damage the vehicle body or suspension.

When driving with tire chains, drive at speeds below 19 mph (30 km/h).

When a temporary spare tire is on a front wheel, replace the temporary spare tire with the rear tire on the same side of the vehicle, and then fit chains on the front tires.

Always use the utmost care when driving with tire chains — overconfidence because you are driving with tire chains 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 selector lever back and forth between "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 AT).

Refer to the Automatic Transmission section in this chapter for information on holding the transmission in 2nd position.

#### **■** Corrosion protection

Refer to Corrosion Protection section (chapter 9).

# Trailer towing (for all vehicles except OUTBACK and SUS)

Your car is designed and intended to be used primarily as a passengercarrying vehicle. Towing a trailer puts additional loads on your car's engine, drive train, 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 a professional trailer and/or hitch supplier 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.

Under no circumstances should a trailer be towed with a new vehicle or a vehicle with any new power train component (engine, transmission, differential, wheel bearings, etc.) for the first 1,000 miles (1,600 km) of driving.

#### ■ Maximum load limits

### **A** CAUTION

Never exceed the maximum load limits explained below. Exceeding the maximum load limits could cause personal injury and/or vehicle damage.

The total trailer weight (trailer weight plus its cargo weight) with brakes must never exceed 2,000 lbs (907 kg).

The Gross Vehicle Weight (i.e., the combined weight of vehicle, driver, passengers, luggage, trailer hitch, trailer tongue load and any other optional equipment installed on your vehicle) must never exceed the Gross Vehicle Weight Rating (GVWR).

GVWR is shown on the certification label located on the driver's door of your vehicle.

The total weight applied to each axle must never exceed the Gross Axle Weight Rating (GAWR). The front and rear GAWR are also shown on the certification label.

The maximum trailer tongue load must never exceed 165 lbs. (75 kg).

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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 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.

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.

#### **■** Trailer hitches

## **A WARNING**

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 into 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 under-body of your vehicle could cause deterioration of strength of your vehicle and cause corrosion around the drilled hole.

### **A** CAUTION

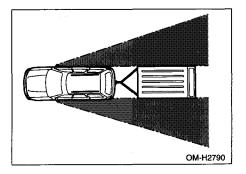
- Do not modify the vehicle exhaust system, brake system, or other system when installing a hitch or other trailer towing equipment.
- Adequate size trailer brakes are required when the trailer and its cargo exceed 1,000 lbs (453 kg) total weight.

Choose a proper hitch for your vehicle and trailer. SUBARU does not offer accessory trailer hitches. 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.

#### Starting and operating

#### ■ 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 lighting system.

Consult your authorized SUBARU dealer concerning the connection of wires for trailer lights. Check for correct operation of the turn signals and brake lights each time you hitch up.

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#### ■ 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 and may lead to an accident.

Make sure that all the tires on your vehicle are inflated to the pressure specified on the tire placard located on the left center pillar of your vehicle. 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

When towing a trailer, steering, stability, stopping distance and braking performance will vary from normal operation. For safety's sake, you should employ extra caution when towing a trailer and you should never speed.

You should also keep the following tips in mind:

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.

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 RPM.

Avoid uneven steering, sharp turns and rapid lane changes.

#### Starting and operating

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 a trailer to your vehicle.

Before going down a steep hill, slow down and shift into low gear in order to utilize the engine braking effect and prevent overheating of your vehicle's brakes. Do not make sudden downshifts.

When going uphill on hot days, turn off your air conditioner to reduce the possibility of engine overheating caused by the added load of the trailer. Pay attention to your water temperature gauge.

If your vehicle has an automatic transmission, avoid using the accelerator pedal to stay stationary on an uphill slope instead of using the parking brake or foot brake. This may cause the transmission fluid to overheat.

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 (manual transmission) or "P" (automatic transmission) and shut off the engine.



