#### **Foreword**

Congratulations on choosing a SUBARU vehicle. This Owner's Manual has all the information necessary to keep your SUBARU in excellent condition and to properly maintain the emission control system for minimizing emission pollutants. We urge you to read this manual carefully so that you may understand your vehicle and its operation. For information not found in this Owner's Manual, such as details concerning repairs or adjustments, please contact the SUBARU dealer from whom you purchased your SUBARU or the nearest SUBARU dealer.

The information, specifications and illustrations found in this manual are those in effect at the time of printing. FUJI HEAVY INDUSTRIES LTD. reserves the right to change specifications and designs at any time without prior notice and without incurring any obligation to make the same or similar changes on vehicles previously sold. This Owner's Manual applies to all models and covers all equipment, including factory installed options. Some explanations, therefore may be for equipment not installed in your vehicle.

Please leave this manual in the vehicle at the time of resale. The next owner will need the information found herein.

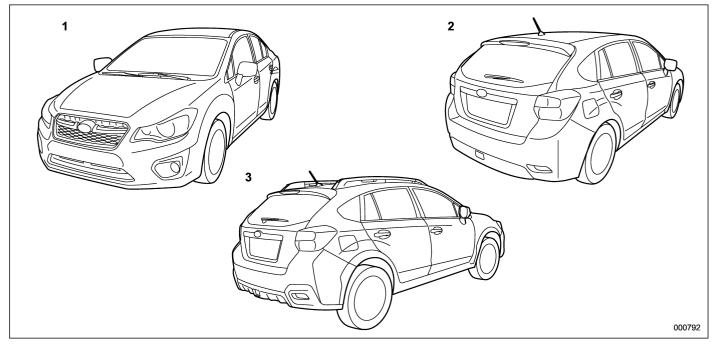
FUJI HEAVY INDUSTRIES LTD., TOKYO, JAPAN

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## **Vehicle types**

This manual describes the following vehicle types.



- 1) 4-door models
- 2) 5-door models except XV CROSSTREK
- 3) XV CROSSTREK models

#### **Warranties**

#### **■** Warranties for U.S.A.

All SUBARU vehicles distributed by Subaru of America, Inc. and sold at retail by an authorized SUBARU dealer in the United States come with the following warranties:

- SUBARU Limited Warranty
- Emission Control Systems Warranty
- Emissions Performance Warranty

All warranty information, including details of coverage and exclusions, is in the "Warranty and Maintenance Booklet". Please read these warranties carefully.

#### ■ Warranties for Canada

All SUBARU vehicles distributed by Subaru Canada, Inc. and sold at retail by an authorized SUBARU dealer in Canada come with the following warranties:

- SUBARU Limited Warranty
- Anti-Corrosion Warranty
- Emission Control Warranty

All warranty information, including details of coverage and exclusions, is in the "Warranty and Service Booklet". Please read these warranties carefully.

### ■ Models with HID headlights



High Intensity Discharge (HID) headlights contain mercury. For that reason, it is necessary to remove HID headlights before vehicle disposal. Once removed, please reuse, recycle or dispose of the HID headlights as hazardous waste.

## Models without HID headlights

#### NOTE

This vehicle does not contain mercury devices or parts.

## How to use this Owner's Manual

## **■** Using your Owner's Manual

Before you operate your vehicle, carefully read this manual. To protect yourself and extend the service life of your vehicle, follow the instructions in this manual. Failure to observe these instructions may result in serious injury and damage to your vehicle.

This manual is composed of fourteen chapters. Each chapter begins with a brief table of contents, so you can usually tell at a glance if that chapter contains the information you want.

## Chapter 1: Seat, seatbelt and SRS airbags

This chapter informs you how to use the seat and seatbelt and contains precautions for the SRS airbags.

#### Chapter 2: Keys and doors

This chapter informs you how to operate the keys, locks and windows.

#### **Chapter 3: Instruments and controls**

This chapter informs you about the operation of instrument panel indicators and how to use the instruments and other switches.

#### **Chapter 4: Climate control**

This chapter informs you how to operate the climate control.

#### Chapter 5: Audio

This chapter informs you how to operate your audio system.

#### Chapter 6: Interior equipment

This chapter informs you how to operate interior equipment.

#### Chapter 7: Starting and operating

This chapter informs you how to start and operate your SUBARU.

#### **Chapter 8: Driving tips**

This chapter informs you how to drive your SUBARU in various conditions and explains some safety tips on driving.

#### Chapter 9: In case of emergency

This chapter informs you what to do if you have a problem, such as a flat tire or engine overheating.

#### Chapter 10: Appearance care

This chapter informs you how to keep your SUBARU looking good.

#### Chapter 11: Maintenance and service

This chapter informs you when you need to take your SUBARU to the dealer for scheduled maintenance and informs you how to keep your SUBARU running properly.

#### **Chapter 12: Specifications**

This chapter informs you about dimensions and capacities of your SUBARU.

## Chapter 13: Consumer information and Reporting safety defects

This chapter informs you about Uniform tire quality grading standards and Reporting safety defects.

#### Chapter 14: Index

This is an alphabetical listing of all that's in this manual. You can use it to quickly find something you want to read.

## ■ Safety warnings

You will find a number of WARNINGS, CAUTIONs and NOTEs in this manual.

These safety warnings alert you to potential hazards that could result in injury to you or others.

Please read these safety warnings as well as all other portions of this manual carefully in order to gain a better understanding of how to use your SUBARU vehicle safely.

## **WARNING**

A WARNING indicates a situation in which serious injury or death could result if the warning is ignored.

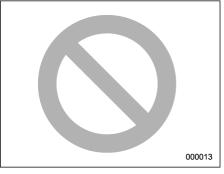
## **A** CAUTION

A CAUTION indicates a situation in which injury or damage to your vehicle, or both, could result if the caution is ignored.

#### NOTE

A NOTE gives information or suggestions how to make better use of your vehicle.

## ■ Safety symbol



You will find a circle with a slash through it in this manual. This symbol means "Do not", "Do not do this", or "Do not let this happen", depending upon the context.

#### ■ Abbreviation list

You may find several abbreviations in this manual. The meanings of the abbreviations are shown in the following list.

Abbreviation	Meaning
A/C	Air conditioner
A/ELR	Automatic/Emergency locking retractor
ABS	Anti-lock brake system
AKI	Anti knock index
ALR	Automatic locking retractor
AWD	All-wheel drive
CVT	Continuously variable trans- mission
DRL	Daytime running light
EBD	Electronic brake force distribution
ELR	Emergency locking retractor
GAW	Gross axle weight
GAWR	Gross axle weight rating
GPS	Global positioning system
GVW	Gross vehicle weight
GVWR	Gross vehicle weight rating
HID	High intensity discharge
INT	Intermittent

Abbreviation	Meaning
LATCH	Lower anchors and tethers for children
LED	Light emitting diode
LSD	Limited slip differential
MIL	Malfunction indicator light
MMT	Methylcyclopentadienyl man- ganese tricarbonyl
MT	Manual transmission
OBD	On-board diagnostics
RON	Research octane number
SRS	Supplemental restraint system
TIN	Tire identification number
TPMS	Tire pressure monitoring system

## Vehicle symbols

There are some of the symbols you may see on your vehicle.

For warning and indicator lights, refer to "Warning and indicator lights" \$\infty\$19.

Mark	Name
	WARNING
$\triangle$	CAUTION
	Read these instructions carefully
9	Wear eye protection
	Battery fluid contains sulfuric acid
<b>(3)</b>	Keep children away
<b>⊗</b>	Keep flames away
	Prevent explosions

## Safety precautions when driving

### ■ Seatbelt and SRS airbag

## **WARNING**

- All persons in the vehicle should fasten their seatbelts BEFORE the vehicle starts to move. Otherwise, the possibility of serious injury becomes greater in the event of a sudden stop or accident.
- To obtain maximum protection in the event of an accident, the driver and all passengers in the vehicle should always wear seatbelts when the vehicle is moving. The SRS (Supplemental Restraint System) airbag does not do away with the need to fasten seatbelts. In combination with the seatbelts, it offers the best combined protection in case of a serious accident.

Not wearing a seatbelt increases the chance of severe injury or death in a crash even when the vehicle has the SRS airbag. • The SRS airbags deploy with considerable speed and force. Occupants who are out of proper position when the SRS airbag deploys could suffer very serious injuries. Because the SRS airbag needs enough space for deployment, the driver should always sit upright and well back in the seat as far from the steering wheel as practical while still maintaining full vehicle control and the front passenger should move the seat as far back as possible and sit upright and well back in the seat.

For instructions and precautions, carefully read the following sections.

- For the seatbelt system, refer to "Seatbelts" \$\alpha 1-11.
- For the SRS airbag system, refer to "\*SRS airbag (Supplemental Restraint System airbag)" ☞ 1-37.

## ■ Child safety

## **WARNING**

 Never hold a child on your lap or in your arms while the vehicle is moving. The passenger cannot

- protect the child from injury in a collision, because the child will be caught between the passenger and objects inside the vehicle.
- While riding in the vehicle, infants and small children should always be placed in the REAR seat in an infant or child restraint system which is appropriate for the child's age, height and weight. If a child is too big for a child restraint system, the child should sit in the REAR seat and be restrained using the seatbelts. According to accident statistics. children are safer when properly restrained in the rear seating positions than in the front seating positions. Never allow a child to stand up or kneel on the seat.
- Put children aged 12 and under in the REAR seat properly restrained at all times in a child restraint device or in a seatbelt. The SRS airbag deploys with considerable speed and force and can injure or even kill children, especially if they are 12 years of age and under and are not restrained or improperly restrained. Because children are

lighter and weaker than adults. their risk of being injured from deployment is greater.

- NEVER INSTALL A REARWARD FACING CHILD SEAT IN THE FRONT SEAT. DOING SO RISKS SERIOUS INJURY OR DEATH TO THE CHILD BY PLACING THE CHILD'S HEAD TOO CLOSE TO THE SRS AIRBAG.
- Always turn the child safety locks to the "LOCK" position when children sit in the rear seat. Serious injury could result if a child accidentally opens the door and falls out. Refer to "Child safety locks" \$\textit{\$\texti
- Always lock the passenger's windows using the lock switch when children are riding in the vehicle. Failure to follow this procedure could result in injury to a child operating the power window. Refer to "Windows" @ 2-16.
- Never leave unattended children. adults or animals in the vehicle. They could accidentally injure themselves or others through inadvertent operation of the vehicle. Also, on hot or sunny days, temperature in a closed vehicle

could quickly become high enough to cause severe or possibly fatal injuries to them.

- Help prevent children, adults or animals from locking themselves in the trunk. On hot or sunny days, the temperature in the trunk could quickly become high enough to cause death or serious heat-related injuries including brain damage to anyone locked inside, particularly for small children.
- When leaving the vehicle, close all windows and lock all doors. Also make certain that the trunk is closed.

For instructions and precautions, carefully read the following sections.

- For the seatbelt system, refer to "Seatbelts" @1-11.
- For the child restraint system, refer to "Child restraint systems" \$\alpha\$1-24.
- For the SRS airbag system, refer to "\*SRS airbag (Supplemental Restraint System airbag)" @1-37.

### ■ Engine exhaust gas (carbon monoxide)

#### **№** WARNING

- Never inhale engine exhaust gas. Engine exhaust gas contains carbon monoxide, a colorless and odorless gas which is dangerous, or even lethal, if inhaled.
- Always properly maintain the engine exhaust system to prevent engine exhaust gas from entering the vehicle.
- Never run the engine in a closed space, such as a garage, except for the brief time needed to drive the vehicle in or out of it.
- Avoid remaining in a parked vehicle for a lengthy time while the engine is running. If that is unavoidable, then use the ventilation fan to force fresh air into the vehicle.
- Always keep the front ventilator inlet grille free from snow, leaves or other obstructions to ensure that the ventilation system always works properly.
- If at any time you suspect that exhaust fumes are entering the

vehicle, have the problem checked and corrected as soon as possible. If you must drive under these conditions, drive only with all windows fully open.

 Keep the trunk lid or rear gate closed while driving to prevent exhaust gas from entering the vehicle.

## ■ Drinking and driving



Drinking and then driving is very dangerous. Alcohol in the blood-stream delays your reaction time and impairs your perception, judgment and attentiveness. If you drive after drinking – even if you drink just a little – it will increase the risk of being involved in a serious or fatal accident, injuring or killing yourself, your passengers and others. In addition, if you are injured in the accident, alcohol may increase the severity of that injury.

Please don't drink and drive.

Drunken driving is one of the most frequent causes of accidents. Since alco-

hol affects all people differently, you may have consumed too much alcohol to drive safely even if the level of alcohol in your blood is below the legal limit. The safest thing you can do is never drink and drive. However if you have no choice but to drive, stop drinking and sober up completely before getting behind the wheel.

## ■ Drugs and driving



There are some drugs (over the counter and prescription) that can delay your reaction time and impair your perception, judgment and attentiveness. If you drive after taking them, it may increase your, your passengers' and other persons' risk of being involved in a serious or fatal accident.

If you are taking any drugs, check with your doctor or pharmacist or read the literature that accompanies the medication to determine if the drug you are taking can impair your driving ability. Do not drive after taking any medications that can make you drowsy or otherwise affect your ability to safely operate a motor vehicle. If you have a medical condition that requires you to take drugs, please consult with

your doctor.

Never drive if you are under the influence of any illicit mind-altering drugs. For your own health and well-being, we urge you not to take illegal drugs in the first place and to seek treatment if you are addicted to those drugs.

## ■ Driving when tired or sleepy

## **WARNING**

When you are tired or sleepy, your reaction time will be delayed and your perception, judgment and attentiveness will be impaired. If you drive when tired or sleepy, your, your passengers' and other persons' chances of being involved in a serious accident may increase.

Please do not continue to drive but instead find a safe place to rest if you are tired or sleepy. On long trips, you should make periodic rest stops to refresh yourself before continuing on your journey. When possible, you should share the driving with others.

### ■ Modification of your vehicle



Your vehicle should not be modified other than with genuine SUBARU parts and accessories. Other types of modifications could affect its performance, safety or durability, and may even violate governmental regulations. In addition, damage or performance problems resulting from modification may not be covered under warranties.

## Car phone/cell phone and driving



Do not use a car phone/cell phone while driving; it may distract your attention from driving and can lead to an accident. If you use a car phone/cell phone, pull off the road and park in a safe place before using your phone. In some States/ Provinces, only hands-free phones may legally be used while driving.

# Driving vehicles equipped with navigation system



Do not allow the monitor to distract your attention from driving. Also, do not operate the controls of the navigation system while driving. The loss of attention to driving could lead to an accident. If you wish to operate the controls of the navigation system, first take the vehicle off the road and stop it in a safe place.

## ■ Driving with pets

Unrestrained pets can interfere with your driving and distract your attention from driving. In a collision or sudden stop, unrestrained pets or cages can be thrown around inside the vehicle and hurt you or your passengers. Besides, the pets can be hurt under these situations. It is also for their own safety that pets should be properly restrained in your vehicle. Restrain a pet with a special traveling harness which can be secured to the rear seat with a seatbelt or use a pet carrier which can be secured to the rear seat by routing a seatbelt through the carrier's

handle. Never restrain pets or pet carriers in the front passenger's seat. For further information, consult your veterinarian, local animal protection society or pet shop.

## ■ Tire pressures

Check and, if necessary, adjust the pressure of each tire (including the spare) at least once a month and before any long journey.

Check the tire pressure when the tires are cold. Use a pressure gauge to adjust the tire pressures to the values shown on the tire placard. For detailed information, refer to "Tires and wheels" \$\infty\$11-21.

## **WARNING**

Driving at high speeds with excessively low tire pressures can cause the tires to deform severely and to rapidly become hot. A sharp increase in temperature could cause tread separation, and destruction of the tires. The resulting loss of vehicle control could lead to an accident.

#### **General information**

## ■ California proposition 65 warning

## **WARNING**

Engine exhaust, some of its constituents, and certain vehicle components contain or emit chemicals known to the State of California to cause cancer and birth defects or other reproductive harm. In addition, certain fluids in vehicles and certain components of product wear contain or emit chemicals known to the State of California to cause cancer and birth defects or other reproductive harm.

## ■ California Perchlorate Advisory

Certain vehicle components such as airbag modules, seatbelt pretensioners and keyless entry transmitter batteries may contain perchlorate material. Special handling may apply for service or vehicle end of life disposal. See www.dtsc.ca.gov/hazardouswaste/perchlorate.

## ■ Noise from under the vehicle NOTE

You may hear a noise from under the vehicle approximately 5 to 10 hours after the ignition switch is turned to the "LOCK" (off) position. However, this does not indicate a malfunction. This noise is caused by the operation of the fuel evaporation leakage checking system and is normal. The noise will stop after approximately 15 minutes.

#### ■ Event data recorder

This vehicle is equipped with an event data recorder (EDR). The main purpose of an EDR is to record, in certain crash or near crash-like situations, such as an airbag deployment or hitting a road obstacle, data that will assist in understanding how a vehicle's systems performed. The EDR is designed to record data related to vehicle dynamics and safety systems for a short period of time, typically 30 seconds or less. The EDR in this vehicle is designed to record such data as:

- How various systems in your vehicle were operating;
- Whether or not the driver and passenger safety belts were buckled/fastened;
- How far (if at all) the driver was

depressing the accelerator and/or brake pedal; and,

How fast the vehicle was traveling.

These data can help provide a better understanding of the circumstances in which crashes and injuries occur. NOTE: EDR data are recorded by your vehicle only if a non-trivial crash situation occurs; no data are recorded by the EDR under normal driving conditions and no personal data (e.g., name, gender, age, and crash location) are recorded. However, other parties, such as law enforcement, could combine the EDR data with the type of personally identifying data routinely acquired during a crash investigation.

To read data recorded by an EDR, special equipment is required, and access to the vehicle or the EDR is needed. In addition to the vehicle manufacturer, other parties, such as law enforcement, that have the special equipment, can read the information if they have access to the vehicle or the EDR.

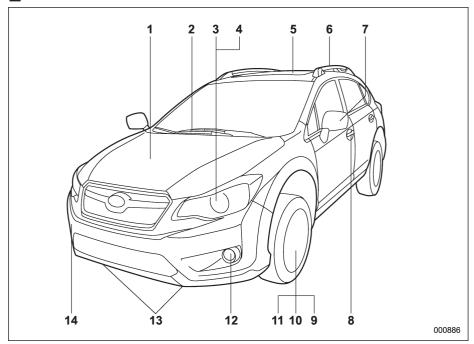
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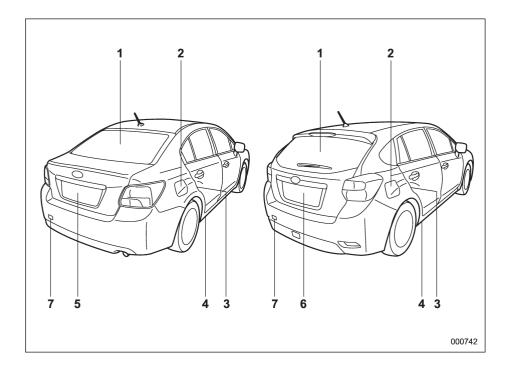
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#### Illustrated index

#### Exterior



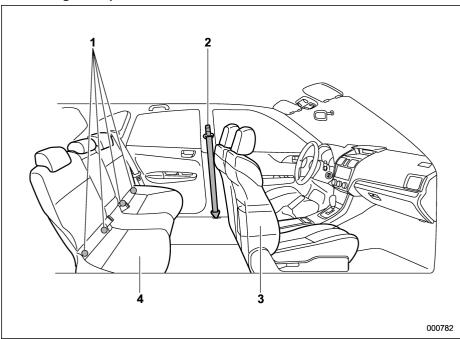
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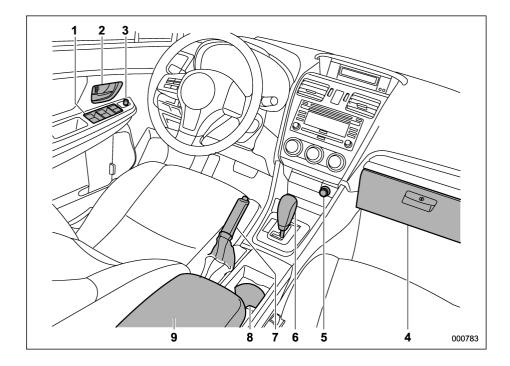
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## ■ Interior

#### **▼** Passenger compartment area

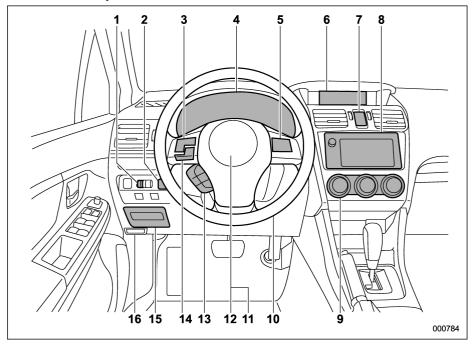


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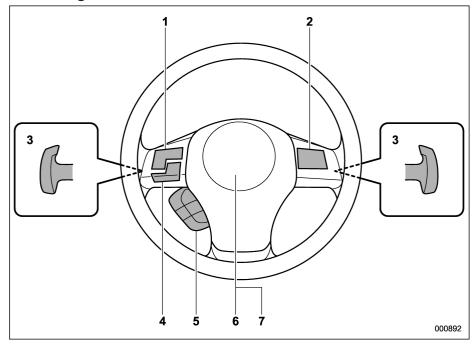
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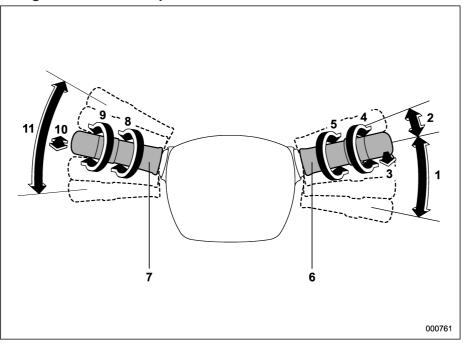
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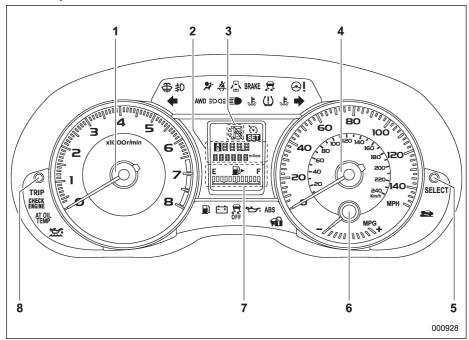
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#### ■ Combination meter

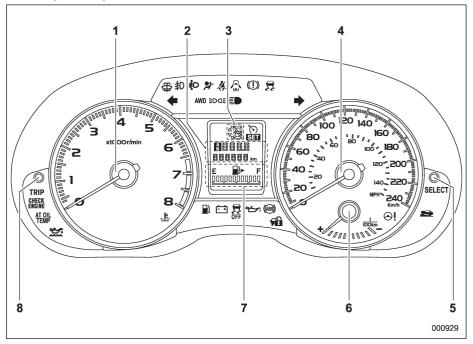
#### ▼ U.S.-spec. models



The illustration above is a typical example. For some models, the combination meter may be slightly different than that shown in the illustration.

- 1) Tachometer (page 3-7)
- 2) Trip meter and odometer (page 3-6)
- Select lever/gear position indicator (page 3-21)
- 4) Speedometer (page 3-6)
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#### **▼** Except U.S.-spec. models



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- 1) Tachometer (page 3-7)
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## ■ Warning and indicator lights

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## **Function settings**

A SUBARU dealer can change the settings of the functions shown in the following table to meet your personal requirements. Contact the nearest SUBARU dealer for details. If your vehicle is equipped with a multi function display, the settings for some of these functions can be changed using the display. For details, refer to "Multi function display" \$\inspec\$3-28.

Item	Function	Possible settings	Default setting
Alarm system	Alarm system	Operation/Non-operation	Operation
	Monitoring start delay time (after closure of doors)	0 second/30 seconds	30 seconds
	Impact sensor operation (only models with shock sensors (dealer option))	Operation/Non-operation	Non-operation
	Passive arming	Operation/Non-operation	Non-operation
	Dome light and map lights illumination (models with moonroof)	ON/OFF	OFF
	Dome light illumination (models without moonroof)		
Remote keyless entry system	Hazard warning flasher	Operation/Non-operation	Operation
	Audible signal	Operation/Non-operation	Operation
Key lock-in prevention	Key lock-in prevention	Operation/Non-operation	Operation
Defogger and deicer system for models with the automatic climate control system	Rear window defogger, outside mirror defogger and windshield wiper deicer	Operation for 15 minutes/ Continuous operation	Operation for 15 minutes
Dome light	Operation of dome light/map light OFF delay timer	OFF/10S/20S/30S	30S
Map light for models with a moonroof			
Battery drainage prevention function	Battery drainage prevention function	Operation/Non-operation	Operation
Seatbelt warning	Sounds a chime while driving	Operation/Non-operation	Operation
Auto on/off headlights (if equipped)	Sensitivity of the operation of the auto on/off headlights	Low/Normal/High/Very high	Normal

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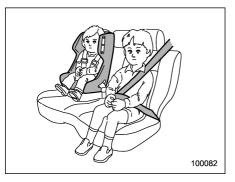
#### Front seats



#### WARNING

- Never adjust the seat while driving to avoid losing control of the vehicle which can result in personal injury.
- Before adjusting the seat, make sure the hands and feet of rear seat passengers and cargo are clear of the adjusting mechanism.
- After adjusting the seat, push it slightly to make sure it is securely locked. If the seat is not securely locked, it may move or the seatbelt may not operate properly.
- Do not put objects under the front seats. They may interfere with front seat locking and cause an accident.
- Seatbelts provide maximum restraint when the occupant sits well back and upright in the seat.
   To reduce the risk of sliding under the seatbelt in a collision, the front seatbacks should be always used in the upright position while the vehicle is running.

- If the front seatbacks are not used in the upright position in a collision, the risk of sliding under the lap belt and of the lap belt sliding up over the abdomen will increase, and both can result in serious internal injury or death.
- The SRS airbags deploy with considerable speed and force. Occupants who are out of proper position when the SRS airbag deploys could suffer very serious injuries. Because the SRS airbag needs enough space for deployment, the driver should always sit upright and well back in the seat as far from the steering wheel as practical while still maintaining full vehicle control and the front passenger should move the seat as far back as possible and sit upright and well back in the seat.



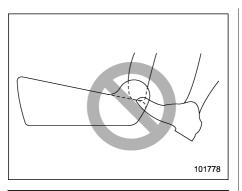


#### WARNING

Put children aged 12 and under in the rear seat properly restrained at all times. The SRS airbag deploys with considerable speed and force and can injure or even kill children. especially if they are 12 years of age and under and are not restrained or improperly restrained. Because children are lighter and weaker than adults, their risk of being injured from deployment is greater. For that reason, we strongly recommend that ALL children (including those in child seats and those that have outgrown child restraint devices) sit in the REAR seat properly restrained at all times in a child restraint device or in a seatbelt, whichever is appropriate for the child's age, height and weight. Secure ALL types of child restraint devices (including forward facing child seat) in the REAR seats at all times.

NEVER INSTALL A REARWARD FACING CHILD SEAT IN THE FRONT SEAT. DOING SO RISKS SERIOUS INJURY OR DEATH TO THE CHILD BY PLACING THE CHILD'S HEAD TOO CLOSE TO THE SRS AIRBAG.

According to accident statistics, children are safer when properly restrained in the rear seating positions than in the front seating positions. For instructions and precautions concerning child restraint systems, refer to "Child restraint systems" \$\ins 1-24\$.

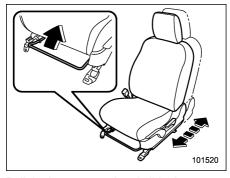


## **WARNING**

Do not let rear passengers rest their feet between the front seatback and seat cushion. Doing so may lead to defective operation of the following systems and could result in serious injury.

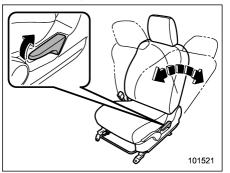
- Occupant detection system
- SRS side airbag
- Seat heater (if equipped)

## ■ Forward and backward adjustment



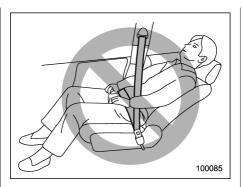
Pull the lever upward and slide the seat to the desired position. Then release the lever and try to move the seat back and forth to make sure that it is securely locked into place.

### ■ Reclining the seatback



Pull the reclining lever up and adjust the seatback to the desired position. Then release the lever and make sure the seatback is securely locked into place.

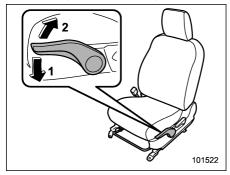
The seatback placed in a reclined position can spring back upward with force when the lever is pulled. While operating the lever to return the seatback, hold the seatback lightly so that it may be raised back gradually.



## **WARNING**

To prevent the passenger from sliding under the seatbelt in the event of a collision, always put the seatback in the upright position while the vehicle is in motion. Also, do not place objects such as cushions between the passenger and the seatback. If you do so, the risk of sliding under the lap belt and of the lap belt sliding up over the abdomen will increase, and both can result in serious internal injury or death.

## Seat cushion height adjustment (driver's seat)



- ) When the lever is pushed down, the seat is lowered.
- 2) When the lever is pulled up, the seat rises.

The height of the seat can be adjusted by moving the seat cushion adjustment lever up and down.

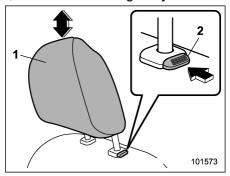
### ■ Head restraint adjustment

### **WARNING**

- Never drive the vehicle with the head restraints removed because they are designed to reduce the risk of serious neck injury in the event that the vehicle is struck from the rear. Also, never install the head restraints the opposite way round. Doing so will prevent the head restraints from functioning as intended. Therefore, when you remove the head restraints, you must reinstall all head restraints correctly to protect vehicle occupants.
- All occupants, including the driver, should not operate a vehicle or sit in a vehicle's seat until the head restraints are placed in their proper positions in order to minimize the risk of neck injury in the event of a crash.

The head restraints for the driver's seat and front passenger's seat are adjustable in the following ways.

#### **▼** Head restraint height adjustment



- 1) Head restraint
- 2) Release button

Each head restraint should be adjusted so that the center of the head restraint is closest to the top of the occupant's ears.

#### To raise:

Pull the head restraint up.

#### To lower:

Push the head restraint down while pressing the release button on the top of the seatback.

#### To remove:

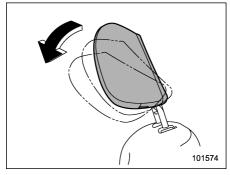
While pressing the release button, pull out the head restraint.

#### To install:

Install the head restraint into the holes that

are located on the top of the seatback until the head restraint locks.

#### **▼** Head restraint angle adjustment



The angle of the head restraint can be adjusted in several steps. While maintaining a suitable driving posture, adjust the head restraint to a position where the back of your head is as close to the head restraint as possible.

#### To tilt:

Tilt the head restraint by hand to the preferred position. A click will be audible when the head restraint is locked.

#### To return:

Tilt the head restraint once as far forward as it can go. The head restraint will automatically return to the fully upright position. Then, adjust the head restraint

- CONTINUED -

again to the preferred angle.

## Seat heater (if equipped)

The seat heater is equipped in the front seats.

The seat heater operates when the ignition switch is either in the "ACC" or "ON" position.

### **■** Safety precautions



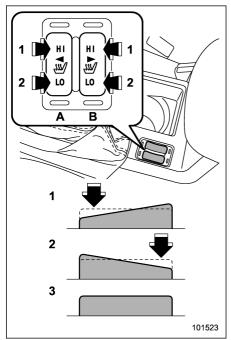
#### CAUTION

- There is a possibility that people with delicate skin may suffer slight burns even at low temperatures if they use the seat heater for a long period of time. When using the heater, always be sure to warn the persons concerned.
- Do not put anything on the seat which insulates against heat, such as a blanket, cushion, or similar items. This may cause the seat heater to overheat.

#### NOTE

Use of the seat heater for a long period of time while the engine is not running can cause battery discharge.

## Operation



- 1) **HI** Rapid heating
- 2) **LO** Normal heating
- 3) Off
- A) Left-hand side
- Right-hand side

To turn on the seat heater, push the "LO" or "HI" position on the switch, as desired, depending on the temperature.

Selecting the "HI" position will cause the seat to heat up quicker.

To turn off the seat heater, lightly press the opposite side of the current position.

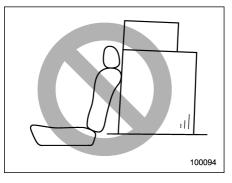
The indicator located on the switch illuminates when the seat heater is in operation. When the vehicle's interior is warmed enough or before you leave the vehicle, be sure to turn the switch off.

#### Rear seats



## **WARNING**

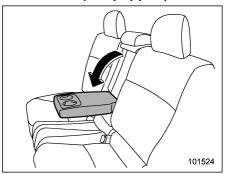
Seatbelts provide maximum restraint when the occupant sits well back and upright in the seat. Do not put cushions or any other materials between occupants and seatbacks or seat cushions. If you do so, the risk of sliding under the lap belt and of the lap belt sliding up over the abdomen will increase, and both can result in serious internal injury or death.



## **WARNING**

Never stack luggage or other cargo higher than the top of the seatback because it could tumble forward and injure passengers in the event of a sudden stop or accident.

### Armrest (if equipped)



To lower the armrest, pull on the top edge of the armrest.

### **WARNING**

To avoid serious injury, passengers must never be allowed to sit on the center armrest while the vehicle is in motion.

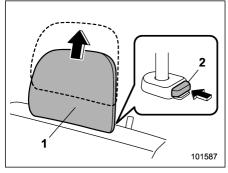
### ■ Head restraint adjustment

Both the rear window side seats and the rear center seat are equipped with head restraints.

## **WARNING**

- Never drive the vehicle with the head restraints removed because they are designed to reduce the risk of serious neck injury in the event that the vehicle is struck from the rear. Therefore, when you have removed the head restraints, you must reinstall all head restraints to protect vehicle occupants.
- All occupants, including the driver, should not operate a vehicle or sit in a vehicle's seat until the head restraints are placed in their proper positions in order to minimize the risk of neck injury in the event of a crash.

#### ▼ Rear windows side seating position



- Head restraint
- 2) Release button

#### To remove:

While pressing the release button, pull out the head restraint.

#### To install:

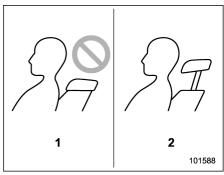
Install the head restraint into the holes that are located on the top of the seatback until the head restraint locks.

▼ Rear center seating position

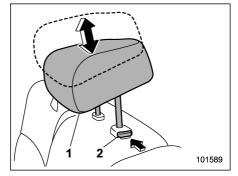


The head restraint is not intended to be used at the lowest position. Before sitting on the seat, raise the head restraint to the extended posi-

#### tion.



- 1) Incorrect (retracted position)
- 2) Correct (extended position)



- 1) Head restraint
- 2) Release button

#### To raise:

Pull the head restraint up.

#### To lower:

Push the head restraint down while pressing the release button on the top of the seatback.

#### To remove:

While pressing the release button, pull out the head restraint.

#### To install:

Install the head restraint into the holes that are located on the top of the seatback until the head restraint locks.

When the rear-center seating position is occupied, raise the head restraint to the extended position. When the rear center seating position is not occupied, lower the head restraint to improve rearward visibility.

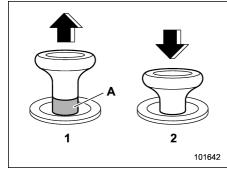
### ■ Folding down the rear seatback

## **MARNING**

 When you fold down the seatback, check that there are no passengers or objects on the rear seat. Not doing so creates a risk of injury or property damage if the seatback suddenly

#### folds down.

- Never allow passengers to ride on the folded rear seatback or in the cargo area or trunk. Doing so may result in serious injury or death.
- Secure all objects and especially long items properly to prevent them from being thrown around inside the vehicle and causing serious injury during a sudden stop, a sudden steering maneuver or a rapid acceleration.

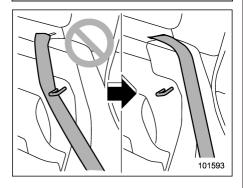


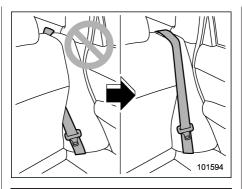
#### Lock release knob

- 1) Unlocked
- 2) Locked
- A) Unlocking marker in red

## WARNING

When you return the seatback to its original position, check that the unlocking marker on the lock release knob is not visible. Also. shake the seatback slightly to confirm that it is securely fixed in place. If the seatback is not securely fixed in place, the seatback may suddenly fold down in the event of sudden braking, or objects may move out from the cargo area or trunk, which could cause serious injury or death.

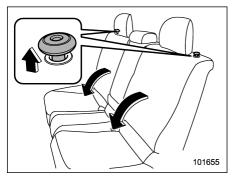




## **WARNING**

When the seatback is returned to its original position, observe the following precautions. Failure to do so may lead to serious injury or an accident because the operation efficiency of the seatbelt is inhibited.

- The seatbelt should not pass behind the securing hook for the seatback.
- The seatbelt should not be caught in the seatback and it should be fully visible.



Unlock the seatback by pulling the lock release knob and then fold the seatback down.

To return the seatback to its original position, raise the seatback until it locks into place and make sure that it is securely locked referring to the following description.

#### **Seatbelts**

## ■ Seatbelt safety tips

## **WARNING**

- All persons in the vehicle should fasten their seatbelts BEFORE the vehicle starts to move. Otherwise, the possibility of serious injury becomes greater in the event of a sudden stop or accident.
- All belts should fit snugly in order to provide full restraint. Loose fitting belts are not as effective in preventing or reducing injury.
- Each seatbelt is designed to support only one person. Never use a single belt for two or more persons – even children. Otherwise, in an accident, serious injury or death could result.
- Replace all seatbelt assemblies including retractors and attaching hardware worn by occupants of a vehicle that has been in a serious accident. The entire assembly should be replaced even if damage is not obvious.
- Put children aged 12 and under in

the rear seat properly restrained at all times. The SRS airbag deploys with considerable speed and force and can injure or even kill children, especially if they are 12 years of age and under and are not restrained or improperly restrained. Because children are lighter and weaker than adults. their risk of being injured from deployment is greater. For that reason, we strongly recommend that ALL children (including those in child seats and those that have outgrown child restraint devices) sit in the REAR seat properly restrained at all times in a child restraint device or in a seatbelt, whichever is appropriate for the child's height and weight.

Secure ALL types of child restraint devices (including forward facing child seats) in the REAR seats at all times.

NEVER INSTALL A REARWARD FACING CHILD SEAT IN THE FRONT SEAT. DOING SO RISKS SERIOUS INJURY OR DEATH TO THE CHILD BY PLACING THE CHILD'S HEAD TOO CLOSE TO THE SRS AIRBAG.

According to accident statistics, children are safer when properly restrained in the rear seating positions than in the front seating positions. For instructions and precautions concerning the child restraint system, refer to "Child restraint systems" \$\instance{1}\text{-1-24}\text{.}

Your vehicle is equipped with a crash sensing and diagnostic module, which will record the use of the seatbelt by the front passenger when any of the SRS frontal, side and curtain airbags deploy.

#### **▼** Infants or small children

Use a child restraint system that is suitable for your vehicle. Refer to "Child restraint systems" \$\tilde{g}\$1-24.

#### **▼** Children

If a child is too big for a child restraint system, the child should sit in the rear seat and be restrained using the seatbelts. According to accident statistics, children are safer when properly restrained in the rear seating positions than in the front seating positions. Never allow a child to stand up or kneel on the seat.

If the shoulder portion of the belt crosses the face or neck, move the child closer to the belt buckle to help provide a good shoulder belt fit. Care must be taken to securely place the lap belt as low as possible on the hips and not on the child's waist. If the shoulder portion of the belt cannot be properly positioned, a child restraint system should be used. Never place the shoulder belt under the child's arm or behind the child's back.

#### **▼** Expectant mothers



Expectant mothers also need to use the seatbelts. They should consult their doctor for specific recommendations. The lap belt should be worn securely and as low as possible over the hips, not over the waist.

## ■ Emergency Locking Retractor (ELR)

The driver's seatbelt has an Emergency Locking Retractor (ELR).

The emergency locking retractor allows normal body movement but the retractor locks automatically during a sudden stop, impact or if you pull the belt very quickly out of the retractor.

## Automatic/Emergency Locking Retractor (A/ELR)

Each passenger's seatbelt has an Automatic/Emergency Locking Retractor (A/ ELR). The Automatic/Emergency Locking Retractor normally functions as an Emergency Locking Retractor (ELR). The A/ ELR has an additional locking mode "Automatic Locking Retractor (ALR) mode" intended to secure a child restraint system. When the seatbelt is once drawn out completely and is then retracted even slightly, the retractor locks the seatbelt in that position and the seatbelt cannot be extended. As the belt is rewinding, clicks will be heard which indicate the retractor functions as an ALR. When the seatbelt is retracted fully, the ALR mode is released.

When securing a child restraint system on the rear seats by the use of the seatbelt, the seatbelt must be changed over to the Automatic Locking Retractor (ALR) mode.

When the child restraint system is removed, make sure that the seatbelt retracts fully and the retractor returned to the Emergency Locking Retractor (ELR) mode.

For instructions on how to convert the retractor to the ALR mode and restore it to the ELR mode, refer to "Installing child restraint systems with A/ELR seatbelt" \$\installing 1-27\$.

## Seatbelt warning light and chime



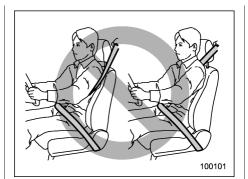
Refer to "Seatbelt warning light and chime" \$\mathrice{3}\$-9.

### **■** Fastening the seatbelt

## **⚠** WARNING

- Never use a belt that is twisted or reversed. In an accident, this can increase the risk or severity of injury.
- Keep the lap belt as low as possible on your hips. In a collision, this spreads the force of the lap belt over stronger hip bones instead of across the weaker abdomen.

- Seatbelts provide maximum restraint when the occupant sits well back and upright in the seat. To reduce the risk of sliding under the seatbelt in a collision, the front seatbacks should be always used in the upright position while the vehicle is running. If the front seatbacks are not used in the upright position in a collision, the risk of sliding under the lap belt and of the lap belt sliding up over the abdomen will increase, and both can result in serious internal injury or death.
- Do not put cushions or any other materials between occupants and seatbacks or seat cushions. If you do so, the risk of sliding under the lap belt and of the lap belt sliding up over the abdomen will increase, and both can result in serious internal injury or death.



## **WARNING**

Never place the shoulder belt under the arm or behind the back. If an accident occurs, this can increase the risk or severity of injury.

## **CAUTION**

Metallic parts of the seatbelt can become very hot in a vehicle that has been closed up in sunny weather; they could burn an occupant. Do not touch such hot parts until they cool.

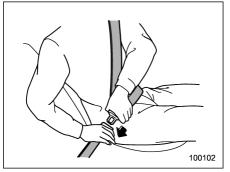
#### ▼ Front seatbelts

1. Adjust the seat position according to the following procedure.

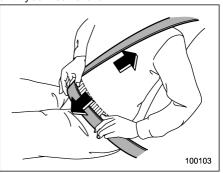
**Driver's seat:** Adjust the seatback to the upright position. Move the seat as far from the steering wheel as practical while still maintaining full vehicle control.

Front passenger's seat: Adjust the seatback to the upright position. Move the seat as far back as possible.

- 2. Sit well back in the seat.
- 3. Pick up the tongue plate and pull the belt out slowly. Do not let it get twisted. If the belt stops before reaching the buckle, return the belt slightly and pull it out more slowly. If the belt still cannot be unlocked, let the belt retract slightly after giving it a strong pull, then pull it out slowly again.

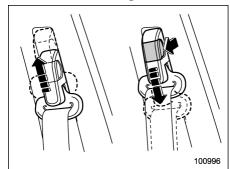


4. Insert the tongue plate into the buckle until you hear a click.



- 5. To make the lap part tight, pull up on the shoulder belt.
- 6. Place the lap belt as low as possible on your hips, not on your waist.

#### 



The shoulder belt anchor height should be adjusted to the position best suited for the driver/front passenger. Always adjust the anchor height so that the shoulder belt passes over the middle of the shoulder without touching the neck.

#### To raise:

Slide the anchor up.

#### To lower:

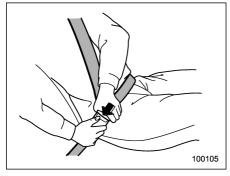
Pull the release knob and slide the anchor down.

Pull down on the anchor to make sure that it is locked in place.

# **WARNING**

When wearing the seatbelts, make sure the shoulder portion of the webbing does not pass over your neck. If it does, adjust the seatbelt anchor to a lower position. Placing the shoulder belt over the neck may result in neck injury during sudden braking or in a collision.

#### **▽** Unfastening the seatbelt

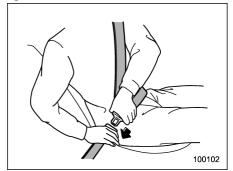


Push the button on the buckle.

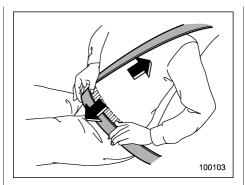
Before closing the door, make sure that the belts are retracted properly to avoid catching the belt webbing in the door.

# ▼ Rear seatbelts (except rear center seatbelt on 5-door models)

- 1. Sit well back in the seat.
- 2. Pick up the tongue plate and pull the belt out slowly. Do not let it get twisted. If the belt stops before reaching the buckle, return the belt slightly and pull it out more slowly. If the belt still cannot be unlocked, let the belt retract slightly after giving a strong pull on it, then pull it out slowly again.

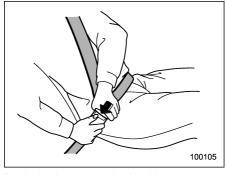


3. Insert the tongue plate into the buckle until you hear a click.



- 4. To make the lap part tight, pull up on the shoulder belt.
- 5. Place the lap belt as low as possible on your hips, not on your waist.

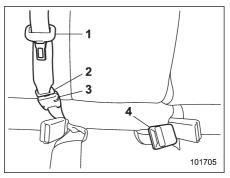
#### **▽** Unfastening the seatbelt



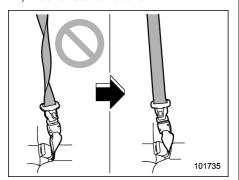
Push the button on the buckle.

Before closing the door, make sure that the belts are retracted properly to avoid catching the belt webbing in the door.

# ▼ Rear center seatbelt on 5-door models

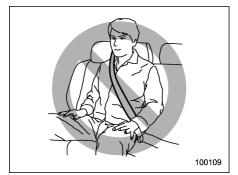


- 1) Center seatbelt tongue plate
- Connector (tongue)
- Connector (buckle)
- 4) Center seatbelt buckle



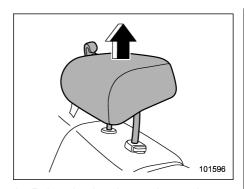
# **WARNING**

Fastening the seatbelt with the webbing twisted can increase the risk or severity of injury in an accident. When fastening the belt after it is pulled out from the retractor, especially when inserting the connector's tongue plate into the mating buckle (on right-hand side), always check that the webbing is not twisted.

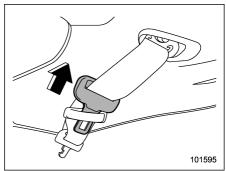


#### **WARNING**

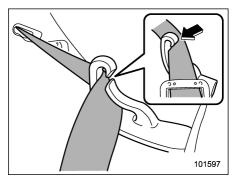
- Be sure to fasten both tongue plates to the respective buckles. If the seatbelt is used only as a shoulder belt (with the connector's tongue plate not fastened to the connector's buckle on the right-hand side), it cannot properly restrain the wearer in position in an accident, possibly resulting in serious injury or death.
- The head restraint is not intended to be used at the lowest position.
   Before sitting on the seat, raise the head restraint to the extended position. Otherwise, in an accident, serious injury or death could result.



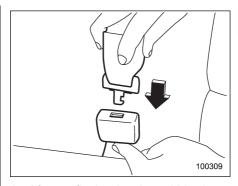
1. Raise the head restraint to the extended position. Do not remove the head restraint.



2. Remove the tongue plate from the belt holder on the right side of the cargo area and pull out the seatbelt slowly.

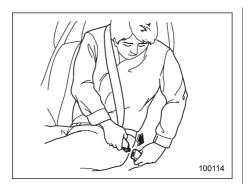


3. After drawing out the seatbelt, pass it through the belt guide as follows: First insert one edge of the belt into the open gap in the belt guide; then slide the rest of the belt in, so that the whole belt fits inside.

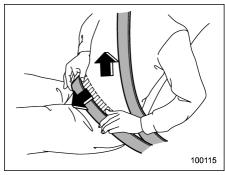


4. After confirming that the webbing is not twisted, insert the connector (tongue) attached at the webbing end into the buckle on the right-hand side until a click is heard.

If the belt stops before reaching the buckle, return the belt slightly and pull it out more slowly. If the belt still cannot be unlocked, let the belt retract slightly after giving it a strong pull, then pull it out slowly again.



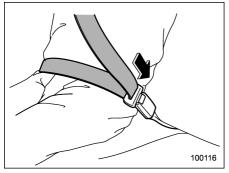
5. Insert the center seatbelt tongue plate into the center seatbelt buckle marked "CENTER" on the left-hand side until it clicks.



6. To make the lap part tight, pull up on the shoulder belt.

7. Place the lap belt as low as possible on your hips, not on your waist.

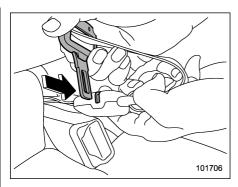
#### **▽** Unfastening the seatbelt



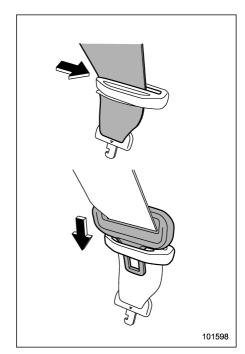
Push the release button of the center seatbelt buckle (on the left-hand side) to unfasten the seatbelt.

### **NOTE**

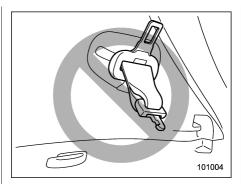
When the seatback is folded down for greater cargo area, it is necessary to disconnect the connector.



1. Insert a tongue plate or other hard pointed object into the slot in the connector (buckle) on the right-hand side and push it in. The connector (tongue) plate will then disconnect from the buckle.



2. Allow the retractor to roll up the belt. You should hold the webbing end and guide it back into the retractor while it is rolling up. Insert the connector (tongue) into the belt holder.



# **A** CAUTION

- Do not allow the retractor to roll up the seatbelt too quickly. Otherwise, the metal tongue plates may hit against the trim, resulting in damaged trim.
- Have the seatbelt fully rolled up so that the tongue plates are neatly stored. A hanging tongue plate can swing and hit against the trim during driving, causing damage to the trim.

#### **■** Seatbelt maintenance

To clean the seatbelts, use a mild soap and lukewarm water. Never bleach or dye the belts because this could seriously affect their strength.

Inspect the seatbelts and attachments including the webbing and all hardware periodically for cracks, cuts, gashes, tears, damage, loose bolts or worn areas. Replace the seatbelts even if only minor damage is found.

### **A** CAUTION

- Keep the belts free of polishes, oils, chemicals and particularly battery acid.
- Never attempt to make modifications or changes that will prevent the seatbelt from operating properly.

# Front seatbelt pretensioners

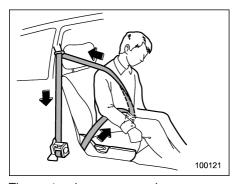
The driver's and front passenger's seatbelts have a seatbelt pretensioner. The seatbelt pretensioners are designed to be activated in the event of an accident involving a moderate to severe frontal and side collision and rollover accident.

### ■ Seatbelt with shoulder belt pretensioner

#### NOTE

This section is applicable to the following components.

- Except XV CROSSTREK models:
  - Driver's seatbelt
  - Front passenger's seatbelt
- XV CROSSTREK models:
  - Driver's seatbelt



The pretensioner sensor also serves as follows.

- SRS frontal airbag sensor
- Side impact sensor

If the sensor detects a certain predetermined amount of force during frontal or side collisions or rollover accidents, the front seatbelt is quickly drawn back in by the retractor to take up the slack so that the belt more effectively restrains the driver.

When a seatbelt pretensioner is activated, an operating noise will be heard and a small amount of smoke will be released. These occurrences are normal and not harmful. This smoke does not indicate a fire in the vehicle.

Once the seatbelt pretensioner has been activated, the seatbelt retractor remains locked. Consequently, the seatbelt can not be pulled out and retracted and therefore must be replaced.

#### NOTE

- Seatbelt pretensioners are not designed to activate in minor impacts or in rear impacts.
- In the case of rollover accidents
  - XV CROSSTREK models:

As the curtain airbags deploy, the driver's side seatbelt pretensioner and front passenger's side shoulder belt pretensioner are activated simultaneously.

- Except XV CROSSTREK models: Seatbelt pretensioners are not activated.
- In cases of frontal collisions, the following components will operate simultaneously.
  - Seatbelt pretensioner for driver
  - Seatbelt pretensioner for front passenger
  - SRS frontal airbag for driver
  - SRS frontal airbag for front passenger\*
  - SRS side airbags (both sides) (if an offset frontal collision occurs)
  - SRS curtain airbags (both sides)

(if an offset frontal collision occurs)

- \*: This does not operate if the occupant detection system deactivates airbag operation. For details, refer to "Front passenger's SRS frontal airbag" #1-46.
- In cases of side collisions, the following components will operate simultaneously.
  - SRS curtain airbag (impacted side)
  - SRS side airbag (impacted side) (when any of the center pillar impact sensors/front door impact sensors sense an impact force)
  - Seatbelt pretensioner for driver (when the driver's side front door impact sensor sense an impact force)
  - Seatbelt pretensioner for front passenger (shoulder belt pretensioner only) (when the front passenger's side front door impact sensor sense an impact force)
- Pretensioners are designed to function on a one-time-only basis. In the event that a pretensioner is activated, both the driver's and front passenger's seatbelt retractor assemblies should be replaced only by an authorized SUBARU dealer. When replacing seatbelt retractor assemblies, use only genuine SUBARU parts.

- If either front seatbelt does not retract or cannot be pulled out due to a malfunction or activation of the pretensioner, contact your SUBARU dealer as soon as possible.
- If the front seatbelt retractor assembly or surrounding area has been damaged, contact your SUBARU dealer as soon as possible.
- When you sell your vehicle, we urge you to explain to the buyer that it has seatbelt pretensioners by alerting the buyer to the contents of this section.

# **WARNING**

- To obtain maximum protection, the occupants should sit in an upright position with their seatbelts properly fastened. Refer to "Seatbelts" #1-11.
- Do not modify, remove or strike the front seatbelt retractor assemblies or surrounding area. This could result in accidental activation of the seatbelt pretensioners or could make the system inoperative, possibly resulting in serious injury. Seatbelt pretensioners have no user-serviceable parts. For required servicing of front seatbelt retractors

- equipped with seatbelt pretensioners, consult your SUBARU dealer.
- When discarding front seatbelt retractor assemblies or scrapping the entire vehicle due to collision damage or for other reasons, consult your SUBARU dealer.

# Seatbelt with shoulder belt and lap belt pretensioners

#### NOTE

This section is applicable to the front passenger's seatbelt in XV CROSS-TREK models.



- Seatbelt retractor assembly (shoulder belt pretensioner)
- 2) Lap belt pretensioner

On the front passenger's side in XV CROSSTREK models, the shoulder belt pretensioner is supplemented by a lap belt pretensioner, which is located at the base of the center pillar. Like the shoulder belt pretensioner, the lap belt pretensioner instantaneously pulls in the belt to eliminate slack if a certain level of frontal collision force is detected. As a result, the

seatbelt restrains the front seat occupant more effectively.

When a seatbelt pretensioner is activated, an operating noise will be heard and a small amount of smoke will be released. These occurrences are normal and not harmful. This smoke does not indicate a fire in the vehicle.

Once the seatbelt pretensioner has been activated, the seatbelt pretensioner remains locked. Consequently, the seatbelt cannot be pulled out and retracted and therefore must be replaced.

#### NOTE

- Seatbelt pretensioners are not designed to activate in minor impacts or in rear impacts.
- When a rollover accident occurs, the lap belt pretensioner does not activate; however, as the curtain airbags deploy, the shoulder belt pretensioner is activated. At this time, the driver's side seatbelt pretensioner and passenger's side shoulder belt pretensioner activate simultaneously.
- In cases of frontal collisions, the following components will operate simultaneously.
  - Seatbelt pretensioner for driver
  - Seatbelt pretensioner for front

#### passenger

- SRS frontal airbag for driver
- SRS frontal airbag for front passenger\*
- SRS side airbags (both sides) (if an offset frontal collision occurs)
- SRS curtain airbags (both sides)
   (if an offset frontal collision occurs)
- \*: This does not operate if the occupant detection system deactivates airbag operation. For details, refer to "Front passenger's SRS frontal airbag" #1-46.
- In cases of side collisions, the following components will operate simultaneously.
  - SRS curtain airbag (impacted side)
  - SRS side airbag (impacted side) (when any of the center pillar impact sensors/front door impact sensors sense an impact force)
  - Seatbelt pretensioner for driver (when the driver's side front door impact sensor sense an impact force)
  - Seatbelt pretensioner for front passenger (shoulder belt pretensioner only) (when the front passenger's side front door impact sensor sense an impact force)
- Pretensioners are designed to func-

tion on a one-time-only basis. In the event that a pretensioner is activated. both the driver's and front passenger's seatbelt retractor assemblies should be replaced only by an authorized SUBARU dealer. When replacing seatbelt retractor assemblies, use only genuine SUBARU parts.

- If either front seatbelt does not retract or cannot be pulled out due to a malfunction or activation of the pretensioner, contact your SUBARU dealer as soon as possible.
- If the front seatbelt retractor assembly or surrounding area has been damaged, contact your SUBARU dealer as soon as possible.
- When you sell your vehicle, we urge you to explain to the buyer that it has seatbelt pretensioners by alerting the buyer to the contents of this section.

# WARNING

- To obtain maximum protection, the occupants should sit in an upright position with their seatbelts properly fastened. Refer to "Seatbelts" @1-11.
- Do not modify, remove or strike the front seatbelt retractor assemblies or surrounding area.

This could result in accidental activation of the seatbelt pretensioners or could make the system inoperative, possibly resulting in serious injury. Seatbelt pretensioners have no user-serviceable parts. For required servicing of front seatbelt retractors equipped with seatbelt pretensioners, consult your SUBARU dealer.

• When discarding front seatbelt retractor assemblies or scrapping the entire vehicle due to collision damage or for other reasons, consult your SUBARU dealer.

### System monitors

A diagnostic system continually monitors the readiness of the seatbelt pretensioner while the vehicle is being driven. The seatbelt pretensioners share the control module with the SRS airbag system. Therefore, if any malfunction occurs in a seatbelt pretensioner, the SRS airbag system warning light will illuminate. For details, refer to "SRS airbag system monitors" \$\textit{\$\textit{\$\textit{\$\textit{\$r\$}}}\$1-64.

### ■ System servicing

#### MARNING

- When discarding a seatbelt retractor assembly or scrapping the entire vehicle damaged by a collision, consult your SUBARU dealer.
- Tampering with or disconnecting the system's wiring could result in accidental activation of the seatbelt pretensioner and/or SRS airbag or could make the system inoperative, which may result in serious injury. Do not use electrical test equipment on any circuit related to the seatbelt pretensioner and SRS airbag systems. For required servicing of the seatbelt pretensioner, consult your nearest SUBARU dealer.

#### **CAUTION**

The sensors and SRS airbag control modules are located in the following locations.

• Front impact sensors: on both sides of the radiator panel

- Front door impact sensors: on both front doors
- Satellite safing sensor: under the rear center seat
- SRS airbag control module (including the impact sensors): under the center of the instrument panel

If you need service or repair in those areas or near the front seatbelt retractors, have the work performed by your authorized SUBARU dealer.

#### **NOTE**

If the front or side part of the vehicle is damaged in an accident to the extent that the seatbelt pretensioner does not operate, contact your SUBARU dealer as soon as possible.

# Precautions against vehicle modification

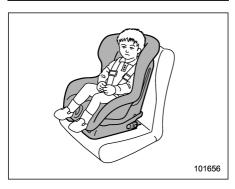
Always consult your SUBARU dealer if you want to install any accessory parts to your vehicle.

# **CAUTION**

Do not perform any of the following modifications. Such modifications can interfere with proper operation of the seatbelt pretensioners.

- Attachment of any equipment (bush bar, winches, snow plow, skid plate, etc.) other than genuine SUBARU accessory parts to the front end.
- Modification of the suspension system or front end structure.
- Installation of a tire of different size and construction from the tires specified on the vehicle placard attached to the driver's door pillar or specified for individual vehicle models in this Owner's Manual.

# **Child restraint systems**



Infants and small children should always be placed in an infant or child restraint system in the rear seat while riding in the vehicle. You should use an infant or child restraint system that meets Federal Motor Vehicle Safety Standards or Canada Motor Vehicle Safety Standards, is compatible with your vehicle and is appropriate for the child's age and size. All child restraint systems are designed to be secured in vehicle seats by lap belts or the lap belt portion of a lap/shoulder belt (except those described in "Installation of child restraint systems by use of lower and tether anchorages (LATCH)" \$\tilde{x}\$1-32).

Children could be endangered in an accident if their child restraints are not

properly secured in the vehicle. When installing the child restraint system, carefully follow the manufacturer's instructions.

According to accident statistics, children are safer when properly restrained in the rear seating positions than in the front seating positions.

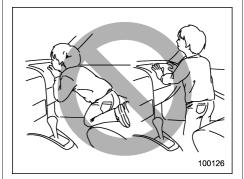
All U.S. states and Canadian provinces require that infants and small children be restrained in an approved child restraint system at all times while the vehicle is moving.



# **WARNING**

Never let a passenger hold a child on his or her lap or in his or her arms while the vehicle is moving. The passenger cannot protect the child from injury in a collision, because the child will be caught between the passenger and objects inside the vehicle.

Additionally, holding a child in your lap or arms in the front seat exposes that child to another serious danger. Since the SRS airbag deploys with considerable speed and force, the child could be injured or even killed.



# **WARNING**

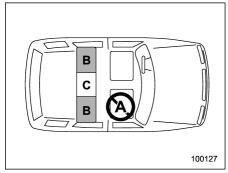
Children should be properly restrained at all times. Never allow a child to stand up, or to kneel on any seat. Unrestrained children will be thrown forward during sudden stop

or in an accident and can be injured seriously.

Additionally, children standing up or kneeling on or in front of the front seat are exposed another serious danger. Since the SRS airbag deploys with considerable speed and force, the child could be injured or even killed.

# ■ Where to place a child restraint system

The following are SUBARU's recommendations on where to place a child restraint system in your vehicle.



#### A: Front passenger's seat

You should not install a child restraint system (including a booster seat) due to the hazard to children posed by the passenger's airbag.

# B: Rear seat, window-side seating positions

Recommended positions for all types of child restraint systems.

In these positions, Automatic/Emergency Locking Retractor (A/ELR) seatbelts and lower anchorages (bars) are provided for installing a child restraint system.

Some types of child restraints might not be able to be secured firmly due to projection of the seat cushion.

In this seating position, you should use only a child restraint system that has a bottom base that fits snugly against the contours of the seat cushion and can be securely retained using the seatbelt.

#### C: Rear seat, center seating position

Installing a child restraint system is not recommended, although the A/ELR seat-belt and an upper anchorage (tether anchorage, if equipped) are provided in this position.

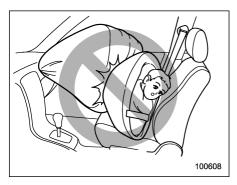
Some types of child restraints might not be able to be secured firmly due to projection of the seat cushion.

In this seating position, you should use only a child restraint system that has a bottom base that fits snugly against the contours of the seat cushion and can be securely retained using the seatbelt.

# **WARNING**

Put children aged 12 and under in the rear seat properly restrained at all times. The SRS airbag deploys with considerable speed and force and can injure or even kill children, especially if they are 12 years of age and under and are not restrained or improperly restrained. Because children are lighter and weaker than adults, their risk of being injured from deployment is greater.

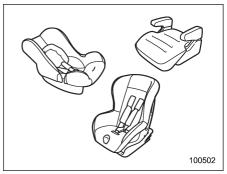
For that reason, be sure to secure ALL types of child restraint devices (including forward facing child seats) in the REAR seats at all times. You should choose a restraint device which is appropriate for the child's age, height and weight. According to accident statistics, children are safer when properly restrained in the rear seating positions than in the front seating positions.



# **WARNING**

SINCE YOUR VEHICLE IS EQUIPPED WITH A PASSENGER'S SRS AIRBAG, NEVER INSTALL A REARWARD FACING CHILD SAFETY SEAT IN THE FRONT PASSENGER'S SEAT. DOING SO RISKS SERIOUS INJURY OR DEATH TO THE CHILD BY PLACING THE CHILD'S HEAD TOO CLOSE TO THE SRS AIRBAG.

# ■ Choosing a child restraint system



Choose a child restraint system that is appropriate for the child's age and size (weight and height) in order to provide the child with proper protection. The child restraint system should meet all applicable requirements of Federal Motor Vehicle Safety Standards for the United States or of Canada Motor Vehicle Safety Standards for Canada. It can be identified by looking for the label on the child restraint system or the manufacturer's statement of compliance in the document attached to the system.

Also it is important for you to make sure that the child restraint system is compatible with the vehicle in which it will be used.

# ■ Installing child restraint systems with A/ELR seatbelt

### **WARNING**

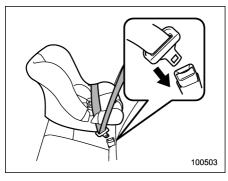
- Child restraint systems and seatbelts can become hot in a vehicle that has been closed up in sunny weather; they could burn a small child. Check the child restraint system before you place a child in it.
- Do not leave an unsecured child restraint system in your vehicle. Unsecured child restraint systems can be thrown around inside of the vehicle in a sudden stop, turn or accident; they can strike and injure vehicle occupants as well as result in serious injuries or death to the child.

# **A** CAUTION

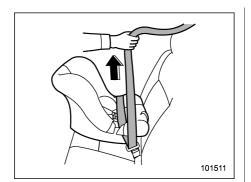
When you install a child restraint system, follow the manufacturer's instructions supplied with it. After installing the child restraint system, check to ensure that it is held securely in position. If it is not held tight and secure, the danger of your

child suffering personal injury in the event of an accident may be increased.

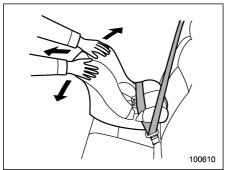
▼ Installing a rearward facing child restraint



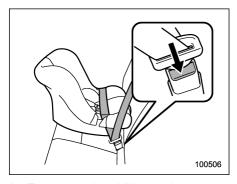
- 1. Place the child restraint system in the rear seating position.
- 2. Run the lap and shoulder belt through or around the child restraint system following the instructions provided by its manufacturer.
- 3. Insert the tongue plate into the buckle until you hear a click.



- 4. Take up the slack in the lap belt.
- 5. Pull out the seatbelt fully from the retractor to change the retractor over from the Emergency Locking Retractor (ELR) to the Automatic Locking Retractor (ALR) function. Then, allow the belt to rewind into the retractor. As the belt is rewinding, clicks will be heard which indicate the retractor functions as ALR.



- 6. Push and pull the child restraint system forward and from side to side to check if it is firmly secured. Sometimes a child restraint can be more firmly secured by pushing it down into the seat cushion and then tightening the seatbelt.
- 7. Pull at the shoulder portion of the belt to confirm that it cannot be pulled out (ALR properly functioning).



8. To remove the child restraint system, press the release button on the seatbelt buckle and allow the belt to retract completely. The belt will return to the FIR mode.

#### **WARNING**

NEVER INSTALL A REARWARD FA-CING CHILD SEAT IN THE FRONT PASSENGER'S SEAT. DOING SO RISKS SERIOUS INJURY OR DEATH TO THE CHILD BY PLACING THE CHILD'S HEAD TOO CLOSE TO THE SRS AIRBAG.

#### NOTE

When the child restraint system is no longer in use, remove it and restore the ELR function of the retractor. That function is restored by allowing the seatbelt to retract fully.

Installing forward facing child restraint

#### **WARNING**

Before installing a child restraint system, be sure to confirm that the seatback is securely locked into place. Otherwise, in an accident, serious injury or death could result.

- 1. Shake the seatback slightly to confirm that it is securely locked into place.
  - It is possible to check whether the seatback is locked visually. If the seatback is locked into place, the red colored unlocking marker which is attached to the bottom of the lock release knob is invisible. For details, refer to "Folding down the rear seatback" ₱1-9.
- 2. Prepare the rear seat head restraint where a child restraint system is intended to be installed in the following way.
  - When a child restraint system is

installed on the window-side seating position or the rear center seating position of a 4-door model, remove the rear seat head restraint. For details, refer to "Head restraint adjustment" \$\tilde{g}\$1-8.

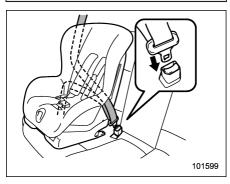
Store the head restraint in the trunk (4-door models) or cargo area (5-door models). Avoid placing the head restraint in the passenger compartment to prevent it from being thrown around in the passenger compartment in a sudden stop or a sharp turn.

- When a child restraint system is installed on the rear center seating position of a 5-door model, raise the rear seat head restraint to the extended position. Do not remove the head restraint. For details, refer to "Rear center seating position" \$\textit{\$\textit{\$\textit{\$m\$}}\$1-8.
- 3. Place the child restraint system in the rear seating position.

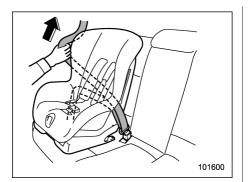
### **WARNING**

When you intend to install a child restraint system on the rear center seating position, if the child restraint system does not fit snugly against the contours of the rear center seat cushion, install the child restraint system on the window-side seating

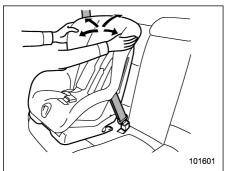
position to be safe. For details, refer to "Where to place a child restraint system" \$\tilde{x}\$1-25.



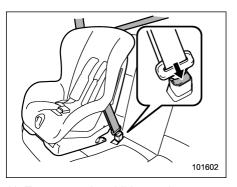
- 4. Run the lap and shoulder belt through or around the child restraint system following the instructions provided by its manufacturer.
  - When a child restraint system is installed on the rear center seating position of a 5-door model, pass the rear center seatbelt through the belt guide properly. For details, refer to "Rear center seatbelt on 5-door models" \$\infty\$1-16
- 5. Insert the tongue plate into the buckle until you hear a click.



- 6. Take up the slack in the lap belt.
- 7. Pull out the seatbelt fully from the retractor to change the retractor over from the Emergency Locking Retractor (ELR) to the Automatic Locking Retractor (ALR) function. Then, allow the belt to rewind into the retractor. As the belt is rewinding, clicks will be heard which indicate the retractor functions as ALR.



- 8. Before having a child sit in the child restraint system, try to move it back and forth and right and left to check if it is firmly secured. Sometimes a child restraint system can be more firmly secured by pushing it down into the seat cushion and then tightening the seatbelt.
- 9. Pull at the shoulder portion of the belt to confirm that it cannot be pulled out (ALR properly functioning).
- 10. Latch the top tether hook onto the tether anchorage that is located behind the rear seat and tighten the top tether firmly. For additional instructions, refer to "Top tether anchorages" \$\alpha\$1-35.



11. To remove the child restraint system, press the release button on the seatbelt buckle and allow the belt to retract completely. The belt will return to the ELR mode.

If you have installed a child restraint system for the rear center seating position on a 5-door model, when you remove the child restraint system, the seatbelt may not be restored to the ELR mode even if the seatbelt is retracted. In this case. lower the head restraint to the retracted position to allow the seatbelt to retract moreover. The seatbelt will return to the FLR mode.

Remember that the head restraint is not intended to be used at the lowest position (retracted position). Therefore, when the

rear center seat is occupied (including when a child restraint system is installed) next time, be sure to raise the head restraint to the extended position.

#### NOTE

When the child restraint system is no longer in use, remove it and restore the ELR function of the retractor. That function is restored by allowing the seatbelt to retract fully.

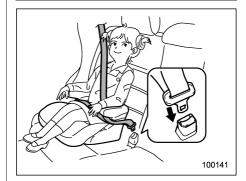
### ■ Installing a booster seat

# **WARNING**

- Child restraint systems and seatbelts can become hot in a vehicle that has been closed up in sunny weather; they could burn a small child. Check the child restraint system before you place a child in it.
- Do not leave an unsecured child restraint system in your vehicle. Unsecured child restraint systems can be thrown around inside of the vehicle in a sudden stop, turn or accident; they can strike and injure vehicle occupants as well as result in serious injuries or death to the child.

# **CAUTION**

When you install a child restraint system, follow the manufacturer's instructions supplied with it. After installing the child restraint system, check to ensure that it is held securely in position. If it is not held tight and secure, the danger of your child suffering personal injury in the event of an accident may be increased.

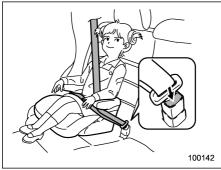


- Place the booster seat in the rear seating position and sit the child on it. The child should sit well back on the booster seat.
- 2. Run the lap and shoulder belt through or around the booster seat and the child

following the instructions provided by its manufacturer.

3. Insert the tongue plate into the buckle until you hear a click. Take care not to twist the seatbelt.

Make sure the shoulder belt is positioned across the center of child's shoulder and that the lap belt is positioned as low as possible on the child's hips.



4. To remove the booster seat, press the release button on the seatbelt buckle and allow the belt to retract.



# WARNING

 Never use a belt that is twisted or reversed. In an accident, this can increase the risk or severity of injury to the child.

#### - CONTINUED -

- Never place the shoulder belt under the child's arm or behind the child's back. If an accident occurs, this can increase the risk or severity of injury to the child.
- The seatbelt should fit snugly in order to provide full restraint.
   Loose fitting belts are not as effective in preventing or reducing injury.
- Place the lap belt as low as possible on the child's hips. A high-positioned lap belt will increase the risk of sliding under the lap belt and of the lap belt sliding up over the abdomen, and both can result in serious internal injury or death.
- Make sure the shoulder belt is positioned across the center of child's shoulder. Placing the shoulder belt over the neck may result in neck injury during sudden braking or in a collision.

Installation of child restraint systems by use of lower and tether anchorages (LATCH)

# **WARNING**

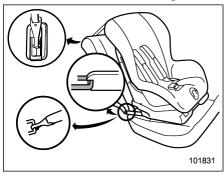
- Child restraint systems and seatbelts can become hot in a vehicle that has been closed up in sunny weather; they could burn a small child. Check the child restraint system before you place a child in it.
- Do not leave an unsecured child restraint system in your vehicle. Unsecured child restraint systems can be thrown around inside of the vehicle in a sudden stop, turn or accident; they can strike and injure vehicle occupants as well as result in serious injuries or death to the child.

# **CAUTION**

When you install a child restraint system, follow the manufacturer's instructions supplied with it. After installing the child restraint system, check to ensure that it is held securely in position. If it is not held

tight and secure, the danger of your child suffering personal injury in the event of an accident may be increased.

#### **▼** Lower and tether anchorages

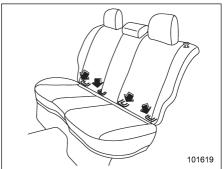


Some types of child restraint systems can be installed on the rear seat of your vehicle without use of the seatbelts. Such child restraint systems are secured to the designated anchorages provided on the vehicle body. The lower and tether anchorages are sometimes referred to as the LATCH system (Lower Anchors and Tethers for CHildren).



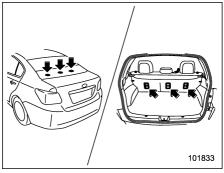
Your vehicle is equipped with four lower anchorages (bars) and three upper anchorages (tether anchorages) for accommodating such child restraint systems.

#### $\nabla$ Lower anchorages



The lower anchorages (bars) are used for installing a child restraint system only on the rear seat window-side seating positions. For each window-side seating position, two lower anchorages are provided. Each lower anchorage is located where the seat cushion meets the seatback.

#### $\nabla$ Tether anchorages



The tether anchorages (upper anchorages) are provided at the locations shown in the above illustration. For details, refer to "Top tether anchorages" \$\tilde{\pi}\$1-35.

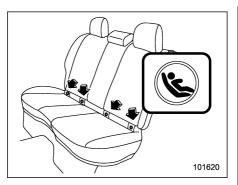
# ∇ To install a child restraint system using lower and tether anchorages

To install a child restraint system using lower and tether anchorages, perform the following procedure.

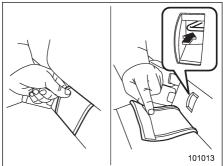
# **WARNING**

Before installing a child restraint system, be sure to confirm that the seatback is securely locked into place. Otherwise, in an accident, serious injury or death could result.

- 1. Shake the seatback slightly to confirm that it is securely locked into place.
  - It is possible to check whether the seatback is locked visually. If the seatback is locked into place, the red colored unlocking marker which is attached to the bottom of the lock release knob is invisible. For details, refer to "Folding down the rear seatback" ₱1-9.

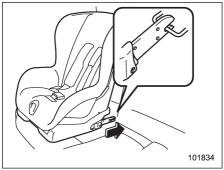


2. You will find marks "©" at the bottom of the rear seat seatbacks. These marks indicate the positions of the lower anchorages (bars).

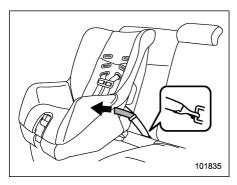


Remove the covers and locate the lower anchorages (bars).

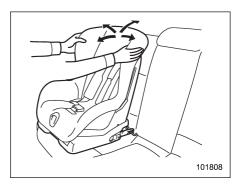
3. Remove the rear seat head restraint. For details, refer to "Rear windows side seating position" \$\textit{\$\textit{\$\textit{w}}\$1-8.}\$



4. While following the instructions supplied by the child restraint system manufacturer, connect the lower hooks onto the lower anchorages located at "©" marks on the bottom of the rear seatback. When the hooks are connected, make sure the adjacent seatbelts are not caught.



- 5. [If your child restraint system is of a flexible attachment type (which uses tether belts to connect the child restraint system properly to the lower anchorages)] While pushing the child restraint into the seat cushion, pull both left and right lower tether belts up to secure the child restraint system firmly by taking up the slack in the belt.
- 6. Latch the top tether hook onto the tether anchorage that is located behind the rear seat and tighten the top tether firmly. For additional instructions, refer to "Top tether anchorages" \$\textit{\sigma}\$1-35.



- 7. Before seating a child in the child restraint system, try to move it back and forth and right and left to verify that it is held securely in position.
- 8. To remove the child restraint system, follow the reverse procedures of installation.

If you have any question concerning this type of child restraint system, ask your SUBARU dealer.

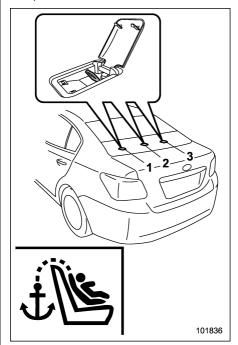
### **■** Top tether anchorages

Your vehicle is equipped with two or three top tether anchorages so that a child restraint system having a top tether can be installed in the rear seat. When installing a child restraint system using top tether, proceed as follows, while observing the instructions by the child restraint system manufacturer.

Since a top tether can provide additional stability by offering another connection between a child restraint system and the vehicle, we recommend that you use a top tether whenever one is required or available.

#### **▼** Anchorage location

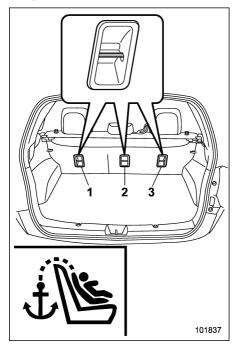
**▽** 4-door models



- 1) For left seat
- 2) For center seat
- 3) For right seat

Three upper anchorages are installed on the rear shelf behind the rear seat.

#### **▽** 5-door models



- 1) For left seat
- 2) For center seat
- 3) For right seat

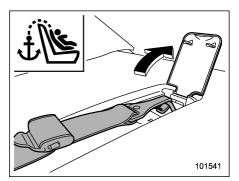
Three upper anchorages are installed on the back side of the rear seatback.

**▼** To hook the top tether

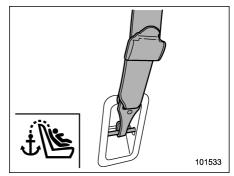
# **CAUTION**

- Except for the center seating position on 5-door models, remove the head restraint when mounting a child restraint system. Otherwise, it might be possible that the top tether cannot be fastened tightly.
- For the center seating position on 5-door models, raise the center head restraint to the extended position when mounting a child restraint system. Otherwise, it will be impossible to use the seatbelt guide that is attached to the head restraint correctly.

The seatbelt guide is essential for routing the belt webbing at the center seating position. For information about using the seatbelt guide, refer to "Rear center seatbelt on 5-door models" \$\tilde{\tilde{\tilde{T}}} 1-16.



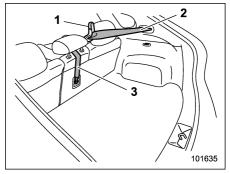
4-door models



5-door models

1. Open the cover (4-door models) and attach the top tether hook to the appropriate upper anchorage.

For the center seating position on 5-door models, route the top tether under the head restraint as illustrated below.



- 1) Seatbelt guide
- 2) Seatbelt of the center seating position
- Top tether
- 2. Tighten the top tether securely.

Please contact your SUBARU dealer if you have any question regarding the installation of a child restraint system.

# \*SRS airbag (Supplemental Restraint System airbag)

\*SRS: This stands for supplemental restraint system. This name is used because the airbag system supplements the vehicle's seatbelts.

Your vehicle is equipped with a supplemental restraint system in addition to a lap/shoulder belt at each front seating position and each rear window-side seating positions. The supplemental restraint system (SRS) consists of seven airbags.

The configurations are as follows.

- Driver's and front passenger's frontal airbags
- Driver's and front passenger's side airbags
- Curtain airbags (for driver, front passenger, and window-side rear passengers)
- Knee airbag for driver

These SRS airbags are designed only as a supplement to the primary protection provided by the seatbelt.

The system also controls front seatbelt pretensioners. For operation instructions and precautions concerning the seatbelt pretensioner, refer to "Front seatbelt pretensioners" #1-20

### General precautions regarding SRS airbag system

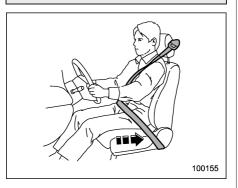
# **WARNING**

To obtain maximum protection in the event of an accident, the driver and all passengers in the vehicle should always wear seatbelts when the vehicle is moving. The SRS airbag is designed only to be a supplement to the primary protection provided by the seatbelt. It does not eliminate the need to fasten seatbelts. In combination with the seatbelts, it offers the best combined protection in case of a serious accident.

Not wearing a seatbelt increases the chance of severe injury or death in a crash even when the vehicle has the SRS airbag.

For instructions and precautions concerning the seatbelt system, refer to "Seatbelts" #1-11.

 The SRS side airbag and SRS curtain airbag are designed only to be a supplement to the primary protection provided by the seatbelt. They do not eliminate the need to fasten seatbelts. It is also important to wear your seatbelt to help avoid injuries that can result when an occupant is not seated in a proper upright position.



# **WARNING**

The SRS airbags deploy with considerable speed and force. Occupants who are out of proper position when the SRS airbag deploys could suffer very serious injuries. Because the SRS airbag needs enough space for deployment, the driver should always sit upright and well back in the seat as far from the steering wheel as practical while still maintaining full vehicle control

and the front passenger should move the seat as far back as possible and sit upright and well back in the seat.



# **WARNING**

 Do not sit or lean unnecessarily close to either front door. The SRS side airbags are stored in both front seat seatbacks next to the door, and they provide protection by deploying rapidly (faster than the blink of an eye) in the event of a side impact or frontal collision. However, the force of SRS side airbag deployment may cause injuries if your head or other parts of the body are too close to the SRS side airbag.

- Since your vehicle is equipped with SRS curtain airbags, do not sit or lean unnecessarily close to the front or rear door on either side. Also, do not put your head, arms or hands out of the window. The SRS curtain airbags on both sides of the cabin are stored in the roof side (between the front pillar and a point behind the rear quarter glass), and they provide protection by deploying rapidly (faster than the blink of an eye) in the event of a side impact or frontal collision. For XV CROSS-TREK models, the SRS curtain airbags also deploy in the event of a rollover. However, the force of its deployment may cause injuries if your head is too close to it.
- Do not sit or lean unnecessarily close to the SRS airbag. Because the SRS airbag deploys with considerable speed – faster than the blink of an eye – and force to protect in high speed collisions, the force of an airbag can injure an occupant whose body is too close to SRS airbag.

It is also important to wear your

seatbelt to help avoid injuries that can result when the SRS airbag contacts an occupant not in proper position such as one thrown forward during pre-accident braking.

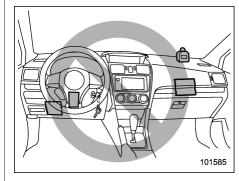
Even when properly positioned, there remains a possibility that an occupant may suffer minor injury such as abrasions and bruises to the face or arms because of the SRS airbag deployment force.



# **WARNING**

 Do not rest your arm on either front door or its internal trim. You

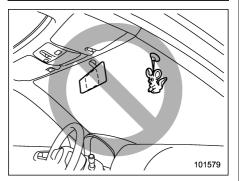
- could be injured in the event of SRS side airbag deployment.
- Do not place any objects over or near the SRS airbag cover or between you and the SRS airbag. If the SRS airbag deploys, these objects could interfere with its proper operation and could be propelled inside the vehicle, causing injury.



# **WARNING**

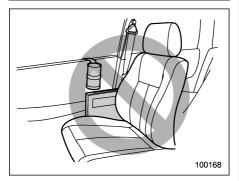
 Do not put any objects over the steering wheel pad and dashboard. If the SRS frontal airbag deploys, these objects could interfere with its proper operation

- and could be propelled inside the vehicle, causing injury.
- Do not put any objects under the driver's side of the instrument panel. If the SRS knee airbag deploys, those objects could interfere with its proper operation and could be propelled inside the vehicle, causing injury.
- The key must not be attached to heavy, sharp or hard accessories, or another key, If the SRS knee airbag deploys, those objects could interfere with its proper operation and could be propelled inside the vehicle and cause injury.



# WARNING

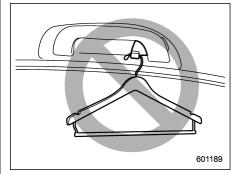
Do not attach accessories to the windshield, or fit an extra-wide mirror over the rear view mirror. If the SRS airbag deploys, those objects could become projectiles that could seriously injure vehicle occupants.



# WARNING

Do not attach accessories to the door trim or near either SRS side airbags and do not place objects near the SRS side airbags. In the event of SRS side airbag deployment, they could be propelled dangerously toward the vehicle's

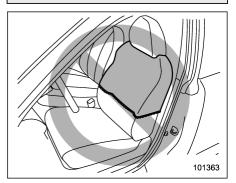
- occupants and cause injuries.
- Do not attach a hands-free microphone or any other accessory to a front pillar, a center pillar, a rear pillar, the windshield, a side window, an assist grip, or any other cabin surface that would be near a deploying SRS curtain airbag. A hands-free microphone or other accessory in such a location could be propelled through the cabin with great force by the curtain airbag, or it could prevent correct deployment of the curtain airbag. In either case, the result could be serious injuries.



#### WARNING

Do not hang coat hangers or other hard or pointed objects on the coat hooks. If such items were hanging on the coat hooks during deployment of the SRS curtain airbags, they could cause serious injuries by coming off the coat hooks and being thrown through the cabin or by preventing deployment of the curtain airbags.

Before hanging clothing on the coat hooks, make sure there are no sharp objects in the pockets. Hang clothing directly on the coat hooks without using hangers.



#### WARNING

Do not put any kind of cover or clothes or other objects over either front seatback and do not attach labels or stickers to the front seat surface on or near the SRS side airbag. They could prevent proper deployment of the SRS side airbag, reducing protection available to the front seat's occupant.



### **WARNING**

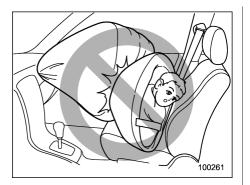
Put children aged 12 and under in the rear seat properly restrained at all times. The SRS airbag deploys with considerable speed and force and can injure or even kill children. especially if they are 12 years of age and under and are not restrained or improperly restrained. Because children are lighter and weaker than adults, their risk of being injured from deployment is greater.

For that reason, we strongly recommend that ALL children (including those in child seats and those that have outgrown child restraint devices) sit in the REAR seat properly restrained at all times in a child restraint device or in a seatbelt. whichever is appropriate for the child's age, height and weight.

Secure ALL types of child restraint devices (including forward facing child seats) in the REAR seats at all times.

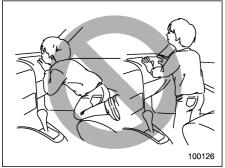
According to accident statistics, children are safer when properly restrained in the rear seating positions than in the front seating positions.

For instructions and precautions concerning the child restraint system, refer to "Child restraint systems" @1-24.



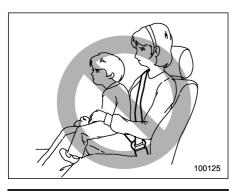


**NEVER INSTALL A REARWARD FA-**CING CHILD SEAT IN THE FRONT SEAT. DOING SO RISKS SERIOUS INJURY OR DEATH TO THE CHILD BY PLACING THE CHILD'S HEAD TOO CLOSE TO THE SRS AIRBAG.



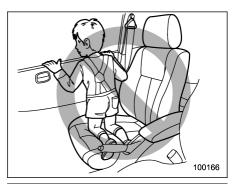
# **WARNING**

Never allow a child to stand up or kneel on the front passenger's seat. The SRS airbag deploys with considerable force and can injure or even kill the child.



# WARNING

Never hold a child on your lap or in your arms. The SRS airbag deploys with considerable force and can injure or even kill the child.





# **WARNING**

- Never allow a child to do the following.
  - Kneel on any passenger's

- seat facing the side window
- Wrap his/her arms around the front seat seatback
- Put his/her head, arms or other parts of the body out of the window

In the event of an accident, the force of SRS side airbag and/or SRS curtain airbag deployment could injure the child seriously because his/her head, arms or other parts of the body are too close to the SRS side airbag and/ or SRS curtain airbag.

 Since your vehicle is also equipped with a front passenger's SRS frontal airbag, children aged 12 and under should be placed in the rear seat anyway and should be properly restrained at all times.

# **A** CAUTION

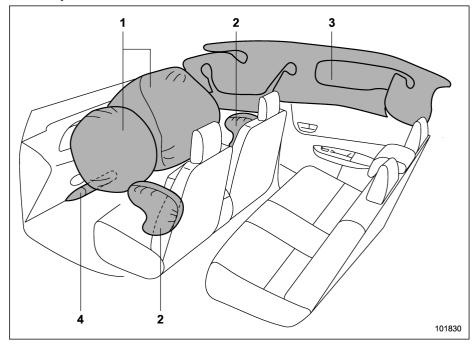
 When the SRS airbag deploys, some smoke will be released. This smoke could cause breathing problems for people with a history of asthma or other breathing trouble. If you or your passengers have breathing pro-

- blems after SRS airbag deploys, get fresh air promptly.
- A deploying SRS airbag releases hot gas. Occupants could get burned if they come into direct contact with the hot gas.

#### NOTE

- When you sell your vehicle, we urge you to explain to the buyer that it is equipped with SRS airbags by alerting the buyer to the applicable section in this Owner's Manual.
- If the SRS airbag deploys, fuel supply will be cut off to reduce the risk of fire caused by leaking fuel. For details about restarting of the engine, refer to "If your vehicle is involved in an accident" \$\alpha 9-18\$.

#### ■ Components



- SRS frontal airbag
- 2) SRS side airbag
- 3) SRS curtain airbag
- 4) SRS knee airbag

The SRS airbags are stowed in the following locations.

**Driver's SRS frontal airbag**: in the center portion of the steering wheel

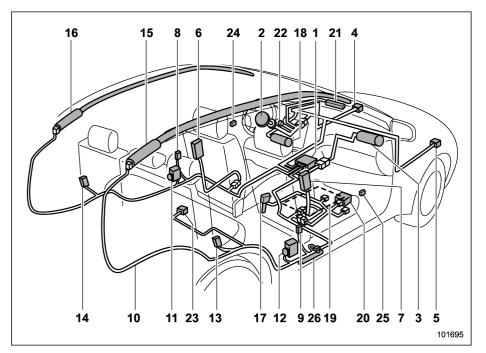
Front passenger's SRS frontal airbag: near the top of the dashboard under an "SRS AIRBAG" mark

**SRS side airbag**: in the door side of each front seat seatback which bears an "SRS AIRBAG" label

**SRS** curtain airbag: in the roof side (between the front pillar and a point behind the rear quarter glass)

An "SRS AIRBAG" mark is located at the top of each center pillar.

SRS knee airbag: under the steering column



- Airbag control module (including impact sensor [all models] and rollover sensor [XV CROSSTREK models])
- 2) Frontal airbag module (driver's side)
- Frontal airbag module (front passenger's side)
- 4) Front sub sensor (left-hand side)
- 5) Front sub sensor (right-hand side)

- 6) Side airbag module (driver's side)
- 7) Side airbag module (front passenger's side)
- Side airbag sensor (center pillar left-hand side)
- Side airbag sensor (center pillar righthand side)
- 10) Airbag wiring

- 11) Seatbelt pretensioner (driver's side)
- 12) Seatbelt pretensioner (front passenger's side)
- 13) Curtain airbag sensor (rear wheel house right-hand side)
- 14) Curtain airbag sensor (rear wheel house left-hand side)
- 15) Curtain airbag module (right-hand side)
- 16) Curtain airbag module (left-hand side)
- Seatbelt buckle switch (front passenger's side)
- 18) Knee airbag module (driver's side)
- 19) Front passenger's occupant detection system sensor
- 20) Front passenger's occupant detection control module
- 21) Front passenger's frontal airbag ON and OFF indicator
- 22) SRS airbag system warning light
- 23) Satellite safing sensor (under the rear center seat)
- 24) Front door impact sensor (left-hand side)
- 25) Front door impact sensor (right-hand side)
- 26) Lap belt pretensioner (front passenger's side in XV CROSSTREK models)

# ■ SUBARU advanced frontal airbag system

Your vehicle is equipped with a SUBARU advanced frontal airbag system that complies with the new advanced frontal airbag requirements in the amended Federal Motor Vehicle Safety Standard (FMVSS) No. 208.

The SUBARU advanced frontal airbag system automatically determines the deployment force of the driver's SRS frontal airbag at the time of deployment as well as whether or not to activate the front passenger's SRS frontal airbag and, if activated, the deployment force of the SRS frontal airbag at the time of deployment.

Your vehicle has warning labels on the driver's and front passenger's sun visors beginning with the phrase "EVEN WITH ADVANCED AIR BAGS" and a tag attached to the glove box lid beginning with the phrase "Even with Advanced Air Bags". Make sure that you carefully read the instructions on the warning labels and tag.

Always wear your seatbelt. The SUBARU advanced frontal airbag system is a supplemental restraint system and must be used in combination with a seatbelt. All occupants should wear a seatbelt or be seated in an appropriate child restraint

system.

For the locations of the SRS airbags, refer to "Components" \$\tilde{G}\$1-44.

In a moderate to severe frontal collision, the following components deploy.

- SRS frontal airbag for driver
- SRS frontal airbag for front passenger
- SRS knee airbag for driver
- SRS curtain airbag\*<sup>1</sup>

\*1: When an offset frontal collision that is severe enough to deploy the front airbag occurs.

These components supplement the seatbelts by reducing the impact to the occupant's head, chest and knees.

#### **▼** Driver's SRS frontal airbag

The driver's SRS frontal airbag uses a dual stage inflator. The inflator operates in different ways depending on the severity of impact.

Have the system inspected by your SUBARU dealer immediately if the SRS airbag system warning light illuminates.

#### NOTE

The driver's SRS side airbag and SRS curtain airbag are not controlled by the SUBARU advanced frontal airbag system.

#### ▼ Front passenger's SRS frontal airbag

The front passenger's SRS frontal airbag uses a dual stage inflator. The inflator operates in different ways depending on the severity of impact.

The occupant detection system sensor is installed under the seat upholstery and monitors the physique and posture of the front passenger. Using this information, the occupant detection system determines whether the front passenger's SRS frontal airbag should be deployed or not.

The occupant detection system may not inflate the front passenger's SRS frontal airbag even when the driver's SRS frontal airbag deploys. This is normal. In this case, although the front passenger's SRS frontal airbag does not operate, the front passenger's seatbelt pretensioner operates with the driver's seatbelt pretensioner. For details about the seatbelt pretensioner, refer to "Front seatbelt pretensioners" \$\textit{9}\text{1-20}\.

# **CAUTION**

Observe the following precautions. Failure to do so may prevent the SUBARU advanced frontal airbag system from functioning correctly

or cause the system to fail.

- Do not apply any strong impact to the front passenger's seat.
- Do not spill liquid on the front passenger's seat. If liquid is spilled, wipe it off immediately.
- Do not remove or disassemble the front passenger's seat.
- Do not install any accessory (such as an audio amplifier) other than a genuine SUBARU accessory under the front passenger's seat.
- Do not place anything (shoes, umbrella, etc.) under the front passenger's seat.
- Do not put sharp object(s) on the seat or pierce the seat upholstery.
- Do not place a magnet near the seatbelt buckle.

If the seatbelt buckle switch and/or front passenger's occupant detection system have failed, the SRS airbag system warning light will illuminate. Have the system inspected by your SUBARU dealer immediately if the SRS airbag system warning light illuminates.

If your vehicle has sustained impact, this

may affect the proper function of the SUBARU advanced frontal airbag system. Have your vehicle inspected at your SUBARU dealer. Do not use the front passenger's seat while driving the vehicle to your SUBARU dealer.

#### NOTE

The front passenger's SRS side airbag and SRS curtain airbag are not controlled by the SUBARU advanced frontal airbag system.

# ▼ Passenger's frontal airbag ON and OFF indicators

Refer to "Front passenger's frontal airbag ON and OFF indicators" \$\sigma 3-11.

#### **▼** Occupant detection system

The occupant detection system sensor is installed under the seat upholstery and monitors the physique and posture of the front passenger. Using this information, the occupant detection system determines whether the front passenger's SRS frontal airbag should be deployed or not.

If the front passenger's seat cushion is wet, this may adversely affect the ability of the system to determine deployment. If the seat cushion is wet, the front passenger should stop sitting on the front passenger's seat. Wipe off liquid from

the seat immediately, let the seat dry naturally and then check the SRS airbag system warning light as follows.

- If the SRS airbag system warning light illuminates, keep the seat dry until the warning light turns off. If the SRS airbag system warning light stays on even when the seat has dried, do not allow anyone to sit on the front passenger's seat and have the system checked by your SUBARU dealer.
- If the SRS airbag system warning light does not illuminate, check that the front passenger's frontal airbag ON and OFF indicators work properly. If the indicators do not work properly, do not allow anyone to sit on the front passenger's seat and have the system checked by your SUBARU dealer.

Also, if luggage or electronic devices are placed on the front passenger's seat, this may adversely affect the ability of the system to determine deployment. This may prevent the front passenger's frontal airbag ON and OFF indicators from working properly. Check that the indicators work properly.

When the OFF indicator turns off and the ON indicator illuminates, the front passenger's frontal airbag may deploy during a collision. Remove luggage and electronic devices from the front passenger's seat.

#### NOTE

This device complies with Part 18 of the FCC Rules. This device may cause interference. If this device causes interference, consult the nearest SUBARU dealer. Also, for maintenance of the system, consult the nearest SUBARU dealer. A copy of the original declaration of conformity can be found in chapter 13.

**▼** Conditions in which front passenger's SRS frontal airbag is not activated

The front passenger's SRS frontal airbag will not be activated when any of the following conditions are met regarding the front passenger's seat:

- The seat is empty.
- The seat is equipped with an appropriate child restraint system and an infant is restrained in it. (See WARNING that follows.)
- The front passenger's occupant detection system is malfunctioning.



**NEVER INSTALL A REARWARD FA-**CING CHILD SEAT IN THE FRONT PASSENGER'S SEAT EVEN IF THE FRONT PASSENGER'S SRS FRON- TAL AIRBAG IS DEACTIVATED. Be sure to install it in the REAR seat in a correct manner. Also, it is strongly recommended that any forward facing child seat or booster seat be installed in the REAR seat, and that even children who have outgrown a child restraint system be also seated in the REAR seat. This is because children sitting in the front passenger's seat may be killed or severely injured should the front passenger's SRS frontal airbag deplov. REAR seats are the safest place for children.



#### **CAUTION**

When the front passenger's seat is occupied by an infant in an appropriate child restraint system, observe the following precautions. Failure to do so may interfere with the proper operation of the occupant detection system, activating the front passenger's SRS frontal airbag even though that seat is occupied by the infant in the child restraint system.

 Do not place any article (including electronic devices) on the seat other than the infant in the

- child restraint system.
- Do not place more than one infant in the child restraint system.
  - **▽** If the front passenger's frontal airbag ON indicator illuminates and the OFF indicator turns off even when an infant or a small child is in a child restraint system (including booster seat)
- 1. Turn the ignition switch to the "LOCK" (off) position.
- 2. Remove the child restraint system from the seat.
- 3. By referring to the child restraint manufacturer's recommendations as well as the child restraint system installation procedures in "Child restraint systems" <sup>™</sup> 1-24, correctly install the child restraint system.
- 4. Turn the ignition switch to the "ON" position and make sure that the front passenger's frontal airbag ON indicator turns off and the OFF indicator illuminates.

If still the ON indicator remains illuminated while the OFF indicator turns off, take the following actions.

 Ensure that no article is placed on the seat other than the child restraint system and the child occupant.

• Ensure that the backward-forward position and seatback of front passenger's seat are locked into place securely by moving the seat back and forth.

If the ON indicator still remains illuminated while the OFF indicator turns off after taking relevant corrective actions described above, relocate the child restraint system to the rear seat and immediately contact your SUBARU dealer for an inspection.

#### NOTE

When a child who has outgrown a child restraint system or a small adult is seated in the front passenger's seat, the SUBARU advanced frontal airbag system may or may not activate the front passenger's SRS frontal airbag depending on the occupant's seating posture. Children should always wear a seatbelt when sitting in the seat irrespective of whether the airbag is deactivated or activated. If the front passenger's SRS frontal airbag is activated (the ON indicator remains illuminated while the OFF indicator turns off), take the following actions.

• Ensure that no article is placed on the seat other than the occupant.

If the ON indicator still remains illuminated while the OFF indicator turns off despite the fact that the actions noted above have been taken, seat the child/small adult in the rear seat and immediately contact your SUBARU dealer for an inspection. Even if the system has passed the dealer inspection, it is recommended that on subsequent trips the child/small adult always take the rear seat.

Children who have outgrown a child restraint system should always wear the seatbelt irrespective of whether the airbag is deactivated or activated.

# ▼ Conditions in which front passenger's SRS frontal airbag is activated

The front passenger's SRS frontal airbag will be activated for deployment upon impact when any of the following conditions are met regarding the front passenger's seat.

- When the seat is occupied by an adult.
- When certain items (e.g. jug of water) are placed on the seat.

#### ∇ If the passenger's frontal airbag OFF indicator illuminates and the ON indicator turns off even when the front passenger's seat is occupied by an adult

This can be caused by the adult incorrectly sitting in the front passenger's seat.

- 1. Turn the ignition switch to the "LOCK" (off) position.
- 2. Ask the front passenger to set the seatback to the upright position, sit up straight in the center of the seat cushion, correctly fasten the seatbelt, position his/her legs out forward, and adjust the seat to the rearmost position.
- 3. Turn the ignition switch to the "ON" position.

If the OFF indicator remains illuminated while the ON indicator remains off, take the following actions.

- 1. Turn the ignition switch to the "LOCK" (off) position.
- 2. Make sure that the front passenger does not use a blanket, seat cushion, seat cover, seat heater or massager, etc.
- 3. If wearing excessive layers of clothing, the front passenger should remove any unnecessary items before sitting in the front passenger's seat, or should sit in a rear seat.
- 4. Turn the ignition switch to the "ON"

- CONTINUED -

position and wait 6 seconds to allow the system to complete self-checking. Following the system check, both indicators turn off for 2 seconds. Now, the ON indicator should illuminate while the OFF indicator remains off.

If the OFF indicator still remains illuminated while the ON indicator remains off, ask the occupant to move to the rear seat and immediately contact your SUBARU dealer for an inspection.

▼ How to contact the vehicle manufacturer concerning modifications for persons with disabilities that may affect the advanced airbag system

Changing or moving any parts of the front seats, rear seat, seatbelts, front bumper, front side frame, radiator panel, instrument panel, combination meter, steering wheel, steering column, tire, suspension or floor panel can affect the operation of the SUBARU advanced airbag system. If you have any questions, you may contact the following SUBARU distributors.

<Continental U.S., Alaska and the District of Columbia>

Subaru of America, Inc.

Customer Dealer Services Department

P.O. Box 6000

Cherry Hill, NJ 08034-6000

1-800-SUBARU3 (1-800-782-2783)

<Hawaii>

Subaru Hawaii

2850 Pukoloa Street, Suite 202,

Honolulu, HI 96819-4467

808-839-2273

<Guam>

Shen's Corporation dba Prestige Automobile

491, East Marine Corps Drive, Route 1 Dededo, Guam 96921-6255 671-633-2698

<Puerto Rico>

Trebol Motors

P.O. Box 11204, San Juan, Puerto Rico 00910

787-793-2828

<Canada>

Subaru Canada, Inc.

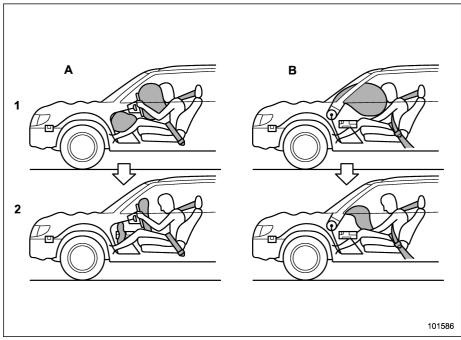
Consumer Support Department 560 Suffolk Court. Mississauga. Ontario

L5R 4J7

1-800-894-4212

There are currently no SUBARU distributors in any other U.S. territories. If you are in such an area, please contact the SUBARU distributor or dealer from which you bought your vehicle.

## Operation



- Driver's side
- Passenger's side
- SRS AIRBAGs deploy as soon as a collision occurs.
- After deployment, SRS AIRBAGs start to deflate immediately so that the driver's vision is not obstructed.

The SRS airbags can function only when the ignition switch is in the "ON" position.

The SUBARU advanced frontal airbag system is designed to determine the activation or deactivation condition of the front passenger's SRS frontal airbag depending on the characteristic of item (s) or person on the front passenger's seat monitored by the front passenger's occupant detection system sensor. For this reason, only the driver's SRS frontal airbag may deploy in the event of a collision, but this does not mean failure of the system.

If the front sub sensors and the impact sensors in the airbag control module detect a predetermined amount of force during a frontal collision, the control module sends signals to the airbag module(s) (only driver's module or both driver's and front passenger's modules) instructing the module(s) to inflate the SRS frontal airbag(s). On driver's side, the SRS knee airbag also inflates with the SRS frontal airbag.

The driver's and front passenger's SRS frontal airbags use dual stage inflators. The two inflators of each airbag are triggered either sequentially or simultaneously, depending on the severity of impact, in the case of the driver's SRS frontal airbag and depending on the severity of impact and the characteristic of item(s) or person on the seat in the case of the front passenger's SRS frontal airbag.

After deployment, the SRS airbag immediately starts to deflate so that the driver's vision is not obstructed and the driver's ability to maintain control of the vehicle is not impaired. The time required from detecting impact to the deflation of the SRS airbag after deployment is shorter than the blink of an eye.

Both when only the driver's SRS frontal airbag deploys and the driver's and front passenger's SRS frontal airbags deploy, the driver's and front passenger's seatbelt pretensioners operate at the same time.

When the SRS airbag deploys, a sudden, fairly loud inflation noise will be heard and some smoke will be released. These occurrences are a normal result of the deployment. This smoke does not indicate a fire in the vehicle.

## A CAUTION

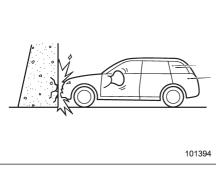
Do not touch the SRS airbag system components around the steering wheel and dashboard with bare hands right after deployment. Doing so can cause burns because the components can be very hot as a result of deployment.

The driver's SRS frontal airbag and front passenger's SRS frontal airbag are designed to deploy in the event of an accident involving a moderate to severe frontal collision. They are not designed to deploy in most lesser frontal impacts because the necessary protection can be achieved by the seatbelt alone. Also, they are not designed to deploy in most side or rear impacts or in most roll-over accidents because deployment of only the driver's SRS frontal airbag or both driver's and front passenger's SRS frontal airbags would not help the occupant in those situations. The driver's and front passenger's SRS frontal airbags are designed to function on a one-time-only basis.

SRS airbag deployment depends on the level of force experienced in the passenger compartment during a collision. That level differs from one type of collision to another, and it may have no bearing on

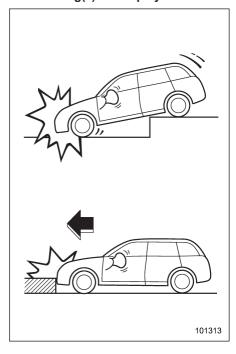
the visible damage done to the vehicle itself.

 ∇ Example of accident in which the driver's/driver's and front pas- senger's SRS frontal airbag(s) will most likely deploy



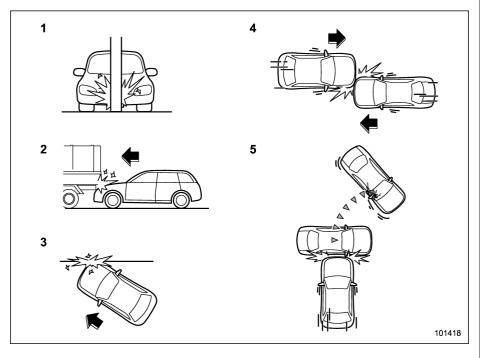
A head-on collision against a thick concrete wall at a vehicle speed of 12 to 19 mph (20 to 30 km/h) or higher activates only the driver's SRS frontal airbag or both driver's and front passenger's SRS frontal airbags. The airbag(s) will also be activated when the vehicle is exposed to a frontal impact similar in fashion and magnitude to the collision described above.

∇ Examples of the types of accidents in which it is possible that the driver's/driver's and front passenger's SRS frontal airbag(s) will deploy



Only the driver's SRS frontal airbag or both driver's and front passenger's SRS frontal airbags may be activated when the vehicle sustains a hard impact in the undercarriage area from the road surface (such as when the vehicle plunges into a deep ditch, is severely impacted or knocked hard against an obstacle on the road such as a curb).

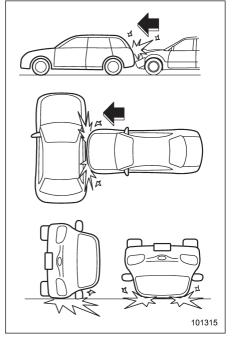
∇ Examples of the types of accidents in which deployment of the driver's/
 driver's and front passenger's SRS frontal airbag(s) is unlikely to occur



- The vehicle strikes an object, such as a telephone pole or sign pole.
- The vehicle slides under the load bed of a truck.
- The vehicle sustains an oblique offset frontal impact.
- The vehicle sustains an offset frontal collision.
- The vehicle strikes an object that can move or deform, such as a parked vehicle

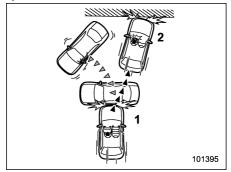
There are many types of collisions which might not necessarily require deployment of driver's/driver's and front passenger's SRS frontal airbag(s). In the event of accidents like those illustrated, the driver's/driver's and front passenger's SRS frontal airbag(s) may not deploy depending on the level of accident forces involved.

∇ Examples of the types of accidents in which the driver's/driver's and front passenger's SRS frontal airbag(s) are not designed to deploy in most cases



The driver's and front passenger's SRS

frontal airbags are designed not to deploy in most cases if the vehicle is struck from the side or from behind, or if it rolls onto its side or roof, or if it is involved in a lowspeed frontal collision.



- 1) First impact
- 2) Second impact

In an accident where the vehicle is impacted more than once, the driver's and/or front passenger's SRS frontal airbag(s) will deploy only once on the first impact.

Example: In the case of a double collision, first with another vehicle, then against a concrete wall in immediate succession, once either or both of the driver's and front passenger's SRS frontal airbags is/are activated on the first impact, it/they will not

be activated on the second impact.

# ■ SRS side airbag and SRS curtain airbag

The SRS side airbag is stored in the door side of each front seat seatback, which bears an "SRS AIRBAG" label.



In a moderate to severe side impact collision, the SRS side airbag on the impacted side of the vehicle deploys between the occupant and the door panel and supplements the seatbelt by reducing the impact on the occupant's chest and waist. The SRS side airbag operates only for front seat occupants.

The SRS curtain airbag on each side of the cabin is stored in the roof side (between the front pillar and a point over the rear seat). An "SRS AIRBAG" mark is located at the top of each center pillar.

In a moderate to severe side impact collision, the SRS curtain airbag on the impacted side of the vehicle deploys between the occupant and the side window and supplements the seatbelt by reducing the impact on the occupant's head.

For XV CROSSTREK models, in a rollover, SRS curtain airbags on both sides of the vehicle deploy between the occupant and the side window and supplement the seatbelt by reducing the impact to the occupant's head.

In a frontal collision, SRS curtain airbags on both sides of the vehicle deploy between the occupant and the side window and supplement the seatbelt by reducing the impact to the occupant's head.

#### **▼** Operation

The SRS side airbag and SRS curtain airbag can function only when the ignition switch is in the "ON" position.

The driver's and front passenger's SRS side airbags and SRS curtain airbags deploy independently of each other since each has its own impact sensor. Therefore, they may not both deploy in the same accident. Also, the SRS side airbag and

SRS curtain airbag deploys independently of the driver's and front passenger's SRS frontal airbags in the steering wheel and instrument panel.

An impact sensor, which senses impact force, is located in each of the following locations.

- In the left and right front doors
- In the left and right center pillars
- In the left and right rear wheel houses
- Under the rear center seat

For XV CROSSTREK models, a rollover sensor is also located inside the airbag control module.

If the impact sensor that is located under the rear center seat and one of the center pillar impact sensors or front door impact sensors together sense an impact force above a predetermined level in a side collision, the control module causes both the SRS side airbag and curtain airbag on the impacted side to inflate regardless of whether the rear wheel house impact sensor on the same side senses an impact.

If the impact sensor that is located under the rear center seat and one of the rear wheel house impact sensors together sense an impact force above a predetermined level in a side collision, the control module causes only the SRS curtain airbag on the impacted side to inflate.

For XV CROSSTREK models, if the rollover sensor detects rollover of the vehicle, the control module inflates the SRS curtain airbags on both sides. At this time, the driver's and front passenger's seatbelt pretensioners also operate at the same time.

After the deployment, the SRS side airbag immediately starts to deflate. The time required from detection of an impact to deflation of an SRS side airbag after deployment is shorter than the blink of an eye.

The SRS curtain airbag remains inflated for a while following deployment then slowly deflates.

The SRS side airbag and SRS curtain airbag deploy even when no one occupies the seat on the side on which an impact is applied.

When the SRS side airbag and SRS curtain airbag deploy, a sudden, fairly loud inflation noise will be heard and some smoke will be released. These occurrences are a normal result of the deployment. This smoke does not indicate a fire in the vehicle.

## **A** CAUTION

Do not touch the SRS side airbag system components around the front seat seatback with bare hands right after deployment. Doing so can cause burns because the components can be very hot as a result of deployment.

After deployment, do not touch any part of the SRS curtain airbag system (from the front pillar to the part of the roof side over the rear seat). Doing so can cause burns because the components can be very hot as a result of deployment.

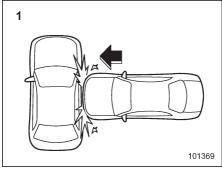
The SRS side airbag and SRS curtain airbag are designed to deploy in the event of an accident involving a moderate to severe side impact collision. They are not designed to deploy in most lesser side impact. Also, they are not designed to deploy in most frontal or most rear impacts because SRS side airbag and SRS curtain airbag deployment would not help the occupant in those situations.

For XV CROSSTREK models, the SRS curtain airbags are also designed to deploy when the vehicle is in an extremely inclined state such as during a rollover. They are not designed to deploy in most lesser inclined state.

Each SRS side airbag and SRS curtain airbag are designed to function on a one-time-only basis.

SRS side airbag and SRS curtain airbag deployment depend on the level of force experienced in the passenger compartment during a side impact collision. That level differs from one type of collision to another, and it may have no bearing on the visible damage done to the vehicle itself.

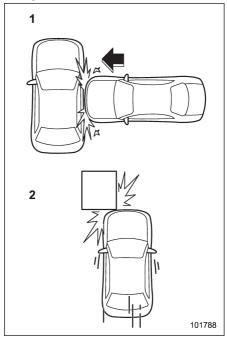
 ∇ Example of the type of accident in which the SRS side airbag will most likely deploy.



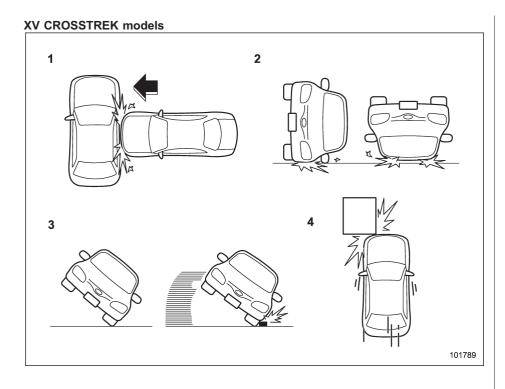
1) A severe side impact near the front seat.

∇ Examples of the types of accidents in which the SRS curtain airbag will most likely deploy.

## **Except XV CROSSTREK models**

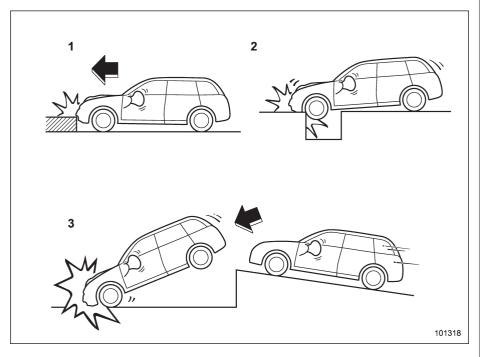


 A severe side impact near the front seat or the rear seat.  An offset frontal collision that is severe enough to deploy the front airbag.



- The vehicle is involved in a severe side impact near the front seat or the rear seat.
- The vehicle rolls onto its side or the roof.
- The angle of vehicle tip-up is marginal or the skidding vehicle's tires hit a curbstone laterally.
- 4) An offset frontal collision that is severe enough to deploy the front airbag.

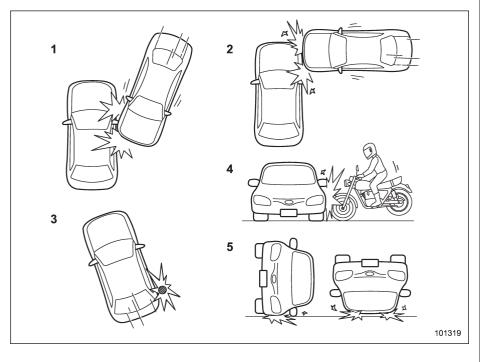
∇ Examples of the types of accidents in which it is possible that the SRS side airbag and the SRS curtain airbag will deploy (XV CROSSTREK models).



- Hitting a curb, edge of pavement or hard surface
- 2) Falling into or jumping over a deep hole
  - Landing hard or vehicle falling

It is possible that the SRS side and curtain airbags will deploy if a serious impact occurs to the underside of your vehicle. Some examples are shown in the illustration.

## ∇ Examples of the types of accidents in which the SRS side airbag is unlikely to deploy.

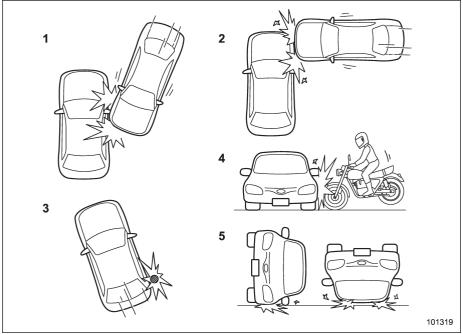


- The vehicle is involved in an oblique side-on impact.
- The vehicle is involved in a side-on impact in an area outside the vicinity of the passenger compartment.
- 3) The vehicle strikes a telephone pole or similar object.
- 4) The vehicle is involved in a side-on impact from a motorcycle.
- 5) The vehicle rolls onto its side or the roof.

There are many types of collisions which might not necessarily require SRS side airbag deployment. In the event of accidents like those illustrated, the SRS side airbag may not deploy depending on the level of accident forces involved.

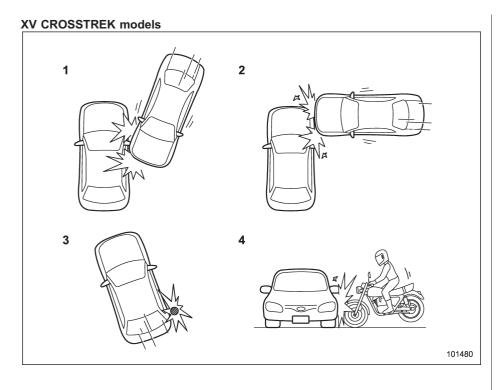
∇ Examples of the types of accidents in which the SRS curtain airbag is unlikely to deploy.

**Except XV CROSSTREK models** 



- The vehicle is involved in an oblique side-on impact.
- 2) The vehicle is involved in a side-on impact in an area outside the vicinity of the passenger compartment.
- The vehicle strikes a telephone pole or similar object.
- The vehicle is involved in a side-on impact from a motorcycle.
- 5) The vehicle rolls onto its side or the roof.

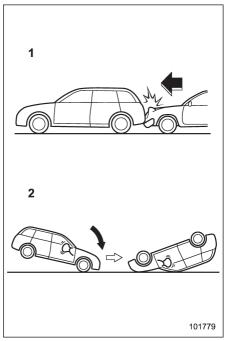
There are many types of collisions which might not necessarily require SRS curtain airbag deployment. In the event of accidents like those illustrated, the SRS curtain airbag may not deploy depending on the level of accident forces involved.



- 1) The vehicle is involved in an oblique side-on impact.
- The vehicle is involved in a side-on impact in an area outside the vicinity of the passenger compartment.
- 3) The vehicle strikes a telephone pole or similar object.
- 4) The vehicle is involved in a side-on impact from a motorcycle.

There are many types of collisions which might not necessarily require SRS curtain airbag deployment. In the event of accidents like those illustrated, the SRS curtain airbag may not deploy depending on the level of accident forces involved.

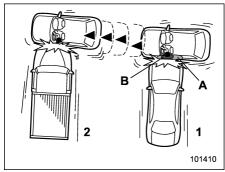
∇ Examples of the types of accidents in which the SRS side airbag and SRS curtain airbag are not designed to deploy in most cases



1) The vehicle is struck from behind.

2) The vehicle pitches end over end.

In the event of accidents like those illustrated, the SRS side airbag and SRS curtain airbag are not designed to deploy in most cases.



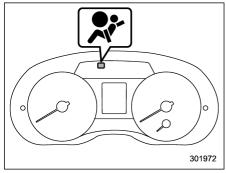
- 1) First impact
- 2) Second impact
- A) SRS curtain airbag
- S) SRS side airbag

In an accident where the vehicle is struck from the side more than once, the SRS side airbag and SRS curtain airbag deploy only once on the first impact.

Example: In the case of a double side impact collision, first with one vehicle and immediately followed by another from the same direction, once the SRS side airbag and SRS curtain airbag are activated on

the first impact, they will not be activated on the second.

## ■ SRS airbag system monitors



SRS airbag system warning light

A diagnostic system continually monitors the readiness of the SRS airbag system (including front seatbelt pretensioners) while the vehicle is being driven. The SRS airbag system warning light will show normal system operation by illuminating for approximately 6 seconds when the ignition switch is turned to the "ON" position.

The following components are monitored by the indicator:

- Front sub sensor
  - Right-hand side

- Left-hand side
- Airbag control module (including impact sensor [all models] and rollover sensor [XV CROSSTREK models])
- Frontal airbag module
  - Driver's side
  - Front passenger's side
- Knee airbag module (driver's side)
- Side airbag sensor
  - Center pillar right-hand side
  - Center pillar left-hand side
- Front door impact sensor
  - Right-hand side
  - Left-hand side
- Side airbag module
  - Driver's side
  - Front passenger's side
- Curtain airbag sensor
  - Rear wheel house right-hand side
  - Rear wheel house left-hand side
- Curtain airbag module
  - Right-hand side
  - Left-hand side
- Satellite safing sensor (under the rear center seat)
- Seatbelt pretensioner
  - Driver's side
  - Front passenger's side
- Lap belt pretensioner (front passenger's side in XV CROSSTREK models)

- Seatbelt buckle switch (front passenaer's side)
- Front passenger's occupant detection system sensor
- Front passenger's occupant detection control module
- Front passenger's frontal airbag ON and OFF indicator
- All related wiring

## WARNING

If the warning light exhibits any of the following conditions, there may be a malfunction in the seatbelt pretensioners and/or SRS airbag system. Immediately take your vehicle to your nearest SUBARU dealer to have the system checked. Unless checked and properly repaired, the seatbelt pretensioners and/or SRS airbag will not operate properly in the event of a collision, which may increase the risk of injury.

- Flashing or flickering of the warning light
- No illumination of the warning light when the ignition switch is first turned to the "ON" position
- Continuous illumination of the warning light

• Illumination of the warning light while driving

## SRS airbag system servicing

## **₩** WARNING

- When discarding an airbag module or scrapping the entire vehicle damaged by a collision, consult your SUBARU dealer.
- The SRS airbag has no userserviceable parts. Do not use electrical test equipment on any circuit related to the SRS airbag system. For required servicing of the SRS airbag, consult your nearest SUBARU dealer. Tampering with or disconnecting the system's wiring could result in accidental inflation of the SRS airbag or could make the system inoperative, which may result in serious injury.

## CAUTION

If you need service or repair in areas indicated in the following list, have the work performed by an authorized SUBARU dealer. The SRS airbag control module, impact sensors and airbag modules are stored in these areas.

- Under the center console
- On both the right and left sides at the front of the vehicle
- Steering wheel and column and nearby areas
- Bottom of the steering column and nearby areas
- Top of the dashboard on front passenger's side and nearby areas
- Each front seat and nearby area
- Inside each center pillar
- Inside each front door
- In each roof side (from the front pillar to a point over the rear seat)
- Between the rear seat cushion and rear wheel house on each side
- Under the rear center seat

In the event that the SRS airbag is deployed, replacement of the system should be performed only by an authorized SUBARU dealer. When the components of the SRS airbag system are

replaced, use only genuine SUBARU parts.

#### NOTE

In the following cases, contact your SUBARU dealer as soon as possible.

- The front part of the vehicle was involved in an accident in which only the driver's SRS frontal airbag or both driver's and front passenger's SRS frontal airbags did not deploy.
- The pad of the steering wheel, the cover over the front passenger's SRS frontal airbag, or either roof side (from the front pillar to a point over the rear seat) is scratched, cracked, or otherwise damaged.
- The center pillar, front door, rear wheel house or rear sub frame, or an area near these parts, was involved in an accident in which the SRS side airbag and SRS curtain airbag did not deploy.
- The fabric or leather of either front seatback is cut, frayed, or otherwise damaged.
- The rear part of the vehicle was involved in an accident in which no SRS airbag was deployed.

## Precautions against vehicle modification

## **WARNING**

To avoid accidental activation of the system or rendering the system inoperative, which may result in serious injury, no modifications should be made to any components or wiring of the SRS airbag system.

This includes following modifications.

- Installation of custom steering wheels
- Attachment of additional trim materials to the dashboard
- Installation of custom seats
- Replacement of seat fabric or leather
- Installation of additional fabric or leather on the front seat
- Attachment of a hands-free microphone or any other accessory
  to a front pillar, a center pillar, a
  rear pillar, the windshield, a side
  window, an assist grip, or any
  other cabin surface that would be
  near a deploying SRS curtain
  airbag.

 Installation of additional electrical/electronic equipment such as a mobile two-way radio on or near the SRS airbag system components and/or wiring is not advisable. This could interfere with proper operation of the SRS airbag system.

## **A** CAUTION

Do not perform any of the following modifications. Such modifications can interfere with proper operation of the SRS airbag system.

- Attachment of any equipment (bush bar, winches, snow plow, skid plate, etc.) other than genuine SUBARU accessory parts to the front end.
- Modification of the suspension system or front end structure.
- Installation of a tire of different size and construction from the tires specified on the vehicle placard attached to the driver's door pillar or specified for individual vehicle models in this Owner's Manual.
- Attachment of any equipment (side steps or side sill protectors,

etc.) other than genuine SUBARU accessory parts to the side body.

Always consult your SUBARU dealer if you want to install any accessory parts on your vehicle.

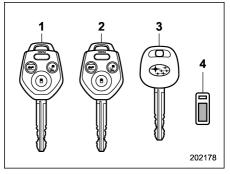


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## **Keys**

## Key types



- 1) Master key
- 2) Submaster key
- 3) Sub key
- 4) Key number plate

Three types of keys are provided for your vehicle.



Do not attach a large key holder or key case to either key. If it bangs against your knees while you are driving, it could turn the ignition switch from the "ON" position to the "ACC" or "LOCK" (off) position, thereby stopping the engine.

## ■ Key number plate

The key number is stamped on the key number plate attached to the key set. Write down the key number and keep it in another safe place, not in the vehicle. This number is needed to make a replacement key if you lose your key or lock it inside the vehicle. Refer to "Key replacement" \$\tilde{x}\$-2-3.

## **Immobilizer**

The immobilizer system is designed to prevent an unauthorized person from starting the engine. Only keys registered with your vehicle's immobilizer system can be used to operate your vehicle. Even if an unregistered key fits into the ignition switch and can be turned to the "START" position, the engine will automatically stop after several seconds.

Each immobilizer key contains a transponder in which the key's ID code is stored. When a key is inserted into the ignition switch and turned to the "ON" position, the transponder transmits the key's ID code to the immobilizer system's receiver. If the transmitted ID code matches the ID code registered in the immobilizer system, the system allows the engine to be started. Since the ID code is transmitted and acted upon almost instantly, the immobilizer system does not impede normal starting of the engine.

If the engine fails to start, pull out the key once before trying again. Refer to "Ignition switch" \$\infty 3-3\$.



 Do not place the key under direct sunlight or anywhere it may become hot.

• Do not get the key wet. If the key gets wet, wipe it dry with a cloth immediately.

#### NOTE

To protect your vehicle from theft, please pay close attention to the following security precautions:

- Never leave your vehicle unattended with its keys inside.
- Before leaving your vehicle, close all windows and the moonroof, and lock the doors and rear gate.
- Do not leave spare keys or any record of your key number in the vehicle.
- The vehicle has a maintenance-free type immobilizer system.

## ■ Security indicator light

Refer to "Security indicator light" \$\sigma 3-21.

## ■ Key replacement

Your key number plate will be required if vou ever need a replacement key made. Any new key must be registered for use with your vehicle's immobilizer system before it can be used. Up to four keys can be registered for use with one vehicle.

One key that has already been registered is required in order to register a new key.

If you lose a key, the lost key's ID code still remains in the memory of the vehicle's immobilizer system. For security reasons. the lost kev's ID code should be erased from the memory. To erase the lost key's ID code, all keys that will be used are required.

For details about new key registration and erasing the lost key's ID code, contact your SUBARU dealer.

## ■ Certification for immobilizer svstem

▼ U.S.-spec. models FCC ID: MOZRI-38BFH

## **CAUTION**

#### **FCC WARNING**

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

**▼** Canada-spec, models

#### NOTE

Operation is subject to the following two conditions: (1) this device may not cause interference, and (2) this device must accept any interference, including interference that may cause undesired operation of the device.

#### NOTE

L'utilisation de ce dispositif est autorisée seulement aux deux conditions suivantes: (1) il ne doit pas produire de brouillage, et (2) l'utilisateur du dispositif doit être prêt à accepter tout brouillage radioélectrique reçu, même si ce brouillage est susceptible de compromettre le fonctionnement du dispositif.

## **Door locks**

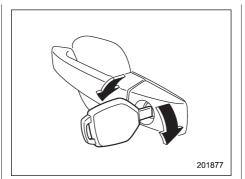
## ■ Locking and unlocking from the outside

#### NOTE

If you unlock the driver's door with a key and open the door while the alarm system is armed, the alarm system is triggered and the vehicle's horn sounds. In this case, perform any of the following operations.

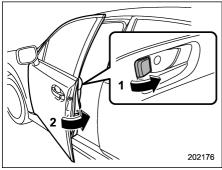
- Press any button on the remote transmitter.
- Insert the key into the ignition switch and turn the ignition switch to the "ON" position.

For details about the alarm system, refer to "Alarm system" \$\tilde{x}^2-10.



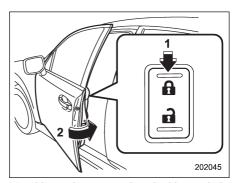
To lock the driver's door from the outside with the key, turn the key toward the front. To unlock the door, turn the key toward the rear. Pull the outside door handle to open an unlocked door.

To lock the door from outside without the key, the following methods are available.



#### Locking using lock lever

- Rotate the lock lever forward.
- Close the door.



Locking using power door locking switch

- 1) Press the front side (lock side) of the power door locking switch.
- 2) Close the door.

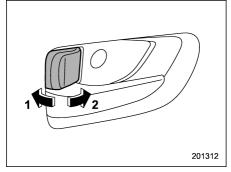
In this case, all closed doors and the rear gate (for 5-door) are locked at the same time.

Always make sure that all doors and the rear gate (for 5-door) are locked before leaving your vehicle.

## NOTE

Make sure that you do not leave the key inside the vehicle when locking the doors from the outside without the key.

## Locking and unlocking from the inside



- 1) Unlock
- 2) Lock

To lock the door from the inside, rotate the lock lever forward. To unlock the door from the inside, rotate the lock lever rearward.

The red mark on the lock lever appears when the door is unlocked

Pull the inside door handle to open an unlocked door.

Always make sure that all doors and the rear gate (for 5-door) are closed before starting to drive.

## MARNING

Keep all doors locked when you drive, especially when small children are in your vehicle.

Along with the proper use of seatbelts and child restraints, locking the doors reduces the chance of being thrown out of the vehicle in an accident.

It also helps prevent passengers from falling out if a door is accidentally opened, and intruders from unexpectedly opening doors and entering your vehicle.

### ■ Battery drainage prevention function

If a door or the rear gate (5-door) is not completely closed, the interior lights will remain illuminated as a result. However, several lights are automatically turned off by the battery drainage prevention function to prevent the battery from discharging. The following interior lights are affected by this function.

Item	Switch position	Automatically turning off
Map lights <sup>*1</sup>	OFF*1	Approximately 20 minutes later
Dome light	DOOR	Approximately 20 minutes later
Ignition switch light	_	Approximately 20 minutes later
Cargo area light	DOOR	Approximately 20 minutes later

\*1: The battery drainage prevention function affects only the map lights on models with the moonroof, and only when the map light switches are in the OFF position. The map lights on models without the moonroof do not turn off automatically, so push the light switches manually to turn them off.

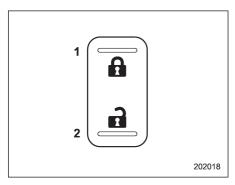
The operational/non-operational setting of this function can be changed by a SUBARU dealer. Contact your SUBARU dealer to change the setting.

#### NOTE

- The factory setting (default setting) for this function is set as "operational".
- When leaving the vehicle, please make sure that all doors and the rear gate (5-door) are completely closed.
- The battery drainage prevention function does not operate while the

key is in the ignition switch.

## Power door locking switches



- ) Lock
- 2) Unlock

All doors and the rear gate (for 5-door) can be locked and unlocked by the power door locking switches located at the driver's side and the front passenger's side doors.

To lock the doors, push the front side of the switch.

To unlock the doors, push the rear side of the switch.

When you close the doors after you set the door locks, the doors remain locked.

## NOTE

Make sure that you do not leave the key inside the vehicle before locking the doors from the outside using the power door locking switches.

## ■ Key lock-in prevention function

This function prevents the doors from being locked with the key still in the ignition switch.

This function's operational/non-operational setting can be changed by a SUBARU dealer. Contact a SUBARU dealer for details.

#### NOTE

- The factory setting (default setting) for this function is set as "operational".
- When leaving the vehicle, make sure you are holding the key before locking the doors.

## **▼** Behavior with key lock-in prevention function operational

With the driver's door open, the doors are automatically kept unlocked even if the front side of the power door locking switch is pressed.

## **▼** Behavior with key lock-in prevention function non-operational

- If the lock lever is turned to the front ("LOCK") position with the driver's door open and the driver's door is then closed with the lock lever in that position, the driver's door is locked.
- If the spare key is used to lock the driver's door from the outside of the vehicle, the door is locked.

## Remote keyless entry system

## Safety precautions

## **CAUTION**

- Do not expose the remote transmitter to severe shocks, such as those experienced as a result of dropping or throwing.
- Do not take the remote transmitter apart except when replacing the battery.
- Do not get the remote transmitter wet. If it gets wet, wipe it dry with a cloth immediately.
- When you carry the remote transmitter on an airplane, do not press the button of the remote transmitter while in the airplane. When any button of the remote transmitter is pressed, radio waves are sent and may affect the operation of the airplane. When you carry the remote transmitter in a bag on an airplane, take measures to prevent the buttons of the remote transmitter from being pressed.
- FCC WARNING

Changes or modifications not

expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

## **■** Transmitter

Two transmitters are provided for your vehicle.

The remote keyless entry system has the following functions.

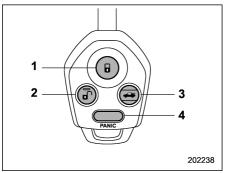
- Locking and unlocking the doors (and rear gate on the 5-door) without a key
- Unlocking the rear gate on the 5-door without a key
- Opening the trunk lid on the 4-door without a key
- Sounding a panic alarm
- Arming and disarming the alarm system. For detailed information, refer to "Alarm system" \$\sigma 2-10\$.

The operable distance of the remote keyless entry system is approximately 30 feet (10 meters). However, this distance will vary depending on environmental conditions. The system's operable distance will be shorter in areas near a facility or electronic equipment emitting strong radio waves such as a power plant, broadcast station, TV tower, or remote

controller of home electronic appliances.

#### NOTE

The remote keyless entry system does not operate when the key is inserted in the ignition switch.



- 1) Lock/arm button
- Unlock/disarm button
- 3) Trunk lid opener/rear gate unlock button
- 4) PANIC button

#### NOTE

The hazard warning flashers will flash once or twice when the transmitter button is pressed in the following cases.

- When locking the doors
- When unlocking the doors
- When opening the trunk lid (4-door

models)

When unlocking the rear gate (5-door models)

Operation of the hazard warning flashers in the above cases can be set to "On" or "Off" by a SUBARU dealer. Consult your SUBARU dealer for details. Also, for models with a multi function display, the setting can be changed using the display. For details, refer to "Hazard warning flasher setting" \$\textit{\$\textit{\$\textit{\$a\$}}\$}\$

## ■ Locking the doors

Press the lock/arm button to lock all doors and rear gate (5-door). An electronic chirp will sound once and the hazard warning flashers will flash once.

If any of the doors (or the rear gate/trunk lid) is not fully closed, an electronic chirp will sound five times and the hazard warning flashers will flash five times to alert you that the doors (or the rear gate/trunk lid) are not properly closed. When you close the door, it will automatically lock and then an electronic chirp will sound once and the hazard warning flashers will flash once.

## ■ Unlocking the doors

Press the unlock/disarm button to unlock the driver's door. An electronic chirp will sound twice and the hazard warning flashers will flash twice. To unlock all doors and the rear gate (5-door), briefly press the unlock/disarm button a second time within 5 seconds.

#### NOTE

If the interval between the first and second presses of the unlock/disarm button (for unlocking of all of the doors and the rear gate) is extremely short, the system may not respond.

## Opening the trunk lid/unlocking rear gate

#### ▼ 4-door models

The trunk lid opens when the trunk lid opener button is pressed and held for at least 2 seconds. An electronic chirp will sound twice and the hazard warning flashers will flash twice.

#### ▼ 5-door models

Pressing the rear gate unlock button unlocks the rear gate.

An electronic chirp will sound twice and the hazard warning flashers will flash twice.

## ■ Vehicle finder function

Use this function to find your vehicle parked among many vehicles in a large parking lot. Provided you are within 30 feet (10 meters) of the vehicle, pressing the lock/arm button three times in a 5-second period will cause your vehicle's horn to sound once and its hazard warning flashers to flash three times

#### NOTE

If the interval between presses is too short when you press the lock/arm button three times, the system may not respond to the signals from the remote transmitter.

## Sounding a panic alarm

To activate the alarm, press the "PANIC" button once.

The horn will sound and the hazard warning flashers will flash.

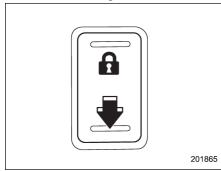
To deactivate the panic alarm, press any button on the remote transmitter. Unless a button on the remote transmitter is pressed, the alarm will be deactivated after approximately 30 seconds.

## ■ Selecting audible signal operation

Using an electronic chirp, the system will give you an audible signal when the doors lock and unlock. If desired, you may turn the audible signal off.

Perform the following steps to deactivate the audible signal. You can also use the same steps to restore the function.

1. Sit in the driver's seat and shut all doors and the rear gate.



- 2. Hold down the REAR (UNLOCK) side of the power door locking switch.
- 3. While holding down the REAR (UN-LOCK) side of the power door locking switch, pull the key out and re-insert it into the ignition switch at least 6 times within 10 seconds after Step 2.

- 4. Open and close the driver's door once within 10 seconds after Step 3.
- 5. The hazard warning flashers flash 3 times to indicate completion of the setting.

You may have the above settings done by your SUBARU dealer. Also, for models with a multi function display, the setting can be changed using the display. For details, refer to "Audible signal setting" \$\textit{\signa}\$3-62.

## ■ Replacing the battery

Refer to "Battery replacement" \$\tilde{F}\$11-45.

## **■** Replacing lost transmitters

If you lose a transmitter or want to purchase additional transmitters (up to four can be programmed), your transmitters should be reprogrammed for security reasons. For details, contact your SUBARU dealer and have the transmitters programmed into the remote keyless entry system.

## ■ Certification for remote keyless entry system

#### ▼ U.S.-spec. models

FCC ID: CWTWB1U811 FCC ID: CWTWBU766

This device complies with part 15 of the

FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

#### **▼** Canada-spec. models

#### NOTE

Operation is subject to the following two conditions: (1) this device may not cause interference, and (2) this device must accept any interference, including interference that may cause undesired operation of the device.

## NOTE

L'utilisation de ce dispositif est autorisée seulement aux deux conditions suivantes: (1) il ne doit pas produire de brouillage, et (2) l'utilisateur du dispositif doit être prêt à accepter tout brouillage radioélectrique reçu, même si ce brouillage est susceptible de compromettre le fonctionnement du dispositif.

## Alarm system

#### **■** General information

The alarm system helps to protect your vehicle and valuables from theft. The horn sounds and the hazard warning flashers flash if someone attempts to break into your vehicle.

The system can be armed or disarmed with the remote transmitter.

The system will not be activated when the key is inserted into the ignition switch.

Your vehicle's alarm system has been set for activation at the time of shipment from the factory. You can set the system for deactivation yourself or have it done by your SUBARU dealer.

## **■** System operation

The alarm system will sound the following alarms when triggered.

- The vehicle's horn will sound for 30 seconds.
- The hazard warning flashers will flash for 30 seconds.

If any of the doors or the rear gate/trunk lid remains open after the 30-second period, the horn will continue to sound for a maximum of 3 minutes. If the door or the

rear gate/trunk lid is closed while the horn is sounding, the horn will stop sounding with a delay of up to 30 seconds.

The alarm is triggered by:

- Opening any of the doors, the rear gate or trunk lid
- Physical impact to the vehicle, such as forced entry (only models with shock sensors (dealer option))

#### NOTE

The alarm system can be set to trigger the illumination of the following interior lights.

- Map lights (models with moonroof)
- Dome light (illuminates only when the dome light switch is in the "DOOR" position)
- Cargo area light (illuminates only when the cargo area light switch is in the "DOOR" position)

The notifications regarding the map lights, dome light and cargo area light are deactivated as the factory setting. A SUBARU dealer can activate the system. Contact your SUBARU dealer for details.

## Activating and deactivating the alarm system

To change the setting of your vehicle's alarm system for activation or deactivation, do the following.

- 1. Disarm the alarm system. Refer to "Disarming the system" \$\tilde{x}^2-13.
- 2. Sit in the driver's seat and shut all doors (and the rear gate if your vehicle is a 5-door).
- 3. Turn the ignition switch to the "ON" position.
- 4. Hold down the REAR (UNLOCK) side of the driver's power door locking switch, open the driver's door within the following 1 second, and wait 10 seconds without releasing the switch. The setting will then be changed as follows.

## If the system was previously activated:

The odometer/trip meter screen displays "AL oF" and the horn sounds twice. indicating that the system is now deactivated.

## If the system was previously deactivated:

The odometer/trip meter screen displays "AL on" and the horn sounds once. indicating that the system is now activated.

#### NOTE

You may have the above setting change done by your SUBARU dealer.

## If you have accidentally triggered the alarm system

## **▼** To stop the alarm

Do any of the following operations:

- Press any button on the remote transmitter.
- Turn the ignition switch to the "ON" position.

#### NOTE

Only registered keys will stop the alarm. If the immobilizer transponder is not registered, the alarm will not stop.

## ■ Arming the system

## **▼** Tips

- The system can be armed even if the engine hood, windows and/or moonroof are open. Always make sure that they are fully closed before arming the system.
- The 30-second standby time can be eliminated if you prefer. Have it performed by your SUBARU dealer.
- If your vehicle is a 4-door and you open the trunk using the remote transmitter's

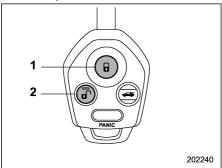
"w" button with the alarm system armed, the system will be temporarily placed in a standby state. The system will go back to the surveillance state upon locking the trunk.

- The system is in the standby mode for a 30-second period after locking the doors with the remote transmitter. The security indicator light will flash at short intervals during this period.
- If any of the following actions are done during the standby period, the system will not switch to the surveillance state.
  - Doors are unlocked using the remote transmitter.
  - Any door (including the rear gate of a 5-door or the trunk of a 4-door) is opened.
  - Ignition switch is turned to the "ON" position.

## ▼ To arm the system using remote transmitter

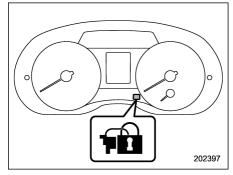
- 1. Close all windows and the moonroof (if equipped).
- 2. Remove the key from the ignition switch.
- 3. Open the doors and get out of the vehicle.
- 4. Make sure that the engine hood (and the trunk lid on the 4-door) are locked.
- 5. Close all doors (and the rear gate on

the 5-door).



#### **Transmitter**

- 1) Arm button: Press to arm the system
- Disarm button: Press to disarm the system



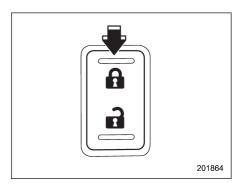
6. Briefly press the "a" button (for less

than 2 seconds). All doors (and the rear gate on the 5-door) will lock, an electronic chirp will sound once, the hazard warning flashers will flash once, and the security indicator light will start flashing rapidly. After rapid flashing for 30 seconds (standby time), the indicator lights will then flash slowly (twice approximately every 2 seconds), indicating that the system has been armed for surveillance.

If any of the doors, (rear gate or trunk lid) is not fully closed, an electronic chirp sounds five times, the hazard warning flashers flash five times to alert you that the doors (or the rear gate) are not properly closed. When you close the door, the system will automatically arm and doors will automatically lock.

## ▼ To arm the system using power door locking switches

- 1. Close all windows.
- 2. Remove the key from the ignition switch.
- 3. Open the doors and get out of the vehicle.
- 4. Make sure that the engine hood is locked.
- 5. Close the doors (and the rear gate on the 5-door) but leave only the driver's door or the front passenger's door open.



- 6. Press the front side ("LOCK" side) of the power door locking switch to set the door locks.
- 7. Close the door. An electronic chirp will sound once, the hazard warning flashers will flash once and the security indicator light will start flashing rapidly. After rapid flashing for 30 seconds (standby time), the indicator lights will then flash slowly (twice approximately every 2 seconds), indicating that the system has been armed for surveillance.

## **■** Disarming the system

Briefly press the "n" button (for less than 2 seconds) on the remote transmitter. The driver's door will unlock, an electronic chirp will sound twice, the hazard warning flashers will flash twice. The flashing of the

security indicator light will then change slowly (once approximately every 3 seconds from twice approximately every 2 seconds), indicating that the alarm system has been disarmed.

#### NOTE

After disarming the alarm system, briefly press the "n" button a second time within 5 seconds to unlock all other doors and the rear gate (5-door).

## **▼** Emergency disarming

If you cannot disarm the system using the transmitter (i.e. the transmitter is lost, broken or the transmitter battery is too weak), you can disarm the system without using the transmitter as follows.

• Turn the ignition switch from the "LOCK" (off) to the "ON" position with a registered key.

#### ■ Valet mode

When you choose the valet mode, the alarm system does not operate. In valet mode, the remote transmitter is used only for locking and unlocking the doors and rear gate (5-door) and panic activation.

To enter the valet mode, change the setting of your vehicle's alarm system for deactivation mode. Refer to "Activating and deactivating the alarm system" @ 211. The security indicator light will continue to flash once every 3 seconds indicating that the system is in the valet mode.

To exit valet mode, change the setting of vour vehicle's alarm system for activation mode. Refer to "Activating and deactivating the alarm system" @ 2-11.

## ■ Passive arming

## **▼** Passive arming mode

When passive arming mode has been programmed by the dealer, arming of the system is automatically accomplished without using the remote transmitter. Note that in this mode, DOORS MUST BE MANUALLY LOCKED.

## **▼** To enter the passive mode

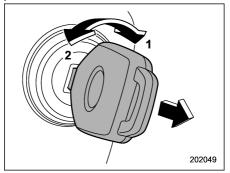
If you wish to program the passive arming mode, have it done by your SUBARU dealer

## **▼** Arming the system

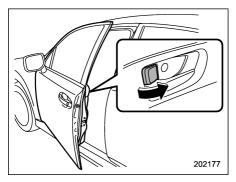
## A CAUTION

In passive mode, the system will automatically activate the alarm but WILL NOT automatically lock the doors. In order to lock the doors vou must either lock them as indicated in step 4 below or with the key once they have been closed. Failure to lock the doors manually will result in a higher security risk.

1. Turn the ignition switch to the "ON" position.



- 1) ON
- 2) LOCK (off)
- 2. Turn the ignition switch from "ON" to "LOCK" (off) position and remove the key from the ignition switch.
- 3. Open the doors and get out of the vehicle.



- 4. Before closing the doors, lock all doors with the inside door lock levers.
- 5. Close the doors. The system will automatically arm after 1 minute.

In the passive mode, the system can also be armed with the remote transmitter or with the power door locking switches. If the remote transmitter or power door locking switch is used to lock the vehicle, arming will take place immediately regardless of whether or not the passive mode has been selected.

#### **▼** Disarming the system

To disarm the system, briefly press the "n" button on the transmitter.

## ■ Tripped sensor identification

The security indicator light flashes when the alarm system has been triggered. Also, the number of flashes indicates the location of unauthorized intrusion or the severity of impact on the vehicle.

When the ignition switch is turned to the "ON" position, the indicator light will light for 1 second and then flash as follows.

- When a door or the rear gate (5-door) was opened: 5 times
- When a door or the trunk (4-door) was opened: 4 times
- When the ignition switch was turned to the "ON" position: 3 times
- When a strong impact or multiple impacts were sensed: twice (only models with shock sensors (dealer option))
- When a light impact was sensed: once (only models with shock sensors (dealer option))

#### NOTE

Any of the above indicator light flashings will recur each time the ignition switch is turned to the "ON" position. Rearming the alarm system cancels the flashing.

## Shock sensors (dealer option)

The shock sensors trigger the alarm system when they sense impacts applied to the vehicle and when any of their electric wires are cut. The alarm system causes the horn to sound and the hazard warning flashers to flash for a short time when the sensed impact is weak, but it warns of a strong impact or multiple impacts by sounding the horn and flashing the hazard warning flashers, both lasting approximately 30 seconds.

If you desire, your SUBARU dealer can connect them and set them for activation or deactivation.

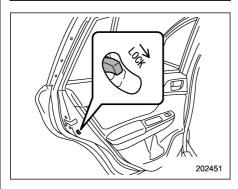
#### NOTE

- The shock sensors are not always able to sense impacts caused by breaking in, and cannot sense an impact that does not cause vibration (such as breaking the glass using a rescue hammer).
- The shock sensors may sense vibration as indicated in the following examples and trigger the alarm system. Select the settings of the alarm system and shock sensors appropriately depending on where you usually park your vehicle.

#### **Examples:**

- Vibration from a construction site
- Vibration in a multistory car park
- Vibration from trains
- You can have the sensitivity of the shock sensors adjusted to your preference by your SUBARU dealer.

## Child safety locks



Each rear door has a child safety lock. When the child safety lock lever is in the lock position, the door cannot be opened from inside. The door can only be opened from the outside.

## MARNING

Always turn the child safety locks to the "LOCK" position when children sit in the rear seat. Serious injury could result if a child accidentally opens the door and falls out.

## Windows

## **WARNING**

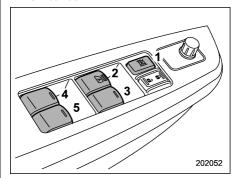
To avoid serious personal injury caused by entrapment, always conform to the following instructions without exception.

- When operating the power windows, be extremely careful to prevent anyone's fingers, arms, neck, head or other objects from being caught in the window.
- Always lock the passengers' windows using the lock switch when children are riding in the vehicle.
- Before leaving the vehicle, always remove the key from the ignition switch for safety and never allow an unattended child to remain in the vehicle. Failure to follow this procedure could result in injury to a child operating the power window.

The power windows operate only when the ignition switch is in the "ON" position.

## ■ Power window operation by driver

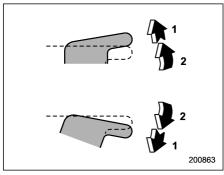
Driver's side power window switches



- 1) Lock switch
- For driver's window (with one-touch auto up and down feature)
- 3) For front passenger's window
- 4) For rear left window
- 5) For rear right window

All door windows can be controlled by the power window switch cluster at the driver side door.

## ▼ Operating the driver's window



- 1) Automatically open/close
- 2) Open/close

#### To open:

Push the switch down lightly and hold it. The window will open as long as the switch is held.

This switch also has a one-touch auto down feature that allows the window to be opened fully without holding the switch.

Push the switch down until it clicks and release it, and the window will fully open. To stop the window halfway, pull the switch up lightly.

#### To close:

Pull the switch up lightly and hold it. The window will close as long as the switch is held.

This switch also has a one-touch auto up feature that allows the window to be closed fully without holding the switch.

Pull the switch up until it clicks and release it, and the window will fully close. To stop the window halfway, push the switch down lightly.

#### NOTE

If the vehicle's battery is disconnected due to situations such as battery or fuse replacement, the one-touch auto up/down function is deactivated. Initialize the power window to reactivate the one-touch auto up/down function. Refer to "Initialization of power window" \$\mathscr{x}^2 - 19\$.

#### **▼** Anti-entrapment function



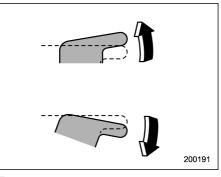
- Never attempt to test this function using fingers, hands or other parts of your body.
- The anti-entrapment function may not operate properly if some object gets trapped just before the window fully closes.

#### NOTE

- If a window detects an impact similar to that caused by trapping an object (for example, when the vehicle encounters a deep pothole), the anti-entrapment function may operate.
- The window cannot be operated for a few seconds after the anti-entrapment function operates.
- If the vehicle's battery is disconnected due to situations such as battery or fuse replacement, the antientrapment function is deactivated. Initialize the power window to reactivate the anti-entrapment function. Refer to "Initialization of power window" \$\mathscr{P}^2\$-19.

While closing the driver's window automatically, if the window senses a substantial enough object trapped between the window and the window frame, it automatically moves down slightly and stops.

## Operating the passengers' windows



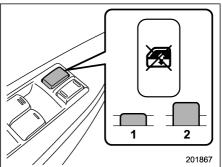
## To open:

Push the appropriate switch down and hold it until the window reaches the desired position.

## To close:

Pull the switch up and hold it until the window reaches the desired position.

## ▼ Locking the passengers' windows



- 1) Lock
- 2) Unlock

### To lock:

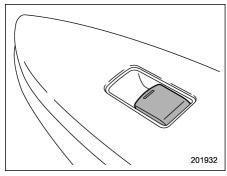
Press the lock switch. When the lock switch is in the lock position, the passengers' windows cannot be opened or closed.

## To unlock:

Press the lock switch again.

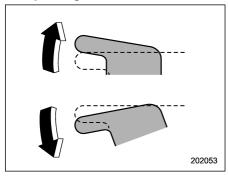
# ■ Power window operation by passengers

▼ Passenger's side power window switches



Each passenger window can be controlled by the power window switch located on the door.

## **▼** Operating the windows



## To open:

Press the switch down and hold it until the window reaches the desired position.

## To close:

Pull the switch up and hold it until the window reaches the desired position.

When the lock switch on the power window switch cluster, located on the driver's side door, is in the lock position, the passengers' windows cannot be operated with the passengers' switches.

## ■ Initialization of power window

If the vehicle's battery is disconnected due to situations such as battery or fuse replacement, the following functions are deactivated

- One-touch auto up/down function
- Anti-entrapment function

Initialize the power window using the following procedure to reactivate these functions.

- 1. Close the driver's door.
- 2. Turn the ignition switch to the "ON" position.
- 3. Open the driver's side window halfway by pushing down the power window switch.
- 4. Pull up the power window switch and close the window completely. Continue pulling up the switch for approximately 1 second after the window is closed completely.
- 5. Open the driver's side window completely by fully pushing down the power windows switch.

# Trunk lid (4-door)

# WARNING

- To prevent dangerous exhaust gas from entering the vehicle, always keep the trunk lid closed while driving.
- Help prevent children, adults or animals from locking themselves in the trunk. On hot or sunny days, the temperature in the trunk could quickly become high enough to cause death or serious heat-related injuries including brain damage to anyone locked inside, particularly for small children.
- When leaving the vehicle, either close all windows and lock all doors. Also make certain that the trunk is closed.

## ■ To open and close the trunk lid from outside

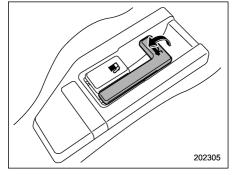
The trunk lid can be opened using the remote keyless entry system. Refer to "Remote keyless entry system" \$2-7.

To close the trunk lid, lightly press the trunk lid down until the latch engages.

## NOTE

Do not leave your valuables in the trunk when you leave your vehicle.

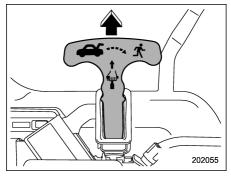
## ■ To open the trunk lid from inside



Pull the trunk lid release lever upward. The lever is on the floor at the left of the driver's seat.

## Internal trunk lid release handle

The internal trunk lid release handle is a device designed to open the trunk lid from inside the trunk. In the event children or adults become locked inside the trunk, the handle allows them to open the lid. The handle is located on the inside of the trunk lid.



To open the trunk lid from inside the trunk, pull the yellow handle upward as indicated by the arrow on the handle.

This operation unlocks the trunk lid. Then, push up the lid.

The handle is made of material that remains luminescent for approximately an hour in the dark trunk space after it is exposed to ambient light even for a short time.



Never allow any child to get in the trunk and play with the release handle. If the driver starts the vehicle without knowing that a child is inside the trunk and the child opens the lid using the release handle, the child could fall out and be killed or seriously injured.



## CAUTION

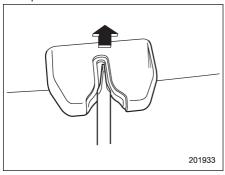
- Do not close the lid while gripping the release handle. The handle may be damaged.
- Do not use the handle as a hook to fasten straps or ropes to secure your cargo in the trunk.
   Such use may result in damage of the handle.

 Load the trunk so that cargo can not strike the release handle. If the cargo hits the handle while the vehicle is being driven, the handle may be pulled up and the trunk lid may open. That may cause cargo to fall out of the trunk, which could create a traffic safety hazard.

## **▼** Inspection

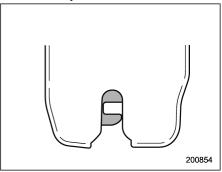
Perform the following steps at least twice a year to check the release handle for correct operation.

1. Open the trunk lid.

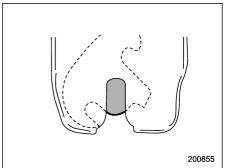


2. Use a flat-head screwdriver with a thin blade. Slide the screwdriver blade from the slit aperture of the lock assembly to

the end until you hear a click.



This places the latch in the locked position.



3. Pull the trunk lid release handle from outside the vehicle, as indicated by the arrow on the handle to check if the latch is released.

If the latch is not released, contact your SUBARU dealer.

In this case, press the "" button on the key lug to release the latch, then close the trunk lid.

Also, if the movement of the trunk lid release handle feels restricted or not entirely smooth during operation, or the handle and/or handle base is cracked. contact your SUBARU dealer.

# Rear gate (5-door)

## ■ Lock/unlock

The rear gate can be locked and unlocked using any of the following systems.

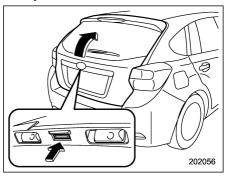
- Power door locking switch: Refer to "Power door locking switches" \$\tilde{}^2-6.
- Remote keyless entry system: Refer to "Remote keyless entry system" \$2-7.

## NOTE

If the rear gate cannot be unlocked due to a discharged vehicle battery, a malfunction in the door locking/unlocking system or other causes, you can unlock it by manually operating the rear gate lock release lever.

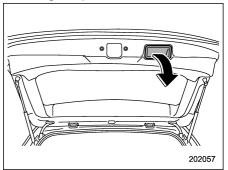
For the procedure, refer to "Rear gate if the rear gate cannot be opened" @9-18.

## ■ Open/close



## To open:

First unlock the rear gate lock then push the rear gate opener button.



### To close:

Lower the rear gate slowly and push down

firmly until the latch engages.

The rear gate can be lowered easily if you pull it down holding the recessed grip.

# **WARNING**

- To prevent dangerous exhaust gas from entering the vehicle, always keep the rear gate closed while driving.
- Do not attempt to shut the rear gate while holding the recessed grip. Also avoid closing the rear gate by pulling on the recessed grip from inside the cargo space. There is a danger of your hand being caught and injured.

# **CAUTION**

- Do not jam a plastic bag in or place cellophane tape on the rear gate stays or scratch the stays while loading or unloading cargo. That could cause leakage of gas from the stays, which may result in their inability to hold the rear gate open.
- Be careful not to hit your head or face on the rear gate when opening or closing the rear gate and

when loading or unloading cargo.

### NOTE

If the rear gate cannot be unlocked due to a discharged vehicle battery, a malfunction in the door locking/unlocking system or other causes, you can unlock it by manually operating the rear gate lock release lever. For the procedure, refer to "Rear gate – if the rear gate cannot be opened" \$\textit{\$\textit{\$\textit{\$p\$}}\$}\$

# **Moonroof (if equipped)**



Never let anyone's hands, arms, head or any objects protrude from the moonroof. A person could be seriously injured if any of the following conditions occur.

- The vehicle stops suddenly.
- The vehicle turns sharply.
- The vehicle is involved in an accident.
- Body parts protruding from the vehicle are struck by outside objects.

To avoid serious personal injury caused by entrapment, always conform to the following instructions without exception.

- Before closing the moonroof, make sure that no one's hands. arms, head or other objects will be accidentally caught in the moonroof.
- Before leaving the vehicle, always remove the key from the ignition switch for safety and never allow an unattended child

to remain in the vehicle. Failure to follow this procedure could result in injury to a child operating the moonroof.

 Never try to check the anti-entrapment function by deliberately placing part of your body in the moonroof.

## (A CAUTION

- Do not sit on the edge of the open moonroof.
- Do not operate the moonroof if falling snow or extremely cold conditions have caused it to freeze shut.
- The anti-entrapment function does not operate when the moonroof is being tilted down. Be sure to confirm that it is safe to do so before tilting the moonroof down.
- If the moonroof does not close. we recommend that you have the system checked by a SUBARU dealer.

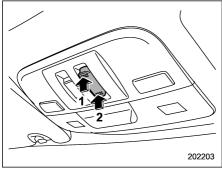
The moonroof has both tilting and sliding functions.

The moonroof operates only when the

ignition switch is in the "ON" position.

## ■ Moonroof switches

## **▼** Tilting moonroof



- 1) Raise
- Lower

The tilting function is activated only when the moonroof is fully closed.

### To raise:

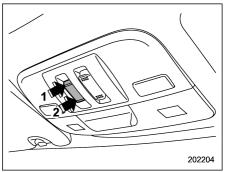
Press the rear side of the "UP/DOWN" switch momentarily. The moonroof raises completely.

### To lower:

Press and hold the front side of the "UP/ DOWN" switch until the preferred position has reached.

Release the switch after the moonroof has been raised or has been lowered completely. Pressing the switch continuously may cause damage to the moonroof.

## **▼** Sliding moonroof



- 1) Open
- 2) Close

## To open:

Slide the "OPEN/CLOSE" switch rearward. The sun shade will also be opened together with the moonroof. The moonroof will stop at a position approximately 16 in (40 cm) away from the fully opened position. Slide the switch rearward again to open the moonroof completely.

### To close:

Slide the "OPEN/CLOSE" switch forward.

To stop the moonroof at a selected midway position while opening or closing it, momentarily push the switch to the "OPEN" side or "CLOSE" side.

After washing the vehicle or after it rains, wipe away water on the roof prior to opening the moonroof to prevent drops of water from falling into the passenger compartment.

## **NOTE**

Driving with the moonroof fully open can cause an annoying sound to be generated at high speeds. If this occurs, use the moonroof at the initial stop position of 16 in (40 cm) away from the fully closed position.

## **▼** Anti-entrapment function

When the moonroof senses a substantial enough object trapped between its glass and the vehicle's roof during closure, it automatically moves back to the fully open position and stops there. The anti-entrapment function may also be activated by a strong shock on the moonroof even when there is nothing trapped.



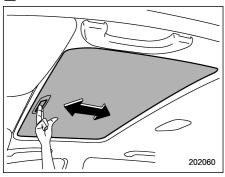
Never attempt to test this function using fingers, hands or other parts

of your body.

## **NOTE**

For the sake of safety, it is recommended that you avoid driving with the moonroof fully opened.

## Sun shade



The sun shade can be slid forward or backward by hand while the moonroof is closed.

If the moonroof is opened, the sun shade also moves back.

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# **Ignition switch**

# ■ Safety precautions



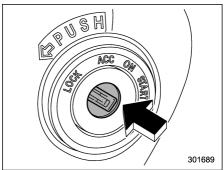
- Never turn the ignition switch to "LOCK" (off) while the vehicle is being driven or towed because that will lock the steering wheel. preventing steering control. And when the engine is turned off, it takes a much greater effort than usual to steer.
- Before leaving the vehicle, always remove the key from the ignition switch for safety and never allow an unattended child to remain in the vehicle. Failure to follow this procedure could result in injury to a child or others. Children could operate the power windows, the moonroof or other controls or even make the vehicle move.

# CAUTION

Do not attach a large key holder or key case to either key. If it banged against your knees or hands while

you are driving, it could turn the ignition switch from the "ON" position to the "ACC" or "LOCK" (off) position, thereby stopping the engine. Also, if the key is attached to a keyholder or to a large bunch of other kevs, centrifugal force may act on it as the vehicle moves, resulting in unwanted turning of the ignition switch.

# Ignition switch positions



The ignition switch has four positions: LOCK (off), ACC, ON and START.

## NOTE

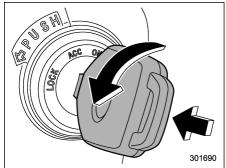
 Keep the ignition switch in the "LOCK" (off) position when the engine is not running.

- Using electrical accessories for a long time with the ignition switch in the "ON" or "ACC" position can cause the battery to go dead.
- If the ignition switch will not move from the "LOCK" (off) position to the "ACC" position, turn the steering wheel slightly to the left and right as you turn the ignition switch.

# ■ LOCK (off)

The key can only be inserted or removed in this position. The ignition switch will lock the steering wheel when you remove the key.

If turning the key is difficult, turn the steering wheel slightly to the right and left as you turn the key.



The key can be turned from the "ACC" to "LOCK" (off) position only when the select lever is in the "P" position (CVT models) and the key is pushed in while turning it (all models).

## **■** ACC

In this position the electrical accessories (audio, accessory power outlet, etc.) can be used.

## 

This is the normal operating position after the engine is started.

## **■ START**

The engine is started in this position. The starter cranks the engine to start it. When the key is released (after the engine has started), the key automatically returns to the "ON" position.

# **A** CAUTION

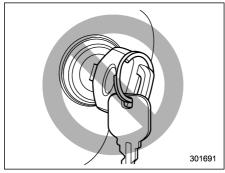
Do not turn the ignition switch to the "START" position while the engine is running.

If your registered key fails to start the engine, pull out the key once (the security indicator light will blink), and then insert the key into the ignition switch and turn it

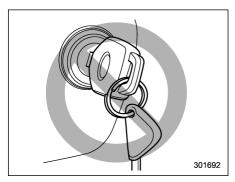
to the "START" position and again try to start the engine.

### NOTE

The engine may not start in the following cases:



• The key grip is touching another key or a metallic key holder.



- The key is near another key that contains an immobilizer transponder.
- The key is near or touching another transmitter.

## ■ Key reminder chime

The reminder chime sounds when the driver's door is opened and the ignition switch is in the "LOCK" (off) or "ACC" position.

The chime stops under the following conditions.

- when the ignition switch is turned to the "ON" position
- when the key is removed from the ignition switch
- when the driver's door is closed

# ■ Ignition switch light (if equipped)

For easy access to the ignition switch in the dark, the ignition switch light illuminates when the driver's door is opened or when the driver's door is unlocked using the remote keyless entry transmitter.

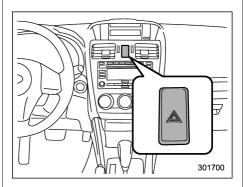
The light remains illuminated for several tens of seconds and then gradually turns off under the following conditions.

- when the driver's door is closed.
- when the doors are unlocked using the remote keyless entry transmitter

The light turns off immediately under the following conditions.

- when the ignition switch is turned to the "ON" position
- when all doors and the rear gate (5door) are locked using the remote keyless entry transmitter

# Hazard warning flasher



The hazard warning flasher is used to warn other drivers when you have to park your vehicle under emergency conditions. The hazard warning flasher works regardless of the position of the ignition switch.

To turn on the hazard warning flasher, push the hazard warning button on the instrument panel. To turn off the flasher. push the button again.

## NOTE

When the hazard warning flasher is on, the turn signals do not work.

# Meters and gauges

## NOTE

Liquid-crystal displays are used in some of the meters and gauges on the combination meter. You will find their indications hard to see if you wear polarized glasses.

## ■ Combination meter illumination

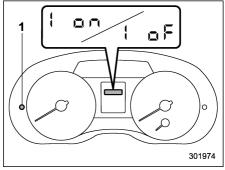
When the ignition switch is turned to the "ON" position, the various parts of the combination meter are illuminated in the following sequence.

- 1. Warning lights, indicator lights, meter needles, gauge needles and liquid crystal display illuminate.
- 2. Meter and gauge indications each show MAX position.
- 3. Meter and gauge indications each show MIN position.
- 4. Regular illumination (for driving) begins.

# Canceling the function for meter/gauge needle movement upon turning on the ignition switch

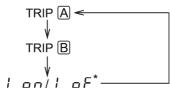
It is possible to activate or deactivate the movement of the meter needles and gauge needles that takes place when the ignition switch is turned to the "ON" position. To change the setting, perform the following procedure.

1. Turn the ignition switch to the "LOCK" (off) or "ACC" position.



- 1) Trip knob
- 2. Press the trip knob to show " $t \circ n$ " or " $t \circ n$ " on the trip meter display.

The display can be switched as shown in the following sequence by pressing the trip knob.



\*: They cannot be displayed when the ignition switch is in the "ON" position.

To change the current setting, press the trip knob for at least 2 seconds.

lon: Activated

≀ ₀F: Deactivated

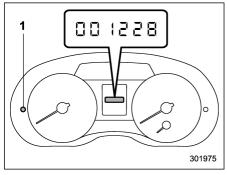
## NOTE

- Your vehicle's initial movement setting of the meter/gauge needles has been set for activation "loo" at the time of shipment from the factory.
- It is not possible to change the initial movement setting of the meter/gauge needles when the ignition switch is in the "ON" position. Change the setting when the ignition switch is in the "LOCK" (off) or "ACC" position.

## ■ Speedometer

The speedometer shows the vehicle speed.

## ■ Odometer



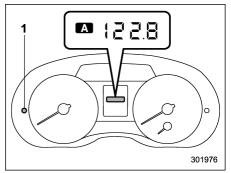
## 1) Trip knob

This meter displays the odometer when the ignition switch is in the "ON" position. The odometer shows the total distance that the vehicle has been driven.

If you press the trip knob when the ignition switch is in the "LOCK" (off) or "ACC" position, the odometer/trip meter will light up. If you do not press the trip knob within 10 seconds of illumination of the odometer/trip meter, the odometer/trip meter will turn off.

Also, if you open and close the driver's door within 10 seconds of illumination of the odometer/trip meter, the odometer/trip meter will turn off.

# ■ Double trip meter



### 1) Trip knob

This meter displays the two trip meters when the ignition switch is in the "ON" position.

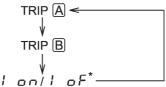
The trip meter shows the distance that the vehicle has been driven since you last set it to zero.

If you press the trip knob when the ignition switch is in the "LOCK" (off) or "ACC" position, the odometer/trip meter will light up. It is possible to switch between the A trip meter and B trip meter indications

while the odometer/trip meter is lit up. If you do not press the trip knob within 10 seconds of illumination of the odometer/ trip meter, the odometer/trip meter will turn off.

Also, if you open and close the driver's door within 10 seconds of illumination of the odometer/trip meter, the odometer/trip meter will turn off.

The display can be switched as shown in the following sequence by pressing the trip knob.



\*: They cannot be displayed when the ignition switch is in the "ON" position.

To set the trip meter to zero, select the A trip or B trip meter by pressing the knob and keep the knob pressed for more than 2 seconds.



To ensure safety, do not attempt to change the function of the indicator during driving, as an accident could result.

## NOTE

If the connection between the combination meter and battery is broken for any reason such as vehicle maintenance or fuse replacement, the data recorded on the trip meter will be lost.

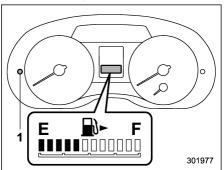
## Tachometer

The tachometer shows the engine speed in thousands of revolutions per minute.



Do not operate the engine with the pointer of the tachometer in the red zone. This may cause severe damage to the engine.

# ■ Fuel gauge



Fuel gauge

1) Trip knob

The fuel gauge is displayed when the ignition is in the "ON" position, and it shows the approximate amount of fuel remaining in the tank.

The gauge indication may change slightly during braking, turning or acceleration due to fuel level movement in the tank.

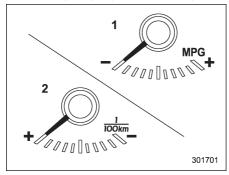
If you press the trip knob while the ignition switch is in the "LOCK" (off) or "ACC" position, the fuel gauge will light up and indicate the amount of fuel remaining in the tank. If, while the fuel gauge is indicating the amount of fuel remaining in the tank, you (a) do not press the trip knob for 10 seconds or (b) open and close the

driver's door, the fuel gauge indication will turn off.

## **NOTE**

You will see the "□▶" sign in the fuel gauge. This indicates that the fuel filler door (lid) is located on the right side of the vehicle.

# **■** ECO gauge (if equipped)



- 1) U.S.-spec. models
- 2) Except U.S.-spec. models

The ECO gauge shows the difference between the current rate of fuel consumption and the average rate of fuel consumption since the trip meter was last reset.

If the needle of the gauge moves towards the right side, this indicates better fuel efficiency.

## NOTE

- The ECO gauge shows only an approximate indication of fuel efficiency.
- After resetting the trip meter, the average rate of fuel consumption is not shown until driving 0.6 mile (1 km).
   Before that time, the ECO gauge does not operate.

# Warning and indicator lights

# ■ Initial illumination for system check

Several of the warning and indicator lights illuminate when the ignition switch is initially turned to the "ON" position. This permits checking the operation of the bulbs.

Apply the parking brake and turn the ignition switch to the "ON" position. For the system check, the following lights illuminate and then turn off after several seconds or after the engine has started.

- Seatbelt warning light
   (The seatbelt warning light turns off only when the driver fastens the seatbelt.)
- Front passenger's seatbelt warning light

  (The seatbelt warning light turns off

(The seatbelt warning light turns off only when the front seat passenger fastens the seatbelt.)

- \*: SRS airbag system warning light
- ON / 🎎: Front passenger's frontal airbag ON indicator light
- off / №2: Front passenger's frontal airbag OFF indicator light

- CHECK ENGINE warning light/Malfunction indicator light
- : Coolant temperature high warning light

: Charge warning light

En: Oil pressure warning light

: Engine low oil level warning light

: Windshield washer fluid warning light

AT OIL TEMP warning light (CVT models)

(!): Low tire pressure warning light (U.S.- spec. models)

ABS / (ABS): ABS warning light

BRAKE / ((!)): Brake system warning light

: Low fuel warning light

: Hill start assist warning light/Hill start assist OFF indicator light

A: Door open warning light

AWD: AWD warning light (CVT models)

- ♠!: Power steering warning light
- : Vehicle Dynamics Control warning light/Vehicle Dynamics Control operation indicator light

- Vehicle Dynamics Control OFF indicator light
- (if equipped)
- Cruise control set indicator light (if equipped)
- Automatic headlight beam leveler warning light (models with HID headlights)

If any lights fail to illuminate, it indicates a burned-out bulb or a malfunction of the corresponding system.

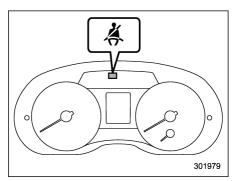
Consult your authorized SUBARU dealer for repair.

## Seatbelt warning light and chime

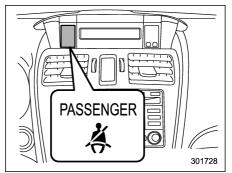


Your vehicle is equipped with a seatbelt warning device at the driver's and front passenger's seat, as required by current safety standards.

With the ignition switch turned to the "ON" position, this device reminds the driver and front passenger to fasten their seat-belts by illuminating the warning lights in the locations indicated in the following illustration and sounding a chime.



Driver's warning light



Front passenger's warning light

## **▼** Operation

If the driver and/or front passenger have/ has not vet fastened the seatbelt(s) when the ignition switch is turned to the "ON" position, the seatbelt warning light(s) will flash for 6 seconds, to warn that the seatbelt(s) is/are unfastened. If the driver's seatbelt is not fastened, a chime will also sound simultaneously.

### NOTE

- If the driver's and/or front passenger's seatbelt(s) are/is still not fastened 6 seconds later, the seatbelt warning device operates as follows according to the vehicle speed.
  - At speeds lower than approximately 9 mph (15 km/h)
  - The warning light(s) for unfastened seatbelt(s) will alternate between steady illumination and flashing at 15-second intervals. The chime will not sound.
  - At speeds higher than approximately 9 mph (15 km/h)
  - The warning light(s) for unfastened seatbelt(s) will alternate between flashing and steady illumination at 15-second intervals and the chime will sound while the warning light(s) is/are flashing.
- It is possible to cancel the warning

operation that follows the 6-second warning after turning ON the ignition switch. When the ignition switch is turned ON next time, however, the complete sequence of the warning operation resumes. For further details about canceling the warning operation, please contact your SUBARU dealer.

If there is no passenger on the front passenger's seat, the seatbelt warning device for the front passenger's seat will be deactivated. The front passenger's occupant detection system monitors whether or not there is a passenger on the front passenger's seat.

Observe the following precautions. Failure to do so may prevent the device from functioning correctly or cause the device to fail.

- Do not install any accessory such as a table or TV onto the seatback.
- Do not store a heavy load in the seatback pocket.
- Do not allow the rear seat occupant to place his/her hands or legs on the front passenger's seatback, or allow him/her to pull the seatback.
- Do not use front seats with their backward-forward position and seatback not being locked into place securely. If any of them are not locked securely, adjust them

board.

again. For adjusting procedure, refer to "Front seats" \$\textit{\$\textit{\$\textit{\$\textit{gr}}\$}\$1-2.}\$

If the seatbelt warning device for the front passenger's seat does not function correctly (e.g., it is activated even when the front passenger's seat is empty or it is deactivated even when the front passenger has not fastened his/her seatbelt), take the following actions.

- Ensure that no article is placed on the seat other than a child restraint system and its child occupant, although we strongly recommend that all children sit in the rear seat properly restrained.
- Ensure that there is no article left in the seatback pocket.
- Ensure that the backward-forward position and seatback of front passenger's seat are locked into place securely by moving the seat back and forth.

If still the seatbelt warning device for front passenger's seat does not function correctly after taking relevant corrective actions described above, immediately contact your SUBARU dealer for an inspection.

# ■ SRS airbag system warning light



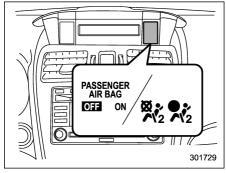
## **WARNING**

If the warning light exhibits any of the following conditions, there may be a malfunction in the seatbelt pretensioners and/or SRS airbag system. Immediately take your vehicle to your nearest SUBARU dealer to have the system checked. Unless checked and properly repaired, the seatbelt pretensioners and/or SRS airbag will not operate properly in the event of a collision, which may increase the risk of injury.

- Flashing or flickering of the warning light
- No illumination of the warning light when the ignition switch is first turned to the "ON" position
- Continuous illumination of the warning light
- Illumination of the warning light while driving

For details about the components monitored by the warning light, refer to "SRS airbag system monitors" \$\tilde{\Pi}\$1-64.

# ■ Front passenger's frontal airbag ON and OFF indicators



ON / 💥: Front passenger's frontal airbag ON indicator

off / ※ Front passenger's frontal airbag OFF indicator

The front passenger's frontal airbag ON and OFF indicators show you the status of the front passenger's SRS frontal airbag. The indicators are located next to the clock in the center portion of the dash-

When the ignition switch is turned to the "ON" position, both the ON and OFF indicators illuminate for 6 seconds during which time the system is checked. Following the system check, both indicators turn off for 2 seconds. After that, one of the

indicators illuminates depending on the status of the front passenger's SRS frontal airbag determined by the SUBARU advanced frontal airbag system monitoring. If the front passenger's SRS frontal airbag is activated, the passenger's frontal airbag ON indicator will illuminate while the OFF indicator will remain off.

If the front passenger's SRS frontal airbag is deactivated, the passenger's frontal airbag ON indicator will remain off while the OFF indicator will illuminate.

With the ignition switch turned to the "ON" position, if both the ON and OFF indicators remain illuminated or off simultaneously even after the system check period, the system is malfunctioning. Contact your SUBARU dealer immediately for an inspection.

■ CHECK ENGINE warn- CHECK ing light/Malfunction in- ENGINE dicator light

# **CAUTION**

If the CHECK ENGINE light illuminates while you are driving, have your vehicle checked/repaired by your SUBARU dealer as soon as possible. Continued vehicle operation without having the emission control system checked and repaired as necessary could cause serious damage, which may not be covered by your vehicle's warranty.

If this light illuminates steadily or blinks while the engine is running, it may indicate that there is a problem or potential problem somewhere in the emission control system.

## **▼** If the light illuminates steadily

If the light illuminates steadily while driving or does not turn off after the engine starts, an emission control system malfunction has been detected.

You should have your vehicle checked by an authorized SUBARU dealer immediately.

## NOTE

This light also illuminates when the fuel filler cap is not tightened until it clicks.

If you have recently refueled your vehicle, the cause of the CHECK ENGINE warning light/malfunction indicator light illuminating could be a loose or missing fuel filler cap. Remove the cap and retighten it until it clicks. Make sure nothing is interfering with the sealing of the cap. Tightening the cap will not make the CHECK ENGINE warning light turn off immediately. It may take several driving trips. If the light does not turn off, take your vehicle to your authorized SUBARU dealer immediately.

## **▼** If the light is blinking

If the light is blinking while driving, an engine misfire condition has been detected which may damage the emission control system.

To prevent serious damage to the emission control system, you should do the following.

- Reduce vehicle speed.
- Avoid hard acceleration.
- Avoid steep uphill grades.
- Reduce the amount of cargo, if possible.
- If towing a trailer, stop doing so as soon as possible (trailer towing permitted with XV CROSSTREK models only).

The CHECK ENGINE warning light may stop blinking and illuminate steadily after several driving trips. You should have your vehicle checked by an authorized SUBARU dealer immediately.

Coolant temperature low indicator light/Coolant temperature high warning light



## CAUTION

- After turning the ignition switch to the "ON" position, if this indicator light/warning light behaves in any of the following ways, the electrical system may be malfunctioning. Contact your SUBARU dealer immediately for an inspection.
  - It remains blinking in RED.
  - It remains illuminated in RED for more than 2 seconds.
  - It remains blinking in RED and BLUE alternately.
- While driving, if this indicator light/warning light behaves in any of the following ways, take the specified appropriate measure listed below.

- Blinking or illuminated in RED: Safely stop the vehicle as soon as possible, and refer to the emergency steps to take in the case of engine overheating. After that, have the system checked by your nearest SUBARU dealer. Refer to "Engine overheating" 9-13.
- Blinking in RED and BLUE alternately: The electrical system may be malfunctioning. Contact your SUBARU dealer for an inspection.

This coolant temperature low indicator light/coolant temperature high warning light has the following three functions.

- Illumination in BLUE indicates insufficient warming up of the engine
- Blinking in RED indicates that the engine is close to overheating
- Illumination in RED indicates overheating condition of the engine

For a system check, this indicator light/ warning light illuminates in RED for approximately 2 seconds when the ignition switch is turned to the "ON" position. After that, this indicator light/warning light changes to **BLUE** and maintains illumination in **BLUE**. This **BLUE** illuminated light turns off when the engine is warmed up sufficiently.

If the engine coolant temperature increases over the specified range, the indicator light/warning light blinks in **RED**. At this time, the engine is close to overheating.

If the engine coolant temperature increases further, the indicator light/warning light illuminates in **RED** continuously. At this time, the engine may be overheating.

When the indicator light/warning light blinks in **RED** or illuminates in **RED**, safely stop the vehicle as soon as possible, and refer to the emergency steps to take in the case of engine overheating. Refer to "Engine overheating" \$\tilde{P}\$9-13. After that, have the system checked by your nearest SUBARU dealer.

Also, if the indicator light/warning light often blinks in **RED**, the electrical system may be malfunctioning. Contact your SUBARU dealer for an inspection.

## NOTE

If the engine is restarted after a certain driving condition, this indicator light/

warning light may illuminate in RED. However, this is not a malfunction if the indicator light/warning light turns off after a short time.

# Charge warning light



If this light illuminates when the engine is running, it may indicate that the charging system is not working properly.

If the light illuminates while driving or does not turn off after the engine starts, stop the engine at the first safe opportunity and check the alternator belt. If the belt is loose, broken or if the belt is in good condition but the light remains illuminated, contact your nearest SUBARU dealer immediately.

# Oil pressure warning liaht



If this light illuminates when the engine is running, it may indicate that the engine oil pressure is low and the lubricating system is not working properly.

If the light illuminates while driving or does not turn off after the engine starts, stop the engine at the first safe opportunity and check the engine oil level. If the oil level is low, add oil immediately. If the engine oil is at the proper level but the light remains illuminated, contact your nearest SUBARU dealer immediately.

For details about checking the engine oil level or adding the engine oil, refer to "Engine oil" @ 11-8.

## **CAUTION**

Do not operate the engine with the oil pressure warning light illuminated. This may cause serious engine damage.

# Engine low oil level warning light



This light illuminates when the engine oil level decreases to the lower limit.

If the engine low oil level warning light illuminates while driving, park the vehicle in a safe and level location, and then check the engine oil level. When the engine oil level is not within the normal range, refill with engine oil. Refer to "Engine oil" \$\tilde{T}\$11-8.

If the warning light does not turn off after refilling the engine oil, or the warning light illuminates even though the engine oil level is within the normal range, have the vehicle checked by a SUBARU dealer.

## **NOTE**

- After replacing or adding the engine oil, if the engine oil level is within the normal range when restarting the engine on a level surface, the warning light will turn off.
- The warning light may illuminate temporarily in the following conditions because a low oil level may be detected as a result of significant oil movement in the engine.
  - when the vehicle is considerably inclined on an uphill or steep slope
  - when the vehicle has continuously accelerated and decelerated
  - when the vehicle is continuously turned
  - when the vehicle is driven on a road that alternates continuously between uphill and downhill

# Windshield washer fluid warning light



This light illuminates when the fluid level in the windshield washer fluid tank decreases to the lower limit (approximately 1.1 US qt, 1.0 liter, 0.9 lmp qt).

# ■ AT OIL TEMP warning light (CVT models)

AT OIL TEMP

If this light illuminates when the engine is running, it may indicate that the transmission fluid temperature is too hot.

If the light illuminates while driving, immediately stop the vehicle in a safe place and let the engine idle until the warning light turns off.

# ▼ Transmission control system warning

If the "AT OIL TEMP" warning light flashes after the engine has started, it may indicate that the transmission control system is not working properly. Contact your nearest SUBARU dealer for service immediately.

## Low tire pressure warning light (U.S.-spec. models)

When the ignition switch is turned to the "ON" position, the low tire pressure warning light will illuminate for approximately 2 seconds to check that the tire pressure monitoring system (TPMS) is functioning properly. If there is no problem and all tires are properly inflated, the light will turn off. Each tire, including the spare (if provided),

should be checked monthly when cold and inflated to the inflation pressure recommended by the vehicle manufacturer on the vehicle placard or tire inflation pressure label. (If your vehicle has tires of a different size than the size indicated on the vehicle placard or tire inflation pressure label, you should determine the proper tire inflation pressure for those tires.)

As an added safety feature, your vehicle has been equipped with a tire pressure monitoring system (TPMS) that illuminates a low tire pressure telltale when one or more of your tires is significantly underinflated. Accordingly, when the low tire pressure telltale illuminates, you should stop and check your tires as soon as possible, and inflate them to the proper pressure. Driving on a significantly underinflated tire causes the tire to overheat and can lead to tire failure. Under-inflation also reduces fuel efficiency and tire tread life, and may affect the vehicle's handling and stopping ability.

Please note that the TPMS is not a substitute for proper tire maintenance, and it is the driver's responsibility to maintain correct tire pressure, even if under-inflation has not reached the level to trigger illumination of the TPMS low tire pressure telltale.

Your vehicle has also been equipped with a TPMS malfunction indicator to indicate when the system is not operating properly. The TPMS malfunction indicator is combined with the low tire pressure telltale. When the system detects a malfunction, the telltale will flash for approximately one minute and then remain continuously illuminated. This sequence will continue upon subsequent vehicle start-ups as long as the malfunction exists. When the malfunction indicator is illuminated, the system may not be able to detect or signal low tire pressure as intended. TPMS malfunctions may occur for a variety of reasons, including the installation of replacement or alternate tires or wheels on the vehicle that prevent the TPMS from functioning properly. Always check the TPMS malfunction telltale after replacing one or more tires or wheels on your vehicle to ensure that the replacement or alternate tires and wheels allow the TPMS to continue to function properly.

Should the warning light illuminate steadily after blinking for approximately one minute, have the system inspected by your nearest SUBARU dealer as soon as possible.

# **WARNING**

If this light does not illuminate

briefly after the ignition switch is turned ON or the light illuminates steadily after blinking for approximately one minute, you should have vour Tire Pressure Monitoring System checked at a SUBARU dealer as soon as possible.

If this light illuminates while driving, never brake suddenly and keep driving straight ahead while gradually reducing speed. Then slowly pull off the road to a safe place. Otherwise an accident involving serious vehicle damage and serious personal injury could occur.

If this light still illuminates while driving after adjusting the tire pressure, a tire may have significant damage and a fast leak that causes the tire to lose air rapidly. If you have a flat tire, replace it with a spare tire as soon as possible.

When a spare tire is mounted or a wheel rim is replaced without the original pressure sensor/transmitter being transferred, the Low tire pressure warning light will illuminate steadily after blinking for approximately one minute. This indicates the TPMS is unable to monitor all four road wheels. Contact your SUBARU dealer as soon as possible for tire and sensor replacement and/ or system resetting.

If the light illuminates steadily after blinking for approximately one minute, promptly contact a SUBARU dealer to have the system inspected.



## CAUTION

The tire pressure monitoring system is NOT a substitute for manually checking tire pressure. The tire pressure should be checked periodically (at least monthly) using a tire gauge. After any change to tire pressure(s), the tire pressure monitoring system will not re-check tire inflation pressures until the vehicle is first driven more than 20 mph (32) km/h). After adjusting the tire pressures, increase the vehicle speed to at least 20 mph (32 km/h) to start the TPMS re-checking of the tire inflation pressures. If the tire pressures are now above the severe low pressure threshold, the low tire pressure warning light should turn off a few minutes later. Therefore, be sure to install the specified size for the front and rear tires.

# ■ ABS warning light ABS/((ABS))



## A CAUTION

- If any of the following conditions occur, we recommend that you have the ABS system repaired at the first available opportunity by vour SUBARU dealer.
  - The warning light does not illuminate when the ignition switch is turned to the "ON" position.
  - The warning light illuminates when the ignition switch is turned to the "ON" position, but it does not turn off even when the vehicle speed exceeds approximately 25 mph (40 km/h).
  - The warning light illuminates during driving.
- When the warning light is on (and the brake system warning light is off), the ABS function shuts down. However, the conventional brake system continues to operate normally.

The ABS warning light illuminates together with the brake system warning light if the EBD system malfunctions. For further details of the EBD system malfunction warning, refer to "Electronic Brake Force Distribution (EBD) system warning" \$\ins 3-17\$.

## **NOTE**

If the warning light behavior is as described in the following conditions, the ABS system may be considered normal.

- The warning light illuminates when the ignition switch is turned to the "ON" position and turns off approximately 2 seconds after the engine has started.
- The warning light illuminates right after the engine is started but turns off immediately, remaining off.
- The warning light remains illuminated after the engine has been started, but it turns off when the vehicle speed reaches approximately 25 mph (40 km/h).
- The warning light illuminates during driving, but it turns off immediately and remains off.

When driving with an insufficient battery voltage such as when the engine is jump started, the ABS warning light may illuminate. This is due to the low battery voltage and does not indicate a malfunction.

When the battery becomes fully charged, the light will turn off.

# ■ Brake system BR warning light (red)

BRAKE / **(!)** 

# **WARNING**

- Driving with the brake system warning light on is dangerous. This indicates your brake system may not be working properly. If the light remains illuminated, have the brakes inspected by a SUBARU dealer immediately.
- If at all in doubt about whether the brakes are operating properly, do not drive the vehicle. Have your vehicle towed to the nearest SUBARU dealer for repair.

This light has the following functions.

## ▼ Parking brake warning

The light illuminates with the parking brake applied while the ignition switch is in the "ON" position. It turns off when the parking brake is fully released.

## **▼** Brake fluid level warning

This light illuminates when the brake fluid level has dropped to near the "MIN" level

of the brake fluid reservoir with the ignition switch in the "ON" position and with the parking brake fully released.

If the brake system warning light should illuminate while driving (with the parking brake fully released and with the ignition switch positioned in "ON"), it could be an indication of leaking of brake fluid or worn brake pads. If this occurs, immediately stop the vehicle at the nearest safe place and check the brake fluid level. If the fluid level is below the "MIN" mark in the reservoir, do not drive the vehicle. Have the vehicle towed to the nearest SUBARU dealer for repair.

# ▼ Electronic Brake Force Distribution (EBD) system warning

The brake system warning light also illuminates if a malfunction occurs in the EBD system. In that event, it illuminates together with the ABS warning light.

The EBD system may be malfunctioning if the brake system warning light and ABS warning light illuminate simultaneously during driving.

Even if the EBD system fails, the conventional braking system will still function. However, the rear wheels will be more prone to locking when the brakes are applied harder than usual and the vehicle's motion may therefore become some-

what harder to control.

If the brake system warning light and ABS warning light illuminate simultaneously, take the following steps.

- 1. Stop the vehicle in the nearest safe, flat place.
- 2. Shut down the engine, apply the parking brake and then restart it.
- 3. Release the parking brake. If both warning lights turn off, the EBD system may be malfunctioning. Drive carefully to the nearest SUBARU dealer and have the system inspected.
- 4. If both warning lights illuminate again and remain illuminated after the engine has been restarted, shut down the engine again, apply the parking brake, and check the brake fluid level.
- 5. If the brake fluid level is not below the "MIN" mark, the EBD system may be malfunctioning. Drive carefully to the nearest SUBARU dealer and have the system inspected.
- 6. If the brake fluid level is below the "MIN" mark, DO NOT drive the vehicle. Instead, have the vehicle towed to the nearest SUBARU dealer for repair.

# Low fuel warning light



The low fuel warning light illuminates when the tank is nearly empty, at approxi-

mately 2.6 US gal (10.0 liters, 2.2 lmp gal). It only operates when the ignition switch is in the "ON" position.



## A CAUTION

Promptly put fuel in the tank whenever the low fuel warning light illuminates. Engine misfires as a result of an empty tank could cause damage to the engine.

## NOTE

This light does not turn off unless the tank is replenished up to an internal fuel quantity of approximately 4.5 US gal (17 liters, 3.7 lmp gal).

Hill start assist warning light/Hill start assist OFF indicator light



While the engine is running, if there are any malfunctions in the Hill start assist system, the warning light will illuminate.



When the Hill start assist warning light illuminates, have the vehicle

inspected at an authorized SUBARU dealer.

## **▼** Hill start assist OFF indicator light

While the Hill start assist system is deactivated, the Hill start assist OFF indicator light illuminates continuously to inform the driver that the Hill start assist system is not operational.

# ■ Door open warning light



The warning light illuminates if any door, the rear gate (5-door models) or trunk lid (4-door models) is not fully closed. This function is effective even if the ignition switch is in the "LOCK" (off) or "ACC" position, or the key is removed from the ignition switch.

Always make sure this light is not illuminated before you start to drive.

# ■ All-Wheel Drive warning light (CVT models)

This light blinks if the vehicle is driven with tires of differing diameters fitted on the wheels or with an excessively low air pressure in any of the tires.

# **A** CAUTION

Continuing to drive with the AWD warning light blinking can damage the powertrain. If the AWD warning light starts to blink, promptly park in a safe place and check whether the tires have differing diameters and whether any of the tires has an excessively low inflation pressure.

# Power steering warning light



This warning light illuminates when the ignition switch is turned to the "ON" position and turns off after the engine has started. This indicates that the warning system is working properly.

While the engine is running, this warning light illuminates when a malfunction has been detected in the electric power steering system.



When the power steering warning light is illuminated, there may be more resistance when the steering wheel is operated. Drive carefully to the nearest SUBARU dealer and

have the vehicle inspected immediately.

## **NOTE**

If the steering wheel is operated in the following ways, the power steering control system may temporarily limit the power assist in order to prevent the system components, such as the control computer and drive motor, from overheating.

- The steering wheel is operated frequently and turned sharply while the vehicle is maneuvered at extremely low speeds, such as while frequently turning the steering wheel during parallel parking.
- The steering wheel remains in the fully turned position for a long period of time.

At this time, there will be more resistance when steering. However this is not a malfunction. Normal steering force will be restored after the steering wheel is not operated for a while and the power steering control system has an opportunity to cool down. However, if the power steering is operated in a non-standard way which causes power assist limitation to occur too frequently, that may result in a malfunc-

tion of the power steering control system.

Vehicle Dynamics Control warning light/ Vehicle Dynamics Control operation indicator light



▼ Vehicle Dynamics Control warning light



The Vehicle Dynamics Control system provides its ABS control through the electrical circuit of the ABS system. Accordingly, if the ABS is inoperative, the Vehicle Dynamics Control system becomes unable to provide ABS control. As a result, the Vehicle Dynamics Control system also becomes inoperative, causing the warning light to illuminate. Though both the Vehicle Dynamics Control and ABS systems are inoperative in this case, the ordinary functions of the brake system are still available. You will be safe while driving with this condition, but drive carefully and have your vehicle checked at a SUBARU dealer as soon as possible.

## NOTE

- If the electrical circuit of the Vehicle Dynamics Control system itself malfunctions, the warning light only illuminates. At this time, the ABS (Anti-lock Brake System) remains fully operational.
- The warning light illuminates when the electronic control system of the **ABS/Vehicle Dynamics Control system** malfunctions.

The Vehicle Dynamics Control system is probably inoperative under any of the following conditions. Have your vehicle checked at a SUBARU dealer immediately.

- The warning light does not illuminate when the ignition switch is turned to the "ON" position.
- The warning light illuminates while the vehicle is running.

## NOTE

If the warning light behavior is as described in the following examples, the Vehicle Dynamics Control system may be considered normal.

• The warning light illuminates when

the ignition switch is turned to the "ON" position and turns off approximately 2 seconds after the engine has started.

- The warning light illuminates right after the engine is started but turns off immediately, remaining off.
- The warning light illuminates after the engine has started and turns off while the vehicle is subsequently being driven.
- The warning light illuminates during driving, but it turns off immediately and remains off.
- The warning light illuminates when the engine has stalled and continues to illuminate after the engine has been restarted. However, it will turn off once the vehicle starts moving.

## **▼** Vehicle Dynamics Control operation indicator light

The indicator light flashes during activation of the skid suppression function and during activation of the traction control function.

## NOTE

• The light may remain illuminated for a short period of time after the engine has been started, especially in cold weather. This does not indicate the existence of a problem. The light should turn off as soon as the engine has warmed up.

 The indicator light illuminates when the engine has developed a problem and the CHECK ENGINE warning light/ malfunction indicator light is on.

The Vehicle Dynamics Control system is probably malfunctioning under the following condition. Have your vehicle checked at a SUBARU dealer as soon as possible.

• The light does not turn off even after the lapse of several minutes (the engine has warmed up) after the engine has started.

# ■ Vehicle Dynamics Control OFF indicator liaht



The light illuminates when the Vehicle Dynamics Control OFF switch is pressed to deactivate the Vehicle Dynamics Control system.

The Vehicle Dynamics Control system is probably malfunctioning under any of the following conditions. Have your vehicle checked at a SUBARU dealer immediately.

 The light does not illuminate when the ignition switch is turned to the "ON" position.

• The light does not turn off even once several seconds have elapsed after the ignition switch has been turned to the "ON" position.

# ■ Security indicator light



This indicator light shows the status of the alarm system. It also indicates operation of the immobilizer system.

## **▼** Alarm system

It blinks to show the driver the operational status of the alarm system. For detailed information, refer to "Alarm system" \$2-10.

## Immobilizer system

The security indicator light starts blinking in the following conditions.

- approximately 60 seconds after the ignition switch is turned from the "ON" position to the "ACC" or "LOCK" (off) position
- immediately after the ignition key is pulled out

If the indicator light does not blink in the above conditions, it may indicate that immobilizer system may be malfunctioning. Contact your nearest SUBARU dealer immediately.

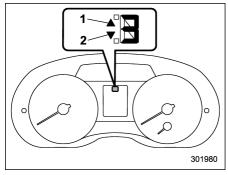
In the event that an unauthorized key (for

example, an unauthorized duplicate) is used, the security indicator light illuminates. For details about the immobilizer system, refer to "Immobilizer" \$\alpha\$2-2.

## NOTE

- The security indicator light remains off in the following conditions. This is normal and does not indicate a malfunction.
  - while the engine is running
  - for approximately 60 seconds after the ignition switch is turned from the "ON" position to the "ACC" or "LOCK" (off) position
- Even if the security indicator light blinks irregularly or its fuse blows (the light does not blink if its fuse is blown), the immobilizer system will function normally.

# ■ Select lever/gear position indicator (CVT models)



- Upshift indicator
- Downshift indicator

This indicator shows the position of the select lever.

For models with manual mode, when the manual mode is selected, the gear position indicator (which shows the current gear selection) and the upshift/downshift indicator light up. Refer to "Continuously variable transmission" @7-19.

# ■ Turn signal indicator liahts



These lights show the operation of the turn signal or lane change signal.

If the indicator lights do not blink or blink rapidly, the turn signal bulb may be burned out. Replace the bulb as soon as possible. Refer to "Replacing bulbs" \$\tilde{g}\$11-37.

# ■ High beam indicator light



This light shows that the headlights are in the high beam mode.

This indicator light also illuminates when the headlight flasher is operated.

# Cruise control indicator light (if equipped)



This light illuminates when the cruise control main button is pressed to activate the cruise control function. For details. refer to "To set cruise control" \$\tilde{\pi} 7-39.

# **CAUTION**

If the CHECK ENGINE warning light/ malfunction indicator light illuminates, the cruise control indicator light flashes at the same time. At this time, avoid driving at high

speed and have your vehicle inspected at a SUBARU dealer as soon as possible.

# Cruise control set indicator light (if equipped)



This light illuminates when vehicle speed has been set to use the cruise control function. Refer to "To set cruise control" **7-39**.

# Automatic headlight beam leveler warning light (models with HID headlights)



This light illuminates when the automatic headlight beam leveler does not operate normally.

If this light illuminates while driving or does not turn off approximately 3 seconds after turning the ignition switch to the "ON" position, have your vehicle inspected at vour SUBARU dealer.

## Front fog light indicator light (if equipped)



This indicator light illuminates while the front fog lights are illuminated.

### ■ Headlight indicator EDQE light (if equipped)

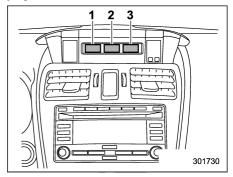
This indicator light illuminates under the following conditions.

- when the light switch is turned to the "≣oo≡" or "≝O" position
- when the light control switch is in the "AUTO" position and the headlights illuminate automatically

# Information display (if equipped)

## NOTE

For models with color multi function display, refer to "Multi function display" \$\tilde{\pi}\$3-28.

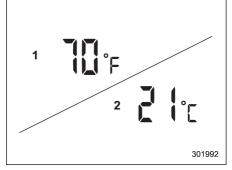


- 1) Outside temperature indicator
- 2) Driving information display
- 3) Clock

With the ignition switch in the "ACC" position, the clock appears on the display.

With the ignition switch in the "ON" position, the outside temperature indicator, driving information display and clock all appear on the display.

# Outside temperature indicator



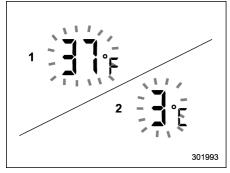
- 1) U.S.-spec. models
- 2) Except U.S.-spec. models

The outside temperature indicator shows the outside temperature in a range from -40 to 122°F (-40 to 50°C).

The indicator can give a false reading under any of the following conditions.

- When there is too much sun.
- During idling; while running at low speeds in a traffic jam; when the engine is restarted immediately following a shutdown.
- When the actual outside temperature falls outside the specified indicator range.

## ▼ Road surface freeze warning indication



- 1) U.S.-spec. models
- 2) Except U.S.-spec. models

When the outside temperature drops to 37°F (3°C) or lower, the temperature indication flashes to show that the road surface may be frozen.

If the outside temperature drops to  $37^{\circ}F$  ( $3^{\circ}C$ ) or lower while the display is giving an indication other than the outside temperature, the display switches to the outside temperature indication and flashes for 5 seconds before returning to its original indication.

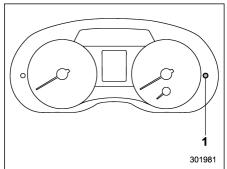
If the display is already indicating an outside temperature of 37°F (3°C) or lower when the ignition switch is turned to the

"ON" position, the indication does not flash.

## NOTE

The outside temperature indication may differ from the actual outside temperature. The road surface freeze warning indication should be treated only as a guide. Be sure to check the condition of the road surface before driving.

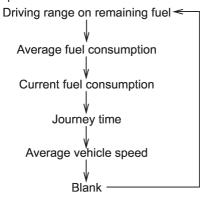
# ■ Driving information display



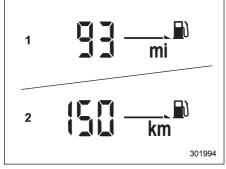
1) Information display selection knob

With the ignition switch in the "ON" position, each successive press of the information display selection knob switches the display in the following

sequence.



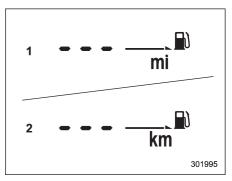
## ▼ Driving range on remaining fuel



- ) U.S.-spec. models
- 2) Except U.S.-spec. models

The driving range indicates the distance that can be driven taking into account the amount of fuel remaining in the tank and the average rate of fuel consumption.

When the low fuel warning light illuminates, the driving range display flashes for 5 seconds. (The display first switches to the driving range value if a different value was previously displayed.)



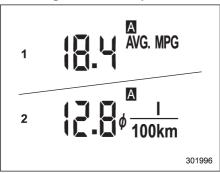
- 1) U.S.-spec. models
- 2) Except U.S.-spec. models

If the driving range is shown as "---", there is only a tiny amount of fuel left in the tank. You must refuel the vehicle immediately.

## NOTE

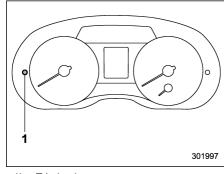
The driving range on remaining fuel is only a guide. The indicated value may differ from the actual driving range on remaining fuel, so you must immediately fill the tank when the low fuel warning light illuminates.

## **▼** Average fuel consumption



- 1) U.S.-spec. models
- 2) Except U.S.-spec. models

This display shows the average rate of fuel consumption since the trip meter was last reset.



1) Trip knob

Pressing the trip knob toggles the display between the average fuel consumption corresponding to the A trip meter display and the average fuel consumption corresponding to the B trip meter display.

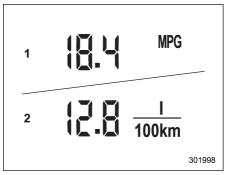
When either of the trip meter displays is reset, the corresponding average fuel consumption value is also reset.

## NOTE

- The indicated values vary in accordance with changes in the vehicle's running conditions. Also, the indicated values may differ slightly from the actual values and should thus be treated only as a guide.
- When either trip meter display is reset, the average fuel consumption

corresponding to that trip meter display is not shown until the vehicle has subsequently covered a distance of 1 mile (or 1 km).

## **▼** Current fuel consumption



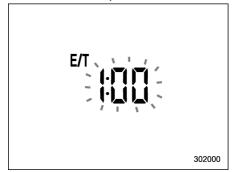
- 1) U.S.-spec. models
- 2) Except U.S.-spec. models

This indication shows the rate of fuel consumption at the present moment.

## **▼** Journey time



The journey time shows the time that has elapsed since the ignition switch was turned to the "ON" position.



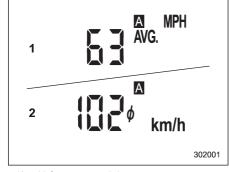
The journey time indication flashes each time a complete hour has elapsed. If the

display is giving a reading other than the journey time, the display switches to the journey time, flashes for 5 seconds, and returns to its original reading each time a complete hour has elapsed.

## NOTE

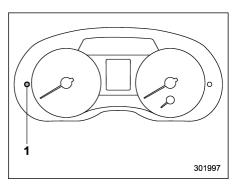
The journey time is reset when the ignition switch is turned to the "LOCK" (off) position. It is also reset if the ignition switch is turned to the "LOCK" (off) or "ACC" position prior to restarting of the engine.

## ▼ Average vehicle speed



- ) U.S.-spec. models
- 2) Except U.S.-spec. models

This display shows the average vehicle speed since the trip meter was last reset.



1) Trip knob

Pressing the trip knob toggles the display between the average vehicle speed corresponding to the A trip meter display and the average vehicle speed corresponding to the B trip meter display.

When either of the trip meter displays is reset, the corresponding average vehicle speed value is also reset.

## NOTE

When either trip meter display is reset, the average vehicle speed corresponding to that trip meter display is not shown until the vehicle has subsequently covered a distance of 1 mile (or 1 km).

# ▼ Turn off display of driving information display

The driving information display can be turned off.

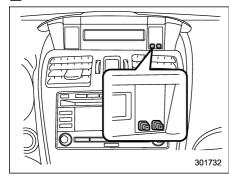
To turn off the display, turn the ignition switch to the "LOCK" (off) position and press the "+" button adjacent to the clock display for approximately 5 seconds. Then, the driving information display and the clock display will blink for 3 seconds to notify you that the driving information display has been turned off.

To restore the driving information display, once again press the "+" button for approximately 5 seconds.

## NOTE

- The initial display setting of the driving information display has been set to operational at the time of shipment from the factory.
- The average fuel consumption and average vehicle speed are calculated even while the driving information display is not displayed.
- Even if you turn off the driving information display, the display will automatically turn on when the battery voltage is disconnected and then reconnected for battery replacement or fuse replacement.

## ■ Clock



To adjust the time shown by the clock, press the "+" button or "-" button. If you press the "+" button, the indicated time will change in one-minute increments. If you press the "-" button, the indicated time will change in one-minute decrements. If you keep the button pressed, the rate at which the indicated time changes will speed up.

The clock can be set to 12-hour or 24-hour clock displays. Perform the following procedure to switch the display format.

- 1. Place the ignition switch in the "LOCK" (off) position.
- 2. Press and hold the "-" button that is located near the clock display for approximately 5 seconds. The clock display will then start to flash.

- 3. While the clock display is flashing, press and hold the "+" button for approximately 2 seconds. The clock format will then change.
- 4. The clock display will continue to flash for approximately 3 seconds to inform you that the clock display has been changed. If you want to change the clock display again, press and hold the "+" button for approximately 2 seconds while the clock display is flashing.

# Multi function display

# Models without multi function display

## **NOTE**

- For models with information display (black and white), refer to "Information display" \$\alpha 3-23\$.
- When the vehicle is in motion, certain functions and selections may not be available.

The U.S.-spec models are not equipped with the multi function display. The other models may be equipped with the multi function display or not, depending on the model.

# **■** Safety precautions

# **WARNING**

Always pay adequate attention to safe driving when operating the multi function display while the vehicle is in motion. When operation of the multi-function display is disturbing your awareness and ability to concentrate on driving, stop the vehicle in a safe place before performing operations on the screen. Also, do not concentrate on the display while driving. Doing so may cause you to look away from the road and could result in an accident.

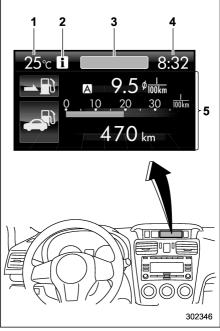
## ■ Features

The multi function display has the following functions.

Description	Page
Displays useful messages, such as warning information, etc.	3-31
Displays basic screens (e.g. fuel consumption screen, etc.)	3-32
Sets and adjusts maintenance notification	3-57
Registers driving history	3-61
Sets and customizes car operation	3-62

Also, the multi function display can also be used to set and initialize the multi function display itself.

## Locations



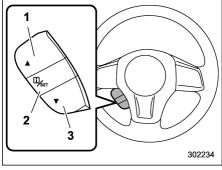
## Multi function display

- Outside temperature indicator
- Information reminder
- Top display (For the display setting, refer to "Top display setting" 

  -3-50.)
- 4) Clock

Driving information display (For the displayed contents, refer to "Basic screens"
 3-32.)

# ■ Basic operation



## Control switch

- 1) Up (select)
- 2) Set (enter)
- ) Down (select)

By operating "\( \bigcup \)" or "\( \bigcup \)" of the control switch, the screens and selection items can be switched. When the "\( \bigcup \)/SET" switch is pulled toward you, the item can be selected and set.

## ■ Welcome screen

When the door is unlocked and the driver's door is opened, the welcome screen will appear for a short time.

- CONTINUED -





#### **NOTE**

- The welcome screen will disappear when the ignition switch is turned to the "ON" position while the welcome screen is displayed.
- If any of the doors (including the

rear gate) is opened while the welcome screen is displayed, the door ajar warning will appear.

- The welcome screen can be set to on or off. For details, refer to "Bypass screen setting" \$\tilde{g}\$ 3-55.
- For a certain period of time after the welcome screen has once appeared, it may not appear again even when the driver's door is opened again. This does not indicate a malfunction.

# ■ Ending screen



When the ignition switch is turned to the "LOCK" (off) position, the "Goodbye" screen will appear for several seconds.

#### ■ Self-check screen

When the ignition switch is turned to the "ON" position, the vehicle self-check is performed. The screens corresponding to the following items will appear one after another for several seconds each.



- Windshield washer fluid: Checks the level of windshield washer fluid.
- Brake fluid: Checks the level of brake fluid.
- Engine oil: Checks the interval of engine oil replacement.
- Oil filter: Checks the interval of oil filter replacement.
- Tires: Checks the interval of tire rotation.
- Inspection and maintenance: Checks the interval of inspection and maintenance.

When the checks are performed, the color of the icon corresponding to the checked item will turn green.

If there is no warning message, the self-check is complete without notification.



#### **Example of notification**

If there is a warning message or a maintenance notification, the color of the icon corresponding to the item will turn yellow and the warning message or the maintenance notification will be displayed. Take the appropriate actions based on the messages indicated.

#### NOTE

- The self-check screen can be set to on or off. For details, refer to "On/Off setting" \$\alpha 3-59\$.
- After performing the maintenance, change the setting of the corresponding maintenance item. For details, refer to "Maintenance settings" \$\tilde{\sigma}\$-3-57.

- The maintenance notification screen will be displayed under either of the following conditions.
  - The period of time remaining until the registered notification date is 15 days or less.
  - The total driving distance remaining until the registered notification distance is approximately 311 miles (500 km) or less.
- The maintenance notification screen will be displayed until either of the following conditions is satisfied.
  - The period of time passed after the registered notification date is 15 days or more.
  - The total distance driven after the registered notification distance is approximately 311 miles (500 km) or more.

# ■ Interruption screen



#### Warning information (display example)

Useful messages, such as reminder information, vehicle information, warning information, etc. may interrupt the current screen and appear on the display accompanied by a beep. Take proper action according to the message.

The warning screen will return to the original screen after a few seconds. If the warning screen can be displayed again, an information reminder "[]" will appear on the upper left part of the display. To recall the message marked with "[]" on the display, pull the "[]/SET" switch on the steering wheel toward you.

#### ■ Basic screens

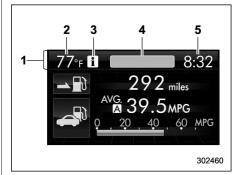
#### ▼ Basic screen items

These are the basic screens of the multi function display.

Page
3-32
3-33
3-34
3-34
3-35
3-36
3-37
3-37

By operating the "\( \\_\)" or "\( \\_\)" switch on the steering wheel, you can switch the screen that is always displayed. Also, when the "\( \\_\)"/SET" switch is pulled and held, the selection screen can be displayed. For details about the selection screen, refer to "Selection screen" \( \\_\)" 3-38.

#### **▼** Information bar



- 1) Information bar
- Outside temperature indicator
- 3) Information reminder
- 4) Top display
- 5) Clock

While the ignition switch is in the "ACC" or "ON" position, the outside temperature indicator, clock, etc. will be shown on the information bar.

#### **▽** Outside temperature indicator

This displays the outside temperature between  $-40^{\circ}F$  ( $-40^{\circ}C$ ) and  $122^{\circ}F$  ( $50^{\circ}C$ ).



Icy road surface warning screen

When the outside temperature becomes 37°F (3°C) or less, the icy road surface warning screen interrupts to inform the driver that the road surface may be frozen.

#### NOTE

- The outside temperature indicator shows the temperature around the sensor. Therefore, the temperature indication may differ from the actual outside air temperature.
- The icy road surface warning screen should be treated only as a guide. Be sure to check the condition of the road surface before driving.
- Once the icy road surface warning screen is displayed, it will not be displayed again unless the ignition

switch is turned to the "ACC" or "ON" position after it has been turned to "LOCK" (off) position.

#### **▽** Information reminder

The screen returns to the original screen several seconds after the interruption screen has been displayed. If the interruption screen can be displayed once more even after the original screen has appeared, an information reminder should be displayed. For details about the interruption screen, refer to "Interruption screen" \$\tilde{x}\$-3-31.

#### **▽** Top display

One of the following items can be displayed on the top display.

- Average fuel consumption corresponding to the driving distance of each trip meter
- Current fuel consumption (This may not be displayed when driving at a low speed.)
- Driving range on remaining fuel

For details about the setting of the top display, refer to "Top display setting" \$\sigma 3-50.

#### NOTE

The driving range on the remaining fuel is calculated using the average fuel consumption of the last 19 miles (30 km) driven. This value may be different from the values calculated using the average fuel consumption corresponding to the driving distance of each trip meter or the current fuel consumption.

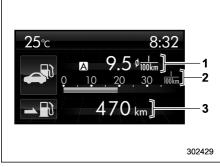
#### $\nabla$ Clock

The clock can be displayed in either 12-hour display or 24-hour display. For details about the setting, refer to "Current date and time setting" \$\tilde{\sigma}\$3-40.

## **NOTE**

If the vehicle battery is disconnected, the clock shown in the information bar will be reset. Set the time again after the vehicle battery is connected. For details about the setting, refer to "Top display setting" \$\tilde{\sigma}\$3-50.

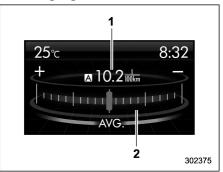
## **▼** Fuel consumption screen



- Average fuel consumption corresponding to the driving distance of each trip meter
- 2) Current fuel consumption
  - 3) Driving range on remaining fuel

The displayed location can be customized. For details, refer to "Fuel consumption screen setting" \$\tilde{\sigma} 3-51.

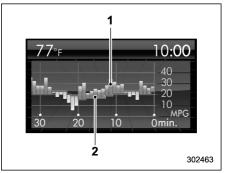
#### ▼ ECO gauge screen



- Average fuel consumption corresponding to the driving distance of each trip meter
- 2) ECO gauge

The gauge pointer shows the difference between the current fuel consumption and the average fuel consumption that is displayed on the center part of the screen. If the gauge pointer moves toward the green side, this indicates better fuel efficiency.

## **▼** ECO history screen



- Average fuel consumption per unit time (bar graph)
- Average fuel consumption corresponding to the driving distance of each trip meter (red line)

This screen displays the fuel economy history for the vehicle using a bar graph.

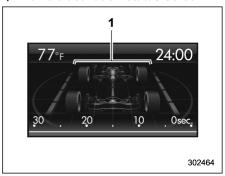
The horizontal scale represents the past time range and the vertical scale represents the fuel consumption. The green bars show driving with good fuel economy and the yellow bars show driving with poor fuel economy.

The time range of the history can be set. The width of the bar graph is adjusted as follows depending on the set time range.

Time range	Width of bar graph
30 minutes	1 minute
60 minutes	2 minutes
120 minutes	4 minutes

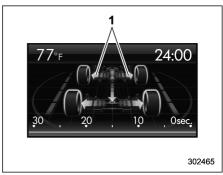
For details about the setting, refer to "Economy history setting" \$\sigma 3-52\$.

#### **▼** Vehicle activation status screen



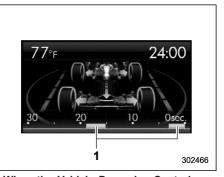
#### When the vehicle stops

Steering axle



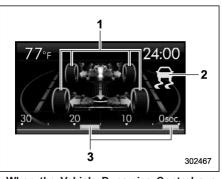
When the vehicle is being driven regularly

) Power train (illuminated in blue)



When the Vehicle Dynamics Control system is being activated: the tires illuminate in yellow.

History of Vehicle Dynamics Control system activation



When the Vehicle Dynamics Control system has been activated: the tires remain illuminated in yellow while the Vehicle Dynamics Control System is activated.

- 1) Activation status of the ABS (Anti-lock Brake System)
- 2) Vehicle Dynamics Control system operating indicator (flashing in yellow)
- History of Vehicle Dynamics Control system activation

This screen displays the following vehicle information.

- steering angle and driving wheel status
- activation status of the ABS (Anti-lock Brake System)
- activation status of the Vehicle Dynamics Control system

While driving, the vehicle wheels are illuminated in blue and the driving direc-

- CONTINUED -

tion is represented using an animation of the traffic lane.

If the ABS is activated, all of the vehicle's wheels will be illuminated in yellow and the length of operation in seconds and the number of activations will be displayed in the bar indicator, located on the lowermost part of the display.

If the Vehicle Dynamics Control system is activated, the activated vehicle wheels will be illuminated in yellow and the operating indicator "§" will appear on the upper right part of the display. Also, the length of operation in seconds and the number of activations will be displayed in the bar indicator.

## **▼** Triple meter screen



Triple meter screen (display example)

This screen displays up to three optional pieces of information that can be selected from the following items.

The items shown in the triple meter screen can be changed. For details, refer to "Triple meter setting" \$\tilde{x}^3\$-53.

Item	Details		
<u>\$</u>	Average vehicle speed (Average vehicle speed for the entire driving time from when the trip meter was reset)		
ODO	Lifetime fuel consumption		
E.	Engine oil temperature		
	Accelerator opening ratio		
	Journey time (the time that has elapsed since the ignition switch was turned to the "ON" position)		
	Journey distance (the distance that has been driven since the ignition switch was turned to the "ON" position)		
	Average fuel consumption for the entire driving distance from when the ignition switch was turned to the "ON" position		

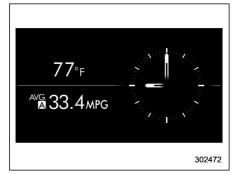
#### ▼ Guidance screen



When the "T/SET" switch is pulled and held, the selection screen can be displayed.

The displayed contents can be set or customized from the selection screen. For details, refer to "Selection screen" \$\sigma 3-38\$.

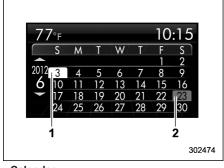
#### **▼** Clock/calendar screen



Clock (analog format)



Clock (digital format)



#### Calendar

- 1) Today's date
- 2) Birthday/Anniversary

In addition to the clock/calendar, the outside temperature and average fuel consumption can also be displayed.

You can select clock (analog format), clock (digital format) or calendar. The clock/calendar can also be set so that it is not displayed. For details, refer to "Clock screen setting" \$\textit{\$\textit{\$\sigma}\$}\$3-54.

# **■** Selection screen

When the "∏/SET" switch is pulled and held, the setting screen for each menu can be displayed. Select the preferred menu by operating the "♠" or "▼" switch.

Top menu	Menu option	Description		Page
Date	Date	Set and adjust the time and date. 12h or 24	Set and adjust the time and date. 12h or 24h format can be selected.	
	Birthday	Set a birthday.		3-41
	Anniversary	Set an anniversary day.		3-43
	Daylight Saving Time	Turn the daylight saving time on or off		3-46
	Go Back Return to the top menu.			_
Display	Brightness	Adjust the brightness.	+5 ↔ −5	3-47
	Contrast	Adjust the contrast.	+5 ↔ −5	3-48
	Screen Off	Turn the screen on or off.	On or Off	3-48
	Веер	Adjust the beep sound volume.	High, Low or Off	3-49
	Go Back	Return to the top menu.		_
Screen Setting	Top Display	Set and customize the top display information contents.	Avg Cons, Inst Cons, Range or Off	3-50
	Cons	Customize the fuel consumption information display.		3-51
	Eco History	Set and customize the time of logging fuel consumption history.	30 min, 60 min or 120 min	3-52
	Triple Meter	Set and customize the triple meter.		3-53
	Clock	Select the clock format.	Analog, Digital, Calendar or Off	3-54
	Bypass Screen	Set the bypass screen for each item.	On or Off	3-55
	Languages	Select the display language.	English or French	3-56
	Go Back	Return to the top menu.		_

Top menu	Menu option	Description		Page
Maintenance	Engine Oil	Set and adjust the oil maintenance notification date.		3-58
	Oil Filter	Set and adjust the oil filter maintenance notification date.		3-59
	Tires	Set and adjust the tire maintenance notification date.		3-59
	Maintenance Schedule	Set and adjust the vehicle maintenance notification date.		3-59
	On/Off	Turn on or off the self-check screen that is activated when the ignition switch is turned to the "ON" position.	On or Off	3-59
	Clear All Settings	Clear all settings for maintenance items.	Yes or No	3-60
	Go Back	Return to the top menu.		_
Driving History	Set	Register and overwrite the driving record.		3-61
	Go Back	Return to the top menu.		_
Car Setting	Audible Signal	Set the audible signal.	On or Off	3-62
	Hazard Warning Flasher	Set the hazard warning flasher.	On or Off	3-64
	Defogger	Set and customize the operation of the defogger.	15 minutes or Continuous	3-65
	Interior Light	Set and customize the interior light off delay timer.	10, 20, 30 seconds or Off	3-66
	Auto Light Sensor (models with auto on/off head- lights)	Set and customize the sensitivity of the auto light sensor.	Low, Mid, High or Max	3-67
	Go Back	Return to top menu.		_
nitialize	Reset to Defaults	Reset all settings to the default settings.	Yes or No	3-68
	Lifetime Fuel Consumption Reset	Clear logged lifetime fuel consumption data.	Yes or No	3-69
	Go Back	Return to the top menu.		_
Go Back	_	Return to the top menu.		_

# ■ Date and time settings

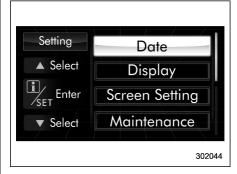
The items in the date and time settings can be set. To change the items, operate the "\( \Lambda \)" or "\( \nabla \)" switch.

#### NOTE

- The "Date" item must be set to display the "Birthday", "Anniversary" and notifications for vehicle maintenance.
- The "Birthday" and "Anniversary" items can be entered after the "Date" item has been set.
- Dates that do not exist in the Gregorian calendar cannot be set (for example, April 31).
- If your vehicle is equipped with the genuine SUBARU navigation system, the clock of navigation system must be set separately.

#### **▼** Preparation for date setting

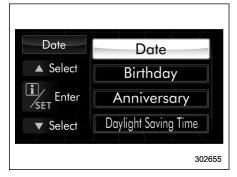
- 1. Turn the ignition switch to the "ON" position.
- 2. Pull and hold the "j/SET" switch toward you to show the selection screen.



3. After the selection screen is displayed, operate the "▲" or "▼" switch to show the "Date" item. Then, pull the "[]/SET" switch toward you.

#### **▼** Current date and time setting

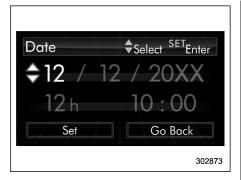
1. Perform the preparation steps according to "Preparation for date setting" \$\tilde{\sigma} 3-40.



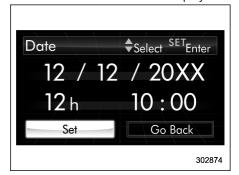
2. Operate the " $\blacktriangle$ " or " $\blacktriangledown$ " switch to select the "Date" item. Then pull the " $\boxed{1}$ ' SET" switch toward you.



3. Select the item to set by operating the "▲" or "▼" switch. Then pull the "①/SET" switch toward you.



4. Select a number by operating the "▲" or "▼" switch. Then pull the "∏/SET" switch toward you. When "12 h" is selected, the clock will be set to a 12-hour display. When "24 h" is selected, the clock will be set to a 24-hour display.



5. After entering the date and time, select "Set" by operating the "\nstar" switch and confirm the setting by pulling the "\frac{1}{3}/SET" switch toward you.



6. The system will notify you that the setting is complete.

## **▼** Birthday setting

1. Perform the preparation steps according to "Preparation for date setting" \$\sigma^3 - 40.



2. Operate the "▲" or "▼" switch to select the "Birthday" item. Then pull the "∏/SET" switch toward you.



3. Select the item to set by operating the "▲" or "▼" switch. Then pull the "∏/SET" switch toward you.

#### - CONTINUED -



- 4. The selected item will be shown.
  - Pull the "i]/SET" switch toward you to set the selected item.
  - If you want to select the other item, operate the "\( \Lambda \)" switch to go back to step 3.



5. Select numbers by operating the "▲" or "▼" switch. Then pull the "①/SET" switch toward you.



6. After entering the date by repeating step 5, you can enter the name.



- 7. Select characters by operating the " $\blacktriangle$ " or " $\blacktriangledown$ " switch. Then pull the " $\boxed{\mathbf{i}}$ ' SET" switch toward you.
  - You can select characters of the English alphabet (upper case characters and lower case characters are available), eleven symbols or blank spaces.
  - The word being edited will be displayed with an underline.



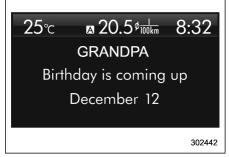
8. After entering the name by repeating step 7, select "Set" by operating the "\vec{v}" switch and confirm the setting by pulling the "\vec{1}/SET" switch toward you.



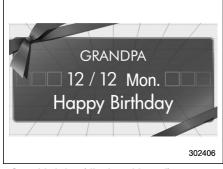
9. The system will notify you that the setting is complete.

#### **▽** If a birthday is approaching

If a birthday is approaching, the following screen will be displayed accompanied by a beep when the ignition switch has been turned to the "ON" position. This function can be set on or off. For details, refer to "Bypass screen setting" \$\infty\$3-55.



From 1 to 7 days prior to the birthday



On a birthday (displayed in red)

#### NOTE

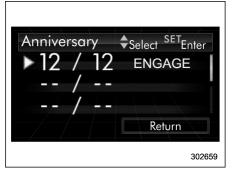
If "\_\_" is selected for either the "Month" or "Day" item instead of numbers, the birthday notification will be deactivated.

## **▼** Anniversary setting

Perform the preparation steps according to "Preparation for date setting" \$\tilde{\sigma}\$3-40.



2. Operate the "▲" or "▼" switch to select the "Anniversary" item. Then pull the "∏/SET" switch toward you.



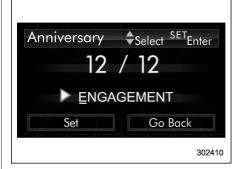
3. Select the item to set by operating the "▲" or "▼" switch. Then pull the "[]/SET" switch toward you.



- 4. The selected item will be shown.
  - Pull the "i SET" switch toward you to set the selected item.
  - If you want to select another item, operate the "▲" switch to go back to step 3.



5. Select numbers by operating the "▲" or "▼" switch. Then pull the "∏/SET" switch toward you.



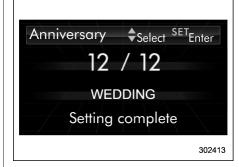
6. After entering the date by repeating step 5, you can enter the name.



- 7. Select characters by operating the "▲" or "▼" switch. Then pull the "⑴/SET" switch toward you.
  - You can select characters of the English alphabet (upper case characters and lower case characters are available), eleven symbols or blank spaces.
  - The word being edited will be displayed with an underline.



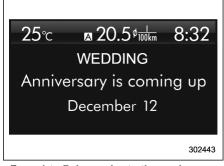
8. After entering the name by repeating step 7, select "Set" by operating the "\nspace" switch and confirm the setting by pulling the "\sqrt{1}/SET" switch toward you.



9. The system will notify you that the setting is complete.

#### **▽** If an anniversary is approaching

If an anniversary is approaching, the following screen will be displayed accompanied by a beep when the ignition switch has been turned to the "ON" position. This function can be set on or off. For details, refer to "Bypass screen setting" \$\textit{\$\textit{\$\textit{e}}\$} 3-55.



From 1 to 7 days prior to the anniversary



On an anniversary (displayed in orange)

#### NOTE

If " is selected for either the "Month" or "Day" item instead of numbers, the anniversary notification will be deactivated.

#### **▼** Clearing birthday or anniversary

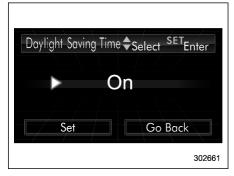
- 1. Perform the preparation steps according to "Preparation for date setting" \$\sigma 3-40\$ and display "Birthday" or "Anniversary" on the screen.
- 2. When " is selected for either the "Month" or "Day" item instead of numbers, the setting of "Birthday" or "Anniversary" will be cleared.

## **▼** Daylight saving time setting

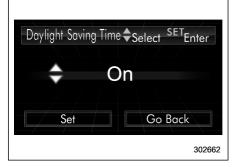
1. Perform the preparation steps according to "Preparation for date setting" 3-40.



2. Operate the "▲" or "▼" switch to select the "Daylight Saving Time" item. Then pull the "I/SET" switch toward you.



3. The current setting will be displayed. Pull the "i/SET" switch toward you to enter the selection mode.



4. Select "On" or "Off" by operating the "▲" or "▼" switch. Then pull the "¶\SET" switch toward you.



5. Select "Set" by operating the "\" switch, and confirm the setting by pulling the "\" | SET" switch toward you.

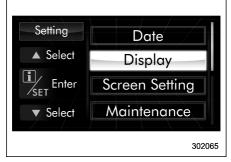


6. The system will notify you that the setting is complete.

# Image quality and volume settings

The items in the image quality and volume settings can be set. To change the items, operate the "▲" or "▼" switch.

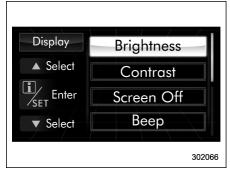
- ▼ Preparation for image quality and volume settings
- 1. Turn the ignition switch to the "ON" position.
- 2. Pull and hold the "IVSET" switch toward you to show the selection screen.



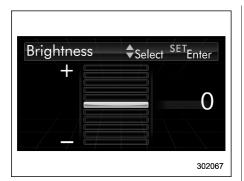
3. After the selection screen is displayed, operate the "▲" or "▼" switch to show the "Display" item. Then, pull the "[]/SET" switch toward you.

## **▼** Brightness setting

1. Perform the preparation steps according to "Preparation for image quality and volume settings" \$\mathscr{-}3-47.



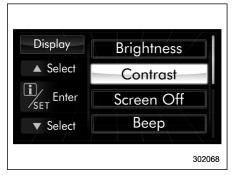
2. Operate the "▲" or "▼" switch to select the "Brightness" item. Then pull the "∐/SET" switch toward you.



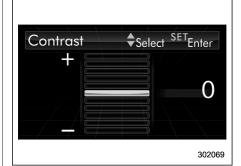
3. Select a brightness level by operating the "▲" or "▼" switch, and confirm the setting by pulling the "[]/SET" switch toward you.

## **▼** Contrast setting

1. Perform the preparation steps according to "Preparation for image quality and volume settings" \$\textit{\$\textit{\$\alpha\$}}\$3-47.



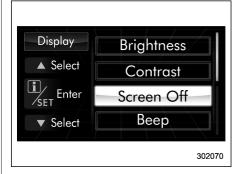
2. Operate the "▲" or "▼" switch to select the "Contrast" item. Then pull the "∏/SET" switch toward you.



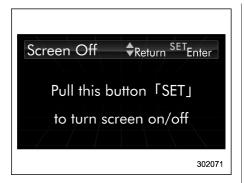
3. Select a contrast level by operating the "▲" or "▼" switch, and confirm the setting by pulling the "¶/SET" switch toward you.

## ▼ Screen OFF setting

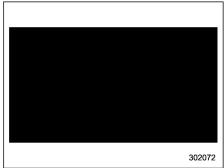
1. Perform the preparation steps according to "Preparation for image quality and volume settings" \$\infty\$3-47.



2. Operate the " $\blacktriangle$ " or " $\blacktriangledown$ " switch to select the "Screen OFF" item. Then pull the "[]/SET" switch toward you.



3. Pull the "[]/SET" switch once more toward you.



4. The screen is turned off.

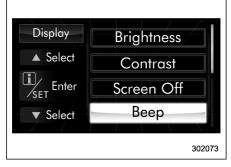
## Restoring the screen

When the "▲", "▼" or "[i/SET" switch is

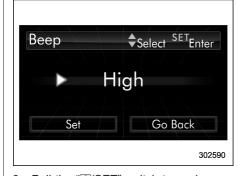
pulled toward you after the ignition switch is turned to the "ON" position, the screen will be restored. The screen will be restored with the basic screen that was displayed when the screen was turned off. While the screen is off, a warning message will be displayed if necessary, but other screens will not be displayed.

## ▼ Beep volume setting

1. Perform the preparation steps according to "Preparation for image quality and volume settings" \$\ins 3-47\$.



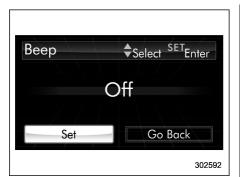
Operate the "▲" or "▼" switch to select the "Beep" item. Then pull the "[]/ SET" switch toward you.



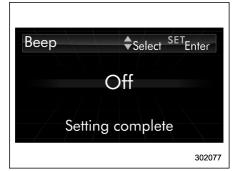
3. Pull the "i/SET" switch toward you.



4. Select an item by operating the "▲" or "▼" switch. Then pull the "∏/SET" switch toward you.



5. Select "Set" by operating the "\[\ni\]" switch, and confirm the setting by pulling the "\[\ii\]/SET" switch toward you.



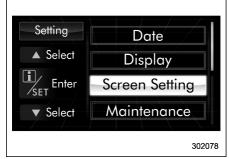
6. The system will notify you that the setting is complete.

# ■ Screen settings

The items in the screen settings can be set. To change the items, operate the "\\_" or "\\_" switch, and then pull the "\\_"/SET" switch toward you.

## **▼** Preparation for screen settings

- 1. Turn the ignition switch to the "ON" position.
- 2. Pull and hold the "  $\cite{1}\slash SET"$  switch toward you to show the selection screen.

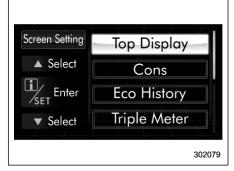


3. After the selection screen is displayed, operate the "▲" or "▼" switch to show the "Screen Setting" item. Then, pull the "[]/ SET" switch toward you.

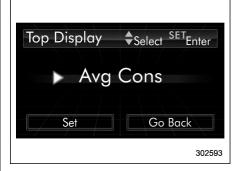
## **▼** Top display setting

1. Perform the preparation steps according to "Preparation for screen settings"

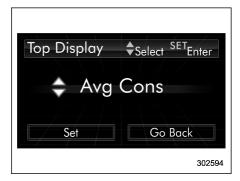
**3-50**.



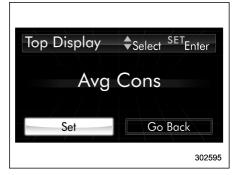
2. Operate the " $\triangle$ " or " $\blacktriangledown$ " switch to select the "Top Display" item. Then pull the "TVSET" switch toward you.



3. Pull the "i/SET" switch once more.



4. Select an item by operating the "▲" or "▼" switch. Then pull the "∏/SET" switch toward you.



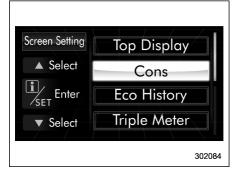
5. Select "Set" by operating the "\" switch, and confirm the setting by pulling the "\"\SET" switch toward you.



6. The system will notify you that the setting is complete.

## ▼ Fuel consumption screen setting

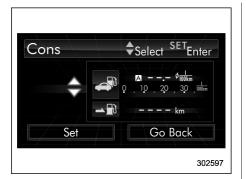
1. Perform the preparation steps according to "Preparation for screen settings" \$\mathscr{G}^2\$-50.



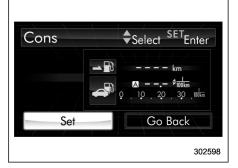
2. Operate the "▲" or "▼" switch to select the "Cons" item. Then pull the "∏/ SET" switch toward you.



3. Pull the "i/SET" switch once more.



4. Select the displayed configuration by operating the "▲" or "▼" switch. Then pull the "∏/SET" switch toward you.



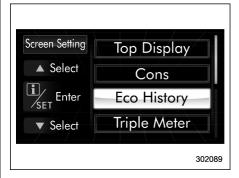
5. Select "Set" by operating the "\[\ni\]" switch, and confirm the setting by pulling the "\[\ii\]/SET" switch toward you.



6. The system will notify you that the setting is complete.

## **▼** Economy history setting

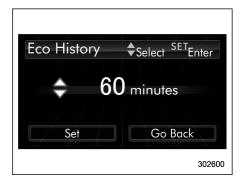
1. Perform the preparation steps according to "Preparation for screen settings" \$\alpha\$3-50.



2. Operate the "▲" or "▼" switch to select the "Eco History" item. Then pull the "∏/SET" switch toward you.



3. Pull the "[i]/SET" switch once more.



4. Select the time of the logged fuel consumption history by operating the "▲" or "▼" switch. Then pull the "∐/ SET" switch toward you.



5. Select "Go Back" by operating the "\( \bigs\_{\text{"}}\)" switch.



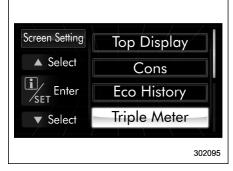
6. Select "Set" by operating the "♠" switch and confirm the setting by pulling the "¶/SET" switch toward you.



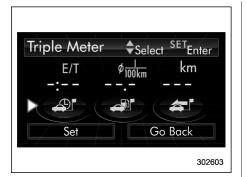
7. The system will notify you that the setting is complete.

## ▼ Triple meter setting

1. Perform the preparation steps according to "Preparation for screen settings" \$\alpha\$3-50.



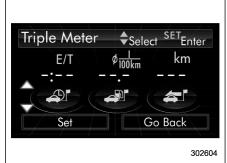
2. Operate the "▲" or "▼" switch to select the "Triple Meter" item. Then pull the "∏/SET" switch toward you.



3. Select the setting location (left, center or right) by operating the " $\blacktriangledown$ " or " $\blacktriangle$ " switch. Then pull the " $\boxed{}$ /SET" switch toward you.

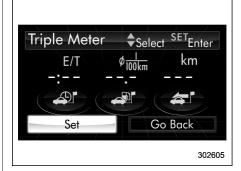
#### NOTE

The same item cannot be selected for the left, center or right location.



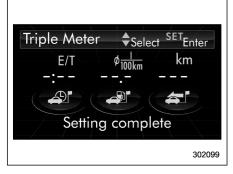
4. Select the preferred item by operating the "▲" or "▼" switch. Then pull the "[]/ SET" switch toward you.

If you also want to change the setting for another location, repeat steps 3 and 4.



5. Select "Set" by operating the "

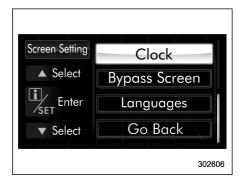
switch, and confirm the setting by pulling the "[]/SET" switch toward you.



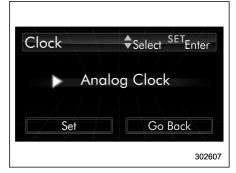
6. The system will notify you that the setting is complete.

#### ▼ Clock screen setting

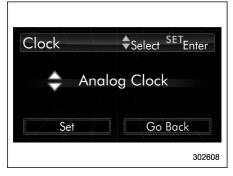
1. Perform the preparation steps according to "Preparation for screen settings" \$\alpha 3-50.



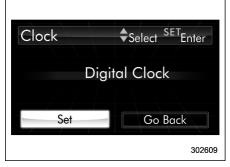
2. Operate the "▲" or "▼" switch to select the "Clock" item. Then pull the "⑴/ SET" switch toward you.



3. Pull the "T/SET" switch once more.



4. Select "Analog Clock", "Digital Clock", "Calendar" or "Off" by operating the "♠" or "♥" switch. Then pull the "¶/SET" switch toward you.



5. Select "Set" by operating the "▼" switch, and confirm the setting by pulling

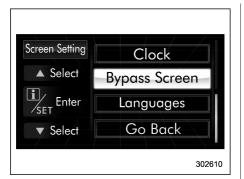
the "i/SET" switch toward you.



6. The system will notify you that the setting is complete.

## ▼ Bypass screen setting

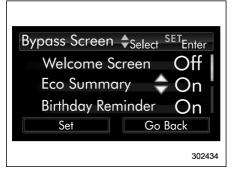
1. Perform the preparation steps according to "Preparation for screen settings" \$\alpha\$3-50.



2. Operate the "▲" or "▼" switch to select the "Bypass Screen" item. Then pull the "∏/SET" switch toward you.



3. Select the item to set by operating the "▲" or "▼" switch. Then pull the "∏/SET" switch toward you.



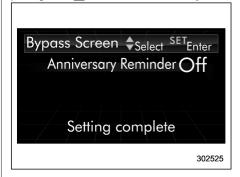
4. Select "On" or "Off" by operating the "▲" or "▼" switch. Then pull the "♠"/SET" switch toward you.

If you want to change setting for another item, repeat steps 3 and 4.



5. Select "Set" by operating the " $\blacktriangle$ " or

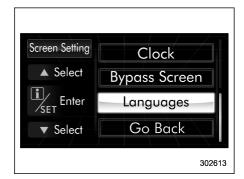
"V" switch, and confirm the setting by pulling the "T/SET" switch toward you.



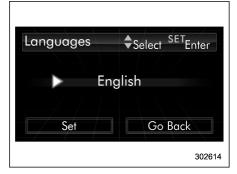
6. The system will notify you that the setting is complete.

## **▼** Language setting

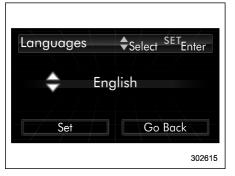
1. Perform the preparation steps according to "Preparation for screen settings" \$\ins 3-50\$.



2. Operate the "▲" or "▼" switch to select the "Languages" item. Then pull the "[]/SET" switch toward you.



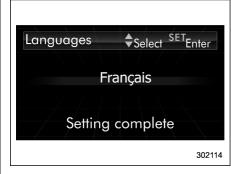
3. The current language setting will be displayed. Pull the "[]/SET" switch toward you to enter the language selection mode.



4. Select the preferred language by operating the "▲" or "▼" switch. Then pull the "[]/SET" switch toward you.



5. Select "Set" by operating the "\" switch, and confirm the setting by pulling the "\"/SET" switch toward you.

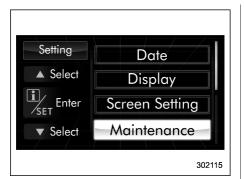


6. The system will notify you that the setting is complete.

# **■** Maintenance settings

The items in the maintenance settings can be set. To change the items, operate the "\underbrank" switch toward you.

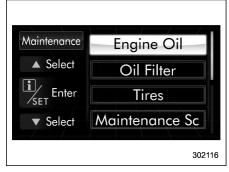
- ▼ Preparation for maintenance settings
- 1. Turn the ignition switch to the "ON" position.
- 2. Pull and hold the "[]/SET" switch toward you to show the selection screen.



3. After the selection screen is displayed, operate the "\( \Lambda \)" or "\( \neq \)" switch to show the "Maintenance" item. Then, pull the "i/ SET" switch toward you.

## **Engine oil setting**

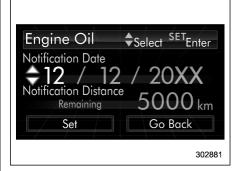
1. Perform the preparation steps according to "Preparation for maintenance settings" 3-57.



2. Operate the "▲" or "▼" switch to select the "Engine Oil" item. Then pull the "IVSET" switch toward you.

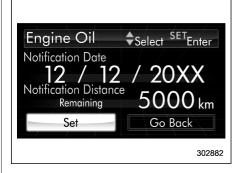


3. Select the setting location (month, day, year or distance) by operating the "\(\nblue{T}\)" or "▲" switch. Then pull the "TVSET" switch toward you.



4. Select a number by operating the "A" or "▼" switch. Then pull the "[]/SET" switch toward you.

If you also want to change the setting for another location, repeat steps 3 and 4.



5. Select "Set" by operating the "▲" or "▼" switch and confirm the setting by pulling the "¶\SET" switch toward you.



6. The system will notify you that the setting is complete.

#### NOTE

- The notification will be displayed with information of both date and distance or either date or distance in accordance with the setting
- When "\_\_" is selected for either the "Month", "Day", "Year" or "Distance" item instead of numbers, the set notification will be deactivated.
- If the notification continues for 15 days or more, the system will display " on the screen.
- When the distance announcement

reaches 0 mile (0 km), the display will show "0000" for the next 311 miles (500 km). After exceeding 311 miles (500 km), "\_\_\_" will be displayed.

#### **▼** Oil filter setting

The setting procedure is the same as "Engine oil setting" \$\tilde{\sigma} 3-58\$, but select the "Oil Filter" item in step 2.

## ▼ Tires setting

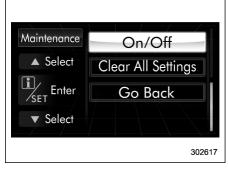
The setting procedure is the same as "Engine oil setting" \$\tilde{\sigma} 3-58\$, but select the "Tires" item in step 2.

#### **▼** Maintenance schedule setting

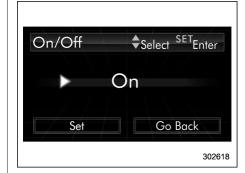
The setting procedure is the same as "Engine oil setting" \$\tilde{\sigma}\$3-58, but select the "Maintenance Schedule" item in step 2.

#### ▼ On/Off setting

1. Perform the preparation steps according to "Preparation for maintenance settings" \$\tilde{\sigma}\$3-57.

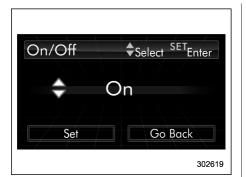


2. Operate the "▲" or "▼" switch to select the "On/Off" item. Then pull the "፲/SET" switch toward you.



3. The current setting will be displayed. Pull the "[]/SET" switch toward you to enter the selection mode.

- CONTINUED -



4. Select "On" or "Off" by operating the "▲" or "▼" switch. Then pull the "♠"/SET" switch toward you.



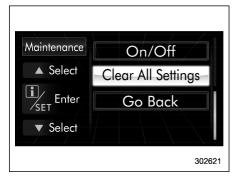
5. Select "Set" by operating the "\" switch, and confirm the setting by pulling the "\" | SET" switch toward you.



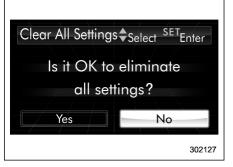
6. The system will notify you that the setting is complete.

## **▼** Clear setting

1. Perform the preparation steps according to "Preparation for maintenance settings" \$\textit{\$=}3-57\$.

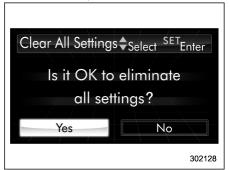


2. Operate the "▲" or "▼" switch to select the "Clear All Settings" item. Then pull the "∏/SET" switch toward you.

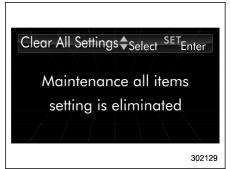


3. The system will prompt a Yes/No dialogue ("No" is selected first). To clear all maintenance settings, select "Yes" by

operating the "\overline" switch.



4. Confirm the setting by pulling the "[]/ SET" switch toward you.

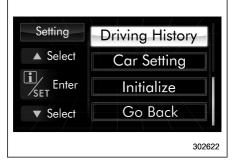


5. The system will notify you that the setting is complete.

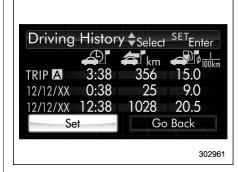
# ■ Driving history registration

The items in the driving history can be registered. To change the items, operate the "▲" or "▼" switch, and then pull the "[]/SET" switch toward you.

- 1. Turn the ignition switch to the "ON" position.
- 2. Pull and hold the "[]/SET" switch toward you to show the selection screen.



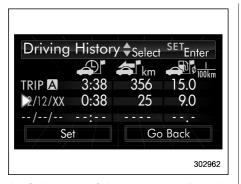
3. After the selection screen is displayed, operate the "▲" or "▼" switch to show the "Driving History" item. Then, pull the "⑴/ SET" switch toward you.



4. Pull the "i)/SET" switch toward you once more to enter the setting mode.



5. The system will notify you of the place to be selected for approximately 2 seconds.



6. Select one of the registration lines by operating the "\( \Lambda \)" or "\( \notation \)" switch. Then pull the "IVSET" switch toward you.



7. To overwrite the previous registration, pull the "I/SET" switch toward you. When registration is performed the first time, it is registered directly without a notification.



8. The system will notify you that the registration is complete.

#### NOTE

The driving history can be registered for the trip meter A or B.

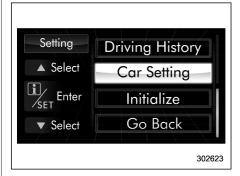
# ■ Car settings

The items in the car settings can be set. To change the items, operate the "\( \Lambda \)" or "V" switch, and then pull the "I/SET" switch toward you.

## **▼** Preparation for car settings

- 1. Turn the ignition switch to the "ON" position.
- 2. Pull and hold the "¡/SET" switch

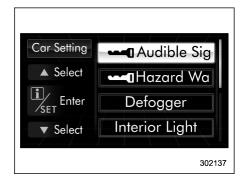
toward you to show the selection screen.



3. After the selection screen is displayed. operate the "\( \Lambda \)" or "\( \nabla \)" switch to show the "Car Setting" item. Then, pull the "I/SET" switch toward you.

#### ▼ Audible signal setting

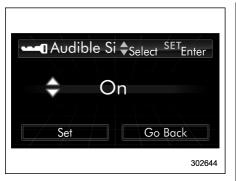
1. Perform the preparation steps according to "Preparation for car settings" \$\alpha\$3-62.



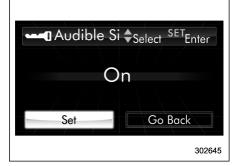
2. Operate the "▲" or "▼" switch to select the "Audible Signal" item. Then pull the "[]/SET" switch toward you.



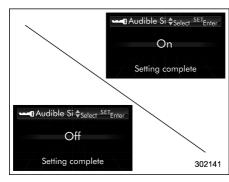
3. The current setting will be displayed. Pull the "[]/SET" switch toward you to enter the selection mode.



4. Select "On" or "Off" by operating the "▲" or "▼" switch. Then pull the "♠"/SET" switch toward you.

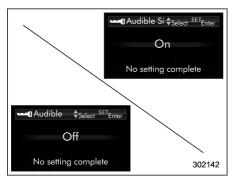


5. Select "Set" by operating the "▼" switch, and confirm the setting by pulling the "¶'SET" switch toward you.



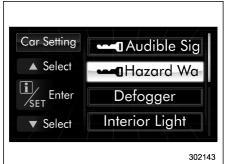
6. The system will notify you that the setting is complete.

If the setting is not available, the following notification will be displayed. In this case, perform the setting procedure again.



#### ▼ Hazard warning flasher setting

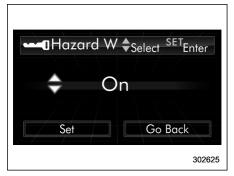
1. Perform the preparation steps according to "Preparation for car settings" \$\mathscr{G}^2\$-62.



2. Operate the "▲" or "▼" switch to select the "Hazard Warning Flasher" item. Then pull the "¶/SET" switch toward you.



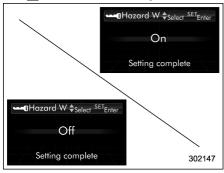
3. The current setting will be displayed. Pull the "[]/SET" switch toward you to enter the selection mode.



4. Select "On" or "Off" by operating the "▲" or "▼" switch. Then pull the "[]/SET" switch toward you.

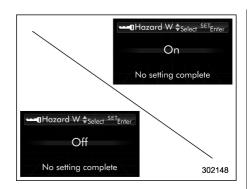


5. Select "Set" by operating the "\sum switch, and confirm the setting by pulling the "\sum /SET" switch toward you.



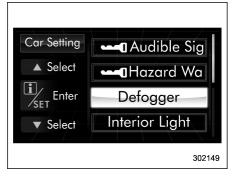
6. The system will notify you that the setting is complete.

If the setting is not available, the following notification will be displayed. For more details, contact a SUBARU dealer.



# ▼ Defogger setting

1. Perform the preparation steps according to "Preparation for car settings" \$\sigma 3-62\$.



2. Operate the "▲" or "▼" switch to select the "Defogger" item. Then pull the

"i/SET" switch toward you.

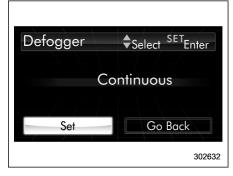


3. The current setting will be displayed. Pull the "\_\_/SET" switch toward you to enter the selection mode.

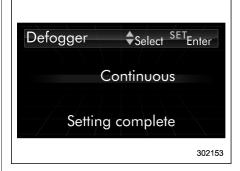


4. Select the preferred setting by operating the "▲" or "▼" switch. Then pull the

"I/SET" switch toward you.



5. Select "Set" by operating the "\" switch, and confirm the setting by pulling the "\"\" | VSET" switch toward you.



6. The system will notify you that the setting is complete.

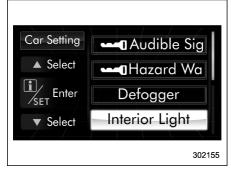
- CONTINUED -

If the setting is not available, the following notification will be displayed. For more details, contact a SUBARU dealer.

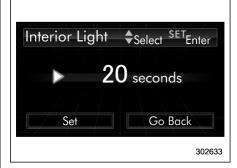


### ▼ Interior light off delay timer setting

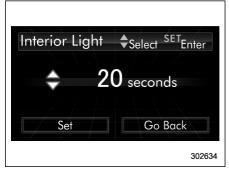
1. Perform the preparation steps according to "Preparation for car settings" \$\sigma 3-62\$.



2. Operate the "▲" or "▼" switch to select the "Interior Light" item. Then pull the "[]/SET" switch toward you.



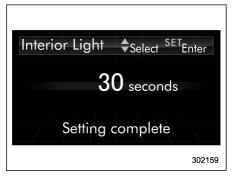
3. The current setting will be displayed. Pull the "[]/SET" switch toward you to enter the selection mode.



4. Select the preferred setting by operating the "♠" or "♥" switch. Then pull the "∏/SET" switch toward you.

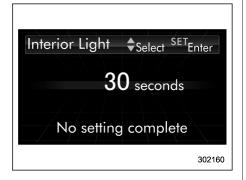


5. Select "Set" by operating the "\sum switch, and confirm the setting by pulling the "\subset"/SET" switch toward you.



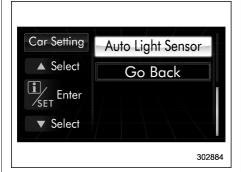
6. The system will notify you that the setting is complete.

If the setting is not available, the following notification will be displayed. For more details, contact a SUBARU dealer.

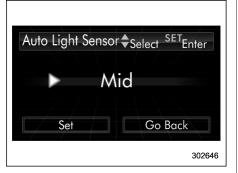


### ▼ Auto light sensor sensitivity setting

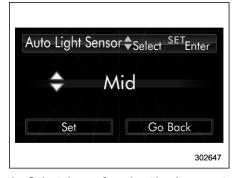
1. Perform the preparation steps according to "Preparation for car settings" \$\sigma 3-62\$.



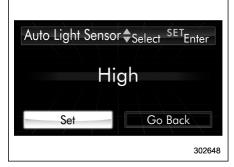
2. Operate the "\( \bigsim\) or "\( \bigsim\) switch to select the "Auto Light Sensor" item. Then pull the "\( \bigsim\)/SET" switch toward you.



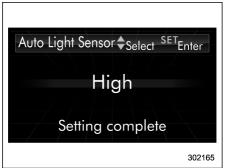
3. The current setting will be displayed. Pull the "[]/SET" switch toward you to enter the selection mode.



4. Select the preferred setting by operating the "♠" or "♥" switch. Then pull the "¶')SET" switch toward you.

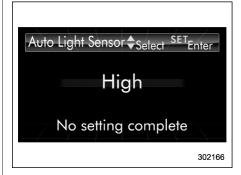


5. Select "Set" by operating the "\" switch, and confirm the setting by pulling the "\" |SET" switch toward you.



6. The system will notify you that the setting is complete.

If the setting is not available, the following notification will be displayed. For more details, contact a SUBARU dealer.

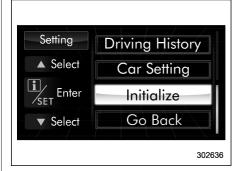


### ■ Initialize

Items that have been set to your preference can be initialized. To select an initialization menu, operate the "\( \bigcap \)" or "\( \bigcup '' \) switch as follows.

### **▼** Preparation for initialization

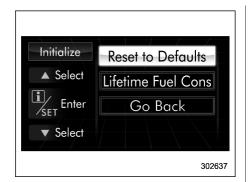
- 1. Turn the ignition switch to the "ON" position.
- 2. Pull and hold the "[]/SET" switch toward you to show the selection screen.



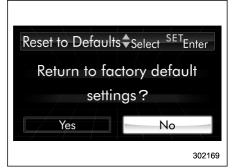
3. After the selection screen is displayed, operate the "♠" or "♥" switch to show the "Initialize" item. Then, pull the "∏/SET" switch toward you.

### ▼ Reset to factory default settings

Perform the preparation steps according to "Preparation for initialization" \$\tilde{\sigma}\$3-68.

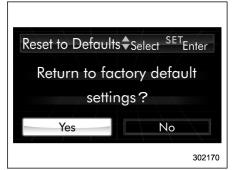


2. Operate the "▲" or "▼" switch to select the "Reset to Defaults" item. Then pull the "∏/SET" switch toward you.

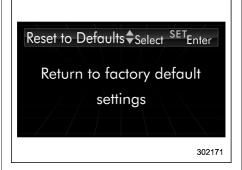


3. The system will prompt a Yes/No dialogue ("No" is selected first). To return to the factory default settings, select "Yes"

by operating the "V" switch.



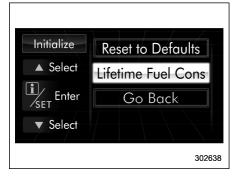
4. Confirm the setting by pulling the "[]/ SET" switch toward you.



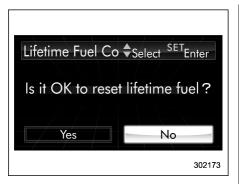
5. The system will notify you that the setting is complete.

### ▼ Lifetime fuel consumption resetting

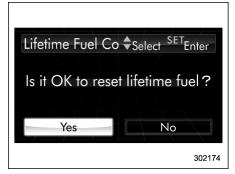
1. Perform the preparation steps according to "Preparation for initialization" \$\tilde{\sigma}\$3-68.



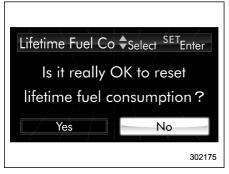
2. Operate the "▲" or "▼" switch to select the "Lifetime Fuel Consumption Resetting" item. Then pull the "∐/SET" switch toward you.



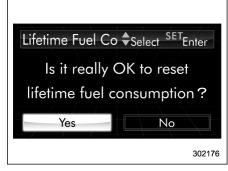
3. The system will prompt a Yes/No dialogue ("No" is selected first). To reset the lifetime fuel consumption, select "Yes" by operating the "\(\psi\)" switch.



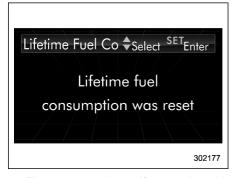
4. Confirm the setting by pulling the "[]/ SET" switch toward you.



5. Reconfirmation will be displayed. If you are sure you want to proceed, select "Yes" by operating the "\(\ni\)" switch.



6. Confirm the setting again by pulling the "[]/SET" switch toward you.



7. The system will notify you that the setting is complete.

# Light control switch

# ■ Precautions and tips

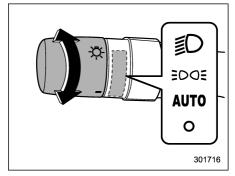
# **A** CAUTION

- Use of any lights for a long period of time while the engine is not running can cause the battery to discharge.
- Before leaving the vehicle, make sure that the lights are turned off.
   If the vehicle is left unattended for a long time with the lights illuminated, the battery may be discharged.

### NOTE

- Even if the key is removed from the ignition switch, the lights can be illuminated by operating the light control switch from the "O" (off) position to the "DOE" or "D" position.
- If the driver's door is opened while the lights are illuminated and the key is removed from the ignition switch, the chirp sound will inform the driver that the lights are illuminated.

# ■ Headlights



To turn on the headlights, turn the knob on the end of the turn signal lever.

### "≝D" position

Instrument panel illumination, headlights, parking lights, front side marker lights, rear side marker lights, tail lights and license plate lights are on.

### "idei" position

Instrument panel illumination, parking lights, front side marker lights, rear side marker lights, tail lights and license plate lights are on.

# "AUTO" position: auto on/off headlights (if equipped)

When the ignition switch is in the "ON" position, the instrument panel illumination, headlights, parking lights, front side marker lights, rear side marker lights, tail lights and license plate lights are automatically on or off depending on the level of the ambient light.

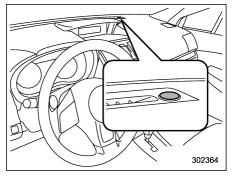
### "O" position

The headlights are all off.

### NOTE

The sensitivity of the auto on/off headlights can be changed by a SUBARU dealer. Consult your SUBARU dealer for details. Also, for models with a multi function display, the setting can be changed using the display. For details, refer to "Multi function display" \$\tilde{x}^3-28\$.

### Sensor for the auto on/off headlights (if equipped)

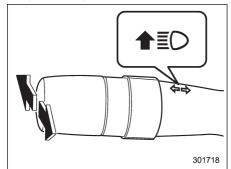


The sensor is on the instrument panel as shown in the illustration.

# CAUTION

If any object is placed on or near the sensor, the sensor may not detect the level of the ambient light correctly and the auto on/off headlights may not operate properly.

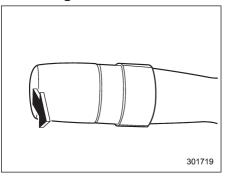
# ■ High/low beam change (dimmer)



To change from low beam to high beam, push the turn signal lever forward. When the headlights are on high beam, the high beam indicator light "=" on the combination meter is also on.

To switch back to low beam, pull the lever back to the center position.

# ■ Headlight flasher



# **CAUTION**

Do not hold the lever in the flashing position for more than just a few seconds.

To flash the headlights, pull the lever toward vou and then release it. The high beam will stay on for as long as you hold the lever. The headlight flasher works even though the lighting switch is in the "O" (off) position.

When the headlights are on high beam, the high beam indicator light "\overlight" on the combination meter also illuminates.

# ■ Daytime running light system

# **WARNING**

The brightness of the illumination of the high beam headlights is reduced by the daytime running light system. The light switch must always be turned to the "D" position when it is dark outside.

The high beam headlights will automatically illuminate at reduced brightness when the following conditions are fulfilled.

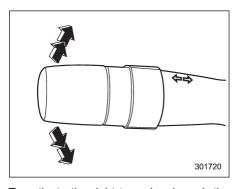
- The engine is running.
- The parking brake is fully released.
- The light control switch is in the "AUTO" (if equipped), "apoat" or off position.
- For CVT models, the select lever is in a position other than the "P" position.

### NOTE

- When the light switch is in the "בַּבְּם:" position, the instrument panel illumination, front side marker lights, tail lights and license plate lights are also illuminated.
- For models with the auto on/off headlights, while the light control switch is in the "AUTO" position and the system is activated to the auto-on mode depending on the ambient light

level, the high beam headlights that have illuminated at reduced brightness turn off, and the low beam headlights turn on alternatively. At this time, the instrument panel illumination, front side marker lights, tail lights and license plate lights are also illuminated.

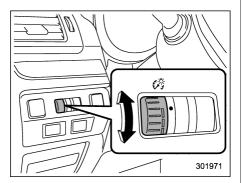
# Turn signal lever



To activate the right turn signal, push the turn signal lever up. To activate the left turn signal, push the turn signal lever down. When the turn is finished, the lever will return automatically. If the lever does not return after cornering, return the lever to the neutral position by hand.

To signal a lane change, push the turn signal lever up or down slightly and hold it during the lane change. The turn signal indicator lights will flash in the direction of the turn or lane change. The lever will return automatically to the neutral position when you release it.

### Illumination brightness control



The illumination brightness of the instrument panel dims under the following conditions.

- when the light switch is in the "soos" or "≦D" position
- when the light control switch is in the "AUTO" position and the headlights illuminate automatically (models with auto on/ off headlights: Refer to "Headlights" \$\alpha\$3-71.)

You can also adjust the illumination brightness for better visibility in the following ways.

To brighten, turn the control dial upward.

To darken, turn the control dial downward.

### **NOTE**

- When the control dial is turned fully upward, the illumination brightness becomes the maximum and the automatic dimming function does not work at all.
- The brightness setting is not canceled even when the ignition switch is turned to the "LOCK" (off) position.

# Headlight beam leveler (if equipped)

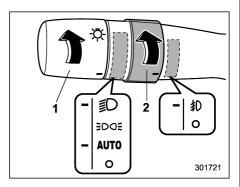
# ■ Automatic headlight beam leveler (models with HID headlights)

The HID headlights generate more light than conventional halogen headlights.

Therefore a driver of an oncoming vehicle may experience too much glare if your headlight beam height adjustment is high when the vehicle is carrying a heavy load.

The automatic headlight beam leveler adjusts the headlight beam height automatically and optimally according to the load being carried by the vehicle.

# Fog light switch (if equipped)

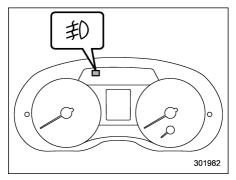


- Headlight switch
- Foa light switch

The front fog lights will turn on when the fog light switch is placed in the "却" position while the headlights are in the following condition.

- while the headlight switch is in the "D" position
- for models with the auto on/off headlights, while the headlight switch is in the "AUTO" position and the headlights turn on automatically

To turn off the front fog lights, turn the switch back down to the "O" position.



The indicator light on the combination meter will illuminate when the front fog lights are illuminated.

# Wiper and washer



#### WARNING

In freezing weather, do not use the windshield washer until the windshield is sufficiently warmed by the defroster.

Otherwise the washer fluid can freeze on the windshield, blocking vour view.



### **CAUTION**

- Do not operate the washer continuously for more than 10 seconds, or when the washer fluid tank is empty. This may cause overheating of the washer motor. Check the washer fluid level frequently, such as at fuel stops.
- Do not operate the wipers when the windshield or rear window is dry. This may scratch the glass, damage the wiper blades and might cause the wiper motor to fail. Before operating the wiper on a dry windshield or rear window, always use the windshield washer.

- In freezing weather, be sure that the wiper blades are not frozen to the windshield or rear window before switching on the wipers. Attempting to operate the wiper with the blades frozen to the window glass could cause not only the wiper blades to be damaged but also might cause the wiper motor to fail. If the wiper blades are frozen to the window glass, be sure to operate the defroster, windshield wiper deicer (if equipped) or rear window defogger before turning on the wiper.
- If the wipers stop during operation because of ice or some other obstruction on the window, this might cause the wiper motor to fail even if the wiper switch is turned off. If this occurs, promptly stop the vehicle in a safe place, turn the ignition switch to the "LOCK" (off) position and clean the window glass to allow proper wiper operation.
- Use clean water if windshield washer fluid is unavailable. In areas where water freezes in winter, use SUBARU Windshield Washer Fluid or the equivalent.

Refer to "Windshield washer fluid" \$\infty\$11-29.

Also, when driving the vehicle when there are freezing temperatures, use non-freezing type wiper blades.

 Do not clean the wiper blades with gasoline or a solvent, such as paint thinner or benzine. This will cause deterioration of the wiper blades.

### **NOTE**

- The windshield wiper motor is protected against overloads by a circuit breaker. If the motor operates continuously under an unusually heavy load, the circuit breaker may trip to stop the motor temporarily. If this happens, park your vehicle in a safe place, turn off the wiper switch, and wait for approximately 10 minutes. The circuit breaker will reset itself, and the wipers will again operate normally.
- Clean your wiper blades and window glass periodically with a washer solution to prevent streaking, and to remove accumulations of road salt or road film. Operate the windshield washer for at least 1 second so that washer solution will be sprinkled all

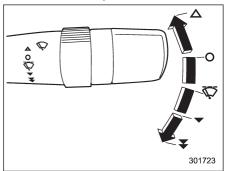
over the windshield or rear window.

- Grease, wax, insects or other material on the windshield or the wiper blade results in jerky wiper operation and streaking on the glass. If you cannot remove those streaks after operating the washer or if the wiper operation is jerky, clean the outer surface of the windshield or rear window and the wiper blades using a sponge or soft cloth with a neutral detergent or mild-abrasive cleaner. After cleaning, rinse the window glass and wiper blades with clean water. The glass is clean if no beads form on the glass when you rinse with water.
- If you cannot eliminate the streaking even after following this procedure, replace the wiper blades with new ones. For replacement instructions, refer to "Replacement of wiper blades" \$\tilde{\pi}\$11-30.

# ■ Windshield wiper and washer switches

The wiper operates only when the ignition switch is in the "ON" or "ACC" position.

### **▼** Windshield wipers



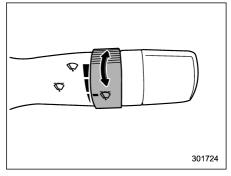
O: Off

To turn the wipers on, push the wiper control lever down.

To turn the wipers off, return the lever to the "O" position.

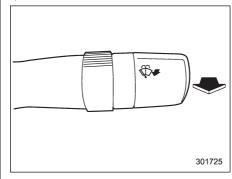
For a single wipe of the wipers, push the lever up. The wipers operate until you release the lever.

### **▼** Wiper intermittent time control



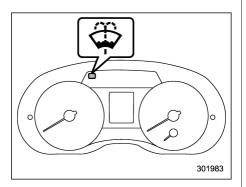
When the wiper switch is in the "D" position, turn the dial to adjust the operating interval of the wiper. The operating interval can be adjusted in several steps from the shortest interval to the longest.

### ▼ Windshield washer



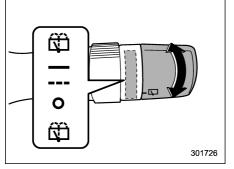
To wash the windshield, pull the wiper control lever toward you. The washer fluid sprays until you release the lever. The wipers operate while you pull the lever.

### **NOTE**



The windshield washer fluid warning light illuminates when the washer fluid level in the tank has dropped to the lower limit. If the warning light illuminates, refill the tank with fluid. For the refilling procedure, refer to "Windshield washer fluid" @11-29.

# Rear window wiper and washer switch - 5-door



Washer (accompanied by wiper operation)

Continuous : Intermittent

: Off

Washer (accompanied by wiper operation)

### ▼ Rear wiper

To turn the rear wiper on, turn the knob switch upward.

To turn the wiper off, return the knob switch to the "O" position.

With the switch turned to the "---" posi-

tion, the rear wiper will operate intermittently at intervals corresponding to the vehicle speed. In this position, when you move the select lever to the "R" position (CVT models) or the shift lever to the reverse position (MT models), the rear wiper will switch to continuous operation. When you move the select lever/shift lever from the "R" (reverse) position to another position, the rear wiper will return to intermittent operation.

#### **▼** Washer

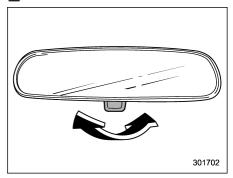
To wash the rear window while the rear wiper is operating, turn the knob switch upward to the "H" position. The washer fluid sprays until you release the knob.

To wash the rear window when the rear wiper is not in use, turn the knob switch downward to the "भि" position. The washer fluid sprays and the wiper operates until you release the knob.

### **Mirrors**

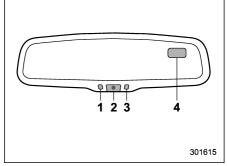
Always check that the inside and outside mirrors are properly adjusted before you start driving.

### ■ Inside mirror



The inside mirror has a day and night position. Pull the tab at the bottom of the mirror toward you for the night position. Push it away for the day position. The night position reduces glare from headlights.

# Auto-dimming mirror/compass (if equipped)



- 1) LED
- 2) Switch
- Sensor
- 4) Compass display

The auto-dimming mirror has an anti-glare feature which automatically reduces glare coming from headlights of vehicles behind you. It also contains a built-in compass.

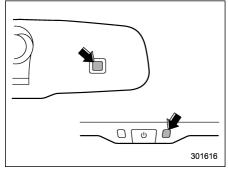
 By pressing and holding the switch for 3 seconds, the automatic dimming function is toggled on or off. When the automatic dimming function is on, the LED indicator will illuminate.

Even with the mirror in anti-glare mode, the mirror surface turns bright if the transmission is shifted into reverse. This is to ensure good rearward visibility during reversing.

• By pressing and releasing the switch for less than 3 seconds, the compass display is toggled on or off. When the compass is on, an illuminated compass reading will appear in the upper right corner of the mirror.

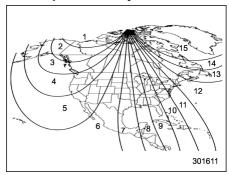
When cleaning the mirror, use a paper towel or similar material dampened with glass cleaner. Do not spray glass cleaner directly on the mirror as that may cause the liquid cleaner to enter the mirror housing and damage the mirror.

#### **▼** Photosensors



The mirror has a photosensor attached on the front and back sides. During nighttime driving, these sensors detect distracting glare from vehicle headlights behind you and automatically dim the mirror to eliminate glare and preserve your vision. For this reason, use care not to cover the sensors with stickers, or other similar items. Periodically wipe the sensors clean using a piece of dry soft cotton cloth or an applicator.

### **▼** Compass zone adjustment



#### Compass calibration zones

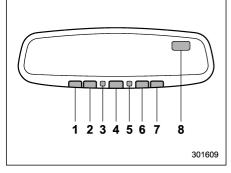
- 1. Refer to the "Compass calibration zones" map shown above to verify that the compass zone setting is correct for your geographical location.
- 2. Press and hold the switch for 6 seconds until the zone selection comes up (a number will be displayed in the mirror compass window).

- 3. Press the switch repeatedly until the correct zone setting for your location is displayed.
- 4. Releasing the button for 10 seconds will exit the zone setting mode.

### **▼** Compass calibration

- 1. If a "C" is displayed in the compass window, the compass needs to be calibrated.
- 2. Drive the vehicle in a circle at 5 mph (8 km/h) or less until the display reads a direction.
- 3. You can also calibrate the compass by driving your vehicle on your everyday routine. The compass will be calibrated once it has tracked a complete circle.
- 4. To recalibrate your compass, push and hold the switch for 9 seconds until a "C" appears in the compass window.
- 5. Calibrate the compass according to step 2 or step 3.

# ■ Auto-dimming mirror/compass with HomeLink<sub>®</sub> (if equipped)



- HomeLink<sub>®</sub> button 1
- ý) HomeLink<sub>®</sub> button 2
- 3) LED
- 4) HomeLink® button 3
- 5) Sensor
- Automatic dimming on/off button
- ') Compass display button
- Compass display

The auto-dimming mirror has an anti-glare feature which automatically reduces glare coming from headlights of vehicles behind you. It also contains a built-in compass and HomeLink® wireless control system.

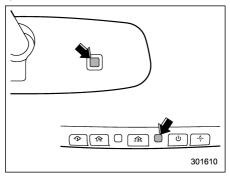
• By pressing the automatic dimming on/ off button, the automatic dimming function is toggled on or off. When the automatic dimming function is on, the LED indicator will illuminate.

Even with the mirror in the automatic dimming mode, the mirror surface turns bright if the transmission is shifted into reverse. This is to ensure good rearward visibility during reversing.

• By pressing the compass display button, the compass display is toggled on or off. When the compass is on, an illuminated compass reading will appear in the upper right corner of the mirror.

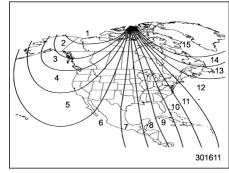
When cleaning the mirror, use a paper towel or similar material dampened with glass cleaner. Do not spray glass cleaner directly on the mirror as that may cause the liquid cleaner to enter the mirror housing and damage the mirror.

#### **▼** Photosensors



The mirror has a photosensor attached on both the front and back sides. During nighttime driving, these sensors detect distracting glare from vehicle headlights behind you and automatically dim the mirror to eliminate glare and preserve your vision. For this reason, use care not to cover the sensors with stickers, or other similar items. Periodically wipe the sensors clean using a piece of dry soft cotton cloth or an applicator.

### **▼** Compass zone adjustment



Compass calibration zones

- 1. Refer to the "Compass calibration zones" map shown above to verify that the compass zone setting is correct for your geographical location.
- 2. Press and hold the compass display button for 3 seconds until the zone selection comes up (a number will be displayed in the mirror compass window).
- 3. Press the compass display button repeatedly until the correct zone setting for your location is displayed.
- 4. Releasing the button for 5 seconds will exit the zone setting mode.

### **▼** Compass calibration

- 1. If a "C" is displayed in the compass window, the compass needs to be calibrated.
- 2. Drive the vehicle in a circle at 5 mph (8 km/h) or less until the display reads a direction.
- 3. You can also calibrate the compass by driving your vehicle on your everyday routine. The compass will be calibrated once it has tracked a complete circle.
- 4. To recalibrate your compass, push and hold the compass display button for 9 seconds until a "C" appears in the compass window.
- 5. Calibrate the compass according to step 2 or step 3.

# ▼ HomeLink<sub>®</sub> Wireless Control System

The HomeLink® Wireless Control System can be used to activate remote control devices such as gate operators, garage door openers, door locks, home lighting and security systems.

There are three HomeLink® buttons on the mirror, each of which can be programmed for operation of one desired device. For details on the device types which can be operated by this system, consult the HomeLink® website at:

www.homelink.com or call 1-800-355-3515.

Note the following information about this system.

If your vehicle is equipped with the HomeLink® Wireless Control System, it complies with Part 15 of the Federal Communications Commission Rules in the U.S. and the RSS-210 of Industry Canada in Canada. Its operation is subject to the following two conditions:

(1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Changes and modifications to this system by anyone other than an authorized service facility could void authorization to use this equipment.

HomeLink® and the HomeLink® house are registered trademarks of Johnson Controls, Inc.

# **WARNING**

 When programming the HomeLink® Wireless Control System, you may be operating a garage door opener or other device. Make sure that people

- and objects are out of the way of the garage door or other device to prevent potential harm or damage.
- Do not use the Homel ink. Wireless Control System with a garage door opener that lacks the safety stop and reverse feature as required by applicable safety standards. A garage door opener which cannot detect an object, signaling the door to stop and reverse, does not meet these safety standards. Using a garage door opener without these features increases risk of serious injury or death. For more information, consult the HomeLink® website at www.homelink.com or call 1-800-355-3515.

# **CAUTION**

When programming the HomeLink® Wireless Control System to operate a garage door opener or an entrance gate, unplug the device's motor from the outlet during programming to prevent motor burnout.

### NOTE

- After programming your HomeLink₀
   Wireless Control System for the desired devices, retain the hand-held transmitters for further programming or device testing in the event of a problem.
- It is recommended that you insert a new battery in the hand-held transmitter of a device to ensure correct programming.

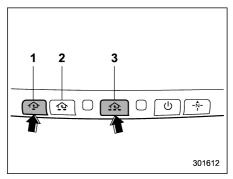
### NOTE

When programming the HomeLink® Wireless Control System for a garage door opener, it is suggested that you park the vehicle outside the garage.

1. Unplug the motor of the garage door opener from the outlet.

### **NOTE**

If any of the HomeLink® buttons are already programmed for other devices, skip step 2 because it clears the memory of all three buttons.



- 1) HomeLink® button 1
- 2) HomeLink<sub>®</sub> button 2
- 3) HomeLink<sub>®</sub> button 3
- 2. Press and hold the two outer HomeLink® buttons (button 1 and button 3) until the indicator light begins to flash (after approximately 20 seconds). Then release both buttons.
- 3. Hold the end of the garage door opener's hand-held transmitter between 1 and 3 inches (25 and 76 mm) away from the HomeLink<sub>®</sub> button you wish to program.
- 4. Simultaneously press and hold both the hand-held transmitter button and the desired HomeLink<sub>®</sub> button. DO NOT release the buttons until step 5 has been completed.

### NOTE

Some gate operators and garage door openers may require you to replace this programming step 4 with procedures in "Programming for entrance gates and garage door openers in Canada" \$\textit{\$\textit{\$\textit{\$}}}\$3-84.

- 5. Hold down both buttons until the HomeLink® indicator light flashes, first slowly then rapidly. When the indicator light flashes rapidly, both buttons may be released. (The rapidly flashing light indicates successful programming of the new frequency signal.)
- 6. Press and hold the programmed button and check the HomeLink<sub>®</sub> indicator light. If the indicator light stays on continuously, your garage door should activate and the programming is completed.

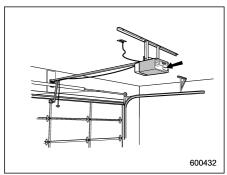
If the indicator light flashes rapidly for 2 seconds and then stays on continuously, your garage door opener may be protected by a rolling code feature. In this case you need to perform the additional steps that are described in "Programming rolling-code-protected garage door openers in the U.S.A." \$\inser\*3-84\$.

 ∇ Programming rolling-code-protected garage door openers in the U.S.A.

If your garage door opener has a rolling code feature, program the HomeLink® Wireless Control System for it by following steps 1 through 5 in "Garage door opener programming in the U.S.A." \$\mathscr{G}\$-83. Then continue with the following steps.

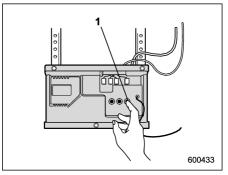
### **NOTE**

The assistance of a second person may make the programming quicker and easier.



1. Locate the training button on the garage door opener motor head unit. The exact location and color of the button may vary by brand of garage door opener. If it is difficult to locate the training button,

refer to your garage door opener's instruction manual.



- 1) Training button
- 2. Press the training button on the garage door opener motor head unit (which activates the "training light" on the unit). Proceed to step 3 within 30 seconds.
- 3. Inside the vehicle, firmly press, hold for 2 seconds and release the HomeLink® button that was programmed in the previous section. Press and release the button a second time to complete the programming procedure.

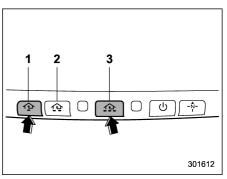
### **NOTE**

Some garage door openers may require you to do the above press-hold-release sequence a third time to complete the programming.

- 4. The garage door opener should now recognize the HomeLink® Wireless Control System and your garage door opener should activate when the HomeLink® button is pressed.
  - ∇ Programming for entrance gates and garage door openers in Canada
- 1. Unplug the motor of the entrance gate or garage door opener from the outlet.

### **NOTE**

If any of the HomeLink® buttons are already programmed for other devices, skip step 2 because it clears the memory of all three buttons.



- 1) HomeLink® button 1
- 2) HomeLink<sub>®</sub> button 2
- HomeLink<sub>®</sub> button 3
- 2. Press and hold the two outer HomeLink® buttons (button 1 and button 3) until the HomeLink® indicator light begins to flash (after approximately 20 seconds). Then release both buttons.
- 3. Hold the end of the entrance gate's/ garage door opener's hand-held transmitter between 1 and 3 inches (25 and 76 mm) away from the HomeLink<sub>®</sub> button you wish to program.
- 4. Press and hold the desired HomeLink<sub>®</sub> button.
- 5. Press and release ("cycle") the handheld transmitter button every 2 seconds until step 6 is complete.

- 6. When the indicator light flashes slowly and then rapidly after several seconds, release both buttons.
- 7. Plug the motor of the entrance gate/garage door opener to the outlet.
- 8. Test your entrance gate/garage door opener by pressing the programmed HomeLink® button.

# ○ Operating the HomeLink<sub>®</sub> Wireless Control System

Once programmed, the HomeLink® Wireless Control System can be used to remote-control the devices to which its buttons are programmed. To activate a device, simply press the appropriate button. The indicator light illuminates, indicating that the signal is being transmitted.

### **▽** Programming other devices

To program other devices such as door locks, home lighting and security systems, contact HomeLink® at www.homelink.com or call 1-800-355-3515.

# ∇ Reprogramming a single HomeLink<sub>®</sub> button

- Press and hold the HomeLink<sub>®</sub> button you wish to reprogram. DO NOT release the button until step 4 has been completed.
- 2. When the HomeLink® indicator light

begins to flash slowly (after approximately 20 seconds), position the hand-held transmitter of the device between 1 to 3 inches (25 to 76 mm) away from the HomeLink® button you wish to program.

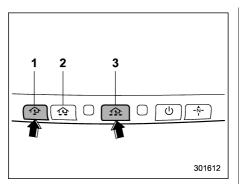
- 3. Press and hold the hand-held transmitter button. The HomeLink₀ indicator light will flash, first slowly and then rapidly.
- 4. When the indicator light begins to flash rapidly, release both buttons.

The programming for the previous device is now erased and the new device can be operated by pressing the HomeLink® button.

□ Erasing HomeLink<sub>®</sub> button memory

### **NOTE**

- Performing this procedure erases the memory of all the preprogrammed buttons simultaneously. The memory of individual buttons cannot be erased.
- It is recommended that upon the sale of the vehicle, the memory of all programmed HomeLink
   buttons be erased for security purposes.



- 1) HomeLink® button 1
- 2) HomeLink® button 2
- 3) HomeLink® button 3
- 1. Press and hold the two outer buttons (button 1 and button 3) until the indicator light begins to flash (after approximately 20 seconds).
- 2. Release both buttons.

### $\nabla$ In case a problem occurs

If you cannot activate a device using the corresponding HomeLink® button after programming, contact HomeLink® at www.homelink.com or call 1-800-355-3515 for assistance.

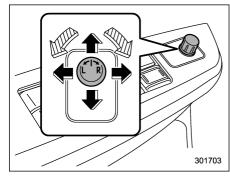
### ■ Outside mirrors

**▼** Convex mirror (passenger side)

# **WARNING**

Objects look smaller in a convex mirror and farther away than when viewed in a flat mirror. Do not use the convex mirror to judge the distance of vehicles behind you when changing lanes. Use the inside mirror (or glance backwards) to determine the actual size and distance of objects that you view in convex mirror.

#### ▼ Remote control mirror switch



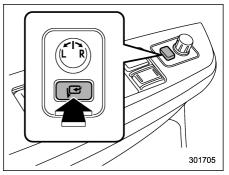
- : Select side to adjust
- : Direction control

The remote control mirrors operate only when the ignition switch is in the "ON" or "ACC" position.

- 1. Turn the control switch to the side that you want to adjust. "L" is for the left mirror, "R" is for the right mirror.
- 2. Move the control switch in the direction you want to move the mirror.
- 3. Return the control switch to the neutral position to prevent unintentional operation.

The mirrors can also be adjusted manually.

# ▼ Power folding mirror switch (if equipped)



The power folding mirror switch operates only when the ignition switch is in the "ON" or "ACC" position.

To fold the outside mirrors, press the power folding mirror switch. To unfold the mirrors, press the switch again.

#### NOTE

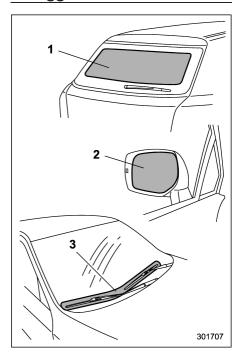
- If the outside mirrors have been operated (folded or unfolded) manually, when you turn the ignition switch from the "LOCK" (off) position to the "ACC" or "ON" position, the outside mirrors may be adjusted automatically depending on the status of the power folding mirror switch.
- If the outside mirrors have been

manually folded slightly forward of the regularly unfolded position, when you turn the ignition switch from the "LOCK" (off) position to the "ACC" or "ON" position, the outside mirrors may automatically fold further forward depending on the status of the power folding mirror switch. When this happens, press the power folding mirror switch. By doing so, the outside mirrors which have been folded to the furthest forward position will extend to the regularly unfolded position and then fold rearward in the usual way. In order to unfold the outside mirrors. press the switch again.

- When you unfold the outside mirrors manually, the mirrors may become wobbly. Be sure to unfold the mirrors by switch operation. If the outside mirrors are still wobbly, fold the mirrors again and then unfold them by switch operation.
- When the temperature is low, the outside mirrors may stop during switch operation. If that occurs, push the switch again. When the outside mirrors do not work by switch operation, move them several times manually. This makes it possible to operate them by switch operation.
- When you operate the power folding mirror switch continuously, it may not

work. This is not a malfunction. Operate the switch again after waiting for a short period of time.

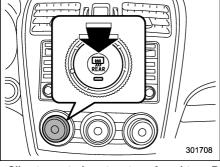
# Defogger and deicer



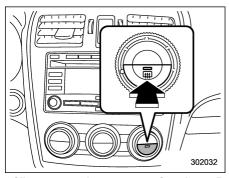
- Rear window defogger
- Outside mirror defogger (if equipped)
- Windshield wiper deicer (if equipped)

The vehicle is equipped with a rear

window defogger. Some models are also equipped with an outside mirror defogger and/or windshield wiper deicer. The defogger and deicer system is activated only when the ignition switch is in the "ON" position.



Climate control system type A and type B



Climate control system type C and type D

To activate the defogger and deicer system, press the control switch that is located on the climate control panel. The rear window defogger, outside mirror defogger and windshield wiper deicer are activated simultaneously. The indicator light on the control switch illuminates while the defogger and deicer system is activated

To turn them off, press the control switch again. They also turn off when the ignition switch is turned to the "ACC" or "LOCK" (off) position.

The defogger and deicer system will automatically shut off after approximately 15 minutes. If the rear window and the outside mirrors have been cleared and the

windshield wiper blades have been deiced completely before that time, press the control switch to turn them off. If defrostina, defogaing or deicing is not complete. you have to press the control switch to turn them on again.

For models with the automatic climate control system (type B, C and D), it is possible for the defogger and deicer system to be set to continuous operation mode by a SUBARU dealer. Consult your SUBARU dealer for details. Also, for models with a multi function display, the setting can be changed using the display. For details, refer to "Multi function display" **3-28**.

If the battery voltage drops below the permissible level, continuous operation of the defogger and deicer system is canceled and the system stops operating.

# **CAUTION**

- To prevent the battery from being discharged, do not operate the defogger and deicer system continuously for any longer than necessarv.
- Do not use sharp instruments or window cleaner containing abrasives to clean the inner surface

of the rear window. They may damage the conductors printed on the window.

### NOTE

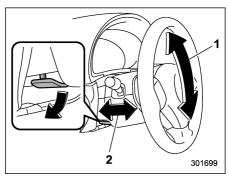
- Turn on the defogger and deicer system if the wipers are frozen to the windshield.
- If the windshield is covered with snow, remove the snow so that the windshield wiper deicer works effectively.
- While the defogger and deicer system is in the continuous operation mode, if the vehicle speed remains at 9 mph (15 km/h) or less for 15 minutes, the windshield wiper deicer automatically stops operating, though the rear window defogger and outside mirror defogger maintain continuous operation in this condition.

# Tilt/telescopic steering wheel



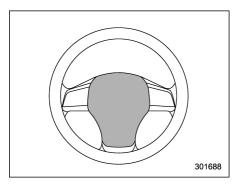
### MARNING

- Do not adjust the steering wheel tilt/telescopic position while driving. This may cause loss of vehicle control and result in personal injury.
- If the lever cannot be raised to the fixed position, adjust the steering wheel again. It is dangerous to drive without locking the steering wheel. This may cause loss of vehicle control and result in personal injury.



- 1) Tilt adjustment
- 2) Telescopic adjustment
- 1. Adjust the seat position. Refer to "Front seats" \$\tilde{F}\$1-2.
- 2. Pull the tilt/telescopic lock lever down.
- 3. Move the steering wheel to the desired level.
- 4. Pull the lever up to lock the steering wheel in place.
- 5. Make sure that the steering wheel is securely locked by moving it up and down, and forward and backward.

# Horn



To sound the horn, push the horn pad.

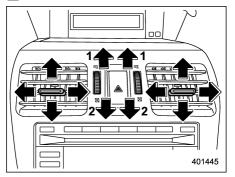
# Climate control

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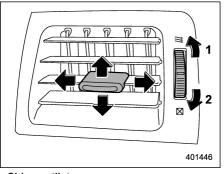
### **Ventilator control**

# ■ Center and side ventilators



### Center ventilators

- Open
- Close



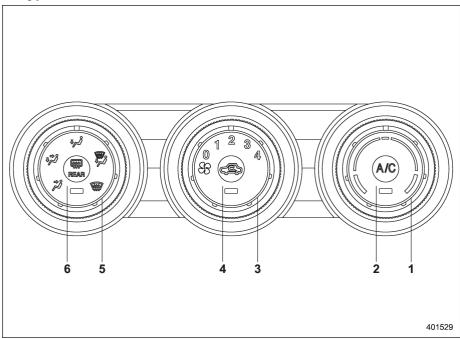
### Side ventilators

- 1) Open
- 2) Close

To adjust the flow direction, move the tab. To open or close the ventilator, turn the thumb-wheel up or down.

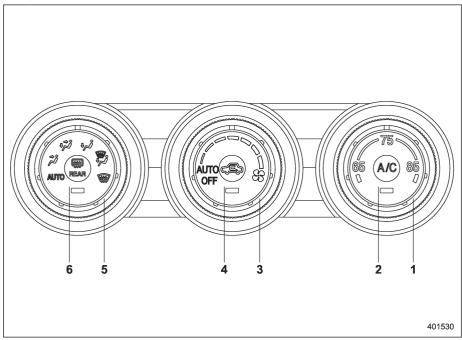
# Climate control panel

# ■ Type A



- Temperature control dial (Refer to "Temperature control" \$\tilde{\pi} 4-9.)
- 2) Air conditioner button (Refer to "Air conditioner control" \$\tilde{\sigma} 4-10.)
- 3) Fan speed control dial (Refer to "Fan speed control" \$\tilde{F}\$-4-10.)
- 4) Air inlet selection button (Refer to "Air inlet selection" #4-10.)
- 5) Airflow mode selection dial (Refer to "Airflow mode selection" \$\tilde{\pi} 4-8.)
- Rear window defogger button (Refer to "Defogger and deicer" \$\tilde{x}\$-3-88.)

### ■ Type B

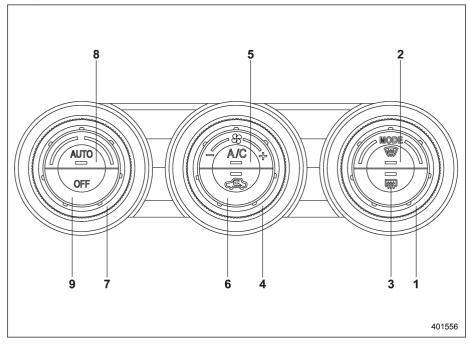


- Temperature control dial (Refer to "Automatic climate control operation (type B, C and D)" #4-7 and/or "Temperature control" #4-9.)
- 2) Air conditioner button (Refer to "Air conditioner control" \$\tilde{-4}\)-10.)
- B) Fan speed control dial (Refer to "Automatic climate control operation (type B, C and D)" #4-7 and/or "Fan speed control" #4-10.)
- i) Air inlet selection button (Refer to "Air inlet selection" \$\tilde{\Phi} 4-10.)
- 5) Airflow mode selection dial (Refer to "Automatic climate control operation (type B, C and D)" #4-7 and/or "Airflow mode selection" #4-8.)
- 6) Rear window defogger button (Refer to "Defogger and deicer" \$\sigma 3-88.)

### **NOTE**

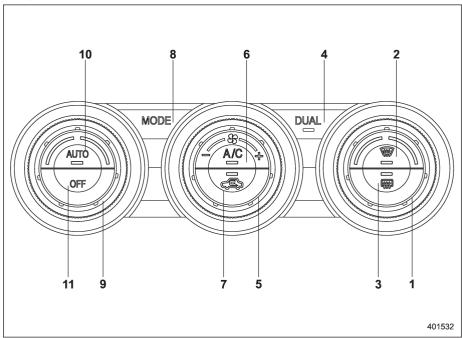
The controllable temperature range may vary depending on the regional specifications of the vehicle.

# ■ Type C



- 1) Airflow mode selection dial (Refer to "Airflow mode selection" \$\tilde{\pi} 4-8.)
- 2) Defroster button (Refer to "Airflow mode selection" #4-8.)
- Rear window defogger button (Refer to "Defogger and deicer" \$\tilde{G} 3-88.)
- 4) Fan speed control dial (Refer to "Fan speed control" #4-10.)
- 5) Air conditioner button (Refer to "Air conditioner control" #4-10.)
- 6) Air inlet selection button (Refer to "Air inlet selection" #4-10.)
- 7) Temperature control dial (Refer to "Automatic climate control operation (type B, C and D)" #4-7 and/or "Temperature control" \( \varphi 4-9. \)
- 8) AUTO button (Refer to "Automatic climate control operation (type B, C and D)" @4-7.)
- OFF button (Refer to "Automatic climate control operation (type B, C and D)" #4-

### ■ Type D



- Temperature control dial (Refer to "Automatic climate control operation (type B, C and D)" #4-7 and/or "Temperature control" #4-9.)
- Defroster button (Refer to "Airflow mode selection" \$\tilde{-4-8.}
- 3) Rear window defogger button (Refer to "Defogger and deicer" #3-88.)
- 4) DUAL mode button (Refer to ""DUAL" mode (type D)" #4-9.)
- 5) Fan speed control dial (Refer to "Fan speed control" \$\tilde{-4} 10.)
- 6) Air conditioner button (Refer to "Air conditioner control" \$\tilde{\sigma} 4-10.)
- Air inlet selection button (Refer to "Air inlet selection" #4-10.)
- 8) Airflow mode selection button (Refer to "Airflow mode selection" \$\sigma 4-8.)
- Temperature control dial (Refer to "Automatic climate control operation (type B, C and D)" #4-7 and/or "Temperature control" #4-9.)
- AUTO button (Refer to "Automatic climate control operation (type B, C and D)"
   4-7.)
- 11) OFF button (Refer to "Automatic climate control operation (type B, C and D)" #4-7.)

# Automatic climate control operation (type B, C and D)

When this mode is selected, the fan speed, airflow distribution, air-inlet control, and air conditioner compressor operation are automatically controlled. To activate this mode, perform the following.

# Type B

- 1. Turn the airflow mode selection dial and fan speed control dial to the "AUTO" position.
- 2. Set the preferred temperature using the temperature control dial.

### NOTE

- Each function can be individually set to the AUTO mode independently of the other functions. Any function set to the AUTO mode is controlled automatically. Any function not set to the AUTO mode can be manually adjusted as desired.
- The controllable temperature range may vary depending on the regional specifications of the vehicle.
- 3. To turn off the climate control system, turn the fan speed control dial to the "OFF" position. Then the air inlet selection will be set as follows.

- when the AUTO mode is selected: OFF (outside air)
- when the AUTO mode is not selected: the mode that was selected when turning off the climate system will be selected.

### ■ Type C and D

- 1. Depress the "AUTO" button. The indicator light "FULL AUTO" on the display illuminates.
- 2. Set the preferred temperature using the temperature control dial.

### NOTE

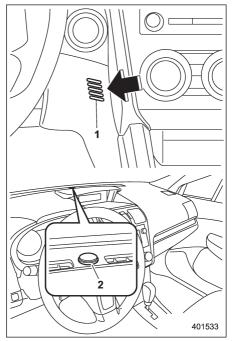
- The controllable temperature range may vary depending on the regional specifications of the vehicle.
- If you operate any of the buttons on the control panel other than the "OFF" button, rear window defogger button and temperature control dial(s) during FULL AUTO mode operation, the "FULL" indicator light on the control panel will turn off and the "AUTO" indicator light will remain illuminated. You can then manually control the system as desired using the button you operated. To change the system back to the FULL AUTO mode, press the "AUTO" button.

3. To turn off the climate control system, press the "OFF" button. Then the air inlet selection will be set to OFF (outside air).

# Operation tips

- Operate the automatic climate control system when the engine is running.
- Even when cooling is not necessary, setting the temperature much lower than the current outlet air temperature turns on the air conditioner compressor automatically and the "A/C" indicator light on the control panel illuminates.

### ■ Temperature sensors



- 1) Interior air temperature sensor
- 2) Solar sensor

The automatic climate control system employs several sensors. These sensors are delicate. If they are not treated

properly and become damaged, the system may not be able to control the interior temperature correctly. To avoid damaging the sensors, observe the following precautions.

- Do not subject the sensors to impact.
- Keep water away from the sensors.
- Do not cover the sensors.

The sensors are located as follows.

- Solar sensor: beside the windshield defroster grille
- Interior air temperature sensor: next to the steering column
- Outside temperature sensor: near the front bumper opening

# Manual climate control operation

### ■ Airflow mode selection

To select the airflow mode:

Type A, B and C: Turn the airflow mode selection dial.

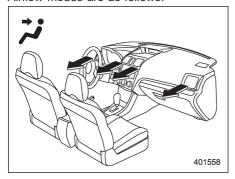
**Type D:** Press the airflow mode selection button.

To select the defrost mode:

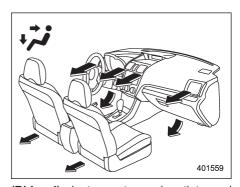
**Type A and B:** Turn the airflow mode selection dial.

**Type C and D:** Press the defroster button.

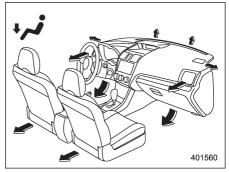
Airflow modes are as follows.



(Ventilation): Instrument panel outlets

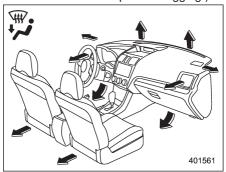


(Bi-level): Instrument panel outlets and foot outlets

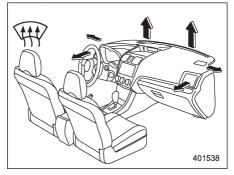


(Heat): Foot outlets, both side outlets of the instrument panel and some through windshield defroster outlets (A small amount of air flows to the windshield and

both side windows to prevent fogging.)



**(Heat-def):** Windshield defroster outlets, foot outlets and both side outlets of the instrument panel (Refer to "Defrosting" \$\tilde{\pi} 4-11.)



(Defrost): Windshield defroster outlets

and both side outlets of the instrument panel (Refer to "Defrosting" \$\textit{\$^{\text{\$}}\$4-11.)}

# ■ Temperature control

# **▼** Type A

Turn the temperature control dial over a range from the blue side (cool) to red side (warm) to regulate the temperature of airflow from the air outlets.

### **▼** Type B, C and D

Turn the temperature control dial to set the preferred interior temperature. With the dial set to your preferred temperature, the system automatically adjusts the temperature of air supplied from the outlets so that the preferred temperature is achieved and maintained.

If the dial is turned fully counterclockwise, the system provides maximum cooling performance. If the dial is turned fully clockwise, the system provides maximum heating performance.

#### NOTE

The controllable temperature range may vary depending on the regional specifications of the vehicle.

### ▼ "DUAL" mode (type D)

You can change the setting of the driver's side and front passenger's side tempera-

- CONTINUED -

ture independently by selecting the "DUAL" mode.

You can select the "DUAL" mode by performing either of the following procedures.

- Press the "DUAL" button
- Turn the passenger's side temperature control dial

The "DUAL" mode can be canceled by pressing the "DUAL" button.

### When the "DUAL" mode is selected:

Turn the driver's side dial to set the driver's side temperature. Turn the front passenger's side dial to set the front passenger's side temperature.

When the "DUAL" mode is canceled: Set the desired temperature by turning the driver's side dial.

### ■ Fan speed control

The fan operates only when the ignition switch is in the "ON" position. Select the preferred fan speed by turning the fan speed control dial.

### ■ Air conditioner control

The air conditioner operates only when the engine is running.

Press the air conditioner button while the

fan is in operation to turn on the air conditioner. When the air conditioner is on, the "A/C" indicator light illuminates. To turn off the air conditioner, press the

# NOTE

button again.

For efficient defogging or dehumidifying in cold weather, turn on the air conditioner. However, if the ambient temperature decreases to approximately 32°F (0°C), the air conditioner compressor will stop operating.

### ■ Air inlet selection

Select the air inlet by pressing the air inlet selection button.

**ON position (recirculation):** Interior air is recirculated inside the vehicle. Press the air inlet selection button to the ON position for fast cooling with the air conditioner or when driving on a dusty road.

**OFF position (outside air):** Outside air is drawn into the passenger compartment. Press the air inlet selection button to the OFF position when the interior has cooled to a comfortable temperature and the road is no longer dusty.

# **WARNING**

Continued operation in the ON position may fog up the windows. Switch to the OFF position as soon as the outside conditions are no longer dusty.

### NOTE

- When the indicator light on the air inlet selection button is flashing at engine starting, a malfunction might be occurring in the electrical system.
   Contact your SUBARU dealer for inspection.
- The indicator light on the air inlet selection button may flash in the following cases. However, this does not indicate a malfunction.
  - After the vehicle battery has been disconnected and reconnected.
  - When the vehicle battery voltage is low.

# **Defrosting**

# ■ Type A and B

Select the "\(\overline{\pi}\)" or "\(\overline{\pi}\)" mode by turning the airflow mode selection dial to defrost or dehumidify the windshield and front door windows.

# ■ Type C

Select the "\(\vec{\pi}\)" mode by pressing the defroster button, or select the "\(\vec{\pi}\)" mode by turning the airflow mode selection dial to defrost or dehumidify the windshield and front door windows.

# ■ Type D

Select the "\(\vec{\pi}\)" mode by pressing the defroster button, or select the "\(\vec{\pi}\)" mode by pressing the airflow mode selection button to defrost or dehumidify the windshield and front door windows.

### NOTE

• When the """ or "" mode is selected, the air conditioner compressor operates automatically regardless of the position of the air conditioner button to defrost the windshield more quickly. However the indicator on the air conditioner button will not illuminate. At the same time, the air inlet

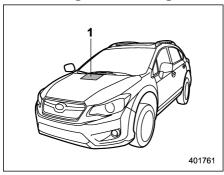
selection is automatically set to the outside air mode.

For type A climate control system, in this state:

- You cannot stop the air conditioner compressor by pressing the air conditioner button.
- You cannot select the recirculation mode by pressing the air inlet selection button.
- For type C and D climate control system, after defrosting the windshield by pressing the defroster button "\(\pi\)", pressing the button again returns the system to the setting that had been selected before the defroster was activated.

# Operating tips for heater and air conditioner

# ■ Cleaning ventilation grille



1) Front ventilation inlet grille

Always keep the front ventilation inlet grille free of snow, leaves, or other obstructions to ensure efficient heating and defrosting. Since the condenser is located in front of the radiator, this area should be kept clean because cooling performance is impaired by any accumulation of insects and leaves on the condenser.

# Efficient cooling after parking in direct sunlight

After parking in direct sunlight, drive with the windows open for a few minutes to

- CONTINUED -

allow outside air to circulate into the heated interior. This results in quicker cooling by the air conditioner. Keep the windows closed during the operation of the air conditioner for maximum cooling efficiency.

## Lubrication oil circulation in the refrigerant circuit

Operate the air conditioner compressor at a low engine speed (at idle or low driving speeds) a few minutes each month during the off-season to circulate its oil.

#### Checking air conditioning system before summer season

Check the air conditioner unit for refrigerant leaks, hose conditions, and proper operation each spring. Have the air conditioning system checked by your SUBARU dealer.

### Cooling and dehumidifying in high humidity and low temperature weather conditions

Under certain weather conditions (high relative humidity, low temperatures, etc.) a small amount of water vapor emission from the air outlets may be noticed. This condition is normal and does not indicate any problem with the air conditioning system.

### ■ Air conditioner compressor shut-off when engine is heavily loaded

To improve acceleration and gas mileage. the air conditioner compressor is designed to temporarily shut off during air conditioner operation whenever the accelerator is fully depressed such as during rapid acceleration or when driving on a steep upgrade.

### ■ Refrigerant for your climate control system

Your air conditioner uses ozone friendly refrigerant HFC134a. Therefore, the method of adding, changing or checking the refrigerant is different from the method for CFC12 (freon). Consult your SUBARU dealer for service. Repairs needed as a result of using the wrong refrigerant are not covered under warranty.

## Air filtration system

Replace the filter element according to the replacement schedule as follows. This schedule should be followed to maintain the filter's dust collection ability. Under extremely dusty conditions, the filter should be replaced more frequently. It is recommended that you have your filter checked or replaced by your SUBARU dealer. For replacement, use only a genuine SUBARU air filter kit.

#### Replacement schedule:

Every 12 months or 7,500 miles (12,000 km) whichever comes first



#### A CAUTION

Contact your SUBARU dealer if the following occurs, even if it is not vet time to change the filter:

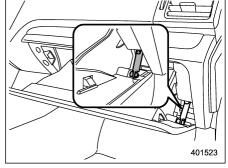
- Reduction of the airflow through the vents.
- Windshield gets easily fogged or misted.

#### NOTE

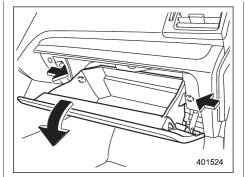
The filter can influence the air conditioning, heating and defroster performance if not properly maintained.

## ■ Replacing an air filter

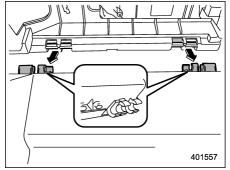
- 1. Remove the glove box.
  - (1) Open the glove box.



(2) Remove the damper shaft from the glove box.

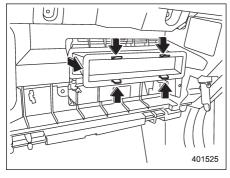


(3) Push in the stoppers located on both sides of the glove box and then pull down the glove box as far as it will go.

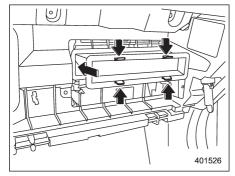


(4) Pull out the glove box horizontally and remove the hinge portion. When

doing this, be careful not to damage the hinge.



2. Remove the air filter.

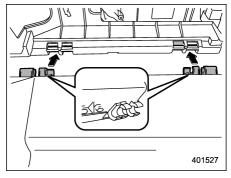


3. Replace the air filter element with a new one.

#### - CONTINUED -

## **CAUTION**

The arrow mark on the filter must point UP.



- 4. Reinstall the glove box, and connect the damper shaft.
- 5. Close the glove box.
- 6. Attach the service label to the driver's side door pillar.

## **Audio**

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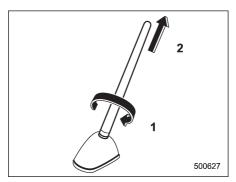
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## Antenna system

#### ■ Roof antenna

## **A** CAUTION

- Be sure to remove the antenna rod before entering garages, parking towers and other locations with low ceilings.
- Remove the antenna rod before washing your car at a car wash. If the antenna rod is left attached, it may scratch the roof.
- When reinstalling the removed antenna rod, be sure to fully tighten it.



- 1) Unscrew
- 2) Remove

The roof antenna is installed in the center at the rear part of the roof.

The antenna rod can be removed by unscrewing it from its base.

## **■** FM reception

Although FM is normally static free, reception can be affected by the surrounding area, atmospheric conditions, station strength and transmitter distance. Buildings or other obstructions may cause momentary static, flutter or station interference. If reception continues to be unsatisfactory, switch to a stronger station.

#### Installation of accessories

Always consult your SUBARU dealer before installing a citizen band radio or other transmitting device in your vehicle. Such devices may cause the electronic control system to malfunction if they are incorrectly installed or if they are not suited for the vehicle.

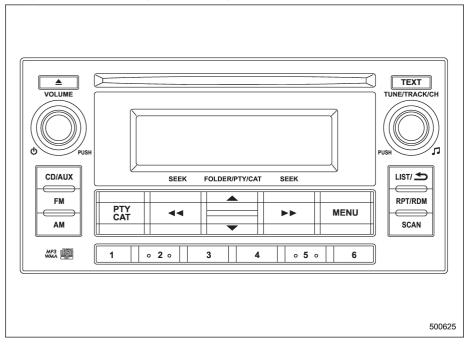
### Audio set

Your SUBARU may be equipped with one of the following audio sets. Refer to the pages indicated in this section for operating details.

#### NOTE

If a cell phone is placed near the audio set, it may cause the audio set to emit noise when the phone receives calls. This noise does not indicate an audio set malfunction. Note that a cell phone should be placed as far as possible from the audio set.

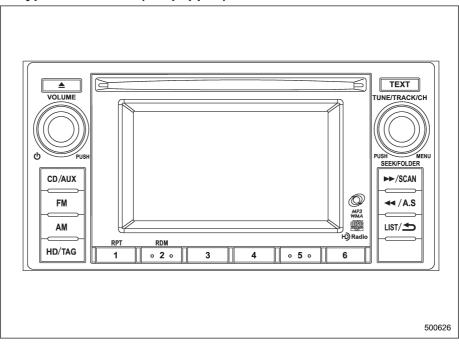
## ■ Type A audio set (if equipped)



The audio set will operate only when the ignition switch is in the "ACC" or "ON" position.

- Power and audio controls: refer to page
- Radio operation: refer to page 5-11
- CD (compact disc) player operation: refer to page 5-16
- Auxiliary input jack: refer to page 5-21
- USB storage device/iPod® operation: refer to page 5-24
- Bluetooth® audio: refer to page 5-31
- Hands-free system: refer to page 5-34

## **■** Type B audio set (if equipped)



The audio set will operate only when the ignition switch is in the "ACC" or "ON" position.

- Power and audio controls: refer to page
   5-7
- Radio operation: refer to page 5-11
- CD (compact disc) player operation: refer to page 5-16
- Auxiliary input jack: refer to page 5-21
- USB storage device/iPod® operation: refer to page 5-24
- Bluetooth® audio: refer to page 5-31
- Hands-free system: refer to page 5-34

#### Power and audio controls

## Power switch and volume control

Type A and B audio



The dial is used for both power (ON/OFF) and volume control. The radio is turned ON and OFF by pressing the dial, and the volume is controlled by turning the dial.

## Sound controls and audio settings

#### NOTE

- SPEED VOLUME CONTROL (SVC) is a function that automatically adjusts the volume according to the vehicle speed. As the vehicle speed increases, the audio volume automatically increases to match the vehicle speed, in order to create a pleasant listening environment even as the driving noise increases.
- For type B audio, SRS TruBass and FOCUS are equipped.
- SRS Sound features:
  - (1) Sound originating from door

- mount speakers can be heard at ear level (built in SRS FOCUS effect) (type B audio).
- (2) Ultra rich bass sound can be obtained from standard door mount speakers (built in SRS TruBass effect) (type B audio).
- TruBass, FOCUS, SRS and "@" symbol are trademarks of SRS Labs, Inc.
- TruBass and FOCUS technologies are incorporated under license from SRS Labs, Inc.

SISON TruBass SISON FOCUS

## ▼ Tone and balance control (type A audio)

Type A audio



Each brief press of the "TUNE/TRACK/ CH" dial will change the control modes in the following sequence.

Choose the preferred level for each mode by turning the "TUNE/TRACK/CH" dial.

The control function returns to the tune/ track/channel control mode after approximately 5 seconds.

### ▼ Other settings (type A audio)



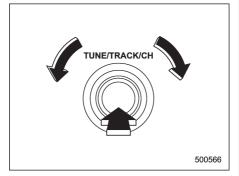
Each brief press of the "MENU" button will change the control modes in the following sequence.



Choose the preferred settings for each mode by turning the "TUNE/TRACK/CH" dial.

The control function returns to the tune/ track/channel control mode after approximately 5 seconds.

#### ▼ Audio settings (type B audio)



- 1. Press the "TUNE/TRACK/CH" dial to display "SETTING Menu".
- 2. Operate the "TUNE/TRACK/CH" dial to select the preferred menu. You can select the menu as shown in the following chart.

First menu	Second menu	Third menu
Screen OFF		
Sound	Tone	Bass
		Mid
		Treble
	Balance	Balance
		Fader
	SVC	_
	SRS Sound	_
Screen	Brightness	_
	Contrast	_
	Screen Size	_
	Screen Saver	Picture Select
		Picture Down- load
		Picture Erase
BT Audio Setup	Pair Audio Player	_
	Select Audio Player	_
	Set Passkey	_
	Delete Audio Player	_
Others	HD ON/OFF	_
	Initialize	_

3. Operate the "TUNE/TRACK/CH" dial to select the preferred setting for each mode.

## **NOTE**

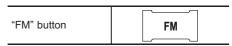
Only "Screen OFF" can be displayed while driving.

## ▼ Adjustable level of each mode

Mode		Range of levels (displayed)	Default setting	Turn counterclockwise	Turn clockwise
Volume	Volume control	0 to 40	15	For less volume	For more volume
	AUX volume control	0 to 40	15	For less volume	For more volume
Tone and balance	Bass control	-8 to +8	0	For less bass sound	For more bass sound
	Midrange control	-8 to +8	0	For less midrange sound	For more midrange sound
	Treble control	-8 to +8	0	For less treble sound	For more treble sound
	Balance	L9 to R9	0	Right channel attenuated	Left channel attenuated
	Fader	R9 to F9	0	Front attenuated	Rear attenuated
Other settings	SPEED VOLUME	OFF to 2	OFF	For less auto volume change	For more auto volume change
	BEEP (Type A audio)	OFF to ON	ON	OFF	ON
	SRS Sound (Type B audio)	OFF to ON	ON	OFF	ON
	Brightness (Type B audio)	0 to 15	13	For less brightness	For more brightness
	Contrast (Type B audio)	0 to 15	8	For less contrast	For more contrast
	Screen size (Type B audio)	Normal to Wide	Wide	Normal	Wide
	HD ON/OFF (Type B audio)	OFF to ON	ON	ON	OFF
	Initialize (Type B audio)	Cancel to Initialize	Cancel	Initialize	Cancel

## FM/AM radio operation

#### **■** FM selection



Press the "FM" button when the radio is off to turn on the radio.

Press the "FM" button when the radio is on to select the preferred reception mode.

Each time the "FM" button is briefly pressed, the radio will change in the following sequence starting from the last radio band that you selected.

#### Type A audio:

### Type B audio:

## ■ AM selection

Type A audio	AM
Type B audio	AM

Press the "AM" button when the radio is off to turn on the radio.

#### ▼ Type A audio

Press the "AM" button when the radio is on to select AM reception starting from the last radio band and the last frequency interval that you selected.

### ▼ Type B audio

Each time the "AM" button is briefly pressed, the radio will change in the following sequence starting from the last radio band that you selected.



## ■ Tuning

#### **▼** Manual tuning

"TUNE/TRACK/CH" dial



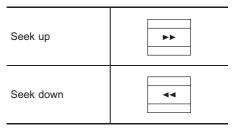
Turn the "TUNE/TRACK/CH" dial clockwise to increase the tuning frequency and turn the "TUNE/TRACK/CH" dial counterclockwise to decrease it.

Each time the dial is turned, the frequency interval can be changed between 10 kHz in the AM mode and 0.2 MHz in the FM mode.

#### **▼** Stereo indicator

The stereo indicator "ST" (type A audio)/ "STEREO" (type B audio) will illuminate when an FM stereo broadcast is received.

## ▼ Seek tuning (SEEK) Type A audio:



## Type B audio:

Seek up	►►/SCAN
Seek down	<b>◄</b> /A.S

If you press the " " " button briefly, the radio will automatically search for a receivable station and stop at the first one it finds. This function may not be available when radio signals are weak. When this happens, perform manual tuning to select the preferred station.

## ▼ Scan tuning (SCAN)

Type A audio*1	SCAN
Type B audio*2	►►/SCAN

- \*1: Press the button briefly.
- \*2: Press and hold the button.

If you press the "SCAN" button, the radio will switch to the scan mode. In this mode, the radio scans through the radio band until a receivable station is found. The radio will briefly stop at the station while displaying the frequency, after which scanning will continue until the entire band has been scanned.

Press the "SCAN" button again to cancel the SCAN mode and to stop at any displayed channel.

Automatic tuning may not function properly if the station reception is weakened by distance from the station or proximity to tall buildings and hills.

#### ▼ PTY (Program type) group tuning (only FM reception)

Type A audio	PTY CAT
Type B audio	LIST/

Press the indicated button to change to the PTY selection mode. At this time, the PTY group that you are currently listening to (type A audio)/that you selected the last time (type B audio) will be displayed for 10 seconds. In the PTY selection mode, "PTY" is displayed on the screen.

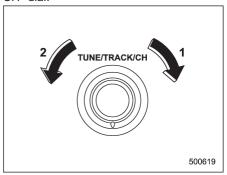
## ∇ PTY (Program type) group selection

In the PTY selection mode, perform the following procedures to change the PTY group by one step at a time.

Type A audio: Press the following but-

PTY group up by one step	
PTY group down by one step	

**Type B audio:** Turn the "TUNE/TRACK/CH" dial.



- 1) PTY group up by one step
- 2) PTY group down by one step

This operation only changes the display. It does not change the station that is currently being received.

## ∇ Seek in PTY (Program type) group

## Type A audio:

Seek up	<b>&gt;</b>
Seek down	44

### Type B audio:

Seek up	►►/SCAN
Seek down	✓ /A.S

In the PTY selection mode, when the preferred PTY group has been selected, pressing the "SEEK" button ">>>" or "<</p>
"seeks within that PTY group.

The control function returns to the normal mode after approximately 10 seconds.

■ HD Radio<sup>TM</sup> Technology (Digital AM and FM Radio) (type B audio)



500590

HD Radio Technology is fueling the digital radio revolution in the United States and around the world.

The digital technology enables broadcasters to offer new and unique FM content via HD2 / HD3 channels, crystal-clear sound and data services on both AM and FM bands - all free, with no subscription fee.

HD Radio Technology manufactured under license from iBiquity Digital Corporation. U.S. and Foreign Patents. HD Radio<sup>TM</sup> and the HD, HD Radio, and "Arc" logos are proprietary trademarks of iBiquity Digital Corp.

For more information, visit www.hdradio. com.

Press the HO/TAG button while receiving FM radio (except an analog broadcast). The next channel of the station that is being received will play.

#### **▼** Mode selection

Turn the "TUNE/TRACK/CH" dial and select the HD Radio ON mode (hybrid mode) or OFF mode (analog mode).

### ▼ iTunes<sup>®</sup> tagging

To tag the received song, press and hold the <code>hd/TAG</code> button. Connect an <code>iPod®</code> to store the tagged song to the <code>iPod®</code>. When the <code>iPod®</code> is connected to <code>iTunes®</code>, you can purchase the tagged songs from the Apple® <code>iTunes</code> Music Store.

For the models of iPod® that support iTunes® tagging, refer to the following website: www.hdradio.com/tagging.php? id=itunes.

#### **▼** HD Radio indicators

Each indicator illuminates under the following conditions.

- The н≫ indicator illuminates while a digital broadcast is received during the HD Radio ON mode.
- The "TAG" indicator illuminates when you can operate the iTunes<sup>®</sup> tagging.

- The "LIVE" indicator illuminates when the "Ballgame" is received.
- The "STEREO" indicator illuminates when an FM stereo broadcast is received.
- The "PTY" indicator illuminates during the PTY selection mode.

#### **▼** About HD Radio

#### **NOTE**

- HD Radio Technology is a hybrid broadcasting system that employs digital and analog signals.
- When the vehicle moves outside the digital broadcasting area (that is narrower than the analog broadcasting area due to the FCC output requirements), the radio reception automatically changes from the digital signal to the analog signal. When the vehicle reenters the digital broadcasting area, the radio reception automatically changes from the analog signal to the digital signal. When in a digital mode the HD Logo will be in orange on the radio display.
- Depending on the broadcasting station, a condition such as a sound delay, echo effect or skipping sound may occur. However, this does not indicate a malfunction.
- Depending on the broadcasting area, the digital signal may not be

received in an area where the analog signal can be properly received, or the system frequently switches the channels between the digital and analog signals. However, this does not indicate a malfunction. If this frequent switching between digital and analog causes annoyance, set the radio to the analog mode (HD Radio off mode) that provides the same radio broadcasting quality as a conventional radio.

# ■ Displaying radio PS (Program Service Name) and RT (Radio Text)

"TEXT" button	TEXT
---------------	------

#### **▼** Type A audio

If the PS (Program Service Name) and/or RT (Radio Text) are available, pressing the "TEXT" button will change the display among PS, RT and frequency. The default setting is "PS".

#### **NOTE**

- The maximum number of characters that can be displayed for PS is 8.
- The maximum number of characters that can be displayed for RT is 64.

• If RT is 13 characters or longer, press and hold the "TEXT" button in order to change the page.

#### **▼** Type B audio

Press the "TEXT" button to show the next page when the text is not fully displayed while the PSD (Program Service Data) or RT (Radio Text) service is received.

#### NOTE

- When the HD Radio function is turned on, PSD provides additional information about the broadcast. Text data such as "Title" and "Artist" is displayed on the screen.
- When the HD Radio function is turned off (HD Radio off mode), the radio text is displayed on the screen while receiving the broadcasting station with RBDS (Radio Broadcast Data System).

### Station preset

### **▼** How to preset stations

- 1. Select the preferred reception mode.
- 2. Select the preferred station.
- 3. Press and hold one of the preset buttons (from 1 to 6) to store the frequency. If the button is pressed briefly, the preceding selection will remain in the

memory.

#### NOTE

- Up to six stations for each reception mode may be preset.
- If the connection between the radio and battery is broken for any reason such as vehicle maintenance or radio removal, all stations stored in the preset buttons are cleared. If this occurs, it is necessary to reset the preset buttons.

#### **▼** Selecting preset stations

- 1. Select the preferred reception mode.
- 2. Press the preferred preset button (from  $\frac{1}{1}$  to  $\frac{6}{1}$ ) briefly.

#### **▼** Auto-store (type B audio)

Using the Auto-store function, you can automatically store 6 stations on the current waveband (FM-AS or AM-AS) by pressing and holding the who button. Use Auto-store to quickly find the strongest stations, for example when traveling through different reception areas.

#### NOTE

• When the HD Radio function is turned on, Auto-store cannot be used while receiving a broadcasting station with SPS (Supplemental Program Ser-

#### vice).

- When you use Auto-store, the new stations replace any stations previously stored.
- Interrupting Auto-store: If you accidentally press the 🍕 button, you can cancel the Auto-store function before it has been completed as follows.
  - switching to the other source mode

  - switching to the other band
  - turning the "TUNE/TRACK/CH" dial
  - pressing the "SCAN" button

## ▼ Displaying and selecting preset stations (type B audio)

- 1. Press and hold the ust/s button during AM/FM reception to display the radio screen.
- 2. Operate the "TUNE/TRACK/CH" dial to select the stations.

## **CD** player operation

#### NOTE

- Make sure to always insert a disc with the label side up. If a disc is inserted with the label side down, the player displays "CHECK DISC". Refer to "When the following messages are displayed" \$\tilde{\sigma}\$5-20.
- If a disc is inserted during a radio broadcast, the disc will interrupt the broadcast.
- After the last song finishes, the disc will automatically return to track 1 (the first track on the disc) and will automatically play back.
- The player is designed to be able to play music CD-Rs and music CD-RWs, but it may not be able to play certain ones.
- Mini CDs (i.e., 8 cm/3 inch CDs) are not supported, and if inserted, they will be immediately ejected.
- CDs that can be played back are accompanied by the following restrictions.
  - Maximum number of folders: 255
  - Maximum number of files in a folder: 255

 Maximum number of files on a CD: 510 (type A audio)/999 (type B audio)

## ■ Play file

#### NOTE

- Copyright protected MP3/WMA/AAC files will not be played by the system.
   The player will automatically skip to the next file (track).
- WMA9 Lossless, WMA9 Professional and WMA9 voice cannot be played.

#### MP3:

- Based on MPEG1, 2 and 2.5 Layer3
- Sampling rate (kHz): 48, 44.1, 32, 24, 22.05, 16, 12, 11.025, 8
- Bit rate (kbps): 8 to 320
- Supports variable bit rates

#### WMA (type A audio):

- Based on Windows Media Audio 9
- Sampling rate (kHz): 48, 44.1, 32
- Bit rate (kbps): 32 to 192

#### WMA (type B audio):

- Based on Windows Media Audio 7, 8 and 9
- Sampling rate (kHz): 48, 44.1, 32
- Bit rate (kbps): 32 to 192

#### AAC (type A audio):

- Based on MPEG4 AAC
- Sampling rate (kHz): 48, 44.1, 32, 24, 22.05, 16, 12, 11.025, 8
- Bit rate (kbps): 8 to 320
- Number of channels: 1 to 2ch

#### AAC (type B audio):

- Based on MPEG2 AAC and MPEG4 AAC
- Sampling rate (kHz): 48, 44.1, 32, 24, 22.05, 16, 12, 11.025, 8
- Bit rate (kbps): 8 to 320
- Number of channels: 1 to 2ch

#### ■ How to insert a CD

Hold a disc with a finger in the center hole while gripping the edge of the disc, then insert it in to the slot (with the label side up) and the player will automatically pull the disc into position.

#### NOTE

DO NOT INSERT TWO DISCS INTO THE DISC INSERTION SLOT AT THE SAME TIME.

## ■ How to play back a CD

#### **▼** When there is no CD inserted

Properly insert a CD. Refer to "How to insert a CD" \$\tilde{g}\$-16.

When a CD is loaded, the player will start playback of the CD, beginning with the first track.

#### **▼** When CD is in the player

Each brief press of the change the modes in the following sequence.



<sup>\*:</sup> For type A audio, "BT-A" is displayed.

When the CD mode is selected, the player will start playback.

## ■ To select a track from the beginning

"TUNE/TRACK/CH"



Turn the "TUNE/TRACK/CH" dial clockwise to skip to the beginning of the next track. Each time the dial is turned, the indicated track number will increase.

Turn the "TUNE/TRACK/CH" dial counterclockwise to skip to the beginning of the current track. Each time the dial is turned, the indicated track number will decrease.

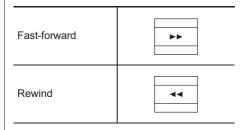
#### NOTE

With an MP3, WMA or AAC:

- Skipping past the last track will take you back to the first track in the folder.
- Skipping past the first track will take you to the last track in the folder.

## ■ Fast-forwarding and rewinding

Type A audio:



### Type B audio:



Press and hold the ">>" button to fastforward the track. Release the button to stop fast-forwarding.

Press and hold the "

" button to rewind the track. Release the button to stop rewinding.

#### NOTE

 If you fast-forward to the end of the last track, fast-forwarding will stop and

- CONTINUED -

the player will start playback beginning with the first track. For an MP3, WMA or AAC folder, the player will start playback beginning with the first track of the next folder.

 If you rewind to the beginning of the first track, rewinding will stop and the player will start playback. For an MP3, WMA or AAC folder, the player will start playback beginning with the first track of the current folder.

## ■ Repeating

To repeat a track, briefly press the following button ("RPT" button) while the track is playing.

Type A audio	RPT/RDM	
Type B audio	RPT 1	

Each time you briefly press the button, the mode will change in the following sequences.

#### Type A audio:



#### Type B audio:



#### NOTE

- The "RPT" (type A audio)/"One RPT" (type B audio) indication refers to the repeat playback of a single track. It repeats the track that is playing.
- The "F-RPT" (type A audio)/"Folder RPT" (type B audio) indication refers to the repeat playback of a folder. It repeats the all of the tracks in the folder. It is possible to select the function when the MP3/WMA/AAC format track is playing.

To cancel the track repeat-play mode, briefly press the "RPT" button and select CANCEL. The "RPT" indication will turn off, and the normal playback mode will be resumed.

#### NOTE

The repeat-play mode will be cancelled if you perform any of the following steps.

- Press the button.
- Press the "SCAN" button (type A audio).

## ■ Random playback

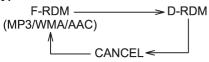
To playback tracks at random, press the following button ("RDM" button) while a track is playing.

Type A audio*1	RPT/RDM
Type B audio*2	RDM ○ 2 ○

- \*1: Press and hold the button.
- \*2: Press the button briefly.

Each time you press the button, the mode will change in the following sequences.

#### Type A audio:



#### Type B audio:



#### NOTE

- The "RDM" (type A audio)/"Track RDM" (type B audio) indication refers to the random playback of the tracks. It randomly repeats the tracks on the CD. It is possible to select the function when formats other than the MP3/WMA/AAC format CD is playing.
- The "F-RDM" (type A audio)/"Folder RDM" (type B audio) indication refers to the random playback in the folder. It randomly repeats the tracks in the folder. It is possible to select the function when an MP3/WMA/AAC format track is playing.
- The "D-RDM" indication refers to the random playback of a disc. It randomly repeats the tracks on the CD. It is possible to select the function when an MP3/WMA format track is playing.

To cancel the random playback mode, press the "RDM" button again and select CANCEL.

The "RDM" indication will turn off, and the normal playback mode will be resumed.

#### NOTE

Random playback will be cancelled if you perform any of the following steps.

- Press the "SCAN" button (type A audio).

## ■ Scan (type A audio)



The scan mode lets you listen to the first 10 seconds of each track in succession. Press the "SCAN" button to start scanning upward beginning with the track following the currently selected one.

After all tracks on the disk/folder have been scanned, normal playback will be resumed. To cancel the scan mode, press the "SCAN" button again.

#### **NOTE**

The scan mode will be cancelled if you perform any of the following steps.

- Press the "RPT" button.
- Turn the "TUNE/TRACK/CH" dial.
- Press the "▼" or "▲" side of the "FOLDER/PTY/CAT" button.
- Turn off the power of the audio

#### equipment.

• Turn the ignition switch to the "LOCK" (off) position.

## ■ Display selection (type A audio)



If you press the "TEXT" button during playback, the display will change as shown in the following sequence.

#### For CD-DA:



#### For MP3/WMA/AAC:



#### **▼** Page (track/folder title) scroll

If you press the "TEXT" button again and hold it, the title will be scrolled so you can see all of it.

#### **NOTE**

- For type A audio, the display is designed to show titles as shown in the following items.
  - When playing a CD-DA: 256 characters
  - When playing an MP3/WMA/AAC:
    64 characters
  - When playing an iPod<sup>®</sup>: 255 characters
- If no operations are performed for 10 seconds, the screen that was displayed before pressing and holding the "TEXT" button will be shown.

## ■ Folder selection NOTE

- Selecting folders in this way is possible only within a single disc.
- Only MP3/WMA/AAC folders are recognized when an attempt to select the next or previous folder is made. If no appropriate folder exists on the disc, pressing the "▲" or "▼" side of the "FOLDER/PTY/CAT" button starts playback beginning with the first track.

Press the following buttons briefly.

#### Type A audio:

To select the next folder	
To go back to the previous folder	_

#### Type B audio:

To select the next folder	►►/SCAN
To go back to the previous folder	<b>←</b> /A.S

## ■ How to eject a CD from the player

When a disc is being played back or when a disc is in the player, press the button. The disc will be ejected.

#### **NOTE**

- Avoid driving the vehicle with a CD sticking out. The CD may fall out due to vibration.
- If you do not remove the ejected disc within approximately 15 seconds, a disc protection function will operate, automatically reloading the disc. In this case, the disc is not played.

## ■ When the following messages are displayed

If one of the following messages is displayed while operating the CD player, determine the cause based on the following information. If you cannot clear those messages, please contact your SUBARU dealer.

#### **▼** When "PUSH EJECT" is displayed

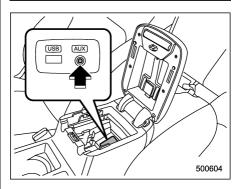
Press the <u>a</u> button to eject the disc. Check the disc for damage or deformation, and also check that the correct disc is inserted. Do not try to eject the disc forcibly. Mini CDs (i.e., 8 cm/3 inch CDs) are not supported, and if inserted, they will be immediately ejected and this message will be displayed. If the disc cannot be ejected or this message remains displayed, please contact your SUBARU dealer.

#### **▼** When "CHECK DISC" is displayed

Press the \_\_\_ button to eject the disc. Check that the disc is not damaged or scratched, and also check that the disc is inserted correctly. This message may appear when using some CD-RW discs. Check that the disc type (i.e., 8 cm/3 inch CDs are not supported) and data format are correct. This player can only play MP3, WMA and AAC data formats. If the disc cannot be ejected or this message

remains displayed, please contact your SUBARU dealer.

## Auxiliary input jack



You can connect an external audio device to the vehicle's audio system and play back audio via the vehicle's speakers.

An auxiliary (AUX) input jack is present in the center console. A stereo mini pin plug (3.5ø) can be inserted in this jack. The connection cable is available at electrical appliance or similar stores.

#### To use the AUX input jack:

1. Connect a portable audio player to the AUX input jack.



- 2. Press the "CD/AUX" button on the audio control panel to select the AUX mode. Refer to "When CD is in the player" \$\textit{\$^{\circ}}5-17\$.
- 3. Play back the portable audio player. Refer to the instruction manual for the portable audio player.

#### NOTE

- The output sound of the portable audio player is not loud, and the sound via the vehicle's speakers that are connected to the vehicle audio set may be very low. If you turn up the volume of the audio set, the volume becomes louder. However, when you change from one portable audio player to another one, the volume levels via the vehicle's speakers may be significantly louder compared to the prior device. To avoid a large volume difference, turn down the volume when you change between portable audio players.
- In some cases, when the sound volume of the portable audio player is low, the sound quality may become impaired when you turn up the volume of the vehicle audio system. In this case, adjust the sound volume of the portable audio player.
- In some cases, noise occurs be-

cause of a bad connection between the portable player and the vehicle audio system. Try cleaning the stereo jack and audio plug.

• If the noise is not reduced, check for disconnection of the cord or a malfunction of the portable player.

## Precautions to observe when handling a compact disc

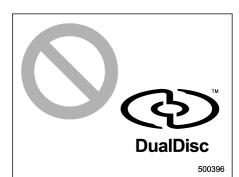
Use only compact discs (CDs, CD-Rs and CD-RWs) that have the mark shown in the following. Also, some compact discs cannot be played.







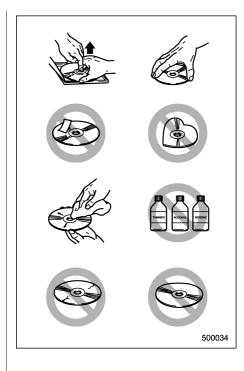
500090



- You cannot use a DualDisc in the CD player. If you insert a DualDisc into the player, the disc may not come out again, possibly causing the player to malfunction.
- In cold and/or rainy weather, dew can form inside the CD player, preventing normal operation. If this happens, eject the CD and wait for the player to dry out.
- Skipping may occur when the CD player is subjected to severe vibration (for example, when the vehicle is driven on a rough surface).
- To remove a disc from the case, press the center of the case and hold both edges of the disc. If the disc surface is touched directly, contamination could cause poor tone quality. Do not touch the disc surface.
- Use a clean disc whenever possible. If

there are deposits, wipe the disc surface from the center outward with a dry, soft cloth. Be sure not to use a hard cloth, thinner, benzine, alcohol, etc.

- Do not use any disc that is scratched, deformed, or cracked. Also, do not use any disc that has a non-standard shape (for example, a heart shape). Malfunctions or problems might result.
- A disc is vulnerable to heat. Never keep it either in places exposed to direct sunlight, near heaters or in vehicles parked in the sun or on hot days.



## USB storage device / iPod® operations

## ■ Play file

Refer to "Play file" \$\infty\$5-16.

## ■ Connectable USB storage device

Mass storage class USB memory can be connected. USB storage devices that can be played back are accompanied by the following restrictions.

- Maximum directory layers: 8 layers (including the ROOT)
- Maximum number of files in a folder: 255
- Maximum number of folders: 512 (type A audio)/255 (type B audio) (including the ROOT)
- Maximum number of files on the device: 130,560 (type A audio)/2,500 (type B audio)

#### **NOTE**

- HUB class USB memory cannot be played.
- ATAPI subclass USB cannot be played.
- For type A audio, High Speed USB 2.0 cannot be played.
- . A USB memory that is powered by a

source other than the USB power supply (for example, an AC power adapter, etc.) cannot be operated.

- A USB memory that is connected to the memory card reader or multi card reader cannot be operated.
- If the USB memory consists of two drives or more, the system will recognize only one of the drives after connecting the USB memory.
- The contents stored on the USB memory may not be played in the same order as they appear on a personal computer.
- A personal computer cannot be used even if it is connected to the system using a USB cable.
- If the USB memory has a security function, the contents stored on the USB memory cannot be played by the system.
- A USB memory and an iPod<sup>®</sup> cannot be connected to the system at the same time.

### ■ Connectable iPod® models

Model		Firmware version
	with video	1.3
	classic	2.0.4
	nano (1st generation)	1.3.1
	nano (2nd generation)	1.1.3
	nano (3rd generation)	1.1.3
iPod <sup>®</sup>	nano (4th generation)	1.0.4
IF OU	nano (5th generation)	1.0.2
	nano (6th generation)	1.0
	touch (1st generation)	3.1.3
	touch (2nd generation)	3.1.3
	touch (3rd generation)	4.1
	touch (4th generation)	4.1
	1G	3.1.3
iPhone <sup>®</sup>	3G	3.1.3
irnone	3G S	3.1.3
	4G	4.1

## **A** CAUTION

Do not connect an iPod<sup>®</sup> other than the previously stated models. Doing so may result in a malfunction or cause the device to experience a thermal hazard.

#### NOTE

- iPod<sup>®</sup> is a registered trademark of Apple Inc.
- You are only permitted to personally copy and play copyright-free material or material that is legally permitted to be copied and played by using an iPod<sup>®</sup> and iTunes. Copyright infringement is prohibited by law.
- To check the firmware version of an iPod<sup>®</sup>, connect it to a computer and check the device manager. For further information, see the User's Guide for the iPod<sup>®</sup>.
- To update the firmware version of an iPod<sup>®</sup>, visit the Apple Inc. website.
- Depending on the model and firmware version of an iPod<sup>®</sup>, it may not work properly or not operate at all.

■ Connecting USB storage device / iPod®



Do not operate an iPod<sup>®</sup> while driving. Doing so may distract your attention from driving and could lead to an accident.

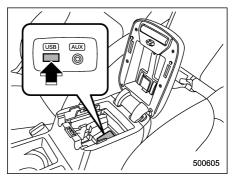
## **A** CAUTION

- If the data stored in an iPod<sup>®</sup> is deleted while it is connected to the in-vehicle system, the data cannot be recovered.
- Do not store an iPod<sup>®</sup> in the vehicle. If an iPod<sup>®</sup> is left in the vehicle for a long period of time, it may be deformed, discolored or damaged by high temperature.

#### NOTE

- Even if a USB storage device or iPod<sup>®</sup> is connected, it cannot be played unless the USB/iPod<sup>®</sup> mode is selected.
- Movies stored on a USB storage device or an iPod<sup>®</sup> cannot be played while the storage device or iPod<sup>®</sup> is connected to the system.

- While an iPod<sup>®</sup> is connected, the iPod<sup>®</sup> cannot be operated using the click wheel on the iPod<sup>®</sup> (except some models).
- When using an iPod® by connecting it to in-vehicle equipment, the order of the list items displayed on the invehicle equipment may be different from that on the iPod®. However, this does not indicate a malfunction.
- An iPod<sup>®</sup> battery that is connected to in-vehicle equipment will be charged when the ignition switch is in the "ON" or "ACC" position. However, activation of the iPod<sup>®</sup> may be delayed if the battery charge of the iPod<sup>®</sup> is low.
- If an iPod<sup>®</sup> does not activate after operation, disconnect the connection cable from the iPod<sup>®</sup> and reset it. For the resetting procedure, see the User's Guide of the iPod<sup>®</sup>.
- If an iPod® and the connection cable are connected improperly, the iPod® cannot be powered on or will not be recognized by in-vehicle equipment. In this case, disconnect the connection cable from the iPod®, and then connect it again.



The USB connector is located in the center console. Use the connector to connect a USB storage device/iPod<sup>®</sup>.

## ■ How to play back

- 1. Connect a USB storage device/iPod<sup>®</sup>.
- 2. Press the Dutton. Each time you briefly press the button, the mode will change in the following sequence.

### Type A audio:



\*: Only when a Media Hub is connected.

### Type B audio:



When the USB/iPod<sup>®</sup> mode is selected, the player will start playback of the USB storage device/iPod<sup>®</sup>.

#### NOTE

- Depending on the number of files stored on the iPod<sup>®</sup> and the firmware version, the iPod<sup>®</sup> may not activate smoothly after operation or not work properly.
- Do not disconnect the connector from the iPod® during iPod® operation.

## ■ To select a track from the beginning

Select a track in the same way as for a CD. For details, refer to "To select a track from the beginning" \$\textit{\$=}5-17\$.

# ■ To select a chapter from the beginning when connecting iPod®

When playing podcasts or audiobooks, select a chapter in the same way as for a CD. For details, refer to "To select a track

from the beginning" \$\sigma 5-17\$.

## ■ Fast-forwarding and rewinding

Fast-forwarding and rewinding are operated in the same way as for a CD. For details, refer to "Fast-forwarding and rewinding" \$\inspec\$5-17.

#### NOTE

When connecting iPod<sup>®</sup>:

- When the end of a track is reached while fast-forwarding, fast-forwarding ends and play begins from the beginning of the next track.
- When the beginning of a track is reached while rewinding, rewinding ends and play begins from the beginning of the track.

## ■ Repeating

▼ When connecting USB storage device

Repeating is operated in the same way as for a CD. For details, refer to "Repeating" \$\tilde{F}\$5-18.

## **▼** When connecting iPod<sup>®</sup>

Type A audio	RPT/RDM
Type B audio	RPT 1

Each time you briefly press the "RPT" button, the mode will change in the following sequence.

#### Type A audio:

ALL RPT ← SONG RPT

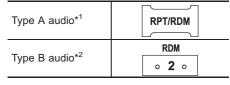
#### Type B audio:

#### NOTE

- The "ALL RPT" indication refers to the repeat playback of all tracks on the entire iPod<sup>®</sup>.
- The "SONG RPT" (type A audio)/
  "ONE RPT" (type B audio) indication
  refers to the repeat playback of a single
  track. It repeats the track that is playing.
- When an audiobook is playing, the mode does not change even if you

press the "RPT" button.

## ■ Random playback



- \*1: Press and hold the button.
- \*2: Press the button briefly.

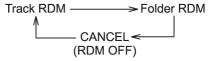
To playback tracks at random, press the "RDM" button while a track is playing.

Each time you press the button, the mode will change in the following sequence.

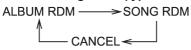
When connecting USB storage device (type A audio):



When connecting USB storage device (type B audio):



When connecting iPod® (type A audio):





#### NOTE

- The "FOLDER RDM" indication refers to the random playback in the folders. It randomly repeats all of the tracks in the folder.
- The "ALL RDM" indication refers to the random playback on the entire USB storage device. It randomly repeats all of the tracks on the USB storage device.
- The "ALBUM RDM" indication refers to the shuffle playback of the album. It sequentially plays back all of the tracks on the album.
- The "SONG RDM" indication refers to the shuffle playback on the entire iPod<sup>®</sup>. It randomly repeats all of the tracks on the iPod<sup>®</sup>.
- When an iPod<sup>®</sup> is connected, the files are played back at random by the shuffle function of the iPod<sup>®</sup>. There-

fore, iPod<sup>®</sup> operation may be different depending on the model of the connected iPod<sup>®</sup>.

 When an audiobook or a podcast is playing, the mode does not change even if you press the "RDM" button.

To cancel the random playback mode, press the "RDM" button and select CANCEL. The "RDM" indication will turn off, and the normal playback mode will resume.

# ■ SCAN (only when connecting USB storage device) (type A audio)

"SCAN" button	SCAN
"SCAN" button	SCAN

Scan is operated in the same way as for a CD. For details, refer to "Scan (type A audio)" \$^5-19\$.

#### NOTE

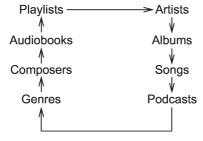
When an iPod<sup>®</sup> is connected, you cannot select the SCAN mode.

## ■ Selecting category (only when connecting iPod®)

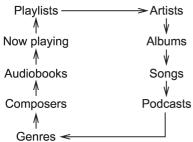
When the button is pressed briefly, the iPod® menu will be displayed.

Each time you turn the "TUNE/TRACK/ CH" dial clockwise, the displayed category will change in the following sequence. Each time you turn the dial counterclockwise, the displayed category will change in the opposite sequence.

### Type A audio:



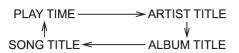
#### Type B audio:



To select the category, press the dial. To close the iPod<sup>®</sup> menu, press and hold the usr/s button. To return to the previous screen, briefly press the usr/s button.

## ■ Display selection

If you press the TEXT button during playback, the display will change as shown in the following sequence.



#### **▼** Page scroll

Refer to "Page (track/folder title) scroll" \$\inspec 5-19\$.

# ■ Folder selection (only when connecting USB storage device)

Refer to "Folder selection" \$\tilde{F}\$ 5-20.

#### NOTE

When an iPod<sup>®</sup> is connected, you cannot select a folder.

### Setting the playing speed (only when the audiobook is playing) (type B audio)

Each time you briefly press the ubutton (the "RPT" button) while the audiobook is playing, the playing speed will change in the following sequence.



## ■ When the following messages are displayed

If one of the following messages is displayed while connecting the USB storage device/iPod®, determine the cause based on the following information. If you cannot clear those messages, please contact your SUBARU dealer.

## ▼ When "CHECK DEVICE" is displayed

This message is displayed under the following conditions.

- When there is a short in the USB bus
- When an unsupported device (for example a USB mouse) is connected
- When an unsupported iPod<sup>®</sup> is connected
- When a connected iPod<sup>®</sup> is frozen
- When a transmission malfunction occurs
- When an iPod® confirmation malfunction occurs
- When a HUB class USB storage device is connected

Disconnect the USB storage device/iPod® and check it.

### When "NO USB" is displayed (type B audio)

This message is displayed under the following conditions.

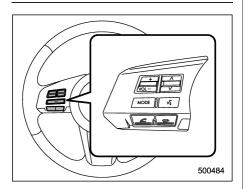
- No USB storage devices/iPod<sup>®</sup> are connected.
- An incompatible USB storage device/ iPod<sup>®</sup> is connected.

Connect a supported USB storage device/ iPod<sup>®</sup>.

#### When "No song" is displayed (type B audio)

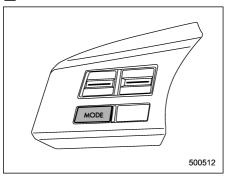
This message is displayed when no playable audio files are in the connected USB storage device/iPod<sup>®</sup>. Connect a USB storage device/iPod<sup>®</sup> that has playable audio files stored in it.

#### **Audio control buttons**



These buttons are located on the spokes of the steering wheel. They allow the driver to control audio functions without taking his/her hands off the steering wheel.

### **■ MODE** button



The "MODE" button is used to select the preferred audio mode. Each time it is pressed, the mode will change to the next one in the following sequence:



- \*1: The frequency last received in the selected waveband will be displayed.
- \*2: Only when a CD is in the player.
- \*3: Only when the device is connected.

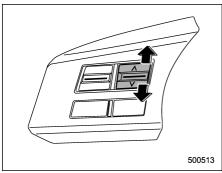
#### **▼** Models with Hands-free system

Press and hold this button if you wish to immediately cut the volume to zero.

The audio display will show "MUTE".

If you press and hold the button again, the original sound volume will return and "MUTE" turns off.

## ■ "∧" and "∨" switch



#### ▼ With radio mode selected

Press the switch to the "\" or "\" side briefly to skip to a preset channel. Press and hold the switch to the "\" or "\" side to seek the next receivable station and stop at it.

That station's frequency will be indicated on the audio display.

#### **▼** With CD mode selected

Press the switch to the "\wedge\" side briefly to skip forward in the track order. Press the switch to the "\wedge\" side briefly to skip backward in the track order.

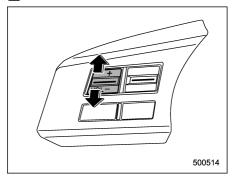
The track number will be shown on the audio display.

When the MP3/WMA/AAC format track is playing, press and hold the switch to the "\lambda" side to select the next folder. Press and hold the switch to the "\sqrty" side to go back to the previous folder.

#### **▼** With USB/iPod® mode selected

Press the switch to the "\" side to skip forward in the track order. Press the switch to the "\" side to skip backward in the track order. The track number will be shown on the audio display.

#### ■ Volume control switch



Press the switch to the "+" side to increase the volume. Press the switch to the "-" side to reduce the volume.

A number indicating the volume will be shown on the audio display.

## Bluetooth® audio

#### NOTE

For models with the genuine SUBARU navigation system, refer to the Owner's Manual supplement for the navigation system.



500481

#### **NOTE**

The Bluetooth word mark and logo are registered trademarks of Bluetooth SIG, Inc.

This function enables you to play back audio sources from **Bluetooth**<sup>®</sup> audio devices. You need to register the **Bluetooth**<sup>®</sup> audio device in the system before using it.

#### **NOTE**

- The Bluetooth<sup>®</sup> audio function may not operate properly under the following conditions.
  - The device is turned off.
  - The battery of the device has run down.
  - The device is not connected to the system.
  - The device is behind the seat or in the glove box.
  - A metal material is covering or touching the device.
- Depending on the type of device that is used, operation and sound volume may be different from normal use of those devices.
- The sound quality may degrade due to the influence of the device that is connected to the system or the circumstances of the Bluetooth network.
- When another Bluetooth<sup>®</sup> device is simultaneously connected, noise may be heard.

#### ■ Media format

**Bluetooth**<sup>®</sup> audio devices cannot be connected if they are not compatible with the following **Bluetooth**<sup>®</sup> profiles.

• A2DP (Advanced Audio Distribution Profile)

• AVRCP (Audio/Video Remote Control Profile)

## ■ Setting Bluetooth<sup>®</sup> audio

"MENU" button (type A audio)	MENU
"TUNE/TRACK/CH" dial	TUNE/TRACKICH

#### Type A audio:

- 1. Select the "BT-A SETUP" menu by pressing the "MENU" button. For details, refer to "Other settings (type A audio)" \$\sigma 5-8\$.
- 2. Perform the following procedure by operating the "TUNE/TRACK/CH" dial while "BT-A" is displayed.

#### Type B audio:

- 1. Select the "BT Audio Setup" menu by operating the "TUNE/TRACK/CH" dial. For details, refer to "Audio settings (type B audio)" \$\infty\$5-8.
- 2. Perform the following procedure by operating the "TUNE/TRACK/CH" dial while "BT Audio" is displayed.

#### NOTE

You cannot set Bluetooth® audio while driving.

**▼** Registering (pairing) device

#### NOTE

Only one device can be registered.

- 1. Select the following menu.
  - "PAIR AUDIO" (type A audio)
  - "Pair Audio Player" (type B audio)

If a device is already registered, "MEMORY FULL" will be displayed and the mode will change to the **Bluetooth**® audio setting mode.

- 2. After the passkey is shown on the display, input the passkey into the device.
  - If you input the correct passkey,
     "PAIRED" will be displayed and the registration procedure will be finished.
     If you input an incorrect passkey,
     "FAILED" will be displayed, the registration procedure will not be success.
  - tration procedure will not be successful and the mode will change to the **Bluetooth**® audio setting mode.

#### NOTE

After the ignition switch is turned to the "LOCK" (off) position, the registered device will not be automatically connected to the system even if the

ignition switch is turned to the "ACC" or "ON" position.

#### **▼** Selecting device

- 1. Select the following menu.
  - "SELECT AUDIO" (type A audio)
  - "Select Audio Player" (type B audio)

If no devices are registered, "EMPTY" will be displayed and the mode will change to the **Bluetooth**® audio setting mode.

- 2. Select the "CONFIRM" menu.
  - If the device is connected, "SE-LECTED" will be displayed and the selecting procedure will be finished.
  - If the device cannot be connected, "FAILED" will be displayed and the selecting procedure will not be successful.

#### **▼** Setting passkey

- 1. Select the "SET PASSKEY" menu.
  - After the currently set passkey is displayed, a new passkey can be entered.
- 2. Input the new passkey by operating the "TUNE/TRACK/CH" dial.
- 3. Select the "CONFIRM" menu.
  - The new passkey will be displayed, the passkey will be changed and the mode will change to the **Bluetooth**<sup>®</sup>

audio setting mode.

#### **▼** Deleting device

- 1. Select the following menu.
  - "DELETE AUDIO" (type A audio)
  - "Delete Audio Player" (type B audio)

If no devices are registered, "EMPTY" will be displayed and the mode will change to the **Bluetooth**® audio setting mode.

- 2. Select the "CONFIRM" menu.
  - "DELETED" will be displayed and the mode will change to the Bluetooth® audio setting mode.

## ■ Bluetooth<sup>®</sup> audio operation NOTE

Depending on the connected device, it may not activate as per the following items or not work smoothly.

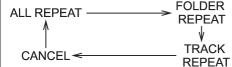
#### **▼** How to play back

Press the conduct button and select the "BT-A" (type A audio)/"BT Audio" (type B audio) mode.

▼ To select a track from its beginning Select a track in the same way as for a CD. Refer to "To select a track from the beginning" ☞ 5-17.

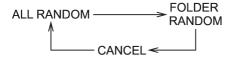
#### ▼ Repeating

Repeating is operated in the same way as for a CD. Refer to "Repeating" \$\sigma 5-18\$. Each time you briefly press the button (type A audio)/ button (the "RPT" button) (type B audio), the mode will change in the following sequence.



#### **▼** Random playback

Random playback is operated in the same way as for a CD. Refer to "Random playback" \$\insightarrow\$5-18. Each time you press and hold the \text{RPIROM} button (type A audio)/ press the \text{o}2\text{o} button (the "RDM" button) briefly (type B audio), the mode will change in the following sequence.



### **▼** Display selection (type A audio)

Select an item to be displayed using the same way as for a CD. Refer to "Display selection (type A audio)" 5-19. Each time you briefly press the TEXT button, the

indication will change in the following sequence.



#### **▼** Folder selection

Select a folder in the same way as for a CD. Refer to "Folder selection" \$\tilde{F}\$5-20.

# Hands-free system (if equipped)

#### **NOTE**

- For models with the genuine SUBARU navigation system, refer to the Owner's Manual supplement for the navigation system.
- When selling your vehicle, make sure that you initialize the Hands-free system to prevent personal data from being improperly accessed.

The Hands-free system operates while the ignition switch is in the "ACC" or "ON" position.

You can use your cell phone without touching it by using the Hands-free system. To use the Hands-free system, connect a cell phone as follows.

#### When no cell phones are registered:

Register a cell phone to the in-vehicle equipment. For details, refer to "When no cell phones are registered" \$\tilde{F}\$-46. After registering a phone, the phone will be automatically connected to the in-vehicle equipment.

## When a cell phone is already registered:

The registered cell phone will be automatically connected to the in-vehicle

equipment when the ignition switch is turned to the "ACC" or "ON" position while carrying the cell phone.

# When two cell phones or more are already registered:

If the system detects a cell phone in the passenger compartment which was previously connected to the in-vehicle equipment when the ignition switch was last turned to the "ACC" or "ON" position, the system connects the cell phone automatically to the in-vehicle equipment. You can select the phone to be connected to the in-vehicle equipment. For details, refer to "Selecting a cell phone" \$\inspec\$5-46.

After connecting a cell phone, you can use the following functions.

Function	Page
Making a phone call	5-47
Taking/declining an incoming call	5-48
Registering phonebook data	5-48
Using and setting phonebook data	5-50
Deleting data	5-50

Even when no cell phones are connected, you may be able to set the following items.

Item	Page
Security setting	5-51
Phone setting	5-52
System setting	5-53

## Safety precautions



- For safety reasons, avoid operating a cell phone while driving.
- Do not make a phone call while driving. When you have an incoming call, stop the vehicle in a safe location before taking the incoming phone call. When you have to absolutely take a phone call, tell the caller "I'll call you back". And then call the caller back after stopping the vehicle in a safe location.

## **A** CAUTION

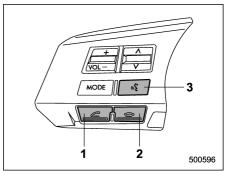
 Do not leave a cell phone in the vehicle. The temperature in the vehicle may become extremely high and cause a malfunction of the cell phone.

- When using a cell phone, be careful not to get it close to the in-vehicle equipment. Getting it too close to the in-vehicle equipment may result in deterioration in tone quality or a poor connecting condition.
- In the frequency band used by this equipment, along with industrial, scientific and medical equipment such as a microwave oven, radio stations (a license is required) to be used by the production line in the factory to identify movable bodies, specific small power radio stations (a license is not required) and amateur radio stations (a license is required) are being operated. (These three types of radio stations are hereinafter referred to as "other radio stations.") Before using this equipment, be sure to check to see if "other radio stations" are being operated in the vicinity. If there is detrimental radio interference from this equipment to "other radio stations," move the equipment to another location as soon as possible to avoid radio interference. The frequency band used

by this equipment is in the 2.4 GHz zone. The FH-SS modulation is employed as a modulation method. The expected inflicting interference distance is less than 33 ft (10 m). This equipment uses a full band and can avoid a band used by a movable body identification device.

## **■** Using the Hands-free system

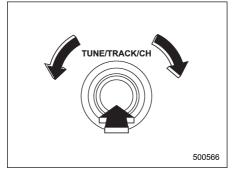
#### **▼** Turning on/off the Hands-free mode



- 1) OFF hook switch
- 2) ON hook switch
- 3) Talk switch

To turn on the Hands-free mode, press the OFF hook switch ... To turn off the Hands-free mode, press the ON hook switch ...

Menu list of the Hands-free system (when not using the voice command system)



- 1. Press the OFF hook switch to turn on the Hands-free mode.
- 2. Turn the "TUNE/TRACK/CH" dial to select a menu, and then press the dial to enter the selected menu.

First menu	Second menu	Third menu	Details	Page
PHONE BOOK*	ADD ENTRY	BY VOICE	Adding a new number by voice	5-48
		BY PHONE	Adding a new number by cell phone	5-48
		MANUAL INPUT	Adding a new number by inputting manually	5-49
		CALL HISTORY	Adding a new number from the call history	5-49
		GO BACK		
	LIST NAMES	_	Showing the list of the names registered in the phonebook	5-50
	CHANGE NAME	_	Changing a name registered in the phonebook	5-50
	SET SPD DIAL/SET SPEED DIAL	_	Registering a speed dial	5-50
	DELETE ENTRY	_	Deleting phonebook data	5-50
	DEL SPD DIAL/DE- LETE SPEED DIAL	_	Deleting a registered speed dial	5-51
	GO BACK	_		
REDIAL	DIAL	_	Redialing	5-47
	STORE	_	Adding a new number stored in the outgoing call history memory	5-49
	DELETE	_	Deleting a number stored in the outgoing call history memory	5-51
	GO BACK	_		
CALLBACK	DIAL	_	Dialing a number stored in the incoming call history memory	5-47
	STORE	_	Adding a new number stored in the incoming call history memory	5-49
	DELETE	_	Deleting a number stored in the incoming call history memory	5-51
	GO BACK	_		

<sup>\*:</sup> If a cell phone is not registered, the menu described in the chart is not indicated.

## 5-38 Audio/Hands-free system

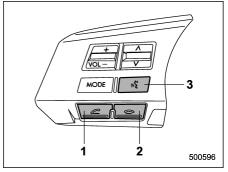
First menu	Second menu	Third menu	Details	Page
SETUP	SECURITY	SET PIN	Setting a PIN code	5-51
		PHBK LOCK* <sup>1</sup> / PHONE BOOK LOCK* <sup>1</sup>	Locking the phonebook	5-51
		PHBK UNLOCK*1/ PHONE BOOK UN- LOCK*1	Unlocking the phonebook	5-52
		GO BACK		
	PHONE SETUP	PAIR PHONE	Registering a new cell phone*2	5-46
		SELECT PHONE	Selecting a cell phone to be used	5-46
		CHANGE NAME	Changing the registered name of the cell phone	5-52
		LIST PHONES	Showing the list of the registered cell phones	5-52
		SET PASSKEY	Changing the pass key	5-53
		DELETE	Deleting the registered cell phone	5-53
		GO BACK		
	SYSTEM SETUP	GUIDANCE VOL/ GUIDANCE VOLUME	Setting the volume of the voice guidance	5-53
		INITIALIZE	Initialization	5-53
		SEL LANGUAGE/SE- LECT LANGUAGE	Selecting the language (using the Hands-free system)	5-53
		GO BACK		
	GO BACK	_		

<sup>\*1:</sup> If a PIN code is not registered, the menu described in the chart is not available. \*2: Up to 5 cell phones can be registered.

 Menu list of the Hands-free system (when using voice command system)

#### NOTE

Press the talk switch and say "Help" to listen to the help guidance.



- 1) OFF hook switch
- 2) ON hook switch
- 3) Talk switch

To turn on the voice command system, press the talk switch & briefly. To turn off the voice command system, wait for 5 seconds without using the voice command system.

## 5-40 Audio/Hands-free system

The commands available for the voice command system are listed in the following chart.

### English:

First menu	Second menu	Third menu	Details	Page
Phone book*	Add entry	By voice	Adding a new number by voice	5-48
		By phone	Adding a new number by cell phone	5-48
		Call history	Adding a new number from call history	5-49
		Go back		
	List names		Showing the list of the names registered in the phonebook	5-50
	Change name		Changing a name registered in the phonebook	5-50
	Set speed dial		Registering a speed dial	5-50
	Delete entry		Deleting phonebook data	5-50
	Delete speed dial		Deleting a registered speed dial	5-51
	Go back			
Redial	Dial		Redialing	5-47
	Store		Adding a new number stored in the outgoing call history memory	5-49
	Delete		Deleting a number stored in the outgoing call history memory	5-51
	Go back			
Callback	Dial		Dialing a number stored in the incoming call history memory	5-47
	Store		Adding a new number stored in the incoming call history memory	5-49
	Delete		Deleting a number stored in the incoming call history memory	5-51
	Go back			

<sup>\*:</sup> If a cell phone is not registered, you cannot use this command.

First menu	Second menu	Third menu	Details	Page
Setup	Security	Set PIN	Setting a PIN code	5-51
		Phone book lock*1	Locking the phonebook	5-51
		Phone book unlock*1	Unlocking the phonebook	5-52
		Go back		
	Phone setup	Pair phone	Registering a new cell phone*2	5-46
		Select phone	Selecting a cell phone to be used	5-46
		Change name	Changing the registered name of the cell phone	5-52
		List phones	Showing the list of the registered cell phones	5-52
		Set passkey	Changing the pass key	5-53
		Delete	Deleting the registered cell phone	5-53
		Go back		
Dial by name		•	Making a phone call by saying a name	5-47
Dial by number			Making a phone call by saying a number	5-47
Outgoing* <sup>3</sup>			Selecting an outgoing call history when adding a new number from the call history	5-49
Incoming*3			Selecting an incoming call history when adding a new number from the call history	5-49

<sup>\*1:</sup> If a PIN code is not registered, you cannot use these commands.
\*2: Up to 5 cell phones can be registered.
\*3: Select the "Phone book" menu then select the "Add entry" menu. Only after then selecting the "Call history" menu will these menus become available for use.

## **5-42** Audio/Hands-free system

### Français:

Premier menu	Deuxième menu	Troisième menu	Détails	Page
Registre*	Ajouter l'entrée	Vocalement	Ajout d'un nouveau numéro par la voix	5-48
		Par téléphone	Ajout d'un nouveau numéro par le téléphone cellulaire	5-48
		Historique d'appels	Ajout d'un nouveau numéro à partir de l'historique des appels	5-49
		Retourner		
	Lister les noms		Affichage de la liste des noms enregistrés dans le répertoire	5-50
	Modifier le nom		Changement du nom enregistré dans le répertoire	5-50
	Configurer composition	on abrégée	Enregistrement d'un appel rapide	5-50
	Supprimer l'entrée		Effacement de données du répertoire	5-50
	Supprimer composition abrégée		Effacement d'une composition rapide enregistrée	5-51
	Retourner			
Recomposer	Composer		Rappel du dernier numéro	5-47
	Enregistrer		Ajout d'un nouveau numéro enregistré dans la mémoire des historiques des appels sortants	5-49
	Supprimer		Suppression d'un numéro enregistré dans la mémoire des historiques des appels sortants	5-51
	Retourner			
Rappel	Composer		Appel du numéro enregistré dans la mémoire des historiques des appels entrants	5-47
	Enregistrer		Ajout d'un nouveau numéro enregistré dans la mémoire des historiques des appels entrants	5-49
	Supprimer		Suppression d'un numéro enregistré dans la mémoire des historiques des appels entrants	5-51
	Retourner			

<sup>\*:</sup> Si un téléphone cellulaire n'est pas enregistré, vous ne pouvez pas utiliser cette commande.

Premier menu	Deuxième menu	Troisième menu	Détails	Page
Réglages	Sécurité	Configurer NIP	Réglage du code PIN	5-51
		Verrouiller le registre*1	Verrouillage du répertoire	5-51
		Déverrouiller le registre*1	Déverrouillage du répertoire	5-52
		Retourner		
	Réglages du téléphone	Jumeler le téléphone	Enregistrement d'un nouveau téléphone cellulaire*2	5-46
		Sélectionner le téléphone	Sélection du téléphone cellulaire à utiliser	5-46
		Modifier le nom	Changement du nom enregistré du téléphone cellulaire	5-52
		Lister les téléphones	Affichage de la liste des téléphones cellulaires enregistrés	5-52
		Configurer le passe-partout	Changement du mot de passe	5-53
		Supprimer	Effacement d'un téléphone cellulaire enregistré	5-53
		Retourner		
Composer par r	nom		Passer un appel en dictant le nom	5-47
Composer par r	numéro		Passer un appel en dictant le numéro	5-47
Sortant* <sup>3</sup>			Sélectionner un historique d'appels sortants lors de l'ajout d'un nouveau numéro à partir de l'historique des appels	5-49
Entrant* <sup>3</sup>			Sélectionner un historique d'appels entrants lors de l'ajout d'un nouveau numéro à partir de l'historique des appels	5-49

<sup>\*1:</sup> Si un code PIN n'est pas enregistré, vous ne pouvez pas utiliser ces commandes.
\*2: Vous pouvez enregistrer jusqu'à 5 téléphones.
\*3: Vous ne pouvez sélectionner ces menus qu'après avoir sélectionné, dans l'ordre, les menus "Registre", "Ajouter l'entrée" puis "Historique d'appels".

## **5-44** Audio/Hands-free system

The other commands available for the voice command system are listed in the following chart.

	Command		Details
	English	Français	Details
1	0 (zero, oh)	0 (zéro)	_
2	1 (one)	1 (un)	_
3	2 (two)	2 (deux)	_
4	3 (three)	3 (trois)	_
5	4 (four)	4 (quatre)	_
6	5 (five)	5 (cinq)	_
7	6 (six)	6 (six)	_
8	7 (seven)	7 (sept)	_
9	8 (eight)	8 (huit)	-
10	9 (nine)	9 (neuf)	_
11	* (star)	* (étoile)	_
12	# (pound)	# (carré, dièse)	-
13	+ (plus)	+ (plus)	_
14	cancel	annuler	Turning off the Hands-free system
15	help	aide	Listening to the help guidance
16	repeat	répéter	Repeat the help guidance that you listened to before speaking the "repeat" command.
17	mute	sourdine	Cutting the volume to zero
18	previous	précédent	
19	confirm	confirmer	
20	PHONE BOOK add entry	ajouter l'entrée dans le re- gistre	Adding a new number

	Command		Details
	English	Français	Details
21	PHONE BOOK change name	modifier le nom dans le registre	Changing a name registered in the phonebook
22	PHONE BOOK delete entry	supprimer l'entrée du registre	Deleting phonebook data
23	PHONE BOOK list names	lister les noms du registre	Showing the list of the names registered in the phonebook
24	PHONE BOOK set speed dial	configurer composition abrégée pour le registre	Registering a speed dial
25	PHONE BOOK delete speed dial	supprimer composition abrégée pour le registre	Deleting a registered speed dial

#### ▼ Preparation for using the Handsfree system

## ∀ When no cell phones are registered

Before using the Hands-free system, it is necessary to register a cell phone in the system. Perform the following procedure to register a cell phone.

- 2. Select "ENGLISH"/"FRANÇAIS" by operating the "TUNE/TRACK/CH" dial.
  - "WELCOME!" will be displayed.
- 3. Press the "TUNE/TRACK/CH" dial or the talk switch  $\boxed{6}$ .
- 4. Perform either of the following procedures
  - Select the "RECORD NAME" menu.
  - Press the talk switch 🥳 .
- 5. Say the name (voice tag) to be registered.
- 6. Select the "CONFIRM" menu.
  - After "CAR M\_MEDIA" (type A audio)/"CAR MULTIMEDIA" (type B audio) is displayed, a pass key will be displayed.
- 7. Input the displayed pass key into the cell phone while the following message is displayed.
  - "PKY: \*\*\*\*" (type A audio)

"PASS KEY: \*\*\*\*" (type B audio)

#### **NOTE**

- If you input the correct pass key, "PAIRED" will be displayed and the registration procedure will be finished.
- If you input an incorrect pass key, "FAILED" will be displayed and the registration procedure will not be successful.
- Up to 5 cell phones can be registered.

#### **▽** Registering a cell phone

To register a cell phone to the in-vehicle equipment, perform the following procedure.

- 1. Select the "SETUP" menu.
- 2. Select the "PHONE SETUP" menu.
- 3. Select the "PAIR PHONE" menu.
- 4. Perform either of the following procedures.
  - Select the "RECORD NAME" menu.
  - Press the talk switch
- 5. Say the name (voice tag) to be registered.
- 6. Select the "CONFIRM" menu.
  - After "CAR M\_MEDIA" (type A audio)/"CAR MULTIMEDIA" (type B

- audio) is displayed, a pass key will be displayed.
- 7. Input the displayed pass key into the cell phone while the following message is displayed.
  - "PKY: \*\*\*\*" (type A audio)
  - "PASS KEY: \*\*\*\*" (type B audio)

#### NOTE

- If you input the correct pass key, "PAIRED" will be displayed and the registration procedure will be finished.
- If you input an incorrect pass key, "FAILED" will be displayed and the registration procedure will not be successful.
- Up to 5 cell phones can be registered.

#### **▽** Selecting a cell phone

To select the registered cell phone for connecting to the in-vehicle equipment, perform the following procedure.

- 1. Select the "SETUP" menu.
- 2. Select the "PHONE SETUP" menu.
- 3. Select the "SELECT PHONE" menu.
  - If no cell phones are registered, "EMPTY" will be displayed and the mode will change to the "PHONE SETUP" mode.

- 4. Select the cell phone by performing either of the following procedures.
  - Operate the "TUNE/TRACK/CH" dial.
  - Press the talk switch and say the voice tag.
- 5. Select the "CONFIRM" menu.
  - "SELECTED" will be displayed, the selected cell phone will be connected to the in-vehicle equipment and the mode will change to the "PHONE SETUP" mode.
  - If the selected cell phone cannot be connected, "FAILED" will be displayed and the mode will change to the "PHONE SETUP" mode.

#### **▼** Making a phone call

#### 

- 1. Select the top menu (phone menu).
- 2. Press the talk switch &.
- 3. Say "DIAL BY NAME".
- 4. Press the talk switch again.
- 5. Say the preferred name (voice tag) to be called.
- 6. Select the "DIAL" menu.

## ∇ Making a phone call by saying number

- 1. Select the top menu (phone menu).
- 2. Press the talk switch &.
- 3. Say "DIAL BY NUMBER".
- 4. Press the talk switch again.
- 5. Say the preferred phone number to be called.
- 6. Select the "DIAL" menu.

#### 

It is possible to select a phone number from speed dial registered with the invehicle equipment to make a phone call.

- 1. Select the top menu (phone menu).
- 2. Press the preset button (from 1 to 6) to which the preferred number is registered.

#### NOTE

When a preset button for which numbers are not registered is pressed, an error message will be shown on the audio screen.

#### **▽** Redial

1. Select the "REDIAL" menu.

- 3. Select the preferred number by turning the "TUNE/TRACK/CH" dial.
- 4. Perform either of the following procedures.
  - Press the OFF hook switch
  - Press the "TUNE/TRACK/CH" dial, then select the "DIAL" menu.

#### **▽** Callback

- 1. Select the "CALL BACK" menu.
- Press the OFF hook switch
- 3. Select the preferred number by turning the "TUNE/TRACK/CH" dial.
- 4. Perform either of the following procedures.
  - Press the OFF hook switch
  - Press the "TUNE/TRACK/CH" dial, then select the "DIAL" menu.

## ∇ Making a phone call from list name

It is possible to select a phone number from the list name registered with the invehicle equipment to make a phone call. For details, refer to "List names function" \$\tilde{\pi}\$5-50.

#### **▽** Top redial

- 1. Select the top menu (phone menu).
- 2. Press the OFF hook switch and

- CONTINUED -

load the outgoing call history.

3. Select the "DIAL" menu.

# ▼ Taking a phone call and declining an incoming call

To take a phone call: Press the OFF hook switch .

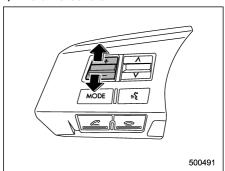
**To put an incoming call on hold** (only if the cell phone has this function): Press the ON hook switch briefly.

**To decline an incoming call** (only if the cell phone has this function): Press and hold the ON hook switch .

#### **▼** Ending a call

Press the ON hook switch <a>\_</a>.

#### **▼** Volume control



You can adjust the phone call volume, the

voice volume and the voice guidance volume. Refer to "Volume control switch" \$\insp\cent{5-31}\$.

#### $\nabla$ Adjustable level of each volume

Volume	Range	Initial setting
Phone call	0 to 14	7
Voice	0 to 14	7
Voice guidance	0 to 6	3

# **▼** Registering phonebook data **NOTE**

The maximum number of phonebook entries that can be registered in the phonebook is 50.

#### **▽** Registering by voice

- 1. Select the "BY VOICE" menu.
- 2. Press the talk switch 6.
- 3. Say the phone number to be registered.
- 4. Select the "CONFIRM" menu.
- 5. Perform either of the following procedures.
  - Select the "RECORD NAME" menu by operating the "TUNE/TRACK/CH" dial.
  - Press the talk switch
- 6. Say the name (voice tag) to be

registered.

- 7. Select the "CONFIRM" menu.
  - Then "STORED" will be displayed and the mode will change to the registering speed dial mode. Refer to "Registering speed dial" ☞5-49.

#### **▽** Registering by phone

- 1. Select the "BY PHONE" menu.
- 2. Select the "CONFIRM" menu.
  - Then "TRANSFER" will be displayed.
- 3. Transfer the data from the cell phone. For details about transferring the data, refer to the instruction manual of the cell phone.
- 4. Perform either of the following procedures.
  - Select the "RECORD NAME" menu by operating the "TUNE/TRACK/CH" dial.
  - Press the talk switch <a>κ</a>.
- 5. Say the name (voice tag) to be registered.
- 6. Select the "CONFIRM" menu.
  - Then "STORED" will be displayed and the mode will change to the registering speed dial mode. Refer to "Registering speed dial" ☞ 5-49.

# ∇ Registering by inputting manually

- 1. Select the "MANUAL INPUT" menu by operating the "TUNE/TRACK/CH" dial.
- 2. Input the phone number to be registered.
- 3. Perform either of the following procedures.
  - Select the "RECORD NAME" menu by operating the "TUNE/TRACK/CH" dial.
  - Press the talk switch
- 4. Say the name (voice tag) to be registered.
- 5. Select the "CONFIRM" menu.
  - Then "STORED" will be displayed and the mode will change to the registering speed dial mode. Refer to "Registering speed dial" ☞ 5-49.

#### NOTE

While inputting the phone numbers, if "GO BACK" (type A audio)/"BS" (type B audio) is chosen using the "TUNE/TRACK/CH" dial, the character that was input last will be deleted.

#### **▽** Registering from call history

- 1. Select the "CALL HISTORY" menu.
- 2. Select "OUTGOING" or "INCOMING"

by operating the "TUNE/TRACK/CH" dial.

- 3. Select the phone number by operating the "TUNE/TRACK/CH" dial.
- 4. Perform either of the following procedures.
  - Select the "RECORD NAME" menu by operating the "TUNE/TRACK/CH" dial.
  - Press the talk switch 6.
- 5. Say the name (voice tag) to be registered.
- 6. Select the "CONFIRM" menu.
  - Then "STORED" will be displayed and the mode will change to the registering speed dial mode. Refer to "Registering speed dial" \$\tilde{\tau}\$-49.

#### **▽** Registering from redial

- 1. Select the "REDIAL" menu.
- 2. Select the phone number by operating the "TUNE/TRACK/CH" dial.
- 3. Select the "STORE" menu.
- 4. Select the "CONFIRM" menu.
- 5. Perform either of the following procedures.
  - Select the "RECORD NAME" menu by operating the "TUNE/TRACK/CH" dial.
  - Press the talk switch [於].
- 6. Say the name (voice tag) to be

registered.

- 7. Select the "CONFIRM" menu.
  - Then "STORED" will be displayed and the mode will change to the registering speed dial mode. Refer to "Registering speed dial" ☞5-49.

#### **▽** Registering from call back

- 1. Select the "CALL BACK" menu.
- 2. Select the phone number by operating the "TUNE/TRACK/CH" dial.
- 3. Select the "STORE" menu.
- 4. Select the "CONFIRM" menu.
- 5. Perform either of the following procedures.
  - Select the "RECORD NAME" menu by operating the "TUNE/TRACK/CH" dial.
  - Press the talk switch
- 6. Say the name (voice tag) to be registered.
- 7. Select the "CONFIRM" menu.
  - Then "STORED" will be displayed and the mode will change to the registering speed dial mode. Refer to "Registering speed dial" ☞ 5-49.

#### **▽** Registering speed dial

1. After registering phonebook data, select the "SPEED DIAL" menu.

#### 5-50 Audio/Hands-free system

2. Press the preset button (from 1 to 6) to which you want to register the phone number.

#### NOTE

If the number to be used is already registered in speed dial, "OVER-WRITE?" will be displayed.

#### **▼** Using and setting phonebook data

#### **▽** List names function

The voice tags registered in the phonebook are spoken by using the list names function. To use the list names function, perform the following procedure.

- 1. Select the "LIST NAMES" menu.
- 2. Select the registered data by performing either of the following procedures.
  - Press the talk switch
  - Operate the "TUNE/TRACK/CH" dial.
- 3. After "SELECTED" is displayed, you can select the following menus.
- "DIAL" to make a phone call
- "CHANGE NAME" to change the name (voice tag)
- "SET SPD DIAL"/"SET SPEED DIAL" to set the speed dial
- "DELETE ENTRY" to delete the name

(voice tag) from the phonebook

"GO BACK" to go back to the menu mode

#### NOTE

- After "LIST NAMES" is selected, if the OFF hook switch is pushed, the selected number will be called.
- After "LIST NAMES" is selected, if no operation is performed, the memories will be displayed and voice tags will be spoken. After all memories/voice tags are displayed/spoken, "END OF LIST" will be displayed and the mode will change to the "PHONE BOOK" menu mode.

#### **▽** Changing voice tag

- 1. Select the "CHANGE NAME" menu.
- 2. Select the phone number by performing either of the following procedures.
  - Operate the "TUNE/TRACK/CH" dial.
  - Press the talk switch  $\fbox{\ }$  and say the voice tag.
- 3. Select the "CONFIRM" menu (only after saying the voice tag).
  - Then the selected phone number/ name will be displayed.
- 4. Press the talk switch .
- 5. Say the new voice tag.

- 6. Select the "CONFIRM" menu.
  - Then "CHANGED" will be displayed.

#### $\nabla$ Set speed dial

- 1. Select the "SET SPD DIAL"/"SET SPEED DIAL" menu.
- 2. Select the phone number by performing either of the following procedures.
  - Operate the "TUNE/TRACK/CH" dial.
  - Press the talk switch  $\[ \[ \[ \] \]$  and say the voice tag.
- 3. Select the "CONFIRM" menu (only after saying the voice tag).
- 4. Press the preset button (from 1 to 6) to which you want to register the phone number.

#### **▼** Deleting data

#### **▽** Deleting the phonebook data

- 1. Select the "DELETE ENTRY" menu.
- 2. Select the phone number by performing either of the following procedures.
  - Operate the "TUNE/TRACK/CH" dial.
  - Press the talk switch and say the voice tag.
- 3. Select the "CONFIRM" menu.
  - Then "DELETED" will be displayed

and the selected phonebook data will be deleted.

#### abla Deleting the speed dial

- 1. Select the "DEL SPD DIAL"/"DELETE SPEED DIAL" menu.
- 2. Press the preset button (from 1 to 6) to which you want to delete the speed dial.
- 3. Select the "CONFIRM" menu.
  - Then "DELETED" will be displayed and the selected speed dial will be deleted.

#### **▽** Deleting the redial data

- 1. Select the "REDIAL" menu.
- 2. Select the phone number by operating the "TUNE/TRACK/CH" dial.
- 3. Select the "DELETE" menu.
- 4. Select the "CONFIRM" menu.
  - Then "DELETED" will be displayed and the selected redial data will be deleted.

#### **▽** Deleting the callback data

- 1. Select the "CALLBACK" menu.
- 2. Select the phone number by operating the "TUNE/TRACK/CH" dial.
- 3. Select the "DELETE" menu.
- 4. Select the "CONFIRM" menu.

 Then "DELETED" will be displayed and the selected callback data will be deleted.

## ■ Bluetooth<sup>®</sup> setting

#### **▼** Security setting

After selecting the "SECURITY" menu, perform the following procedures.

#### **▽** Setting PIN code

The PIN code is a 4-digit number and is used when locking the phonebook.

- 1. Select the "SET PIN" menu.
  - Then "CURRENT PIN?" will be displayed.
- 2. Input the current PIN code by performing either of the following procedures.
  - Operate the "TUNE/TRACK/CH" dial.
  - Press the talk switch (♠) and say the number.
- 3. Select the "CONFIRM" menu.
- 4. Input the new PIN code by performing either of the following procedures.
  - Operate the "TUNE/TRACK/CH" dial.
  - Press the talk switch (a) and say the number.
- 5. Select the "CONFIRM" menu.

#### ∇ Locking the phonebook

## **A** CAUTION

After locking the phonebook, you cannot unlock the phonebook without inputting the PIN code. Do not forget the PIN code after locking the phonebook.

- 1. Select the "PHBK LOCK"/"PHONE-BOOK LOCK" menu.
  - Then "CURRENT PIN?" will be displayed.
- 2. Input the PIN code by performing either of the following procedures.
  - Operate the "TUNE/TRACK/CH" dial.
  - Press the talk switch (≰) and say the number.
- 3. Select the "CONFIRM" menu.
  - If the inputted PIN code is correct, "LOCKED" will be displayed and the phonebook will be locked.

#### NOTE

While the phonebook is locked, if the operation restricted menu is selected, "PHBK LOCK" will be displayed.

#### **▽** Unlocking the phonebook

#### NOTE

If you have forgotten your PIN code and/or are somehow unable to unlock the phonebook, the phonebook lock can be released by initializing the registered data and re-setting the PIN code. However, initializing the data will cause all data registered in the handsfree system, such as the registration devices and phonebook data, to be erased. For initialization, refer to "Initializing the registered data" \$\tilde{x}\$-5-53.

- 1. Select the "PHBK UNLOCK"/"PHONE-BOOK UNLOCK" menu.
  - Then "CURRENT PIN?" will be displayed.

#### NOTE

If the phonebook is not locked, "UN-LOCK" will be displayed and the mode will change to the security mode.

- 2. Input the PIN code by performing either of the following procedures.
  - Operate the "TUNE/TRACK/CH" dial.
  - Press the talk switch (a) and say the number.
- 3. Select the "CONFIRM" menu.
  - If the inputted PIN code is correct,

"UNLOCKED" will be displayed and the phonebook will be unlocked.

#### **▼** Phone setup

After selecting the "PHONE SETUP" menu, perform the following procedures.

#### $\nabla$ Setting pair phone

Refer to "Registering a cell phone" \$\tilde{F}\$5-46.

#### **▽** Selecting phone

Refer to "Selecting a cell phone" \$\tilde{F}\$5-46.

#### 

- 1. Select the "CHANGE NAME" menu.
  - If no cell phones are registered, "EMPTY" will be displayed and the mode will change to the "PHONE SETUP" mode.
- 2. Select the cell phone by performing either of the following procedures.
  - Operate the "TUNE/TRACK/CH" dial.
  - Press the talk switch  $\boxed{\mbox{\ensuremath{\ensuremath{\mathfrak{K}}}}}$  and say the voice tag.
- 3. Register the voice tag. For details, refer to "Preparation for using the Handsfree system" \$\sigma 5-46\$.

#### $\nabla$ List phones function

The cell phone voice tags saved in the cell phone list are spoken by using the list phones function.

- 1. Select the "LIST PHONES" menu.
  - If no cell phones are registered, "EMPTY" will be displayed and the mode will change to the "PHONE SETUP" mode.
- 2. Registered cell phones are displayed in the saved order. While displayed, if the "TUNE/TRACK/CH" dial is turned, the next registered cell phone will be displayed. Press the ON hook button to close the Hands-free menu.
- 3. Select a cell phone by performing either of the following procedures.
  - Operate the "TUNE/TRACK/CH" dial.
  - Press the talk switch
- 4. After "SELECTED" is displayed, you can select the following menus.
- "SELECT PHONE" to connect the selected cell phone
- "CHANGE NAME" to change the voice tag
- "DELETE" to delete the selected cell phone from the list
- "GO BACK" to go back to the "PHONE SETUP" mode

#### **▽** Setting passkey

- 1. Select the "SET PASSKEY" menu.
  - After the currently set passkey is displayed, a new passkey can be entered.
- 2. Input the new passkey by performing either of the following procedures.
  - Operate the "TUNE/TRACK/CH" dial.
- 3. Select the "CONFIRM" menu.
  - The new passkey will be displayed, the passkey will be changed and the mode will change to the "PHONE SETUP" mode.

## □ Deleting registered cell phone from the list

- 1. Select the "DELETE" menu.
- 2. Select a cell phone to be deleted by performing either of the following procedures.
  - Operate the "TUNE/TRACK/CH" dial.
  - Press the talk switch and say the voice tag.
- 3. Select the "CONFIRM" menu.
  - "DELETED" will be displayed, the data will be deleted and the mode will change to the "PHONE SETUP"

mode.

#### ▼ System setup

After selecting the "SYSTEM SETUP" menu, perform the following procedures. Select the following menus by operating the "TUNE/TRACK/CH" dial.

#### abla Setting guidance volume

To set the guidance volume, perform the following procedure.

- 1. Select the "GUIDANCE VOL"/"GUIDANCE VOLUME" menu.
- 2. Set the guidance volume by operating the "TUNE/TRACK/CH" dial.

#### abla Initializing the registered data

To initialize the registered data, perform the following procedure.

- 1. Select the "INITIALIZE" menu.
- Select the "CONFIRM" menu.
  - First "PLEASE WAIT", then "INITI-ALIZED" will be displayed. The registered data will be initialized and the mode will change to the last mode.

#### **▽** Selecting language

To select the language, perform the following procedure.

1. Select the "SEL LANGUAGE"/"SE-

LECT LANGUAGE" menu.

2. Select the preferred language by operating the "TUNE/TRACK/CH" dial.

# ■ Tips for the Hands-free system

#### **▼** Bluetooth<sup>®</sup>

It is possible to connect a cell phone to the in-vehicle equipment through the **Bluetooth**® format (wireless) to make a phone call from the in-vehicle equipment or take an incoming phone call.

Since the **Bluetooth**® format is wireless, a connection between the in-vehicle equipment and the cell phone can be made without placing them in close proximity of each other. The cell phone can be used with it left in the breast pocket or bag.

#### **NOTE**

- The Hands-free system may not operate properly under the following conditions.
  - The cell phone is turned off.
  - The cell phone is not in the phone call area.
  - The battery of the cell phone has run down.
  - The cell phone is not connected to the Hands-free system.
  - The cell phone is behind the seat
    - CONTINUED -

or in the glove box.

- A metal material covers or touches the cell phone.
- Depending on the type of cell phone that is used, the screen on the cell phone may remain illuminated while the ignition switch is in the "ON" position. If this occurs, turn the illumination off by adjusting the cell phone settings.
- Depending on the setting of the cell phone, the dial lock function may be activated after making a call. Deactivate the automatic dial lock function of the cell phone before using the Handsfree system.
- Depending on the type of cell phone that is used, operation and the sound volume may be different from those of cell phones currently used.
- When the ignition switch is turned to the "LOCK" (off) position during a call, the call may be disconnected or continued on the cell phone depending on the type of cell phone that is used. Note that operation of the cell phone may be necessary if the call is continued on the cell phone.
- Do not speak at the same time as the other party during a call. If you and the party speak at the same time, it may be difficult for the other party to hear your

voice and vice versa. This is normal.

- The receiver sound volume should be set as low as possible. Otherwise, the party you are calling may notice an undesirable echo sound.
- Speak clearly and loudly.
- Your voice may be difficult to be heard by the party under the following conditions.
  - Driving on a rough road
  - Driving at a high speed
  - Driving with a window open
  - When air from the ventilator blows directly towards the microphone
  - When the sound coming from the ventilator is loud
  - When the cell phone is too close to the microphone
- The sound quality may degrade due to the influence of the cell phone that is connected to the system or the circumstances of the Bluetooth network.
- When another Bluetooth<sup>®</sup> device is simultaneously connected, noise may be heard in the voice coming from the hands-free phone.

- ▼ Corresponding profiles for the cell phone
- HFP (Hands Free Profile): Ver. 1.0
- OPP (Object Push Profile): Ver. 1.1
- Certification for the Handsfree system



#### **FCC WARNING**

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

#### NOTE

This device complies with Part 15 of the FCC Rules and RSS-Gen of IC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

#### NOTE

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment may cause harmful interference to radio communications, if it is not installed and used in accordance with the instructions. However, there is no quarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures.

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.
- Changes or modifications not expressly approved by the party respon-

sible for compliance could void the user's authority to operate the equipment.

- This equipment complies with FCC/ IC radiation exposure limits set forth for an uncontrolled environment and meets the FCC radio frequency (RF) **Exposure Guidelines in Supplement C** to OET65 and RSS-102 of the IC radio frequency (RF) Exposure rules. This equipment has very low levels of RF energy that it deemed to comply without maximum permissive exposure evaluation (MPE). But it is desirable that it should be installed and operated keeping the radiator at least 20 cm or more away from person's body (excluding extremities: hands, wrists, feet and ankles).
- This transmitter must not be colocated or operated in conjunction with any other antenna or transmitter.

#### ▼ Mexico models

Módulo Bluetooth instalado en el interior de la radio

COFETEL RCPCLPF10-1358

Clarion

PF-3386A-A

500630

Este equipo opera a título secundario, consecuentemente, debe aceptar interferencias perjudiciales incluyendo equipos de la misma clase y puede no causar interferencias a sistemas operando a título primario.

500612

#### **▼** Paraguay models

- Vendor: Tokyo Motors S.A.
- Vendor address: Avda. Eusebio Ayala 4649 kg 5 1/2 Asuncion, Paraguay

## Screensaver (type B audio)

If the following operations are not performed for more than 30 seconds while the audio is ON, the screensaver will be displayed.

- Operate any button or dial
- Shift the shift lever/select lever to the "R" position
- A cell phone registered in the Handsfree system is called

If one of the following operations is performed, the screensaver turns off and the operation screen will be displayed.

• A cell phone registered in the Handsfree system is called

If one of the following operations is performed, the screensaver turns off. However, the operation screen will not be displayed.

- Operate any button or any dial in a condition other than the following conditions
  - Pressing the <u>a</u> button while a mode other than the CD mode is selected
  - Pressing the volume control buttons of the audio control buttons
  - Pressing the power switch
- Insert a CD (except reloading a CD)

 $\bullet$  Connect a USB storage device or an  $\mathsf{iPod}^{\circledR}$ 

#### NOTE

The screensaver is not displayed under the following conditions.

- While the ignition switch is in the "LOCK" (off) position
- While the audio is OFF
- While the screen is OFF
- While talking on a cell phone registered in the Hands-free system
- While setting the audio
- While seek tuning, PTY group tuning, scan tuning or auto-storing while the FM/AM radio is on.
- While the rear view camera is being used

### ■ Downloading pictures

Perform the following procedure to download a picture to be used as screensaver.

- 1. Connect a USB storage device. Refer to "Connecting USB storage device / iPod<sup>®</sup>" \$5-25.
- 2. Select the "Picture Download" menu by operating the "TUNE/TRACK/CH" dial. For details, refer to "Audio settings (type B audio)" \$\tilde{F}\$-5-8.
- 3. Select the preferred JPEG file by operating the "TUNE/TRACK/CH" dial.

4. Select "Wide" or "Normal" by operating the "TUNE/TRACK/CH" dial.

#### NOTE

- JPEG files that are 10 MB or less can be saved.
- If the file name is too long, the file may not be saved.
- Up to two JPEG files can be saved in the in-vehicle equipment.
- If the aspect ratio of the displayed picture is 16:9, "Wide" cannot be selected.
- If the aspect ratio of the displayed picture is 4:3, "Normal" cannot be selected.

### **■** Selecting pictures

- 1. Select the "Picture Select" menu by operating the "TUNE/TRACK/CH" dial. For details, refer to "Audio settings (type B audio)" \$\tilde{F}\$-5-8.
  - If no pictures are saved, "No Data" will be displayed. Press the usr.s button to return to the "Screen Saver" mode.
- 2. Select the preferred picture by operating the "TUNE/TRACK/CH" dial.

## ■ Erasing pictures

- 1. Select the "Picture Erase" menu by operating the "TUNE/TRACK/CH" dial. For details, refer to "Audio settings (type B audio)" \$\tilde{F}\$-5-8.
  - If no pictures are saved, "No Data" will be displayed. Press the usr/s button to return to the "Screen Saver" mode.
- 2. Select the preferred picture by operating the "TUNE/TRACK/CH" dial.
- 3. Operate the "TUNE/TRACK/CH" dial to select "OK" to erase the picture or "Cancel" to cancel the operation.



# Interior equipment

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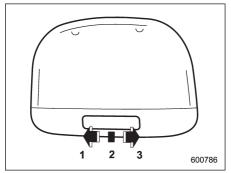
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## **Interior lights**



When leaving your vehicle, make sure the lights are turned off to avoid battery discharge.

## ■ Dome light



- 1) ON
- DOOR
- 3) OFF

The dome light switch has the following positions.

**ON:** The light remains on continuously.

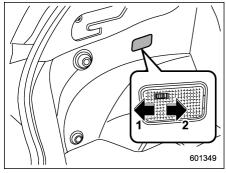
**OFF:** The light remains off.

DOOR: The dome light illuminates automatically in the following cases.

- Any of the doors or the rear gate (5door) is opened.
- The doors or the rear gate (5-door) are unlocked using the remote keyless entry transmitter.
- The ignition switch is turned from the "ACC" position to the "LOCK" (off) posi-

tion.

### ■ Cargo area light (5-door models)

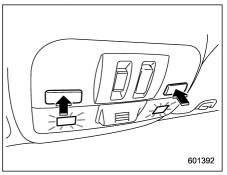


- **DOOR**
- OFF

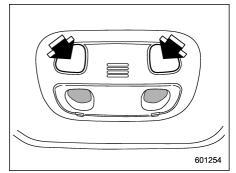
**DOOR**: The light illuminates when the rear gate is opened. The light remains illuminated for several seconds and gradually turns off after the rear gate is closed.

**OFF**: The light remains off.

## ■ Map lights



Type A



Type B

To turn on the map light, push the switch. To turn it off, push the switch again.

#### NOTE

For the type A map lights, although the light switches are in the ON position, the lights are automatically turned off after approximately 30 seconds of illumination to prevent the vehicle battery from discharging. For details, refer to "Battery drainage prevention function" \$\mathscr{x}^2 2-5\$.

# ▼ Automatic illumination (models with moonroof)

The map lights illuminate automatically in the following cases.

- Any of the doors other than the rear gate is opened. (The map lights do not illuminate when only the rear gate is opened.)
- The doors are unlocked using the remote keyless entry transmitter.
- The ignition switch is turned from the "ACC" position to the "LOCK" (off) position.

### ■ OFF delay timer

The following lights have an automatic illumination function.

- dome light
- map light (type A)

After being illuminated automatically, these lights remain on for several seconds

and then gradually turn off under the following conditions.

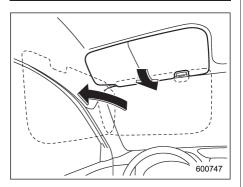
- after all doors and the rear gate (5-door) are closed (dome light)
- after all doors are closed (type A map light)

While the lights are illuminated, if any of the following operations are performed, the lights turn off immediately.

- The ignition switch is turned from the "LOCK" (off) position to the "ACC" or "ON" position.
- All doors and the rear gate (5-door) are locked using the remote keyless entry system.

The setting for the period of time in which the lights remain on (OFF delay timer) can be changed by a SUBARU dealer. Contact your SUBARU dealer for details. For models with multi function display, the setting can be changed by operating the multi function display. For details, refer to "Interior light off delay timer setting" \$\textit{9}3-66.

#### Sun visors



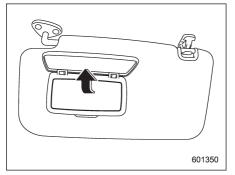
To block out glare, swing down the visors. To use the sun visor at a side window. swing it down and move it sideways.

## ■ Vanity mirror



#### CAUTION

Keep the vanity mirror cover closed while the car is being driven to avoid being temporarily blinded by the glare of bright light.



To use the vanity mirror, swing down the sun visor and open the vanity mirror cover.

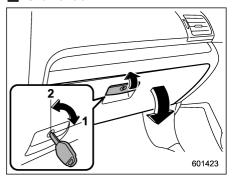
## **Storage compartment**



#### CAUTION

- Always keep the storage compartment closed while driving to reduce the risk of injury in the event of a sudden stop or an accident.
- Do not store spray cans, containers with flammable or corrosive liquids or any other dangerous items in the storage compartment.

#### ■ Glove box



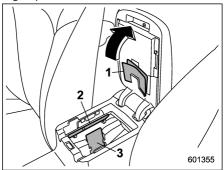
- 1) Lock
- 2) Unlock

To open the glove box, pull the handle. To close it, push the lid firmly upward.

To lock the glove box, insert the key and turn it clockwise. To unlock the glove box, insert the key and turn it counterclockwise.

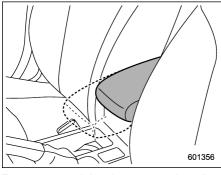
#### ■ Center console

The center console box provides a storage space.



- 1) Paper holder
- 2) Pen holder
- 3) Card holder

The top of the console can be used as an armrest.

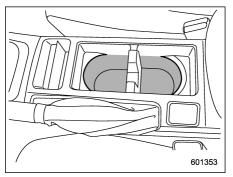


For some models, the armrest is adjustable. Slide the armrest to the desired position.

## **Cup holders**

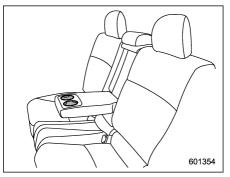
## CAUTION

- Do not pick up a cup from the cup holder or put a cup in the holder while you are driving, as this may distract you and lead to an accident.
- Take care to avoid spills. Beverages, if hot, might scald you and/or your passengers. Spilled beverages may also damage upholstery or carpets.
- When a cup in the rear passenger's cup holder contains a beverage, do not fold down the rear seatback. Otherwise, the beverage could spill and, if the beverage is hot, it could scald you and/or your passengers.



Front passenger's cup holder

A dual cup holder is built into the center console.

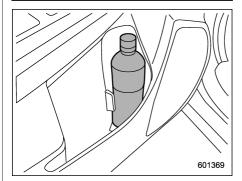


Rear passenger's cup holder (if equipped) A dual cup holder is built into the armrest.

#### **Bottle holders**



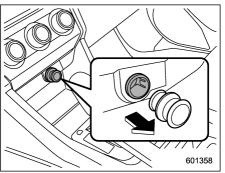
- Do not pick up a bottle from the bottle holder or put a bottle in the holder while you are driving, as this may distract you and lead to an accident.
- When placing a beverage in a bottle holder, make sure it is capped. Otherwise, the beverage could spill when opening/closing the door or while driving and, if the beverage is hot, it could scald you and/or your passengers.



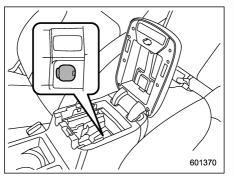
The bottle holder equipped on each door

trim can be used to hold beverage bottles and other items.

## Accessory power outlets



Power outlet below the climate control dials



Power outlet in the center console

Accessory power outlets are provided

below the climate control dials and in the center console. Electrical power (12V DC) from the battery is available at any of the outlets when the ignition switch is in either the "ACC" or "ON" position.

You can use an in-vehicle electrical appliance by connecting it to an outlet.

The maximum power rating of an appliance that can be connected is 120W. Do not use an appliance which exceeds the indicated wattage for each outlet.

When using appliances connected to two outlets simultaneously, the total power consumed by them must not exceed 120W.

## CAUTION

- Do not attempt to use a cigarette lighter in the accessory power outlets.
- Do not place any foreign objects, especially metal ones such as coins or aluminum foil, into the accessory power outlet. That could cause a short circuit. Always put the cap on the accessory power outlet when it is not in use.
- Use only electrical appliances which are designed for 12V DC.

The maximum power rating of an

- CONTINUED -

appliance that can be connected is 120W. Do not use an appliance which exceeds the indicated wattage for each outlet.

When using appliances connected to two outlets simultaneously, the total power consumed by them must not exceed 120W. Overloading the accessory power outlet can cause a short circuit. Do not use double adapters or more than one electrical appliance.

- If the plug on your electric appliance is either too loose or too tight for the accessory power outlet, this can result in a poor contact or cause the plug to get stuck. Only use plugs that fit properly.
- Use of an electric appliance in the accessory power outlet for a long period of time while the engine is not running can cause battery discharge.
- Before driving your vehicle, make sure that the plug and the cord on your electrical appliance will not interfere with your shifting gears and operating the accelerator and brake pedals. If they

do, do not use the electrical appliance while driving.

### ■ Use with a cigarette lighter (if equipped)

To use the accessory power outlet as a cigarette lighter socket, purchase the cigarette lighter plug, which is an optional accessory. A cigarette lighter plug is available from your SUBARU dealer.

The cigarette lighter operates only when the ignition switch is in the "ON" or "ACC" position.

To use the cigarette lighter, push in the knob and wait a few moments. It will automatically spring up when ready for use.

## **WARNING**

To avoid being burned, never grasp the lighter by the end with the heating element. Doing so could result in injury and could also damage the heating element.

## A CAUTION

 Do not hold the lighter pushed in, because it will overheat.

- The electrical power socket is originally designed to use a genuine SUBARU cigarette lighter plug. Do not use a non-genuine cigarette lighter plug in the socket. Doing so may cause a shortcircuit and overheating, resulting in a fire.
- If the socket is ever used for a plug-in accessory such as a cell phone, that may damage the portion of the socket's internal mechanism that causes a cigarette lighter plug to "pop out" after its lighter element is heated. Therefore, do not place a cigarette lighter plug in a socket that has been used, even once, to power a plug-in accessory. Doing so may cause the plug to stick and overheat, creating a potential fire hazard.

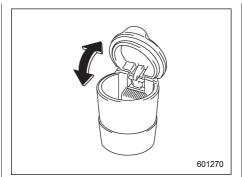
## **Ashtray** (if equipped)



- Do not use ashtrays as waste receptacles or leave a lighted cigarette in an ashtray. This could cause a fire.
- Always extinguish matches and cigarettes before putting them into the ashtray, and then close the ashtray securely. If you keep the ashtray open, the fire of the cigarette may spread to another cigarette butt and start a fire.
- Do not put flammable material in the ashtray.
- Do not leave a lot of cigarette butts in the ashtray.

#### NOTE

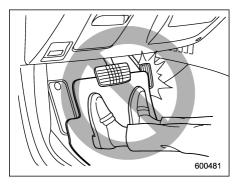
Particles of ash and tobacco will accumulate around the hinges of the ashtray's inner lid. Clean them off using a toothbrush or a similar narrow-ended implement.



The portable ashtray can be installed in each cup holder or bottle holder. For the locations of the cup holders, refer to "Cup holders" \$\mathscr{G}-6-6\$. For the locations of the bottle holders, refer to "Bottle holders" \$\mathscr{G}-6-6\$.

When using the ashtray, open the lid of the ashtray. Fully close the lid after using the ashtray to help reduce residual smoke.

## Floor mat (if equipped)

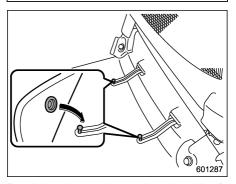


## A CAUTION

If the floor mat slips forward and interferes with the movement of the pedals during driving, it could cause an accident. Observe the following precautions to prevent the floor mat from slipping forward.

- Be sure to use a genuine SUBARU floor mat or an equivalent designed with grommets in the correct locations.
- Make sure that the driver's floor mat is placed in its proper location and is correctly secured on its retaining pins.

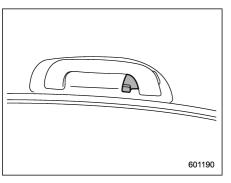
Do not use more than one floor mat.



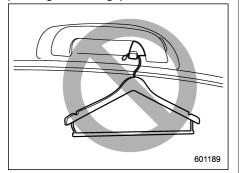
Retaining pins are located on the driver's side floor.

The floor mat should be properly secured using the built-in grommets, by placing the grommets over the pins and pushing them downward.

#### Coat hook



A coat hook is attached to the rear passenger's hand grip.



## **WARNING**

Hang clothing directly on the coat hooks without using hangers. Do not hang coat hangers or other hard or pointed objects on the coat hooks. If such items are hanging on the coat hooks, when the SRS curtain airbags deploy, they could cause serious injuries by coming off the coat hooks and being thrown through the cabin or by preventing correct airbag deployment. Before hanging clothing on the coat hooks, make sure there are no pointed objects in the pockets.

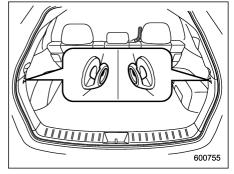
## A CAUTION

Never hang anything on the coat hook that might obstruct the driver's view or that could cause injury in sudden stops or in a collision.

## **Shopping bag hook (5-door)**



Do not hang items on the shopping bag hook that weigh 6 lbs (3 kg) or more.

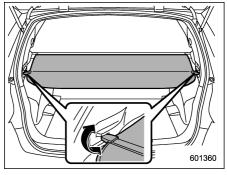


A shopping bag hook is attached to each side of the cargo area.

# Cargo area cover (5-door – if equipped)

The cargo area cover is provided for covering the cargo area and to protect its contents from direct sunlight. This cover is detachable to make room for additional cargo.

## ■ Using the cover



To extend the cover, pull the end of the cover out of the housing, then insert its hooks into the catches as shown. To rewind it, unhook it from the catches and it will rewind automatically. You should hold on to the cover and guide it back into the cover housing while it is rewinding.

## **WARNING**

Do not place anything on the extended cover. Putting excessive weight on the extended cover can break it and an object on the cover could tumble forward in the event of a sudden stop or collision. This could cause serious injury.

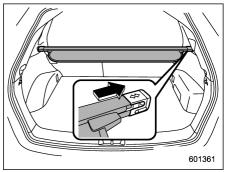
## **CAUTION**

Be careful not to scratch the rear gate stays while extending and rewinding the cover.

Scratches on the stays could cause leakage of gas from the stays, which may result in their inability to hold the rear gate open.

## ■ To remove the cover housing

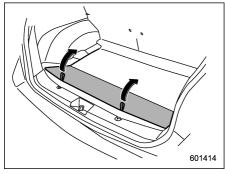
1. Rewind the cover.



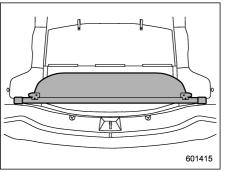
- 2. Push the cover housing to the right side and shorten it.
- 3. Take it off the retainer.

# ■ Stowage of the cargo area cover

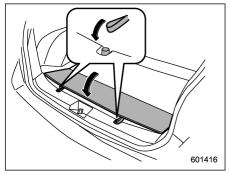
The cargo area cover can be stowed in under the cargo floor.



1. Raise and fold the rear end of the cargo floor board.



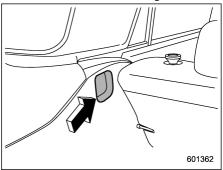
2. Stow the cover housing in the cargo area end.



3. Put the cargo floor board back while hanging two retaining straps on the hooks that are located on the rear wall of cargo area.

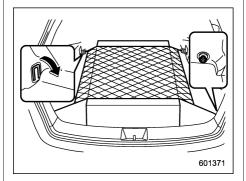
## ■ To install the cover housing

1. Shorten the cover housing.



2. Insert both ends of the cover housing into the recesses of the retainers.

# Cargo tie-down hooks (5-door – if equipped)



The cargo area is equipped with four tiedown hooks so that cargo can be secured with a cargo net or ropes.

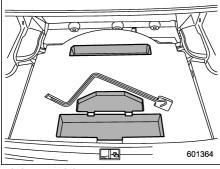
When using the front tie-down hooks, turn them down out of the storing recesses.



#### **CAUTION**

The cargo tie-down hooks are designed only for securing light cargo. Never try to secure cargo that exceeds the capacity of the hooks. The maximum load capacity is 22 lbs (10 kg) per hook.

# Under-floor storage compartment (if equipped)



4-door models

For 4-door models, the storage compartments are located under the floor of the trunk. They can be used to store small items.

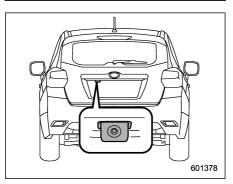
#### NOTE

- The shape of the storage compartment may be different depending on the model.
- When storing a flat tire, put the storage tray in the trunk.

## **CAUTION**

- Always keep the lids closed while driving to reduce the risk of injury in the event of a sudden stop or an accident.
- Do not store spray cans, containers with flammable or corrosive liquids or any other dangerous items in the storage compartment.

# Rear view camera (if equipped)



A rear view camera is attached to the trunk lid or rear gate. When the ignition switch is "ON" and the shift lever (MT models) or select lever (CVT models) is set to "R", the rear view camera automatically displays the rear view image behind the vehicle on one of the following displays.

- Navigation display (if equipped)
- Multi function display (if equipped)
- Type B audio display (if equipped)



• Since the rear view camera uses a wide-angle lens, the image on

- the monitor is different from the actual view in terms of distance.
- Since the range of the image on the monitor is limited, you should always check the rear view and the surrounding area with your eyes and mirrors, and move backward at a slow speed. Moving backward only by checking the rear view image from the camera could cause an accident.
- Do not disassemble or modify the camera, switch or wiring. If smoke comes out or you smell a strange odor, stop using the rear view camera immediately. Contact your SUBARU dealer for an inspection. Continued use may result in accident, fire or electric shock.

## **CAUTION**

- If your vehicle is washed with a high-pressure washer, do not allow water to contact the camera directly. Entry of water in the camera lens may result in condensation, malfunction, fire or electric shock.
- Since the camera is a precision

- device, do not subject it to strong impacts. Otherwise, malfunction, fire or electric shock may occur.
- If mud or snow sticks to or is frozen on the camera, you must be very careful when removing it.
   Otherwise, damage to the camera may cause a fire or electric shock. Pour water or lukewarm water over the camera to remove mud and ice, and wipe it with a soft, dry cloth.
- Do not put a flame close to the camera or wiring. Otherwise, damage or fire may occur.
- When replacing the fuse, be sure to use a fuse with the specified rating. Use of a fuse with a different rating may result in a malfunction.
- If the rear view camera is used for a long time while the engine is not operated, the battery may become completely discharged.

#### NOTE

 Do not wipe the camera with alcohol, benzine or paint thinner. Otherwise, discoloration may occur. To remove contamination, wipe the camera with a cloth moistened with a diluted neutral detergent and then wipe it with a soft, dry cloth.

- When waxing the vehicle, be careful not to apply the wax to the camera. If it comes in contact with the camera, moisten a clean cloth with a diluted neutral detergent to remove the wax.
- The camera lens has a hard coating to help prevent scratches. However, when washing the vehicle or cleaning the camera lens, be careful not to scratch the camera lens. Do not use a washing brush directly on the camera lens. The image quality of the rear view camera may deteriorate.
- Strong light shined on the camera lens may develop vertical lines around the light source. This is not a malfunction.
- Under fluorescent light, the display may flicker. However, this is not a malfunction.
- The image of the rear view camera may be slightly different from the actual color of the objects.
- For models with both the multi function display and type B audio, the rear view image is displayed on the type B audio display.

# How to use the rear view camera

When the shift lever/select lever is set to "R", the rear view camera automatically displays the rear view image from the vehicle. When the lever is set to other positions, the image before setting to "R" is displayed.

- 1. Set the ignition switch to "ON".
- 2. Set the shift lever/select lever to "R".

#### NOTE

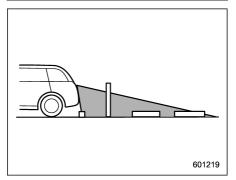
- For models with the genuine SUBARU navigation system, the image of the rear view camera has priority over other screen displays. However, while the navigation system is activated, the image of the rear view camera is not displayed.
- The image of the rear view camera is horizontally reversed as is the case with the vehicle rearview mirror or the side view mirror.
- It may be difficult to see the image of the rear view camera in the following cases. This is not a malfunction of the camera.
  - The vehicle is in a dark place (at night, in a tunnel, etc.).
  - The vehicle is in an extremely hot or cold place.

- An object (such as raindrops, snow, dirt, etc.) that disturbs the view of the rear view camera sticks to the lens of the camera.
- Strong light shined directly on the camera lens (occasionally, there are vertical lines on the screen).

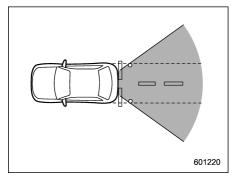
## ■ Viewing range on the screen



The range that can be viewed with the rear view camera is limited. Always be sure to check with your eyes when moving backward and proceed slowly.



Range of view



Range of view

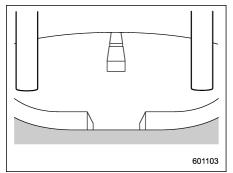
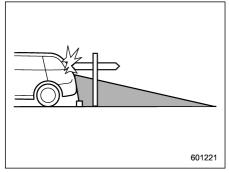


Image from camera

The area from the rear end of the bumper can be viewed. Areas at both ends of the bumper and areas just under the bumper cannot be viewed.

Also, the image from the rear view camera looks shorter than the actual distance.



Range of view

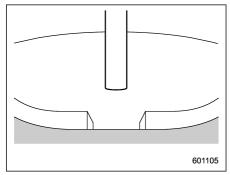


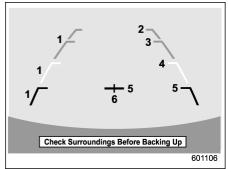
Image from camera

The area above the camera cannot be viewed. If there is an object that has a

wide projection on its upper part such as a sign pole behind the vehicle, the projection cannot be seen on the screen.

## ■ Help line

The help line (distance marker and vehicle width line) is a guide to help you realize the actual distance from the screen image.



- Vehicle width line (oblique vertical line)
- Approx. 10 feet (3 m) from the bumper (green horizontal line)
- Approx. 6.5 feet (2 m) from the bumper (green horizontal line)
- Approx. 3 feet (1 m) from the bumper (vellow horizontal line)
- Approx. 1.5 feet (0.5 m) from the bumper (red horizontal line)
- Vehicle centerline

When the shift lever/select lever is set to position "R", the monitor screen displays the help lines together with the rear view image.

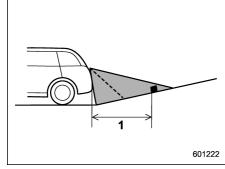
## CAUTION

- When moving backward, always check the back with your eyes without relying on the help lines.
- The actual position may be different from the indication of the help lines.
- Differences may occur due to number of passengers or loaded cargo.
- When the vehicle is on a slope or when the vehicle is inclined against the road, the indication is different from the actual position.

#### **▼** Difference between screen image and actual road

The distance markers show the distance for a level road when the vehicle is not loaded. It may be different from the actual distance depending on the loading conditions or road conditions.

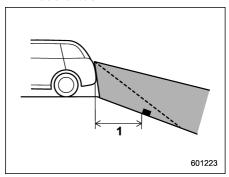
#### ∇ When there is an upward slope at the back



1) 3 feet (1 m)

The distance on the screen looks farther than the actual distance.

# ∀ When there is a downward slope at the back



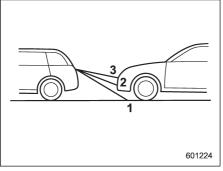
1) 3 feet (1 m)

The distance on the screen looks nearer than the actual distance.

## NOTE

When cargo is loaded, the rear view distance on the screen looks farther than the actual distance as in an upward slope.

#### **▼** Feature of distance marker



- 1) 3 feet (1 m) line
- 2) 6.5 feet (2 m) line
- 3) 10 feet (3 m) line

The distance marker shows the distance on the road. If there is a car or other object close behind, distance cannot be correctly displayed.

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## Starting and operating

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#### Fuel



Use of a fuel which is low in quality or use of an inappropriate fuel additive may cause engine damage.

## **■** Fuel requirements

The engine is designed to operate using unleaded gasoline with an octane rating of 87 AKI (90 RON) or higher.

#### **▼** Fuel octane rating

This octane rating is the average of the Research Octane and Motor Octane numbers and is commonly referred to as the Anti Knock Index (AKI).

Using a gasoline with a lower octane rating can cause persistent and heavy knocking, which can damage the engine. Do not be concerned if your vehicle sometimes knocks lightly when you drive up a hill or when you accelerate. Contact your SUBARU dealer if you use a fuel with the specified octane rating and your vehicle knocks heavily or persistently.

#### **▼** Unleaded gasoline

The neck of the fuel filler pipe is designed to accept only an unleaded gasoline filler nozzle. Under no circumstances should leaded gasoline be used because it will damage the emission control system and may impair driveability and fuel economy.

#### ▼ Gasoline for California-certified LEV

If your vehicle was certified to California's low emission vehicle (LEV) standards as indicated on the underhood tune-up label, it is designed to optimize engine and emission performance with gasoline that meets the clean burning low-sulfur California gasoline specifications. If you live in any other state than California, your vehicle will operate on gasoline meeting Federal specifications. Gasoline sold outside California is permitted to have higher sulfur levels, which may affect the performance of your vehicle's catalytic converter and may produce a sulfur exhaust odor or smell. SUBARU recommends that you try a different brand of unleaded gasoline having lower sulfur to determine if the problem is fuel related before returning vour vehicle to an authorized dealer for service.

#### ▼ MMT

Some gasoline contains an octane-enhancing additive called MMT (Methylcvclopentadienyl Manganese Tricarbonyl). If vou use such fuels, your emission control system performance may deteriorate and the CHECK ENGINE warning light/Malfunction indicator light may turn on. If this happens, return to your authorized SUBARU Dealer for service. If it is determined that the condition is caused by the type of fuel used, repairs may not be covered by your warranty.

#### ▼ Gasoline for cleaner air

Your use of gasoline with detergent additives will help prevent deposits from forming in your engine and fuel system. This helps keep your engine in tune and vour emission control system working properly, and is a way of doing your part for cleaner air. If you continuously use a high quality fuel with the proper detergent and other additives, you should never need to add any fuel system cleaning agents to your fuel tank.

Many gasolines are now blended with materials called oxygenates. Use of these fuels can also help keep the air cleaner. Oxygenated blend fuels, such as MTBE (Methyl Tertiary Butyl ether) or ethanol (ethyl or grain alcohol) may be used in your vehicle, but should contain no more than 15% MTBE or 10% ethanol for the proper operation of your SUBARU.

Do not use any gasoline that contains more than 10% ethanol, including from any pump labeled E15, E30, E50 or E85 (which are only some examples of fuel containing more than 10% ethanol).

In addition, some gasoline suppliers are now producing reformulated gasolines, which are designed to reduce vehicle emissions. SUBARU approves the use of reformulated gasoline.

If you are not sure what the fuel contains, you should ask your service station operators if their gasolines contain detergents and oxygenates and if they have been reformulated to reduce vehicle emissions.

As additional guidance, only use fuels suited for your vehicle as explained in the following description.

- Fuel should be unleaded and have an octane rating no lower than that specified in this manual.
- Methanol (methyl or wood alcohol) is sometimes mixed with unleaded gasoline. Methanol can be used in your vehicle **ONLY** if it does not exceed 5% of the fuel mixture **AND** if it is accompanied by sufficient quantities of the proper cosolvents and corrosion inhibitors required to prevent damage to the fuel system. Do not use fuel containing methanol **EXCEPT** under these conditions.

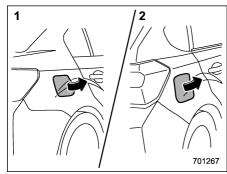
- If undesirable driveability problems are experienced and you suspect they may be fuel related, try a different brand of gasoline before seeking service at your SUBARU dealer.
- Fuel system damage or driveability problems which result from the use of improper fuel are not covered under the SUBARU Limited Warranty.

## **CAUTION**

Do not let fuel spill on the exterior surfaces of the vehicle. Because fuel may damage the paint, be sure to wipe off any spilled fuel quickly. Paint damage caused by spilled fuel is not covered under the SUBARU Limited Warranty.

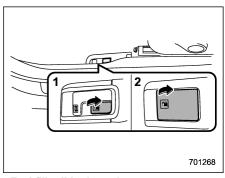
## ■ Fuel filler lid and cap

▼ Locations of the fuel filler lid and the lid release lever



Fuel filler lid

- 1) 4-door models
- 2) 5-door models



#### Fuel filler lid release lever

- 4-door models
- 5-door models

#### Refueling

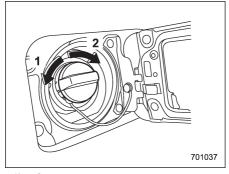
Only one person should be involved in refueling. Do not allow others to approach the area of the vehicle near the fuel filler pipe while refueling is in progress.

Be sure to observe any other precautions that are posted at the service station.

- 1. Stop the vehicle and turn the ignition switch to the "LOCK" (off) position and turn off all the other electrical components.
- 2. To open the fuel filler lid, pull the lid release lever up. The lever is on the floor at the left of the driver's seat

## WARNING

Before opening the fuel filler cap, first touch the vehicle body or a metal portion of the fuel pump or similar object to discharge any static electricity that may be present on your body. If your body is carrying an electrostatic charge, there is a possibility that an electric spark could ignite the fuel, which could burn you. To avoid acquiring a new static electric charge, do not get back into the vehicle while refueling is in progress.



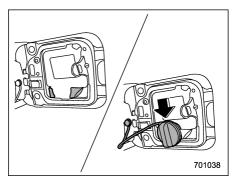
- Open
- Close
- 3. Remove the fuel filler cap by turning it

slowly counterclockwise.



#### WARNING

- Gasoline vapor is highly flammable. Before refueling, always turn the ignition switch to the "LOCK" (off) position first and then close all vehicle doors and windows. Make sure that there are no lighted cigarettes, open flames or electrical sparks in the adjacent area. Only handle fuel outdoors. Quickly wipe up any spilled fuel.
- When opening the cap, grasp it firmly and turn it slowly to the left. Do not remove the cap quickly. Fuel may be under pressure and spray out of the fuel filler neck, especially in hot weather. If you hear a hissing sound while you are removing the cap, wait for the sound to stop and then slowly open the cap to prevent fuel from spraying out and creating a fire hazard.



4. Set the fuel filler cap on the cap holder inside the fuel filler lid.

## **WARNING**

 When refueling, insert the fuel nozzle securely into the fuel filler pipe. If the nozzle is lifted or not fully inserted, its automatic stopping mechanism may not function, causing fuel to overflow the tank and creating a fire hazard.

- Stop refueling when the automatic stop mechanism on the fuel nozzle activates. If you continue to add fuel, temperature changes or other conditions may cause fuel to overflow from the tank and create a fire hazard.
- 5. Stop filling the tank after the fuel filler pump automatically stops. Do not add any more fuel.
- 6. Put the cap back on, turn it clockwise until you hear a clicking noise. Be certain not to catch the tether under the cap while tightening.
- 7. Close the fuel filler lid completely. If you spill any fuel on the painted surface, rinse it off immediately. Otherwise, the painted surface could be damaged.

#### **NOTE**

- You will see the "□▶" sign in the fuel gauge. This indicates that the fuel filler door (lid) is located on the right side of the vehicle.
- If the fuel filler cap is not tightened until it clicks or if the tether is caught under the cap, the CHECK ENGINE warning light/malfunction indicator light may illuminate. Refer to "CHECK ENGINE warning light/Malfunction in-

dicator light" \$\tilde{F}\$3-12.

## **CAUTION**

- Never add any cleaning agents to the fuel tank. The addition of a cleaning agent may cause damage to the fuel system.
- After refueling, turn the cap to the right until it clicks to ensure that it is fully tightened. If the cap is not securely tightened, fuel may leak out while the vehicle is being driven or fuel spillage could occur in the event of an accident, creating a fire hazard.
- Do not let fuel spill on the exterior surfaces of the vehicle. Because fuel may damage the paint, be sure to wipe off any spilled fuel quickly. Paint damage caused by spilled fuel is not covered under the SUBARU Limited Warranty.
- Always use a genuine SUBARU fuel filler cap. If you use the wrong cap, it may not fit or have proper venting and your fuel tank and emission control system may be damaged. It could also lead to fuel spillage and a fire.
- Immediately put fuel in the tank

whenever the low fuel warning light illuminates. Engine misfires as a result of an empty tank could cause damage to the engine.

## State emission testing (U.S. only)



## **WARNING**

Testing of an All-Wheel Drive model must NEVER be performed on a single two-wheel dynamometer. Attempting to do so will result in uncontrolled vehicle movement and may cause an accident or injuries to persons nearby.

#### **CAUTION**

- At state inspection time, remember to tell your inspection or service station in advance not to place your SUBARU AWD vehicle on a two-wheel dynamometer. Otherwise, serious transmission damage will result.
- Resultant vehicle damage due to improper testing is not covered under the SUBARU Limited Warranty and is the responsibility of the state inspection program or its contractors or licensees.

California and a number of federal states

have Inspection/Maintenance programs to inspect your vehicle's emission control system. If your vehicle does not pass this test, some states may deny renewal of your vehicle's registration.

Your vehicle is equipped with a computer that monitors the performance of the engine's emission control system. Certified emission inspectors will inspect the On-Board Diagnostic (OBDII) system as part of the state emission inspection process. The OBDII system is designed to detect engine and transmission problems that might cause the vehicle emissions to exceed allowable limits. OBDII inspections apply to all 1996 model year and newer passenger cars and trucks. Over 30 states plus the District of Columbia have implemented emission inspection of the OBDII system.

- The inspection of the OBDII system consists of a visual operational check of the "CHECK ENGINE" warning light/malfunction indicator light (MIL) and an examination of the OBDII system with an electronic scan tool.
- A vehicle passes the OBDII system inspection if proper operation of the "CHECK ENGINE" warning light is observed, there are no stored diagnostic trouble codes, and the OBDII readiness monitors are all complete.

- A vehicle fails the OBDII inspection if the "CHECK ENGINE" warning light is not properly operating (light is illuminated or is not working due to a burned out bulb) or there is one or more diagnostic trouble codes stored in the vehicle's computer.
- A state emission inspection may reject (not pass or fail) a vehicle if the number of OBDII system readiness monitors "NOT READY" is greater than one. If the vehicle's battery has been recently replaced or disconnected, the OBDII system inspection may indicate that the vehicle is not ready for the emission test. Under this condition, the vehicle driver should be instructed to drive his/her vehicle for a few days to reset the readiness monitors and return for an emission re-inspection.
- Owners of rejected or failing vehicles should contact their SUBARU Dealer for service.

Some states still use dynamometers in their emission inspection program. A dynamometer is a treadmill or roller-like testing device that allows your vehicle's wheels to turn while the vehicle remains in one place. Prior to your vehicle being put on a dynamometer, tell your emission inspector not to place your SUBARU AWD vehicle on a two-wheel dynamometer. Otherwise, serious transmission damage will result.

The U.S. Environmental Protection Agency (EPA) and states using two-wheel dynamometers in their emission testing program have EXEMPTED SUBARU AWD vehicles from the portion of the testing program that involves a two-wheel dynamometer. There are some states that use four-wheel dynamometers in their testing program. When properly used, this equipment should not damage a SUBARU AWD vehicle.

Under no circumstances should the rear wheels be jacked off the ground, nor should the driveshaft be disconnected for state emission testing.

## Preparing to drive

You should perform the following checks and adjustments every day before you start driving.

- 1. Check that all windows, mirrors, and lights are clean and unobstructed.
- 2. Check the appearance and condition of the tires. Also check tires for proper inflation.
- 3. Look under the vehicle for any sign of leaks.
- 4. Check that the hood, trunk (4-door) and rear gate (5-door) are fully closed.
- 5. Check the adjustment of the seat.
- 6. Check the adjustment of the inside and outside mirrors.
- 7. Fasten your seatbelt. Check that your passengers have fastened their seatbelts.
- 8. Check the operation of the warning and indicator lights when the ignition switch is turned to the "ON" position.
- 9. Check the gauges, indicator and warning lights after starting the engine.

#### NOTE

Engine oil, engine coolant, brake fluid, washer fluid and other fluid levels should be checked daily, weekly or at fuel stops.

# Starting and stopping the engine



Do not operate the starter motor continuously for more than 10 seconds. If the engine fails to start after operating the starter for 5 to 10 seconds, wait for 10 seconds or more before trying again.

#### NOTE

It may be difficult to start the engine when the battery has been disconnected and reconnected (for maintenance or other purposes). This difficulty is caused by the electronically controlled throttle's self-diagnosis function. To overcome it, keep the ignition switch in the "ON" position for approximately 10 seconds before starting the engine.

## **■** Starting engine

▼ General precautions when starting engine

## **WARNING**

- Never start the engine from outside the vehicle (except when using the remote engine start system). It may result in an accident.
- Do not leave the engine running in locations with poor ventilation, such as a garage and indoors. The exhaust gas may enter the vehicle or indoors, and it may result in carbon monoxide poisoning.
- Do not start the engine near dry foliage, paper, or other flammable substances. The exhaust pipe and exhaust emissions can create a fire hazard at high temperatures.

## A

## **CAUTION**

 If the engine is stopped during driving, the catalyst may overheat and burn.  When starting the engine, be sure to sit in the driver's seat (except when using the remote engine start system).

#### **NOTE**

- Avoid rapid racing and rapid acceleration immediately after the engine has started.
- For a short time after the engine has started, the engine speed is kept high. When the warm-up is completed, the engine speed lowers automatically.
- On rare occasions, it may be difficult to start the engine depending on the fuel and the usage condition (repeated driving of a distance in which the engine has not warmed up sufficiently).
   In such a case, it is recommended that you change to a different brand of fuel.
- On rare occasions, transient knocking may be heard from the engine when the accelerator is operated rapidly such as a rapid start-up and a rapid acceleration. This is not a malfunction.
- The engine starts more easily when the headlights, air conditioner and rear window defogger are turned off.
- After the engine starts, the engine speed will be kept high until the engine has warmed up sufficiently.

#### **▼** MT models

- 1. Apply the parking brake.
- 2. Turn off unnecessary lights and accessories.
- 3. Depress the clutch pedal to the floor and shift the shift lever into neutral. Hold the clutch pedal to the floor while starting the engine.

The starter motor will only operate when the clutch pedal is depressed fully to the floor.

- 4. Turn the ignition switch to the "ON" position and check the operation of the warning and indicator lights. Refer to "Warning and indicator lights" \$\alpha\$3-9.
- 5. Turn the ignition switch to the "START" position **without** depressing the accelerator pedal. Release the key immediately after the engine has started.

If the engine does not start, try the following.

- (1) Turn the ignition switch to the "LOCK" (off) position and wait for at least 10 seconds. After checking that the parking brake is firmly set, turn the ignition switch to the "START" position while depressing the accelerator pedal slightly (approximately a quarter of the full stroke). Release the accelerator pedal as soon as the engine starts.
- (2) If this fails to start the engine, turn

the ignition switch back to the "LOCK" (off) position and wait for at least 10 seconds. Then fully depress the accelerator pedal and turn the ignition switch to the "START" position. If the engine starts, quickly release the accelerator pedal.

- (3) If this fails to start the engine, turn the ignition switch again to the "LOCK" (off) position. After waiting for 10 seconds or longer, turn the ignition switch to the "START" position without depressing the accelerator pedal.
- (4) If the engine still refuses to start, contact your nearest SUBARU dealer for assistance.
- 6. Confirm that all warning and indicator lights have turned off after the engine has started. The fuel injection system automatically lowers the idle speed as the engine warms up.

#### **▼ CVT models**

- 1. Apply the parking brake.
- 2. Turn off unnecessary lights and accessories.
- 3. Shift the select lever to the "P" or "N" position (preferably the "P" position).

The starter motor will only operate when the select lever is at the "P" or "N" position.

4. Turn the ignition switch to the "ON"

position and check the operation of the warning and indicator lights. Refer to "Warning and indicator lights" \$\sigma\$3-9.

5. Turn the ignition switch to the "START" position **without** depressing the accelerator pedal. Release the key immediately after the engine has started.

If the engine does not start, try the following.

- (1) Turn the ignition switch to the "LOCK" (off) position and wait for at least 10 seconds. After checking that the parking brake is firmly set, turn the ignition switch to the "START" position while depressing the accelerator pedal slightly (approximately a quarter of the full stroke). Release the accelerator pedal as soon as the engine starts.
- (2) If this fails to start the engine, turn the ignition switch back to the "LOCK" (off) position and wait for at least 10 seconds. Then fully depress the accelerator pedal and turn the ignition switch to the "START" position. If the engine starts, quickly release the accelerator pedal.
- (3) If this fails to start the engine, turn the ignition switch again to the "LOCK" (off) position. After waiting for 10 seconds or longer, turn the ignition switch to the "START" position without depressing the accelerator pedal.

- (4) If the engine still refuses to start, contact your nearest SUBARU dealer for assistance.
- 6. Confirm that all warning and indicator lights have turned off after the engine has started. The fuel injection system automatically lowers the idle speed as the engine warms up.

While the engine is warming up, make sure that the select lever is at the "P" or "N" position and that the parking brake is applied.



If you restart the engine while the vehicle is moving, shift the select lever into the "N" position. Do not attempt to place the select lever of a moving vehicle into the "P" position.

## ■ Stopping the engine

The ignition switch should be turned off only when the vehicle is stopped and the engine is idling.

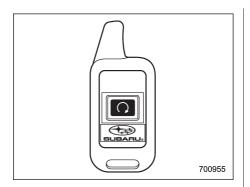


Do not stop the engine when the vehicle is moving. This will cause loss of power to the power steering and the brake booster, making steering and braking more difficult. It could also result in accidental activation of the "LOCK" (off) position on the ignition switch, causing the steering wheel to lock.

## Remote engine start system (dealer option)

#### WARNING

- There are some general precautions when starting the engine. Carefully read the precautions described in "General precautions when starting engine" @7-9.
- Do not remote start a vehicle in an enclosed environment (e.g. closed garage). Prolonged operation of a motor vehicle in an enclosed environment can cause a harmful build-up of Carbon Monoxide. Carbon Monoxide is harmful to your health. Exposure to high levels of Carbon Monoxide can cause headaches, dizziness or in extreme cases unconsciousness and/or death.
- Before performing any servicing of the vehicle, temporarily place the remote engine start system in service mode to prevent the system from unexpectedly starting the engine.



# ■ Starting your vehicle NOTE

All vehicle doors, the engine hood and trunk / rear gate must be closed prior to activating the remote engine start system. Any open entry point will prevent starting or cause the system to shut down.

The remote engine start function is activated by pressing the " $\mathbf{Q}$ " button twice within 3 seconds on your remote engine start transmitter. Upon successful activation the remote start confirming transmitter button will flash once\* and the vehicle will honk the horn and flash the side marker lights, tail lights and parking lights once. The system will check certain precondi-

tions before starting, and if all safety parameters are correct, the engine will start within 5 seconds. Upon successful engine start, the remote start confirmation transmitter button will flash twice every 5 seconds\* and the vehicle will honk the horn and flash the side marker lights, tail lights and the parking lights once, then the lights will illuminate and remain illuminated, indicating that the engine is running. While the vehicle is operating via the remote engine start function, the power window features will be disabled. Also, the system has a timer and will shut down after 15 minutes if you do not operate the vehicle. Press and hold the "Ω" button for 2 seconds to turn the engine off. The remote start confirmation transmitter button will flash three times\* indicating that the engine has shut down. If the starter cranks but does not start or starts and stalls, the remote engine start system will power off and then attempt to start the engine an additional three times unless the remote engine start system determines that a vehicle malfunction is preventing the system from starting. If the engine does not start after additional attempts, the remote engine start system will abort and return to a non-activate state.

\*: Provided that the remote engine start

transmitter is within the operating range of the system.

## ■ Remote start safety features

For safety and security reasons, the system will fail to start and honk the horn twice or shut down the engine during remote start operation if any of the following occur:

- Any of the doors or the trunk / rear gate are open / opened (\*the vehicle's horn will honk six times and the side marker lights, tail lights and the parking lights will flash six times indicating that a vehicle door or trunk / rear gate was open when the remote engine start system was activated).
- The brake pedal is depressed
- The key was already in the ignition switch
- The engine hood is opened
- The remote start system "Service mode" is engaged
- The vehicle's engine idle speed has reached a level over 3,500 RPM
- The alarm is triggered by opening a door or the rear gate.
- The select lever is not in the "P" position (CVT models)

In addition to the items above, if the

vehicle's engine management system determines there is a safety risk due to a vehicle related problem, the engine will shut down and the vehicle's horn will honk three times.

#### NOTE

- If the alarm system is armed at the time of remote engine start activation (the security indicator light on the combination meter is flashing), the alarm system will remain armed throughout the remote start run cycle.
- If the alarm system is disarmed at the time of remote engine start activation (the security indicator light on the combination meter is not flashing), the alarm system will remain disarmed throughout the remote start run cycle.

## ■ Entering the vehicle while it is running via remote start

1. Unlock the vehicle doors using the remote keyless entry system. If the vehicle's doors are unlocked manually using the key, the vehicle's alarm system will trigger (if the alarm system is armed prior to activating the remote engine start system) and the engine will turn off. Inserting the key into the ignition switch and turning it to the "ON" position or pressing the unlock button "" on the

remote keyless entry transmitter will disarm the alarm system. Refer to "Alarm system" @ 2-10.

- 2. Enter the vehicle.
- 3. The engine will shut down when any door or trunk/rear gate is opened.
- 4. Insert the key into the ignition switch and turn to the "START" position to restart the engine.

#### ■ Remote start confirmation transmitter feature

Your remote engine start transmitter is equipped with a unique bidirectional confirmation feature. This feature will allow the transmitter's backlit button to display the status of the system under the condition that the vehicle and transmitter are within the operational range of the system. Typical transmitter button flash sequences are outlined in the following chart.

Transmitter flash sequence	Feature description
Flashes when button is pressed	Indicates that the system is transmitting an RF signal.
Two long flashes following remote start activation (transmitter button is pressed two times within 3 seconds)	Indicates that the transmitter did not receive the remote start activation confirmation from the vehicle system. The transmitter will automatically send one additional remote start activation attempt. This usually occurs when the operational range is at its limit or has been exceeded.
One flash following remote start activation (transmitter button is pressed two times within 3 seconds)	Indicates that the engine is running via remote start. If the transmitter is moved outside of the operating range of the system, this sequence will timeout after the normal 15-minute vehicle run cycle.
2 flashes every 5 seconds	Indicates that the engine is running via remote start. If the transmitter is removed outside of the operating range of the system, this sequence will timeout after the normal 15-minute vehicle run cycle.
3 flashes	Indicates that the engine has turned off due to a remote start system 15-minute timeout, vehicle safety parameter or normal shutdown.

# ■ Entering the vehicle following remote engine start shutdown

An alarm trigger may occur if the vehicle is opened by the remote keyless entry transmitter within a few seconds immediately following remote engine start shutdown.

## ■ Pre-heating or pre-cooling the interior of the vehicle

Before exiting the vehicle, set the temperature controls to the desired setting and operation. After the system starts the engine, the heater or air conditioning will activate and heat or cool the interior to your setting.

#### Service mode

In service mode, the remote engine start function is temporarily disabled to prevent the system from unexpectedly starting the engine while being serviced.

#### To engage or disengage service mode:

- 1. Enter the vehicle and close all vehicle doors and the trunk/rear gate.
- 2. Verify that the select lever is in the "P" position (CVT models)
- 3. Depress and hold the brake pedal
- 4. Turn the ignition switch to the "ON" position
- 5. Press and release the remote engine start transmitter "Q" button three times. The system will honk the vehicle's horn each time the button is pressed.
- 6. The system will pause for 1 second then honk the vehicle's horn three times to indicate that the service mode has been engaged or honk one time to indicate that the service mode has been disengaged.

## NOTE

When taking your vehicle in for service, it is recommended that you inform the service personnel that your vehicle is equipped with a remote engine start system.

## ■ Remote transmitter program

New transmitters can be programmed to the remote engine start system in the event that a transmitter is lost, stolen. damaged or additional transmitters are desired (the system will accept up to eight transmitters). New remote engine start transmitters can be programmed according to the following procedure.

- 1. Open the driver's door (the driver's door must remain opened throughout the entire process).
- 2. Depress and hold the brake pedal.
- 3. Turn the ignition switch to "ON" then "LOCK" (off), back to "ON" then "LOCK" (off), back to "ON" then "LOCK" (off), then back to "ON" again and leave the ignition "ON" throughout the programming process.
- 4. The system will flash the side marker lights, tail lights and parking lights and honk the horn three times, indicating that the system has entered the transmitter learn mode.
- 5. Press and release the "\O" button on the transmitter that you want to program.
- 6. The system will flash the side marker lights, tail lights and parking lights and honk the horn one time, indicating that the system has learned the transmitter. Upon successful programming, the remote start

confirmation transmitter button will flash one time.

- 7. Repeat step 5 for any additional transmitters (the system will accept up to eight transmitters).
- 8. The system will exit the transmitter learn mode if the key is turned to the "LOCK" (off) position, the door is closed or after 2 minutes.

## System maintenance

## NOTE

In the event that the vehicle's battery is replaced, discharged or disconnected, it will be necessary to start the vehicle a minimum of one time using the key prior to activating the remote engine start system. This is required to allow the vehicle electronic systems to resynchronize.

#### ▼ Changing the batteries



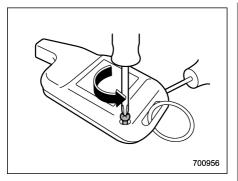
#### CAUTION

- Do not let dust, oil or water get on or in the remote engine start transmitter when replacing the battery.
- Be careful not to damage the printed circuit board in the remote engine start transmitter

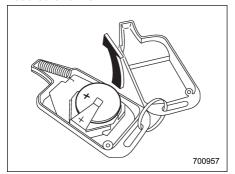
when replacing the battery.

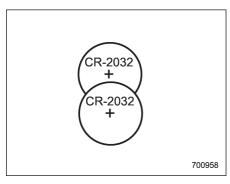
- Be careful not to allow children to touch the battery and any removed parts; children could swallow them.
- There is a danger of explosion if an incorrect replacement battery is used. Replace only with the same or equivalent type of battery.
- Batteries should not be exposed to excessive heat such as sunshine, fire or the like.

The two 3-volt lithium batteries (model CR-2032) supplied in your remote engine start transmitter should last approximately one year, depending on usage. When the batteries begin to weaken, you will notice a decrease in range (distance from the vehicle that your remote control operates). Follow the instructions below to change the remote engine start transmitter batteries.



- 1. Remove the small phillips screw located on the back side lower left corner of the transmitter.
- 2. Carefully pry the remote engine start transmitter halves apart using a small flathead screwdriver.





- 3. Remove the circuit board from the bottom half of the case and remove the batteries and replace with new ones. Be sure to observe the (+) sign on the old batteries before removing them to ensure that the new batteries are inserted properly (battery "+" should be pointed away from the transmitter circuit board on both batteries).
- 4. Carefully snap the case halves back together, reinstall the phillips screw and test the remote engine start system.

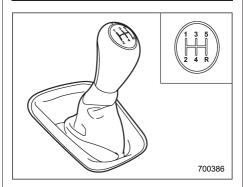
#### NOTE

 This device complies with Part 15 of the FCC Rules and with RSS-210 of Industry Canada. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment and void warranty.

• To comply with the FCC RF exposure compliance requirements, no change to the antenna or the device is permitted. Any change to the antenna or the device could result in the device exceeding the RF exposure requirements and void user's authority to operate the device.

#### **Manual transmission**



The manual transmission is a fully synchromeshed, 5-forward-speed and 1-reverse-speed transmission.

The shift pattern is shown on the shift lever knob. When shifting from 5th gear to reverse gear, first return the shift lever to the neutral position then shift into reverse gear.

To change gears, fully depress the clutch pedal, move the shift lever, and gradually let up on the clutch pedal.

If it is difficult to shift into gear, put the transmission in neutral, release the clutch pedal momentarily, and then try again.

## **WARNING**

- Do not drive the vehicle with the clutch disengaged (i.e., when the clutch pedal is depressed) or with the shift lever in the neutral position. Engine braking has no effect in either of these conditions and the risk of an accident is consequently increased.
- Do not engage the clutch (i.e., release the clutch pedal) suddenly when starting the vehicle. By doing so the vehicle might unexpectedly accelerate or the transmission could malfunction.

## A CAUTION

Shift into reverse ONLY when the vehicle has completely stopped. It may cause damage to the transmission to try shifting into reverse when the vehicle is moving.

## ■ Shifting speeds

#### **▼** Recommended shifting speeds

The best compromise between fuel economy and vehicle performance during normal driving is ensured by shifting up at the speeds listed in the following table.

Shift up	mph (km/h)
1st to 2nd	15 (24)
2nd to 3rd	25 (40)
3rd to 4th	40 (64)
4th to 5th	45 (72)

#### **▼** Maximum allowable speeds

The following table shows the maximum speeds that are possible with each different gear. The tachometer's needle will enter the red area if these speeds are exceeded.

With the exception of cases where sudden acceleration is required, the vehicle should not be driven with the tachometer's needle inside the red area. Failure to observe this precaution can lead to excessive engine wear and poor fuel economy.

mnh i	(km/h)
man	KIII/II)

Gear	Except XV CROSSTREK models	XV CROSSTREK models
1st	30 (48)	28 (46)
2nd	55 (89)	53 (86)
3rd	80 (130)	78 (126)
4th	Legal speed limit	
5th	Legal speed limit (Posted limit speed)	

## **WARNING**

When shifting down a gear, ensure that the vehicle is not travelling at a speed exceeding the Maximum Allowable Speed for the gear which is about to be selected. Failure to observe this precaution can lead to engine over-revving and this in turn can result in engine damage.

In addition, sudden application of engine brakes when the vehicle is travelling on a slippery surface can lead to wheel locking; as a consequence, control of the vehicle may be lost and the risk of an accident increased.

#### **NOTE**

Never exceed the posted speed limit.

## ■ Driving tips

Do not drive with your foot resting on the clutch pedal and do not use the clutch to hold your vehicle at a standstill on an upgrade. Either of those actions may cause clutch damage.

Do not drive with your hand resting on the shift lever. This may cause wear on the transmission components.

When it is necessary to reduce vehicle speed due to slow traffic, turning corners, or driving up steep hills, downshift to a lower gear before the engine starts to labor.

On steep downgrades, downshift the transmission to 4th, 3rd or 2nd gear as necessary; this helps to maintain a safe speed and to extend brake pad life.

In this way, the engine provides a braking effect. Remember, if you "ride" (over use) the brakes while descending a hill, they may overheat and not work properly.

The engine may, on rare occasions, knock when the vehicle rapidly accelerates or rapidly pulls away from a standstill. This phenomenon is not an indication of a problem in your vehicle.

## Continuously variable transmission



#### WARNING

Do not shift from the "P" or "N" position into the "D" or "R" position while depressing the accelerator pedal. This may cause the vehicle to jump forward or backward.

## **CAUTION**

- Shift into the "P" or "R" position only after the vehicle is completely stopped. Shifting while the vehicle is moving may cause damage to the transmission.
- Do not race the engine for more than 5 seconds in any position except the "N" or "P" position when the brake is applied or when chocks are used in the wheels. This may cause the transmission fluid to overheat.
- Avoid shifting from one of the forward driving positions into the "R" position or vice versa until the vehicle has completely stopped. Such shifting may

- cause damage to the transmission.
- When parking the vehicle, first securely apply the parking brake and then place the select lever in the "P" position. Avoid parking for a long time with the select lever in any other position as doing so could result in a dead batterv.

#### ■ Continuously variable transmission features

The continuously variable transmission is electronically controlled and provides an infinite number of forward speeds and 1 reverse speed. For some models, it also has a manual mode or an "L" position.

#### NOTE

- When the engine coolant temperature is still low, the transmission will upshift to higher engine speeds than when the coolant temperature is sufficiently high in order to shorten the warm-up time and improve driveability. The gearshift timing will automatically shift to the normal timing after the engine has warmed up.
- Immediately after transmission fluid is replaced, you may feel that the

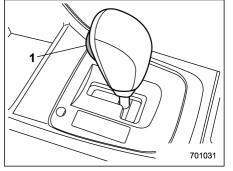
transmission operation is somewhat unusual. This results from invalidation of data which the on-board computer has collected and stored in memory to allow the transmission to shift at the most appropriate times for the current condition of your vehicle. Optimized shifting will be restored as the vehicle continues to be driven for a while.

- When driving a CVT model under continuous heavy load conditions such as when towing a camper or climbing a long, steep hill, the engine speed or the vehicle speed may automatically be reduced. This is not a malfunction. This phenomenon results from the engine control function maintaining the cooling performance of the vehicle. The engine and vehicle speed will return to a normal speed when the engine is able to maintain the optimum cooling performance after the heavy load decreases. Driving under a heavy load must be performed with extreme care. Do not try to pass a vehicle in front when driving on an uphill slope while towing.
- The continuously variable transmission is a chain type system that provides superior transmission efficiency for maximum fuel economy. At times, depending on varying driving conditions, a chain operating sound

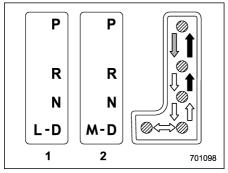
may be heard that is characteristic of this type of system.

#### Select lever

#### **▼** Select lever positions



1) Select lever button



- 1) Models with "L" position
- 2) Models with manual mode
- : With the brake pedal depressed, shift while pressing the select lever button in.
- : Shift while pressing the select lever button in.
- : Shift without pressing the select lever button.

The select lever has four positions, "P", "R", "N", "D" and it also has an "L" or "M" gate.

#### ▼ P (Park)

This position is for parking the vehicle and starting the engine. In this position, the transmission is mechanically locked to prevent the vehicle from rolling freely.

When you park the vehicle, first apply the parking brake firmly, then shift into the "P" position. Do not hold the vehicle with only the mechanical friction of the transmission.

To shift the select lever from the "P" to any other position, you should depress the brake pedal fully then move the select lever. This prevents the vehicle from lurching when it is started.

#### ▼ R (Reverse)

This position is for backing the vehicle. To shift from the "N" to "R" position, stop the vehicle completely then move the lever to the "R" position while pressing the select lever button in.

When the ignition switch has been turned to the "LOCK" (off) position, movement of the select lever from the "N" to "R" position is possible for a limited time period by depressing the brake pedal, and then it becomes impossible. For details, refer to "Shift lock function" \$\mathscr{P} 7-23.

#### **▼** N (Neutral)

This position is for restarting a stalled engine. In this position, the transmission is neutral, meaning that the wheels and transmission are not locked. Therefore, the vehicle will roll freely, even on the slightest incline unless the parking brake

or foot brake is applied.

Avoid coasting with the transmission in neutral. Engine braking has no effect in this condition.

## WARNING

Do not drive the vehicle with the select lever in the "N" (neutral) position. Engine braking has no effect in this condition and the risk of an accident is consequently increased.

#### NOTE

If the select lever is in the "N" position when you stop the engine for parking. you may not subsequently be able to move it to the "R" and "P" positions. If this happens, turn the ignition switch to the "ON" position. You will then be able to move the select lever to the "P" position.

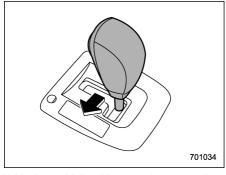
## ▼ D (Drive)

This position is for normal driving. The transmission shifts automatically and continuously into a suitable gear according to the vehicle speed and the acceleration you require. Also, while driving up and down a hill, the transmission assists and controls the driving performance and engine braking while corresponding to the road grade.

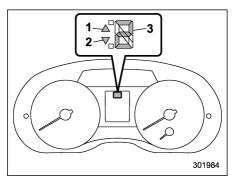
When more acceleration is required in the "D" position, depress the accelerator pedal fully to the floor and hold that position. The transmission will automatically downshift. When you release the pedal, the transmission will return to the original gear position.

For models with manual mode, if one of the shift paddles behind the steering wheel is operated while driving in the "D" position, the transmission will temporarily switch to the manual mode. In this mode. you can shift into any gear position using the shift paddles. For details about the manual mode, refer to "Selection of manual mode" @7-21. Once the vehicle speed stabilizes, the transmission will switch from the manual mode back to the "D" position for normal driving.

## ■ Selection of manual mode (if equipped)



With the vehicle either moving or stationary, move the select lever from the "D" position to the "M" position to select the manual mode.

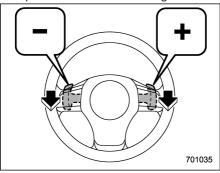


- 1) Upshift indicator
- Downshift indicator
- 3) Gear position indicator

When the manual mode is selected, the gear position indicator and upshift indicator and/or downshift indicator on the combination meter illuminate.

The gear position indicator shows the currently selected gear in the 1st-to-6th-gear range. The upshift and downshift indicators show when a gear shift is possible. When the upshift indicator "\[Delta"\]" illuminates, upshifting is possible. When the downshift indicator "\[\P\]" illuminates, downshifting is possible. When both indicators illuminate, upshifting and downshifting are both possible. When the vehicle stops (for example, at traffic signals), the downshift indicator turns off.

Gearshifts can be performed using the shift paddle behind the steering wheel.



To upshift to the next higher gear position, pull the shift paddle that has "+" indicated on it. To downshift to the next lower gear position, pull the shift paddle that has "-" indicated on it.

To deselect the manual mode, return the select lever to the "D" position from the "M" position.

## **CAUTION**

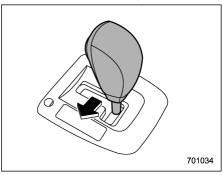
Do not place or hang anything on the shift paddles. Doing so may result in accidental gear shifting.

#### **▼** Manual mode tips

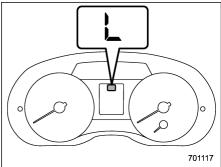
Please read the following points carefully and bear them in mind when using the manual mode.

- If you attempt to shift down when the engine speed is too high, i.e., when a downshift would push the tachometer needle beyond the red zone, beeps will be emitted to warn you that the downshift is not possible.
- If you attempt to shift up when the vehicle speed is too low, the transmission will not respond.
- You can perform a skip-shift (for example, from 4th to 2nd) by operating the shift paddle twice in rapid succession.
- The transmission automatically selects
   1st gear when the vehicle stops moving.
- If the temperature of the transmission fluid becomes too high, the "AT OIL TEMP" warning light on the combination meter will illuminate. Immediately stop the vehicle in a safe location and let the engine idle until the warning light turns off.

## ■ Selection of "L" (if equipped)



"L" is for using engine braking when going down a hill, etc. To select this mode, move the selector lever from the "D" position to the "L" position.



When selected, the indicator "L" will

illuminate on the combination meter.

To deselect "L", move the selector lever to the "D" position.

#### ■ Shift lock function

The shift lock function helps prevent the improper operation of the select lever.

- The select lever cannot be operated unless the ignition switch is turned to the "ON" position and the brake pedal is depressed.
- The select lever cannot be moved from the "P" position to any other position before the brake pedal is depressed. Depress the brake pedal first, and then operate the select lever.
- Only the "P" position allows you to turn the ignition switch from the "ACC" position to the "LOCK" (off) position and remove the key from the ignition switch.
- If the ignition switch is turned to the "LOCK" (off) position while the select lever is in the "N" position, the select lever may not be moved to the "P" position after a period of time. Therefore, move the select lever to the "P" position with the brake pedal depressed soon after the ignition switch is turned to the "LOCK" (off) position.

#### **▼** Shift lock release

If the select lever cannot be operated, turn the ignition switch back to the "ON" position then move the select lever to the "P" position with the select lever button pressed and brake pedal depressed.

If the select lever does not move after performing the above procedure, perform the following steps.

• When the select lever cannot be shifted from "P" to "N":

Refer to "Shift lock release using the shift lock release button" \$\tilde{\sigma} 7-24.

• When the select lever cannot be shifted from "N" to "R", "P":

Within 60 seconds after placing the ignition switch in the "ACC" position, move the select lever to the "P" position with the select lever button pressed and brake pedal depressed.

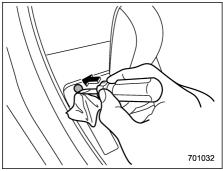
If you must perform the above procedure, the shift lock system (or the vehicle control system) may be malfunctioning. Contact a SUBARU dealer for an inspection as soon as possible.

If the select lever does not move after performing the above procedure, refer to "Shift lock release using the shift lock release button" \$\infty 7-24.

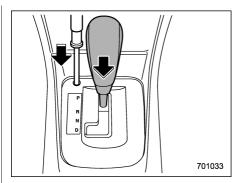
## ▼ Shift lock release using the shift lock release button

Perform the following procedure to release the shift lock.

1. Apply the parking brake and turn the ignition switch to the "LOCK" (off) position.



2. Wrap the tip of a flat-head screwdriver with vinyl tape or a cloth and use it to remove the shift lock cover. The shift lock release button is located under the shift lock cover.



3. While depressing the brake pedal, insert a screwdriver into the hole, press the shift lock release button using a screwdriver, and then move the select lever.

If the select lever does not move after performing the above procedure, the shift lock system may be malfunctioning. Contact a SUBARU dealer for an inspection as soon as possible.

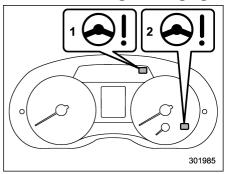
## ■ Driving tips

- Always apply the foot or parking brake when the vehicle is stopped in the "D" or "R" position.
- Always apply the parking brake when parking your vehicle. Do not hold the vehicle with only the mechanical friction of the transmission.

- Do not keep the vehicle in a stationary position on an uphill grade by using the "D" position. Use the brake instead.
- The engine may, on rare occasions, knock when the vehicle rapidly accelerates or rapidly pulls away from a standstill. This phenomenon does not indicate a malfunction.

## **Power steering**

## ■ Power steering warning light



- 1) U.S.-spec. models
- 2) Except U.S.-spec. models

#### ■ Power steering system features

The vehicle is equipped with an electric power steering system. When the ignition switch is turned to the "ON" position, the power steering warning light on the combination meter illuminates to inform the driver that the warning system is functioning properly. Then, if the engine started, the warning light turns off to inform the driver that the steering power assist is operational.

## A CAUTION

When the power steering warning light is illuminated, there may be more resistance when the steering wheel is operated. Drive carefully to the nearest SUBARU dealer and have the vehicle inspected immediately.

#### NOTE

If the steering wheel is operated in the following ways, the power steering control system may temporarily limit the power assist in order to prevent the system components, such as the control computer and drive motor, from overheating.

- The steering wheel is operated frequently and turned sharply while the vehicle is maneuvered at extremely low speeds, such as while frequently turning the steering wheel during parallel parking.
- The steering wheel remains in the fully turned position for a long period of time.

At this time, there will be more resistance when steering. However this is not a malfunction. Normal steering force will be restored after the steering

wheel is not operated for a while and the power steering control system has an opportunity to cool down. However, if the power steering is operated in a non-standard way which causes power assist limitation to occur too frequently, this may result in a malfunction of the power steering control system.

## **Braking**

## ■ Braking tips



Never rest your foot on the brake pedal while driving. This can cause dangerous overheating of the brakes and needless wear on the brake pads and linings.

#### **▼** When the brakes get wet

When driving in rain or after washing the vehicle, the brakes may get wet. As a result, brake stopping distance will be longer. To dry the brakes, drive the vehicle at a safe speed while lightly depressing the brake pedal to heat up the brakes.

#### **▼** Use of engine braking

Remember to make use of engine braking in addition to foot braking. When descending a grade, if only the foot brake is used, the brakes may start working improperly because of brake fluid overheating, caused by overheated brake pads. To help prevent this, shift into a lower gear to get stronger engine braking.

#### **▼** Braking when a tire is punctured

Do not depress the brake pedal suddenly when a tire is punctured. This could cause

a loss of control of the vehicle. Keep driving straight ahead while gradually reducing speed. Then slowly pull off the road to a safe place.

## ■ Brake system

#### **▼** Two separate circuits

Your vehicle has two separate circuit brake systems. Each circuit works diagonally across the vehicle. If one circuit of the brake system should fail, the other half of the system still works. If one circuit fails, the brake pedal will go down much closer to the floor than usual and you will need to press it down much harder. And a much longer distance will be needed to stop the vehicle.

#### **▼** Brake booster

The brake booster uses engine manifold vacuum to assist braking force. Do not turn the ignition switch to the "LOCK" (off) position while driving because that will turn off the brake booster, resulting in poor braking power.

The brakes will continue to work even when the brake booster completely stops functioning. If this happens, however, you will have to depress the pedal much harder than normal and the braking distance will increase.

#### **▼** Brake assist system



#### **WARNING**

Do not be overconfident about the brake assist. It is not a system that brings more braking ability to the vehicle beyond its braking capability. Always use the utmost care when driving regarding vehicle speed and safe distance.



#### **CAUTION**

When you need to brake suddenly, continue depressing the brake pedal strongly to bring the effect of the brake assist.

Brake assist is a driver assistance system. It assists the brake power when the driver cannot depress the brake pedal strongly and the brake power is insufficient.

Brake assist generates the brake power according to the speed at which the driver depresses the brake pedal.

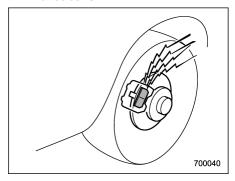
#### NOTE

When you depress the brake pedal strongly or suddenly, the following phenomena occur. However, even though these occur, they do not indi-

cate any malfunctions, and the brake assist system is operating properly.

- You might feel that the brake pedal is applied by lighter force and generates a greater braking force.
- You might hear an ABS operating noise from the engine compartment.

# Disc brake pad wear warning indicators



The disc brake pad wear warning indicators on the disc brakes give a warning noise when the brake pads are worn.

If a squeaking or scraping noise is heard from the disc brakes while braking, immediately have your vehicle checked by your SUBARU dealer.

# ABS (Anti-lock Brake System)

The ABS system prevents the lock-up of wheels which may occur during sudden braking or braking on slippery road surfaces. This helps prevent the loss of steering control and directional stability caused by wheel lock-up.

When the ABS system is operating, you may hear a chattering noise or feel a slight vibration in the brake pedal. This is normal when the ABS operates.

The ABS system will not operate when the vehicle speed is below approximately 6 mph (10 km/h).

## **WARNING**

Always use the utmost care in driving – overconfidence because you are driving a vehicle with the ABS system could easily lead to a serious accident.

## **CAUTION**

 The ABS system does not always decrease stopping distance. You should always maintain a safe following distance from other vehicles.

- when driving on badly surfaced roads, gravel roads, icy roads, or over deep newly fallen snow, stopping distances may be longer for a vehicle with the ABS system than one without. When driving under these conditions, therefore, reduce your speed and leave ample distance from other vehicles.
- When tire chains are installed, stopping distances may be longer for a vehicle with the ABS system than one without. Be sure to reduce your speed and maintain a safe distance from the vehicle in front.
- When you feel the ABS system operating, you should maintain constant brake pedal pressure.
   Do not pump the brake pedal since doing so may defeat the operation of the ABS system.

## ■ ABS system self-check

Just after the vehicle is started, you may feel on the brake pedal a vibration similar to when the ABS operates, and you may also hear the sound of the ABS working from the engine compartment. This is caused by an automatic functional test of the ABS system being carried out and does not indicate any abnormal condition.

## ■ ABS warning light

Refer to "ABS warning light" \$\alpha\$3-16.

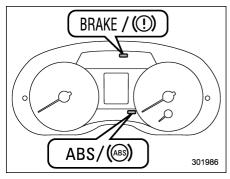
# Electronic Brake Force Distribution (EBD) system

The EBD system maximizes the effectiveness of the brakes by allowing the rear brakes to supply a greater proportion of the braking force. It functions by adjusting the distribution of braking force to the rear wheels in accordance with the vehicle's loading condition and speed.

The EBD system is an integral part of the ABS system and uses some of the ABS system's components to perform its function of optimizing the distribution of braking force. If any of the ABS components used by the EBD system malfunction, the EBD system also stops working.

When the EBD system is operating, you may hear a chattering noise or feel a slight vibration in the brake pedal. This is normal and does not indicate a malfunction.

# ■ Steps to take if EBD system malfunctions



If a malfunction occurs in the EBD system, the system stops working and the brake system warning light and ABS warning light illuminate simultaneously.

The EBD system may be malfunctioning if the brake system warning light and ABS warning light illuminate simultaneously during driving.

Even if the EBD system malfunctions, the conventional braking system will still function. However, the rear wheels will be more prone to locking when the brakes are applied harder than usual and the vehicle's motion may therefore become somewhat harder to control.

If the brake system warning light and ABS

warning light illuminate simultaneously, take the following steps.

- 1. Stop the vehicle in the nearest safe, flat location.
- 2. Shut down the engine, apply the parking brake, and then restart it.
- 3. Release the parking brake. If both warning lights turn off, the EBD system may be malfunctioning. Drive carefully to the nearest SUBARU dealer and have the system inspected.
- 4. If both warning lights illuminate again and remain illuminated after the engine has been restarted, shut down the engine again, apply the parking brake, and check the brake fluid level. Refer to "Brake fluid" **☞11-16**
- 5. If the brake fluid level is not below the "MIN" mark, the EBD system may be malfunctioning. Drive carefully to the nearest SUBARU dealer and have the system inspected.
- 6. If the brake fluid level is below the "MIN" mark. DO NOT drive the vehicle. Instead, have the vehicle towed to the nearest SUBARU dealer for repair.

## **WARNING**

 Driving with the brake system warning light illuminated is dan-

- gerous. This indicates your brake system may not be working properly. If the light remains illuminated, have the brakes inspected by a SUBARU dealer immediately.
- If at all in doubt about whether. the brakes are operating properly, do not drive the vehicle. Have your vehicle towed to the nearest SUBARU dealer for repair.

## Vehicle Dynamics Control system

■ Safety precautions

## MARNING

Always use the utmost care in driving - overconfidence because you are driving a vehicle with the Vehicle Dynamics Control system could easily lead to a serious accident.

## A CAUTION

- Even if your vehicle is equipped with Vehicle Dynamics Control system, winter tires should be used when driving on snow-covered or icy roads; in addition, vehicle speed should be reduced considerably. Simply having a Vehicle Dynamics Control system does not guarantee that the vehicle will be able to avoid accidents in any situation.
- Activation of the Vehicle Dynamics Control system is an indication that the road being travelled on has a slippery sur-

face; since having Vehicle Dynamics Control is no guarantee that full vehicle control will be maintained at all times and under all conditions, its activation should be seen as a sign that the speed of the vehicle should be reduced considerably.

- Whenever suspension components, steering components, or an axle are removed from a vehicle, have an inspection of that system performed by an authorized SUBARU dealer.
- The following precautions should be observed in order to ensure that the Vehicle Dynamics Control system is operating properly:
  - All four wheels should be fitted with tires of the same size, type, and brand. Furthermore, the amount of wear should be the same for all four tires.
  - Keep the tire pressure at the proper level as shown on the vehicle placard attached to the driver's side door pillar.
  - Use only the specified temporary spare tire to replace a flat tire. With a temporary

spare tire, the effectiveness of the Vehicle Dynamics Control system is reduced and this should be taken into account when driving the vehicle in such a condition.

- If non-matching tires are used, the Vehicle Dynamics Control system may not operate correctly.
- The Vehicle Dynamics Control system helps prevent unstable vehicle motion such as skidding using control of the brakes and engine power. Do not turn off the Vehicle Dynamics Control system unless it is absolutely necessary. If you must turn off the Vehicle Dynamics Control system, drive very carefully according to the road surface conditions.

## **■** System features

In the event of wheelspin and/or skidding on a slippery road surface and/or during cornering and/or an evasive maneuver, the Vehicle Dynamics Control system adjusts the engine's output and the wheels' respective braking forces to help

maintain traction and directional control.

#### Traction Control Function

The traction control function is designed to prevent spinning of the driving wheels on slippery road surfaces, thereby helping to maintain traction and directional control. Activation of this function is shown by flashing the Vehicle Dynamics Control operation indicator light.

#### Skid Suppression Function

The skid suppression function is designed to help maintain directional stability by suppressing the wheels' tendency to slide sideways during steering operations. Activation of this function is shown by flashing the Vehicle Dynamics Control operation indicator light.

#### **NOTE**

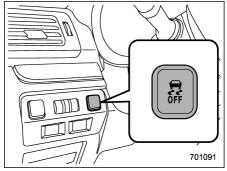
- The Vehicle Dynamics Control system may be considered normal when the following conditions occur.
  - Slight twitching of the brake pedal is felt.
  - The vehicle or steering wheel shakes to a small degree.
  - An operating sound from the engine compartment is heard briefly when starting the engine and when driving off after starting the engine.

- The brake pedal seems to jolt when driving off after starting the engine.
- In the circumstances shown in the following list, the vehicle may be less stable than it feels to the driver. The Vehicle Dynamics Control System may therefore operate. Such operation does not indicate a system malfunction.
  - on gravel-covered or rutted roads
  - on unfinished roads
  - when the vehicle is towing a trailer (trailer towing permitted with XV CROSSTREK models only)
  - when the vehicle is fitted with snow tires or winter tires
- Activation of the Vehicle Dynamics Control system will cause operation of the steering wheel to feel slightly different compared to that for normal conditions.
- It is always important to reduce speed when approaching a corner, even if your vehicle is equipped with the Vehicle Dynamics Control system.
- Always turn off the engine before replacing a tire. Failure to do so may render the Vehicle Dynamics Control system unable to operate correctly.

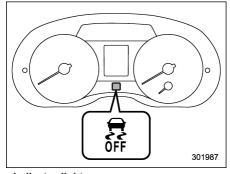
# ■ Vehicle Dynamics Control system monitor

Refer to "Vehicle Dynamics Control warning light/Vehicle Dynamics Control operation indicator light" \$\tilde{\sigma}\$-19 and "Vehicle Dynamics Control OFF indicator light" \$\tilde{\sigma}\$-3-20.

# ■ Vehicle Dynamics Control OFF switch



Vehicle Dynamics Control OFF switch



Indicator light

Pressing the switch to deactivate the Vehicle Dynamics Control system can facilitate the following operations.

- a standing start on a steeply sloping road with a snowy, gravel-covered, or otherwise slippery surface
- extrication of the vehicle when its wheels are stuck in mud or deep snow

When the switch is pressed during engine operation, the Vehicle Dynamics Control OFF indicator light "#" on the combination meter illuminates. The Vehicle Dynamics Control system will be deactivated and the vehicle will behave like a model not equipped with the Vehicle Dynamics Control system. When the switch is pressed again to reactivate the Vehicle Dynamics

Control system, the Vehicle Dynamics Control OFF indicator light turns off.

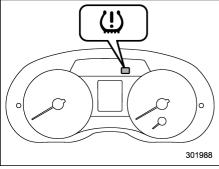
With the Vehicle Dynamics Control system deactivated, traction and stability enhancement offered by Vehicle Dynamics Control system is unavailable. Therefore you should not deactivate the Vehicle Dynamics Control system except under above-mentioned situations.

#### NOTE

- The Vehicle Dynamics Control system will be activated automatically when the engine is started.
- If the switch is held down for 30 seconds or longer, the indicator light turns off, the Vehicle Dynamics Control system is activated, and the system ignores any further pressing of the switch. To make the switch usable again, turn the ignition switch to the "LOCK" (off) position and restart the engine.
- When the switch is pressed to deactivate the Vehicle Dynamics Control system, the vehicle's running performance is comparable with that of a vehicle that does not have a Vehicle Dynamics Control system. Do not deactivate the Vehicle Dynamics Control system except when absolutely necessary.

• Even when the Vehicle Dynamics Control system is deactivated, components of the brake control system may still activate. When the brake control system is activated, the Vehicle Dynamics Control operation indicator light flashes.

# Tire pressure monitoring system (TPMS) (U.S.-spec. models)



Low tire pressure warning light

The tire pressure monitoring system provides the driver with a warning message by sending a signal from a sensor that is installed in each wheel when tire pressure is severely low.

The tire pressure monitoring system will activate only when the vehicle is driven at speeds above 20 mph (32 km/h). Also, this system may not react immediately to a sudden drop in tire pressure (for example, a blow-out caused by running over a sharp object).

# **♠** w

#### WARNING

If the low tire pressure warning light illuminates while driving, never brake suddenly and keep driving straight ahead while gradually reducing speed. Then slowly pull off the road to a safe place. Otherwise an accident involving serious vehicle damage and serious personal injury could occur.

Check the pressure for all four tires and adjust the pressure to the COLD tire pressure shown on the tire placard on the door pillar on the driver's side.

Even when the vehicle is driven a very short distance, the tires get warm and their pressures increase accordingly. Be sure to let the tires cool thoroughly before adjusting their pressures to the standard values shown on the tire placard. Refer to "Tires and wheels" @11-21. The tire pressure monitoring system does not function when the vehicle is stationary. After adjusting the tire pressures, increase the vehicle speed to at least 20 mph (32 km/h) to start the TPMS re-checking of the tire inflation pressures. If the tire pressures are now above the severe

low pressure threshold, the low tire pressure warning light should turn off a few minutes later.

If this light still illuminates while driving after adjusting the tire pressure, a tire may have significant damage and a fast leak that causes the tire to lose air rapidly. If you have a flat tire, replace it with a spare tire as soon as possible.

When a spare tire is mounted or a wheel rim is replaced without the original pressure sensor/transmitter being transferred, the low tire pressure warning light will illuminate steadily after blinking for approximately one minute. This indicates the TPMS is unable to monitor all four road wheels. Contact your SUBARU dealer as soon as possible for tire and sensor replacement and/ or system resetting.

When a tire is repaired with liquid sealant, the tire pressure warning valve and transmitter may not operate properly. If a liquid sealant is used, contact your nearest SUBARU dealer or other qualified service shop as soon as possible. Make sure to replace the tire pressure warning valve and transmitter when replacing the tire. You may reuse the

wheel if there is no damage to it and if the sealant residue is properly cleaned off. If the light illuminates steadily after blinking for approximately one minute, promptly contact a SUBARU dealer to have the system inspected.



#### CAUTION

- Do not place metal film or any metal parts in the cargo area/ trunk. This may cause poor reception of the signals from the tire pressure sensors, and the tire pressure monitoring system will not function properly.
- FCC WARNING

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

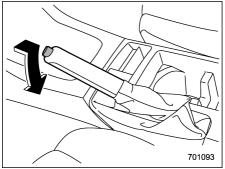
#### NOTE

This device complies with Part 15 of the FCC Rules and RSS-Gen of IC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

# Parking your vehicle

# ■ Parking brake

To set the parking brake, depress the brake pedal firmly and hold it down until the parking brake lever is fully pulled up.



To release the parking brake, pull the lever up slightly, press the release button, then lower the lever while keeping the button pressed.

When the parking brake is set while the engine is running, the parking brake warning light illuminates. After starting the vehicle, be sure that the warning light has turned off before the vehicle is driven. Refer to "Parking brake warning" \$\alpha\$3-17.



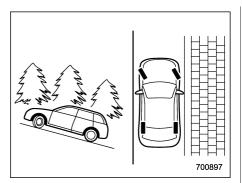
Never drive while the parking brake is set because this will cause unnecessary wear on the brake linings. Before starting to drive, always make sure that the parking brake has been fully released.

# ■ Parking tips

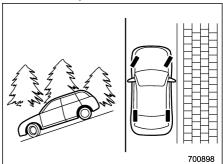
When parking your vehicle, always perform the following items.

- Apply the parking brake firmly.
- For MT models, put the shift lever in the "1" (1st) for upgrade or "R" (Reverse) for a downgrade.
- For CVT models, put the select lever in the "P" (Park) position.

Never rely on the mechanical friction of the transmission alone to hold the vehicle.



When parking on a hill, always turn the steering wheel. When the vehicle is headed up the hill, the front wheels should be turned away from the curb.



When facing downhill, the front wheels should be turned into the curb.

## **WARNING**

- Never leave unattended children or pets in the vehicle. They could accidentally injure themselves or others through inadvertent operation of the vehicle. Also, on hot or sunny days, the temperature in a closed vehicle could quickly become high enough to cause severe or possibly fatal injuries to people.
- Do not park the vehicle over flammable materials such as dry grass, waste paper or rags, as they may burn easily if they come near hot engine or exhaust system parts.
- Be sure to stop the engine if you take a nap in the vehicle. If engine exhaust gas enters the passenger compartment, occupants in the vehicle could die from carbon monoxide (CO) contained in the exhaust gas.

# **A** CAUTION

If your vehicle has a front underspoiler and rear underspoiler (both optional), pay attention to blocks and other obstructions on the ground when parking. The underspoilers could be damaged by contact with them.

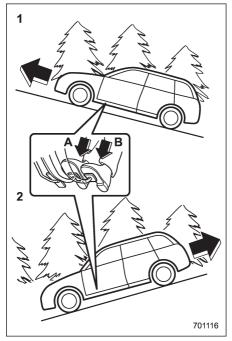
# Hill start assist system

## System features

# A CAUTION

The Hill start assist system is a device only for helping the driver to START the vehicle on an uphill grade. To prevent accidents when the vehicle is parked on a slope, be sure to firmly set the parking brake. When setting the parking brake, make sure that the vehicle remains stationary when the clutch pedal (MT models) or brake pedal (CVT models) is released.

The Hill start assist system is a device to make the following vehicle operations easier.



- Starting forward facing uphill
- Starting backward facing downhill
- Brake pedal (both MT models and CVT models)
- B) Clutch pedal (MT models only)

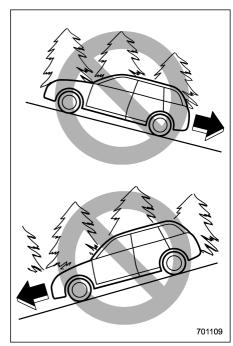
In both these cases, the Hill start assist system operates under the following conditions.

- when the clutch pedal is depressed while the brake pedal is also depressed (MT models)
- when the vehicle has stopped with the brake pedal depressed (CVT models)

Braking power is maintained temporarily (for approximately 2 seconds) by the Hill start assist system after the brake pedal is released. The driver is therefore able to start the vehicle in the same way as on a level grade, just using the clutch pedal (MT models only) and accelerator pedal (all models).

If the braking power of the Hill start assist system is insufficient after the brake pedal is released, apply more braking power by depressing the brake pedal again.

The Hill start assist system may not operate on slight grades. Also, the Hill start assist system does not operate in the following cases.



- when starting backward facing uphill
- when starting forward facing downhill
- while the parking brake is applied
- while the ignition switch is in the "ACC" or "LOCK" (off) position
- while the Hill start assist warning light/

Hill start assist OFF indicator light is illuminated

When using the Hill start assist system, a braking effect may be felt even after the brake pedal has been released. However, for MT models, this braking effect should disappear once the clutch pedal is released.

#### NOTE

A slight jolt may be felt when the vehicle begins to move forward after being reversed.

■ To activate/deactivate the Hill start assist system

# **A** CAUTION

While the Hill start assist system is deactivated, when starting on an uphill grade, braking power is not maintained if the brake pedal is released. Start on an uphill grade by using the parking brake.

You can activate/deactivate the Hill start assist system according to the following procedure.

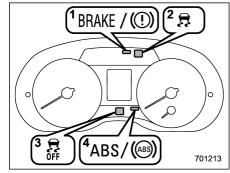
#### NOTE

If you make an error when performing

any steps in the following procedure, place the ignition switch in the "LOCK" (off) position once and then start over again.

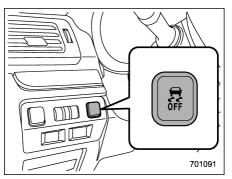
#### ▼ To deactivate

- 1. Park your vehicle in a flat and safe location and apply the parking brake.
- 2. Turn the ignition switch to the "LOCK" (off) position.
- 3. Restart the engine.



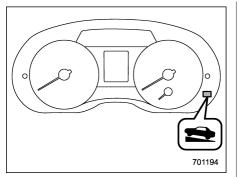
- 4. Confirm the following items.
  - (1) The Brake system warning light illuminates.
  - (2) The Vehicle Dynamics Control warning light turns off.
  - (3) The Vehicle Dynamics Control OFF indicator light turns off.

(4) The ABS warning light turns off.



**Vehicle Dynamics Control OFF switch** 

- 5. Press the Vehicle Dynamics Control OFF switch and hold it until the Vehicle Dynamics Control OFF indicator light "#" on the combination meter illuminates for several seconds and then turns off.
- 6. Within 5 seconds after the Vehicle Dynamics Control OFF indicator light turns off, release the Vehicle Dynamics Control OFF switch.



Hill start assist OFF indicator light

- 7. Within 2 seconds after releasing the Vehicle Dynamics Control OFF switch, press the Vehicle Dynamics Control OFF switch once again. Then the Hill start assist OFF indicator light blinks.
- 8. Turn the ignition switch to the "LOCK" (off) position. The hill start assist system has now been deactivated.

#### NOTE

While the Hill start assist system is deactivated, the Hill start assist OFF indicator light blinks.

#### **▼** To activate

When the procedure to deactivate the Hill start assist system is performed again, the

system is activated. When the Hill start assist system is activated, the Hill start assist OFF indicator light turns off.

#### Hill start assist warning light/ Hill start assist OFF indicator light

Refer to "Hill start assist warning light/Hill start assist OFF indicator light" \$\tilde{x}\$-3-18.

# **Cruise control (if equipped)**

Cruise control enables you to maintain a constant vehicle speed without holding your foot on the accelerator pedal and it is operative when the vehicle speed is 25 mph (40 km/h) or more.

# WARNING

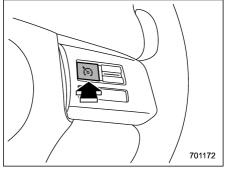
Do not use the cruise control under any of the following conditions. These may cause loss of vehicle control.

- driving up or down a steep grade
- driving on slippery or winding roads
- driving in heavy traffic
- towing a trailer

#### NOTE

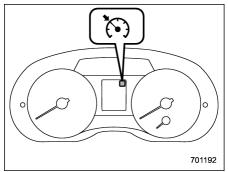
Make sure the cruise control system is turned off when the cruise control is not in use to avoid unintentionally setting of the cruise control.

# ■ To set cruise control



Cruise control main button

Press the cruise control main button.

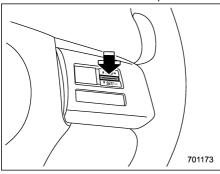


Cruise control indicator light

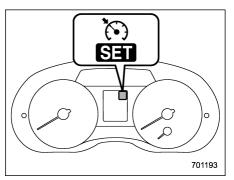
The cruise control indicator light on the

combination meter will illuminate.

2. Depress the accelerator pedal until the vehicle reaches the desired speed.



3. Press the "RES/SET" switch to the "SET" side and release it. Then release the accelerator pedal.



Cruise control set indicator light

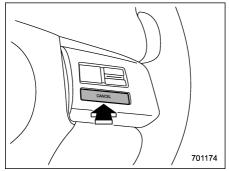
At this time, the cruise control set indicator light is illuminated in the combination meter.

The vehicle will maintain the desired speed.

Vehicle speed can be temporarily increased while driving with the cruise control activated. Simply depress the accelerator pedal to accelerate the vehicle. When the accelerator pedal is released, the vehicle will return to and maintain the previous cruising speed.

# ■ To temporarily cancel the cruise control

The cruise control can be temporarily canceled in the following ways.



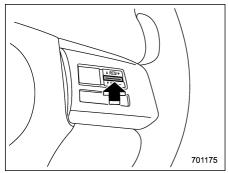
- Press the "CANCEL" button.
- Depress the brake pedal.
- Depress the clutch pedal (MT models only).

# **WARNING**

For CVT models, you can cancel the cruise control by shifting the select lever into the "N" position. However, do not shift the lever into the "N" position while driving except in case of emergency. If the select lever is shifted into the "N" position, the engine brake will no longer work.

#### This could result in an accident.

The cruise control set indicator light in the combination meter turns off when the cruise control is canceled.



To resume the cruise control after it has been temporarily canceled and with vehicle speed of approximately 20 mph (32 km/h) or more, press the "RES/SET" switch to the "RES" side to return to the original cruising speed automatically.

The cruise control set indicator light in the combination meter will automatically illuminate at this time.

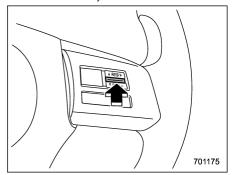
#### ■ To turn off the cruise control

There are two ways to turn off the cruise control.

- Press the cruise control main button again.
- Turn the ignition switch to the "ACC" or "LOCK" (off) position (but only when the vehicle is completely stopped).

## ■ To change the cruising speed

#### ▼ To increase the speed (by the "RES/ SET" switch)



Press the "RES/SET" switch to the "RES" side and hold it until the vehicle reaches the desired speed. Then, release the switch. The vehicle speed at that moment will be memorized and treated as the new set speed.

#### U.S.-spec. models

When the difference between the actual vehicle speed and the set speed is less than 4 mph (6.8 km/h), the set speed can be increased 1 mph (1.6 km/h) each time by pressing the "RES/SET" switch to the "RES" side quickly.

#### Except U.S.-spec. models

When the difference between the actual vehicle speed and the set speed is less than 4.4 km/h, the set speed can be increased 1 km/h each time by pressing the "RFS/SFT" switch to the "RFS" side quickly.

#### ▼ To increase the speed (by accelerator pedal)

- 1. Depress the accelerator pedal to accelerate the vehicle to the desired speed.
- 2. Press the "RES/SET" switch to the "SET" side once. Now the desired speed is set and the vehicle will keep running at that speed without depressing the accelerator pedal.

#### NOTE

U.S.-spec, models

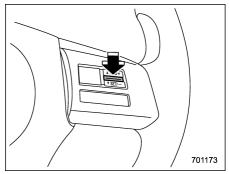
If the difference between the actual vehicle speed when the switch is pressed and the speed last time you

set is less than 4 mph (6.8 km/h), the vehicle speed will be lowered by 1 mph (1.6 km/h). This occurs because the cruise control system regards this operation as that intended to decrease the vehicle speed.

• Except U.S.-spec. models

If the difference between the actual vehicle speed when the switch is pressed and the speed last time you set is less than 4.4 km/h, the vehicle speed will be lowered by 1 km/h. This occurs because the cruise control system regards this operation as that intended to decrease the vehicle speed.

#### ▼ To decrease the speed (by the "RES/SET" switch)



Press the "RES/SET" switch to the "SET" side and hold it until the vehicle reaches the desired speed. Then, release the switch. The vehicle speed at that moment will be memorized and treated as the new set speed.

#### U.S.-spec. models

When the difference between the actual vehicle speed and the set speed is less than 4 mph (6.8 km/h), the set speed can be lowered 1 mph (1.6 km/h) each time by pressing the "RES/SET" switch to the "SET" side quickly.

#### Except U.S.-spec. models

When the difference between the actual vehicle speed and the set speed is less

than 4.4 km/h, the set speed can be lowered 1 km/h each time by pressing the "RES/SET" switch to the "SET" side quickly.

# ▼ To decrease the speed (by brake pedal)

- 1. Depress the brake pedal to release cruise control temporarily.
- 2. When the speed decreases to the desired speed, press the "RES/SET" switch to the "SET" side once. Now the desired speed is set and the vehicle will keep running at that speed without depressing the accelerator pedal.

#### ■ Cruise control indicator light

Refer to "Cruise control indicator light" \$\alpha\$3-22.

# ■ Cruise control set indicator light

Refer to "Cruise control set indicator light" \$\alpha 3-22\$.

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# New vehicle break-in driving – the first 1,000 miles (1,600 km)

The performance and long life of your vehicle are dependent on how you handle and care for your vehicle while it is new. Follow these instructions during the first 1,000 miles (1,600 km):

- Do not race the engine. And do not allow engine speed to exceed 4,000 rpm except in an emergency.
- Do not drive at one constant engine or vehicle speed for a long time, either fast or slow.
- Avoid starting suddenly and rapid acceleration, except in an emergency.
- Avoid hard braking, except in an emergency.

The same break-in procedures should be applied to an overhauled engine, newly mounted engine or when brake pads or brake linings are replaced with new ones.

# Fuel economy hints

The following suggestions will help to save fuel.

- Select the proper gear position for the speed and road conditions.
- Avoid sudden acceleration or deceleration. Always accelerate gently until you reach the desired speed. Then try to maintain that speed for as long as possible.
- Do not pump the accelerator and avoid racing the engine.
- Avoid unnecessary engine idling.
- Keep the engine properly tuned.
- Keep the tires inflated to the correct pressure shown on the tire placard, which is located under the door latch on the driver's side. Low pressure will increase tire wear and fuel consumption.
- Use the air conditioner only when necessary.
- Keep the front and rear wheels in proper alignment.
- Avoid carrying unnecessary luggage or cargo.

# Engine exhaust gas (carbon monoxide)

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#### WARNING

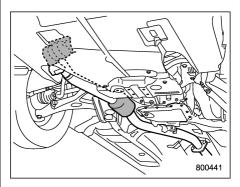
- Never inhale engine exhaust gas.
   Engine exhaust gas contains carbon monoxide, a colorless and odorless gas which is dangerous, or even lethal, if inhaled.
- Always properly maintain the engine exhaust system to prevent engine exhaust gas from entering the vehicle.
- Never run the engine in a closed space, such as a garage, except for the brief time needed to drive the vehicle in or out of it.
- Avoid remaining in a parked vehicle for a lengthy time while the engine is running. If that is unavoidable, then use the ventilation fan to force fresh air into the vehicle.
- Always keep the front ventilator inlet grille free from snow, leaves or other obstructions to ensure that the ventilation system always works properly.
- If at any time you suspect that

- exhaust fumes are entering the vehicle, have the problem checked and corrected as soon as possible. If you must drive under these conditions, drive only with all windows fully open.
- Keep the trunk lid (4-door) or rear gate (5-door) closed while driving to prevent exhaust gas from entering the vehicle.

#### NOTE

Due to the expansion and contraction of the metals used in the manufacture of the exhaust system, you may hear a crackling sound coming from the exhaust system for a short time after the engine has been shut off. This sound is normal.

# Catalytic converter



The catalytic converter is installed in the exhaust system. It serves as a catalyst to reduce HC, CO and NOx in exhaust gases, thus providing cleaner exhaust.

To avoid damage to the catalytic converter:

- Use only unleaded fuel. Even a small amount of leaded fuel will damage the catalytic converter.
- Never start the engine by pushing or pulling the vehicle.
- Avoid racing the engine.
- Never turn off the ignition switch while the vehicle is moving.
- Keep your engine tuned-up. If you feel the engine running rough (misfiring, back-

firing or incomplete combustion), have vour vehicle checked and repaired by an authorized SUBARU dealer.

- Do not apply undercoating or rust prevention treatment to the heat shield of catalytic converter and the exhaust system.
- Do not drive with an extremely low fuel level.



- Avoid fire hazards. Do not drive or park the vehicle anywhere near flammable materials (e.g., grass, paper, rags or leaves), because the catalytic converter operates at very high temperatures.
- Keep everyone and flammable materials away from the exhaust pipe while the engine is running. The exhaust gas is very hot.

# **Periodic inspections**

To keep your vehicle in the best condition at all times, always have the recommended maintenance services listed in the maintenance schedule in the "Warranty and Maintenance Booklet" performed at the specified time or mileage intervals.

# **Driving in foreign countries**

When planning to use your vehicle in another country:

- Confirm the availability of the correct fuel. Refer to "Fuel requirements" \$\textit{\$^{2}\$}7-3.
- Comply with all regulations and requirements of each country.

# **Driving tips for AWD models**



#### WARNING

- Always maintain a safe driving speed according to the road and weather conditions in order to avoid having an accident on a sharp turn, during sudden braking or under other similar conditions.
- Always use the utmost care in driving – overconfidence because you are driving an All-Wheel Drive vehicle could easily lead to a serious accident.
- When replacing or installing tire (s), all four tires must be the same for following items.
  - (a) Size
  - (b) Circumference
  - (c) Speed symbol
  - (d) Load index
  - (e) Construction
  - (f) Manufacturer
  - (g) Brand (tread pattern)
  - (h) Degrees of wear

For the items (a) to (d), you must obey the specification that is

printed on the tire placard. The tire placard is located on the driver's door pillar.

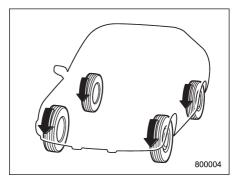
If all of four tires are not the same for items (a) to (h), serious mechanical damage could occur to the drive train of your car, and affect the following.

- Ride
- Handling
- Braking
- Speedometer/Odometer calibration
- Clearance between the body and tires

It also may be dangerous and lead to loss of vehicle control. and it can lead to an accident.



If you use a temporary spare tire to replace a flat tire, be sure to use the original temporary spare tire stored in the vehicle. Using other sizes may result in severe mechanical damage to the drive train of your vehicle.



All-Wheel Drive distributes the engine power to all four wheels. AWD models provide better traction when driving on slipperv, wet or snow-covered roads and when moving out of mud, dirt and sand. By shifting power between the front and rear wheels. SUBARU AWD can also provide added traction during acceleration and added engine braking force during deceleration.

Therefore, your SUBARU AWD vehicle may handle differently than an ordinary two wheel drive vehicle and it contains some features unique to AWD. For safety purposes as well as to avoid damaging the AWD system, you should keep the following tips in mind.

 An AWD model is better able to climb steeper roads under snowy or slippery conditions than a two wheel drive vehicle. There is little difference in handling. however, during extremely sharp turns or sudden braking. Therefore, when driving down a slope or turning corners, be sure to reduce your speed and maintain an ample distance from other vehicles.

- Always check the cold tire pressure before starting to drive. The recommended tire pressure is provided on the tire placard, which is located under the door latch on the driver's side.
- There are some precautions that you must observe when towing your vehicle. For detailed information, refer to "Towing" **₽9-14**.

# Off road driving



- Always maintain a safe driving speed according to the road and weather conditions in order to avoid having an accident on a sharp turn, during sudden braking or under other similar conditions.
- Always use the utmost care in driving – overconfidence because you are driving an All-Wheel Drive model could easily lead to a serious accident.

# ■ Except XV CROSSTREK models

Your AWD vehicle is neither a conventional off-road vehicle nor an all terrain vehicle. It is a passenger car designed primarily for on-road use. The AWD feature gives it some limited off-road capabilities in situations in which the driving surface is relatively level, obstruction-free and otherwise similar to on-road driving conditions. Operating it under other than those conditions could subject the vehicle to excessive stress which might

result in damage not eligible for repair under warranty.

If you do take your SUBARU off road, you should review the common sense precautions in the next section (applicable to the XV CROSSTREK models) for general guidance. But please keep in mind that your vehicle's off-road capabilities are more limited than those of the XV CROSSTREK models.

Never attempt to drive through pools and puddles, or roads flooded with water. Water entering the engine air intake or the exhaust pipe or water splashing onto electrical parts may damage your vehicle and may cause it to stall.

#### ■ XV CROSSTREK models

Because of the AWD feature and higher ground clearance, your SUBARU can be driven on ordinary roads or off-road. But please keep in mind that an AWD SUBARU is a passenger car and is neither a conventional off-road vehicle nor an all-terrain vehicle. If you do take your SUBARU off-road, certain common sense precautions such as those in the following list should be taken:

- Make certain that you and all of your passengers are wearing seatbelts.
- · Carry some emergency equipment,

such as a towing rope or chain, a shovel, wheel blocks, first aid kit and cell phone or citizens band radio.

- Drive carefully. Do not take unnecessary risks by driving in dangerous areas or over rough terrain.
- Slow down and employ extra caution at all times. When driving off-road, you will not have the benefit of marked traffic lanes, banked curves, traffic signs and the like.
- Do not drive across steep slopes. Instead, drive either straight up or straight down the slopes. A vehicle can much more easily tip over sideways than it can end over end. Avoid driving straight up or down slopes that are too steep.
- Avoid sharp turning maneuvers, especially at higher speeds.
- Do not grip the inside or spokes of the steering wheel. A bad bump could jerk the wheel and injure your hands. Instead drive with your fingers and thumbs on the outside of the rim.
- If driving through water, such as when crossing shallow streams, first check the depth of the water and the bottom of the stream bed for firmness and ensure that the bed of the stream is flat. Drive slowly and cross the stream without stopping. The water should be shallow enough that it does not reach the vehicle's under-

carriage. Water entering the engine air intake or the exhaust pipe or water splashing onto electrical parts may damage your vehicle and may cause it to stall. Never attempt to drive through rushing water; regardless of its depth, it can wash away the ground from under your tires, resulting in possible loss of traction and even vehicle rollover.

- Always check your brakes for effectiveness immediately after driving in sand, mud or water. Do this by driving slowly and stepping on the brake pedal. Repeat that process several times to dry out the brake discs and brake pads.
- Do not drive or park over or near flammable materials such as dry grass or fallen leaves, as they may burn easily. The exhaust system is very hot while the engine is running and right after engine stops. This could create a fire hazard.
- After driving through tall grass, mud, rocks, sand, rivers, etc., check that there is no grass, bush, paper, rags, stones, sand, etc. adhering to or trapped on the underbody. Clear off any such matter from the underbody. If the vehicle is used with these materials trapped or adhering to the underbody, a mechanical breakdown or fire could occur.
- Secure all cargo carried inside the vehicle and make certain that it is not

piled higher than the seatbacks. During sudden stops or jolts, unsecured cargo could be thrown around in the vehicle and cause injury. Do not pile heavy loads on the roof. Those loads raise the vehicle's center of gravity and make it more prone to tip over.

- If you must rock the vehicle to free it from sand or mud. depress the accelerator pedal slightly and move the shift lever/ select lever back and forth between "1"/ "D" and "R" repeatedly. Do not race the engine. For the best possible traction, avoid spinning the wheels when trying to free the vehicle.
- Never equip your vehicle with tires larger than those specified in this manual.
- Wash the vehicle's underbody after offroad driving. Suspension components are particularly prone to dirt buildup, so they need to be washed thoroughly.
- Frequent driving of an AWD model under hard-driving conditions such as rough roads or off roads will necessitate more frequent replacement of the following items than that specified in the maintenance schedule described in the "Warranty and Maintenance Booklet".
  - Engine oil
  - Brake fluid
  - Rear differential gear oil
  - Manual transmission oil (MT mod-

els)

- Continuously variable transmission fluid (CVT models)
- Front differential gear oil (CVT models)

Remember that damage done to your SUBARU while operating it off-road and not using common sense precautions such as those listed above is not eligible for warranty coverage.

# Winter driving

# Operation during cold weather

#### ▼ Maintenance

Carry some emergency equipment, such as a window scraper, a bag of sand, flares, a small shovel and jumper cables.

Check the battery and cables. Cold temperatures reduce battery capacity. The battery must be in good condition to provide enough power for cold winter starts.

It normally takes longer to start the engine in very cold weather conditions. Use an engine oil of a proper grade and viscosity for cold weather. Using heavy summer oil will make it harder to start the engine. Keep the door locks from freezing by squirting them with deicer or glycerin.

Forcing a frozen door open may damage or separate the rubber weather strips around the door. If the door is frozen, use hot water to melt the ice, and afterwards thoroughly wipe the water away.

Use a windshield washer fluid that contains an antifreeze solution. Do not use engine antifreeze or other substitutes because they may damage the paint of

the vehicle.

SUBARU Windshield Washer Fluid contains 58.5% methyl alcohol and 41.5% surfactant, by volume. Its freezing temperature varies according to how much it is diluted, as indicated in the following table.

Washer Fluid Con- centration		
30%	10.4°F (−12°C)	
50%	-4°F (-20°C)	
100%	-49°F (-45°C)	

In order to prevent freezing of washer fluid, check the freezing temperatures in the table above when adjusting the fluid concentration to the outside temperature. If you fill the reservoir tank with a fluid with a different concentration from the one used previously, purge the old fluid from the piping between the reservoir tank and washer nozzles by operating the washer for a certain period of time. Otherwise, if the concentration of the fluid remaining in the piping is too low for the outside temperature, it may freeze and block the nozzles.

# **A** CAUTION

- Adjust the washer fluid concentration appropriately for the outside temperature. If the concentration is inappropriate, sprayed washer fluid may freeze on the windshield and obstruct your view, and the fluid may freeze in the reservoir tank.
- State or local regulations on volatile organic compounds may restrict the use of methanol, a common windshield washer antifreeze additive. Washer fluids containing non-methanol antifreeze agents should be used only if they provide cold weather protection without damaging your vehicle's paint, wiper blades or washer system.

#### **▼** Before driving your vehicle

Before entering the vehicle, remove any snow or ice from your shoes because that could make the pedals slippery and driving dangerous.

While warming up the vehicle before driving, check that the accelerator pedal, brake pedal, and all other controls operate smoothly.

Clear away ice and snow that has accumulated under the fenders to avoid making steering difficult. During severe winter driving, stop when and where it is safe to do so and check under the fenders periodically.

#### **▼** Parking in cold weather

Do not use the parking brake when parking for long periods in cold weather since it could freeze in that position. Instead, you should observe the following tips.

- 1. Place the shift lever in "1" or "R" for MT models, or the select lever in "P" for CVT models.
- 2. Use tire stops under the tires to prevent the vehicle from moving.

When the vehicle is parked in snow or when it snows, raise the wiper blades off the glass to prevent damage to them.

When the vehicle has been left parked after use on roads heavily covered with snow, or has been left parked during a snowstorm, icing may develop on the brake system, which could cause poor braking action. Check for snow or ice buildup on the suspension, disc brakes and brake hoses underneath the vehicle. If there is caked snow or ice, remove it. being careful not to damage the disc brakes and brake hoses and ABS harness.



#### WARNING

Snow can trap dangerous exhaust gases under your vehicle. Keep snow clear of the exhaust pipe and from around your vehicle if you park the vehicle in snow with the engine running.

#### ▼ Refueling in cold weather

To help prevent moisture from forming in the fuel system and the risk of its freezing, use of an antifreeze additive in the fuel tank is recommended during cold weather. Use only additives that are specifically designed for this purpose. When an antifreeze additive is used, its effect lasts longer if the tank is refilled whenever the fuel level reaches half empty.

If your SUBARU is not going to be used for an extended period, it is best to have the fuel tank filled to capacity.

#### Driving on snowy and icy roads

To prevent skidding and slipping, avoid sudden braking, abrupt acceleration, highspeed driving, and sharp turning when driving on snowy or icy roads.

Always maintain ample distance between vour vehicle and the vehicle ahead of vou to avoid the need for sudden braking.

To supplement the foot brake, use the engine brake effectively to control the vehicle speed. (Shift into a lower gear when necessary.)

Avoid shifting down abruptly. Such behavior can cause the wheels to lock, possibly leading to loss of vehicle control.

An anti-lock brake system (ABS) enhances your vehicle's braking performance on snowy and icy roads. For information on braking on slippery surfaces, refer to "ABS (Anti-lock Brake System)" \$\textit{\$\t Control system" \$\tilde{F}7-29.



#### WARNING

Do not use the cruise control on slippery roads such as snowy or icy roads. This may cause loss of vehicle control.



#### **CAUTION**

Avoid prolonged continuous driving in snowstorms. Snow will enter the engine's intake system and may hinder the airflow, which could result in engine shutdown or even breakdown.

#### ▼ Wiper operation when snowing

Before driving in cold weather, make sure the wiper blades are not frozen to the windshield or rear window.

If the wiper blades are frozen to the windshield or rear window, perform the following procedure.

- To thaw the windshield wiper blades, use the defroster with the airflow selection in "\(\frac{\psi}{W}\)" and the temperature set for maximum warmth until the wiper blades are completely thawed. Refer to "Climate control" \(\sigma 4-1\).
- If your vehicle is equipped with a wiper deicer, use it. It is helpful to thaw the windshield wiper blades. Refer to "Defogger and deicer" \$\tilde{\sigma}\$-88.
- To thaw the rear wiper blade, use the rear window defogger. Refer to "Defogger and deicer" \$\alpha 3-88\$.

When driving in snow, if frozen snow starts to stick on the surface of the windshield despite wiper operation, use the defroster with the airflow selection in "\(\frac{\pi}{HV}\)" and the temperature set for maximum warmth. After the windshield gets warmed enough to melt the frozen snow on it, wash it away

using the windshield washer. Refer to "Windshield washer" \$\tilde{F}\$3-77.

Snow stuck on the wiper arm prevents the wiper from working effectively. If snow is stuck on the wiper arm, pull off the road to a safe place, then remove it. If you stop the vehicle at road side, use the hazard warning flasher to alert other drivers. Refer to "Hazard warning flasher" \$\textit{3}-5.

We recommend use of non-freezing type wiper blades (winter blades) during the seasons you could have snow and freezing temperatures. Blades of this type give superior wiping performance in snowy conditions. Be sure to use blades that are suitable for your vehicle.

# A CAU

#### CAUTION

During high-speed driving, nonfreezing type wiper blades may not perform as well as standard wiper blades. If this happens, reduce the vehicle speed.

#### **NOTE**

When the season requiring non-freezing type wiper blades is over, replace them with standard wiper blades.

#### **■** Corrosion protection

Refer to "Corrosion protection" \$\tilde{G}\$10-4.

#### ■ Snow tires

# **WARNING**

- When replacing or installing winter tire(s), all four tires must be the same for following items.
  - (a) Size
  - (b) Circumference
  - (c) Speed symbol
  - (d) Load index
  - (e) Construction
  - (f) Manufacturer
  - (g) Brand (tread pattern)
  - (h) Degrees of wear

For the items (a) to (d), you must obey the specification that is printed on the tire placard. The tire placard is located on the driver's door pillar.

If all of four winter tires are not the same for items (a) to (h), serious mechanical damage could occur to the drive train of your car, and affect the following.

- Ride

- Handling
- Braking
- Speedometer/Odometer calibration
- Clearance between the body and tires

It also may be dangerous and lead to loss of vehicle control. and it can lead to an accident.

 Do not use a combination of radial, belted bias or bias tires since it may cause dangerous handling characteristics and lead to an accident.

Your vehicle is equipped with "all season tires" as original equipment, which are designed to provide an adequate measure of traction, handling and braking performance in year-round driving. In winter, it may be possible to enhance performance through use of tires designed specifically for winter driving conditions.

When you choose to install winter tires on your vehicle, be sure to use the correct tire size and type. You must install four winter tires that are of the same size, construction, brand and load range and you should never mix radial, belted bias or bias tires since this may result in dangerous handling characteristics. When you choose a

tire, make sure that there is enough clearance between the tire and vehicle bodv.

Remember to drive with care at all times regardless of the type of tires on your vehicle.

#### ■ Tire chains

# A CAUTION

Tire chains cannot be used on your vehicle because of the lack of clearance between the tires and vehicle body.

#### **NOTE**

When tire chains cannot be used, use of another type of traction device (such as spring chains) may be acceptable if use on your vehicle is recommended by the device manufacturer, taking into account tire size and road conditions. Follow the device manufacturer's instructions, especially regarding maximum vehicle speed.

To help avoid damage to your vehicle, drive slowly, readiust or remove the device if it is contacting your vehicle, and do not spin your wheels. Damage caused to your vehicle by use of a traction device is not covered under warrantv.

Make certain that any traction device vou use is an SAE class S device, and use it on the front wheels only. Always use the utmost care when driving with a traction device. Overconfidence because you are using a traction device could easily lead to a serious accident.

## ■ Rocking the vehicle

If you must rock the vehicle to free it from snow, sand, or mud, depress the accelerator pedal slightly and move the shift lever/select lever back and forth between "1"/"D" and "R" repeatedly. Do not race the engine. For the best possible traction, avoid spinning the wheels when trying to free the vehicle

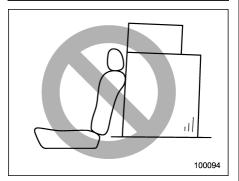
When the road surface is extremely slippery, you can obtain better traction by starting the vehicle with the transmission in 2nd than 1st (both for MT and CVT models).

If your vehicle is a CVT model, for information about holding the transmission in the 2nd position, refer to "Selection of manual mode" @7-21.

# Loading your vehicle



- Never allow passengers to ride on a folded rear seatback, in the trunk or in the cargo area. Doing so may result in serious injury.
- Never stack luggage or other cargo higher than the top of the seatback because it could tumble forward and injure passengers in the event of a sudden stop or accident. Keep luggage or cargo low, as close to the floor as possible.



# **WARNING**

- When you carry something inside the vehicle, secure it whenever you can to prevent it from being thrown around inside the vehicle during sudden stops, sharp turns or in an accident.
- Do not pile heavy loads on the roof. These loads raise the vehicle's center of gravity and make it more prone to tip over.
- Secure lengthy items properly to prevent them from shooting forward and causing serious injury during a sudden stop.
- Never exceed the maximum load limit. If you do, some parts on your vehicle can break, or it can change the way your vehicle handles. This could result in loss of control and cause personal injury. Also, overloading can shorten the life of your vehicle.
- Do not place anything on the rear shelf behind the rear seatback (for 4-door) or the extended cargo area cover (for 5-door). Such items could tumble forward in the event of a sudden stop or a collision. This could cause ser-

ious injury.

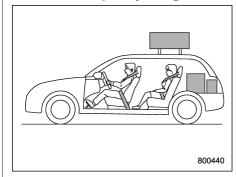


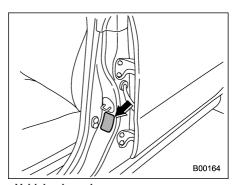
Do not carry spray cans, containers with flammable or corrosive liquids or any other dangerous items inside the vehicle.

#### NOTE

For better fuel economy, do not carry unneeded cargo.

# ■ Vehicle capacity weight

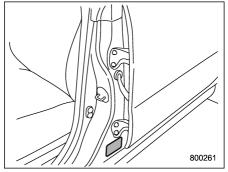




Vehicle placard

The load capacity of your vehicle is determined by weight, not by available cargo space. The maximum load you can carry in your vehicle is shown on the vehicle placard attached to the driver's side door pillar. It includes the total weight of the driver and all passengers and their belongings, any optional equipment such as a trailer hitch, roof rack or bike carrier. etc., and the tongue load of a trailer.

## ■ GVWR and GAWR (Gross Vehicle Weight Rating and **Gross Axle Weight Rating)**



Certification label

The certification label attached to the driver's side doorjamb shows GVWR (Gross Vehicle Weight Rating) and GAWR (Gross Axle Weight Rating).

The GVW (Gross Vehicle Weight) must never exceed the GVWR. GVW is the combined total of weight of the vehicle. fuel, driver, all passengers, luggage, any optional equipment and trailer tongue load. Therefore, the GVW changes depending on the situation. The GVWR equals Curb Weight (actual weight of your vehicle - including standard equipment, fluids, emergency tools and spare tire

assembly) plus the vehicle capacity weight.

In addition, the total weight applied to each axle (GAW) must never exceed the GAWR. The front and rear GAWs can be adjusted by relocating luggage inside the vehicle.

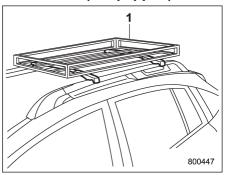
Even if the total weight of your luggage is lower than the vehicle capacity weight, either front or rear GAW may exceed the GAWR, depending on the distribution of the luggage.

When possible, the load should be evenly distributed throughout the vehicle.

If you carry heavy loads in the vehicle, you should confirm that GVW and front and rear GAWs are within the GVWR and GAWR by putting your vehicle on a vehicle scale, found at a commercial weighing station.

Do not use replacement tires with a lower load range than the originals because they may lower the GVWR and GAWR limitations. Replacement tires with a higher load range than the originals do not increase the GVWR and GAWR limitations.

## ■ Roof rail (if equipped)



#### 1) Roof rack

Luggage can be carried on the roof after securing the roof rack to the roof rails. When installing the roof rack on the roof rails, follow the manufacturer's instructions. The roof rails are designed to carry loads (luggage and roof rack) of not more than **150 lbs (68 kg)**.

# **CAUTION**

- When using the roof rack, make sure that the total carrying load of the roof rack and luggage does not exceed 150 lbs (68 kg). Overloading may cause damage to the vehicle.
- For cargo carrying purposes, the

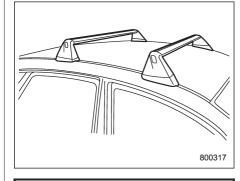
roof rails must be used together with the roof rack and any appropriate carrying attachment that may be needed. The roof rails must never be used alone to carry cargo. Otherwise, damage to the roof or paint, or a dangerous road hazard due to loss of cargo could result.

#### **NOTE**

Remember that the vehicle's center of gravity is altered with the weight of the load on the roof, thus affecting driving characteristics.

Drive carefully. Avoid rapid starts, hard cornering and abrupt stops. Crosswind effects will be increased.

# ■ Roof molding and crossbar (5-door models — if equipped)



## **CAUTION**

- For cargo carrying purposes, the roof molding must be used together with a roof crossbar kit and the appropriate carrying attachment. Otherwise, damage to the roof or paint or a dangerous road hazard due to loss of cargo could result.
- When using the roof crossbar kit, make sure that the total weight of the crossbars, carrying attachment and cargo does not exceed the maximum load limit. Over-

loading may cause damage to the vehicle and create a safety hazard.

Cargo can be carried after securing the roof crossbar kit to the roof molding and installing the appropriate carrying attachment. When installing the roof crossbar kit. follow the manufacturer's instructions.

When you carry cargo on the roof using the roof crossbar kit and a carrying attachment, never exceed the maximum load limit as explained below. You should also be careful that your vehicle does not exceed the Gross Vehicle Weight Rating (GVWR) and front and rear Gross Axle Weight Rating (GAWR). For information about loading cargo into or onto your vehicle, refer to "Loading your vehicle" \$\textit{\$\textit{\$\gamma}\$} 8-12. The maximum load limit of the cargo, crossbars and carrying attachment must not exceed 176 lbs (80 kg). Place the heaviest load at the bottom, nearest the roof, and evenly distribute the cargo. Always properly secure all cargo.

#### **▼** Installing carrying attachments on the crossbars

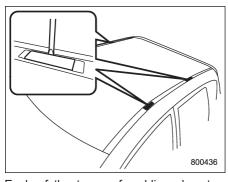
When installing any carrying attachment such as a bike carrier, ski carrier, kayak carrier, cargo basket, etc. on the crossbars, follow the manufacturer's instructions and make sure that the attachment is securely fixed to the crossbars. Use only attachments designed specifically for the crossbars. A set of the crossbars is designed to carry loads (cargo and attachment) of not more than 165 lbs (75 kg). Before operating the vehicle, make sure that the cargo is properly secured on the attachment.

#### NOTE

Remember that the vehicle's center of gravity is altered with the weight of the load on the roof, thus affecting the driving characteristics.

Drive carefully. Avoid rapid starts, hard cornering and abrupt stops. Crosswind effects will be increased.

#### ▼ Removal and installation of the crossbars



Each of the two roof moldings has two mounting points for crossbars. Each mounting point is fitted with a cover. Use a screwdriver to remove the covers. When installing the crossbars on the roof molding, follow the manufacturer's instructions.

# Trailer hitch (dealer option)

# **WARNING**

- Never exceed the maximum weight specified for the trailer hitch. Exceeding the maximum weight could cause an accident resulting in serious personal injuries. Permissible trailer weight changes depending on the situation. For possible recommendations and limitations, refer to "Trailer towing (XV CROSSTREK models)" \$\tilde{\tilde{T}} 8-18.
- Trailer brakes are required when the towing load exceeds 1,000 lbs (453 kg). Be sure your trailer has safety chains and that each chain will hold the trailer's maximum gross weight. Towing trailers without safety chains could create a traffic safety hazard if the trailer separates from the hitch due to coupling damage or hitch ball damage.
- Be sure to check the hitch pin and safety pin for positive locking placement before towing a trailer. If the ball mount comes off the hitch receiver, the trailer

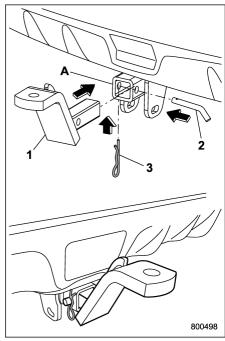
- could get loose and create a traffic safety hazard.
- Use only the ball mount supplied with this hitch. Use the hitch only as a weight carrying hitch. Do not use with any type of weight distributing hitch.
- The standard bumper beam must be installed after you remove the trailer hitch. Consult a SUBARU dealer for purchase of a standard bumper beam if you do not have the original.
- Safety performance is decreased and there is increased risk of injury to passengers in the case of an accident if the trailer hitch or a standard bumper beam is not installed. One of them must always be installed on the vehicle.
- If a trailer hitch is installed, it is not possible to install the rear towing hook.

The trailer hitch is designed to tow a Class 1 rated load. The maximum gross trailer weight and maximum gross tongue weight are indicated in the following table.

	Maximum gross trailer weight	Maximum gross ton- gue weight
XV CROSSTREK models	1,500 lbs (680 kg)	200 lbs (90 kg)

When you tow a trailer, refer to "Trailer towing (XV CROSSTREK models)" \$\tilde{\sigma}\$8-18.

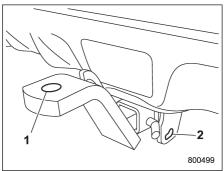
# ■ Connecting a trailer



- 1) Ball mount
- 2) Hitch pin
- 3) Safety pin
- A) Hitch receiver tube
- Insert the ball mount into the hitch

receiver tube.

- 2. Insert the hitch pin into the hole on the hitch receiver tube so that the pin passes through the ball mount.
- 3. Insert the safety pin onto the hitch pin securely.
- 4. Pull the ball mount to make sure it does not come off the hitch receiver.

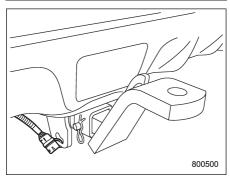


- 1) Hitch ball installation point
- 2) Hooks for safety chains
- 5. Use only a hitch ball that is appropriate for the ball mount and your trailer. The hitch ball must be securely installed on the ball mount.
- 6. Connect your trailer to the hitch ball.
- 7. Connect the trailer and the hitch with safety chains that will hold the trailer's maximum gross weight. The chains

should cross under the trailer tongue to prevent the tongue from dropping onto the ground in case it should disconnect from the hitch ball. Allow sufficient slack in the chains taking tight turn situations into account; however, be careful not to let them drag on the ground.



Do not connect safety chains to part of the vehicle other than the safety chain hooks.



Hitch harness connector

- 8. Connect the hitch wire harness's black four-pin wire connector to the towing trailer's wire harness.
- 9. Confirm proper function of the hitch

- CONTINUED -

wire harness by individually activating the brake, stop and turn signal lights on the trailer.

#### NOTE

Always disconnect the trailer wire harness before launching or retrieving a watercraft.

# ■ When not towing a trailer

- Remove the ball mount from the hitch receiver tube and insert the receiver cover onto the hitch receiver tube.
- Place the dust cap over the four-pin connector of the hitch wire harness to protect against possible damage.
- Occasionally lubricate terminals of the four-pin connector using terminal grease.

# Trailer towing (XV CROSS-TREK models)



#### **CAUTION**

This "Trailer towing" section is applicable for XV CROSSTREK models. Other vehicle models are neither designed nor intended to be used for trailer towing. Therefore, never tow a trailer with other vehicle models.

Your vehicle is designed and intended to be used primarily as a passenger-carrying vehicle. Towing a trailer puts additional loads on your vehicle's engine, drivetrain. brakes, tires and suspension and has an adverse effect on fuel economy.

If you do decide to tow a trailer, your safety and satisfaction depend upon proper use of correct equipment and cautious operation of your vehicle. Seek the advice of your SUBARU dealer to assist you in purchasing a hitch and other necessary towing equipment appropriate for your vehicle. In addition, be sure to follow the instructions on correct installation and use provided by the trailer and other towing equipment manufacturers.

SUBARU assumes no responsibility for

injuries or vehicle damage that result from trailer towing equipment, or from any errors or omissions in the instructions accompanying such equipment or for your failure to follow the proper instructions.

#### ■ Warranties and maintenance

SUBARU warranties do not apply to vehicle damage or malfunction caused by trailer towing. If you use your vehicle to tow a trailer, more frequent maintenance will be required due to the additional load. (Refer to "Maintenance schedule under severe driving conditions" in the "Warranty and Maintenance Booklet".)

Under no circumstances should a trailer be towed with a new vehicle or a vehicle with any new powertrain component (engine, transmission, differential, wheel bearings, etc.) for the first 1.000 miles (1.600 km) of driving.

#### ■ Maximum load limits



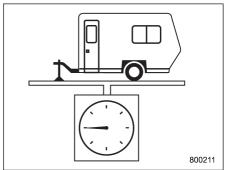
#### **₩** WARNING

Never exceed the maximum load limits explained in the following. Exceeding the maximum load limits could cause personal injury and/or vehicle damage.

# **CAUTION**

- Adequate size trailer brakes are required when the trailer and its cargo exceed 1,000 lbs (453 kg) total weight.
- Before towing a trailer, check the trailer total weight, GVW, GAWs and tongue load. Make sure the load and its distribution in your vehicle and trailer are acceptable.

#### **▼** Total trailer weight



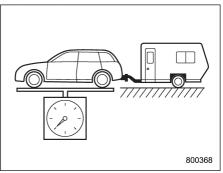
Total trailer weight

The total trailer weight (trailer weight plus its cargo load) must never exceed the maximum weight in the following table.

#### XV CROSSTREK models

AV GROOOTILE MODELS			
Conditions	Maximum total trailer weight		
When towing a trailer without brakes.	1,000 lbs (453 kg)		
When towing a trailer with brakes.	1,500 lbs (680 kg)		
When towing a trailer on a long uphill grade continuously for over 5 miles (8 km) with an outside temperature of 104°F (40°C) or above.	750 lbs (340 kg)		

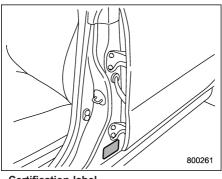
#### ▼ Gross Vehicle Weight (GVW) and Gross Vehicle Weight Rating (GVWR)



#### **Gross Vehicle Weight**

The Gross Vehicle Weight (GVW) must never exceed the Gross Vehicle Weight Rating (GVWR).

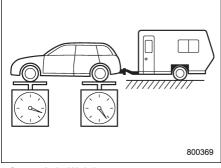
Gross Vehicle Weight (GVW) is the combined total of the weight of the vehicle, driver, passengers, luggage, trailer hitch, trailer tongue load and any other optional equipment installed on your vehicle. Therefore, the GVW changes depending on the situation. Determine the GVW each time before going on a trip by putting your vehicle and trailer on a vehicle scale



Certification label

GVWR is shown on the certification label located on the driver's door of your vehicle.

#### ▼ Gross Axle Weight (GAW) and Gross Axle Weight Rating (GAWR)

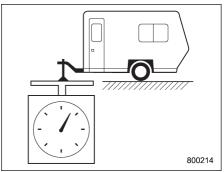


**Gross Axle Weight** 

The total weight applied to each axle (GAW) must never exceed the Gross Axle Weight Rating (GAWR). The front and rear GAWs can be adjusted by relocating passengers and luggage inside the vehicle. The front and rear GAWR are also shown on the certification label.

To check both GVWR and GAWR and to confirm that the total weight and weight distribution are within safe driving limits, you should have your vehicle and trailer weighed at a commercial weighing station. Be sure that all cargo is firmly secured to prevent a change in weight distribution while driving.

#### **▼** Tongue load



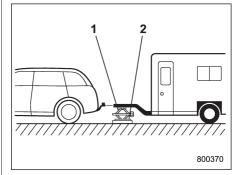
Tongue load

Ensure that the trailer tongue load is from 8 to 11 percent of the total trailer weight and does not exceed the maximum value of 200 lbs (90 kg).

#### NOTE

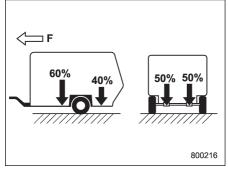
For vehicles with trailer brakes, the trailer tongue load exceeds 200 lbs (90 kg) when calculated at 8% of the maximum total trailer weight.

Even in this case, the maximum value is 200 lbs (90 kg).



- 1) Jack
- 2) Bathroom scale

The tongue load can be weighed with a bathroom scale as shown in the illustration above. When weighing the tongue load, be sure to position the towing coupler at the height at which it would be during actual towing, using a jack as shown.



F: Front

The tongue load can be adjusted by proper distribution of the load in the trailer. Never load the trailer with more weight in the back than in the front; approximately 60 percent of the trailer load should be in the front and approximately 40 percent in the rear. Also, distribute the load as evenly as possible on both the left and right sides.

Be sure that all cargo is firmly secured to prevent a change in weight distribution while driving.

# **WARNING**

If the trailer is loaded with more weight in the back of trailer's axle than in the front, the load is taken off the rear axle of the towing vehicle. This may cause the rear wheels to skid, especially during braking or when vehicle speed is reduced during cornering, resulting in oversteer, spin out and/or jackknifing.

#### ■ Trailer hitches



Never drill the frame or under-body of your vehicle to install a commercial trailer hitch. If you do, dangerous exhaust gas, water or mud may enter the passenger compartment through the drilled hole. Exhaust gas contains carbon monoxide, a colorless and odorless gas which is dangerous, or even lethal, if inhaled. Also, drilling the frame or underbody of your vehicle could cause deterioration of strength of your vehicle and cause corrosion around the drilled hole.

# A CAUTION

• Do not modify the vehicle exhaust system, brake system, or other systems when installing a

hitch or other trailer towing equipment.

 Do not use axle-mounted hitches as they can cause damage to the axle housing, wheel bearings, wheels or tires.

Choose a proper hitch for your vehicle and trailer. The use of a genuine SUBARU trailer hitch is recommended. A genuine SUBARU hitch is available from your SUBARU dealer.

If use of a non-genuine hitch is unavoidable, be sure the hitch is suited to your vehicle and trailer. Consult with a professional hitch supplier to assist you in choosing an appropriate hitch for your vehicle. Be sure to follow all of the hitch manufacturer's instructions for installation and use.

Never use a hitch that mounts only to the rear bumper. The bumper is not designed to handle that type of load.

For all types of hitches, regularly check that the hitch mounting bolts and nuts are tiaht.

# ■ Connecting a trailer

▼ Trailer brakes



#### **WARNING**

- Adequate size trailer brakes are required when the trailer and its cargo exceed 1.000 lbs (453 kg) total weight.
- Do not directly connect your trailer's hydraulic brake system to the hydraulic brake system in your vehicle. Direct connection would cause the vehicle's brake performance to deteriorate and could lead to an accident.

If your trailer's total weight (trailer weight plus its cargo weight) exceeds 1,000 lbs (453 kg), the trailer is required to be equipped with its own brake system. Electric brakes or surge brakes are recommended, and must be installed properly. Check that your trailer's brakes conform with Federal, state/province and/ or other applicable regulations. Your SUBARU's brake system is not designed to be tapped into the trailer's hydraulic brake system. Please ask your SUBARU dealer and professional trailer supplier for more information about the trailer's brake system.

#### **▼** Trailer safety chains



#### **WARNING**

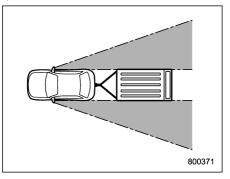
Always use safety chains between your vehicle and the trailer. Towing trailer without safety chains could create a traffic safety hazard if the trailer separates from the hitch due to coupling damage or hitch ball damage.

In case the trailer hitch connector or hitch ball should break or become disconnected, the trailer could get loose and create a traffic safety hazard.

For safety, always connect the towing vehicle and trailer with trailer safety chains. Pass the chains crossing each other under the trailer tongue to prevent the trailer from dropping onto the ground in case the trailer tongue should disconnect from the hitch ball. Allow sufficient slack in the chains taking tight turn situations into account; however, be careful not to let them drag on the ground.

For more information about the safety chain connection, refer to the instructions for your hitch and trailer.

#### **▼** Side mirrors



After hitching a trailer to your vehicle, check that the standard side mirrors provide a good rearward field of view without significant blind spots. If significant blind spots occur with the vehicle's standard side mirrors, use towing mirrors that conform with Federal, state/province and/ or other applicable regulations.

#### **▼** Trailer lights



#### CAUTION

Direct splicing or other improper connection of trailer lights may damage your vehicle's electrical system and cause a malfunction of your vehicle's lighting system.

Connection of trailer lights to your vehicle's electrical system requires modifications to the vehicle's lighting circuit to increase its capacity and accommodate wiring changes. To ensure the trailer lights are connected properly, please consult your SUBARU dealer. Check for proper operation of the turn signals and the brake lights each time you hitch up.

#### **▼** Tires



#### **WARNING**

Never tow a trailer when the temporary spare tire is used. The temporary spare tire is not designed to sustain the towing load. Use of the temporary spare tire when towing can result in failure of the spare tire and/or less stability of the vehicle.

Make sure that all the tires on your vehicle are properly inflated. Refer to "Tires" \$\textit{\$\textit{\$\textit{\$\textit{e}}\$}\$} 12-8.

Trailer tire condition, size, load rating and proper inflation pressure should be in accordance with the trailer manufacturer's specifications.

In the event your vehicle gets a flat tire when towing a trailer, ask a commercial road service to repair the flat tire.

If you carry a regular size spare tire in your vehicle or trailer as a precaution against getting a flat tire, be sure that the spare tire is firmly secured.

## ■ Trailer towing tips



- Never exceed 45 mph (72 km/h) when towing a trailer in hilly country on hot days.
- When towing a trailer, steering, stability, stopping distance and braking performance will be different from normal operation. For safety's sake, you should employ extra caution when towing a trailer and you should never drive at excessive speeds. You should also keep the following tips in mind:

#### **▼** Before starting out on a trip

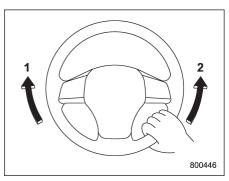
- Check that the vehicle and vehicle-tohitch mounting are in good condition. If any problems are apparent, do not tow the trailer.
- Check that the vehicle sits horizontally with the trailer attached. If the vehicle is tipped sharply up at the front and down at

the rear, check the total trailer weight, GVW, GAWs and tongue load again, then confirm that the load and its distribution are acceptable.

- Check that the tire pressures are correct.
- Check that the vehicle and trailer are connected properly. Confirm that
  - the trailer tongue is connected properly to the hitch ball.
  - the trailer lights connector is connected properly and trailer's brake lights illuminate when the vehicle's brake pedal is pressed, and that the trailer's turn signal lights flash when the vehicle's turn signal lever is operated.
  - the safety chains are connected properly.
  - all cargo in the trailer is secured safety in position.
  - the side mirrors provide a good rearward field of view without a significant blind spot.
- Sufficient time should be taken to learn the "feel" of the vehicle/trailer combination before starting out on a trip. In an area free of traffic, practice turning, stopping and backing up.

#### **▼** Driving with a trailer

- You should allow for considerably more stopping distance when towing a trailer.
   Avoid sudden braking because it may result in skidding or jackknifing and loss of control.
- Avoid abrupt starts and sudden accelerations. If your vehicle has a manual transmission, always start out in first gear and release the clutch at moderate engine revolution.
- Avoid uneven steering, sharp turns and rapid lane changes.
- Slow down before turning. Make a longer than normal turning radius because the trailer wheels will be closer than the vehicle wheels to the inside of the turn. In a tight turn, the trailer could hit your vehicle.
- Crosswinds will adversely affect the handling of your vehicle and trailer, causing sway. Crosswinds can be due to weather conditions or the passing of large trucks or buses. If swaying occurs, firmly grip the steering wheel and slow down immediately but gradually.
- When passing other vehicles, considerable distance is required because of the added weight and length caused by attaching the trailer to your vehicle.



- 1) Left turn
- 2) Right turn
- Backing up with a trailer is difficult and takes practice. When backing up with a trailer, never accelerate or steer rapidly. When turning back, grip the bottom of the steering wheel with one hand and turn it to the left for a left turn, and turn it to the right for a right turn.
- If the ABS warning light illuminates while the vehicle is in motion, stop towing the trailer and have repairs performed immediately by the nearest SUBARU dealer.

#### ▼ Driving on grades

• Before going down a steep hill, slow down and shift into lower gear (if necessary, use 1st gear) in order to utilize the engine braking effect and prevent overheating of your vehicle's brakes. Do not make sudden downshifts.

- When driving uphill in hot weather, the air conditioner may turn off automatically to protect the engine from overheating.
- When driving uphill in hot weather, pay attention to the following indicators because the engine and transmission are relatively prone to overheating.
- : Coolant temperature high warning light

AT OIL TEMP warning light (CVT models)

If the coolant temperature high warning light and/or the AT OIL TEMP warning light illuminates, immediately turn off the air conditioner and stop the vehicle in the nearest safe location. For further instructions and additional information, refer to the following sections.

- "If you park your vehicle in case of an emergency" \$\sigma 9-2
- "Engine overheating" ₱9-13
- "Coolant temperature low indicator light/Coolant temperature high warning light" \$\mathbb{P}\$3-13
- "AT OIL TEMP warning light (CVT models)" ☞ 3-15

• For CVT models, avoid using the accelerator pedal to stay stationary on an uphill slope instead of using the parking brake or foot brake. That may cause the transmission fluid to overheat.

#### **▼** Parking on a grade

Always block the wheels under both vehicle and trailer when parking. Apply the parking brake firmly. You should not park on a hill or slope. But if parking on a hill or slope cannot be avoided, you should take the following steps:

- 1. Apply the brakes and hold the pedal down.
- 2. Have someone place wheel blocks under both the vehicle and trailer wheels.
- 3. When the wheel blocks are in place, release the regular brakes slowly until the blocks absorb the load.
- 4. Apply the regular brakes and then apply the parking brake; slowly release the regular brakes.
- 5. Shift into 1st or reverse gear (MT models) or "P" position (CVT models) and shut off the engine.



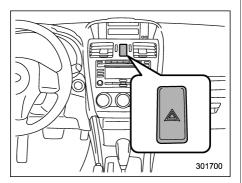
#### 9

# In case of emergency

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# If you park your vehicle in case of an emergency



The hazard warning flasher should be used in day or night to warn other drivers when you have to park your vehicle under emergency conditions.

Avoid stopping on the road. It is best to safely pull off the road if a problem occurs.

The hazard warning flasher can be activated regardless of the ignition switch position.

Turn on the hazard warning by pushing the hazard warning flasher switch. Turn it off by pushing the switch again.

#### NOTE

When the hazard warning flasher is on, the turn signals do not work.

# Temporary spare tire

## WARNING

- Never tow a trailer when the temporary spare tire is used. The temporary spare tire is not designed to sustain the towing load. Use of the temporary spare tire when towing can result in failure of the spare tire and/or less stability of the vehicle and may lead to an accident.
- When a spare tire is mounted or a wheel rim is replaced without the original pressure sensor/transmitter being transferred, the low tire pressure warning light will illuminate steadily after blinking for approximately one minute. This indicates the tire pressure monitoring system (TPMS) is unable to monitor all four road wheels. Contact your SUBARU dealer as soon as possible for tire and sensor replacement and/ or system resetting.

# **A** CAUTION

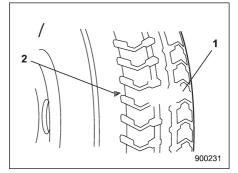
Never use any temporary spare tire other than the original. Using other sizes may result in severe mechanical damage to the drive train of your vehicle.

The temporary spare tire is smaller and lighter than a conventional tire and is designed for emergency use only. Remove the temporary spare tire and reinstall the conventional tire as soon as possible because the spare tire is designed only for temporary use.

Check the inflation pressure of the temporary spare tire periodically to keep the tire ready for use. The correct pressure is **60 psi (420 kPa, 4.2 kg/cm²)**.

When using the temporary spare tire, note the following.

- Do not exceed 50 mph (80 km/h).
- Do not put a tire chain on the temporary spare tire. Because of the smaller tire size, a tire chain will not fit properly.
- Do not use two or more temporary spare tires at the same time.
- Do not drive over obstacles. This tire has a smaller diameter, so road clearance is reduced.



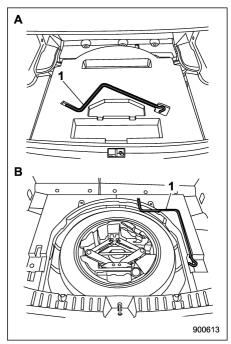
- 1) Tread wear indicator bar
- Indicator location mark
- When the wear indicator appears on the tread, replace the tire.
- The temporary spare tire must be used only on a rear wheel. If a front wheel tire gets punctured, replace the wheel with a rear wheel and install the temporary spare tire in place of the removed rear wheel.

#### **Maintenance tools**

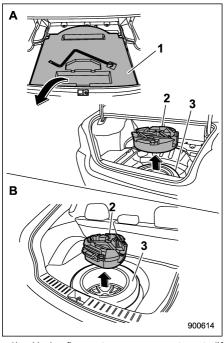
Your vehicle is equipped with the following maintenance tools.

- Jack
- Jack handle
- Screwdriver
- Towing hook (eye bolt)
- Wheel nut wrench

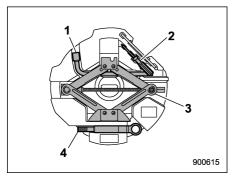
#### ■ Tool locations



- 1) Jack handle
- A) 4-door models
- B) 5-door models



- Under-floor storage compartment (if equipped) (Refer to "Under-floor storage compartment" @6-13.)
- 2) Tool bucket
- 3) Spare tire
- A) 4-door models
- 3) 5-door models



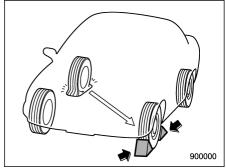
- l) Wheel nut wrench
- 2) Screwdriver
- 3) Jack
- 4) Towing hook (eye bolt)

A jack handle is stored under the floor of the trunk (4-door) or the cargo area (5door). A jack and a towing hook are stored in the tool bucket that is located in the recess of the spare tire wheel.

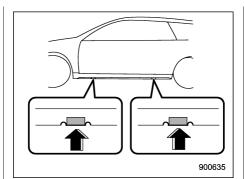
Also, a tool bag that contains a wheel nut wrench and a screwdriver is equipped with the vehicle. Open the tool bag and store the tools in the tool bucket as illustrated in order that all tools are ready for use at any time.

## ■ Using the jack

- 1. Park on a hard, level surface, whenever possible, then stop the engine.
- 2. Set the parking brake securely and shift the shift lever in reverse (MT models) or the select lever to the "P" (Park) position (CVT models).
- 3. Turn on the hazard warning flasher and have everyone get out of the vehicle.

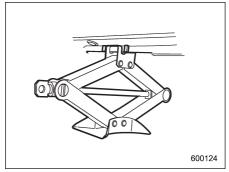


- 4. Put wheel blocks at the front and rear of the tire diagonally opposite the tire that you are going to replace.
- 5. Take out the jack and jack handle.

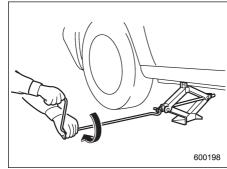


#### Jack-up points

6. Place the jack under the side sill at the front or rear jack-up point closest to the tire that you are going to replace.



Turn the jackscrew by hand until the jack head engages firmly into the jack-up point.



7. Insert the jack handle into the jackscrew, and turn the handle until the tire clears the ground. Do not raise the vehicle higher than necessary.

#### Flat tires

If you have a flat tire while driving, never brake suddenly; keep driving straight ahead while gradually reducing speed. Then slowly pull off the road to a safe place.

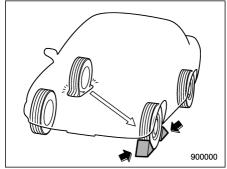
## ■ Changing a flat tire

# **WARNING**

- Do not jack up the vehicle on an incline or a loose road surface. The jack can come out of the jacking point or sink into the ground and this can result in a severe accident.
- Use only the jack provided with your vehicle. The jack supplied with the vehicle is designed only for changing a tire. Never get under the vehicle while supporting the vehicle with this jack.
- Always turn off the engine before raising the flat tire off the ground using the jack. Never swing or push the vehicle supported with the jack. The jack can come out of the jacking point due to a jolt and this can result in a severe

#### accident.

- 1. Park on a hard, level surface, whenever possible, then stop the engine.
- 2. Set the parking brake securely and shift the shift lever in reverse (MT models) or the select lever to the "P" (Park) position (CVT models).
- 3. Turn on the hazard warning flasher and have everyone get out of the vehicle.

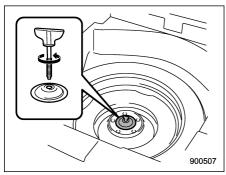


- 4. Put wheel blocks at the front and rear of the tire diagonally opposite the flat tire.
- 5. Take out the jack, jack handle and wheel nut wrench.

The tools and the spare tire are stored under the floor of the trunk (4-door) or the cargo area (5-door). Refer to "Maintenance tools" \$\textit{\$=}9-3\$.

#### NOTE

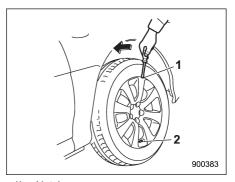
Make sure that the jack is well lubricated before using it.



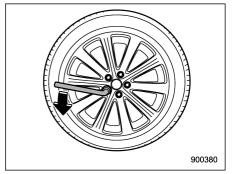
6. Take out the tool bucket and turn the attaching bolt counterclockwise, then take the spare tire out.

#### NOTE

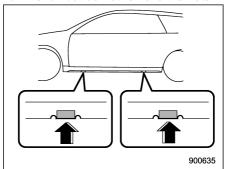
If the spare tire provided in your vehicle is a temporary spare tire, carefully read "Temporary spare tire" \$\textit{\$\textit{\$\textit{\$\sigma}\$}}\$9-2 and strictly follow the instructions.



- 1) Notch
- 2) Valve hole
- 7. If your vehicle has wheel covers, insert a flat-head screwdriver into the notch on the opposite side of the valve hole and pry the wheel cover to remove it.

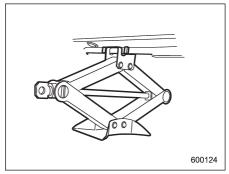


8. Loosen the wheel nuts using the wheel nut wrench but do not remove the nuts.

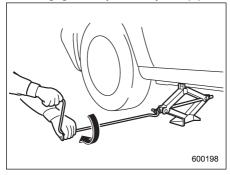


Jack-up points

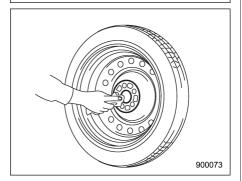
9. Place the jack under the side sill at the front or rear jack-up point closest to the flat tire.



Turn the jackscrew by hand until the jack head engages firmly into the jack-up point.



- 10. Insert the jack handle into the jackscrew, and turn the handle until the tire clears the ground. Do not raise the vehicle higher than necessary.
- 11. Remove the wheel nuts and the flat tire.

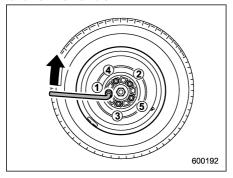


- 12. Before putting the spare tire on, clean the mounting surface of the wheel and hub with a cloth.
- 13. Put on the spare tire. Replace the wheel nuts. Tighten them by hand.

# **WARNING**

Do not use oil or grease on the wheel studs or nuts when the spare tire is installed. This could cause the nuts to become loose and lead to an accident.

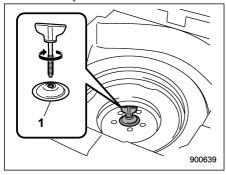
14. Turn the jack handle counterclockwise to lower the vehicle.



15. Use the wheel nut wrench to securely tighten the wheel nuts to the specified torque, following the tightening order in the illustration.

For the wheel nut tightening torque, refer to "Tires" \$\textit{\$^{\textit{\$}}\$12-8. Never use your foot on the wheel nut wrench or a pipe extension on the wrench because you may exceed the specified torque. Have the wheel nut

torque checked at the nearest automotive service facility.



1) Support holder

16. Store the flat tire in the spare tire compartment. Install with the support holder facing upward and secure the flat tire by firmly tightening the attaching bolt.

#### NOTE

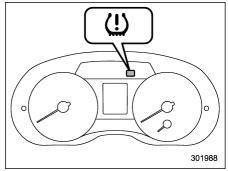
If you cannot fix the flat tire firmly, try turning the support holder upside down.

17. Store the jack, jack handle and wheel nut wrench in their storage locations.



tools in the passenger compartment after changing wheels. In a sudden stop or collision, loose equipment could strike occupants and cause injury. Store the tire and all tools in the proper place.

■ Tire pressure monitoring system (TPMS) (U.S.-spec. models)



Low tire pressure warning light

The tire pressure monitoring system provides the driver with the warning message indicated by sending a signal from a sensor that is installed in each wheel when tire pressure is severely low.

The tire pressure monitoring system will activate only when the vehicle is driven.

Also, this system may not react immediately to a sudden drop in tire pressure (for example, a blow-out caused running over a sharp object).

#### A

#### WARNING

- If the low tire pressure warning light illuminates while driving, never brake suddenly. Instead, perform the following procedure.
  - (1) Keep driving straight ahead while gradually reducing speed.
  - (2) Slowly pull off the road to a safe place. Otherwise an accident involving serious vehicle damage and serious personal injury could occur.
  - (3) Check the pressure for all four tires and adjust the pressure to the COLD tire pressure shown on the vehicle placard on the door pillar on the driver's side.

If this light still illuminates while driving after adjusting the tire pressure, a tire may have significant damage and a fast leak that causes the tire to lose air rapidly. If you have a flat tire, replace it with a spare tire as soon as

possible.

- When a spare tire is mounted or a wheel rim is replaced without the original pressure sensor/transmitter being transferred, the low tire pressure warning light will illuminate steadily after blinking for approximately one minute. This indicates the TPMS is unable to monitor all four road wheels. Contact your SUBARU dealer as soon as possible for tire and sensor replacement and/or system resetting.
- When a tire is repaired with liquid sealant, the tire pressure warning valve and transmitter may not operate properly. If a liquid sealant is used, contact your nearest SUBARU dealer or other qualified service shop as soon as possible. Make sure to replace the tire pressure warning valve and transmitter when replacing the tire. You may reuse the wheel if there is no damage to it and if the sealant residue is properly cleaned off.

If the light illuminates steadily after blinking for approximately one minute, promptly contact a SUBARU dealer to have the sys-

tem inspected.

# Jump starting



#### WARNING

Battery fluid is SULFURIC ACID.
Do not let it come in contact with
the eyes, skin, clothing or the
vehicle.

If battery fluid gets on you, thoroughly flush the exposed area with water immediately. Get medical help if the fluid has entered your eyes.

If battery fluid is accidentally swallowed, immediately drink a large amount of milk or water, and obtain immediate medical help.

Keep everyone including children away from the battery.

- The gas generated by a battery explodes if a flame or spark is brought near it. Do not smoke or light a match while jump starting.
- Never attempt jump starting if the discharged battery is frozen. It could cause the battery to burst or explode.
- Whenever working on or around a battery, always wear suitable

- eye protectors, and remove metal objects such as rings, bands or other metal jewelry.
- Be sure the jumper cables and clamps on them do not have loose or missing insulation.

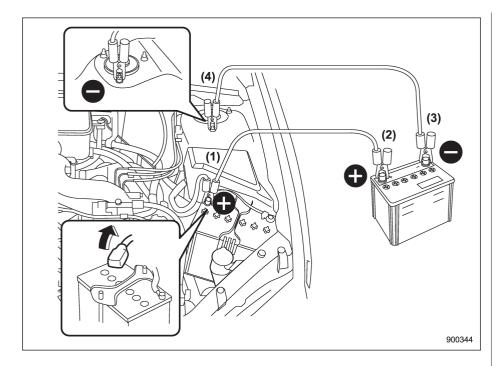
Do not jump start unless cables in suitable condition are available.

- A running engine can be dangerous. Keep your fingers, hands, clothing, hair and tools away from the cooling fan, belts and any other moving engine parts. Removing rings, watches and ties is advisable.
- Jump starting is dangerous if it done incorrectly. If you are unsure about the proper procedure for jump starting, consult a competent mechanic.

When your vehicle does not start due to a run down (discharged) battery, the vehicle may be jump started by connecting your battery to another battery (called the booster battery) with jumper cables.

# ■ How to jump start

- 1. Make sure the booster battery is 12 volts and the negative terminal is grounded.
- 2. If the booster battery is in another vehicle, do not let the two vehicles touch.
- 3. Turn off all unnecessary lights and accessories.
- 4. Connect the jumper cables exactly in the sequence illustrated.



- (1) Connect one jumper cable to the positive (+) terminal on the discharged battery.
- (2) Connect the other end of the jumper cable to the positive (+) terminal of the booster battery.
- (3) Connect one end of the other cable to the negative (-) terminal of the booster battery.
- (4) Connect the other end of the cable to the strut mounting nut of the vehicle with the discharged battery.

Make sure that the cables are not near any moving parts and that the cable clamps are not in contact with any other metal.

- 5. Start the engine of the vehicle with the booster battery and run it at moderate speed. Then start the engine of the vehicle that has the discharged battery.
- 6. When finished, carefully disconnect the cables in exactly the reverse order.

# **Engine overheating**



#### WARNING

Never attempt to remove the radiator cap until the engine has been shut off and has fully cooled down. When the engine is hot, the coolant is under pressure. Removing the cap while the engine is still hot could release a spray of boiling hot coolant, which could burn you very seriously.

If the engine overheats, safely pull off the road and stop the vehicle in a safe location.

# If steam is coming from the engine compartment

- Turn the ignition switch to the "LOCK" (off) position and get everyone away from the vehicle until it cools down.
- Contact an authorized SUBARU dealer.

# ■ If no steam is coming from the engine compartment

1. Keep the engine running at idling speed.

2. Open the engine hood to ventilate the engine compartment. Refer to "Engine hood" \$\tilde{F}\$11-5.

Confirm that the cooling fan is turning. If the fan is not turning, immediately turn off the engine and contact an authorized SUBARU dealer for repair.

- 3. After the coolant temperature high warning light that has blinked or illuminated in **RED** turns off, turn off the engine. For details about the warning light, refer to "Coolant temperature low indicator light! Coolant temperature high warning light" \$\mathscr{G}\$3-13.
- 4. After the engine has fully cooled down, check the coolant level in the reserve tank. If the coolant level is below the "LOW" mark, add coolant up to the "FULL" mark.

#### NOTE

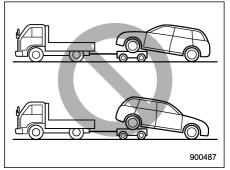
For details about how to check the coolant level or how to add coolant, refer to "Engine coolant" \$\textit{\sigma}\$11-11.

5. If there is no coolant in the reserve tank, add coolant to the reserve tank. Then remove the radiator cap and fill the radiator with coolant.

If you remove the radiator cap from a hot radiator, first wrap a thick cloth around the radiator cap, then turn the cap counterclockwise slowly without pressing down until it stops. Release the pressure from the radiator. After the pressure has been fully released, remove the cap by pressing down and turning it.

# **Towing**

If towing is necessary, it is best done by your SUBARU dealer or a commercial towing service. Observe the following procedures for safety.



# **WARNING**

Never tow AWD models with the front wheels raised off the ground while the rear wheels are on the ground, or with the rear wheels raised off the ground while the front wheels are on the ground. This will cause the vehicle to spin away due to the operation or deterioration of the center differential.

## ■ Towing and tie-down hooks

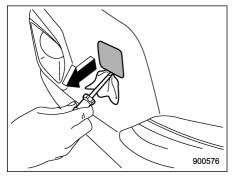
The towing hooks should be used only in an emergency (e.g., to free a stuck vehicle from mud, sand or snow).

# **CAUTION**

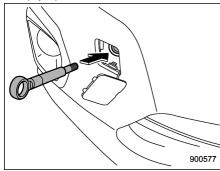
- Use only the specified towing hook and tie-down hook. Never use suspension parts or other parts of the body for towing or tie-down purposes.
- To prevent deformation to the front bumper and the towing hook, do not apply excessive lateral load to the towing hook.

#### **▼** Front towing hook

1. Take the towing hook and screwdriver out of the tool bucket. Take the jack handle out of the trunk (4-door) or cargo area (5-door).

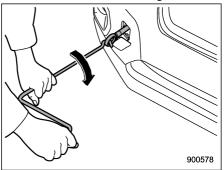


2. Cover the tip of a flat-head screwdriver with vinyl tape or cloth so that it will not scratch the bumper. Insert the flat-head screwdriver into the cutout of the cover and pry open the cover.



3. Screw the towing hook into the thread

hole until its thread can no longer be seen.



4. Tighten the towing hook securely using the jack handle.

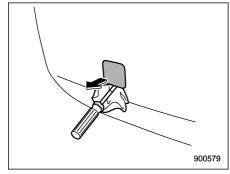
After towing, remove the towing hook from the vehicle and stow it in the tool bucket. Fit the towing hook cover on the bumper.

# **WARNING**

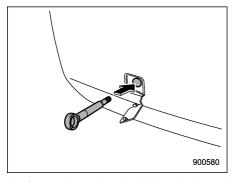
- Do not use the towing hook except when towing your vehicle.
- Be sure to remove the towing hook after towing. Leaving the towing hook mounted on the vehicle could interfere with proper operation of the SRS airbag system in a frontal collision.

#### ▼ Rear towing hook

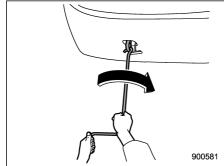
1. Take the towing hook and screwdriver out of the tool bucket. Take the jack handle out of the trunk (4-door) or cargo area (5-door).



2. Pry off the cover on the rear bumper using a screwdriver, and you will find a threaded hole for attaching the towing hook.



3. Screw the towing hook into the thread hole until its thread can no longer be seen.



4. Tighten the towing hook securely using the jack handle.

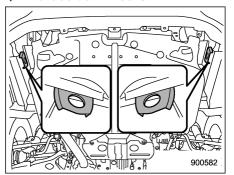
After towing, remove the towing hook from

the vehicle and stow it in the tool bucket. Fit the towing hook cover on the bumper.



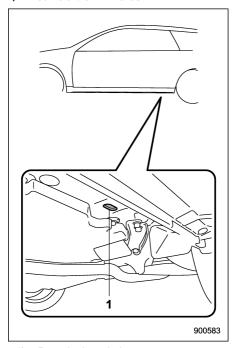
Do not use the towing hook except when towing your vehicle.

#### **▼** Front tie-down hooks



The front tie-down hooks are located between each of the front tires and the front bumper.

#### ▼ Rear tie-down holes



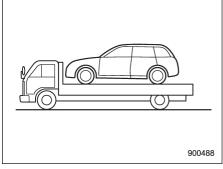
1) Rear tie-down hole

The rear tie-down holes are located near each of the jack-up reinforcements.

# **WARNING**

Use the rear tie-down holes only for downward anchoring. If they are used to anchor the vehicle in any other direction, cables may slip out of the holes, possibly causing a dangerous situation.

# ■ Using a flat-bed truck



This is the best way to transport your vehicle. Use the following procedures to ensure safe transportation.

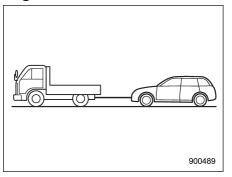
- 1. Shift the select lever into the "P" position for CVT models. Shift the shift lever into the "1st" position for MT models.
- 2. Pull up the parking brake lever firmly.
- 3. Secure the vehicle onto the carrier

properly with safety chains. Each safety chain should be equally tightened and care must be taken not to pull the chains so tightly that the suspension bottoms out.

# **A** CAUTION

If your vehicle has a front underspoiler and rear underspoiler (both optional), be careful not to scrape them when placing the vehicle on the carrier and when removing the vehicle from the carrier.

# ■ Towing with all wheels on the ground



- 1. Release the parking brake and put the transmission in the "N" position.
- 2. The ignition switch should be in the "ACC" position while the vehicle is being towed.
- 3. Take up slack in the towline slowly to prevent damage to the vehicle.

# **WARNING**

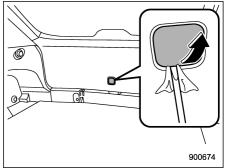
 Never turn the ignition switch to the "LOCK" (off) position while the vehicle is being towed because the steering wheel and the direction of the wheels will be locked.  Remember that the brake booster and power steering do not function when the engine is not running. Because the engine is turned off, it will take greater effort to operate the brake pedal and steering wheel.

# **A** CAUTION

- If transmission failure occurs, transport your vehicle on a flatbed truck.
- Do not run the engine while being towed using this method. Transmission damage could result if the vehicle is towed with the engine running.
- For CVT models, the traveling speed must be limited to less than 20 mph (30 km/h) and the traveling distance to less than 31 miles (50 km). For greater speeds and distances, transport your vehicle on a flat-bed truck.

# Rear gate – if the rear gate cannot be opened

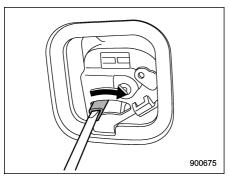
In the event that you cannot open the rear gate by operating the rear gate opener button, you can open it from inside the cargo area.



- 1. Remove the access cover at the bottom-center of the rear gate trim.
- 2. Locate the rear gate open lever behind the rear gate trim panel.



Never operate the rear gate open lever with fingers because doing so may cause an injury. Always use a flat-head screwdriver or a similar tool.



3. To open the rear gate, turn the lever to the right position using a flat-head screwdriver or a similar tool.

#### If your vehicle is involved in an accident



#### **CAUTION**

If your vehicle is involved in an accident, be sure to inspect the ground under the vehicle before restarting the engine. If you find that fuel has leaked on the ground, do not try to restart the engine. The fuel system has been damaged and is in need of repair. Immediately contact the nearest automotive service facility. We recommend that you consult vour SUBARU dealer.

Your vehicle has a fuel pump shut off system. To minimize the risk of fire due to fuel leakage when the engine stalls, an airbag inflates upon collision or a rear collision happens, the system stops supplying fuel to the engine.

Perform the following procedures to restart the engine after the system is activated.

- 1. Turn the ignition switch to the "LOCK" (off) or "ACC" position.
- 2. Restart the engine.

# Appearance care

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#### Exterior care

## Washing

# A CAUTION

- When washing the vehicle, the brakes may get wet. As a result, the brake stopping distance will be longer. To dry the brakes. drive the vehicle at a safe speed while lightly depressing the brake pedal to heat up the brakes.
- Do not wash the engine compartment and area adjacent to it. If water enters the engine air intake or electrical parts, it will cause engine trouble or a malfunction of electrical equipment.
- Do not use any organic solvents when washing the surface of the bulb assembly cover. However, if a detergent with organic solvents is used to wash the cover surface, completely rinse off the detergent with water. Otherwise. the cover surface may be damaged.
- For 5-door models, since your vehicle is equipped with a rear wiper, automatic car-wash

brushes could become tangled around it, damaging the wiper arm and other components. Ask the automatic car-wash operator not to let the brushes touch the wiper arm or to fix the wiper arm on the rear window glass with adhesive tape before operating the machine.

#### **NOTE**

When having your vehicle washed in an automatic car wash, make sure beforehand that the car wash is of suitable type.

The best way to preserve your vehicle's beauty is frequent washing. Wash the vehicle at least once a month to avoid contamination by road grime.

Wash dirt off with a wet sponge and plenty of lukewarm or cold water. Do not wash the vehicle with hot water and in direct sunlight.

Salt, chemicals, insects, tar, soot, tree sap, and bird droppings should be washed off by using a light detergent, as required. If you use a light detergent, make certain that it is a neutral detergent. Do not use strong soap or chemical detergents. All cleaning agents should be promptly flushed from the surface and not allowed to dry there. Rinse the vehicle thoroughly with plenty of lukewarm water. Wipe the remaining water off with a chamois or soft cloth.

#### **▼** Washing the underbody

Chemicals, salts and gravel used for deicing road surfaces are extremely corrosive, accelerating the corrosion of underbody components, such as the exhaust system, fuel and brake lines, brake cables, floor pan and fenders, and suspension.

Thoroughly flush the underbody and inside of the fenders with lukewarm or cold water at frequent intervals to reduce the harmful effects of such agents.

Mud and sand adhering to the underbody components may accelerate their corrosion.

After driving off-road or on muddy or sandy roads, wash the mud and sand off the underbody. Carefully flush the suspension and axle parts, as they are particularly prone to mud and sand buildup. Do not use a sharp-edged tool to remove caked mud

## **A** CAUTION

- Be careful not to damage brake hoses, sensor harnesses, and other parts when washing suspension components.
- Be careful not to flush the engine bottom for a long time. It may cause damage of some electrical parts.

#### **▼** Using a warm water washer

- Keep a good distance of 12 in (30 cm) or more between the washer nozzle and the vehicle.
- Do not wash the same area continuously.
- If a stain will not come out easily, wash by hand. Some warm water washers are of the high temperature, high pressure type, and they can damage or deform the resin parts such as moldings, or cause water to leak into the vehicle.

#### **■** Waxing and polishing

Always wash and dry the vehicle before waxing and polishing.

Use a good quality polish and wax and apply them according to the manufacturer's instructions. Wax or polish when the painted surface is cool.

Be sure to polish and wax the chrome trim, as well as the painted surfaces. Loss of wax on a painted surface leads to loss of the original luster and also quickens the deterioration of the surface. It is recommended that a coat of wax be applied at least once a month, or whenever the surface no longer repels water.

If the appearance of the paint has diminished to the point where the luster or tone cannot be restored, lightly polish the surface with a fine-grained compound. Never polish just the affected area, but include the surrounding area as well. Always polish in only one direction. A No. 2000 grain compound is recommended. Never use a coarse-grained compound. Coarse-grained compounds have a smaller grain-size number and could damage the paint. After polishing with a compound, coat with wax to restore the original luster. Frequent polishing with a compound or an incorrect polishing technique will result in removing the paint layer and exposing the undercoat. When in doubt, it is always best to contact your SUBARU dealer or an auto paint specialist.

# **CAUTION**

Do not use any agents with organic

solvents on the surface of the bulb assembly cover. However, if a polish or wax with organic solvents is applied to the cover surface, completely wipe off the polish or wax. Otherwise, the cover surface may be damaged.

#### NOTE

Be careful not to block the windshield washer nozzles with wax when waxing the vehicle.

#### ■ Cleaning aluminum wheels

- Promptly wipe the aluminum wheels clean of any kind of grime or agent. If dirt is left on too long, it may be difficult to clean off.
- Do not use soap containing grit to clean the wheels. Be sure to use a neutral cleaning agent, and later rinse thoroughly with water. Do not clean the wheels with a stiff brush or expose them to a high-speed washing device.
- Clean the vehicle (including the aluminum wheels) with water as soon as possible when it has been splashed with sea water, exposed to sea breezes, or driven on roads treated with salt or other agents.

# **Corrosion protection**

Your SUBARU has been designed and built to resist corrosion. Special materials and protective finishes have been used on most parts of the vehicle to help maintain fine appearance, strength, and reliable operation.

# ■ Most common causes of corrosion

The most common causes of corrosion are:

- 1. The accumulation of moisture retaining dirt and debris in body panel sections, cavities, and other areas.
- 2. Damage to paint and other protective coatings caused by gravel and stone chips or minor accidents.

Corrosion is accelerated on the vehicle when:

- 1. It is exposed to road salt or dust control chemicals, or used in coastal areas where there is more salt in the air, or in areas where there is considerable industrial pollution.
- 2. It is driven in areas of high humidity, especially when temperatures range just above freezing.
- 3. Dampness in certain parts of the

vehicle remains for a long time, even though other parts of the vehicle may be dry.

4. High temperatures will cause corrosion to parts of the vehicle which cannot dry quickly due to lack of proper ventilation.

#### ■ To help prevent corrosion

Wash the vehicle regularly to prevent corrosion of the body and suspension components. Also, wash the vehicle promptly after driving on any of the following surfaces.

- roads that have been salted to prevent them from freezing in winter
- mud, sand, or gravel
- coastal roads

After the winter has ended, it is recommended that the underbody be given a very thorough washing.

Before the beginning of winter, check the condition of underbody components, such as the exhaust system, fuel and brake lines, brake cables, suspension, steering system, floor pan, and fenders. If any of them are found to be rusted, they should be given an appropriate rust prevention treatment or should be replaced. Contact your SUBARU dealer to perform this kind

of maintenance and treatment if you need assistance.

Repair chips and scratches in the paint as soon as you find them.

Check the interior of the vehicle for water and dirt accumulation under the floor mats because that could cause corrosion. Occasionally check under the mats to make sure the area is dry.

Keep your garage dry. Do not park your vehicle in a damp, poorly ventilated garage. In such a garage, corrosion can be caused by dampness. If you wash the vehicle in the garage or put the vehicle into the garage when wet or covered with snow, that can cause dampness.

If your vehicle is operated in cold weather and/or in areas where road salts and other corrosive materials are used, the door hinges and locks, trunk lid lock, and hood latch should be inspected and lubricated periodically.

# Cleaning the interior

Use a soft, damp cloth to clean the climate control panel, audio equipment, instrument panel, center console, combination meter panel, and switches. (Do not use organic solvents.)

#### ■ Seat fabric

Remove loose dirt, dust or debris with a vacuum cleaner. If the dirt is caked on the fabric or hard to remove with a vacuum cleaner, use a soft brush then vacuum it. Wipe the fabric surface with a tightly wrung cloth and dry the seat fabric thoroughly. If the fabric is still dirty, wipe using a solution of mild soap and lukewarm water then dry thoroughly.

If the stain does not come out, try a commercially-available fabric cleaner. Use the cleaner on a hidden place and make sure it does not affect the fabric adversely. Use the cleaner according to its instructions.

# **A** CAUTION

When cleaning the seat, do not use benzine, paint thinner, or any similar materials.

#### ■ Leather seat materials

The leather used by SUBARU is a high quality natural product which will retain its distinctive appearance and feel for many years with proper care.

Allowing dust or road dirt to build up on the surface can cause the material to become brittle and to wear prematurely. Regular cleaning with a soft, moist, natural fiber cloth should be performed monthly, taking care not to soak the leather or allow water to penetrate the stitched seams.

A mild detergent suitable for cleaning woolen fabrics may be used to remove difficult dirt spots, rubbing with a soft, dry cloth afterwards to restore the luster. If your SUBARU is to be parked for a long time in bright sunlight, it is recommended that the seats and head restraints be covered, or the windows shaded, to prevent fading or shrinkage.

Minor surface blemishes or bald patches may be treated with a commercial leather spray lacquer. You will discover that each leather seat section will develop soft folds or wrinkles, which is characteristic of genuine leather.

## **■** Synthetic leather upholstery

The synthetic leather material used on the SUBARU may be cleaned using mild soap or detergent and water, after first vacuuming or brushing away loose dirt. Allow the soap to soak in for a few minutes and wipe off with a clean, damp cloth. Commercial foam-type cleaners suitable for synthetic leather materials may be used when necessary.

# **CAUTION**

Strong cleaning agents such as solvents, paint thinners, window cleaner or fuel must never be used on leather or synthetic interior materials. Doing so could damage the surface and cause the color to deteriorate.

# ■ Climate control panel, audio panel, instrument panel, console panel, and switches

Use a soft, damp cloth to clean the climate control panel, audio equipment, instrument panel, center console, combination meter panel, and switches.

# **CAUTION**

- Do not use organic solvents such as paint thinners or fuel, or strong cleaning agents that contain those solvents.
- Do not use chemical solvents that contain silicone on the vehicle audio system, electrical components of the air-conditioner or any switches. If silicone adheres to these parts, it may cause damage to electrical components.

# **■** Monitor (if equipped)

To clean the audio/navigation/multi function display monitor, wipe it with a silicone cloth or with a soft cloth. If the monitor is extremely dirty, clean it with a soft cloth moistened with neutral detergent then carefully wipe off any remaining detergent.



#### **CAUTION**

- Do not spray neutral detergent directly onto the monitor. Doing so could damage the monitor's components.
- Do not wipe the monitor with a hard cloth. Doing so could scratch the monitor.
- Do not use cleaning fluid that contains thinner, fuel, or any other volatile substance. Such cleaning fluid could erase the lettering on the switches at the bottom of the monitor.

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#### Maintenance schedule

The scheduled maintenance items required to be serviced at regular intervals are shown in the "Warranty and Maintenance Booklet".

For details of your maintenance schedule, read the separate "Warranty and Maintenance Booklet".

#### NOTE

For models with a multi function display, you can set a reminder to be displayed when a scheduled maintenance item is almost due. For details, refer to "Maintenance settings" \$\tilde{\sigma} 3-57.

# **Maintenance precautions**

When maintenance and service are required, it is recommended that all work be done by an authorized SUBARU dealer.

If you perform maintenance and service by yourself, you should familiarize yourself with the information provided in this section on general maintenance and service for your SUBARU.

Incorrect or incomplete service could cause improper or unsafe vehicle operation. Any problems caused by improper maintenance and service performed by you are not eligible for warranty coverage.

# A

#### MARNING

- Always select a safe area when performing maintenance on your vehicle.
- Always be very careful to avoid injury when working on the vehicle. Remember that some of the materials in the vehicle may be hazardous if improperly used or handled, for example, battery acid.
- Your vehicle should only be serviced by persons fully competent to do so. Serious personal injury

may result to persons not experienced in servicing vehicles.

- Always use the proper tools and make certain that they are well maintained.
- Never get under the vehicle supported only by a jack. Always use safety stands to support the vehicle.
- Never keep the engine running in a poorly ventilated area, such as a garage or other closed areas.
- Do not smoke or allow open flames around the fuel or battery.
   This will cause a fire.
- Because the fuel system is under pressure, replacement of the fuel filter should be performed only by your SUBARU dealer.
- Wear adequate eye protection to guard against getting oil or fluids in your eyes. If something does get in your eyes, thoroughly wash them out with clean water.
- Do not tamper with the wiring of the SRS airbag system or seatbelt pretensioner system, or attempt to take its connectors apart, as that may activate the system or it can render it inop-

erative. NEVER use a circuit tester for this wiring. If your SRS airbag or seatbelt pretensioner needs service, consult your nearest SUBARU dealer.

#### NOTE

SUBARU does not endorse the use of non-SUBARU approved flushing systems and strongly advises against performing these services on a SUBARU vehicle. Non-SUBARU approved flushing systems use chemicals and/or solvents which have not been tested or approved by SUBARU. SUBARU warranties do not cover any part of the vehicle which is damaged by adding or applying chemicals and/or solvents other than those approved or recommended by SUBARU.

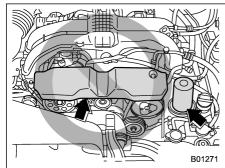
Before checking or servicing in the engine compartment

# WARNING

- Always turn the ignition switch to the "LOCK" (off) position and set the parking brake firmly to prevent the vehicle from moving.
- Always let the engine cool down. Engine parts become very hot when the engine is running and remain hot for some time after the engine has stopped.
- Do not spill engine oil, engine coolant, brake fluid or any other fluid on hot engine components. This may cause a fire.
- Always remove the key from the ignition switch. When the ignition switch is in the "ON" position, the cooling fan may operate suddenly even when the engine is stopped. If your body or clothes come into contact with a rotating fan, that could result in serious injury.
- Before performing any servicing on a vehicle equipped with a remote engine start system (a dealer option) temporarily place

that system in the service mode to prevent it from unexpectedly starting the engine.

When checking or servicing in the engine compartment



# **CAUTION**

- Do not contact the drive belt cover while checking the components in the engine compartment. Doing so may cause your hand to slip off the cover and result in an unexpected injury.
- Do not touch the oil filter until the engine has cooled down completely. Doing so may result in a

burn or other injury. Note that the oil filter becomes very hot when the engine is running and remains hot for some time after the engine has stopped.

When checking or servicing in the engine compartment while the engine is running



A running engine can be dangerous. Keep your fingers, hands, clothing, hair and tools away from the cooling fan, drive belt and any other moving engine parts. Removing rings, watches and ties is advisable.

# **Engine hood**

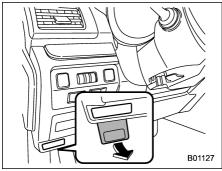


#### CAUTION

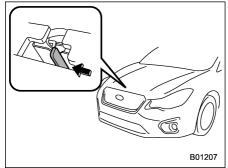
- When you open the engine hood, do not stand the wiper blades up. Furthermore, while the hood is open, do not operate the windshield wipers. Doing so could result in damage to the engine hood and wiper blades.
- Be extremely careful not to catch fingers or other objects when closing the engine hood.
- Do not push the hood forcibly to close it. It could deform the metal.
- Be extremely careful opening the engine hood when the wind is strong. The engine hood could close suddenly, possibly causing injuries from slamming.
- Do not install accessories other than genuine SUBARU parts to the engine hood. If the engine hood becomes too heavy, the stay may not be able to support holding it open.

#### To open the hood:

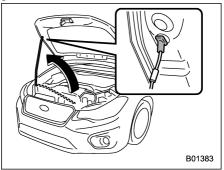
1. If the wiper blades are lifted off the windshield, return them to their original position.



2. Pull the hood release knob under the instrument panel.



3. Release the secondary hood release by moving the lever between the front grille and the hood toward the left.



4. Lift up the hood, release the hood prop from its retainer and put the end of the hood prop into the slot in the hood.

#### To close the hood:

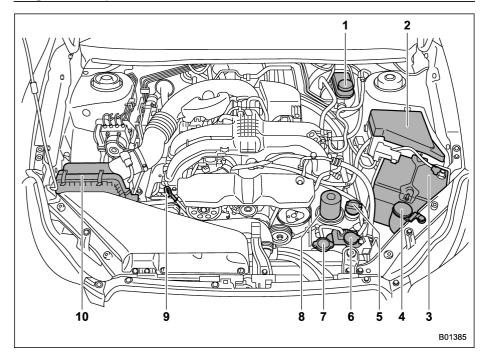
- 1. Lift the hood slightly and remove the hood prop from the slot in the hood and return the prop to its retainer.
- 2. Lower the hood to a height of approximately 5.9 in (15 cm) above its closed position and then let it drop.
- 3. After closing the hood, be sure the hood is securely locked.

If this does not close the hood, release it from a slightly higher position.

# **WARNING**

Always check that the hood is properly locked before you start driving. If it is not, it might fly open while the vehicle is moving and block your view, which may cause an accident and serious bodily injury.

# **Engine compartment overview**



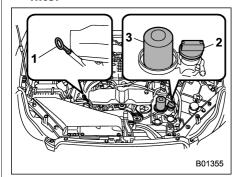
- ) Brake fluid reservoir/Clutch fluid reservoir (MT) (page 11-16)
- 2) Fuse box (page 11-35)
- 3) Battery (page 11-34)
- 4) Windshield washer tank (page 11-29)
- 5) Engine oil filler cap (page 11-8)
- 6) Engine coolant reservoir (page 11-11)
- 7) Radiator cap (page 11-11)
- 8) Engine oil filter (page 11-9)
- 9) Engine oil level gauge (page 11-8)
- 10) Air cleaner case (page 11-13)

## **Engine oil**

#### NOTE

- The engine oil consumption rate is not stabilized, and therefore cannot be determined until the vehicle has traveled at least several thousand miles (kilometers). Even after break-in, when the vehicle is used under severe driving conditions such as those mentioned in the Warranty and Maintenance Booklet, engine oil is consumed or deteriorated more quickly than under normal driving conditions. If you drive your vehicle under these severe conditions, you should check the oil level at least at every second fuel fill-up time, and change the oil more frequently. Please refer to the Warranty and Maintenance Booklet for more details.
- If the oil consumption rate seems abnormally high after the break-in period, for example more than 1 quart per 1,200 miles or 1 liter per 2,000 kilometers, contact your SUBARU dealer.

Locations of the oil level gauge, oil filler cap and oil filter



- Oil level gauge
- Oil filler cap
- Oil filter

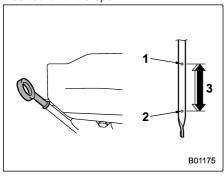
# ■ Checking the oil level

Check the engine oil level at each fuel stop.

- 1. Park the vehicle on a level surface and turn the ignition switch to the "LOCK" (off) position. If you check the oil level just after turning the ignition switch to the "LOCK" (off) position, wait a few minutes for the oil to drain back into the oil pan before checking the level.
- 2. Pull out the level gauge, wipe it clean,

and insert it again.

3. Be sure the level gauge is correctly inserted until it stops.



- Full level
- I ow level
- Approximately 1.1 US gt (1.0 liter, 0.9 Imp qt) from low level to full level
- 4. Pull out the oil level gauge again.
- 5. Check the oil levels on both sides of the level gauge. The engine oil level must be judged by the lowest of the two levels. If the oil level is below the low level mark. add oil so that the full level is reached.



Be careful not to touch the engine oil filter when removing the oil filler cap. Doing so may result in a burn, a pinched finger, or may cause some other injury.

- Use only engine oil with the recommended grade and viscosity.
- Be careful not to spill engine oil when adding it. If oil touches the exhaust pipe, it may cause a bad smell, smoke, and/or a fire. If engine oil gets on the exhaust pipe, be sure to wipe it off.
- If the level gauge is not pulled out easily, twist the level gauge right and left, then pull it out. Otherwise, you may be injured accidentally straining yourself.

To add engine oil, remove the engine oil filler cap and slowly pour engine oil through the filler neck. After pouring oil into the engine, you must use the level gauge to confirm that the oil level is correct.

#### NOTE

To prevent overfilling the engine oil, do not add any additional oil above the upper level when the engine is cold.

# ■ Changing the oil and oil filter

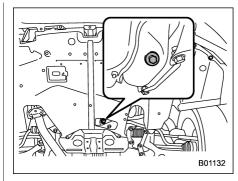


If you change your own oil, be sure to drain all the oil from the filter before disposal. Do not dispose of used engine oil by placing it in the trash, or by pouring it onto the ground, into sewers, or into any body of water. Check with your local government office for the proper disposal options available to you.

Change the oil and oil filter according to the maintenance schedule in the "Warranty and Maintenance Booklet".

The engine oil and oil filter must be changed more frequently than listed in the maintenance schedule when driving on dusty roads, when short trips are frequently made, or when driving in extremely cold weather.

- 1. Warm up the engine by letting the engine idle for approximately 10 minutes to ease draining the engine oil.
- 2. Park the vehicle on a level surface and turn the ignition switch to the "LOCK" (off) position.
- 3. Remove the oil filler cap.



4. Drain out the engine oil by removing the drain plug while the engine is still warm. The used oil should be drained into an appropriate container and disposed of properly.

# **WARNING**

Be careful not to burn yourself with hot engine oil.

- 5. Wipe the seating surface of the drain plug with a clean cloth and tighten it securely with a new sealing washer after the oil has completely drained out.
- 6. Remove the oil filter with an oil filter wrench.
- 7. Before installing a new oil filter, apply a thin coat of engine oil to the seal.

- 8. Clean the rubber seal seating area of the engine and install the oil filter by hand turning. Be careful not to twist or damage the seal.
- 9. Tighten the oil filter by the amount indicated in the following table after the seal makes contact with the seating surface.

Oil filter color	Part number	Amount of rotation
Black	15208AA160	1 rotation

## **CAUTION**

- Never over tighten the oil filter because that can result in an oil leak.
- Thoroughly wipe off any engine oil that has spilled over the exhaust pipe and/or under-cover. If spilled oil is not promptly wiped up, the oil could cause a fire.
- 10. Pour engine oil through the filler neck. For the oil capacity (guideline), refer to "Engine oil" \$\tilde{-12-4}.

The oil quantity indicated above is only auideline.

The necessary quantity of oil depends on

the quantity of oil that has been drained. The quantity of drained oil differs slightly depending on the temperature of the oil and the time the oil is left flowing out. After refilling the engine with oil, therefore, you must use the level gauge to confirm that the level is correct.

- 11. Start the engine and make sure that no oil leaks appear around the filter's rubber seal and drain plug.
- 12. Run the engine until it reaches the normal operating temperature. Then turn the ignition switch to the "LOCK" (off) position and wait a few minutes to allow the oil drain back. Check the oil level again and if necessary, add more engine oil.

#### **CAUTION**

Be careful not to spill engine oil when adding it. If oil touches the exhaust pipe, it may cause a bad smell, smoke, and/or a fire.

Recommended grade and viscosity



A CAUTION

Use only engine oil with the recom-

#### mended grade and viscosity.

Refer to "Engine oil" \$\tilde{F}\$12-4.

#### NOTE

Engine oil viscosity (thickness) affects fuel economy. Oils of lower viscosity provide better fuel economy. However, in hot weather, oil of higher viscosity is required to properly lubricate the engine.

### ■ Synthetic oil

You should use synthetic engine oil that meets the same requirements given for conventional engine oil. When using synthetic oil, you must use oil of the same classification, viscosity and grade shown in this Owner's Manual. Refer to "Engine oil" \$\infty\$12-4. Also, you must follow the oil and filter changing intervals shown in the Warranty and Maintenance booklet.

#### NOTE

Synthetic oil of the grade and viscosity noted in chapter 12 is the recommended engine oil for optimum engine performance. Conventional oil may be used if synthetic oil is unavailable.

## Cooling system

## ■ Safety precautions



#### WARNING

Never attempt to remove the radiator cap until the engine has been shut off and has cooled down completely. Since the coolant is under pressure, you may suffer serious burns from a spray of boiling hot coolant when the cap is removed.



#### **CAUTION**

 Vehicles are filled at the factory with SUBARU Super Coolant that does not require the first change for 11 years/137,500 miles (11 years/220,000 km). This coolant should not be mixed with any other brand or type of coolant during this period. Mixing with a different coolant will reduce the life of the coolant. Should it be necessary to top up the coolant for any reason, use only **SUBARU Super Coolant.** 

If the SUBARU Super Coolant is

diluted with another brand or type, the maintenance interval is shortened to that of the mixing coolant.

• Do not splash the engine coolant over painted parts. The alcohol contained in the engine coolant may damage the paint surface.

#### ■ Cooling fan, hose and connections

Your vehicle employs an electric cooling fan which is thermostatically controlled to operate when the engine coolant reaches a specific temperature.

If the radiator cooling fan does not operate even when the coolant temperature high warning light blinks or illuminates in **RED**. the cooling fan circuit may be defective. Refer to "Coolant temperature low indicator light/Coolant temperature high warning liaht" @3-13.

Check the fuse and replace it if necessary. Refer to "Fuses" \$\alpha\$11-35 and "Fuse panel located in the engine compartment" \$\tilde{\pi}\$12-12.

If the fuse is not blown, have the cooling system checked by your SUBARU dealer.

If frequent addition of coolant is neces-

sary, there may be a leak in the engine cooling system. It is recommended that the cooling system and connections be checked for leaks, damage, or looseness.

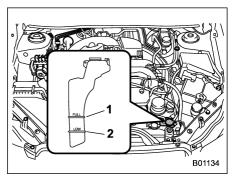
## **■** Engine coolant

**▼** Checking the coolant level



#### WARNING

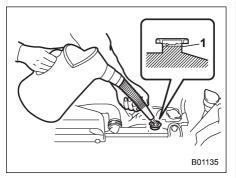
Never attempt to remove the radiator cap until the engine has been shut off and has cooled down completely. Since the coolant is under pressure, you may suffer serious burns from a spray of boiling hot coolant when the cap is removed.



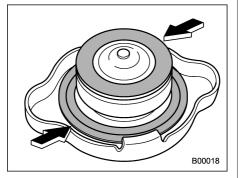
- 1) "FULL" level mark
- 2) "LOW" level mark

Check the coolant level at each fuel stop.

- 1. Check the coolant level on the outside of the reservoir while the engine is cool.
- 2. If the level is close to or lower than the "LOW" level mark, add coolant up to the "FULL" level mark. If the reserve tank is empty, remove the radiator cap and refill coolant up to just below the filler neck as shown in the following illustration.



1) Fill up to this level



3. After refilling the reserve tank and the radiator, reinstall the cap and check that the rubber gaskets inside the radiator cap are in the proper position.

## **A** CAUTION

- Be careful not to spill engine coolant when adding it. If coolant touches the exhaust pipe, it may cause a bad smell, smoke, and/or a fire. If engine coolant gets on the exhaust pipe, be sure to wipe it off.
- Do not splash the engine coolant over painted parts. The alcohol contained in the engine coolant may damage the paint surface.

#### **▼** Changing the coolant

It may be difficult to change the coolant. Have the coolant changed by your SUBARU dealer if necessary.

The coolant should be changed according to the maintenance schedule in the "Warranty and Maintenance Booklet".

#### Air cleaner element



#### WARNING

Do not operate the engine with the air cleaner element removed. The air cleaner element not only filters intake air but also stops flames if the engine backfires. If the air cleaner element is not installed when the engine backfires, you could be burned.



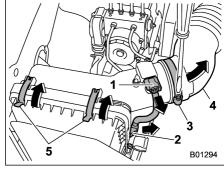
When replacing the air cleaner element, use a genuine SUBARU air cleaner element. If it is not used, there is the possibility of causing a negative effect to the engine.

The air cleaner element functions as a filter screen. When the element is perforated or removed, engine wear will be excessive and engine life shortened.

It is not necessary to clean or wash the air cleaner element.

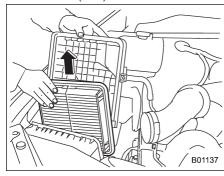
## ■ Replacing the air cleaner element

Replace the air cleaner element according to the maintenance schedule in the "Warranty and Maintenance Booklet". Under extremely dusty conditions, replace it more frequently. It is recommended that you always use genuine SUBARU parts.

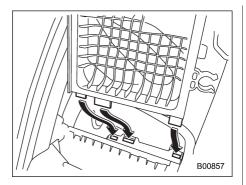


- Connector
- 2) Clip
- 3) Clamp
- Air intake boot
- ) Clip
- 1. Unplug the connector that is attached to the top of the air cleaner case.
- 2. Detach the connector cable from the clip on the right side of the air cleaner case.

- 3. Loosen the screw on the clamp and pull the air intake boot out of the air cleaner case.
- 4. Unsnap the two clips holding the air cleaner case (rear).



- 5. Open the air cleaner case and remove the air cleaner element.
- 6. Clean the inside of the air cleaner case (both front and rear) with a damp cloth and install a new air cleaner element.



- 7. To install the air cleaner case (rear), insert the three projections on the air cleaner case (rear) into the slits on the air cleaner case (front).
- 8. Install in the reverse order of removal.

## Spark plugs

It may be difficult to replace the spark plugs. It is recommended that you have the spark plugs replaced by your SUBARU dealer.

The spark plugs should be replaced according to the maintenance schedule in the "Warranty and Maintenance Booklet".

## **CAUTION**

Make sure the cables are replaced in the correct order.

## ■ Recommended spark plugs

For the recommended spark plugs, refer to "Electrical system" \$\alpha\$12-7.

### **Drive belts**

It is unnecessary to check the deflection of the drive belt periodically because your engine is equipped with an automatic belt tension adjuster. However, replacement of the belt should be done according to the maintenance schedule in the "Warranty and Maintenance Booklet". Consult your SUBARU dealer for replacement.

If the drive belt is loose, cracked or worn, contact your SUBARU dealer.

### Manual transmission oil

It is not necessary to check the transmission oil level. Check that there are no cracks, damage or leakage. However, the oil inspection should be performed according to the maintenance schedule in the "Warranty and Maintenance Booklet". Consult your SUBARU dealer for details.

# Recommended grade and viscosity

Each oil manufacturer has its own base oils and additives. Never use different brands together. For details, refer to "712-6."

# Continuously variable transmission fluid

It is not necessary to check the transmission fluid level. Check that there are no cracks, damage or leakage. However, the fluid inspection should be performed according to the maintenance schedule in the "Warranty and Maintenance Booklet". Consult your SUBARU dealer for details.

# Front differential gear oil (CVT models)

It is not necessary to check the gear oil level. Check that there are no cracks, damage or leakage. However, the oil inspection should be performed according to the maintenance schedule in the "Warranty and Maintenance Booklet". Consult your SUBARU dealer for details.

# Recommended grade and viscosity

Each oil manufacturer has its own base oils and additives. Never use different brands together. For details, refer to "712-6."

## **A** CAUTION

Using a differential gear oil other than the specified oil may cause occurrences of rattling noises while idling and poor fuel consumption.

## Rear differential gear oil

It is not necessary to check the gear oil level. Check that there are no cracks, damage or leakage. However, the oil inspection should be performed according to the maintenance schedule in the "Warranty and Maintenance Booklet". Consult your SUBARU dealer for details.

# Recommended grade and viscosity

Each oil manufacturer has its own base oils and additives. Never use different brands together. For details, refer to ""
\$\textit{T} 12-6.

## **A** CAUTION

Using a differential gear oil other than the specified oil may cause occurrences of rattling noises while idling and poor fuel consumption.

## **Brake fluid**

### ■ Checking the fluid level

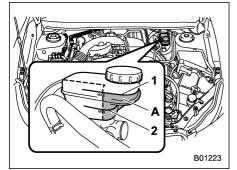


- Never let brake fluid contact your eyes because brake fluid can be harmful to your eyes. If brake fluid gets in your eyes, immediately flush them thoroughly with clean water. For safety, when performing this work, wearing eye protection is advisable.
- Brake fluid absorbs moisture from the air. Any absorbed moisture can cause a dangerous loss of braking performance.
- If the vehicle requires frequent refilling, there may be a leak. If you suspect a problem, have the vehicle checked at your SUBARU dealer.

## **A** CAUTION

- When adding brake fluid, be careful not to allow any dirt into the reservoir.
- Never splash the brake fluid over painted surfaces or rubber parts.

- Alcohol contained in the brake fluid may damage them.
- Be careful not to spill brake fluid when adding it. If brake fluid touches the exhaust pipe, it may cause a bad smell, smoke, and/or a fire. If brake fluid gets on the exhaust pipe, be sure to wipe it off.



- 1) "MAX" level line
- 2) "MIN" level line
- A) The brake fluid level must be checked in this area.

Check the fluid level monthly.

Check the fluid level on the outside of the reservoir. Be sure to check the fluid level for the brake system at the **front part of the reservoir** (shaded area in the illustra-

tion). For MT models, this reservoir is used for both the brake and clutch systems and has chambers for each system. If the fluid level is below "MIN", add the recommended brake fluid to "MAX".

Use only brake fluid from a sealed container.

## ■ Recommended brake fluid

Refer to "Fluids" \$\textit{\$\textit{\$\textit{\$\textit{\$r\$}}}\$12-7.

## **CAUTION**

Never use different brands of brake fluid together. Also, avoid mixing DOT 3 and DOT 4 brake fluids even if they are the same brand.

## Clutch fluid (MT models)

## ■ Checking the fluid level

## **WARNING**

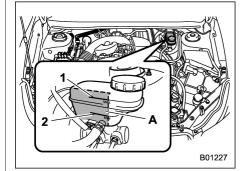
Never let clutch fluid contact your eyes because clutch fluid can be harmful to your eyes. If clutch fluid gets in your eyes, immediately flush them thoroughly with clean water. For safety, when performing this work, wearing eye protection is advisable.

## **A** CAUTION

- Clutch fluid absorbs moisture from the air. Any absorbed moisture can cause improper clutch operation.
- If the vehicle requires frequent refilling, there may be a leak. If you suspect a problem, have the vehicle checked at your SUBARU dealer.
- When clutch fluid is added, be careful not to allow any dirt into the tank.
- Never splash the clutch fluid over painted surfaces or rubber parts.

Alcohol contained in the clutch fluid may damage them.

- Be careful not to spill clutch fluid when adding it. If clutch fluid touches the exhaust pipe, it may cause a bad smell, smoke, and/or a fire. If clutch fluid gets on the exhaust pipe, be sure to wipe it off.
- The fluid level for the clutch system must be checked at the inboard side of the reservoir. It cannot be checked at the outboard side of the reservoir.



- 1) "MAX" level line
- 2) "MIN" level line
- A) The clutch fluid level must be checked in this area.

Check the fluid level monthly.

Check the fluid level on the outside of the reservoir. Because this reservoir is used for both the brake and clutch systems and has chambers for each system, be sure to check the fluid level for the clutch system at the **inboard side of the reservoir** (shaded area in the illustration). If the fluid level is below "MIN", add the recommended clutch fluid to "MAX".

Use only clutch fluid from a sealed container.

## Recommended clutch fluid

Refer to "Fluids" \$\textit{\$\textit{\$\textit{\$\textit{\$r\$}}}\$12-7.



Never use different brands of clutch fluid together. Also, avoid mixing DOT 3 and DOT 4 brake fluids even if they are the same brand.

#### **Brake booster**

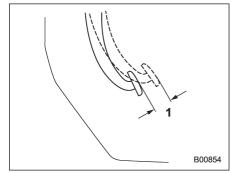
If the brake booster does not operate as described in the following, have it checked by your SUBARU dealer.

- 1. With the ignition switch in the "LOCK" (off) position, depress the brake pedal several times, applying the same pedal force each time. The distance the pedal travels should not vary.
- 2. With the brake pedal depressed, start the engine. The pedal should move slightly down to the floor.
- 3. With the brake pedal depressed, stop the engine and keep the pedal depressed for 30 seconds. The pedal height should not change.
- 4. Start the engine again and run for approximately one minute then turn it off. Depress the brake pedal several times to check the brake booster. The brake booster operates properly if the pedal stroke decreases with each depression.

## Brake pedal

Check the brake pedal free play and reserve distance according to the maintenance schedule in the "Warranty and Maintenance Booklet".

# ■ Checking the brake pedal free play



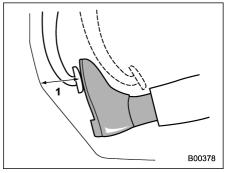
) 0.02 - 0.08 in (0.5 - 2.0 mm)

Turn the ignition switch to the "LOCK" (off) position and firmly depress the brake pedal several times. Lightly pull the brake pedal up with one finger to check the free play with a force of less than 2 lbf (10 N, 1 kgf).

If the free play is not within proper specification, contact your SUBARU deal-

er.

## ■ Checking the brake pedal reserve distance



1) More than 2.56 in (65 mm)

Depress the pedal with a force of approximately 66 lbf (294 N, 30 kgf) and measure the distance between the upper surface of the pedal pad and the floor.

When the measurement is smaller than the specification, or when the pedal does not operate smoothly, contact with your SUBARU dealer.

## Clutch pedal (MT models)

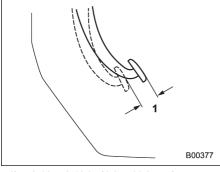
Check the clutch pedal free play and reserve distance according to the maintenance schedule in the "Warranty and Maintenance Booklet".

## ■ Checking the clutch function

Check the clutch engagement and disengagement.

- 1. With the engine idling, check that there are no abnormal noises when the clutch pedal is depressed, and that shifting into 1st or reverse feels smooth.
- 2. Start the vehicle by releasing the pedal slowly to check that the engine and transmission smoothly couple without any sign of slippage.

# ■ Checking the clutch pedal free play



1) 0.16 - 0.43 in (4.0 - 11.0 mm)

Lightly depress the clutch pedal down with your finger until you feel resistance, and check the free play.

If the free play is not within proper specification, contact your SUBARU dealer.

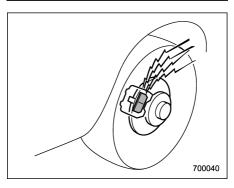
## Hill start assist system

Ensure that the Hill start assist system operates properly under the following circumstances.

- 1. Stop the vehicle on an uphill grade by depressing the brake pedal (all models) and clutch pedal (MT models only), with the engine running.
- 2. Make sure that the vehicle does not move backward for several seconds after the brake pedal is released.
- 3. Then make sure the vehicle starts climbing the grade by following the normal starting procedures.

If the Hill start assist system does not operate as described above, contact your SUBARU dealer.

# Replacement of brake pad and lining



The disc brakes have audible wear indicators on the brake pads. If the brake pads wear close to their service limit, the wear indicator makes a very audible scraping noise when the brake pedal is applied.

If you hear this scraping noise each time you apply the brake pedal, have the brake pads serviced by your SUBARU dealer as soon as possible.



If you continue to drive despite the scraping noise from the audible

brake pad wear indicator, it will result in the need for costly brake rotor repair or replacement.

# ■ Breaking-in of new brake pads and linings

When replacing the brake pad or lining, use only genuine SUBARU parts. After replacement, the new parts must be broken in as follows.

#### ▼ Brake pad and lining

While maintaining a speed of 30 to 40 mph (50 to 65 km/h), step on the brake pedal lightly. Repeat this five or more times

#### **▼** Parking brake lining

- 1. Drive the vehicle at a speed of approximately 22 mph (35 km/h).
- 2. With the parking brake release button pushed in, pull the parking brake lever SLOWLY and GENTLY (pulling with a force of approximately 33.7 lbf [150 N, 15.3 kgf]).
- 3. Drive the vehicle for approximately 220 yards (200 meters) in this condition.
- 4. Wait 5 to 10 minutes for the parking brake to cool down. Repeat this procedure.
- 5. Check the parking brake stroke. If the

parking brake stroke is out of the specified range, adjust it by turning the adjusting nut located on the parking brake lever.

#### Parking brake stroke:

7 - 8 notches / 45 lbf (200 N, 20.4 kgf)

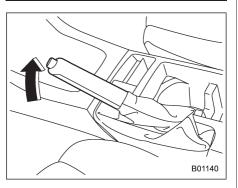


A safe location and situation should be selected for break-in driving.



Pulling the parking brake lever too forcefully may cause the rear wheels to lock. To avoid this, be certain to pull the lever up slowly and gently.

## Parking brake stroke



Check the parking brake stroke according to the maintenance schedule in the "Warranty and Maintenance Booklet". When the parking brake is properly adjusted, braking power is fully applied by pulling the lever up 7 to 8 notches gently but firmly (approximately 45 lbf [200 N, 20.4 kgf]). If the parking brake lever stroke is not within the specified range, have the brake system checked and adjusted at your SUBARU dealer.

#### Tires and wheels

## ■ Types of tires

You should be familiar with type of tires present on your vehicle.

#### ▼ All season tires

All season tires are designed to provide an adequate measure of traction, handling and braking performance in year-round driving including snowy and icy road conditions. However all season tires do not offer as much traction performance as winter (snow) tires in heavy or loose snow or on icy roads.

All season tires are identified by "ALL SEASON" and/or "M+S" (Mud & Snow) on the tire sidewall.

#### **▼** Summer tires

Summer tires are high-speed capability tires best suited for highway driving under dry conditions.

Summer tires are inadequate for driving on slippery roads such as on snow-covered or icy roads.

If you drive your vehicle on snow-covered or icy roads, we strongly recommend the use of winter (snow) tires.

When installing winter tires, be sure to replace all four tires.

#### **▼** Winter (snow) tires

Winter tires are best suited for driving on snow-covered and icy roads. However winter tires do not perform as well as summer tires and all season tires on roads other than snow-covered and icy roads.

# ■ Tire pressure monitoring system (TPMS) (if equipped)

The tire pressure monitoring system provides the driver with a warning message by sending a signal from a sensor that is installed in each wheel when tire pressure is severely low. The tire pressure monitoring system will activate only when the vehicle is driven. Also, this system may not react immediately to a sudden drop in tire pressure (for example, a blow-out caused by running over a sharp object).

If you adjust the tire pressures in a warm garage and will then drive the vehicle in cold outside air, the resulting drop in tire pressures may cause the low tire pressure warning light to illuminate. To avoid this problem when adjusting the tire pressures in a warm garage, inflate the tires to pressures higher than those shown on the tire placard. Specifically, inflate them by an extra 1 psi (6.9 kPa, 0.07 kgf/cm²) for every difference of 10°F (5.6°C) between the temperature in the garage and the

temperature outside. By way of example, the following table shows the required tire pressures that correspond to various outside temperatures when the temperature in the garage is 60°F (15.6°C).

#### Example:

Tire size: P205/55R16 89V and P205/50R17 88V

Standard tire pressures:

Front: 33 psi (230 kPa, 2.3 kgf/cm<sup>2</sup>) Rear: 32 psi (220 kPa, 2.2 kgf/cm<sup>2</sup>) Garage temperature: 60°F (15.6°C)

Outside temperature	Adjusted pressure [psi (kPa, kgf/cm²)]	
	Front	Rear
30°F (−1°C)	36 (250, 2.5)	35 (240, 2.4)
10°F (−12°C)	38 (265, 2.65)	37 (255, 2.55)
-10°F (-23°C)	40 (280, 2.8)	39 (270, 2.7)

If the low tire pressure warning light illuminates when you drive the vehicle in cold outside air after adjusting the tire pressures in a warm garage, re-adjust the tire pressures using the method described above. Then, increase the vehicle speed to at least 20 mph (32 km/h) and check to see that the low tire pressure warning light turns off a few minutes later. If the low tire pressure warning light does not turn off,

the tire pressure monitoring system may not be functioning normally. In this event, go to a SUBARU dealer to have the system inspected as soon as possible.

While the vehicle is driven, friction between tires and the road surface causes the tires to warm up. After illumination of the low tire pressure warning light, any increase in the tire pressures caused by an increase in the outside air temperature or by an increase in the temperature in the tires can cause the low tire pressure warning light to turn off.

System resetting is necessary when the wheels are changed (for example, a switch to snow tires) and new TPMS valves are installed on the newly fitted wheels. Have this work performed by a SUBARU dealer following wheel replacement.

It may not be possible to install TPMS valves on certain wheels that are on the market. Therefore, if you change the wheels (for example, a switch to snow tires), use wheels that have the same part number as the standard-equipment wheels. Without four operational TPMS valve/sensors on the wheels, the TPMS will not fully function and the warning light on the combination meter will illuminate steadily after blinking for approximately

one minute.

When a tire is replaced, adjustments are necessary to ensure continued normal operation of the tire pressure monitoring system. As with wheel replacement, therefore, you should have the work performed by a SUBARU dealer.



If the low tire pressure warning light does not illuminate briefly after the ignition switch is turned ON or the light illuminates steadily after blinking for approximately one minute, you should have your Tire Pressure Monitoring System checked at a SUBARU dealer as soon as possible.

If this light illuminates while driving, never brake suddenly and keep driving straight ahead while gradually reducing speed. Then slowly pull off the road to a safe place. Otherwise an accident involving serious vehicle damage and serious personal injury could occur.

If this light still illuminates while driving after adjusting the tire pressure, a tire may have significant damage and a fast leak that causes the tire to lose air rapidly. If you have

a flat tire, replace it with a spare tire as soon as possible.

When a spare tire is mounted or a wheel rim is replaced without the original pressure sensor/transmitter being transferred, the low tire pressure warning light will illuminate steadily after blinking for approximately one minute. This indicates the TPMS is unable to monitor all four road wheels. Contact vour SUBARU dealer as soon as possible for tire and sensor replacement and/ or system resetting. If the light illuminates steadily after blinking for approximately one minute, promptly contact a SUBARU dealer to have the system inspected.

## ■ Tire inspection

Check on a daily basis that the tires are free from serious damage, nails, and stones. At the same time, check the tires for abnormal wear.

Contact your SUBARU dealer immediately if you find any problem.

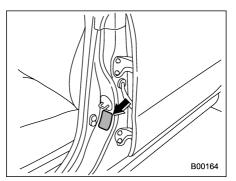
#### **NOTE**

 When the wheels and tires strike curbs or are subjected to harsh treatment as when the vehicle is driven on a rough surface, they can suffer damage that cannot be seen with the naked eye. This type of damage does not become evident until time has passed. Try not to drive over curbs, potholes or on other rough surfaces. If doing so is unavoidable, keep the vehicle's speed down to a walking pace or less, and approach the curbs as squarely as possible. Also, make sure the tires are not pressed against the curb when you park the vehicle.

 If you feel unusual vibration while driving or find it difficult to steer the vehicle in a straight line, one of the tires and/or wheels may be damaged. Drive slowly to the nearest authorized SUBARU dealer and have the vehicle inspected.

### ■ Tire pressures and wear

Maintaining the correct tire pressures helps to maximize the tires' service lives and is essential for good running performance. Check and, if necessary, adjust the pressure of each tire (including the spare - if equipped) at least once a month (for example, during a fuel stop) and before any long journey.



Tire placard

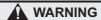
Check the tire pressures when the tires are cold. Use a pressure gauge to adjust the tire pressures to the values shown on the tire placard. The tire placard is located on the door pillar on the driver's side.

Driving even a short distance warms up the tires and increases the tire pressures. Also, the tire pressures are affected by the outside temperature. It is best to check tire pressure outdoors before driving the vehicle

When a tire becomes warm, the air inside it expands, causing the tire pressure to increase. Be careful not to mistakenly release air from a warm tire to reduce its pressure.

#### **NOTE**

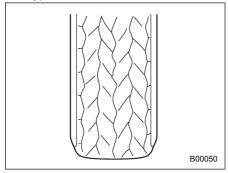
- The air pressure in a tire increases by approximately 4.3 psi (30 kPa, 0.3 kgf/cm<sup>2</sup>) when the tire becomes warm.
- The tires are considered cold when the vehicle has been parked for at least three hours or has been driven less than one mile (1.6 km).



Do not let air out of warm tires to adjust pressure. Doing so will result in low tire pressure.

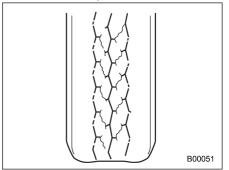
Incorrect tire pressures detract from controllability and ride comfort, and they cause the tires to wear abnormally.

• Correct tire pressure (tread worn evenly)



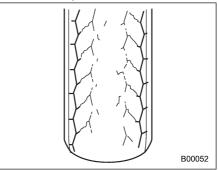
Roadholding is good, and steering is responsive. Rolling resistance is low, so fuel consumption is also lower.

• Abnormally low tire pressure (tread worn at shoulders)



Rolling resistance is high, so fuel consumption is also higher.

• Abnormally high tire pressure (tread worn in center)



Ride comfort is poor. Also, the tire magnifies the effects of road-surface bumps and dips, possibly resulting in vehicle damage.

If the tire placard shows tire pressures for the vehicle when fully loaded, adjust the tire pressures to the values that match current loading conditions.



#### WARNING

Driving at high speeds with excessively low tire pressures can cause the tires to deform severely and to rapidly become hot. A sharp increase in temperature could cause tread separation, and destruction of

the tires. The resulting loss of vehicle control could lead to an accident.

#### ■ Wheel balance

Each wheel was correctly balanced when your vehicle was new, but the wheels will become unbalanced as the tires become worn during use. Wheel imbalance causes the steering wheel to vibrate slightly at certain vehicle speeds and detracts from the vehicle's straight-line stability. It can also cause steering and suspension system problems and abnormal tire wear. If you suspect that the wheels are not correctly balanced, have them checked and adjusted by your SUBARU dealer. Also have them adjusted after tire repairs and after tire rotation.



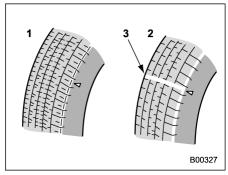
#### **CAUTION**

Loss of correct wheel alignment causes the tires to wear on one side and reduces the vehicle's running stability. Contact your SUBARU dealer if you notice abnormal tire wear.

#### **NOTE**

The suspension system is designed to hold each wheel at a certain alignment (relative to the other wheels and to the road) for optimum straight-line stability and cornering performance.

#### ■ Wear indicators



- New tread
- 2) Worn tread
- Tread wear indicator

Each tire incorporates a tread wear indicator, which becomes visible when the depth of the tread grooves decreases to 0.063 in (1.6 mm). A tire must be replaced when the tread wear indicator appears as a solid band across the tread.

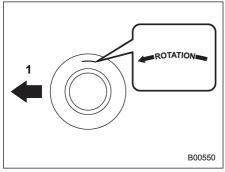
## **WARNING**

When a tire's tread wear indicator becomes visible, the tire is worn beyond the acceptable limit and must be replaced immediately. With a tire in this condition, driving at high speeds in wet weather can cause the vehicle to hydroplane. The resulting loss of vehicle control can lead to an accident.

### **NOTE**

For safety, inspect tire tread regularly and replace the tires before their tread wear indicators become visible.

#### ■ Tire rotation direction mark



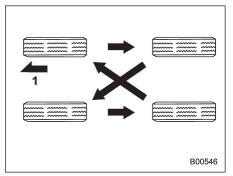
Example of tire rotation direction mark

1) Front

If the tire has the rotation direction specification, the tire rotation direction mark is placed on its sidewall.

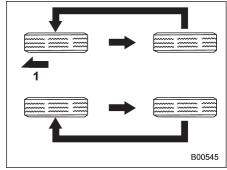
When you install a tire that has the tire rotation direction mark, install the tire with the direction mark facing forward.

#### ■ Tire rotation



Vehicles equipped with 4 non-unidirectional tires

1) Front



Vehicles equipped with unidirectional tires

1) Front

Tire wear varies from wheel to wheel. To maximize the life of each tire and ensure that the tires wear uniformly, it is best to rotate the tires every 7,500 miles (12,000 km). Move the tires to the positions shown in the illustration each time they are rotated.

Replace any damaged or unevenly worn tires at the time of rotation. After tire rotation, adjust the tires pressures and make sure the wheel nuts are correctly tightened.

After driving approximately 600 miles (1,000 km), check the wheel nuts again and retighten any nut that has become loose.

## **■** Tire replacement

The wheels and tires are important and integral parts of your vehicle's design; they cannot be changed arbitrarily. The tires fitted as standard equipment are optimally matched to the characteristics of the vehicle and were selected to give the best possible combination of running performance, ride comfort, and service life. It is essential for every tire to have a size and construction matching those shown on the tire placard and to have a speed symbol and load index matching those shown on the tire placard.

Using tires of a non-specified size detracts from controllability, ride comfort, braking performance, speedometer accuracy and odometer accuracy. It also creates incorrect body-to-tire clearances and inappropriately changes the vehicle's ground clearance.

All four tires must be the same in terms of manufacturer, brand (tread pattern), construction, and size. You are advised to replace the tires with new ones that are identical to those fitted as standard equipment.

For safe vehicle operation, SUBARU recommends replacing all four tires at the same time.

## **▲** WARNING

- When replacing or installing tire (s), all four tires must be the same for following items.
  - (a) Size
  - (b) Circumference
  - (c) Speed symbol
  - (d) Load index
  - (e) Construction
  - (f) Manufacturer
  - (g) Brand (tread pattern)

#### (h) Degrees of wear

For the items (a) to (d), you must obey the specification that is printed on the tire placard. The tire placard is located on the driver's door pillar.

If all of four tires are not the same for items (a) to (h), serious mechanical damage could occur to the drive train of your car, and affect the following.

- Ride
- Handling
- Braking
- Speedometer/Odometer calibration
- Clearance between the body and tires

It also may be dangerous and lead to loss of vehicle control, and it can lead to an accident.

 Use only radial tires. Do not use radial tires together with belted bias tires and/or bias-ply tires. Doing so can dangerously reduce controllability, resulting in an accident.

## **■** Wheel replacement

When replacing wheels due, for example, to damage, make sure the replacement wheels match the specifications of the wheels that are fitted as standard equipment. Replacement wheels are available from SUBARU dealers.

## **WARNING**

Use only those wheels that are specified for your vehicle. Wheels not meeting specifications could interfere with brake caliper operation and may cause the tires to rub against the wheel well housing during turns. The resulting loss of vehicle control could lead to an accident.

#### **NOTE**

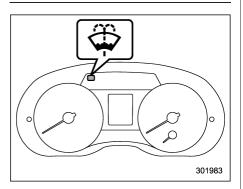
When any of the wheels are removed and replaced for tire rotation or for any other reason, always check the tightness of the wheel nuts after driving approximately 600 miles (1,000 km). If any nut is loose, tighten it to the specified torque.

#### Aluminum wheels

Aluminum wheels can be scratched and damaged easily. Handle them carefully to maintain their appearance, performance, and safety.

- When any of the wheels are removed and replaced for tire rotation or to change a flat tire, always check the tightness of the wheel nuts after driving approximately 600 miles (1,000 km). If any nut is loose, tighten it to the specified torque.
- Never apply oil to the threaded parts, wheel nuts, or tapered surface of the wheel.
- Never let the wheel rub against sharp protrusions or curbs.
- When wheel nuts, balance weights, or the center cap is replaced, be sure to replace them with genuine SUBARU parts designed for aluminum wheels.

#### Windshield washer fluid

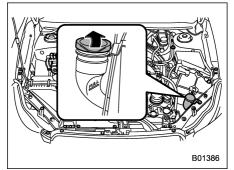


When there is only a small amount of washer fluid remaining, the windshield washer fluid warning light will illuminate. When this occurs, refill the washer fluid.

# Adding the windshield washer fluid



Never use engine coolant as washer fluid because it could cause paint damage.



Remove the washer tank filler cap, then add windshield washer fluid until it reaches the "FULL" mark on the tank.

#### ■ Windshield washer fluid

Use windshield washer fluid. If windshield washer fluid is unavailable use clean water.

In areas where water freezes in winter, use an anti-freeze type windshield washer fluid. SUBARU Windshield Washer Fluid contains 58.5% methyl alcohol and 41.5% surfactant, by volume. Its freezing temperature varies according to how much it is diluted, as indicated in the following table.

Washer Fluid Concentration	Freezing Temperature
30%	10.4°F (−12°C)
50%	-4°F (−20°C)
100%	-49°F (-45°C)

In order to prevent freezing of washer fluid, check the freezing temperatures in the table above when adjusting the fluid concentration to the outside temperature. If you fill the reservoir tank with a fluid with a different concentration from the one used previously, purge the old fluid from the piping between the reservoir tank and washer nozzles by operating the washer for a certain period of time. Otherwise, if the concentration of the fluid remaining in the piping is too low for the outside temperature, it may freeze and block the nozzles.

#### **CAUTION**

- Adjust the washer fluid concentration appropriately for the outside temperature. If the concentration is inappropriate, sprayed washer fluid may freeze on the windshield and obstruct vour view, and the fluid may freeze in the reservoir tank.
- State or local regulations on volatile organic compounds may restrict the use of methanol, a common windshield washer antifreeze additive. Washer fluids containing non-methanol antifreeze agents should be used only if they provide cold weather protection without damaging your vehicle's paint, wiper blades or washer system.

## Replacement of wiper blades

Grease, wax, insects, or other material on the windshield or the wiper blade results in jerky wiper operation and streaking on the glass. If you cannot remove the streaks after operating the windshield washer or if the wiper operation is jerky, clean the outer surface of the windshield (or rear window) and the wiper blades using a sponge or soft cloth with a neutral detergent or mild-abrasive cleaner. After cleaning, rinse the windshield and wiper blades with clean water. The windshield is clean if beads do not form when you rinse the windshield with water.

## **CAUTION**

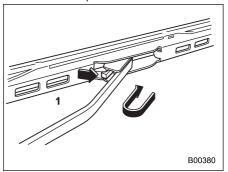
- Do not clean the wiper blades with gasoline or a solvent, such as paint thinner or benzine. This will cause deterioration of the wiper blades.
- While removing the wiper blades from the wiper arms, do not return the wiper arms to the original positions. Otherwise, the windshield surface may be scratched.
- When returning the raised wiper arms to the original positions.

carefully return the wiper arms on the windshield by hand. You should not return the wiper arms to the windshield only by the return spring. Otherwise, the wiper arms may be deformed and/ or the windshield surface may be scratched.

If you cannot eliminate the streaking even after following this method, replace the wiper blades using the following procedures.

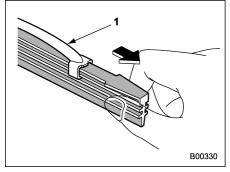
# ■ Windshield wiper blade assembly

1. Raise the wiper arm off the windshield.

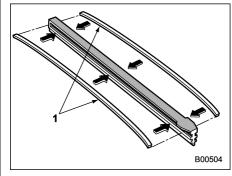


- 1) Stopper
- 2. Remove the wiper blade assembly by holding its pivot area and pushing it in the direction shown by the arrow while depressing the wiper blade stopper.
- 3. Install the wiper blade assembly to the wiper arm. Make sure that it locks in place.
- 4. Hold the wiper arm by hand and slowly lower it in position.

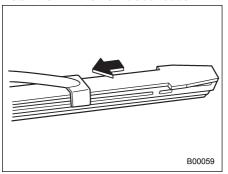
## ■ Windshield wiper blade rubber



- 1) Metal support
- 1. Grasp the locked end of the blade rubber assembly and pull it firmly until the stoppers on the rubber are free of the metal support.



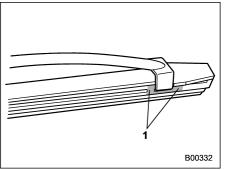
- 1) Metal spines
- 2. If the new blade rubber is not provided with two metal spines, remove the metal spines from the old blade rubber and install them in the new blade rubber.



3. Align the claws of the metal support

- CONTINUED -

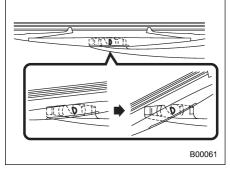
with the grooves in the rubber and slide the blade rubber assembly into the metal support until it locks.



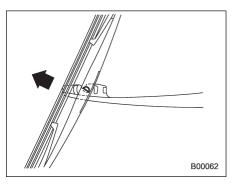
- 1) Stopper
- 4. Be sure to position the claws at the end of the metal support between the stoppers on the rubber as shown. If the rubber is not retained properly, the wiper blade may scratch the windshield.

# Rear window wiper blade assembly

1. Raise the wiper arm off the rear window.

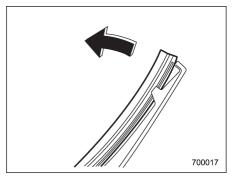


2. Turn the wiper blade assembly counterclockwise.

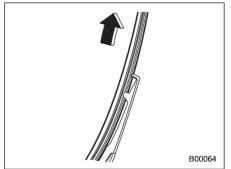


- 3. Pull the wiper blade assembly toward you to remove it from the wiper arm.
- 4. Install the wiper blade assembly to the wiper arm. Make sure that it locks in place.
- 5. Hold the wiper arm by hand and slowly lower it in position.

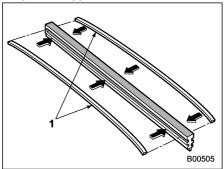
## Rear window wiper blade rubber



1. Pull out the end of the blade rubber assembly to unlock it from the plastic support.

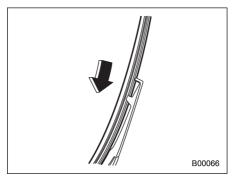


2. Pull the blade rubber assembly out of the plastic support.

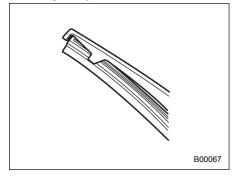


1) Metal spines

3. If the new blade rubber is not provided with two metal spines, remove the metal spines from the old blade rubber and install them in the new blade rubber.



4. Align the claws of the plastic support with the grooves in the blade rubber assembly, then slide the blade rubber assembly into place.



Securely retain both ends of the rubber with the stoppers on the plastic support

ends. If the rubber is not retained properly, the wiper may scratch the rear window glass.

5. Install the wiper blade assembly to the wiper arm. Make sure that it locks in place.6. Hold the wiper arm by hand and slowly lower it in position.

## **Battery**



#### **WARNING**

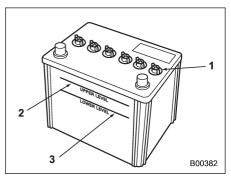
- Before beginning work on or near any battery, be sure to extinguish all cigarettes, matches, and lighters. Never expose a battery to an open flame or electric sparks. Batteries give off a gas which is highly flammable and explosive.
- For safety, in case an explosion does occur, wear eye protection or shield your eyes when working near any battery. Never lean over a battery.
- Do not let battery fluid contact eyes, skin, fabrics, or paint because battery fluid is a corrosive acid. If battery fluid gets on your skin or in your eyes, immediately flush the area with water thoroughly. Seek medical help immediately if acid has entered the eyes.

If battery fluid is accidentally swallowed, immediately drink a large amount of milk or water, and seek medical attention immediately.

To lessen the risk of sparks,

remove rings, metal watchbands, and other metal jewelry. Never allow metal tools to contact the positive battery terminal and anything connected to it WHILE you are at the same time in contact with any other metallic portion of the vehicle because a short circuit will result.

- Keep everyone including children away from the battery.
- Charge the battery in a wellventilated area.
- Battery posts, terminals and related accessories contain lead and lead compounds, chemicals known to the State of California to cause cancer and reproductive harm. Batteries also contain other chemicals known to the State of California to cause cancer. Wash hands after handling.



- 1) Cap
- Upper level
- Lower level

It is unnecessary to periodically check the battery fluid level or periodically refill with distilled water.

However, if the battery fluid level is below the lower level, remove the cap. Fill to the upper level with distilled water.



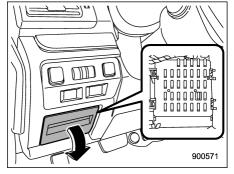
Never use more than 10 amperes when charging the battery because it will shorten battery life.

#### **Fuses**

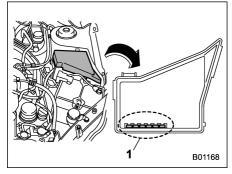


Never replace a fuse with one having a higher rating or with material other than a fuse because serious damage or a fire could result.

The fuses are designed to melt during an overload to prevent damage to the wiring harness and electrical equipment. The fuses are located in two fuse boxes.

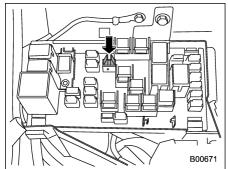


One is located under the instrument panel behind the fuse box cover on the driver's seat side. To remove the cover, pull it out.



#### 1) Spare fuses

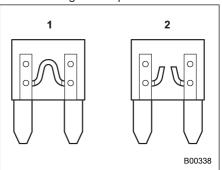
The other one (main fuse box) is housed in the engine compartment. Also, the spare fuses are stored in the fuse box cover.



The fuse puller is stored in the main fuse

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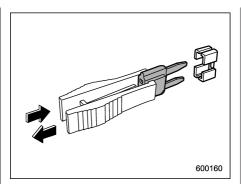
box in the engine compartment.



- 1) Good
- 2) Blown

If any lights, accessories or other electrical controls do not operate, inspect the corresponding fuse. If a fuse has blown, replace it.

- 1. Turn the ignition switch to the "LOCK" (off) position and turn off all electrical accessories.
- 2. Remove the cover.
- 3. Determine which fuse may be blown. Look at the back side of each fuse box cover and refer to "Fuses and circuits" \$\textit{\$\textit{\$\textit{\$r\$}}\$12-10.}



- 4. Pull out the fuse with the fuse puller.
- 5. Inspect the fuse. If it has blown, replace it with a spare fuse of the same rating.
- 6. If the same fuse blows again, this indicates that its system has a problem. Contact your SUBARU dealer for repairs.

## Installation of accessories

Always consult your SUBARU dealer before installing fog lights or any other electrical equipment in your vehicle. Such accessories may cause the electronic system to malfunction if they are incorrectly installed or if they are not suited for the vehicle.

## Replacing bulbs



#### **WARNING**

Bulbs may become very hot while illuminated. Before replacing bulbs, turn off the lights and wait until the bulbs cool down. Otherwise, there is a risk of sustaining a burn injury.



#### CAUTION

Replace any bulb only with a new bulb of the specified wattage. Using a bulb of different wattage could result in a fire. For the specified wattage of each bulb, refer to "Bulb chart" \$\tilde{\text{\$\sigma}}\$12-14.

Headlights (models with HID headlights)



### **WARNING**

High-intensity-discharge (HID) bulbs are used for the low beams of the headlights. These HID bulbs use an extremely high voltage. To avoid the risk of an electric shock that could result in serious injury, observe the following precautions.

- Do not replace any headlight bulbs (both low beam and high beam) by yourself.
- Do not remove/restore the headlight assemblies by yourself.
- Do not remove any headlightassembly components by yourself.

For replacement, contact your SUBARU dealer.

■ Headlights (models without HID headlights)



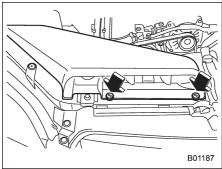
## CAUTION

Halogen headlight bulbs become very hot while in use. If you touch the bulb surface with bare hands or greasy gloves, fingerprints or grease on the bulb surface will develop into hot spots, causing the bulb to break. If there are finger prints or grease on the bulb surface, wipe them away with a soft cloth moistened with alcohol.

#### NOTE

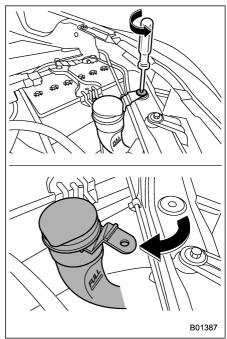
- If headlight aiming is required, consult your SUBARU dealer for proper adjustment of the headlight aim.
- It may be difficult to replace the bulbs. Have the bulbs replaced by your SUBARU dealer if necessary.

Perform the following steps to replace the bulbs.



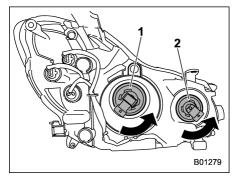
Right-hand side

1. Use a screwdriver to undo the clips on the air intake duct, then remove the air intake duct (right-hand side).



Left-hand side

2. Use a screwdriver to remove the secured clip of the washer tank. To make it easy to access the bulb, turn the neck of the washer fluid filler pipe as illustrated (left-hand side).



- 1) Low beam bulb
- 2) High beam bulb
- 3. Disconnect the electrical connector from the bulb and remove the bulb from the headlight assembly by turning it counterclockwise.
- 4. Replace the bulb with new one. At this time, use care not to touch the bulb surface.
- 5. To install the bulb to the headlight assembly, turn it clockwise until it clicks.
- 6. Reconnect the electrical connector.
- 7. Install the air intake duct with clips (right-hand side).
- 8. Set the washer fluid filler pipe to the original place and secure it by clip (left-hand side).

## **■** Front turn signal light

It may be difficult to replace the bulbs. Have the bulbs replaced by your SUBARU dealer if necessary.

## ■ Parking light

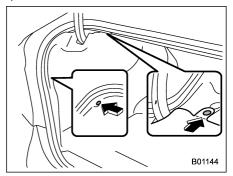
It may be difficult to replace the bulbs. Have the bulbs replaced by your SUBARU dealer if necessary.

## **■** Front fog light (if equipped)

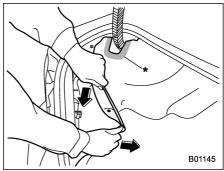
It may be difficult to replace the bulbs. Have the bulbs replaced by your SUBARU dealer if necessary.

## ■ Rear combination lights

#### ▼ 4-door models



1. Remove the clips from the trunk trim with a flat-head screwdriver.

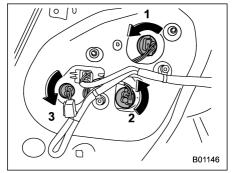


2. Open the rear portion of the trunk trim

panel as illustrated.

#### NOTE

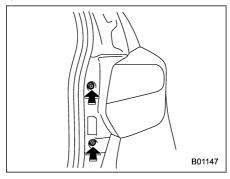
Make sure that the "\*" part of the trunk trim in the illustration does not contact the trunk lid stay. If the "\*" part is bent, the trunk trim may be torn.



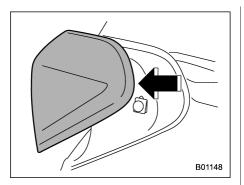
- 1) Stop light/Tail and rear side marker light
- 2) Rear turn signal light
- 3) Backup light
- 3. Remove the bulb socket from the rear combination light assembly by turning it counterclockwise.
- 4. Pull the bulb out of the bulb socket and replace it with a new one.
- 5. Set the bulb socket into the rear combination light assembly and turn it clockwise until it locks.

6. Secure the rear trunk trim panel with the clips.

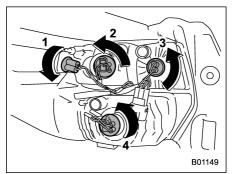
#### ▼ 5-door models



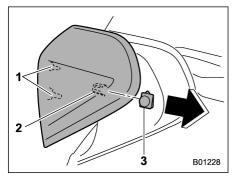
1. Using a Phillips screwdriver, remove the upper and lower screws that secure the rear combination light assembly.



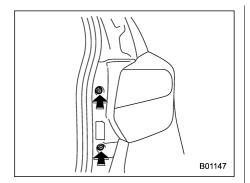
2. Slide the rear combination light assembly rearward and remove it from the vehicle.



- 1) Rear side marker light
- 2) Rear turn signal light
- 3) Backup light
- 4) Stop light/Tail light
- 3. Remove the bulb socket from the rear combination light assembly by turning it counterclockwise.
- 4. Pull the bulb out of the bulb socket and replace it with a new one.
- 5. Set the bulb socket into the rear combination light assembly and turn it clockwise until it locks.



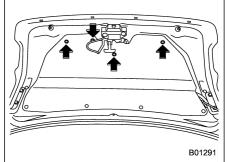
- 1) Guide pins
- 2) Catch
- 3) Clip
- 6. Put the rear combination light assembly into place while aligning the 2 guide pins and a catch with the guide holes and a clip on the vehicle.



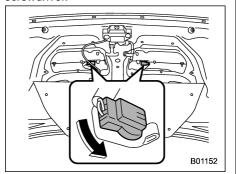
7. Tighten the upper and lower screws.

## **■** License plate light

#### ▼ 4-door models

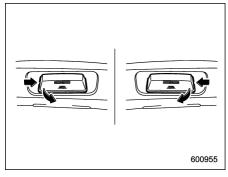


1. Open the trunk and remove the clips from the trunk lid trim with a flat-head screwdriver.

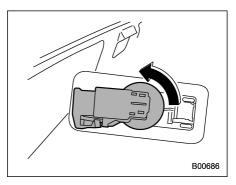


- 2. Turn the bulb socket counterclockwise and pull out the socket.
- 3. Pull the bulb out of the socket.
- 4. Install a new bulb.
- 5. Reinstall the bulb socket and the trunk lid trim.

#### **▼** 5-door models



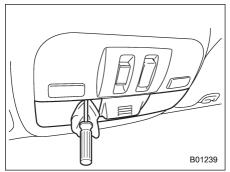
1. License plate light must be pushed inwards, then pulled out to be removed.



- 2. Turn the bulb socket counterclockwise and pull out the socket.
- 3. Pull the bulb out of the socket.
- 4. Install a new bulb.
- 5. Reinstall the bulb socket and the license plate light cover.

## ■ Map light

#### ▼ Type A



1. Remove the lens by prying the edge of the lens with a flat-head screwdriver.

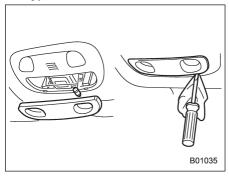


2. Turn the bulb until the flat surfaces at

its ends are aligned vertically. Pull the bulb straight downward to remove it.

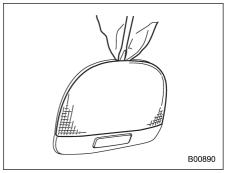
- 3. Install a new bulb.
- 4. Reinstall the lens.

## ▼ Type B

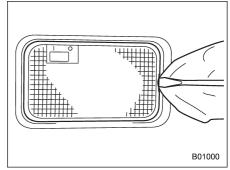


- 1. Remove the lens by prying the edge of the lens with a flat-head screwdriver.
- 2. Pull the bulb out of the socket.
- Install a new bulb.
- 4. Reinstall the lens.

# ■ Dome light and cargo area light



Dome light



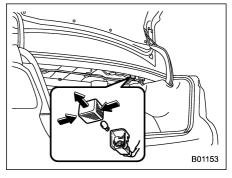
Cargo area light

1. Remove the lens by prying the edge of

the lens with a flat-head screwdriver.

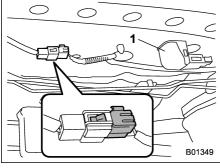
- 2. Pull the bulb out of the socket.
- 3. Install a new bulb.
- 4. Reinstall the lens.

## ■ Trunk light

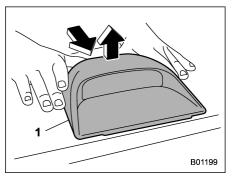


- 1. Remove the cover by squeezing its sides and pulling it.
- 2. Pull the bulb out of the socket.
- 3. Install a new bulb.
- 4. Reinstall the cover.

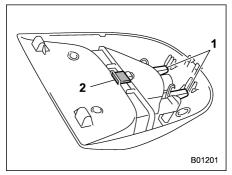
## ■ High-mounted stop light (4-door)



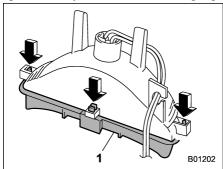
- 1) Trunk light
- 1. Open the trunk and locate the electrical connector of the high-mounted stop light that is wired near the trunk light by referring to the illustration.
- 2. Disconnect the electrical connector by unlocking its retainer. Then, enter the rear cabin.



- 1) Mount assembly
- 3. While pushing the mount assembly rearward by hand, lift up the front end of the mount assembly to remove it. At this time, be careful not to allow your hand to slip off the mount assembly.



- 1) Retainer
- 2) Locking lug
- 4. Undo the two retainers and slide the light assembly to release the locking lug.



1) Lens

- 5. Unlock the three retainers and remove the lens.
- 6. Pull the bulb out of the bulb socket and replace it with a new one.
- 7. Reinstall the removed parts in the reverse order of removal.

#### Other bulbs

It may be difficult to replace the bulbs. Have the bulbs replaced by your SUBARU dealer if necessary.

## **Battery replacement**

## ■ Battery replacement timing

The transmitter battery may be discharged under the following conditions.

- The operating distance of the remote keyless entry system is unstable
- The transmitter does not operate properly when used within the standard distance

Replace the battery with a new one.

## ■ Safety precautions

## **A** CAUTION

- Do not let dust, oil or water get on or in the transmitter when replacing battery.
- Be careful not to damage the printed circuit board in the transmitter when replacing the battery.
- Be careful not to allow children to touch the battery and any removed parts; children could swallow them.
- There is a danger of an explosion if the battery is incorrectly replaced. Replace only with the same or equivalent type of the

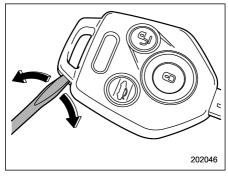
#### battery.

 Batteries should not be exposed to excessive heat such as bright sunlight, fire or the like.

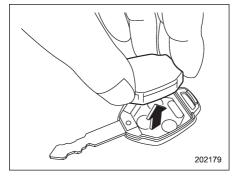
#### **NOTE**

- Replace only with the same or equivalent type of battery recommended by the manufacturer.
- Dispose of used batteries according to local laws.
- Mount the battery in the correct orientation to prevent fluid leakage.
   Be careful not to bend the terminals. It may result in a malfunction.
- It is recommended that the battery should be replaced by a SUBARU dealer.
- Use a new battery.
- After replacing the battery, confirm that the transmitter functions properly.

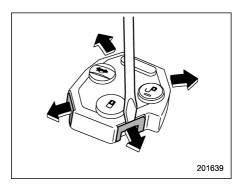
## ■ Replacing transmitter battery



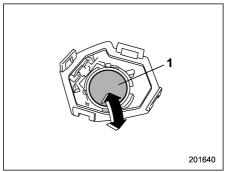
1. Open the key head using a flat-head screwdriver.



2. Remove the transmitter case from the key head.



3. Open the transmitter case by releasing the hooks.



- 1) Negative (-) side facing up
- 4. Replace the old battery with a new battery (type CR1620 or equivalent) making sure to install the new battery with the

negative (-) side facing up.

- 5. Put together the transmitter case by fitting the hooks on the case.
- 6. Reinstall the transmitter case in the key head.
- 7. Refit the removed half of the key head.

After the battery is replaced, the transmitter must be synchronized with the remote keyless entry system's control unit. Press either the "\(\textit{o}\)" or "\(\textit{o}\)" button six times to synchronize the unit.

# Specifications

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# **Specifications**

These specifications are subject to change without notice.

## **■** Dimensions

in (mm)

Item XV CROSS		5-door models 4-door models		5-door models	
		XV CROSSTREK models	SPORT models	Other models	4-door models
Overall length		175.2 (4,450)	173.8	(4,415)	180.3 (4,580)
Overall width		70.1 (1,780)	68.5 (1,740)		
Overall height 63.6 (1,615) 59.5 (1		59.5 (1,515) 57.7 (1,465)			
Wheel base		103.7 (2,635)	104.1 (2,645)		
Tread	Front	60.0 (1,525)	59.4 (1,510)		
	Rear	60.0 (1,525)	59.6 (1,515)		
Ground clea	rance*	8.7 (220)	5.9 (150) 5.7 (145)		(145)

<sup>\*:</sup> Measured with vehicle empty

# ■ Engine

Engine model	FB20 (2.0 L, DOHC, non-turbo)
Engine type	Horizontally opposed, liquid cooled 4 cylinder, 4-stroke gasoline engine
Displacement cu-in (cc)	121.7 (1,995)
Bore × Stroke in (mm)	3.31 × 3.54 (84.0 × 90.0)
Compression ratio	10.5 : 1
Firing order	1 – 3 – 2 – 4

## Fuel

Fuel requirement	Fuel tank capacity	
Unleaded gasoline with 87 AKI (90 RON) or higher	Except XV CROSSTREK models	14.5 US gal (55 liters, 12.1 lmp gal)
	XV CROSSTREK models	15.9 US gal (60 liters, 13.2 lmp gal)

For more details, refer to "Fuel" \$\tilde{F}7-3.

## ■ Engine oil

For the checking, adding and replacing procedure or other details, refer to "Engine oil" \$\textit{\$\textit{\$\textit{e}}}\$11-8.

#### **NOTE**

The procedure for changing the engine oil and oil filter should be performed by a properly-trained expert. It is recommended that you have this service performed by your SUBARU dealer.

### **▼** Approved engine oil

Always use the SUBARU approved engine oil. For further details, please contact your SUBARU dealer. If the approved engine oil is unavailable, use the alternative engine oil described on the next page.

### **▼** Alternative engine oil

If the SUBARU approved oil is unavailable, the following alternative oil can be used.

#### NOTE

Each quantity indicated here is only a guideline. The necessary quantity for replacement may differ slightly depending on the temperature and other factors.

Oil gra	ade	SAE viscosity No. and applicable temperature	Engine oil capacity
API (American Petroleum Institute) classification SM with the words "ENERGY CONSERVING" or SN with the words "RESOURCE CONSERVING"	ILSAC (International Lubricant Specification Advisory Committee) GF-4 or GF-5, which can be identified with the ILSAC certification mark (Starburst mark)	OW-20 synthetic oil is the required oil for optimum engine performance and protection. Conventional oil may be used if synthetic oil is unavailable.  *: If OW-20 synthetic oil is not available, 5W-30 or 5W-40 conventional oil may be used if replenishment is needed but should be changed to OW-20 synthetic oil at the next oil change.  'C -30-20-10 0 10 20 30 40	<ul> <li>Adding the oil from low level to full level:</li> <li>1.1 US qt (1.0 liter, 0.9 lmp qt)</li> <li>Changing the oil and oil filter:</li> <li>5.1 US qt (4.8 liters, 4.2 lmp qt)</li> </ul>

# ■ Manual transmission, front differential and rear differential gear oil

Oil	Manual transmission oil	Front differential gear oil (CVT models)	Rear differential gear oil	
Oil grade	<ul> <li>SUBARU Extra MT*<sup>3</sup></li> <li>API classification GL-5 (75W-90)*<sup>4</sup></li> </ul>	API classification GL-5		
SAE viscosity No. and applicable temperature	_	• 90  C 30 20 10 0  F 20 0 20 40	V/90*  10 20 30 40 0 60 80 100 90  zomose4	
Oil capacity*1	3.7 US qt (3.5 liters, 3.1 Imp qt)	1.5 US qt (1.4 liters, 1.2 lmp qt)	0.8 US qt (0.8 liters, 0.7 Imp qt)	
Remarks*2	"Manual transmission oil" #11-15	"Front differential gear oil (CVT models)" #11-15	"Rear differential gear oil" #11-16	

<sup>\*1:</sup> The indicated oil quantity is only a guideline. The necessary quantity for replacement may differ slightly depending on the temperature and other factors. After refilling the gearbox with oil, the oil level should be checked.
\*2: For more details about maintenance and service, refer to the indicated section.
\*3: The vehicle is filled at the factory with this type of manual transmission oil.
\*4: You may use this type of manual transmission oil. However, using this type of oil will detract from driveability and fuel efficiency.

#### ■ Fluids

Fluid	Fluid type*1	Fluid capacity*2	Remarks*3
Continuously variable transmission fluid (CVT models)	Consult your SUBARU dealer.	13.1 US qt (12.4 liters, 10.9 lmp qt)	"Continuously variable transmission fluid" #11-15
Brake fluid	FMVSS No. 116, fresh DOT 3 or DOT 4 brake fluid	-	"Brake fluid" ℱ11-16
Clutch fluid (MT models)	FMVSS No. 116, fresh DOT 3 or DOT 4 brake fluid	-	"Clutch fluid (MT models)" #11- 17

## **■** Engine coolant

	Vehicle model	Coolant capacity	Coolant type
XV CROSSTREK models	MT models	8.0 US qt (7.6 liters, 6.7 lmp qt)	
AV CROSSTRER IIIodels	CVT models	8.5 US qt (8.0 liters, 7.0 lmp qt)	SUBARU Super Coolant
Other models	MT models	8.2 US qt (7.8 liters, 6.9 Imp qt)	SUBARU Super Coolani
Other models	CVT models	8.7 US qt (8.2 liters, 7.2 lmp qt)	

The indicated coolant quantity is only a guideline. The necessary quantity for replacement may differ slightly depending on the temperature and other factors. For more details about maintenance and service, refer to "Cooling system" #11-11.

## **■** Electrical system

Battery type and capacity (5HR)	55D23L (12V-48AH)	
Alternator	12V-110A	
Spark plugs	SILZKAR7B11 (NGK)	

<sup>\*1:</sup> Use one of the indicated types of fluid.
\*2: The indicated fluid quantity is only a guideline. The necessary quantity for replacement may differ slightly depending on the temperature and other factors.

<sup>\*3:</sup> For more details about maintenance and service, refer to the indicated section.

## 12-8 Specifications/Specifications

#### ■ Tires

#### **▼** U.S.-spec. models and Canada-spec. models

Tire size		P195/65R15 89H	P205/55R16 89V	P205/50R17 88V	P225/55R17 95H	
Wheel size		15 × 6 J	16 × 6 <sup>1</sup> / <sub>2</sub> J	17 × 7 JJ* <sup>1</sup> 17 × 7 J* <sup>2</sup>		17 × 7 J
Pressure	Front	22 noi /220 kD	33 psi (230 kPa. 2.3 kgf/cm <sup>2</sup> )   32 psi (220 kPa. 2.2 kgf/cm <sup>2</sup> )		CVT models	33 psi (230 kPa, 2.3 kgf/cm <sup>2</sup> )
		33 psi (230 kp			MT models	32 psi (220 kPa, 2.2 kgf/cm <sup>2</sup> )
	Rear	22 no; /220 kDo 2 2 kmf/am²\		30 psi (210 kPa, 2.1 kgf/cm²)	CVT models	32 psi (220 kPa, 2.2 kgf/cm <sup>2</sup> )
	32 psi (220 kPa, 2.2 kgf/cm²)		30 psi (210 kPa, 2.1 kgi/ciii )	MT models	30 psi (210 kPa, 2.1 kgf/cm <sup>2</sup> )	
Temporary	Size	T135/80 D16			T145/90 D16	
spare tire	Pressure	60 psi (420 kPa, 4.2 kgf/cm <sup>2</sup> )				
Wheel nut ti torque	ghtening	89 lbf·ft (120 N·m, 12 kgf·m)* <sup>3</sup>				

<sup>\*1: &</sup>quot;SPORT" and "SPORT-Ltd" models

<sup>\*2:</sup> Other vehicle models

<sup>23:</sup> This torque is equivalent to applying approximately 88 to 110 lbf (40 to 50 kgf) at the end of the wheel nut wrench. If you have tightened the wheel nuts by yourself, have the tightening torque checked at the nearest automotive service facility as soon as possible. For the wheel nut tightening procedure, refer to "Changing a flat tire" \$\sigma 9-6\$.

#### **▼** Other models

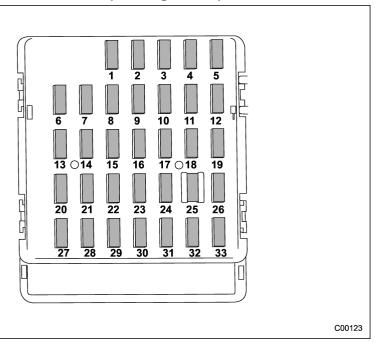
Tire size		P205/55R16 89V	P205/50R17 88V	225/55R17 97V
Wheel size		16 × 6 1/2 J	17 × 7 J	17 × 7 J
Pressure	Front	33 psi (230 kPa, 2.3 kgf/cm²)	32 psi (220 kPa, 2.2 kgf/cm <sup>2</sup> )	32 psi (220 kPa, 2.2 kgf/cm²)
	Rear	32 psi (220 kPa, 2.2 kgf/cm²)	30 psi (210 kPa, 2.1 kgf/cm²)	30 psi (210 kPa, 2.1 kgf/cm²)
Temporary spare	Size		185/65R17	
tire Pressure			42 psi (290 kPa, 3.0 kgf/cm²)	
	Wheel nut tightening torque		73.8 lbf·ft (100 N·m, 10.2 kgf·m)	

## ■ Brake disc

If you need information on the usage limit value of brake discs and the method for measuring them, we recommend that you consult your SUBARU dealer.

## **Fuses and circuits**

# ■ Fuse panel located in the passenger compartment

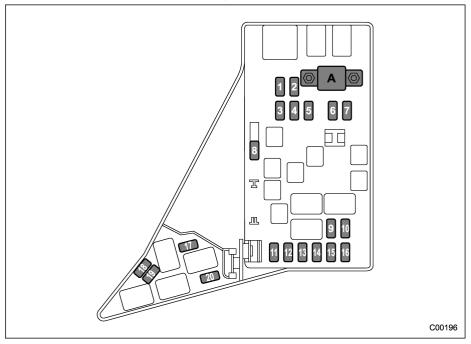


Fuse panel	Fuse rating	Circuit	
1	20A	Trailer hitch connector	
2	Empty		
3	15A	•	Door locking
4	10A	•	Front wiper deicer relay
5	10A	<ul><li>Combination meter</li><li>Clock</li></ul>	
6	7.5A	•	Remote control rear view mirrors Seat heater relay
7	15A	•	Combination meter Integrated unit
8	15A	Stop light	
9	15A	Front wiper deicer	
10	7.5A	Power supply (battery)	
11	7.5A	Turn signal unit	
12	15A	•	Transmission control unit Engine control unit Integrated unit
13	20A	<ul><li>Accessory power outlet (center console)</li><li>AC110V (If installed)</li></ul>	
14	15A	•	Parking light Tail light Rear combination light

Fuse panel	Fuse rating	Circuit	
15	10A	•	Luggage light Clock
16	7.5A	•	Illumination
17	15A	•	Seat heaters
18	10A	•	Backup light
19	7.5A	(Sp	pare)
20	10A	•	Accessory power outlet (instrument panel)
21	7.5A	•	Starter relay
22	10A	•	Air conditioner Rear window defogger relay coil
23	Empty		
24	10A	•	Audio unit Clock
25	15A	•	SRS airbag system
26	7.5A	•	Power window relay Radiator main fan relay
27	15A	•	Blower fan
28	15A	•	Blower fan
29	15A	•	Fog light
30	Empty		
31	7.5A	•	Auto air conditioner unit Integrated unit

Fuse panel	Fuse rating	Circuit	
32	7.5A	•	Clutch switch Steering lock control unit
33	7.5A	Vehicle Dynamics Control unit	

# ■ Fuse panel located in the engine compartment



A) Main fuse

Fuse panel	Fuse rating		Circuit
1	30A	•	ABS unit Vehicle Dynamics Con- trol unit
2	25A	•	Main fan (cooling fan)
3	25A	•	Sub fan (cooling fan)
4	Empty		
5	Empty		
6	30A	•	Headlight (low beam)
7	15A	Headlight (high beam)	
8	20A	•	Back-up
9	15A	•	Horn
10	25A	<ul><li>Rear window defogger</li><li>Mirror heater</li></ul>	
11	15A	•	Fuel pump
12	20A	•	Continuously variable transmission control unit
13	7.5A	•	Engine control unit
14	15A	•	Turn and hazard warn- ing flasher
15	15A	•	Tail and illumination re- lay
16	7.5A	•	Alternator

Fuse panel	Fuse rating	Circuit	
17	Empty		
18	Empty		
19	15A	<ul> <li>Headlight (low beam – right hand)</li> </ul>	
20	15A	<ul> <li>Headlight (low beam – left hand)</li> </ul>	

#### **Bulb chart**

## ■ Safety precautions

# **WARNING**

- Bulbs may become very hot while illuminated. Before replacing bulbs, turn off the lights and wait until the bulbs cool down. Otherwise, there is a risk of sustaining a burn injury.
- For models with HID low beam headlights, observe the following precautions. Not doing so carries the risk of an electric shock that could result in serious injury because the HID bulbs use an extremely high voltage.
  - Do not replace any headlight bulbs (both low beam and high beam) by yourself.
  - Do not remove/restore the headlight assemblies by yourself.
  - Do not remove any headlightassembly components by yourself.

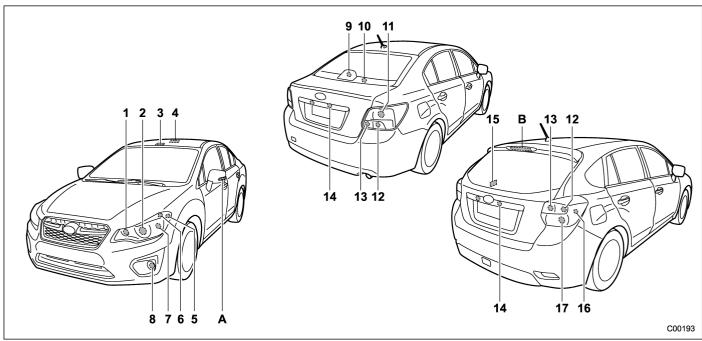
For replacement, contact your SUBARU dealer.



#### CAUTION

Replace any bulb only with a new bulb of the specified wattage. Using a bulb of different wattage could result in a fire.

## ■ Bulb chart

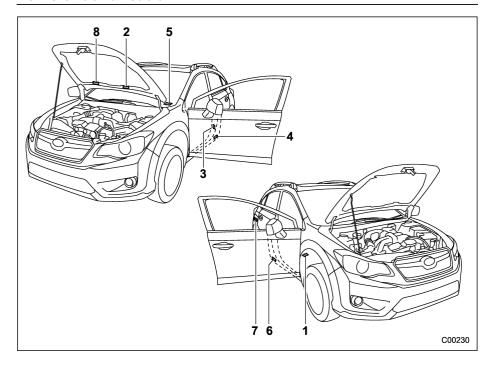


**NOTE** Lights A and B are the LED (Light Emitting Diode) type. Consult your SUBARU dealer for replacement.

# 12-16 Specifications/Bulb chart

		Wattage	Bulb No.
1)	High beam headlight	12V-60W	HB3 (9005)
2)	Low beam headlight		
	Models with HID light	12V-35W	D2R
	Models with halogen light	12V-55W	H11
3)	Map light	12V-8W	_
4)	Dome light	12V-8W	_
5)	Front side marker light	12V-5W	W5W (168)
6)	Parking light	12V-5W	W5W (168)
7)	Front turn signal light	12V-21W	WY21W
8)	Front fog light	12V-24W	PSX24W
9)	High-mounted stop light (4-door)	12V-21W	W21W
10)	Trunk light (4-door)	12V-5W	W5W
11)	Stop light/Tail and rear side marker light (4-door)	12V-21/5W	W21/5W
12)	Rear turn signal light	12V-21W	WY21W
13)	Backup light	12V-16W	W16W (921)
14)	License plate light	12V-5W	W5W (168)
15)	Cargo area light (5-door)	12V-5W	_
16)	Rear side marker light (5-door)	12V-5W	W5W (168)
17)	Stop light/Tail light (5-door)	12V-21/5W	W21/5W
A)	Side turn signal light (if equipped)	_	_
B)	High-mounted stop light (5-door)	_	_

## **Vehicle identification**



- Vehicle identification number (under the floor carpet of the right-hand front seat)
- 2) Emission control label
- 3) Tire inflation pressure label
- 4) Certification label
- 5) Vehicle identification number plate
- 6) Model number label
- ) Fuel label
- 8) Air conditioner label



# Consumer information and Reporting safety defects

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#### For U.S.A.

The following information has been compiled according to Code of Federal Regulations "Title 49, Part 575".

## Tire information

## ■ Tire labeling

Many markings (e.g. Tire size, Tire Identification Number or TIN) are placed on the sidewall of a tire by tire manufacturers. These markings can provide you with useful information on the tire.

#### **▼** Tire size

Your vehicle comes equipped with P-Metric tire size. It is important to understand the sizing system in selecting the proper tire for your vehicles. Here is a brief review of the tire sizing system with a breakdown of its individual elements.

#### **▽ P Metric**

With the P-Metric system, Section Width is measured in millimeters. To convert millimeters into inches, divide by 25.4. The Aspect Ratio (Section Height divided by Section Width) helps provide more dimensional information about the tire size.

## Example:

$$\frac{P}{(1)} \frac{205}{(2)} / \frac{55}{(3)} \frac{R}{(4)} \frac{16}{(5)}$$

- (1) P = Certain tire type used on light duty vehicles such as passenger cars
- (2) Section Width in millimeters
- (3) Aspect Ratio (= section height ÷ section width).
- (4) R = Radial Construction
- (5) Rim diameter in inches

### 

The load and speed rating descriptions will appear following the size designation.

They provide two important facts about the tire. First, the number designation is its load index. Second, the letter designation indicates the tire's speed rating.

#### **Example:**

# P 205 / 55 R 16 89 V

Size designation

(6) (7)

(6) Load Index: A numerical code which specifies the maximum load a tire can carry at the speed indicated by its speed symbol, at maximum inflation pressure.

For example, "90" means 1,323 lbs (600 kg), "89" means 1,278 lbs (580 kg).

# **WARNING**

Load indices apply only to the tire, not to the vehicle. Putting a load rated tire on any vehicle does not mean the vehicle can be loaded up to the tire's rated load.

(7) Speed Rating: An alphabetical system describing a tire's capability to travel at established and predetermined speeds.

For example, "V" means 149 mph (240 km/h)

## **WARNING**

- Speed ratings apply only to the tire, not to the vehicle.
   Putting a speed rated tire on any vehicle does not mean the vehicle can be operated at the tire's rated speed.
- The speed rating is void if the tires are worn out, damaged, repaired, retreaded, or otherwise altered from their original condition. If tires are repaired, retreaded, or otherwise altered, they may not be suitable for original equipment tire designed loads and speeds.

### **▼** Tire Identification Number (TIN)

Tire Identification Number (TIN) is marked on the intended outboard sidewall. The TIN is composed of four groups. Here is a brief review of the TIN with a breakdown of its individual elements.

# $DOT \underbrace{XX}_{(1)} \underbrace{XX}_{(2)} \underbrace{XXX}_{(3)} \underbrace{XXXX}_{(4)}$

- (1) Manufacturer's Identification Mark
- (2) Tire Size
- (3) Tire Type Code
- (4) Date of Manufacture

The first two figures identify the week, starting with "01" to represent the first full week of the calendar year; the second two figures represent the year. For example, 0101 means the 1st week of 2001.

## **▼** Other markings

The following makings are also placed on the sidewall.

## 

The maximum cold inflation pressure to which this tire may be inflated. For example, "300 kPa (44 PSI) MAX. PRESS"

#### **▽** Maximum load rating

The load rating at the maximum permissible weight load for this tire. For example, "MAX. LOAD 580 kg (1279 LBS) @ 300 kPa (44 PSI) MAX. PRESS."

## WARNING

Maximum load rating applies only to the tire, not to the vehicle. Putting a load rated tire on any vehicle does not mean the vehicle can be loaded up to the tire's rated load.

#### **▽** Construction type

Applicable construction of this tire. For example, "TUBELESS STEEL BFI TFD RADIAI "

#### **▽** Construction

The generic name of each cord material used in the plies (both sidewall and tread area) of this tire. For example, "PLIES: TREAD 2 STEEL + 2 POLYESTER SIDE-WALL 2 POLYESTER"

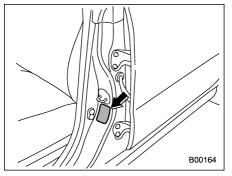
## **▽** Uniform Tire Quality Grading (UTQG)

For details, refer to "Uniform tire quality grading standards" \$\tilde{g}\$13-15.

- Recommended tire inflation pressure
- ▼ Recommended cold tire inflation pressure

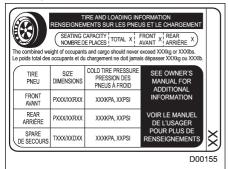
For recommended cold tire inflation pressure for your vehicle's tires. refer to "Tires" \$\textit{\$\textit{\$\textit{\$\textit{\$r\$}}}\$12-8.

## ▼ Vehicle placard



The vehicle placard is affixed to the driver's side B-pillar.

#### Example:



The vehicle placard shows original tire size, recommended cold tire inflation pressure on each tire at maximum loaded vehicle weight, seating capacity and loading information

#### ▼ Adverse safety consequences of under-inflation

Driving at high speeds with excessively low tire pressures can cause the tires to flex severely and to rapidly become hot. A sharp increase in temperature could cause tread separation, and failure of the tire(s). Possible resulting loss of vehicle control could lead to an accident.

#### Measuring and adjusting air pressure to achieve proper inflation

Check and, if necessary, adjust the pressure of each tire (including the spare) at least once a month and before any long journey. Check the tire pressures when the tires are cold. Use a pressure gauge to adjust the tire pressures to the specific values. Driving even a short distance warms up the tires and increases the tire pressures. Also, the tire pressures are affected by the outside temperature. It is best to check tire pressure outdoors before driving the vehicle. When a tire becomes warm, the air inside it expands, causing the tire pressure to increase. Be careful not to mistakenly release air from a warm tire to reduce its pressure.

## **■** Glossary of tire terminology

#### Accessory weight

The combined weight (in excess of those standard items which may be replaced) of automatic transmission, power steering, power brakes, power windows, power seats, radio, and heater, to the extent that these items are available as factory-installed equipment (whether installed or not).

#### Bead

The part of the tire that is made of steel wires, wrapped or reinforced by ply cords and that is shaped to fit the rim.

#### • Bead separation

A breakdown of the bond between components in the bead.

## Bias ply tire

A pneumatic tire in which the ply cords that extend to the beads are laid at alternate angles substantially less than 90 degrees to the centerline of the tread.

#### Carcass

The tire structure, except tread and

sidewall rubber which, when inflated, bears the load.

#### Chunking

The breaking away of pieces of the tread or sidewall.

#### • Cold tire pressure

The pressure in a tire that has been driven less than 1 mile or has been standing for three hours or more.

#### Cord

The strands forming the plies in the tire.

#### Cord separation

The parting of cords from adjacent rubber compounds.

#### Cracking

Any parting within the tread, sidewall, or inner liner of the tire extending to cord material.

#### Curb weight

The weight of a motor vehicle with standard equipment including the maximum capacity of fuel, oil and coolant, and if so equipped, air conditioning and additional weight optional engine.

#### Extra load tire

A tire designed to operate at higher loads and higher inflation pressure than the corresponding standard tire.

#### Groove

The space between two adjacent tread ribs.

#### Innerliner

The layer(s) forming the inside surface of a tubeless tire that contains the inflating medium within the tire.

#### • Innerliner separation

The parting of the innerliner from cord material in the carcass.

#### Intended outboard sidewall

- (1) The sidewall that contains a whitewall, bears white lettering or bears manufacturer, brand, and/or model name molding that is higher or deeper than the same molding on the other sidewall of the tire, or
- (2) The outward facing sidewall of an asymmetrical tire that has a particular side that must always face outward when mount-

ing on a vehicle.

### • Light truck (LT) tire

A tire designated by its manufacturer as primarily intended for use on lightweight trucks or multipurpose passenger vehicles.

#### Load rating

The maximum load that a tire is rated to carry for a given inflation pressure.

## Maximum inflation pressure

The maximum cold inflation pressure to which a tire may be inflated.

#### Maximum load rating

The load rating for a tire at the maximum permissible inflation pressure for that tire.

- Maximum loaded vehicle weight The sum of:
  - (a) Curb weight
  - (b) Accessory weight
  - (c) Vehicle capacity weight
  - (d) Production options weight
- Maximum permissible inflation pressure

The maximum cold inflation pressure to which a tire may be inflated.

#### Measuring rim

The rim on which a tire is fitted for physical dimension requirements.

## Normal occupant weight

150 lbs (68 kg) times the number of occupants specified in the second column of Table 1 that is appended to the end of this section.

#### Occupant distribution

Distribution of occupants in a vehicle as specified in the third column of Table 1 that is appended to the end of this section.

#### Open splice

Any parting at any junction of tread, sidewall, or innerliner that extends to cord material.

#### Outer diameter

The overall diameter of an inflated new tire.

#### Overall width

The linear distance between the exteriors of the sidewalls of an inflated tire, including elevations due to labeling, decorations, or protective bands or ribs.

#### Passenger car tire

A tire intended for use on passenger cars, multipurpose passenger vehicles, and trucks, that have a gross vehicle weight rating (GVWR) of 10,000 lbs (4,535 kg) or less.

#### Ply

A layer of rubber-coated parallel cords.

#### Ply separation

A parting of rubber compound between adjacent plies.

#### Pneumatic tire

A mechanical device made of rubber, chemicals, fabric and steel or other materials, that, when mounted on an automotive wheel, provides the traction and contains the gas or fluid that sustains the load.

#### Production options weight

The combined weight of those installed regular production options weighing over 5.1 lbs (2.3 kg) in excess of those standard items which they replace, not previously considered in curb weight or acces-

sory weight, including heavy duty brakes, ride levelers, roof rack, heavy duty battery, and special trim.

### Radial ply tire

A pneumatic tire in which the ply cords that extend to the beads are laid at substantially 90 degrees to the centerline of the tread.

# Recommended inflation pressure

The cold inflation pressure recommended by a vehicle manufacturer.

#### Reinforced tire

A tire designed to operate at higher loads and at higher inflation pressures than the corresponding standard tire.

#### Rim

A metal support for a tire or a tire and tube assembly upon which the tire beads are seated.

#### Rim diameter

Nominal diameter of the bead seat.

# Rim size designation

Rim diameter and width.

#### • Rim type designation

The industry of manufacturer's designation for a rim by style or code.

#### Rim width

Nominal distance between rim flanges.

#### Section width

The linear distance between the exteriors of the sidewalls of an inflated tire, excluding elevations due to labeling, decoration, or protective bands.

#### Sidewall

That portion of a tire between the tread and bead.

#### Sidewall separation

The parting of the rubber compound from the cord material in the sidewall.

#### Test rim

The rim on which a tire is fitted for testing, and it may be any rim listed as appropriate for use with that tire.

#### Tread

That portion of a tire that comes into contact with the road.

#### Tread rib

A tread section running circumferentially around a tire.

### • Tread separation

Pulling away of the tread from the tire carcass.

#### Treadwear indicators (TWI)

The projections within the principal grooves designed to give a visual indication of the degrees of wear of the tread.

#### · Vehicle capacity weight

The rated cargo and luggage load plus 150 lbs (68 kg) times the vehicle's designated seating capacity.

# • Vehicle maximum load on the tire

Load on an individual tire that is determined by distributing to each axle its share of the maximum loaded vehicle weight and dividing by two.

#### · Vehicle normal load on the tire

Load on an individual tire that is determined by distributing to each axle its share of the curb weight, accessory weight, and normal occupant weight (distributed in accordance with Table 1 that is appended to the end of this section) and dividing by 2.

## • Wheel-holding fixture

The fixture used to hold the wheel and tire assembly securely during testing.

Table 1 — Occupant loading and distribution for vehicle normal load for various designated seating capacities

Designated seating capacity, number of occupants	Vehicle normal load, number of occupants	Occupant distribution in a normally loaded vehicle
2 through 4	2	2 in front.
5 through 10	3	2 in front, 1 in second seat.
11 through 15	5	2 in front, 1 in second seat, 1 in third seat, 1 in fourth seat.
16 through 22	7	2 in front, 2 in second seat, 2 in third seat, 1 in fourth seat.

## ■ Tire care – maintenance and safety practices

- Check on a daily basis that the tires are free from serious damage, nails, and stones. At the same time, check the tires for abnormal wear.
- Inspect the tire tread regularly and replace the tires before their tread wear indicators become visible. When a tire's tread wear indicator becomes visible, the tire is worn beyond the acceptable limit and must be replaced immediately. With a tire in this condition, driving at even low speeds in wet weather can cause the vehicle to hydroplane. Possible resulting loss of vehicle control can lead to an accident.
- To maximize the life of each tire and ensure that the tires wear uniformly, it is best to rotate the tires every 7,500 miles (12,000 km). For information about the tire rotation order, refer to "Tire rotation" #11-27. Replace any damaged or unevenly worn tires at the time of

rotation. After tire rotation, adjust the tire pressures and make sure the wheel nuts are correctly tightened. For information about the tightening torque and tightening sequence for the wheel nuts, refer to "Flat tires" \$\mathscr{F}\$9-6.

# ■ Vehicle load limit – how to determine

The load capacity of your vehicle is determined by weight, not by available cargo space. The load limit of your vehicle is shown on the vehicle placard attached to the driver's side B-pillar. Locate the statement "The combined weight of occupants and cargo should never exceed XXX kg or XXX lbs" on your vehicle's placard.

The vehicle placard also shows seating capacity of your vehicle.

The total load capacity includes the total weight of driver and all passengers and their belongings, any cargo, any optional equipment such as a trailer hitch, roof rack or bike

carrier, etc., and the tongue load of a trailer. Therefore cargo capacity can be calculated by the following method.

Cargo capacity = Load limit - (total weight of occupants + total weight of optional equipment + tongue load of a trailer (if applicable))

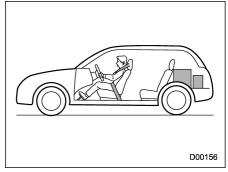
For information about vehicle loading, refer to "Loading your vehicle" \$\alpha 8-12.

For information about towing capacity and weight limits, refer to "Trailer towing (XV CROSSTREK models)" \$\sigma 8-18\$.

## ▼ Calculating total and load capacities varying seating configurations

Calculate the available load capacity as shown in the following examples:

## Example 1A



Vehicle capacity weight of the vehicle is 900 lbs (408 kg), which is indicated on the vehicle placard with the statement "The combined weight of occupants and cargo should never exceed 900 lbs or 408 kg".

For example, if the vehicle has one

occupant weighing 154 lbs (70 kg) plus cargo weighing 662 lbs (300 kg).

1. Calculate the total weight.

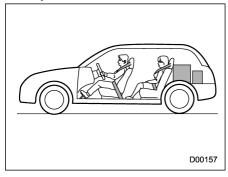
#### Total weight

- = 154 lbs (70 kg) + 662 lbs (300 kg) (Occupant) (Cargo)
- = 816 lbs (370 kg)
- 2. Calculate the available load capacity by subtracting the total weight from the vehicle capacity weight of 900 lbs (408 kg).

# **Available Load Capacity**

- = 900 lbs (408 kg) 816 lbs (370 kg) (Vehicle capacity weight) (Total weight)
- = 84 lbs (38 kg)
- 3. The result of step 2 shows that a further 84 lbs (38 kg) of cargo can be carried.

#### Example 1B



For example, if a person weighing 176 lbs (80 kg) now enters the same vehicle (bringing the number of occupants to two), the calculations are as follows.

1. Calculate the total weight.

## Total weight

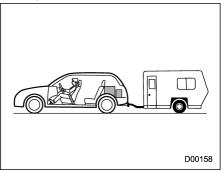
- $= \frac{154 \text{ lbs } (70 \text{ kg}) + 176 \text{ lbs } (80 \text{ kg})}{(\text{Occupant})}$
- + 662 lbs (300 kg) (Cargo)
- = 992 lbs (450 kg)

2. Calculate the available load capacity.

#### **Available Load Capacity**

- = 900 lbs (408 kg) 992 lbs (450 kg) (Vehicle (Total weight) capacity weight)
- = -92 lbs (-42 kg)
- 3. The total weight now exceeds the capacity weight by 92 lbs (42 kg), so the cargo weight must be reduced by 92 lbs (42 kg) or more.

#### **Example 2A**



Vehicle capacity weight of the vehicle is 900 lbs (408 kg), which is indicated on the vehicle placard

with the statement "The combined weight of occupants and cargo should never exceed 408 kg or 900 lbs".

For example, the vehicle has one occupant weighing 165 lbs (75 kg) plus cargo weighing 375 lbs (170 kg). In addition, the vehicle is fitted with a trailer hitch weighing 22 lbs (10 kg), to which is attached a trailer weighing 1,764 lbs (800 kg). 10% of the trailer weight is applied to the trailer tongue (i.e. Tongue load = 176 lbs (80 kg)).

1. Calculate the total weight.

#### **Total weight**

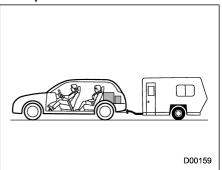
- $= \frac{165 \text{ lbs } (75 \text{ kg})}{(\text{Occupant})} + \frac{375 \text{ lbs } (170 \text{ kg})}{(\text{Cargo})}$
- + <u>22 lbs (10 kg)</u> + <u>176 lbs (80 kg)</u> (Trailer hitch) (Tongue load)
- = 738 lbs (335 kg)

2. Calculate the available load capacity.

#### **Available Load Capacity**

- = 900 lbs (408 kg) 738 lbs (335 kg) (Vehicle (Total weight)
- = 162 lbs (73 kg)
- 3. The result of step 2 shows that a further 162 lbs (73 kg) of cargo can be carried.

#### Example 2B



For example, if a person weighing 143 lbs (65 kg) and a child weighing 40 lbs (18 kg) now enter the same vehicle (bringing the number of occupants to three), and a child restraint system weighing 11 lbs (5 kg) is installed in the vehicle for the child to use, the calculations are as follows.

1. Calculate the total weight.

### **Total weight**

- = 165 lbs (75 kg) + 143 lbs (65 kg) (Occupant)
- + 40 lbs (18 kg) (Occupant)
- + 11 lbs (5 kg) (Child restraint) + 375 lbs (170 kg) (Cargo)
- + <u>22 lbs (10 kg)</u> + <u>176 lbs (80 kg)</u> (Trailer hitch) (Tongue load)
- = 932 lbs (423 kg)
- 2. Calculate the available load capacity.

## **Available Load Capacity**

- = 900 lbs (408 kg) 932 lbs (423 kg) (Vehicle (Total weight) capacity weight)
- = -32 lbs (-15 kg)
- 3. The total weight now exceeds the capacity weight by 32 lbs (15 kg), so the cargo weight must be reduced by 32 lbs (15 kg) or more.

#### Determining compatibility of tire and vehicle load capacities

The sum of four tires' maximum load ratings must exceed the maximum loaded vehicle weight ("GVWR"). In addition, sum of the maximum load ratings of two front tires and of two rear tires must exceed each axle's maximum loaded capacity ("GAWR"). Original equipment tires are designed to fulfill those conditions.

The maximum loaded vehicle weight is referred to Gross Vehicle Weight Rating (GVWR). And each axle's maximum loaded capacity is referred to Gross Axle Weight Rating (GAWR). The GVWR and each axle's GAWR are shown on the vehicle certification label affixed to the driver's door.

The GVWR and front and rear GAWRs are determined by not only the maximum load rating of tires but also loaded capacities of the vehicle's suspension, axles and other

parts of the body.

Therefore, this means that the vehicle cannot necessarily be loaded up to the tire's maximum load rating on the tire sidewall.

# Adverse safety consequences of overloading on handling and stopping and on tires

Overloading could affect vehicle handling, stopping distance, and vehicle and tire performance in the following ways. This could lead to an accident and possibly result in severe personal injury.

- Vehicle stability will deteriorate.
- Heavy and/or high-mounted loads could increase the risk of rollover.
- Stopping distance will increase.
- Brakes could overheat and fail.
- Suspension, bearings, axles and other body parts could break or experience accelerated wear that will shorten vehicle life.
- · Tires could fail.
- Tread separation could occur.

Tire could separate from its rim.

# ■ Steps for Determining Correct Load Limit

- 1. Locate the statement "The combined weight of occupants and cargo should never exceed XXX kg or XXX lbs." on your vehicle's placard.
- 2. Determine the combined weight of the driver and passengers that will be riding in your vehicle.
- 3. Subtract the combined weight of the driver and passengers from XXX kg or XXX lbs.
- 4. The resulting figure equals the available amount of cargo and luggage load capacity. For example, if the "XXX" amount equals 1400 lbs. and there will be five 150 lb passengers in your vehicle, the amount of available cargo and luggage load capacity is 650 lbs.  $(1400 750 (5 \times 150) = 650 \text{ lbs.})$
- 5. Determine the combined weight of luggage and cargo being loaded on the vehicle. That weight may not

safely exceed the available cargo and luggage load capacity calculated in Step 4.

6. If your vehicle will be towing a trailer, load from your trailer will be transferred to your vehicle. Consult this manual to determine how this reduces the available cargo and luggage load capacity of your vehicle.

# Uniform tire quality grading standards

This information indicates the relative performance of passenger car tires in the area of treadwear, traction, and temperature resistance. This is to aid the consumer in making an informed choice in the purchase of tires.

Quality grades can be found where applicable on the tire sidewall between tread shoulder and maximum section width. For example:

# Treadwear 200 Traction AA Temperature A

The quality grades apply to new pneumatic tires for use on passenger cars. However, they do not apply to deep tread, winter type snow tires, space-saver or temporary use spare tires, tires with nominal rim diameters of 12 inches or less, or to some limited production tires.

All passenger car tires must con-

form to Federal Safety Requirements in addition to these grades.

#### **■** Treadwear

The treadwear grade is a comparative rating based on the wear rate of the tire when tested under controlled conditions on a specified government test course.

For example, a tire graded 150 would wear one and one-half (1-1/2) times as well on the government course as a tire graded 100. The relative performance of tires depends upon the actual conditions of their use, however, and may depart significantly from the norm due to variations in driving habits, service practices and differences in road characteristics and climate.

## ■ Traction AA, A, B, C

The traction grades, from highest to lowest, are AA, A, B and C. Those grades represent the tire's ability to stop on wet pavement as measured under controlled conditions on spe-

cified government test surfaces of asphalt and concrete. A tire marked C may have poor traction performance.

## **WARNING**

The traction grade assigned to this tire is based on straightahead braking traction tests, and does not include acceleration, cornering, hydroplaning, or peak traction characteristics.

## **■** Temperature A, B, C

The temperature grades are A (the highest), B, and C, representing the tire's resistance to the generation of heat and its ability to dissipate heat when tested under controlled conditions on a specified indoor laboratory test wheel. Sustained high temperature can cause the material of the tire to degenerate and reduce tire life, and excessive temperature can lead to sudden tire failure. The

grade C corresponds to a level of performance which all passenger car tires must meet under the Federal Motor Vehicle Safety Standards No. 109. Grades B and A represent higher levels of performance on the laboratory test wheel than the minimum required by law.

## **WARNING**

The temperature grade for this tire is established for a tire that is properly inflated and not overloaded. Excessive speed, underinflation, or excessive loading, either separately or in combination, can cause heat buildup and possible tire failure.

# Reporting safety defects (U.S.A.)

If you believe that your vehicle has a defect which could cause a crash or could cause injury or death, you should immediately inform the National Highway Traffic Safety Administration (NHTSA) in addition to notifying Subaru of America, Inc.

If NHTSA receives similar complaints, it may open an investigation, and if it finds that a safety defect exists in a group of vehicles, it may order a recall and remedy campaign. However, NHTSA cannot become involved in individual problems between you, your dealer, or Subaru of America, Inc. To contact NHTSA, you may call the Vehicle Safety Hotline toll-free at 1-888-327-4236 (TTY: 1-800-424-9153); go to http://www.safercar.gov; or write to: Administrator, NHTSA, 1200

New Jersey Avenue, SE, West Building, Washington, DC 20590. You can also obtain other information about motor vehicle safety from http://www.safercar.gov.

# **Supplement**

- **■** Declaration of conformity with FCC rules
- Electrostatic sensor for occupant detection system



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#### **GAS STATION REFERENCE**

#### Fuel:

Use only unleaded gasoline with an octane rating of 87 AKI (90 RON) or higher.

## **■** Fuel octane rating:

This octane rating is the average of the Research Octane and Motor Octane numbers and is commonly referred to as the Anti Knock Index (AKI). Refer to "Fuel octane rating" \$\tilde{F}7-3.

## ■ Fuel capacity:

Except XV CROSSTREK models: 14.5 US gal (55 liters, 12.1 lmp gal)

XV CROSSTREK models: 15.9 US gal (60 liters, 13.2 lmp gal)

## **■** Engine oil:

Use only the following oils.

- API classification SM with the words "ENERGY CONSER-VING" or SN with the words "RESOURCE CONSERVING"
- or ILSAC GF-4 or GF-5, which can be identified with the ILSAC certification mark (Starburst mark)

For the complete viscosity requirements, refer to "Engine oil" \$\textit{\$\textit{\$\textit{e}}\$} 12-4.

## ■ Engine oil capacity:

5.1 US qt (4.8 liters, 4.2 Imp qt)

The indicated oil quantity is only a guideline and is estimated based on a case when the engine oil is changed with an oil filter. After refilling the engine with oil, the oil level should be checked using the oil level gauge. For more details about maintenance and service, refer to "Engine oil" \$\infty\$11-8.

## ■ Cold tire pressure:

Refer to "Tires" \$\textit{\$\textit{\$\textit{\$\textit{\$r\$}}}\$12-8.