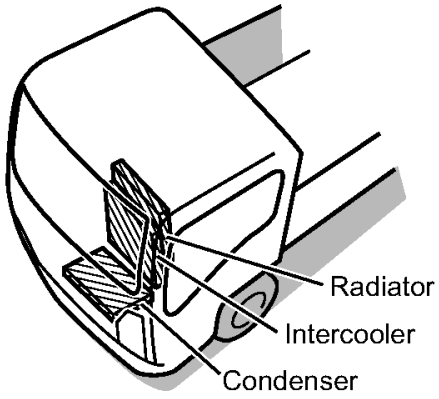


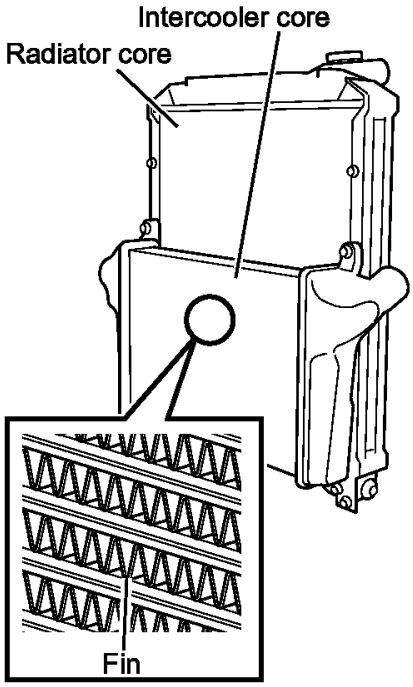
NMS model



7. Start the engine, let it idle for 5 minutes or more and then stop the engine.
8. After checking that the engine has sufficiently cooled down, remove the radiator cap. If the engine coolant level has decreased, replenish with engine coolant up to the radiator filler opening. If the engine coolant level has abnormally decreased, check for leaks from the radiator, the engine coolant passages, or the reserve tank hose.
9. After firmly closing the radiator cap, warm up the engine until the needle of the coolant temperature gauge reaches the center and the thermostat opens.
   To save time for warming up the engine, turn the warm-up switch on (models with the warm-up switch) or increase the engine speed to approximately 2,000 r/min. After the needle of the coolant temperature gauge reaches the center, maintain the engine speed at approximately 2,000 r/min for 5 more minutes.
   If the vehicle is equipped with an air conditioner, turn the A/C switch off to facilitate warming.
   If the vehicle is equipped with a heater, turn off the fan to facilitate warming.
   Check if the thermostat is open or not by checking whether the upper hose and lower hose are hot.
   If the vehicle is equipped with a heater, turn the temperature control to the maximum setting and make sure that hot air comes out.
10. Let the engine idle for 5 minutes and then stop the engine.
11. After checking that the engine has sufficiently cooled down, remove the radiator cap and check the engine coolant level. If the engine coolant level has decreased, replenish with engine coolant up to the radiator filler opening from the radiator cap section. If the engine coolant level has abnormally decreased, check for engine coolant leaks.
12. Repeat steps 9 through 11 until the engine coolant level in the radiator filler opening stops declining.
13. Firmly close the radiator cap.
14. Replenish the engine coolant in the reserve tank up to the "MAX" line, and then close the reserve tank cap.
15. Check the engine coolant level of the reserve tank the next morning. If the engine coolant level has decreased, refill with engine coolant to the "MAX" line.

Cleaning the Radiator, Intercooler and Condenser





Cooling efficiency is compromised when there is dirt or dust plugging air passages in the radiator core and intercooler core. This can also cause corrosion of these cores.
In addition, if the condenser fins mounted around the radiator are clogged with mud or dust, the performance of the air conditioner will deteriorate.
When replacing the engine coolant, wash the radiator core, intercooler core and condenser with tap water. After washing, run the air conditioner to remove water from the fan and motor. Replace the engine coolant according to the Maintenance Schedule.

Refer to page
8-2 Maintenance Schedule

⚠ WARNING

- **Make sure to turn the engine off and remove the key from the starter switch before cleaning cores.**
- **The engine, exhaust pipe and radiator will be hot immediately after the vehicle is driven. Be careful around these parts to prevent burns. Clean the engine when it is cold.**

⚠ CAUTION

- Do not clean the radiator, intercooler, condenser core and their surrounding areas using water that is supplied under high pressure. Doing so may cause damage.
- When cleaning the radiator core, intercooler core and condenser core, do not crush or damage the fins.
- The fins are very fragile so be careful not to bend them out of shape. If they become deformed, their cooling efficiency will be impaired.
- Before cleaning, take steps to ensure that no water will splash onto the surrounding electrical components and wires.
- If stubborn dirt still remains even after the radiator core, intercooler core and condenser core have been cleaned, have the vehicle inspected and serviced at your Isuzu Dealer.

Fan Belt

⚠ CAUTION

- A V-ribbed belt is used for the fan belt. This type of belt requires the tension to be adjusted more accurately than is required with the conventional V belt. Inappropriate tension could cause the belt to make noise or break. When the fan belt is damaged, electricity is not properly generated or becomes a cause of engine overheating. You must check the tension of the fan belt carefully.
- Use Isuzu genuine parts when changing the fan belt.

[Follow this to properly adjust belt tension]

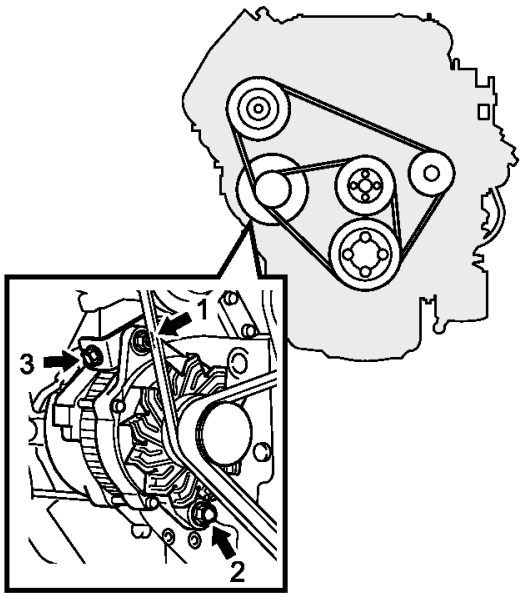
- Adjust the belt using the following method after installing either a new or used belt.
  - Inspect the belt before starting the engine or 30 minutes after turning off the engine to cool down.
  - Align the belt and pulley grooves and adjust the belt tension using the indicated method.
  - Start the engine, and let it idle for about 1 minute to equalize the tension of the belt at all spans between the pulleys.
  - Stop the engine, and then check the belt tension. If the tension is inappropriate, readjust it to the specified standard value.
  - Use the new belt tension specification only after replacing the belt with a new one.

Checking the Fan Belt

Refer to page
9-12 Checking the Fan Belt

Adjustment and Replacement

4HK1 Engine Model with 50A/60A Generator



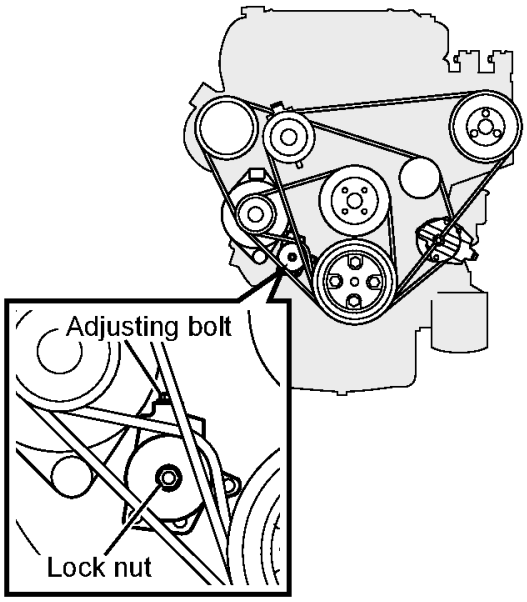
Adjustment

1. Loosen the generator's upper and lower nuts and bolts (1, 2).
2. Turn the adjusting bolt (3) until the belt tension falls within the standard value range.
3. After adjustment, firmly tighten all the loosened nuts and bolts.

Changing the belt

1. Remove the air conditioning compressor belt.
2. Loosen the generator's upper and lower nuts and bolts (1, 2), and then detach the belt from the pulleys.
3. Take out the belt through the opening in the fan.
4. Insert the new belt through the opening in the fan and install the belt while aligning its grooves with those in the generator pulley and crankshaft pulley.
5. Turn the adjusting bolt (3) until the belt tension falls within the standard value range.
6. After adjustment, firmly tighten all the loosened nuts and bolts.
7. Install the air conditioning compressor belt.

4HK1 Engine Model with 80A/90A Generator



Adjustment

1. Loosen the tensioner's lock nut.
2. Adjust the belt tension with the adjusting bolt.
3. When the tension has been adjusted, securely fasten the tensioner's lock nut.

Changing the belt

1. Loosen the tensioner's lock nut.
2. Loosen the adjusting bolt and remove the belt from the pulleys.
3. Take out the belt through the opening in the fan.
4. Insert the new belt through the opening in the fan, and install the belt while aligning its grooves with those in the pulleys.
5. Turn the adjusting bolt until the belt tension is within the standard value range.
6. When the tension has been adjusted, securely fasten the tensioner's lock nut.

Air Cleaner

Use of clogged air cleaner element not only causes a deterioration in the engine output but also increased fuel consumption. The air cleaner element should be serviced in the following manner.
Replace the air cleaner element in accordance with the Maintenance Schedule.

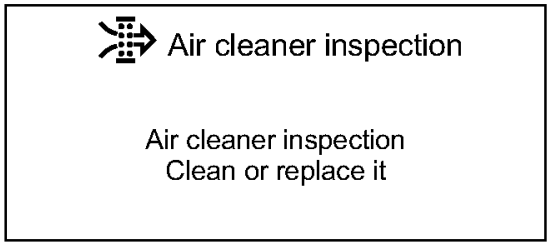
ADVICE

- Be sure to use an Isuzu genuine air cleaner element.

Refer to page
8-2 Maintenance Schedule

Air Cleaner Warnings/Indicators

Air Cleaner Warning Light



This message appears on the multi-information display when the next air cleaner element service interval is near.
Clean or replace the air cleaner element.

Refer to page
10-34 Replacing the Air Cleaner Element
10-37 Cleaning the Air Cleaner Element

ADVICE

- Securely fasten tarpaulins with rubber tie-downs, or similar means, so that they do not block the air inlet opening. If the air inlet opening is blocked, then air intake is not possible, or in rainy weather a large amount of rainwater can get in due to the tarpaulins. This may result in "Air cleaner inspection" being displayed on the multi-information display.

Refer to page
2-64 Make Sure There is No Flammable Material between the Cab and Cargo Bed

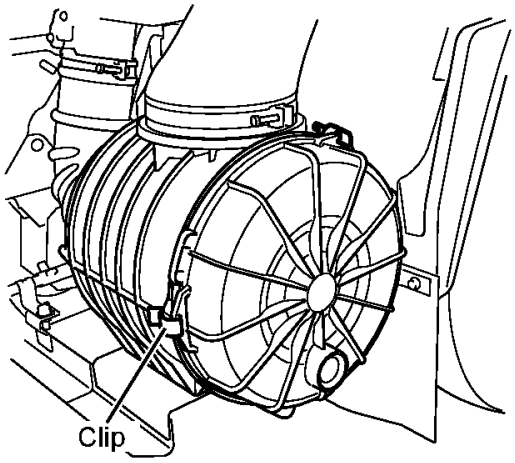
Checking the Air Cleaner

Remove the air cleaner element and check to see if it is blocked by dirt.

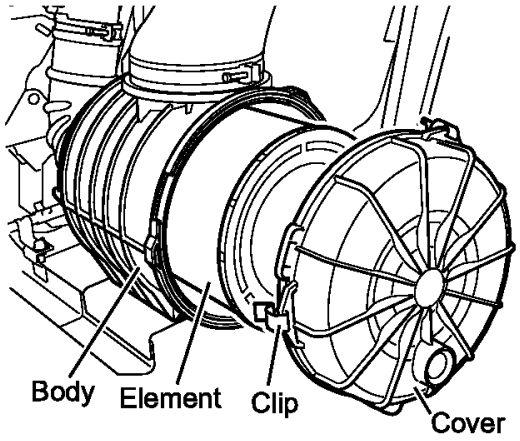
Refer to page
10-34 Replacing the Air Cleaner Element
10-37 Cleaning the Air Cleaner Element

Replacing the Air Cleaner Element

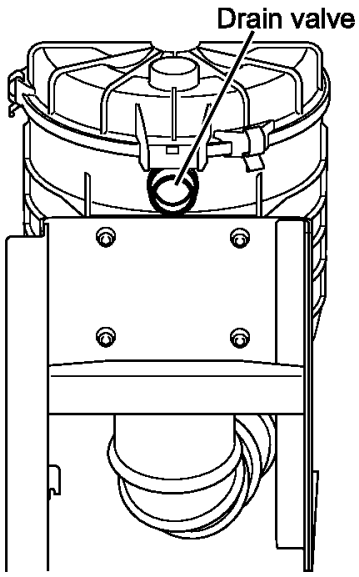
Type 1



1. Unfasten the 3 clips and remove the air cleaner cover.

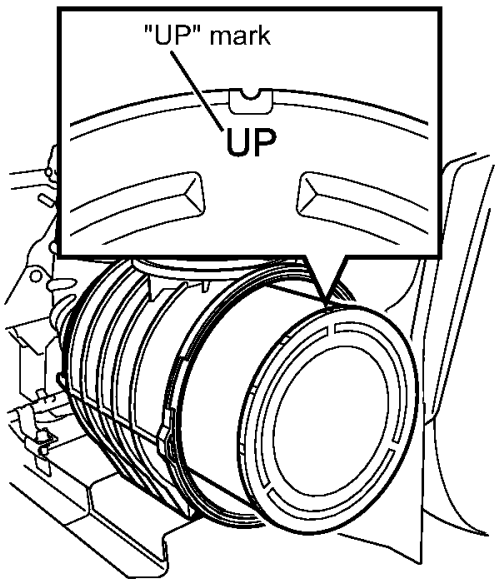


2. Remove the air cleaner element by pulling it out toward you.

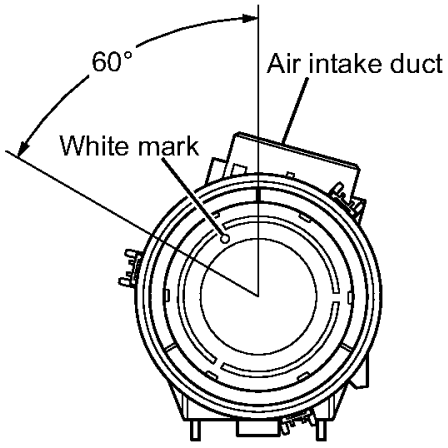


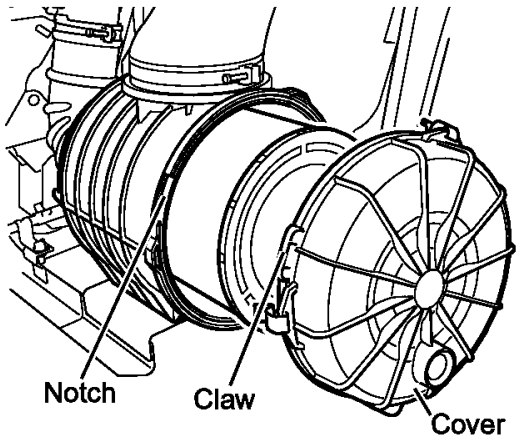
3. Remove the dirt that has accumulated on the air cleaner cover and the air cleaner body.
4. Clean the drain valve at the bottom of the air cleaner.

4HK1 engine model



4JZ1 engine model





5. Push the element back into position in the air cleaner body.

ADVICE

[Element installation direction requirements for 4HK1 engine model]

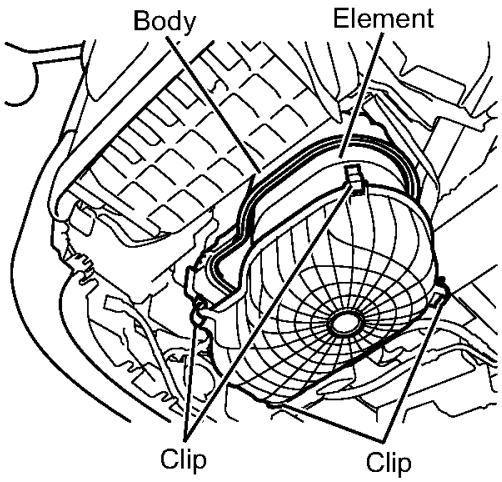
- Install the element with the "UP" mark facing upward.

[Element installation direction requirements for 4JZ1 engine model]

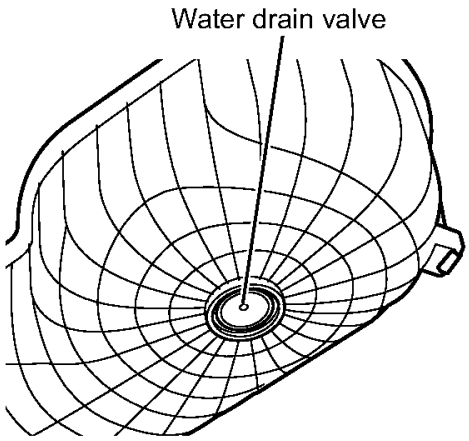
- Adjust the element angle so that the white mark is within the indicated range when viewing the element from the front.

6. Install the air cleaner cover.
   Line up the notch on the left side of the body with the claw on the cover.
   Secure the cover in position by fastening the 3 clips.

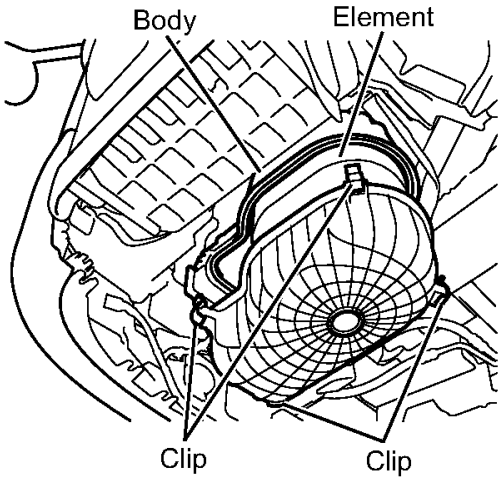
Type 2



1. Unfasten the 4 clips and remove the air cleaner cover.
2. Remove the element from the body.
3. Clean off the cover.



4. Clean the inside and outside of the water drain plug located on the bottom of the cover. Also, check to make sure that the outer periphery of the water drain valve adheres tightly to the cover. Replace the water drain valve is deformed or any gaps have formed.
5. Install the element.
   Check to make sure that the fits all the way inside and is not slanted.



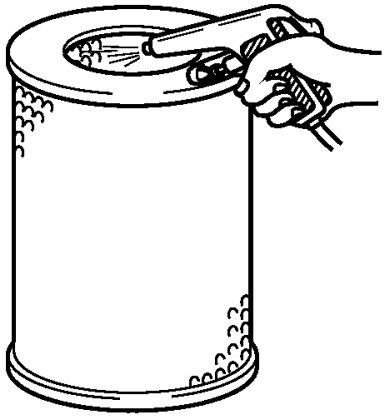
6. Install the cover.
   Securely attach the 4 clips.

ADVICE

- When the cover is difficult to close, check to see that the element is installed correctly.

Cleaning the Air Cleaner Element

Type 1



Choose one of the following cleaning methods depending on how the element has become dirty.

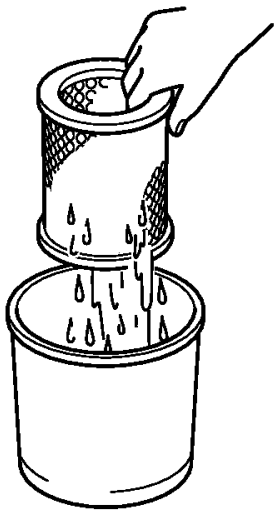
1. When dry dust has adhered to the element

   1) Blow compressed air at a pressure of up to **690 kPa** (7.0 kgf/cm²/**100 psi**) against the inside of the element while turning it to remove the dust.

   2) Check to see if the element has been damaged or become thin in places.

ADVICE

- Do not apply compressed air to the outer face of the element as it causes the dust to lodge in the inner face.



2. When the element has become blackened by oily smoke or soot

   1) Soak the element in a mixture of water and neutral detergent for about 30 minutes.

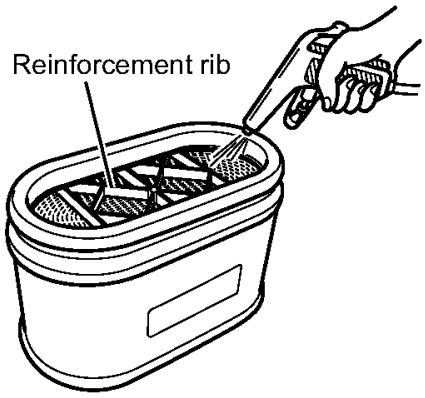
   2) Remove the element from the detergent solution and rinse well using tap water.

   3) After cleaning, allow the element to dry naturally in a well-ventilated place.

ADVICE

- Do not hit or strike the element, as this might damage it.
- Air drying will take 2 or 3 days. We recommend using a spare element.

Type 2



Apply compressed air (**690 kPa** (7.0 kgf/cm²/ **100 psi**) or less) to the side of the element with the reinforcement ribs to remove any dust. Replace the element when it is significantly dirty.

ADVICE

- Do not clean the air element with water even if it is fouled with oil or soot.
- To prevent deformation or breakage, do not touch an element that has become wet. Perform any inspections or cleaning after the element has dried.

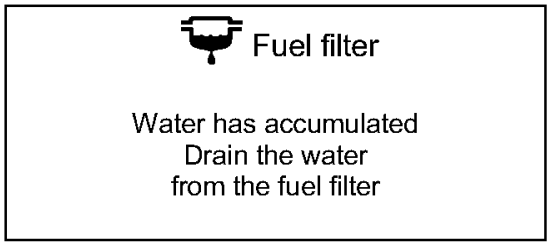
Fuel Filter

Change the fuel filter (both the chassis-side and engine-side fuel filters for vehicles with a pre-fuel filter) in accordance with the Maintenance Schedule.
Drain the water when the water separator (fuel filter) warning light comes on. (For vehicles with a pre fuel-filter, drain the water from the chassis-side and engine-side fuel filters.)

Refer to page
8-2 Maintenance Schedule

Fuel Filter Warnings/Indicators

Water Separator (Fuel Filter) Warning Light



When a certain amount of water has collected in the water separator, this message is displayed on the multi-information display. When this happens, drain the water and make sure that the warning message has gone out.

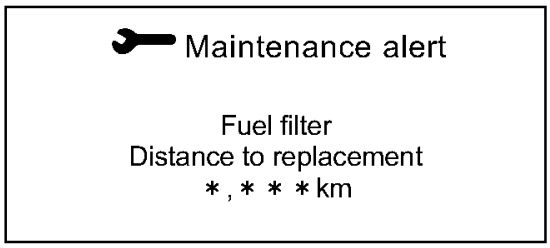
⚠ CAUTION

- **Water remaining that is not discharged from the water separator could freeze and damage the vehicle.**
- **If the warning light comes on while the engine is in operation, immediately drain the water from the water separator (fuel filter). Continuing to drive with the light remaining on could damage the fuel injection system. If this happens, have the vehicle checked and serviced by the nearest Isuzu Dealer.**

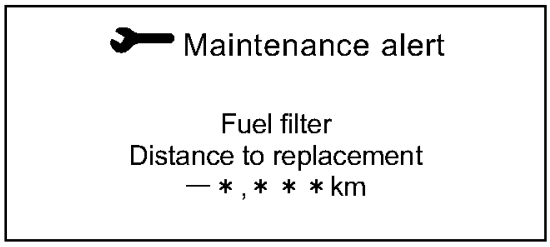
Refer to page
10-40 Draining Water from the Fuel Filter

Fuel Filter Maintenance Alerts

Remaining distance



Excess distance



This message appears on the multi-information display when the next replacement interval for the fuel filter is near, and the distance remaining until the replacement timing or the distance exceeded after the replacement timing is displayed. When the time for maintenance is approaching, the message is displayed in amber when the starter switch is turned to the "ON" position. It remains on the display until "Enter" in the multi-information display switch is pressed once or the vehicle is started.
When this message comes on, have the vehicle inspected/serviced at your Isuzu Dealer.

NOTE

- Checking and setting the maintenance period can be done from the "Maintenance alert" on the multi-information display.

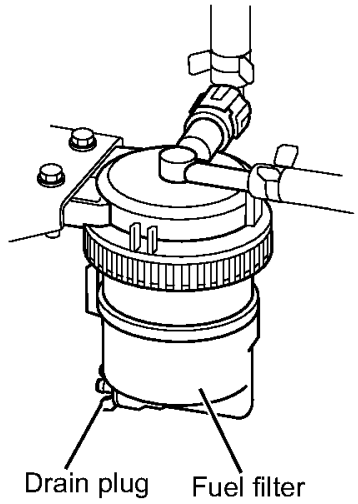
Refer to page
3-59 Maintenance Alert
10-43 Changing the Fuel Filter

Draining Water from the Fuel Filter

CAUTION

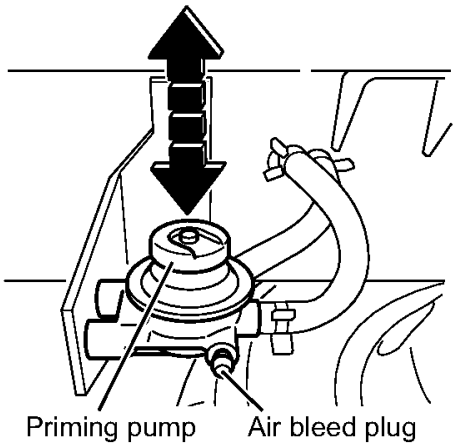
- **Clean off any fuel that has adhered to the vehicle body.**
- **Starting the engine immediately after draining the water from the fuel filter requires a little more time than usual. If the engine does not start in 10 seconds, wait for a while and try again.**
- **Fuel will be mixed in the drained water. Dispose of it in a method conforming to the regulatory requirements in your country.**
- **If the water separator (fuel filter) requires frequent draining, have the fuel tank drained at your Isuzu Dealer. It would be better not to use the water separator (fuel filter), since it may possibly exert a bad effect on the fuel system.**

4JZ1 Engine Model



Type1

1. Connect one end of a plastic hose to the drain plug at the bottom of the fuel filter and place the other end of the hose inside a container to receive the drained fluid.



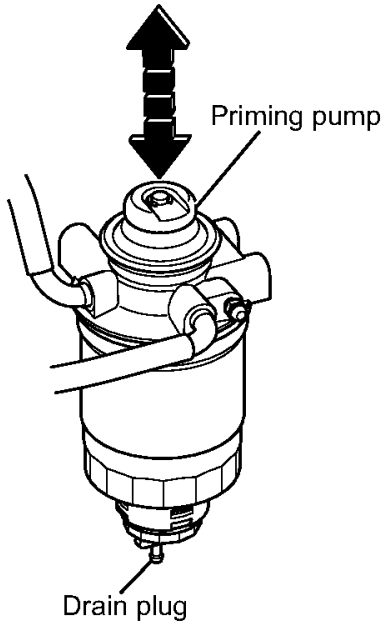
2. Loosen the drain plug and move the priming pump up and down by hand between 10 and 20 times.

NOTE

- If almost no fuel is drained from the drain plug, fuel can be drained by removing the drain plug.

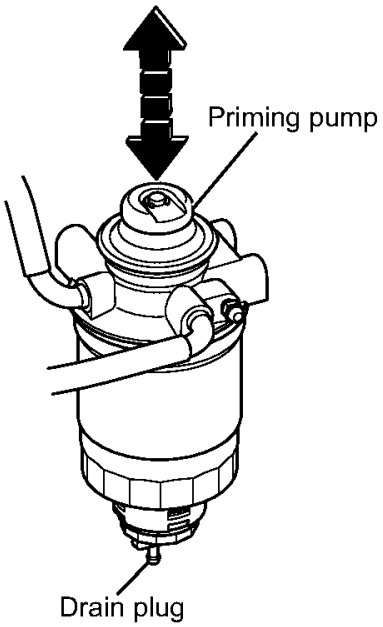
3. Fully tighten the drain plug and move the priming pump several times.
4. Test run the engine and check that there are no fuel leaks from the drain plugs of the fuel filter. Also check that the water separator (fuel filter) warning light stays off.

Type2



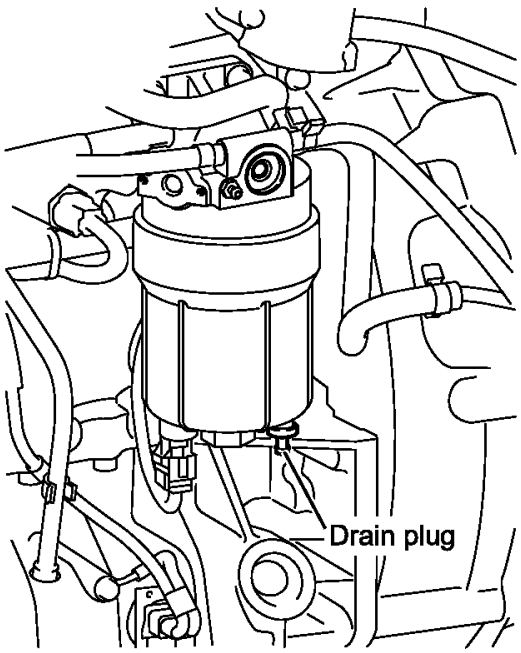
1. Connect one end of a plastic hose to the drain plug at the bottom of the fuel filter and place the other end of the hose inside a container to receive the drained fluid.
2. Loosen the drain plug at the bottom of the fuel filter, and then move the priming pump up and down by hand 10 to 20 times.
3. Tighten the drain plug securely, and then operate the priming pump once again several times.
4. Confirm that no fuel leaks from the drain plug and also that the warning light goes out after the engine starts.

4HK1 Engine Model



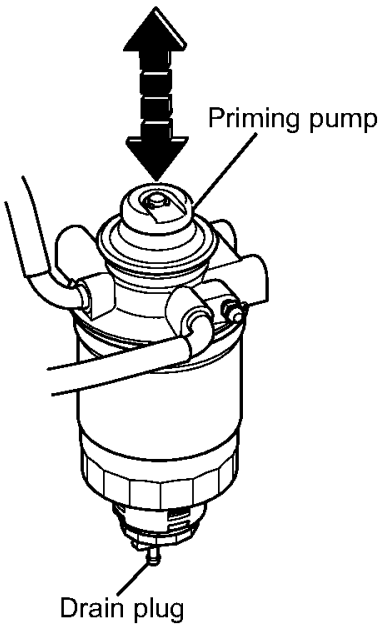
Chassis-side fuel filter

1. Connect one end of a plastic hose to the drain plug at the bottom of the fuel filter and place the other end of the hose inside a container to receive the drained fluid.
2. Loosen the drain plug at the bottom of the fuel filter, and then move the priming pump up and down by hand 10 to 20 times.
3. Tighten the drain plug securely, and then operate the priming pump once again several times.
4. Confirm that no fuel leaks from the drain plug and also that the warning light goes out after the engine starts.
5. If the water separator (fuel filter) warning light comes on, drain water from the engine-side fuel filter as well.



Engine-side fuel filter

1. Connect one end of a plastic hose to the drain plug at the bottom of the engine-side fuel filter and place the other end of the hose inside a container to receive the drained fluid.



2. Loosen the drain plug and move the priming pump up and down by hand between 10 and 20 times.
3. Fully tighten the drain plug and move the priming pump several times.
4. Test run the engine and check that there are no fuel leaks from the drain plugs of the chassis-side fuel filter and engine-side fuel filter. Also check that the water separator (fuel filter) warning light stays off.

Changing the Fuel Filter

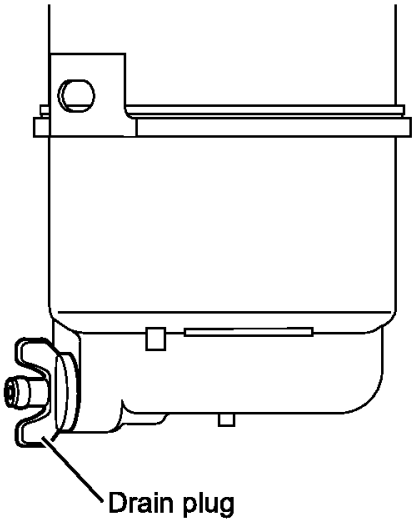
⚠ WARNING

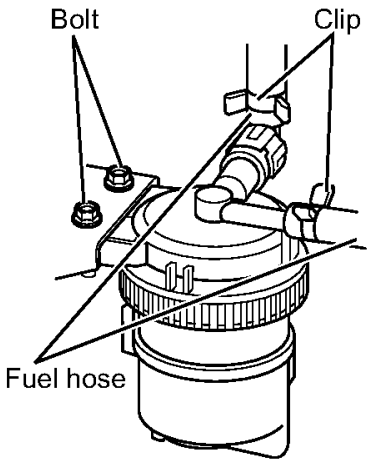
- **When fitting the element case, be careful not to let the O-ring become caught in the screw threads. This could cause a fuel leak and start a fire.**
- **After changing the fuel filter, operate the engine to check that there are no leaks around the filter. Fuel leaks could cause a fire.**

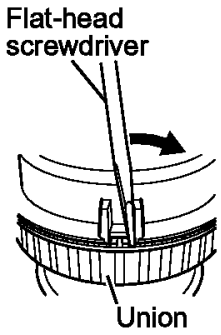
ADVICE

- Be sure to use an Isuzu genuine fuel filter element.
- Replace the gaskets when replacing the filter element.
- Dispose of the replaced filter element in a method conforming to the regulatory requirements in your country.

4JZ1 Engine Model







Chassis-side fuel filter (Type1)

1. Connect one end of a plastic hose to the drain plug at the bottom of the element case and place the other end of the hose inside a container to receive the drained fuel.
2. Loosen the drain plug to drain fuel. After draining, tighten the drain plug.

NOTE

- If almost no fuel is drained from the drain plug, fuel can be drained by removing the drain plug.

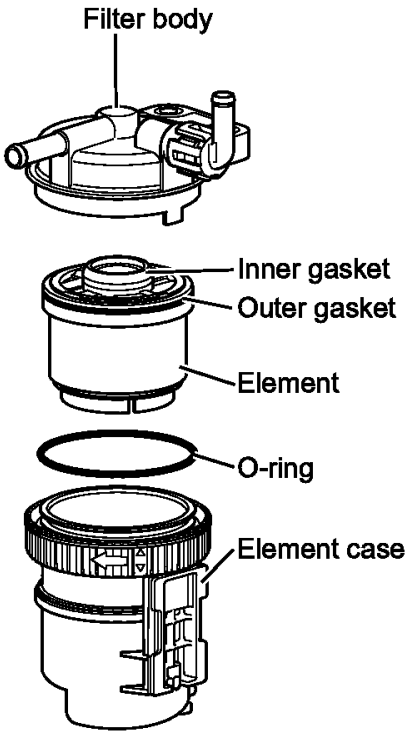
3. Pinch the clip of the fuel hose connected to the filter body and remove the fuel hose.

CAUTION

- **Prevent foreign matter from getting into the fuel hose. The engine may be damaged if foreign matter intrudes.**

4. Loosen the installation bolt and remove the fuel filter assembly.

5. Insert a flat-head screwdriver into the groove on the filter body and turn the union to lightly loosen. After that, turn the union by hand and loosen halfway.

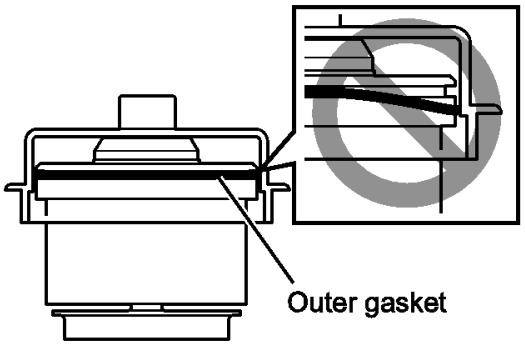


6. Further loosen the half loosened union and remove the element case. Then remove the element.
7. Remove the O-ring from the element case.
8. Use a clean cloth to wipe off any foreign matter that has accumulated on the inside surface of the filter body. In addition, clean any foreign matter or dirt inside the element case.

⚠ CAUTION

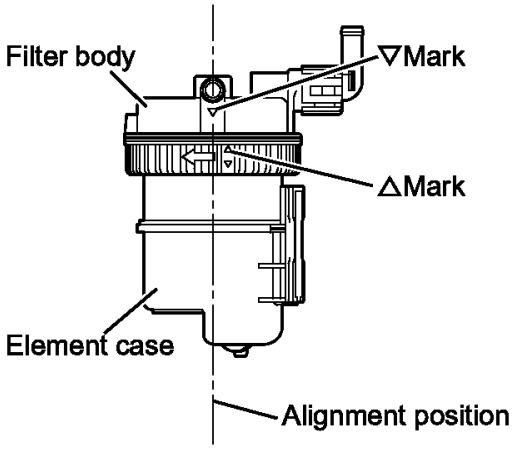
- **Do not use compressed air to remove foreign matter. Using compressed air could cause an intrusion of foreign matter into the fuel passage. (The engine may be damaged if foreign matter intrudes.) Use a clean cloth to remove any dirts.**

9. Install a new O-ring to the element case and lightly coat the O-ring with diesel fuel.
10. Lightly coat the inner gasket and outer gasket of the new element with diesel fuel.
    Insert the element into the filter body.



⚠ CAUTION

- **After inserting the element into the filter body, check that the outer gasket is securely engaged in the element groove. Incomplete installation may cause an intrusion of foreign matter into the fuel passage resulting in engine damage.**



11. Install the element case to the filter body while holding the element with your hand.
    After aligning the filter body and element case to the alignment position shown in the illustration, align the claws on the filter body with the element case notches and tighten the union halfway, while holding the filter body and element case.
12. Tighten the union until the △ mark on the union comes to the right of the ▽ mark on the filter body.
13. Install the fuel filter assembly with a bolt and nut.

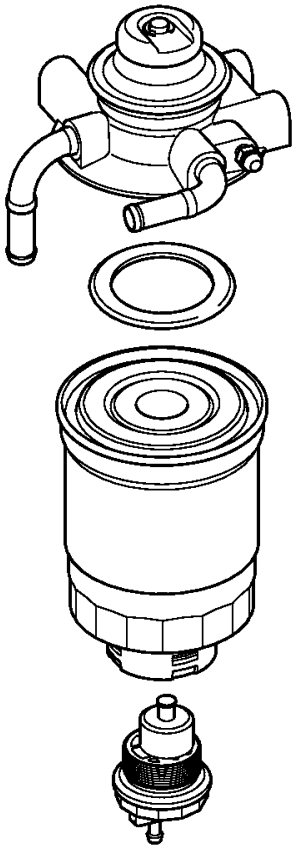
Tightening torque
13.7 - 23.5 N·m (1.4 - 2.4 kgf·m/**10.1 -17.3 lb·ft**)

14. Connect the fuel hose to the filter body.

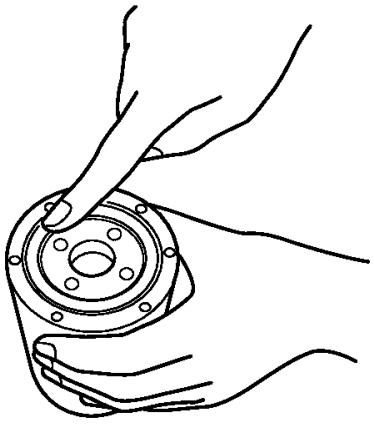
⚠ WARNING

- **Check that there is no breakage of the fuel hose such as cracking. Have your vehicle inspected at the nearest Isuzu Dealer as soon as possible if there is any fuel hose breakage such as cracking.**

Chassis-side fuel filter (Type2)



1. Remove the cartridge using the special filter wrench.
2. Remove the sediment sensor.
3. Install the sediment sensor on the new cartridge.
4. Clean the cartridge mounting surface of the filter body to ensure tight seating of the cartridge.
5. Lightly coat the O-ring of the cartridge with engine oil.
6. To facilitate bleeding of the fuel system, fill the new cartridge with diesel fuel.

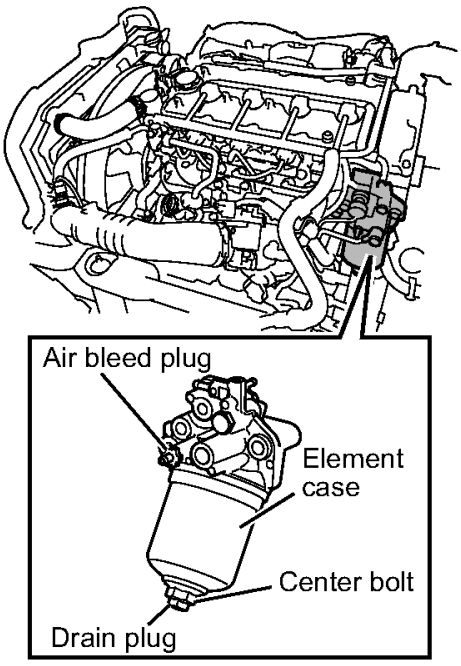


7. Install the cartridge by tightening it until the O-ring touches the sealing surface. Do this work extremely carefully not to spill the diesel fuel from the cartridge.
8. Using the special filter wrench, tighten the cartridge an additional 1/3 to 2/3 of a turn.

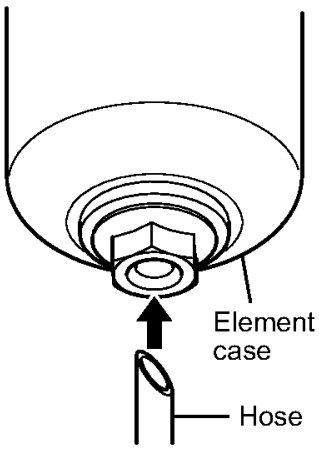
Engine-side Fuel Filter

NOTE

- Fuel cannot be drained by just removing the drain plug.
- A hose is needed when draining fuel. Prepare a hose with an 8 mm 0.31 in) outside diameter.
- The hose should be long enough to reach from the fuel filter to the container for receiving the drained fuel.
- Cutting the hose end at an angle will make the fuel-drain easier.



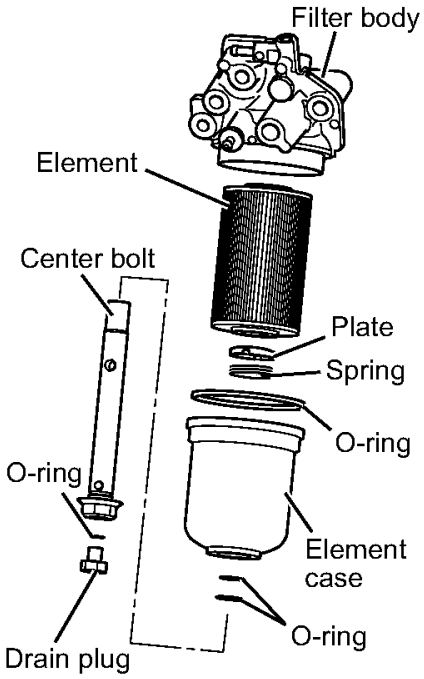
1. Remove the drain plug at the bottom of the element case.



2. Insert one end of the hose into the hole where the drain bolt was removed and place the other end of the hose into the container for receiving the drained fuel.
3. Loosen the air bleed plug and drain the fuel.
4. Loosen the center bolt and remove the element case and the element.
5. If foreign matter has adhered to the inner periphery of the filter body or center bolt, wipe it off with a clean cloth, etc.

ADVICE

- Do not use compressed air or other similar means. Clean any foreign matter using a clean cloth. If compressed air is used, foreign matter may enter the fuel passage and cause damage to the engine.



6. Install a new element. Replace the O-ring as well. Thinly apply clean diesel fuel to the O-ring before installing.
7. Tighten the center bolt and the drain plug to the specified torque.

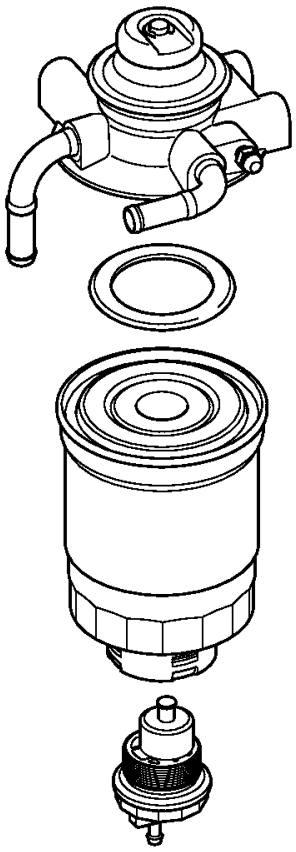
Center bolt tightening torque
45 N·m (4.6 kgf·m/**33 lb·ft**)

Drain plug tightening torque
25 N·m (2.5 kgf·m/**18 lb·ft**)

8. Tighten the air bleed plug until there is no gap with the filter body.
9. Perform fuel air-bleeding.

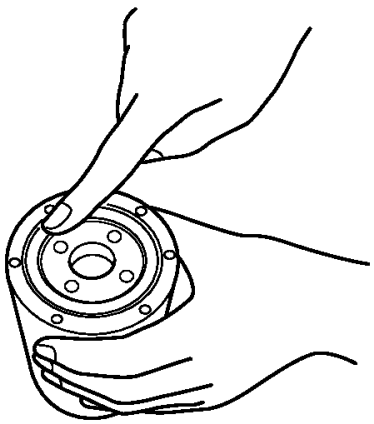
Refer to page
11-15 Bleeding the Fuel System (4JZ1 Engine Model)

4HK1 Engine Model

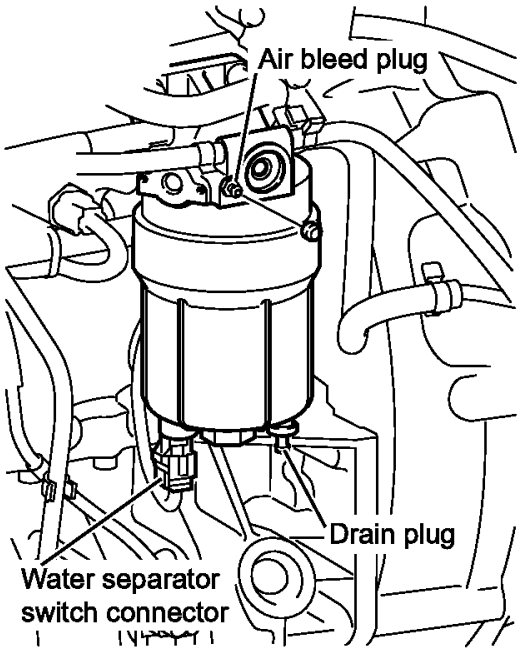


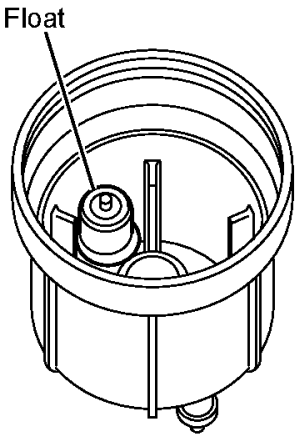
Chassis-side fuel filter

1. Remove the cartridge using the special filter wrench.
2. Remove the sediment sensor.
3. Install the sediment sensor on the new cartridge.
4. Clean the cartridge mounting surface of the filter body to ensure tight seating of the cartridge.
5. Lightly coat the O-ring of the cartridge with engine oil.
6. To facilitate bleeding of the fuel system, fill the new cartridge with diesel fuel.



7. Install the cartridge by tightening it until the O-ring touches the sealing surface. Do this work extremely carefully not to spill the diesel fuel from the cartridge.
8. Using the special filter wrench, tighten the cartridge an additional 1/3 to 2/3 of a turn.



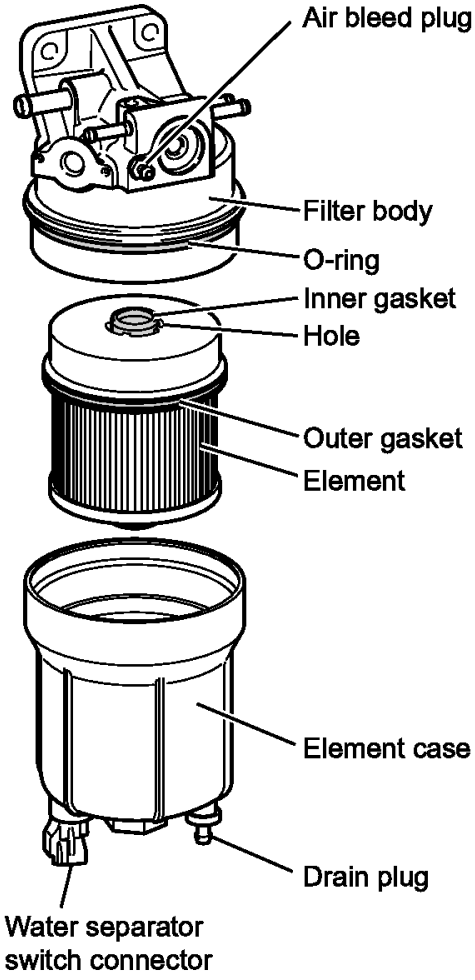


Engine-side fuel filter

1. Loosen the drain plug at the bottom of the filter element case. Remove the rubber cap of the air bleed plug and then loosen the plug. This will allow the fuel in the filter element case to drain through the drain plug. Tighten the air bleed plug.
2. Disconnect the water separator switch connector.
3. Use a tool (like a 29 mm (1.14 in) socket wrench) to turn the hexagonal part at the bottom of the element case counterclockwise and remove the element case.

ADVICE

- Check the float at the bottom of the interior of the filter element case for free and smooth movement.
- Connect the water separator switch connector, turn the filter element case upside down, and confirm that the water separator (fuel filter) warning light comes on.
- Clean any foreign matter or dirt at the bottom inside the filter element case.



4. Pull out the filter element downward and remove the O-ring.
   Use a clean cloth to wipe off any foreign matter that has accumulated on the inside surface of the filter body.

ADVICE

- Do not use compressed air to remove foreign matter. Use a clean cloth instead. Air blowing may bring foreign matter into the fuel passage, which could cause the engine to malfunction.

5. Attach the new O-ring to the filter body, making sure that it is not damaged by the screw threads.
6. After lightly coating the inner and outer gaskets of the new filter element with diesel fuel, insert the element until it touches the filter body.

ADVICE

- Do not allow foreign matter to get into the 4 holes next to the inner gasket.

7. After lightly coating the inner surface of the element case or the O-ring with diesel fuel, turn the element case clockwise until it touches the filter body. If the element case end fails to touch the filter body, the filter element has not been inserted fully. Reinsert the element while turning it.
8. Install the element case.

Element case tightening torque
51 - 61 N·m (5.2 - 6.2 kgf·m/**38 - 45 lb·ft**)

9. Tighten the drain plug and connect the water separator switch connector.

10. Bleed air from the fuel system. To bleed air from the fuel system, refer to and follow the instructions in "Engine-side Fuel Filter", followed by "After You Have Bled Air from the Fuel System".

Refer to page
11-16 Bleeding the Fuel System (4HK1 Engine Model)

Diesel Particulate Defuser (DPD)

The DPD purifies particulate matter (PM) in exhaust gases. To maintain the performance of the DPD, it must be inspected and cleaned regularly. This is because ash accumulates inside the filter, which is different from the PM that can be removed by combustion.

Refer to page
8-2 Maintenance Schedule

Checking and Cleaning the DPD

Have the exhaust pressure check performed at your Isuzu Dealer in accordance with the Maintenance Schedule. The filter may need cleaning depending on the results of the check. If you cannot do the exhaust pressure check, clean the filter and inspect the exhaust differential pressure sensor rubber hose.

⚠ CAUTION

- **Failure to perform checks or cleaning of the DPD could result in a faulty DPD and engine damage, or poor fuel economy. Ask your Isuzu Dealer about checks and cleaning of the DPD.**

AdBlue® Filter [V]

Model with 16 liter AdBlue® tank

The AdBlue® filter removes foreign material. It is recommended to use Isuzu genuine filters when replacing.

Refer to page
8-2 Maintenance Schedule

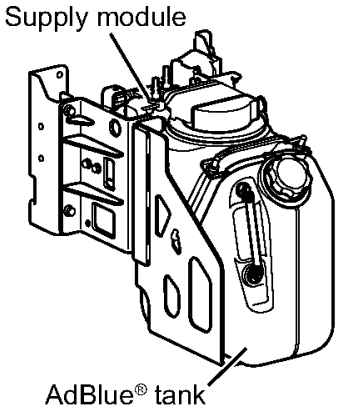
Replacement of AdBlue® Filter

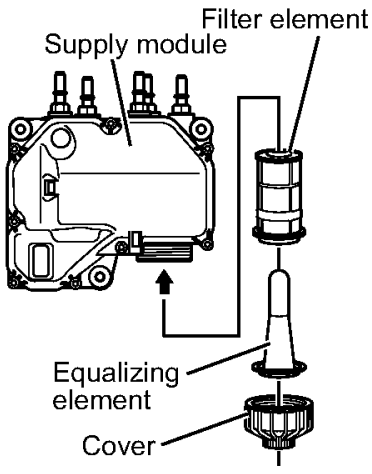
ADVICE

- The urea SCR system will continue to operate for approximately 3 to 5 minutes after the starter switch is set to the "LOCK" position. Wait for 3 minutes or more before removing the battery or power line for inspection or repair.
- Discharged AdBlue® is not reusable. Reuse may result in failure of the urea SCR system.
- When disposing of discharged AdBlue®, comply with regulations.
- Do not clean using highly-pressurized air, but instead wipe with clean cloth. Were foreign material blown by air to intrude into the AdBlue® piping, a failure with the urea SCR system may result.

Refer to page
4-252 Handling of AdBlue®
4-265 Disposing of AdBlue®

How to Replace





1. Set the starter switch to the "LOCK" position and wait for 3 minutes or more until the supply module stops operating.
2. Place a tray under the supply module and loosen the cover. Pull out the filter element and equalizing element together.
3. Mount the new filter element and equalizing element.
4. Close the cover.

Tightening torque for the AdBlue® filter cover
20 - 25 N·m (2.0 - 2.5 kgf·m/**14 - 18 lb·ft**)

Chassis-related Maintenance and Care

Brakes

Checking the Brake Pedal Free Play and Stroke [HB]

Refer to page
9-28 Checking the Brake Pedal Free Play and Stroke

Checking the Brake Pedal Free Play [FAB]

Refer to page
9-28 Checking the Brake Pedal Free Play and Stroke

Checking the Exhaust Sound from Brake Valve [FAB]

Refer to page
9-31 Checking the Exhaust Sound from Brake Valve [FAB]

Checking Brake Effectiveness

Refer to page
9-37 Checking Brake Effectiveness

Brake Fluid [V]

Brake fluid is an oil that allows brakes to operate smoothly.

⚠ CAUTION

- **When adding fluid to the tank, take care to prevent dirt and water from entering it. Any dirt or water in the system could cause the vehicle to lose braking functions.**
- **Inspect and change brake fluid according to the Maintenance Schedule.**
- **Use non-petroleum base brake fluid when adding brake fluid.**
- **Be careful not to spill brake fluid onto painted surfaces or to let it come in contact with skin. If fluid is spilled onto a painted surface or come in contact with skin, wash away the fluid with water and immediately wipe the area clean.**
- **Brake fluid readily absorbs moisture. Therefore, it is necessary to close the container tightly for storage.**
- **Never mix the specified brake fluid with fluids of any other brand.**
- **If the brake fluid level decreases rapidly, there may be a problem in the brake system or brake pads or shoe linings may have worn out. Have your vehicle inspected by the nearest Isuzu Dealer immediately.**

Checking the Brake Fluid Level

Refer to page
9-23 Checking the Brake Fluid Level [HB]

Adding Brake Fluid

Refer to page
9-23 Checking the Brake Fluid Level [HB]

Bleeding the Brake Hydraulic System

If air is present in the brake hydraulic system, it adversely affects brake operations. Bleed the system if the brakes are used when the quantity of the brake fluid in the tank is extremely low or the brake piping is removed during maintenance operation. Do not perform bleeding by yourself; it should be done with the help of another person.

⚠ WARNING

- **Before bleeding the brake system, be sure to park the vehicle on flat, level ground and apply chocks to the wheels.**
- **Since the brake fluid readily absorbs moisture, ensure that moisture does not enter the fluid while checking, adding or storing it. If moisture enters the fluid, the boiling point of the fluid decreases and this causes "vapor lock", a highly dangerous problem that affects brakes' functionality.**
- **Do not allow engine oil, gear oil and any other oils to mix with the brake fluid. Brake fluid contaminated with such oils degrades the brakes' functionality and damages the brake system components, possibly causing a very dangerous situation.**

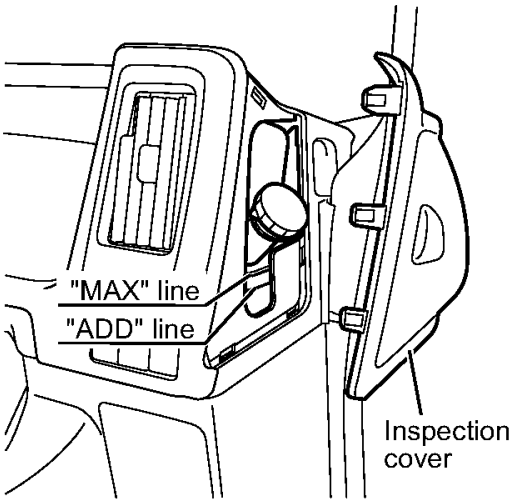
⚠ CAUTION

- **Brake fluid melts paintwork and vehicle component materials such as plastic, vinyl and rubber. It is also highly corrosive on metals. If it is spilled, wipe it off the affected surface immediately and thoroughly wash the surface with water.**

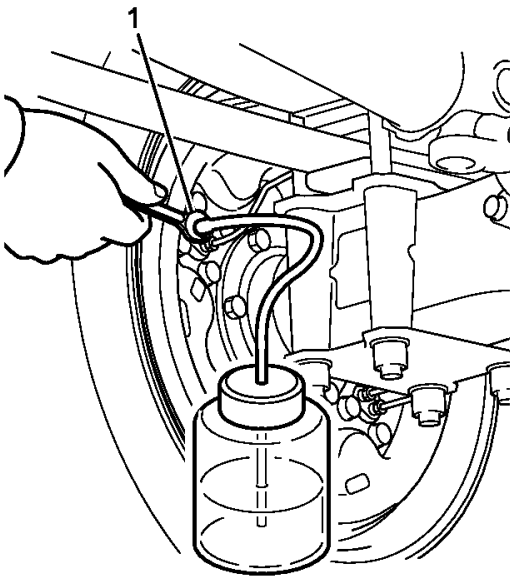
1. Fully apply the parking brake.
2. Start the engine and allow it to idle.

⚠ CAUTION

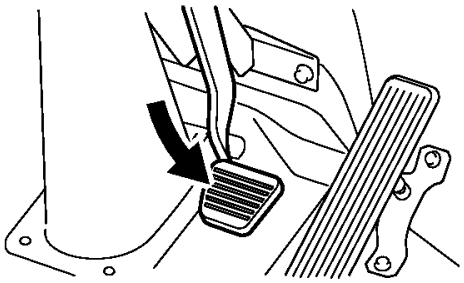
- **If the engine is not running during air bleeding, the brake booster may be damaged.**



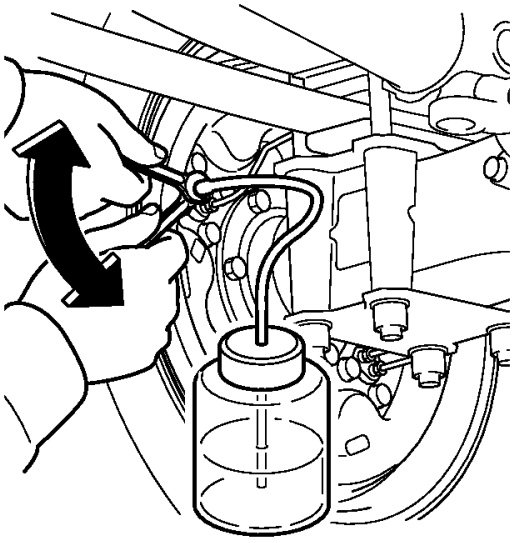
3. Remove the cap from the brake fluid tank, and then add brake fluid to the "MAX" line on the tank.
   Maintain this level throughout bleeding by adding brake fluid as necessary.
4. Bleed the brake hydraulic system part by part in the following sequence:
   Right-hand drive:
   Left rear wheel → Right rear wheel → Left front wheel → Right front wheel
   Left-hand drive:
   Right rear wheel → Left rear wheel → Right front wheel → Left front wheel



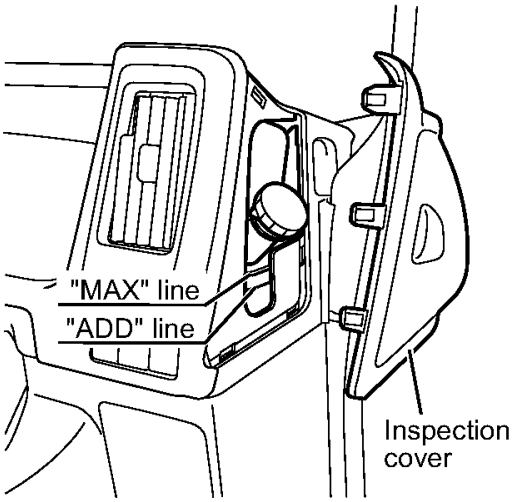
5. Detach the rubber cap from the bleeder screw (1). Wipe the bleeder screw clean. Attach one end of a vinyl tube to the bleeder screw and put the other end in a clear container. Fill the container with the brake fluid to about one-third (1/3) of its capacity.



6. Press the brake pedal a few times and keep it pressed.



7. Loosen the bleeder screw to let the brake fluid containing air bubbles flow into the container and then tighten the bleeder screw immediately.



8. Release the brake pedal slowly. Repeat Steps 6 and 7 until the fluid from the tube no longer contains air bubbles. After bleeding, install the rubber cap in position.

CAUTION

- **While bleeding, ensure that the fluid level in the brake fluid tank is not below the "ADD" line.**
- **If the engine is not running during air bleeding, the brake booster may be adversely affected.**

Brake system warning light



9. After you finish the bleeding for each wheel, press the brake pedal to check that the brake system warning light does not come on.

Parking Brake

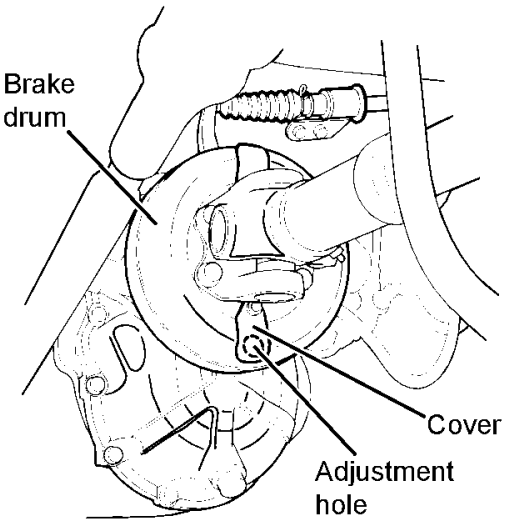
The parking brake acts to lock the wheels to park the vehicle when it is stopped. If there is any abnormality, contact the nearest Isuzu Dealer.

Checking the Parking Brake

Refer to page
9-33 Checking the Parking Brake

Adjusting the Parking Brake

Model with Center Parking Brake [HB]



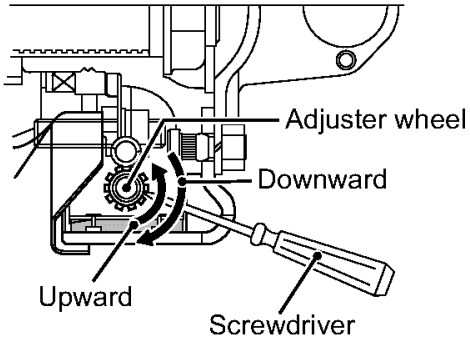
Model without electric parking brake

1. Park the vehicle on a level and flat ground surface, prevent the vehicle from moving by applying chocks to the front and back of the front wheels, and release the parking brake completely.
2. Loosen the parking brake lever cable adjusting nut inside the cab.
3. Confirm that the transmission is in the neutral position and then raise the vehicle with a jack until the rear wheels come clear of the ground.
4. Support the raised vehicle with jack stands.

Refer to page
7-13 Handling the Jack

⚠ WARNING

- **Before going under the raised vehicle, make sure that the vehicle is securely supported with jack stands.**

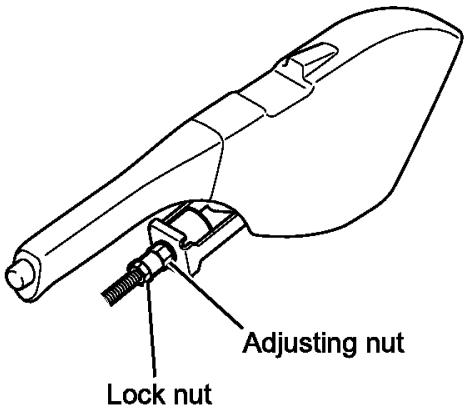


5. Turn the parking brake drum to place the adjustment hole straight down. Remove the adjustment hole cover and turn the drum as necessary to align the hole with the position of the adjuster wheel.
6. Insert a screwdriver through the adjustment hole and turn the adjuster wheel until the brake lining does not expand any further. Refer to the following for the direction to turn the adjuster wheel.

Vehicle model	Brake lining expansion direction
MZZ transmission	Upward
MYY/MYR transmission	Downward

7. From this point, turn the adjuster wheel back by the number of teeth indicated below. After the adjustment, reinstall the adjustment hole cover.

Vehicle model	Number of teeth by which the adjuster wheel should be turned back	Parking brake drum-to-lining clearance
MZZ transmission	8 teeth	0.23 mm (0.009 in)
MYY/MYR transmission	30 teeth	0.75 mm (0.030 in)

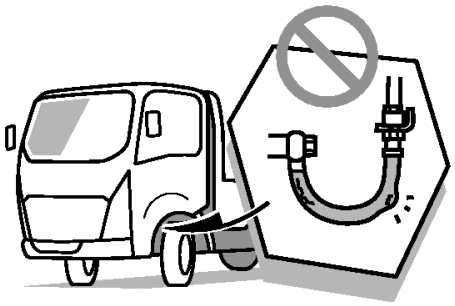


8. Loosen the lock nut.
9. Turn the adjusting nut until the parking brake lever stroke is adjusted to a number of notches within the standard value range below. After the adjustment, securely tighten the lock nut.

Lever stroke
6 to 8 notches

Brake Hoses and Pipes

Checking the Brake Hoses and Pipes



1. Turn the steering wheel fully to the left.
2. Check the left front brake hose and pipe visually and by touch, making sure that they are free of scratches, cracks and bulging. Also make sure that the hose and pipe do not interfere with any chassis part or wheel, and that their joints are not leaking and free of any type of damage.
3. Turn the steering wheel fully to the right.
4. Check the right front brake hose and pipe in the same way as step 2.
5. The rear left and right brake hoses and pipes should also be checked in the same manner.

Disc Brakes [V]

If the brake pads wear out beyond their usable limit, not only will the brake performance be impaired, but brake components could also fail.

WARNING

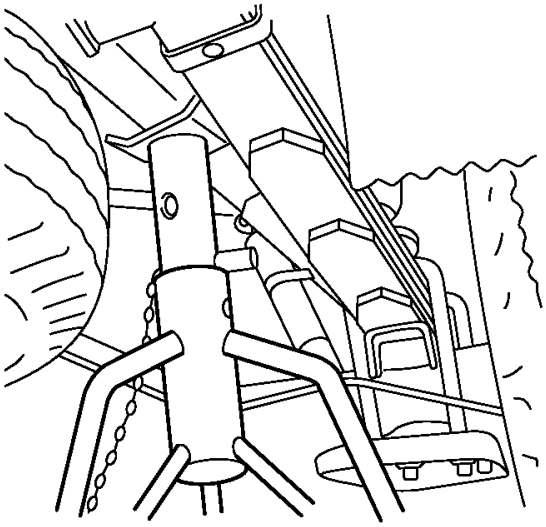
- **Do not drive with brake pads worn out beyond the limit. Excessively worn brake pads may cause breakdown of brake components and poor braking performance. This is very dangerous.**

ADVICE

- The pad has an embedded wear indicator. A squeaking noise from the indicator means that the pad is approaching the usable limit. If the squeaking noise from the indicator can be heard, contact the nearest Isuzu Dealer for inspection or replacement.

Checking the Brake Rotor and Pads for Wear

Removal



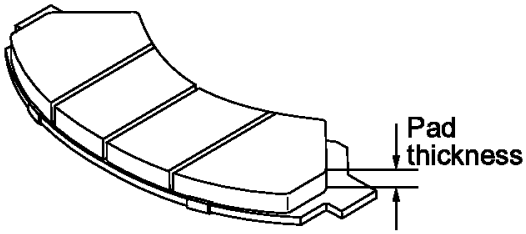
1. Apply the parking brake firmly and chock the wheels.

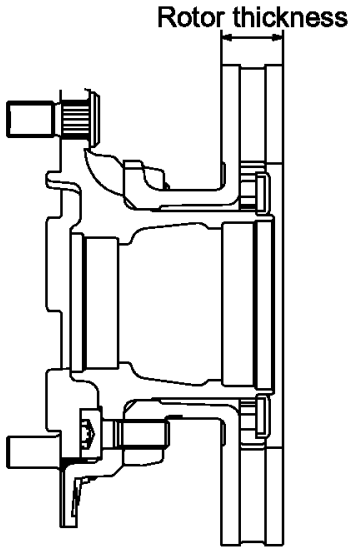
Refer to page
4-75 Parking Brake Lever [V]

2. Raise the vehicle until the wheel is completely clear of the ground.
3. Support the raised vehicle with jack stands.
4. Remove the wheel.

Refer to page
10-72 Removing a Wheel

5. Check the pad and rotor as follows: Measure the pad thickness, rotor thickness and rotor runout.





Brake size (Diameter × Thickness)	Rotor thickness		Pad thickness	
	Standard value	Usable limit	Standard value	Usable limit
φ275 × 30 mm (10.83 × 1.18 in)	30.0 mm (1.181 in)	28.0 mm (1.102 in)	14.0 mm (0.551 in)	1.0 mm (0.039 in)
φ293 × 40 mm (11.54 × 1.57 in)	40.0 mm (1.575 in)	37.0 mm (1.457 in)	13.0 mm (0.512 in)	1.0 mm (0.039 in)
φ310 × 42 mm (12.20 × 1.65 in)	42.0 mm (1.654 in)	39.0 mm (1.535 in)	13.0 mm (0.512 in)	1.0 mm (0.039 in)
φ348 × 42 mm (13.70 × 1.65 in)	42.0 mm (1.654 in)	39.0 mm (1.535 in)	13.0 mm (0.512 in)	3.0 mm (0.120 in)
φ363 × 42 mm (14.29 × 1.65 in)	42.0 mm (1.654 in)	39.0 mm (1.535 in)	13.0 mm (0.512 in)	3.0 mm (0.120 in)

Drum Brakes [V]

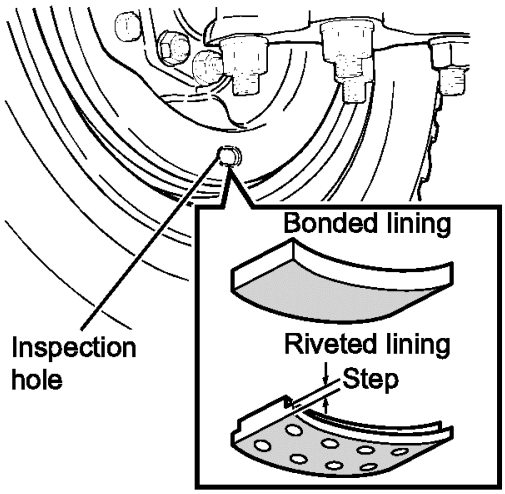
If the brake shoe linings wear out beyond their usable limit, not only will the brake performance be impaired, but brake components could also fail.

⚠ WARNING

- **Do not drive with brake shoe linings worn out beyond the limit. Excessively worn brake shoe linings may cause breakdown of brake components and poor braking performance. This is very dangerous.**

Checking Brake Shoe Linings for Wear

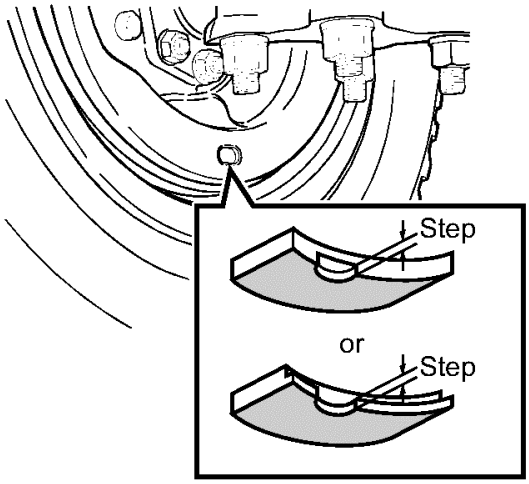
Hydraulic Brake Model [HB]



1. For hydraulic brake models, remove the rubber plug from the inspection hole in the backing plate.
2. Check that brake shoe lining of sufficient thickness is remaining. Also check the side surfaces of the lining for cracks, flaking or other damage.

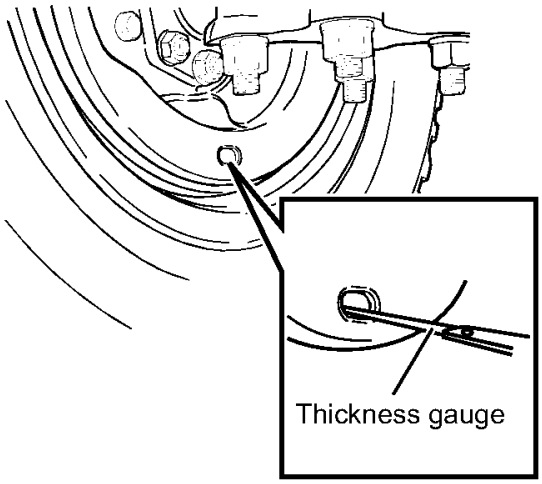
3. The wear limit for bonded brake shoe linings is when the thickness is reduced to 1 mm (0.04 in) and the wear limit for riveted linings is when the step is worn away. The lining must be replaced if it is worn beyond the wear limit or there are cracks or flaking on the side surfaces. Have the replacement carried out by the nearest Isuzu Dealer.

Full-air Brake Model [FAB]



1. Remove the rubber plug from the inspection hole in the backing plate.
2. Each brake shoe lining has a step that is cut at its side as shown in the figure. Check that the step is remaining. Also check the side surfaces of the lining for cracks, flaking or other damage.
3. The lining must be replaced if the step is lost or there are cracks or flaking on the side surfaces. Have the replacement carried out by the nearest Isuzu Dealer.

Checking the Drum-to-Lining Gap [FAB]



1. Perform this check under the following conditions: Park the vehicle on a level and flat surface. Prevent the vehicle from moving by applying chocks to the front and back of each wheel and release the parking brake completely.

NOTE

[Model with electric parking brake]

- Usually, when the starter switch is turned to the "LOCK" position, the parking brake operates automatically. When carrying out an inspection, change the starter switch from the "ON" to "LOCK" position while pressing the electric parking brake switch with the brake pedal depressed. At this time, the vehicle will go into maintenance mode and the parking brake will not engage. After finishing the inspection, deactivate the maintenance mode by pulling up the electric parking brake switch to the second position for at least 2 seconds or driving the vehicle at a speed of approximately 10 km/h (6 MPH) or more.

2. Remove the rubber plug from the inspection hole in the backing plate.
3. Insert a thickness gauge through the inspection hole in between the brake drum and brake shoe lining to check that the gap is up to the specification indicated below.

ADVICE

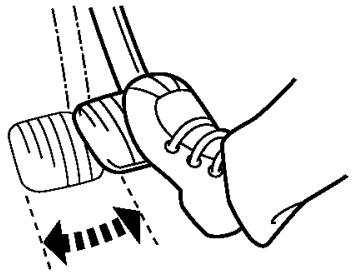
- If the drum-to-lining gap measurement is not as specified, have the brakes inspected by the nearest Isuzu Dealer.

Standard drum-to-lining gap

Gap*	Remarks
Within 1.2 mm (0.047 in)	Brake shoe lining should not drag on the drum. (Brakes on any model are automatically adjusted.)

*: Drum-to-lining gap as measured when the drum temperature is almost equal to the environmental temperature

Adjustment of Drum-to-Lining Gap



1. Press down the brake pedal as far as it goes.
2. Repeating Step 1 above until there is no change in pedal stroke will automatically adjust the drum-to-lining gap to a certain extent. After this, repeated braking while driving will automatically adjust the gap.

Air Tanks [FAB]

Checking the Air Tanks [FAB]

Refer to page
9-20 Checking the Air Tanks [FAB]

Checking Air Pressure [FAB]

Refer to page
9-31 Checking Air Pressure [FAB]

Air Dryer [FAB]

Checking the Air Dryer [FAB]

Refer to page
9-21 Checking the Air Dryer [FAB]

Wheels and Tires

The wheels have a major influence upon the safety and comfort of driving. Should any wheel fall off the vehicle, it not only causes the vehicle to break down on the road and block other traffic, but it may also lead to a serious accident. We strongly recommend that you check the wheels and tires daily and maintain them in satisfactory condition.

⚠ WARNING

- **Do not drive the vehicle unless the tires are properly inflated and in safe condition.**
- **If you find anything abnormal with wheel bolts, wheel nuts or disc wheels when you check them, avoid driving the vehicle and contact the nearest Isuzu Dealer as soon as possible.**
- **If you find anything abnormal on the left wheels, check the right wheels carefully for similar defects. A defect on a wheel may be a sign of defects on other wheels.**

Checking Tires

Refer to page
9-14 Checking Tires

Tire Rotation

Tires at different locations wear differently. For uniform tire wear and longer tire life, you should rotate the tires on your vehicle regularly.

⚠ CAUTION

- **If differently sized tires are used between the front and rear axles, do not exchange tires between the front and rear axles; otherwise, the tires get loaded beyond their limits. This is highly dangerous because the tires and disc wheels could be break down under an excessive load.**
- **Be sure to check the wheel bolts, wheel nuts and disc wheel for any abnormality whenever the disc wheel is removed.**
- **If you find any abnormal condition on the wheel bolts, wheel nuts or disc wheel, do not continue to use the wheel. Contact the nearest Isuzu Dealer as soon as possible.**
- **Your vehicle may be equipped with special tires whose direction of rotation is specified. A tire of this type has a set of arrows on the sidewall. The larger arrow shows the direction of rotation for forward movement of the vehicle. When installing the wheel assembly consisting of a tire of this type and a disc wheel, install the assembly so that the larger arrow points in the direction of rotation when the vehicle moves forward. (If the tread depth is 5 mm (0.20 in) or less when measured, it is possible to install the assembly so that the smaller arrow points in the direction of rotation when the vehicle moves forward. The tread depth can be checked with a depth gauge in either of the two center grooves among the four.)**

ADVICE

- The tightening torque of the wheel nuts may decrease after a tire change due to their initial settlement. Upon driving 50 to 100 km (31 to 62 miles) after a tire change, retighten the wheel nuts to the specified torques according to the instructions in the "Retightening Wheel Nuts" section in this chapter.

Refer to page
10-78 Retightening Wheel Nuts

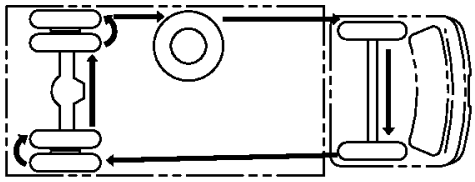
NOTE

- Make sure to use tires of the same type on the same axle. If you install tires of different types on the same axle, the vehicle may drift right or left when you apply the brakes.
- New tires are more likely to build up heat and wear faster than old tires, so they should be installed on the front axle where the load is smaller.

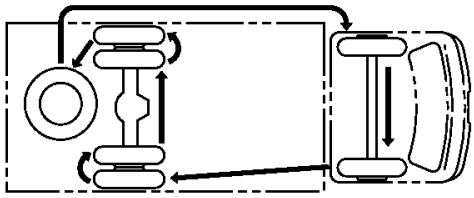
[Vehicles equipped with tire pressure monitoring system]

- A tire pressure sensor is also installed in the spare tire.

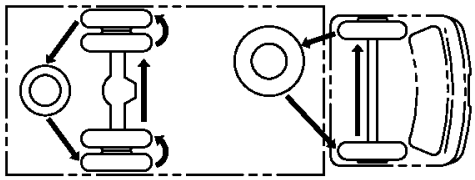
[Model with one spare tire stored at side]



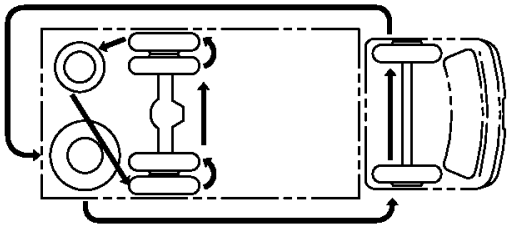
[Model with one spare tire stored at rear]



[Model with two spare tires stored at side and rear]



[Model with two spare tires stored at rear]



Dual Tire Operation

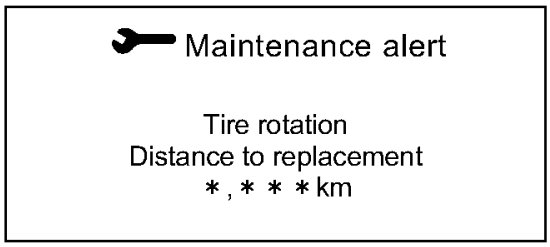
NOTE

- If there is a difference in diameter between the inner and outer tires of a dual-tire wheel, install the smaller diameter tire inside.
- The difference in diameter of the tires for a dual-tire wheel should be within the limit specified in the table below. If the limit is exceeded, the tires wear more rapidly than they should.

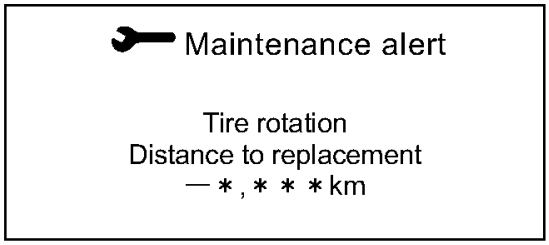
Permissible diameter difference	
Radial tire	Within 6 mm (0.24 in)

Tire Rotation Maintenance Alerts

Distance remaining



Distance exceeded



This message appears on the multi-information display when the next tire rotation is near, and the distance remaining until the tire rotation timing or the distance exceeded after the tire rotation timing is displayed. When the time for maintenance is approaching, the message is displayed in amber when the starter switch is turned to the "ON" position. It remains on the display until "Enter" in the multi-information display switch is pressed once or the vehicle is started.
When this message comes on, have the vehicle inspected/serviced at your Isuzu Dealer.

NOTE

- Checking and setting the maintenance period can be done from the "Maintenance alert" on the multi-information display.

Refer to page
3-59 Maintenance Alert
10-68 Tire Rotation

Changing the Wheels and Tires

CAUTION

- **Consult your Isuzu Dealer before replacing tires or wheels. Never use wheels that are not designed for the vehicle, tires of different types at the same time or tires that are not the specified size. Doing so would impede safe vehicle operation.**

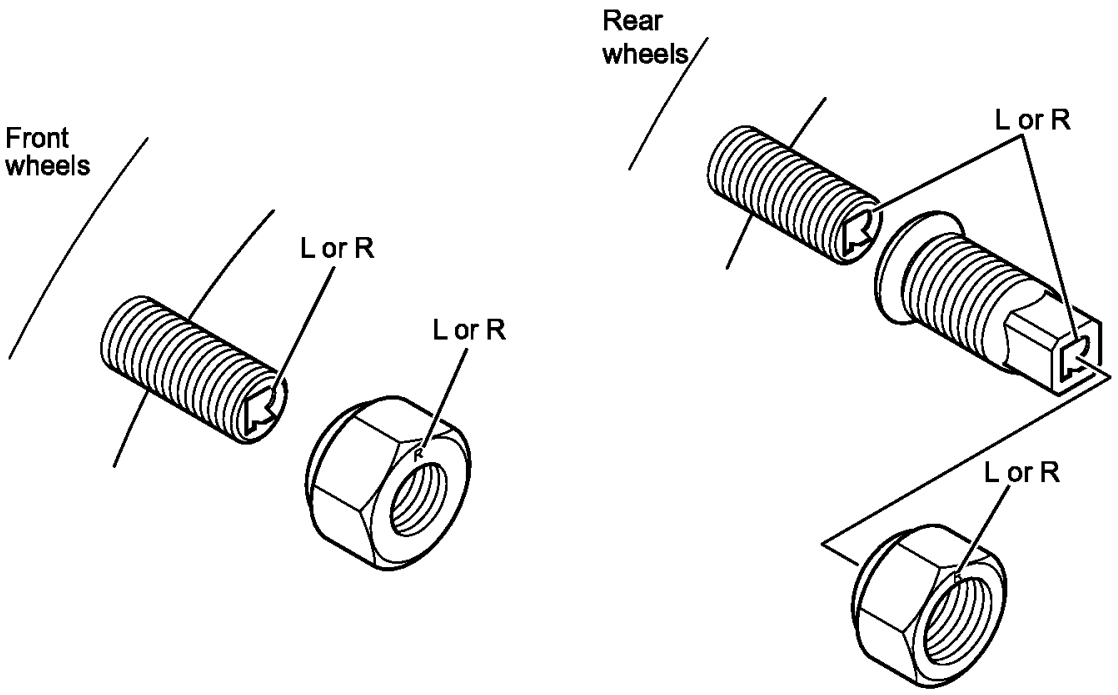
ADVICE

[Vehicles equipped with tire pressure monitoring system]

- The tire pressure sensor is installed inside the wheel. If you change to a tire that does not have a sensor, then you need to reinstall the sensor. Contact the nearest Isuzu Dealer.
- When replacing a tire that is equipped with a tire pressure sensor, there is no need to reset the sensor because it automatically learns its position after the vehicle is driven for a certain period of time.

NOTE

- Change a tire on a level and solid surface after checking safety in the surrounding area.
- Every bolt or nut for right-hand wheels is marked "R" or " R ", and each bolt or nut for left-hand wheels is marked "L" or " L ".



Preparation



When you park the vehicle to change tires, choose a place listed below.

- Your vehicle does not hinder other traffic.
- The surface is level, flat and solid.
- You can change a tire safely.

When changing tires on a road, use the hazard warning flasher and triangle reflectors to alert other traffic to the presence of your vehicle.

Fully pull the parking brake lever. Chock both the front and back sides of the wheel diagonally opposite to the one to be changed with chocks (or stones, wood blocks, etc.). (Example: When changing the right rear wheel, chock the left front wheel.) Have the passengers get out of the vehicle.

⚠ CAUTION

- **Use a tire of the specified size and the same tread pattern as the one to be replaced.**

Removing a Wheel

⚠ WARNING

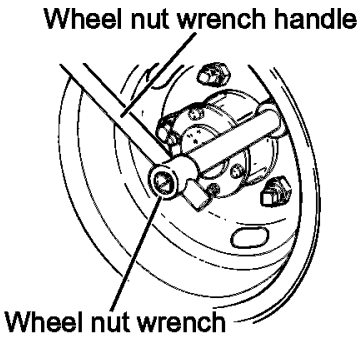
- **Always apply the parking brake fully and correctly chock the wheels before raising the vehicle. Applying only the parking brake is insufficient to prevent the vehicle from moving. When a rear wheel is jacked up, the vehicle blocked only by the parking brake would move, creating a very dangerous situation.**
- **Never open doors or start the engine while jacking up the wheel. Do not try to look into the underside of the vehicle or get beneath the vehicle. This is very dangerous.**
- **To avoid danger in case of the jack slipping off, place the removed spare tire near the jack under the vehicle.**

Refer to page
7-13 Handling the Jack

⚠ CAUTION

- **The wheel is heavy. Carefully handle it to avoid getting hurt when removing and installing the wheel.**
- **Do not touch the exhaust pipe just after stopping the vehicle; it is very hot. Do not perform tire changes while diesel particulate defuser (DPD) regeneration is under way, as the exhaust temperature is very high at that time.**

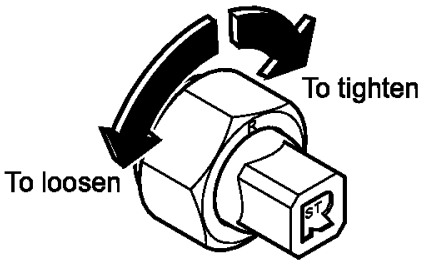
1. Firmly apply the parking brake. When changing a front wheel, chock the rear wheel diagonally opposite to the front wheel. When changing a rear wheel, chock the front wheel diagonally opposite to the rear wheel.
2. Firmly apply the head of the jack to the jacking point.
3. Raise the vehicle enough so that the tire not quite clear of the ground.
4. Using the wheel nut wrench, loosen the wheel nuts just enough so that the wheel remains stable in position. Do not remove the wheel nuts yet.



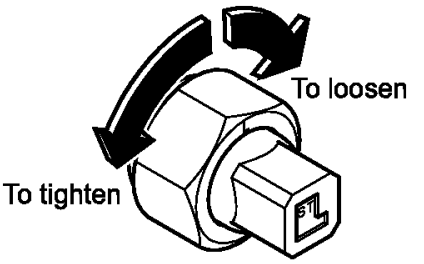
⚠ CAUTION

- **Do not loosen the wheel nuts too much. The wheel bolts would be damaged.**

5. Jack up the vehicle so that the tire is clear of the ground completely.



Right wheel: Right-hand screw wheel nut



Left wheel: Left-hand screw wheel nut

6. Remove all the wheel nuts that have been loosened, and then remove the wheel.
   Remove the wheel being careful to not damage the threads of the wheel bolts.
7. When removing either of the dual rear wheels, first remove the wheel nuts from the outer wheel and remove that wheel. Then, lower the vehicle and loosen the inner wheel nuts.
8. Raise the vehicle again, and then remove the inner wheel.
9. Check the following parts: the disc wheel for deformation and damage such as cracks; the hub for excessive wear of the disc wheel fitting surface; and the wheel bolts and nuts for damage to the threads. If anything abnormal is found in the above parts, check other parts as well, and replace any defective part with a new one.

Refer to page
7-16 Front Wheel Jacking Points
7-19 Rear Wheel Jacking Points

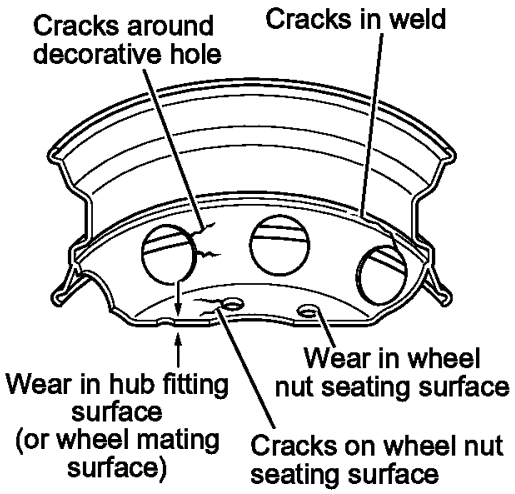
Installing a Wheel

⚠ WARNING

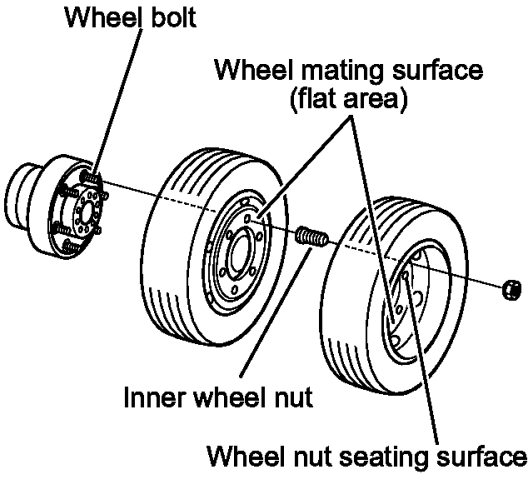
- **A disc wheel, wheel bolts or wheel nuts in any abnormal condition could break later, causing the wheel to be detached from the vehicle while driving.**
- **Do not repaint any mating surfaces, wheel nut seating surfaces (tapered surfaces) and hub fitting surface of the disc wheel. Thick paint films would cause loosened or broken wheel bolts.**

⚠ CAUTION

- **Change wheels only when the tire is clear of the ground. Otherwise, the wheel will be installed improperly and the operation of the vehicle will be affected adversely.**
- **Remove mud and rust from the hub fitting surface or wheel-to-wheel mating surfaces. Otherwise, the wheel might become loose while driving.**



1. Check the disc wheel for the following:
   - Cracks or other damage around the bolt holes and decorative holes
   - Cracks or other damage or wear on the wheel nut seating surfaces (tapered surfaces)
   - Cracks or other damage on welds
   - Wear or other damage on the hub fitting surface or wheel-to-wheel mating surface



2. Check the wheel bolts and wheel nuts for the following:
   - Cracks or other damage
   - Bolt elongation or excessive rust
   - Crushed, thinned or seized threads

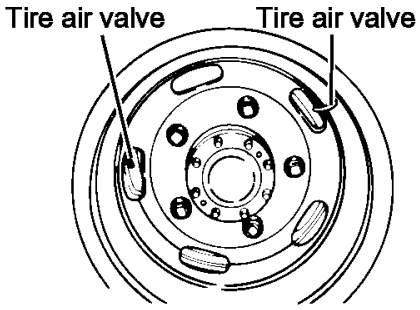
⚠ CAUTION

- **Remove rust and dirt from a wheel bolt and nut before tightening the nut to the bolt. If the nut does not turn smoothly, the threads are defective.**
- **If the threads are defective, replace both wheel bolt and wheel nut as a set.**
- **If any wheel bolt is broken, change all the wheel bolts and wheel nuts on the wheel.**

3. Remove rust, dust and mud from the fitting surface, hub fitting surface or wheel-to-wheel mating surfaces, and wheel nut seating surfaces (tapered surfaces) of the disc wheel, and from the threads of the wheel bolts and nuts.

⚠ CAUTION

- **Clean the disc wheel to remove dirt and rust from its fitting surfaces, hub fitting surface or wheel-to-wheel mating surface. Also clean the tapered portion of each nut. If you fasten the wheel nuts without removing dirt and rust, the wheel nuts would later loosen and the wheel might be detached from the vehicle while driving. This could be very dangerous.**

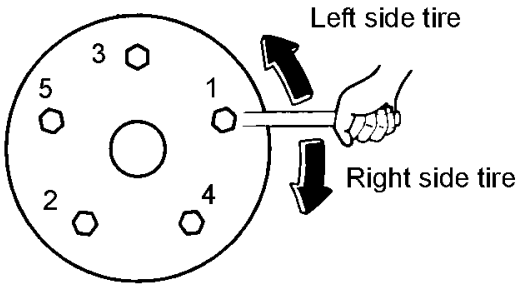


4. Install the wheel while aligning the bolt holes in the disc wheel with the wheel bolts.
   When installing the rear wheel, place the outer wheel so that its tire air valve will be 180 degrees apart from that of the inner wheel to enable inflating both inner and outer tires.

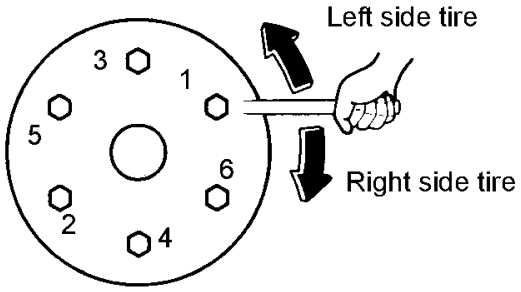
5. Screw in each wheel nut by hand until it touches the nut seating surface on the disc wheel, and then finger tighten all wheel nuts until the wheel is held in position without any looseness.
   Face the tapered end of wheel nuts inward.

6. Turn the bleeder screw of the jack counterclockwise to lower the vehicle slowly.

Wheel nut tightening sequence



Wheel with 5 nuts



Wheel with 6 nuts

7. Tighten the wheel nuts in a diagonal sequence and in two or three passes. When installing a rear wheel, tighten the nuts of the inner wheel first and then the nuts of the outer wheel.

⚠ CAUTION

- **Some impact wrenches available in the market produce torques higher than the maximum torque specified for tightening the wheel nuts. If the wheel nuts are tightened with such an impact wrench, wheel bolts might be broken. Before using an impact wrench, check that the torque it produces conforms to the specification.**
- **When using an impact wrench, carefully adjust the air pressure regulator and select the tightening time. As a final step, tighten to the specified torque using a torque wrench.**

8. Finally, tighten all wheel nuts using a torque wrench to the specified torque. You must tighten the nuts of the rear inner wheel before tightening the nuts of the rear outer wheel even when you change only the rear outer wheel.

Model or specification	Front wheel nuts		Rear wheel nuts	
	Tightening torque	Quantity	Tightening torque	Quantity
Single tire	**140 - 200 N·m** (14 - 20 kgf·m/ **101 - 145 lb·ft**)	6	**140 - 200 N·m** (14 - 20 kgf·m/ **101 - 145 lb·ft**)	6
Dual tire	**450 - 550 N·m** (45 - 55 kgf·m/ **325 - 398 lb·ft**)	5 or 6	**450 - 550 N·m** (45 - 55 kgf·m/ **325 - 398 lb·ft**)	5 or 6

WARNING

- **The tightening torque of the wheel nuts may decrease after tire replacement due to their initial settlement. Upon driving 50 to 100 km (31 to 62 miles) after a tire change, retighten the wheel nuts to the specified torque according to the instructions in the "Retightening Wheel Nuts" section in this chapter.**

Refer to page
10-78 Retightening Wheel Nuts

ADVICE

- After changing a tire, turn the steering wheel in both directions to make sure that the wheels do not interfere with the surrounding components. If you are unclear about any of this, please contact the nearest Isuzu Dealer.

Retightening Wheel Nuts

Check the wheel nuts to make sure they are tightened to the specific torque by using a torque wrench.
Use the following methods to check loose wheel nuts. The tightening torque of the wheel nuts may decrease after a tire change or rotation due to their initial settlement. After driving 50 to 100 km (31 to 62 miles), be sure to retighten the wheel nuts to the specified torque.

WARNING

- **The tightening torque of the wheel nuts may decrease after tire replacement due to their initial settlement. Upon driving 50 to 100 km (31 to 62 miles) after a tire change, retighten the wheel nuts to the specified torque.**
- **If you find any abnormal conditions with the wheel nuts such as frequent loosening of retightened nuts, have your vehicle checked or serviced at the nearest Isuzu Dealer as soon as possible.**

⚠ CAUTION

- **Fully engage the wheel wrench on a wheel nut in order to tighten the nut to the specified torque. However, do not use a pipe as a handle extension or your foot to apply force on the wrench. This would tighten the nut more than required and might damage components.**
- **Both under-tightening and over-tightening of wheel nuts may cause broken wheel bolts or cracked disc wheels and could lead to wheel detachment. Adhere to the specified tightening torques.**
- **When replacing a tire with a new one, use only a tire of the same type and size as the replaced tire; otherwise, driving safety could be affected. Avoid mixed use of different types or different size tires at all costs.**

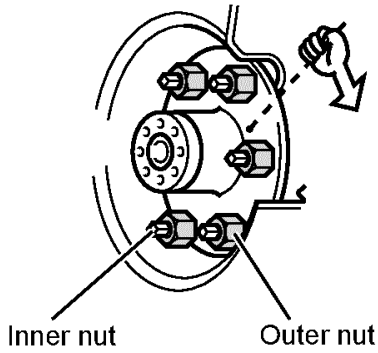
Model or specification	Front wheel nuts		Rear wheel nuts	
	Tightening torque	Quantity	Tightening torque	Quantity
Single tire	**140 - 200 N·m** (14 - 20 kgf·m/ **101 - 145 lb·ft**)	6	**140 - 200 N·m** (14 - 20 kgf·m/ **101 - 145 lb·ft**)	6
Dual tire	**450 - 550 N·m** (45 - 55 kgf·m/ **325 - 398 lb·ft**)	5 or 6	**450 - 550 N·m** (45 - 55 kgf·m/ **325 - 398 lb·ft**)	5 or 6

Single Tire

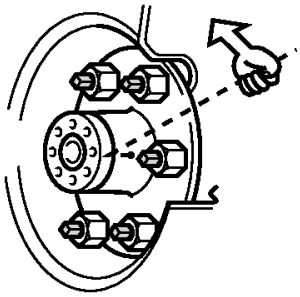
Turn the wheel nuts in the tightening direction to the specified torque.

Dual Tire

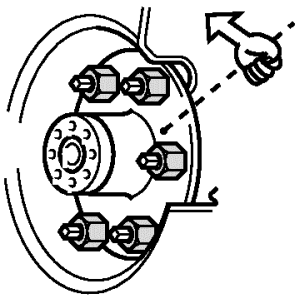
Retightening of nuts on left rear dual-tire wheel



1. Of the nuts on the wheel bolts, loosen the outer wheel nuts.



2. Tighten the inner wheel nuts of the same wheel to the specified torque.



3. Next, tighten the outer wheel nuts to the specified torque.

Spare Tire [V]

The spare tire is used when one of the tires cannot be used or for tire rotation.

WARNING

- **If the chain twisted when it is wound, it becomes loose while running due to vibrations or shocks and the tire might fall off; this is very dangerous.**
- **After storing the tire in the carrier, check that the tire is held firmly. If loosely retained, the tire becomes loose while running due to vibrations or shocks and the tire might fall off; this is very dangerous.**

ADVICE

[Vehicles equipped with tire pressure monitoring system]

- When replacing a tire that is equipped with a tire pressure sensor, there is no need to reset the sensor because it automatically learns its position after the vehicle is driven for a certain period of time.

NOTE

[Vehicles equipped with tire pressure monitoring system]

- A tire pressure sensor is also installed in the spare tire.

Spare Tire Inspection

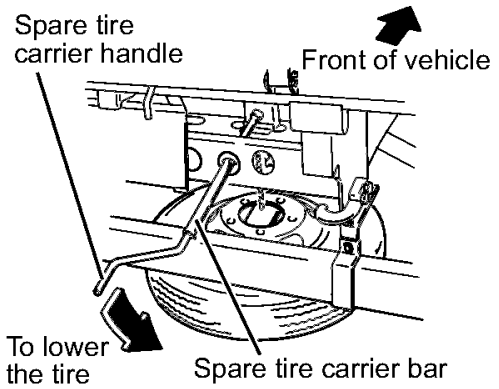
1. Check that the spare tire is not loose by strongly pushing it with your foot or other body parts.
2. If the tire is loose, fasten it again after checking that there are no defects in the bracket or hanger plate. If the tire is still loose, contact the nearest Isuzu Dealer before driving the vehicle.

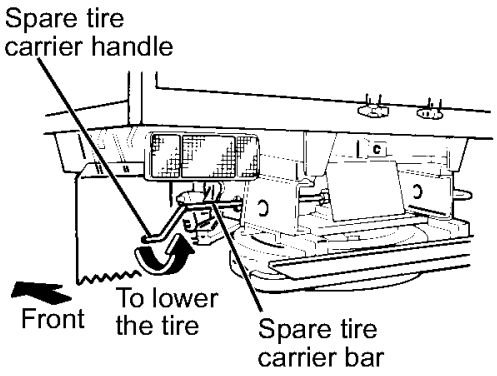
Removing and Installing the Spare Tire

Removal

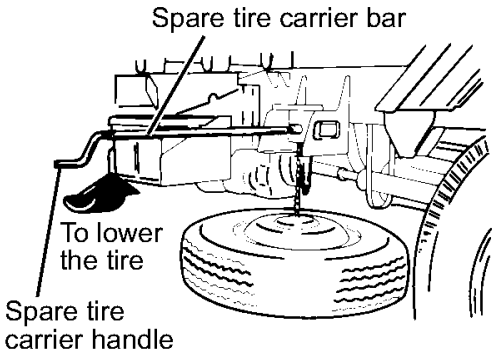
Assemble the spare tire carrier bar and the handle together, insert the bar into the hole in the carrier, and turn the handle counterclockwise to lower the spare tire.

Spare tire stored at rear of frame





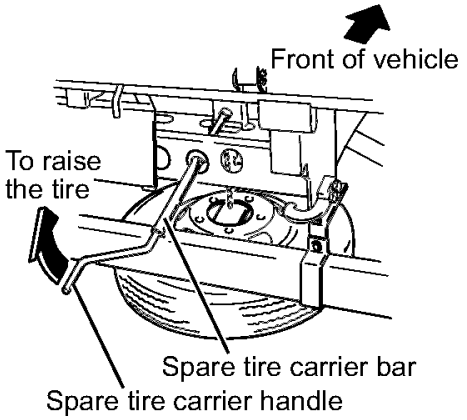
Spare tire stored at side of frame

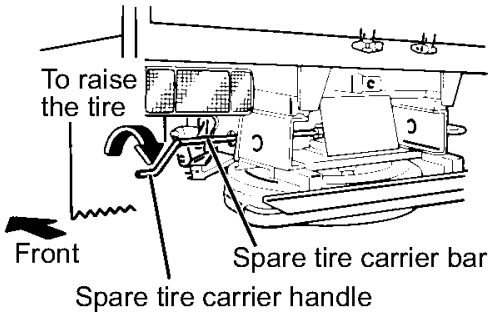


Storage

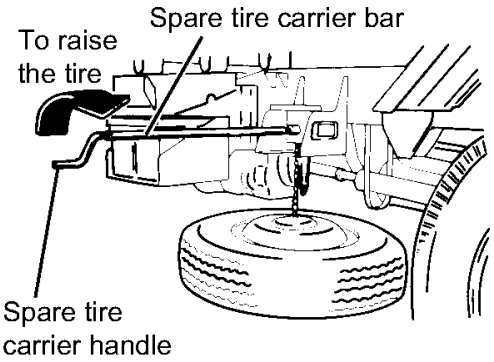
1. With the convex side of the disc wheel facing upward, firmly fit the pawls of the carrier hanger plate.
2. Check that the chain is not twisted.
3. Assemble the spare tire carrier bar and the handle, insert the bar into the hole in the carrier, and turn the handle clockwise to wind up the chain holding the spare tire. Be careful not to twist the chain while winding it up. Install the carrier so that it will be perpendicular to the hanger plate.

Spare tire stored at rear of frame





Spare tire stored at side of frame



4. After winding the chain up, secure the tire by tightening the spare tire carrier bar to **196 N** (20 kgf/**44 lb**) or more. After securing the tire, remove the bar without turning it in reverse.
5. After the spare tire is installed, check that it is not loose by strongly pushing it with your foot or other body parts. If the tire is loose, fasten it again after checking that there are no defects in the bracket or hanger plate. If the tire is still loose, contact the nearest Isuzu Dealer before driving the vehicle.

Checking the Air Pressure of the Spare Tire

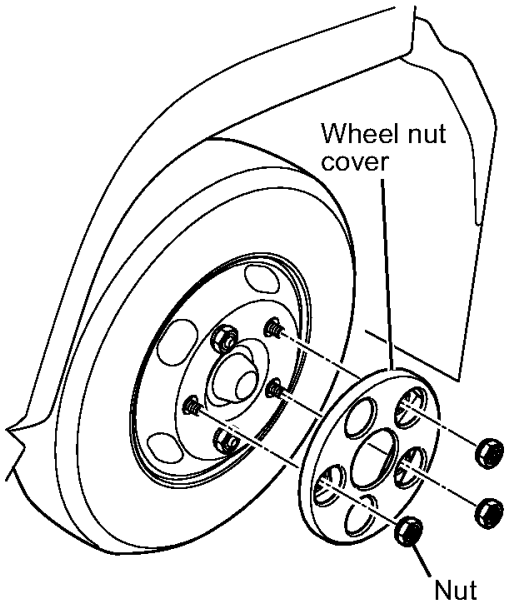
Check the air pressure of the spare tire using a tire air pressure gauge at the intervals specified in the Maintenance Schedule.
A spare tire inflated to a normal pressure may lose its pressure gradually over time due to leaks. You should therefore inflate it to a pressure a little higher than the normal over time pressure.

Refer to page
8-2 Maintenance Schedule

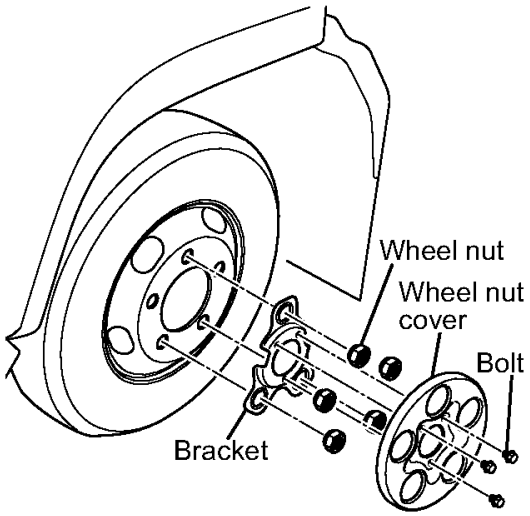
Wheel Nut Cover (JIS 5-Bolt or 6-Bolt Wheels) [V]

Installing the Wheel Nut Cover

Type 1

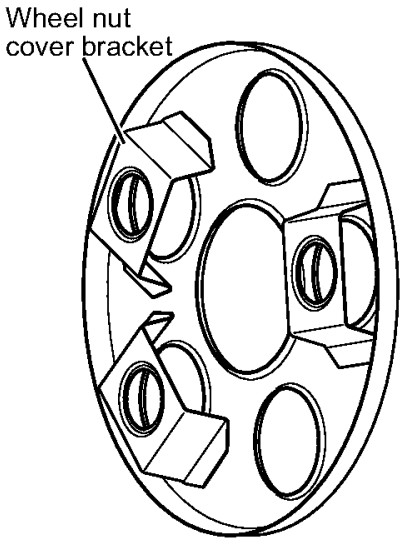


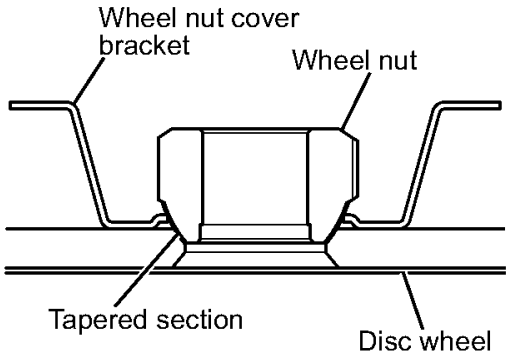
Type 2



1. Install the wheel nut cover (type 1) or the bracket (type 2) using 3 of the 5 bolts (JIS 5-bolt wheels) or 3 of the 6 bolts (JIS 6-bolt wheels).

Back of the wheel nut cover





2. Install the wheel nut cover.
   For type 1 specification vehicles, temporarily tighten the wheel nuts by hand until the tapered sections of the wheel nuts perfectly fit the tapered sections of the disc wheel. In this case, make sure the wheel nut cover bracket does not get caught between the nut and disc wheel.
   For type 2 specification vehicles, install the wheel nut covers on the brackets using the bolts.

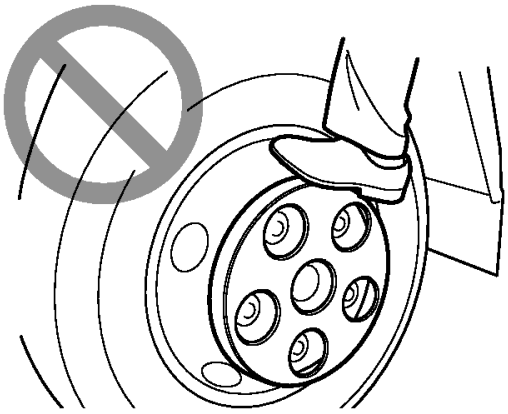
3. Tighten the wheel nuts diagonally in several sequences.

4. Finally, make sure that the wheel nuts are tightened to the specified torque by using torque wrench, etc.

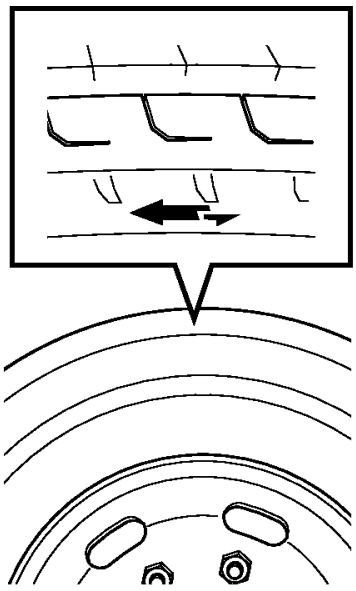
Model or specification	Front wheel nuts	
	Tightening torque	Quantity
Single tire	**140 - 200 N·m** (14 - 20 kgf·m/**101 - 145 lb·ft**)	6
Dual tire	**450 - 550 N·m** (45 - 55 kgf·m/**325 - 398 lb·ft**)	5 or 6

⚠ CAUTION

- **Do not step on the wheel nut cover.**



Directional Tires [V]



Your vehicle may be equipped with special tires whose direction of rotation is specified. A tire of this type has a set of arrows on the sidewall. The larger arrow shows the direction of rotation for forward movement of the vehicle. When installing the wheel assembly consisting of a tire of this type and a disc wheel, install the assembly so that the larger arrow points in the direction of rotation when the vehicle moves forward.

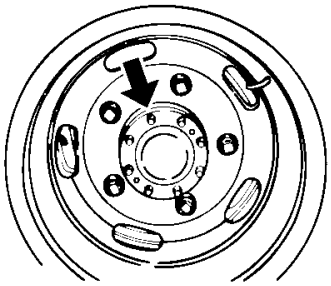
⚠ CAUTION

- **Before installing a directional tire, make sure that the arrows point in the direction of rotation when the vehicle moves forward.**

NOTE

- If the tread depth is 5 mm (0.20 in) or less when measured, it is possible to install the assembly so that the smaller arrow points in the direction of rotation when the vehicle moves forward. The tread depth can be checked with a depth gauge in either of the two center grooves among the four.

Wheel Hub Bearing Grease [V]



As disassembly and reassembly will be required in order to replace front and rear bearing grease, have these operations performed by your Isuzu Dealer.

Leaf Spring Suspension

Checking the Leaf Springs

Refer to page
9-20 Checking the Leaf Springs

Clutch [M/T]

The clutch disc wears down as the clutch is used, and this causes the free play of the clutch pedal to decrease. If you continue to use the clutch with reduced clutch pedal play, the clutch slips easily. On the other hand, if the pedal free play is too much, the clutch disengages poorly, making gearshifts difficult.

⚠ CAUTION

- **Overloading can cause damage to the clutch, such as slipping or rapid wear of the clutch.**

Checking the Clutch Pedal Free Play and Stroke

Refer to page
9-30 Checking the Clutch Pedal Free Play and Stroke [M/T]

Checking the Clutch System Function

Refer to page
9-37 Checking the Clutch System Function [M/T]

Clutch Fluid [M/T]

Clutch fluid is used to create hydraulic pressure to engage and disengage the clutch. Be sure to use the specified oil when replacing it. The tank of the clutch fluid is common to the tank of the brake fluid.

⚠ CAUTION

- **When refilling the tank with clutch fluid, be careful not to let dust or water enter the tank. Dust or water can impair clutch operation.**
- **Be careful not to spill clutch fluid on a painted surface or let it come in contact with your skin. Should the fluid be spilled on a painted surface or come in contact with your skin, wash away the fluid with water and immediately wipe the area clean.**
- **Use only the specified clutch fluid and change it according to the Maintenance Schedule.**
- **Clutch fluid readily absorbs moisture. Close the cap of the container tightly when storing it.**
- **Do not use clutch fluid mixed with that of any other brand.**
- **If clutch fluid decreases too rapidly, there might be a problem in the clutch system or the brake system, or brake pads or shoe linings may have worn out. Have your vehicle inspected by the nearest Isuzu Dealer immediately.**
- **Before refilling the tank, clean the area around the cap and fill clutch fluid from a clean container. Foreign objects getting in the tank will lead to a clutch system failure.**
- **Clutch fluid melts paintwork and vehicle component materials such as plastic, vinyl and rubber. It is also highly corrosive on metals. If it is spilled, immediately wipe the area clean or wash away the fluid with water.**
- **Do not mix clutch fluid with fluids of a non-specified brand. Due to chemical reactions, any mixture of differently branded fluids will cause failure of the clutch system.**

Refer to page
8-2 Maintenance Schedule
8-22 Recommended Fluids, Lubricants and Diesel Fuels

Checking the Clutch Fluid Level

Refer to page
9-24 Checking the Clutch Fluid Level [M/T]

Adding Clutch Fluid

Refer to page
9-24 Checking the Clutch Fluid Level [M/T]

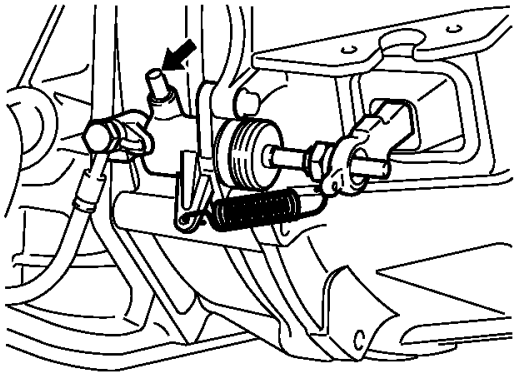
Changing Clutch Fluid

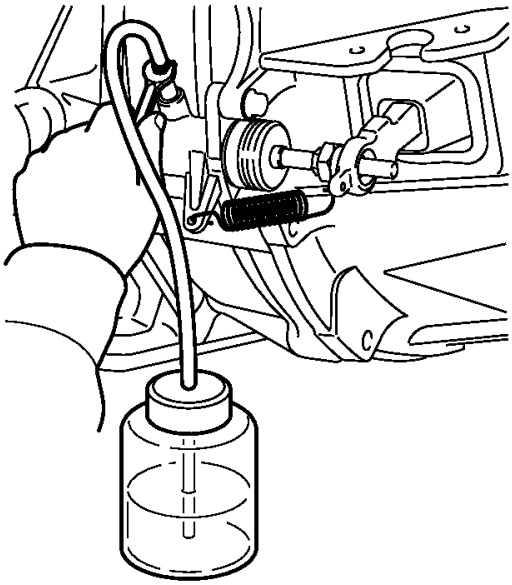
Change the clutch fluid according to the Maintenance Schedule using the specified fluid. Since a clutch fluid change requires operation of the related components, have this service performed by your Isuzu Dealer.

Bleeding the Clutch Hydraulic System

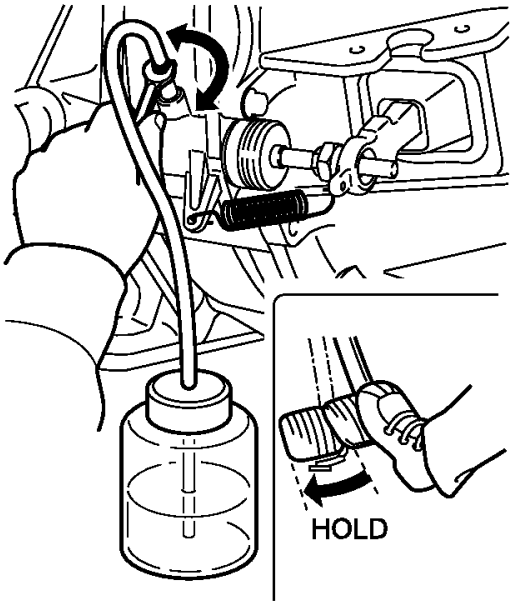
If air is present in the clutch hydraulic system, the clutch may disengage incompletely. Bleed the system if the clutch is used when the quantity of the clutch fluid in the tank is extremely low or the clutch piping is disconnected during a maintenance operation. Do not perform bleeding by yourself; it should be done with the help of another person.

1. Chock the wheels and firmly apply the parking brake.
2. Check the level of the clutch fluid in the clutch fluid tank and add fluid as required.
3. Detach the rubber cap from the bleeder screw on the clutch slave cylinder. Wipe the bleeder screw clean.





4. Attach one end of a vinyl tube to the bleeder screw and put the other end in a clear container. Fill the container with clutch fluid to about one-third (1/3) of its capacity.



5. Press the clutch pedal several times and then keep it pressed.
6. Loosen the bleeder screw to let the clutch fluid containing air bubbles flow into the container and then tighten the bleeder screw immediately.
7. Release the clutch pedal slowly. Repeat Steps 5 and 6 until the fluid from the tube no longer contains air bubbles. After bleeding, install the rubber cap in position.

⚠ CAUTION

- **While bleeding, ensure that the fluid level in the clutch fluid tank is not below the "ADD" line.**

Transmission Oil

The transmission is the mechanism that transmits the drive force of the engine. Transmission oil lubricates the inside of the transmission and protects the gears inside it. It also prevents the gears from wearing or seizing.
Change the transmission oil according to the Maintenance Schedule.

Refer to page
8-2 Maintenance Schedule

If your vehicle is equipped with Smoother or DCT, you should follow the special procedures for level checking and changing of the Smoother clutch oil or DCT clutch oil. The procedures to inspect and replace clutch oil are different in Smoother models and DCT models.

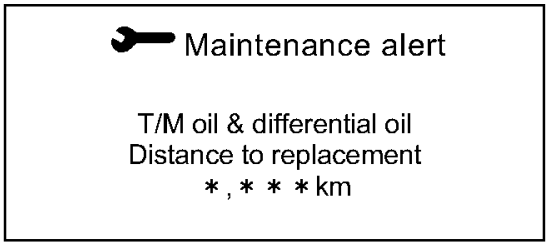
Refer to page
10-95 Smoother Clutch Oil [SA]
10-100 DCT Clutch Oil [DCT]

ADVICE

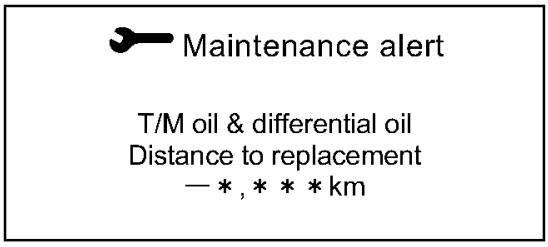
- Use the oil quantities indicated as guidelines when changing the transmission oil. After changing the oil, make sure the oil is at the required level.
- Drained oil must be disposed of in a method conforming to the regulatory requirements in your country.

Transmission Oil Maintenance Alerts

Distance remaining



Distance exceeded



This message appears on the multi-information display when the next replacement interval for the transmission oil is near, and the distance remaining until the replacement timing or the distance exceeded after the replacement timing is displayed. When the time for maintenance is approaching, the message is displayed in amber when the starter switch is turned to the "ON" position. It remains on the display until "Enter" in the multi-information display switch is pressed once or the vehicle is started.
When this message comes on, have the vehicle inspected/serviced at your Isuzu Dealer.

NOTE

- Checking and setting the maintenance period can be done from the "Maintenance alert" on the multi-information display.

Refer to page
3-59 Maintenance Alert
10-93 Changing the Transmission Oil
10-110 Rear Axle Differential Gear Oil

Checking the Transmission Oil Level

CAUTION

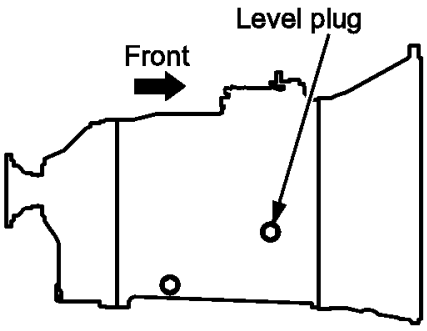
- **Be extremely careful not to burn yourself when checking the oil level if the engine temperature is high. Protect yourself with gloves, etc.**

ADVICE

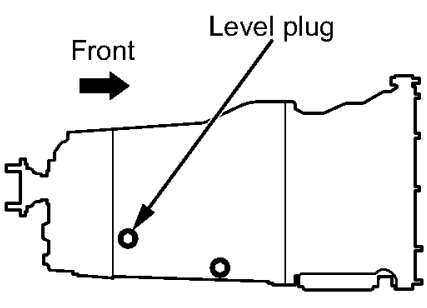
- Any dirt on the plug should be wiped off before installing it.
- For transmissions with aluminum casing, be especially careful not to tighten the oil level plug and drain plug to an excessively large torque when installing them. Otherwise, the threads might be damaged.

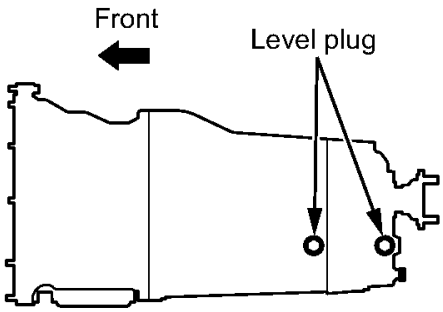
1. Park the vehicle on level ground and firmly apply the parking brake.
2. Remove the oil level plug.

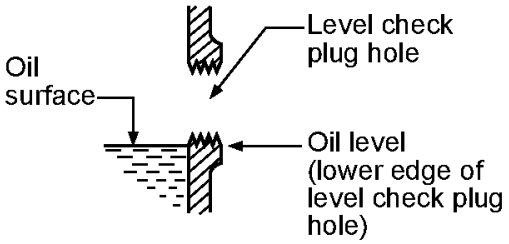
MYY/MZZ models



MYR model







3. Check whether the oil level is up to the lower edge of the oil level plug hole.
   If the oil level is too low, add oil through the oil level plug hole.
4. Fasten the oil level plug to the specified torque.
   Also check to see if there are any transmission oil leaks.

Oil level plug tightening torque
39 N·m (4.0 kgf·m/**29 lb·ft**)

Changing the Transmission Oil

CAUTION

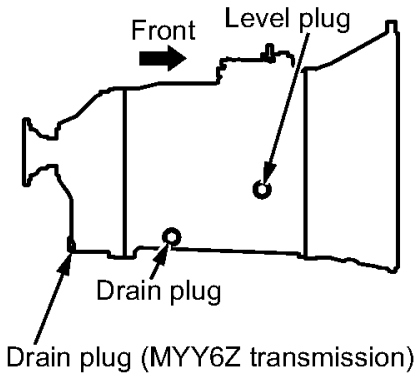
- **Be extremely careful not to burn yourself when changing the oil if the engine temperature is high. Protect yourself with gloves, etc.**
- **Be very careful not to splash the transmission oil when you change it. If oil spills on anything, carefully wipe it all off.**

ADVICE

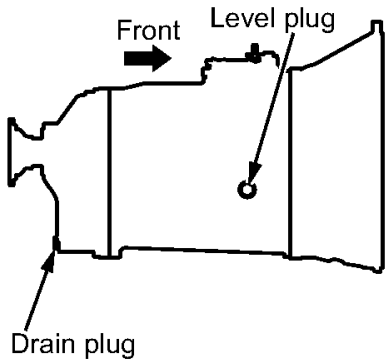
- Any dirt on the plug should be wiped off before installing it.
- For transmissions with aluminum casing, be especially careful not to tighten the oil level plug and drain plug to an excessively large torque when installing them. Otherwise, the threads might be damaged.

1. Place a container under the drain plug(s) to receive oil.
2. Remove both oil level plug and drain plug(s) to discharge the oil into the container.

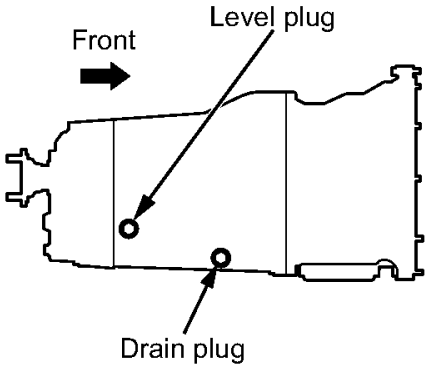
MYY model

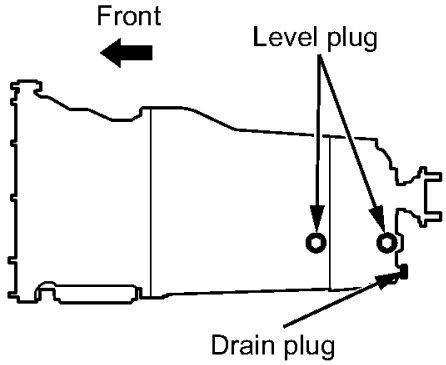


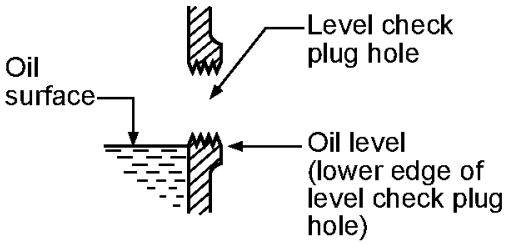
MZZ model



MYR model







3. After installing the drain plug(s) by tightening it to the specified torque, refill the transmission with new oil through the oil level plug hole up to the lower edge of the hole.

Drain plug tightening torque
39 N·m (4.0 kgf·m/**29 lb·ft**)

ADVICE

- The dirt on the plug should be wiped off before installing it.

4. After refilling, confirm that the oil level is up to the lower edge of the oil level plug hole.

5. Install the oil level plug by tightening it to the specified torque. Check to see if there are any transmission oil leaks.

Oil level plug tightening torque
39 N·m (4.0 kgf·m/29 lb·ft)

Quantity of Transmission Oil to Be Changed

Use the oil quantities indicated below only as guidelines when changing the transmission oil. After changing the oil, make sure the oil is at the required level.

Transmission model		Oil quantity [Reference value] Liter (US gal./Imp gal.)	
		Without PTO	With PTO
MYY5S	5 speeds	**3.5** (0.92/**0.77**)	**3.8** (1.00/**0.84**)
MYY5T	5 speeds	**2.8** (0.74/**0.62**)	**3.1** (0.82/**0.68**)
MYY6Z	6 speeds	**3.5** (0.92/**0.77**)	**3.8** (1.00/**0.84**)
MZZ6F/MZZ6T/MZZ6U	6 speeds	**4.4** (1.16/**0.97**)	**5.3** (1.40/**1.17**)
MYR9R/MYR9S	9 speeds	**5.1** (1.35/**1.12**)	**5.4** (1.43/**1.19**)

NOTE

- The transmission model is indicated on the ID plate in the cab.

Refer to page
0-4 Option Codes

Smoother Clutch Oil [SA]

Smoother clutch oil is used for operating the fluid coupling, which transmits the engine power, and the clutch, which engages and disengages drive power when shifting. Be sure to use the specified oil when replacing it.
Check and change the Smoother clutch oil at intervals specified by the Maintenance Schedule.

Refer to page
8-2 Maintenance Schedule

Your vehicle, if equipped with a Smoother system, needs a change of Smoother clutch oil in addition to transmission oil.
The procedures to inspect and replace transmission oil are different.

Refer to page
10-90 Transmission Oil

ADVICE

- Both quality and quantity of oil are important factors that have a significant influence on the performance and durability of Smoother. Be sure to use only the Isuzu recommended oil for replenishment, and observe the specified oil level.
  - Too much oil will cause oil leaks.
  - Too little oil will cause malfunction of the system.
- Before checking the Smoother clutch oil level, thoroughly clean the dipstick and the area around it to prevent dust or other foreign matter from entering the system. Failure to do so may cause a fault in the transmission. Clean the dipstick before installing it as well.
- Do not let engine coolant, water or other oils mix with the Smoother clutch oil. Otherwise, degraded performance and faulty operation of the system would result.

Refer to page
8-22 Recommended Fluids, Lubricants and Diesel Fuels

Smoother Clutch Oil Maintenance Alerts

Distance remaining

Maintenance alert

Clutch oil
Distance to replacement
*,***km

Distance exceeded

Maintenance alert

Clutch oil
Distance to replacement
—*,***km

This message appears on the multi-information display when the next replacement interval for the clutch oil is near, and the distance remaining until the replacement timing or the distance exceeded after the replacement timing is displayed. When the time for maintenance is approaching, the message is displayed in amber when the starter switch is turned to the "ON" position. It remains on the display until "Enter" in the multi-information display switch is pressed once or the vehicle is started.
When this message comes on, have the vehicle inspected/serviced at your Isuzu Dealer.

NOTE

- Checking and setting the maintenance period can be done from the "Maintenance alert" on the multi-information display.

Refer to page
3-59 Maintenance Alert
10-105 Changing the DCT Clutch Oil

Checking the Smoother Clutch Oil Level

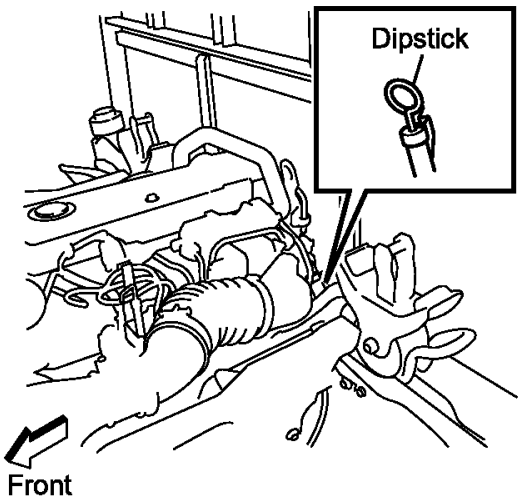
CAUTION

- **Be extremely careful not to burn yourself when checking the oil level if the engine temperature is high. Protect yourself with gloves, etc.**

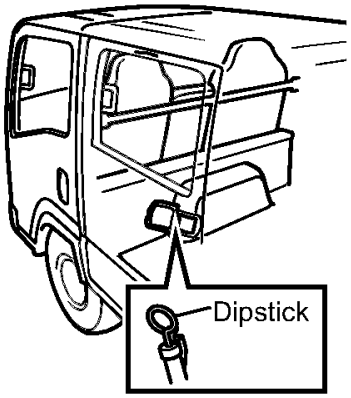
ADVICE

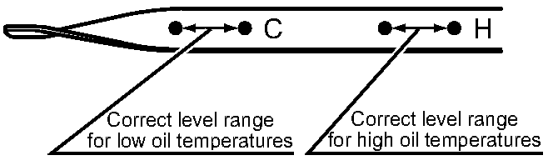
- When the dipstick is in the "C (Cold)" range, it is a sign that the Smoother clutch oil must be replaced and repairs made at your Isuzu Dealer that has the required equipment to do so.
  When adjusting the oil level, do so after having warmed the vehicle with the dipstick in the "H (Hot)" range.
- In order to avoid excessively low oil levels, have your vehicle inspected and oil replenished at your Isuzu Dealer.

Single cab model



Crew cab model





The position of the dipstick is on the left side of the transmission behind the engine.

1. Park the vehicle on level ground and firmly apply the parking brake.
2. Start the engine and let it warm up.

Refer to page
4-61 Warm-Up Switch [V]

3. For single cab models, tilt up the cab. For crew cab models, open the inspection hatch.

Refer to page
7-26 Tilting the Cab [V]
7-22 Inspection Hatches [V]

4. Pull out the dipstick and wipe it with a clean cloth.
5. Reinsert the dipstick into position and then, while the engine is running at idle, pull out the dipstick slowly and check whether the oil level is within the "C" marked range on the dipstick when the oil temperature is low, or within the "H" marked range when the oil temperature is high.

Mark on dipstick	Smoother clutch oil temperature
C (Cold)	About 20 - 30°C (68 - 86°F)
H (Hot)	About 70 - 80°C (158 - 176°F)

6. If the oil level is too low, add oil as necessary.
7. After checking, insert the dipstick fully into position.

8. Drive the vehicle once and check the oil level with the dipstick again.

Changing the Smoother Clutch Oil

CAUTION

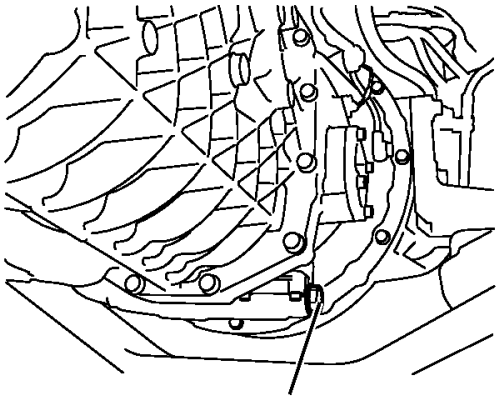
- **Hot fluid can cause severe skin burns. Allow the transmission to cool before draining the Smoother clutch oil.**

ADVICE

- After changing the Smoother clutch oil, check that the oil level is correct by following the instructions in the preceding "Checking the Smoother Clutch Oil Level" section.
- Drained oil must be disposed of in a method conforming to the regulatory requirements in your country.

NOTE

- Smoother clutch oil cannot be completely drained because a certain amount remains in the fluid coupling and hydraulic circuits.



1. Place a container beneath the drain plug.
2. Tilt the cab.

Refer to page
7-26 Tilting the Cab [V]

3. Pull out the dipstick.
4. Remove the drain plug and gasket to discharge the oil into the container.

ADVICE

- Do not reuse the gasket.

5. Install the drain plug by tightening it to the specified torque.

Drain plug tightening torque
29 - 49 N·m (3.0 - 5.0 kgf·m/**22 - 36 lb·ft**)

6. Fill the clutch with new oil through the dipstick guide tube.
7. Check the oil level according to the "Checking the Smoother Clutch Oil Level" section.

Refer to page
10-97 Checking the Smoother Clutch Oil Level

DCT Clutch Oil [DCT]

DCT clutch oil is used for operating the fluid coupling, which transmits the engine power, and the clutch, which engages and disengages drive power when shifting. Be sure to use the specified oil when replacing it.
Check and change the DCT clutch oil at intervals specified by the Maintenance Schedule.

Refer to page
8-2 Maintenance Schedule

Your vehicle, if equipped with an DCT system, needs a change of DCT clutch oil in addition to transmission oil.
The procedures to inspect and replace transmission oil are different.

Refer to page
10-90 Transmission Oil

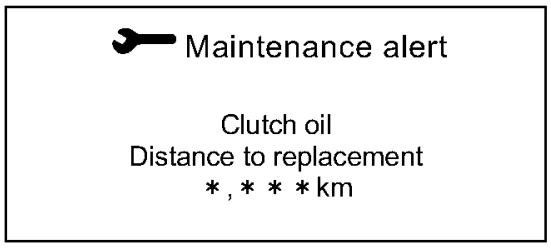
ADVICE

- Both quality and quantity of oil are important factors that have a significant influence on the performance and durability of DCT. Be sure to use only the Isuzu recommended oil for replenishment, and observe the specified oil level.
  - Too much oil will cause oil leaks.
  - Too little oil will cause malfunction of the system.
- Before checking the DCT clutch oil level, thoroughly clean the dipstick and the area around it to prevent dust or other foreign matter from entering the system. Failure to do so may cause a fault in the transmission. Clean the dipstick before installing it as well.
- Do not let engine coolant, water or other oils mix with the DCT clutch oil. Otherwise, degraded performance and faulty operation of the system would result.

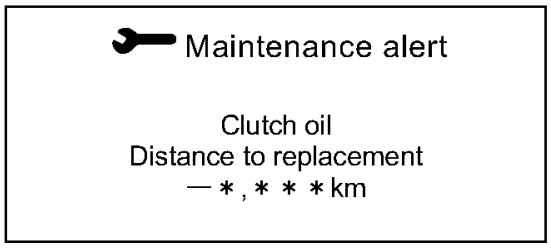
Refer to page
8-22 Recommended Fluids, Lubricants and Diesel Fuels

DCT Clutch Oil Maintenance Alerts

Distance remaining



Distance exceeded



This message appears on the multi-information display when the next replacement interval for the clutch oil is near, and the distance remaining until the replacement timing or the distance exceeded after the replacement timing is displayed. When the time for maintenance is approaching, the message is displayed in amber when the starter switch is turned to the "ON" position. It remains on the display until "Enter" in the multi-information display switch is pressed once or the vehicle is started.
When this message comes on, have the vehicle inspected/serviced at your Isuzu Dealer.

NOTE

- Checking and setting the maintenance period can be done from the "Maintenance alert" on the multi-information display.

Refer to page
3-59 Maintenance Alert
10-105 Changing the DCT Clutch Oil

Checking the DCT Clutch Oil Level

CAUTION

- **Be extremely careful not to burn yourself when checking the oil level if the engine temperature is high. Protect yourself with gloves, etc.**

ADVICE

[MYR9S model]

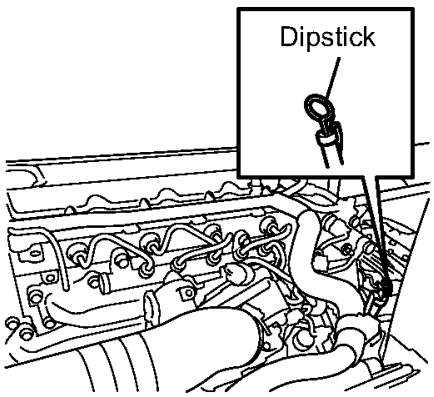
- The following procedure is a simplified inspection method. Accurate inspection and replenishment of DCT clutch oil requires measurement by specialized equipment. Have the inspection and replenishment done at an Isuzu Dealer to ensure there is not too much or too little DCT clutch oil.

[MYR9R model]

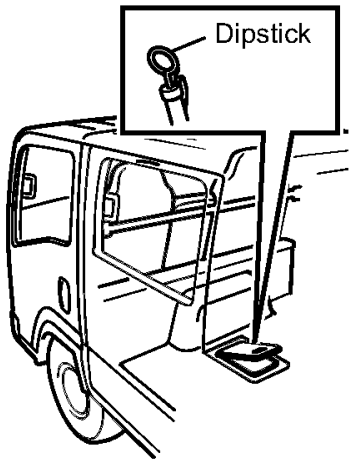
- The "C (Cold)" range on the dipstick is a guideline for when the DCT oil should be changed or repaired at an Isuzu Dealer with specialized equipment. When adjusting the oil amount, be sure to keep it in the "H (Hot)" range after warming up the engine.
- To ensure that the DCT oil level is not excessive or insufficient, we recommend having it inspected and replenished at an Isuzu Dealer.

MYR9S Model

Single cab model



Crew cab model



The position of the dipstick is on the left side of the transmission behind the engine.

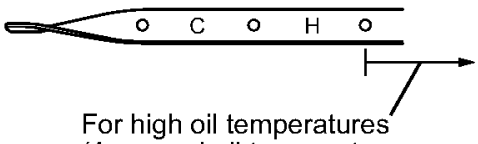
1. Park the vehicle on level ground and firmly apply the parking brake.
2. Start the engine and let it warm up.

Refer to page
4-61 Warm-Up Switch [V]

3. For single cab models, tilt up the cab. For crew cab models, open the inspection hatch.

Refer to page
7-26 Tilting the Cab [V]
7-22 Inspection Hatches [V]

4. While the engine is idling, pull out the dipstick and wipe it with a clean cloth.



For high oil temperatures
(Assumed oil temperature:
30 - 70℃ (86 – 158°F))

5. Insert the dipstick again, and gently pull it out, then check that the oil is above the maximum value of the "H" range.

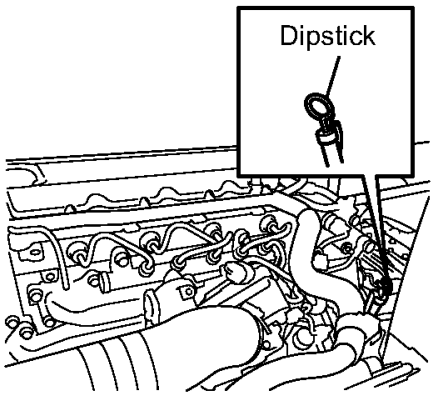
NOTE

- The range of the dipstick is a guide when doing repairs or changing DCT clutch oil at an Isuzu Dealer that has special equipment.

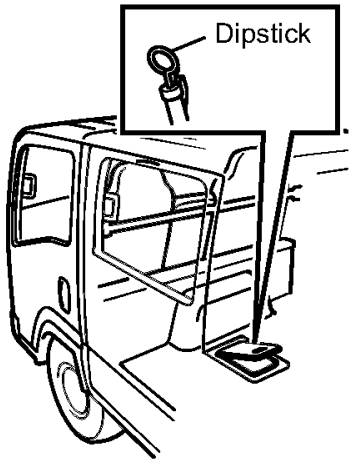
6. If the oil level is low, replenish it from the guide tube of the dipstick with the specified oil. Also, check that the clutch oil is not leaking.
7. After checking, insert the dipstick fully into position.
8. Drive the vehicle once and check the oil level with the dipstick again.

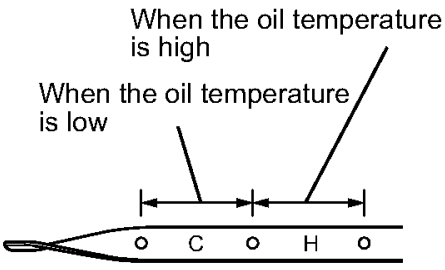
MYR9R Model

Single cab model



Crew cab model





The position of the dipstick is on the left side of the transmission behind the engine. For single cab vehicles, tilt up the cab; for double cab vehicles, open the clutch oil inspection hatch to carry out an inspection.

Refer to page
7-25 Rear Inspection Hatches (Crew Cab Model)
7-26 Tilting the Cab [V]

1. Park the vehicle on level ground and firmly apply the parking brake.
2. Start the engine and let it warm up.

Refer to page
4-61 Warm-Up Switch [V]

3. Turn on the DCT emergency switch.

Refer to page
4-140 How to Use the DCT Emergency Switch

4. With the engine idling, pull out the dipstick and wipe it with a clean cloth.
5. Insert the clutch oil dipstick again and gently pull it out to check that the oil is between the levels. When the oil temperature is low, check between "C (Cold)", and when the temperature is high, check between "H (Hot)".

Mark on dipstick	DCT clutch oil temperature
C (Cold)	About 20 - 30°C (68 - 86°F)
H (Hot)	About 70 - 80°C (158 - 176°F)

6. If the oil level is low, replenish it from the guide tube of the dipstick with the specified oil. Also, check that the clutch oil is not leaking.

7. After checking, insert the dipstick fully into position.
8. Drive the vehicle once and check the oil level with the dipstick again.

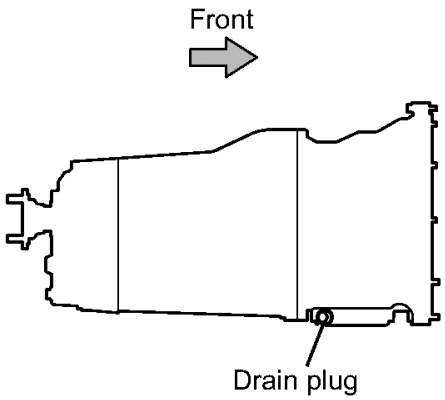
Changing the DCT Clutch Oil

ADVICE

- The amount of oil noted here is a guide for replacement. After replacement, refer to "Checking the DCT Clutch Oil Level" and confirm that it was filled to the specified position.
- Drained oil must be disposed of in a method conforming to the regulatory requirements in your country.

NOTE

- Oil remains in fluid couplings and hydraulic circuits, so completely draining the oil is impossible.



1. Place a container under the drain plug.
2. Tilt the cab.

Refer to page
7-26 Tilting the Cab [V]

3. Pull out the dipstick.
4. Remove the drain plug to discharge the oil.
5. Install the drain plug by tightening it to the specified torque.

Drain plug tightening torque
40 N·m (4.1 kgf·m/**29.5 lb·ft**)

6. Replenish with the specified clutch oil from the guide tube of the dipstick.
7. Refer to "Checking the DCT Clutch Oil Level" and follow the procedure to check the oil level.

Refer to page
10-101 Checking the DCT Clutch Oil Level

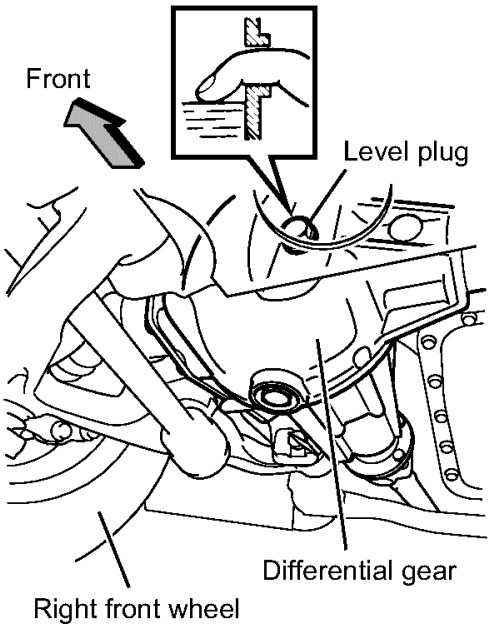
Front Axle Differential Gear Oil [V]

The differential is the mechanism that transmits drive force to the wheels. Differential gear oil lubricates the inside of the differential and protects the gears inside it. It prevents the gears from wearing or seizing.
The front axle differential gear oil level must be checked and it must be changed according to the Maintenance Schedule.

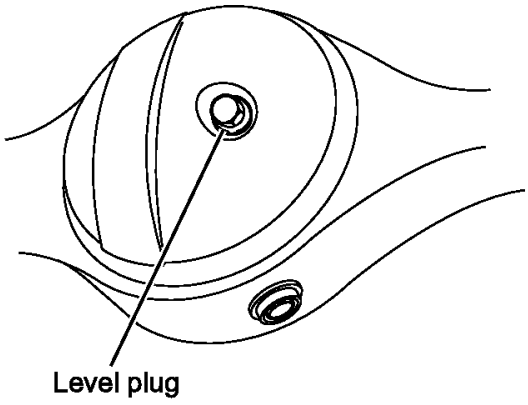
Refer to page
8-2 Maintenance Schedule

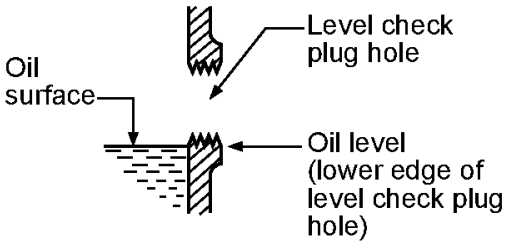
Checking the Front Axle Differential Gear Oil Level

NMS model



NPS/NQS models





1. Remove the oil level plug.
2. Check that the oil level is up to the lower edge of the oil level plug hole.
3. If the oil level is low, replenish the specified oil. Also, check that differential gear oil is not leaking.

ADVICE

[NMS model]

- The differential gear oil level of a viscous type torque split 4WD vehicle is appropriate (approximately 1.3 liters (0.34 US gal./0.29 Imp gal.)) if it is approximately 10 mm (0.39 in) lower than the underside of the level plug hole. If the level plug is filled to the top, gear oil may overflow depending on the driving conditions.

Refer to page
8-22 Recommended Fluids, Lubricants and Diesel Fuels

4. Fasten the oil level plug to the specified torque.

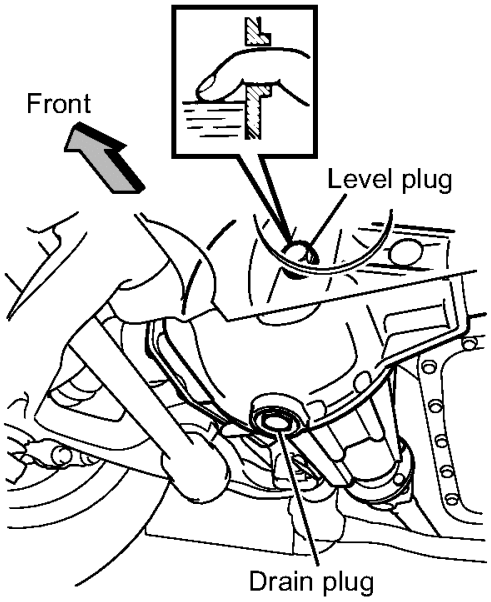
Vehicle model	Plug tightening torque
NMS model	**78 N·m** (8.0 kgf·m/**58 lb·ft**)
NPS/NQS models	**84 N·m** (8.6 kgf·m/**62 lb·ft**)

ADVICE

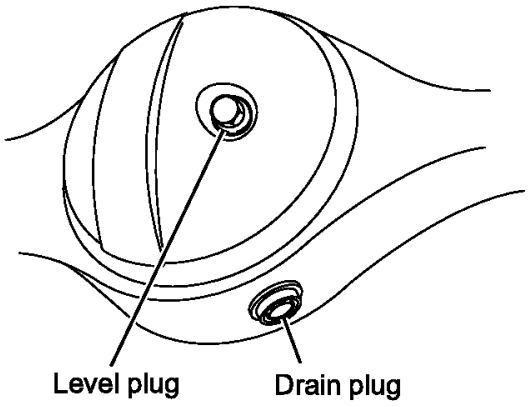
- Any dirt on the plug should be wiped off before installing it.

Changing the Front Axle Differential Gear Oil

NMS model



NPS/NQS models



1. Place a container under the drain plug to receive oil.

ADVICE

- Use the oil quantities indicated below only as guidelines when changing the front axle differential oil. After changing the oil, ensure that its level is as required.
- Drained oil must be disposed of in a method conforming to the regulatory requirements in your country.

2. Remove the plugs indicated in the figure to discharge the oil into the container.
3. After installing the drain plug by tightening it to the specified torque, refill the front axle differential with new oil through the oil level plug hole up to the lower edge of the hole.

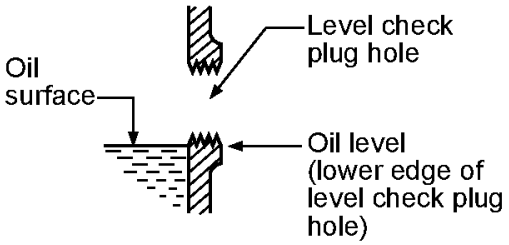
Vehicle model	Plug tightening torque
NMS model	**78 N·m** (8.0 kgf·m/**58 lb·ft**)
NPS/NQS models	**84 N·m** (8.6 kgf·m/**62 lb·ft**)

ADVICE

- Any dirt on the plug should be wiped off before installing it.

[NMS model]

- The differential gear oil level of a viscous type torque split 4WD vehicle is appropriate (approximately 1.3 liters (0.34 US gal./0.29 Imp gal.)) if it is approximately 10 mm (0.39 in) lower than the underside of the level plug hole. If the level plug is filled to the top, gear oil may overflow depending on the driving conditions.



4. After refilling, confirm that the oil level is up to the lower edge of the oil level plug hole.
5. Install the oil level plug by tightening it to the specified torque.

Vehicle model	Plug tightening torque
NMS model	**78 N·m** (8.0 kgf·m/**58 lb·ft**)
NPS/NQS models	**84 N·m** (8.6 kgf·m/**62 lb·ft**)

ADVICE

- Any dirt on the plug should be wiped off before installing it.

Quantity of front axle differential gear oil to be changed

Oil quantity [Reference value]	
NMS model	**1.3 liters** (0.34 US gal./**0.29 Imp gal.**)
NPS/NQS models	**2.7 liters** (0.71 US gal./**0.59 Imp gal.**)

Rear Axle Differential Gear Oil

The differential is the mechanism that transmits drive force to the wheels. Differential gear oil lubricates the inside of the differential and protects the gears inside it. It prevents the gears from wearing or seizing.
The rear axle differential gear oil level must be checked for its level and it must be changed according to the Maintenance Schedule.

Refer to page
8-2 Maintenance Schedule

ADVICE

- After changing the oil, ensure that it is at the correct level.
- Drained oil must be disposed of in a method conforming to the regulatory requirements in your country.

Differential Gear Oil Maintenance Alerts

Distance remaining

Maintenance alert

T/M oil & differential oil
Distance to replacement
＊,＊＊＊km

Distance exceeded

Maintenance alert

T/M oil & differential oil
Distance to replacement
—＊,＊＊＊km

This message appears on the multi-information display when the next replacement interval for the differential gear oil is near, and the distance remaining until the replacement timing or the distance exceeded after the replacement timing is displayed.
When the time for maintenance is approaching, the message is displayed in amber when the starter switch is turned to the "ON" position. It remains on the display until "Enter" in the multi-information display switch is pressed once or the vehicle is started.
When this message comes on, have the vehicle inspected/serviced at your Isuzu Dealer.

NOTE

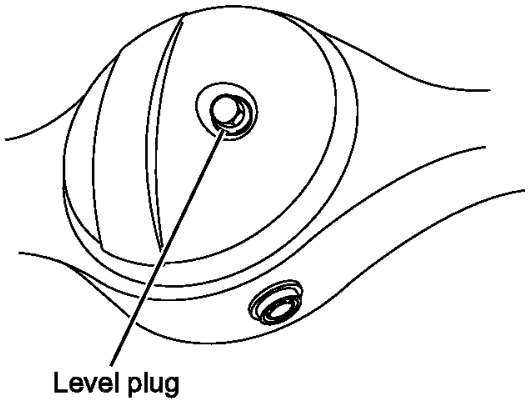
- Checking and setting the maintenance period can be done from the "Maintenance alert" on the multi-information display.

Refer to page
3-59 Maintenance Alert
10-90 Transmission Oil
10-112 Changing the Rear Axle Differential Gear Oil

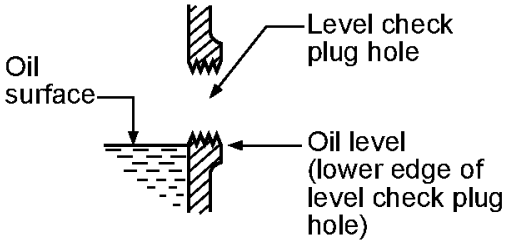
Checking the Rear Axle Differential Gear Oil Level

ADVICE

- Any dirt on the plug should be wiped off before installing it.



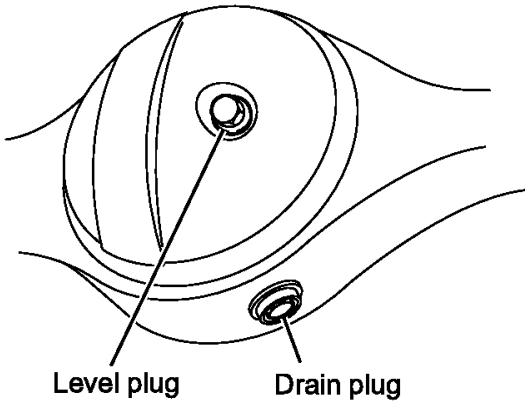
1. Remove the oil level plug.



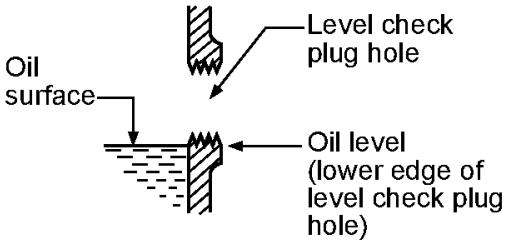
2. Check that the oil level is up to the lower edge of the oil level plug hole.
   - If the oil level is too low, add oil through the oil level plug hole.
3. Fasten the oil level plug to the specified torque.

Plug tightening torque
78.4 N·m (8.0 kgf·m/**57.8 lb·ft**)

Changing the Rear Axle Differential Gear Oil



1. Place a container under the drain plug to receive oil.
2. Remove the plugs indicated in the figure to discharge the oil into the container.



3. After installing the drain plug by tightening it to the specified torque, refill the rear axle differential with new oil through the oil level plug hole up to the lower edge of the hole.

Plug tightening torque
78.4 N·m (8.0 kgf·m/**57.8 lb·ft**)

ADVICE

- Any dirt on the plug should be wiped off before installing it.

4. After refilling, confirm that the oil level is up to the lower edge of the oil level plug hole.
5. Install the oil level plug by tightening it to the specified torque.

Plug tightening torque
78.4 N·m (8.0 kgf·m/**57.8 lb·ft**)

Quantity of Rear Axle Differential Gear Oil to Be Changed

Use the oil quantities indicated below only as guidelines when changing the rear axle differential gear oil.

Specifications	Oil quantity [Reference value]
φ292 mm final drive	**3.0 liters** (0.79 US gal./**0.66 Imp gal.**)
φ320 mm final drive	**4.3 liters** (1.14 US gal./**0.95 Imp gal.**)

Transfer Gear Case Oil [V]

The transfer gear is the mechanism that distributes the drive force to the front and rear. Transfer gear oil lubricates the inside of the transfer gear and protects the gears inside it. It prevents the gears from wearing or seizing.
The transfer gear case oil level must be checked and it must be changed according to the Maintenance Schedule.

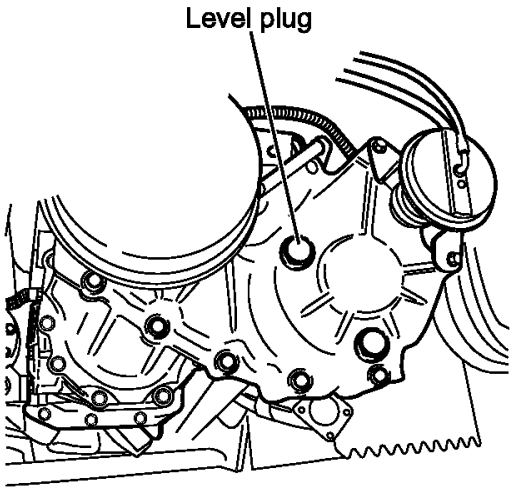
Refer to page
8-2 Maintenance Schedule

Checking the Transfer Gear Case Oil Level

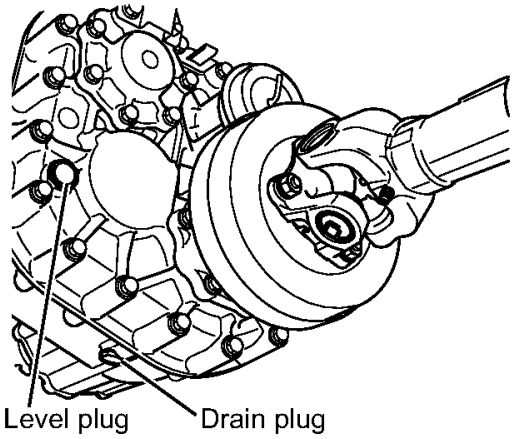
ADVICE

- Any dirt on the plug should be wiped off before installing it.
- For transfer case with aluminum casing, be especially careful not to tighten the oil level plug to an excessively large torque when installing them. Otherwise, the threads might be damaged.

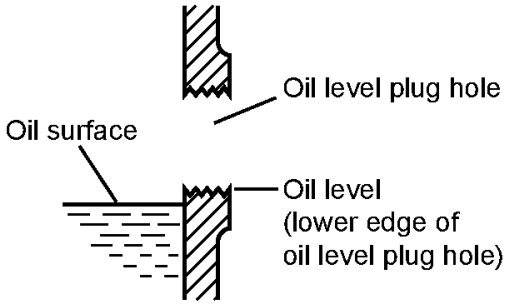
NMS model



NPS/NQS models



1. Remove the oil level plug.



2. Check that the oil level is up to the lower edge of the oil level plug hole.
   - If the oil level is too low, add oil through the oil level plug hole.
3. Fasten the oil level plug to the specified torque.

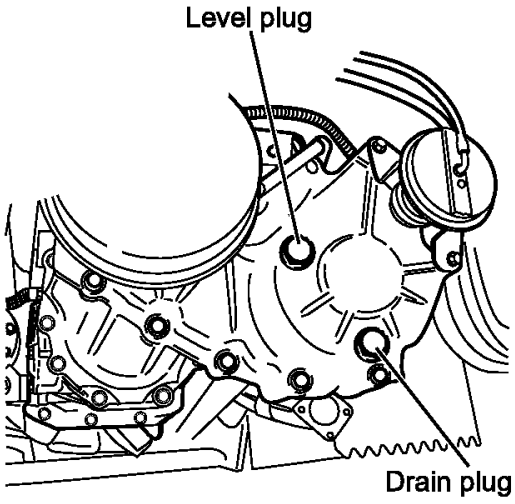
Plug tightening torque	
NMS model	**39 N·m** (4.0 kgf·m/**29 lb·ft**)
NPS/NQS models	**83.3 N·m** (8.5 kgf·m/**61.3 lb·ft**)

Changing the Transfer Gear Case Oil

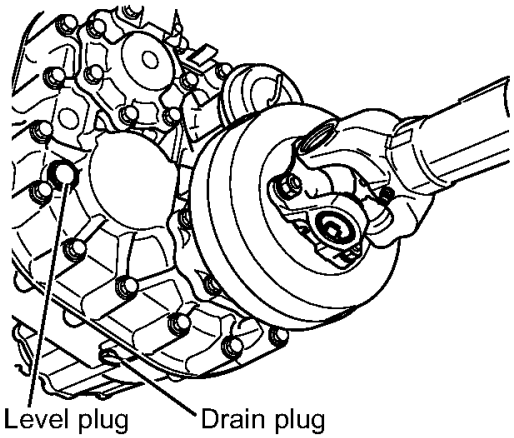
ADVICE

- Use the oil quantity indicated below only as a guideline when changing the transfer gear case oil. After changing the oil, ensure that its level is as required.
- Any dirt on the plug should be wiped off before installing it.
- For transfer case with aluminum casing, be especially careful not to tighten the drain plug to an excessively large torque when installing them. Otherwise, the threads might be damaged.
- Drained oil must be disposed of in a method conforming to the regulatory requirements in your country.

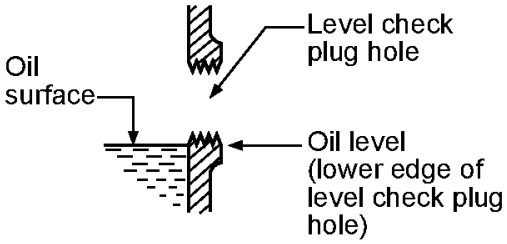
NMS model



NPS/NQS models



1. Place a container under the drain plug to receive oil.
2. Remove both the oil level plug and the drain plug to discharge the oil into the container.



3. After installing the drain plug by tightening it to the specified torque, refill the transfer gear case with new oil through the oil level plug hole and up to the lower edge of the hole.

Drain plug tightening torque	
NMS model	**39 N·m** (4.0 kgf·m/**29 lb·ft**)
NPS/NQS models	**83.3 N·m** (8.5 kgf·m/**61.3 lb·ft**)

4. After refilling, confirm that the oil level is up to the lower edge of the Soil level plug hole.

5. Install the oil level plug by tightening it to the specified torque.

Oil level plug tightening torque	
NMS model	**39 N·m** (4.0 kgf·m/**29 lb·ft**)
NPS/NQS models	**83.3 N·m** (8.5 kgf·m/**61.3 lb·ft**)

Quantity of transfer gear case oil to be changed

Oil quantity [Reference value]	
NMS model	**1.6 liters** (0.42 US gal./**0.35 Imp gal.**)
NPS/NQS models	**2.8 liters** (0.74 US gal./**0.62 Imp gal.**)

Steering Wheel

Checking the Steering Wheel Free Play and Looseness

Refer to page
9-26 Checking the Steering Wheel Free Play and Looseness

Power Steering Fluid

Power steering fluid is an oil that allows steering to operate smoothly.
The power steering fluid level must be checked and it must be changed according to the Maintenance Schedule.

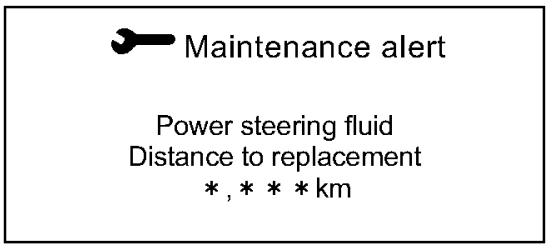
Refer to page
8-2 Maintenance Schedule

CAUTION

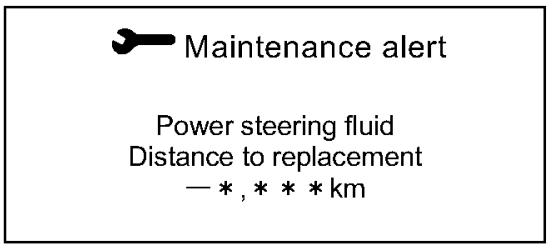
- **Do not mix the recommended power steering fluid with fluids of other brands. Due to chemical reactions, any mixture of differently branded fluids will cause failure of the system.**

Power Steering Fluid Maintenance Alerts

Distance remaining



Distance exceeded



This message appears on the multi-information display when the next replacement interval for the power steering fluid is near, and the distance remaining until the replacement timing or the distance exceeded after the replacement timing is displayed.
When the time for maintenance is approaching, the message is displayed in amber when the starter switch is turned to the "ON" position. It remains on the display until "Enter" in the multi-information display switch is pressed once or the vehicle is started.
When this message comes on, have the vehicle inspected/serviced at your Isuzu Dealer.

NOTE

- Checking and setting the maintenance period can be done from the "Maintenance alert" on the multi-information display.

Refer to page
3-59 Maintenance Alert

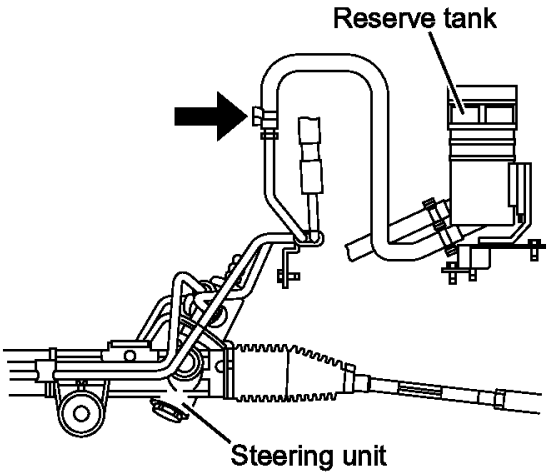
Checking the Power Steering Fluid Level

Refer to page
9-9 Checking the Power Steering Fluid Level

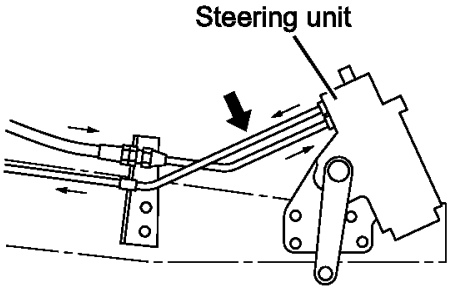
Changing the Power Steering Fluid

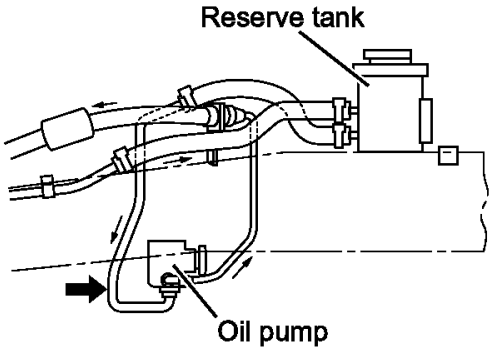
Draining

Rack and pinion



Recirculating balls



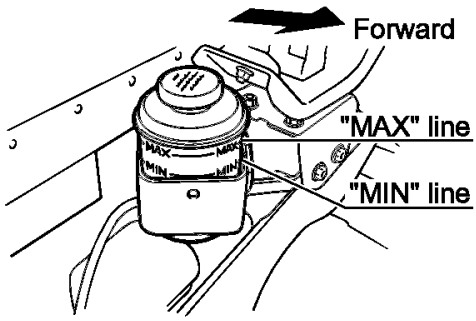


1. Apply the parking brake firmly and chock the rear wheels.
2. Firmly apply the head of the jack to the jacking point.
3. Raise the vehicle until the front wheels are completely clear of the ground.
4. Disconnect the oil pipe between the steering unit and reserve tank as well as the oil hose between the oil pump and reserve tank, and discharge the power steering fluid.
5. When the power steering fluid has been completely discharged, turn the steering wheel fully to the left and right several times to remove fluid left in the piping.

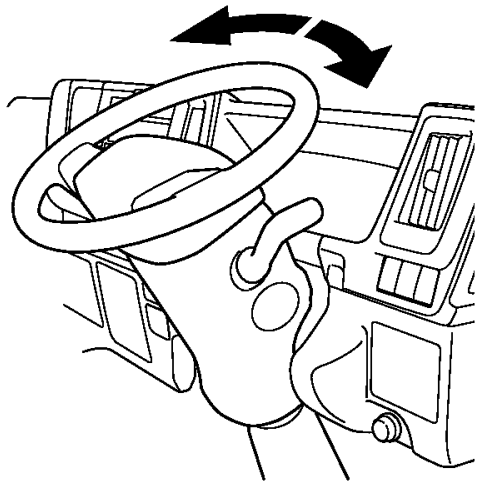
Refilling

⚠ CAUTION

- **Before adding fluid, clean the area around the cap and pour fluid from a clean jug or filler. Foreign matter getting in the tank will cause power steering system failure.**



1. Securely connect the oil pipe and oil hose, and then refill the reserve tank with the specified power steering fluid.
2. When the reserve tank is filled with the fluid up to the specified level, wait for 2 to 3 minutes to allow the fluid level to lower.



3. Without running the engine, fully turn the steering wheel in both directions a few times.
4. Lower the vehicle and start the engine. While running the engine at idle, fully turn the steering wheel in both directions a few times. If you do not hear any abnormal sounds, the system has been properly bled.

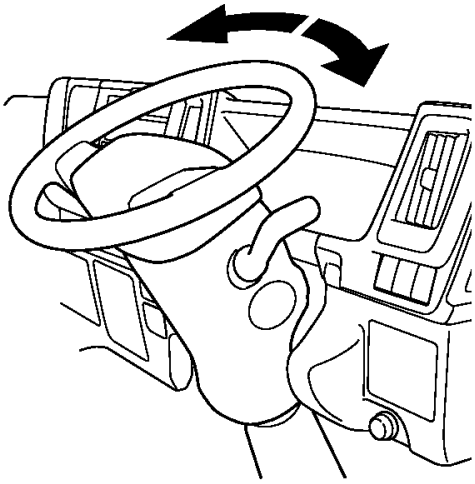
⚠ CAUTION

- **While refilling the system, keep the reserve tank full of the fluid by making additions as necessary to prevent air from getting into the hydraulic system.**

Bleeding

If you hear any abnormal sounds when you turn the steering wheel, air has gotten trapped in the hydraulic system. Follow the steps below to bleed the system.

1. Apply the parking brake firmly and chock the rear wheels.



2. Apply the head of the jack to the jacking point firmly.
3. Raise the vehicle until the front wheels are completely clear of the ground.
4. 4.Start the engine. Turn the steering wheel fully in both directions a few times.
5. Lower the vehicle. With the engine still running, fully turn the steering wheel in both directions a few times. If you do not hear any abnormal sounds, the system has been properly bled. If you still hear any abnormal sounds, this means there is air remaining in the power steering system. To remove the remaining air from the system, fully turn the steering wheel in both directions a few times to increase the fluid temperature. When the fluid temperature has risen to between 60 to 80°C (140 to 176°F), stop the engine and wait for about 5 minutes (allowing air to be collected from high temperature fluid).
6. Check the level of the fluid in the reservoir and also check the joints for fluid leaks.
7. Test drive the vehicle on a road while checking that the steering wheel turns smoothly and the system produces no abnormal sounds when you turn the steering wheel.

Cab Tilt

Checking the Cab is Lowered and Cab Tilt Handle is Locked

Refer to page
9-13 Checking the Cab is Lowered and Cab Tilt Handle is Locked

Other Maintenance and Care

Windshield Washer Fluid

The windshield washer fluid acts to remove dirt.

Checking Windshield Washer

Refer to page
9-27 Checking Windshield Wipers and Windshield Washer

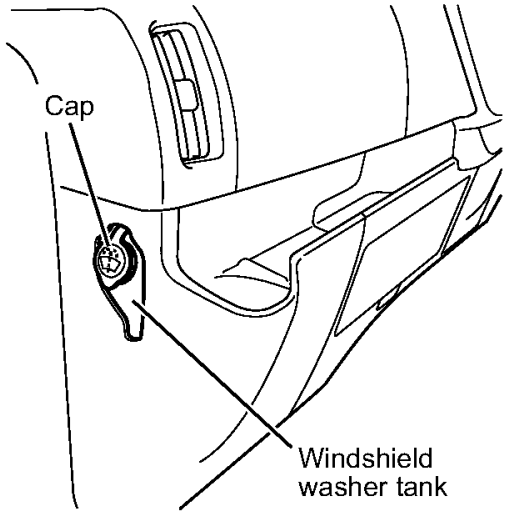
Checking the Windshield Washer Fluid Level

Refer to page
9-9 Checking the Windshield Washer Fluid Level

Refilling Windshield Washer Fluid

NOTE

- Upon factory shipment, new vehicles contain only tap water in the washer fluid tank. Adjust the concentration of the fluid to suit your own usage.
- Follow the instructions provided with the windshield washer fluid regarding the ratio for mixing with tap water.
- Poor quality products, engine coolant, and soapy water must not be used. Failure to observe this precaution can result in nozzle blockage or damage to painted surfaces.
- The washer should never be used while the tank is empty. Operating the washer with the tank empty can result in motor damage.



1. The windshield washer fluid tank is located under the instrument panel on the passenger side.
2. Open the cap and fill the tank with windshield washer fluid to the opening.

Windshield and Windshield Wiper Blades

The windshield wiper blades act to wipe away rain, snow, and dirt to maintain the field of view.

⚠ CAUTION

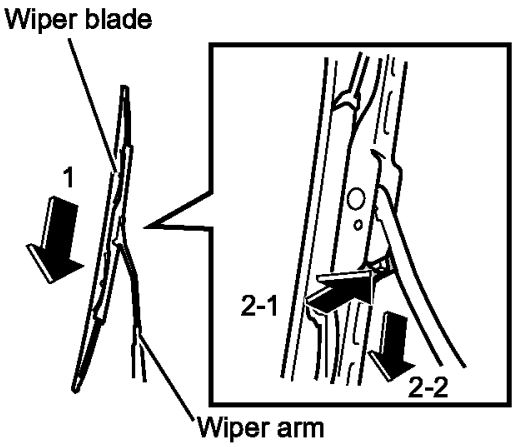
- **Clear ice or packed snow from the wiper blades before using the wipers.**

Checking Windshield Wipers

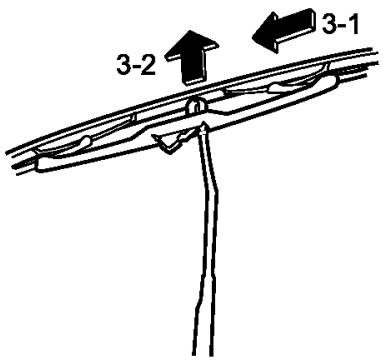
Refer to page
9-27 Checking Windshield Wipers and Windshield Washer

Windshield Wiper Blade Replacement

Removal

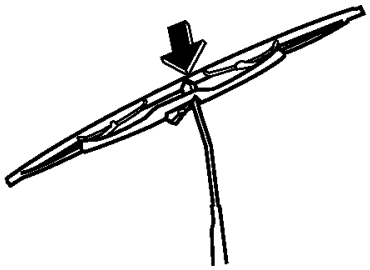


1. Pull the wiper arm up to the vertical position.
2. While pressing the wiper-blade hook towards the arm, slide the blade downwards (towards the base of the arm).

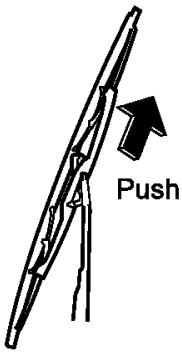


3. With the blade and arm almost perpendicular, remove the blade from the arm.

Installation



1. Insert the blade while holding it almost perpendicular to the arm.



Push up the blade.

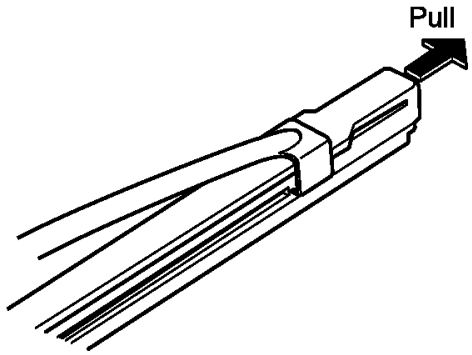
2. Then, with the blade and arm oriented in the same direction, push up the blade until it locks into place on the arm.

ADVICE

- Do not lower the wiper arm with its blade removed; the windshield glass may be scratched.
- Whenever a wiper blade has been attached, ensure that it is locked into place. Failure to observe this precaution can result in the wiper blade becoming dislocated when the windshield wiper switch is turned on.

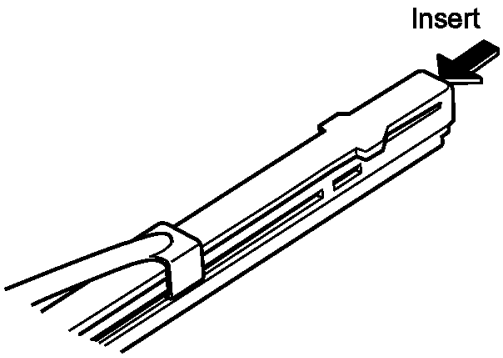
Wiper Rubber Insert Replacement

Removal

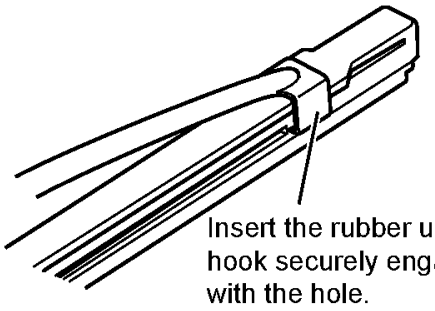


1. Remove the wiper blade from the wiper arm.
2. Pull the wiper rubber insert in the direction indicated by the arrow and extract it from the wiper blade.

Installation



1. Insert a new wiper rubber insert into the wiper blade.



2. Continue pushing in the wiper rubber insert until the wiper blade's hook engages with the hole in it, and then confirm that the rubber insert is securely held in place.
3. Attach the wiper blade to the wiper arm.

Windshield Care



If not fully cleaned by the windshield wipers, the windshield should be cleaned using Isuzu genuine glass cleaner.

Battery

The battery provides power to start the engine, as well as for many electric systems, such as the various lamps and accessories.

Battery Handling Precautions

⚠ DANGER

- **Usage or charging of the battery when the battery fluid is below the "LOWER LEVEL" line can accelerate deterioration and give rise to dangerous situations such as the generation of heat and even explosion.**
- **If battery fluid should come in contact with an eye, immediately wash away using a large amount of water and continue washing for at least 5 minutes. Following this, you should seek medical assistance.**
- **When using tools or other metal objects in the vicinity of the battery, take care to prevent them from coming into contact with the positive terminal. As the vehicle itself will conduct electricity, any such contact can result in a short-circuit and a highly dangerous electric shock.**
- **A vehicle battery generates extremely flammable hydrogen gas. For this reason, operations producing sparks or requiring the usage of an open flame must never be carried out near a vehicle battery. Failure to observe this precaution can result in explosion if the hydrogen gas ignites. Whenever wiping up battery fluid, a damp cloth should be used.**

⚠ WARNING

- **Always stop the engine whenever the battery is to be inspected.**
- **Dilute sulfuric acid is used as the battery fluid. Special care must be taken to ensure that this fluid does not come into contact with skin, clothing, or metal surfaces.**
- **When disconnecting cables, turn the starter switch to the "LOCK" position, wait at least 3 minutes, and then disconnect the cables starting with the negative cable from the terminals. If the negative cable is disconnected within 3 minutes, the engine control module may malfunction. When reconnecting them, the negative cable should be reconnected last.**

⚠ CAUTION

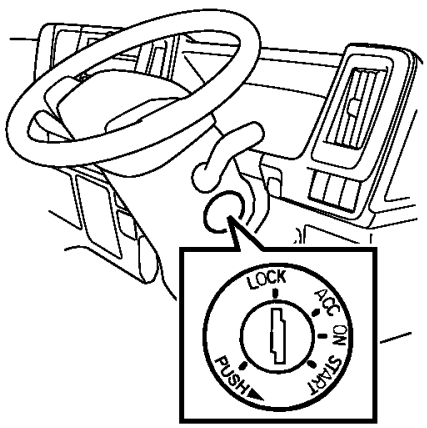
- **Take care to avoid mixing up the positive and negative terminals when connecting battery cables. Incorrect connection to these terminals can result in flow of excessive current and burnout of the generator or vehicle wiring.**

ADVICE

- When replacing the batteries, be sure to prepare the same size (type) as the batteries installed in the vehicle, and replace the two batteries at the same time. Replacing the batteries with different sizes (types), or replacing only one battery with a new one, may result in quicker deterioration of the batteries or ecostop may not operate normally.

Keep the battery clean. If the battery is left in a dirty condition, contaminants can get mixed into the battery fluid, the battery plates can be damaged, short circuits can occur on the top surface of the battery and the battery's service life can be reduced.

When Performing Inspection or Maintenance



Before starting inspection and maintenance of electric systems, including the battery, follow the procedure below.

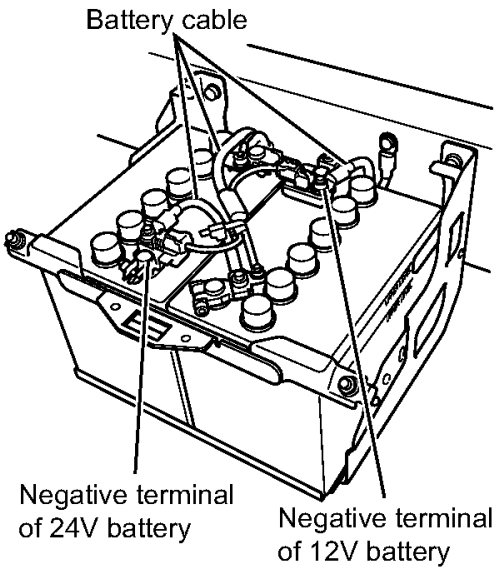
1. Turn off the switches.
2. Turn the starter switch to the "LOCK" position, wait at least 3 minutes, and then disconnect the negative terminal of the 12V battery. Next, disconnect the negative terminal of the 24V battery.

There is a danger that electrical components could be damaged if inspection or maintenance is carried out if the battery remains connected.

ADVICE

- To disconnect the negative terminals, disconnect both terminals in order, 12V battery and then the 24V battery. If inspection or maintenance is done while the negative terminal is connected to the 24V battery, then electronic control devices may malfunction.

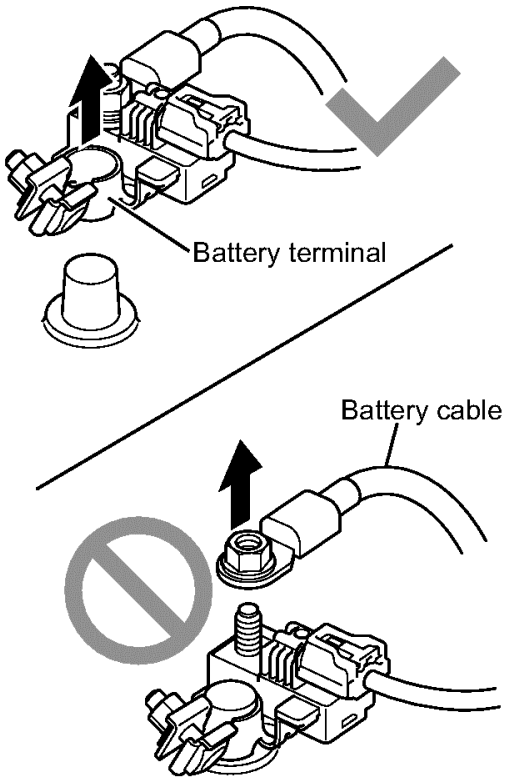
Removing the Battery



When the battery is to be removed, turn the starter switch to the "LOCK" position, wait at least 3 minutes, and then disconnect the battery cables from the negative terminals in order, first from the 12V battery and then form the 24V battery. If the battery cable remains connected to the negative terminal, any contact made by tools and the like between the positive terminal and the vehicle body could lead to a short-circuit and dangerous electrical shocks. The electrical system can also be damaged.

CAUTION

- **If the negative cable is disconnected from the negative terminal on the battery within 3 minutes after turning the starter switch to the "LOCK" position, the engine control module may malfunction.**



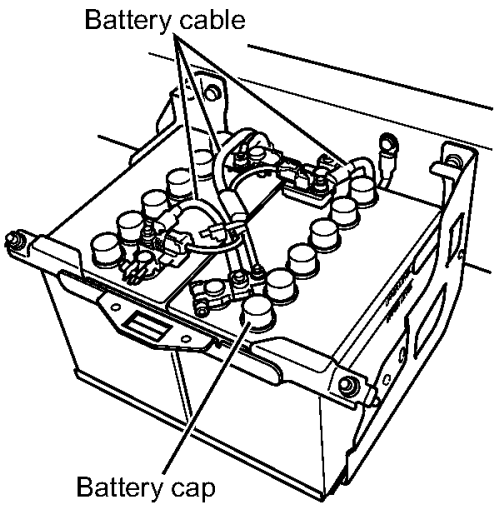
NOTE

- When you disconnect the negative terminal of the battery, disconnect the terminal part of the battery without removing the battery cable.

Charging the Battery

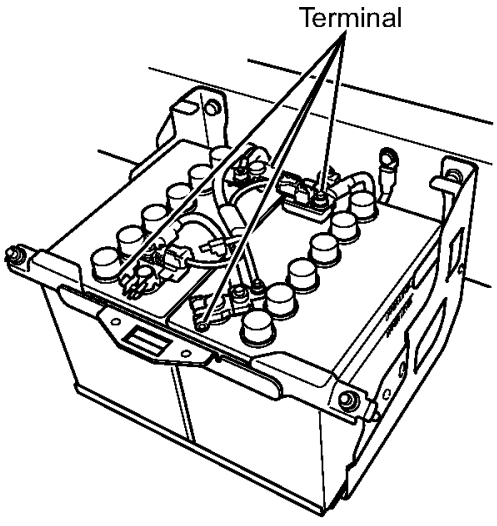
DANGER

- **Do not use open flames in the vicinity of the battery when it is being charged. Hydrogen gas is generated by the battery during the charging process; accordingly, failure to observe this precaution can result in fire or explosion.**



- Before charging the battery, remove it from the vehicle to a location with good ventilation and take off the battery caps. If, on the other hand, the battery is to be charged while still on the vehicle, be sure to first disconnect the battery cables.
- Whenever a charger is being connected to or disconnected from a battery, ensure that it is turned off.
- Battery cables must always be disconnected when performing quick charging.
  Failure to observe this precaution can result in generator burnout.

Installing the Battery



1. When installing the battery in your vehicle, ensure that it is oriented correctly and securely fastened without any looseness. If the battery is not installed correctly, the battery case and battery plates can be damaged as a result of vibrations during driving.
2. When connecting the battery cables, start with the positive terminals, and then connect the negative terminal of the 24V battery, and finally the negative terminal of the 12V battery.

Tightening torque for battery terminals
3.0 - 6.0 N·m (0.3 - 0.6 kgf·m/**2.2 - 4.4 lb·ft**)

ADVICE

- When tightening the battery terminals, arrange the battery cables so they are not forcibly bent.

NOTE

- The ESC warning light may turn on when the battery cables are disconnected or the battery voltage is low. The ESC function turns off while the ESC warning light is on, but the ESC warning light will turn off by driving the vehicle normally for a while, then the ESC function will resume. If the ESC warning light remains on even after driving for a while, contact the nearest Isuzu Dealer.

Using the Battery as a Direct Power Source

The battery should not be used as a direct source of 12-volt power.
If your battery must be used as a direct power source, please consult with your Isuzu Dealer.

Checking the Battery Fluid Level

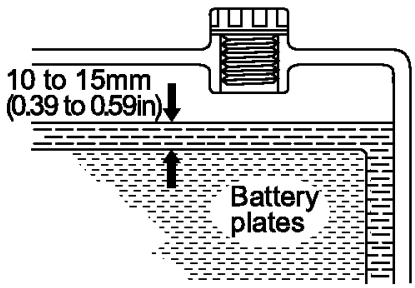
Refer to page
9-22 Checking the Battery Fluid Level

Filling Battery Fluid

ADVICE

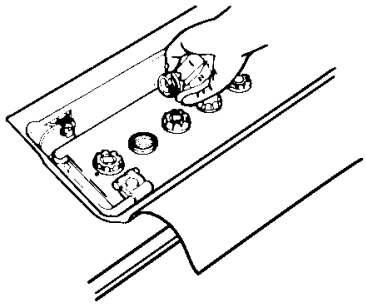
- Battery fluid should never be filled beyond the "UPPER LEVEL" line. Failure to observe this precaution can result in battery fluid spillage and corrosion of battery terminals and other components. Any spilled battery fluid should be immediately washed away with water.
- Whenever battery fluid has been added, the battery should be recharged (by driving the vehicle). In winter months in particular, battery fluid can freeze and damage the battery case if you fail to recharge the battery.
- If the battery fluid level continues to drop at an unusually fast rate, have an inspection carried out immediately by the nearest Isuzu Dealer.

Single Cab Model



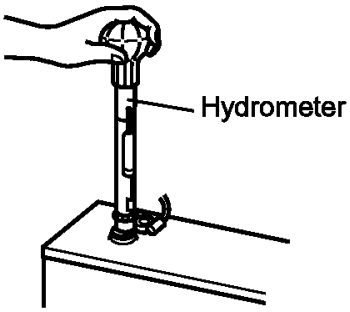
If the quantity of battery fluid inside the battery is insufficient, remove the cover and cap, and then add distilled water until the surface is close to the "UPPER LEVEL" line or in a range between 10 and 15 mm (0.39 to 0.59 inches) from the top of the battery plates. When you have finished adding the distilled water, securely install the cap and battery cover.

Crew Cab Model



If the battery fluid level is too low, add distilled water until the surface is between 10 and 15 mm (0.39 to 0.59 inches) from the top of the battery plates.

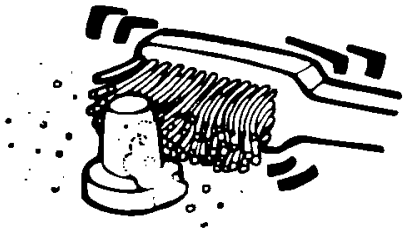
Checking the Specific Gravity of Battery Fluid

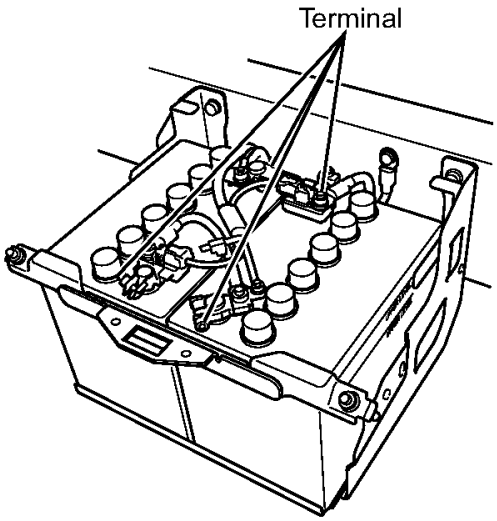


1. Check the specific gravity of the battery fluid using a hydrometer. If the specific gravity is too low, the battery should be charged.

Specific gravity at a fluid temperature of 20°C (68°F)
1.27 - 1.29

Checking the Battery Terminals





1. Check the terminals for looseness and corrosion.
2. If a terminal is found to be corroded and coated in white powder, wash this away with warm water and then wipe fully dry. Excessively corroded terminals should be polished using a wire brush or sandpaper.
3. After cleaning, securely connect the battery cables to prevent them from becoming loose. After connecting the battery cables, apply a thin layer of grease to the terminals.
   See "When the Battery Goes Flat" regarding steps to be taken should the battery be completely discharged.

Tightening torque for battery terminals
3.0 - 6.0 N·m (0.3 - 0.6 kgf·m/**2.2 - 4.4 lb·ft**)

ADVICE

- When tightening the battery terminals, arrange the battery cables so they are not forcibly bent.

Refer to page
11-12 When the Battery Goes Flat

Lighting Equipment

The vehicle uses many types of lights in various locations. Burned out lights may lead to an unexpected accident. Be sure to check the condition of the lights to use the vehicle safely.

Checking the Lighting Equipment

1. Check for damage or dirt on lights.

Refer to page
9-8 Checking for Damage or Dirt on Reflectors and Lights

2. Check whether lights light and flash.

Refer to page
9-25 Checking Exterior Light Operation

3. Check each bulb for blowout.
4. If a bulb has blown out, replace it. Always place the starter switch in the "LOCK" position and place all the other switches in the off position before replacing the blown bulbs.
5. If the bulb has not blown out, the fault may be in the wiring. Contact the nearest Isuzu Dealer.

⚠ WARNING

- **If the LED lights do not light, have your vehicle inspected at the nearest Isuzu Dealer. Reckless disassembly or repair of the LED lights may lead to malfunctions of the parts or electric shock.**

Bulb Wattage

Position	Lights		Bulb wattage
Front	Headlight		LED
	Front fog light [V]		LED
	Front turn signal light		LED
	Clearance light/Daytime running light [V]		LED
	Side turn signal light		LED
Rear	Taillight and stop light	LED type	LED
		Bulb type	5/21W
	Rear turn signal light	LED type	LED
		Bulb type	21W
	Back up light	LED type	LED
		Bulb type	21W
	License plate light	1-light type	10W
		2-light type	5W
	Rear fog light [V]	LED type	LED
		Bulb type	21W
Interior	Dome light [V]		LED
	Rear dome light (crew cab model) [V]		LED
	Interior light		LED
Roof	Roof-mounted clearance light [V]		5W

Contact the nearest Isuzu Dealer when replacing lights that are not listed here.

⚠ CAUTION

- **Using bulbs with a wattage other than that specified could cause the bulb or the wiring to become hot. This could result in the warping of the lens and case, and it could also lead to the outbreak of fire.**
- **Bulbs are hot immediately after they go out. When replacing the bulbs, avoid being burned by making sure they are fully cooled.**
- **Never drive the vehicle with the bulbs not working. This could result in an accident.**

ADVICE

- When one bulb of a pair of lights, such as a headlight blows out, the other bulb is approaching the end of its useful life. We recommend that both be changed at the same time.
- Proper aiming of the headlights is most important to ensure sufficient illumination of the highway without blinding other motorists. When replacing headlight bulbs, have the headlight aim adjusted at your Isuzu Dealer.

NOTE

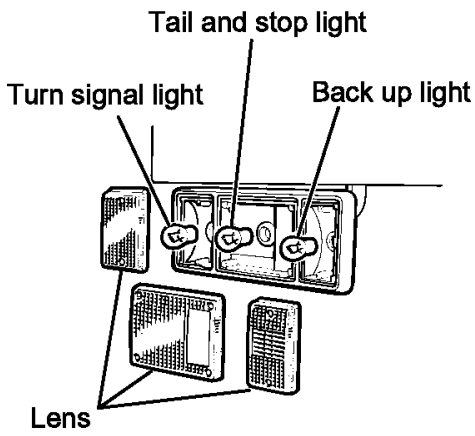
- For the lights (lighting equipment) such as headlights, inside of the lens can mist up momentarily when driving in the rain or during the car wash. Also, the temperature difference between inside and outside of the lights can sometimes cause the water condensation inside the lens. This is not abnormal because this is the same phenomenon as the windshield or door glass fogs up when it rains. If it is demisted minutes after the light is turned on, things are normal.

Replacing the LED Lights

ADVICE

- LED lights do not need to be replaced, but if something is abnormal, contact the nearest Isuzu Dealer.

Replacing the Rear Turn Signal Lights, Taillights, Stop Lights, and Back Up Lights

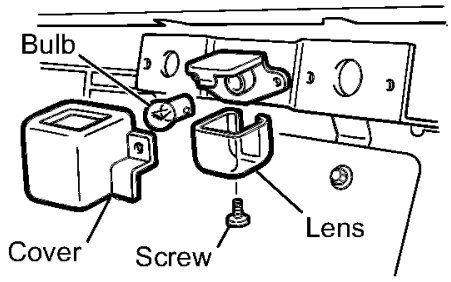


Bulb type

1. Loosen the screws and remove the lens.
2. Loosen the bulb by turning it counterclockwise while pressing on it.
3. To install the lights, follow the removal procedure in reverse.

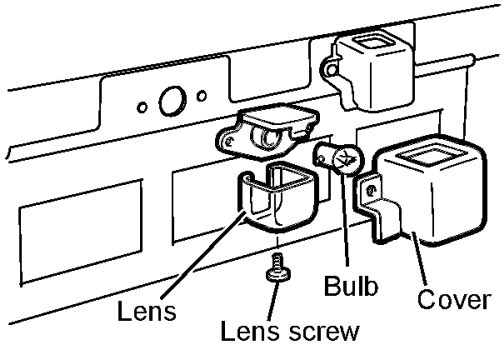
Replacing the License Plate Light

1-light type



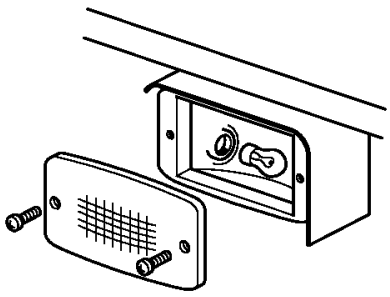
1. Loosen the screws and remove the cover.
2. Remove the lens.
3. Loosen the bulb by turning it counterclockwise while pressing on it.
4. To install the lights, follow the removal procedure in reverse.

2-light type



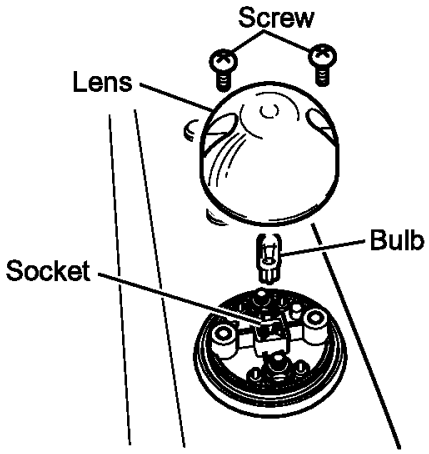
Replacing the Rear Fog Light [V]

Bulb type



1. Loosen the screws and remove the lens.
2. Loosen the bulb by turning it counterclockwise while pressing on it.
3. To install the lights, follow the removal procedure in reverse.

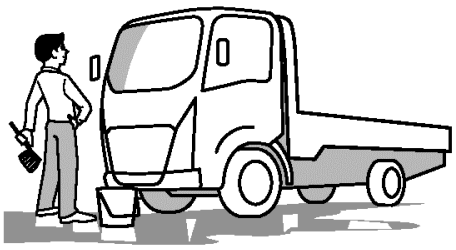
Replacing the Roof-Mounted Clearance Light [V]



1. Loosen the screws and remove the lens.
2. Remove the bulb and replace it with a new one.
3. To install the lights, follow the removal procedure in reverse.

Exterior Maintenance

Washing

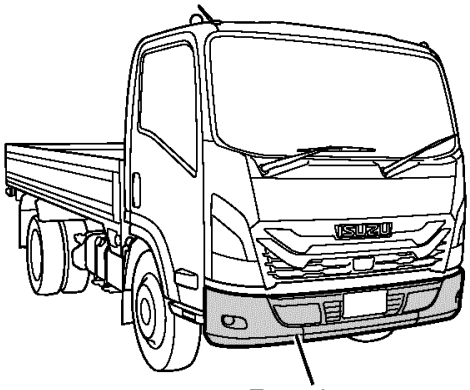


If the vehicle is operated with foreign material adhering to the exterior, this material may react chemically with paint or plating, resulting in staining, discoloration, rusting or corrosion of components. Also, the material may become trapped within mechanical components, adversely affecting their functions or forming an aerodynamic resistance. In the following cases, therefore, the vehicle must be washed and all foreign matter removed.

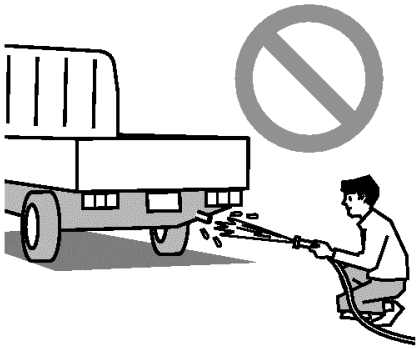
- When soot, iron powder, dead bugs, bird droppings, tree sap or oily matter from coal tar and smoke has adhered to painted surfaces.
- When the vehicle has been driven in coastal areas.
- When the vehicle has been driven on roads where road chemicals have been applied.
- When a large amount of mud or dirt has adhered to the exterior.

⚠ CAUTION

- **Do not apply water directly in order to clean the cab interior. Failure to observe this precaution can result in malfunction or breakdown of electronic control units and electrical components, or in rusting of the cab floor.**
- **Do not apply water from a high-pressure washer nozzle directly to the electric connectors. Failure to observe this precaution can lead to faulty operation of the electrical system.**



Front bumper


NJR model for Singapore


Air inlet opening

ADVICE

- If an automatic car or truck-wash is used with vehicles having dark or metallic coating, the painted surfaces can be damaged by the brushes, lose their luster or be very noticeably scratched.
- Do not direct a large amount of water at the air inlet openings.
- Do not apply water to the engine compartment or at electrical components. Failure to observe this precaution can lead to a poorly starting and operating engine and problems in the electrical system.
- Ensure that mirrors and the antenna are retracted before washing the vehicle.
- Do not apply water to the tail end of the exhaust pipe. Failure to observe this precaution can lead to fault exhaust gas measurement sensors by getting wet.
- If an automatic car or truck-wash must be used, avoid a high-temperature, high-pressure type machine. Failure to observe this precaution can lead to heat deformation and breakage of plastic components, or to water leaks into the cab.
- When using an automatic car or truck-wash, ensure that a distance of at least 0.4 m (15.75 inches) is maintained between the nozzle and the vehicle, and when washing door windows, that the spray is perpendicular to the surface of the glass.
- Do not use a high-pressure washer near the condenser. Doing so could deform the condenser fins, causing air conditioning performance to fall and malfunctions to occur.

ADVICE (Continued)

ADVICE (Continued)

- Ensure that all detergent is fully washed and wiped away. Particularly in the case of strong alkaline detergents (typically those for industrial uses), there is a danger that hairline cracks can develop in lighting-cluster lenses if the vehicle is operated without detergent being fully wiped away. Always read the detergent manufacturer's instructions carefully before use.
- Airborne dirt that adheres to plastic front bumpers as a result of rain, for example, can be difficult to remove.
  In such a case, use a commercially-available cleaner to clean away the dirt, and then apply a wax for use with plastic components.

1. Fully turn on the tap, and wash out the undercarriage and suspension.
2. Close all openings and wash the cab and cargo body panels using a neutral detergent.
3. Clean wheels and tires using a brush and detergent.
4. After washing away all remaining detergent, use a shammy or other clean cloth to fully remove all moisture and water droplets.

Vehicle Storage

In order to maintain your vehicle's attractive appearance as long as possible, special consideration must be given to its storage location.
If the vehicle is stored or kept for an extended period of time in any of the following locations, a chemical change may occur in the paintwork, resulting in staining, discoloration, rusting, and corrosion of components.

- Locations where a large amount of oily matter, soot, heavy smoke or metal powder can adhere to the vehicle.
- Areas around pharmaceutical plants and other facilities that discharge chemical matter.
- Coastal areas
- Locations where a large amount of dead bugs, bird droppings or tree sap can adhere to the vehicle.

Waxing

Painted and chrome-plated surfaces should be waxed once or twice a month, or whenever water is being poorly repelled on the surfaces. Ensure that wax is not applied in direct sunlight, and that the temperature of the painted surface is no more than 40°C (104°F).
Always follow the instructions provided with your wax product.

CAUTION

- **Wax must not be applied to the windshield. Failure to observe this precaution can result in irregular reflection of light, impairing your view.**

ADVICE

- Do not use wax containing abrasive material. Failure to observe this precaution can lead to scratching of painted surfaces or plastic components.
- The application of wax to rubber component surfaces can result in permanent whitening.

NOTE

- Wax must not be applied to the windshield. A layer of wax can impair your view in rainy weather and can also lead to rough movements of the windshield wiper.
- If engine oil or grease comes into contact with the windshield, staining or discoloration may result. It must be immediately cleaned away.

Interior Maintenance

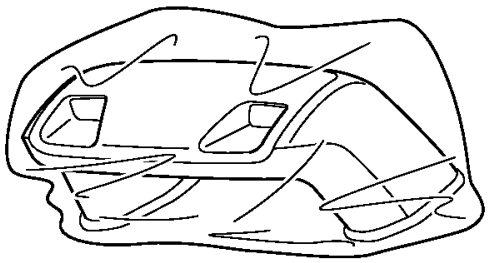
Remove dust and dirt from the interior of the cab using an automotive cleaner or vacuum cleaner, and gently wipe surfaces clean using a cloth wet with warm or cold water.

⚠ WARNING

- When cleaning the interior of the vehicle, water should never be sprayed directly. Failure to observe this precaution can lead to vehicle malfunction and possibly to fire if water should enter the audio system, other electrical components located underneath the floor mat, seat belt with pretensioners, or the body or components of the SRS airbag.
- Petroleum ether, gasoline, alcohol or other organic solvents should not be used to clean seat belts.
  In addition, seat belts should be neither bleached nor dyed. The performance or strength of the seat belts could be impaired, such that in the case of a collision, the belts could be insufficiently effective, and serious life-threatening injuries could result. When cleaning, use warm water in which a small amount of neutral detergent has been dissolved to gently wipe the seat belts, and do not use them until they are dry.

⚠ CAUTION

- The interior of the vehicle must never be cleaned using acidic or alkaline solvents, or petroleum ether, gasoline, alcohol or other organic solvents, dyes, or bleaches. They can cause discoloration , staining, peeling of paint, melting, or deformation. Also, certain types of cleaning products may contain these compounds. Be sure to read cleaning product labels carefully.
- Do not use polishing wax or polishing cleaner when cleaning the interior of the vehicle. The equipment and parts inside the vehicle could be reflected in the windshield, obstruct the driver's view, and lead to an accident.
- Air fresheners (liquid, solid, gel or plate types) must not come into direct contact with, or spill onto, interior components such as the air conditioning or audio system. Compounds contained in these products can cause discoloration, staining or peeling of paint.
- Glass cleaners that contain these compounds must not be used to clean the inside of the windshield or window glass. To clean the glass, wipe using a cloth wet with warm or cold water.
- When cleaning the inside of the windshield, cover the camera with a sheet of paper, a plastic bag, masking tape, or by other means. When doing so, be careful that the covering material does not touch the lens of the camera.



- Be aware that there is a risk of injury from hitting your hands against the seat rails and seat frames when cleaning or picking things up from under the seats.

Seat Belt Care

A dirty seat belt can develop retracting problems, and for this reason, regular inspection and upkeep are required.

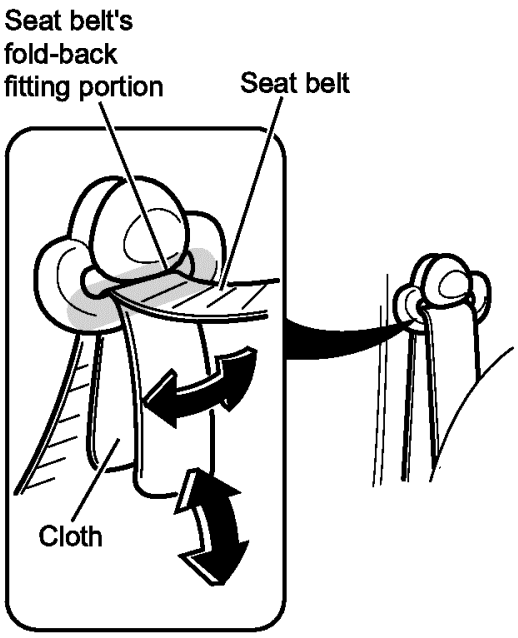
CAUTION

- **Seat belt webbing can lose its strength when bleached or dyed, or when cleaned using gasoline, paint thinners, alcohol or other volatile substances.**
- **Do not disassemble the seat belt mechanism in order to remove any foreign material or objects that may have entered the buckle. Instead, arrange for inspection and maintenance to be carried out by your Isuzu Dealer.**

Cleaning a Seat Belt's Fold-back Fitting Portion

ADVICE

- Avoid using anything like a tool to pass the cloth through the fold-back fitting portion or try to remove stubborn dirt. Using such an object can result in plastic parts or seat belt webbing damage.

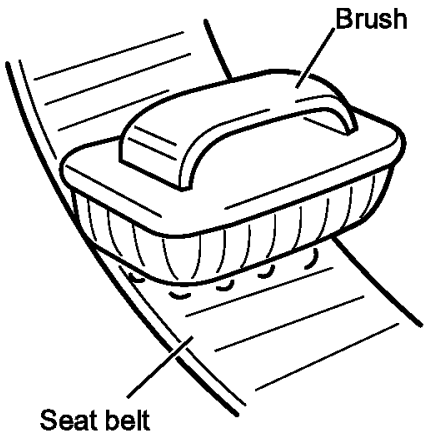


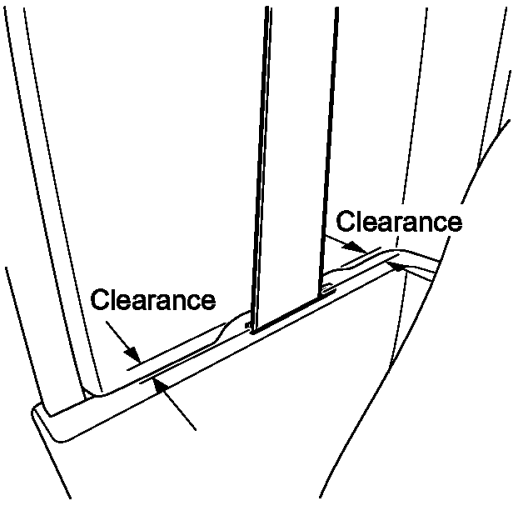
1. Fold a piece of cotton cloth, absorbent gauze, or the like of approximately 50 mm (2 in) in width into a rectangle.
2. Mix one part neutral detergent into approximately twenty parts warm water.
3. Wet the cloth in the detergent mixture, pass it through the fold-back fitting portion of the belt, and slide it back and forth and laterally until dirt can no longer be seen.
4. Remove the cloth, remove moisture from the fitting portion of the belt using a dry cloth, and then allow it to dry naturally out of direct sunlight.
5. Check to be sure the seat belt retracts and pulls out correctly.

Cleaning a Belt Webbing

ADVICE

- If the above-described upkeep operations do not improve the operation of the seat belt through the retractor, there is a possibility that the belt is making contact with the pillar trim. In this case, arrange for inspection and maintenance to be carried out by your Isuzu Dealer.
- If the belt is not winding and unwinding correctly, or if inspection reveals problems such as loose mountings, metal parts deformation, webbing damage, fraying or discoloration, arrange for replacement to be carried out by your Isuzu Dealer.





1. Fully extract the belt and examine for any difference in color between the front and back surfaces.
2. Mix one part neutral detergent into approximately twenty parts warm water.
3. Wet a nail brush or another similar brush having soft bristles (of nylon or the like) in warm water, and use this to clean away dirt.
4. Wipe the seat belt dry using a dry cloth, and then allow it to dry naturally out of direct sunlight.
5. Check to be sure the seat belt retracts and pulls out correctly.

Fabric Seat Covering and Floor Mat Care

Remove dirt and dust using a home-use electric vacuum cleaner.
Do not remove the floor mat. Use standard household cleaning products and methods to remove stains from food, drink and the like.
Be sure to use neutral detergents or cleaning products indicated as higher alcohol based detergents.

In an Emergency 11

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11-2 In an Emergency

Troubleshooting

Performing regular inspections and maintenance prevents damage. Be sure to perform inspections and maintenance at regular intervals. Also, quickly rectify any fault in the vehicle (even a small fault) to prevent it from becoming more serious.
If a symptom shown in the following table occurs, perform inspections and take corrective action in accordance with the table. If you are unable to perform a repair, the corrective action shown in the table does not eliminate a symptom or you cannot locate a fault, contact the nearest Isuzu Dealer.

ADVICE

- Any item for which there is a ◎ in the "Corrective action" column requires repairs and adjustments. Contact the nearest Isuzu Dealer.

Symptom		Cause	Corrective action	Reference page
Engine does not start	Starter does not turn over, or is weak	Flat batteries	Recharge or replace	11-12
		Battery terminals detached, loose or corroded	After repairing corroded section, connect the terminals firmly	—
		Starter ground wire terminal detached, loose or corroded	After repairing corroded section, connect the terminals firmly	—
		Engine oil viscosity too high	Change to oil with proper viscosity	8-26
		Starter or electrical system is faulty	◎	—
		Gearshift lever is not in the "N" position (Smoother vehicles)	Place gearshift lever in "N" position. (Smoother vehicles)	4-101
		Gearshift lever is not in the "P" position (DCT vehicles)	Place gearshift lever in "P" position. (DCT vehicles)	4-103
		Have not depressed brake pedal or apply parking brake (Smoother/DCT vehicles)	Depress brake pedal or apply parking brake (Smoother/DCT vehicles)	4-75
	Starter turns over	No fuel	Make sure there are no fuel leaks, and then add fuel	—
		Air in the fuel system	Bleed fuel system	11-15 11-16
		Fuel filter is clogged	Replace filter	10-43
		Fuel is frozen	Warm fuel pipe with hot water or wait until it gets warmer	—
		Preheating system is faulty	◎	—
		Common rail system is faulty	◎	—
		Fuel system is faulty	◎	—
		Engine control system faulty	◎	—

11-4 In an Emergency

Symptom	Cause	Corrective action	Reference page
Engine starts, but immediately stops	Idling speed too low	Adjust the idling speed	4-62
	Fuel filter is clogged	Replace filter	10-43
	Air cleaner is clogged	Clean or replace element	10-34 10-37
	Common rail system is faulty	◎	—
	Fuel system is faulty	◎	—
	Engine control system faulty	◎	—
Unsteady engine speed	There is water or air in the fuel system	Drain water from fuel filter or bleed fuel system	10-40 11-15 11-16
	Common rail system is faulty	◎	—
	Fuel system is faulty	◎	—
	Engine control system faulty	◎	—
White or black exhaust smoke	Engine not sufficiently warmed up	Allow engine to warm up sufficiently	4-61 4-62
	Excessive engine oil	Correct oil level	9-11
	Air cleaner clogged	Clean or replace element	10-34 10-37
	Air inlet opening disconnected	◎	—
	DPD is faulty	◎	—
	Common rail system is faulty	◎	—
	Fuel system is faulty	◎	—
	Engine control system faulty	◎	—

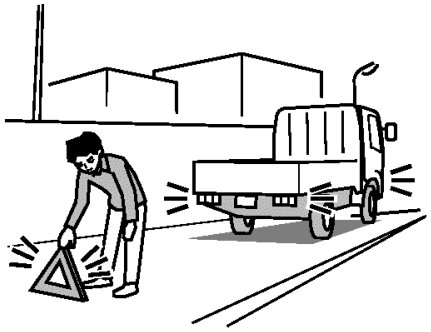
Symptom	Cause	Corrective action	Reference page
Engine is overheating	No engine coolant	Add engine coolant	10-15
	Front of radiator is clogged with dirt	Wash clean with tap water	10-19
	Radiator cap not sufficiently tightened	Make sure it is firmly tightened	—
	Fan belt loose	Adjust the tension or replace the belt	10-31
	Engine coolant dirty	Clean the radiator interior or change engine coolant	10-17
	Fan clutch is faulty	◎	—
	Radiator cap dirty or faulty	Clean or replace	10-20
	Common rail system is faulty	◎	—
	Fuel system is faulty	◎	—
	Engine control system faulty	◎	—
Oil pressure is low	Improper engine oil viscosity	Change to oil with proper viscosity	8-26
	Engine oil level too low	Add engine oil	10-7
	Engine inner components are faulty	◎	—
	Meter, indicator/warning lights or switches faulty	◎	—
Air pressure is low	Air compressor faulty	◎	—
	Air leaking from pipes	◎	—
	Air governor faulty	◎	—

Symptom	Cause	Corrective action	Reference page
Not enough engine power	Parking brake not fully released	Make sure it is fully released	—
	Brake dragging	◎	—
	Clutch slipping (Manual transmission model)	Adjust clutch free play (if the clutch slave cylinder is manual adjustment type)	10-87
		◎ (if the clutch slave cylinder is automatic adjustment type)	10-87
	Clutch slipping (Smoother model)	Add Smoother clutch fluid	10-100
	Clutch slipping (DCT model)	Add DCT clutch oil	10-100
	Air cleaner is clogged	Clean or replace element	10-34 10-37
	Fuel filter is clogged	Replace filter	10-43
	Engine faulty	◎	—
	DPD clogged	◎	—
	Common rail system is faulty	◎	—
	Fuel system is faulty	◎	—
	Engine control system faulty	◎	—
Brakes not effective	Drum-to-lining gap too large	◎	—
	Air in brake fluid [HB]	◎	—
	Low air pressure [FAB]	Raise engine speed to supply air	—
	Brake system failure	◎	—

Symptom	Cause	Corrective action	Reference page
Uneven braking	Unbalanced air pressure in tires	Adjust to proper air pressure	9-14
	Tire unevenly worn	Replace tire	10-71
	Unbalanced drum-to-lining gap of the wheels	◎	—
	Poor wheel alignment	◎	—
Exhaust brake not working	The electrical system is faulty	◎	—
Steering wheel hard to turn	Loaded too far forward	Load properly	—
	Power steering fluid level too low	Add fluid	10-118
	Insufficient air in front tires	Adjust to proper inflation pressure	9-14
Excessive play in the steering wheel	Wheel bolts and nuts loose	Tighten to the specified torque	10-78
	Unbalanced inflation pressure in the tires	Adjust to proper inflation pressure	9-14
	Unbalanced tires	◎	—
	Excessive steering wheel play	◎	—
Poor steering wheel return	Poor lubrication in the steering mechanisms	Lubricate the mechanism	—
	Poor wheel alignment	◎	—
Clutch disengages poorly	Insufficient clutch fluid	Add fluid	10-89
	Excessive clutch pedal free play	Adjust to proper level (if the clutch slave cylinder is manual adjustment type)	10-87
		◎ (if the clutch slave cylinder is automatic adjustment type)	10-87

Symptom		Cause	Corrective action	Reference page
Loud or abnormal noises	From the transmission	Insufficient transmission oil	Add oil	10-90
		Transmission inner components faulty	◎	—
	From differential	Insufficient differential gear oil	Add oil	10-110
		Differential inner components faulty	◎	—
	From the suspension	Spring pins, shackles, or stoppers worn	◎	—
	From the propeller shaft	Poor lubrication in each component	Lubricate them	8-17
		Splines or bearings worn	◎	—
	From the transfer case	Insufficient transfer oil	Add oil	
		Transfer inner components faulty	◎	—

When the Vehicle Breaks Down during Driving



1. Operate the hazard warning flasher and pull the vehicle immediately over to a safe place that does not impede traffic (shoulder, verge). Place the triangle reflectors to alert other traffic to the presence of your vehicle.
2. Have the other passengers get out and wait in a safe place.
3. Walk to a safe place and take appropriate measures by using the closest telephone, etc.

⚠ WARNING

[If there is a fuel leak]

- **Leaking fuel from the vehicle is dangerous due to possible combustion or explosion. Stop the engine immediately.**

When the Engine Stops While Driving



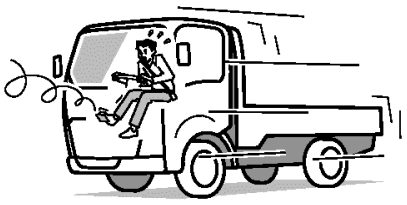
For hydraulic brake models, as the brake booster will no longer operate, brake effectiveness will be reduced. Do not panic. Press the brake pedal to reduce speed, head immediately for a safe place, stop the vehicle and perform an inspection. If the engine cannot be started, promptly have the vehicle inspected and repaired by the nearest Isuzu Dealer.
If the engine stopped because the vehicle ran out of fuel while driving, refueling alone will not be enough to restart the engine. Bleed the fuel system after refueling the vehicle.

Refer to page
11-14 When the Fuel Runs Out

⚠ WARNING

- **Vehicle operations will change, so stop the vehicle in a safe place with the following in mind.**
  - **The power steering system will not work so the steering wheel will be hard to turn. It will require more strength than during normal operation.**
  - **As the brake booster will no longer be functional, brake effectiveness will be greatly reduced. Be sure to apply more pressure than usual to the brake pedal.**

When the Brakes Do not Work



Model with electric parking brake
If the brakes become ineffective unexpectedly, reduce speed by quickly shifting down from 3rd to 2nd to 1st gear using the gearshift lever. Gradually keep pulling up the electric parking brake switch while firmly holding on to the steering wheel. Stop the vehicle on the side of the road.

Model without electric parking brake
If the brakes become ineffective unexpectedly, reduce speed by quickly shifting down from 3rd to 2nd to 1st gear using the gearshift lever. Gradually pull the parking brake lever while firmly holding on to the steering wheel. Stop the vehicle on the side of the road.

⚠ CAUTION

[Model without electric parking brake]

- **It is very dangerous to suddenly pull the parking brake lever all the way while moving at high speed. Reduce speed first by shifting down and then gradually pull the parking brake lever.**

NOTE

- In worst case conditions on a mountain road or similar situations, stop the vehicle by scraping along a guardrail or cliff, or drop the front and rear wheels of one side into a ditch at the side of the road.

When a Tire Goes Flat

⚠ WARNING

- **If you continue to drive on a flat tire, undue force will be applied to the wheel bolts, possibly causing the bolts to break and the wheel to come off.**

[Vehicles equipped with tire pressure monitoring system]

- **The tire pressure sensor may be damaged, depending on the conditions of the flat tire. Have the vehicle inspected at your nearest Isuzu Dealer.**

ADVICE

[Vehicles equipped with tire pressure monitoring system]

- When replacing a tire that is equipped with a tire pressure sensor, there is no need to reset the sensor because it automatically learns its position after the vehicle is driven for a certain period of time.



When a tire gets flat while driving, avoid hard braking, hold on to the steering wheel firmly and stop the vehicle.
The tire should be changed on a flat space to prevent obstructing other vehicles or pedestrians.

ADVICE

- If a blowout or flat tire occurs while you are driving, calmly grip the steering wheel and gradually apply the brakes to decelerate. (Hard braking would be dangerous because it could cause the steering wheel to be pulled to one side.) Stop the vehicle in a safe place, and change the tire.

Refer to page
10-80 Spare Tire [V]
7-13 Handling the Jack
10-71 Changing the Wheels and Tires

When the Engine Stalls and Cannot be Restarted

In manual transmission models, place the gearshift lever in the "N" position and push the vehicle to a safe place.
In Smoother vehicles, place the gearshift lever in the "N" position, and if the shift indicator shows "N", push the vehicle to a safe place. If the shift indicator displays a shift position other than "N", place the emergency switch to "ON" and the gearshift lever into the "N" position. Then, make sure that the shift indicator displays "N" and push the vehicle to a safe place.
In DCT vehicles, place the gearshift lever in the "N" position, and if the shift indicator shows "N", push the vehicle to a safe place.

Refer to page
4-122 If the Smoother System Fails
4-138 When There is a DCT Failure
11-57 When Towing

11-12 In an Emergency

CAUTION

- **In case of emergency with manual transmission models, place the gearshift lever in "R (reverse)", "1 (1st gear)" or "2 (2nd gear)" if the starter turns over. Then, keep turning the starter switch with your foot off the clutch pedal to move the vehicle.**

NOTE

- For vehicles with auto brake hold, cancel the auto brake hold by pressing the auto brake hold switch.

Refer to page
4-178 Auto Brake Hold Switch

When the Battery Goes Flat

Use a jumper cable (sold separately) and the batteries of another vehicle to start the engine in this sequence.

CAUTION

- **For safety and the protection of the vehicle, do not try to start the engine by pushing or towing the vehicle. You could damage the engine.**
- **Make sure that the booster batteries in the vehicle providing the charge have the same voltage as the disabled vehicle.**
- **Under no circumstances should the battery's positive and negative terminals be put in contact with one another.**
- **When connecting the cables, under no circumstances should the clips be allowed to touch each other.**
- **Ask the nearest Isuzu Dealer to recharge the battery.**
- **Do not disconnect a battery terminal with the engine running. It could cause a breakdown in the electrical system.**

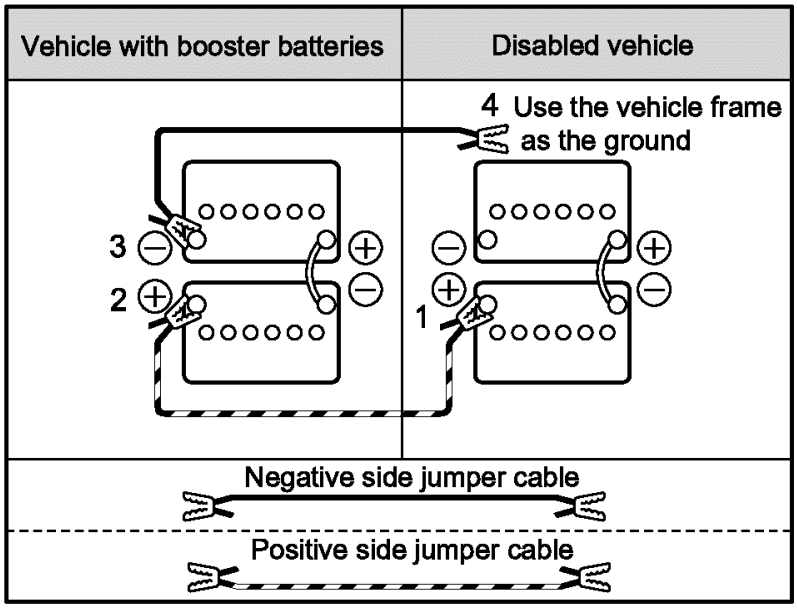
1. Check the battery fluid level in the disabled vehicle.

Refer to page
9-22 Checking the Battery Fluid Level

2. Use a vehicle that has a charged battery with the same voltage.
3. Remove the battery cover and connect the jumper cables in the numbered sequence in the drawing. (The following drawings are example connections.)

NOTE

- If the disabled vehicle is a 12 V vehicle, connections to the 12 V vehicle with either one or two booster batteries are possible.



4. After connecting the cables, start the engine of the vehicle with the booster battery.
5. Slightly rev up the engine of the vehicle with the booster battery and start the engine of the disabled vehicle.
6. If the engine in the disabled vehicle starts, remove the jumper cables in the reverse sequence as they were connected.

WARNING

- **Check the battery fluid level before connecting the jumper cables. Usage or charging of the battery when the battery fluid is below the "LOWER LEVEL" can accelerate deterioration, and give rise to dangerous situations such as the generation of heat and may even cause an explosion. Perform the work after adding the battery fluid.**
- **A vehicle battery generates flammable gas that could explode. Be careful of the following to avoid creating sparks.**
  - **Do not connect one end of the jumper cable shown in Step 4 in the drawing directly to the battery's negative terminal. Connect the jumper cable to a metal part of the engine that is away from the battery.**
  - **Do not let the cable connected to the positive terminal come in contact with the cable connected to the negative terminal or the body.**
  - **Keep flames away from the battery.**
- **Use care not to become entangled in any belts when connecting the cable.**

NOTE

- When it is difficult to start the engine in a cold area, first start the engine of the vehicle with the booster batteries and a few minutes after that start the engine of the disabled vehicle.

When the Fuel Runs Out

When the fuel runs out, air will enter the fuel system, so refueling alone will not be enough to restart the engine. Use the following methods to bleed the fuel system.

⚠ WARNING

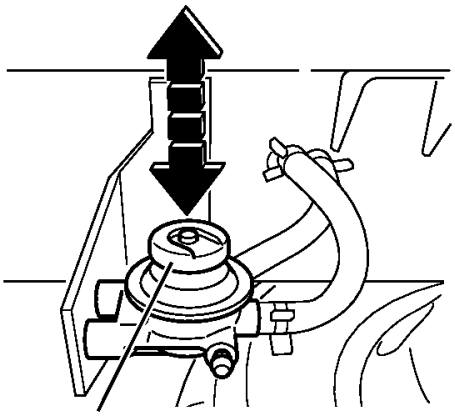
- **Wipe off any fuel that adheres to the vehicle body or the engine compartment below the cab. This could cause a fire.**

⚠ CAUTION

- **Before starting the engine, sit in the driver's seat and make sure that the gearshift lever is placed in the "N" position. Alternatively, in the case of the Smoother or DCT vehicle, make sure that the shift indicator displays "N". Do not start the engine unless you are sitting in the driver's seat. For example, do not start the vehicle by reaching through the window from outside, or from outside the vehicle with the door open. Pay particular attention to the fact that manual transmission vehicles will move when the engine is started with the transmission in a position other than "N".**

Bleeding the Fuel System (4JZ1 Engine Model)

Priming Pump


Priming pump

1. Place a container beneath the air bleed plug of the priming pump to receive the fuel, and remove the rubber cap from the air bleed plug. Connect a plastic hose to the air bleed plug to prevent the fuel from spilling. Fully loosen the air bleed plug.
2. Operate the priming pump up and down more than 20 times until the fuel from the air bleed plug no longer contains air bubbles.
3. Fully retighten the air bleed plug and wipe off any fuel that may have adhered to the plug or surrounding area.

After You Have Bled Air from the Fuel System

1. Operate the priming pump up and down more than 10 times to feed air in the fuel system to the fuel supply pump.
2. Without depressing the accelerator pedal, turn the starter switch and start the engine.
3. After the engine has started, allow it to idle for 5 seconds.
4. Fully depress the accelerator pedal and increase the engine r/min to the maximum speed, then keep it for 10 seconds. (Repeat this operation several times.)

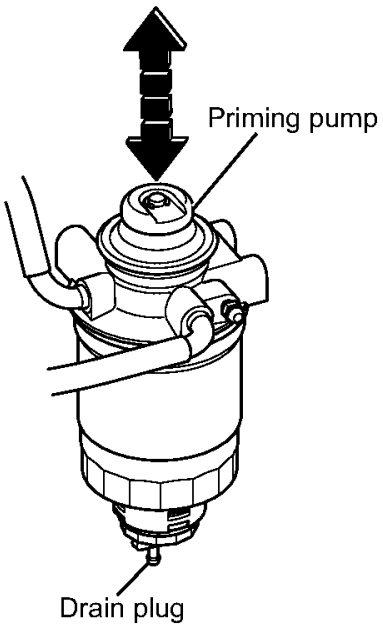
Bleeding the Fuel System (4HK1 Engine Model)

If the fuel is exhausted, perform the steps required to bleed air from the fuel system in the order "Chassis-side Priming Pump", "Engine-side Fuel Filter", "After You Have Bled Air from the Fuel System".

ADVICE

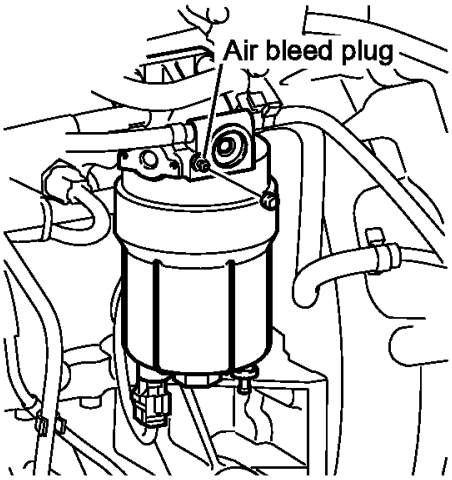
- Insufficient air bleeding can result in faulty engine operation. Be sure, therefore, to always carry out the procedure described in "After You Have Bled Air from the Fuel System".

Chassis-side Priming Pump

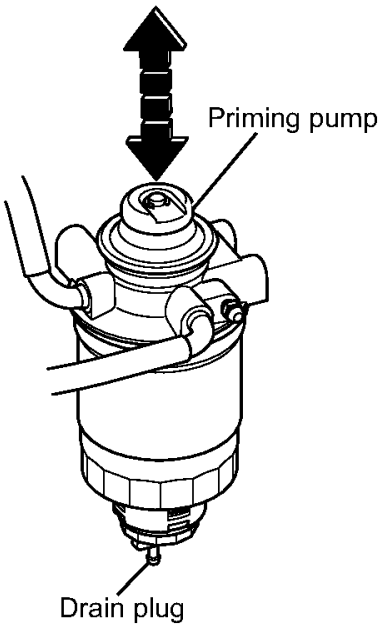


1. Place a container beneath the air bleed plug of the chassis-side priming pump to receive the fuel, and remove the rubber cap from the air bleed plug. Connect a plastic hose to the air bleed plug to prevent the fuel from spilling. Fully loosen the air bleed plug.
2. Operate the priming pump up and down more than 20 times until the fuel from the air bleed plug no longer contains air bubbles.
3. Fully retighten the air bleed plug and wipe off any fuel that may have adhered to the plug or surrounding area.

Engine-side Fuel Filter



1. Place a container beneath the air bleed plug of the engine-side fuel filter to receive the fuel, and remove the rubber cap from the air bleed plug. Connect a plastic hose to the air bleed plug to prevent the fuel from spilling. Fully loosen the air bleed plug.



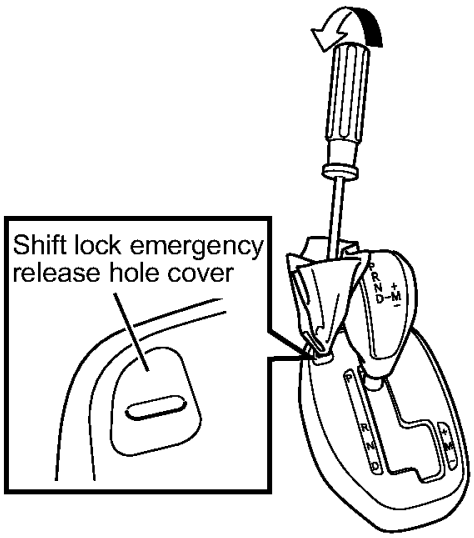
2. Operate the priming pump on the chassis side up and down more than 20 times until the fuel from the air bleed of the engine-side fuel filter no longer contains air bubbles.
3. Fully retighten the air bleed plug and wipe off any fuel that may have adhered to the plug or surrounding area.

After You Have Bled Air from the Fuel System

1. Operate the priming pump up and down more than 10 times to feed air in the fuel system to the fuel supply pump.
2. Without depressing the accelerator pedal, turn the starter switch and start the engine.
3. After the engine has started, allow it to idle for 5 seconds.
4. Fully depress the accelerator pedal and increase the engine r/min to the maximum speed, then keep it for 10 seconds. (Repeat this operation several times.)

When the Gearshift Lever Cannot be Moved From the "P" Position [DCT]

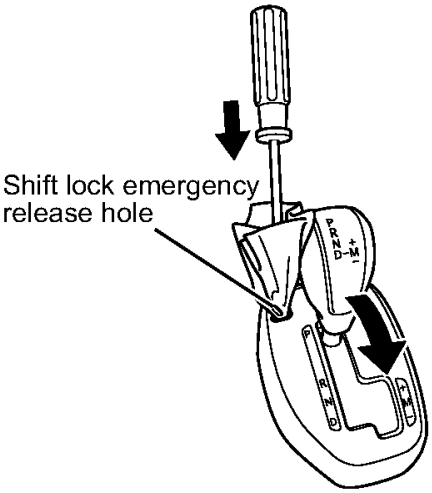
Perform the following when the gearshift lever cannot be moved from the "P" position.



1. Make sure that the parking brake is securely engaged.
2. Remove the shift lock emergency release hole cover with a flat head screwdriver.

ADVICE

- To not damage the gearshift lever, cover the screwdriver with cloth before you start working.



3. As you push a flat-head screwdriver all the way into the shift lock emergency release hole, operate the gearshift lever.

ADVICE

- Be sure to put the shift lock emergency release cover that you removed back in its original position so you do not lose it.

WARNING

- **Except for when the battery has gone flat, it is possible that a shift lock failure may be the cause for preventing correct gearshift lever operation. Promptly have the vehicle inspected and repaired by the nearest Isuzu Dealer.**

ADVICE

- The above procedure can be used to move the gearshift lever from the "P" position when the battery has gone flat.

When the Wheel Parking Brake Stops Working [FAB]

Model with electric parking brake

If the wheel parking brake does not work even when the electric parking brake switch is pulled up, follow the procedure below to stop the vehicle.

NOTE

- When the electric parking brake warning light is on or when the parking brake warning light is flashing and the parking brake does not work, the parking brake may be activated by performing the following procedure. When the parking brake is applied, the parking brake warning light comes on.
  - Depressing the brake pedal for 10 seconds or more.
  - Pull the electric parking brake switch up to the second position for 2 seconds or more.
- After the parking brake has been activated using the above procedure, immediately contact the nearest Isuzu Dealer. If the parking brake does not work, follow the procedure below to stop the vehicle.

Refer to page
4-85 Parking Brake Warning Light
4-86 Electric Parking Brake Warning Light

1. Move the vehicle to a flat, safe location.
2. Perform gear-in parking.

Refer to page
4-113 Parking in Gear

3. Make sure the vehicle won't roll away and use wheel chocks on the tires. After stopping the vehicle, contact the nearest Isuzu Dealer.

When the Wheel Parking Brake Cannot be Released [FAB]

CAUTION

- **When the spring brake is released manually to move the vehicle with a wheel parking brake, the parking brake will not work. Do not release the spring brake on a slope.**
- **Do not release the brake manually, other than when the vehicle is being towed by a tow truck or the vehicle is being moved temporarily.**
- **Contact the nearest Isuzu Dealer immediately after moving the vehicle.**

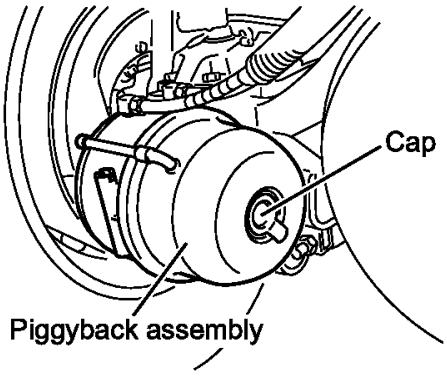
NOTE

[Model with electric parking brake]

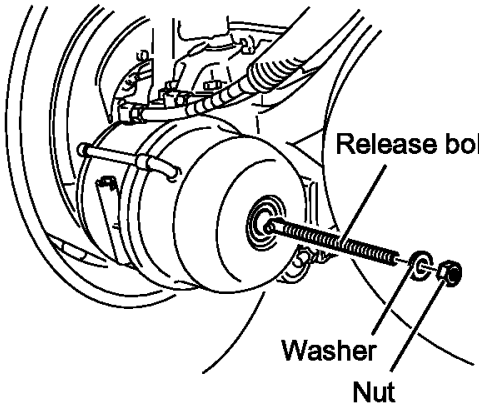
- When the starter switch is turned to the "ACC" or "LOCK" position, the parking brake is automatically applied.
- If the parking brake cannot be released and the electric parking brake warning light is on, turn the starter switch to the "ON" position, then press and hold the electric parking brake switch for approximately 2 seconds or more. Once you have released the brake, move the vehicle to a safe location and immediately contact the nearest Isuzu Dealer. If you are unable to release the parking brake, follow the procedure below to release it.

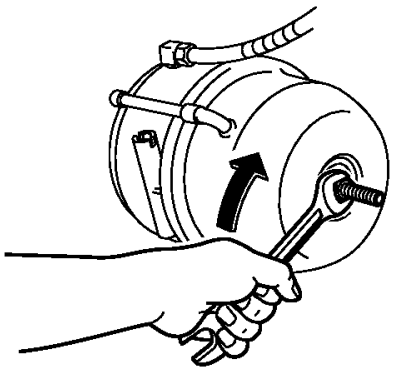
Refer to page
4-83 When the Parking Brake Operates Automatically

1. Firmly chock the wheels.



2. Remove the cap and insert the release bolt, a tool carried on the vehicle, as far as it goes. Rotate it 90° clockwise and lock.





3. Pull on the release bolt to make sure that it is secure, attach the washer and nut, and tighten them.

Tighten to (Extruded length of release bolt)
Approx. 91.5 mm (3.60 in)

4. To remove the release bolt, perform the same sequence of operations in reverse.

When the Center Parking Brake Cannot be Released [HB]

Model with electric parking brake

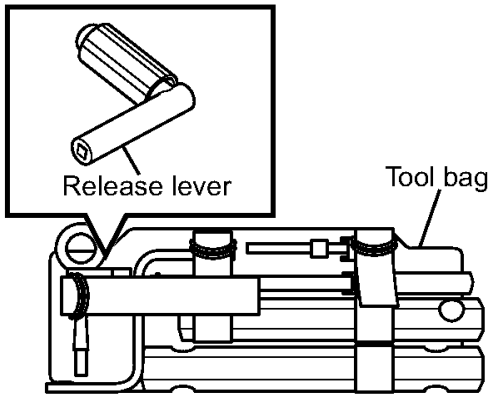
When the battery is flat or the electric parking brake fails, you can use the following procedure to release the parking brake.

⚠ CAUTION

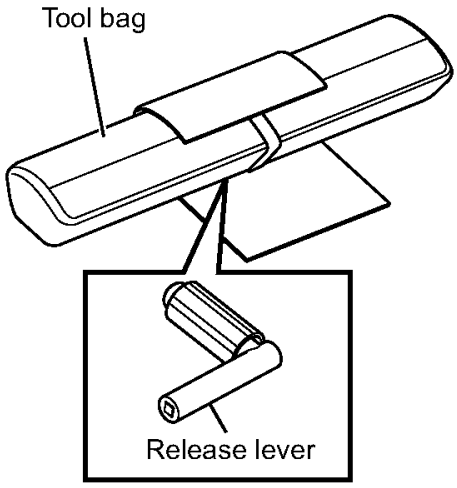
- **Do not manually release the parking brake except when the vehicle is towed by a specialized tow truck or when temporarily moving the vehicle.**
- **Do not release the parking brake manually while on a slope.**
- **After manually releasing it, move the vehicle to a safe location and immediately contact the nearest Isuzu Dealer.**

1. For DCT models, put the gearshift lever in "P". For manual transmission models and Smoother models, park in gear and chock the wheels.

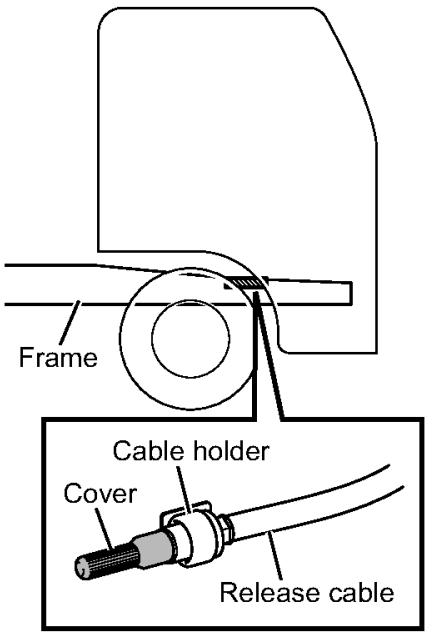
NJR/NKR models (single cab model)



NJR/NKR models (crew cab model) and NLR/NMR/NMS/NNR/NPR/NPS/NQR/NQS models



2. Take the lever to release the electric parking brake out of the on-vehicle tools.

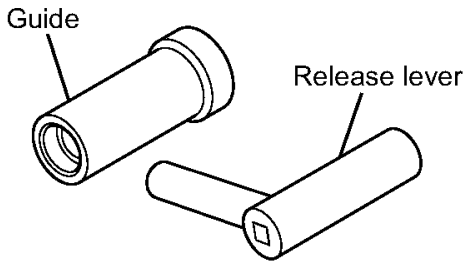


3. Remove the cover from the tip of the release cable.

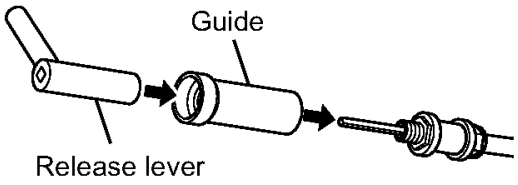
NOTE

- The location of the release cable varies depending on vehicle specifications. It is located on the side or top of the right-front frame.
- Turn the steering wheel all the way, tilt the cab, or open the door to make the release cable easier to access.

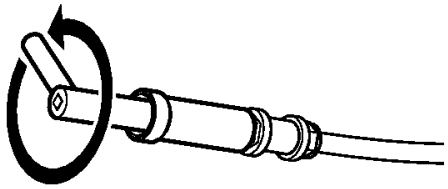
Refer to page
7-26 Tilting the Cab [V]



4. Remove the guide from the release lever for the electric parking brake.



5. Attach the guide and then the release lever to the release cable, in this order.



6. Press in on the release lever as you turn it to the left 35 times.

NOTE

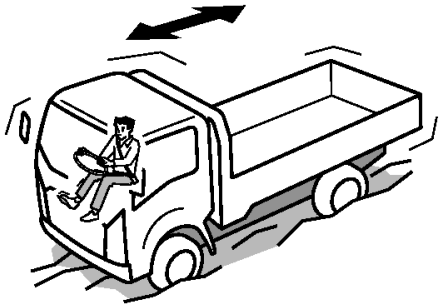
- If the parking brake is not released, then turn the release lever an additional 5 turns at a time to the left until the parking brake is released.

7. After the parking brake is released, attach the cover to the tip of the release cable, and return the release cable to the cable holder.

ADVICE

- Do not let the cable holder be deformed. Doing so could prevent the release cable from being taken out, or excessive force could be applied and damage it.

When Driving on Bad Roads



Pressing the accelerator pedal will dig the vehicle deeper into the mud and make it harder to extricate.
Either put stones, tree branches or blankets under the tires to gain traction, or repeatedly drive forward and in reverse and use the vehicle's momentum to extricate it.

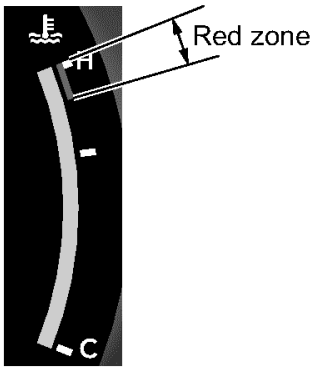
NOTE

- When you want to free the vehicle from mud where the tires may slip slightly by increasing the engine speed, you can press the ESC OFF switch to disable the ASR.

Refer to page
4-199 Anti-Slip Regulator (ASR)
4-206 ESC OFF Switch

When the Engine Overheats

Engine coolant temperature gauge



Overheating

Overheating

Stop in a safe place
Cool engine while idling

If engine power drops and the needle on the engine coolant temperature gauge goes up above the upper limit of the safety zone and enters the "H" zone, the engine is overheating. "Overheating" will be displayed on the multi-information display and the warning buzzer will sound. Either steam or boiling water will squirt out of the radiator. Take the following corrective actions immediately.

CAUTION

- **If you continue to drive the vehicle with the "Overheating" message appearing on the display, the engine may seize up.**

Inspection and Repairs for Overheating

1. Operate the hazard warning flasher and pull the vehicle immediately over to a safe place that does not impede traffic (shoulder, verge) and park it.
2. Lower the temperature of the engine for a while with the engine idling.

ADVICE

- Do not stop an overheating engine immediately. Otherwise, the engine may seize up.

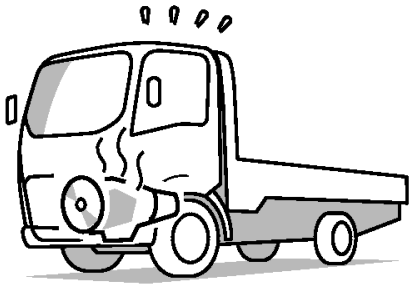
3. When the needle of the engine coolant temperature gauge returns to the middle of the safety zone, stop the engine.

WARNING

- **Do not loosen or remove the radiator cap or reserve tank cap while the engine coolant is still hot. Scalding fluid and steam can be blown out under pressure if either cap is taken off too soon, and cause burns. Perform inspection, refilling, and replacement of coolant only when it has cooled.**



- **When removing the radiator cap and reserve tank cap, use a thick cloth to cover the cap and turn it little by little.**
- **Engine coolant is toxic and must not be ingested. If the engine coolant gets in your eyes, rinse your eyes immediately.**
- **Engine coolant is flammable, and therefore, it must be kept away from flames and other heat sources.**



ADVICE

- When the cooling fan for the radiator is not turning, turn off the engine immediately.

4. Check the engine coolant level in the reserve tank and radiator after the engine has sufficiently cooled. If the level is insufficient, add engine coolant. Also, check to see if the fan belt is loose or has been damaged.
5. Inspect to see if there is any dirt, etc. attached to the front surface of the radiator and intercooler. Also, inspect to see if there is anything blocking the core. If there is anything attached, clean and remove it.
6. After the inspection, regardless of the vehicle condition, please contact the nearest Isuzu Dealer.

ADVICE

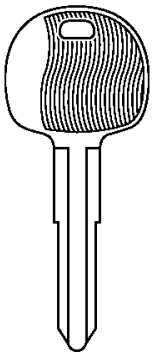
- Make sure that the needle on the engine coolant temperature gauge is below "C" before adding engine coolant. Adding engine coolant when the engine is not sufficiently cool could cause a breakdown in the engine or damage it.
- When tap water only has been used for engine coolant in an emergency, adjust the engine coolant concentration as soon as possible.

Refer to page
10-12 Engine Coolant
10-30 Fan Belt
10-29 Cleaning the Radiator, Intercooler and Condenser

When the Passive Entry and Start System Does Not Work Properly [V]

The passive entry and start system fails to recognize the remote control unit when the remote control unit battery has run out or when affected by the surrounding radio waves. In this case, perform the following operations to lock/unlock the doors or start the engine.

Locking and Unlocking the Doors

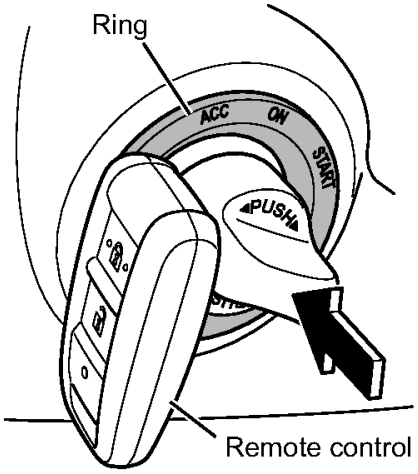


Use the key to lock/unlock the door.

Refer to page
2-30 Opening and Closing the Front Doors
2-32 Opening and Closing the Rear Doors (Crew Cab Model)

Starting the Engine

1. Firmly pull the parking brake lever and make sure the gearshift lever is in the "P" position for DCT models, or in the "N" position for manual transmission models. And then firmly press the brake pedal with your right foot.



Key collation complete

Put starter switch in ON position

Authenticate key

Hold key over starter switch

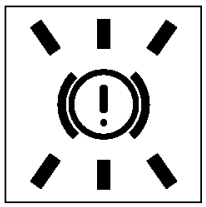
2. Press the starter switch while holding the remote control unit to the ring.
   - "Key collation complete" is displayed on the multi-information display.
   - If the key cannot be recognized, "Authenticate key" is displayed on the multi-information display, and a long beep continues to sound. Make sure that the remote control unit is touching the ring.
3. Confirm that "Key collation complete" is displayed on the multi-information display, and turn the starter switch within 10 seconds to start the engine.
   - If the engine was not started within 10 seconds, start again from step 2.

Refer to page
4-50 Starting and Stopping the Engine

ADVICE

- When you cannot start the engine even after following the procedures, contact the nearest Isuzu Dealer.

When a Warning Light or Indicator Light Comes On or Flashes





ADVICE

- If a warning light comes on or flashes, do not ignore it and keep driving. Be sure to take corrective action referring to the explanation of the meters, warning lights and indicator lights.

Refer to page
3-2 Instruments Layout
3-8 Instrument Panel Warning/Indicator Lights

When a Warning Buzzer Sounds

The warning buzzers sound to notify the driver of the vehicle's condition and the operating status of various functions. Check the following table and do the repairs described on the referenced page as necessary.

ADVICE

- If the buzzer does not stop sounding, even if you do the repairs, contact the nearest Isuzu Dealer.
- The warning buzzer may not sound if there is a problem with the buzzer system. If this occurs, the system needs to be inspected. Please contact the nearest Isuzu Dealer.

Warning Buzzer

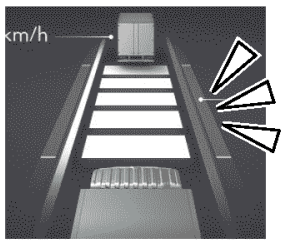
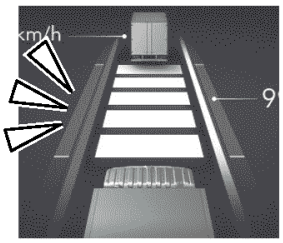
While Driving

If the warning light and multi-information display indicator are displayed

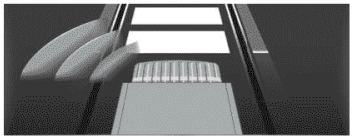
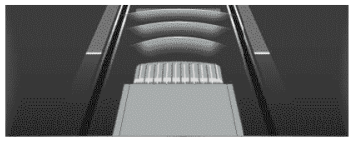
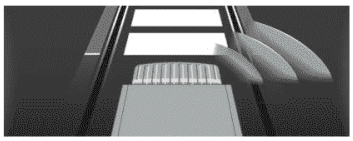
Buzzer pattern	Warning light/Multi-information display	Location	Cause/Operating Conditions	Page
Continuous beep	Overheating Stop in a safe place Cool engine while idling	●	**Engine overheat warning** Engine has overheated.	3-5 11-25
Continuous beep	BRAKE BOOSTER	●	**Brake booster warning [HB]** • The brake booster's vacuum becomes insufficient, either during driving or when the starter switch is in the "ON" position. • There is an abnormality in the charging system (such as a generator malfunction or either loosening or splitting of the fan belt, etc.). • A problem occurs with the exhaust brake while it is being used.	3-35
Continuous beep	 Hydraulic pressure failure Stop in a safe place Check the engine oil level and if there is no oil leakage, contact the dealer	●	**Engine oil pressure warning** The engine oil pressure is abnormal.	3-36 3-38
Continuous beep	Low air pressure Fill with air	●	**Low air pressure warning [FAB]** Parking brake is released when air pressure is below specification.	3-41

Buzzer pattern	Warning light/Multi-information display	Location	Cause/Operating Conditions	Page
Continuous beep	 (Comes on) Parking brake applied Parking brake is operating	●	**Warning for parking brake operating (while driving) (model with electric parking brake) [FAB]** The electric parking brake switch is pulled up while driving.	4-99
Continuous beep	 EBS brake abnormal Stop in a safe place Contact the dealer	●	**EBS brake abnormal [FAB]** There is an abnormality in the EBS, ABS, or ESC/ ASR systems.	4-211
Continuous beep	 Restart inhibited Engine cannot restart because AdBlue is empty Fill with specified AdBlue	●	**Restart Inhibited Warning (AdBlue® is empty) (Model conforming to Japan post-post new long term regulation emission standards)** Driving continues without refilling AdBlue® such that the remaining AdBlue® reaches level 0.	4-259
Continuous beep	 Restart inhibited Engine cannot restart due to abnormal AdBlue quality Contact the dealer	●	**Restart Inhibited Warning (Abnormal AdBlue® Quality) (Model conforming to Japan post-post new long term regulation emission standards)** Driving continues without taking appropriate measures after "Restart inhibited" (Abnormal AdBlue® Quality) is displayed.	4-261

Buzzer pattern	Warning light/Multi-information display	Location	Cause/Operating Conditions	Page
Continuous beep	AdBlue injection system AdBlue injection system is abnormal Contact the dealer	●	**AdBlue® injection system warning (Model conforming to Japan post-post new long term regulation emission standards)** Driving continues without taking appropriate measures after "AdBlue injection system" is displayed.	4-262
Continuous beep	80 (Flashes)	●	**Warning of exceeding the maximum speed limit [V]** The speed limit recognized by the camera is exceeded while driving.	5-90
Rapidly repeated beeps	Brake!	●	**AEBS warning (autonomous brake) [V]** • Obstacles located so close to your vehicle in the forward direction that there is a strong possibility of a collision are detected, and the AEBS autonomously operates the brakes. • Pedestrian is detected crossing the road while the vehicle is turning left or right and avoiding a collision is difficult, so the AEBS activates automatic braking.	5-13
Rapidly repeated beeps	Pedal misapplication!	●	**Mis-acceleration mitigation system warning [V]** The mis-acceleration mitigation system has operated.	5-42

Buzzer pattern	Warning light/Multi-information display	Location	Cause/Operating Conditions	Page
Rapidly repeated beeps	 	●	**Lane departure warning system (LDWS) [V]** The lane departure warning system senses that the vehicle is departing its lane.	5-109
Rapidly repeated beeps	Attention Take a break?	●	**Weaving warning [V]** The weaving warning has operated.	5-114
Short, repeated beeps	 (Flashes)	●	**ESC warning** The ESC is operating.	4-208
Short, repeated beeps	Warning Brake!	●	**AEBS warning (driver attention alert) [V]** • Obstacles located in the forward direction are detected, and the driver is encouraged to operate the brakes. • Pedestrian is detected crossing the road while the vehicle is turning left or right, so the driver is prompted to apply the brakes.	5-13

Buzzer pattern	Warning light/Multi-information display	Location	Cause/Operating Conditions	Page
Long, repeated beeps	 (Comes on) Parking brake applied Parking brake is operating	●	**Warning for parking brake operating (while driving) (model with electric parking brake) [HB]** The electric parking brake switch is pulled up while driving.	4-88
Long, repeated beeps	T/M oil temp rising Release accelerator pedal or drive in auto mode	●	**Smoother warning [SA]** • The vehicle continues to drive in unsuitable gear or slowly on uphill slope. • The vehicle is started and stopped too frequently.	4-118
			DCT warning [DCT] • The vehicle continues to drive in unsuitable gear or slowly on uphill slope. • The vehicle is started and stopped too frequently.	4-136
Three long beeps	Shifting to R inhibited With the vehicle stopped, put the gearshift lever in R	●	**Shifting to R inhibited warning [SA]/[DCT]** The gearshift lever is moved to the "R" position while driving.	4-118 4-136
Two long beeps	 (Flashes)	●	**Seat belt warning** The vehicle speed exceeds 20 km/h (12 MPH) while a seatbelt is unfastened in the driver seat, passenger seat, or the center seat when the starter switch is "ON" position.	1-4
Three short beeps	DPD regeneration needed Stop in a safe place to perform DPD regeneration	●	**DPD regeneration required warning** The manual regeneration procedure is necessary.	4-242

Buzzer pattern	Warning light/Multi-information display	Location	Cause/Operating Conditions	Page
Three short beeps	DPD regeneration needed Stop in a safe place to perform DPD regeneration The engine may not be able to restart	●	**DPD regeneration required warning** The vehicle is continuing to drive without doing the manual regeneration procedure.	4-242
Three short beeps	Attention Keep distance from Preceding Vehicle	●	**Inter-vehicular distance warning [V]** The vehicle is approaching a preceding vehicle and the driver needs to operate the brakes.	5-20
Three short beeps	  	●	**Blind spot monitor warning [V]** There is a high possibility of collision.	5-30
Two short beeps	Clutch may slip Do not use half-clutch for a long time	●	**Half-clutch warning [M/T]** When half-clutch condition continues for a certain period of time	4-100
Two short beeps	Clutch may slip Do not put your foot on clutch pedal while driving	●	**Foot on clutch pedal warning [M/T]** When foot is left on clutch pedal while driving	4-100
Two short beeps	Improper gearshift This gearshift may lead to transmission malfunction	●	**Change gears caution warning [M/T]** When transmission is shifted to a gear position that is unsuitable for the driving speed.	4-101

Buzzer pattern	Warning light/Multi-information display	Location	Cause/Operating Conditions	Page
One short beep	Preceding vehicle start	●	**Preceding vehicle departure notification function warning [V]** The preceding vehicle moved forward for approximately 5 m but your vehicle does not start off.	5-36
One short beep	 (Flashes)	●	**No entry warning [V]** A no entry sign recognized by the camera is passed while driving.	5-91
	No entry 			

●: In cab ○: Outside cab △: In cab and outside cab

If the warning light and multi-information display indicator are not displayed

Buzzer pattern	Location	Cause/Operating Conditions	Page
Continuous beep	●	**Smoother warning [SA]** • The engine is overrunning. • When trying to shift into an over-run gear level (manual mode)	4-117
		DCT warning [DCT] The engine is overrunning.	4-135
Long, repeated beeps	●	**Smoother warning [SA]** When trying to shift into an under-run gear level (manual mode)	4-117
		DCT warning [DCT] When trying to shift into an under-run or over-run gear level (manual mode)	4-135

●: In cab ○: Outside cab △: In cab and outside cab

While Stopped

If the warning light and multi-information display indicator are displayed

Buzzer pattern	Warning light/Multi-information display	Location	Cause/Operating Conditions	Page
Continuous beep	Door lock unavailable Key is in vehicle	△	**Key lock-in prevention alarm (when locking the door manually) [V]** While the remote control unit was left in the vehicle, locking the door was attempted by pressing the lock button on the driver side or passenger side door and closing the door with the door handle pulled up.	2-21
Continuous beep	Door lock unavailable Key is in vehicle	△	**Key lock-in prevention alarm (when pressing the request switch) [V]** While the remote control unit was left in the vehicle, locking the door was attempted by pressing the request switch.	2-21
Continuous beep	Door lock unavailable Put starter switch in LOCK position	△	**Starter switch ON-position warning (when pressing the request switch) [V]** While the starter switch was in the "ACC" or "ON" position, an attempt was made to lock the door by pressing the request switch.	2-22
Continuous beep	Key undetectable No key found in vehicle	●	**Remote control unit carried out warning [V]** While the starter switch was in the "ACC" or "ON" position, the remote control unit was carried out of the vehicle and the door was closed.	2-22

Buzzer pattern	Warning light/Multi-information display	Location	Cause/Operating Conditions	Page
Continuous beep	Door lock unavailable Door is open	△	**Door ajar warning [V]** While the driver side or passenger side door had not been closed properly, an attempt was made to lock the door by pressing the request switch or operating the remote control unit.	2-23
Continuous beep	Authenticate key Hold key over starter switch	●	**Start operation without remote control unit warning [V]** The starter switch cannot be turned to the "ON" position because the unit cannot be recognized due to the remote control unit's dead battery or due to the surrounding radio wave conditions.	2-23
Continuous beep	Low key battery Key battery is low Replace the battery	●	**Remote control unit (passive entry and start system unit) battery level warning [V]** The battery in the remote control unit is running down.	2-24
Continuous beep	Key system abnormal Remote controller key system abnormal Contact the dealer	●	**Abnormal passive entry and start system warning [V]** The passive entry and start system has an abnormality and does not work properly.	2-24
Continuous beep	Idling stop warning Start the engine by operating the key	●	**Idling stop warning [V]** The engine stalls, such as due to key operations, while ecostop automatically stops the engine.	4-65

Buzzer pattern	Warning light/Multi-information display	Location	Cause/Operating Conditions	Page
Continuous beep	 T/M abnormal Restart engine, if it appears again, contact the dealer	●	**Smoother warning [SA]** The Smoother system has failed.	4-119
Continuous beep	 (Amber) Vehicle rolling Apply the parking brake	●	**HSA vehicle movement warning [V]** The vehicle starts moving during a stop using the HSA.	4-168
Continuous beep	 (Amber) Vehicle rolling Apply the parking brake	●	**Auto brake hold movement warning [V]** The vehicle is stopped and then starts moving while auto brake hold is engaged.	4-180
Continuous beep	Warning Cab is not locked Check that cab is locked	●	**Cab tilt warning [V]** The starter switch is turned to the "ON" position and if the cab is not fully locked.	7-27
Continuous beep	 (comes on)	●	**Warning for parking brake still applied [HB]** When driving while the parking brake is applied	4-79 4-87

Buzzer pattern	Warning light/Multi-information display	Location	Cause/Operating Conditions	Page
Long, repeated beeps	 (Comes on) Parking brake error Depress brake pedal	●	**Vehicle movement warning (model with electric parking brake) [HB]** The vehicle starts moving while the electric parking brake is operating.	4-87
Long, repeated beeps	 (Comes on) Parking brake applied Parking brake is operating	●	**Warning for parking brake operating (model with electric parking brake) [FAB]** The electric parking brake switch is pulled up.	4-98
Long, repeated beeps	T/M oil temp rising Release the accelerator pedal or return gearshift lever to N position	●	**Smoother warning [SA]** The accelerator pedal is kept depressed while the brakes are being applied.	4-118
Long, repeated beeps	T/M oil temp rising Release the accelerator pedal or return gearshift lever to P position		**DCT warning [DCT]** The accelerator pedal is kept depressed while the brakes are being applied.	4-136
Long, repeated beeps	T/M oil temp rising Release accelerator pedal and depress the brake pedal	●	**Smoother warning [SA]** The vehicle is stopped on a slope with the accelerator pedal kept depressed.	4-118
			DCT warning [DCT] The vehicle is stopped on a slope with the accelerator pedal kept depressed.	4-136

Buzzer pattern	Warning light/Multi-information display	Location	Cause/Operating Conditions	Page
Long, repeated beeps	T/M oil temp rising While engine is running, put gearshift lever in the P or N position, and wait	●	**Smoother warning [SA]** The temperature of the Smoother clutch oil is abnormally high.	4-118 4-267
		●	**DCT warning [DCT]** The temperature of the DCT clutch oil is abnormally high.	4-136 4-267
Long, repeated beeps	Alert! Driver not seated Return the gearshift lever to N position and apply the parking brake	●	**Smoother warning [SA]** The driver opens the door and is leaving the vehicle with the starter switch in the "ON" position and the transmission in gear.	4-118
	Alert! Driver not seated Return the gearshift lever to P position and apply the parking brake		**DCT warning [DCT]** The driver opens the door and is leaving the vehicle with the starter switch in the "ON" position and the transmission in gear.	4-136
Long, repeated beeps	(Amber)	●	**HSA door open warning [V]** A door is opened without pulling the parking brake while the HSA is activated.	4-167
	Caution! Driver not seated HSA system is operating When releasing, apply the parking brake			
Long, repeated beeps	(Amber)	●	**HSA too long activation warning [V]** The vehicle is stopped a long time with the HSA activated.	4-168
	Caution! HSA long operation HSA system is operating for a long time Apply the parking brake			

Buzzer pattern	Warning light/Multi-information display	Location	Cause/Operating Conditions	Page
Long, repeated beeps	 (Amber) HSA abnormal Restart engine, if it appears again, contact the dealer	●	**HSA failure warning [V]** HSA has malfunctioned. (When HSA is activated)	4-168
Long, repeated beeps	 (Amber) Caution! Driver not seated AUTO HOLD is operating When you leave the seat, apply the parking brake	●	**Auto brake hold door open warning [V]** The door is opened without applying the parking brake while auto brake hold is engaged. (Only when the key-off automatic activation of electric parking brake is set to automatic activation OFF or to driver not seated conjunction OFF)	4-180
Long, repeated beeps	 (Amber) Brake hold system abnormal Stop in a safe place Restart engine if Brake Hold Error appears again Contact dealer	●	**Auto brake hold malfunction warning [V]** Auto brake hold malfunctions (while auto brake hold is operating)	4-181
Long, repeated beeps	Preparing PTO Preparing to operate PTO	●	**Preparing for PTO warning [SA]/[DCT]** PTO control lever is operated or the PTO switch is pressed, so the PTO is preparing to operate.	4-267
	Deactivating PTO Deactivating operation of PTO	●	**Deactivating PTO warning [SA]/[DCT]** PTO was deactivated, so the PTO is deactivating.	4-267

Buzzer pattern	Warning light/Multi-information display	Location	Cause/Operating Conditions	Page
Short, repeated beeps	 T/M abnormal Restart engine, if it appears again, contact the dealer	●	**Smoother warning [SA]** The Smoother system has failed.	4-119
Short, repeated beeps	Caution!turn off the light Battery may go flat because forget to turn off the light	●	**Turn off vehicle lights** The door is opened while the starter switch is in the "LOCK" position and the lights on indicator light are lit.	4-147
Short, slow beeps	PTO operating PTO is operating	●	**PTO is active warning [SA]/[DCT]** The PTO is operating.	4-267
Long, repeated beeps (approx. 6 seconds)	 [HB] Flashes → Comes on [FAB] Comes on Auto parkng brake active Parking brake is activated because driver is not detected in seat	●	**Warning for parking brake operated (driver not seated) [V]** The electric parking brake operates automatically because driver not seated conjunction.	4-88 4-99
One beep	Depress brake pedal 	●	**Forgot to depress brake pedal warning [V]** The auto brake hold switch is turned to off without depressing the brake pedal while auto brake hold is operating.	4-181
Three beeps	Key undetectable No key found in vehicle	○	**Remote control unit carried out warning [V]** While the starter switch was in the "ACC" or "ON" position, the remote control unit was carried out of the vehicle and the door was closed.	2-22

Buzzer pattern	Warning light/Multi-information display	Location	Cause/Operating Conditions	Page
Three beeps	Idling stop warning Put gearshift lever in neutral position and depress the clutch pedal	●	**Idling stop warning [M/T]** The driver shifts into gear while ecostop automatically stops the engine.	4-65
Three beeps	Engine restart Engine is restarted because door was open	●	**Engine restart warning** The driver side door is opened while the engine is automatically stopped by ecostop.	4-65
	Engine restart Engine is restarted because seatbelt was not fastened	●	**Engine restart warning** The driver side seat belt is unbuckled while the engine is automatically stopped by ecostop.	4-65
Two short beeps	Key collation complete Put starter switch in ON position	●	**Immobilizer recognition completion alert [V]** The remote control unit is recognized and the starter switch can be turned to the "ON" position.	2-23

●: In cab ○: Outside cab △: In cab and outside cab

If the warning light and multi-information display indicator are not displayed

Buzzer pattern	Location	Cause/Operating Conditions	Page
Continuous beep	●	**Warning for parking brake not applied (model without electric parking brake)** When starter switch turned to "ACC" or "LOCK" position without applying the parking brake	4-79
Continuous beep	●	**Warning for parking brake not applied (model with electric parking brake) [HB]** When starter switch turned to "ACC" or "LOCK" position without applying the parking brake	4-87

Buzzer pattern	Location	Cause/Operating Conditions	Page
Continuous beep	●	**Warning for parking brake not applied (model with electric parking brake) [FAB]** When the parking brake does not engage even if you change the starter switch to the "ACC" or "LOCK" position (when in maintenance mode)	4-99
Long, repeated beeps	●	**Key left inserted warning [V]** The driver side door is opened with the key left inserted and the starter switch in the "ACC" or "LOCK" position.	2-28
Long, repeated beeps	△	**Back up warning** Gearshift lever is placed in "R" position.	4-100
Long, repeated beeps	●	**Smoother warning [SA]** When an upshift or downshift operation is performed to shift to an unsuitable starting gear level (manual mode)	4-117
		DCT warning [DCT] When an upshift or downshift operation is performed to shift to an unsuitable starting gear level (manual mode)	4-135
Two beeps	○	**Starter switch ON-position warning (when locking the door manually) [V]** • While the starter switch was in the "ACC" or "ON" position, the lock button on the driver side door was pressed with the door opened. • While the starter switch was in the "ACC" or "ON" position, an attempt was made to close the door after it was opened when it was previously locked.	2-22

●: In cab ○: Outside cab △: In cab and outside cab

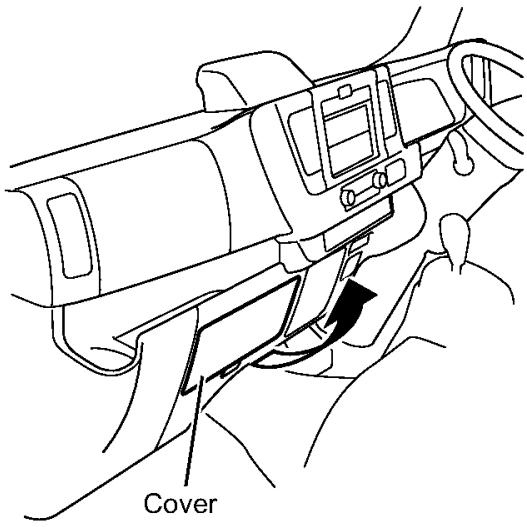
Replacing the Fuses and Relays

When the lights will not come on or flash, or the equipment in the electrical system does not operate, check to see if a fuse has blown.

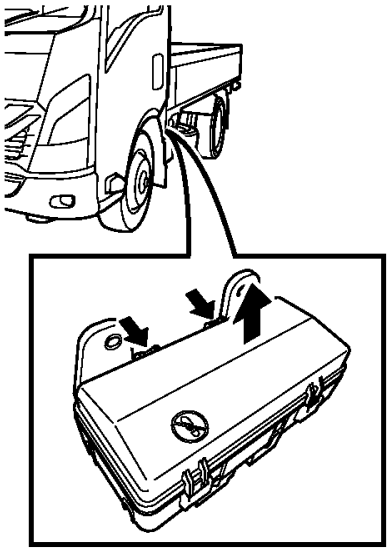
The Locations of Fuses and Relays

The fuses and relays are located in the lower part of the instrument panel in the center and in the left rear of the cab. The cover must be opened in order to carry out inspection and replacement. In addition, the cover of the relay box at the left rear of the cab must also be opened at this time.

Instrument panel

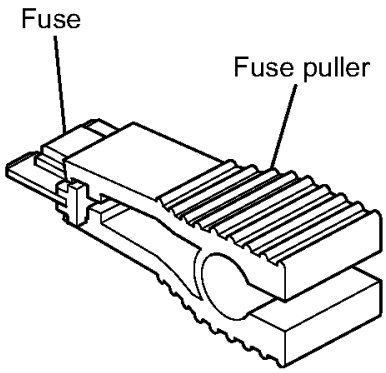


Left rear of the cab

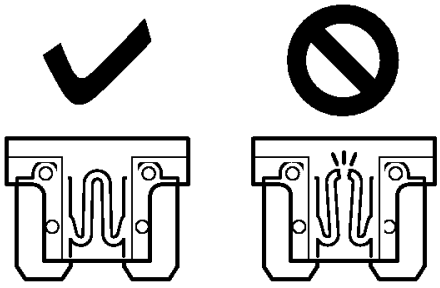


Replacing Fuses

1. Before replacing fuses, be sure to place the starter switch in the "LOCK" position and pull back on the parking brake lever.



2. Place the fuse puller on the fuse and pull it out. (The fuse puller is stored in the fuse box inside the cab.)

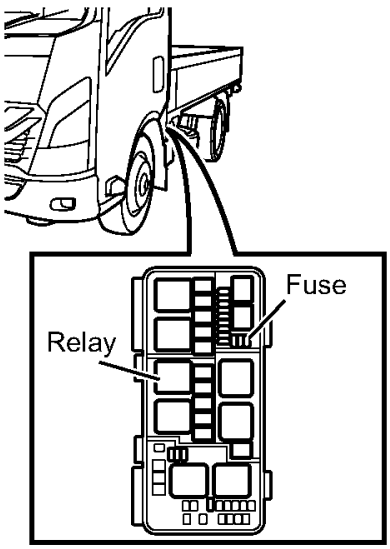


3. If the fuse appears is as shown in the right hand side of the diagram at left, the fuse is blown. Replace with a spare fuse. (Spare fuses are stored in the fuse box inside the cab.)

⚠ WARNING

- **Always use fuses specified by Isuzu. Using fuses with a rating other than that specified, or using wire or tin foil, etc., could result in fire or damage.**
- **If the new fuses blow right away and the cause is unknown, contact the nearest Isuzu Dealer.**
- **Do not inspect or replace fuses when the starter switch is in the "ON" position. Doing so may lead to an accident.**
- **When inspecting fuses, be sure to park the vehicle on flat, level ground and apply chocks to the wheels.**

Replacing Relays



When replacing the relays, contact the nearest Isuzu Dealer.

ADVICE

- It is not necessary to open or close the cover unless trouble is found.
- The relay box structure makes it difficult for water to enter. If you should spill water or a beverage on the cover, however, wipe it off before opening the cover.
- The area around the cover will get warm when the vehicle is being driven, but this is not abnormal.

Fuse and Relay Locations

Fuse Locations (Cab Interior)

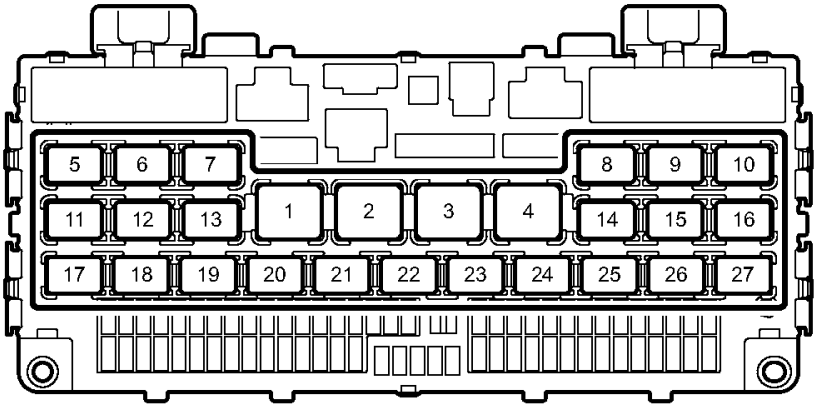
NOTE

- Refer to the label on the back of the cover for the layout of the fuses in the instrument panel on the passenger side in the cab.

Refer to page
0-6 Caution and Other Labels in Your Vehicle

Relay Locations (Cab Interior)

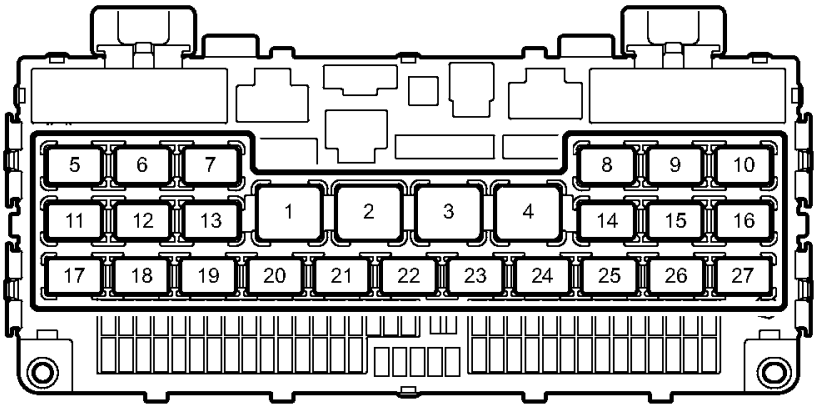
NJR/NKR/NLR/NMR/NNR/NPR/NQR models



No.	Relay name
1	Accessory
2	Ignition main
3	Blower motor
4	Wiper key on
5	Stop light switch (full-air brake model)
6	Power window
7	Rear power window (crew cab model)
8	Back up lights
9	Idling start/stop ST2
10	12V ignition 1
11	Daytime running light
12	Mirror open
13	Mirror close
14	Tail lights

No.	Relay name
15	Idling start/stop ST1
16	Headlights high
17	Starter
18	Headlights low
19	—
20	Rear cooler
21	Headlights washer
22	12V ignition 2
23	Washer motor
24	Horn
25	—
26	Rear fog lights
27	Front fog lights

NMS/NPS/NQS models

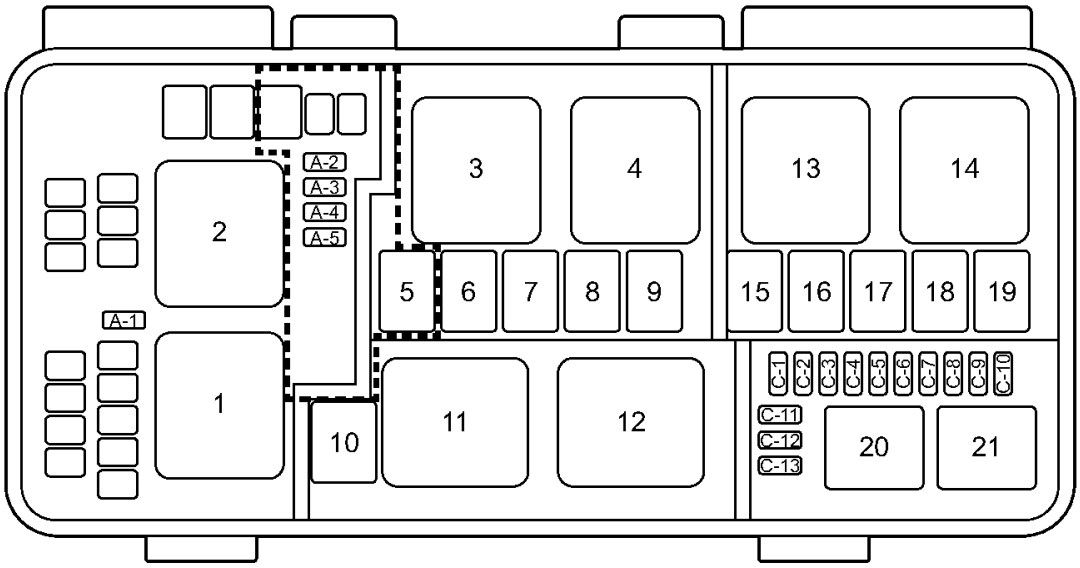


No.	Relay name
1	Accessory
2	Ignition main
3	—
4	Blower motor
5	Front fog lights
6	Accessory socket
7	Starter
8	Stop light switch (full-air brake model)
9	Passive entry and start system (manual transmission model)
10	Idling start/stop ST2
11	Headlights low
12	Mirror open
13	Mirror close

No.	Relay name
14	—
15	—
16	Idling start/stop ST1
17	Headlights high
18	Tail lights
19	12V ignition
20	Daytime running light
21	12V ignition (voltage stabilizer)
22	Back up lights
23	Rear cooler
24	Horn
25	Washer pump
26	—
27	—

Fuse and Relay Locations (Cab exterior)

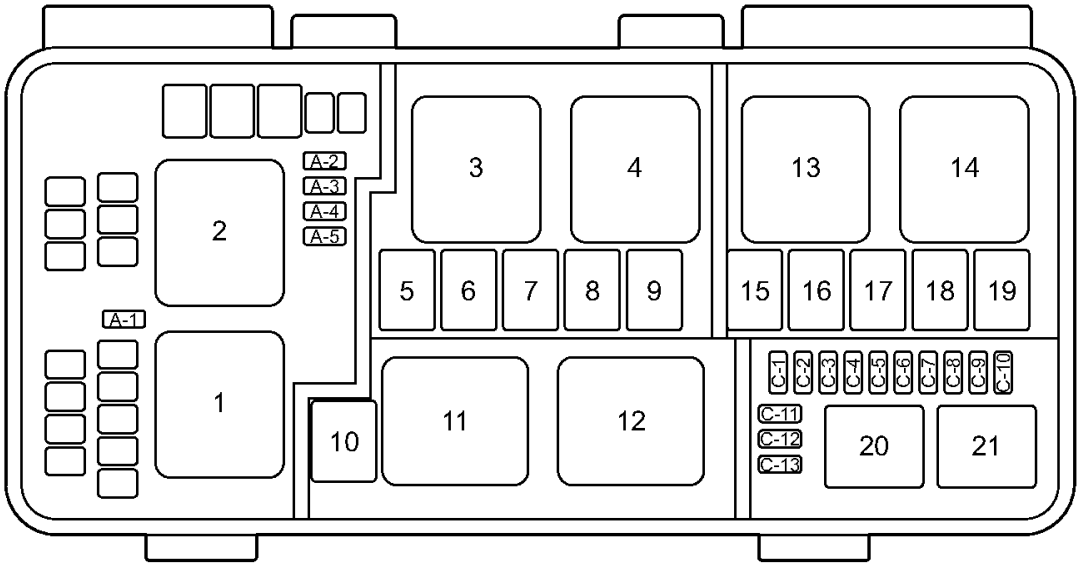
NJR/NKR/NLR/NMR/NNR/NPR/NQR models



No.	Relay name
1	Starter
2	Gear shifter
3	SCR heater
4	Starter 2
5	—
6	—
7	—
8	Service (ignition)
9	Electric parking brake
10	Marker lights
11	Glow
12	DCU main
13	Ignition chassis
14	ECM main
15	Service (accessory)
16	Condenser fan (model with rear cooler)
17	DCT neutral 2 (DCT model) PM sensor (4HK1 engine model)
18	Starter cut
19	Condenser fan
20	A/C compressor
21	DCT neutral 1

No.	Fuse name	Rating
A-1	Air conditioner	15A
A-2	Cab 12V (+B)	15A
A-3	SCR (+B)	20A
A-4	EDU (+B)	10A
A-5	Service (ignition)	15A
C-1	Electric parking brake 1 (full-air brake model)	10A
C-2	Electric parking brake 2 (full-air brake model)	10A
C-3	Blower (rear) (crew cab model)	15A
C-4	Equalizer (ignition)	15A
C-5	ECM (ignition)	15A
C-6	SCR (ignition)	15A
C-7	ECM main	10A
C-8	PM sensor	10A
C-9	Chassis (ignition)	15A
C-10	Service (accessory)	15A
C-11	Chassis (+B)	20A
C-12	Battery spare	20A
C-13	Marker lights	10A

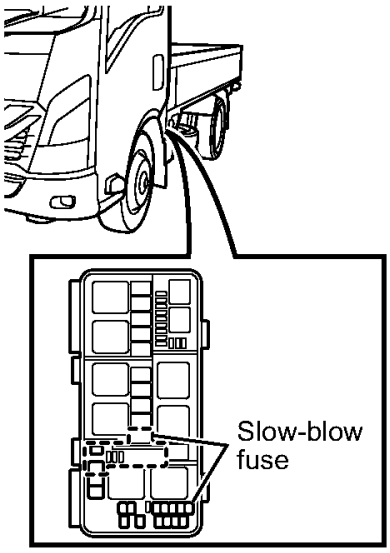
NMS/NPS/NQS models



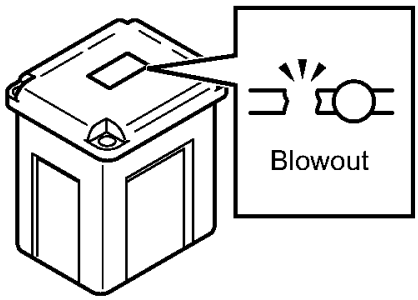
No.	Relay name
1	Starter 1
2	Starter 2
3	SCR heater
4	—
5	—
6	Transfer cut
7	Transfer high
8	4WD indicator
9	Electric parking brake
10	Marker lights
11	Glow
12	DCU main
13	Ignition chassis
14	ECM
15	DCT neutral (DCT model)
16	Condenser fan (model with rear cooler)
17	DCT neutral (DCT model)
18	Starter cut
19	Condensor fan
20	A/C compressor
21	Ignition 1 sub

No.	Fuse name	Rating
A-1	Air conditioner	15A
A-2	Cab 12V (+B)	15A
A-3	SCR (+B)	20A
A-4	Service (ignition)	15A
A-5	PTC heater	20A
C-1	—	—
C-2	—	—
C-3	—	—
C-4	Equalizer (ignition)	15A
C-5	ECM (ignition)	15A
C-6	SCR (ignition)	15A
C-7	ECM main	10A
C-8	PM sensor	10A
C-9	Chassis (ignition)	15A
C-10	—	—
C-11	Chassis (+B)	20A
C-12	Marker lights	10A
C-13	Battery spare	20A

When Slow-blow Fuses Blow Out



Slow-blow fuses protect the electrical circuits, and they are installed so that they can be quickly replaced if there is a malfunction.
If an overload exists in the circuit from the battery, the slow-blow fuse will blow out before the wiring harness is damaged to protect the electrical circuitry.



Inspection
When the headlights and other devices in the electrical system do not work, but there is no problem with the fuses, check the slow-blow fuse.
The slow-blow fuse is blown if it looks like the illustration to the left.
Immediately contact the nearest Isuzu Dealer.

⚠ WARNING

- **Always use fuses specified by Isuzu when replacing the slow-blow fuse. Using fuses with a rating other than that specified, or using wire or tin foil, etc., could result in fire or damage.**
- **If the new fuses blow right away and the cause is unknown, contact the nearest Isuzu Dealer.**
- **Do not inspect or replace fuses when the starter switch is in the "ON" position. Doing so may lead to an accident.**
- **When inspecting fuses, be sure to park the vehicle on flat, level ground and apply chocks to the wheels.**

ADVICE

- It is not necessary to open or close the cover unless trouble is found.
- The relay box structure makes it difficult for water to enter. If you should spill water or a beverage on the cover, however, wipe it off before opening the cover.
- The area around the cover will get warm when the vehicle is being driven, but this is not abnormal.

When Your Vehicle is Involved in an Accident

Stay calm and take the following steps:

1. Avoid a chain of accidents
   Operate the hazard warning flasher, pull the vehicle immediately over to a safe place that does not impede traffic (shoulder, verge) and stop the engine.
2. Aid the injured
   Render whatever first aid is possible to injured people until a doctor or ambulance arrives. In particular, do not move people with head injuries. If there is a danger of a series of accidents, move them to a safe place.
3. Contact the police
   Contact the police, give them the information on the location of the accident, the conditions, injured people and the extent of their injuries, and then receive instructions.
4. Confirm information from other parties (name, address and telephone number) and the conditions of the accident.
5. If necessary, contact the insurance company or the dealer you purchased the vehicle from.

ADVICE

- Make sure to notify the police and consult a doctor even for small accidents and light injuries. When receiving a blow to the head in particular, it is possible for symptoms to develop later even if there are no external wounds.

When Towing

To move a disabled vehicle, it is best to rely on someone in the wrecker or tow truck business. If that is not possible, follow these procedures.
When towing, use appropriate equipment and comply with local legal requirements.
Do not try to start the engine by towing or pushing the vehicle.

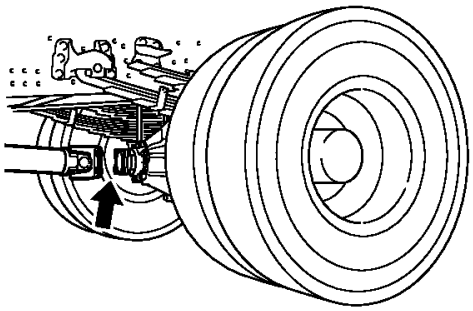
⚠ WARNING

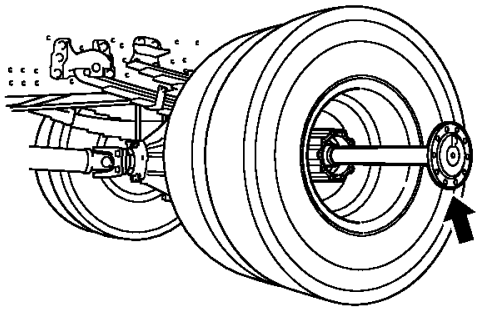
- **Be sure to chock the wheels when disconnecting the propeller shaft. The vehicle could start to move and cause a serious accident.**

⚠ CAUTION

- When towing a disabled vehicle, unload everything and tow the vehicle empty.
- For manual transmission models, place the gearshift lever in the "N" position, and tow the vehicle to a safe location a maximum distance of 10 km (6.2 miles) at speeds less than 40 km/h (25 MPH).
  After moving the vehicle to a safe location, disconnect the propeller shaft to protect the transmission, and then continue towing the vehicle. Towing the vehicle without doing this can cause the transmission to malfunction.
- For Smoother vehicles, place the gearshift lever in the "N" position and make sure the shift indicator displays "N". Tow for a maximum distance of 10 km (6.2 miles) at speeds less than 40 km/h (25 MPH).
  When the shift indicator does not indicate "N", or in situations other than the above, disconnect the propeller shaft when towing to avoid damage to the transmission.
- For DCT vehicles, place the gearshift lever in the "N" position and make sure the shift indicator displays "N", and then tow the vehicle to a safe location a maximum distance of 2 km (1.2 miles) at speeds less than 40 km/h (25 MPH).
  After moving the vehicle to a safe location, disconnect the propeller shaft or raise the rear wheels to protect the transmission, and then continue towing the vehicle. Towing the vehicle without doing this can cause the DCT to malfunction.
- If you have a 4WD vehicle, be sure to switch to 2WD and release the freewheel hub before towing.
- Whenever possible, tow a vehicle with the engine started.
  If the engine is not started:
  - The brakes will not be as effective;
  - The steering wheel will be hard to turn;
  - The steering wheel could lock, making it impossible to turn. This is extremely dangerous (particularly when the ignition key is removed).
- Do not tow the vehicle with the starter switch turned to the "ON" position with just the front wheels or rear wheels raised. The ESC may operate and cause an accident.
- Do not tow a disabled vehicle that is heavier than your vehicle's weight.
- Use the towing hook when towing on good roads or when being towed.

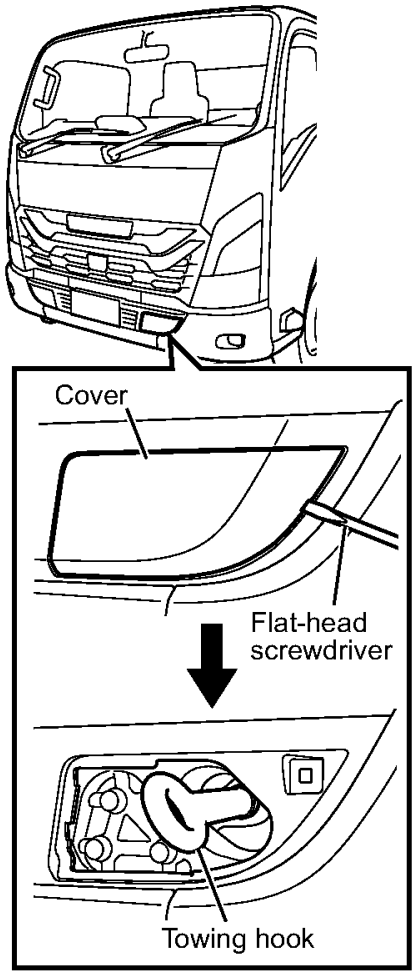
Refer to page
4-206 ESC OFF Switch

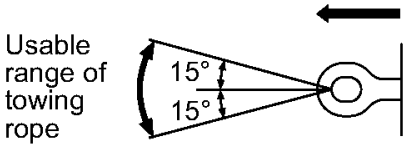


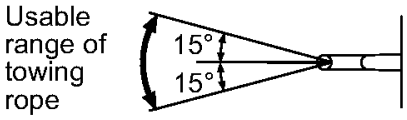


When it is possible to operate the steering wheel, the vehicle can be towed with all wheels on the ground.
However, the power steering will not be able to provide any power assist when the engine cannot be started.
If the transmission is damaged, disconnect the propeller shaft at the rear axle flange and secure it to the frame.
If the rear axle fails or rear axle failure is suspected, remove the axle shaft and plug up the opening of the hub to prevent differential gear oil from leaking, or to prevent dirt or foreign objects from entering the axle.

Front







1. The front towing hook is kept in the vehicle as a tool. Install it with the following procedure.

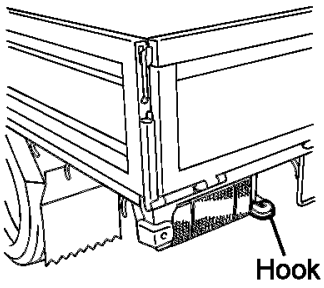
Refer to page
7-5 Tools

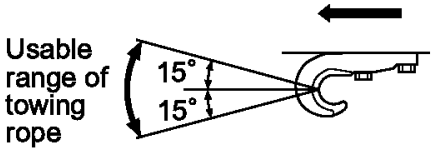
   1) Remove the cover by prying up the notched section with a flathead screwdriver, etc.
   2) Install the towing hook from the vehicle tools. Install the towing hook by turning it until it stops.

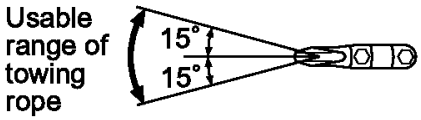
ADVICE

- Before installing the towing hook, remove any dirt or foreign matter that may be stuck to the threaded part of the hook or in the mounting hole on the frame.
- Screw the towing hook all the way in. The hook can be damaged if it is not installed securely.
- Use the towing hook when the vehicle is empty.

Rear







2. If the vehicle is towing or being towed, firmly attach a rope to the front or rear towing hook on the same side.
3. During towing, carefully watch the stop lights of the towing vehicle in order to prevent the rope from becoming slack. Ensure that there is no strong shock or lateral force applied to the vehicle.

⚠ CAUTION

- **Do not tow a vehicle at an angle of greater than 15°. This could exert too much stress on the vehicle and damage it.**
- **Attach a rope to the towing hook only. Attaching a rope to other part of the vehicle could damage it.**
- **Make sure there are no people near the towing rope and hook before towing a vehicle. If the rope snaps, people nearby could be injured.**
- **The towing hook is for use to tow a vehicle with about the same weight as the towing vehicle on good roads.**
- **When coming to channels or muddy areas, unload the vehicle. Do not use the towing hook to tow, but tow with a rope attached to the axle.**
- **For models equipped with auto brake hold, press the auto brake hold switch to release auto brake hold.**

Refer to page
4-178 Auto Brake Hold Switch

4. After having used the front towing hook, remove the towing hook and install the cover.

ADVICE

- In the case of a four wheel drive (4WD) model, set the 4WD switch to "OFF" before towing. Failure to do so could cause the brakes to activate during towing.

[Contact a tow truck at these times]

- When the vehicle will descend long hills. (The brakes could overheat and become ineffective.)
- When the transmission or differential fails.
- When the vehicle breaks down on a highway.

Refer to page
4-232 Switching between 2WD and 4WD

12 Specifications

● Main Data and Specifications 12-2

● Others 12-16

Main Data and Specifications

Engine

4JZ1 Engine Model

Specifications	
Water-cooled, overhead camshaft, direct injection engine with an inter-cooled turbocharger	
Compression ratio (to 1)	17.3
Displacement cc (cu. in)	2,999 (183.0)
Firing order	1-3-4-2
Fuel injection timing	Electric control
Valve clearance (Between cam and roller) mm (in)	Both inlet and exhaust valves: 0.15 (0.006) in cold engine
Idling speed r/min	600
Fan belt tension mm (in)/Hz	Accessory belt: Automatic adjust
Oil filter	Replaceable element type
Engine oil capacity [Reference value] liters (US gal./Imp gal.)	When changing oil and filter: 8.3 (2.19/1.83)
Engine coolant capacity [Reference value] liters (US gal./Imp gal.)	NJR (single cab)/NKR/NLR/NMR: 12.4 (3.28/2.73) NJR (crew cab): 12.8 (3.38/2.82) NMS (single cab): 12.7 (3.36/2.79) NMS (crew cab): 13.0 (3.43/2.86) NNR/NPR/NPS/NQS: 13.4 (3.54/2.95)
Preheating system	Glow plugs

4HK1 Engine Model

Specifications	
Water-cooled, overhead camshaft, direct injection engine with an inter-cooled turbocharger	
Compression ratio (to 1)	16.5
Displacement cc (cu. in)	5,193 (317)
Firing order	1-3-4-2
Fuel injection timing (static) degree	Electric control
Valve clearance (Between rocker arm and end bridge cap) mm (in)	Both inlet and exhaust valves: 0.4 (0.016) in cold engine
Idling speed r/min	[M/T] 550 - 600 [SA] 625 - 675
Fan belt tension mm (in)/Hz	50A/60A generator New belt: 5 - 7 (0.20 - 0.28)/208 - 232 When reused: 6 - 8 (0.24 - 0.31)/178 - 190
	80A/90A generator New belt: 5 - 7 (0.20 - 0.28)/187 - 209 When reused: 6 - 8 (0.24 - 0.31)/161 - 173
Oil filter	Cartridge (spin on) type
Engine oil capacity [Reference value] liters (US gal./Imp gal.)	When changing oil only: 9.5 (2.51/2.09) When changing oil and filter: 11.5 (3.04/2.53)
Engine coolant capacity [Reference value] liters (US gal./Imp gal.)	18.7 (4.94/4.11)
Preheating system	Glow plugs

12-4 Specifications

Transmission

MYY5T Model

Specifications		
Five-speed transmission (overdrive gear for 5th), synchromesh for 1st to 5th and reverse		
Gear ratio (to 1)	1st	5.315
	2nd	3.053
	3rd	1.655
	4th	1.000
	5th	0.721
	Reverse	5.068
Transmission oil capacity [Reference value] liters (US gal./Imp gal.)	Model without PTO: 2.8 (0.74/ 0.62) Model with PTO: 3.1 (0.82/ 0.68)	

MYY5S Model

M/T with Transfer

Specifications		
Five-speed transmission (overdrive gear for 5th), synchromesh for 1st to 5th and reverse		
Gear ratio (to 1)	1st	5.979
	2nd	3.434
	3rd	1.752
	4th	1.000
	5th	0.795
	Reverse	5.701
Transmission oil capacity [Reference value] liters (US gal./Imp gal.)	Model without PTO: 3.5 (0.92/ 0.77) Model with PTO: 3.8 (1.00/ 0.84)	
Transfer type	Chain drive, viscous type	
Transfer gear ratio (to 1)	1.000	
Transfer oil capacity [Reference value] liters (US gal./Imp gal.)	1.6 (0.42/ 0.35)	

MYY6Z Model

Specifications		
Six-speed transmission (overdrive gear for 6th), synchromesh for 2nd to 6th		
Gear ratio (to 1)	1st	5.979
	2nd	3.434
	3rd	2.040
	4th	1.379
	5th	1.000
	6th	0.708
	Reverse	5.701
Transmission oil capacity [Reference value] liters (US gal./Imp gal.)	Model without PTO: 3.5 (0.92/ 0.77) Model with PTO: 3.8 (1.00/ 0.84)	

MZZ6F Model

M/T

Specifications		
Six-speed transmission (overdrive gear for 6th), synchromesh for 1st to 6th and reverse		
Gear ratio (to 1)	1st	6.369
	2nd	3.767
	3rd	1.966
	4th	1.355
	5th	1.000
	6th	0.782
	Reverse	6.369
Transmission oil capacity [Reference value] liters (US gal./Imp gal.)	Model without PTO: 4.4 (1.16/0.97) Model with PTO: 5.3 (1.40/1.17)	

Smoother

Specifications		
Six-speed transmission (overdrive gear for 6th), synchromesh for 2nd to 6th		
Gear ratio (to 1)	1st	6.369
	2nd	3.767
	3rd	1.966
	4th	1.355
	5th	1.000
	6th	0.782
	Reverse	6.369
Transmission oil capacity [Reference value] liters (US gal./Imp gal.)	Model without PTO: 4.4 (1.16/0.97) Model with PTO: 5.3 (1.40/1.17)	
Smoother clutch oil capacity [Reference value] liters (US gal./Imp gal.)	6.14 (1.62/1.35)	

12-6 Specifications

MZZ6T Model

Specifications		
Six-speed transmission (overdrive gear for 6th), synchromesh for 1st to 6th and reverse		
Gear ratio (to 1)	1st	6.369
	2nd	3.767
	3rd	2.234
	4th	1.442
	5th	1.000
	6th	0.743
	Reverse	6.369
Transmission oil capacity [Reference value] liters (US gal./Imp gal.)	Model without PTO: 4.4 (1.16/0.97) Model with PTO: 5.3 (1.40/1.17)	
Transfer type	Gear drive, 2 speed, separate type	
Transfer gear ratio (to 1)	High: 1.000, Low: 2.140	
Transfer oil capacity [Reference value] liters (US gal./Imp gal.)	2.8 (0.74/0.62)	

MZZ6U Model

Specifications		
Six-speed transmission (overdrive gear for 6th), synchromesh for 1st to 6th and reverse		
Gear ratio (to 1)	1st	6.369
	2nd	3.767
	3rd	2.234
	4th	1.442
	5th	1.000
	6th	0.782
	Reverse	6.369
Transmission oil capacity [Reference value] liters (US gal./Imp gal.)	Model without PTO: 4.4 (1.16/0.97) Model with PTO: 5.3 (1.40/1.17)	

MYR9R Model

DCT

Specifications		
Nine-speed transmission (overdrive gear for 8th and 9th), synchromesh for 1st to 9th		
Gear ratio (to 1)	1st	5.162
	2nd	3.941
	3rd	2.915
	4th	2.225
	5th	1.706
	6th	1.304
	7th	1.000
	8th	0.763
	9th	0.585
	Reverse	4.810
Transmission oil capacity [Reference value] liters (US gal./Imp gal.)	Model without PTO: 5.1 (1.35/1.12) Model with PTO: 5.4 (1.43/1.19)	
DCT clutch oil capacity [Reference value] liters (US gal./Imp gal.)	5.9 (1.56/1.30)	
Transfer type	NMS: Chain drive, viscous type NPS/NQS: Gear drive, 2 speed, separate type	
Transfer gear ratio (to 1)	NMS: 1.000 NPS/NQS: High: 1.000, Low: 2.140	
Transfer oil capacity [Reference value] liters (US gal./Imp gal.)	NMS: 1.6 (0.42/ 0.35) NPS/NQS: 2.8 (0.74/0.62)	

12-8 Specifications

MYR9S Model

DCT

Specifications		
Nine-speed transmission (overdrive gear for 8th and 9th), synchromesh for 1st to 9th		
Gear ratio (to 1)	1st	5.162
	2nd	3.941
	3rd	2.868
	4th	2.189
	5th	1.679
	6th	1.304
	7th	1.000
	8th	0.763
	9th	0.585
	Reverse	4.810
Transmission oil capacity [Reference value] liters (US gal./Imp gal.)	Model without PTO: 5.1 (1.35/1.12) Model with PTO: 5.4 (1.43/1.19)	
DCT clutch oil capacity [Reference value] liters (US gal./Imp gal.)	5.9 (1.56/1.30)	

Service Specifications

NJR88/NKR88/NLR88/NMR88/NNR88/NPR88 Models

Weights	
Axle weight rating: Front kg (lb)	NJR88/NKR88: 2,600(5,733) NLR88/NMR88: 2,900 (6,395) NNR88/NPR88: 3,100 (6,836)

Engine	
Model	4JZ1
Engine oil capacity	Refer to page 12-2
Engine coolant capacity	

Transmission	
Model	[M/T] MYY5T, [M/T] MYY6Z, [DCT] MYR9S
Transmission oil capacity	Refer to page 12-4

Rear axle	
Differential gear oil capacity	Refer to page 10-113

Fuel	
Fuel tank capacity [Reference value] liters (US gal./Imp gal.)	[V] 50 (13.2/11.0), [V] 70 (18.5/15.4), [V] 100 (26.4/22.0), [V] 140 (37.0/30.8)

Clutch	
Clutch pedal free play	Refer to page 9-30
The distance from the fully pressed position to the position just before the clutch engages mm (in)	20 (0.79) or more

Steering	
Steering wheel free play mm (in)	10 - 50 (0.39 - 1.97)
Power steering fluid capacity [Reference value] liters (US gal./Imp gal.)	1.5 (0.40/0.33)

Service brakes	
Brake pedal free play	Refer to page 9-28
Clearance between the brake pedal and the brake pedal bracket	Refer to page 9-28

Parking brake	
Lever effective stroke (Under pull force of approx. 147 N (15 kgf/33 lb))	6 - 8 notches

Wheel		
Wheel alignment	: Toe-in mm (in)	-2 to 2 (-0.08 to 0.08)
	: Camber (degree)	Model with rigid front suspension 0°15´
		Model with independent front suspension (coil spring type) NJR/NKR/NLR/NMR: 0°30´ NPR: 0°15´
		Model with independent front suspension (transverse leaf spring type) 0°
	: Caster (degree)	Model with rigid front suspension NLR88: 3°00´ NMR88 (for Ukraine): 2°30´ NMR88 (except for Ukraine): 3°00´ NNR88/NPR88: 2°45´
		Model with independent front suspension (coil spring type) NJR/NKR/NLR/NMR: 3°00´ NPR: 2°15´
		Model with independent front suspension (transverse leaf spring type) With flat cargo bed: 3°30´ Without flat cargo bed: 3°00´
	: King pin (degree)	Model with rigid front suspension 12°
		Model with independent front suspension (coil spring type) 12°
		Model with independent front suspension (transverse leaf spring type) 12°15´
Rear wheel hub bearing grease capacity [Reference value] kg (lb)		Drum brake model: 0.3 (0.66)

Electrical system	
Battery type [BCI size] (RC-CCA) × No. of units	[V] 65D23L (12 - 55) × 2 [V] 75D23L (12 - 60) × 2 [V] 80D26L (12 - 63) × 2
Starter volt-kw	24 - 3.7
Generator volt/amp.	[V] 24/60 [V] 24/90

NMS88/NPS88/NQS88 Models

Weights	
Axle weight rating : Front kg (lb)	NMS88: 2,450 (5,401) NPS88/NQS88: 3,100 (6,836)

Engine	
Model	4JZ1
Engine oil capacity	Refer to page 12-2
Engine coolant capacity	

Transmission	
Model	[M/T] MYY5S, [DCT] MYR9R, [M/T] MZZ6T
Transmission oil capacity	Refer to pages 12-4
Transfer oil capacity	

Transfer	
Transfer oil capacity	Refer to page 10-117

Rear axle	
Differential gear oil capacity	Refer to page 10-113

Front axle	
Differential gear oil capacity [Reference value] liters (US gal./Imp gal.)	NMS88: 1.3 (0.34/0.29) NPS88/NQS88: 2.7 (0.71/0.59)

Fuel	
Fuel tank capacity [Reference value] liters (US gal./Imp gal.)	[V] 75 (19.82/16.5), [V] 100 (26.4/22.0), [V] 140 (37.0/30.8)

Clutch	
Clutch pedal free play	Refer to page 9-30
The distance from the fully pressed position to the position just before the clutch engages mm (in)	20 (0.79) or more

Steering	
Steering wheel free play mm (in)	10 - 50 (0.39 - 1.97)
Power steering fluid capacity [Reference value] liters (US gal./Imp gal.)	1.5 (0.40/0.33)

Service brakes	
Brake pedal free play	Refer to page 9-28
Clearance between the brake pedal and the brake pedal bracket	Refer to page 9-28

Parking brake	
Lever effective stroke (Under pull force of approx. 147 N (15 kgf/33 lb))	6 - 8 notches

Wheel		
Wheel alignment	: Toe-in mm (in)	Model with rigid front suspension -1 to 1 (-0.04 to 0.04)
		Model with independent front suspension (torsion bar spring type) -2 to 2 (-0.08 to 0.08)
	: Camber (degree)	Model with rigid front suspension 0°15´
		Model with independent front suspension (torsion bar spring type) 0°15´
	: Caster (degree)	Model with rigid front suspension 3°15´
		Model with independent front suspension (torsion bar spring type) 1°
	: King pin (degree)	Model with rigid front suspension 12°
		Model with independent front suspension (torsion bar spring type) 10°45´
Front wheel hub bearing grease capacity [Reference value] kg (lb)		NPS88/NQS88: 0.15 (0.33)
Rear wheel hub bearing grease capacity [Reference value] kg (lb)		NPS88/NQS88: 0.3 (0.66)

Electrical system		
Battery type (Volt-Amp.h.) x No. of units		[V] 65D23L (12 - 55) × 2 [V] 75D23L (12 - 60) × 2 [V] 80D26L (12 - 63) × 2
Starter	volt-kw	24 - 3.7
Generator	volt/amp.	[V] 24/60, [V] 24/90

NPR75/NQR75/NQR90 Models

Weights	
Axle weight rating: Front kg (lb)	3,100 (6,836)

Engine	
Model	4HK1
Engine oil capacity	Refer to page 12-3
Engine coolant capacity	

Transmission	
Model	[M/T] MZZ6F [SA] MZZ6F [M/T] MZZ6U
Transmission oil capacity	Refer to page 12-4

Rear axle	
Differential gear oil capacity	Refer to page 10-113

Fuel	
Fuel tank capacity [Reference value] liters (US gal./Imp gal.)	[V] 100 (26.4/22.0) [V] 140 (37.0/30.8)

Clutch	
Clutch pedal free play	Refer to page 9-30
The distance from the fully pressed position to the position just before the clutch engages mm (in)	20 (0.79) or more

Steering	
Steering wheel free play mm (in)	10 - 50 (0.39 - 1.97)
Power steering fluid capacity [Reference value] liters (US gal./Imp gal.)	1.5 (0.40/0.33)

Service brakes	
Brake pedal free play	Refer to page 9-28
Clearance between the brake pedal and the brake pedal bracket	Refer to page 9-28

Parking brake [HB]	
Lever effective stroke (Under pull force of approx. 147 N (15 kgf/33 lb))	6 - 8 notches

Wheel		
Wheel alignment	: Toe-in mm (in)	-2 to 2 (-0.08 to 0.08)
	: Camber (degree)	0°15´
	: Caster (degree)	2°45´
	: King pin (degree)	12°
Front wheel hub bearing grease capacity [Reference value] kg (lb)		NQR90: 0.18 (0.40)
Rear wheel hub bearing grease capacity [Reference value] kg (lb)		NQR90: 0.3 (0.66)

Electrical system	
Battery type (Volt-Amp.h.) x No. of units	[V] 80D26L (12 - 63) × 2 [V] 115E41L (12 - 100) × 2
Starter volt-kw	24 - 5.0
Generator volt/amp.	[V] 24/50 [V] 24/60 [V] 24/80 [V] 24/90

Others

Statement of Compliance with the RE Directive (2014/53/EU)

Passive Entry and Start System

CE

The following information is for the batteries used in your passive entry and start system when it is shipped from the factory. The brand and type of battery depends on your passive entry and start system. Manufacturer information for each brand and type of battery is as follows;
Battery Type: CR2023
Trade Name: Panasonic

Manufacturer

Panasonic Energy Co., Ltd.
Address: 1-1 Matsushita-cho, Moriguchi City, Osaka 570-8511, Japan
URL; https://www.panasonic.com/global/energy.html

Importer information

Importer name	Address
MIDI Europe S.r.l	Via Crosaron, sn, 37053, Cerea (Verona), Italy
Anadolu Isuzu Otomotiv Sanayi Ve Ticaret	Sekerpinar Mah. Otomotiv Cad. No：2, 41435 Cayirova, Kocaeli, Turkey
Isuzu Motors Europe NV.	Bist 12 2630 Aartelaar, Belgium
Isuzu Benelux N.V.	Satenrozen 8 2550, Kontich, Belgium



Dispose of used battery according to the local laws.

⚠ : This mark is a safety/warning mark.

• Do not ingest battery.

Chemical Burn Hazard

• This product contains a coin / button cell battery.
• If the coin / button cell battery is swallowed, it can cause severe internal burns in just 2 hours and can lead to death.
• Keep new and used batteries away from children.
• If the battery compartment does not close securely, stop using the product and keep it away from children.
• If you think batteries might have been swallowed or placed inside any part of the body, seek immediate medical attention.

CAUTION

• Risk of explosion if the battery is replaced by an incorrect type.
• Replace battery with the same type.

CAUTION

• Risk of explosion or the leakage of flammable liquid or gas.
• Do not use in /store in /bring into environment of extremely high temperature or extremely low pressure due to the very high altitude.
• Do not attempt to burn, crush, or cut used battery.
• Do not charge. Charging is dangerous as it may cause leakage, heat generation, explosion, or fire.

Keyless Entry System

CE

This vehicle's keyless entry system conforms to the basic requirements of the RE Directive (2014/53/EU), Regulation (EU) 2023/1542 and related regulations.

Refer to page
2-12 Keyless Entry System [V]

12-18 Specifications

Product	RKE TXE (Keyless System)
Model Number	IK3600F
DoC	Hereby, Panasonic Corporation declares that the radio equipment type SRD(IK3600F) is in compliance with Directive (2014/53/EU), Regulation (EU) 2023/1542. The full text of the EU declaration of conformity is available at the following internet address: http:// www.ptc.panasonic.eu/
Explanation of use of equipment	Short range device for remote control
Manufacturer name	Panasonic Automotive Systems Co., Ltd.
Manufacturer address	101 Moo 2 Teparak Road, T. Bangsaothong Ging A. Bangsaothong, Samutprakarn 10540 Thailand
Operational frequency band	433.87 to 433.97(MHz)
Maximum output power	10mW (ERP)

Product	WAM MID (Keyless System)
Model Number	IM2035BB
DoC	Hereby, Panasonic Corporation declares that the radio equipment type SRD(IK3600F) is in compliance with Directive 2014/53/EU. The full text of the EU declaration of conformity is available at the following internet address: http:// www.ptc.panasonic.eu/
Explanation of use of equipment	Short range device for remote control
Manufacturer name	Panasonic Automotive Systems Co., Ltd.
Manufacturer address	101 Moo 2 Teparak Road, T. Bangsaothong Ging A. Bangsaothong, Samutprakarn 10540 Thailand
Operational frequency band	125kHz
Maximum output power	66dBuA/m @10m

Importer information

Importer name	Address
MIDI Europe S.r.l	Via Crosaron, sn, 37053, Cerea （Verona）, Italy
Anadolu Isuzu Otomotiv Sanayi Ve Ticaret A.S.	Sekerpinar Mah. Otomotiv Cad. No：2, 41435 Cayirova, Kocaeli, Turkey
Isuzu Motors Europe NV.	Bist 12 2630 Aartelaar, Belgium
Isuzu Benelux N.V.	Satenrozen 8 2550, Kontich, Belgium

Tire Pressure Monitoring System

This vehicle's tire pressure monitoring system conforms to the basic requirements of the RE Directive (2014/53/EU) and related regulations.

Refer to page
4-280 Tire Pressure Monitoring System [V]

Product	Wheel unit pressure sensor (WUS)
Certification No.(Korea)	R-C-T46-14127
Model Number	14127 WUS Hook
Country of origin	Made in Thailand
Manufacturer name	LID Technologies S.A.S.
Manufacturer address	Parc Technologique du Canal, 3 rue Giotto, 31520 Ramonville-Saint-Agne,France

The frequency bands and the associated maximum transmit power are as follows:

- 433.92 MHz +/- 250 KHz
- E.R.P -10 dBm max.

Product	Receiver control unit (RCU)
Certification No.(Korea)	R-C-T46-20152
Model Number	20152 RCU
Country of origin	Made in Thailand
Manufacturer name	LID Technologies S.A.S.
Manufacturer address	Parc Technologique du Canal, 3 rue Giotto, 31520 Ramonville-Saint-Agne,France

1. 取得審驗證明之低功率射頻器材，非經核准，公司、商號或使用者均不得擅自變更頻率、加大功率或變更原設計之特性及功能。低功率射頻器材之使用不得影響飛航安全及干擾合法通信；經發現有干擾現象時，應立即停用，並改善至無干擾時方得繼續使用。前述合法通信，指依電信管理 法規定作業之無線電通信。低功率射頻器材須忍受合法通信或工業、科學及醫療用電波輻射性電機設備之干擾。
2. 本器材須經專業工程人員安裝及設定，始得設置使用，且不得直接販售給一般消費者

The frequency bands and the associated maximum transmit power are as follows:

- 433.92 MHz +/- 250 KHz
- E.R.P -4 dBm max.
- 125 KHz : -13 dBμA*-/m @ 10 m

For Australia (Statement of Compliance with the Consumer Goods (Products Containing Button/Coin Batteries) Safety Standard 2020)

Electronic Key (Passive Entry and Start System)/RKE TXE (Keyless Entry System)

⚠ WARNING

THIS PRODUCT CONTAINS A BUTTON/COIN BATTERY

The button/coin battery in the vehicle key is hazardous. Keep the new or used batteries out of reach of children at all times.
If swallowed or placed inside any part of the body, a lithium button/coin battery can cause severe or fatal injuries in two hours or less.
Seek immediate medical attention if it is suspected the battery has been swallowed or placed inside any part of the body.

For the Republic of Korea

Keyless Entry System

상호명/제조자	Panasonic Automotive Systems Co., Ltd.
기자재의 명칭	특정소출력무선기기(데이터전송용무선기기)
모델명	IK3600F
제조년월/제조국	Shown on product./Thailand
식별부호	R-C-Pa4-IK3600F

상호명/제조자	Panasonic Automotive Systems Co., Ltd.
기자재의 명칭	WAM MID
모델명	IM2035BB
제조년월/제조국	Shown on product./Thailand
식별부호	R-R-Pa4-IM2035BB

For the Republic of Singapore

Keyless Entry System

Model Name/No.: IM2035BB
Model Name/No.: IK3600F

Complies with
IMDA Standards
DA107248

This vehicle's keyless entry system conforms to the basic requirements of the Info-communications Media Development Authority of Singapore (IMDA) and related regulations.

For Taiwan

Keyless Entry System

Product	RKE TXE
Model	IK3600F
Brand name	Panasonic
NCC logo + certification number	CCAH23LP6060T1
Operational frequency band	433.87 to 433.97(MHz)
Maximum Output Power	80.8dBuV/m @3m

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Product	WAM MID
Model	IM2035BB
Brand name	Panasonic
NCC logo + certification number	CCAH23LP6500T3
Operational frequency band	125kHz
Maximum Output Power	19.2uV/m @300m

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Guidelines for Installation of Aftermarket Radio Frequency Transmitting Equipment

Purpose

This installation guidelines give requirement and recommendations for the installation in vehicles of

- radio frequency (RF) transmitting equipment.
- ancillary equipment associated with these.

NOTE

- These guidelines are intended to supplement, but not to be used in place of, detailed instructions for such installations which are the sole responsibility of the manufacturer of the involved radio telephone or land mobile radio.

General

1. Only the RF-transmitting equipment and ancillary equipment (microphone, converter, booster, etc.) with 'CE' mark or 'e' may be installed in vehicle.
2. Installation of RF-transmitting equipment shall be performed by competent personal permitted by the country regulation. The vehicle and RF-transmitting equipment manufacturer's instruction manuals and installation notes shall be followed.

NOTE

- Vehicle manufacturer's instructions take priority in case of conflict.
- Installation of RF-transmitting equipment to any part of the vehicle, other than an authorized connection or mounting location, may invalidate the vehicle warranty.
- If a problem is found and can not be rectified, and it is suspected that the RF-transmitting equipment is out of specification, the appropriate manufacturer, agent or supplier shall be consulted.
- Expenses incurred from any adverse effect of any such installation are not the responsibility of vehicle manufacturer.

3. The installation shall comply with national legal requirements for the installation and use of RF-transmitting equipment in vehicles.
4. Full consideration shall be given to the positioning of RF-transmitting equipment such that electromagnetic interference (EMI) and radio frequency interference (RFI) is minimized between the RF-transmitting equipment being installed and the vehicle electrical and electronic systems.

5. Care shall be taken when planning the installation that any additional equipment used does not constitute a safety hazard and does not contravene safety regulations.
6. Care shall be taken to ensure that any microphone/handset lead is not such that the lead can interfere with the vehicle controls or driver.
7. Where a hand portable or transportable unit is installed in road vehicles, the correct car adapter kit specified for the product shall be used.

Installation

Care shall be taken in
- choosing the antenna,
- sitting it in a recommended location,
- installing it correctly,
- ensuring that all connection in the antenna feeder are sealed to prevent dirt and water from entering the feeder and affecting its performance,
- ensuring that all connection are electrically tested after installation, and
- ensuring that a satisfactory VSWR reading is obtained.

Antenna

1. For RF-transmitting equipments with output power levels above 100mW (peak), an external antenna is strongly recommended.
2. The external antenna and feeder cable shall be impedance matched with a VSWR < 2.0.
3. The antenna should be a permanent-mount type located in the roof or the rear trunk lid. If a magnet-mount antenna is used, care should be taken to mount the antenna in the same location as a permanent-mount type.

NOTE

- Each vehicle model and body style reacts to radio frequency energy differently. When dealing with an unfamiliar vehicle, it is suggested that a magnetic-mount antenna be used to check the proposed antenna location for unwanted effects on the vehicle. An antenna location is a major factor in these effects.
- The best position for an antenna is on the metallic roof, preferably towards the center, but where possible with a distance of > λ/4 (λ = wavelength) from any opening, such as a sunroof or windows.

4. Care shall be taken when sitting an antenna next to an existing one or when mounting antennas with magnetic bases, as this could affect the accuracy or operation of the compass on vehicles so equipped.

[Radiation patterns and ground planes]

1. In order to create a symmetrical, non-directional radiation pattern, an antenna needs to be mounted vertically on a horizontal ground plane with – ideally – a radius of > λ/4 at the lowest frequency band used (see Table 1).
2. The antenna should not be located close to any electrically resonant structure.
3. Care shall be taken when sitting the antenna close to another, existing antenna. It is necessary to separate them by > λ/4 for transmit frequency f < 600 MHz and > λ for transmit frequency f > 600 MHz (see Table 1).

Table 1. Approximate frequency-to-wavelength conversion

Frequency f MHz	Wavelength λ cm	λ/4 cm
50	600	150
80	375	94
150	200	50
450	66	17
600	49.5	12
900	33	8
1800	16.5	4

[Ground-plane provision]

When the antenna installation is to be carried out on a non-metallic surface

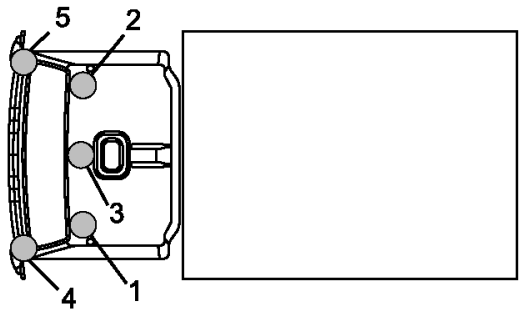
- a ground-plane-independent antenna can be fitted directly to any surface (glass-fiber etc.) or onto a mounting bracket which may be supplied by the manufacturer,
- a standard antenna can be used with a ground plane fitted to the underside of the panel, for example a metallic plate complying with dimensions Table 1.

[Antenna position at vehicle]

Installation and use of RF transmitters with antenna outside the vehicle is shown by Table 2.

Table 2. Installation and use of RF transmitters with antenna outside the vehicle

Frequency bands (MHz)		Max. output power (W)	Antenna position at vehicle	Specific conditions for installation and/or use
1.	1.8-30	50	1.2.3.4.5.	Ham Radio
2.	50-54	50	1.2.3.	Ham Radio
3.	142-176	50	1.2.3.	Ham Radio / General Service Radio
4.	380-470	50	1.2.3.	Ham Radio / General Service Radio
5.	870-915	5	1.2.3.	General Service Radio / Mobile Telephone
6.	1200-1300	10	1.2.3.	Ham Radio
7.	1710-1785	2	1.2.3.	Mobile Telephone
8.	1885-2025	1	1.2.3.	Mobile Telephone



Antenna location;
0: all location (vehicle exterior)
1: front left of roof
2: front right of roof
3: center of roof
4: left of bumper
5: right of bumper

Figure 1. Drawing showing antenna installation points in the vehicle

[Case of "On-glass" antennas]

Glass mounted antennas should be kept as high as possible in the center of the rear window or windshield.

NOTE

- Care shall be taken to ensure that the glass is within the specified temperature range when fixing the antenna mount in order to obtain a good bond.

Antenna Cable

1. Use a high quality, one piece coaxial cable (at least 95% shield coverage) that is impedance matched for the RF-transmitting equipment (VSWR < 2.0).

2. Excess coaxial cable shall not be coiled, as this may affect the tuning of the antenna as well as producing electrical interference.
3. If possible, the antenna cable should be cut to the correct length.
4. The cable should be routed so as to avoid sharp bends.
5. Safety-sensitive electronic unit (e.g. airbag and ABS systems), circuits and harnesses shall not be used for parallel wiring.
6. If it is necessary to cross other wiring, cross at right angles.
7. If an extension feeder cable is required, suitable coaxial cable shall be used and correctly terminated with good quality, low-loss connectors.

NOTE

- Fit the correct antenna connectors at each end of the feeder cable to match the equipment using either crimp or soldered connectors as appropriate.

8. If the antenna cable provided is too short, wherever possible the cable should be replaced by a suitable feeder cable of correct length.

NOTE

- Extending the length of the feeder cable will result in additional losses, particularly at frequencies > 800 MHz.

9. Ensure that the feeder cable is not strained or distorted by, for example, excessive tightening of cable ties.
10. When vehicle trim is replaced, make sure that the panels do not trap the feeder cable.
11. Additional care should be taken when installing a glass mount to the rear screen of a hatch-back type vehicle to allow opening and to prevent damage to the feeder cable.

RF-transmitting Equipment

[Mounting of RF-transmitting equipment]

1. Location of a RF-transmitting equipment should be selected that provides a solid mounting point which does not interfere with the vehicle operator controls and provides adequate ventilation.
2. RF-transmitting equipment shall not be able to be damaged or its ventilation restricted. Special care should be taken to ensure that RF-transmitting equipment can not be damaged by ingress of water.

3. Access to vehicle equipment in the load storage area shall not be barred, e.g. by wheel jack, fire extinguishers or spare wheel.
4. The connections to the RF-transmitting equipment should be easily accessible in order that the equipment may be removed for operation in transportable mode, or for repairs and servicing.
5. It shall not hinder the operation of airbags or other safety equipment.

NOTE

- Great care should be taken not to mount any RF-transmitting equipment, microphones or any other item in the deployment path of a Supplemental Inflatable Restraint or "Air Bag".

[Routing of RF-transmitting equipment's cables]

1. Where possible, all cables should pass inside or underneath trim and through moldings in such a way as to afford maximum protection. If necessary, use sleeving, a proprietary protector and/or cable ties where required.
2. Select a route for the cable, ideally on the opposite side of the vehicle to the fuel pipe, clear of brake pipes, cables, controls, vehicle wiring and any hot components. Under no circumstances shall any cables be attached to the foregoing.
3. Cable shall be routed so that they avoid
   - sharp edges,
   - continual bending,
   - stress or strain,
   - abrasion,
   - extreme temperature, and
   - becoming a hazard to the occupants of the car.

Power Supply for RF-transmitting Equipment

[General]

1. A dedicated supply cable should be used for the RF-transmitting equipment installation which should be as short as possible to the battery positive and negative connections. Do not connect directly to the battery pillars, but use the battery terminals provided.

NOTE

- Connections shall not be made to any electronic control unit feeds under any circumstances. For example, avoid using cigar lighter as power sources for a RF-transmitting equipment.

2. It is also recommended that, unless a molded twin supply cable is used, the two supply lines be twisted together along their length in order to reduce radiated noise or induce noise.

NOTE

- The supply cable from the RF-transmitting equipment should approach the battery in such a way that, when terminated, the two wires can not be inadvertently reversed, e.g. one wire is shorter than the other.

3. If ignition switch control is desired, the handset or control unit positive lead may be connected through an appropriate in-line fuse to an available accessory circuit or ignition circuit not powered during cranking.

[Supply cable and routing]

1. Heavy-duty cable of a low electrical resistance should be used on long cable runs to minimize voltage drop.
2. The cable shall be of a higher current capacity than the protection fuse, and the correct fuse shall be fitted.
3. The cable should be as short as possible.
4. The cable shall be secured well clear of moving parts, (shock absorbers, steering, drive shaft, control pedals, etc.).
5. The cable shall be secured well clear of the engine, exhaust system or other hot items.
6. The supply cable run should, where possible, be separate from that of the in-car entertainment equipment control cables, although they may pass through the same holes in the chassis and body for ease of fitting; suitable grommets should be fitted if additional holes are drilled.
7. The cable shall be supported, avoiding sharp bends, and shall not be subjected to strain.
8. The cable shall be sited away from ignition coil, the high voltage circuits of the ignition systems and electronic control units and, where possible, other vehicle wiring.

[Vehicle Electrical Supply Systems with Voltages 24 V]

1. A 12 V tap shall not be taken from 24 V vehicle batteries.

NOTE

- Most mobile RF-transmitting equipment operates from a 12 V supply. ISUZU NJR88/ NKR88/NLR88/NMR88/NMS88/NNR88/NPR88/NPS88/NPR75/NQR75/NQS88/ NQR90 have a 24 V, so it is essential that a suitable regulator or converter be used which will provide the nominal supply voltage and current for which the RF-transmitting equipment is designed.

2. The supply cable to the regulator or converter shall be as practicable and suitable fuses should be fitted as close as possible to the supply.

NOTE

- The installation of the RF-transmitting equipment shall be carried out such that the integrity of the vehicle isolated power supply is not impaired.

3. The unit shall be mounted in accordance with the manufacturer's instructions. Unless environmentally protected, it should be located in a dry and well-ventilated position.

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