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2015

Spark EV

2015 Chevrolet Spark EV Owner Manual

In Brief 1-1
Instrument Panel 1-2
Initial Drive Information 1-4
Vehicle Features 1-12
Battery and Efficiency 1-15
Performance and Maintenance 1-21

Keys, Doors, and Windows 2-1
Keys and Locks 2-1
Doors 2-11
Vehicle Security 2-12
Exterior Mirrors 2-14
Interior Mirrors 2-15
Windows 2-15

Seats and Restraints 3-1
Head Restraints 3-2
Front Seats 3-3
Rear Seats 3-6
Safety Belts 3-8
Airbag System 3-16
Child Restraints 3-29

Storage 4-1
Storage Compartments 4-1
Additional Storage Features ... 4-1

Instruments and Controls 5-1
Controls 5-2
Warning Lights, Gauges, and Indicators 5-6
Information Displays 5-18
Vehicle Messages 5-30
Vehicle Personalization 5-36

Lighting 6-1
Exterior Lighting 6-1
Interior Lighting 6-4
Lighting Features 6-5

Infotainment System 7-1
Introduction 7-1
Radio 7-5
Audio Players 7-10
Phone 7-12
Downloadable Applications ... 7-22
Bluetooth Phone/Devices 7-26
Trademarks and License Agreements 7-35

Climate Controls 8-1
Climate Control Systems 8-1
Air Vents 8-4
Maintenance 8-5

Driving and Operating 9-1
Driving Information 9-2
Starting and Operating 9-14
Electric Vehicle Operating Modes 9-19
Electric Drive Unit 9-19
Brakes 9-21
Ride Control Systems 9-25
Cruise Control 9-27
Driver Assistance Systems ... 9-30
Charging 9-32
Trailer Towing 9-42
Conversions and Add-Ons ... 9-42

Vehicle Care 10-1
General Information 10-2
Vehicle Checks 10-3
Headlamp Aiming 10-16
Bulb Replacement 10-16
Electrical System 10-19
Wheels and Tires 10-27

Jump Starting 10-55
Towing the Vehicle 10-58
Appearance Care 10-60

Service and Maintenance . . . 11-1
General Information 11-1
Maintenance Schedule 11-2
Special Application Services 11-5
Additional Maintenance and Care 11-5
Recommended Fluids, Lubricants, and Parts 11-8
Maintenance Records 11-10

Technical Data 12-1
Vehicle Identification 12-1
Vehicle Data 12-2

Customer Information 13-1
Customer Information 13-1
Reporting Safety Defects 13-13
Vehicle Data Recording and Privacy 13-14

OnStar 14-1
OnStar Overview 14-1
OnStar Services 14-2
OnStar Additional Information 14-6

Index i-1

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For vehicles first sold in Canada, substitute the name “General Motors of Canada Limited” for Chevrolet Motor Division wherever it appears in this manual.

This manual describes features that may or may not be on the vehicle because of optional equipment that was not purchased on the vehicle, model variants, country specifications, features/applications that may not be available in your region, or changes subsequent to the printing of this owner manual.

Refer to the purchase documentation relating to your specific vehicle to confirm the features.

Keep this manual in the vehicle for quick reference.

Canadian Vehicle Owners

Propriétaires Canadiens

A French language manual can be obtained from your dealer, at www.helminc.com, or from:

On peut obtenir un exemplaire de ce guide en français auprès du concessionnaire ou à l'adresse savant:

Helm, Incorporated
Attention: Customer Service
47911 Halyard Drive
Plymouth, MI 48170

Using this Manual

To quickly locate information about the vehicle, use the Index in the back of the manual. It is an alphabetical list of what is in the manual and the page number where it can be found.

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Danger, Warnings, and Cautions

Warning messages found on vehicle labels and in this manual describe hazards and what to do to avoid or reduce them.

⚠ Danger

Danger indicates a hazard with a high level of risk which will result in serious injury or death.

⚠ Warning

Warning indicates a hazard that could result in injury or death.

⚠ Caution

Caution indicates a hazard that could result in property or vehicle damage.

A circle with a slash through it is a safety symbol which means “Do Not,” “Do not do this,” or “Do not let this happen.”

Symbols

The vehicle has components and labels that use symbols instead of text. Symbols are shown along with the text describing the operation or information relating to a specific component, control, message, gauge, or indicator.

: This symbol is shown when you need to see your owner manual for additional instructions or information.

: This symbol is shown when you need to see a service manual for additional instructions or information.

Vehicle Symbol Chart

Here are some additional symbols that may be found on the vehicle and what they mean. For more information on the symbol, refer to the Index.

: Airbag Readiness Light

: Antilock Brake System (ABS)

: Air Conditioning Refrigerant Oil

: Audio Steering Wheel Controls or OnStar® (if equipped)

: Brake System Warning Light

: Charging System (12-Volt Battery)

: Cruise Control

: Exterior Lamps

: Fog Lamps

: First Responder

: Fuses

: Headlamp High/Low-Beam Changer

: High Voltage

: LATCH System Child Restraints

: Energy Usage and Charge Mode Selection

: Power

: Remote Vehicle Start

: Safety Belt Reminders

: Service Vehicle Soon

: Tire Pressure Monitor

: Traction Control/StabiliTrak®

: StabiliTrak® Off

: Traction Control Off

READY : Vehicle Ready

: Windshield Washer Fluid

✍ NOTES

In Brief

Instrument Panel
Instrument Panel 1-2

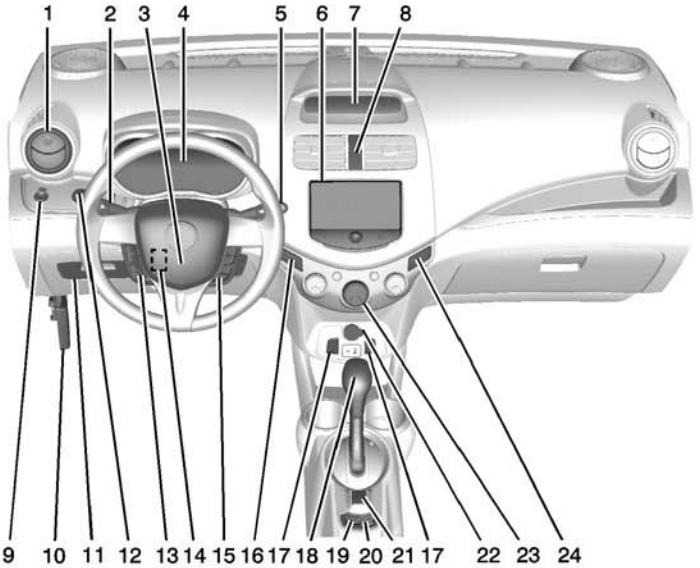
Initial Drive Information
Initial Drive Information 1-4
Remote Keyless Entry (RKE) System 1-4
Remote Start 1-4
Door Locks 1-5
Liftgate 1-6
Windows 1-6
Seat Adjustment 1-6
Second Row Seats 1-7
Head Restraint Adjustment 1-7
Safety Belts 1-8
Passenger Sensing System . . . 1-8
Mirror Adjustment 1-8
Steering Wheel Adjustment . . . 1-9
Interior Lighting 1-9
Exterior Lighting 1-10
Windshield Wiper/Washer 1-10
Climate Controls 1-11

Vehicle Features
Radio(s) 1-12
Satellite Radio 1-12
Portable Audio Devices 1-12
Bluetooth® 1-12
Steering Wheel Controls 1-13
Cruise Control 1-13
Driver Information Center (DIC) 1-14
Rear Vision Camera (RVC) 1-14
Power Outlets 1-14

Battery and Efficiency
High Voltage Safety Information 1-15
Charging 1-16
Regenerative Braking 1-21
Service 1-21

Performance and Maintenance
Traction Control/Electronic Stability Control 1-21
Tire Pressure Monitor 1-22
Driving for Better Energy Efficiency 1-22
Roadside Assistance Program 1-24
OnStar® 1-24

Instrument Panel



1. *Air Vents on page 8-4*.
2. *Exterior Lamp Controls on page 6-1*.

   Turn Signal Lever. See *Turn and Lane-Change Signals on page 6-4*.
3. *Horn on page 5-3*.
4. *Instrument Cluster on page 5-7*.
5. *Windshield Wiper/Washer on page 5-3*.
6. *Infotainment on page 7-1*.
7. Information Display.
8. *Hazard Warning Flashers on page 6-3*.
9. *Power Mirrors on page 2-14* (If Equipped).
10. Hood Release. See *Hood on page 10-4*.
11. *Instrument Panel Fuse Block on page 10-25*.
12. *Driver Information Center (DIC) on page 5-28*.

    Instrument Panel Illumination Control on page 6-4.
13. *Cruise Control on page 9-27* (If Equipped).
14. *Steering Wheel Adjustment on page 5-2*.
15. *Steering Wheel Controls on page 5-2* (If Equipped).
16. *Power Button on page 9-14*.
17. *Heated Front Seats on page 3-5* (If Equipped).
18. Shift Lever. See *Electric Drive Unit on page 9-19*.
19. *Traction Control/Electronic Stability Control on page 9-25*.
20. Sport Mode Button. See *Driver Selected Operating Modes on page 9-19*.
21. *Electric Parking Brake on page 9-22*.
22. *Power Outlets on page 5-6*.
23. *Automatic Climate Control System on page 8-1*.
24. Leaf Button. See *Power Flows on page 5-18*.

Initial Drive Information

This section provides a brief overview about some of the important features that may or may not be on your specific vehicle.

For more detailed information, refer to each of the features which can be found later in this owner manual.

Remote Keyless Entry (RKE) System

The RKE transmitter may work up to 60 m (195 ft) away from the vehicle.

With DC Charging Button Shown, Without DC Charging Similar

Press the key release button to extend the key. The key can be used for all locks.

: Press once to unlock the driver door. Press a second time within five seconds to unlock all doors.

: Press to lock all doors.

Lock and unlock feedback can be personalized. See *Vehicle Personalization on page 5-36*.

: Press and release to initiate vehicle locator. Press and hold for three seconds to sound the panic alarm. Press again to cancel the panic alarm.

: Press and release and then immediately press and hold for at least four seconds to start the vehicle's heating or air conditioning systems and rear window defogger from outside the vehicle using the RKE transmitter. See *Remote Start on page 2-7*.

: If equipped, press and hold to stop the charge. See *Plug-In Charging on page 9-32*.

See *Keys on page 2-1* and *Remote Keyless Entry (RKE) System Operation on page 2-3*.

Remote Start

Use remote start to heat or cool the interior when the vehicle is plugged in to maximize electric range by utilizing electricity from the electrical outlet. The vehicle may start to

support the climate control operation. Normal operation of the system will return after the vehicle has been turned on.

Activating Remote Start

1. Aim the RKE transmitter at the vehicle.
2. Press and release 🔒.
3. Immediately, press and hold for at least four seconds or until the turn signal lamps flash.

After entering the vehicle during a remote start, press the ⏻ POWER button on the center stack with the brake pedal applied to operate as normal.

The time can be extended on a remote start. See “Extending Vehicle Run Time” under *Remote Start on page 2-7*.

Canceling Remote Start

To cancel a remote start, do any of the following:

- Aim the RKE transmitter at the vehicle and press and hold until the parking lamps turn off.
- Turn on the hazard warning flashers.
- Press ⏻ POWER on the center stack, with the brake pedal applied, then press ⏻ POWER again to turn the vehicle off.

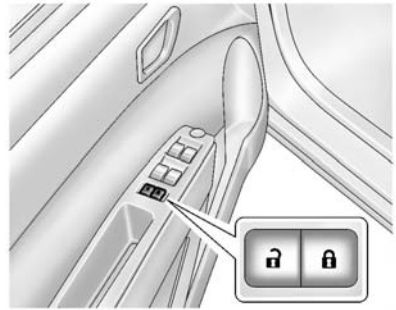
See *Remote Start on page 2-7*.

Door Locks

To lock or unlock the doors from outside the vehicle:

- Use the key in the driver door to lock and unlock the door.
- Press 🔒 or 🔓 on the Remote Keyless Entry (RKE) transmitter to lock and unlock the doors.

  See *Remote Keyless Entry (RKE) System Operation on page 2-3*.



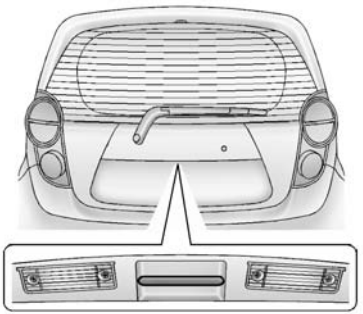
To lock or unlock the doors from inside the vehicle:

- Press 🔒 or 🔓.
- Use the lock knob on the top of the door panel.

See *Door Locks on page 2-8* and *Central Locking System on page 2-9*.

Liftgate

To unlock the liftgate, press 🔓 on a power door lock switch or press 🔓 twice on the Remote Keyless Entry (RKE) transmitter. See *Remote Keyless Entry (RKE) System Operation on page 2-3*.



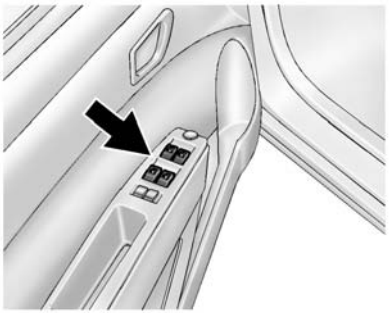
To open the liftgate, pull the handle and lift up.

When closing the liftgate, use the pull cup.

To lock the liftgate, press 🔒 on a power door lock switch or on the RKE transmitter, or use the key in the lock cylinder.

See *Liftgate on page 2-11*.

Windows



Press the switch down to open the window. Pull the front of the switch up to close it.

The switches work when the vehicle is in ON/RUN or when Retained Accessory Power (RAP) is active.

See *Retained Accessory Power (RAP) on page 9-17* and *Power Windows on page 2-16*.

Seat Adjustment

Manual Seats

To adjust the seat:

1. Lift the bar under the front edge of the seat cushion to unlock the seat.
2. Slide the seat to the desired position and release the bar.

3. Try to move the seat back and forth to be sure it is locked in place.

See *Seat Adjustment on page 3-3*.

Seat Height Adjuster

If available, turn the knob to raise or lower the seat.

See *Seat Adjustment on page 3-3*.

Reclining Seatbacks

To recline the seatback:

1. Lift the lever.
2. Move the seatback to the desired position, and then release the lever to lock the seatback in place.
3. Push and pull on the seatback to make sure it is locked in place.

To return the seatback to the upright position:

1. Lift the lever fully without applying pressure to the seatback, and the seatback will return to the upright position.
2. Push and pull on the seatback to make sure it is locked.

See *Reclining Seatbacks on page 3-4*.

Second Row Seats

The rear seatbacks can be folded down to increase cargo space.

See *Rear Seats on page 3-6*.

Head Restraint Adjustment

Do not drive until the head restraints for all occupants are installed and adjusted properly.

To achieve a comfortable seating position, change the seatback recline angle as little as necessary

while keeping the seat and the head restraint height in the proper position.

See *Head Restraints on page 3-2* and *Seat Adjustment on page 3-3*.

Safety Belts

Refer to the following sections for important information on how to use safety belts properly.

- *Safety Belts on page 3-8*.
- *How to Wear Safety Belts Properly on page 3-9*.
- *Lap-Shoulder Belt on page 3-10*.
- *Lower Anchors and Tethers for Children (LATCH System) on page 3-37*.

Passenger Sensing System

United States

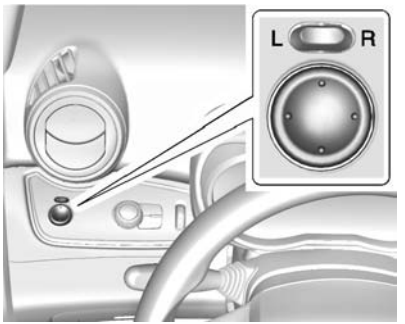
Canada and Mexico

The passenger sensing system turns off the front outboard passenger frontal airbag and knee airbag under certain conditions. No other airbag is affected by the passenger sensing system. See *Passenger Sensing System on page 3-23* for important information.

The passenger airbag status indicator will be visible on the center display when the vehicle is started. See *Passenger Airbag Status Indicator on page 5-12*.

Mirror Adjustment

Exterior Mirrors



1. Move the selector switch to L (Left) or R (Right) to choose the driver or passenger mirror.

2. Move the control up, down, or side to side to adjust the mirror.
3. Return the selector switch to the center with done.

See *Power Mirrors on page 2-14*.

Folding Mirrors

The vehicle has manual folding mirrors. These mirrors can be folded inward to prevent damage when going through an automatic car wash. To fold, pull the mirror toward the vehicle. Push the mirror outward to return it to the original position.

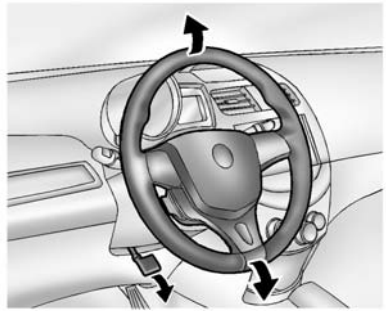
See *Folding Mirrors on page 2-15*.

Interior Mirror

Manual Rearview Mirror

To avoid glare of the headlamps from behind, pull the tab backward for nighttime use. Push the tab forward for daytime use.

Steering Wheel Adjustment



To adjust the steering wheel:

1. Pull the lever down.
2. Move the steering wheel up or down.
3. Pull the lever up to lock the steering wheel in place.

Do not adjust the steering wheel while driving.

Interior Lighting

Dome Lamps

The dome lamp controls are in the overhead console.

Move the control to change the lamp setting.

OFF: Turns the lamps off, even when a door is open.

DOOR: Turns the lamps on automatically when a door is opened.

ON: Turns on the dome lamps.

For more information about interior lighting, see *Instrument Panel Illumination Control on page 6-4* or *Courtesy Lamps on page 6-5*.

Exterior Lighting

The exterior lamp control is on the turn signal lever on the left side of the steering column.

There are four positions:

: Turns on the headlamps together with the parking lamps and instrument panel lights.

: Turns on the parking lamps including all lamps, except the headlamps.

AUTO: Turns the exterior lamps on and off automatically depending on the exterior light.

: Turns all the lamps off, except the Daytime Running Lamps (DRL).

The DRL automatically turn off when the vehicle is turned off.

See *Exterior Lamp Controls on page 6-1* and *Daytime Running Lamps (DRL) on page 6-2*.

Windshield Wiper/Washer

The windshield wiper/washer lever is on the right side of the steering column.

Move the lever to one of the following positions:

HI: Use for fast wipes.

LO: Use for slow wipes.

INT: Move the lever up to INT for intermittent wipes, then turn the INT band up for more frequent wipes or down for less frequent wipes.

OFF: Use to turn the wipers off.

: For a single wipe, briefly move the wiper lever down. For several wipes, hold the wiper lever down.

Windshield Washer

Pull the windshield wiper lever toward you to spray windshield washer fluid and activate the wipers.

Rear Wiper/Washer

If equipped with the rear wiper/washer, the controls are on the end of the windshield wiper lever.

ON: Turns the rear wiper on for continuous wipes.

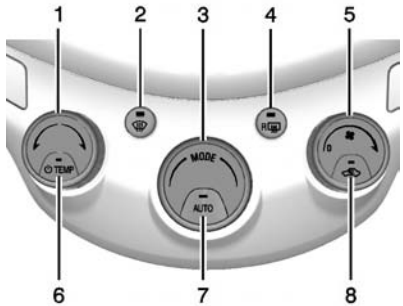
OFF: Turns the rear wiper off.

: Sprays washer fluid on the rear window. The control returns to its ON or OFF starting position when released.

See *Windshield Wiper/Washer on page 5-3* or *Rear Window Wiper/Washer on page 5-4* (If Equipped).

Climate Controls

The heating, cooling, and ventilation for the vehicle can be controlled with this system.



1. Temperature Control
2. Defrost
3. Air Delivery Mode Control
4. Rear Window Defogger
5. Fan Control
6. TEMP (Air Conditioning/Heater Power)
7. AUTO (Automatic Operation)
8. Recirculation

See *Automatic Climate Control System on page 8-1*.

Vehicle Features

Radio(s)

∨ VOL ∧ : Press to decrease or increase the volume.

⏻ : Press and hold to turn the power on and off.

Buttons 1−5: Press the screen buttons to save and select favorite stations.

For more information about these and other radio features, see *Operation on page 7-4*.

Storing a Favorite Station

Stations from all bands can be stored in the favorite lists in any order. Up to five stations can be stored in each of the seven favorite pages.

To store the station to a position in the list, press the corresponding screen button 1−5 until a beep is heard.

For more information, see “Storing a Station as a Favorite” in *AM-FM Radio on page 7-5*.

Setting the Clock

See *Clock on page 5-5*.

Satellite Radio

If equipped, vehicles with a SiriusXM® satellite radio tuner and a valid SiriusXM satellite radio subscription can receive SiriusXM programming.

SiriusXM Satellite Radio Service

SiriusXM is a satellite radio service based in the 48 contiguous United States and 10 Canadian provinces. SiriusXM satellite radio has a wide variety of programming and commercial-free music, coast to coast, and in digital-quality sound. A fee is required to receive the SiriusXM service.

Refer to:

- www.siriusxm.com or call 1-866-635-2349 (U.S.).
- www.xmradio.ca or call 1-877-209-0079 (Canada).

See *Satellite Radio on page 7-7*.

Portable Audio Devices

The vehicle has a 3.5 mm (1/8 in) auxiliary input and a USB port in the center stack. External devices such as iPods®, laptop computers, MP3 players, CD changers, and USB drives may be connected, depending on the audio system.

See *Auxiliary Devices on page 7-11*.

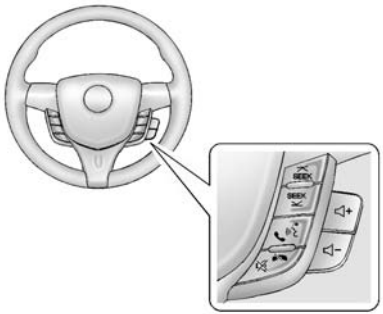
Bluetooth®

The Bluetooth® system allows users with a Bluetooth-enabled cell phone to make and receive hands-free calls using the vehicle audio system and controls.

The Bluetooth-enabled cell phone must be paired with the in-vehicle Bluetooth system before it can be used in the vehicle. Not all phones will support all functions.

See *Bluetooth (Overview) on page 7-12* or *Bluetooth (Infotainment Controls) on page 7-14*.

Steering Wheel Controls



If equipped with audio steering wheel controls, some audio controls can be adjusted at the steering wheel.

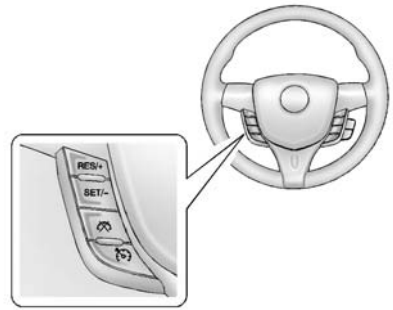
SEEK or SEEK : Press to go to the next or previous radio station, song on an iPod®, or file on a USB device (if equipped).

/ : If equipped with Bluetooth or OnStar, press to interact with those systems. See *Bluetooth (Overview) on page 7-12* or *Bluetooth (Infotainment Controls) on page 7-14* or *OnStar Overview on page 14-1*.

/ : Press to silence the vehicle speakers only. Press again to turn the sound on. If equipped with OnStar or Bluetooth systems, press to decline an incoming call, to end speech recognition, or to end a current call.

+ or − : Press + or − to increase or decrease the volume.

Cruise Control



If equipped with cruise control:

: Press to turn the cruise control system on and off. A cruise control indicator light turns on when in use.

RES/+: If there is a set speed in memory, press briefly to resume to that speed or press and hold to accelerate. If cruise control is already active, use to increase vehicle speed.

SET/−: Press briefly to set the speed and activate cruise control. If cruise control is already active, use to decrease vehicle speed.

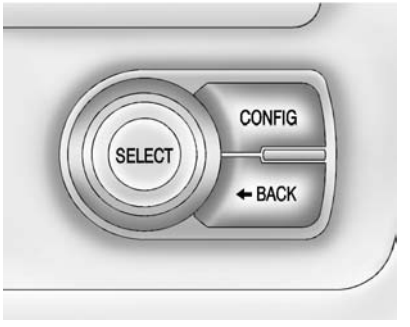
: Press to disengage cruise control without erasing the set speed from memory.

See *Cruise Control on page 9-27*.

Driver Information Center (DIC)

The DIC has different displays, which can be accessed by using the DIC buttons to the left of the steering wheel. The DIC displays information about the vehicle and warning messages if a system problem is detected.

DIC Controls



CONFIG: Press to change the instrument cluster display configuration. See *Instrument Cluster on page 5-7*.

BACK: Press to return to the previous screen, exit a screen, or return to the main menu. Press BACK to minimize the DIC menu display.

SELECT: Press the center of the knob to select the highlighted item. Turn the knob to scroll through the menu items.

See *Driver Information Center (DIC) on page 5-28*.

Rear Vision Camera (RVC)

The RVC displays a view of the area behind the vehicle, on the infotainment system display, when the vehicle is shifted into R (Reverse).

See *Rear Vision Camera (RVC) on page 9-30*.

Power Outlets

The accessory power outlets can be used to plug in electrical equipment, such as a cell phone or MP3 player.

The vehicle may have accessory power outlets:

- On the center stack below the climate control.
- On the rear of the center console.

See *Power Outlets on page 5-6*.

Battery and Efficiency

High Voltage Safety Information

⚠ Warning

Exposure to high voltage can cause shock, burns, and even death. The high voltage components in the vehicle can only be serviced by technicians with special training.

High voltage components are identified by labels. Do not remove, open, take apart, or modify these components. High voltage cable or wiring has orange covering. Do not probe, tamper with, cut, or modify high voltage cable or wiring.

This vehicle has a high voltage battery and a standard 12-volt battery.

If the vehicle is in a crash, the sensing system may shut down the high voltage system. When this occurs, the high voltage battery is disconnected and the vehicle will not start. The SERVICE VEHICLE SOON message in the Driver Information Center (DIC) will be displayed. Before the vehicle can be operated again, it must be serviced at your dealer.

⚠ Warning

Damage to the high voltage battery or high voltage system can create a risk of electric shock, overheating, or fire.

If the vehicle is damaged from a moderate to severe crash, flood, fire, or other event, the vehicle should be inspected as soon as possible. Until the vehicle has been inspected, store it outside at least 15 m (50 ft) from any

(Continued)

Warning (Continued)

structure or anything that can burn. Ventilate the vehicle by opening a window or a door.

Contact Spark EV Customer Assistance at 1 855-477-2754 (1-855-4SPARKINFO) as soon as possible to determine whether an inspection is needed.

See *Battery on page 10-13* for important safety information. If an airbag has inflated, see *What Will You See after an Airbag Inflates? on page 3-21*.

Only a trained service technician with the proper knowledge and tools should inspect, test, or replace the high voltage battery. See your dealer if the high voltage battery needs service.

See *Battery on page 10-13*.

Charging

This section explains the process for charging the high voltage battery. Do not allow the vehicle to remain in temperature extremes for long periods without being driven or plugged in. It is recommended that the vehicle be plugged in when temperatures are below 0°C (32°F) and above 32°C (90°F) to maximize high voltage battery life.

Do not turn the vehicle on during charging. Turning the vehicle on or activating remote start while the vehicle is charging may use more energy than the charger provides and may cause the charging process to deactivate.

When using a 240-volt charging station, it will take approximately seven hours to charge the vehicle from empty to full. When using a 120-volt AC electrical outlet, it will take approximately 20 hours to charge the vehicle with the 12 amp AC current setting, and considerably longer using the default 8 amp AC current setting. Charge times will vary with outside temperature. There are three ways to program how the vehicle is charged. See *Programmable Charging on page 5-19*.

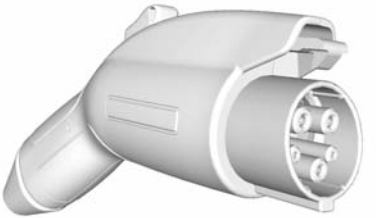
If equipped, the vehicle can be charged using DC charging equipment found at service stations and other public locations.

When using a DC charging station with at least 50kW of available power, it will take approximately 20 minutes to recharge from a depleted battery to a level of 80% of the driving range available for use. This time estimate is applicable to nominal temperature ranges. In extreme hot or cold conditions, this time may be lengthened. When a full charge is desired, the charging time will be increased.

The charging system may run fans and pumps that result in sounds from the vehicle while it is turned off. Additionally, clicking sounds may be caused by the electrical devices used while charging.

While the charge cord is plugged into the vehicle, the vehicle cannot be driven.

AC Charging



AC Charge Cord Vehicle Plug

Start Charge

1. Make sure the vehicle is parked and turned off.

2. Push on the charge port door and release to open the door.

   In cold weather conditions, ice may form around the charge port door. The charge port door may not open on the first attempt. Remove ice from the area and repeat attempting to open the charge port door.

3. Open the rear hatch, lift the load support floor covering, and remove the charge cord. It is located near the tire sealant and compressor kit. Pull up on the charge cord handle to release it from the handle clip. Lift the charge cord up and rearward to remove it from the vehicle. The vehicle plug is stored as shown.

4. Plug the charge cord into the electrical outlet. See *Electrical Requirements for Battery Charging on page 9-41*. Verify the charge cord status. See the charge cord user guide and *Charge Cord on page 9-40*. Select the appropriate charge level. See *Programmable Charging on page 5-19*.

5. Plug in the AC vehicle plug of the charge cord into the charge port on the vehicle. Make sure the AC vehicle plug is fully

connected to the AC charge port. If it is not properly seated, the charge may not occur.

6. Verify that the Charging Status Indicator illuminates on top of the instrument panel and a horn chirp occurs. See *Charging Status Feedback on page 9-37*.

End Charge

1. Unlock the vehicle with the RKE transmitter to disarm the charge cord theft alert.
2. Unplug the vehicle plug of the charge cord from the vehicle. Unlock the vehicle plug of the charge cord from the vehicle by pushing the button on the top of the charge cord plug.
3. Close the charge port door by pressing firmly in the center to latch properly.
4. Unplug the charge cord from the electrical outlet.
5. Place the charge cord into the storage compartment.

Charge Cord

See *Radio Frequency Statement on page 13-12*.

A portable charge cord used to charge the vehicle high voltage battery is stored in the rear hatch.

Important Information About Portable Electric Vehicle Charging

- Charging an electric vehicle can stress a building's electrical system more than a typical household appliance.
- Before you plug in to any electrical outlet, have a qualified electrician inspect and verify the electrical system (electrical outlet, wiring, junctions, and protection devices) for heavy-duty service at a 12 amp continuous load.
- Electrical outlets may wear out with normal usage or be damaged over time, making them unsuitable for electric vehicle charging.
- Check the electrical outlet/plug while charging and discontinue use if the electrical outlet/plug is hot, then have the electrical outlet serviced by a qualified electrician.
- When outdoors, plug into an electrical outlet that is weather-proof while in use.
- Mount the charge cord to reduce strain on the electrical outlet/plug.

⚠ Warning

Improper use of portable electric vehicle charge cords may cause a fire, electrical shock, or burns, and may result in damage to property, serious injury, or death.

- Do not use extension cords, multi-outlet power strips, splitters, grounding adaptors, surge protectors, or similar devices.

(Continued)

Warning (Continued)

- Do not use an electrical outlet that is worn or damaged, or one that will not hold the plug firmly in place.
- Do not use an electrical outlet that is not properly grounded.
- Do not use an electrical outlet that is on a circuit with other electrical loads.

See the charge cord user guide.

Charge Cord Status Indicators

See “Charge Cord Status Indicators” in the charge cord user guide.

Charge Level Selection

Charge level selection can be made using the Change Charge Level Preference screen on the center stack. See “Charge Level Selection” under *Programmable Charging on page 5-19*.

⚠ Warning

Using a charge level that exceeds the electrical circuit or electrical outlet capacity may start a fire or damage the electrical circuit. Use the lowest charge level until a qualified electrician inspects your electrical circuit capacity. Use the lowest charge level if the electrical circuit or electrical outlet capacity is not known.

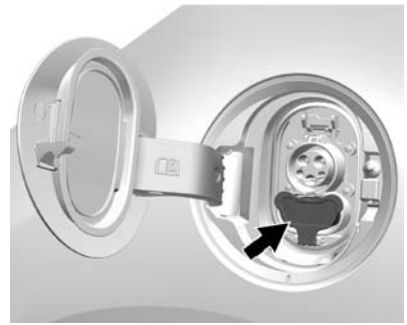
DC Charging

Start Charge

Starting a DC charge requires the vehicle to be off until charging has started. If for any reason DC charging does not begin or is interrupted, check the DC charge station display for messages. Unplug to restart the DC charge process.

1. Make sure the vehicle is parked and turned off.
2. Push ☞ on the charge port door and release to open the door.

   In cold weather conditions, ice may form around the charge port door. The charge port door may not open on the first attempt. Remove ice from the area and repeat attempting to open the charge port door.



3. Unlatch the DC charging dust cover and lower it fully.

4. Plug in the DC vehicle plug into the DC charge port on the vehicle. Make sure that the DC vehicle plug is fully connected to the DC charge port. If it is not properly seated then the charge may not occur. Proper plug connection can be can be checked by information on the DIC.
5. Follow the steps listed on the charging station to start charging. The electric parking brake will automatically apply once the charge process has been started.
6. Once charging, the DC vehicle plug will be locked to the DC charge port and cannot be disconnected while charging is active.
7. Verify the charging status indicator illuminates on top of the instrument panel and a horn chirp occurs. See *Charging Status Feedback on page 9-37*.

⚠ Caution

Do not attempt to disconnect the DC vehicle plug while charging is active. This action may damage vehicle or charging station hardware.

Stop Charge

Controls on the charging station can be used to stop the charge process at any time.

To stop charging using the RKE transmitter, press and hold the stop charge button. This only applies to DC charging. The latch button on the DC vehicle plug should not be used to stop charging.

Additionally, to stop the charge when inside the vehicle, you may use the stop charging button on the Battery Information Screen.

Stop Charge — Automatic

When the vehicle no longer needs to use power from the charging station, it will stop charging and the DC vehicle plug will be unlocked from the DC charge port.

Energy can still be consumed from the charging station when the vehicle displays and indicators show that the battery is fully charged. This is to ensure the battery is in optimal temperature operating range to maximize vehicle range. See *Programmable Charging on page 5-19*.

The process can be stopped by using the procedure to stop charging manually.

End Charge

1. Wait until the charging process has been fully stopped and the Charging Status Indicator is no longer solid green.
2. Unlock the vehicle with the RKE transmitter to disarm the charge cord theft alert.

3. Unplug the DC vehicle plug from the DC charge port on the vehicle.
4. Close the charge port door by pressing firmly in the center to latch properly.
5. The electric parking brake should be manually disengaged before driving the vehicle.
6. To start another DC charge, remove the DC vehicle plug and reconnect.

Regenerative Braking

Regenerative braking takes some of the energy from the moving vehicle and turns it back into electrical energy. This energy is then stored in the high voltage battery system, contributing to increased energy efficiency.

See *Regenerative Braking on page 9-24*.

Service

⚠ Warning

Never try to do your own service on high voltage components. You can be injured and the vehicle can be damaged if you try to do your own service work. Service and repair of these high voltage components should only be performed by a trained service technician with the proper knowledge and tools. See *Doing Your Own Service Work on page 10-3*.

Performance and Maintenance

Traction Control/ Electronic Stability Control

The Traction Control System (TCS) limits wheel spin. The system turns on automatically every time the vehicle is started.

The StabiliTrak system assists with directional control of the vehicle in difficult driving conditions. The system also turns on automatically every time the vehicle is started.

- To turn off traction control, press and release the OFF button on the center console behind the shift lever. The traction off light TC illuminates, and the appropriate DIC message is displayed. See *Ride Control System Messages on page 5-33*.

- To turn off both traction control and StabiliTrak, press and hold the OFF button, until the traction off light and the StabiliTrak OFF light OFF illuminate. The appropriate DIC messages are displayed. See *Ride Control System Messages on page 5-33*.
- Press and release the OFF button again to turn on both systems.

See *Traction Control/Electronic Stability Control on page 9-25*.

Tire Pressure Monitor

This vehicle may have a Tire Pressure Monitor System (TPMS).

The low tire pressure warning light alerts to a significant loss in pressure of one of the vehicle's tires. If the warning light comes on, stop as soon as possible and inflate the tires to the recommended pressure shown on the Tire and Loading Information label. See *Vehicle Load Limits on page 9-10*. The warning light will remain on until the tire pressure is corrected.

The low tire pressure warning light may come on in cool weather when the vehicle is first started, and then turn off as the vehicle is driven. This may be an early indicator that the tire pressures are getting low and the tires need to be inflated to the proper pressure.

The TPMS does not replace normal monthly tire maintenance. Maintain the correct tire pressures.

See *Tire Pressure Monitor System on page 10-35*.

Driving for Better Energy Efficiency

Use the following tips to help maximize energy efficiency and range.

In colder temperatures, while these efficiency tips will help, the electric vehicle driving range may be lower due to higher energy usage.

Driving Style

Efficiency Gauge (Instrument Cluster)

The ball indicator should be kept green and in the center of the gauge.

Inefficient acceleration is indicated when the ball turns yellow and travels above the center of the gauge.

Aggressive braking is indicated when the ball turns yellow and travels below the center of the gauge.

Acceleration/Braking/Coasting

Avoid unnecessary rapid accelerations and decelerations.

Electric range is maximized at 80 km/h (50 mph) and below. Higher speeds use more energy and can significantly reduce electric range.

Use cruise control when appropriate.

Plan ahead for decelerations and coast whenever possible. For example, do not rush to traffic signals.

Do not shift to N (Neutral) to coast. The vehicle recovers energy while coasting and braking in D (Drive) or L (Low).

Drive Mode and PRNDL Selection

Use Normal Mode when possible.

Sport Mode provides more responsive acceleration than Normal Mode but can reduce efficiency.

Use L (Low) in heavy stop-and-go traffic or when traveling downhill. L (Low) requires less brake pedal application and provides a controlled, efficient way to slow the vehicle down.

Climate Setting

Using the heat and air conditioning systems decreases the energy available for electric driving.

Optimal energy efficiency is achieved with the heat, air conditioning, and fan turned off.

Operating with the TEMP button off is the most energy efficient climate setting as long as is not selected.

Use the heated seat feature instead of climate settings. Heating the seat uses less energy than heating the vehicle interior.

Use remote start to heat or cool the interior when the vehicle is plugged in to maximize the electric range by utilizing electricity from the electrical outlet.

In hot weather, avoid parking in direct sunlight or use sunshades inside the vehicle.

Turn off the front and rear window defog/defrost when they are no longer needed.

Avoid driving with the windows open at highway speeds.

Vehicle Charging/Maintenance

Charging

Keep the vehicle plugged in, even when fully charged, to keep the battery temperature ready for the next drive. This is important when outside temperatures are extremely hot or cold.

Maintenance

Always keep the tires properly inflated and the vehicle properly aligned.

The weight of excess cargo in the vehicle affects efficiency and range. Avoid carrying more than is needed.

Avoid unnecessary use of electrical accessories. Power used for functions other than propelling the vehicle will reduce EV range.

Using a rooftop carrier will reduce efficiency due to additional weight and drag.

Roadside Assistance Program

U.S.: 1-888-811-1926

TTY Users (U.S. Only): 1-888-889-2438

Canada: 1-800-268-6800

As the owner of a new Chevrolet, you are automatically enrolled in the Roadside Assistance program.

See *Roadside Assistance Program on page 13-5*.

OnStar®

This vehicle may be equipped with a comprehensive, in-vehicle system that can connect to a live OnStar Advisor for Emergency, Security, Navigation, Connection, and Diagnostic Services. OnStar services may require a paid subscription. See *OnStar Overview on page 14-1*.

Keys, Doors, and Windows

Keys and Locks
Keys 2-1
Remote Keyless Entry (RKE) System 2-2
Remote Keyless Entry (RKE) System Operation 2-3
Remote Start 2-7
Door Locks 2-8
Central Locking System 2-9
Delayed Locking 2-9
Automatic Door Locks 2-9
Lockout Protection 2-9
Safety Locks 2-10

Doors
Liftgate 2-11

Vehicle Security
Vehicle Security 2-12
Vehicle Alarm System 2-12
Immobilizer 2-13
Immobilizer Operation 2-13

Exterior Mirrors
Convex Mirrors 2-14
Power Mirrors 2-14
Folding Mirrors 2-15

Interior Mirrors
Interior Rearview Mirrors 2-15
Manual Rearview Mirror 2-15

Windows
Windows 2-15
Power Windows 2-16
Sun Visors 2-17

Keys and Locks

Keys

⚠ Warning

Leaving children in a vehicle with a Remote Keyless Entry (RKE) transmitter is dangerous and children or others could be seriously injured or killed. They could operate the power windows or other controls or make the vehicle move. The windows will function with the RKE transmitter in the vehicle, and children or others could be caught in the path of a closing window. Do not leave children in a vehicle with an RKE transmitter.

The key that is part of the RKE transmitter can be used for all locks.

With DC Charging Button Shown, Without DC Charging Similar

- Press the key release button on the RKE transmitter to extend the key.
- Press the key release button and fold the key blade to retract the key.

The key has a bar-coded key tag that the dealer or qualified locksmith can use to make new keys. Store this information in a safe place, not in the vehicle.

See your dealer if a replacement key or an additional key is needed.

If it becomes difficult to turn the key in a vehicle lock, inspect the key blade for debris. Periodically clean with a brush or pick.

If locked out of the vehicle, call the Roadside Assistance Center. See *Roadside Assistance Program on page 13-5*. If equipped with an active OnStar subscription, an OnStar Advisor may remotely unlock the vehicle. If equipped, see *OnStar Overview on page 14-1*.

Remote Keyless Entry (RKE) System

See *Radio Frequency Statement on page 13-12*.

If there is a decrease in the RKE operating range:

- Check the distance. The transmitter may be too far from the vehicle.

- Check the location. Other vehicles or objects may be blocking the signal.
- Check the transmitter's battery. See “Battery Replacement” later in this section.
- If the transmitter is still not working correctly, see your dealer or a qualified technician for service.

Remote Keyless Entry (RKE) System Operation

The RKE transmitter functions may work up to 60 m (195 ft) away from the vehicle.

Other conditions, such as those previously stated, can impact the performance of the transmitter.

With DC Charging Button Shown, Without DC Charging Similar

(Unlock): Press once to unlock the driver door. Press a second time within five seconds to unlock all doors.

The hazard warning lamps will flash twice each time the button is pressed and the anti-theft alarm system will be disarmed. See *Vehicle Alarm System on page 2-12*.

(Lock): Press to lock all doors. The hazard warning lamps will flash once and the anti-theft alarm system will be armed. See *Vehicle Alarm System on page 2-12*.

If the driver door is open when is pressed, all doors lock and then the driver door will unlock if the Unlocked Door Anti Lock Out feature is enabled through the vehicle personalization. See “Unlocked Door Anti Lock Out” under *Vehicle Personalization on page 5-36*. This may vary based on vehicle personalization.

(Panic Alarm): Press and release one time to initiate vehicle locator. The exterior lamps flash and the horn chirps three times. Press and hold for three seconds to sound the panic alarm. The horn sounds and the turn signals flash for 30 seconds. Press again or start the vehicle to cancel the panic alarm.

(Remote Start): Press and release and then immediately press and hold for at least four seconds to start the vehicle's heating or air conditioning systems and rear window defogger from outside the vehicle using the RKE transmitter. See *Remote Start on page 2-7*.

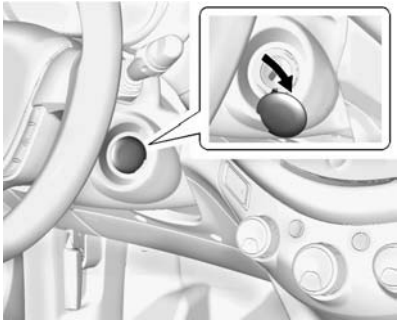
(Stop Charge): If equipped with DC charging, press and hold to stop the charge. See *Plug-In Charging on page 9-32*.

Programming Transmitters to the Vehicle

Only RKE transmitters programmed to this vehicle will work. If a transmitter is lost or stolen, a replacement can be purchased and programmed through your dealer. When the replacement transmitter is programmed to this vehicle, all remaining transmitters must also be reprogrammed. Any lost or stolen transmitters will no longer work once the new transmitter is programmed. Each vehicle can have up to eight transmitters matched to it.

Programming with a Recognized Transmitter

A new transmitter can be programmed to the vehicle when there is one recognized transmitter. To program, the vehicle must be off and all of the transmitters, both currently recognized and new, must be with you.



1. Remove the rubber cap on the steering column. Press the button on the recognized transmitter to extend the key blade. Insert the key blade into the transmitter slot.
2. Insert the vehicle key of the new transmitter into the key lock cylinder on the outside of the driver door and turn the key to the unlock position five times within 10 seconds.

   The Driver Information Center (DIC) displays READY FOR REMOTE #2, 3, 4 or 5.
3. Remove the recognized key and place the new transmitter into the transmitter slot.
4. Press the ⏻ POWER button. When the transmitter is learned, the DIC will show that it is ready to program the next transmitter.

5. Remove the transmitter from the transmitter pocket and press 🔓.

   To program additional transmitters, repeat Steps 3–5.

   When all additional transmitters are programmed, press and hold the ⏻ POWER for 12 seconds to exit programming mode. Replace the plastic trim piece from the small storage area.

Programming without a Recognized Transmitter

Program a new key to the vehicle when a recognized key is not available. Canadian regulations require that owners see their dealer.

This procedure will take approximately 30 minutes to complete. The vehicle must be off and all of the transmitters you wish to program must be with you.

1. Insert the vehicle key of the transmitter into the key lock cylinder on the outside of the driver door and turn the key to the unlock position five times within 10 seconds.

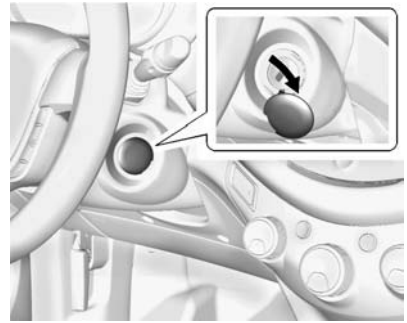
   The Driver Information Center (DIC) displays REMOTE LEARN PENDING, PLEASE WAIT.

2. Wait for 10 minutes until the DIC displays PRESS ENGINE START BUTTON TO LEARN and then press the ⏻ POWER.

   The DIC displays will again show REMOTE LEARN PENDING, PLEASE WAIT.

3. Repeat Step 2 two additional times. After the third time all previously known transmitters will no longer work with the vehicle. Remaining transmitters can be relearned during the next steps.

   The DIC display should now show READY FOR REMOTE # 1.



4. Remove the rubber cap on the steering column. Press the button on the recognized transmitter to extend the key blade. Insert the key blade into the transmitter slot.

5. Press the ⏻ POWER. When the transmitter is learned the DIC will show that it is ready to program the next transmitter.

6. Remove the transmitter from the transmitter slot and press 🔓.

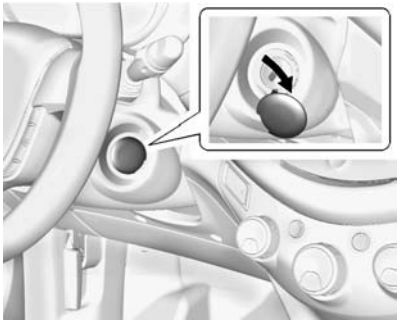
   To program additional transmitters, repeat Steps 4–6.

   When all additional transmitters are programmed, press and hold the ⏻ POWER for 12 seconds to exit programming mode. Replace the plastic trim piece from the small storage area.

Starting the Vehicle with a Low Transmitter Battery

If the transmitter battery is weak or there is interference with the signal, the DIC may display NO REMOTE DETECTED or PLACE KEY IN TRANSMITTER POCKET when you try to start the vehicle. The REPLACE BATTERY IN REMOTE KEY message may also display at this time.

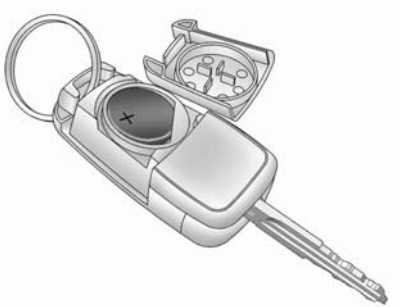
To start the vehicle:



1. Remove the rubber cap on the steering column.
2. Extend the key blade and place the blade into the slot.
3. With the vehicle in P (Park) or N (Neutral), press the brake pedal and ⏻ POWER on the center stack. See *Power Button on page 9-14*.

Replace the transmitter battery as soon as possible.

Battery Replacement



⚠ Caution

When replacing the battery, do not touch any of the circuitry on the transmitter. Static from your body could damage the transmitter.

To replace the battery:

1. Extend the key blade and open the battery cover on the back of the unit.

2. Remove the used battery. Avoid touching the circuit board to other components.
3. Insert the new battery, positive side facing down toward the base.
4. Reassemble the battery cover.
5. Check the operation of the transmitter with the vehicle.

Remote Start

Use remote start to heat or cool the interior when the vehicle is plugged in to maximize electric range by utilizing electricity from the electrical outlet. Normal operation of the system will return after the vehicle has been turned on.

(Remote Vehicle Start): This button will be on the RKE transmitter if the vehicle has remote start.

The climate control system will use the previous settings during a remote start. The rear defog may come on during remote start based on cold ambient conditions. The rear defog indicator light does not come on during remote start.

Laws in some local communities may restrict the use of remote starters. For example, some laws require a person using remote start to have the vehicle in view. Check local regulations for any requirements.

If the vehicle is low on electricity, do not use the remote start feature. The vehicle may run out of electricity.

The RKE transmitter range may be less while the vehicle is running.

Other conditions can affect the performance of the transmitter. See *Remote Keyless Entry (RKE) System on page 2-2*.

Activating the Remote Start

To start the vehicle using the remote start feature:

1. Aim the RKE transmitter at the vehicle.
2. Press and release .
3. Immediately press and hold for at least four seconds or until the turn signal lamps flash.
4. The vehicle will shut off after 20 minutes unless a time extension is done or the ⏻ POWER button is pressed.

After entering the vehicle during a remote start, press ⏻ POWER on the center stack with the brake pedal applied to operate as normal.

Extending Vehicle Run Time

The vehicle run time can also be extended by another 20 minutes, if during the first 20 minutes Steps 1–3 are repeated while the vehicle is running. This provides a total of 40 minutes.

The remote start can only be extended once.

A maximum of two remote starts, or a single start with an extension, are allowed between ignition cycles.

For additional remote starts, press ⏻ POWER first.

Canceling a Remote Start

To cancel a remote start, do one of the following:

- Aim the RKE transmitter at the vehicle and press and hold until the parking lamps turn off.
- Turn on the hazard warning flashers.
- Press ⏻ POWER on the center stack with the brake pedal applied, then press ⏻ POWER again to turn the vehicle off.

Conditions in Which Remote Start Will Not Work

The remote vehicle start feature will not operate if:

- The RKE transmitter is in the vehicle.
- The hood is not closed.
- The hazard warning flashers are on.
- The malfunction indicator lamp is on.
- The electric drive unit coolant temperature is too high.
- Two remote vehicle starts, or a single remote start with an extension, have already been used.
- The vehicle is not in P (Park).

Door Locks

⚠ Warning

Unlocked doors can be dangerous.

- Passengers, especially children, can easily open the doors and fall out of a moving vehicle. When a door is locked, the handle will not open it. The chance of being thrown out of the vehicle in a crash is increased if the doors are not locked. So, all

(Continued)

Warning (Continued)

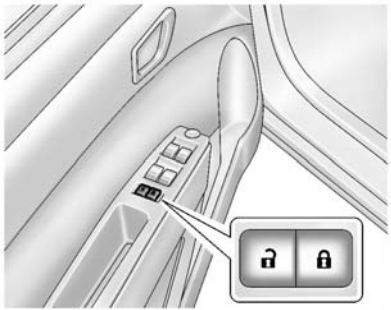
passengers should wear safety belts properly and the doors should be locked whenever the vehicle is driven.

- Young children who get into unlocked vehicles may be unable to get out. A child can be overcome by extreme heat and can suffer permanent injuries or even death from heat stroke. Always lock the vehicle whenever leaving it.
- Outsiders can easily enter through an unlocked door when you slow down or stop the vehicle. Locking the doors can help prevent this from happening.

To lock or unlock the doors from outside the vehicle:

- Use the key in the driver door to lock and unlock the door.

- Press 🔒 or 🔓 on the Remote Keyless Entry (RKE) transmitter to lock and unlock the doors. See *Remote Keyless Entry (RKE) System Operation on page 2-3*.



To lock or unlock the doors from inside the vehicle:

- Press 🔒 or 🔓.
- Use the lock knob on the top of the door panel.

Central Locking System

This system allows the doors and liftgate to be locked and unlocked by using the Remote Keyless Entry (RKE) transmitter or by using the key in the driver door.

See *Door Locks on page 2-8* and *Liftgate on page 2-11*.

Delayed Locking

This feature is activated through vehicle personalization. See *Vehicle Personalization on page 5-36*.

When delayed locking is active and 🔒 is pressed on the door lock switch while the door is open, a chime will sound three times.

When all the doors are closed, the doors will lock automatically after five seconds. If a door is reopened before five seconds have elapsed, the five-second timer will reset once all the doors are closed again.

Press 🔒 on the door lock switch again or press 🔒 on the RKE transmitter to override this feature and lock the doors immediately.

Automatic Door Locks

The doors will lock automatically when all doors are closed, the ignition is on, and the shift lever is moved out of P (Park).

To unlock the doors:

- Press 🔓 on a door.
- Shift the vehicle into P (Park).

Automatic door unlocking can be programmed through the Driver Information Center (DIC). See *Vehicle Personalization on page 5-36*.

Lockout Protection

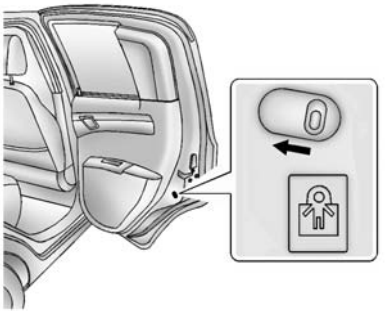
If the vehicle is in ACC/ACCESSORY or ON/RUN/START and the power door lock switch is

pressed with the driver door open, all the doors will lock and only the driver door will unlock.

Lockout Protection can be manually overridden with the driver door open by pressing and holding 🔒 on the power door lock switch.

If Unlocked Door Anti Lockout is turned on and the vehicle is off, the driver door is open, and locking is requested, all the doors will lock and only the driver door will unlock. The Unlocked Door Anti Lockout feature can be turned on or off using the vehicle personalization menus. See *Vehicle Personalization on page 5-36*.

Safety Locks



The vehicle has rear door safety locks on each rear door that prevent passengers from opening the rear doors from the inside.

Using the Rear Door Safety Lock

1. Move the lever up to lock.
2. Close the door.
3. Repeat Steps 1 and 2 for the other rear door lock.

⚠ Caution

Pulling the inside door handle while the rear door safety locks are engaged could damage your vehicle. Do not pull the inside door handle while the rear door safety locks are engaged.

The rear doors on the vehicle cannot be opened from the inside while this feature is in use.

Opening a Rear Door When the Safety Lock Is On

1. Unlock the door from the inside.
2. Open the door from the outside.

For the rear doors to open from the inside, the safety locks have to be moved back to the unlock position.

Canceling a Rear Door Safety Lock

1. Unlock the door from the inside and open the door from the outside.

2. Move the lever down to unlock.
3. Repeat Steps 1 and 2 for the other rear door lock.

The rear door locks can now be locked and unlocked normally.

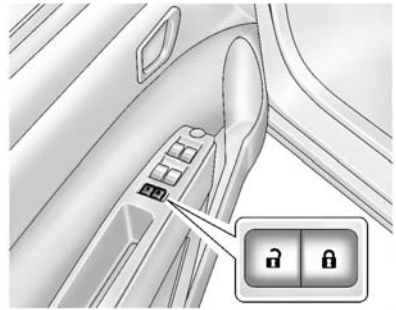
Doors

Liftgate

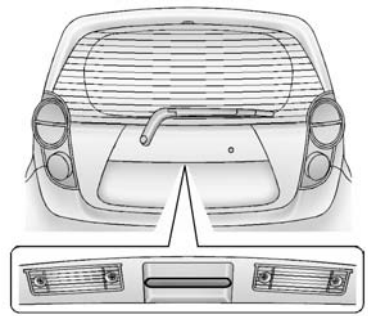
⚠ Caution

To avoid damage to the liftgate or liftgate glass, make sure the area above and behind the liftgate is clear before opening it.

To lock or unlock the liftgate from the outside, use the key in the liftgate lock or press 🔒 or 🔓 on the RKE transmitter. See *Remote Keyless Entry (RKE) System Operation on page 2-3*.



To lock or unlock the liftgate from the inside, press 🔒 or 🔓.



To open the liftgate, pull the handle and lift up.

When closing the liftgate, use the pull cup.

See *Central Locking System on page 2-9*.

Vehicle Security

This vehicle has theft-deterrent features; however, they do not make the vehicle impossible to steal.

Vehicle Alarm System

This vehicle has an anti-theft alarm system.

Arming the Alarm System

1. Close the trunk and the liftgate, then turn off the vehicle.
2. Lock the vehicle in one of two ways:
   - Use the RKE transmitter.
   - With a door open, press inside 🔒.
3. After 30 seconds the alarm will arm. Pressing 🔒 on the RKE transmitter a second time will bypass the 30-second delay and immediately arm the alarm system.

The vehicle alarm system will not arm if the doors are locked with the key.

If the driver door is opened without first unlocking with the RKE transmitter, the horn will chirp and the lights will flash to indicate pre-alarm. If the vehicle is not started, or the door is not unlocked by pressing 🔓 on the RKE transmitter during the 10-second pre-alarm, the alarm will be activated.

If a door or the liftgate is opened without first disarming the system, the turn signals will flash and the horn will sound for about 30 seconds. The alarm system will then re-arm to monitor for the next unauthorized event.

Disarming the System

Do one of the following to disarm the alarm system or turn off the alarm if it has been activated:

- Press 🔓 on the RKE transmitter.

- Start the vehicle.

To avoid setting off the alarm by accident:

- Lock the vehicle after all occupants have left the vehicle.
- Always unlock a door with the RKE transmitter.

Unlocking the driver door with the key will not disarm the system or turn off the alarm.

To turn off the alarm sound and lights without disarming or arming the system:

- Press any button on the RKE transmitter.
- Press on the RKE transmitter. The alarm will re-arm after about 30 seconds.

Detecting a Tamper Condition

If is pressed on the RKE transmitter and the horn chirps and the lights flash three times, an alarm occurred previously while the alarm system was armed.

If the alarm has been activated, a message will appear on the DIC. See *Security Messages on page 5-34*.

Immobilizer

See *Radio Frequency Statement on page 13-12*.

Immobilizer Operation

This vehicle has a passive theft-deterrent system.

The system does not have to be manually armed or disarmed.

The vehicle is automatically immobilized when the transmitter leaves the vehicle.

The immobilization system is disarmed when the ignition button is pressed and a valid transmitter is found in the vehicle.

The security light on the instrument cluster comes on when there is a problem with arming or disarming the theft-deterrent system.

The system has one or more transmitters matched to an immobilizer control unit in the vehicle. Only a correctly matched transmitter will start the vehicle. If the transmitter is ever damaged, you may not be able to start your vehicle.

When trying to start the vehicle, the security light comes on briefly when the ignition is turned on.

If the vehicle does not start and the security light stays on, there is a problem with the system. Turn the vehicle off and try again after 30 seconds.

If the RKE transmitter appears to be undamaged, try another transmitter, or place the transmitter in the steering ignition slot. See “Starting the Vehicle with a Low Transmitter Battery” under *Remote Keyless Entry (RKE) System Operation on page 2-3*.

If the vehicle does not start with the other transmitter or when the transmitter is in the steering ignition slot, your vehicle needs service. See your dealer who can service the theft-deterrent system and have a new transmitter programmed to the vehicle.

Do not leave the transmitter or device that disarms or deactivates the theft-deterrent system in the vehicle.

Exterior Mirrors

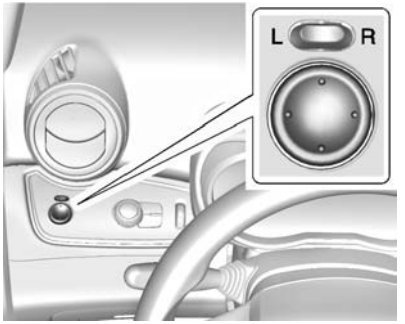
Convex Mirrors

⚠ Warning

A convex mirror can make things, like other vehicles, look farther away than they really are. If you cut too sharply into the right lane, you could hit a vehicle on the right. Check the inside mirror or glance over your shoulder before changing lanes.

The passenger side mirror is convex shaped. A convex mirror's surface is curved so more can be seen from the driver seat.

Power Mirrors



1. Move the selector switch to L (Left) or R (Right) to choose the driver or passenger mirror.
2. Move the control up, down, or side to side to adjust the mirror. Adjust the mirrors so the side and the area behind the vehicle can be seen.
3. Return the selector switch to the center when done.

Folding Mirrors

Manual Folding Mirrors

The vehicle has manual folding mirrors. These mirrors can be folded inward to prevent damage when going through an automatic car wash. To fold, pull the mirror toward the vehicle. Push the mirror outward to return it to the original position.

Interior Mirrors

Interior Rearview Mirrors

Adjust the rearview mirror for a clear view of the area behind your vehicle.

Do not spray glass cleaner directly on the mirror. Use a soft towel dampened with water.

Manual Rearview Mirror

Push the tab forward for daytime use and pull it rearward for nighttime use to avoid glare of the headlamps from behind.

Windows

⚠ Warning

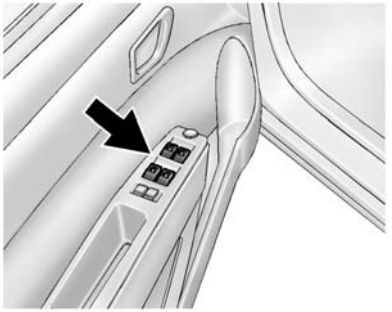
Never leave a child, a helpless adult, or a pet alone in a vehicle, especially with the windows closed in warm or hot weather. They can be overcome by the extreme heat and suffer permanent injuries or even death from heat stroke.

The vehicle aerodynamics are designed to improve electric range performance. This may result in a pulsing sound when either rear window is down and the front windows are up. To reduce the sound, open a front window.

Power Windows

⚠ Warning

Children could be seriously injured or killed if caught in the path of a closing window. Never leave keys in a vehicle with children. When there are children in the rear seat, use the window lockout button to prevent operation of the windows. See *Keys on page 2-1*.

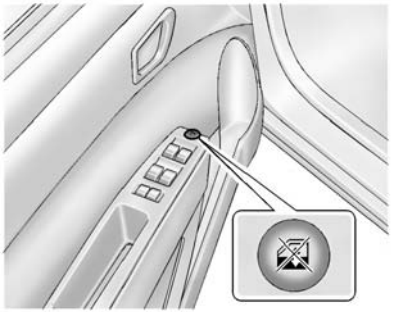


The switches on the driver door control all windows. In addition, each passenger door has a switch for its own window.

Press the switch down to open the window. Pull the front of the switch up to close it.

The power windows only operate with the ignition in ON/RUN or when Retained Accessory Power (RAP) is active. See *Retained Accessory Power (RAP) on page 9-17*.

Window Lockout



This feature prevents the rear passenger windows from operating, except from the driver position.

- Press to activate the window lockout.
- Press again to deactivate the window lockout.

Sun Visors

Pull the sun visor down to block out glare. Detach the sun visor from the center mount and swing it to the side.

Visor Vanity Mirror

The vehicle may have vanity mirrors and card holders on the back of the sun visors. Swing down the sun visor to expose the vanity mirror.

✍ NOTES

Seats and Restraints

Head Restraints
Head Restraints 3-2

Front Seats
Seat Adjustment 3-3
Reclining Seatbacks 3-4
Front Seat Armrest 3-5
Heated Front Seats 3-5

Rear Seats
Rear Seats 3-6

Safety Belts
Safety Belts 3-8
How to Wear Safety Belts Properly 3-9
Lap-Shoulder Belt 3-10
Safety Belt Use During Pregnancy 3-14
Safety Belt Extender 3-15
Safety System Check 3-15
Safety Belt Care 3-15
Replacing Safety Belt System Parts after a Crash 3-15

Airbag System
Airbag System 3-16
Where Are the Airbags? 3-18
When Should an Airbag Inflate? 3-20
What Makes an Airbag Inflate? 3-21
How Does an Airbag Restrain? 3-21
What Will You See after an Airbag Inflates? 3-21
Passenger Sensing System 3-23
Servicing the Airbag-Equipped Vehicle 3-27
Adding Equipment to the Airbag-Equipped Vehicle . . . 3-27
Airbag System Check 3-28
Replacing Airbag System Parts after a Crash 3-29

Child Restraints
Older Children 3-29
Infants and Young Children 3-31
Child Restraint Systems 3-34
Where to Put the Restraint . . . 3-36
Lower Anchors and Tethers for Children (LATCH System) 3-37
Replacing LATCH System Parts After a Crash 3-44
Securing Child Restraints (Rear Seat) 3-45
Securing Child Restraints (Front Passenger Seat) 3-47

Head Restraints

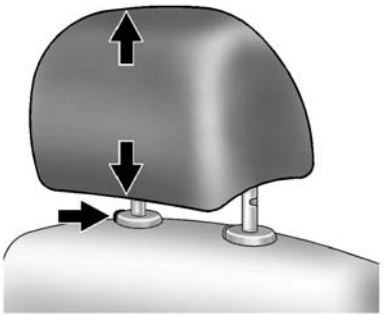
⚠ Warning

With head restraints that are not installed and adjusted properly, there is a greater chance that occupants will suffer a neck/spinal injury in a crash. Do not drive until the head restraints for all occupants are installed and adjusted properly.

Adjust the head restraint so that the top of the restraint is at the same height as the top of the occupant's head. This position reduces the chances of a neck injury in a crash.

Front Seats

The front seats have adjustable head restraints in the outboard seating positions.



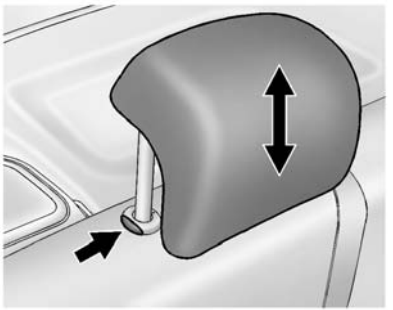
The height of the head restraint can be adjusted. Pull the head restraint up to raise it. Try to move the head restraint to make sure that it is locked in place.

To lower the head restraint, press the button, located on the top of the seatback, and push the head restraint down. Try to move the head restraint after the button is released to make sure that it is locked in place.

The front seat outboard head restraints are not removable.

Rear Seats

The vehicle's rear seats have adjustable head restraints in the outboard seating positions.



The height of the head restraint can be adjusted. Pull the head restraint up to raise it. Try to move the head restraint to make sure that it is locked in place.

To lower the head restraint, press the button, located on the top of the seatback, and push the head restraint down. Try to move the head restraint after the button is released to make sure that it is locked in place.

If you are installing a child restraint in the rear seat, see “Securing a Child Restraint Designed for the LATCH System” under *Lower Anchors and Tethers for Children (LATCH System) on page 3-37*.

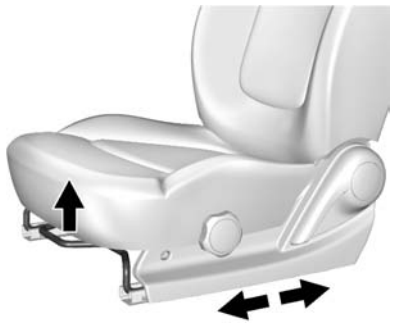
Front Seats

Seat Adjustment

Manual Seats

⚠ Warning

You can lose control of the vehicle if you try to adjust a driver seat while the vehicle is moving. Adjust the driver seat only when the vehicle is not moving.



To adjust the seat:

1. Lift the bar under the front edge of the seat cushion to unlock the seat.
2. Slide the seat to the desired position and release the bar.
3. Try to move the seat back and forth to be sure it is locked in place.

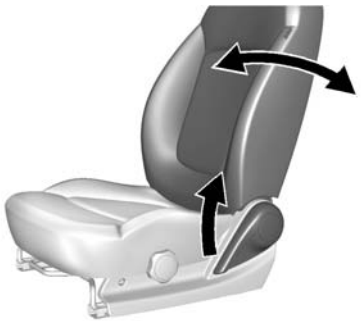
Seat Height Adjuster

If available, turn the knob to raise or lower the seat.

Reclining Seatbacks

⚠ Warning

If either seatback is not locked, it could move forward in a sudden stop or crash. That could cause injury to the person sitting there. Always push and pull on the seatbacks to be sure they are locked.



To recline the seatback:

1. Lift the lever.
2. Move the seatback to the desired position, and then release the lever to lock the seatback in place.
3. Push and pull on the seatback to make sure it is locked in place.

To return the seatback to the upright position:

1. Lift the lever fully without applying pressure to the seatback, and the seatback will return to the upright position.
2. Push and pull on the seatback to make sure it is locked.

⚠ Warning

Sitting in a reclined position when the vehicle is in motion can be dangerous. Even when buckled up, the safety belts cannot do their job.

(Continued)

Warning (Continued)

The shoulder belt will not be against your body. Instead, it will be in front of you. In a crash, you could go into it, receiving neck or other injuries.

The lap belt could go up over your abdomen. The belt forces would be there, not at your pelvic bones. This could cause serious internal injuries.

For proper protection when the vehicle is in motion, have the seatback upright. Then sit well back in the seat and wear the safety belt properly.

Do not have a seatback reclined if the vehicle is moving.

Front Seat Armrest

There is an armrest on the inboard side of the driver seat. To raise or lower the armrest, push up or pull down on the armrest.

Heated Front Seats

⚠ Warning

If you cannot feel temperature change or pain to the skin, the seat heater may cause burns. To reduce the risk of burns, people with such a condition should use care when using the seat heater, especially for long periods of time. Do not place anything on the seat that insulates against heat, such as a blanket, cushion, cover, or similar item. This may cause the seat heater to overheat. An overheated seat heater may cause a burn or may damage the seat.

The buttons are below the climate control system. To operate, the vehicle must be on.

Press or to heat the driver or passenger seat. The indicator light on the control turns on when this feature is on. Press the control again to turn this feature off.

The passenger seat may take longer to heat up.

Rear Seats

Folding the Seatback

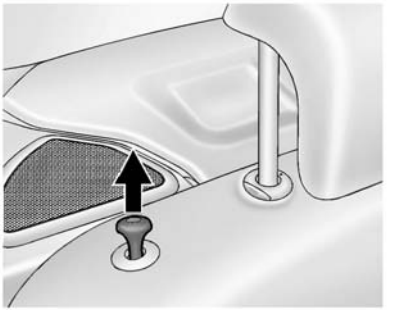
Either side of the seatback can be folded down for more cargo space. Fold a seatback only when the vehicle is not moving.

⚠ Caution

Folding a rear seat with the safety belts still fastened may cause damage to the seat or the safety belts. Always unbuckle the safety belts and return them to their normal stowed position before folding a rear seat.

To fold a seatback down:

1. Remove the rear head restraints. See “Head Restraint Removal and Reinstallation” under *Lower Anchors and Tethers for Children (LATCH System) on page 3-37*.
2. Slide the front seats forward and place the front seatbacks in the upright position. See *Seat Adjustment on page 3-3* and *Reclining Seatbacks on page 3-4*.



3. Pull up the release knob on the top of the seatback.
4. Fold the seatback forward and down.
5. Repeat Steps 1–4 for the other seatback and seat cushion, if desired.

Raising the Seatback

⚠ Warning

If either seatback is not locked, it could move forward in a sudden stop or crash. That could cause injury to the person sitting there. Always push and pull on the seatbacks to be sure they are locked.

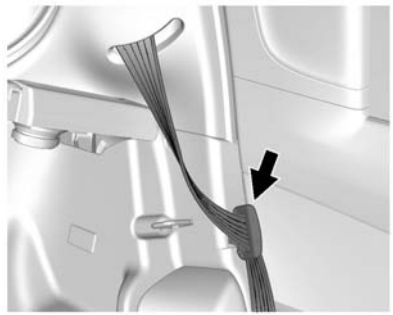
⚠ Warning

A safety belt that is improperly routed, not properly attached, or twisted will not provide the protection needed in a crash. The person wearing the belt could be seriously injured. After raising the rear seatback, always check to be sure that the safety belts are properly routed and attached, and are not twisted.

⚠ Warning

With head restraints that are not installed and adjusted properly, there is a greater chance that occupants will suffer a neck/spinal injury in a crash. Do not drive until the head restraints for all occupants are installed and adjusted properly.

To return the rear seats to the normal seating position:



1. Insert the safety belt latch plate into the hole on the side trim before raising the seatback.

   The safety belt should not cross the seatback locking mechanism when raising the seatback.
2. Lift the seatback up slightly and reinstall the head restraint. See “Head Restraint Removal and Reinstallation” under *Lower Anchors and Tethers for Children (LATCH System) on page 3-37*.
3. Push the seatback rearward all the way to lock it in place.
4. Push and pull the top of the seatback to be sure it is locked into position.
5. Remove the safety belt from the hole on the side trim.
6. Repeat Steps 1–5 for the other seatback and seat cushion, if necessary.

If added cargo space is not needed, the seatbacks should be kept in the upright, locked position

Safety Belts

This section of the manual describes how to use safety belts properly. It also describes some things not to do with safety belts.

⚠ Warning

Do not let anyone ride where a safety belt cannot be worn properly. In a crash, if you or your passenger(s) are not wearing safety belts, injuries can be much worse than if you are wearing safety belts. You can be seriously injured or killed by hitting things inside the vehicle harder or by being ejected from the vehicle. In addition, anyone who is not buckled up can strike other passengers in the vehicle.

It is extremely dangerous to ride in a cargo area, inside or outside of a vehicle. In a collision, passengers riding in these areas

(Continued)

Warning (Continued)

are more likely to be seriously injured or killed. Do not allow passengers to ride in any area of the vehicle that is not equipped with seats and safety belts.

Always wear a safety belt, and check that all passenger(s) are restrained properly too.

This vehicle has indicators as a reminder to buckle the safety belts. See *Safety Belt Reminders on page 5-11*.

Why Safety Belts Work

When riding in a vehicle, you travel as fast as the vehicle does. If the vehicle stops suddenly, you keep going until something stops you. It could be the windshield, the instrument panel, or the safety belts!

When you wear a safety belt, you and the vehicle slow down together. There is more time to stop because you stop over a longer distance and, when worn properly, your strongest bones take the forces from the

safety belts. That is why wearing safety belts makes such good sense.

Questions and Answers About Safety Belts

Q: Will I be trapped in the vehicle after a crash if I am wearing a safety belt?

A: You *could* be — whether you are wearing a safety belt or not. Your chance of being conscious during and after a crash, so you *can* unbuckle and get out, is *much* greater if you are belted.

Q: If my vehicle has airbags, why should I have to wear safety belts?

A: Airbags are supplemental systems only; so they work *with* safety belts — not instead of them. Whether or not an airbag is provided, all occupants still have to buckle up to get the most protection.

Also, in nearly all states and in all Canadian provinces, the law requires wearing safety belts.

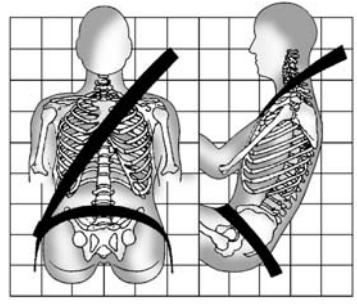
How to Wear Safety Belts Properly

This section is only for people of adult size.

There are special things to know about safety belts and children. And there are different rules for smaller children and infants. If a child will be riding in the vehicle, see *Older Children on page 3-29* or *Infants and Young Children on page 3-31*. Follow those rules for everyone's protection.

It is very important for all occupants to buckle up. Statistics show that unbelted people are hurt more often in crashes than those who are wearing safety belts.

There are important things to know about wearing a safety belt properly.



- Sit up straight and always keep your feet on the floor in front of you.
- Always use the correct buckle for your seating position.
- Wear the lap part of the belt low and snug on the hips, just touching the thighs. In a crash, this applies force to the strong pelvic bones and you would be less likely to slide under the lap belt. If you slid under it, the belt would apply force on your abdomen. This could cause serious or even fatal injuries.

- Wear the shoulder belt over the shoulder and across the chest. These parts of the body are best able to take belt restraining forces. The shoulder belt locks if there is a sudden stop or crash.

⚠ Warning

You can be seriously injured, or even killed, by not wearing your safety belt properly.

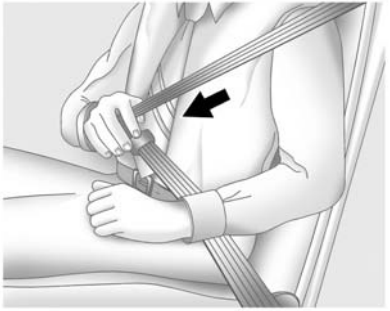
- Never allow the lap or shoulder belt to become loose or twisted.
- Never wear the shoulder belt under both arms or behind your back.
- Never route the lap or shoulder belt over an armrest.

Lap-Shoulder Belt

All seating positions in the vehicle have a lap-shoulder belt.

The following instructions explain how to wear a lap-shoulder belt properly.

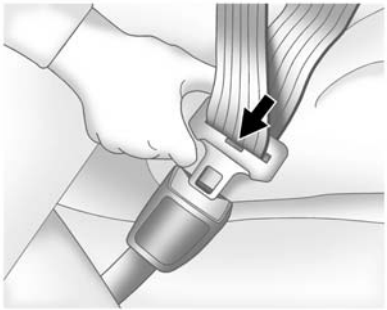
1. Adjust the seat, if the seat is adjustable, so you can sit up straight. To see how, see “Seats” in the Index.



2. Pick up the latch plate and pull the belt across you. Do not let it get twisted.

   The lap-shoulder belt may lock if you pull the belt across you very quickly. If this happens, let the belt go back slightly to unlock it. Then pull the belt across you more slowly.

   If the shoulder portion of a passenger belt is pulled out all the way, the child restraint locking feature may be engaged. If this happens, let the belt go back all the way and start again.

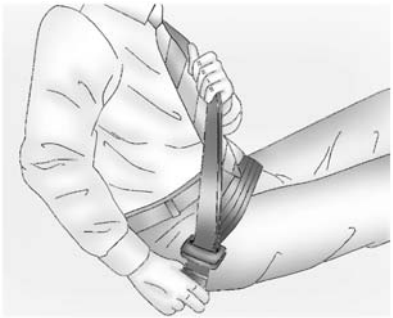


3. Push the latch plate into the buckle until it clicks.

   Pull up on the latch plate to make sure it is secure. If the belt is not long enough, see *Safety Belt Extender on page 3-15*.

   Position the release button on the buckle so that the safety belt could be quickly unbuckled if necessary.

4. If equipped with a shoulder belt height adjuster, move it to the height that is right for you. See “Shoulder Belt Height Adjuster” in this section for instructions on use and important safety information.



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

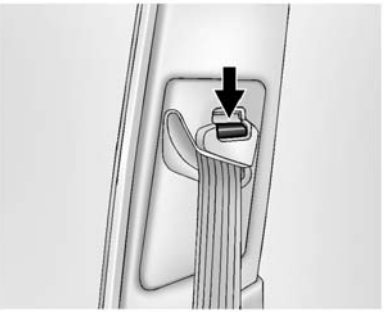
To unlatch the belt, push the button on the buckle. The belt should return to its stowed position.

Before a door is closed, be sure the belt is out of the way. If a door is slammed against a safety belt, damage can occur to both the safety belt and the vehicle.

Shoulder Belt Height Adjuster

The vehicle has a shoulder belt height adjuster for the driver position and may have an adjuster for the front outboard passenger seating position.

Adjust the height so the shoulder portion of the belt is on the shoulder and not falling off of it. The belt should be close to, but not contacting, the neck. Improper shoulder belt height adjustment could reduce the effectiveness of the safety belt in a crash. See *How to Wear Safety Belts Properly on page 3-9*.



Press the release button and move the height adjuster down to the desired position. The adjuster can be moved up by pushing up on the adjuster.

After the adjuster is set to the desired position, try to move it down without pressing the release button to make sure it has locked into position.

Safety Belt Pretensioners

This vehicle has safety belt pretensioners for front outboard occupants. Although the safety belt pretensioners cannot be seen, they are part of the safety belt assembly. They can help tighten the safety belts during the early stages of a moderate to severe frontal, near frontal, side, or rear crash if the threshold conditions for pretensioner activation are met. Safety belt pretensioners can also help tighten the safety belts in a side crash or a rollover event.

Pretensioners work only once. If the pretensioners activate in a crash, the pretensioners and probably other new parts of the vehicle's safety belt system will need to be replaced. See *Replacing Safety Belt System Parts after a Crash on page 3-15*.

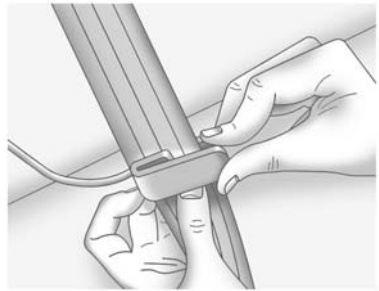
Rear Safety Belt Comfort Guides (U.S. and Canada Only)

This vehicle may have rear safety belt comfort guides. If not, they are available through your dealer.

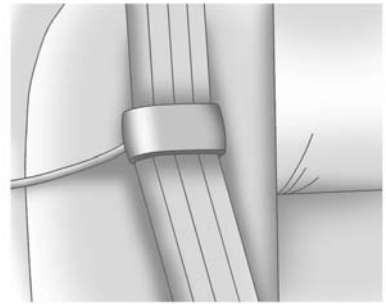
Rear safety belt comfort guides may provide added safety belt comfort for older children who have outgrown booster seats and for some adults. When installed on a shoulder belt, the comfort guide positions the shoulder belt away from the neck and head.

To install:

1. Locate the anchor loop on the rear outboard seatback, near the top.
2. Attach the comfort guide to the anchor loop by threading the hook through the loop.



3. Place the guide over the belt, and insert the two edges of the belt into the slots of the guide.



4. Be sure that the belt is not twisted and it lies flat. The elastic cord must be behind the belt with the plastic guide on the front.

⚠ Warning

A safety belt that is not properly worn may not provide the protection needed in a crash. The person wearing the belt could be seriously injured. The shoulder belt should go over the shoulder

(Continued)

Warning (Continued)

and across the chest. These parts of the body are best able to take belt restraining forces.

5. Buckle, position, and release the safety belt as described previously in this section. Make sure the shoulder portion of the belt is on the shoulder and not falling off of it. The belt should be close to, but not contacting, the neck.

To remove and store the comfort guide, squeeze the belt edges together so that the safety belt can be removed from the guide. Unhook the guide from the loop on the seat. Store the guide in a convenient place like the glove box for the next time it is needed.

Safety Belt Use During Pregnancy

Safety belts work for everyone, including pregnant women. Like all occupants, they are more likely to be seriously injured if they do not wear safety belts.

A pregnant woman should wear a lap-shoulder belt, and the lap portion should be worn as low as possible, below the rounding, throughout the pregnancy.

The best way to protect the fetus is to protect the mother. When a safety belt is worn properly, it is more likely that the fetus will not be hurt in a crash. For pregnant women, as for anyone, the key to making safety belts effective is wearing them properly.

Safety Belt Extender

If the vehicle's safety belt will fasten around you, you should use it.

But if a safety belt is not long enough, your dealer will order you an extender. When you go in to order it, take the heaviest coat you will wear, so the extender will be long enough for you. To help avoid personal injury, do not let someone else use it, and use it only for the seat it is made to fit. The extender has been designed for adults. Never use it for securing child seats. To wear it, attach it to the regular safety belt. See the instruction sheet that comes with the extender.

Safety System Check

Now and then, check that the safety belt reminder light, safety belts, buckles, latch plates, retractors, and anchorages are all working properly. Look for any other loose or damaged safety belt system parts that might keep a safety belt system from doing its job. See your dealer to have it repaired. Torn or frayed safety belts may not protect you in a crash. They can rip apart under impact forces. If a belt is torn or frayed, get a new one right away.

Make sure the safety belt reminder light is working. See *Safety Belt Reminders on page 5-11*.

Keep safety belts clean and dry. See *Safety Belt Care on page 3-15*.

Safety Belt Care

Keep belts clean and dry.

⚠ Warning

Do not bleach or dye safety belts. It may severely weaken them. In a crash, they might not be able to provide adequate protection. Clean safety belts only with mild soap and lukewarm water.

Replacing Safety Belt System Parts after a Crash

⚠ Warning

A crash can damage the safety belt system in the vehicle. A damaged safety belt system may not properly protect the person using it, resulting in serious injury or even death in a crash. To help make sure the safety belt systems are working properly after a crash, have them inspected and any necessary replacements made as soon as possible.

After a minor crash, replacement of safety belts may not be necessary. But the safety belt assemblies that were used during any crash may have been stressed or damaged.

See your dealer to have the safety belt assemblies inspected or replaced.

New parts and repairs may be necessary even if the safety belt system was not being used at the time of the crash.

Have the safety belt pretensioners, if equipped, checked if the vehicle has been in a crash, or if the airbag readiness light stays on after you start the vehicle or while you are driving. See *Airbag Readiness Light on page 5-11*.

Airbag System

The vehicle has the following airbags:

- A frontal airbag for the driver.
- A frontal airbag for the front outboard passenger.
- A knee airbag for the driver.
- A knee airbag for the front outboard passenger.
- A seat-mounted side impact airbag for the driver.
- A seat-mounted side impact airbag for the front outboard passenger.
- Seat-mounted side impact airbags for the second row outboard passengers.
- A roof-rail airbag for the driver and the passenger seated directly behind the driver.
- A roof-rail airbag for the front outboard passenger and the passenger seated directly behind the front outboard passenger.

All vehicle airbags have the word AIRBAG on the trim or on a label near the deployment opening.

For frontal airbags, the word AIRBAG is on the center of the steering wheel for the driver and on the instrument panel for the front outboard passenger.

For knee airbags, the word AIRBAG is on the lower part of the instrument panel.

For seat-mounted side impact airbags, the word AIRBAG is on the side of the seatback closest to the door.

For roof-rail airbags, the word AIRBAG is on the ceiling or trim.

Airbags are designed to supplement the protection provided by safety belts. Even though today's airbags are also designed to help reduce

the risk of injury from the force of an inflating bag, all airbags must inflate very quickly to do their job.

Here are the most important things to know about the airbag system:

⚠ Warning

You can be severely injured or killed in a crash if you are not wearing your safety belt, even with airbags. Airbags are designed to work with safety belts, not replace them. Also, airbags are not designed to inflate in every crash. In some crashes safety belts are the only restraint. See *When Should an Airbag Inflate? on page 3-20*.

Wearing your safety belt during a crash helps reduce the chance of hitting things inside the vehicle or being ejected from it. Airbags are "supplemental restraints" to the safety belts. Everyone in the

(Continued)

Warning (Continued)

vehicle should wear a safety belt properly, whether or not there is an airbag for that person.

⚠ Warning

Because airbags inflate with great force and faster than the blink of an eye, anyone who is up against, or very close to any airbag when it inflates can be seriously injured or killed. Do not sit unnecessarily close to any airbag, as you would be if sitting on the edge of the seat or leaning forward. Safety belts help keep you in position before and during a crash. Always wear a safety belt, even with airbags. The driver should sit as far back as possible while still maintaining control of the vehicle.

(Continued)

Warning (Continued)

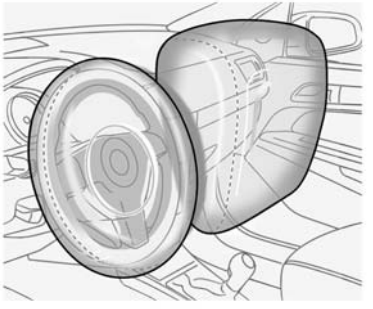
Occupants should not lean on or sleep against the door or side windows in seating positions with seat-mounted side impact airbags and/or roof-rail airbags.

⚠ Warning

Children who are up against, or very close to, any airbag when it inflates can be seriously injured or killed. Always secure children properly in the vehicle. To read how, see *Older Children on page 3-29* or *Infants and Young Children on page 3-31*.

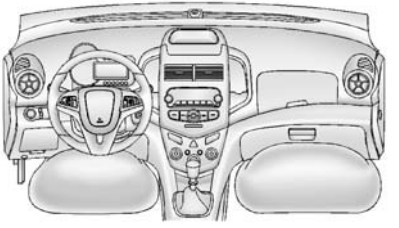
There is an airbag readiness light on the instrument cluster, which shows the airbag symbol. The system checks the airbag electrical system for malfunctions. The light tells you if there is an electrical problem. See *Airbag Readiness Light on page 5-11* for more information.

Where Are the Airbags?

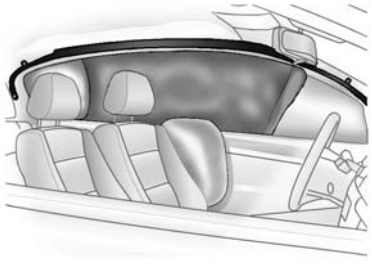


The driver frontal airbag is in the center of the steering wheel.

The front outboard passenger frontal airbag is in the passenger side instrument panel.



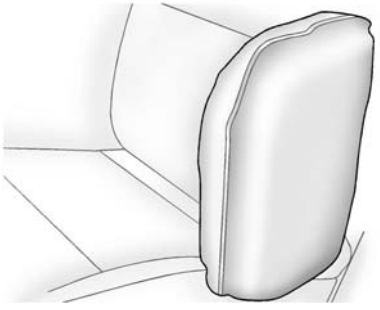
The driver knee airbag is below the steering column. The front outboard passenger knee airbag is below the glove box.



Driver Side Shown, Passenger Side Similar

The seat-mounted side impact airbags for the driver and front outboard passenger are in the side of the seatbacks closest to the door.

The roof-rail airbags for the driver, right front passenger, and second row outboard passengers are in the ceiling above the side windows.



Rear Seat Driver Side Shown, Passenger Side Similar

The second row seat-mounted side impact airbags are in the sides of the rear seatback closest to the door.

⚠ Warning

If something is between an occupant and an airbag, the airbag might not inflate properly or it might force the object into that person causing severe injury

(Continued)

Warning (Continued)

or even death. The path of an inflating airbag must be kept clear. Do not put anything between an occupant and an airbag, and do not attach or put anything on the steering wheel hub or on or near any other airbag covering.

Do not use seat accessories that block the inflation path of a seat-mounted side impact airbag.

Never secure anything to the roof of a vehicle with roof-rail airbags by routing a rope or tie-down through any door or window opening. If you do, the path of an inflating roof-rail airbag will be blocked.

When Should an Airbag Inflate?

This vehicle is equipped with airbags. See *Airbag System on page 3-16*. Airbags are designed to inflate if the impact exceeds the specific airbag system's deployment threshold. Deployment thresholds are used to predict how severe a crash is likely to be in time for the airbags to inflate and help restrain the occupants. The vehicle has electronic sensors that help the airbag system determine the severity of the impact. Deployment thresholds can vary with specific vehicle design.

Frontal airbags are designed to inflate in moderate to severe frontal or near frontal crashes to help reduce the potential for severe injuries, mainly to the driver's or front outboard passenger's head and chest.

Whether the frontal airbags will or should inflate is not based primarily on how fast the vehicle is traveling. It depends on what is hit, the direction of the impact, and how quickly the vehicle slows down.

Frontal airbags may inflate at different crash speeds depending on whether the vehicle hits an object straight on or at an angle, and whether the object is fixed or moving, rigid or deformable, narrow or wide.

Frontal airbags are not intended to inflate during vehicle rollovers, in rear impacts, or in many side impacts.

In addition, the vehicle has advanced technology frontal airbags. Advanced technology frontal airbags adjust the restraint according to crash severity.

Knee airbags are designed to inflate in moderate to severe frontal or near frontal impacts. Knee airbags are not designed to inflate during vehicle rollovers, in rear impacts, or in many side impacts.

Seat-mounted side impact airbags are designed to inflate in moderate to severe side crashes depending on the location of the impact. Seat-mounted side impact airbags are not designed to inflate in frontal impacts, near frontal impacts, rollovers, or rear impacts.
A seat-mounted side impact airbag is designed to inflate on the side of the vehicle that is struck.

Roof-rail airbags are designed to inflate in moderate to severe side crashes depending on the location of the impact. In addition, these roof-rail airbags are designed to inflate during a rollover or in a severe frontal impact. Roof-rail airbags are not designed to inflate in rear impacts. Both roof-rail airbags will inflate when either side of the vehicle is struck, if the sensing system predicts that the vehicle is about to roll over on its side, or in a severe frontal impact.

In any particular crash, no one can say whether an airbag should have inflated simply because of the vehicle damage or repair costs.

What Makes an Airbag Inflate?

In a deployment event, the sensing system sends an electrical signal triggering a release of gas from the inflator. Gas from the inflator fills the airbag causing the bag to break out of the cover. The inflator, the airbag, and related hardware are all part of the airbag module.

For airbag locations, see *Where Are the Airbags? on page 3-18*.

How Does an Airbag Restrain?

In moderate to severe frontal or near frontal collisions, even belted occupants can contact the steering wheel or the instrument panel. In moderate to severe side collisions, even belted occupants can contact the inside of the vehicle.

Airbags supplement the protection provided by safety belts by distributing the force of the impact more evenly over the occupant's body.

Rollover capable roof-rail airbags are designed to help contain the head and chest of occupants in the outboard seating positions in the first and second rows. The rollover capable roof-rail airbags are designed to help reduce the risk of full or partial ejection in rollover events, although no system can prevent all such ejections.

But airbags would not help in many types of collisions, primarily because the occupant's motion is not toward those airbags. See *When Should an Airbag Inflate? on page 3-20*.

Airbags should never be regarded as anything more than a supplement to safety belts.

What Will You See after an Airbag Inflates?

After the frontal airbags and seat-mounted side impact airbags inflate, they quickly deflate, so quickly that some people may not even realize an airbag inflated. Roof-rail airbags may still be at least partially inflated for some time after they inflate. Some components of the airbag module may be hot for several minutes. For location of the airbags, see *Where Are the Airbags? on page 3-18*.

The parts of the airbag that come into contact with you may be warm, but not too hot to touch. There may be some smoke and dust coming from the vents in the deflated airbags. Airbag inflation does not prevent the driver from seeing out of the windshield or being able to steer the vehicle, nor does it prevent people from leaving the vehicle.

⚠ Warning

When an airbag inflates, there may be dust in the air. This dust could cause breathing problems for people with a history of asthma or other breathing trouble. To avoid this, everyone in the vehicle should get out as soon as it is safe to do so. If you have breathing problems but cannot get out of the vehicle after an airbag inflates, then get fresh air by opening a window or a door. If you experience breathing problems following an airbag deployment, you should seek medical attention.

The vehicle has a feature that may automatically unlock the doors, turn on the interior lamps, and turn on the hazard warning flashers after the airbags inflate. The feature may also activate, without airbag inflation, after an event that exceeds a predetermined threshold. You can lock the doors, and turn off the interior lamps, and turn off the hazard warning flashers by using the controls for those features.

⚠ Warning

A crash severe enough to inflate the airbags may have also damaged important functions in the vehicle, such as the brake and steering systems, etc. Even if the vehicle appears to be drivable after a moderate crash, there may be concealed damage that could make it difficult to safely operate the vehicle.

Use caution if attempting to restart the vehicle after a crash has occurred.

In many crashes severe enough to inflate the airbag, windshields are broken by vehicle deformation. Additional windshield breakage may also occur from the front outboard passenger airbag.

- Airbags are designed to inflate only once. After an airbag inflates, you will need some new parts for the airbag system. If you do not get them, the airbag system will not be there to help protect you in another crash. A new system will include airbag modules and possibly other parts. The service manual for the vehicle covers the need to replace other parts.
- The vehicle has a crash sensing and diagnostic module which records information after a crash. See *Vehicle Data Recording and Privacy on page 13-14* and *Event Data Recorders on page 13-14*.

- Let only qualified technicians work on the airbag systems. Improper service can mean that an airbag system will not work properly. See your dealer for service.

Passenger Sensing System

The vehicle has a passenger sensing system for the front outboard passenger position. The passenger airbag status indicator will light on the center display when the vehicle is started.

United States

Canada and Mexico

The words ON and OFF, or the symbol for on and off, will be visible during the system check. When the system check is complete, either the word ON or OFF, or the symbol for on or off, will be visible. See *Passenger Airbag Status Indicator on page 5-12*.

The passenger sensing system turns off the front outboard passenger frontal airbag and knee airbag under certain conditions. No other airbag is affected by the passenger sensing system.

The passenger sensing system works with sensors that are part of the front outboard passenger seat and safety belt. The sensors are designed to detect the presence of a properly seated occupant and determine if the front outboard passenger frontal airbag and knee airbag should be allowed to inflate or not.

According to accident statistics, children are safer when properly secured in a rear seat in the correct child restraint for their weight and size.

Whenever possible, children aged 12 and under should be secured in a rear seating position.

Never put a rear-facing child seat in the front. This is because the risk to the rear-facing child is so great, if the airbag inflates.

⚠ Warning

A child in a rear-facing child restraint can be seriously injured or killed if the front outboard passenger frontal airbag inflates. This is because the back of the rear-facing child restraint would be very close to the inflating airbag. A child in a forward-facing child restraint can be seriously injured or killed if the front outboard passenger frontal airbag inflates and the passenger seat is in a forward position.

Even if the passenger sensing system has turned off the front outboard passenger airbag(s), no system is fail-safe. No one can guarantee that an airbag will not inflate under some unusual circumstance, even though the airbag(s) are off.

(Continued)

Warning (Continued)

Secure rear-facing child restraints in a rear seat, even if the airbag(s) are off. If you secure a forward-facing child restraint in the front outboard passenger seat, always move the seat as far back as it will go. It is better to secure the child restraint in a rear seat.

The passenger sensing system is designed to turn off the front outboard passenger frontal airbag and knee airbag if:

- The front outboard passenger seat is unoccupied.
- The system determines that an infant is present in a rear-facing infant seat.
- The system determines that a small child is present in a child restraint.
- The system determines that a small child is present in a booster seat.
- A front outboard passenger takes his/her weight off of the seat for a period of time.
- The front outboard passenger seat is occupied by a smaller person, such as a child who has outgrown child restraints.
- There is a critical problem with the airbag system or the passenger sensing system.

When the passenger sensing system has turned off the front outboard passenger frontal airbag and knee airbag, the off indicator will light and stay lit as a reminder that the airbags are off. See *Passenger Airbag Status Indicator on page 5-12*.

The passenger sensing system is designed to turn on the front outboard passenger frontal airbag and knee airbag anytime the system senses that a person of adult size is sitting properly in the front outboard

passenger seat. When the passenger sensing system has allowed the airbags to be enabled, the on indicator will light and stay lit as a reminder that the airbags are active.

For some children who have outgrown child restraints and for very small adults, the passenger sensing system may or may not turn off the front outboard passenger frontal airbag and knee airbag, depending upon the person's seating posture and body build. Everyone in the vehicle who has outgrown child restraints should wear a safety belt properly — whether or not there is an airbag for that person.

⚠ Warning

If the airbag readiness light ever comes on and stays on, it means that something may be wrong with the airbag system. To help

(Continued)

Warning (Continued)

avoid injury to yourself or others, have the vehicle serviced right away. See *Airbag Readiness Light on page 5-11* for more information, including important safety information.

If the On Indicator Is Lit for a Child Restraint

If a child restraint has been installed and the on indicator is lit:

1. Turn the vehicle off.
2. Remove the child restraint from the vehicle.
3. Remove any additional items from the seat such as blankets, cushions, seat covers, seat heaters, or seat massagers.
4. Reinstall the child restraint following the directions provided by the child restraint manufacturer and refer to *Securing Child Restraints (Rear Seat) on page 3-45* or *Securing Child Restraints (Front Passenger Seat) on page 3-47*.
5. If, after reinstalling the child restraint and restarting the vehicle, the on indicator is still lit, turn the vehicle off. Then slightly recline the vehicle seatback and adjust the seat cushion, if adjustable, to make sure that the vehicle seatback is not pushing the child restraint into the seat cushion. Also make sure the child restraint is not trapped under the vehicle head restraint. If this happens, adjust the head restraint. See *Head Restraints on page 3-2*.
6. Restart the vehicle.

If the on indicator is still lit, secure the child in the child restraint in a rear seat position in the vehicle, and check with your dealer.

If the Off Indicator Is Lit for an Adult-Sized Occupant

If a person of adult size is sitting in the front outboard passenger seat, but the off indicator is lit, it could be because that person is not sitting properly in the seat or that the child restraint locking feature is engaged.

Use the following steps to allow the system to detect that person and enable the front outboard passenger frontal airbag and knee airbag:

1. Turn the vehicle off.
2. Remove any additional material from the seat, such as blankets, cushions, seat covers, seat heaters, or seat massagers.
3. Place the seatback in the fully upright position.
4. Have the person sit upright in the seat, centered on the seat cushion, with legs comfortably extended.
5. If the shoulder portion of the belt is pulled out all the way, the child restraint locking feature will be engaged. This may unintentionally cause the passenger sensing system to turn the airbag off for some adult-sized occupants. If this happens, unbuckle the belt and let the belt go back all the way, and then buckle the belt again without pulling the belt out all the way.
6. Restart the vehicle and have the person remain in this position for two to three minutes after the on indicator is lit.

⚠ Warning

If the front outboard passenger airbag is turned off for an adult-sized occupant, the airbag will not be able to inflate and help protect that person in a crash, resulting in an increased risk of serious injury or even death. An adult-sized occupant should not ride in the front outboard passenger seat, if the passenger airbag off indicator is lit.

Additional Factors Affecting System Operation

Safety belts help keep the passenger in position on the seat during vehicle maneuvers and braking, which helps the passenger sensing system maintain the passenger airbag status. See “Safety Belts” and “Child Restraints” in the Index for additional information about the importance of proper restraint use.

A thick layer of additional material, such as a blanket or cushion, or aftermarket equipment such as seat covers, seat heaters, and seat massagers can affect how well the passenger sensing system operates. We recommend that you not use seat covers or other aftermarket equipment except when approved by GM for your specific vehicle. See *Adding Equipment to the Airbag-Equipped Vehicle on page 3-27* for more information about modifications that can affect how the system operates.

The on indicator may be lit if an object, such as a briefcase, handbag, grocery bag, laptop, or other electronic device, is put on an unoccupied seat. If this is not desired, remove the object from the seat.

⚠ Warning

Stowing of articles under the passenger seat or between the passenger seat cushion and seatback may interfere with the proper operation of the passenger sensing system.

Servicing the Airbag-Equipped Vehicle

Airbags affect how the vehicle should be serviced. There are parts of the airbag system in several places around the vehicle. Your dealer and the service manual have information about servicing the vehicle and the airbag system. To purchase a service manual, see *Service Publications Ordering Information on page 13-11*.

⚠ Warning

For up to 10 seconds after the vehicle is turned off and the 12-volt battery is disconnected, an airbag can still inflate during improper service. You can be injured if you are close to an airbag when it inflates. Avoid yellow connectors. They are probably part of the airbag system. Be sure to follow proper service procedures, and make sure the person performing work for you is qualified to do so.

Adding Equipment to the Airbag-Equipped Vehicle

Adding accessories that change the vehicle's frame, bumper system, height, front end, or side sheet metal may keep the airbag system

from working properly. The operation of the airbag system can also be affected by changing any parts of the front seats, safety belts, the airbag sensing and diagnostic module, steering wheel, instrument panel, any of the airbag modules, ceiling or pillar garnish trim, front sensors, side impact sensors, or airbag wiring.

Your dealer and the service manual have information about the location of the airbag sensors, sensing and diagnostic module, and airbag wiring.

In addition, the vehicle has a passenger sensing system for the front outboard passenger position, which includes sensors that are part of the passenger seat. The passenger sensing system may not operate properly if the original seat trim is replaced with non-GM covers, upholstery, or trim; or with GM covers, upholstery, or trim designed for a different vehicle. Any object, such as an aftermarket seat heater or a comfort-enhancing pad or device, installed under or on top of the seat fabric, could also interfere with the operation of the passenger sensing system. This could either prevent proper deployment of the passenger airbag(s) or prevent the passenger sensing system from properly turning off the passenger airbag(s). See *Passenger Sensing System on page 3-23*.

The vehicle has rollover roof-rail airbags. See *Different Size Tires and Wheels on page 10-43* for additional important information.

If you have to modify your vehicle because you have a disability and you have questions about whether the modifications will affect the vehicle's airbag system, or if you have questions about whether the airbag system will be affected if the vehicle is modified for any other reason, call Customer Assistance. See *Customer Assistance Offices on page 13-3*.

Airbag System Check

The airbag system does not need regularly scheduled maintenance or replacement. Make sure the airbag readiness light is working. See *Airbag Readiness Light on page 5-11*.

⚠ Caution

If an airbag covering is damaged, opened, or broken, the airbag may not work properly. Do not open or break the airbag coverings. If there are any opened or broken airbag coverings, have the airbag covering and/or airbag module replaced. For the location of the airbags, see *Where Are the Airbags? on page 3-18*. See your dealer for service.

Replacing Airbag System Parts after a Crash

⚠ Warning

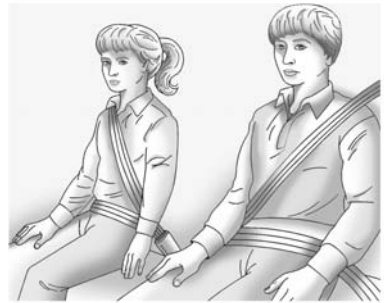
A crash can damage the airbag systems in the vehicle.
A damaged airbag system may not work properly and may not protect you and your passenger(s) in a crash, resulting in serious injury or even death. To help make sure the airbag systems are working properly after a crash, have them inspected and any necessary replacements made as soon as possible.

If an airbag inflates, you will need to replace airbag system parts. See your dealer for service.

If the airbag readiness light stays on after the vehicle is started or comes on when you are driving, the airbag system may not work properly. Have the vehicle serviced right away. See *Airbag Readiness Light on page 5-11*.

Child Restraints

Older Children



Older children who have outgrown booster seats should wear the vehicle safety belts.

The manufacturer instructions that come with the booster seat state the weight and height limitations for that booster. Use a booster seat with a lap-shoulder belt until the child passes the fit test below:

- Sit all the way back on the seat. Do the knees bend at the seat edge? If yes, continue. If no, return to the booster seat.
- Buckle the lap-shoulder belt. Does the shoulder belt rest on the shoulder? If yes, continue. If no, try using the rear safety belt comfort guide, if available. See “Rear Safety Belt Comfort Guides” under *Lap-Shoulder Belt on page 3-10*. If a comfort guide is not available, or if the shoulder belt still does not rest on the shoulder, then return to the booster seat.
- Does the lap belt fit low and snug on the hips, touching the thighs? If yes, continue. If no, return to the booster seat.
- Can proper safety belt fit be maintained for the length of the trip? If yes, continue. If no, return to the booster seat.

Q: What is the proper way to wear safety belts?

A: An older child should wear a lap-shoulder belt and get the additional restraint a shoulder belt can provide. The shoulder belt should not cross the face or neck. The lap belt should fit snugly below the hips, just touching the top of the thighs. This applies belt force to the child's pelvic bones in a crash. It should never be worn over the abdomen, which could cause severe or even fatal internal injuries in a crash.

Also see “Rear Safety Belt Comfort Guides” under *Lap-Shoulder Belt on page 3-10*.

According to accident statistics, children are safer when properly restrained in a rear seating position.

In a crash, children who are not buckled up can strike other people who are buckled up, or can be thrown out of the vehicle. Older children need to use safety belts properly.

⚠ Warning

Never allow more than one child to wear the same safety belt. The safety belt cannot properly spread the impact forces. In a crash, they can be crushed together and seriously injured. A safety belt must be used by only one person at a time.

⚠ Warning

Never allow a child to wear the safety belt with the shoulder belt behind their back. A child can be seriously injured by not wearing the lap-shoulder belt properly. In a crash, the child would not be restrained by the shoulder belt. The child could move too far forward increasing the chance of head and neck injury. The child might also slide under the lap

(Continued)

Warning (Continued)

belt. The belt force would then be applied right on the abdomen. That could cause serious or fatal injuries. The shoulder belt should go over the shoulder and across the chest.

Infants and Young Children

Everyone in a vehicle needs protection! This includes infants and all other children. Neither the distance traveled nor the age and size of the traveler changes the need, for everyone, to use safety restraints. In fact, the law in every state in the United States and in every Canadian province says children up to some age must be restrained while in a vehicle.

⚠ Warning

Children can be seriously injured or strangled if a shoulder belt is wrapped around their neck. The shoulder belt can tighten but cannot be loosened if it is locked. The shoulder belt locks when it is pulled all the way out of the retractor. It unlocks when the shoulder belt is allowed to go all

(Continued)

Warning (Continued)

the way back into the retractor, but it cannot do this if it is wrapped around a child's neck. If the shoulder belt is locked and tightened around a child's neck, the only way to loosen the belt is to cut it.

Never leave children unattended in a vehicle and never allow children to play with the safety belts.

Every time infants and young children ride in vehicles, they should have the protection provided by appropriate child restraints. Neither the vehicle's safety belt system nor its airbag system is designed for them.

Children who are not restrained properly can strike other people, or can be thrown out of the vehicle.

⚠ Warning

Never hold an infant or a child while riding in a vehicle. Due to crash forces, an infant or a child will become so heavy it is not possible to hold it during a crash. For example, in a crash at only 40 km/h (25 mph), a 5.5 kg (12 lb) infant will suddenly become a 110 kg (240 lb) force on a person's arms. An infant should be secured in an appropriate restraint.

⚠ Warning

Children who are up against, or very close to, any airbag when it inflates can be seriously injured or killed. Never put a rear-facing child restraint in the front outboard seat. Secure a rear-facing child restraint in a rear seat. It is also better to secure a forward-facing child restraint in a rear seat. If you must secure a forward-facing child restraint in

(Continued)

Warning (Continued)

the front outboard seat, always move the front passenger seat as far back as it will go.

Q: What are the different types of add-on child restraints?

A: Add-on child restraints, which are purchased by the vehicle owner, are available in four basic types. Selection of a particular restraint should take into consideration not only the child's weight, height, and age but also whether or not the restraint will be compatible with the motor vehicle in which it will be used.

For most basic types of child restraints, there are many different models available. When purchasing a child restraint, be sure it is designed to be used in a motor vehicle. If it is, the restraint will have a label saying that it meets federal motor vehicle safety standards.

The restraint manufacturer instructions that come with the restraint state the weight and height limitations for a particular child restraint. In addition, there are many kinds of restraints available for children with special needs.

⚠ Warning

To reduce the risk of neck and head injury during a crash, infants need complete support. In a crash, if an infant is in a rear-facing child restraint, the crash forces can be distributed across the strongest part of an infant's body, the back and shoulders. Infants should always be secured in rear-facing child restraints.

⚠ Warning

A young child's hip bones are still so small that the vehicle's regular safety belt may not remain low on the hip bones, as it should. Instead, it may settle up around the child's abdomen. In a crash, the belt would apply force on a body area that is unprotected by

(Continued)

Warning (Continued)

any bony structure. This alone could cause serious or fatal injuries. To reduce the risk of serious or fatal injuries during a crash, young children should always be secured in appropriate child restraints.

Child Restraint Systems

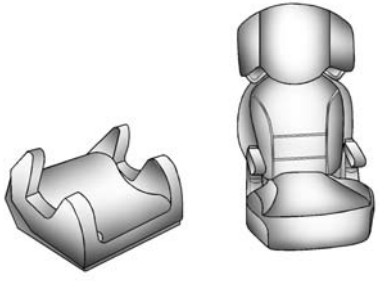
Rear-Facing Infant Seat

A rear-facing infant seat provides restraint with the seating surface against the back of the infant.

The harness system holds the infant in place and, in a crash, acts to keep the infant positioned in the restraint.

Forward-Facing Child Seat

A forward-facing child seat provides restraint for the child's body with the harness.



Booster Seats

A booster seat is a child restraint designed to improve the fit of the vehicle's safety belt system.
A booster seat can also help a child to see out the window.

Securing an Add-On Child Restraint in the Vehicle

⚠ Warning

A child can be seriously injured or killed in a crash if the child restraint is not properly secured in the vehicle. Secure the child restraint properly in the vehicle using the vehicle safety belt or LATCH system, following the instructions that came with that child restraint and the instructions in this manual.

To help reduce the chance of injury, the child restraint must be secured in the vehicle. Child restraint systems must be secured in vehicle seats by lap belts or the lap belt portion of a lap-shoulder belt, or by the LATCH system. See *Lower Anchors and Tethers for Children (LATCH System) on page 3-37*.

Children can be endangered in a crash if the child restraint is not properly secured in the vehicle.

When securing an add-on child restraint, refer to the instructions that come with the restraint which may be on the restraint itself or in a booklet, or both, and to this manual. The child restraint instructions are important, so if they are not available, obtain a replacement copy from the manufacturer.

Keep in mind that an unsecured child restraint can move around in a collision or sudden stop and injure people in the vehicle. Be sure to properly secure any child restraint in the vehicle — even when no child is in it.

In some areas of the United States and Canada, Certified Child Passenger Safety Technicians (CPSTs) are available to inspect and demonstrate how to correctly use and install child restraints. In the U.S., refer to the National Highway Traffic Safety

Administration (NHTSA) website to locate the nearest child safety seat inspection station. For CPST availability in Canada, check with Transport Canada or the Provincial Ministry of Transportation office.

Securing the Child Within the Child Restraint

⚠ Warning

A child can be seriously injured or killed in a crash if the child is not properly secured in the child restraint. Secure the child properly following the instructions that came with that child restraint.

Where to Put the Restraint

According to accident statistics, children and infants are safer when properly restrained in a child restraint system or infant restraint system secured in a rear seating position.

Whenever possible, children aged 12 and under should be secured in a rear seating position.

Never put a rear-facing child seat in the front. This is because the risk to the rear-facing child is so great if the airbag deploys.

⚠ Warning

A child in a rear-facing child restraint can be seriously injured or killed if the front passenger airbag inflates. This is because the back of the rear-facing child restraint would be very close to the inflating airbag. A child in a forward-facing child restraint can be seriously injured or killed if the front passenger airbag inflates and the passenger seat is in a forward position.

Even if the passenger sensing system has turned off the front passenger frontal airbag, no

(Continued)

Warning (Continued)

system is fail-safe. No one can guarantee that an airbag will not deploy under some unusual circumstance, even though it is turned off.

Secure rear-facing child restraints in a rear seat, even if the airbag is off. If you secure a forward-facing child restraint in the front seat, always move the front passenger seat as far back as it will go. It is better to secure the child restraint in a rear seat.

See *Passenger Sensing System on page 3-23* for additional information.

When securing a child restraint in a rear seating position, study the instructions that came with the child restraint to make sure it is compatible with this vehicle.

Child restraints and booster seats vary considerably in size, and some may fit in certain seating positions better than others.

Depending on where you place the child restraint and the size of the child restraint, you may not be able to access adjacent safety belt assemblies or LATCH anchors for additional passengers or child restraints. Adjacent seating positions should not be used if the child restraint prevents access to or interferes with the routing of the safety belt.

Wherever a child restraint is installed, be sure to secure the child restraint properly.

Keep in mind that an unsecured child restraint can move around in a collision or sudden stop and injure people in the vehicle. Be sure to properly secure any child restraint in the vehicle — even when no child is in it.

Lower Anchors and Tethers for Children (LATCH System)

The LATCH system secures a child restraint during driving or in a crash. LATCH attachments on the child restraint are used to attach the child restraint to the anchors in the vehicle. The LATCH system is designed to make installation of a child restraint easier.

In order to use the LATCH system in your vehicle, you need a child restraint that has LATCH attachments. LATCH-compatible rear-facing and forward-facing child seats can be properly installed using either the LATCH anchors or the vehicle's safety belts. Do not use both the safety belts and the LATCH anchorage system to secure a rear-facing or forward-facing child seat.

Booster seats use the vehicle's safety belts to secure the child in the booster seat. If the manufacturer recommends that the booster seat be secured with the LATCH system, this can be done as long as the booster seat can be positioned properly and there is no interference with the proper positioning of the lap-shoulder belt on the child.

Make sure to follow the instructions that came with the child restraint, and also the instructions in this manual.

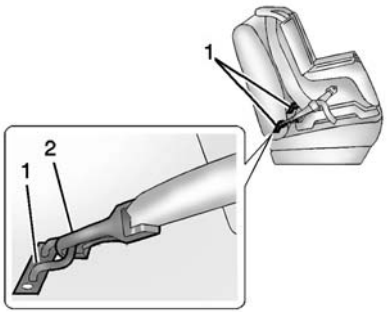
When installing a child restraint with a top tether, you must also use either the lower anchors or the safety belts to properly secure the child restraint. A child restraint must never be installed using only the top tether and anchor.

The LATCH anchorage system can be used until the combined weight of the child plus the child restraint is 29.5 kg (65 lbs). Use the safety belt alone instead of the LATCH anchorage system once the combined weight is more than 29.5 kg (65 lbs).

The following explains how to attach a child restraint with these attachments in the vehicle.

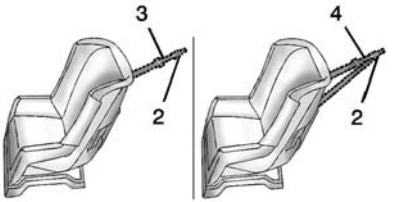
Not all vehicle seating positions or child restraints have lower anchors and attachments or top tether anchors and attachments.

Lower Anchors



Lower anchors (1) are metal bars built into the vehicle. There are two lower anchors for each LATCH seating position that will accommodate a child restraint with lower attachments (2).

Top Tether Anchor

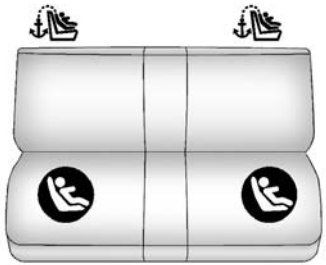


A top tether (3, 4) anchors the top of the child restraint to the vehicle. A top tether anchor is built into the vehicle. The top tether attachment (2) on the child restraint connects to the top tether anchor in the vehicle in order to reduce the forward movement and rotation of the child restraint during driving or in a crash.

The child restraint may have a single tether (3) or a dual tether (4). Either will have a single attachment (2) to secure the top tether to the anchor.

Some child restraints that have a top tether are designed for use with or without the top tether being attached. Others require the top tether always to be attached. In Canada, the law requires that forward-facing child restraints have a top tether, and that the tether be attached. Be sure to read and follow the instructions for your child restraint.

Lower Anchor and Top Tether Anchor Locations

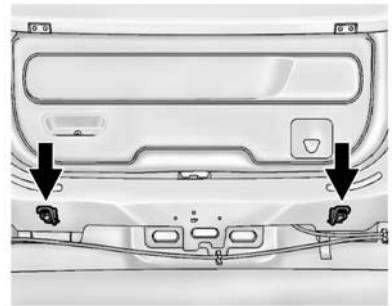


(Top Tether Anchor): Seating positions with top tether anchors.

(Lower Anchor): Seating positions with two lower anchors.

To assist in locating the lower anchors, each seating position with lower anchors has two labels, near the crease between the seatback and the seat cushion.

To assist in locating the top tether anchors, the top tether anchor symbol is on the trim near the anchor.



The top tether anchors are on the rear wall of the cargo area. Be sure to use an anchor on the same side of the vehicle as the seating position where the child restraint will be placed.

Do not secure a child restraint in a position without a top tether anchor if a national or local law requires that the top tether be attached, or if the instructions that come with the child restraint say that the top tether must be attached.

According to accident statistics, children and infants are safer when properly restrained in a child restraint system or infant restraint system secured in a rear seating position. See *Where to Put the Restraint on page 3-36* for additional information.

Securing a Child Restraint Designed for the LATCH System

⚠ Warning

If a LATCH-type child restraint is not attached to anchors or with the safety belt, the child restraint will not be able to protect the child correctly. In a crash, the child could be seriously injured or killed. Install a LATCH-type child restraint properly using the anchors, or use the vehicle safety belts to secure the restraint,

(Continued)

Warning (Continued)

following the instructions that came with the child restraint and the instructions in this manual.

⚠ Warning

To reduce the risk of serious or fatal injuries during a crash, do not attach more than one child restraint to a single anchor. Attaching more than one child restraint to a single anchor could cause the anchor or attachment to come loose or even break during a crash. A child or others could be injured.

⚠ Warning

Children can be seriously injured or strangled if a shoulder belt is wrapped around their neck. The shoulder belt can tighten but cannot be loosened if it is locked. The shoulder belt locks when it is pulled all the way out of the retractor. It unlocks when the shoulder belt is allowed to go all the way back into the retractor, but it cannot do this if it is wrapped around a child's neck. If the shoulder belt is locked and tightened around a child's neck, the only way to loosen the belt is to cut it.

Buckle any unused safety belts behind the child restraint so children cannot reach them. Pull the shoulder belt all the way out of the retractor to set the lock, and tighten the belt behind the child restraint after the child restraint has been installed.

⚠ Caution

Do not let the LATCH attachments rub against the vehicle's safety belts. This may damage these parts. If necessary, move buckled safety belts to avoid rubbing the LATCH attachments.

Do not fold the empty rear seat with a safety belt buckled. This could damage the safety belt or the seat. Unbuckle and return the safety belt to its stowed position, before folding the seat.

If you need to secure more than one child restraint in the rear seat, see *Where to Put the Restraint on page 3-36*.

This system is designed to make installation of child restraints easier. When using lower anchors, do not use the vehicle's safety belts. Instead use the vehicle's anchors and child restraint attachments to secure the restraints. Some restraints also use another vehicle anchor to secure a top tether.

1. Attach and tighten the lower attachments to the lower anchors. If the child restraint does not have lower attachments or the desired seating position does not have lower anchors, secure the child restraint with the top tether and the safety belts. Refer to your child restraint manufacturer instructions and the instructions in this manual.

   1.1. Find the lower anchors for the desired seating position.

   1.2. Put the child restraint on the seat.

   For rear outboard seating positions, if the head restraint interferes with the proper installation of the child restraint, the head restraint may be removed. See "Head Restraint Removal and Reinstallation" at the end of this section.

   When installing a rear-facing child restraint, it may be necessary to move the front seat forward to properly install the child restraint per the child restraint manufacturer instructions. See *Seat Adjustment on page 3-3*.

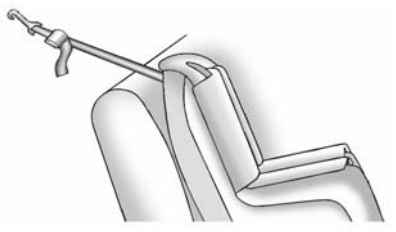
   1.3. Attach and tighten the lower attachments on the child restraint to the lower anchors.

2. If the child restraint manufacturer recommends that the top tether be attached, attach and tighten the top tether to the top tether anchor, if equipped. Refer to the child restraint instructions and the following steps:

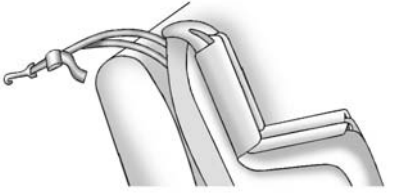
   2.1. Find the top tether anchor.

   2.2. Remove the cargo cover before installing the top tether. Place the cargo cover on the floor of the cargo area. The cargo cover should remain off while the top tether is in use.

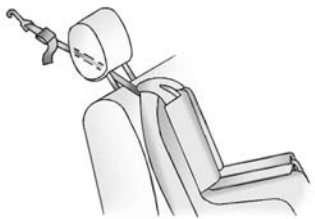
   2.3. Route, attach, and tighten the top tether according to your child restraint instructions and the following instructions:



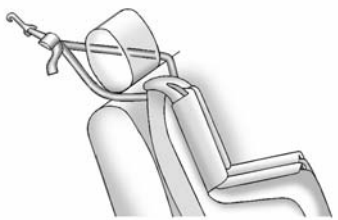
If you are using a single tether in an outboard seating position and the head restraint has been removed, route the tether over the seatback.



If you are using a dual tether in an outboard seating position and the head restraint has been removed, route the tether over the seatback and over the inboard edge of the rear speaker.



If the rear outboard seating position you are using has an adjustable head restraint and you are using a single tether, raise the head restraint and route the tether under the head restraint and in between the head restraint posts.



If the rear outboard seating position you are using has an adjustable head restraint and you are using a dual tether, raise the head restraint and route the tether under the head restraint and around the head restraint posts.

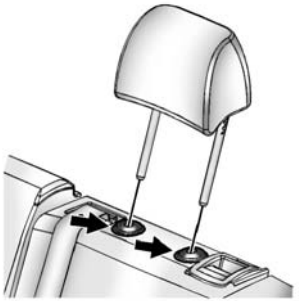
3. Before placing a child in the child restraint, make sure it is securely held in place. To check, grasp the child restraint at the LATCH path and attempt to move it side to side and back and forth. There should be no more than 2.5 cm (1 in) of movement for proper installation.

Head Restraint Removal and Reinstallation

The rear outboard head restraints can be removed if they interfere with the proper installation of the child restraint.

To remove the head restraint:

1. Partially fold the seatback forward. See *Rear Seats on page 3-6* for additional information.

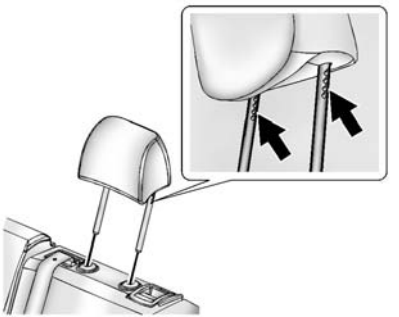


2. Press both buttons on the head restraint posts at the same time, and pull up on the head restraint.
3. Store the head restraint in the cargo area of the vehicle inside the cargo net.
4. When the child restraint is removed, reinstall the head restraint before the seating position is used.

⚠ Warning

With head restraints that are not installed and adjusted properly, there is a greater chance that occupants will suffer a neck/spinal injury in a crash. Do not drive until the head restraints for all occupants are installed and adjusted properly.

To reinstall the head restraint:



1. Insert the head restraint posts into the holes in the top of the seatback. The notches on the posts must face the driver side of the vehicle.
2. Push the head restraint down.

   If necessary, press the height adjustment release button to further lower the head restraint. See *Head Restraints on page 3-2*.
3. Try to move the head restraint to make sure that it is locked in place.

Replacing LATCH System Parts After a Crash

⚠ Warning

A crash can damage the LATCH system in the vehicle. A damaged LATCH system may not properly secure the child restraint, resulting in serious injury or even

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Warning (Continued)

death in a crash. To help make sure the LATCH system is working properly after a crash, see your dealer to have the system inspected and any necessary replacements made as soon as possible.

If the vehicle has the LATCH system and it was being used during a crash, new LATCH system parts may be needed.

New parts and repairs may be necessary even if the LATCH system was not being used at the time of the crash.

Securing Child Restraints (Rear Seat)

When securing a child restraint in a rear seating position, study the instructions that came with the child restraint to make sure it is compatible with this vehicle.

If the child restraint has the LATCH system, see *Lower Anchors and Tethers for Children (LATCH System) on page 3-37* for how and where to install the child restraint using LATCH. If a child restraint is secured in the vehicle using a safety belt and it uses a top tether, see *Lower Anchors and Tethers for Children (LATCH System) on page 3-37* for top tether anchor locations.

Do not secure a child seat in a position without a top tether anchor if a national or local law requires that the top tether be anchored, or if the instructions that come with the child restraint say that the top strap must be anchored.

In Canada, the law requires that forward-facing child restraints have a top tether, and that the tether be attached.

If the child restraint or vehicle seat position does not have the LATCH system, you will be using the safety belt to secure the child restraint in this position. Be sure to follow the instructions that came with the child restraint. Secure the child in the child restraint when and as the instructions say.

If more than one child restraint needs to be installed in the rear seat, be sure to read *Where to Put the Restraint on page 3-36*.

1. Put the child restraint on the seat.

   If the head restraint interferes with the proper installation of the child restraint, the head restraint may be removed. See “Head Restraint Removal and Reinstallation” under *Lower Anchors and Tethers for Children (LATCH System) on page 3-37*.

   When installing a rear-facing child restraint, it may be necessary to move the front seat forward to properly install the child restraint per the child

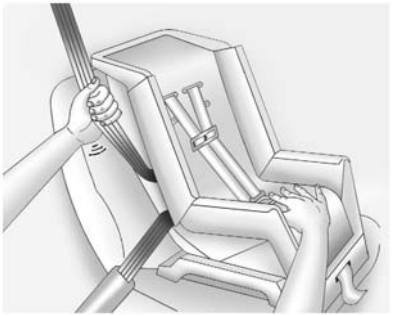
restraint manufacturer instructions. See *Seat Adjustment on page 3-3*.

2. Pick up the latch plate, and run the lap and shoulder portions of the vehicle safety belt through or around the restraint. The child restraint instructions will show you how.

3. Push the latch plate into the buckle until it clicks.

   Position the release button on the buckle so that the safety belt could be quickly unbuckled if necessary.

4. Pull the shoulder belt all the way out of the retractor to set the lock. When the retractor lock is set, the belt can be tightened but not pulled out of the retractor.



5. To tighten the belt, push down on the child restraint, pull the shoulder portion of the belt to tighten the lap portion of the belt, and feed the shoulder belt back into the retractor. When installing a forward-facing child restraint, it may be helpful to use your knee to push down on the child restraint as you tighten the belt.

   Try to pull the belt out of the retractor to make sure the retractor is locked. If the retractor is not locked, repeat Steps 4 and 5.

6. If the child restraint has a top tether, follow the child restraint manufacturer's instructions regarding the use of the top tether. See *Lower Anchors and Tethers for Children (LATCH System) on page 3-37* for more information.
7. Before placing a child in the child restraint, make sure it is securely held in place. To check, grasp the child restraint at the safety belt path and attempt to move it side to side and back and forth. When the child restraint is properly installed, there should be no more than 2.5 cm (1 in) of movement.

To remove the child restraint, unbuckle the vehicle safety belt and let it return to the stowed position. If the top tether is attached to a top tether anchor, disconnect it. If the head restraint was removed, reinstall it before the seating position is used. See “Head Restraint Removal and Reinstallation” under *Lower Anchors and Tethers for Children (LATCH System) on page 3-37*.

Securing Child Restraints (Front Passenger Seat)

This vehicle has airbags. A rear seat is a safer place to secure a forward-facing child restraint. See *Where to Put the Restraint on page 3-36*.

In addition, the vehicle has a passenger sensing system which is designed to turn off the front outboard passenger frontal airbag and knee airbag under certain conditions. See *Passenger Sensing System on page 3-23* and *Passenger Airbag Status Indicator on page 5-12* for more information on this, including important safety information.

Never put a rear-facing child seat in the front. This is because the risk to the rear-facing child is so great, if the airbag deploys.

⚠ Warning

A child in a rear-facing child restraint can be seriously injured or killed if the front outboard passenger frontal airbag inflates. This is because the back of the rear-facing child restraint would be very close to the inflating airbag. A child in a forward-facing child restraint can be seriously injured or killed if the front outboard passenger frontal airbag inflates and the passenger seat is in a forward position.

Even if the passenger sensing system has turned off the front outboard passenger airbag(s), no system is fail-safe. No one can guarantee that an airbag will not

(Continued)

Warning (Continued)

inflate under some unusual circumstance, even though the airbag(s) are off.

Secure rear-facing child restraints in a rear seat, even if the airbag(s) are off. If you secure a forward-facing child restraint in the front outboard passenger seat, always move the seat as far back as it will go. It is better to secure the child restraint in a rear seat.

See *Passenger Sensing System on page 3-23* for additional information.

If the child restraint uses a top tether, see *Lower Anchors and Tethers for Children (LATCH System) on page 3-37* for top tether anchor locations.

Do not secure a child seat in a position without a top tether anchor if a national or local law requires that the top tether be anchored, or if the instructions that come with the child restraint say that the top strap must be anchored.

In Canada, the law requires that forward-facing child restraints have a top tether, and that the tether be attached.

When using the lap-shoulder belt to secure the child restraint in this position, follow the instructions that came with the child restraint and the following instructions:

1. Move the seat as far back as it will go before securing the forward-facing child restraint.

   When the passenger sensing system has turned off the front outboard passenger frontal airbag and knee airbag, the off indicator on the passenger airbag status indicator should light and stay lit when you start the vehicle. See *Passenger Airbag Status Indicator on page 5-12*.

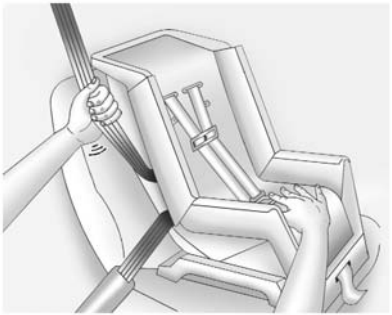
2. Put the child restraint on the seat.

3. Pick up the latch plate, and run the lap and shoulder portions of the vehicle's safety belt through or around the restraint. The child restraint instructions will show you how.

4. Push the latch plate into the buckle until it clicks.

   Position the release button on the buckle so that the safety belt could be quickly unbuckled if necessary.

5. Pull the shoulder belt all the way out of the retractor to set the lock. When the retractor lock is set, the belt can be tightened but not pulled out of the retractor.



6. To tighten the belt, push down on the child restraint, pull the shoulder portion of the belt to tighten the lap portion of the belt, and feed the shoulder belt back into the retractor. When installing a forward-facing child restraint, it may be helpful to use your knee to push down on the child restraint as you tighten the belt.

   Try to pull the belt out of the retractor to make sure the retractor is locked. If the retractor is not locked, repeat Steps 5 and 6.

7. Before placing a child in the child restraint, make sure it is securely held in place. To check, grasp the child restraint at the safety belt path and attempt to move it side to side and back and forth. When the child restraint is properly installed, there should be no more than 2.5 cm (1 in) of movement.

If the airbags are off, the off indicator in the passenger airbag status indicator will come on and stay on when the vehicle is started.

If a child restraint has been installed and the off symbol is not lit, see “If the On Indicator Is Lit for a Child Restraint” under *Passenger Sensing System on page 3-23*.

To remove the child restraint, unbuckle the vehicle's safety belt and let it go back all the way.

✍ NOTES

Storage

Storage Compartments
Storage Compartments 4-1
Glove Box 4-1

Additional Storage Features
Cargo Cover 4-1
Shopping Bag Hooks 4-2
Cargo Net 4-2

Storage Compartments

⚠ Warning

Do not store heavy or sharp objects in storage compartments. In a crash, these objects may cause the cover to open and could result in injury.

Glove Box

Lift up on the glove box lever to open it.

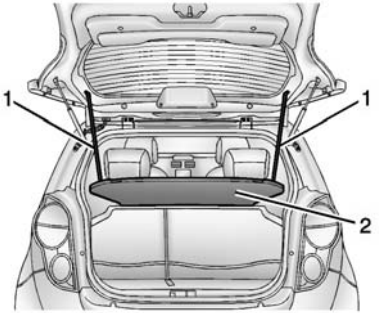
Additional Storage Features

Cargo Cover

⚠ Warning

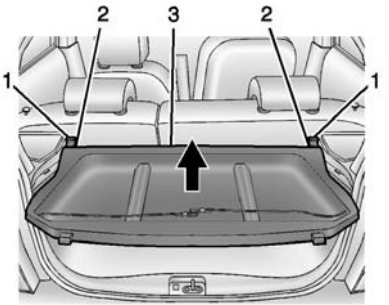
An unsecured cargo cover could strike people in a sudden stop or turn, or in a crash. Store the cargo cover securely or remove it from the vehicle.

The cargo cover can be used to cover items in the rear of the vehicle.



To remove the cargo cover:

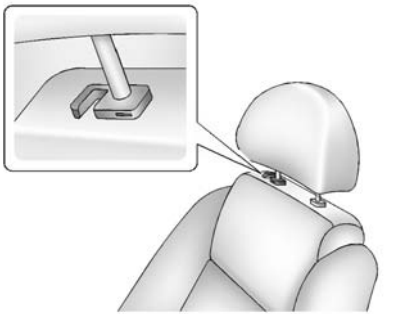
1. Remove both of the cords (1) from the hooks at the top of the liftgate.
2. Pull the cargo cover (2) rearward to release the cargo cover.



To install the cargo cover:

1. Align the cargo cover (3) on the trim panel edge (2) on both sides and push it forward, locking the cargo cover into the hooks (1).
2. Reconnect both of the cords to the hooks at the top of the liftgate.

Shopping Bag Hooks



The vehicle has a shopping bag hook under the front seat head restraints. Lift the head restraints to access the hook.

Cargo Net

The cargo net is in the trunk and used to store small loads. The net should not be used to store heavy loads.

Instruments and Controls

Controls

Steering Wheel Adjustment . . . 5-2
Steering Wheel Controls 5-2
Horn 5-3
Pedestrian Safety Signal 5-3
Windshield Wiper/Washer 5-3
Rear Window Wiper/ Washer 5-4
Clock 5-5
Power Outlets 5-6

Warning Lights, Gauges, and Indicators

Warning Lights, Gauges, and Indicators 5-6
Instrument Cluster 5-7
Speedometer 5-9
Odometer 5-9
Trip Odometer 5-9
Compass 5-9
Battery Gauge (High Voltage) 5-10
Driver Efficiency Gauge 5-10
Power Indicator Gauge 5-10
Safety Belt Reminders 5-11
Airbag Readiness Light 5-11
Passenger Airbag Status Indicator 5-12
Charging System Light (12-Volt Battery) 5-13
Service Vehicle Soon Light 5-13
Brake System Warning Light 5-13
Electric Parking Brake Light 5-14
Service Electric Parking Brake Light 5-14
Antilock Brake System (ABS) Warning Light 5-14
Sport Mode Light 5-15
Traction Off Light 5-15
StabiliTrak® OFF Light 5-15
Traction Control System (TCS)/StabiliTrak® Light 5-16
Tire Pressure Light 5-16
Security Light 5-17
Vehicle Ready Light 5-17
High-Beam On Light 5-17
Daytime Running Lamps (DRL) Indicator Light 5-17
Lamps On Reminder 5-17
Cruise Control Light 5-18
Door Ajar Light 5-18

Information Displays

Center Stack Display 5-18
Power Flows 5-18
Programmable Charging 5-19
Energy Information 5-28
Driver Information Center (DIC) 5-28

Vehicle Messages

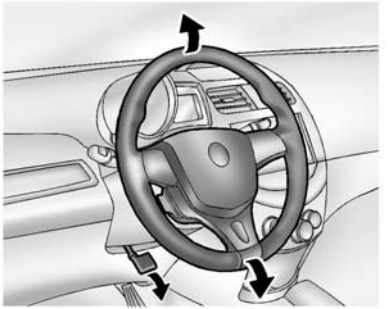
Vehicle Messages 5-30
Battery and Charging Messages 5-30
Brake System Messages 5-31
Cruise Control Messages 5-32
Door Ajar Messages 5-32
Electric Drive Unit Messages 5-32
Key and Lock Messages 5-32
Lamp Messages 5-33
Propulsion Power Messages 5-33
Ride Control System Messages 5-33
Airbag System Messages 5-34
Security Messages 5-34

Service Vehicle Messages . . . 5-34
Starting the Vehicle Messages 5-34
Tire Messages 5-35
Vehicle Reminder Messages 5-35
Vehicle Speed Messages 5-35

Vehicle Personalization
Vehicle Personalization 5-36

Controls

Steering Wheel Adjustment

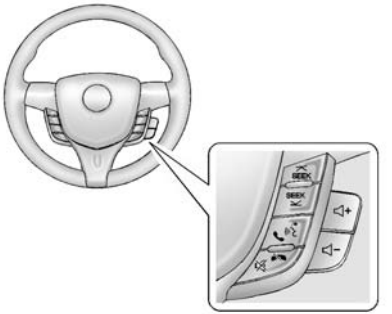


To adjust the steering wheel:

1. Pull the lever down.
2. Move the steering wheel up or down.
3. Pull the lever up to lock the steering wheel in place.

Do not adjust the steering wheel while driving.

Steering Wheel Controls



If equipped with audio steering wheel controls, some audio controls can be adjusted at the steering wheel.

⊼ **SEEK or SEEK ⊻ (Next/ Previous):** Press to go to the next or previous radio station, song on an iPod®, or file on a USB device (if equipped).

/ (Push to Talk): If equipped with Bluetooth or OnStar, press to interact with those systems. See *Bluetooth (Overview) on page 7-12* or *Bluetooth (Infotainment Controls) on page 7-14* or *OnStar Overview on page 14-1*.

/ (Mute/End Call): Press to silence the vehicle speakers only. Press again to turn the sound on. If equipped with OnStar or Bluetooth systems, press to decline an incoming call, to end speech recognition, or to end a current call.

+ or − (Volume): Press + or − to increase or decrease the volume.

Horn

Press on the steering wheel pad to sound the horn.

The pedestrian safety signal provides a momentary soft-note horn sound. See *Pedestrian Safety Signal on page 5-3*.

Pedestrian Safety Signal

Your vehicle is equipped with an automatic sound generation and a manual alert.

The automatic sound is generated to indicate the vehicle presence to pedestrians. The sound changes if the vehicle is speeding up or slowing down. It is activated when the vehicle is shifted into a forward gear or R (Reverse), up to 30 km/h (19 mph).

An alert can also be sounded manually while driving, such as in parking lots. Use this feature to alert people who may not hear your vehicle approaching.

At speeds less than 64 km/h (40 mph), to manually sound the pedestrian safety signal:

1. Pull the turn signal lever all the way toward you momentarily. See *Exterior Lamp Controls on page 6-1* and *Headlamp High/Low-Beam Changer on page 6-1*. The high-beam headlamps and indicator light will turn on, and a soft-note alert will momentarily sound. When the turn signal lever is released, the high-beam headlamps and indicator light will turn off.
2. Repeat for additional activations of the pedestrian safety signal.

Windshield Wiper/Washer

The windshield wiper/washer lever is on the right side of the steering column.

Move the lever to one of the following positions:

HI: Use for fast wipes.

LO: Use for slow wipes.

INT (Intermittent Wipes): Move the lever up to INT for intermittent wipes, then turn the INT band up for more frequent wipes or down for less frequent wipes.

OFF: Use to turn the wipers off.

(Mist): For a single wipe, briefly move the wiper lever down. For several wipes, hold the wiper lever down.

Clear snow and ice from the wiper blades before using them. If frozen to the windshield, carefully loosen or thaw them. Replace damaged wiper blades. See *Wiper Blade Replacement on page 10-15*.

Heavy snow or ice can overload the wiper motor. A circuit breaker will stop the motor until it cools down.

Wiper Parking

If the ignition is turned to LOCK/OFF while the wipers are on LO, HI, or INT, they will immediately stop.

If the windshield wiper lever is then moved to OFF before the driver door is opened or within 10 minutes, the wipers will restart and move to the base of the windshield.

If the ignition is turned to LOCK/OFF while the wipers are performing wipes due to windshield washing, the wipers continue to run until they reach the base of the windshield.

Windshield Washer

Pull the windshield wiper lever toward you to spray windshield washer fluid and activate the wipers.

The wipers will continue until the lever is released or the maximum wash time is reached.

When the windshield wiper lever is released, additional wipes may occur depending on how long the windshield washer had been activated. See *Washer Fluid on page 10-10* for information on filling the windshield washer fluid reservoir.

⚠ Warning

In freezing weather, do not use the washer until the windshield is warmed. Otherwise the washer fluid can form ice on the windshield, blocking your vision.

Rear Window Wiper/Washer

If equipped with the rear wiper/washer, the controls are on the end of the windshield wiper lever.

Turn the rear wiper/washer band to operate the rear window wiper/washer.

ON: Turns the rear wiper on for continuous wipes.

OFF: Turns the rear wiper off.

(Rear Washer): Turn the band up or down toward to spray washer fluid on the rear window. The control returns to its starting position when released.

The rear window wiper will stop when the electric drive unit is in N (Neutral) or the liftgate is open. It also stops for 10 seconds when the electric drive unit is shifted from N (Neutral) to other gears.

Reverse Gear Wipes

If the rear wiper control is off, the rear wiper will automatically operate continuously when the electric drive unit is in R (Reverse), and the front windshield wiper is performing low or high speed wipes. If the rear wiper control is off, the electric drive unit is in R (Reverse), and the front windshield wiper is performing interval wipes, then the rear wiper automatically performs interval wipes.

This feature can be changed. See *Vehicle Personalization on page 5-36*.

The windshield washer reservoir is used for the windshield and the rear window. Check the fluid level in the reservoir if either washer is not working. See *Washer Fluid on page 10-10*.

Clock

The infotainment system controls are used to access the time and date settings through the menu system. See *Operation on page 7-4* for information about how to use the menu system.

Setting the Time and Date

1. Press , and then press settings.
2. Press time and date settings, and then set time and date.
3. Press ∧ or ∨ to adjust the value.
4. Press OK.

Setting the 12/24 Hour Format

1. Press , and then press settings.
2. Press time and date settings, and then set time format.
3. Select 12/24 HR Format.

Setting the Month and Day Format

1. Press , and then press settings.
2. Press time and date settings, and then set date format.
3. Set the date display to DD/MM/YYYY (day/month/year), MM/DD/YYYY (month/day/year), or YYYY/MM/DD (year/month/day) display format.

Power Outlets

The accessory power outlets can be used to plug in electrical equipment, such as a cell phone or MP3 player. The accessory power outlets only work with the ignition turned on.

The vehicle may have accessory power outlets:

- On the center stack below the climate control.
- On the rear of the center console.

Open the cover to access and replace when not in use.

⚠ Caution

Leaving electrical equipment plugged in for an extended period of time while the vehicle is off will drain the battery. Always unplug electrical equipment when not in use and do not plug in equipment that exceeds the maximum 20 amp rating.

Certain accessory power plugs may not be compatible with the accessory power outlet and could overload vehicle or adapter fuses. If a problem is experienced, see your dealer.

When adding electrical equipment, be sure to follow the proper installation instructions included with the equipment. See *Add-On Electrical Equipment on page 9-42*.

⚠ Caution

Hanging heavy equipment from the power outlet can cause damage not covered by the vehicle warranty. The power outlets are designed for accessory power plugs only, such as cell phone charge cords.

Warning Lights, Gauges, and Indicators

Warning lights and gauges can signal that something is wrong before it becomes serious enough to cause an expensive repair or replacement. Paying attention to the warning lights and gauges could prevent injury.

Warning lights come on when there could be a problem with a vehicle function. Some warning lights come on briefly when the propulsion system is started to indicate they are working.

Gauges can indicate when there could be a problem with a vehicle function. Often gauges and warning lights work together to indicate a problem with the vehicle.

When one of the warning lights comes on and stays on while driving, or when one of the gauges shows there may be a problem, check the section that explains what to do. Waiting to do repairs can be costly and even dangerous.

Instrument Cluster

The instrument cluster displays a charging status screen that includes electric range, charging, odometer, and battery status. This happens upon entry when the driver door is opened, before starting the vehicle.

A CHARGING OVERRIDE/ INTERRUPTION OCCURRED message may display on the lower right of the screen to indicate that a charging override or interruption has occurred due to one or more of the following events:

- Override of the charge settings by the owner using OnStar.
- Unintended interruption of AC power at the vehicle's charge port.
- Interruption of charging by the utility company using OnStar as authorized by the vehicle owner.

There are several screens that will display depending on the current charging status.

English Cluster with Enhanced Battery Gauge and Driver Efficiency Gauge Shown, Others and Metric Similar

Instrument Cluster Display Configurations

There are four instrument cluster display configurations to choose from:

- Enhanced Battery Gauge with Driver Efficiency Gauge
- Enhanced Battery Gauge with Power Indicator Gauge
- Simple Battery Gauge with Driver Efficiency Gauge
- Simple Battery Gauge with Power Indicator Gauge

Press CONFIG to the left of the steering wheel to change the display configuration.

Speedometer

The speedometer shows the vehicle's speed in either kilometers per hour (km/h) or miles per hour (mph).

Odometer

The odometer shows how far the vehicle has been driven, in either kilometers or miles.

Trip Odometer

The trip odometer shows how far the vehicle has been driven since the trip odometer was last reset.

The trip odometer is accessed and reset through the Driver Information Center (DIC). See *Driver Information Center (DIC) on page 5-28*.

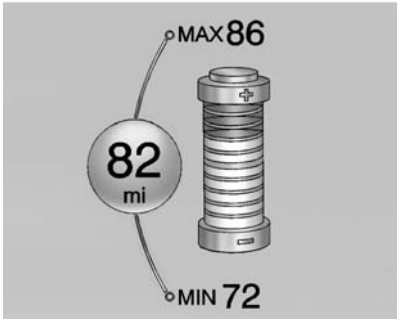
Compass

The vehicle has a compass display in the instrument cluster above the speedometer. The compass receives its heading and other information from the Global Positioning System (GPS) antenna and vehicle speed information.

The compass system has automatic calibration and zone adjustment features.

Avoid covering the GPS antenna for long periods of time with objects that may interfere with the antenna's ability to receive a satellite signal. The compass system is designed to operate for a certain number of miles or degrees of turn before needing a signal from the GPS satellites. The compass system will automatically determine when a GPS signal is restored and provide a heading.

Battery Gauge (High Voltage)

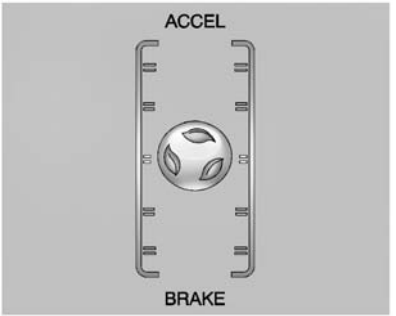


Enhanced Battery Gauge Shown

This displays the charge level of the high voltage battery.

The number in the ball is an estimate of how far the vehicle can be driven. MAX is the current maximum and MIN is the current minimum range based on recent driving habits. LOW displays when the charge level is very low. Use this indicator to monitor energy usage.

Driver Efficiency Gauge



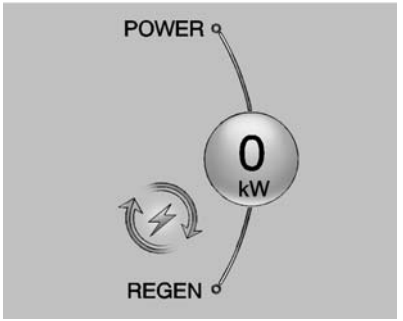
This gauge is a guide to driving in an efficient manner by keeping the ball green and in the center of the gauge. The leaves stop spinning when the vehicle stops or when the ball travels away from the center of the gauge.

See *Driving for Better Energy Efficiency on page 1-22*.

ACCEL: If the ball turns yellow and travels above the center of the gauge, acceleration is too aggressive to optimize efficiency. Driving fast also uses more energy than driving slow.

BRAKE: If the ball turns yellow and travels below the center of the gauge, braking is too aggressive to optimize efficiency.

Power Indicator Gauge



The power gauge shows the vehicle's instantaneous power consumption. It also shows the regenerative power going back into the battery.

Safety Belt Reminders

Driver Safety Belt Reminder Light

There is a driver safety belt reminder light on the instrument cluster.

When the vehicle is started, this light flashes and a chime may come on to remind the driver to fasten their safety belt. Then the light stays on solid until the belt is buckled. This cycle may continue several times if the driver remains or becomes unbuckled while the vehicle is moving.

If the driver safety belt is buckled, neither the light nor the chime comes on.

Passenger Safety Belt Reminder Light

There is a passenger safety belt reminder light near the passenger airbag status indicator. See *Passenger Sensing System on page 3-23*.

When the vehicle is started, this light flashes and a chime may come on to remind passengers to fasten their safety belt. Then the light stays on solid until the belt is buckled. This cycle continues several times if the passenger remains or becomes unbuckled while the vehicle is moving.

If the passenger safety belt is buckled, neither the chime nor the light comes on.

The front passenger safety belt reminder light and chime may turn on if an object is put on the seat such as a briefcase, handbag, grocery bag, laptop, or other electronic device. To turn off the reminder light and/or chime, remove the object from the seat or buckle the safety belt.

Airbag Readiness Light

This light shows if there is an electrical problem with the airbag system. The system check includes the airbag sensor(s), passenger sensing system, the pretensioners (if equipped), the airbag modules, the wiring, and the crash sensing and diagnostic module. For more information on the airbag system, see *Airbag System on page 3-16*.

The airbag readiness light comes on for several seconds when the vehicle is started. If the light does not come on then, have it fixed immediately.

⚠ Warning

If the airbag readiness light stays on after the vehicle is started or comes on while driving, it means the airbag system might not be working properly. The airbags in the vehicle might not inflate in a crash, or they could even inflate without a crash. To help avoid injury, have the vehicle serviced right away.

If there is a problem with the airbag system, a Driver Information Center (DIC) message may also come on. See *Vehicle Messages on page 5-30*.

Passenger Airbag Status Indicator

The vehicle has a passenger sensing system. See *Passenger Sensing System on page 3-23* for important safety information. The center display has a passenger airbag status indicator.

United States

Canada and Mexico

When the vehicle is started, the passenger airbag status indicator will light ON and OFF, or the symbol for on and off, for several seconds as a system check. Then, after several seconds, the status indicator will light either ON or OFF, or the on or off symbol to let you know the status of the front outboard passenger frontal airbag and knee airbag.

If the word ON or the on symbol is lit on the passenger airbag status indicator, it means that the front outboard passenger frontal airbag and knee airbag are allowed to inflate.

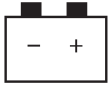
If the word OFF or the off symbol is lit on the passenger airbag status indicator, it means that the passenger sensing system has turned off the front outboard passenger frontal airbag and knee airbag.

If, after several seconds, both status indicator lights remain on, or if there are no lights at all, there may be a problem with the lights or the passenger sensing system. See your dealer for service.

⚠ Warning

If the airbag readiness light ever comes on and stays on, it means that something may be wrong with the airbag system. To help avoid injury to yourself or others, have the vehicle serviced right away. See *Airbag Readiness Light on page 5-11* for more information, including important safety information.

Charging System Light (12-Volt Battery)



The charging system light comes on briefly when the vehicle is in ON/RUN, as a check to show the light is working.

If the light stays on, or comes on while driving, there could be a problem with the electrical charging system. Have it checked by your dealer. Driving while this light is on could drain the 12-volt battery.

If a short distance must be driven with the light on, be sure to turn off all accessories, such as the radio.

Service Vehicle Soon Light

This light comes on if a condition exists that may require the vehicle to be taken in for service.

If the light comes on, take the vehicle to your dealer for service as soon as possible.

Brake System Warning Light

The vehicle brake system consists of two hydraulic circuits. If one circuit is not working, the remaining circuit can still work to stop the vehicle. For normal braking performance, both circuits need to be working.

If the warning light comes on, there is a brake problem. Have the brake system inspected right away.

Metric

English

This light comes on briefly when the vehicle is turned on. If it does not come on then, have it fixed so it will be ready to warn if there is a problem.

If the light comes on and stays on, there is a base brake problem.

⚠ Warning

The brake system might not be working properly if the brake system warning light is on. Driving with the brake system warning light on can lead to a crash. If the light is still on after the vehicle has been pulled off the road and carefully stopped, have the vehicle towed for service.

Electric Parking Brake Light

This status light comes on when the parking brake is applied. If the light flashes and stays on after the parking brake is released, or while driving, there is a problem with the electric parking brake system.

If the light does not come on, or remains flashing, see your dealer.

See *Electric Parking Brake on page 9-22* for more information.

Service Electric Parking Brake Light

The service electric parking brake light should come on briefly when the vehicle is in ON/RUN. If it does not come on, have the vehicle serviced by your dealer.

If this light stays on, there is a problem with a system on the vehicle that is causing the parking brake system to work at a reduced level. The vehicle can still be driven, but should be taken to a dealer as soon as possible. See *Electric Parking Brake on page 9-22*. If a message displays in the Driver Information Center (DIC), see *Brake System Messages on page 5-31*.

Antilock Brake System (ABS) Warning Light

The ABS warning light will come on briefly when the ignition is in ON/RUN. This is normal. If the light does not come on then, have it fixed so it will be ready to warn if there is a problem.

If the light stays on or comes on while driving, stop as soon as possible and turn the ignition off. Then start the vehicle again to reset

the system. If the light still stays on, or comes on again while driving, the vehicle needs service. See your dealer. If the regular brake system warning light is not on, the brakes will still work, but the antilock brakes will not work. If the regular brake system warning light is also on, the antilock brakes will not work and there is a problem with the regular brakes. See *Brake System Warning Light on page 5-13*.

Sport Mode Light

This light comes on when Sport Mode is selected. See “Sport Mode” in *Driver Selected Operating Modes on page 9-19* for more information.

Traction Off Light

This light comes on briefly while starting the vehicle. If it does not, have the vehicle serviced by your dealer. If the system is working normally, the indicator light then turns off.

The traction off light comes on when the Traction Control System (TCS) has been turned off by pressing and releasing the TCS/StabiliTrak button.

This light and the StabiliTrak OFF light come on when StabiliTrak is turned off.

If the TCS is off, wheel spin is not limited. Adjust driving accordingly.

See *Traction Control/Electronic Stability Control on page 9-25*.

StabiliTrak® OFF Light

This light comes on briefly while starting the vehicle. If it does not, have the vehicle serviced by your dealer.

This light comes on when the StabiliTrak system is turned off. If StabiliTrak is off, the Traction Control System (TCS) is also off.

If the StabiliTrak and TCS are off, the system does not assist in controlling the vehicle. Turn on the TCS and the StabiliTrak systems and the warning light turns off.

See *Traction Control/Electronic Stability Control on page 9-25*.

Traction Control System (TCS)/StabiliTrak® Light

This light comes on briefly when the vehicle is started.

If the light does not come on, have the vehicle serviced by your dealer. If the system is working normally, the indicator light turns off.

If the light is on and not flashing, the TCS, and potentially the StabiliTrak system have been disabled. A DIC message may display. Check the DIC messages to determine which feature(s) is no longer functioning and whether the vehicle requires service.

If the indicator/warning light is on and flashing, the TCS and/or the StabiliTrak system is actively working.

See *Traction Control/Electronic Stability Control on page 9-25*.

Tire Pressure Light

For vehicles with the Tire Pressure Monitor System (TPMS), this light comes on briefly when the vehicle is in ON/RUN. It provides information about tire pressures and the TPMS.

When the Light is On Steady

This indicates that one or more of the tires are significantly underinflated.

A message in the Driver Information Center (DIC) may also display. See *Tire Messages on page 5-35*. Stop as soon as possible, and inflate the tires to the pressure value shown on the Tire and Loading Information label. See *Tires on page 10-27*.

When the Light Flashes First and Then is On Steady

This indicates that there may be a problem with the Tire Pressure Monitor System. The light flashes for about one minute and stays on steady until the vehicle is in OFF. This sequence repeats each time the vehicle is in ON/RUN. See *Tire Pressure Monitor System on page 10-35*.

Security Light

The security light should come on briefly as the vehicle is started. If it does not come on, have the vehicle serviced by your dealer. If the system is working normally, the indicator light turns off.

If the light stays on and the vehicle does not start, there could be a problem with the theft-deterrent system. See *Immobilizer Operation on page 2-13*.

Vehicle Ready Light

The vehicle ready light comes on whenever the vehicle is ready to be driven.

High-Beam On Light

This light comes on when the high-beam headlamps are in use.

See *Headlamp High/Low-Beam Changer on page 6-1* for more information.

Daytime Running Lamps (DRL) Indicator Light

If equipped, this light turns on whenever the Daytime Running Lamps are in use.

See *Daytime Running Lamps (DRL) on page 6-2*.

Lamps On Reminder

This light comes on when the exterior lamps are in use. See *Exterior Lamp Controls on page 6-1*.

Cruise Control Light

For vehicles with cruise control, the cruise control light is white when the cruise control is on and ready, and turns green when the cruise control is set and active.

The light turns off when the cruise control is turned off. See *Cruise Control on page 9-27*.

Door Ajar Light

This light comes on, when a door is open or not securely latched.

Information Displays

Center Stack Display

The center stack screen displays Charging, Power Flow, and Energy Information. See the information that follows.

Climate Control, Infotainment, and Vehicle Personalization information also displays in this screen. For more information on these systems, see:

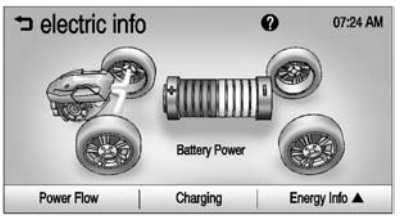
- *Automatic Climate Control System on page 8-1*.
- *Infotainment on page 7-1*.
- *Vehicle Personalization on page 5-36*.

The center stack controls only need a light touch to operate and work best with bare hands. The controls will work with most gloves although they may take longer to respond. Use the finger pad rather than the finger tip to minimize response time. If the controls are not responding, remove the gloves.

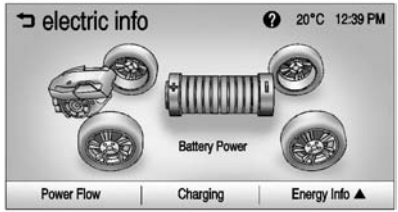
To view the Power Flow, Charging, and Energy Information, press the button on the center stack.

Power Flows

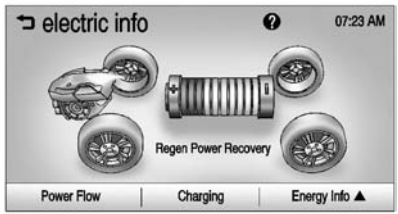
To view the Power Flow screens, press the button on the center stack then press the Power Flow button at the bottom of the touch screen. The Power Flow screens indicate the current system operating condition. The screens show the energy flow.



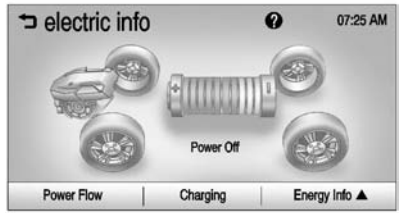
Battery Power – Battery is active with energy flowing to the wheels.



Battery Power – Vehicle is stationary and no power is flowing to the wheels.



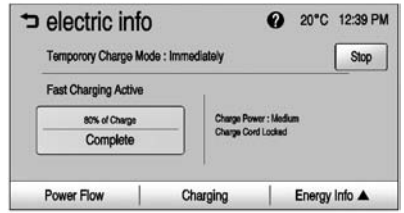
Regen Power Recovery – Power from the wheels returns to the battery during regenerative braking or coasting.



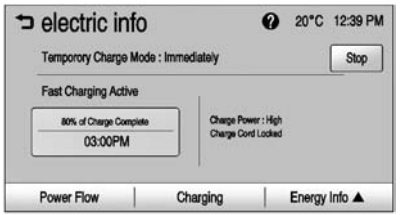
Power Off – No power is flowing to the wheels.

Programmable Charging

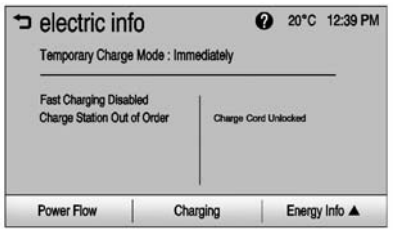
DC Charging



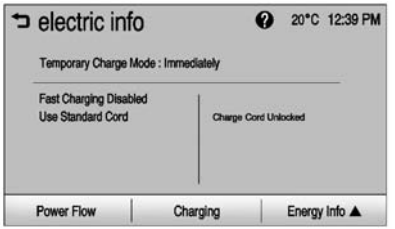
This screen indicates fast charging is active and 80% of the charge process is complete. Charge Power indicates the rate of charge, i.e. Low, Medium or High. High indicates the fastest possible charge rate. Stop can be pressed to stop the charge process at any time.



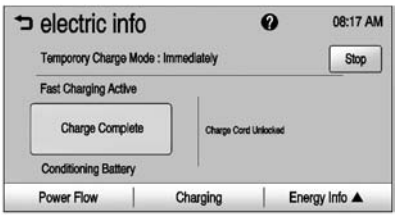
This screen indicates that fast charging is active with an estimated 80% completion time of 3:00 PM.



This screen indicates that fast charging is no longer active and an error was detected with the charging station.



This screen indicates that the vehicle's fast charging system has been disabled, and the standard charge cord should be used.



This screen indicates that the battery has fully charged, but the fast charge process is still remaining active to condition the battery. The fast charge process can be manually stopped at this point.

Important Information About Portable Electric Vehicle Charging

- Charging an electric vehicle can stress a building's electrical system more than a typical household appliance.
- Before you plug in to any electrical outlet, have a qualified electrician inspect and verify the electrical system (electrical outlet, wiring, junctions, and protection devices) for heavy-duty service at a 12 amp continuous load.
- Electrical outlets may wear out with normal usage or be damaged over time, making them unsuitable for electric vehicle charging.
- Check the electrical outlet/plug while charging and discontinue use if the electrical outlet/plug is

hot, then have the electrical outlet serviced by a qualified electrician.

- When outdoors, plug into an electrical outlet that is weather-proof while in use.
- Mount the charge cord to reduce strain on the electrical outlet/plug.

⚠ Warning

Improper use of portable electric vehicle charge cords may cause a fire, electrical shock, or burns, and may result in damage to property, serious injury, or death.

- Do not use extension cords, multi-outlet power strips, splitters, grounding adaptors, surge protectors, or similar devices.

(Continued)

Warning (Continued)

- Do not use an electrical outlet that is worn or damaged, or one that will not hold the plug firmly in place.
- Do not use an electrical outlet that is not properly grounded.
- Do not use an electrical outlet that is on a circuit with other electrical loads.

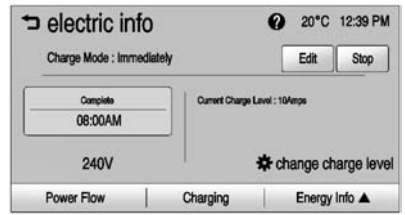
See the charge cord user guide.

Programmable Charging Modes

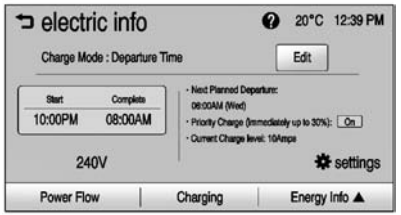
This vehicle has three programmable charge modes. To view the current charge mode status in the center stack display, press on the center stack and then press Charging at the bottom of the touch screen.

The charge Start and charge Complete time estimations are also displayed on the screen. These estimations are most accurate when the vehicle is plugged in and in moderate temperature conditions. Also, to get an accurate time estimate, the vehicle uses an internal clock for Programmable Charging, not the clock in the center stack.

Charge Mode Status



Immediately: The vehicle starts charging as soon as it is connected to an electrical outlet. See *Plug-In Charging on page 9-32*.



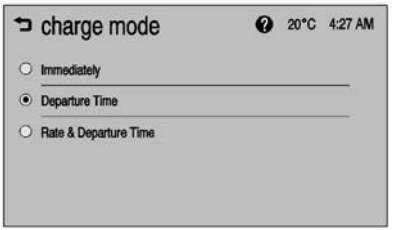
Departure Time: The vehicle estimates the charging start time considering the programmed departure time for the current day of the week. Charging begins at the start time and is complete by the departure time only if sufficient time is allowed after the charge cord is plugged in.

Rate & Departure Time: The vehicle estimates the charging start time based on the utility rate schedule, utility rate preference, and the programmed departure time for the current day of the week. The vehicle will charge during the least expensive rate periods to achieve a full battery charge by the departure time. Electrical rate information from the utility company for the charging location is required for this mode.

Also, if the selected electric rate settings result in a very long charge completion time, the vehicle will start charging immediately upon plug-in. For example, if the electric rate table is set up with all “Peak” rates and the rate preference is to charge during “Off-Peak” rates only, then the vehicle will start charging immediately upon plug-in.

Charge Mode Selection

From any charge mode status screen, press Edit to change the charge mode.

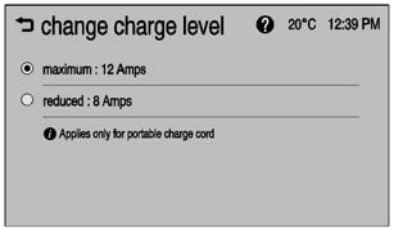


Select one option:

- Immediately
- Departure Time
- Rate & Departure Time

Charge Level Selection

The Change Charge Level setting allows the vehicle's charge level to be selected so it matches the capability of the charging location. If the vehicle consistently stops charging after plugging in, or if a circuit breaker continues to trip, reducing to a lower charge level setting may resolve the issue.



The charge level setting should be configured to match the electrical current rating for the electrical outlet that the charge cord is connected to. The charge level settings are:

- Maximum: Limits AC current to 12 amps
- Reduced: Limits AC current to 8 amps

Exact current levels may vary from the values shown in this manual. Check the vehicle for the current available levels.

The charge level setting can be changed at any time while the center stack display is operable. From the Immediately charge mode status screen, select Change Charge Level. From the Departure Time or Rate & Departure Time charge mode status screens, select Settings and then Change Charge Level.

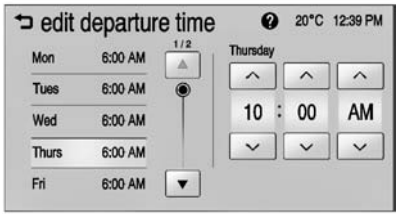
The charge level setting must be updated prior to the vehicle being charged and the charge level setting will reset to a default value when the vehicle is shifted from P (Park).

⚠ Warning

Using a charge level that exceeds the electrical circuit or electrical outlet capacity may start a fire or damage the electrical circuit. Use the lowest charge level until a qualified electrician inspects your electrical circuit capacity. Use the lowest charge level if the electrical circuit or electrical outlet capacity is not known.

Departure Time Entry

From the Departure Time or Rate & Departure Time charge mode status screen, press Settings to change the departure time to match your personal schedule.



1. For the Departure Time charge mode, press Edit Departure Time. Or, for the Rate & Departure Time charge mode, press Edit Schedule and then Edit Departure Time.
2. Press ∧ or ∨ to change the hours and minutes.
3. Press ∧ or ∨ to change AM or PM.
4. Press ⮌ to exit the screen.

Charge Rate Selection

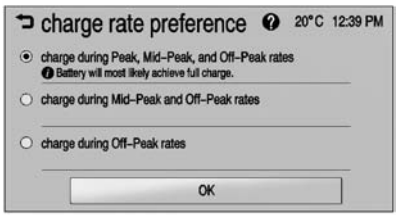
From the Rate & Departure Time screen, press Settings and then press Edit Schedule to select charge rate settings and edit the charge rate information.

Select one of the following:

- Select Rate Schedule.
- Edit Summer Rate Schedule.
- Edit Winter Rate Schedule.
- Edit Yearly Rate Schedule.
- Charge Rate Preference.

Charge Rate Preference Selection

From the Edit Schedule screen, press Charge Rate Preference.



Press one of the following options to select the Charge Rate Preference:

- Charge during Peak, Mid-Peak, and Off-Peak Rates: The vehicle can charge during any rate period to satisfy the next planned departure time. However, it will select when to charge to minimize the total cost of the charge.
- Charge during Mid-Peak and Off-Peak Rates: The vehicle will charge during Off-Peak and/or Mid-Peak rate periods only and will select when to charge to minimize the total cost of the charge.
- Charge during Off-Peak Rates: The vehicle will only charge during Off-Peak rate periods.

Charging begins at the start time and is complete by the departure time only if sufficient time is allowed after the charge cord is plugged in. For example, if the vehicle is plugged in for only one hour prior to the departure time, and the battery is completely discharged, the vehicle will not be fully charged by the departure time regardless of the rate selection.

Also, if the selected electric rate settings result in a very long charge completion time, the vehicle will start charging immediately upon plug-in. For example, if the electric rate table is set up with all “Peak” rates and the rate preference is to charge during “Off-Peak” rates only, then the vehicle will start charging immediately upon plug-in.

Electric Rate Plan Selection

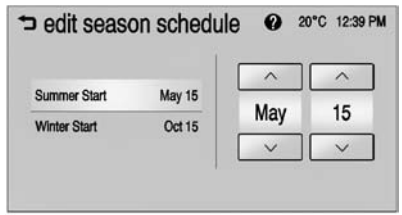
Electric rates, or cost per unit, may vary based on time, weekday/ weekend, and season. During the day when the demand for electricity is high, the rates are usually higher and called Peak rates. At night when the demand for electricity is low, the rates are usually lower and called Off-Peak rates. In some areas, a Mid-Peak rate is offered.

Contact the utility company to obtain the rate schedule for your area. The summer and winter start dates must be established to use a summer/ winter schedule.

From the Edit Schedule screen, select Summer/Winter or Yearly as the preferred rate schedule.

Summer/Winter Schedule Start Date Entering

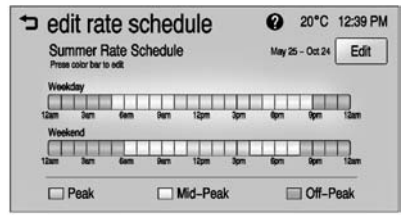
With Summer/Winter as the preferred rate schedule, from the Edit Schedule screen press Edit Summer Rate Schedule and then press Edit next to the dates for the summer rate schedule

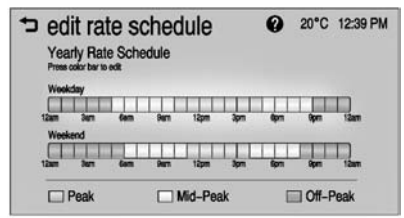


1. Press Summer Start.
2. Press ∧ or ∨ to set the month and day for the start of summer.
3. Press Winter Start.
4. Press ∧ or ∨ to set the month and day for the start of winter.

Electric Rate Schedule Editing

From the Edit Schedule screen press Edit Summer Rate Schedule, Edit Winter Rate Schedule, or Edit Yearly Rate Schedule.





1. Press the color bar for weekday or weekend.
   - Weekdays are Monday through Friday and use the same rate schedule.
   - Weekends are Saturday and Sunday and use the same rate schedule.

     Both weekday and weekend schedules must be set. The rate schedule only applies for a 24-hour period, starting at 12:00 AM and ending at 12:00 AM. There can be five rate changes for each day; not all must be used.

2. Select Peak, Mid-Peak, or Off Peak and use ∧ or ∨ to enter the end time.

   The finish times must be consecutive. If a finish time does not follow a start time, the error message displays “An invalid entry was found in the data entered. Please re-enter data.”
3. Press OK.

Priority Charging

The priority charging feature will work in Departure Time and Rate & Departure Time charging modes. This feature is designed to ensure that the high voltage battery pack has a minimal amount of energy prior to delaying a charge. Upon completion of priority charging the vehicle will return to normal Programmable Charging operation.

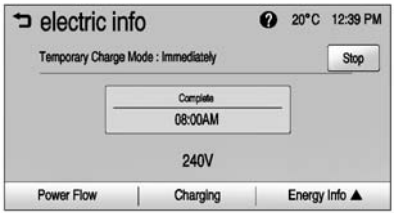
The feature can be enabled/disabled by selecting On/Off from the settings screens. When enabled, Priority Charging will only prevent Programmable Charging while the battery is recharged from a depleted state to a level allowing 40% of the driving range.

Temporary Charge Mode Override and Cancel

Programmed delayed charge modes can be temporarily overridden to an immediate charge mode for one charge cycle. Also, the next planned departure time can be temporarily overridden for one charge cycle. In addition to the in-vehicle overrides via the center stack, there are other ways to temporarily override a delayed charge mode. See *Plug-In Charging on page 9-32*.

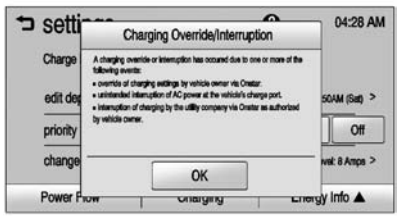
Temporary Override of a Delayed Charge Mode

Delayed charge can be overridden from outside the vehicle by plugging in the vehicle, disconnecting the connector, and then immediately plugging back in again.



The Temporary Charge Mode status screen will automatically display the revised charge complete time.

Charging Override/Interruption Pop-Up

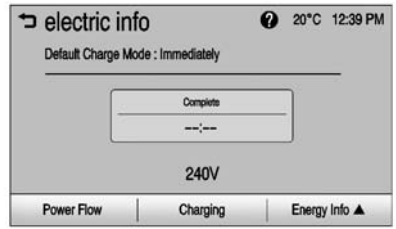


The Charging Override/Interruption pop-up will appear if any of the following conditions occur:

- The charging settings have been modified via OnStar through the website or the Mobile App. For example, the Departure Time Tables, the Rate Tables, or the Charge Mode were updated using the customer website (available in select regions).
- There was an unintended loss of AC power during the plug-in charge event. For example, there was a power outage or the charge cord was unplugged from the wall.
- The charge process was interrupted by the utility company via OnStar as authorized by the vehicle owner (available in select regions).

For more information see *Utility Interruption of Charging on page 9-41*.

Programmable Charging Disabled

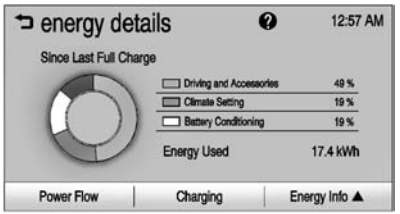


When the Programmable Charging system is disabled, the Default Charge Mode status screen and the pop-up will display “- -:- -” for the charge Complete time. The Programmable Charging system will be disabled if the Charge Complete Time cannot be confidently estimated. If the Programmable Charging system is consistently disabled, see your dealer for details.

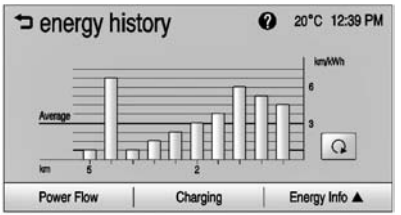
Energy Information

To view the Energy Details and Energy Tips, press the button on the center stack and then press the Energy Info button at the bottom of the touch screen.

Energy Details



The Energy Details screen shows how energy is being used since the last full charge.



The historic view graph shows the energy usage.

Energy Tips

The Energy Tips screens provide a guide on how to improve energy usage to increase economy and range.

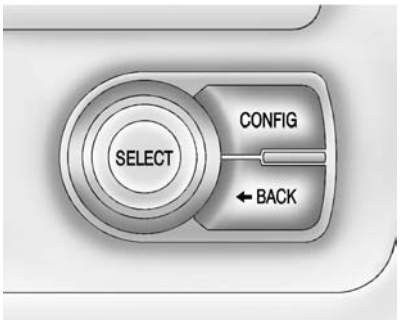
Driver Information Center (DIC)

The DIC display is in the instrument cluster. The DIC displays information about the vehicle. It also displays warning messages if a system problem is detected. See *Vehicle Messages on page 5-30*.

DIC Operation and Displays

View the DIC displays by pressing the DIC buttons to the left of the steering wheel.

DIC Controls



CONFIG: Press to change the instrument cluster display configuration. See *Instrument Cluster on page 5-7*.

BACK: Press to return to the previous screen, exit a screen, or return to the main menu. Press BACK to minimize the DIC menu display.

SELECT: Press the center of the knob to select the highlighted item. Turn the knob to scroll through the menu items.

DIC Menu Items

At the main DIC menu:

1. Turn the SELECT knob to scroll through the possible DIC menus.
2. Press the center of the SELECT knob when a menu item is highlighted to enter that menu.
3. Continue to turn and press the SELECT knob to scroll through and select the available menu items:

: Turn-by-Turn

: Trip

: Tire Pressure

: Vehicle Messages

: Units

: Tutorial Mode and Open Source Software

Turn-by-Turn

Select this menu item to view the OnStar or Navigation System Turn-by-Turn guidance.

Trip

The trip display shows distance traveled and average economy since the last trip reset.

Reset the trip data by pressing and holding SELECT when Trip is displayed.

Tire Pressure

The display will show a vehicle with the approximate pressures of all four tires. Tire pressure is displayed in either kilopascals (kPa) or in pounds per square inch (psi).

If a low or high tire pressure is detected, a message is displayed advising to check the tire pressure in the specified tire. See *Tire Pressure on page 10-34* and *Tire Messages on page 5-35*.

If the tire pressure display shows dashes instead of a value, there may be a problem with the vehicle. See your dealer for service.

Vehicle Messages

Turn the SELECT knob to scroll through any active warning messages. Press SELECT to review the messages.

Units

Turn the SELECT knob to change the unit display to Metric, US, or Imperial when the display is active. Press SELECT to confirm the setting. This will change the displays on the cluster and DIC to either metric or English (US) measurements.

Tutorial Mode and Open Source Software

Select this menu item to view a screen that explains some of the unique features of the cluster or the Open Source Software information for the cluster.

Tutorial mode is only available when the vehicle is in P (Park).

Vehicle Messages

Messages displayed in the DIC indicate the status of the vehicle or some action that may be needed to correct a condition. Multiple messages may display one after the other.

Messages that do not require immediate action can be acknowledged and cleared by pressing the SELECT knob. The messages requiring immediate action cannot be cleared until that action is performed. All messages should be taken seriously. Clearing the messages does not correct the problem.

Battery and Charging Messages

BATTERY SAVER ACTIVE

This message displays when the vehicle has detected that the 12-volt battery voltage has dropped and vehicle features are being disabled. The 12-volt battery saver system starts reducing certain features trying to save the charge of the 12-volt battery. Turn off unnecessary features to allow the battery to recharge. This message may also display when the high voltage battery is very low.

BATTERY TOO COLD, PLUG IN TO WARM

This message displays during extremely cold temperatures, when the vehicle will not start until the high voltage battery is warm enough.

Plug the vehicle in to an AC charging station and make sure ⏻ POWER is off to allow the charging system to warm the high voltage battery, then the vehicle can be started. DC charging cannot be used to recover a cold high voltage battery.

BATTERY WARM, AC COMPRESSOR TURNING ON

This message displays when the high voltage battery is too warm. The AC compressor will turn on to help cool the battery.

CHARGE CORD CONNECTED

This message displays when the charge cord is connected to the vehicle. The vehicle cannot be shifted out of P (Park) with the charge cord connected.

CHARGE VEHICLE NOW

This message displays when the high voltage battery is almost out of energy. The vehicle needs to be charged.

CHARGE VEHICLE SOON

This message displays when the high voltage battery is low and the vehicle needs to be charged.

LOW BATTERY

This message displays when the 12-volt battery voltage is low. See *Battery on page 10-13*.

OUT OF ENERGY, CHARGE VEHICLE NOW

This message displays when the high voltage battery is out of energy. The vehicle needs to be charged.

PROBLEM DETECTED WITH CHARGING STATION

This message displays when there is a problem with the high voltage charging station.

SERVICE BATTERY CHARGING SYSTEM

This message displays when there is a fault in the 12-volt battery charging system. Take the vehicle to your dealer for service.

SERVICE HIGH VOLTAGE CHARGING SYSTEM

This message displays when there is a problem with the high voltage charging system. See your dealer for service.

Brake System Messages

BRAKE FLUID LOW

This message displays when the brake fluid level is low. See *Brake Fluid on page 10-11*.

RELEASE PARKING BRAKE

This message displays if the electric parking brake is on while the vehicle is in motion. Release it before attempting to drive. See *Electric Parking Brake on page 9-22*.

SERVICE BRAKE ASSIST

This message displays when there is a problem with the brake boost system. When this message displays, the brake pedal may be

harder to push and the stopping distance may be longer. Take the vehicle to your dealer for service.

SERVICE PARKING BRAKE

This message displays when there is a problem with the parking brake. Take the vehicle to your dealer for service.

STEP ON BRAKE TO RELEASE PARK BRAKE

This message displays when attempting to release the electric parking brake without the brake pedal applied. See *Electric Parking Brake on page 9-22*.

Cruise Control Messages

CRUISE SET TO XXX

This message displays when the cruise control is set and shows the speed it was set to. See *Cruise Control on page 9-27*.

Door Ajar Messages

DOOR(S) OPEN, HOOD OPEN, HATCH OPEN

A symbol will appear on the display showing the area that is open.

Electric Drive Unit Messages

SHIFT TO PARK

This message displays when the vehicle should be shifted to P (Park). This may appear when attempting to turn off the vehicle when it is not in P (Park).

Key and Lock Messages

When programming new Remote Keyless Entry (RKE) transmitters, DIC messages display. See *Remote Keyless Entry (RKE) System Operation on page 2-3*.

NO REMOTE DETECTED

This message displays when the RKE transmitter is not detected while attempting to start the vehicle. The transmitter battery may be weak. See “Starting the Vehicle with a Low Transmitter Battery” under *Remote Keyless Entry (RKE) System Operation on page 2-3*.

NO REMOTE DETECTED, PRESS BRAKE TO RESTART

This message displays if the RKE transmitter is no longer detected in the vehicle. Press the brake pedal and ⏻ POWER to restart the vehicle, or press ⏻ POWER without pressing the brake pedal to turn the vehicle off. If the vehicle is turned off and a valid transmitter is not available, the vehicle will not restart.

REMINDER: KEY LEFT IN VEHICLE

This message displays when leaving the vehicle with the RKE transmitter still inside.

REPLACE BATTERY IN REMOTE KEY

This message displays when the battery in the RKE transmitter needs to be replaced.

SERVICE KEYLESS START SYSTEM

This message displays when the keyless start system needs service. Take the vehicle to your dealer.

Lamp Messages

AUTOMATIC LIGHT CONTROL ON/OFF

A message will display when the automatic light control has been turned on or off.

CHECK LAMP or LAMP FAILURE

Depending on the lamp, one of these messages may display. See *Bulb Replacement on page 10-16*.

TURN SIGNAL ON

This message displays if the turn signal has been left on. Turn off the turn signal.

Propulsion Power Messages

PROPULSION POWER IS REDUCED

This message displays when the propulsion power is reduced and can affect the ability to accelerate. If this message is on, but there is no reduction in performance, proceed to your destination. The performance may be reduced the next time the vehicle is driven. The vehicle may be driven at a reduced speed while this message is on, but maximum acceleration and speed may be reduced.

This message is also displayed when the vehicle range is low.

Ride Control System Messages

LOW TRACTION

This message displays when the Antilock Brake System (ABS) is active and is working to assist the driver with control of the vehicle in difficult driving conditions.

SERVICE STABILITRAK

This message displays when there is a problem detected with the StabiliTrak system. The vehicle is safe to drive, but the StabiliTrak system is not operational. See *Traction Control/Electronic Stability Control on page 9-25*.

SERVICE TRACTION CONTROL

This message displays when there is a problem detected with the Traction Control System (TCS). The vehicle is safe to drive, but the TCS is not operational. See *Traction Control/Electronic Stability Control on page 9-25*.

STABILITRAK OFF

This message displays when StabiliTrak is turned off. Adjust your driving accordingly.

TRACTION CONTROL OFF

This message displays when the Traction Control System (TCS) is turned off. Adjust your driving accordingly.

TRACTION CONTROL ON

This message displays when the Traction Control System (TCS) is turned on.

Airbag System Messages

SERVICE AIRBAG

This message displays if there is a problem with the airbag system. Take the vehicle to your dealer for service.

Security Messages

SERVICE THEFT ALARM

This message displays if there is a problem with the alarm. See your dealer for service.

SERVICE THEFT DETERRENT SYSTEM

This message displays if there is a problem with the theft-deterrent system. See your dealer for service.

Service Vehicle Messages

SERVICE AC SYSTEM

This message displays if there is a problem with the air conditioning system. Take the vehicle to your dealer for service.

SERVICE HEATER SOON

This message displays if there is a problem with the heater system. Take the vehicle to your dealer for service.

SERVICE POWER STEERING

This message displays if there is a problem with the power steering system. Take the vehicle to your dealer for service.

SERVICE VEHICLE SOON

This message displays if there is a problem with the vehicle. Take the vehicle to your dealer for service. Depending on the severity of a crash, this message may come on along with the airbag readiness light.

Starting the Vehicle Messages

PRESS BRAKE TO START VEHICLE

This message displays when attempting to start the vehicle without first pressing the brake pedal.

PRESS BUTTON AGAIN TO TURN OFF

This message displays as a reminder to press ⏻ POWER to turn the vehicle off when an attempt is made to turn off the vehicle while it is in motion.

Tire Messages

SERVICE TIRE MONITOR SYSTEM

This message displays if there is a problem with the Tire Pressure Monitor System (TPMS). See *Tire Pressure Monitor Operation on page 10-36*.

TIRE LEARNING ACTIVE

This message displays when the system is learning new tires. See *Tire Pressure Monitor Operation on page 10-36*.

TIRE LOW ADD AIR TO TIRE

This message displays when the pressure in one or more of the tires is low.

This message also displays LEFT FRONT, RIGHT FRONT, LEFT REAR, or RIGHT REAR to indicate the location of the low tire.

The low tire pressure warning light will also come on. See *Tire Pressure Light on page 5-16*.

If a tire pressure message appears on the DIC, stop as soon as you can. Inflate the tires by adding air until the tire pressure is equal to the values shown on the Tire and Loading Information label. See *Tires on page 10-27*, *Vehicle Load Limits on page 9-10*, and *Tire Pressure on page 10-34*.

You can receive more than one tire pressure message at a time. The DIC also shows the tire pressure values. See *Driver Information Center (DIC) on page 5-28*.

Vehicle Reminder Messages

ICE POSSIBLE DRIVE WITH CARE

This message is displayed when ice conditions are possible.

Vehicle Speed Messages

SPEED LIMITED TO XXX

This message displays when the vehicle speed is limited.

Vehicle Personalization

Personalization Menu

Settings can be made with the ignition ON and the vehicle not moving.

The following are all possible personalization features. Depending on the vehicle, some may not be available.

(Home): Press to access the Home Page Menu.

▲ or ▼ (Up/Down): Press to scroll through the menus or setup items.

(Back): Press to exit or return to the previous screen or menu.

To access the menu:

1. Press .
2. Press settings.

Press the menu item to select it. Each of the menus is detailed in the following information.

Settings menus and functions may vary depending on vehicle option.

The following list of menu items may be available:

- Time & Date Settings
- Radio Settings
- Connection Settings
- Vehicle Settings
- Language
- Text Scroll
- Touch Beep Sound
- Max Startup Volume
- System Version
- DivX® VOD

Time & Date Settings

Select the Time & Date Settings menu and the following may be displayed:

- Set Time Format
- Set Date Format
- Set Time and Date
- Automatic Clock Sync

Set Time Format

Select to set the 12/24 hour format.

Press 12h or 24h.

Set Date Format

Select to set the month and day format.

Press < or > to select the DD/MM/YYYY (day/month/year), MM/DD/YYYY (month/day/year), or YYYY/MM/DD (year/month/day) format.

Set Time and Date

Select to manually set the time and date.

1. Press ∧ or ∨ to adjust the value.
2. Press OK.

Automatic Clock Sync

Select to display the real or user time on the radio.

Select On to display the real time or Off to display the time set by the user.

Radio Settings

Select the Radio Settings menu and the following may be displayed:

- Auto Volume
- Radio Tune Bar
- Radio Text
- XM Categories
- Radio Factory Settings

Auto Volume

This feature adjusts the radio volume to compensate for road and wind noise as the vehicle speeds up or slows down, so that the volume level is consistent.

Press < or > to select Off, Low, Medium, or High.

Radio Tune Bar

Select to display the radio station tune bar.

Select On or Off.

Radio Text

Select to display the radio broadcast information.

Select On or Off.

XM Categories

Select to set the selection of XM categories.

Radio Factory Settings

Select to restore the radio to the factory settings.

Connection Settings

Select the Connection Settings menu and the following may be displayed:

- Bluetooth Settings
- Change Ringtone
- Ringtone Volume

Bluetooth Settings

Select this feature to:

- Connect, disconnect, or delete a device
- Change or set a Personal Identification Number (PIN)
- Turn on or off the Bluetooth connection
- Check the device information

Change Ringtone

Select to set different ringtones.

Ringtone Volume

Select to set the ringtone volume.

Press < or >.

Vehicle Settings

Select the Vehicle Settings menu and the following may be displayed:

- Climate and Air Quality
- Comfort and Convenience
- Lighting
- Power Door Locks

- Lock, Unlock Settings
- Rear Camera Option
- Vehicle Factory Settings
- Radio Power Down
- Charging Alerts

Climate and Air Quality

- Auto Fan Speed
- Auto Defog

Auto Fan Speed

Select to set the automatic fan speed.

Select Low, Medium, or High. Press ↩.

Auto Defog

Select to set the auto defog on or off.

Select On or Off. Press ↩.

Comfort and Convenience

Select the Comfort and Convenience menu and the following may be displayed:

- Chime Volume
- Auto Wipe in Reverse Gear

Chime Volume

Select to set the chime volume level.

Select Normal or High. Press ↩.

Auto Wipe in Reverse Gear

Select to set the Auto Wipe in Reverse Gear feature on or off. When on, and the front wipers are on, the rear window wiper will turn on automatically when the vehicle is shifted into R (Reverse).

Select On or Off. Press ↩.

Lighting

Select the Lighting menu and the following may be displayed:

- Exit Lighting
- Vehicle Locator Lights

Exit Lighting

Select to set how long the exterior lamps stay on when leaving the vehicle and it is dark outside.

Select Off, 30 Sec, 60 Sec, or 120 Sec. Press ↩.

Vehicle Locator Lights

Select to turn the vehicle locator lights on or off.

Select On or Off. Press ↩.

Power Door Locks

Select Power Door Locks and the following may be displayed:

- Auto Door Unlock
- Unlocked Door Anti Lock Out
- Delayed Door Lock

Auto Door Unlock

Select to set which of the doors will automatically unlock when the vehicle is shifted into P (Park).

Select All Doors, Driver Door, or Off. Press ↩.

Unlocked Door Anti Lock Out

When on, this feature will keep the driver door from locking when the door is open. If Off is selected, the Delayed Door Lock menu will be available and the door will lock as programmed through this menu.

Select On or Off. Press ↩.

Delayed Door Lock

When on, this feature will delay the locking of the doors until five seconds after the last door is closed.

Select On or Off. Press ↩.

Lock, Unlock Settings

Select Lock, Unlock Settings and the following may be displayed:

- Remote Unlock Light Feedback
- Remote Lock Light & Horn Feedback
- Remote Door Unlock
- Remote Left in Vehicle Reminder

Remote Unlock Light Feedback

When on, the exterior lamps will flash when unlocking the vehicle with the RKE transmitter.

Select Flash Lights or Lights Off. Press ↩.

Remote Lock Light & Horn Feedback

Select to set what type of feedback is given when pressing 🔒 on the RKE transmitter.

Select Lights Only, Lights & Horn, Horn Only, or Off. Press ↩.

Remote Door Unlock

Select to set which doors will unlock when pressing 🔓 on the RKE transmitter.

Select All Doors or Driver Door. When set to Driver Door, the driver door will unlock the first time 🔓 is pressed and all doors will unlock when the button is pressed a second time. When set to All Doors, all of the doors will unlock at the first press of 🔓. Press ↩.

Remote Left in Vehicle Reminder

When on, the horn will chirp if the remote is left in the vehicle.

Select On or Off. Press ↩.

Rear Camera Option

Select Rear Camera Option and the following may be displayed:

- Guidelines

Guidelines

Select to turn the guidelines on or off. See *Rear Vision Camera (RVC) on page 9-30*.

Select On or Off. Press ↩.

Vehicle Factory Settings

Select Vehicle Factory Settings to return all of the vehicle personalization to the default

settings. Press Vehicle Factory Settings when highlighted. Select Yes or No. Press ⮌.

Radio Power Down

Select Radio Power Down and the following may be displayed:

- Radio Power Down

Radio Power Down

Select to set the battery level to show the pop-up screen associated with the radio power down.

Select Off, 5%, 10%, 15%, 20%, or 25%. Press ⮌.

Charging Alerts

Select Charging Alerts and the following may be displayed:

- Charge Status Feedback
- Charge Power Loss Alert
- Charge Cord Theft Alert

Charge Status Feedback

Select to turn the Charge Status Feedback on or off.

Select On or Off. Press ⮌.

Charge Power Loss Alert

Select to turn the Charge Power Loss Alert on or off.

Select On or Off. Press ⮌.

Charge Cord Theft Alert

Select to turn the Charge Cord Theft Alert on or off.

Select On or Off. Press ⮌.

Language

Select the Language menu and the following may be displayed:

- English (US)
- Francais (Canadien)
- Espanol

Select the language desired. Press ⮌.

Text Scroll

Select to set the Text Scroll feature on or off.

When on, if there is long text displayed on the audio screen, the text is scrolled. When off, the text is scrolled once and displayed in truncated form.

Select On or Off. Press ⮌.

Touch Beep Sound

Select to set the Touch Beep Sound feature on or off.

When on, a beep will be heard when pressing the screen. When off, the beep is canceled.

Select On or Off. Press ⮌.

Max Startup Volume

Select to set the startup volume of the infotainment system.

Press < or > to select the desired volume between 9–21. Press ⮌.

System Version

Press System Version when highlighted to view the version of the infotainment system. Press ⮌.

DivX VOD

Press DivX VOD when highlighted.

- **DIVX VIDEO**: DivX is a digital video format created by DivX, LLC, a subsidiary of Rovi Corporation. This is an official DivX Certified® device that plays DivX video. See divx.com for more information and software tools on how to convert files into DivX videos.
- **DIVX VIDEO-ON DEMAND**: This DivX Certified device must be registered in order to play purchased DivX Video-on-Demand (VOD) movies. To obtain a registration code, locate the DivX VOD section in the device setup menu. See vod.divx.com for more information on how to complete the registration.

Press ↩.

✍ NOTES

Lighting

Exterior Lighting
Exterior Lamp Controls 6-1
Exterior Lamps Off Reminder 6-1
Headlamp High/Low-Beam Changer 6-1
Flash-to-Pass 6-2
Daytime Running Lamps (DRL) 6-2
Automatic Headlamp System 6-2
Hazard Warning Flashers 6-3
Turn and Lane-Change Signals 6-4

Interior Lighting
Instrument Panel Illumination Control 6-4
Courtesy Lamps 6-5
Dome Lamps 6-5

Lighting Features
Exit Lighting 6-5
Battery Power Protection 6-6

Exterior Lighting

Exterior Lamp Controls

The exterior lamp control is on the turn signal lever on the left side of the steering column.

There are four positions:

(Headlamps): Turns on the headlamps together with the parking lamps and instrument panel lights.

(Parking Lamps): Turns on the parking lamps including all lamps, except the headlamps.

AUTO (Automatic): Turns the exterior lamps on and off automatically depending on the exterior light.

(Off): Turns all the lamps off, except the Daytime Running Lamps (DRL).

The DRL automatically turn off when the vehicle is turned off.

Exterior Lamps Off Reminder

A reminder chime will sound when the headlamps or parking lamps are manually turned on when the ignition is off and a door is open. To disable the chime, turn the light off.

Headlamp High/ Low-Beam Changer

The headlamps must be on for this feature to work.

Push the turn signal lever away from you to turn the high beams on.

The light comes on in the instrument cluster while the high beams are on and the ignition is turned to ON/RUN.

To return to low beams, push the lever again or pull the lever toward you and release.

Flash-to-Pass

This feature is used to signal to the vehicle ahead that you want to pass.

Pull the turn signal lever toward you until the high-beam headlamps come on, then release the lever to turn them off.

Daytime Running Lamps (DRL)

DRL can make it easier for others to see the front of your vehicle during the day. Fully functional DRL are required on all vehicles first sold in Canada.

The DRL system makes the headlamps come on when the following conditions are met:

- The ignition is on.
- The exterior lamp control is in the AUTO position during the day.
- The shift lever is out of the P (Park) position.

This indicator light in the center stack display comes on when the DRL system is on.

When the DRL system is on, the taillamps, sidemarker lamps, parking lamps, and instrument panel lights do not come on unless the exterior lamp control is turned to the parking lamp or headlamp position.

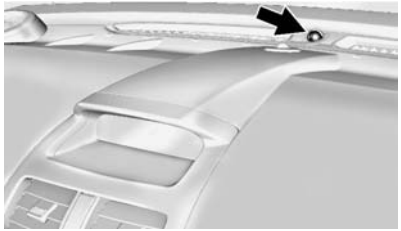
The DRL system turns off when one of the following conditions is met:

- The ignition is off.
- The high-beam headlamps are on.
- The low-beam headlamps are on.
- The flash-to-pass feature is used.

The regular headlamp system should be used when needed.

Automatic Headlamp System

When it is dark enough outside and the exterior lamp control is in the automatic position, the headlamps come on automatically. See *Exterior Lamp Controls on page 6-1*.



The vehicle has a light sensor on top of the instrument panel. Make sure it is not covered, or the headlamps will be on when they are not needed.

The system may also turn on the headlamps when driving through a parking garage or tunnel.

If the vehicle is started in a dark garage, the automatic headlamp system comes on immediately. If it is light outside when the vehicle leaves the garage, there is a slight delay before the automatic headlamp system changes to the DRL. During that delay, the instrument cluster may not be as bright as usual. Make sure the instrument panel brightness control is in the full bright position. See *Instrument Panel Illumination Control on page 6-4*.

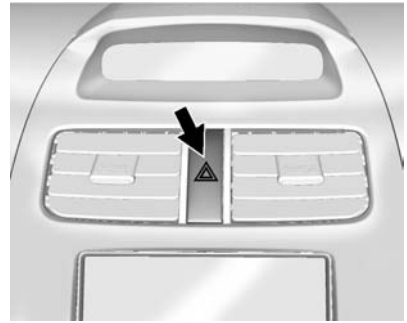
When it is bright enough outside, the headlamps will turn off or may change to Daytime Running Lamps (DRL).

The automatic headlamp system turns off when the exterior lamp control or the ignition is off.

Lights On with Wipers

If the windshield wipers are activated in daylight with the vehicle on, and the exterior lamp control is in AUTO, the headlamps, parking lamps, and other exterior lamps come on. The transition time for the lamps coming on varies based on wiper speed. When the wipers are not operating, these lamps turn off. Move the exterior lamp control to ⏻ or ≻00≺ to disable this feature.

Hazard Warning Flashers

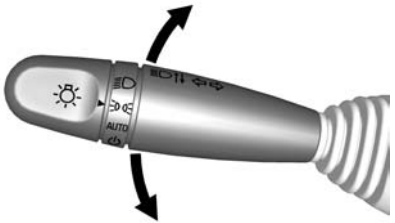


The hazard warning flasher button is on the center stack.

⚠ **(Hazard Warning Flasher):** Press to make the front and rear turn signal lamps flash on and off. This warns others that you are having trouble. Press the button again to turn the flashers off.

When the hazard warning flashers are on, the turn signals will not work.

Turn and Lane-Change Signals



Move the lever all the way up or down to signal a turn.

An arrow on the instrument cluster flashes in the direction of the turn or lane change.

Raise or lower the lever until the arrow starts to flash to signal a lane change. Hold it there until the lane change is completed.

If the lever is moved momentarily to the lane change position, the arrow will flash three times.

The lever returns to its starting position whenever it is released.

If after signaling a turn or a lane change the arrow flashes rapidly or does not come on, a signal bulb may be burned out.

Replace any burned out bulbs. If a bulb is not burned out, check the fuse. See *Fuses and Circuit Breakers on page 10-20*.

Interior Lighting

Instrument Panel Illumination Control

This feature controls the brightness of the instrument panel controls and infotainment display screen. The thumbwheel is to the left of the steering column on the instrument panel.

(Instrument Panel Brightness): Move the thumbwheel up or down to brighten or dim the instrument panel controls and infotainment display screen.

Courtesy Lamps

The courtesy lamps come on automatically when any door is opened and the dome lamp is in the DOOR position.

Dome Lamps

The dome lamp controls are in the overhead console.

Move the control to change the lamp setting.

OFF: Turns the lamps off, even when a door is open.

DOOR: Turns the lamps on automatically when a door is opened.

ON: Turns on the dome lamps.

Lighting Features

Exit Lighting

If the dome lamps are in the DOOR position, they come on automatically when the vehicle is turned off. The exterior lamps and dome lamps remain on after the door is closed for a set amount of time, then automatically turn off.

To turn on the exterior lamps while the ignition is off:

1. Open the driver door.
2. Pull and release the turn signal lever.

The headlamps, parking lamps, and back-up lamps will turn on for a set amount of time, then automatically turn off.

This feature can be changed. See *Vehicle Personalization on page 5-36*.

Battery Power Protection

The battery saver feature is designed to protect the vehicle's 12-volt battery.

If some interior lamps and/or the headlamps are left on and the ignition is turned off, the battery rundown protection system automatically turns the lamp off after some time.

Infotainment System

Introduction
Infotainment 7-1
Theft-Deterrent Feature 7-2
Overview 7-3
Home Page 7-3
Operation 7-4

Radio
AM-FM Radio 7-5
Satellite Radio 7-7
Radio Reception 7-9
Multi-Band Antenna 7-10

Audio Players
USB Port 7-10
Auxiliary Devices 7-11

Phone
Bluetooth (Overview) 7-12
Bluetooth (Infotainment Controls) 7-14
Hands-Free Phone 7-19

Downloadable Applications
Smartphone Link (Overview) 7-22
Smartphone Link (Pandora) 7-24
Smartphone Link (Stitcher) 7-25

Bluetooth Phone/Devices
Pictures and Movies (Audio System) 7-26
Pictures and Movies (Movie System) 7-31
Pictures and Movies (Picture System) 7-33

Trademarks and License Agreements
Trademarks and License Agreements 7-35

Introduction

Infotainment

Read the following pages to become familiar with these features.

⚠ Warning

Taking your eyes off the road for too long or too often while using any infotainment feature can cause a crash. You or others could be injured or killed. Do not give extended attention to infotainment tasks while driving. Limit your glances at the vehicle displays and focus your attention on driving. Use voice commands whenever possible.

The infotainment system has built-in features intended to help avoid distraction by disabling some functions when driving. These functions may gray out when they are unavailable. Many infotainment

features are also available through the instrument cluster and steering wheel controls.

Before driving:

- Become familiar with the operation, faceplate buttons, and screen buttons.
- Set up the audio by presetting favorite stations, setting the tone, and adjusting the speakers.
- Set up phone numbers in advance so they can be called easily by pressing a single button or by using a single voice command if equipped with Bluetooth phone capability.

See *Defensive Driving on page 9-4*

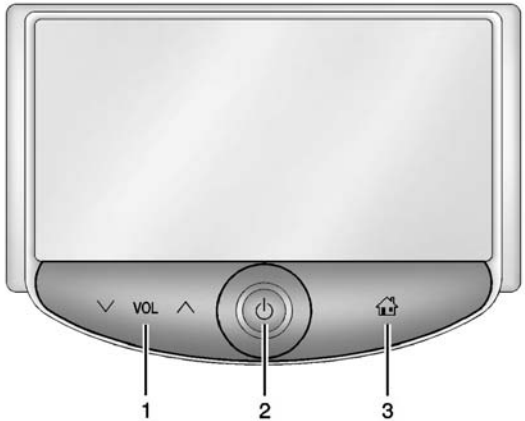
To play the infotainment system with the ignition off, see *Retained Accessory Power (RAP) on page 9-17*.

Theft-Deterrent Feature

The infotainment system has an electronic security system installed to prevent theft.

The infotainment system only works in the vehicle in which it was first installed, and cannot be used in another vehicle.

Overview



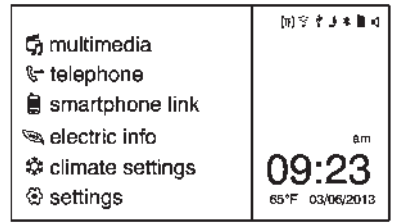
1. ∨ VOL ∧ (Volume)
   - Press to decrease or increase the volume.
2. ⏻ (Power)
   - Press and hold to turn the power on or off.
   - Press and release to view the clock and mute audio.
3. ⌂ (Home Page)
   - Press to go to the Home Page. See “Home Page” following.

Home Page

Touchscreen Buttons

Touchscreen buttons show on the screen when available. When a function is unavailable, the button may gray out. When a function is selected, the button may highlight.

Home Page Features



Press ⌂ to go to the Home Page.

multimedia: Press to select AM, FM, SiriusXM® (if equipped), USB, iPod, Bluetooth, AUX, Picture, Movie, or AUX video.

telephone: Press to activate the phone features (if equipped). See *Bluetooth (Overview) on page 7-12* or *Bluetooth (Infotainment Controls) on page 7-14*.

smartphone link: Press to listen to Pandora® or Stitcher®. See *Smartphone Link (Overview) on page 7-22* or *Smartphone Link (Pandora) on page 7-24* or *Smartphone Link (Stitcher) on page 7-25*.

electric info: See *Energy Information on page 5-28*.

climate settings: See *Automatic Climate Control System on page 8-1*.

settings: Press to access the Personalization menu. See *Vehicle Personalization on page 5-36*.

Operation

The infotainment system is operated by using the pushbuttons, menus shown on the display, and steering wheel controls.

Turning the System On or Off

(Power): Press and hold to turn the radio on and off.

Automatic Switch-Off

If the infotainment system has been turned on after the ignition is turned off, the system will turn off automatically after 10 minutes.

Volume Control

∨ VOL ∧ (Volume): Press to decrease or increase the volume or press the volume bar.

(Mute): Press ∨ VOL ∧, then press to mute and unmute the system.

System Settings

Auto Volume

This feature automatically adjusts the radio volume to compensate for road and wind noise.

The level of volume compensation can be selected, or the feature can be turned off.

1. Press .
2. Select settings.
3. Select Radio Settings.
4. Select Auto Volume.
5. Select the setting by pressing < or >.
6. Press the button to go back to the System Configuration menu.

Audio Settings

The audio settings can be set for each radio band and each audio player source.

Tone Settings: Press menu, then tone settings from the AM or FM menu.

- EQ (Equalizer): Press < or > to select a sound style or turn off the sound style.
- Bass, Mid (Midrange), or Treble: Press − or + to change the desired sound style from −12 to +12.
- Fader or Balance: Adjust the front/rear or left/right speakers.
- Reset: Restore the settings back to default settings.

Press OK to exit Tone Settings.

Radio

AM-FM Radio

Audio Source Menu

∨ **VOL** ∧ **(Volume):** Press to decrease or increase the volume.

⏻ **(Power):** Press and hold to turn the system on and off.

⌂ **(Home Page):** Press to enter the Home Page.

RDS (Radio Data System)

The radio may have RDS. The RDS feature is available for use only on FM stations that broadcast RDS information. This feature only works when the information from the radio station is available. In rare cases, a radio station could broadcast incorrect information that causes the radio features to work improperly. If this happens, contact the radio station.

While the radio is tuned to an FM-RDS station, the station name or call letters display.

Selecting a Band

Press ⌂, multimedia, then Source ▼ to choose AM, FM, or SiriusXM®, if equipped. The last station that was playing starts playing again.

Selecting an Auxiliary Device

Connect the auxiliary device to the AUX input terminal. Play will begin when the system has finished reading the information on the device.

If the storage device is already connected, press ⌂, multimedia, and Source ▼, then select AUX from the drop-down menu.

Selecting a Station

Seek Tuning

If the radio station is not known:

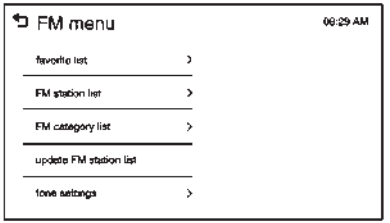
Press ⏮ SEEK ⏭ on the screen to automatically search for available radio stations.

Hold and drag to the left or right of the radio station to automatically search for available radio stations.

Manual Tuning

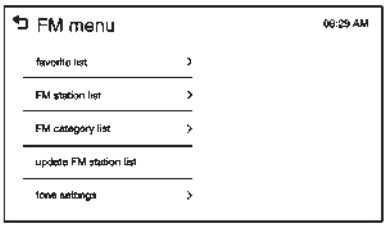
Continue pressing ◀ TUNE ▶ on the screen to manually change the radio station.

Favorite List



- From the AM or FM menu, press favorite list on the screen.
- Press ▲ or ▼ to scroll through the list. Press on the station to select it.

Station List

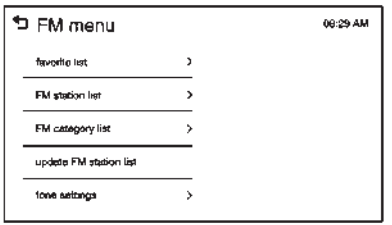


- From the AM or FM menu, press AM or FM station list on the screen.
- Press ▲ or ▼ to scroll through the list. Press on the station to select it.

Category List

- From the FM menu, press FM category list on the screen.
- Press ▲ or ▼ to scroll through the list. Press on the station to select it.

Update Station List



- From the AM or FM menu, press update AM or FM station list on the screen. The broadcasting list updating will begin.
- During the AM or FM broadcasting list update, press Cancel to stop the updates.

Storing a Station as a Favorite

Stations from all bands can be stored in any order in the favorite pages.

Up to five stations can be stored in each of the seven favorites pages.

Storing Stations

To store the station to a position in the list, press the corresponding button 1−5 until a beep is heard.

1. Select the desired station.
2. Press < or > to select the desired page of saved favorites.

3. Hold down any of the preset buttons to save the current radio station to that button of the selected favorites page.

To change a preset button, tune to the new desired radio station and hold the button.

Satellite Radio

Vehicles with a SiriusXM® Satellite Radio tuner and a valid SiriusXM Satellite subscription can receive SiriusXM programming.

SiriusXM Satellite Radio Service

SiriusXM is a satellite radio service based in the 48 contiguous United States and 10 Canadian provinces. SiriusXM Satellite Radio has a wide variety of programming and commercial-free music, coast to coast, and in digital-quality sound. A service fee is required to receive the SiriusXM service. For more information, contact SiriusXM at www.siriusxm.com or 1-866-635-2349 (U.S.), and www.xmradio.ca or 1-877-209-0079 (Canada).

Listening to SiriusXM Radio

1. Press ⌂.
2. Press multimedia.
3. Press Source ▼.
4. From the drop-down menu, press XM and the most recent listened to SiriusXM channel will display.

Press ⮌ to return to the HOME menu.

Selecting a Category

Continue pressing ◀ Category ▶ on the screen and the previous or next category will be selected.

Selecting a Channel

Press ◀ Channel ▶ on the screen and the previous or next channel will be selected within the same category.

Press and hold ◀ Channel ▶ on the screen to jump four channels backward or forward in the same category, then release the button at the desired channel.

Using the Preset Buttons

Up to seven favorites pages can be saved, and each page can store up to five channels.

To change a preset button, tune to the new desired channel and hold the button.

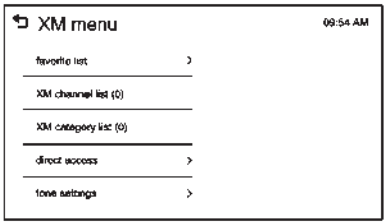
Listening to Preset Channels

1. Continue pressing < or > on the screen to select the desired favorites page.
2. Press the preset button to listen to the channel saved to that button.

Using the SiriusXM Menu

Operation

1. Press MENU on the XM radio screen.



2. Press the menu to select the desired item or to display the detail menu item.
3. Press ⮌ to return to the previous menu.

Favorite List

1. Press favorite list from the XM menu. The favorite list information is displayed.

2. Press ▲ or ▼ on the screen to find the desired station. Tune to the station by selecting it.

Channel List

1. Press XM channel list from the XM menu. The channel list is displayed.
2. Press ▲ or ▼ on the screen to find the desired channel. Tune to the channel by selecting it.

Category List

1. Press XM category list from the XM menu. The category list is displayed.
2. Press ▲ or ▼ on the screen to find the desired category. Tune to the category by selecting it.

Direct Access

1. Press direct access from the XM menu. The direct access screen is displayed.
2. Press the channel number to tune to the desired channel.
3. Press OK.

Tone Settings

From tone settings menu, the sound features can be set up for SiriusXM audio and each audio player's functions.

1. Press tone settings from the XM menu. The tone settings screen is displayed. See "Tone Settings" under *Operation on page 7-4*.
2. Press OK.

Radio Reception

Frequency interference and static can occur during normal radio reception if items such as mobile phone chargers, vehicle convenience accessories, and external electronic devices are plugged into the accessory power outlet. If there is interference or static, unplug the item from the accessory power outlet.

FM

FM signals only reach about 16 to 65 km (10 to 40 mi). Although the radio has a built-in electronic circuit that automatically works to reduce interference, some static can occur, especially around tall buildings or hills, causing the sound to fade in and out.

AM

The range for most AM stations is greater than for FM, especially at night. The longer range can cause station frequencies to interfere with each other. Static can occur when things like storms and power lines interfere with radio reception. When this happens, try reducing the treble on the radio.

SiriusXM® Satellite Radio Service

SiriusXM Satellite Radio Service gives digital radio reception from coast to coast in the 48 contiguous United States, and in Canada. Just as with FM, tall buildings or hills can

interfere with satellite radio signals, causing the sound to fade in and out. In addition, traveling or standing under heavy foliage, bridges, garages, or tunnels may cause loss of the SiriusXM signal for a period of time.

Cellular Phone Usage

Cellular phone usage can cause interference with the vehicle's radio.

Multi-Band Antenna

The multi-band antenna is on the roof of the vehicle. The antenna is used for the AM-FM radio, OnStar, the SiriusXM Satellite Radio Service System, and GPS (Global Positioning System), if the vehicle has these features. Keep the antenna clear of obstructions for clear reception.

Audio Players

USB Port

Using the USB Port

The infotainment system can play music or movies by connecting an auxiliary device to the USB port.

USB Support

The USB connector is in the center stack, and uses the USB 2.0 standard.

USB Supported Devices

- USB Flash Drives
- Portable USB Hard Drives
- 2G–5G iPod nano®
- 1G–3G iPod touch®
- 120GB/160GB iPod classic®
- 3G/3GS/4/4S iPhone®

Not all iPods and USB drives are compatible with the USB port.

Make sure the iPod has the latest firmware from Apple® for proper operation. iPod firmware can be updated using the latest iTunes® application. See www.apple.com/itunes.

For help with identifying your iPod, go to www.apple.com/support.

The USB port can play both lower and upper case .mp3, .wma, .ogg, and .wav files stored on a USB storage device.

USB Supported File and Folder Structure

The infotainment system supports:

- Up to 2,500 folders.
- Up to 10 folders in depth.
- Up to 2,500 music files.
- Up to 2,500 photo files.
- Up to 250 movie files.
- ID3 Tag (versions 1.0/1.1/2.2/2.3/2.4).
- FAT16.

- FAT32.
- exFAT.

Connecting a USB Storage Device or iPod/iPhone

To connect a USB storage device, connect the device to the USB port.

To connect an iPod/iPhone, connect one end of the device's cable to the iPod/iPhone and the other end to the USB port.

The iPod/iPhone charges while it is connected to the vehicle if the vehicle is in ACC/ACCESSORY, ON/RUN, or Service Only Mode. See *Power Button on page 9-14*. When the vehicle is turned off, the iPod/iPhone automatically powers off and will not charge or draw power from the vehicle's battery.

For more information on USB usage, see "Audio System Information" under *Pictures and Movies (Audio System) on page 7-26* or *Pictures and Movies (Movie System) on page 7-31* or *Pictures and Movies (Picture System) on page 7-33*.

Auxiliary Devices

Using the Auxiliary Input Jack

Settings menus and functions may vary depending on vehicle options.

The auxiliary input jack in the center stack can be used to connect external audio devices such as an iPod®, iPhone®, MP3 player, CD player, and other supported devices for use as another source for audio listening. This input jack is not an audio output; do not plug headphones into the front auxiliary input jack.

The infotainment system can play music or movies connected by the auxiliary device.

Play will begin when the system has finished reading the information on the device.

Playing Music

To play the music from the device, if the device is already connected:

1. Press ⌂.
2. Press multimedia.
3. Press Source ▼.
4. Press AUX/USB.

To adjust the tone settings, see "Tone Settings" under *Operation on page 7-4*.

Playing Movies

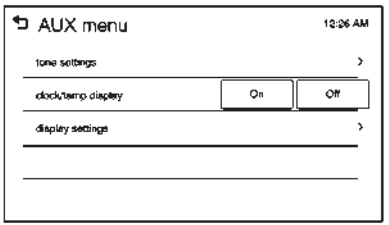
Movies are not available while driving.

If the USB storage device is already connected:

1. Press ⌂.
2. Press multimedia.
3. Press Source ▼.
4. Press USB (Movie).

For iPod/iPhone, connect the iPod/iPhone to the AUX input terminal by using the AUX cable for iPod/iPhone to play movie files.

Using the AUX Movie Menu



1. Press MENU from the AUX movie screen. The AUX menu is displayed.
2. Press the desired menu.
   - tone settings: Adjust the sound setup. See “Tone Settings” under *Operation on page 7-4*.
   - clock/temp display: To display the clock and temperature on the full screen, select On or Off.
   - display settings: Adjust the brightness and contrast of the screen.
3. Press ↩.

Phone

Bluetooth (Overview)

If equipped with Bluetooth® capability, the system can interact with many Bluetooth phones, PDAs, or other devices to:

- Place and receive hands-free calls.
- Transmit hands-free data.
- Play audio streaming files.

The device must be paired first. See “Pairing” in Bluetooth (Infotainment Controls).

To minimize driver distraction, before driving, and with the vehicle parked:

- Become familiar with the features of the cell phone. Organize the phone book and contact lists clearly and delete duplicate or rarely used entries. If possible, program speed dial or other shortcuts.

- Review the controls and operation of the infotainment system.
- Pair cell phone(s) to the vehicle. The system may not work with all cell phones. See “Pairing” in Bluetooth (Infotainment Controls).

⚠ Warning

When using a cell phone, it can be distracting to look too long or too often at the screen of the phone or the infotainment system. Taking your eyes off the road too long or too often could cause a crash resulting in injury or death. Focus your attention on driving.

Vehicles with a Bluetooth system can use a Bluetooth-capable cell phone with a Hands-Free Profile to make and receive phone calls. The infotainment system is used to control the system. The system can be used while in ACC/ACCESSORY, ON/RUN or Service Only Mode. See *Power Button on page 9-14*. Not all phones support all functions and not all phones work with the Bluetooth system. See www.gm.com/bluetooth for more information about compatible phones.

There may be restrictions on using Bluetooth wireless technology in some locations.

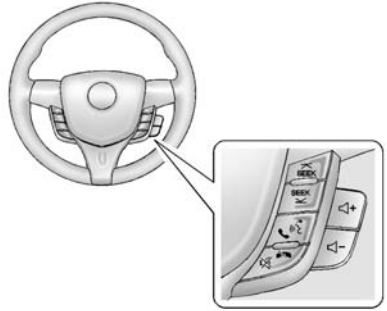
Due to the variety of Bluetooth devices and their firmware versions, the device may respond differently when performing over Bluetooth.

Refer to the cell phone manufacturer’s user guide for questions about the phone's Bluetooth functionality.

Bluetooth Controls

For vehicles equipped with Bluetooth capability, use the buttons on the infotainment system and the steering wheel to operate the system.

Steering Wheel Controls



⌃ SEEK or SEEK ⌄ (Next/Previous): Press to go to the next or previous radio station, song on an iPod, or file on a USB device (if equipped).

/ (Press to Talk): Press to interact with Bluetooth or OnStar, if equipped. See *Bluetooth (Overview) on page 7-12* or *Bluetooth (Infotainment Controls) on page 7-14* or *OnStar Overview on page 14-1*.

/ (Mute/End Call): Press to silence the vehicle speakers only. Press again to turn the sound on. Press to reject an incoming call, or end a current call.

+ or − (Volume): Press to increase or decrease the volume.

Audio System

When using the Bluetooth system, sound comes through the vehicle's front audio system speakers and overrides the audio system. Use the volume bar during a call to change the volume level. The adjusted volume level remains in memory for later calls. The system maintains a minimum volume level.

Bluetooth (Infotainment Controls)

To use infotainment controls to access the menu system, see *Overview on page 7-3*.

Pairing

A Bluetooth-enabled cell phone must be paired to the Bluetooth system and then connected to the vehicle before it can be used. See your cell phone manufacturer's user guide for Bluetooth functions before pairing the cell phone. If a Bluetooth phone is not connected, calls will be made using OnStar Hands-Free Calling, if available. See *OnStar Overview on page 14-1*.

Pairing Information

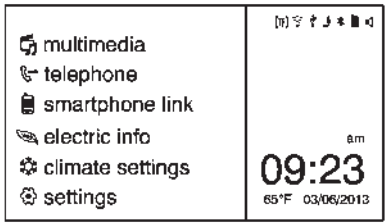
- A Bluetooth phone with MP3 capability cannot be paired to the vehicle as a phone and an MP3 player at the same time.
- Up to five cell phones can be paired to the Bluetooth system.
- The pairing process is disabled when the vehicle is moving.
- Pairing only needs to be completed once, unless the pairing information on the cell phone changes or the cell phone is deleted from the system.
- Only one paired cell phone can be connected to the Bluetooth system at a time.
- If multiple paired cell phones are within range of the system, the system connects to the first available paired cell phone in the order that they were first paired to the system. To link to a different paired phone, see “Linking to a Different Phone” later in this section.

When the Bluetooth device and infotainment system are successfully paired, the phone book is downloaded automatically. However, the phone book may not be downloaded automatically according to the type of the phone. In this case, proceed with the phone book download on the phone.

Pairing a Phone

When there is no paired device on the infotainment system and the Simple Secure Pairing (SSP) is supported:

1. Press ⌂.

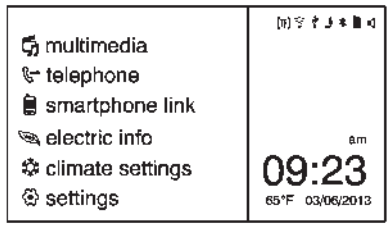


2. Press telephone, then press Yes.
3. Press Search Bluetooth Device.
4. Press the desired device to pair on the searched list screen.
5. Press Yes on the pop-up screen of the Bluetooth device and infotainment system.
6. When the Bluetooth device and infotainment system are successfully paired, the telephone screen is displayed on the infotainment system.

Pairing a Phone

When a paired device is on the infotainment system and the SSP is supported:

1. Press ⌂.



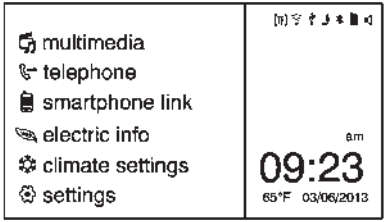
2. Press ⚙ settings.
3. Press connection settings.
4. Press bluetooth settings.
5. Press pair device.
6. Press Search Bluetooth Device.
7. Press the desired device to pair on the searched list screen.
8. Press Yes on the pop-up screen of the Bluetooth device and infotainment system.
9. When the Bluetooth device and infotainment system are successfully paired, BT♪ is displayed on the pair device screen.

- The connected phone is highlighted by .
- BT♪ indicates the hands-free and phone music functions are enabled.
- indicates only the hands-free function is enabled.
- BT♪ indicates only Bluetooth music is enabled.

Pairing a Phone

When there is no paired device on the infotainment system and the SSP is not supported:

1. Press ⌂.



2. Press telephone, then press Yes.
3. Press Search Bluetooth Device.
4. Press the desired device to pair on the searched list screen.
5. Input the Personal Identification Number (PIN) code (default: 1234) to the Bluetooth device. When the Bluetooth device and infotainment system are successfully paired, the telephone screen is displayed on the infotainment system.

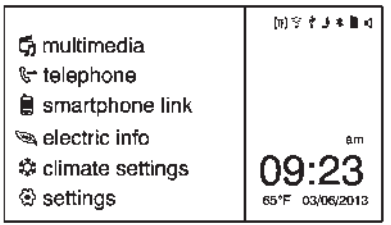
When the connection fails, a failure message is displayed on the infotainment system.

If a Bluetooth device was previously connected, the infotainment system executes the auto connection. However, if the Bluetooth setting on the Bluetooth device is turned off, a failure message is displayed on the infotainment system.

Pairing a Phone

When a paired device is on the infotainment system and the SSP is not supported:

1. Press .



2. Press settings.
3. Press connection settings.
4. Press bluetooth settings.
5. Press pair device.
6. Press Search Bluetooth Device.
7. Press the desired device to pair on the searched list screen.
8. Input the Personal Identification Number (PIN) code (default: 1234) to the Bluetooth device. When the Bluetooth device and infotainment system are successfully paired, BT is displayed on the pair device screen.

- The connected phone is highlighted by .
- BT indicates the hands-free and phone music functions are enabled.
- indicates only the hands-free function is enabled.
- BT indicates only Bluetooth music is enabled.

Connecting a Bluetooth Device

1. Press .

2. Select ⚙ settings.
3. Press connection settings.
4. Press bluetooth settings.
5. Press pair device.
6. Press the device to be paired.
7. Press OK.

Checking the Bluetooth Connection

1. Press ⌂.
2. Select ⚙ settings.
3. Press connection settings.
4. Press bluetooth settings.
5. Press pair device.
6. The paired device will show with BT♪ when connected.

Disconnecting the Bluetooth Device

1. Press ⌂.
2. Select ⚙ settings.
3. Press connection settings.
4. Press bluetooth settings.
5. Press pair device.
6. Press the name of the device to be disconnected.
7. Press OK.

Deleting a Paired Phone

1. Press ⌂.
2. Select ⚙ settings.
3. Press connection settings.
4. Press bluetooth settings.
5. Press pair device.
6. Press Delete.
7. Press Yes.

Bluetooth Music

Before playing Bluetooth music, read the following information.

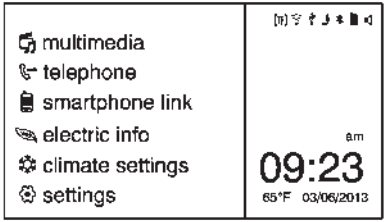
- A cell phone or Bluetooth device that supports Advanced Audio Distribution Profile (A2DP) versions over 1.2 must be registered and connected to the product.
- From the cell phone or Bluetooth device, find the Bluetooth device type to set/connect the item as a stereo headset.
- BT♪ will appear on the screen if the stereo headset is successfully connected.
- The sound played by the Bluetooth device is delivered through the infotainment system.
- Bluetooth music can be played only when a Bluetooth device has been connected. To play Bluetooth music, connect the Bluetooth phone to the infotainment system.
- If the Bluetooth device is disconnected while playing phone music, the music is discontinued. The audio streaming function may not be supported in some Bluetooth phones. Only one function can be used at a time between the Bluetooth hands-free or Phone music function. For example, if you convert to Bluetooth

hands-free while playing Phone music, the music is discontinued. Playing music from the car is not possible when there are no music files stored in the cell phone.

- For Bluetooth music to play, the music must be played at least once from the music player mode of the cell phone or Bluetooth device after connecting as a stereo headset. After being played at least once, the music player will automatically play upon entering play mode, and it will automatically stop when the music player mode ends. If the cell phone or Bluetooth device is not in the waiting screen mode, some devices may not automatically play in Bluetooth music play mode.

Playing Bluetooth Music

1. Press ⌂.



2. Press multimedia.
3. Press Source ▼.
4. Press Bluetooth, then select the connected Bluetooth music play mode.

Pause

Press ▶II to pause.

Press ▶II again to resume.

Skipping the Previous or Next File

Press ⏮ or ⏭ to select the previous or next file.

Search

Press and hold ⏮ or ⏭ to rewind or fast forward.

Playing a File Repeatedly

Press 🔁 during playback.

- 1: Plays the current file repeatedly.
- ALL: Plays all files repeatedly.
- OFF: Returns to normal playback.

This function may not be supported depending on the cell phone.

Playing a File Randomly

Press 🔀 during playback.

- NO: Plays all files repeatedly.
- OFF: Returns to normal playback.

This function may not be supported depending on the cell phone.

Do not change the track too quickly when playing Bluetooth music.

Conditions that may occur when playing Bluetooth music:

- It takes some time to transmit data from the cell phone to the infotainment system.
- If the cell phone or Bluetooth device is not in the waiting screen mode, it may not automatically play despite being carried out from the Bluetooth music play mode.
- The infotainment system transmits the order to play from the cell phone in the Bluetooth music play mode. If this is done in a different mode, then the device transmits the order to stop. Depending on the cell phone's options, this order to play/stop may take time to activate.
- If the Bluetooth music playback is not functioning, then check to see if the cell phone is in the waiting screen mode.
- Sounds may be cut off during the Bluetooth music playback.
- The infotainment system outputs the audio from the cell phone or Bluetooth device as it is transmitted.

Hands-Free Phone

General Information

Vehicles with a Hands-Free Phone system can use a Bluetooth-capable cell phone with a hands-free profile to make and receive phone calls. The infotainment system and voice control are used to operate the system. Not all phones support all functions and not all phones work with the Hands-Free Phone system.

Hands-Free Phone Controls

Use the buttons on the infotainment system and the steering wheel to operate the Hands-Free Phone system.

Steering Wheel Controls

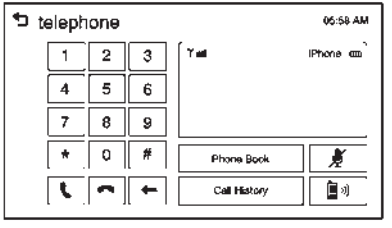
Steering wheel controls can be used to:

- Answer incoming calls.
- Confirm system information.
- End a call.
- Decline a call.
- Cancel an operation.
- Make outgoing calls using the call list.

/ **(Push to Talk):** Press to answer incoming calls and to confirm system information. Press and hold for two to three seconds to access the call list.

/ **(Mute/End Call):** Press to end a call, decline a call, or cancel an operation.

Making a Call by Entering a Phone Number



1. Enter the phone number using the keypad on the telephone screen.
2. Press on the screen or / on the steering wheel controls.

If a wrong number is entered, press to delete the number one digit at a time, or press and hold to delete all digits of the number.

Switching a Call to the Cell Phone (Private Mode)

To switch the call from the cell phone to hands-free:

1. Press .
2. Press again to switch back to hands-free.

Turning the Microphone On and Off

Press to turn the microphone on or off.

Calling by Redial

To call by using redial:

- Press / on the steering wheel controls to display the redial guidance screen.
- Press and hold on the telephone screen.

Redialing is not possible when there is no call history.

Taking Calls

When a phone call comes through the connected Bluetooth cell phone, the playing track will be cut off and the phone will ring with the relevant information displayed.

Press / on the steering wheel controls or press Accept on the screen.

To decline the call, press / on the steering wheel controls or press Reject on the screen.

Using the Phone Book Menu

1. Press Phone Book on the telephone screen.
2. Press ▲ or ▼ to scroll through the list.
3. Select the phone book entry to call.
4. Press the number to dial.

Searching for Phone Book Entries

1. Press Phone Book on the telephone screen.

2. Press 🔎 on the phone book screen.
3. Use the keypad to input the name to search. For details, see “Searching for a Name” later in this section.
4. Select the phone book entry to call.
5. Press the number to dial.

When the Bluetooth device and infotainment system are successfully paired, the phone book will download. Some phones may not download automatically. If this happens, connect it again or proceed with the phone book download on the phone.

Searching for a Name

Select characters by using the keypad on the phone book screen. As characters are selected, the names that include those characters will display on the phone book screen. As more characters of the name are entered, the list of possible names is shortened.

To search for the name Alex:

1. Press (abc) to select the first character.
2. Press (jkl) to select the second character.
3. Press (def) to select the third character.
4. Press (wxy) to select the fourth character.

Making a Call from Call History

1. Press Call History on the telephone screen.
2. Press one of the following:
   - Dialed calls.
   - Missed calls.
   - Received calls.
3. Select the phone book entry to call.

Making a Call with Speed Dial Numbers

Press and hold the speed dial number using the keypad on the telephone screen.

Only speed dial numbers already stored on the cell phone can be used for speed dial calls. Up to two-digit speed dial numbers are supported.

For two-digit speed dial numbers, press and hold the second digit to make a call to the speed dial number.

Downloadable Applications

Smartphone Link (Overview)

Before Using Smartphone Link

If equipped, the vehicle can connect to Pandora®, Stitcher SmartRadio®, or other available applications through the infotainment system. The applications must be downloaded to the device first, then the device can be connected to the infotainment system.

Pandora is a free Internet radio service that streams personalized radio stations based on artists, songs, genres, and comedians. Create stations using the Pandora website or smartphone application, then use (thumbs up) or (thumbs down) to personalize stations. To set up an account, or for more information, go to www.pandora.com. Pandora may not be available in Canada or Mexico.

Stitcher SmartRadio is an Internet radio service that streams news, sports, and entertainment shows through the audio system. Create personalized, on-demand stations or discover new shows through Stitcher's preset stations. To set up an account, download the application from the Android Market or iTunes Store, or go to www.stitcher.com.

A phone or tablet with Internet connection and the application installed is required. Personal cell phone data plans are used. Make sure the latest version is installed on the device and the volume is turned up.

Smartphone Supported by Application

To use Applications:

- Connect an iPod/iPhone using the USB port.
- Connect Andriod™ phones through Bluetooth.

iPod/iPhone Error Messages and Solution

If the system fails to activate the application on the iPod/iPhone connected, an error message is displayed as, “Unable to start application, possible reasons.”

- Your iPhone is locked. To resolve, unlock the iPhone.
- You have another active application open. To resolve, close the other active application.
- You have not installed the application on your iPhone. To resolve, install the application on the iPhone.

iOS Version Error

If the iOS version of the iPhone is less than 4.0, the error message is displayed as, “Your iPhone does not allow this application to be opened on a USB connection. Please refer to owner’s manual.”

- Activate the application on your iPhone, then press the desired application menu on the infotainment system.

Connecting Application Error

If the infotainment system fails to activate the application on the smartphone connected through Bluetooth wireless technology, the error message is displayed as, “Connecting application failed.”

- Reset all settings related to the phone, then press the desired application menu on the infotainment system.
- Reconnect the smartphone and infotainment system through Bluetooth wireless technology, then press the desired application menu on the infotainment system.
- When the application is stopped on the smartphone, it usually takes time to return to normal operation. Try to activate the application after 10–20 seconds.

To switch to another application while playing an application and connected through the USB port, press HOME on the iPod/iPhone, then press the application icon on the infotainment system.

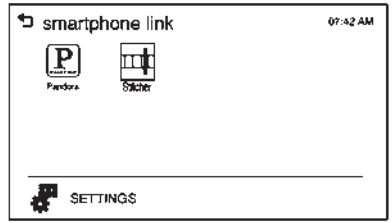
Switching Between a USB Connected Device and a Bluetooth Device

When the iPhone is connected to the infotainment system through the USB port, and the infotainment system is connected to another phone through Bluetooth wireless technology, press iPhone or bluetooth phone on the smartphone list menu to switch between the two applications.

Displaying or Hiding Application Icons

To display or hide application icons on the smartphone link menu:

1. Press ⌂.
2. Press smartphone link.



3. Press SETTINGS.
4. Press the desired application icon to hide or display it on the smartphone link menu.
5. Press OK.

If the activated application is on the smartphone link menu, the is activated in the upper position of the HOME menu or playing screen.

Connecting an Application

This section explains a general operation. It may vary depending on the phone operation system, versions, and/or application versions.

To connect an application:

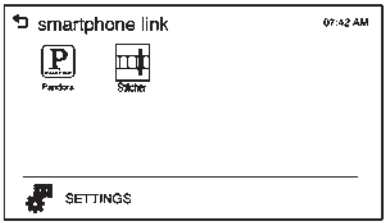
1. Install the application on the smartphone from Appstore or Playstore.
2. Connect the smartphone to the infotainment system through the USB port or Bluetooth.
   - iPhone: USB port
   - Android phone: Bluetooth
3. Activate the application.
4. Press ⌂ to play the application through the infotainment system. The smartphone link menu is displayed.
5. Press the application icon.
6. The application screen is displayed.

Smartphone Link (Pandora)

Some images and explanations may vary by phone operating systems, versions, and/or application (App) versions.

Using Pandora

1. Install the Pandora application on the smartphone.
2. Connect the smartphone to the infotainment system through the USB port or Bluetooth wireless technology.
   - iPhone: USB connection.
   - Android phone/BlackBerry phone: Bluetooth wireless technology.
3. Activate the Pandora application.
4. Press ⌂.
5. Press smartphone link.



6. Press Pandora.

If the smartphone is not connected to the infotainment system or the application is not installed on the smartphone, the Pandora menu is not activated.

Thumbs Up and Thumbs Down

Rate tracks by using (thumbs up) or (thumbs down).

Pause

- Press ❚❚ to pause.
- Press ▶ to resume.

Changing Tracks

Press ▶▶❚ to change to the next track.

Bookmark

To bookmark a favorite artist or track:

1. Press + on the screen.
2. Press Artist or Track.

Pandora Menus

Creating Stations from Currently Playing Music

1. Press MENU. The Pandora menu is displayed.
2. Press create station.
3. Press from currently playing.
4. Press Artist or Track.
5. Press the desired station. The station is added into the Pandora menu automatically.

Creating Stations by Searching by Artist or Track

1. Press MENU. The Pandora menu is displayed.
2. Press create station.
3. Press enter artist/track. The keypad is displayed.
4. Enter the artist or track name using the keypad, then press Create.
5. Press the desired station. The station is added into the Pandora menu automatically.

Listening to Stations

1. Press MENU. The Pandora menu is displayed.
2. Press ▲ or ▼ to scroll through the list. Select the desired station.

QuickMix

1. Press MENU. The Pandora menu is displayed.
2. Press QuickMix ⤮ to listen to a selection of tracks from your stations.

Tone Settings

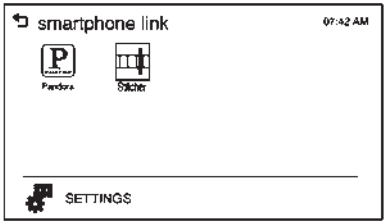
1. Press MENU. The Pandora menu is displayed.
2. Press tone settings. The tone settings menu is displayed. See “Tone Settings” under *Operation on page 7-4*.

Smartphone Link (Stitcher)

Some images and explanations may vary by phone operating systems, versions, and/or application (App) versions.

Using Stitcher®

1. Install the Stitcher application on the smartphone.
2. Connect the smartphone to the infotainment system through the USB port or Bluetooth wireless technology.
   - iPhone: USB connection.
   - Android phone/BlackBerry phone: Bluetooth wireless technology.
3. Activate the Stitcher application.
4. Press ⌂.
5. Press smartphone link.



6. Press Stitcher.

If the smartphone is not connected to the infotainment system or the application is not installed on the smartphone, the Stitcher menu is not activated.

Thumbs Up and Thumbs Down

Rate tracks by using (thumbs up) or (thumbs down).

Pause

- Press ❚❚ to pause.
- Press ▶ to resume.

Changing Stations

Press ⏭ to change to the next station.

Saving Favorites

To save a station as a favorite, press ★ on the stitcher screen.

Stitcher Menus

The Stitcher Station menu displays available station data from the Stitcher server.

1. Press MENU. The Stitcher Station menu is displayed.
2. Press ▲ or ▼ to scroll through the list. Select the desired station.

Tone Settings

1. Press MENU. The Stitcher menu is displayed.
2. Press tone settings. The tone settings menu is displayed. See “Tone Settings” under *Operation on page 7-4*.

Bluetooth Phone/ Devices

Pictures and Movies (Audio System)

The infotainment system can play the music files contained in the USB storage device or iPod/iPhone products.

Audio System Information

Using MP3/WMA/OGG/WAV Files

- Music files with .mp3, .wma, .ogg, and .wav file name extensions can be played.
- MP3 files that can be played are: Bit rate: 8 kbps ~ 320 kbps - Sampling frequency: 48 kHz, 44.1 kHz, 32 kHz, 24 kHz, 22.05 kHz, and 16 kHz.
- Files with a bit rate above 128 kbps will result in higher quality sound.

- ID3 Tag information for MP3 files, such as the album name and the artist, can be played.
- To display album title, track title, and artist information, the file should be compatible with the ID3 Tag V1 and V2 formats.

Using USB Storage Devices and iPod/iPhone

- Use a USB or flash memory type storage device. Do not connect using a USB adaptor.
- Do not connect and reconnect the USB device repeatedly in a short time, as this may cause static electricity and problems using the device.
- Use a USB device with a metal connecting terminal.
- Connection with i-Stick Type USB storage devices may be faulty due to vehicle vibration.
- Do not to touch the USB connecting terminal.
- Only USB storage devices formatted in FAT16/32, exFAT file system are recognized. NTFS and other file systems are not recognized.
- The time it takes to process files will depend on the USB storage device type and capacity, and the type of files stored.
- Some USB storage device files may not be compatible.
- Up to two USB devices and one iPod can be played through a USB hub. All devices may not be supported, depending on the performance of the USB hub. If there is not enough power supply, it may not operate normally.
- Do not disconnect the USB storage device while it is playing. This may cause damage to the product or affect the performance of the USB device.
- Disconnect the USB storage device when the ignition is turned off. If the ignition is turned on while the USB device is connected, the USB device may be damaged or may not operate normally.
- USB storage devices can only be connected for playing music/movies, viewing photo files, or upgrading.
- Do not use the USB terminal to charge USB accessory equipment. The heat generated may cause performance issues or damage.
- Store files in the top-level drive of the USB storage device. When the logical drive is separated from the device, only the USB music files from the top-level logical drive can be played. Music files stored on USB storage devices may not play normally if an application is loaded by partitioning a separate drive.
- Music files to which Digital Right Management (DRM) is applied cannot be played.

- USB storage device capacity limit is 2,500 music files, 2,500 photo files, 250 movie files, 2,500 folders, and 10 stages of folder structure. The iPod/iPhone can play all music files supported, but will only display up to 2,500 files on the screen in alphabetical order.
- The following iPod/iPhone product models are supported:
  - iPod 2G nano®/iPod 3G nano/ iPod 4G and 5G nano
  - iPod 120GB and 160GB classic®
  - iPod 1G, 2G, and 3G touch®
  - iPhone 3G and 3GS
  - iPhone 4/4S
- Only connect the iPod/iPhone with connection cables supported by iPod/iPhone products. Other connection cables cannot be used.
- The iPod/iPhone may be damaged if the ignition is turned off when it is connected to the vehicle. When not in use, disconnect the iPod/iPhone.
- When the iPod/iPhone is connected to the USB port by using the iPod/iPhone cable, the Bluetooth music is not supported.
- Connect the iPod/iPhone to the USB port by using the iPod/ iPhone cable to play the music files. When the iPod/iPhone is connected to the AUX input terminal, the music file will not play.
- The iPod/iPhone playback functions and the information displayed may be different when played on the infotainment system.

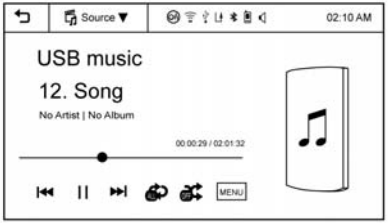
	Step 1	Step 2	Step 3	Step 4
Playlists	Playlists	Songs		
Artists	Artists	Albums	Songs	
Albums	Albums	Songs		
Songs	Songs			
Genres	Genres	Artists	Albums	Songs
Composer	Composer	Albums	Songs	
Audiobooks	Songs			

- Refer to the table for the classification items related to the search function provided by the iPod/iPhone.

USB Player

Playing Music from a USB Device

Connect the USB device to the USB port. Play will start automatically after the system has finished reading the USB device. If a non-readable USB device is connected, an error message displays and the system will switch to the previous audio function.



If the USB device is already connected:

1. Press ⌂.
2. Press multimedia.
3. Press Source▼.
4. Press USB.

To stop the USB device and select another media source, press Source▼, then select the other source.

To remove the USB device, select another function, then remove the USB device.

Pause

- Press ❚❚ to pause.
- Press ▶ to resume.

Changing to Next/Previous Files

- Press ▶▶| to change to the next file.
- Press |◀◀ within five seconds of the playback time to play the previous file.

Returning to the Beginning of the Current File

Press |◀◀ after five seconds of the playback time.

Scanning Forward or Backward

Press and hold |◀◀ or ▶▶| during playback to rewind or fast forward. Release the button to resume playback at normal speed.

Playing a File Repeatedly

Press during playback.

- 1: Plays the current file repeatedly.
- ALL: Plays all files repeatedly.
- OFF: Returns to normal playback.

Playing a File Randomly

Press during playback.

- NO: Plays all files randomly.
- OFF: Returns to normal playback.

Viewing Information on the Currently Playing File

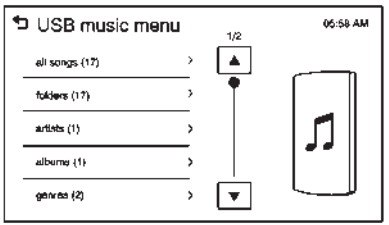
Press the title during playback to display information about the current file playing.

- The information displayed includes the title, file name, folder name, and artist/album saved with the song.

- Incorrect information cannot be modified or corrected on the infotainment system.
- The information for songs expressed in special symbols or in unavailable languages may be displayed as "□."

Using the USB Music Menu

- Press MENU during playback.



- Press the play mode.

Tone Settings

1. Press ▼.
2. Press tone settings. The tone settings menu is displayed. See "Tone Settings" under *Operation on page 7-4*.

iPod/iPhone Player

This feature is limited to models supporting the iPod/iPhone connection.

Playing Music Files

- Connect the iPod/iPhone to the USB port.
- Play will start from the previously played point after the system has finished reading the USB device.
- If a non-readable USB device is connected, an error message displays and the system will switch to the previous audio function.

If the iPod/iPhone is already connected:

1. Press ⌂.
2. Press multimedia.
3. Press Source▼.
4. Press iPod.

To stop the device and select another media source, press Source▼, then select the other source.

To remove the device, select another function, then remove the device.

Pause

- Press ❚❚ to pause.
- Press ▶ to resume.

Changing to Next/Previous Song

- Press ▶▶| to change to the next song.
- Press |◀◀ within two seconds of the playback time to play the previous file.

Returning to the Beginning of the Current File

Press |◀◀ after two seconds of the playback time.

Scanning Forward or Backward

Press and hold ⏮ or ⏭ during playback to rewind or fast forward. Release the button to resume playback at normal speed.

Playing a File Repeatedly

Press during playback.

- 1: Plays the current file repeatedly.
- ALL: Plays all files repeatedly.
- OFF: Returns to normal playback.

Playing a File Randomly

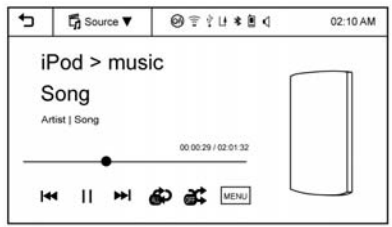
Press during playback.

- NO: Plays all files randomly.
- OFF: Returns to normal playback.

Viewing Information on the Currently Playing Song

Press the title during playback to display information about the current song playing.

- The information displayed includes the title, file name, folder name, and artist/album saved with the song.
- Incorrect information cannot be modified or corrected on the infotainment system.
- The information for songs expressed in special symbols or in unavailable languages may be displayed as "□."



Using the iPod Menu

- Press MENU during playback.
- Press the appropriate play mode.

Tone Settings

1. Press ▼ on the iPod menu.
2. Press tone settings. The tone settings menu is displayed. See "Tone Settings" under *Operation on page 7-4*.

Pictures and Movies (Movie System)

The infotainment system can play movie files stored on a USB device.

Movie System Information

Caution for Using Movie Files

- Available resolution: Within 720 x 576 (W x H) pixels.
- Frame rate: Less than 30 fps.

- Playable movie file: .avi, .mpg, .mp4, .divx, .xvid, .wmv. The playable movie file may not be played according to the codec format.
- Playable codec format: divx, xvid, mpeg-1, mpeg-4 (mpg4, mp42, mp43), wmv9 (wmv3).
- Playable audio format: MP3, AC3, AAC, WMA.
- Max video bitrate:
  - mpeg-1: 8 Mbps
  - mpeg-4 (mpg4, mp42, mp43): 4 Mbps
  - wmv9: 3 Mbps
  - divx 3: 3 Mbps
  - divx 4/5/6: 4.8 Mbps
  - xvid: 4.5 Mbps
- Max audio bitrate:
  - mp3: 320 Kbps
  - wma: 320 Kbps
  - ac-3: 640 Kbps
  - aac: 449 Kbps
- Movie files to which Digital Right Management (DRM) is applied may not be played.

Playing a Movie File

1. Connect the USB device to the USB port.
2. Press the screen to open to full screen. Press the screen again to return to the previous screen.

If the USB device is already connected:

1. Press ⌂.
2. Press multimedia.
3. Press Source▼.
4. Press USB movie.

Movie is not available while driving.

Viewing a Slide Show

From the picture screen, press ▶.

- The slide show will start to play.
- Press the screen to cancel the slide show during the slide show playback.
- The last played audio source will play as background music during the slide show playback.

Pause

- Press ❚❚ to pause.
- Press ▶ to resume.

Changing to Next/Previous Movie

- Press ▶| to change to the next file.
- Press |◀ within five seconds of the playback time to play the previous file.

Returning to the Beginning of the Current Movie

Press |◀ after five seconds of the playback time.

Scanning Forward or Backward

Press and hold |◀ or ▶| during playback to rewind or fast forward. Release the button to resume playback at normal speed.

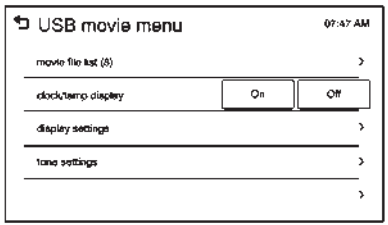
Viewing Full Screen

Press ⊡ from the movie screen.

Press ⊡ again to return to the previous screen.

Using the USB Movie Menu

1. Press MENU from the movie screen.



2. Press the appropriate menu:
   - movie file list: lists all movie files.
   - clock/temp display: allows selection of On or Off to show the clock and temperature on the full screen.
   - display settings: adjusts for Brightness and Contrast.
   - tone settings: shows the sound setup. See “Tone Settings” under *Operation on page 7-4*.
3. Press ↩ to exit.

Subtitle Language

If the movie file has a subtitle language, it can be viewed.

- Press ◀ from the movie screen.
- Press < or > on the pop-up screen.
- Press ▶ to close the pop-up screen.

If there is only one subtitle language, it can be set to On/Off.

Audio Language

If the movie file has an audio language, it can be used.

- Press ◀ from the movie screen.
- Press (🔊) < or > on the pop-up screen.
- Press ▶ to close the pop-up screen.

If there is only one audio language, it cannot be set. Audio language can be set only when the movie file is the Divx File.

Pictures and Movies (Picture System)

The infotainment system can view picture files stored on a USB device.

Picture System Information

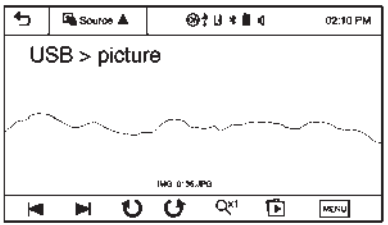
Caution for Using Picture Files

- File size:
  - JPG: Within 64 to 5,000 pixels (Width) and 64 to 5,000 pixels (Height).
  - BMP, PNG, GIF: Within 64 to 1,024 pixels (Width) and 64 to 1,024 pixels (Height).

- File extensions: .jpg, .bmp, .png, .gif. Animated .gif files are not supported.
- Some files may not operate due to a different recording format or the condition of the file.

Viewing Pictures

1. Connect the USB device to the USB port.



2. Press the screen to open to full screen. Press the screen again to return to the previous screen.

If the USB device is already connected:

1. Press ⌂.
2. Press multimedia.
3. Press Source ▼.
4. Press USB picture.

Some features are disabled while the vehicle is in motion.

Viewing a Slide Show

1. From the picture screen, press ▶. The slide show will start to play.
2. Press the screen to cancel the slide show during the slide show playback.

Viewing a Previous or Next Picture

Press ◀ or ▶ from the picture screen.

Rotating a Picture

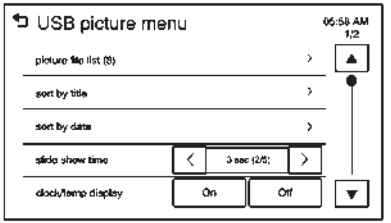
Press ↻ or ↺ from the picture screen.

Enlarging a Picture

Press Q from the picture screen.

Using the USB Picture Menu

1. Press MENU from the picture screen.



2. Press the appropriate menu:
   - picture file list: lists all picture files.
   - sort by title: shows pictures in title order.
   - sort by date: shows pictures in date order.
   - slide show time: allows selection of the slide show interval.

- clock/temp display: allows selection of On or Off to show the clock and temperature on the full screen.
- display settings: adjusts for Brightness and Contrast.

3. Press ⮌ to exit.

Trademarks and License Agreements

FCC Information

See *Radio Frequency Statement on page 13-12*.

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2. For products to be distributed, marketed, and/or sold in Canada, a separate agreement is required with Canadian Satellite Radio Inc. (operating as XM Canada).

FreeType 2

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Libjpeg

The navigation software is based in part on the work of the independent JPEG Group.

Climate Controls

Climate Control Systems
Automatic Climate Control System 8-1

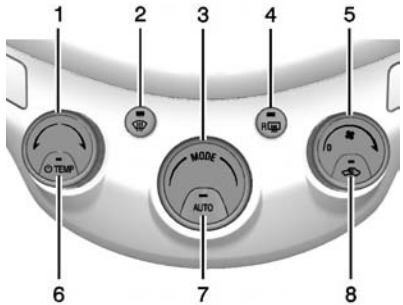
Air Vents
Air Vents 8-4

Maintenance
Air Intake 8-5
Passenger Compartment Air Filter 8-6
Service 8-6

Climate Control Systems

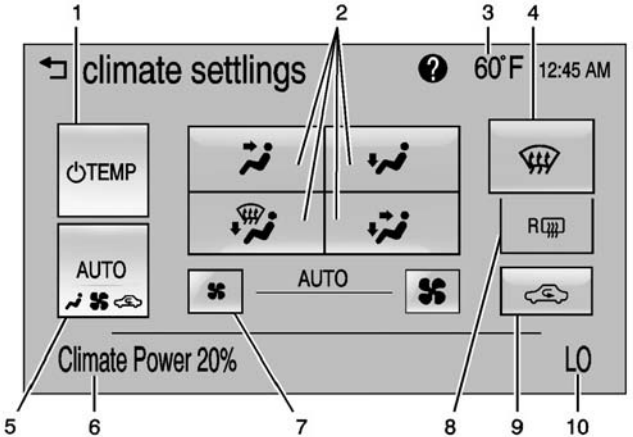
Automatic Climate Control System

The climate control buttons and the touch screen are used to adjust the heating, cooling, and ventilation.



Climate Control Buttons

1. Temperature Control
2. Defrost
3. Air Delivery Mode Control
4. Rear Window Defogger
5. Fan Control
6. TEMP (Air Conditioning/Heater Power)
7. AUTO (Automatic Operation)
8. Recirculation



Climate Touch Screen Controls

1. TEMP (Air Conditioning/Heater Power)
2. Air Delivery Mode Controls
3. Outside Air Temperature Display
4. Defrost
5. AUTO (Automatic Operation)
6. Climate Power Gauge
7. Fan Control
8. Rear Window Defogger
9. Recirculation
10. Driver Temperature Display

Climate Control Touch Screen

The fan, air delivery mode, recirculation, defrost, and rear window defogger can be controlled by pressing Climate Settings on the infotainment home screen.
A selection can then be made on the climate settings page displayed on the center stack.

Climate Power Gauge

When the climate mode is changed, the Climate Power gauge displays the impact that the changes have on energy use. The higher the reading, the more energy is being used.

Automatic Operation

The system automatically controls the fan speed, air delivery, air conditioning, and recirculation in order to heat or cool the vehicle to the desired temperature.

When the indicator light is on or AUTO is displayed on the touch screen, the system is in full automatic operation. If the air delivery mode or fan setting is

manually adjusted, the auto indicator turns off and the display will show the selected settings. Auto operation can be turned off individually for climate settings.

For automatic operation:

1. Press AUTO on the button or on the touch screen.
2. Set the temperature. Allow the system time to stabilize. Then adjust the temperature as needed for best comfort.

(Fan Control): To increase or decrease the fan speed, press the fan controls on the touch screen or turn the fan control knob clockwise or counterclockwise. Turning the fan control to 0 turns the fan off. The fan must be turned on to run the air conditioning compressor.

Temperature Control: Turn clockwise or counterclockwise to increase or decrease the temperature.

Air Delivery Mode Control: To change the current airflow mode, press the air delivery modes on the touch screen or turn the air delivery mode control clockwise or counterclockwise.

Select from the following:

(Vent): Air is directed to the instrument panel outlets.

(Bi-Level): Air is divided between the instrument panel and floor outlets.

(Floor): Air is directed to the floor outlets.

(Defog): This mode clears the windows of fog or moisture. Air is directed to the floor, windshield, and side window outlets.

(Defrost): Press the button or the touch screen to clear the windshield of fog or frost more quickly. Air is directed to the windshield and side window outlets.

Do not drive the vehicle until all windows are clear.

TEMP (Air Conditioning/Heater Power): Press the TEMP button or on the touch screen to turn the air conditioning or heater on and off. An indicator light comes on when it is in use. The air conditioning and heater does not operate when the fan control knob is at 0. Turning TEMP off reduces the electric power usage and extends the driving range.

(Recirculation): This mode recirculates and helps to quickly cool the air inside the vehicle. It can be used to reduce entry of outside air and odors.

Press the button or on the touch screen to turn the recirculation mode on. An indicator light comes on to show that the recirculation is on. Press again to return to outside air mode.

Using the recirculation mode for extended periods may cause the windows to fog. If this happens, select the defrost mode.

Using air conditioning and recirculation together for long periods of time may cause the air inside the vehicle to become too dry. To prevent this from happening, after the air in the vehicle has cooled, turn the recirculation mode off.

Rear Window Defogger

R (Rear Window Defogger): Press the R button or on the touch screen to turn the rear window defogger on or off. An indicator light comes on to show that the feature is on.

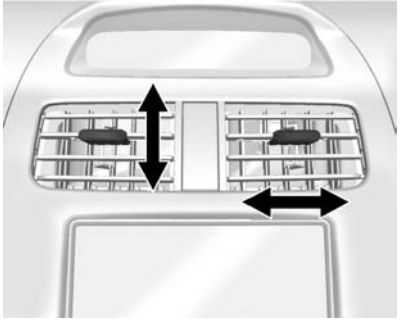
The rear window defogger can be turned off by pressing R again or by putting the vehicle power button into the STOPPING THE VEHICLE/OFF position.

⚠ Caution

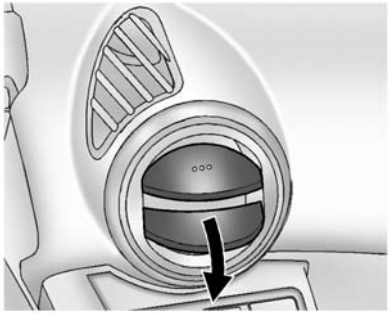
Using a razor blade or sharp object on the inside rear window can damage the antenna or defogger. Repairs would not be covered by the vehicle warranty. Do not stick anything to the rear window.

Air Vents

Adjustable air vents are in the center and on the side of the instrument panel.



Move the slats to change the direction of the airflow. The center air vent does not close completely.



Press the cover of the side air vents to open. Turn open slats clockwise or counterclockwise to direct airflow as needed. Close the cover to stop the airflow.

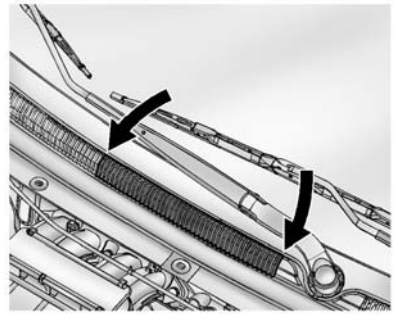
Additional air vents are located beneath the windshield and the driver and passenger side door windows, and in the footwells. These are fixed and cannot be adjusted.

Operation Tips

- Clear away any ice, snow, or leaves from air inlets at the base of the windshield that could block the flow of air into the vehicle.
- Keep the path under the front seats clear of objects to help circulate the air inside of the vehicle more effectively.
- Use of non-GM approved hood deflectors can adversely affect the performance of the system. Check with your dealer before adding equipment to the outside of the vehicle.

Maintenance

Air Intake

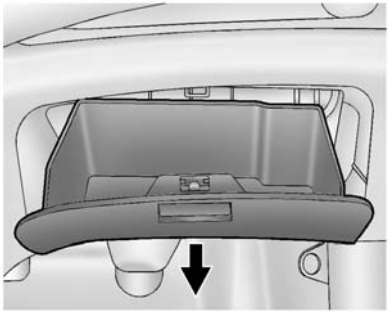


The air intake at the base of the windshield under the hood must be kept clear to allow the flow of air into the vehicle. Clear away any ice, snow, or leaves.

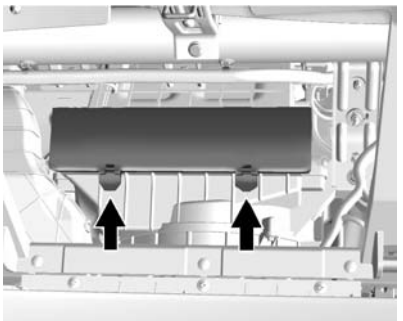
Passenger Compartment Air Filter

The filter reduces the dust, pollen, and other airborne irritants from outside air that is pulled into the vehicle.

The filter should be replaced as part of routine scheduled maintenance. See *Maintenance Schedule on page 11-2*. To find out what type of filter to use, see *Maintenance Replacement Parts on page 11-9*.



1. Open the glove box completely and pull it up by each side to remove.



2. Push the two tabs upward and release the latches holding the service door. Lift the service door.
3. Remove the old air filter.
4. Install the new air filter.
5. Close the service door and latches.
6. Reinstall the glove box.

See your dealer if additional assistance is needed.

Service

This vehicle may have the new environmentally friendly refrigerant, R1234yf. This refrigerant has a significantly reduced global warming impact on the environment, compared to the traditional automotive refrigerant, R-134a. All vehicles have a label underhood that identifies the refrigerant used in the vehicle.

The refrigerant system should only be serviced by trained and certified technicians. The air conditioning evaporator should never be repaired or replaced by one from a salvage vehicle. It should only be replaced by a new evaporator to ensure proper and safe operation.

During service, all refrigerants should be reclaimed with proper equipment. Venting refrigerants directly to the atmosphere is harmful to the environment and may also create unsafe conditions based on inhalation, combustion, frostbite, or other health-based concerns.

✍ NOTES

Driving and Operating

Driving Information
Driving for Better Energy Efficiency 9-2
Distracted Driving 9-3
Defensive Driving 9-4
Drunk Driving 9-4
Control of a Vehicle 9-4
Braking 9-5
Steering 9-5
Off-Road Recovery 9-6
Loss of Control 9-6
Driving on Wet Roads 9-7
Hill and Mountain Roads 9-8
Winter Driving 9-8
If the Vehicle Is Stuck 9-9
Vehicle Load Limits 9-10

Starting and Operating
New Vehicle Break-In 9-14
Power Button 9-14
Starting and Stopping the Vehicle 9-16
Retained Accessory Power (RAP) 9-17
Shifting Into Park 9-17
Shifting out of Park 9-18

Electric Vehicle Operating Modes
Driver Selected Operating Modes 9-19

Electric Drive Unit
Electric Drive Unit 9-19

Brakes
Antilock Brake System (ABS) 9-21
Electric Parking Brake 9-22
Brake Assist 9-24
Hill Start Assist (HSA) 9-24
Regenerative Braking 9-24

Ride Control Systems
Traction Control/Electronic Stability Control 9-25

Cruise Control
Cruise Control 9-27

Driver Assistance Systems
Rear Vision Camera (RVC) 9-30

Charging
When to Charge 9-32
Plug-In Charging 9-32
Delayed Charging Override 9-36
Charging Status Feedback 9-37
Charge Cord 9-40
Utility Interruption of Charging 9-41
Electrical Requirements for Battery Charging 9-41

Trailer Towing
General Towing Information 9-42

Conversions and Add-Ons
Add-On Electrical Equipment 9-42

Driving Information

Driving for Better Energy Efficiency

Use the following tips to help maximize energy efficiency and range.

In colder temperatures, while these efficiency tips will help, the electric vehicle driving range may be lower due to higher energy usage.

Driving Style

Efficiency Gauge (Instrument Cluster)

The ball indicator should be kept green and in the center of the gauge.

Inefficient acceleration is indicated when the ball turns yellow and travels above the center of the gauge.

Aggressive braking is indicated when the ball turns yellow and travels below the center of the gauge.

Acceleration/Braking/Coasting

Avoid unnecessary rapid accelerations and decelerations.

Electric range is maximized at 80 km/h (50 mph) and below. Higher speeds use more energy and can significantly reduce electric range.

Use cruise control when appropriate.

Plan ahead for decelerations and coast whenever possible. For example, do not rush to traffic signals.

Do not shift to N (Neutral) to coast. The vehicle recovers energy while coasting and braking in D (Drive) or L (Low).

Drive Mode and PRNDL Selection

Use Normal Mode when possible.

Sport Mode provides more responsive acceleration than Normal Mode but can reduce efficiency.

Use L (Low) in heavy stop-and-go traffic or when traveling downhill. L (Low) requires less brake pedal application and provides a controlled, efficient way to slow the vehicle down.

Climate Setting

Using the heat and air conditioning systems decreases the energy available for electric driving.

Optimal energy efficiency is achieved with the heat, air conditioning, and fan turned off.

Operating with the TEMP button off is the most energy efficient climate setting as long as is not selected.

Use the heated seat feature instead of climate settings. Heating the seat uses less energy than heating the vehicle interior.

Use remote start to heat or cool the interior when the vehicle is plugged in to maximize the electric range by utilizing electricity from the electrical outlet.

In hot weather, avoid parking in direct sunlight or use sunshades inside the vehicle.

Turn off the front and rear window defog/defrost when they are no longer needed.

Avoid driving with the windows open at highway speeds.

Vehicle Charging/Maintenance

Charging

Keep the vehicle plugged in, even when fully charged, to keep the battery temperature ready for the next drive. This is important when outside temperatures are extremely hot or cold.

Maintenance

Always keep the tires properly inflated and the vehicle properly aligned.

The weight of excess cargo in the vehicle affects efficiency and range. Avoid carrying more than is needed.

Avoid unnecessary use of electrical accessories. Power used for functions other than propelling the vehicle will reduce EV range.

Using a rooftop carrier will reduce efficiency due to additional weight and drag.

Distracted Driving

Distraction comes in many forms and can take your focus from the task of driving. Exercise good judgment and do not let other activities divert your attention away from the road. Many local governments have enacted laws regarding driver distraction. Become familiar with the local laws in your area.

To avoid distracted driving, always keep your eyes on the road, hands on the wheel, and mind on the drive.

- Do not use a phone in demanding driving situations. Use a hands-free method to place or receive necessary phone calls.
- Watch the road. Do not read, take notes, or look up information on phones or other electronic devices.
- Designate a front seat passenger to handle potential distractions.
- Become familiar with vehicle features before driving, such as programming favorite radio stations and adjusting climate control and seat settings. Program all trip information into any navigation device prior to driving.
- Wait until the vehicle is parked to retrieve items that have fallen to the floor.

- Stop or park the vehicle to tend to children.
- Keep pets in an appropriate carrier or restraint.
- Avoid stressful conversations while driving, whether with a passenger or on a cell phone.

⚠ Warning

Taking your eyes off the road too long or too often could cause a crash resulting in injury or death. Focus your attention on driving.

Refer to the Infotainment section for more information on using that system, including pairing and using a cell phone.

Defensive Driving

Defensive driving means “always expect the unexpected.” The first step in driving defensively is to wear the safety belt. See *Safety Belts on page 3-8*.

- Assume that other road users (pedestrians, bicyclists, and other drivers) are going to be careless and make mistakes. Anticipate what they might do and be ready.
- Allow enough following distance between you and the driver in front of you.
- Focus on the task of driving.

Drunk Driving

Death and injury associated with drinking and driving is a global tragedy.

⚠ Warning

Drinking and then driving is very dangerous. Your reflexes, perceptions, attentiveness, and judgment can be affected by even a small amount of alcohol. You can have a serious — or even fatal — collision if you drive after drinking.

Do not drink and drive or ride with a driver who has been drinking. Ride home in a cab; or if you are with a group, designate a driver who will not drink.

Control of a Vehicle

Braking, steering, and accelerating are important factors in helping to control a vehicle while driving.

Braking

Braking action involves perception time and reaction time. Deciding to push the brake pedal is perception time. Actually doing it is reaction time.

Average driver reaction time is about three-quarters of a second. In that time, a vehicle moving at 100 km/h (60 mph) travels 20 m (66 ft), which could be a lot of distance in an emergency.

Helpful braking tips to keep in mind include:

- Keep enough distance between you and the vehicle in front of you.
- Avoid needless heavy braking.
- Keep pace with traffic.

If propulsion is disabled while the vehicle is being driven, brake normally but do not pump the brakes. If the brakes are pumped, the pedal could get harder to push down. If propulsion stops, there will still be some power brake assist but it will be used when the brake is applied. Once the power assist is used up, it can take longer to stop and the brake pedal will be harder to push.

Steering

Electric Power Steering

The vehicle has electric power steering. It does not have power steering fluid. Regular maintenance is not required.

If power steering assist is lost due to a system malfunction, the vehicle can be steered, but may require increased effort.

See your dealer if there is a problem.

If the steering wheel is turned until it reaches the end of its travel and is held against that position for an extended period of time, power steering assist may be reduced.

If the steering assist is used for an extended period of time, power assist may be reduced.

Normal use of the power steering assist should return when the system cools down.

See specific vehicle steering messages under *Service Vehicle Messages on page 5-34*. See your dealer if there is a problem.

Curve Tips

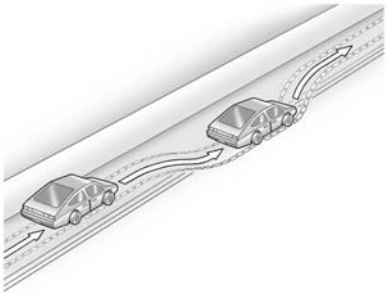
- Take curves at a reasonable speed.
- Reduce speed before entering a curve.
- Maintain a reasonable steady speed through the curve.
- Wait until the vehicle is out of the curve before accelerating gently into the straightaway.

Steering in Emergencies

- There are some situations when steering around a problem may be more effective than braking.

- Holding both sides of the steering wheel allows you to turn 180 degrees without removing a hand.
- The Antilock Brake System (ABS) allows steering while braking.

Off-Road Recovery



The vehicle's right wheels can drop off the edge of a road onto the shoulder while driving. Follow these tips:

1. Ease off the accelerator and then, if there is nothing in the way, steer the vehicle so that it straddles the edge of the pavement.
2. Turn the steering wheel about one-eighth of a turn, until the right front tire contacts the pavement edge.
3. Turn the steering wheel to go straight down the roadway.

Loss of Control

Skidding

There are three types of skids that correspond to the vehicle's three control systems:

- Braking Skid — wheels are not rolling.
- Steering or Cornering Skid — too much speed or steering in a curve causes tires to slip and lose cornering force.
- Acceleration Skid — too much throttle causes the driving wheels to spin.

Defensive drivers avoid most skids by taking reasonable care suited to existing conditions, and by not overdriving those conditions. But skids are always possible.

If the vehicle starts to slide, follow these suggestions:

- Ease your foot off the accelerator pedal and steer the way you want the vehicle to go. The vehicle may straighten out. Be ready for a second skid if it occurs.
- Slow down and adjust your driving according to weather conditions. Stopping distance can be longer and vehicle control can be affected when traction is reduced by water, snow, ice, gravel, or other

material on the road. Learn to recognize warning clues — such as enough water, ice, or packed snow on the road to make a mirrored surface — and slow down when you have any doubt.

- Try to avoid sudden steering, acceleration, or braking, including reducing vehicle speed by shifting to a lower gear. Any sudden changes could cause the tires to slide.

Remember: Antilock brakes help avoid only the braking skid.

Driving on Wet Roads

Rain and wet roads can reduce vehicle traction and affect your ability to stop and accelerate. Always drive slower in these types of driving conditions and avoid driving through large puddles and deep-standing or flowing water.

⚠ Warning

Wet brakes can cause crashes. They might not work as well in a quick stop and could cause pulling to one side. You could lose control of the vehicle.

After driving through a large puddle of water or a car/vehicle wash, lightly apply the brake pedal until the brakes work normally.

Flowing or rushing water creates strong forces. Driving through flowing water could cause the vehicle to be carried away. If this happens, you and other vehicle occupants could drown. Do not ignore police warnings and be very cautious about trying to drive through flowing water.

Hydroplaning

Hydroplaning is dangerous. Water can build up under the vehicle's tires so they actually ride on the water. This can happen if the road is wet enough and you are going fast enough. When the vehicle is hydroplaning, it has little or no contact with the road.

There is no hard and fast rule about hydroplaning. The best advice is to slow down when the road is wet.

Other Rainy Weather Tips

Besides slowing down, other wet weather driving tips include:

- Allow extra following distance.
- Pass with caution.
- Keep windshield wiping equipment in good shape.
- Keep the windshield washer fluid reservoir filled.
- Have good tires with proper tread depth. See *Tires on page 10-27*.

- Turn off cruise control.

Hill and Mountain Roads

Driving on steep hills or through mountains is different than driving on flat or rolling terrain.

- Keep the vehicle serviced and in good shape.
- Check all fluid levels and brakes, tires, cooling system, and electric drive unit.
- Keep the vehicle in gear when going down steep or long hills.
- Stay in your own lane. Do not swing wide or cut across the center of the road. Drive at speeds that let you stay in your own lane.
- Top of hills: Be alert — something could be in your lane (stalled car, accident).
- Pay attention to special road signs (falling rocks area, winding roads, long grades, passing or no-passing zones) and take appropriate action.

Winter Driving

Driving on Snow or Ice

Drive carefully when there is snow or ice between the tires and the road, creating less traction or grip. Wet ice can occur at about 0°C (32° F) when freezing rain begins to fall, resulting in even less traction. Avoid driving on wet ice or in freezing rain until roads can be treated with salt or sand.

Drive with caution, whatever the condition. Accelerate gently so traction is not lost. Accelerating too quickly causes the wheels to spin and makes the surface under the tires slick, so there is even less traction.

Try not to break the fragile traction. If you accelerate too fast, the drive wheels will spin and polish the surface under the tires even more. Traction control should be turned on. See *Traction Control/Electronic Stability Control on page 9-25*.

The Antilock Brake System (ABS) improves vehicle stability during hard stops on slippery roads, but apply the brakes sooner than when on dry pavement. See *Antilock Brake System (ABS) on page 9-21*.

Allow greater following distance on any slippery road and watch for slippery spots. Icy patches can occur on otherwise clear roads in shaded areas. The surface of a curve or an overpass can remain icy when the surrounding roads are clear. Avoid sudden steering maneuvers and braking while on ice.

Turn off cruise control on slippery surfaces.

Blizzard Conditions

Being stuck in snow can be a serious situation. Stay with the vehicle unless there is help nearby. If possible, use Roadside Assistance. See *Roadside Assistance Program on page 13-5*. To get help and keep everyone in the vehicle safe:

- Turn on the hazard warning flashers.
- Tie a red cloth to an outside mirror.

To save fuel, run the vehicle for only short periods as needed to warm the vehicle and then shut the vehicle off and close the window most of the way to save heat. Repeat this until help arrives but only when you feel really uncomfortable from the cold. Moving about to keep warm also helps.

If it takes some time for help to arrive, now and then when you run the vehicle, push the accelerator pedal slightly so the vehicle runs faster than the idle speed. This keeps the battery charged to restart the vehicle and to signal for help with the headlamps. Do this as little as possible to save electricity.

If the Vehicle Is Stuck

Slowly and cautiously spin the wheels to free the vehicle when stuck in sand, mud, ice, or snow.

If stuck too severely for the traction system to free the vehicle, turn the traction system off and use the rocking method. See *Traction Control/Electronic Stability Control on page 9-25*.

⚠ Warning

If the vehicle's tires spin at high speed, they can explode, and you or others could be injured. The vehicle can overheat, causing an underhood compartment fire or

(Continued)

Warning (Continued)

other damage. Spin the wheels as little as possible and avoid going above 56 km/h (35 mph).

Rocking the Vehicle to Get it Out

Turn the steering wheel left and right to clear the area around the front wheels. Turn off any traction system. Shift back and forth between R (Reverse) and a low forward gear, spinning the wheels as little as possible. To prevent electric drive unit wear, wait until the wheels stop spinning before shifting gears. Release the accelerator pedal while shifting, and press lightly on the accelerator pedal when the electric drive unit is in gear. Slowly spinning the wheels in the forward and reverse directions causes a rocking motion that could free the vehicle. If that does not get the vehicle out after a few tries, it

might need to be towed out. If the vehicle does need to be towed out, see *Towing the Vehicle on page 10-58*.

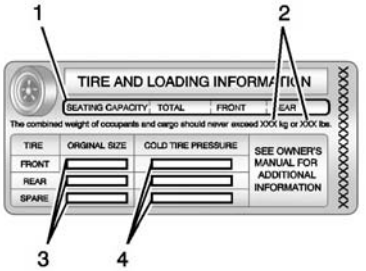
Vehicle Load Limits

It is very important to know how much weight the vehicle can carry. This weight is called the vehicle capacity weight and includes the weight of all occupants, cargo, and all nonfactory-installed options. Two labels on the vehicle show how much weight it may properly carry: the Tire and Loading Information label and the Certification label.

⚠ Warning

Do not load the vehicle any heavier than the Gross Vehicle Weight Rating (GVWR), or either the maximum front or rear Gross Axle Weight Rating (GAWR). This can cause systems to break and change the way the vehicle handles. This could cause loss of control and a crash. Overloading can also shorten the life of the vehicle.

Tire and Loading Information Label



Label Example

A vehicle-specific Tire and Loading Information label is attached to the vehicle's center pillar (B-pillar). The Tire and Loading Information label shows the number of occupant seating positions (1), and the maximum vehicle capacity weight (2) in kilograms and pounds.

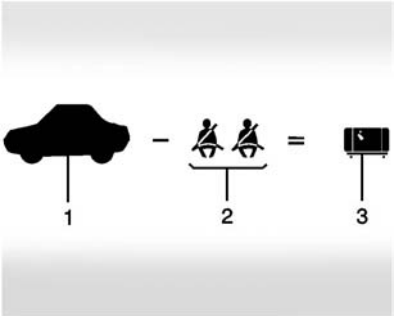
The Tire and Loading Information label also shows the tire size of the original equipment tires (3) and the recommended cold tire inflation pressures (4). For more information on tires and inflation see *Tires on page 10-27* and *Tire Pressure on page 10-34*.

There is also important loading information on the Certification label. It tells you the Gross Vehicle Weight Rating (GVWR) and the Gross Axle Weight Rating (GAWR) for the front and rear axle. See “Certification Label” later in this section.

“Steps for Determining Correct Load Limit–

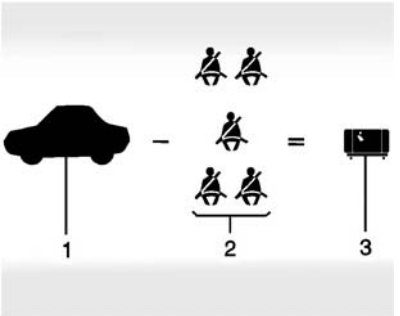
1. Locate the statement "The combined weight of occupants and cargo should never exceed XXX kg or XXX lbs." on your vehicle’s placard.
2. Determine the combined weight of the driver and passengers that will be riding in your vehicle.
3. Subtract the combined weight of the driver and passengers from XXX 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 x 150) = 650 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.”

This vehicle is neither designed nor intended to tow a trailer.



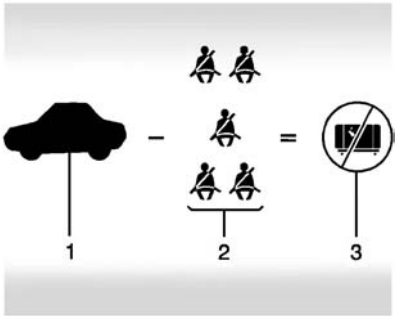
Example 1

1. Vehicle Capacity Weight for Example 1 = 453 kg (1,000 lbs).
2. Subtract Occupant Weight @ 68 kg (150 lbs) × 2 = 136 kg (300 lbs).
3. Available Occupant and Cargo Weight = 317 kg (700 lbs).



Example 2

1. Vehicle Capacity Weight for Example 2 = 453 kg (1,000 lbs).
2. Subtract Occupant Weight @ 68 kg (150 lbs) × 5 = 340 kg (750 lbs).
3. Available Cargo Weight = 113 kg (250 lbs).



Example 3

1. Vehicle Capacity Weight for Example 3 = 453 kg (1,000 lbs).
2. Subtract Occupant Weight @ 91 kg (200 lbs) × 5 = 453 kg (1,000 lbs).
3. Available Cargo Weight = 0 kg (0 lbs).

Refer to the vehicle's Tire and Loading Information label for specific information about the vehicle's capacity weight and

seating positions. The combined weight of the driver, passengers, and cargo should never exceed the vehicle's capacity weight.

Certification Label

Label Example

A vehicle-specific Certification label is attached to the vehicle's center pillar (B-pillar). The label tells the gross weight capacity of the vehicle, called the Gross Vehicle Weight Rating (GVWR). The GVWR includes the weight of the vehicle, all occupants, fuel, and cargo. Never exceed the GVWR for the vehicle, or the Gross Axle Weight Rating (GAWR) for either the front or rear axle.

And, if there is a heavy load, it should be spread out. See “Steps for Determining Correct Load Limit” earlier in this section.

⚠ Warning

Do not load the vehicle any heavier than the Gross Vehicle Weight Rating (GVWR), or either the maximum front or rear Gross Axle Weight Rating (GAWR). This can cause systems to break and change the way the vehicle handles. This could cause loss of control and a crash. Overloading can also shorten the life of the vehicle.

If you put things inside the vehicle — like suitcases, tools, packages, or anything else — they will go as fast as the vehicle goes. If you have to stop or turn quickly, or if there is a crash, they will keep going.

⚠ Warning

Things inside the vehicle can strike and injure people in a sudden stop or turn, or in a crash.

- Put things in the cargo area of the vehicle. In the cargo area, put them as far forward as possible. Try to spread the weight evenly.

(Continued)

Warning (Continued)

- Never stack heavier things, like suitcases, inside the vehicle so that some of them are above the tops of the seats.
- Do not leave an unsecured child restraint in the vehicle.
- Secure loose items in the vehicle.
- Do not leave a seat folded down unless needed.

Starting and Operating

New Vehicle Break-In

⚠ Caution

Avoid making hard stops for the first 322 km (200 mi). During this time the new brake linings are not yet broken in. Hard stops with new linings can mean premature wear and earlier replacement. Follow this breaking-in guideline every time you get new brake linings. Following break-in, vehicle speed and load can be gradually increased.

Power Button

The vehicle has an electronic pushbutton start.

The Remote Keyless Entry (RKE) transmitter must be in the vehicle for the system to operate. If the vehicle will not start, place the RKE transmitter in the transmitter slot. See *Remote Keyless Entry (RKE) System Operation on page 2-3*.

ON/RUN: This position is for starting and driving. With the vehicle off, and the brake pedal applied, pressing the ⏻ POWER button once

will place the vehicle in ON/RUN. When the vehicle READY light is on in the instrument cluster, the vehicle is ready to be driven. This could take up to 15 seconds at extremely cold temperatures. See *Starting and Stopping the Vehicle on page 9-16*.

Service Only Mode

This power mode is available for service and diagnostics, and to verify the proper operation of the malfunction indicator lamp as may be required for emission inspection purposes. With the vehicle off, and the brake pedal not applied, pressing and holding the ⏻ POWER button for more than five seconds will place the vehicle in Service Only Mode. The instruments and audio systems will operate as they do in ON/RUN, but the vehicle will not be able to be driven. The propulsion system will not start in Service Only Mode. Push the button again to turn the vehicle off.

⚠ Caution

Service Only Mode will discharge the 12-volt battery. Do not use Service Only Mode for an extended period, or the vehicle may not start.

STOPPING THE VEHICLE/OFF:

To turn the vehicle off, push the ⏻ POWER button with the vehicle in P (Park). Retained Accessory Power (RAP) will remain active until the driver door is opened. See *Retained Accessory Power (RAP) on page 9-17*. When turning off the vehicle, if the vehicle is not in P (Park), the vehicle will go to ACC/ACCESSORY and display the message SHIFT TO PARK in the Driver Information Center (DIC). See *Electric Drive Unit Messages on page 5-32*.

If the vehicle must be shut off in an emergency:

1. Brake using a firm and steady pressure. Do not pump the brakes repeatedly. This may deplete power assist, requiring increased brake pedal force.
2. Shift the vehicle to N (Neutral). This can be done while the vehicle is moving. After shifting to N (Neutral), firmly apply the brakes and steer the vehicle to a safe location.
3. Come to a complete stop, shift to P (Park), and turn the vehicle off by pushing the ⏻ POWER button.
4. Set the parking brake. See *Electric Parking Brake on page 9-22*.

⚠ Warning

Turning off the vehicle while moving may disable the airbags. While driving, only shut the propulsion system off in an emergency.

If the vehicle cannot be pulled over, and must be shut off while driving, press and hold the ⏻ POWER button for longer than two seconds, or press twice in five seconds.

Starting and Stopping the Vehicle

Starting Procedure

Move the shift lever to P (Park) or N (Neutral). The propulsion system will not start in any other position.

⚠ Caution

Do not try to shift to P (Park) if the vehicle is moving or the electric drive unit could be damaged. Shift to P (Park) only when the vehicle is stopped.

⚠ Caution

If you add electrical parts or accessories, you could change the way the vehicle operates. Any resulting damage would not be covered by the vehicle warranty. See *Add-On Electrical Equipment on page 9-42*.

The Remote Keyless Entry (RKE) transmitter must be in the vehicle. Press the brake pedal and push and release the ⏻ POWER button.

If the RKE transmitter is not in the vehicle or something is interfering with the transmitter, a message displays in the Driver Information Center (DIC). See *Key and Lock Messages on page 5-32*.

If the vehicle will not start due to a low RKE transmitter battery, the vehicle can still be driven. See “Starting the Vehicle with a Low Transmitter Battery” in *Remote Keyless Entry (RKE) System Operation on page 2-3*.

A vehicle ready light displays in the lower right corner of the instrument cluster when the vehicle is ready to be driven.

The instrument cluster also displays an active battery gauge when the vehicle is ready to be driven.

Restarting Procedure

If the vehicle must be restarted while it is still moving, move the shift lever to N (Neutral) and press the ⏻ POWER button twice without pressing the brake pedal. The propulsion system will not restart in any other position.

A chime will sound if the driver door is opened while the vehicle is in ON/RUN. Always press the ⏻ POWER button to turn the vehicle off before exiting.

Stopping Procedure

For information on how to turn the vehicle off, see *Power Button on page 9-14*.

Retained Accessory Power (RAP)

The following features will operate for up to 10 minutes or until the driver door is opened:

- Audio System
- Accessory Power Outlets

Power windows will operate for up to 10 minutes or until any door is opened.

Shifting Into Park

1. Hold the brake pedal down and set the parking brake. See *Electric Parking Brake on page 9-22*.
2. Move the shift lever into P (Park) by pushing the lever all the way toward the front of the vehicle.
3. Turn the vehicle off.

Leaving the Vehicle with the Propulsion System On

⚠ Warning

It can be dangerous to leave the vehicle with the propulsion system running. It could overheat and catch fire.

(Continued)

Warning (Continued)

It is dangerous to get out of the vehicle if the shift lever is not fully in P (Park) with the parking brake firmly set. The vehicle can roll.

Do not leave the vehicle when the propulsion system is running. If you have left the propulsion system running, the vehicle can move suddenly. You or others could be injured. To be sure the vehicle will not move, even when you are on fairly level ground, always set the parking brake and move the shift lever to P (Park). See *Shifting Into Park on page 9-17*.

If you have to leave the vehicle with the propulsion system on, be sure the vehicle is in P (Park) and the parking brake is firmly set before you leave it. After you have moved the shift lever into P (Park), hold down the regular brake pedal. See if

you can move the shift lever away from P (Park) without first pulling it toward you. If you can, it means that the shift lever was not fully locked into P (Park).

Torque Lock

Torque lock is when the weight of the vehicle puts too much force on the parking pawl in the electric drive unit. This happens when parking on a hill and shifting the electric drive unit into P (Park) is not done properly and then it is difficult to shift out of P (Park). To prevent torque lock, set the parking brake and then shift into P (Park).

If torque lock does occur, your vehicle may need to be pushed uphill by another vehicle to relieve the parking pawl pressure, so you can shift out of P (Park).

Shifting out of Park

To shift out of P (Park), the vehicle must be in ON/RUN, the brake pedal must be applied, and the charge cord must be unplugged.

The vehicle has an electronic shift lock release system. The shift lock release is designed to:

- Prevent the vehicle from turning off unless the shift lever is in P (Park).
- Prevent moving the shift lever out of P (Park), unless the vehicle is in ON/RUN, the brake pedal is applied, and the charge cord is unplugged.

Parking the vehicle in extreme cold for several days without the charge cord connected may cause the electric drive unit to be locked in P (Park) until the propulsion system has warmed sufficiently.

The shift lock is always functional except in the case of an uncharged or low charged 12-volt battery (less than 9 volts).

If the vehicle has an uncharged 12-volt battery or a 12-volt battery with low voltage, try charging or jump starting the 12-volt battery. See *Battery on page 10-13* or *Jump Starting on page 10-55*.

If the console shift lever cannot be moved out of P (Park):

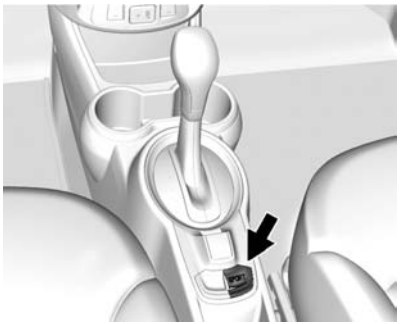
1. Apply and maintain the regular brakes.
2. Turn the vehicle on using the ⏻ POWER button. See *Power Button on page 9-14*.
3. Let up on the shift lever and make sure the shift lever is pushed all the way into P (Park).
4. Verify that the vehicle is unplugged, and the READY light is on.
5. Press the shift lever button.
6. Move the shift lever into the desired gear.

If you still cannot move the shift lever from P (Park), see your dealer or a professional towing service.

Electric Vehicle Operating Modes

Driver Selected Operating Modes

Sport Mode



Sport Mode provides more responsive acceleration than Normal Mode, but can reduce efficiency. Use Normal Mode whenever possible. When the SPORT light is not on, the vehicle is in Normal Mode.

Press the SPORT button to select Sport Mode.

Press the SPORT button again to return to Normal Mode.

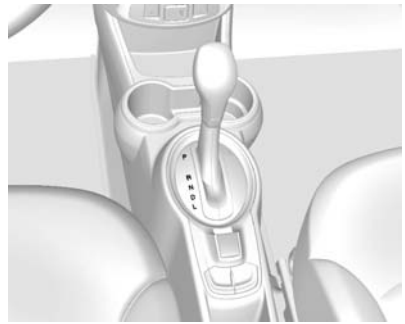
The SPORT light comes on when Sport Mode is selected. See *Sport Mode Light on page 5-15*.

Each time the vehicle is started, it will return to Normal Mode.

Sport Mode may be unavailable if the battery charge is too low.

Electric Drive Unit

The vehicle uses an electric drive unit.



P (Park): This position locks the front wheels. It is the best position to use when starting the propulsion system because the vehicle cannot move easily.

⚠ Warning

It is dangerous to get out of the vehicle if the shift lever is not fully in P (Park) with the parking brake firmly set. The vehicle can roll.

Do not leave the vehicle when the propulsion system is running. If you have left the propulsion system running, the vehicle can move suddenly. You or others could be injured. To be sure the vehicle will not move, even when you are on fairly level ground, always set the parking brake and move the shift lever to P (Park). See *Shifting Into Park on page 9-17*.

Make sure the shift lever is fully in P (Park) before starting the propulsion system. The vehicle has an electric drive unit shift lock control system. The regular brake must be fully applied first and then the shift lever button pressed before shifting from P (Park) when the vehicle is in ON/RUN. If you cannot shift out of P (Park), ease pressure on the shift lever, then push the shift lever all the way into P (Park) as you maintain brake application. Then press the shift lever button and move the shift lever into another gear. See *Shifting out of Park on page 9-18*.

R (Reverse): Use this gear to back up.

⚠ Caution

Shifting to R (Reverse) while the vehicle is moving forward could damage the electric drive unit. The repairs would not be covered by the vehicle warranty. Shift to R (Reverse) only after the vehicle is stopped.

To rock the vehicle back and forth to get out of snow, ice, or sand without damaging the electric drive unit, see *If the Vehicle Is Stuck on page 9-9*.

N (Neutral): In this position, the propulsion system does not provide torque to the wheels.

D (Drive): This position is for normal driving. If more power is needed for passing, and the vehicle is:

- Going less than 56 km/h (35 mph), push the accelerator pedal about halfway down.
- Going about 56 km/h (35 mph) or more, push the accelerator all the way down.

⚠ Caution

If the vehicle seems to accelerate slowly or not respond when you go faster, and you continue to drive the vehicle that way, you could damage the electric drive unit. Have the vehicle serviced right away.

L (Low): This position reduces vehicle speed without using the brakes. The brake lights will come on when the vehicle is in L (Low) and the accelerator pedal is not being pressed to indicate the vehicle is slowing down. You can use L (Low) on hills. It can help control vehicle speed going down steep mountain roads along with using the brakes off and on. You can use L (Low) on very steep hills, in deep snow, or in mud.

⚠ Caution

Spinning the tires or holding the vehicle in one place on a hill using only the accelerator pedal may damage the electric drive unit. The repair will not be covered by the vehicle warranty. If you are stuck, do not spin the tires. When stopping on a hill, use the brakes to hold the vehicle in place.

Brakes

Antilock Brake System (ABS)

This vehicle has ABS, an advanced electronic braking system that helps prevent a braking skid.

When the vehicle begins to drive away, ABS checks itself.
A momentary motor or clicking noise might be heard while this test is going on, and it might even be noticed that the brake pedal moves a little. This is normal.

If there is a problem with ABS, this warning light stays on. See *Antilock Brake System (ABS) Warning Light on page 5-14*.

If driving safely on a wet road and it becomes necessary to slam on the brakes and continue braking to avoid a sudden obstacle, a computer senses the wheels are slowing down. If one of the wheels is about to stop rolling, the computer will separately work the brakes at each wheel.

ABS can change the brake pressure to each wheel, as required, faster than any driver could. This can help you steer around the obstacle while braking hard.

As the brakes are applied, the computer keeps receiving updates on wheel speed and controls braking pressure accordingly.

Remember: ABS does not change the time needed to get a foot up to the brake pedal or always decrease stopping distance. If you get too close to the vehicle in front of you, there will not be enough time to apply the brakes if that vehicle

suddenly slows or stops. Always leave enough room up ahead to stop, even with ABS.

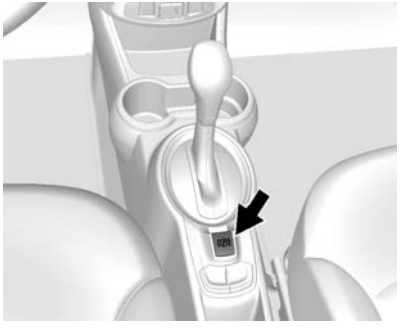
Using ABS

Do not pump the brakes. Just hold the brake pedal down firmly and let ABS work. You may hear the ABS pump or motor operating and feel the brake pedal pulsate. This is normal.

Braking in Emergencies

ABS allows you to steer and brake at the same time. In many emergencies, steering can help more than even the very best braking.

Electric Parking Brake



The vehicle has an Electric Parking Brake (EPB). The Ⓟ switch is on the center console. The EPB can always be activated, even if the vehicle is off. To prevent draining the 12-volt battery, avoid repeated cycles of the EPB system when the vehicle is off.

In case of insufficient electrical power, the EPB cannot be applied or released.

Before leaving the vehicle, check the Electric Parking Brake Light to ensure the parking brake is applied.

EPB Apply

The EPB can be applied anytime the vehicle is stopped. The EPB is applied by momentarily lifting up on the Ⓟ switch with the brake pedal applied. Once fully applied, the Electric Parking Brake light will be on. While the brake is being applied, the Electric Parking Brake light will flash until full apply is reached. If the light does not come on, or remains flashing, have the vehicle serviced. Do not drive the vehicle if the Electric Parking Brake light is flashing. See your dealer.

If the EPB is applied while the vehicle is in motion, a chime will sound, and the DIC message RELEASE PARKING BRAKE will be displayed. The vehicle will decelerate as long as the switch is held in the up position. Releasing the Ⓟ switch during deceleration

will release the parking brake. If the (P) switch is held in the up position until the vehicle comes to a stop, the EPB will remain applied.

If the Electric Parking Brake light flashes continuously, the EPB is only partially applied or released, or there is a problem with the EPB. The DIC message SERVICE PARKING BRAKE will be displayed. If this light flashes continuously, release the EPB, and attempt to apply it again. If this light continues to flash, do not drive the vehicle. See your dealer.

If the Service Electric Parking Brake light is on, the EPB has detected a system problem and is operating with reduced functionality. To apply the EPB when this light is on, lift up on the (P) switch and hold it in the up position. Full application of the parking brake by the EPB system may take a longer period of time than normal when this light is on. Continue to hold the (P) switch until the Electric Parking Brake light remains on. If the Service Electric Parking Brake light is on, see your dealer.

If the EPB fails to apply, the rear wheels should be blocked to prevent vehicle movement.

For maximum EPB force when parking on a hill, pull the EPB switch twice.

The vehicle may automatically apply the EPB in some situations when the vehicle is not moving. This is normal, and is done to periodically check the correct operation of the EPB system.

EPB Release

To release the EPB, place the vehicle in ON/RUN, apply and hold the brake pedal, and push down momentarily on the (P) switch. If attempting to release the EPB without the brake pedal applied, a chime will sound, and the DIC message STEP ON BRAKE TO RELEASE PARK BRAKE will be displayed. The EPB is released when the Electric Parking Brake light is off.

If the Service Electric Parking Brake light is on, the EPB has detected a system problem, and is operating with reduced functionality. To release the EPB when this light is on, push down on the (P) switch and hold it in the down position. EPB release may take a longer period of time than normal when this light is on. Continue to hold the (P) switch until the Electric Parking Brake Light is off. If the light is on, see your dealer.

⚠ Caution

Driving with the parking brake on can overheat the brake system and cause premature wear or damage to brake system parts. Make sure that the parking brake is fully released and the brake system warning light is off before driving.

Automatic EPB Release

The EPB will automatically release if the vehicle is running, placed into gear, and an attempt is made to drive away. Avoid rapid acceleration when the EPB is applied, to preserve parking brake lining life.

See *Electric Parking Brake Light on page 5-14*, *Service Electric Parking Brake Light on page 5-14*, and *Brake System Messages on page 5-31*.

Brake Assist

The Brake Assist feature is designed to assist the driver in stopping or decreasing vehicle speed in emergency driving conditions. This feature uses the stability system hydraulic brake control module to supplement the power brake system under conditions where the driver has quickly and forcefully applied the brake pedal in an attempt to quickly stop or slow down the vehicle. The stability system hydraulic brake control module increases brake pressure at each corner of the vehicle until the ABS activates. Minor brake pedal pulsation or pedal movement during this time is normal and the driver should continue to apply the brake pedal as the driving situation dictates. The Brake Assist feature will automatically disengage when the brake pedal is released or brake pedal pressure is quickly decreased.

Hill Start Assist (HSA)

This vehicle has an HSA feature, which may be useful when the vehicle is stopped on a grade sufficient enough to activate HSA. This feature is designed to prevent the vehicle from rolling, either forward or rearward, during vehicle drive off. After the driver completely stops and holds the vehicle in a complete standstill on a grade, HSA will be automatically activated. During the transition period between when the driver releases the brake pedal and starts to accelerate to drive off on a grade, HSA holds the braking pressure for a maximum of two seconds to ensure that there is no rolling. The brakes will automatically release when the accelerator pedal is applied within the two-second window. It will not activate if the vehicle is in a drive gear and facing downhill, or if the vehicle is facing uphill and in R (Reverse).

Regenerative Braking

Regenerative braking takes some of the energy from the moving vehicle and turns it back into electrical energy. This energy is then stored back into the high voltage battery system, contributing to increased energy efficiency.

The hydraulic disc brakes work with the regenerative braking to ensure effective braking, such as when a high braking demand is requested.

The braking system is computer controlled and blends the regenerative braking with the conventional hydraulic disc brakes to meet any requirements for deceleration. The controller interprets the braking request and uses regenerative braking, conventional hydraulic braking, or a combination of both as necessary. Because the controller applies the hydraulic brakes through its high pressure accumulator, you may occasionally hear the motor-driven pump when it recharges the system. This is normal.

See *Warning Lights, Gauges, and Indicators on page 5-6* and *Driver Information Center (DIC) on page 5-28*. In the event of a controller problem, the brake pedal may be harder to push and the stopping distance may be longer.

Ride Control Systems

Traction Control/ Electronic Stability Control

System Operation

The vehicle has a Traction Control System (TCS) and StabiliTrak®, an electronic stability control system. These systems help limit wheel slip and assist the driver in maintaining control, especially on slippery road conditions.

TCS activates if it senses that any of the drive wheels are spinning or beginning to lose traction. When this happens, TCS applies the brakes to the spinning wheels and reduces propulsion system power to limit wheel spin.

StabiliTrak activates when the vehicle senses a difference between the intended path and the direction the vehicle is actually traveling. StabiliTrak selectively applies braking pressure to any one of the vehicle wheel brakes to assist the driver in keeping the vehicle on the intended path.

If cruise control is being used and traction control or StabiliTrak begins to limit wheel spin, cruise control will disengage. Cruise control may be turned back on when road conditions allow.

Both systems come on automatically when the vehicle is started and begins to move. The systems may be heard or felt while they are operating or while performing diagnostic checks. This is normal and does not mean there is a problem with the vehicle.

It is recommended to leave both systems on for normal driving conditions, but it may be necessary to turn TCS off if the vehicle gets stuck in sand, mud, ice, or snow. See *If the Vehicle Is Stuck on page 9-9* and “Turning the Systems Off and On” later in this section.

The indicator light for both systems is in the instrument cluster. This light will:

- Flash when TCS is limiting wheel spin.
- Flash when StabiliTrak is activated.
- Turn on and stay on when either system is not working.

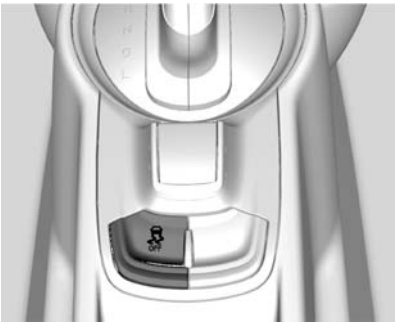
If either system fails to turn on or to activate, a message displays in the Driver Information Center (DIC), and comes on and stays on to indicate that the system is inactive and is not assisting the driver in maintaining control. The vehicle is safe to drive, but driving should be adjusted accordingly.

If comes on and stays on:

1. Stop the vehicle.
2. Turn the vehicle off and wait 15 seconds.
3. Start the vehicle.

Drive the vehicle. If comes on and stays on, the vehicle may need more time to diagnose the problem. If the condition persists, see your dealer.

Turning the Systems Off and On



The button for TCS and StabiliTrak is on the center console behind the shift lever.

⚠ Caution

Do not repeatedly brake or accelerate heavily when TCS is off. The vehicle driveline could be damaged.

To turn off only TCS, press and release the OFF button. The traction off light displays in the instrument cluster, and the appropriate message is displayed in the DIC. See *Ride Control System Messages on page 5-33*.

To turn TCS on again, press and release the OFF button. The traction off light displayed in the instrument cluster will turn off.

If TCS is limiting wheel spin when the OFF button is pressed, the system will not turn off until the wheels stop spinning.

To turn off both TCS and StabiliTrak, press and hold the OFF button until the traction off light and StabiliTrak OFF light come on and stay on in the instrument cluster. The appropriate messages are displayed in the DIC. See *Ride Control System Messages on page 5-33*.

To turn TCS and StabiliTrak on again, press and release the OFF button. The traction off light and StabiliTrak OFF light in the instrument cluster turn off.

Adding accessories can affect the vehicle performance. See *Accessories and Modifications on page 10-2*.

Cruise Control

If equipped with cruise control, the vehicle can maintain a speed of about 40 km/h (25 mph) or more without keeping your foot on the accelerator. Cruise control does not work at speeds below 40 km/h (25 mph).

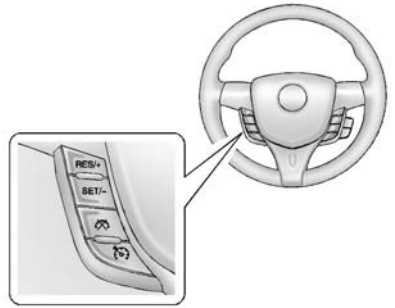
⚠ Warning

Cruise control can be dangerous where you cannot drive safely at a steady speed. Do not use cruise control on winding roads or in heavy traffic.

Cruise control can be dangerous on slippery roads. On such roads, fast changes in tire traction can cause excessive wheel slip, and you could lose control. Do not use cruise control on slippery roads.

If the vehicle's Traction Control System (TCS) begins to limit wheel spin while using cruise control, the cruise control will automatically disengage. See *Traction Control/ Electronic Stability Control on page 9-25*. When road conditions allow you to safely use it again, cruise control can be turned back on.

If the brakes are applied, the cruise control disengages.



(On/Off): Press to turn the cruise control system on and off. A white cruise control indicator light turns on when in use.

RES/+ (Resume/Accelerate): If there is a set speed in memory, press briefly to resume to that speed or press and hold to accelerate. If cruise control is already active, use to increase vehicle speed.

SET/− (Set/Coast): Press briefly to set the speed and activate cruise control. If cruise control is already active, use to decrease vehicle speed.

(Cancel): Press to disengage cruise control without erasing the set speed from memory.

Setting Cruise Control

If the button is on when not in use, SET/− or RES/+ could get pressed and go into cruise when not desired. Keep the button off when cruise is not being used.

The cruise control light on the instrument panel cluster turns green after the cruise control has been set to the desired speed.

1. Press .
2. Get up to the desired speed.
3. Press and release the SET/−.
4. Remove foot from the accelerator.

The cruise control indicator on the instrument cluster turns green after cruise control has been set to the desired speed. See *Instrument Cluster on page 5-7*.

Resuming a Set Speed

If the cruise control is set at a desired speed and then the brakes are applied or is pressed, the cruise control is disengaged without erasing the set speed from memory.

Once the vehicle speed is 40 km/h (25 mph) or greater, press the RES/+ briefly. The vehicle returns to the previous set speed and stays there.

Increasing Speed While Using Cruise Control

If the cruise control system is already activated:

- Press and hold the RES/+ until the desired speed is reached, then release it.
- To increase vehicle speed in small increments, briefly press RES/+. For each press, the vehicle goes about 1.6 km/h (1 mph) faster.

The speedometer reading can be displayed in either English or metric units. See *Instrument Cluster on page 5-7*. The increment value used depends on the units displayed.

Reducing Speed While Using Cruise Control

If the cruise control system is already activated:

- Press and hold the SET/− until the lower desired speed is reached, then release it.

- To decrease the vehicle speed in small increments, briefly press SET/−. For each press, the vehicle goes about 1.6 km/h (1 mph) slower.

The speedometer reading can be displayed in either English or metric units. See *Instrument Cluster on page 5-7*. The increment value used depends on the units displayed.

Passing Another Vehicle While Using Cruise Control

Use the accelerator pedal to increase the vehicle speed. When you take your foot off the pedal, the vehicle will slow down to the previous set cruise speed. While pressing the accelerator pedal or shortly following the release to override cruise control, briefly pressing the SET/– button will result in cruise control set to the current vehicle speed.

Using Cruise Control on Hills

How well cruise control will work on hills depends on the vehicle speed, load, and the steepness of the hills. When going up steep hills, you might have to step on the accelerator pedal to maintain your speed. When going downhill, you might have to brake or shift to a lower gear to keep your speed down. If the brake pedal is applied, cruise control will disengage.

Ending Cruise Control

There are four ways to end cruise control:

- Step lightly on the brake pedal.
- Press .
- Shift the electric drive unit to N (Neutral).
- To turn off the cruise control, press .

Erasing Speed Memory

The cruise control set speed is erased from memory if is pressed or if the vehicle is turned off.

Driver Assistance Systems

Rear Vision Camera (RVC)

If equipped, the RVC system can assist the driver when backing up by displaying a view of the area behind the vehicle.

⚠ Warning

The RVC system does not display children, pedestrians, bicyclists, crossing traffic, animals, or any other object located outside the camera's field of view, below the bumper, or under the vehicle. Perceived distances may be different from actual distances. Do not back the vehicle using only the RVC screen. Failure to use proper care before backing may result in injury, death,

(Continued)

Warning (Continued)

or vehicle damage. Always check behind and around the vehicle before backing.

How the System Works

When the vehicle is shifted into R (Reverse), the image of the area behind the vehicle appears on the infotainment screen. The previous screen displays when the vehicle is shifted out of R (Reverse) after approximately two seconds.

To return to the previous screen sooner, do one of the following:

- Press a button on the infotainment system.
- Shift into P (Park).

Guidelines

The RVC system has a guideline overlay that can help the driver align the vehicle when backing into a parking spot.

To turn the guidelines on or off:

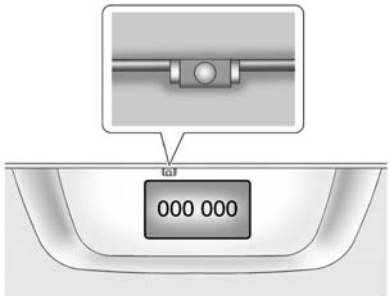
1. Shift into P (Park).
2. Select Settings on the infotainment system home page.
3. Select Vehicle Settings.
4. Select Rear Camera Option.
5. Select Guidelines and select On or Off.

Rear Vision Camera Error Messages

SERVICE REAR VISION SYSTEM: If this message appears in the infotainment display, the system may need service.

If any other problem occurs or if a problem persists, see your dealer.

Rear Vision Camera Location

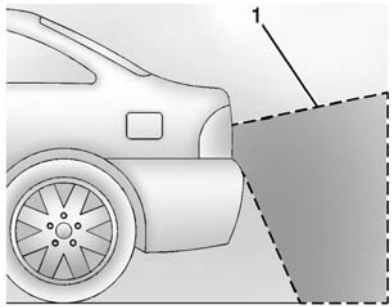


The RVC is above the license plate.

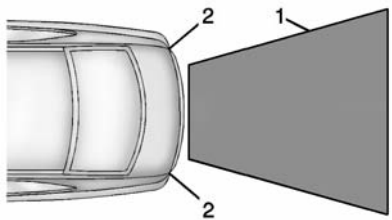
The area displayed by the camera is limited.

It does not display objects that are close to either corner or under the bumper and can vary depending on vehicle orientation or road conditions. Displayed images may be farther or closer than they appear.

The following illustrations show the field of view that the camera provides.



1. View displayed by the camera.



1. View displayed by the camera.
2. Corner of the rear bumper.

When the System Does Not Seem To Work Properly

The RVC system may not work properly or display a clear image if:

- It is dark.
- The sun or the beam of headlamps is shining directly into the camera lens.
- Ice, snow, mud, or anything else has built up on the camera lens. Clean the lens, rinse it with water, and wipe it with a soft cloth.
- The back of the vehicle was in an accident. The position and mounting angle of the camera can change or the camera can be affected. Be sure to have the camera and its position and mounting angle checked at your dealer.

Charging

When to Charge

When the high voltage battery is getting low, charging messages may display.

The CHARGE SOON message indicates that the driving range is getting low and the vehicle needs to be charged soon. As the charge level drops, the PROPULSION POWER IS REDUCED message comes on at the same time that the accelerator pedal response is reduced. When the energy is depleted, the OUT OF ENERGY, CHARGE VEHICLE NOW message is displayed and the vehicle slows to a stop. Brake and steering assist will still operate.

See *Battery and Charging Messages on page 5-30* and *Propulsion Power Messages on page 5-33*.

Plug-In Charging

This section explains the process for charging the high voltage battery. Do not allow the vehicle to remain in temperature extremes for long periods without being driven or plugged in. It is recommended that the vehicle be plugged in when temperatures are below 0°C (32°F) and above 32°C (90°F) to maximize high voltage battery life.

Do not turn the vehicle on during charging. Turning the vehicle on or activating remote start while the vehicle is charging may use more energy than the charger provides and may cause the charging process to deactivate.

When using a 240-volt charging station, it will take approximately seven hours to charge the vehicle from empty to full. When using a 120-volt AC electrical outlet, it will take approximately 20 hours to charge the vehicle with the 12 amp AC current setting, and considerably longer using the default 8 amp AC current setting. Charge times will vary with outside temperature. There are three ways to program how the vehicle is charged. See *Programmable Charging on page 5-19*.

If equipped, the vehicle can be charged using DC charging equipment found at service stations and other public locations.

When using a DC charging station with at least 50kW of available power, it will take approximately 20 minutes to recharge from a depleted battery to a level of 80% of the driving range available for use. This time estimate is applicable to nominal temperature ranges. In extreme hot or cold conditions, this time may be lengthened. When a full charge is desired, the charging time will be increased.

The charging system may run fans and pumps that result in sounds from the vehicle while it is turned off. Additional unexpected clicking

sounds may be caused by the electrical devices used while charging.

While the charge cord is plugged into the vehicle, the vehicle cannot be driven.

AC Charging

AC Charge Cord Vehicle Plug

Start Charge

1. Make sure the vehicle is parked and turned off.

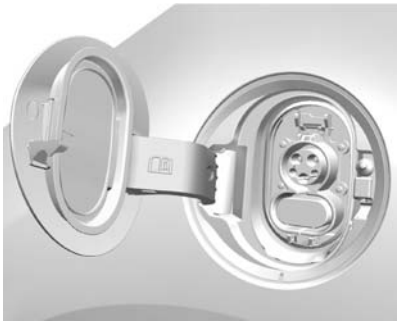
2. Push on the charge port door and release to open the door.

   In cold weather conditions, ice may form around the charge port door. The charge port door may not open on the first attempt. Remove ice from the area and repeat attempting to open the charge port door.

3. Open the rear hatch, lift the load support floor covering, and remove the charge cord. It is located near the tire sealant and compressor kit. Pull up on the charge cord handle to release it from the handle clip. Lift the charge cord up and rearward to remove it from the vehicle. The vehicle plug is stored as shown.

4. Plug the charge cord into the electrical outlet. See *Electrical Requirements for Battery Charging on page 9-41*. Verify the charge cord status. See the charge cord user guide and *Charge Cord on page 9-40*.

   Select the appropriate charge level using the Change Charge Level setting on the center stack. See *Programmable Charging on page 5-19*.

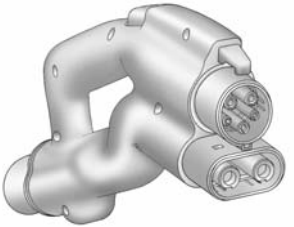


5. Plug in the AC vehicle plug of the charge cord into the charge port on the vehicle. Make sure the AC vehicle plug is fully connected to the AC charge port. If it is not properly seated, the charge may not occur.
6. Verify that the Charging Status Indicator illuminates on top of the instrument panel and a horn chirp occurs. See *Charging Status Feedback on page 9-37*.

End Charge

1. Unlock the vehicle with the RKE transmitter to disarm the charge cord theft alert.
2. Unplug the vehicle plug of the charge cord from the vehicle. Unlock the vehicle plug of the charge cord from the vehicle by pushing the button on the top of the charge cord plug.
3. Close the charge port door by pressing firmly in the center to latch properly.
4. Unplug the charge cord from the electrical outlet.
5. Place the charge cord into the storage compartment.

DC Charging



AC/DC Charge Cord Vehicle Plug (If Equipped)

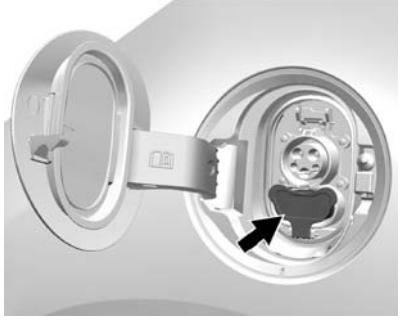
Starting a DC charge requires the vehicle to be off until charging has started. If for any reason DC charging does not begin or is interrupted, check the DC charge station display for messages. Unplug to restart the DC charge process.

Start Charge

1. Make sure the vehicle is parked and turned off.

2. Push on the charge port door and release to open the door.

   In cold weather conditions, ice may form around the charge port door. The charge port door may not open on the first attempt. Remove ice from the area and repeat attempting to open the charge port door.



3. Unlatch the DC charging dust cover and lower it fully.

4. Plug in the DC vehicle plug into the DC charge port on the vehicle. Make sure that the DC vehicle plug is fully connected to the DC charge port. If it is not properly seated then the charge may not occur. Proper plug connection can be can be checked by information on the DIC.

5. Follow the steps listed on the charging station to start charging. The electric parking brake will automatically apply once the charge process has been started.

6. Once charging, the DC vehicle plug will be locked to the DC charge port and cannot be disconnected while charging is active.

7. Verify the charging status indicator illuminates on top of the instrument panel and a horn chirp occurs. See *Charging Status Feedback on page 9-37*.

⚠ Caution

Do not attempt to disconnect the DC vehicle plug while charging is active. This action may damage vehicle or charging station hardware.

Stop Charge

Controls on the charging station can be used to stop the charge process at any time.

To stop charging, the stop charge button on the RKE transmitter may also be used. This applies only to DC charging.

Additionally, to stop the charge when inside the vehicle, you may use the stop charging button on the Battery Information Screen.

Stop Charge — Automatic

When the vehicle no longer needs to use power from the charging station, it will stop charging and the DC vehicle plug will be unlocked from the DC charge port.

Energy can still be consumed from the charging station when the vehicle's displays and indicators show that the battery is fully charged. This is to ensure the battery is in optimal temperature operating range to maximize vehicle range. See *Programmable Charging on page 5-19*.

The process can be stopped by using the procedure to stop charging manually.

End Charge

1. Wait until the charging process has been fully stopped and the Charging Status Indicator is no longer solid green.
2. Unlock the vehicle with the RKE transmitter to disarm the charge cord theft alert.
3. Unplug the DC vehicle plug from the DC charge port on the vehicle.
4. Close the charge port door by pressing firmly in the center to latch properly.
5. The electric parking brake should be manually disengaged before driving the vehicle.
6. To start another DC charge, remove the DC vehicle plug and reconnect.

DC Charging Station Hardware

Typically, DC charging stations will be found in public locations and are not planned for residential home use. This vehicle is capable of charging with SAE J1772 charge stations. Check the charge station DC vehicle plug for compatibility with the DC charge port on this vehicle.

The vehicle is designed to take full advantage of a 55kW DC charger to obtain optimal charging times. When the vehicle is connected to a charger larger than 55kW, the vehicle will not charge any quicker.

The DC vehicle plug is relatively large and can cause damage to personal property if not used correctly. Use caution when connecting to the DC charge port.

Follow the steps listed on the charging station to perform a DC vehicle charge.

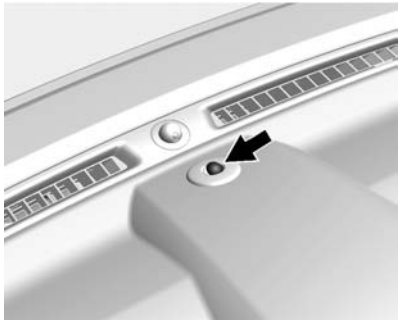
Delayed Charging Override

To temporarily override a delayed charge event, unplug the charge cord from the charge port and then plug it back in within five seconds. A single horn chirp will sound and charging will begin immediately.

To cancel a temporary override, unplug the charge cord, wait for 10 seconds, and then plug the charge cord back in. A double horn chirp will sound and charging will be delayed.

See “Programmable Charging Modes” in *Programmable Charging on page 5-19* for advanced charge scheduling options.

Charging Status Feedback



The vehicle has a Charging Status Indicator (CSI) at the center of the instrument panel near the windshield. When the vehicle is plugged in and the vehicle power is off, the CSI indicates the following:

- Solid Green – Vehicle is plugged in. Battery is not fully charged. Battery is charging.
- Slow Flashing Green – Vehicle is plugged in. Battery is not fully charged. Battery charging is delayed.
- Fast Flashing Green – Vehicle is plugged in. Battery is fully charged.
- Solid Yellow – Vehicle is plugged in. It is normal for the CSI to turn yellow for a few seconds after plugging in a compatible charge cord. The solid yellow may be extended depending on the vehicle and if there is a total utility interruption via OnStar. See *Utility Interruption of Charging on page 9-41*. This may also indicate that the charging system has detected a fault and will not charge the battery. See “Charge Cord Status Indicators” in the charge cord user guide.

The system may be thermally conditioning the battery during any of the states above, requiring electrical energy to be transferred to the vehicle.

If the vehicle is plugged in and vehicle power is on, the CSI will be on solid green. The same is true during a remote start if the vehicle is plugged in.

If the vehicle is plugged in and the CSI is off, a total utility interruption using OnStar or a charging fault has been detected. See *Utility Interruption of Charging on page 9-41* or “Charge Cord Status Indicators” in the charge cord user guide.

This chart indicates vehicle feedback when the charge cord is plugged in.

Charging Status Indicator	Sound	Action/Reason
Solid Green	One horn chirp	Charging has begun.
* Slow Flashing Green	Two horn chirps	Charging is delayed by Programmable Charging (if equipped), by a total utility interruption via OnStar. Charging will begin later. See *Utility Interruption of Charging on page 9-41*. This may also occur during the start of DC charging.
Fast Flashing Green	None	Charging is complete.
Yellow (Upon Plug-in)	None	Charge cord is OK and vehicle is not yet charging.
Yellow (For Extended Time Period after Plug-in)	None	Charge cord is OK, but vehicle is not charging. This may be due to a total utility interruption via OnStar and charging will begin later. See *Utility Interruption of Charging on page 9-41*.
* Solid Green or Slow Flashing Green	Four horn chirps	Insufficient time to fully charge by departure time.
None (Upon Plug-in)	None	Charge cord connection should be checked.

Charging Status Indicator	Sound	Action/Reason
None (After Green or Yellow CSI Indication Observed)	None	Charge cord connection should be checked. If connection is good, this may be due to a total utility interruption via OnStar and charging will begin later. See *Utility Interruption of Charging on page 9-41*. Turning the vehicle on or activating remote start while the vehicle is charging may use more energy than the charger provides and may cause the charging process to deactivate. Make sure the vehicle is off and restart the charging process.
None	Repeated horn chirps To stop this alert, do one of the following: • Unplug the charge cord. • Press on the RKE transmitter. • Press and hold on the RKE transmitter, then press again to stop the panic alarm. • Press the horn pad.	Electricity was interrupted before charging was complete.
* Solid Green	Two horn chirps	Charging has begun but vehicle will delay at some point in time prior to charge completion by Programmable Charging.

* - Does not apply to DC charging.

Charge Cord

See *Radio Frequency Statement on page 13-12*.

A portable charge cord used to charge the vehicle high voltage battery is stored in the rear hatch.

Important Information About Portable Electric Vehicle Charging

- Charging an electric vehicle can stress a building's electrical system more than a typical household appliance.
- Before you plug in to any electrical outlet, have a qualified electrician inspect and verify the electrical system (electrical outlet, wiring, junctions, and protection devices) for heavy-duty service at a 12 amp continuous load.
- Electrical outlets may wear out with normal usage or be damaged over time, making them unsuitable for electric vehicle charging.
- Check the electrical outlet/plug while charging and discontinue use if the electrical outlet/plug is hot, then have the electrical outlet serviced by a qualified electrician.
- When outdoors, plug into an electrical outlet that is weather-proof while in use.
- Mount the charge cord to reduce strain on the electrical outlet/plug.

⚠ Warning

Improper use of portable electric vehicle charge cords may cause a fire, electrical shock, or burns, and may result in damage to property, serious injury, or death.

(Continued)

Warning (Continued)

- Do not use extension cords, multi-outlet power strips, splitters, grounding adaptors, surge protectors, or similar devices.
- Do not use an electrical outlet that is worn or damaged, or one that will not hold the plug firmly in place.
- Do not use an electrical outlet that is not properly grounded.
- Do not use an electrical outlet that is on a circuit with other electrical loads.

See the charge cord user guide.

Charge Cord Status Indicators

See "Charge Cord Status Indicators" in the charge cord user guide.

Charge Level Selection

Charge level selection can be made using the Change Charge Level setting on the center stack. See *Programmable Charging on page 5-19*.

⚠ Warning

Using a charge level that exceeds the electrical circuit or electrical outlet capacity may start a fire or damage the electrical circuit. Use the lowest charge level until a qualified electrician inspects your electrical circuit capacity. Use the lowest charge level if the electrical circuit or electrical outlet capacity is not known.

Utility Interruption of Charging

For participating customers using AC charging, this vehicle will respond to remote requests via OnStar to limit or completely block electrical power grid usage for brief time periods. A utility interruption of charging may increase AC vehicle charge times, but will not affect DC charge times.

When electrical grid power is completely blocked, the vehicle will delay charging until the utility interruption has expired. The vehicle should be left plugged in so that, when the utility interruption expires, the vehicle can automatically begin charging.

Changing the charge mode to Immediate or performing a delayed charging override will not disable a utility interruption.

A pop-up will appear in the center stack display during the key cycle following any utility interruption. See “Charging Override/Interruption Pop-up” under *Programmable Charging on page 5-19*.

Text will be displayed on the instrument cluster indicating that a utility interruption has occurred. See *Instrument Cluster on page 5-7*.

Electrical Requirements for Battery Charging

This vehicle is capable of being charged with most standard vehicle charging equipment complying to one or more of the following:

- SAE J1772
- SAE J2847-2
- IEC 61851-1
- IEC 61851-22
- IEC 61851-23
- IEC 61851-24
- IEC 62196-1
- IEC 62196-2
- IEC 62196-3
- ISO 15118

The following are the minimum requirements for circuits used to charge this vehicle:

- 120 volts/15 amps
- 240 volts/20 amps

Charging equipment with a rating of at least 240 volts/20 amps will provide the fastest charging time and best charging efficiency to recharge the high voltage battery. 240 volt/40 amp circuits provide flexibility for future vehicle charging needs. Always follow the charging equipment installation instructions. Contact your dealer for more information.

⚠ Caution

Do not use portable or stationary backup generating equipment to charge the vehicle. This may cause damage to the vehicle's charging system. Only charge the vehicle from utility supplied power.

Trailer Towing

General Towing Information

The vehicle is neither designed nor intended to tow a trailer.

Conversions and Add-Ons

Add-On Electrical Equipment

⚠ Caution

Some electrical equipment can damage the vehicle or cause components to not work and would not be covered by the warranty. Always check with your dealer before adding electrical equipment.

Add-on equipment can drain the vehicle's 12-volt battery, even if the vehicle is not operating.

When adding electrical equipment, it should only be connected using the accessory power outlets. The maximum power that can be supplied by one accessory power outlet or spread across all three is 200 watts or 15 amps. Exceeding

200 watts or 15 amps may cause erratic vehicle operation. See *Power Outlets on page 5-6*.

The vehicle has an airbag system. Before attempting to add anything electrical to the vehicle, see *Servicing the Airbag-Equipped Vehicle on page 3-27* and *Adding Equipment to the Airbag-Equipped Vehicle on page 3-27*.

✍ NOTES

Vehicle Care

General Information

General Information 10-2
California Proposition 65 Warning 10-2
California Perchlorate Materials Requirements 10-2
Accessories and Modifications 10-2

Vehicle Checks

Doing Your Own Service Work 10-3
Hood 10-4
Underhood Compartment Overview 10-6
Cooling System (High Voltage Battery) 10-7
Cooling System (TPIM, APM, and Charger Modules) 10-8
Cabin Heating Coolant System 10-9
Washer Fluid 10-10
Brakes 10-11
Brake Fluid 10-11
Battery 10-13
Wiper Blade Replacement 10-15

Headlamp Aiming

Headlamp Aiming 10-16

Bulb Replacement

Bulb Replacement 10-16
Halogen Bulbs 10-16
Headlamps, Front Turn Signal and Parking Lamps 10-17
Taillamps, Turn Signal, Stoplamps, and Back-Up Lamps 10-18
License Plate Lamp 10-18
Replacement Bulbs 10-19

Electrical System

Electrical System Overload 10-19
Fuses and Circuit Breakers 10-20
Underhood Compartment Fuse Block 10-20
Instrument Panel Fuse Block 10-25

Wheels and Tires

Tires 10-27
Winter Tires 10-28
Summer Tires 10-29
Tire Sidewall Labeling 10-29
Tire Designations 10-30
Tire Terminology and Definitions 10-31
Tire Pressure 10-34
Tire Pressure Monitor System 10-35
Tire Pressure Monitor Operation 10-36
Tire Inspection 10-39
Tire Rotation 10-39
When It Is Time for New Tires 10-41
Buying New Tires 10-41
Different Size Tires and Wheels 10-43
Uniform Tire Quality Grading 10-43
Wheel Alignment and Tire Balance 10-45
Wheel Replacement 10-45
Tire Chains 10-46

If a Tire Goes Flat 10-46
Tire Sealant and Compressor Kit 10-48
Storing the Tire Sealant and Compressor Kit 10-55

Jump Starting
Jump Starting 10-55

Towing the Vehicle
Towing the Vehicle 10-58
Recreational Vehicle Towing 10-58

Appearance Care
Exterior Care 10-60
Interior Care 10-64
Floor Mats 10-68

General Information

For service and parts needs, visit your dealer. You will receive genuine GM parts and GM-trained and supported service people.

Genuine GM parts have one of these marks:

California Proposition 65 Warning

Most motor vehicles, including this one, contain and/or emit chemicals known to the State of California to cause cancer and birth defects or other reproductive harm. Engine exhaust, many parts and systems, many fluids, and some component wear by-products contain and/or emit these chemicals.

California Perchlorate Materials Requirements

Certain types of automotive applications, such as airbag initiators, safety belt pretensioners, and lithium batteries contained in Remote Keyless Entry transmitters, may contain perchlorate materials. Special handling may be necessary. For additional information, see www.dtsc.ca.gov/hazardouswaste/perchlorate.

Accessories and Modifications

Adding non-dealer accessories or making modifications to the vehicle can affect vehicle performance and safety, including such things as airbags, braking, stability, ride and

handling, emissions systems, aerodynamics, durability, and electronic systems like antilock brakes, traction control, and stability control. These accessories or modifications could even cause malfunction or damage not covered by the vehicle warranty.

Damage to vehicle components resulting from modifications or the installation or use of non-GM certified parts, including control module or software modifications, is not covered under the terms of the vehicle warranty and may affect remaining warranty coverage for affected parts.

GM Accessories are designed to complement and function with other systems on the vehicle. See your dealer to accessorize the vehicle using genuine GM Accessories installed by a dealer technician.

Also, see *Adding Equipment to the Airbag-Equipped Vehicle on page 3-27*.

Vehicle Checks

Doing Your Own Service Work

⚠ Warning

Never try to do your own service on high voltage battery components. You can be injured and the vehicle can be damaged if you try to do your own service work. Service and repair of these high voltage battery components should only be performed by a trained dealer technician with the proper knowledge and tools.

Exposure to high voltage can cause shock, burns, and even death. The high voltage components in the vehicle can only be serviced by technicians with special training.

(Continued)

Warning (Continued)

High voltage components are identified by labels. Do not remove, open, take apart, or modify these components. High voltage cable or wiring has orange covering. Do not probe, tamper with, cut, or modify high voltage cable or wiring.

⚠ Warning

It can be dangerous to work on your vehicle if you do not have the proper knowledge, service manual, tools, or parts. Always follow owner manual procedures and consult the service manual for your vehicle before doing any service work.

If doing some of your own service work, use the proper service manual. It tells you much more

about how to service the vehicle than this manual can. To order the proper service manual, see *Service Publications Ordering Information on page 13-11*.

This vehicle has an airbag system. Before attempting to do your own service work, see *Airbag System Check on page 3-28*.

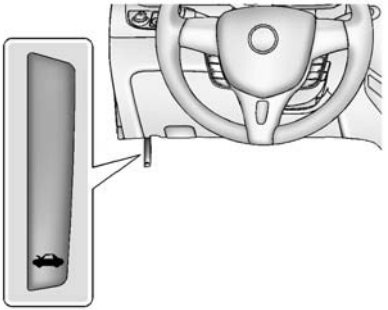
Keep a record with all parts receipts and list the mileage and the date of any service work performed. See *Maintenance Records on page 11-10*.

⚠ Caution

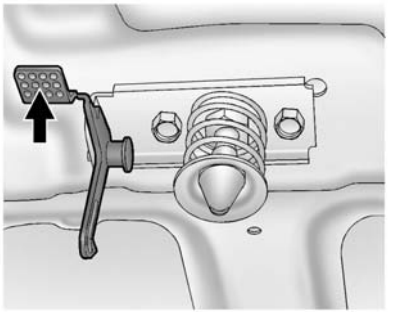
Even small amounts of contamination can cause damage to vehicle systems. Do not allow contaminants to contact the fluids, reservoir caps, or dipsticks.

Hood

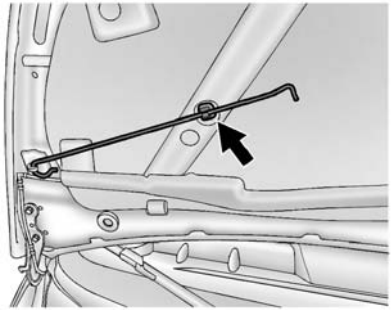
To open the hood:



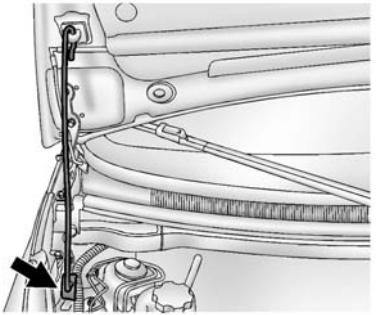
1. Pull the hood release handle inside the vehicle. It is on the lower left side of the instrument panel.



2. Go to the front of the vehicle and push the secondary hood release lever up.



3. Lift the hood and release the hood prop from the prop retainer, which is under the hood.

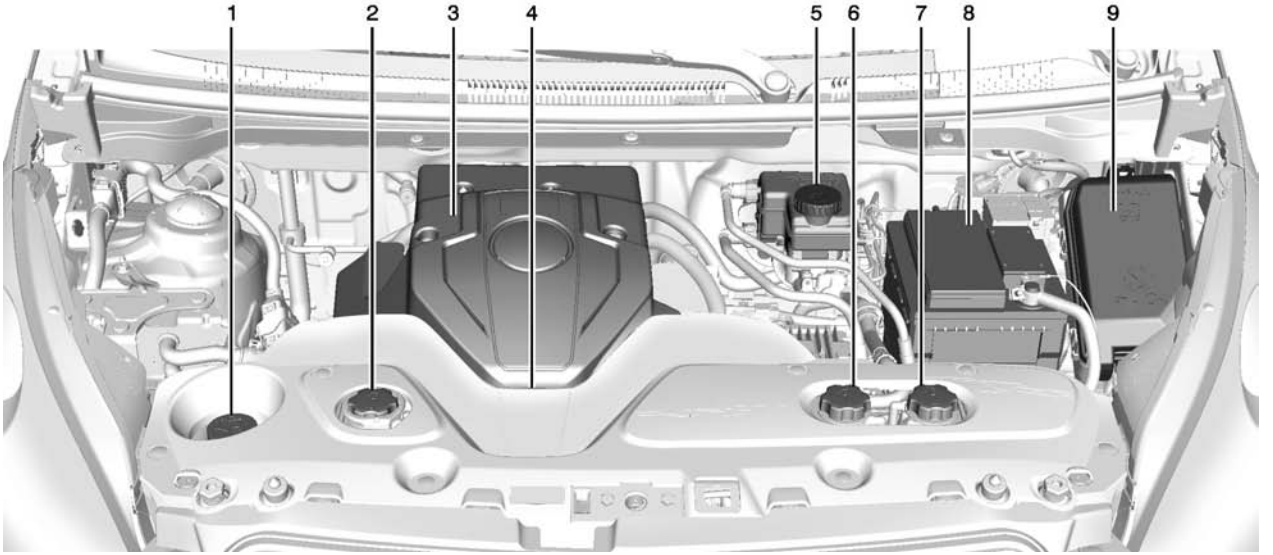


4. Securely place the hood prop into the hood prop holder, at the rear passenger side of the underhood compartment.

To close the hood:

1. Before closing the hood, be sure all filler caps are on properly. Then, lift the hood to relieve pressure on the hood prop. Remove the hood prop from the prop holder in the rear passenger side of the underhood compartment and secure it to the retainer on the underside of the hood. The prop rod must click into place when returning it to the retainer to prevent hood damage.
2. Lower the hood 30 cm (12 in) above the vehicle and release it so it fully latches. Check to make sure the hood is closed and repeat the process if necessary.

Underhood Compartment Overview



1. Windshield Washer Fluid Reservoir. See *Washer Fluid on page 10-10*.
2. High Voltage Battery Coolant Reservoir. See “Cooling System (High Voltage Battery)” following.
3. Traction Power Inverter Module (TPIM), Accessory Power Module (APM), and Charger Module (Under Cover).
4. Cooling Fan (Out of View). See “Cooling System (High Voltage Battery)” following.
5. Brake Fluid Reservoir. See *Brakes on page 10-11*.
6. TPIM, APM, and Charger Module Coolant Reservoir. See “Cooling System (High Voltage Battery)” following.
7. Heater Coolant Reservoir. See *Cabin Heating Coolant System on page 10-9*.
8. *Battery on page 10-13*.
9. *Underhood Compartment Fuse Block on page 10-20*.

Cooling System (High Voltage Battery)

During vehicle operation and also during charging, the high voltage battery cells in the vehicle are kept within a normal operating temperature range. If the temperature rises above this temperature, the battery cooling system turns on the air conditioning compressor and cools the coolant until the correct temperature is reached. If the temperature falls below this temperature, a high voltage heater, located in the battery, heats the coolant until the correct temperature is reached.

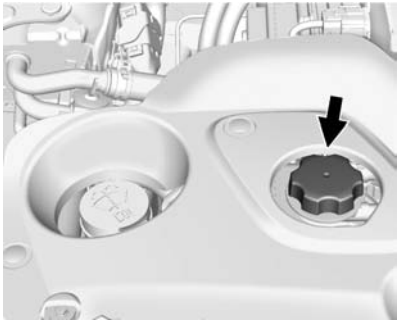
The high voltage battery cooling system reservoir has a tamper resistant cap. The high voltage battery coolant should only be serviced by a qualified technician.

The coolant needs to be replaced at the appropriate interval. See *Maintenance Schedule on page 11-2*.

Checking Coolant

The vehicle must be on a level surface when checking the coolant level.

The high voltage battery coolant reservoir is in the underhood compartment. See *Underhood Compartment Overview on page 10-6*.



Check to see if coolant is visible in the high voltage battery coolant reservoir. If coolant is visible but the

coolant level is below the cold fill line, there could be a leak in the cooling system.

Cooling System (TPIM, APM, and Charger Modules)

The Traction Power Inverter Module (TPIM), Accessory Power Module (APM), and charger module are cooled using a separate coolant loop.

These modules are kept below a maximum temperature. If the temperature rises above this temperature, the electric cooling fan will turn on to cool the coolant.

What to Use

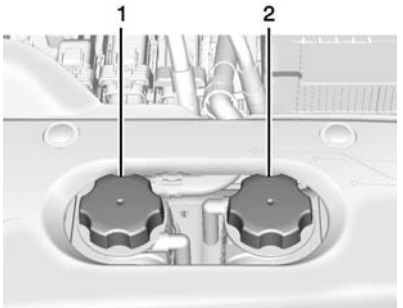
The coolant reservoir for these modules is filled with a 50/50 mixture of DEX-COOL coolant and deionized water. See *Recommended Fluids and Lubricants on page 11-8*. If using this mixture, nothing else needs to be added.

The coolant needs to be replaced at the appropriate interval. See *Maintenance Schedule on page 11-2*.

Checking Coolant

The vehicle must be on a level surface when checking the coolant level.

The reservoir is in the underhood compartment. See *Underhood Compartment Overview on page 10-6*.



1. TPIM, APM, and Charger Module Coolant Reservoir
2. Heater Coolant Reservoir

Check to see if coolant is visible in the reservoir. If coolant is visible but the coolant level is below the cold fill line, there could be a leak in the cooling system.

How to Add Coolant to the Coolant Reservoir

If no problem is found, add the coolant mixture at the coolant reservoir.

The coolant reservoir pressure cap can be removed when the cooling system, including the pressure cap, is no longer hot.

1. Turn the pressure cap counterclockwise and remove it.

2. Fill the coolant reservoir with the proper coolant mixture to the cold fill line on the side of the coolant reservoir.
3. Reinstall the pressure cap tightly.

Check the level in the coolant reservoir when the cooling system has cooled down. If the coolant is not at the proper level, repeat Steps 1 and 2, then reinstall the pressure cap. If the coolant still is not at the proper level when the system cools down again, see your dealer.

Cabin Heating Coolant System

Cabin heating uses a separate coolant system.

When cabin heating is requested, the heater and heater coolant pump are turned on to circulate warm coolant through the heater core.

What to Use

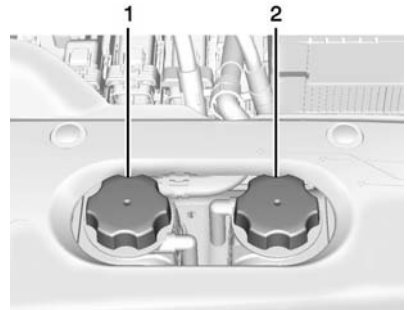
The coolant reservoir is filled with a 50/50 mixture of DEX-COOL coolant and deionized water. See *Recommended Fluids and Lubricants on page 11-8*. If using this mixture, nothing else needs to be added.

The coolant needs to be replaced at the appropriate interval. See *Maintenance Schedule on page 11-2*.

Checking Coolant

The vehicle must be on a level surface when checking the coolant level.

The reservoir is in the underhood compartment. See *Underhood Compartment Overview on page 10-6*.



1. TPIM, APM, and Charger Module Coolant Reservoir
2. Heater Coolant Reservoir

Check to see if coolant is visible in the reservoir. If coolant is visible but the coolant level is below the cold fill line, there could be a leak in the system.

How to Add Coolant to the Coolant Reservoir

If no problem is found, add the proper DEX-COOL coolant mixture at the coolant reservoir.

The coolant reservoir pressure cap can be removed when the cooling system, including the pressure cap, is no longer hot.

1. Turn the pressure cap counterclockwise and remove it.
2. Fill the coolant reservoir with the proper coolant mixture to the cold fill line on the side of the coolant reservoir.
3. Reinstall the pressure cap tightly.

Check the level in the coolant reservoir when the cooling system has cooled down. If the coolant is not at the proper level, repeat Steps 1 and 2, then reinstall the pressure cap. If the coolant still is not at the proper level when the system cools down again, see your dealer.

Washer Fluid

What to Use

When windshield washer fluid is needed, be sure to read the manufacturer's instructions before use. If operating the vehicle in an area where the temperature may fall below freezing, use a fluid that has sufficient protection against freezing.

Adding Washer Fluid

Open the cap with the washer symbol on it. Add washer fluid until the tank is full. See *Underhood Compartment Overview on page 10-6* for reservoir location.

⚠ Caution

- Do not use engine coolant (antifreeze) in the windshield washer. It can damage the windshield washer system and paint.
- Do not mix water with ready-to-use washer fluid. Water can cause the solution to freeze and damage the washer fluid tank and other parts of the washer system.
- When using concentrated washer fluid, follow the manufacturer instructions for adding water.
- Fill the washer fluid tank only three-quarters full when it is very cold. This allows for fluid expansion if freezing occurs, which could damage the tank if it is completely full.

Brakes

Disc brake pads have built-in wear indicators that make a high-pitched warning sound when the brake pads are worn and new pads are needed. The sound can come and go or be heard all the time when the vehicle is moving, except when applying the brake pedal firmly.

⚠ Warning

The brake wear warning sound means that soon the brakes will not work well. That could lead to a crash. When the brake wear warning sound is heard, have the vehicle serviced.

⚠ Caution

Continuing to drive with worn-out brake pads could result in costly brake repair.

Some driving conditions or climates can cause a brake squeal when the brakes are first applied or lightly applied. This does not mean something is wrong with the brakes.

Properly torqued wheel nuts are necessary to help prevent brake pulsation. When tires are rotated, inspect brake pads for wear and evenly tighten wheel nuts in the proper sequence to torque specifications. See *Capacities and Specifications on page 12-2*.

Brake pads should be replaced as complete sets.

Brake Pedal Travel

See your dealer if the brake pedal does not return to normal height, or if there is a rapid increase in pedal travel. This could be a sign that brake service may be required.

Replacing Brake System Parts

Always replace brake system parts with new, approved replacement parts. If this is not done, the brakes may not work properly. The braking performance expected can change in many other ways if the wrong replacement brake parts are installed or parts are improperly installed.

Brake Fluid

The brake master cylinder reservoir is filled with DOT 4 brake fluid as indicated on the reservoir cap. See *Underhood Compartment Overview on page 10-6* for the location of the reservoir.

There are only two reasons why the brake fluid level in the reservoir might go down:

- The brake fluid level goes down because of normal brake lining wear. When new linings are installed, the fluid level goes back up.
- A fluid leak in the brake hydraulic system can also cause a low fluid level. Have the brake hydraulic system fixed, since a leak means that sooner or later the brakes will not work well.

Do not top off the brake fluid. Adding fluid does not correct a leak. If fluid is added when the linings are worn, there will be too much fluid when new brake linings are installed. Add or remove fluid, as necessary, only when work is done on the brake hydraulic system.

Checking Brake Fluid

The brake fluid can be checked without taking off the cap by looking at the brake fluid reservoir.

The fluid level should be above MIN. If it is not, have the brake hydraulic system checked to see if there is a leak.

After work is done on the brake hydraulic system, make sure the level is above MIN but not over the MAX mark.

When the brake fluid falls to a low level, the brake system warning light comes on. See *Brake System Warning Light on page 5-13*.

What to Add

Use only new DOT 4 brake fluid from a sealed container. It is recommended that the brake hydraulic system be flushed and refilled with new DOT 4 fluid at a regular maintenance service every two years. See *Maintenance Schedule on page 11-2* and *Recommended Fluids and Lubricants on page 11-8*.

Always clean the brake fluid reservoir cap and the area around the cap before removing it. This helps keep dirt from entering the reservoir.

⚠ Warning

With the wrong kind of fluid in the brake hydraulic system, the brakes might not work well. This could cause a crash. Always use the proper brake fluid.

⚠ Caution

- Using the wrong fluid can badly damage brake hydraulic system parts. For example, just a few drops of mineral-based oil, such as engine oil, in the brake hydraulic system can damage brake hydraulic system parts so badly that they will have to

(Continued)

Caution (Continued)

be replaced. Do not let someone put in the wrong kind of fluid.

- If brake fluid is spilled on the vehicle's painted surfaces, the paint finish can be damaged. Be careful not to spill brake fluid on the vehicle. If you do, wash it off immediately.

Battery

The original equipment battery is maintenance free. Do not remove the cap and do not add fluid.

This vehicle has a high voltage battery and a standard 12-volt battery.

If the vehicle is in a crash, the sensing system may shut down the high voltage system. When this occurs, the high voltage battery is disconnected and the vehicle will not start. The SERVICE VEHICLE SOON message in the Driver Information Center (DIC) will be displayed. Before the vehicle can be operated again, it must be serviced at your dealer.

See “If a Crash Occurs” under *Collision Damage Repair on page 13-9* for additional information. If an airbag has inflated, see *What Will You See after an Airbag Inflates? on page 3-21*.

Only a trained service technician with the proper knowledge and tools should inspect, test, or replace the high voltage battery. See your dealer if the high voltage battery needs service. The dealer has information on how to recycle the high voltage battery. There is also information available at http://www.recyclemybattery.com.

Keep the vehicle plugged in, even when fully charged, to keep the high voltage battery temperature ready for the next drive. This is important when outside temperatures are extremely hot or cold.

Propulsion power may be reduced in extremely cold temperatures, or if the high voltage battery is too cold. BATTERY TOO COLD, PLUG IN TO WARM will display. See *Battery and Charging Messages on page 5-30*.

A vehicle cover, which can reduce sun loading on the vehicle and improve high voltage battery life, is available from your dealer.

Refer to the replacement number shown on the original battery label when a new 12-volt battery is needed. The vehicle has an Absorbed Glass Mat (AGM) 12-volt battery. Installation of a standard 12-volt battery will result in reduced 12-volt battery life.

When using a 12-volt battery charger on the 12-volt AGM battery, some chargers have an AGM battery setting on the charger.

If available, use the AGM setting on the charger, to limit charge voltage to 14.8 volts.

⚠ Warning

Battery posts, terminals, and related accessories contain lead and lead compounds, chemicals known to the State of California to cause cancer and reproductive harm. Wash hands after handling.

Vehicle Storage

⚠ Warning

12-volt batteries have acid that can burn you and gas that can explode. You can be badly hurt if you are not careful. See *Jump Starting on page 10-55* for tips on working around a battery without getting hurt.

Up to Four Weeks

- Plug in the charge cord.

Four Weeks to 12 Months

- Discharge the high voltage battery until two or three bars remain on the battery range indicator (Battery symbol) on the instrument cluster.
- Do not plug in the charge cord.
- Remove the black negative (−) cable from the 12-volt battery and attach a trickle charger to the battery terminals or keep the 12-volt battery cables connected and trickle charge from the underhood remote positive (+) and negative (−) terminals. See *Jump Starting on page 10-55* for the location of these terminals.

⚠ Caution

The vehicle is equipped with an AGM/VRLA 12-volt battery, which can be damaged by using the incorrect type of trickle charger. An AGM/VRLA-compatible charger must be used, with the appropriate setting selected. Follow the trickle charger manufacturer instructions.

Reconnecting the 12-Volt Black Negative Cable

With the 12-volt black negative (−) cable disconnected, the hatch cannot be opened by pressing the hatch release button. If the hatch is closed and latched, reopen it:

1. Use the door key to open the driver door.
2. Manually unlock and open one of the rear doors.
3. Lower one of the rear seatbacks.

4. Pull the load floor cover forward to access and reconnect the 12-volt battery black negative (−) cable.
5. After the cable has been connected, open the hatch and then tighten the cable.

After the battery cable is reconnected, it is possible that the vehicle may not operate. If this happens, the high voltage battery may need to be charged.

Wiper Blade Replacement

Front Wiper Blade Replacement

Windshield wiper blades should be inspected for wear or cracking. See *Maintenance Schedule on page 11-2*.

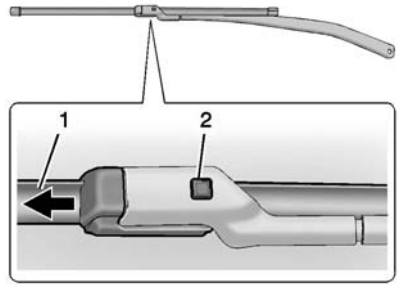
Replacement blades come in different types and are removed in different ways. For proper windshield wiper blade length and type, see *Maintenance Replacement Parts on page 11-9*.

⚠ Caution

Allowing the wiper arm to touch the windshield when no wiper blade is installed could damage the windshield. Any damage that occurs would not be covered by the vehicle warranty. Do not allow the wiper arm to touch the windshield.

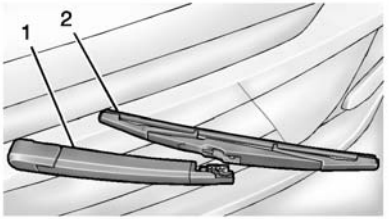
To replace the windshield wiper blade:

1. Pull the windshield wiper assembly away from the windshield.



2. Press the button (2) in the middle of the wiper arm connector, and pull the wiper blade away from the arm connector (1).
3. Remove the wiper blade.
4. Reverse Steps 1–3 for wiper blade replacement.

Rear Wiper Blade Replacement



1. Pull the wiper arm (1) a short distance away from the glass.
2. Push the blade (2) away from the arm (1).
3. Once the blade pin disengages from the wiper arm, remove the wiper blade by sliding the blade off the arm.
4. Reverse the steps to install the new blade.

Headlamp Aiming

Headlamp aim has been preset and should need no further adjustment.

If the vehicle is damaged in a crash, the headlamp aim may be affected. If adjustment to the headlamps is necessary, see your dealer.

Bulb Replacement

For the proper type of replacement bulbs, see *Replacement Bulbs on page 10-19*.

For any bulb-changing procedure not listed in this section, contact your dealer.

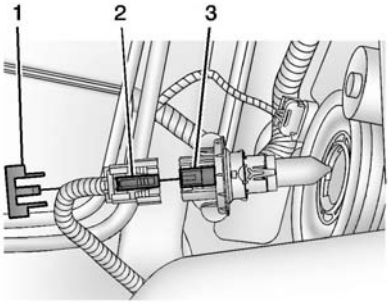
Halogen Bulbs

⚠ Warning

Halogen bulbs have pressurized gas inside and can burst if you drop or scratch the bulb. You or others could be injured. Be sure to read and follow the instructions on the bulb package.

Headlamps, Front Turn Signal and Parking Lamps

High/Low-Beam Headlamp



1. Connector Retaining Tab
2. Connector Release
3. Headlamp Bulb

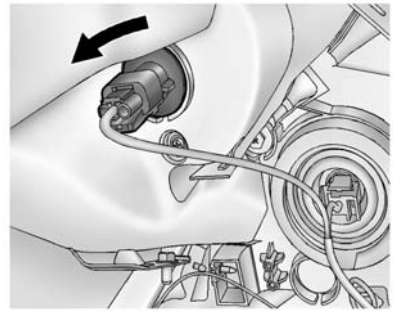
To replace a headlamp bulb:

1. Open the hood. See *Hood on page 10-4*.
2. Remove the connector retaining tab (1).
3. Disconnect the wiring harness connector from the bulb (3) by pressing the connector release (2) and pulling straight back.
4. Remove the bulb (3) from the headlamp assembly by turning counterclockwise and pulling straight back.
5. Install the new bulb in the headlamp assembly by turning clockwise.
6. Install the wiring harness connector to the bulb. Be sure the connector release (2) locks into place.
7. Install the connector retaining tab (1).

Front Turn Signal/Parking Lamps

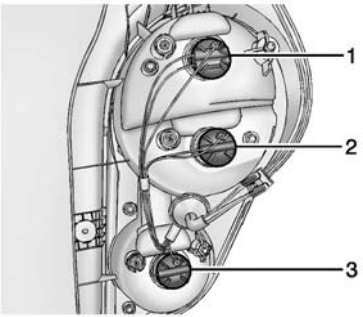
To replace a front turn signal bulb:

1. Open the hood. See *Hood on page 10-4*.



2. Turn the bulb socket counterclockwise and pull it out of the lamp housing.
3. Pull the bulb straight out of the bulb socket.
4. Install the new bulb into the socket by pressing it in.
5. Install the socket into the lamp housing by turning it clockwise.

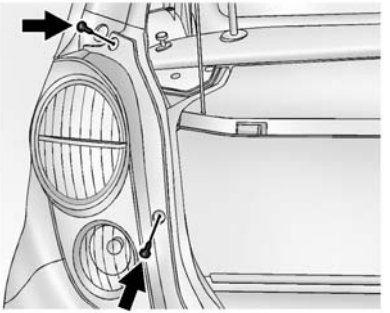
Taillamps, Turn Signal, Stoplamps, and Back-Up Lamps



1. Stoplamp/Taillamp
2. Turn Signal Lamp/Taillamp
3. Back-up Lamp

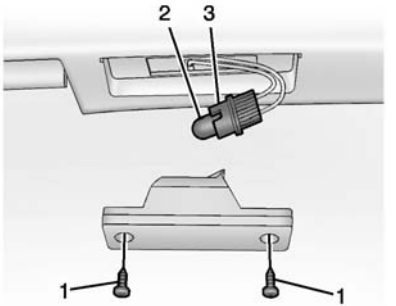
To replace a taillamp, turn signal lamp, stoplamp, or back-up bulb:

1. Open the liftgate. See *Liftgate on page 2-11*.



2. Remove the two screws and the lamp assembly.
3. Turn the bulb socket counterclockwise and remove the socket.
4. Press the bulb in and turn counterclockwise to remove it from the socket.
5. Press the new bulb in and turn clockwise to install the bulb into the socket.
6. Turn the bulb socket clockwise to reinstall.
7. Reinstall the lamp assembly and two screws.

License Plate Lamp



1. Attachment Screws
2. License Plate Bulb
3. Bulb Socket

To replace a license plate lamp bulb:

1. Remove the two screws (1) from the license plate lamp assembly.
2. Turn and pull the license plate lamp assembly down.

3. Turn the bulb socket (3) counterclockwise and pull it out of the lamp assembly.
4. Pull the bulb (2) straight out of the socket.
5. Push the new bulb into the socket.
6. Install the bulb socket (3) by turning clockwise into the license plate lamp assembly.
7. Replace the license plate lamp assembly by using the two screws to secure.

Replacement Bulbs

Exterior Lamp	Bulb Number
Back-Up Lamps	921
Front Turn Signal/ Parking Lamps	7444NA
High/Low-Beam Headlamp	H13
License Plate Lamp	W5W LL
Rear Turn Signal/ Taillamps	7443 LL
Stoplamp/ Taillamps	7443 LL

For replacement bulbs not listed here, contact your dealer.

Electrical System

Electrical System Overload

The vehicle has fuses and circuit breakers to protect against an electrical system overload.

When the current electrical load is too heavy, the circuit breaker opens and closes, protecting the circuit until the current load returns to normal or the problem is fixed. This greatly reduces the chance of circuit overload and fire caused by electrical problems.

Fuses and circuit breakers protect power devices in the vehicle.

Replace a bad fuse with a new one of the identical size and rating.

If there is a problem on the road and a fuse needs to be replaced, the same amperage fuse can be borrowed. Choose some feature of the vehicle that is not needed to use and replace it as soon as possible.

Headlamp Wiring

An electrical overload may cause the lamps to go on and off, or in some cases to remain off. Have the headlamp wiring checked right away if the lamps go on and off or remain off.

Windshield Wipers

If the wiper motor overheats due to heavy snow or ice, the windshield wipers will stop until the motor cools and will then restart.

Although the circuit is protected from electrical overload, overload due to heavy snow or ice may cause wiper linkage damage. Always clear ice and heavy snow from the windshield before using the windshield wipers.

If the overload is caused by an electrical problem and not snow or ice, be sure to get it fixed.

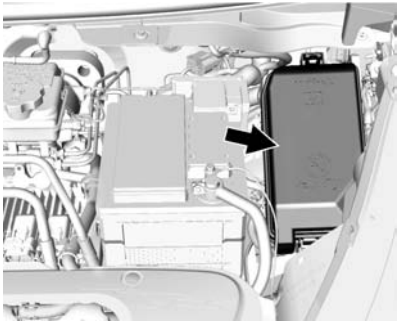
Fuses and Circuit Breakers

The wiring circuits in the vehicle are protected from short circuits by a combination of fuses, circuit breakers, and fusible thermal links. This greatly reduces the chance of fires caused by electrical problems.

Look at the silver-colored band inside the fuse. If the band is broken or melted, replace the fuse. Be sure you replace a bad fuse with a new one of the identical size and rating.

Fuses of the same amperage can be temporarily borrowed from another fuse location, if a fuse goes out. Replace the fuse as soon as you can.

Underhood Compartment Fuse Block

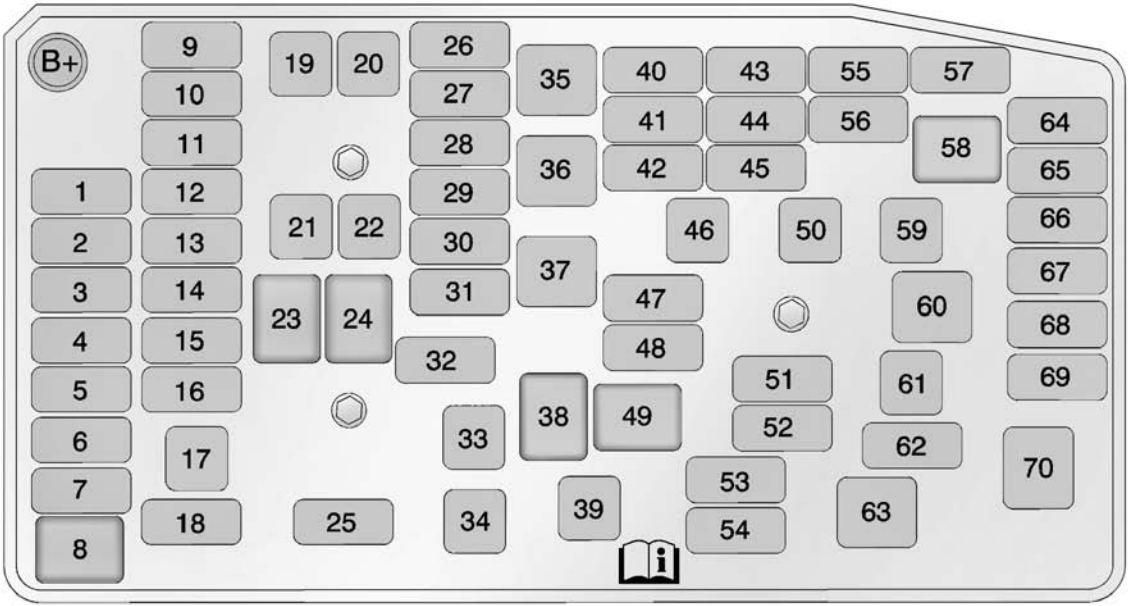


The underhood compartment fuse block is on the driver side of the vehicle, near the battery.

⚠ Caution

Spilling liquid on any electrical component on the vehicle may damage it. Always keep the covers on any electrical component.

To access the fuses, press the tab at the back of the cover, and lift the cover.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The vehicle may not be equipped with all of the fuses, relays, and features shown.

Number	Usage
1	TPIM1 Fuse
2	Engine Control Module Fuse
3	Not Used
4	CHCM Fuse
5	ACCM Fuse
6	High-Beam Headlamp Fuse–Right
7	High-Beam Headlamp Fuse–Left
8	Horn Relay
9	RESS Coolant Pump Fuse
10	TPIM2 Fuse
11	HPCC Fuse
12	Auxiliary Heater Pump Fuse
13	ACCM Fuse
14	HPCC Fuse
15	Washer Fuse
16	PE Coolant Pump Fuse
17	High-Beam Headlamp Relay
18	Base/Dual Horn Fuse
19	OBCM Fuse
20	Antilock Brake System Pump Fuse
21	Antilock Brake System Valve Fuse
22	Not Used
23	Rear Washer Relay
24	Front Washer Relay
25	Antilock Brake System Oil Feeding Fuse
26	OBCM Fuse
27	TPIM Fuse
28	VICM Fuse
29	RESS Fuse
30	Not Used
31	Not Used
32	Not Used
33	Not Used
34	Engine Cooling Fan Fuse
35	Second Run/Crank Relay
36	Run/Crank Relay
37	Not Used

Number	Usage
38	Front Wiper Control Relay
39	Front Wiper Fuse
40	VICM Fuse
41	Electronic Brake Control Module Fuse
42	Engine Control Module Fuse
43	Automatic Occupant Sensing System Fuse
44	PWM Fuse
45	Rear View Camera Fuse
46	Instrument Panel Fuse Block Run/ Crank Fuse
47	Aero Shutter Fuse
48	HLLD Fuse

Number	Usage
49	Front Wiper Speed Relay
50	Not Used
51	Not Used
52	Not Used
53	Outside Rearview Heated Mirror Fuse
54	Rear Defog Fuse
55	RESS1 Fuse
56	Voltage Sensing Fuse
57	Rear Wiper Fuse
58	Rear Wiper Relay
59	Not Used
60	Not Used
61	Electric Parking Brake Fuse
62	Passive Entry/ Passive Start Fuse
63	Rear Defog Relay

Number	Usage
64	Spare Fuse
65	Spare Fuse
66	Spare Fuse
67	Spare Fuse
68	Spare Fuse
69	Spare Fuse
70	Fuse Puller

Instrument Panel Fuse Block

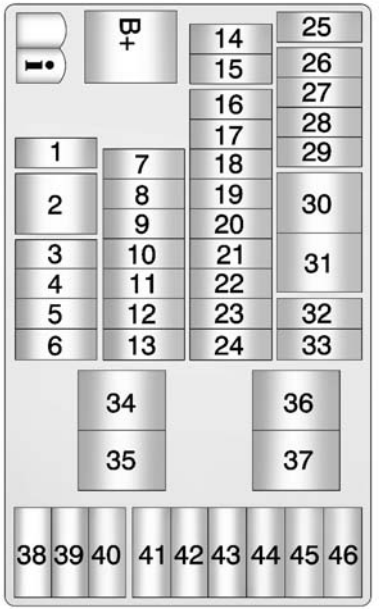
The instrument panel fuse block is on the underside of the driver side instrument panel.

Open the fuse panel door by pulling out at the top.

Remove the fuse panel door diagonally.

⚠ Caution

Spilling liquid on any electrical component on the vehicle may damage it. Always keep the covers on any electrical component.



The vehicle may not be equipped with all of the fuses, relays, and features shown.

Number	Usage
1	Not Used
2	Not Used
3	Heater, Ventilation, and Air Conditioning Switch
4	Heated Seat
5	Not Used
6	Not Used
7	Body Control Module 4
8	Body Control Module 5
9	Body Control Module 7
10	Instrument Cluster
11	Discrete Logic Ignition Switch
12	Airbag Power
13	Radio

Number	Usage
14	Steering Wheel Controls Backlighting
15	Not Used
16	Body Control Module 1
17	Body Control Module 2
18	Body Control Module 3
19	Body Control Module 6
20	Body Control Module 8
21	Heater, Ventilation, and Air Conditioning
22	Data Link Connector
23	Pedestrian Safety Signal

Number	Usage
24	Outside Rearview Mirror
25	Spare Fuse
26	Headlamp Leveling
27	Park Assist
28	Instrument Cluster
29	Not Used
30	Rear Window
31	Front Window
32	Lighter/Auxiliary Power Outlet
33	Rear Auxiliary Power Outlet
34	Run Relay
35	Logic Mode Relay
36	Accessory/ Retained Accessory Power Relay
37	Not Used

Number	Usage
38	Radio
39	Heater, Ventilation, and Air Conditioning
40	OnStar
41	Spare Fuse
42	Spare Fuse
43	Spare Fuse
44	Spare Fuse
45	Spare Fuse
46	Spare Fuse

Wheels and Tires

Tires

Every new GM vehicle has high-quality tires made by a leading tire manufacturer. See the warranty manual for information regarding the tire warranty and where to get service. For additional information refer to the tire manufacturer.

⚠ Warning

- Poorly maintained and improperly used tires are dangerous.
- Overloading the tires can cause overheating as a result of too much flexing. There could be a blowout

(Continued)

Warning (Continued)

and a serious crash. See *Vehicle Load Limits on page 9-10*.

- Underinflated tires pose the same danger as overloaded tires. The resulting crash could cause serious injury. Check all tires frequently to maintain the recommended pressure. Tire pressure should be checked when the tires are cold.
- Overinflated tires are more likely to be cut, punctured, or broken by a sudden impact — such as when hitting a pothole. Keep tires at the recommended pressure.

(Continued)

Warning (Continued)

- Worn or old tires can cause a crash. If the tread is badly worn, replace them.
- Replace any tires that have been damaged by impacts with potholes, curbs, etc.
- Improperly repaired tires can cause a crash. Only the dealer or an authorized tire service center should repair, replace, dismount, and mount the tires.
- Do not spin the tires in excess of 56 km/h (35 mph) on slippery surfaces such as snow, mud, ice, etc. Excessive spinning may cause the tires to explode.

Winter Tires

This vehicle was not originally equipped with winter tires. Winter tires are designed for increased traction on snow and ice-covered roads. Consider installing winter tires on the vehicle if frequent driving on ice or snow covered roads is expected. See your dealer for details regarding winter tire availability and proper tire selection. Also, see *Buying New Tires on page 10-41*.

With winter tires, there may be decreased dry road traction, increased road noise, and shorter tread life. After changing to winter tires, be alert for changes in vehicle handling and braking.

If using winter tires:

- Use tires of the same brand and tread type on all four wheel positions.

- Use only radial ply tires of the same size, load range, and speed rating as the original equipment tires.

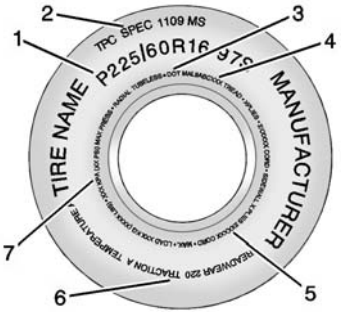
Winter tires with the same speed rating as the original equipment tires may not be available for H, V, W, Y, and ZR speed rated tires. If winter tires with a lower speed rating are chosen, never exceed the tire's maximum speed capability.

Summer Tires

This vehicle may come with high performance summer tires. These tires have a special tread and compound that are optimized for maximum dry and wet road performance. This special tread and compound will have decreased performance in cold climates, and on ice and snow. We recommend installing winter tires on the vehicle if frequent driving at temperatures below approximately 5°C (40°F) or on ice or snow covered roads is expected. See *Winter Tires on page 10-28*.

Tire Sidewall Labeling

Useful information about a tire is molded into its sidewall. The examples show a typical passenger tire sidewall.



Passenger (P-Metric) Tire Example

(1) Tire Size: The tire size is a combination of letters and numbers used to define a particular tire's width, height, aspect ratio, construction type, and service description. See the “Tire Size” illustration later in this section for more detail.

(2) TPC Spec (Tire Performance Criteria Specification): Original equipment tires designed to GM's specific tire performance criteria have a TPC specification code molded onto the sidewall. GM's TPC specifications meet or exceed all federal safety guidelines.

(3) DOT (Department of Transportation): The Department of Transportation (DOT) code indicates that the tire is in compliance with the U.S. Department of Transportation Motor Vehicle Safety Standards.

DOT Tire Date of Manufacture: The last four digits of the TIN indicate the tire manufactured date. The first two digits represent the week (01-52) and the last two digits, the year. For example, the third

week of the year 2010 would have a four-digit DOT date of 0310.

(4) Tire Identification Number (TIN): The letters and numbers following the DOT code are the Tire Identification Number (TIN). The TIN shows the manufacturer and plant code, tire size, and date the tire was manufactured. The TIN is molded onto both sides of the tire, although only one side may have the date of manufacture.

(5) Tire Ply Material: The type of cord and number of plies in the sidewall and under the tread.

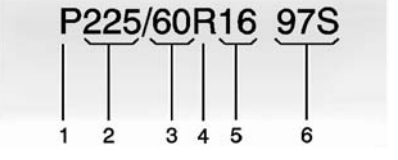
(6) Uniform Tire Quality Grading (UTQG): Tire manufacturers are required to grade tires based on three performance factors: treadwear, traction, and temperature resistance. For more information see *Uniform Tire Quality Grading on page 10-43*.

(7) Maximum Cold Inflation Load Limit: Maximum load that can be carried and the maximum pressure needed to support that load.

Tire Designations

Tire Size

The following is an example of a typical passenger vehicle tire size.



(1) Passenger (P-Metric) Tire: The United States version of a metric tire sizing system. The letter P as the first character in the tire size means a passenger vehicle tire engineered to standards set by the U.S. Tire and Rim Association.

(2) Tire Width: The three-digit number indicates the tire section width in millimeters from sidewall to sidewall.

(3) Aspect Ratio: A two-digit number that indicates the tire height-to-width measurements. For example, if the tire size aspect ratio is 60, as shown in item 3 of the illustration, it would mean that the tire's sidewall is 60 percent as high as it is wide.

(4) Construction Code: A letter code is used to indicate the type of ply construction in the tire. The letter R means radial ply construction; the letter D means diagonal or bias ply construction; and the letter B means belted-bias ply construction.

(5) Rim Diameter: Diameter of the wheel in inches.

(6) Service Description: These characters represent the load index and speed rating of the tire. The load index represents the load carrying capacity a tire is certified to carry. The speed rating is the maximum speed a tire is certified to carry a load.

Tire Terminology and Definitions

Air Pressure: The amount of air inside the tire pressing outward on each square inch of the tire. Air pressure is expressed in kPa (kilopascal) or psi (pounds per square inch).

Accessory Weight: The combined weight of optional accessories. Some examples of optional accessories are, electric drive unit, power windows, power seats, and air conditioning.

Aspect Ratio: The relationship of a tire's height to its width.

Belt: A rubber coated layer of cords that is located between the plies and the tread. Cords may be made from steel or other reinforcing materials.

Bead: The tire bead contains steel wires wrapped by steel cords that hold the tire onto the rim.

Bias Ply Tire: A pneumatic tire in which the plies are laid at alternate angles less than 90 degrees to the centerline of the tread.

Cold Tire Pressure: The amount of air pressure in a tire, measured in kPa (kilopascal) or psi (pounds per square inch) before a tire has built up heat from driving. See *Tire Pressure on page 10-34*.

Curb Weight: The weight of a motor vehicle with standard and optional equipment including the maximum capacity of fuel, oil, and coolant, but without passengers and cargo.

DOT Markings: A code molded into the sidewall of a tire signifying that the tire is in compliance with the U.S. Department of Transportation (DOT) Motor Vehicle Safety Standards. The DOT code includes the Tire Identification Number (TIN), an alphanumeric designator which can also identify the tire manufacturer, production plant, brand, and date of production.

GVWR: Gross Vehicle Weight Rating. See *Vehicle Load Limits on page 9-10*.

GAWR FRT: Gross Axle Weight Rating for the front axle. See *Vehicle Load Limits on page 9-10*.

GAWR RR: Gross Axle Weight Rating for the rear axle. See *Vehicle Load Limits on page 9-10*.

Intended Outboard Sidewall: The side of an asymmetrical tire, that must always face outward when mounted on a vehicle.

Kilopascal (kPa): The metric unit for air pressure.

Light Truck (LT-Metric) Tire: A tire used on light duty trucks and some multipurpose passenger vehicles.

Load Index: An assigned number ranging from 1 to 279 that corresponds to the load carrying capacity of a tire.

Maximum Inflation Pressure: The maximum air pressure to which a cold tire can be inflated. The maximum air pressure is molded onto the sidewall.

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 curb weight, accessory weight, vehicle capacity weight, and production options weight.

Normal Occupant Weight: The number of occupants a vehicle is designed to seat multiplied by 68 kg (150 lbs). See *Vehicle Load Limits on page 9-10*.

Occupant Distribution: Designated seating positions.

Outward Facing Sidewall: The side of an asymmetrical tire that has a particular side that faces outward when mounted on a vehicle. The side of the tire that contains a whitewall, bears white lettering, or bears manufacturer, brand, and/or model name molding that is higher or deeper than the same moldings on the other sidewall of the tire.

Passenger (P-Metric) Tire: A tire used on passenger cars and some light duty trucks and multipurpose vehicles.

Recommended Inflation Pressure: Vehicle manufacturer's recommended tire inflation pressure as shown on the tire placard. See *Tire Pressure on page 10-34* and *Vehicle Load Limits on page 9-10*.

Radial Ply Tire: A pneumatic tire in which the ply cords that extend to the beads are laid at 90 degrees to the centerline of the tread.

Rim: A metal support for a tire and upon which the tire beads are seated.

Sidewall: The portion of a tire between the tread and the bead.

Speed Rating: An alphanumeric code assigned to a tire indicating the maximum speed at which a tire can operate.

Traction: The friction between the tire and the road surface. The amount of grip provided.

Tread: The portion of a tire that comes into contact with the road.

Treadwear Indicators: Narrow bands, sometimes called wear bars, that show across the tread of a tire when only 1.6 mm (1/16 in) of tread remains. See *When It Is Time for New Tires on page 10-41*.

UTQGS (Uniform Tire Quality Grading Standards): A tire information system that provides consumers with ratings for a tire's traction, temperature, and treadwear. Ratings are determined by tire manufacturers using government testing procedures. The ratings are molded into the sidewall of the tire. See *Uniform Tire Quality Grading on page 10-43*.

Vehicle Capacity Weight: The number of designated seating positions multiplied by 68 kg (150 lbs) plus the rated cargo load. See *Vehicle Load Limits on page 9-10*.

Vehicle Maximum Load on the Tire: Load on an individual tire due to curb weight, accessory weight, occupant weight, and cargo weight.

Vehicle Placard: A label permanently attached to a vehicle showing the vehicle's capacity weight and the original equipment tire size and recommended inflation pressure. See “Tire and Loading Information Label” under *Vehicle Load Limits on page 9-10*.

Tire Pressure

Tires need the correct amount of air pressure to operate effectively.

⚠ Caution

Neither tire underinflation nor overinflation is good. Underinflated tires, or tires that do not have enough air, can result in:

- Tire overloading and overheating which could lead to a blowout.
- Premature or irregular wear.
- Poor handling.
- Reduced fuel economy.

(Continued)

Caution (Continued)

Overinflated tires, or tires that have too much air, can result in:

- Unusual wear.
- Poor handling.
- Rough ride.
- Needless damage from road hazards.

The Tire and Loading Information label on the vehicle indicates the original equipment tires and the correct cold tire inflation pressures. The recommended pressure is the minimum air pressure needed to support the vehicle's maximum load carrying capacity.

For additional information regarding how much weight the vehicle can carry, and an example of the Tire and Loading Information label, see *Vehicle Load Limits on page 9-10*. How the vehicle is loaded affects vehicle handling and ride comfort. Never load the vehicle with more weight than it was designed to carry.

When to Check

Check the tires once a month or more.

How to Check

Use a good quality pocket-type gauge to check the tire pressure. Proper tire inflation cannot be determined by looking at the tire. Check the tire inflation pressure when the tires are cold, meaning the vehicle has not been driven for at least three hours or no more than 1.6 km (1 mi).

Remove the valve cap from the tire valve stem. Press the tire gauge firmly onto the valve to get the pressure measurement. If the cold tire inflation pressure matches the recommended pressure on the Tire and Loading Information label, no further adjustment is necessary.

If the inflation pressure is low, add air until the recommended pressure is reached. If the inflation pressure in high, press on the metal stem in the center of the tire valve to release air. Re-check the tire pressure with the tire gauge.

Return the valve caps on the valve stems to keep out dirt and moisture and prevent leaks.

Tire Pressure Monitor System

The Tire Pressure Monitor System (TPMS) uses radio and sensor technology to check tire pressure levels. The TPMS sensors monitor the air pressure in your tires and transmit tire pressure readings to a receiver located in the vehicle.

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 under-inflated.

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 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.

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.

See *Tire Pressure Monitor Operation on page 10-36*.

See *Radio Frequency Statement on page 13-12*.

Tire Pressure Monitor Operation

This vehicle may have a Tire Pressure Monitor System (TPMS). The TPMS is designed to warn the driver when a low tire pressure condition exists. TPMS sensors are mounted onto each tire and wheel assembly, excluding the spare tire and wheel assembly. The TPMS sensors monitor the air pressure in the tires and transmit the tire pressure readings to a receiver located in the vehicle.

When a low tire pressure condition is detected, the TPMS illuminates the low tire pressure warning light located on the instrument cluster. If the warning light comes on, stop as soon as possible and inflate the tires to the recommended pressure shown on the Tire and Loading Information label. See *Vehicle Load Limits on page 9-10*.

The low tire pressure warning light comes on at each drive cycle until the tires are inflated to the correct inflation pressure.

The low tire pressure warning light may come on in cool weather when the vehicle is first started, and then turn off as the vehicle is driven. This could be an early indicator that the air pressure is getting low and must be inflated to the proper pressure.

A Tire and Loading Information label shows the size of the original equipment tires and the correct inflation pressure for the tires when they are cold. See *Vehicle Load Limits on page 9-10*, for an example of the Tire and Loading Information label and its location. Also see *Tire Pressure on page 10-34*.

The TPMS can warn about a low tire pressure condition but it does not replace normal tire maintenance. See *Tire Inspection on page 10-39*, *Tire Rotation on page 10-39* and *Tires on page 10-27*.

⚠ Caution

Tire sealant materials are not all the same. A non-approved tire sealant could damage the TPMS sensors. TPMS sensor damage caused by using an incorrect tire sealant is not covered by the vehicle warranty. Always use only the GM approved tire sealant available through your dealer or included in the vehicle.

Factory-installed Tire Inflator Kits use a GM-approved liquid tire sealant. Using non-approved tire sealants could damage the TPMS sensors. See *Tire Sealant and Compressor Kit on page 10-48* for information regarding the inflator kit materials and instructions.

TPMS Malfunction Light

The TPMS will not function properly if one or more of the TPMS sensors are missing or inoperable. When the system detects a malfunction, the low tire warning light flashes for about one minute and then stays on for the remainder of the ignition cycle. The malfunction light comes on at each ignition cycle until the problem is corrected. Some of the conditions that can cause this to come on are:

- One of the road tires has been replaced with the spare tire, if the vehicle has one. The spare tire does not have a TPMS sensor. The malfunction light should go off after the road tire is replaced and the sensor matching process is performed successfully. See "TPMS Sensor Matching Process" later in this section.
- The TPMS sensor matching process was not done or not completed successfully after rotating the tires. The malfunction light should go off after successfully completing the sensor matching process. See "TPMS Sensor Matching Process" later in this section.
- One or more TPMS sensors are missing or damaged. The malfunction light should go off when the TPMS sensors are installed and the sensor matching process is performed successfully. See your dealer for service.
- Replacement tires or wheels do not match the original equipment tires or wheels. Tires and wheels other than those recommended could prevent the TPMS from functioning properly. See *Buying New Tires on page 10-41*.

- Operating electronic devices or being near facilities using radio wave frequencies similar to the TPMS could cause the TPMS sensors to malfunction.

If the TPMS is not functioning properly, it cannot detect or signal a low tire condition. See your dealer for service if the TPMS malfunction light comes on and stays on.

TPMS Sensor Matching Process

Each TPMS sensor has a unique identification code. The identification code needs to be matched to a new tire/wheel position after rotating the tires or replacing one or more of the TPMS sensors. The TPMS sensor matching process should also be performed after replacing a spare tire with a road tire containing the TPMS sensor. The malfunction light should go off at the next ignition cycle. The sensors are matched to the tire/wheel positions, using a TPMS relearn tool, in the following order: driver side front tire, passenger side front tire, passenger side rear tire, and driver side rear. See your dealer for service or to purchase a relearn tool. A TPMS relearn tool can also be purchased. See Tire Pressure Monitor Sensor Activation Tool at www.gmtoolsandequipment.com or call 1-800-GM TOOLS (1-800-468-6657).

There are two minutes to match the first tire/wheel position, and five minutes overall to match all four tire/wheel positions. If it takes longer, the matching process stops and must be restarted.

The TPMS sensor matching process is:

1. Set the parking brake.
2. Put the vehicle in ON/RUN and place the vehicle in P (Park).
3. If the DIC display is minimized, press the SELECT knob to maximize it.
4. Use the SELECT knob to scroll to the Tire Pressure display screen.
5. Press and hold the SELECT knob for five seconds to begin the sensor matching process.

   A message displays confirming to begin the process.
6. Use the SELECT knob to select YES with the highlighted selection, and press the SELECT knob again to confirm the selection.

   The horn sounds twice to signal the receiver is in relearn mode and the TIRE LEARNING ACTIVE message displays on the DIC screen.
7. Start with the driver side front tire.
8. Place the relearn tool against the tire sidewall, near the valve stem. Then press the button to activate the TPMS sensor. A horn chirp confirms that the

sensor identification code has been matched to this tire and wheel position.

9. Proceed to the passenger side front tire, and repeat the procedure in Step 8.
10. Proceed to the passenger side rear tire, and repeat the procedure in Step 8.
11. Proceed to the driver side rear tire, and repeat the procedure in Step 8. The horn sounds two times to indicate the sensor identification code has been matched to the driver side rear tire, and the TPMS sensor matching process is no longer active. The TIRE LEARNING ACTIVE message on the DIC display screen goes off.
12. Turn the vehicle off.
13. Set all four tires to the recommended air pressure level as indicated on the Tire and Loading Information label.

Tire Inspection

We recommend that the tires, including the spare tire, if the vehicle has one, be inspected for signs of wear or damage at least once a month.

Replace the tire if:

- The indicators at three or more places around the tire can be seen.
- There is cord or fabric showing through the tire's rubber.
- The tread or sidewall is cracked, cut, or snagged deep enough to show cord or fabric.
- The tire has a bump, bulge, or split.
- The tire has a puncture, cut, or other damage that cannot be repaired well because of the size or location of the damage.

Tire Rotation

If the vehicle has non-directional tires, they should be rotated every 12 000 km/7,500 mi. See *Maintenance Schedule on page 11-2*.

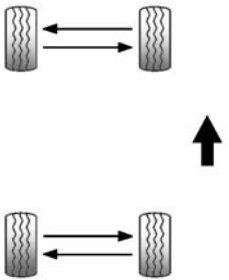
Tires are rotated to achieve uniform wear for all tires. The first rotation is the most important.

Anytime unusual wear is noticed, rotate the tires as soon as possible, check for proper tire inflation pressure, and check for damaged tires or wheels. If the unusual wear continues after the rotation, check the wheel alignment.

See *When It Is Time for New Tires on page 10-41* and *Wheel Replacement on page 10-45*.

Directional tires should not be rotated. Each tire and wheel should be used only in the position it is in. Directional tires will have an arrow on the tire indicating the proper direction of rotation or will have “left” or “right” molded on the sidewall.

Different tire sizes should not be rotated front to rear.



Use this rotation pattern if the vehicle has different size tires on the front and rear and they are non-directional.

Adjust the front and rear tires to the recommended inflation pressure on the Tire and Loading Information label after the tires have been rotated. See *Tire Pressure on page 10-34* and *Vehicle Load Limits on page 9-10*.

Reset the Tire Pressure Monitor System. See *Tire Pressure Monitor Operation on page 10-36*.

Check that all wheel nuts are properly tightened. See “Wheel Nut Torque” under *Capacities and Specifications on page 12-2*.

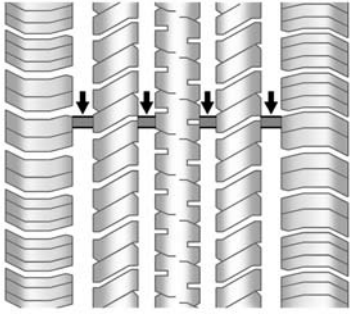
⚠ Warning

Rust or dirt on a wheel, or on the parts to which it is fastened, can make wheel nuts become loose after time. The wheel could come off and cause an accident. When changing a wheel, remove any rust or dirt from places where the wheel attaches to the vehicle. In an emergency, a cloth or a paper towel can be used; however, use a scraper or wire brush later to remove all rust or dirt.

Lightly coat the center of the wheel hub with wheel bearing grease after a wheel change or tire rotation to prevent corrosion or rust build-up. Do not get grease on the flat wheel mounting surface or on the wheel nuts or bolts.

When It Is Time for New Tires

Factors such as maintenance, temperatures, driving speeds, vehicle loading, and road conditions affect the wear rate of the tires.



Treadwear indicators are one way to tell when it is time for new tires. Treadwear indicators appear when the tires have only 1.6 mm (1/16 in) or less of tread remaining. See *Tire Inspection on page 10-39* and *Tire Rotation on page 10-39*.

The rubber in tires ages over time. This also applies to the spare tire, if the vehicle has one, even if it is never used. Multiple factors including temperatures, loading conditions, and inflation pressure maintenance affect how fast aging takes place. GM recommends that tires, including the spare if equipped, be replaced after six years, regardless of tread wear. The tire manufacture date is the last four digits of the DOT Tire Identification Number (TIN) which is molded into one side of the tire sidewall. The first two digits represent the week (01–52) and the last two digits, the year. For example, the third week of the year 2010 would have a four-digit DOT date of 0310.

Vehicle Storage

Tires age when stored normally mounted on a parked vehicle. Park a vehicle that will be stored for at least a month in a cool, dry, clean area away from direct sunlight to slow aging. This area should be free of grease, gasoline, or other substances that can deteriorate rubber.

Parking for an extended period can cause flat spots on the tires that may result in vibrations while driving. When storing a vehicle for at least a month, remove the tires or raise the vehicle to reduce the weight from the tires.

Buying New Tires

GM has developed and matched specific tires for the vehicle. The original equipment tires installed were designed to meet General Motors Tire Performance Criteria Specification (TPC Spec) system rating. When replacement tires are needed, GM strongly recommends buying tires with the same TPC Spec rating.

GM's exclusive TPC Spec system considers over a dozen critical specifications that impact

the overall performance of the vehicle, including brake system performance, ride and handling, traction control, and tire pressure monitoring performance. GM's TPC Spec number is molded onto the tire's sidewall near the tire size. If the tires have an all-season tread design, the TPC Spec number will be followed by MS for mud and snow. See *Tire Sidewall Labeling on page 10-29*, for additional information.

GM recommends replacing worn tires in complete sets of four. Uniform tread depth on all tires will help to maintain the performance of the vehicle. Braking and handling performance may be adversely affected if all the tires are not replaced at the same time. If proper rotation and maintenance have been done, all four tires should wear out at about the same time. See *Tire Rotation on page 10-39* for information on proper tire rotation. However, if it is necessary to replace only one axle set of worn tires, place the new tires on the rear axle.

Winter tires with the same speed rating as the original equipment tires may not be available for H, V, W, and ZR speed rated tires. Never exceed the winter tire's maximum speed capability when using winter tires with a lower speed rating.

⚠ Warning

Tires could explode during improper service. Attempting to mount or dismount a tire could cause injury or death. Only your dealer or authorized tire service center should mount or dismount the tires.

⚠ Warning

Mixing tires of different sizes (other than those originally installed on the vehicle), brands, or types may cause loss of control of the vehicle, resulting in a crash or other vehicle damage. Use the correct size, brand, and type of tire on all four wheels.

⚠ Warning

Using bias-ply tires on the vehicle may cause the wheel rim flanges to develop cracks after many miles of driving. A tire and/or wheel could fail suddenly and cause a crash. Use only radial-ply tires with the wheels on the vehicle.

If the vehicle tires must be replaced with a tire that does not have a TPC Spec number, make sure they are the same size, load range, speed rating, and construction (radial) as the original tires.

Vehicles that have a tire pressure monitoring system could give an inaccurate low-pressure warning if non-TPC Spec rated tires are installed. See *Tire Pressure Monitor Operation on page 10-36*.

The Tire and Loading Information label indicates the original equipment tires on the vehicle. See *Vehicle Load Limits on page 9-10*, for the label location and more information about the Tire and Loading Information label.

Different Size Tires and Wheels

If wheels or tires are installed that are a different size than the original equipment wheels and tires, vehicle performance, including its braking, ride and handling characteristics, stability, and resistance to rollover may be affected. If the vehicle has electronic systems such as antilock brakes, rollover airbags, traction control, electronic stability control, or All-Wheel Drive, the performance of these systems can also be affected.

⚠ Warning

If different sized wheels are used, there may not be an acceptable level of performance and safety if tires not recommended for those wheels are selected. This increases the chance of a crash and serious injury. Only use GM

(Continued)

Warning (Continued)

specific wheel and tire systems developed for the vehicle, and have them properly installed by a GM certified technician.

See *Buying New Tires on page 10-41* and *Accessories and Modifications on page 10-2*.

Uniform Tire Quality Grading

The following information relates to the system developed by the United States National Highway Traffic Safety Administration (NHTSA), which grades tires by treadwear, traction, and temperature performance. This applies only to vehicles sold in the United States. The grades are molded on the sidewalls of most passenger car tires. The Uniform Tire Quality Grading

(UTQG) system does not apply to deep tread, winter tires, compact spare tires, tires with nominal rim diameters of 10 to 12 inches (25 to 30 cm), or to some limited-production tires.

While the tires available on General Motors passenger cars and light trucks may vary with respect to these grades, they must also conform to federal safety requirements and additional General Motors Tire Performance Criteria (TPC) standards.

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

All Passenger Car Tires Must Conform 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 (1½) 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

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 specified 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 straight-ahead braking traction tests, and does not include acceleration, cornering, hydroplaning, or peak traction characteristics.

Temperature

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 Safety Standard 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.

Wheel Alignment and Tire Balance

The tires and wheels were aligned and balanced at the factory to provide the longest tire life and best overall performance. Adjustments to wheel alignment and tire balancing are not necessary on a regular basis. Consider an alignment check if there is unusual tire wear or the vehicle is significantly pulling to one side or the other. Some slight pull to the left or right, depending on the crown of the road and/or other road surface variations such as troughs or ruts, is normal. If the vehicle is vibrating when driving on a smooth road, the tires and wheels may need to be rebalanced. See your dealer for proper diagnosis.

Wheel Replacement

Replace any wheel that is bent, cracked, or badly rusted or corroded. If wheel nuts keep coming loose, the wheel, wheel bolts, and wheel nuts should be replaced.

If the wheel leaks air, replace it. Some aluminum wheels can be repaired. See your dealer if any of these conditions exist.

Your dealer will know the kind of wheel that is needed.

Each new wheel should have the same load-carrying capacity, diameter, width, offset, and be mounted the same way as the one it replaces.

Replace wheels, wheel bolts, wheel nuts, or Tire Pressure Monitor System (TPMS) sensors with new GM original equipment parts.

⚠ Warning

Using the wrong replacement wheels, wheel bolts, or wheel nuts can be dangerous. It could affect the braking and handling of the vehicle. Tires can lose air, and cause loss of control, causing

(Continued)

Warning (Continued)

a crash. Always use the correct wheel, wheel bolts, and wheel nuts for replacement.

⚠ Caution

The wrong wheel can also cause problems with bearing life, brake cooling, speedometer or odometer calibration, headlamp aim, bumper height, vehicle ground clearance, and tire or tire chain clearance to the body and chassis.

Used Replacement Wheels

⚠ Warning

Replacing a wheel with a used one is dangerous. How it has been used or how far it has been driven may be unknown. It could fail suddenly and cause a crash. When replacing wheels, use a new GM original equipment wheel.

Tire Chains

⚠ Warning

Do not use tire chains. There is not enough clearance. Tire chains used on a vehicle without the proper amount of clearance can cause damage to the brakes, suspension, or other vehicle

(Continued)

Warning (Continued)

parts. The area damaged by the tire chains could cause loss of control and a crash.

Use another type of traction device only if its manufacturer recommends it for the vehicle's tire size combination and road conditions. Follow that manufacturer's instructions. To avoid vehicle damage, drive slow and readjust or remove the traction device if it contacts the vehicle. Do not spin the wheels. If traction devices are used, install them on the front tires.

If a Tire Goes Flat

This vehicle has a tire sealant and compressor kit. See *Tire Sealant and Compressor Kit on page 10-48*. There is no spare tire, no tire changing equipment, and no place to store a tire.

It is unusual for a tire to blow out, especially if the tires are maintained properly. See *Tires on page 10-27*. air goes out of a tire, it is much more likely to leak out slowly. But if there is ever a blowout, here are a few tips about what to expect and what to do.

If a front tire fails, the flat tire will create a drag that pulls the vehicle toward that side. Take your foot off the accelerator pedal and grip the steering wheel firmly. Steer to maintain lane position, and then gently brake to a stop, well off the road, if possible.

A rear blowout, particularly on a curve, acts much like a skid and may require the same correction as used in a skid. Stop pressing the accelerator pedal and steer to straighten the vehicle. It may be very bumpy and noisy. Gently brake to a stop, well off the road, if possible.

⚠ Warning

Driving on a flat tire will cause permanent damage to the tire. Re-inflating a tire after it has been driven on while severely underinflated or flat may cause a blowout and a serious crash. Never attempt to re-inflate a tire that has been driven on while severely underinflated or flat. Have your dealer or an authorized tire service center repair or replace the flat tire as soon as possible.

⚠ Warning

Lifting a vehicle and getting under it to do maintenance or repairs is dangerous without the appropriate safety equipment and training. If a jack is provided with the vehicle, it is designed only for

(Continued)

Warning (Continued)

changing a flat tire. If it is used for anything else, you or others could be badly injured or killed if the vehicle slips off the jack. If a jack is provided with the vehicle, only use it for changing a flat tire.

If a tire goes flat, avoid further tire and wheel damage by driving slowly to a level place, well off the road, if possible.

1. Turn on the hazard warning flashers. See *Hazard Warning Flashers on page 6-3*.
2. Park the vehicle. Set the parking brake firmly and put the shift lever in P (Park). See *Shifting Into Park on page 9-17*.
3. Turn off the vehicle.
4. Inspect the flat tire.

If the tire has been separated from the wheel, has damaged sidewalls, or has a puncture larger than a

6 mm (0.25 in), the tire is too severely damaged for the tire sealant and compressor kit to be effective.

If the tire has a puncture less than a 6 mm (0.25 in) in the tread area of the tire, see *Tire Sealant and Compressor Kit on page 10-48*.

Tire Sealant and Compressor Kit

⚠ Warning

Overinflating a tire could cause the tire to rupture and you or others could be injured. Be sure to read and follow the tire sealant and compressor kit instructions and inflate the tire to its recommended pressure. Do not exceed the recommended pressure.

⚠ Warning

Storing the tire sealant and compressor kit or other equipment in the passenger compartment of the vehicle could cause injury. In a sudden stop or collision, loose equipment could strike someone. Store the tire sealant and compressor kit in its original location.

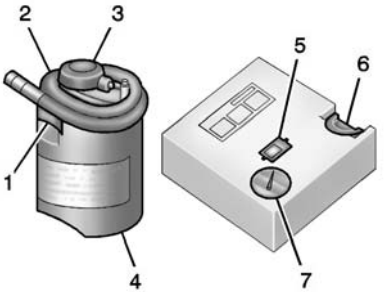
If this vehicle has a tire sealant and compressor kit, there may not be a spare tire or tire changing equipment, and on some vehicles there may not be a place to store a tire.

The tire sealant and compressor can be used to temporarily seal punctures up to 6 mm (0.25 in) in the tread area of the tire. It can also be used to inflate an underinflated tire.

If the tire has been separated from the wheel, has damaged sidewalls, or has a large puncture, the tire is too severely damaged for the tire sealant and compressor kit to be effective. See *Roadside Assistance Program on page 13-5*.

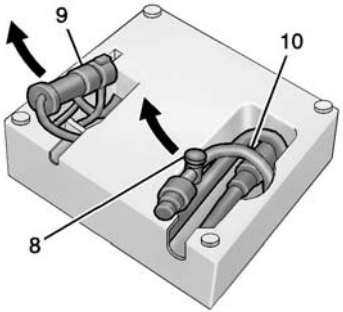
Read and follow all of the tire sealant and compressor kit instructions.

The kit includes:



1. Sealant Canister Inlet Valve
2. Sealant/Air Hose
3. Base of Sealant Canister

4. Tire Sealant Canister
5. On/Off Button
6. Slot on Top of Compressor
7. Pressure Gauge



8. Pressure Deflation Button
9. Power Plug
10. Air Only Hose

Tire Sealant

Read and follow the safe handling instructions on the label adhered to the tire sealant canister (4).

Check the tire sealant expiration date on the tire sealant canister. The tire sealant canister (4) should be replaced before its expiration date. Replacement tire sealant canisters are available at your local dealer.

There is only enough sealant to seal one tire. After usage, the tire sealant canister must be replaced.

Using the Tire Sealant and Compressor Kit to Temporarily Seal and Inflate a Punctured Tire

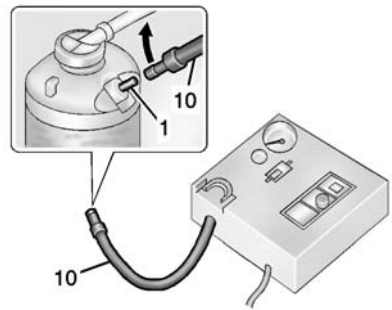
When using the tire sealant and compressor kit during cold temperatures, warm the kit in a heated environment for five minutes. This will help to inflate the tire faster.

If a tire goes flat, avoid further tire and wheel damage by driving slowly to a level place. Turn on the hazard warning flashers. See *Hazard Warning Flashers on page 6-3*.

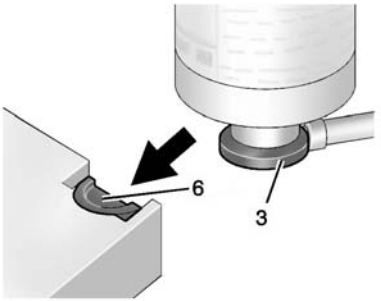
See *If a Tire Goes Flat on page 10-46* for other important safety warnings.

Do not remove any objects that have penetrated the tire.

1. Remove the tire sealant canister (4) and compressor from its storage location. See *Storing the Tire Sealant and Compressor Kit on page 10-55*.
2. Remove the air only hose (10) and the power plug (9) from the bottom of the compressor.
3. Place the compressor on the ground near the flat tire.



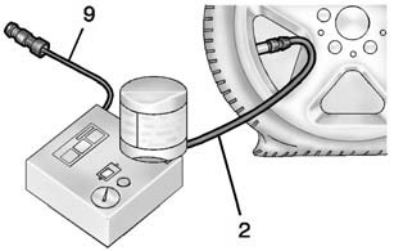
4. Attach the air only hose (10) to the sealant canister inlet valve (1) by turning it clockwise until tight.



5. Slide the base of the tire sealant canister (3) into the slot on the top of the compressor (6) to hold it upright.

   Make sure the tire valve stem is positioned close to the ground so the hose will reach it.

6. Remove the valve stem cap from the flat tire by turning it counterclockwise.



7. Attach the sealant/air hose (2) to the tire valve stem by turning it clockwise until tight.

8. Plug the power plug (9) into the accessory power outlet in the vehicle. Unplug all items from other accessory power outlets. See *Power Outlets on page 5-6*.

   If the vehicle has an accessory power outlet, do not use the cigarette lighter.

   If the vehicle only has a cigarette lighter, use the cigarette lighter.

   Do not pinch the power plug cord in the door or window.

9. Start the vehicle. The vehicle must be running while using the air compressor.

10. Press the on/off button (5) to turn the tire sealant and compressor kit on.

    The compressor will inject sealant and air into the tire.

    The pressure gauge (7) will initially show a high pressure while the compressor pushes the sealant into the tire. Once the sealant is completely dispersed into the tire, the pressure will quickly drop and start to rise again as the tire inflates with air only.

11. Inflate the tire to the recommended inflation pressure using the pressure gauge (7). The recommended inflation pressure can be found on the Tire and Loading Information label. See *Tire Pressure on page 10-34*.

    The pressure gauge (7) may read higher than the actual tire pressure while the compressor is on. Turn the compressor off to get an accurate pressure reading. The compressor may be turned on/off until the correct pressure is reached.

⚠ Caution

If the recommended pressure cannot be reached after approximately 25 minutes, the vehicle should not be driven farther. The tire is too severely damaged and the tire sealant and compressor kit cannot inflate the

(Continued)

Caution (Continued)

tire. Remove the power plug from the accessory power outlet and unscrew the inflating hose from the tire valve. See *Roadside Assistance Program on page 13-5*.

12. Press the on/off button (5) to turn the tire sealant and compressor kit off.

    The tire is not sealed and will continue to leak air until the vehicle is driven and the sealant is distributed in the tire. Therefore, Steps 13–21 must be done immediately after Step 12.

    Be careful while handling the tire sealant and compressor kit as it could be warm after usage.

13. Unplug the power plug (9) from the accessory power outlet in the vehicle.

14. Turn the sealant/air hose (2) counterclockwise to remove it from the tire valve stem.

15. Replace the tire valve stem cap.

16. Remove the tire sealant canister (4) from the slot on top of the compressor (6).

17. Turn the air only hose (10) counterclockwise to remove it from the tire sealant canister inlet valve (1).

18. Turn the sealant/air hose (2) clockwise onto the sealant canister inlet valve (1) to prevent sealant leakage.

19. Return the air only hose (10) and power plug (9) back to their original storage location.

20. If the flat tire was able to inflate to the recommended inflation pressure, remove the maximum speed label from the sealant canister and place it in a highly visible location.

    Do not exceed the speed on this label until the damaged tire is repaired or replaced.

21. Return the equipment to its original storage location in the vehicle.

22. Immediately drive the vehicle 8 km (5 mi) to distribute the sealant in the tire.

23. Stop at a safe location and check the tire pressure. Refer to Steps 1–10 under “Using the Tire Sealant and Compressor Kit without Sealant to Inflate a Tire (Not Punctured).”

    If the tire pressure has fallen more than 68 kPa (10 psi) below the recommended inflation pressure, stop driving the vehicle. The tire is too severely damaged and the tire sealant cannot seal the tire. See *Roadside Assistance Program on page 13-5*.

    If the tire pressure has not dropped more than 68 kPa (10 psi) from the recommended inflation pressure, inflate the tire to the recommended inflation pressure.

24. Wipe off any sealant from the wheel, tire, or vehicle.

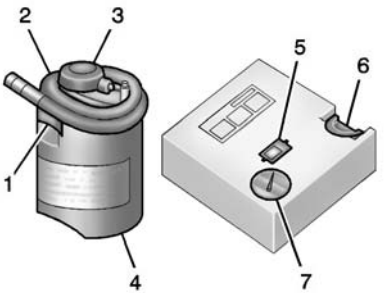
25. Dispose of the used tire sealant canister (4) at a local dealer or in accordance with local state codes and practices.

26. Replace it with a new canister available from your dealer.

27. After temporarily sealing a tire using the tire sealant and compressor kit, take the vehicle to an authorized dealer within 161 km (100 mi) of driving to have the tire repaired or replaced.

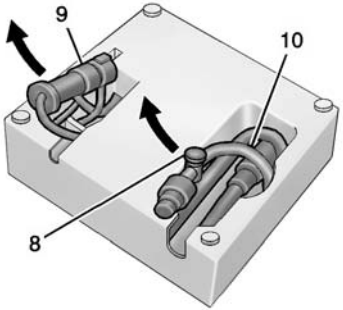
Using the Tire Sealant and Compressor Kit without Sealant to Inflate a Tire (Not Punctured)

The kit includes:



1. Sealant Canister Inlet Valve
2. Sealant/Air Hose
3. Base of Sealant Canister
4. Tire Sealant Canister

5. On/Off Button
6. Slot on Top of Compressor
7. Pressure Gauge



8. Pressure Deflation Button
9. Power Plug
10. Air Only Hose

If a tire goes flat, avoid further tire and wheel damage by driving slowly to a level place. Turn on the hazard warning flashers. See *Hazard Warning Flashers on page 6-3*.

See *If a Tire Goes Flat on page 10-46* for other important safety warnings.

1. Remove the compressor from its storage location. See *Storing the Tire Sealant and Compressor Kit on page 10-55*.
2. Remove the air only hose (10) and the power plug (9) from the bottom of the compressor.
3. Place the compressor on the ground near the flat tire.

   Make sure the tire valve stem is positioned close to the ground so the hose will reach it.
4. Remove the valve stem cap from the flat tire by turning it counterclockwise.
5. Attach the air only hose (10) to the tire valve stem by turning it clockwise until tight.
6. Plug the power plug (9) into the accessory power outlet in the vehicle. Unplug all items from other accessory power outlets. See *Power Outlets on page 5-6*.

   If the vehicle has an accessory power outlet, do not use the cigarette lighter.

   If the vehicle only has a cigarette lighter, use the cigarette lighter.

   Do not pinch the power plug cord in the door or window.
7. Start the vehicle. The vehicle must be running while using the air compressor.
8. Press the on/off button (5) to turn the tire sealant and compressor kit on.

   The compressor will inflate the tire with air only.

9. Inflate the tire to the recommended inflation pressure using the pressure gauge (7). The recommended inflation pressure can be found on the Tire and Loading Information label. See *Tire Pressure on page 10-34*.

   The pressure gauge (7) may read higher than the actual tire pressure while the compressor is on. Turn the compressor off to get an accurate pressure reading. The compressor may be turned on/off until the correct pressure is reached.

   If the tire is inflated higher than the recommended pressure, adjust the excess pressure by pressing the pressure deflation button (8) until the proper pressure reading is reached. This option is only functional when using the air only hose (10).

⚠ Caution

If the recommended pressure cannot be reached after approximately 25 minutes, the vehicle should not be driven farther. The tire is too severely damaged and the tire sealant and compressor kit cannot inflate the tire. Remove the power plug from the accessory power outlet and unscrew the inflating hose from the tire valve. See *Roadside Assistance Program on page 13-5*.

10. Press the on/off button (5) to turn the tire sealant and compressor kit off.

    Be careful while handling the compressor as it could be warm after usage.

11. Unplug the power plug (9) from the accessory power outlet in the vehicle.

12. Turn the air only hose (10) counterclockwise to remove it from the tire valve stem.

13. Replace the tire valve stem cap.

14. Return the air only hose (10) and power plug (9) back to their original storage location.

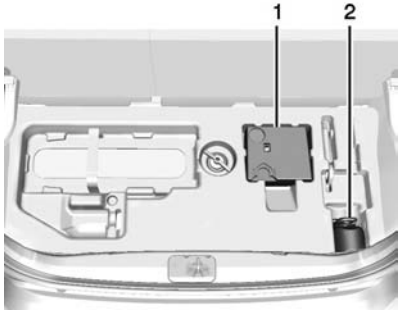
15. Return the equipment to its original storage location in the vehicle.

The tire sealant and compressor kit has accessory adapters located in a compartment on the bottom of its housing that can be used to inflate air mattresses, balls, etc.

Storing the Tire Sealant and Compressor Kit

The tire sealant and compressor kit is located in the rear storage area.

1. Lift the trim cover.



2. Remove the compressor (1) and the tire sealant canister (2).

To store the tire sealant and compressor kit, reverse the steps.

Jump Starting

For more information about the vehicle battery, see *Battery on page 10-13*.

If the 12–volt battery has run down, try to use another vehicle and some jumper cables to start your vehicle. Be sure to use the following steps to do it safely.

⚠ Warning

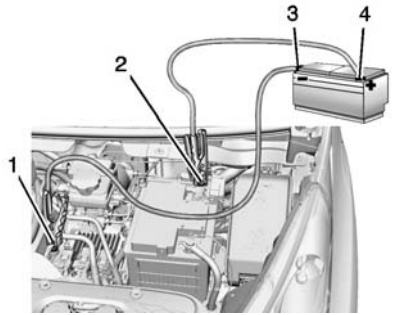
Batteries can hurt you. They can be dangerous because:

- They contain acid that can burn you.
- They contain gas that can explode or ignite.
- They contain enough electricity to burn you.

If you do not follow these steps exactly, some or all of these things can hurt you.

⚠ Caution

Ignoring these steps could result in costly damage to the vehicle that would not be covered by the vehicle warranty. Trying to start the vehicle by pushing or pulling it will not work, and it could damage the vehicle.



1. Discharged Battery Negative Grounding Point
2. Discharged Battery Positive Terminal

3. Good Battery Negative Terminal
4. Good Battery Positive Terminal

The jump start negative grounding point (1) is a stud on a bracket located to the right of the Traction Power Inverter Module (TPIM).

The jump start positive terminal (2) is on the discharged battery on the driver side of the vehicle.

The jump start positive terminal (4) and jump start negative terminal (3) are on the battery of the vehicle providing the jump start.

The positive jump start connection for the discharged battery is under a trim cover. Open the cover to expose the terminal.

1. Check the other vehicle. It must have a 12-volt battery with a negative ground system.

⚠ Caution

If the other vehicle does not have a 12-volt system with a negative ground, both vehicles can be damaged. Only use a vehicle that has a 12-volt system with a negative ground for jump starting.

2. Position the two vehicles so that they are not touching.
3. Set the parking brake firmly and put the shift lever in P (Park). See *Shifting Into Park on page 9-17*.

⚠ Caution

If any accessories are left on or plugged in during the jump starting procedure, they could be damaged. The repairs would not be covered by the vehicle warranty. Whenever possible, turn off or unplug all accessories on either vehicle when jump starting.

4. Turn the ignition to LOCK/OFF. Turn off all lights and accessories in both vehicles, except the hazard warning flashers if needed.

⚠ Warning

An electric fan can start up even when the propulsion system is not operating and can injure you. Keep hands, clothing and tools away from any underhood electric fan.

⚠ Warning

Using a match near a battery can cause battery gas to explode. People have been hurt doing this, and some have been blinded. Use a flashlight if you need more light.

(Continued)

Warning (Continued)

Be sure the battery has enough water. You do not need to add water to the battery installed in your new vehicle. But if a battery has filler caps, be sure the right amount of fluid is there. If it is low, add water to take care of that first. If you do not, explosive gas could be present.

Battery fluid contains acid that can burn you. Do not get it on you. If you accidentally get it in your eyes or on your skin, flush the place with water and get medical help immediately.

⚠ Warning

Fans or other moving propulsion system parts can injure you badly. Keep your hands away from moving parts once the propulsion system is operating.

5. Connect one end of the red positive (+) cable to the positive (+) terminal on the discharged battery.
6. Connect the other end of the red positive (+) cable to the positive (+) terminal of the good battery.
7. Connect one end of the black negative (–) cable to the negative (–) terminal of the good battery.
8. Connect the other end of the black negative (–) cable to the negative (–) grounding point for the discharged battery.
9. Start the engine in the vehicle with the good battery and run the engine at idle speed for at least four minutes.
10. Try to start the vehicle that had the dead battery. If it will not start after a few tries, it probably needs service.

⚠ Caution

If the jumper cables are connected or removed in the wrong order, electrical shorting may occur and damage the vehicle. The repairs would not be covered by the vehicle warranty. Always connect and remove the jumper cables in the correct order, making sure that the cables do not touch each other or other metal.

Jumper Cable Removal

Reverse the sequence exactly when removing the jumper cables.

Towing the Vehicle

⚠ Caution

Incorrectly towing a disabled vehicle may cause damage. The damage would not be covered by the vehicle warranty.

Have the vehicle towed on a flatbed car carrier or a wheel lift tow truck. If a wheel lift tow truck is used, the drive wheels cannot contact the road while the vehicle is being towed. A wheel dolly must be used to lift all drive wheels off the ground.

Use the tow eye for towing a disabled vehicle or loading it onto a flatbed car carrier. The tow eye should not be used to recover a vehicle from an off road situation.

⚠ Caution

Improper use of the tow eye can cause vehicle damage. Use caution and low speeds to prevent damage to the vehicle.

Carefully open the cover by using the small notch that conceals the tow eye socket.

Install the tow eye into the socket by turning it clockwise until it stops. When the tow eye is removed, reinstall the cover with the notch in the original position.

Consult your dealer or a professional towing service if the disabled vehicle must be towed.

To tow the vehicle behind another vehicle for recreational purposes, such as behind a motor home, see “Recreational Vehicle Towing” in this section.

Recreational Vehicle Towing

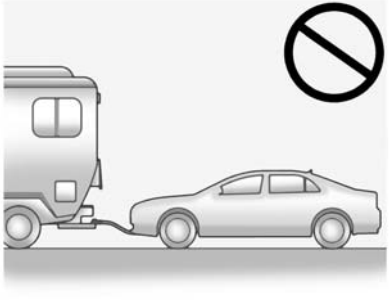
Recreational vehicle towing means towing the vehicle behind another vehicle – such as behind a motor home. The two most common types of recreational vehicle towing are known as dinghy towing and dolly towing. Dinghy towing is towing the vehicle with all four wheels on the ground. Dolly towing is towing the vehicle with two wheels on the ground and two wheels up on a device known as a dolly.

Here are some important things to consider before recreational vehicle towing:

- What is the towing capacity of the towing vehicle? Be sure to read the tow vehicle manufacturer's recommendations.
- How far will the vehicle be towed? Some vehicles have restrictions on how far and how long they can tow.

- Does the vehicle have the proper towing equipment? See your dealer or trailering professional for additional advice and equipment recommendations.
- Is the vehicle ready to be towed? Just as preparing the vehicle for a long trip, make sure the vehicle is prepared to be towed.

Dinghy Towing

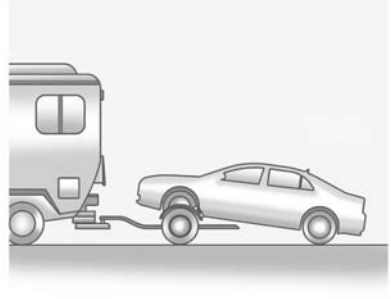


⚠ Caution

If the vehicle is towed with all four wheels on the ground, the drivetrain components could be damaged. The repairs would not be covered by the vehicle warranty. Do not tow the vehicle with all four wheels on the ground.

The vehicle was not designed to be towed with all four wheels on the ground. If the vehicle must be towed, a dolly should be used. See “Dolly Towing” following.

Dolly Towing



Tow the vehicle with the two rear wheels on the ground and the front wheels on a dolly.

To tow the vehicle with two wheels on the ground and a dolly:

1. Put the front wheels on a dolly.
2. Put the shift lever in P (Park).
3. Secure the vehicle to the dolly.

⚠ Caution

Towing the vehicle from the rear could damage it. Also, repairs would not be covered by the vehicle warranty. Never have the vehicle towed from the rear.

Appearance Care

Exterior Care

Locks

Locks are lubricated at the factory. Use a de-icing agent only when absolutely necessary, and have the locks greased after using. See *Recommended Fluids and Lubricants on page 11-8*.

Washing the Vehicle

To preserve the vehicle's finish, wash it often and out of direct sunlight.

⚠ Caution

Do not use petroleum-based, acidic, or abrasive cleaning agents as they can damage the vehicle's paint, metal, or plastic parts. If damage occurs, it would not be covered by the vehicle warranty. Approved cleaning

(Continued)

Caution (Continued)

products can be obtained from your dealer. Follow all manufacturer directions regarding correct product usage, necessary safety precautions, and appropriate disposal of any vehicle care product.

⚠ Caution

Avoid using high-pressure washes closer than 30 cm (12 in) to the surface of the vehicle. Use of power washers exceeding 8,274 kPa (1,200 psi) can result in damage or removal of paint and decals.

The symbol is on any underhood compartment electrical center that should not be power

washed. This could cause damage that would not be covered by the vehicle warranty.

If using an automatic car wash, follow the car wash instructions. The windshield wiper and rear window wiper, if equipped, must be off. Remove any accessories that may be damaged or interfere with the car wash equipment.

Rinse the vehicle well, before washing and after, to remove all cleaning agents completely. If they are allowed to dry on the surface, they could stain.

Dry the finish with a soft, clean chamois or an all-cotton towel to avoid surface scratches and water spotting.

Finish Care

Application of aftermarket clearcoat sealant/wax materials is not recommended. If painted surfaces are damaged, see your dealer to have the damage assessed and repaired. Foreign materials such as calcium chloride and other salts, ice melting agents, road oil and tar, tree sap, bird droppings, chemicals from industrial chimneys, etc., can damage the vehicle's finish if they remain on painted surfaces. Wash the vehicle as soon as possible. If necessary, use non-abrasive cleaners that are marked safe for painted surfaces to remove foreign matter.

Occasional hand waxing or mild polishing should be done to remove residue from the paint finish. See your dealer for approved cleaning products.

Do not apply waxes or polishes to uncoated plastic, vinyl, rubber, decals, simulated wood, or flat paint as damage can occur.

⚠ Caution

Machine compounding or aggressive polishing on a basecoat/clearcoat paint finish

(Continued)

Caution (Continued)

may damage it. Use only non-abrasive waxes and polishes that are made for a basecoat/clearcoat paint finish on the vehicle.

To keep the paint finish looking new, keep the vehicle garaged or covered whenever possible.

Protecting Exterior Bright Metal Moldings

⚠ Caution

Failure to clean and protect the bright metal moldings can result in a hazy white finish or pitting. This damage would not be covered by the vehicle warranty.

The bright metal moldings on the vehicle are aluminum or stainless steel. To prevent damage always follow these cleaning instructions:

- Be sure the molding is cool to the touch before applying any cleaning solution.
- Use a cleaning solution approved for aluminum or stainless steel. Some cleaners are highly acidic or contain alkaline substances and can damage the moldings.
- Always dilute a concentrated cleaner according to the manufacturer's instructions.
- Do not use chrome cleaners.
- Do not use cleaners that are not intended for automotive use.
- Use a nonabrasive wax on the vehicle after washing to protect and extend the molding finish.

Cleaning Exterior Lamps/ Lenses, Emblems, Decals and Stripes

Use only lukewarm or cold water, a soft cloth, and a car washing soap to clean exterior lamps, lenses, emblems, decals and stripes. Follow instructions under "Washing the Vehicle" previously in this section.

Lamp covers are made of plastic, and some have a UV protective coating. Do not clean or wipe them while they are dry.

Do not use any of the following on lamp covers:

- Abrasive or caustic agents.
- Washer fluids and other cleaning agents in higher concentrations than suggested by the manufacturer.
- Solvents, alcohols, fuels, or other harsh cleaners.
- Ice scrapers or other hard items.
- Aftermarket appearance caps or covers while the lamps are illuminated, due to excessive heat generated.

⚠ Caution

Failure to clean lamps properly can cause damage to the lamp cover that would not be covered by the vehicle warranty.

⚠ Caution

Using wax on low gloss black finish stripes can increase the gloss level and create a non-uniform finish. Clean low gloss stripes with soap and water only.

Air Intakes

Clear debris from the air intakes, between the hood and windshield when washing the vehicle.

Windshield and Wiper Blades

Clean the outside of the windshield with glass cleaner.

Clean rubber blades using a lint-free cloth or paper towel soaked with windshield washer fluid or a mild detergent. Wash the windshield thoroughly when cleaning the blades. Bugs, road grime, sap, and a buildup of vehicle wash/wax treatments may cause wiper streaking.

Replace the wiper blades if they are worn or damaged. Damage can be caused by extreme dusty conditions, sand, salt, heat, sun, snow, and ice.

Weatherstrips

Apply Dielectric silicone grease on weatherstrips to make them last longer, seal better, and not stick or squeak. Lubricate weatherstrips at least once a year. Hot, dry climates may require more frequent application. Black marks from rubber material on painted surfaces can be removed by rubbing with a clean cloth. See *Recommended Fluids and Lubricants on page 11-8*.

Tires

Use a stiff brush with tire cleaner to clean the tires.

⚠ Caution

Using petroleum-based tire dressing products on the vehicle may damage the paint finish and/or tires. When applying a tire dressing, always wipe off any overspray from all painted surfaces on the vehicle.

Wheels and Trim — Aluminum or Chrome

Use a soft, clean cloth with mild soap and water to clean the wheels. After rinsing thoroughly with clean water, dry with a soft, clean towel. A wax may then be applied.

⚠ Caution

Chrome wheels and other chrome trim may be damaged if the vehicle is not washed after driving on roads that have been sprayed with magnesium, calcium, or sodium chloride. These chlorides are used on roads for conditions such as ice and dust. Always wash the chrome with soap and water after exposure.

⚠ Caution

To avoid surface damage, do not use strong soaps, chemicals, abrasive polishes, cleaners, brushes, or cleaners that contain acid on aluminum or chrome-plated wheels. Use only approved cleaners. Also, never drive a vehicle with aluminum or chrome-plated wheels through an

(Continued)

Caution (Continued)

automatic car wash that uses silicone carbide tire cleaning brushes. Damage could occur and the repairs would not be covered by the vehicle warranty.

Steering, Suspension, and Chassis Components

Visually inspect steering, suspension, and chassis components for damaged, loose, or missing parts or signs of wear at least once a year.

Inspect power steering for proper hook-up, binding, leaks, cracks, chafing, etc.

Visually check constant velocity joint boots and axle seals for leaks.

Body Component Lubrication

Lubricate all key lock cylinders, hood hinges, liftgate hinges, steel fuel door hinge and power assist step hinges, unless the components are plastic. Applying silicone grease on weatherstrips with a clean cloth will make them last longer, seal better, and not stick or squeak.

Underbody Maintenance

At least twice a year, spring and fall use plain water to flush any corrosive materials from the underbody. Take care to thoroughly clean any areas where mud and other debris can collect.

Sheet Metal Damage

If the vehicle is damaged and requires sheet metal repair or replacement, make sure the body repair shop applies anti-corrosion material to parts repaired or replaced to restore corrosion protection.

Original manufacturer replacement parts will provide the corrosion protection while maintaining the vehicle warranty.

Finish Damage

Quickly repair minor chips and scratches with touch-up materials available from your dealer to avoid corrosion. Larger areas of finish damage can be corrected in your dealer's body and paint shop.

Chemical Paint Spotting

Airborne pollutants can fall upon and attack painted vehicle surfaces causing blotchy, ring-shaped discolorations, and small, irregular dark spots etched into the paint surface. See “Finish Care” previously in this section.

Interior Care

To prevent dirt particle abrasions, regularly clean the vehicle's interior. Immediately remove any soils. Note that newspapers or dark garments that can transfer color to home furnishings can also permanently transfer color to the vehicle's interior.

Use a soft bristle brush to remove dust from knobs and crevices on the instrument cluster. Using a mild soap solution, immediately remove hand lotions, sunscreen, and insect repellent from all interior surfaces or permanent damage may result.

Your dealer may have products for cleaning the interior. Use cleaners specifically designed for the surfaces being cleaned to prevent permanent damage. Apply all cleaners directly to the cleaning cloth. Do not spray cleaners directly on any switches or controls. Cleaners should be removed quickly. Never allow cleaners to remain on the surface being cleaned for extended periods of time.

Cleaners may contain solvents that can become concentrated in the interior. Before using cleaners, read and adhere to all safety instructions on the label. While cleaning the interior, maintain adequate ventilation by opening the doors and windows.

To prevent damage, do not clean the interior using the following cleaners or techniques:

- Never use a razor or any other sharp object to remove a soil from any interior surface.
- Never use a brush with stiff bristles.
- Never rub any surface aggressively or with excessive pressure.
- Do not use laundry detergents or dishwashing soaps with degreasers. For liquid cleaners, use approximately 20 drops per 3.8 L (1 gal) of water.
  A concentrated soap solution will leave a residue that creates streaks and attracts dirt. Do not use solutions that contain strong or caustic soap.
- Do not heavily saturate the upholstery when cleaning.
- Do not use solvents or cleaners containing solvents.

Interior Glass

To clean, use a terry cloth fabric dampened with water. Wipe droplets left behind with a clean dry cloth. Commercial glass cleaners may be used, if necessary, after cleaning the interior glass with plain water.

⚠ Caution

To prevent scratching, never use abrasive cleaners on automotive glass. Abrasive cleaners or aggressive cleaning may damage the rear window defogger.

Cleaning the windshield with water during the first three to six months of ownership will reduce tendency to fog.

Speaker Covers

Vacuum around a speaker cover gently, so that the speaker will not be damaged. Clean spots with just water and mild soap.

Coated Moldings

Coated moldings should be cleaned.

- When lightly soiled, wipe with a sponge or soft lint-free cloth dampened with water.
- When heavily soiled, use warm soapy water.

Fabric/Carpet/Suede

Start by vacuuming the surface using a soft brush attachment. If a rotating brush attachment is being used during vacuuming, only use it on the floor carpet. Before cleaning, gently remove as much of the soil as possible using one of the following techniques:

- Gently blot liquids with a paper towel. Continue blotting until no more soil can be removed.
- For solid soils, remove as much as possible prior to vacuuming.

To clean:

1. Saturate a clean lint-free colorfast cloth with water. Microfiber cloth is recommended to prevent lint transfer to the fabric or carpet.
2. Remove excess moisture by gently wringing until water does not drip from the cleaning cloth.
3. Start on the outside edge of the soil and gently rub toward the center. Fold the cleaning cloth to a clean area frequently to prevent forcing the soil in to the fabric.
4. Continue gently rubbing the soiled area until there is no longer any color transfer from the soil to the cleaning cloth.
5. If the soil is not completely removed, use a mild soap solution followed only by plain water.

If the soil is not completely removed, it may be necessary to use a commercial upholstery cleaner or spot lifter. Test a small hidden area for colorfastness before using a commercial upholstery cleaner or spot lifter. If ring formation occurs, clean the entire fabric or carpet.

Following the cleaning process, a paper towel can be used to blot excess moisture.

Cleaning High Gloss Surfaces and Vehicle Information and Radio Displays

For vehicles with high gloss surfaces or vehicle displays, use a microfiber cloth to wipe surfaces. Before wiping the surface with the microfiber cloth, use a soft bristle brush to remove dirt that could scratch the surface. Then use the microfiber cloth by gently rubbing to clean. Never use window cleaners or solvents. Periodically hand wash the microfiber cloth separately, using mild soap. Do not use bleach or fabric softener. Rinse thoroughly and air dry before next use.

⚠ Caution

Do not attach a device with a suction cup to the display. This may cause damage and would not be covered by the vehicle warranty.

Instrument Panel, Leather, Vinyl, Other Plastic Surfaces, Low Gloss Paint Surfaces and Natural Open Pore Wood Surfaces

Use a soft microfiber cloth dampened with water to remove dust and loose dirt. For a more thorough cleaning, use a soft microfiber cloth dampened with a mild soap solution.

⚠ Caution

Soaking or saturating leather, especially perforated leather, as well as other interior surfaces, may cause permanent damage. Wipe excess moisture from these surfaces after cleaning and allow them to dry naturally. Never use heat, steam, or spot removers. Do not use cleaners that contain silicone or wax-based products. Cleaners containing these solvents can permanently change the appearance and feel of leather or soft trim, and are not recommended.

Do not use cleaners that increase gloss, especially on the instrument panel. Reflected glare can decrease visibility through the windshield under certain conditions.

⚠ Caution

Use of air fresheners may cause permanent damage to plastics and painted surfaces. If an air freshener comes in contact with any plastic or painted surface in the vehicle, blot immediately and clean with a soft cloth dampened with a mild soap solution. Damage caused by air fresheners would not be covered by the vehicle warranty.

Cargo Cover and Convenience Net

Wash with warm water and mild detergent. Do not use chlorine bleach. Rinse with cold water, and then dry completely.

Care of Safety Belts

Keep belts clean and dry.

⚠ Warning

Do not bleach or dye safety belts. It may severely weaken them. In a crash, they might not be able to provide adequate protection. Clean safety belts only with mild soap and lukewarm water.

Floor Mats

⚠ Warning

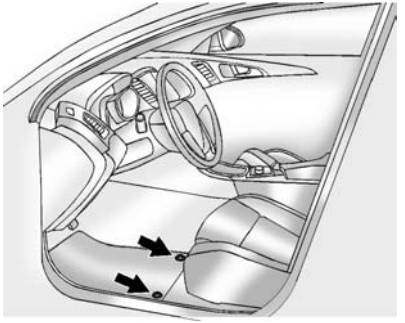
If a floor mat is the wrong size or is not properly installed, it can interfere with the pedals. Interference with the pedals can cause unintended acceleration and/or increased stopping distance which can cause a crash and injury. Make sure the floor mat does not interfere with the pedals.

Use the following guidelines for proper floor mat usage:

- The original equipment floor mats were designed for your vehicle. If the floor mats need replacing, it is recommended that GM certified floor mats be purchased. Non-GM floor mats may not fit properly and may interfere with the pedals. Always check that the floor mats do not interfere with the pedals.
- Do not use a floor mat if the vehicle is not equipped with a floor mat retainer on the driver side floor.
- Use the floor mat with the correct side up. Do not turn it over.
- Do not place anything on top of the driver side floor mat.
- Use only a single floor mat on the driver side.
- Do not place one floor mat on top of another.

Removing and Replacing the Floor Mats

Pull up on the rear of the floor mat to unlock each retainer and remove.



Reinstall by lining up the floor mat retainer openings over the carpet retainers and snap into position.

Make sure the floor mat is properly secured in place.

Verify the floor mat does not interfere with the pedals.

Service and Maintenance

General Information
General Information 11-1

Maintenance Schedule
Maintenance Schedule 11-2

Special Application Services
Special Application Services 11-5

Additional Maintenance and Care
Additional Maintenance and Care 11-5

Recommended Fluids, Lubricants, and Parts
Recommended Fluids and Lubricants 11-8
Maintenance Replacement Parts 11-9

Maintenance Records
Maintenance Records 11-10

General Information

Your vehicle is an important investment. This section describes the required maintenance for the vehicle. Follow this schedule to help protect against major repair expenses resulting from neglect or inadequate maintenance. It may also help to maintain the value of the vehicle if it is sold. It is the responsibility of the owner to have all required maintenance performed.

Your dealer has trained technicians who can perform required maintenance using genuine replacement parts. They have up-to-date tools and equipment for fast and accurate diagnostics. Many dealers have extended evening and Saturday hours, courtesy transportation, and online scheduling to assist with service needs.

Your dealer recognizes the importance of providing competitively priced maintenance and repair services. With trained technicians, the dealer is the place for routine maintenance such as tire rotations and additional maintenance items like tires, brakes, batteries, and wiper blades.

⚠ Caution

Damage caused by improper maintenance can lead to costly repairs and may not be covered by the vehicle warranty. Maintenance intervals, checks, inspections, recommended fluids, and lubricants are important to keep the vehicle in good working condition.

The Tire Rotation and Required Services are the responsibility of the vehicle owner. It is recommended to have your dealer perform these services every 12 000 km/7,500 mi. Proper vehicle maintenance helps to keep the vehicle in good working condition.

The Additional Required Services are for vehicles that:

- Carry passengers and cargo within recommended limits on the Tire and Loading Information label. See *Vehicle Load Limits on page 9-10*.
- Are driven on reasonable road surfaces within legal driving limits.

Refer to the information in the Maintenance Schedule Additional Required Services chart.

⚠ Warning

Performing maintenance work can be dangerous and can cause serious injury. Perform maintenance work only if the required information, proper tools, and equipment are available.
If they are not, see your dealer to have a trained technician do the work. See *Doing Your Own Service Work on page 10-3*.

Maintenance Schedule

Owner Checks and Services

Once a Month

- Check the tire inflation pressures. See *Tire Pressure on page 10-34*.
- Inspect the tires for wear. See *Tire Inspection on page 10-39*.
- Check the windshield washer fluid level. See *Washer Fluid on page 10-10*.

Tire Rotation and Required Services Every 12 000 km/ 7,500 mi

Rotate the tires, if recommended for the vehicle, and perform the following services. See *Tire Rotation on page 10-39*.

- Check vehicle coolant level.

- Check windshield washer fluid level. See *Washer Fluid on page 10-10*.
- Visually inspect windshield wiper blades for wear, cracking, or contamination. See *Exterior Care on page 10-60*. Replace worn or damaged wiper blades. See *Wiper Blade Replacement on page 10-15*.
- Check tire inflation pressures. See *Tire Pressure on page 10-34*.
- Inspect tire wear. See *Tire Inspection on page 10-39*.
- Visually check for fluid leaks.
- Inspect brake system.
- Visually inspect steering, suspension, and chassis components for damaged, loose, or missing parts or signs of wear. See *Exterior Care on page 10-60*.
- Check restraint system components. See *Safety System Check on page 3-15*.
- Lubricate body components. See *Exterior Care on page 10-60*.
- Check accelerator pedal for damage, high effort, or binding. Replace if needed.
- Visually inspect gas strut for signs of wear, cracks, or other damage. Check the hold open ability of the strut. See your dealer if service is required.
- Check tire sealant expiration date, if equipped. See *Tire Sealant and Compressor Kit on page 10-48*.

Maintenance Schedule Additional Required Services	12 000 km/7,500 mi	24 000 km/15,000 mi	36 000 km/22,500 mi	48 000 km/30,000 mi	60 000 km/37,500 mi	72 000 km/45,000 mi	84 000 km/52,500 mi	96 000 km/60,000 mi	108 000 km/67,500 mi	120 000 km/75,000 mi	132 000 km/82,500 mi	144 000 km/90,000 mi	156 000 km/97,500 mi	168 000 km/105,000 mi	180 000 km/112,500 mi	192 000 km/120,000 mi	204 000 km/127,500 mi	216 000 km/135,000 mi	228 000 km/142,500 mi	240 000 km/150,000 mi
Rotate tires and perform Required Services.	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Replace passenger compartment air filter. (1)			✓			✓			✓			✓			✓			✓		
Drain and fill vehicle coolant circuits. (2)																				✓
Replace brake fluid. (3)						✓						✓						✓		

Footnotes — Maintenance Schedule Additional Required Services

(1) Or every two years, whichever comes first. More frequent replacement may be needed if the vehicle is driven in areas with heavy traffic, areas with poor air quality, or areas with high dust levels. Replacement may also be needed if there is a reduction in air flow, excessive window fogging, or odors.

(2) Or every five years, whichever comes first. See *Cooling System (High Voltage Battery) on page 10-7* or *Cooling System (TPIM, APM, and Charger Modules) on page 10-8* and *Cabin Heating Coolant System on page 10-9*.

(3) Or every three years, whichever comes first.

Special Application Services

- Severe Commercial Use Vehicles Only: Lubricate chassis components every 5 000 km/ 3,000 mi.
- Have underbody flushing service performed. See "Underbody Maintenance" in *Exterior Care on page 10-60*.
- Have the air conditioning system flushed and refilled and desiccant replaced every 10 years.

Additional Maintenance and Care

Your vehicle is an important investment and caring for it properly may help to avoid future costly repairs. To maintain vehicle performance, additional maintenance services may be required. It is recommended that your dealer perform these services — their trained dealer technicians know your vehicle best. Your dealer can also perform a thorough assessment with a multi-point inspection to recommend when your vehicle may need attention. The following list is intended to explain the services and conditions to look for that may indicate services are required.

Battery

The battery supplies power to operate any additional electrical accessories.

- To avoid break-down or failure, maintain a battery with full power.
- Trained dealer technicians have the diagnostic equipment to test the battery and ensure that the connections and cables are corrosion-free.

Brakes

Brakes stop the vehicle and are crucial to safe driving.

- Signs of brake wear may include chirping, grinding, or squealing noises, or difficulty stopping.
- Trained dealer technicians have access to tools and equipment to inspect the brakes and recommend quality parts engineered for the vehicle.

Fluids

Proper fluid levels and approved fluids protect the vehicle's systems and components. See *Recommended Fluids and Lubricants on page 11-8* for GM approved fluids.

- Keep the windshield washer fluid reservoir filled.
- Instrument cluster lights may come on to indicate that fluids may be low and need to be filled.

Hoses

Hoses transport fluids and should be regularly inspected to ensure that there are no cracks or leaks. With a multi-point inspection, your dealer can inspect the hoses and advise if replacement is needed.

Lamps

Properly working headlamps, taillamps, and brake lamps are important to see and be seen on the road.

- Signs that the headlamps need attention include dimming, failure to light, cracking, or damage. The brake lamps need to be checked periodically to ensure that they light when braking.
- With a multi-point inspection, your dealer can check the lamps and note any concerns.

Shocks and Struts

Shocks and struts help aid in control for a smoother ride.

- Signs of wear may include steering wheel vibration, bounce/sway while braking, longer stopping distance, or uneven tire wear.
- As part of the multi-point inspection, trained dealer technicians can visually inspect the shocks and struts for signs of leaking, blown seals, or damage, and can advise when service is needed.

Tires

Tires need to be properly inflated, rotated, and balanced. Maintaining the tires can save money and reduce the risk of tire failure.

- Signs that the tires need to be replaced include three or more visible treadwear indicators; cord or fabric showing through the rubber; cracks or cuts in the tread or sidewall; or a bulge or split in the tire.
- Trained dealer technicians can inspect and recommend the right tires. Your dealer can also provide tire/wheel balancing services to ensure smooth vehicle operation at all speeds. Your dealer sells and services name brand tires.

Vehicle Care

To help keep the vehicle looking like new, vehicle care products are available from your dealer. For information on how to clean and protect the vehicle's interior and exterior, see *Interior Care on page 10-64* and *Exterior Care on page 10-60*.

Wheel Alignment

Wheel alignment is critical for ensuring that the tires deliver optimal wear and performance.

- Signs that the alignment may need to be adjusted include pulling, improper vehicle handling, or unusual tire wear.
- Your dealer has the required equipment to ensure proper wheel alignment.

Windshield

For safety, appearance, and the best viewing, keep the windshield clean and clear.

- Signs of damage include scratches, cracks, and chips.
- Trained dealer technicians can inspect the windshield and recommend proper replacement if needed.

Wiper Blades

Wiper blades need to be cleaned and kept in good condition to provide a clear view.

- Signs of wear include streaking, skipping across the windshield, and worn or split rubber.
- Trained dealer technicians can check the wiper blades and replace them when needed.

Recommended Fluids, Lubricants, and Parts

Recommended Fluids and Lubricants

Usage	Fluid/Lubricant
Vehicle Coolant Circuits	50/50 mixture of deionized water and use only DEX-COOL® coolant.
Hydraulic Brake System	DOT 4 Hydraulic Brake Fluid (GM Part No. 19299570, in Canada 19299571).
Windshield Washer	Automotive windshield washer fluid that meets regional freeze protection requirements.
Electric Drive Unit	DEXRON® HP Automatic Transmission Fluid (GM Part No. 19300536, in Canada 19300537).
Key Lock Cylinders, Hood and Hatch Hinges	Multi-Purpose Lubricant, Superlube (GM Part No. 12346241, in Canada 10953474).
Weatherstrip Conditioning	Weatherstrip Lubricant (GM Part No. 3634770, in Canada 10953518) or Dielectric Silicone Grease (GM Part No. 12345579, in Canada 10953481.

Maintenance Replacement Parts

Replacement parts identified below by name, part number, or specification can be obtained from your dealer.

Maintenance Replacement Parts

Part	GM Part Number	ACDelco Part Number
Passenger Compartment Air Filter	13271190	CF181
Wiper Blades		
Driver Side – 60 cm (23.6 in)	95108156	—
Passenger Side – 40 cm (15.7 in)	95108153	—
Rear	96688389	—

Maintenance Records

After the scheduled services are performed, record the date, odometer reading, who performed the service, and the type of services performed in the boxes provided. Retain all maintenance receipts.

Date	Odometer Reading	Serviced By	Services Performed

Technical Data

Vehicle Identification
Vehicle Identification Number (VIN) 12-1
Service Parts Identification Label 12-1

Vehicle Data
Capacities and Specifications 12-2

Vehicle Identification

Vehicle Identification Number (VIN)

This legal identifier is in the front corner of the instrument panel, on the left side of the vehicle. It can be seen through the windshield from outside. The VIN also appears on the Vehicle Certification and Service Parts labels and certificates of title and registration.

Service Parts Identification Label

This label, on the inside of the glove box, has the following information:

- Vehicle Identification Number (VIN).
- Model designation.
- Paint information.
- Production options and special equipment.

Do not remove this label from the vehicle.

Vehicle Data

Capacities and Specifications

The following approximate capacities are given in metric and English conversions. See *Recommended Fluids and Lubricants on page 11-8*.

Application	Capacities	
	Metric	English
Air Conditioning Refrigerant	For the air conditioning system refrigerant type and charge amount, see the refrigerant label under the hood. See your dealer for more information.	
Cooling System		
High Voltage Battery	6.2 L	6.6 qt
Power Electronics	2.4 L	2.5 qt
Heater	2.0 L	2.1 qt
Wheel Nut Torque	125 N•m	92 lb ft
All capacities are approximate. When adding, be sure to fill to the approximate level, as recommended in this manual. Recheck fluid level after filling.		

Customer Information

Customer Information
Customer Satisfaction Procedure 13-1
Customer Assistance Offices 13-3
Customer Assistance for Text Telephone (TTY) Users 13-4
Online Owner Center 13-4
GM Mobility Reimbursement Program 13-5
Roadside Assistance Program 13-5
Scheduling Service Appointments 13-7
Courtesy Transportation Program 13-8
Collision Damage Repair 13-9
Service Publications Ordering Information 13-11
Radio Frequency Identification (RFID) 13-12
Radio Frequency Statement 13-12

Reporting Safety Defects
Reporting Safety Defects to the United States Government 13-13
Reporting Safety Defects to the Canadian Government 13-13
Reporting Safety Defects to General Motors 13-14

Vehicle Data Recording and Privacy
Vehicle Data Recording and Privacy 13-14
Event Data Recorders 13-14
OnStar® 13-15

Customer Information

Customer Satisfaction Procedure

Your satisfaction and goodwill are important to your dealer and to Chevrolet. Normally, any concerns with the sales transaction or the operation of the vehicle will be resolved by your dealer's sales or service departments. Sometimes, however, despite the best intentions of all concerned, misunderstandings can occur. If your concern has not been resolved to your satisfaction, the following steps should be taken:

STEP ONE: Discuss your concern with a member of dealership management. Normally, concerns can be quickly resolved at that level. If the matter has already been reviewed with the sales, service, or parts manager, contact the owner of your dealership or the general manager.

STEP TWO: If after contacting a member of dealership management, it appears your concern cannot be resolved by your dealership without further help, in the U.S., call the Chevrolet Customer Assistance Center at 1-855-477-2754 (1-855-4-SPARK-INFO). In Canada, call General Motors of Canada Customer Care Centre at 1-800-263-3777 (English), or 1-800-263-7854 (French).

We encourage you to call the toll-free number in order to give your inquiry prompt attention. Have the following information available to give the Customer Assistance representative:

- Vehicle Identification Number (VIN). This is available from the vehicle registration or title, or the plate at the top left of the instrument panel and visible through the windshield.
- Dealership name and location.
- Vehicle delivery date and present mileage.

When contacting Chevrolet, remember that your concern will likely be resolved at a dealer's facility. That is why we suggest following Step One first.

STEP THREE — U.S. Owners: Both General Motors and your dealer are committed to making sure you are completely satisfied with the new vehicle. However, if you continue to remain unsatisfied after following the procedure outlined in Steps One and Two, you can file with the Better Business Bureau (BBB) Auto Line® Program to enforce your rights.

The BBB Auto Line Program is an out-of-court program administered by the Council of Better Business Bureaus to settle automotive disputes regarding vehicle repairs or the interpretation of the New Vehicle Limited Warranty. Although you may be required to resort to this informal dispute resolution program prior to filing a court action, use of the program is free of charge and your case will generally be heard within 40 days. If you do not agree with the decision given in your case, you may reject it and proceed with any other venue for relief available to you.

You may contact the BBB Auto Line Program using the toll-free telephone number or write them at the following address:

BBB Auto Line Program
Council of Better Business Bureaus, Inc.
4200 Wilson Boulevard
Suite 800
Arlington, VA 22203-1838

Telephone: 1-800-955-5100
www.dr.bbb.org/goauto

This program is available in all 50 states and the District of Columbia. Eligibility is limited by vehicle age, mileage, and other factors. General Motors reserves the right to change eligibility limitations and/or discontinue its participation in this program.

STEP THREE — Canadian Owners: In the event that you do not feel your concerns have been addressed after following the procedure outlined in Steps One and Two, General Motors of Canada Limited wants you to be aware of its participation in a no-charge Mediation/Arbitration Program. General Motors of Canada Limited has committed to binding arbitration of owner disputes involving factory-related vehicle service claims. The program provides for the review of the facts involved by an impartial third party arbiter, and may include an informal hearing before the arbiter. The program is designed so that the entire dispute settlement process, from the time you file your complaint to the final decision, should be completed in about 70 days. We believe our impartial program offers advantages over courts in most jurisdictions because it is informal, quick, and free of charge.

For further information concerning eligibility in the Canadian Motor Vehicle Arbitration Plan (CAMVAP), call toll-free 1-800-207-0685, or call the General Motors Customer Care Centre, 1-800-263-3777 (English), 1-800-263-7854 (French), or write to:

The Mediation/Arbitration Program
c/o Customer Care Centre
General Motors of Canada Limited
Mail Code: CA1-163-005
1908 Colonel Sam Drive
Oshawa, Ontario L1H 8P7

The inquiry should be accompanied by the Vehicle Identification Number (VIN).

Customer Assistance Offices

Chevrolet encourages customers to call the toll-free number for assistance. However, if a customer wishes to write or e-mail Chevrolet, the letter should be addressed to:

United States and Puerto Rico

Chevrolet Motor Division
Chevrolet Customer Assistance Center
P.O. Box 33170
Detroit, MI 48232-5170
www.Chevrolet.com

1-855-477-2754
(1-855-4-SPARK-INFO)
1-800-833-2438 (For Text Telephone Devices (TTYs))
Roadside Assistance:
1-888-811-1926

From U.S. Virgin Islands:

1-800-496-9994

Canada

General Motors of Canada Limited
Customer Care Centre, Mail Code: CA1-163-005
1908 Colonel Sam Drive
Oshawa, Ontario L1H 8P7
www.gm.ca

1-800-263-3777 (English)
1-800-263-7854 (French)
1-800-263-3830 (For Text Telephone devices (TTYs))
Roadside Assistance:
1-800-268-6800

Overseas

Please contact the local General Motors Business Unit.

Customer Assistance for Text Telephone (TTY) Users

To assist customers who are deaf, hard of hearing, or speech-impaired and who use Text Telephones (TTYs), Chevrolet has TTY equipment available at its Customer Assistance Center. Any TTY user in the U.S. can communicate with Chevrolet by dialing: 1-800-833-2438. TTY users in Canada can dial 1-800-263-3830.

Online Owner Center

Online Owner Experience (U.S.) my.chevrolet.com

The Chevrolet online owner experience allows interaction with Chevrolet and keeps important vehicle-specific information in one place.

Membership Benefits

(Vehicle Information): Download owner manuals and view vehicle-specific how-to videos.

(Maintenance Information): View maintenance schedules, alerts, and OnStar onboard vehicle diagnostic information. Schedule service appointments.

(Service History): View and print dealer-recorded service records and self-recorded service records.

(Preferred Dealer Information): Select a dealer and view locations, maps, phone numbers, and hours.

(Warranty Tracking Information): Track the vehicle's warranty information.

(Recall Information): View active recalls by Vehicle Identification Number (VIN). See *Vehicle Identification Number (VIN) on page 12-1*.

(Other Account Information): View GM Card, SiriusXM Satellite radio (if equipped), and OnStar account information.

(Live Chat Support): Chat with online help representatives.

See my.chevrolet.com to register your vehicle.

Chevrolet Owner Centre (Canada) chevroletowner.ca

Visit the Chevrolet Owner Centre:

- Chat live with online help representatives.
- Locate owner resources such as lease-end, financing, and warranty information.
- Retrieve your favorite articles, quizzes, tips, and multimedia galleries organized into the Featured Articles and Auto Care Sections.
- Download owner manuals.
- Find the Chevrolet-recommended maintenance services.

GM Mobility Reimbursement Program

This program is available to qualified applicants for cost reimbursement of eligible aftermarket adaptive equipment required for the vehicle, such as hand controls or a wheelchair/scooter lift for the vehicle.

For more information on the limited offer, visit www.gmmobility.com or call the GM Mobility Assistance Center at 1-800-323-9935. Text Telephone (TTY) users, call 1-800-833-9935.

General Motors of Canada also has a Mobility Program. Visit www.gm.ca or call 1-800-GM-DRIVE (463-7483) for details. TTY users call 1-800-263-3830.

Roadside Assistance Program

For U.S.-purchased vehicles, call 1-888-811-1926; (Text Telephone (TTY): 1-888-889-2438).

For Canadian-purchased vehicles, call 1-800-268-6800.

Service is available 24 hours a day, 365 days a year.

Calling for Assistance

When calling Roadside Assistance, have the following information ready:

- Your name, home address, and home telephone number.
- Telephone number of your location.
- Location of the vehicle.

- Model, year, color, and license plate number of the vehicle.
- Odometer reading, Vehicle Identification Number (VIN), and delivery date of the vehicle.
- Description of the problem.

Coverage

Services are provided up to 5 years/ 160 000 km (100,000 mi), whichever comes first.

In the U.S., anyone driving the vehicle is covered. In Canada, a person driving the vehicle without permission from the owner is not covered.

Roadside Assistance is not a part of the New Vehicle Limited Warranty. General Motors North America and Chevrolet reserve the right to make any changes or discontinue the Roadside Assistance program at any time without notification.

General Motors North America and Chevrolet reserve the right to limit services or payment to an owner or driver if they decide the claims are made too often, or the same type of claim is made many times.

Services Provided

- **Emergency Charging Service:** Delivery of up to a 30 minute/ 5 mile charge. There is also the option of being towed to the nearest charging station or home, whichever is closest, if a mobile charging unit is not available or if the wait for mobile charging is considered to be excessive. (U.S. only)
- **Lock-Out Service:** Service to unlock the vehicle if you are locked out. A remote unlock may be available if you have OnStar. For security reasons, the driver must present identification before this service is given.
- **Emergency Tow from a Public Road or Highway:** Tow to the nearest Chevrolet dealer for warranty service, or if the vehicle was in a crash and cannot be driven. Assistance is not given when the vehicle is stuck in the sand, mud, or snow.

  Emergency towing may be covered for the duration of the Extended Vehicle (EV) component warranty.
- **Flat Tire Change:** Service to change a flat tire with the spare tire. The spare tire, if equipped, must be in good condition and properly inflated. It is the owner's responsibility for the repair or replacement of the tire if it is not covered by the warranty.
- **Battery Jump Start:** Service to jump start a dead battery.

Services Not Included in Roadside Assistance

- Impound towing caused by violation of any laws.
- Legal fines.
- Mounting, dismounting, or changing of snow tires, chains, or other traction devices.

Service is not provided if a vehicle is in an area that is not accessible to the service vehicle or is not a regularly traveled or maintained public road, which includes ice and winter roads. Off-road use is not covered.

Services Specific to Canadian-Purchased Vehicles

- **Lock-Out Service:** Vehicle registration is required.
- **Trip Interruption Benefits and Assistance:** Must be over 150 kilometers from where your trip was started to qualify. General Motors of Canada Limited requires pre-authorization, original detailed receipts, and a copy of the repair orders. Once authorization has been received, the Roadside Assistance advisor will help to make arrangements and explain how to receive payment.
- **Alternative Service:** If assistance cannot be provided right away, the Roadside Assistance advisor may give permission to get local emergency road service. You will receive payment, up to $100, after sending the original receipt to Roadside Assistance. Mechanical failures may be covered, however any cost for parts and labor for repairs not covered by the warranty are the owner responsibility.

Scheduling Service Appointments

When the vehicle requires warranty service, contact your dealer and request an appointment. By scheduling a service appointment and advising the service consultant of your transportation needs, your dealer can help minimize your inconvenience.

If the vehicle cannot be scheduled into the service department immediately, keep driving it until it can be scheduled for service, unless, of course, the problem is safety related. If it is, please call your dealership, let them know this, and ask for instructions.

If your dealer requests you to bring the vehicle for service, you are urged to do so as early in the work day as possible to allow for same-day repair.

Courtesy Transportation Program

To enhance your ownership experience, we and our participating dealers are proud to offer Courtesy Transportation, a customer support program for vehicles with the Bumper-to-Bumper (Base Warranty Coverage period in Canada), extended powertrain, and/or hybrid-specific warranties in both the U.S. and Canada.

Several Courtesy Transportation options are available to assist in reducing inconvenience when warranty repairs are required.

Courtesy Transportation is not a part of the New Vehicle Limited Warranty. A separate booklet entitled “Limited Warranty and Owner Assistance Information” furnished with each new vehicle provides detailed warranty coverage information.

Transportation Options

Warranty service can generally be completed while you wait. However, if you are unable to do so, your dealer may offer the following transportation options:

Shuttle Service

This includes one-way or round-trip shuttle service within reasonable time and distance parameters of your dealer's area.

Public Transportation or Fuel Reimbursement

If overnight warranty repairs are needed, and public transportation is used, the expense must be supported by original receipts and within the maximum amount allowed by GM for shuttle service. If U.S. customers arrange their own transportation, limited reimbursement for reasonable fuel expenses may be available. Claim amounts should reflect actual costs and be supported by original receipts. See your dealer for information.

Courtesy Rental Vehicle

For an overnight warranty repair, the dealer may provide an available courtesy rental vehicle or provide for reimbursement of a rental vehicle. Reimbursement is limited and must be supported by original receipts as well as a signed and completed rental agreement and meet state/provincial, local, and rental vehicle provider requirements. Requirements vary and may include minimum age requirements, insurance coverage, credit card, etc. Additional fees such as fuel usage charges, taxes, levies, usage fees, excessive mileage, or rental usage beyond the completion of the repair are also your responsibility.

It may not be possible to provide a like vehicle as a courtesy rental.

Additional Program Information

All program options, such as shuttle service, may not be available at every dealer. Contact your dealer for specific availability.

General Motors reserves the right to unilaterally modify, change, or discontinue Courtesy Transportation at any time and to resolve all questions of claim eligibility pursuant to the terms and conditions described herein at its sole discretion.

Collision Damage Repair

If the vehicle is involved in a collision and it is damaged, have the damage repaired by a qualified technician using the proper equipment and quality replacement parts. Poorly performed collision repairs diminish the vehicle resale value, and safety performance can be compromised in subsequent collisions.

Collision Parts

Genuine GM Collision parts are new parts made with the same materials and construction methods as the parts with which the vehicle was originally built. Genuine GM Collision parts are the best choice to ensure that the vehicle's designed appearance, durability, and safety are preserved. The use of Genuine GM parts can help maintain the GM New Vehicle Limited Warranty.

Recycled original equipment parts may also be used for repair. These parts are typically removed from vehicles that were total losses in prior crashes. In most cases, the parts being recycled are from undamaged sections of the vehicle. A recycled original equipment GM part may be an acceptable choice to maintain the vehicle's originally designed appearance and safety performance; however, the history of these parts is not known. Such parts are not covered by the GM New Vehicle Limited Warranty, and any related failures are not covered by that warranty.

Aftermarket collision parts are also available. These are made by companies other than GM and may not have been tested for the vehicle. As a result, these parts may fit poorly, exhibit premature durability/corrosion problems, and may not perform properly in subsequent collisions. Aftermarket parts are not covered by the GM New Vehicle Limited Warranty, and any vehicle failure related to such parts is not covered by that warranty.

Repair Facility

GM also recommends that you choose a collision repair facility that meets your needs before you ever need collision repairs. Your dealer may have a collision repair center with GM-trained technicians and state-of-the-art equipment, or be able to recommend a collision repair

center that has GM-trained technicians and comparable equipment.

Insuring the Vehicle

Protect your investment in the GM vehicle with comprehensive and collision insurance coverage. There are significant differences in the quality of coverage afforded by various insurance policy terms. Many insurance policies provide reduced protection to the GM vehicle by limiting compensation for damage repairs by using aftermarket collision parts. Some insurance companies will not specify aftermarket collision parts. When purchasing insurance, we recommend that you ensure that the vehicle will be repaired with GM original equipment collision parts. If such insurance coverage is not available from your current insurance carrier, consider switching to another insurance carrier.

If the vehicle is leased, the leasing company may require you to have insurance that ensures repairs with Genuine GM Original Equipment Manufacturer (OEM) parts or Genuine Manufacturer replacement parts. Read the lease carefully, as you may be charged at the end of the lease for poor quality repairs.

If a Crash Occurs

If there has been an injury, call emergency services for help. Do not leave the scene of a crash until all matters have been taken care of. Move the vehicle only if its position puts you in danger, or you are instructed to move it by a police officer.

Give only the necessary information to police and other parties involved in the crash.

For emergency towing see *Roadside Assistance Program on page 13-5*.

Gather the following information:

- Driver name, address, and telephone number.
- Driver license number.
- Owner name, address, and telephone number.
- Vehicle license plate number.
- Vehicle make, model, and model year.
- Vehicle Identification Number (VIN).
- Insurance company and policy number.
- General description of the damage to the other vehicle.

Choose a reputable repair facility that uses quality replacement parts. See “Collision Parts” earlier in this section.

In a crash, the sensing system may shut down the high voltage system. See *Battery on page 10-13* for important safety information. If an

airbag has inflated, see *What Will You See after an Airbag Inflates? on page 3-21*.

If the vehicle is damaged from a crash, flood, fire, or other event it may be necessary to have the vehicle inspected. See *Battery on page 10-13* and *High Voltage Safety Information on page 1-15* for important safety information.

Managing the Vehicle Damage Repair Process

In the event that the vehicle requires damage repairs, GM recommends that you take an active role in its repair. If you have a pre-determined repair facility of choice, take the vehicle there, or have it towed there. Specify to the facility that any required replacement collision parts be original equipment parts, either new Genuine GM parts or recycled original GM parts. Remember, recycled parts will not be covered by the GM vehicle warranty.

Insurance pays the bill for the repair, but you must live with the repair. Depending on your policy limits, your insurance company may initially value the repair using aftermarket parts. Discuss this with the repair professional, and insist on Genuine GM parts. Remember, if the vehicle is leased, you may be obligated to have the vehicle repaired with Genuine GM parts, even if your insurance coverage does not pay the full cost.

If another party's insurance company is paying for the repairs, you are not obligated to accept a repair valuation based on that insurance company's collision policy repair limits, as you have no contractual limits with that company. In such cases, you can have control of the repair and parts choices as long as the cost stays within reasonable limits.

Service Publications Ordering Information

Service Manuals

Service Manuals have the diagnosis and repair information on the electric drive unit, axle, suspension, brakes, electrical, steering, body, etc.

Service Bulletins

Service Bulletins give additional technical service information needed to knowledgeably service General Motors cars and trucks. Each bulletin contains instructions to assist in the diagnosis and service of the vehicle.

Owner Information

Owner publications are written specifically for owners and intended to provide basic operational information about the vehicle. The Owner Manual includes the Maintenance Schedule for all models.

In-Portfolio: Includes a Portfolio, Owner Manual, and Warranty Booklet.

RETAIL SELL PRICE: $35.00 to $40.00 (U.S.) plus handling and shipping fees.

Upgraded Pouch: Owner Manual only.

RETAIL SELL PRICE: $25.00 (U.S.) plus handling and shipping fees.

Current and Past Models

Technical Service Bulletins and Manuals are available for current and past model GM vehicles.

ORDER TOLL FREE:
1-800-551-4123 Monday - Friday
8:00 AM - 6:00 PM Eastern Time

For Credit Card Orders Only (VISA-MasterCard-Discover), visit Helm, Inc. at: www.helminc.com

Or write to:

Helm, Incorporated
Attention: Customer Service
47911 Halyard Drive
Plymouth, MI 48170

Prices are subject to change without notice and without incurring obligation. Allow ample time for delivery.

All listed prices are quoted in U.S. funds. Make checks payable in U.S. funds.

Radio Frequency Identification (RFID)

RFID technology is used in some vehicles for functions such as tire pressure monitoring and ignition system security, as well as in connection with conveniences such as Remote Keyless Entry (RKE) transmitters for remote door locking/unlocking and starting, and in-vehicle transmitters for garage door openers. RFID technology in GM vehicles does not use or record personal information or link with any other GM system containing personal information.

Radio Frequency Statement

This vehicle has systems that operate on a radio frequency that complies with Part 15/Part 18 of the Federal Communications Commission (FCC) rules and with Industry Canada Standards RSS-GEN/210/220/310, ICES-001.

Operation is subject to the following two conditions:

1. The device may not cause harmful interference.
2. The device must accept any interference received, including interference that may cause undesired operation of the device.

Changes or modifications to any of these systems by other than an authorized service facility could void authorization to use this equipment.

Reporting Safety Defects

Reporting Safety Defects to the United States Government

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 General Motors.

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 General Motors.

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, S.E.
Washington, D.C. 20590

You can also obtain other information about motor vehicle safety from *http://www.safercar.gov.*

Reporting Safety Defects to the Canadian Government

If you live in Canada, and you believe that the vehicle has a safety defect, notify Transport Canada immediately, and notify General Motors of Canada Limited. Call Transport Canada at 1-800-333-0510 or write to:

Transport Canada
Road Safety Branch
80 rue Noel
Gatineau, QC J8Z 0A1

Reporting Safety Defects to General Motors

In addition to notifying NHTSA (or Transport Canada) in a situation like this, notify General Motors.

Call 1-800-222-1020, or write:

Chevrolet Motor Division
Chevrolet Customer Assistance Center
P.O. Box 33170
Detroit, MI 48232-5170

In Canada, call 1-800-263-3777 (English) or 1-800-263-7854 (French), or write:

General Motors of Canada Limited
Customer Care Centre, Mail Code: CA1-163-005
1908 Colonel Sam Drive
Oshawa, Ontario L1H 8P7

Vehicle Data Recording and Privacy

The vehicle has a number of computers that record information about the vehicle's performance and how it is driven. For example, the vehicle uses computer modules to monitor and control electric drive unit performance, to monitor the conditions for airbag deployment and to deploy them in a crash, and, if equipped, to provide antilock braking to help the driver control the vehicle. These modules may store data to help the dealer technician service the vehicle. Some modules may also store data about how the vehicle is operated, such as rate of fuel consumption or average speed. These modules may retain personal preferences, such as radio presets, seat positions, and temperature settings.

Event Data Recorders

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 air bag 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.

GM will not access this data or share it with others except: with the consent of the vehicle owner or, if the vehicle is leased, with the consent of the lessee; in response to an official request by police or similar government office; as part of GM's defense of litigation through the discovery process; or, as required by law. Data that GM collects or receives may also be used for GM research needs or may be made available to others for research purposes, where a need is shown and the data is not tied to a specific vehicle or vehicle owner.

OnStar®

If the vehicle is equipped with OnStar® and has an active subscription, additional data may be collected through the OnStar system. This includes information about the vehicle's operation; collisions involving the vehicle; the use of the vehicle and its features; and, in certain situations, the location and approximate GPS speed of the vehicle. Refer to the OnStar Terms and Conditions and Privacy Statement on the OnStar website.

✍ NOTES

OnStar

OnStar Overview
OnStar Overview 14-1

OnStar Services
Emergency 14-2
Security 14-3
Navigation 14-3
Connections 14-4
Vehicle Diagnostics 14-6

OnStar Additional Information
OnStar Additional Information 14-6

OnStar Overview

Voice Command Button

Blue OnStar Button

Emergency Button

This vehicle may be equipped with a comprehensive, in-vehicle system that can connect to a live OnStar Advisor for Emergency, Security, Navigation, Connection, and Diagnostic Services. OnStar services may require a paid subscription. OnStar requires the vehicle battery and electrical system, cellular service, and GPS satellite signals to be available and operating. OnStar acts as a link to existing public emergency service providers. OnStar may collect information about you and your vehicle, including location information. See OnStar's Terms and Conditions and Privacy Statement for more details including system limitations at www.onstar.com (U.S.) or www.onstar.ca (Canada).

The OnStar system status light is next to the OnStar buttons. If the status light is:

- Solid Green: System is on.
- Flashing Green: On a call.
- Red: Indicates a problem.
- Off: System is off. Press the blue OnStar button twice to speak with an OnStar Advisor.

Press or call 1-888-4-ONSTAR (1-888-466-7827) to speak to an Advisor.

Press to:

- Make a call, end a call, or answer an incoming call.
- Give OnStar Hands-Free Calling voice commands.

- Give OnStar Turn-by-Turn Navigation voice commands. Requires a specific OnStar subscription plan.
- Obtain the WiFi network name, or Service Set Identifier or SSID, and passphrase (if equipped).

Press On to connect to a live Advisor to:

- Verify account information or update contact information.
- Get driving directions. Requires a specific OnStar subscription plan.
- Receive On-Demand Diagnostics for a check of the vehicle's key operating systems.
- Receive Roadside Assistance.
- Manage WiFi Settings (if equipped).

Press SOS to get a priority connection to an OnStar Emergency Advisor available 24/7 to:

- Get help for an emergency.
- Be a Good Samaritan or respond to an AMBER Alert.
- Get assistance in severe weather or other crisis and evacuation routes.

OnStar Services

Emergency

With Automatic Crash Response, the OnStar system can automatically connect to an OnStar Emergency Advisor. The built-in system can automatically connect to help in certain crashes.

Press SOS to connect to an OnStar Emergency Advisor. GPS technology is used to identify the vehicle location and can provide important information to emergency personnel. OnStar Emergency Advisors are trained to provide assistance and link to existing public emergency service providers in emergency situations.

With OnStar Crisis Assist, specially trained Crisis Advisors are available 24 hours a day, 7 days a week, to provide a central point of contact, assistance, and information if a crisis occurs.

Security

OnStar provides services including Stolen Vehicle Assistance, Remote Ignition Block, and Roadside Assistance, if equipped. OnStar can unlock the vehicle doors remotely, if equipped with automatic door locks, and can help police locate the vehicle if it is stolen.

Navigation

OnStar navigation requires a specific OnStar subscription plan.

Press On to receive directions or have them sent to the vehicle navigation screen, if equipped. Destinations can also be forwarded to the vehicle from MapQuest.com.

Turn-by-Turn Navigation

1. Press On to connect to a live Advisor.
2. Request directions.
3. Directions are downloaded to the vehicle.
4. Follow the voice-guided commands.

Using Voice Commands During a Planned Route

Cancel Route

1. Press . System responds: “OnStar ready,” then a tone. Say “Cancel route.” System responds: “Do you want to cancel directions?”
2. Say “Yes.” System responds: “OK, request completed, thank you, goodbye.”

Route Preview

1. Press . System responds: “OnStar ready,” then a tone.
2. Say “Route preview.” System responds with the next three maneuvers.

Repeat

1. Press . System responds: “OnStar ready,” then a tone.
2. Say “Repeat.” System responds with the last direction given, then responds with “OnStar ready,” then a tone.

Get My Destination

1. Press . System responds: “OnStar ready,” then a tone.
2. Say “Get my destination.” System responds with the address and the distance to the destination, then responds with “OnStar ready,” then a tone.

Other Navigation Services Available from OnStar

OnStar eNav: Subscribers can send destinations from MapQuest.com to the vehicle Turn-by-Turn Navigation or screen-based navigation system (if equipped). When ready, the directions will be downloaded to the vehicle.

Destination Download: Press On, then request the Advisor to download directions to the navigation system in the vehicle (if equipped). After the call ends, press the “Go” button on the navigation screen to begin driving directions.

If directions are downloaded to the navigation system, the route can only be canceled through the navigation system.

Destinations can also be downloaded on the go. For information about eNav or Destination Download, see www.onstar.com (U.S.) or www.onstar.ca (Canada).

Connections

Directions & Connections includes the services that follow to help customers stay connected.

For coverage maps, see www.onstar.com (U.S.) or www.onstar.ca (Canada).

WiFi Connectivity (If Equipped)

The vehicle has a WiFi hotspot that provides a high-speed, wireless Internet connection to connect multiple mobile devices (data plan required).

1. To retrieve WiFi hotspot information, press and select or say “WiFi settings.”
2. The WiFi settings will display the WiFi network name/SSID, passphrase, and level of encryption.
3. To change the SSID or passphrase, press On or call 1-888-4-ONSTAR to connect with an Advisor.

OnStar RemoteLink® Mobile App (If Equipped)

Download the OnStar RemoteLink mobile app to select Apple®, Android™, and BlackBerry® or Windows 7 or 8 mobile devices. From the mobile device, check the vehicle’s energy levels, range, or tire pressure (if the vehicle is equipped with the tire pressure monitoring system); or activate remote horn and lights. Also remote start the vehicle (if factory equipped) or unlock the doors from anywhere with a wireless connection (if equipped with automatic locks). With the Directions & Connections service plan, a destination can be sent to the vehicle. For OnStar RemoteLink information and compatibility, see www.onstar.com (U.S.) or www.onstar.ca (Canada).

OnStar RemoteLink® Key Fob Services

This feature is included for five years and allows for remote door lock/unlock (if equipped with automatic locks), remote start (if factory equipped), or activation of horn and lights from anywhere with a wireless signal. Download the app and start using it any time during the trial period to get started.

OnStar Hands-Free Calling

This service allows calls to be made and received from the vehicle.

To Make a Call

1. Press . System responds: “OnStar ready.”
2. Say “Call.” System responds: “Call. Please say the name or number to call.”
3. Say the entire number without pausing, including a “1” and the area code. System responds: “OK calling.”

Calling 911 Emergency

1. Press . System responds: “OnStar Ready,” followed by a tone.
2. Say “Call.” System responds: “Call. Please say the name or number to call.”
3. Say “911” without pausing. System responds: “911.”
4. Say “Call.” System responds: “OK, dialing 911.”

Retrieve My Number

1. Press . System responds: “OnStar ready.”
2. Say “My number.” System responds: “Your OnStar Hands-Free Calling number is,” then says the number.

End a Call

Press . System responds: “Call ended.”

Store a Name Tag for Speed Dialing

1. Press . System responds: “OnStar ready.”
2. Say “Store.” System responds: “Please say the number you would like to store.”
3. Say the entire number without pausing. System responds: “Please say the name tag.”
4. Pick a name tag. System responds: “About to store <name tag>. Does that sound OK?”
5. Say “Yes” or say “No” to try again. System responds: “OK, storing <name tag>.”

Place a Call Using a Stored Number

1. Press . System responds: “OnStar ready.”
2. Say “Call <name tag>.” System responds: “OK, calling <name tag>.”

Verify Minutes and Expiration

Press and say “Minutes” then “Verify” to check how many minutes remain and their expiration date.

Vehicle Diagnostics

OnStar Vehicle Diagnostics can perform a vehicle check every month. It will check the electric drive unit, antilock brakes, and major vehicle systems. It also checks the tire pressures, if the vehicle is equipped with the Tire Pressure Monitoring System. If an On-Demand Diagnostics check is needed, press On, and an Advisor can run a check.

OnStar Additional Information

Transferring Service

Press On to request account transfer eligibility information. The Advisor can assist in canceling or removing account information.

Selling/Transferring the Vehicle

Call 1-888-4-ONSTAR immediately to terminate your OnStar services if the vehicle is disposed of, sold, transferred, or if the lease ends.

Reactivation for Subsequent Owners

Press On and follow the prompts to speak to an Advisor as soon as possible. The Advisor will update vehicle records and explain the OnStar service options available.

How OnStar Service Works

Automatic Crash Response, Emergency Services, Crisis Assist, Stolen Vehicle Assistance, Vehicle Diagnostics, Remote Door Unlock, Roadside Assistance, Turn-by-Turn Navigation, and Hands-Free Calling are available on most vehicles. Not all OnStar services are available everywhere or on all vehicles. For more information, a full description of OnStar services, system limitations, and OnStar terms and conditions:

- Call 1-888-4-ONSTAR (1-888-466-7827).
- See www.onstar.com (U.S.).
- See www.onstar.ca (Canada).
- Call TTY 1-877-248-2080.
- Press On to speak with an Advisor.

OnStar services cannot work unless the vehicle is in a place where OnStar has an agreement with a wireless service provider for service

in that area. The wireless service provider must also have coverage, network capacity, reception, and technology compatible with OnStar services. Service involving location information about the vehicle cannot work unless GPS signals are available, unobstructed, and compatible with the OnStar hardware. OnStar services may not work if the OnStar equipment is not properly installed or it has not been properly maintained. If equipment or software is added, connected, or modified, OnStar services may not work. Other problems beyond the control of OnStar may prevent service such as hills, tall buildings, tunnels, weather, electrical system design and architecture of the vehicle, damage to the vehicle in a crash, or wireless phone network congestion or jamming.

See *Radio Frequency Statement on page 13-12*.

Services for People with Disabilities

Advisors provide services to help subscribers with physical disabilities and medical conditions.

Press On for help with:

- Finding a hotel, restaurant, etc., that meets accessibility needs.
- Providing directions to the closest hospital or pharmacy in urgent situations.

TTY Users

OnStar has the ability to communicate to deaf, hard-of-hearing, or speech-impaired customers while in the vehicle. The available dealer-installed TTY system can provide in-vehicle access to all of the OnStar services, except Virtual Advisor and OnStar Turn-by-Turn Navigation.

OnStar Personal Identification Number (PIN)

A PIN is needed to access some of the OnStar services, like Remote Door Unlock and Stolen Vehicle Assistance. The PIN will need to be changed the first time when speaking with an Advisor. To change the OnStar PIN, contact an OnStar Advisor by pressing On or calling 1-888-4-ONSTAR.

Warranty

OnStar equipment may be warranted as part of the vehicle warranty.

Languages

The vehicle can be programmed to respond in multiple languages. Press On and ask an Advisor. Advisors are available in English, Spanish, and French. Available languages may vary by country.

Potential Issues

OnStar cannot perform Remote Door Unlock or Stolen Vehicle Assistance after the vehicle has been off continuously for five days. After five days, OnStar can contact Roadside Assistance and a locksmith to help gain access to the vehicle.

Global Positioning System (GPS)

- Obstruction of the GPS can occur in a large city with tall buildings; in parking garages; around airports; in tunnels, underpasses, or parking garages; or in an area with very dense trees. If GPS signals are not available, the OnStar system should still operate to call OnStar. However, OnStar could have difficulty identifying the exact location.
- In emergency situations, OnStar can use the last stored GPS location to send to emergency responders.

A temporary loss of GPS can cause loss of the ability to send a Turn-by-Turn Navigation route. The Advisor may give a verbal route or may ask for a call back after the vehicle is driven into an open area.

Cellular and GPS Antennas

Do not place items over or near the antenna to prevent blocking cellular and GPS signal reception. Cellular reception is required for OnStar to send remote signals to the vehicle.

Unable to Connect to OnStar Message

If there is limited cellular coverage or the cellular network has reached maximum capacity, this message may come on. Press OnStar to try the call again or try again after driving a few miles into another cellular area.

Vehicle and Power Issues

OnStar services require a vehicle electrical system, wireless service, and GPS satellite technologies to be available and operating for features to function properly. These systems may not operate if the battery is discharged or disconnected.

Add-on Electrical Equipment

The OnStar system is integrated into the electrical architecture of the vehicle. Do not add any electrical equipment. See *Add-On Electrical Equipment on page 9-42*. Added electrical equipment may interfere with the operation of the OnStar system and cause it to not operate.

Privacy

The complete OnStar Privacy Statement may be found at www.onstar.com (U.S.), or www.onstar.ca (Canada). We recommend that you review it. If you have any questions, call 1-888-4-ONSTAR (1-888-466-7827) or press OnStar to speak with an

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A

Accessories and
Modifications 10-2
Accessory Power 9-17
Add-On Electrical
Equipment 9-42
Additional Information
OnStar® 14-6
Additional Maintenance
and Care 11-5
Air Conditioning 8-1
Air Filter, Passenger
Compartment 8-6
Air Intake 8-5
Air Vents 8-4
Airbag System
Check 3-28
How Does an Airbag
Restrain? 3-21
Passenger Sensing
System 3-23
What Makes an Airbag
Inflate? 3-21
Airbag System (cont'd)
What Will You See after an
Airbag Inflates? 3-21
When Should an Airbag
Inflate? 3-20
Where Are the Airbags? 3-18
Airbags
Adding Equipment to the
Vehicle 3-27
Passenger Status Indicator . . .5-12
Readiness Light 5-11
Servicing Airbag-Equipped
Vehicles 3-27
System Check 3-16
Alarm
Vehicle Security 2-12
AM-FM Radio 7-5
Antenna
Multi-band 7-10
Antilock Brake
System (ABS) 9-21
Warning Light 5-14
Appearance Care
Exterior 10-60
Interior 10-64
Armrest
Front Seat 3-5
Assistance Program,
Roadside 13-5
Audio System
Radio Reception 7-9
Theft-Deterrent Feature 7-2
Automatic
Climate Control System 8-1
Door Locks 2-9
Headlamp System 6-2
Auxiliary
Devices 7-11

B

Battery 10-13
Gauge 5-10
High Voltage 5-10
Jump Starting 10-55
Power Protection 6-6
Battery and Charging
Messages. 5-30
Blade Replacement, Wiper . . .10-15
Bluetooth
Overview 7-12, 7-14
Brake
Parking, Electric 9-22
System Warning Light 5-13

Brakes 10-11
Antilock 9-21
Assist 9-24
Fluid 10-11
Regenerative Braking 9-24
System Messages 5-31
Braking 9-5
Break-In, New Vehicle 9-14
Bulb Replacement 10-19
Halogen Bulbs 10-16
Headlamp Aiming 10-16
Headlamps 10-16
Headlamps, Front Turn Signal, and Parking Lamps 10-17
License Plate Lamps 10-18
Taillamps, Turn Signal, Stoplamps, and Back-up Lamps 10-18
Buying New Tires 10-41

C

Cabin Heating Coolant System 10-9
Calibration 5-9
California
Perchlorate Materials Requirements 10-2
Warning 10-2
Camera
Rear Vision (RVC) 9-30
Canadian Vehicle Owners iii
Capacities and Specifications 12-2
Carbon Monoxide
Liftgate 2-11
Winter Driving 9-8
Cargo
Cover 4-1
Cargo Net 4-2
Cautions, Danger, and Warnings iv
Center Stack Display 5-18
Central Locking System 2-9
Chains, Tire 10-46
Charge Cord 9-40
Charging
Delay Override 9-36
Electrical Requirements 9-41
Plug-In 9-32
Programmable 5-19
Utility Interruption 9-41
Charging Status Screens 9-37
Charging System Light 5-13
Child Restraints
Infants and Young Children 3-31
Lower Anchors and Tethers for Children 3-37
Older Children 3-29
Securing 3-45, 3-47
Systems 3-34
Circuit Breakers 10-20
Cleaning
Exterior Care 10-60
Interior Care 10-64
Climate Control Systems
Automatic 8-1
Clock 5-5
Cluster, Instrument 5-7
Collision Damage Repair 13-9

Compartment
Underhood 10-6
Compartments
Storage 4-1
Compass 5-9
Compressor Kit, Tire
Sealant.....10-48
Connections
OnStar® 14-4
Control
Traction and Electronic
Stability 9-25
Control of a Vehicle 9-4
Convex Mirrors 2-14
Coolant System
Cabin Heating 10-9
Cooling System..... 10-7, 10-8
Courtesy Lamps 6-5
Courtesy Transportation
Program..... 13-8
Cover
Cargo.....4-1
Cruise Control 9-27
Light 5-18
Messages 5-32
Customer Assistance 13-4
Offices 13-3
Text Telephone (TTY)
Users 13-4
Customer Information
Service Publications
Ordering Information 13-11
Customer Satisfaction
Procedure 13-1

D

Damage Repair, Collision 13-9
Danger, Warnings, and
Cautions iv
Data Recorders, Event 13-14
Daytime Running
Lamps (DRL) 6-2
Indicator Light 5-17
Defensive Driving 9-4
Delayed Charging Override 9-36
Delayed Locking 2-9
Devices
Auxiliary 7-11
Display
Center Stack 5-18
Distracted Driving 9-3
Dome Lamps 6-5
Door
Ajar Light 5-18
Ajar Messages 5-32
Central Locking System 2-9
Delayed Locking 2-9
Locks 2-8
Drive Unit
Electric 9-19
Driver Efficiency Gauge 5-10
Driver Information
Center (DIC) 5-28
Driver Selected Operating
Modes 9-19
Driving
Defensive..... 9-4
Drunk 9-4
Hill and Mountain Roads 9-8
If the Vehicle is Stuck 9-9
Loss of Control 9-6
Off-Road Recovery 9-6
Vehicle Load Limits 9-10
Wet Roads 9-7
Winter 9-8
Driving for Better
Energy Efficiency 1-22, 9-2

E

Electric Drive Unit 9-19
Electric Drive Unit
Messages 5-32
Electric Parking Brake 9-22
Electric Parking Brake Light ... 5-14
Electrical Equipment,
Add-On 9-42
Electrical Requirements for
Battery Charging 9-41
Electrical System
Fuses and Circuit
Breakers 10-20
Instrument Panel Fuse
Block 10-25
Overload 10-19
Emergency
OnStar® 14-2
Energy Efficiency
Driving 1-22, 9-2
Energy Information 5-28
Engine
Cooling System 10-7, 10-8
Event Data Recorders 13-14
Exit Lighting 6-5
Extender, Safety Belt 3-15
Exterior Lamp Controls 6-1
Exterior Lamps Off Reminder ... 6-1

F

Flash-to-Pass 6-2
Flashers, Hazard Warning 6-3
Flat Tire 10-46
Floor Mats 10-68
Fluid
Brakes 10-11
Washer 10-10
Folding Mirrors 2-15
Frequency Statement
Radio 13-12
Front Seat Armrest 3-5
Front Seats
Adjustment 3-3
Heated 3-5
Fuses
Fuses and Circuit
Breakers 10-20
Instrument Panel Fuse
Block 10-25

G

Gauges
Battery 5-10
Driver Efficiency 5-10
Odometer 5-9
Power Indicator 5-10
Speedometer 5-9
Trip Odometer 5-9
Warning Lights and
Indicators 5-6
General Information
Service and Maintenance 11-1
Towing 9-42
Vehicle Care 10-2
Glove Box 4-1
GM Mobility Reimbursement
Program 13-5

H

Halogen Bulbs 10-16
Hands-Free Phone 7-19
Hazard Warning Flashers 6-3
Head Restraints 3-2

Headlamps
Aiming 10-16
Automatic 6-2
Bulb Replacement 10-16
Daytime Running
Lamps (DRL) 6-2
Daytime Running Lamps
(DRL) Indicator Light 5-17
Flash-to-Pass 6-2
High-Beam On Light 5-17
High/Low Beam Changer 6-1
Lamps On Reminder 5-17
Heated Front Seats 3-5
Heating and Air Conditioning . . . 8-1
High Voltage Battery Gauge . . . 5-10
High-Beam On Light 5-17
Hill and Mountain Roads 9-8
Hill Start Assist (HSA) 9-24
Home Page 7-3
Hood 10-4
Hooks
Shopping Bag 4-2
Horn 5-3
How to Wear Safety Belts
Properly 3-9

I

Immobilizer 2-13
Infants and Young Children,
Restraints 3-31
Information
Energy 5-28
Infotainment 7-1
Instrument Cluster 5-7
Interior Rearview Mirrors 2-15
Introduction iii

J

Jump Starting 10-55

K

Key and Lock Messages 5-32
Keyless Entry
Remote (RKE) System 2-3
Keys 2-1

L

Labeling, Tire Sidewall 10-29
Lamps
Courtesy 6-5
Daytime Running (DRL) 6-2
Dome 6-5
Exterior Controls 6-1
Exterior Lamps Off
Reminder 6-1
Headlamps, Front Turn
Signal, and Parking
Lamps 10-17
License Plate 10-18
Messages 5-33
On Reminder 5-17
Lap-Shoulder Belt 3-10
LATCH System
Replacing Parts after a
Crash 3-44
LATCH, Lower Anchors and
Tethers for Children 3-37
Liftgate 2-11
Light
Ready Indicator 5-17
Vehicle Ready 5-17

Lighting
Exit 6-5
Illumination Control 6-4
Lights
Airbag Readiness 5-11
Antilock Brake System (ABS) Warning 5-14
Brake System Warning 5-13
Charging System 5-13
Cruise Control 5-18
Daytime Running Lamps (DRL) 5-17
Door Ajar 5-18
Electric Parking Brake 5-14
Flash-to-Pass 6-2
High-Beam On 5-17
High/Low Beam Changer 6-1
Safety Belt Reminders 5-11
Security 5-17
Service Electric Parking Brake 5-14
Service Vehicle Soon 5-13
Sport Mode 5-15
StabiliTrak® OFF 5-15
Lights (cont'd)
Tire Pressure 5-16
Traction Control System (TCS)/StabiliTrak® 5-16
Traction Off 5-15
Link
Smartphone 7-22, 7-24, 7-25
Locks
Automatic Door 2-9
Central Locking System 2-9
Delayed Locking 2-9
Door 2-8
Lockout Protection 2-9
Safety 2-10
Loss of Control 9-6
Lower Anchors and Tethers for Children (LATCH System) 3-37

M

Maintenance
Records 11-10
Maintenance and Care
Additional 11-5
Maintenance Schedule 11-2
Recommended Fluids and Lubricants 11-8
Messages
Airbag System 5-34
Brake System 5-31
Door Ajar 5-32
Electric Drive Unit 5-32
Key and Lock 5-32
Lamp 5-33
Propulsion Power 5-33
Ride Control System 5-33
Security 5-34
Service Vehicle 5-34
Starting the Vehicle 5-34
Tire 5-35
Vehicle 5-30
Vehicle Reminder 5-35
Vehicle Speed 5-35
Mirrors
Convex 2-14
Folding 2-15
Manual Rearview 2-15
Power 2-14

Mirrors, Interior Rearview 2-15
Modes
Driver Selected 9-19
Monitor System, Tire
Pressure 10-35
Movies 7-26, 7-31, 7-33
Multi-band Antenna 7-10

N

Navigation
OnStar® 14-3
Net
Cargo 4-2
New Vehicle Break-In 9-14

O

Odometer 5-9
Trip 5-9
Off-Road
Recovery 9-6
Older Children, Restraints 3-29
Online Owner Center 13-4
OnStar 13-15
OnStar®
System, In Brief 1-24
OnStar® Additional
Information 14-6
OnStar® Connections 14-4
OnStar® Emergency 14-2
OnStar® Navigation 14-3
OnStar® Overview 14-1
OnStar® Security 14-3
OnStar® Vehicle
Diagnostics 14-6
Operation, Infotainment
System 7-4
Ordering
Service Publications 13-11
Outlets
Power 5-6
Overview
Underhood Compartment 10-6
Overview, Infotainment
System 7-3

P

Park
Shifting Into 9-17
Shifting Out of 9-18
Passenger Airbag Status
Indicator 5-12
Passenger Compartment Air
Filter 8-6
Passenger Sensing System ... 3-23
Pedestrian Safety Signal 5-3
Perchlorate Materials
Requirements, California 10-2
Personalization
Vehicle 5-36
Phone
Bluetooth 7-12, 7-14
Hands-Free 7-19
Pictures and
Movies 7-26, 7-31, 7-33
Plug-In Charging 9-32
Port
USB 7-10
Power
Button 9-14
Flows 5-18
Indicator Gauge 5-10

Power (cont'd)
Mirrors 2-14
Outlets 5-6
Protection, Battery 6-6
Retained Accessory (RAP) . . . 9-17
Windows 2-16
Pregnancy, Using Safety
Belts 3-14
Privacy
Vehicle Data Recording 13-14
Program
Courtesy Transportation 13-8
Programmable Charging 5-19
Proposition 65 Warning,
California 10-2
Propulsion Power
Messages 5-33

R

Radio Frequency
Identification (RFID) 13-12
Radio Frequency
Statement 13-12
Radios
AM-FM Radio 7-5
Reception 7-9
Satellite 7-7
Ready Indicator 5-17
Rear Seats 3-6
Rear Vision Camera (RVC) 9-30
Rear Window Washer/Wiper 5-4
Rearview Mirrors 2-15
Reclining Seatbacks 3-4
Recommended Fluids and
Lubricants 11-8
Records
Maintenance 11-10
Recreational Vehicle
Towing 10-58
Regenerative Braking 9-24
Reimbursement Program,
GM Mobility 13-5
Remote Keyless Entry
(RKE) System 2-2, 2-3
Remote Start 2-7
Replacement Bulbs 10-19
Replacement Parts
Airbags 3-29
Maintenance 11-9
Replacing Airbag System 3-29
Replacing LATCH System
Parts after a Crash 3-44
Replacing Safety Belt
System Parts after a Crash . . . 3-15
Reporting Safety Defects
Canadian Government 13-13
General Motors 13-14
U.S. Government 13-13
Requirements
Electrical Battery Charging . . . 9-41
Restraints
Where to Put 3-36
Retained Accessory
Power (RAP) 9-17
Ride Control Systems
Messages 5-33
Roads
Driving, Wet 9-7
Roadside Assistance
Program 13-5
Rotation, Tires 10-39

S

Safety Belts 3-8
Care 3-15
Extender 3-15
How to Wear Safety Belts Properly 3-9
Lap-Shoulder Belt 3-10
Reminders 5-11
Replacing after a Crash 3-15
Use During Pregnancy 3-14
Safety Defects Reporting
Canadian Government 13-13
General Motors 13-14
U.S. Government 13-13
Safety Locks 2-10
Safety Signal
Pedestrian 5-3
Safety System Check 3-15
Satellite Radio 7-7
Scheduling Appointments 13-7
Sealant Kit, Tire 10-48
Seats
Adjustment, Front 3-3
Head Restraints 3-2
Heated Front 3-5
Rear 3-6
Reclining Seatbacks 3-4
Securing Child
Restraints 3-45, 3-47
Security
Light 5-17
Messages 5-34
OnStar® 14-3
Vehicle 2-12
Vehicle Alarm 2-12
Service 8-6
Accessories and Modifications 10-2
Doing Your Own Work 10-3
Maintenance Records 11-10
Maintenance, General Information 11-1
Parts Identification Label 12-1
Publications Ordering Information 13-11
Service (cont'd)
Scheduling Appointments 13-7
Vehicle Messages 5-34
Vehicle Soon Light 5-13
Service Electric Parking
Brake Light 5-14
Services
Special Application 11-5
Servicing the Airbag 3-27
Shifting
Into Park 9-17
Out of Park 9-18
Shopping Bag Hooks 4-2
Signals, Turn and
Lane-Change 6-4
Smartphone
Link 7-22, 7-24, 7-25
Special Application Services ... 11-5
Specifications and
Capacities 12-2
Speedometer 5-9
Sport Mode Light 5-15
StabiliTrak
OFF Light 5-15
Start
Remote 2-7
Start Assist, Hills 9-24

Starting and Stopping the Vehicle 9-16
Starting the Vehicle Messages 5-34
Status Screens Charging 9-37
Steering 9-5
Wheel Adjustment 5-2
Wheel Controls 5-2
Stoplamps and Back-up Lamps Bulb Replacement 10-18
Storage Areas Cargo Cover 4-1
Glove Box 4-1
Storage Compartments 4-1
Storing the Tire Sealant and Compressor Kit 10-55
Stuck Vehicle 9-9
Summer Tires 10-29
Sun Visors 2-17
Symbols iv
System Infotainment 7-1

T

Taillamps Bulb Replacement 10-18
Text Telephone (TTY) Users . . . 13-4
Theft-Deterrent Systems 2-13
Immobilizer 2-13
Time 5-5
Tires 10-27
Buying New Tires 10-41
Chains 10-46
Designations 10-30
Different Size 10-43
If a Tire Goes Flat 10-46
Inflation Monitor System 10-36
Inspection 10-39
Messages 5-35
Pressure Light 5-16
Pressure Monitor System . . . 10-35
Rotation 10-39
Sealant and Compressor Kit 10-48
Sealant and Compressor Kit, Storing 10-55
Sidewall Labeling 10-29
Tires (cont'd)
Terminology and Definitions 10-31
Uniform Tire Quality Grading 10-43
Wheel Alignment and Tire Balance 10-45
Wheel Replacement 10-45
When It Is Time for New Tires 10-41
Winter 10-28
Towing General Information 9-42
Recreational Vehicle 10-58
Vehicle 10-58
Traction Control System (TCS)/ StabiliTrak® Light 5-16
Off Light 5-15
Traction Control/Electronic Stability Control 9-25
Trademarks and License Agreements 7-35
Transportation Program, Courtesy 13-8
Trip Odometer 5-9

Turn and Lane-Change
Signals 6-4
Turn Signal
Bulb Replacement 10-18

U

Underhood Compartment
Overview 10-6
Uniform Tire Quality
Grading 10-43
USB Port 7-10
Using This Manual iii
Utility Interruption of
Charging 9-41

V

Vehicle
Alarm System 2-12
Canadian Owners iii
Control 9-4
Identification
Number (VIN) 12-1
Load Limits 9-10
Messages 5-30
Personalization 5-36
Reminder Messages 5-35
Vehicle (cont'd)
Security 2-12
Service Soon Light 5-13
Speed Messages 5-35
Starting and Stopping 9-16
Towing 10-58
Vehicle Care
Storing the Tire Sealant
and Compressor Kit 10-55
Tire Pressure 10-34
Vehicle Data Recording
and Privacy 13-14
Vehicle Diagnostics
OnStar® 14-6
Vehicle Ready Light 5-17
Ventilation, Air 8-4
Visors 2-17

W

Warning
Brake System Light 5-13
Warning Lights, Gauges, and
Indicators 5-6
Warnings iv
Warnings (cont'd)
Cautions and Danger iv
Hazard Flashers 6-3
Washer Fluid 10-10
Wheels
Alignment and Tire
Balance 10-45
Different Size 10-43
Replacement 10-45
When It Is Time for New
Tires 10-41
When to Charge 9-32
Where to Put the Restraint 3-36
Windows 2-15
Power 2-16
Windshield
Wiper/Washer 5-3
Winter
Driving 9-8
Winter Tires 10-28
Wiper Blade Replacement 10-15
Wipers
Rear Washer 5-4

✍ NOTES