

Tire Pressure Monitoring System (TPMS)

Your vehicle is equipped with a tire pressure monitoring system (TPMS) that turns on every time you start the engine and monitors the pressure in your tires while driving.

Each tire has its own pressure sensor. If the air pressure of a tire becomes significantly low, the sensor in that tire immediately sends a signal that causes the low tire pressure indicator and the appropriate tire on the tire pressure monitor to come on.



Low Tire Pressure Indicator

When the tire pressure monitoring system warning indicator is on, one or more of your tires is significantly under-inflated. You should stop and check your tires as soon as possible, and inflate them to the proper pressure as indicated on the vehicle's tire information placard.

Driving on a significantly under-inflated 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.

Each tire, including the spare, should be checked monthly when cold and set to the recommended inflation pressure as specified in the vehicle placard and this owner's manual (see page [289](#)).

Although your tire pressure is monitored, you must manually check the tire pressures monthly.

If you think you can safely drive a short distance to a service station, proceed slowly, and inflate the tire to the recommended pressure shown on the driver's doorjamb.

If the tire is flat, or if the tire pressure is too low to continue driving, replace the tire with the compact spare tire.

Tire Pressure Monitoring System (TPMS)



Tire Pressure Monitor

The appropriate tire indicator and low tire pressure indicator comes on if a tire becomes significantly underinflated. See **Low Tire Pressure Indicator** on page 205 .



Tire Pressure Monitoring System (TPMS) Indicator

This indicator comes on and stays on if there is a problem with the tire pressure monitoring system.

If you see this message, the system is off and is not monitoring the tire pressures. Have the system checked by your dealer as soon as possible.

Changing a Tire with TPMS

If you have a flat tire, the low tire pressure and tire monitor indicators will come on. Replace the indicated flat tire with the compact spare tire (see page 266).

Each wheel is equipped with a tire pressure sensor mounted inside the tire behind the valve stem. You must use TPMS specific wheels. It is recommended that you always have your tires serviced by your dealer or qualified technician.

After you replace the flat tire, the low tire pressure indicator stays on. This is normal; the system is not monitoring the spare tire pressure. Manually check the spare tire pressure to be sure it is correct.

Never use a puncture-repairing agent in a flat tire. If used, you will have to replace the tire pressure sensor. Have the flat tire repaired by your dealer as soon as possible.

As required by the FCC:

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.

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 Industry Canada Standard RSS-210. Operation is subject to the following two conditions: (1) this device may not cause interference, and (2) this device must accept any interference that may cause undesired operation of the device.

Always use the parking brake when you park your vehicle. Make sure the parking brake is set firmly or your vehicle may roll if it is on an incline.

Set the parking brake before you put the transmission in Park. This keeps the vehicle from moving and putting pressure on the parking mechanism in the transmission.

- Make sure the moonroof (if equipped) and the windows are closed.
- Turn off the lights.
- Place any packages, valuables, etc. in the cargo area or take them with you.
- Lock the doors.

On vehicles with security system
Check the indicator on the driver's door to verify that the security system is set.

- Never park over dry leaves, tall grass, or other flammable materials. The hot three way catalytic converter could cause these materials to catch on fire.

- If the vehicle is facing uphill, turn the front wheels away from the curb and set the parking brake.
- If the vehicle is facing downhill, turn the front wheels toward the curb and set the parking brake.

Braking System

Your vehicle is equipped with disc brakes at all four wheels. A power assist helps reduce the effort needed on the brake pedal. The anti-lock brake system (ABS) helps you retain steering control when braking very hard.

Resting your foot on the pedal keeps the brakes applied lightly, builds up heat, and reduces their effectiveness. It also keeps your brake lights on all the time, confusing drivers behind you.

Constant application of the brakes when going down a long hill builds up heat and reduces their effectiveness. Use the engine to assist the brakes by taking your foot off the accelerator and downshifting to a lower gear.

Check the brakes after driving through deep water. Apply the brakes moderately to see if they feel normal. If not, apply them gently and frequently until they do. Be extra cautious in your driving.

Braking System Design

The hydraulic system that operates the brakes has two separate circuits. Each circuit works diagonally across the vehicle (the left-front brake is connected with the right-rear brake, etc.). If one circuit should develop a problem, you will still have braking at two wheels.

Brake Wear Indicators

If the brake pads need replacing, you will hear a distinctive, metallic screeching sound when you apply the brake pedal. If you do not have the brake pads replaced, they will screech all the time. It is normal for the brakes to occasionally squeal or squeak when you apply them.

Anti-lock Brakes (ABS)

The anti-lock brake system (ABS) helps prevent the brakes from locking up, and helps you retain steering control by pumping the brakes rapidly, much faster than a person can do it.

The ABS also balances the front-to-rear braking distribution according to vehicle loading.

You should never pump the brake pedal. Let the ABS work for you by always keeping firm, steady pressure on the brake pedal. This is sometimes referred to as “stomp and steer.”

You will feel a pulsation in the brake pedal when the ABS activates, and you may hear some noise. This is normal: it is the ABS rapidly pumping the brakes. On dry pavement, you will need to press on the brake pedal very hard before the ABS activates. However, you may feel the ABS activate immediately if you are trying to stop on snow or ice.

Anti-lock Brakes (ABS)



ABS Indicator

If this indicator comes on, the anti-lock function of the braking system has shut down. The brakes still work like a conventional system, but without anti-lock. You should have your dealer inspect your vehicle as soon as possible.

If the ABS indicator and the brake system indicator come on together, and the parking brake is fully released, the front-to-rear braking distribution system may also be shut down.

Test your brakes as instructed on page 278. If the brakes feel normal, drive slowly and have your vehicle repaired by your dealer as soon as possible. Avoid sudden hard braking which could cause the rear wheels to lock up and possibly lead to a loss of control.

Important Safety Reminders
ABS does not reduce the time or distance it takes to stop the vehicle. It only helps with steering control during braking.

ABS will not prevent a skid that results from changing direction abruptly, such as trying to take a corner too fast or making a sudden lane change. Always drive at a safe speed for the road and weather conditions.

ABS cannot prevent a loss of stability. Always steer moderately when you are braking hard. Severe or sharp steering wheel movement can still cause your vehicle to veer into oncoming traffic or off the road.

A vehicle with ABS may require a longer distance to stop on loose or uneven surfaces, such as gravel or snow, than a vehicle without anti-lock.

The vehicle stability assist (VSA) system helps to stabilize the vehicle during cornering if the vehicle turns more or less than desired. It also assists you in maintaining traction while accelerating on loose or slippery road surfaces. It does this by regulating the engine's output, and by selectively applying the brakes.

When VSA activates, you may notice that the engine does not respond to the accelerator in the same way it does at other times.

The VSA system cannot enhance the vehicle's driving stability in all situations and does not control your vehicle's entire braking system. It is still your responsibility to drive and corner at reasonable speeds and to leave a sufficient margin of safety.



VSA Activation Indicator

When VSA activates, you will see the VSA activation indicator blink.



VSA System Indicator

If the VSA system indicator comes on while driving, pull to the side of the road when it is safe, and turn off the engine. Reset the system by restarting the engine. If the VSA system indicator stays, or comes back on while driving, have the VSA system inspected by your dealer.

If the indicator does not come on when the ignition switch is turned to the ON (II) position, there may be a problem with the VSA system. Have your dealer inspect your vehicle as soon as possible (see page 64).

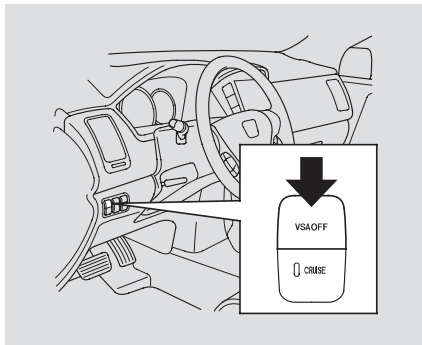
Without VSA, your vehicle will have normal braking and cornering ability, but it will not have VSA traction and stability enhancement.

Vehicle Stability Assist (VSA) System

VSA Off Switch

In certain unusual conditions when your vehicle gets stuck in shallow mud or fresh snow, it may be easier to free it with the VSA temporarily switched off. When the VSA system is off, the traction control system is also off. You should only attempt to free your vehicle with the VSA off if you are not able to free it when the VSA is on.

Immediately after freeing your vehicle, be sure to switch the VSA on again. We do not recommend driving your vehicle with the VSA and traction control systems switched off.



This switch is under the left vent. Press it to turn the vehicle stability assist system on and off.

When VSA is off, the VSA activation indicator comes on as a reminder.

VSA is turned on every time you start the engine, even if you turned it off the last time you drove the vehicle.

VSA and Tire Sizes

Driving with varying tire or wheel sizes may cause the VSA to malfunction. When replacing tires, make sure they are of the same size and type as your original tires (see page [258](#)).

Deactivate the VSA system if you need to drive with the compact spare tire installed (see page [266](#)).

If you install winter tires, make sure they are the same size as those that were originally supplied with your vehicle. Exercise the same caution during winter driving as you would if your vehicle was not equipped with VSA.

Your vehicle has been designed to tow a trailer, as well as carrying passengers and their cargo. To safely tow a trailer, you should carefully observe the load limits (see page 194), use the proper equipment, and follow the guidelines in this section.

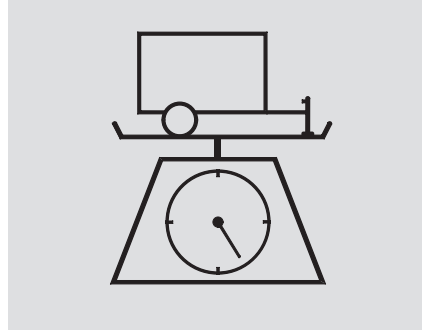
Be sure to read the **Off-Highway Driving Guidelines** section on page 222 if you plan to tow off paved surfaces.

⚠ WARNING

Exceeding any load limit or improperly loading your vehicle and trailer can cause a crash in which you can be seriously hurt or killed.

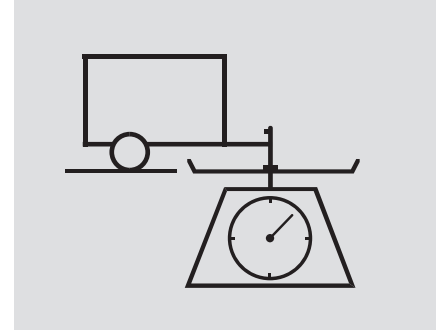
Check the loading of your vehicle and trailer carefully before starting to drive.

Load Limits



Total Trailer Weight: The maximum weight of the trailer and everything in or on it depends on the number of occupants in your vehicle and the type of trailer being towed (see page 215).

Towing a load that is too heavy can seriously affect your vehicle's handling and performance.



Tongue Load: The weight that the tongue of a fully loaded trailer puts on the hitch should be 5 to 10 percent of the total trailer weight for boat trailers, and 8 to 15 percent of total trailer weight for all other trailers. (See page 215 for limits for your towing situation). Too much tongue load reduces front-tire traction and steering control. Too little tongue load can make the trailer unstable and cause it to sway.

Towing a Trailer

Gross Vehicle Weight Rating

(GVWR) – The maximum allowable weight of the vehicle, all occupants, all cargo and the tongue load is 5,950 lbs (2,700 kg).

Gross Axle Weight Ratings

(GAWR) – The maximum allowable weight on the vehicle axles is 2,865 lbs (1,300 kg) on the front axle, and 3,155 lbs (1,430 kg) on the rear axle.

Gross Combined Weight Rating

(GCWR) – The maximum allowable weight of the fully loaded vehicle and trailer is 9,700 lbs (4,400 kg) with the proper hitch and fluid coolers (see page 217).

The GCWR must be reduced 2 percent for every 1,000 feet (305 meters) of elevation.

Estimating Loads

The best way to confirm that all loads are within limits is to check them at a public scale.

For public scales in your area, check your local phone book, or contact your trailer dealer or rental agency for assistance.

To help ensure a safe drive to a scale, or if you cannot get to a public scale, we recommend that you estimate your total trailer weight and tongue load as described.

To Estimate the Total Trailer Weight

Add the weight of your trailer (as quoted by the manufacturer) with everything in or on the trailer. Then check the tables on page 215 to make sure you do not exceed the limit for your conditions.

To Estimate the Tongue Load

1. Park the vehicle on level ground.
2. Measure from the ground to the bottom of the trailer hitch.

3. Connect the fully loaded trailer to the hitch.
4. Measure again from the ground to the same spot on the bottom of the hitch.
5. Subtract the second measurement from the first measurement, then refer to the following table.

If the difference is:	Estimated tongue load is:
1 ½"	150 lbs (68 kg)
2 ¼"	250 lbs (114 kg)
3"	350 lbs (160 kg)
3 ¾"	450 lbs (205 kg)

If the difference is more than 3 ¾ inch, you have too much load on the tongue. Redistribute the load or remove cargo as needed.

Total Trailer Weight and Tongue Load Limits:

BOAT TRAILERS

Number of Occupants	Equipped with transmission cooler and power steering fluid cooler.	
	Maximum Total Trailer Weight	Maximum Tongue Load
2	4,500 lbs (2,045 kg)	450 lbs (205 kg)
3	4,500 lbs (2,045 kg)	450 lbs (205 kg)
4	4,500 lbs (2,045 kg)	450 lbs (205 kg)
5	4,300 lbs (1,945 kg)	350 lbs (160 kg)
6	4,100 lbs (1,855 kg)	220 lbs (100 kg)
7	2,000 lbs (905 kg)	100 lbs (45 kg)
8	Towing is Not Recommended	

OTHER TYPES OF TRAILERS

Number of Occupants	Equipped with transmission cooler and power steering fluid cooler.	
	Maximum Total Trailer Weight	Maximum Tongue Load
2	3,500 lbs (1,590 kg)	450 lbs (205 kg)
3	3,500 lbs (1,590 kg)	450 lbs (205 kg)
4	3,300 lbs (1,490 kg)	450 lbs (205 kg)
5	3,100 lbs (1,400 kg)	350 lbs (160 kg)
6	2,700 lbs (1,220 kg)	220 lbs (100 kg)
7	1,200 lbs (540 kg)	100 lbs (45 kg)
8	Towing is Not Recommended	

The corresponding weight limits assume occupants fill seats from the front of the vehicle to the back, each occupant weighs 150 lbs (70 kg) and each has 15 lbs (7 kg) of luggage in the cargo area.