The Vehicle Stability Assist 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 on, or comes back on while driving, have the VSA system inspected by an Acura dealer.

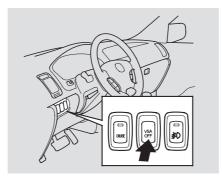
**CONTINUED** 

# Vehicle Stability Assist (VSA) System

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

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

#### **VSA Off Switch**



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 224).

Deactivate the VSA system if you need to drive with the compact spare tire installed (see page 230).

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.

To safely tow a trailer, you should observe the load limits, use the proper equipment, and follow the guidelines in this section.

Be sure to read the Off-Highway **Driving Guidelines section on page** 192 if you plan to tow off paved surfaces.

# **AWARNING**

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.

# **Estimating Loads**

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 next.

**Gross Vehicle Weight Rating** (GVWR) – The maximum allowable weight of the vehicle, all occupants, all cargo and the tongue load is 5,787 lbs (2,630 kg).

**Gross Axle Weight Ratings** (GAWR) – The maximum allowable weight on the vehicle axles are 2,882 lbs (1,307 kg) on the front axle, and 2,992 lbs (1,360 kg) on the rear axle.

**Gross Combined Weight Ratings** (GCWR) – The maximum allowable weight of the fully loaded vehicle and trailer is 9700 lbs (4410 kg) with the proper hitch and fluid coolers (see page 188 for information about fluid coolers).

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

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

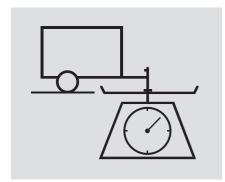
#### **Load Limits**

Total Trailer Weight See page 187 for limits for your towing situation.

To Estimate the Total Trailer Weight Add the weight of your trailer (as quoted by the manufacturer) with everything in or on the trailer. Check the tables on page 187 that you do not exceed the limit for your conditions

**CONTINUED** 

# **Towing Weight Limits**



# 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 187 for limits for your towing situation.

Too much tongue load reduces fronttire traction and steering control. Too little tongue load can make the trailer unstable and cause it to sway.

# To Estimate the Tongue Load

- 1. Park the vehicle on level ground.
- 2. Measure and record the distance 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. Refer to Fig. 1.

## Fig.1

If the difference is:

1 ½" = 150 lbs (68 kg)

2 ¼" = 250 lbs (114 kg)

3" = 350 lbs (159 kg) 3 34" = 450 lbs (204 kg)

4'' = over 450 lbs (204 kg)

If the difference is more than 4" you have too much tongue load at the rear. Move or remove cargo from the trailer and the vehicle, and measure again.

If the estimated trailer weight and tongue load do not exceed the limits, drive your trailer to a public scale fully loaded with all occupants and cargo you plan to take on the road.

# Total Trailer Weight and Tongue Load Limits: BOAT TRAILERS

Number of	Equipped with transmission cooler and power steering fluid cooler.	
Occupants*	Max. Trailer Weight	Max. Tongue Load
2	4500 lbs (2045 kg)	450 lbs (205 kg)
3	4500 lbs (2045 kg)	410 lbs (185 kg)
4	4500 lbs (2045 kg)	310 lbs (140 kg)
5	4000 lbs (1820 kg)	215 lbs (100 kg)
6	1700 lbs (770 kg)	90 lbs (40 kg)
7	Towing is Not Recommended	

# Total Trailer Weight and Tongue Load Limits: OTHER TYPES OF TRAILERS

Number of	Equipped with transmission cooler and power steering fluid cooler.	
Occupants*	Max. Trailer Weight	Max. Tongue Load
2	3500 lbs (1590 kg)	450 lbs (205 kg)
3	3500 lbs (1590 kg)	410 lbs (185 kg)
4	3000 lbs (1365 kg)	310 lbs (140 kg)
5	2000 lbs (910 kg)	215 lbs (100 kg)
6	1000 lbs (455 kg)	90 lbs (40 kg)
7	Towing is Not Recommended	

<sup>\*</sup> 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.

# **Towing a Trailer**

# Towing Equipment and Accessories

Towing generally requires a variety of supplemental equipment. To ensure the best quality, we recommend that you purchase Acura equipment whenever possible.

Discuss any additional needs with your trailer sales or rental agency, and make sure all equipment is properly installed, maintained, and also meets state regulations.

#### Hitch

We strongly recommend that you have your Acura dealer install an Acura hitch and use the required fluid coolers. Using non-Acura equipment may result in serious damage to your vehicle.

Weight Distributing Hitch
A weight distributing hitch is not recommended for use with your MDX.

### Safety Chains

Always use safety chains when you tow a trailer. Make sure the chains are secured to the trailer and hitch, and that they cross under the tongue and can catch the trailer if it becomes unhitched. Leave enough slack to allow the trailer to turn corners easily, but do not let the chains drag on the ground.

#### Sway Control

This device is recommended if your trailer tends to sway. Your trailer maker can tell you what kind of sway control you need and how to install it.

Transmission Fluid Cooler and Power Steering Fluid Cooler
To help prevent overheating, a heavy-duty transmission fluid cooler and a heavy-duty power steering fluid cooler are required for trailer towing. These coolers are available only from your Acura dealer.

#### Trailer Brakes

Acura requires that any trailer with a total trailer weight of 1,000 lbs (455 kg) or more have its own brakes.

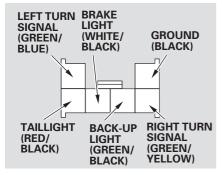
There are two common types of trailer brakes: surge and electric. Surge brakes are common for boat trailers, since the brakes will get wet.

Electric brakes must be electronically actuated. Do not attempt to tap into your vehicle's hydraulic system. See your brake manufacturer for more information on installing electric brakes.

#### Trailer Mirrors

Many states and provinces require special exterior mirrors when towing a trailer. Even if they don't, you should install special mirrors if you cannot clearly see behind you, or if the trailer creates a blind spot.

# Trailer Lights



Check trailer light requirements for the areas where you plan to tow.

To get to your vehicle's trailer lighting connector, open the tailgate, remove the cargo cover, then remove the rear panel trim. The connector is on the left side. We recommend that you have your Acura dealer install an Acura wiring harness and converter.

If you use a non-Acura trailer lighting harness and converter, you can get the mating connector and pins that mate with the connector in your vehicle from your Acura dealer.

Cennector-98530-00006-00 Terminal Kit-07JAZ-001-030A

If your trailer lights do not work, see page 250.

## Spare Tires

When towing a trailer, we recommend that you carry a full-size spare wheel and tire for your vehicle and trailer. See page 224 for proper tire size, page 235 for how to store a full size wheel and tire, and page 231 for information on changing a flat tire.

Remember to unhitch the trailer before changing a flat. Ask your trailer sales or rental agency where and how to store the trailer's spare tire.

**Driving Safely With a Trailer** For your safety and the safety of others, take time to practice driving maneuvers before heading for the open road, and follow the guidelines below.

- Avoid towing a trailer during your vehicle's first 600 miles (1,000 km).
- Drive slower than normal in all driving conditions.
- Make turns more slowly and wider than normal. The trailer has a smaller arc and it can hit or run over something the vehicle misses.
- Allow more time and distance for braking. Do not brake or turn suddenly — the trailer could iackknife or turn over.

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