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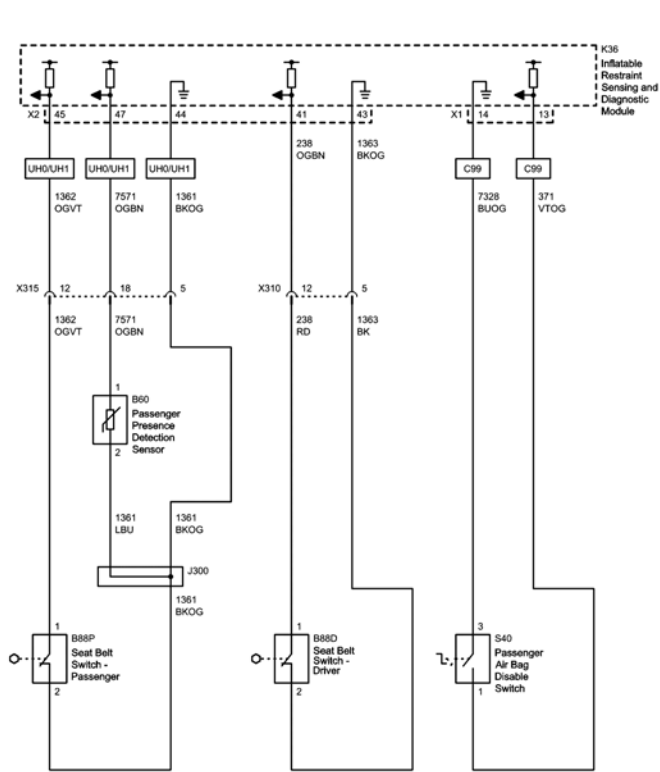


### Fastener Tightening Specifications

| Application                             | Specification |          |
|-----------------------------------------|---------------|----------|
|                                         | Metric        | English  |
| Front Seat Belt Buckle                  | 45 N·m        | 33 lb ft |
| Front Seat Retractor Side Belt          | 45 N·m        | 33 lb ft |
| Front Seat Shoulder Belt                | 45 N·m        | 33 lb ft |
| Front Seat Shoulder Belt Bracket Bolt   | 9 N·m         | 80 lb in |
| Front Seat Shoulder Belt Guide Adjuster | 45 N·m        | 33 lb ft |
| Rear Seat Center Shoulder Belt Buckle   | 45 N·m        | 33 lb ft |
| Rear Seat Center Shoulder Belt Nut      | 45 N·m        | 33 lb ft |
| Rear Seat Rear Bracket Nut              | 45 N·m        | 33 lb ft |
| Rear Seat Shoulder Belt                 | 45 N·m        | 33 lb ft |
| Rear Seat Shoulder Belt Bracket Bolt    | 45 N·m        | 33 lb ft |
| Rear Seat Shoulder Belt Retractor Bolt  | 45 N·m        | 33 lb ft |

Seat Belt Schematics

Seat Belt Switches



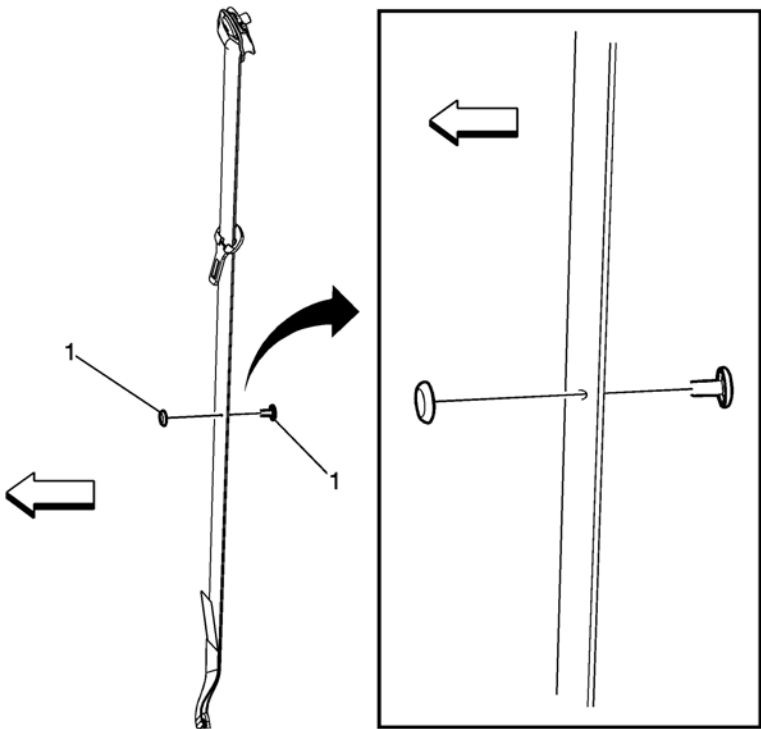
## Repairs and Inspections Required After a Collision

- Warning:** Restraint systems can be damaged in a collision. To help avoid injury and ensure that all parts in need of replacement are replaced:
- Replace any seat belt system that was in use during the collision serious enough to deploy any automatic restraint device such as air bags and seat belt pretensioners. This not only includes seat belt systems in use by people of adult size, but seat belt systems used to secure child restraints, infant carriers and booster seats, including LATCH system and top tether anchorages.
  - Replace any seat belt system that has torn, worn, or damaged components. This not only includes adult seat belt systems, but built-in child restraints and LATCH system components, if any.
  - Replace any seat belt system if you observe the words "REPLACE" or "CAUTION", or if a yellow tag is visible. Do not replace a seat belt if only the child seat caution label is visible.
  - Replace any seat belt system if you are doubtful about its condition. This not only includes adult seat belt systems, but built-in child restraints, LATCH system components, and any restraint system used to secure infant carriers, child restraints, and booster seats.

Do NOT replace single seat belt system components in vehicles that have been in a collision as described above. Always replace the entire seat belt system with the buckle, guide and retractor assembly, which includes the latch and webbing material.

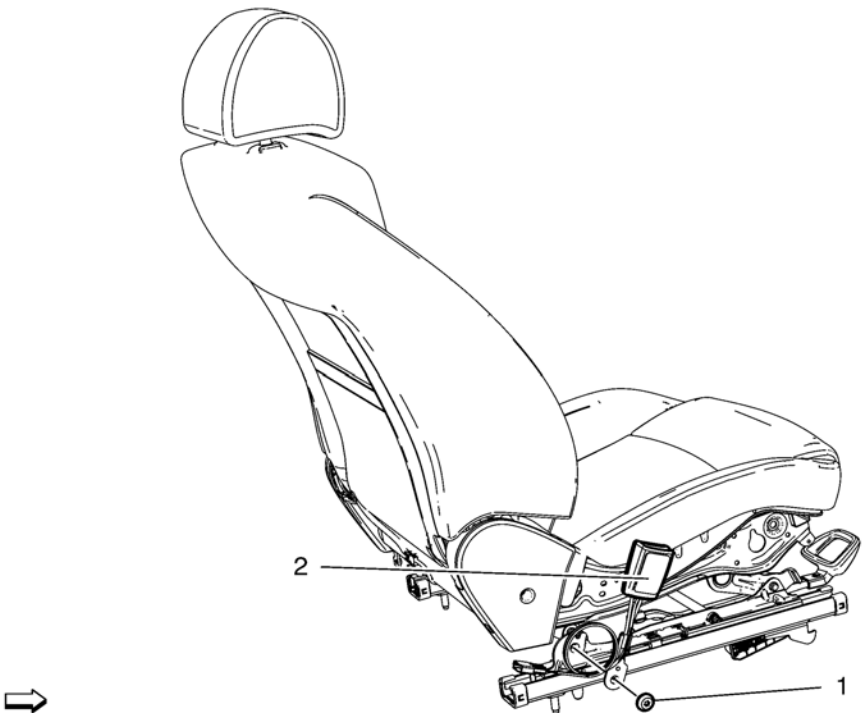
After a minor collision where no automatic restraint device was deployed, seat belt system replacement may not be necessary, unless some of the parts are torn, worn, or damaged.

Seat Belt Latch Stop Installation



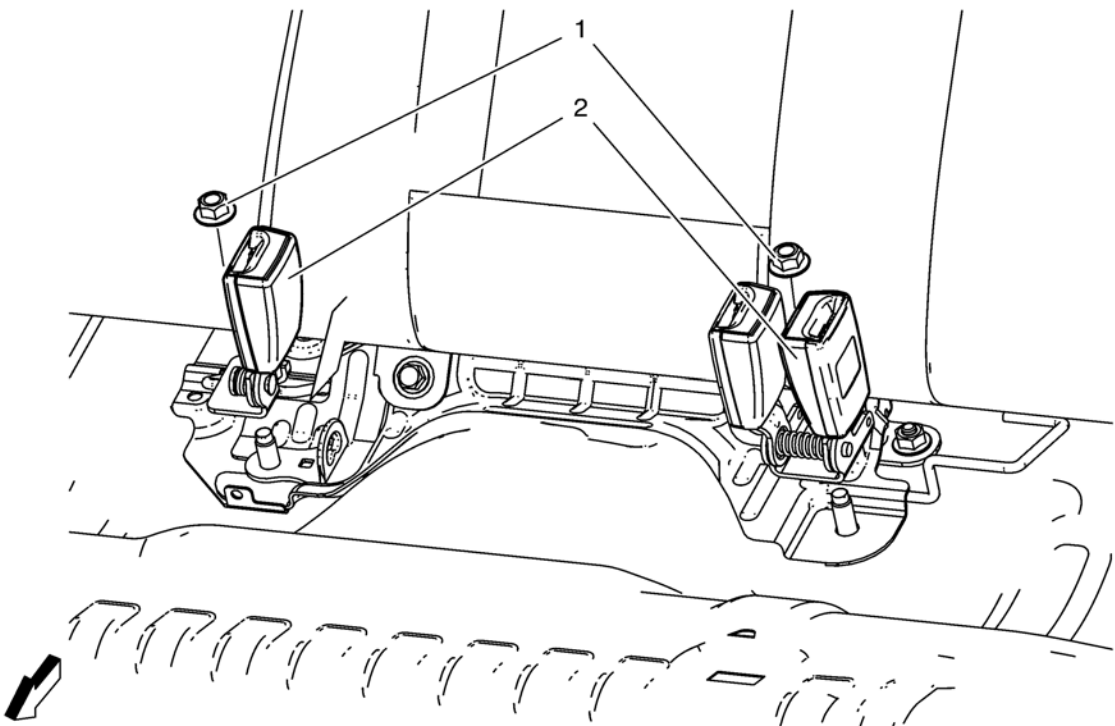
| Callout                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | Component Name                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <p><b>Preliminary Procedure</b></p> <ol style="list-style-type: none"><li>1. Locate the hole in the seat belt webbing where the original seat belt stop button was located.</li><li>2. If the original hole in the seat belt webbing is not visible, perform the following:<ul style="list-style-type: none"><li>• If either the right or left stop button is missing use the opposing seat belt as a reference.</li><li>• With the opposing seat belt fully stowed, measure the distance between the seat belt lower anchor and the stop button.</li><li>• Using the measurement obtained above, measure and mark the location of the missing stop button on the center of the seat belt webbing.</li></ul></li><li>3. Ensure the seat belt latch plate is located above the mark or original hole.</li></ol> |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| 1                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | <p>Seat Belt Stop Button</p> <p><b>Procedure</b></p> <ol style="list-style-type: none"><li>1. Work the male half of the stop button through the hole in the webbing or at the marked location.</li><li>2. Align the female half of the stop button with the male half of the stop button.</li><li>3. Snap the two halves together.</li><li>4. Trim off any access of the male half of the stop button flush with the female half of the stop button.</li></ol> <p><b>Tip</b><br/>Ensure the male half of the stop button is facing forward in the vehicle in order to ensure the stop button will not snag customers clothing.</p> |

Driver or Passenger Seat Belt Buckle Replacement



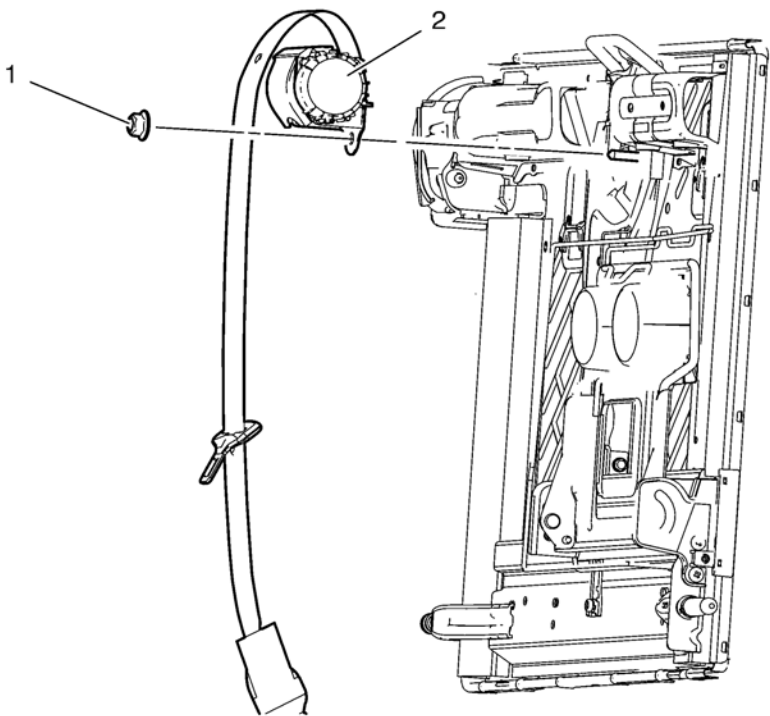
| Callout                                                                                                                | Component Name                                                                                                                                          |
|------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Preliminary Procedure</b><br>Remove the front seat. Refer to <a href="#">Driver or Passenger Seat Replacement</a> . |                                                                                                                                                         |
| 1                                                                                                                      | Front Seat Belt Buckle Bolt<br><b>Caution:</b> Refer to <a href="#">Fastener Caution</a> in the Preface section.<br><b>Tighten</b><br>45 N·m (33 lb ft) |
| 2                                                                                                                      | Front Seat Belt Buckle Assembly                                                                                                                         |

Rear Seat Buckle Side Belt Replacement



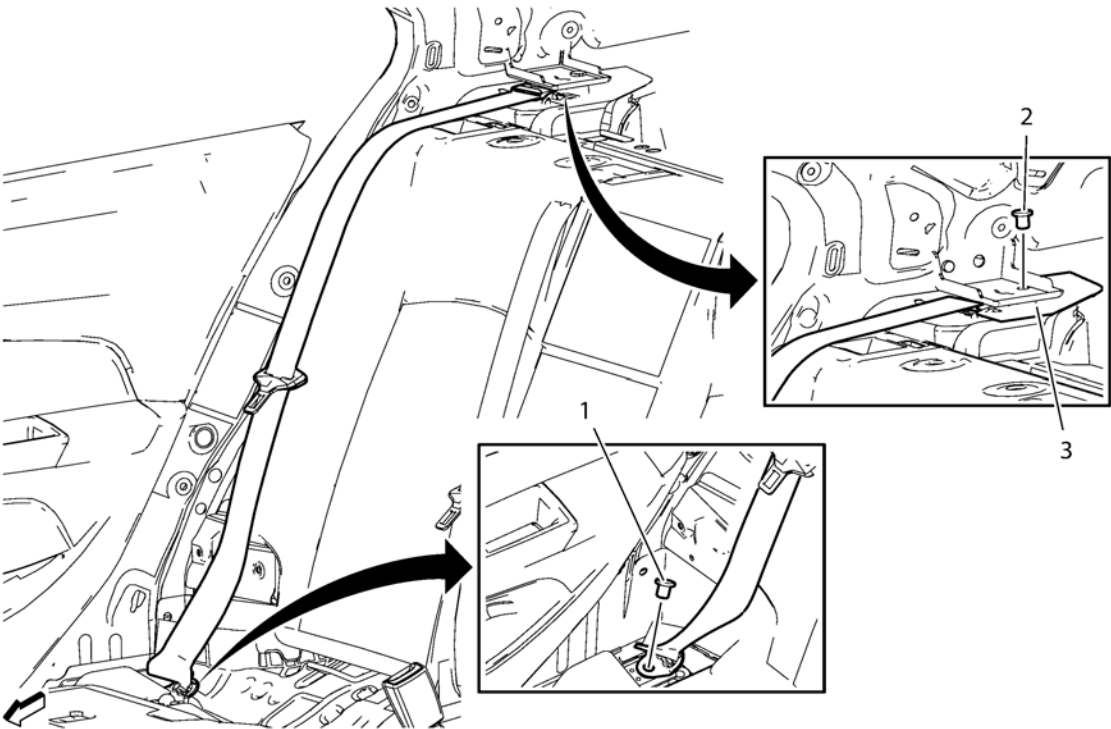
| Callout                                                                                                                | Component Name                                                                                                                                         |
|------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Preliminary Procedure</b><br>Remove the Rear Seat Cushion. Refer to <a href="#">Rear Seat Cushion Replacement</a> . |                                                                                                                                                        |
| 1                                                                                                                      | Rear Seat Rear Bracket Nut<br><b>Caution:</b> Refer to <a href="#">Fastener Caution</a> in the Preface section.<br><b>Tighten</b><br>45 N·m (33 lb ft) |
| 2                                                                                                                      | Rear Seat Belt Buckle Assembly                                                                                                                         |

Rear Seat Center Shoulder Belt Replacement



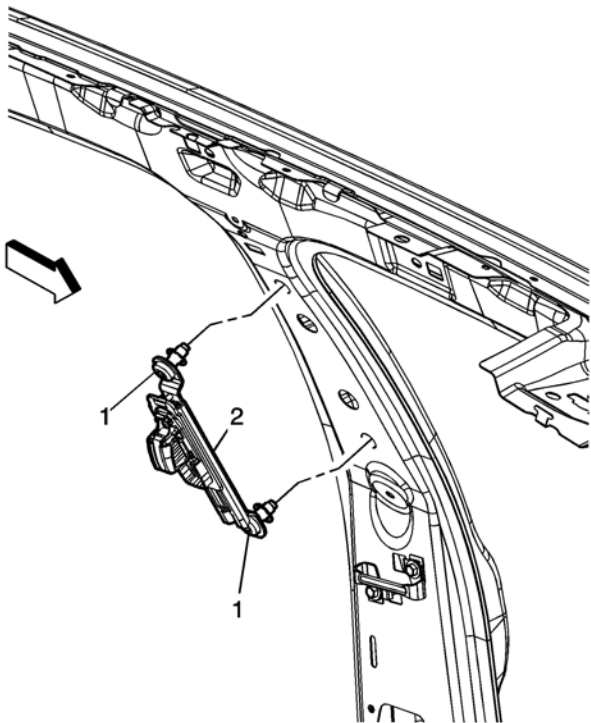
| Callout                                                                                                                                                                         | Component Name                                                                                                                                                 |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Preliminary Procedure</b><br>Remove the right rear seat back cushion cover and pad. Refer to <a href="#">Rear Seat Back Cushion Cover and Pad Replacement - Right Side</a> . |                                                                                                                                                                |
| 1                                                                                                                                                                               | Rear Seat Center Shoulder Belt Nut<br><b>Caution:</b> Refer to <a href="#">Fastener Caution</a> in the Preface section.<br><b>Tighten</b><br>45 N·m (33 lb ft) |
| 2                                                                                                                                                                               | Rear Seat Center Shoulder Belt Assembly                                                                                                                        |

Shoulder Belt Replacement - Rear



| Callout                                                                                                                                                                                                                                                | Component Name                                                                                                                                                                |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Preliminary Procedure</b><br><br>1. Remove the body side trim panel. Refer to <a href="#">Body Side Trim Panel Replacement - Left Side</a> .<br>2. Remove the rear window panel trim. Refer to <a href="#">Rear Window Panel Trim Replacement</a> . |                                                                                                                                                                               |
| 1                                                                                                                                                                                                                                                      | Rear Seat Shoulder Belt Anchor Plate Bolt<br><br><b>Caution:</b> Refer to <a href="#">Fastener Caution</a> in the Preface section.<br><br><b>Tighten</b><br>45 N·m (33 lb ft) |
| 2                                                                                                                                                                                                                                                      | Rear Seat Shoulder Belt Retractor Bolt<br><br><b>Tighten</b><br>45 N·m (33 lb ft)                                                                                             |
| 3                                                                                                                                                                                                                                                      | Rear Seat Shoulder Belt Assembly                                                                                                                                              |

Driver or Passenger Seat Shoulder Belt Guide Adjuster Replacement



| Callout                                                                                                                                                 | Component Name                                                                                                                                                                    |
|---------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Preliminary Procedure</b><br>Remover center pillar upper garnish molding. Refer to <a href="#">Center Pillar Upper Garnish Molding Replacement</a> . |                                                                                                                                                                                   |
| 1                                                                                                                                                       | Front Seat Shoulder Belt Guide Adjuster Bolt (Qty: 2)<br><b>Caution:</b> Refer to <a href="#">Fastener Caution</a> in the Preface section.<br><b>Tighten</b><br>45 N·m (33 lb ft) |
| 2                                                                                                                                                       | Front Seat Shoulder Belt Guide Adjuster Assembly                                                                                                                                  |

## Seat Belt System Description and Operation

### Restraint System

**Note:** If the vehicle has been in a collision, refer to [Repairs and Inspections Required After a Collision](#) for additional information.

Vehicle has front and rear seat belts that are the primary means of occupant restraint. Seat belts help to keep the occupants inside the passenger compartment and to gradually reduce the impact forces during the following events:

- Frontal impact type crashes
- Rear impact type crashes
- Side impact type crashes
- Roll-over type crashes

All seat belt retractors have emergency locks. The retractors remain unlocked during normal operation and under normal driving conditions. The retractors remain unlocked during normal conditions in order to allow free movement of the upper body of each occupant. A pendulum locks the seat belt webbing into position. The pendulum causes a locking bar to engage a cog on the spool of the retractor mechanism when the following conditions occur:

- A rapid extraction of the seat belt webbing from the retractor
- An abrupt change in vehicle speed
- An abrupt change in vehicle direction
- Operation of the vehicle on a steep upgrade
- Operation of the vehicle on a downgrade

The seat belts have an automatic locking (cinch) feature. The cinch feature is activated when the seat belt webbing is completely extended from the retractor. The cinch feature prevents the webbing from extending beyond the position from which it is allowed to retract. Use of the cinch feature is recommended for securing a child seat. The cinch feature may be cancelled by allowing the webbing to wind back completely into the retractor. After the cinch feature is cancelled, the webbing is unlocked. After the cinch feature is cancelled, the webbing will extend from the retractor. This vehicle is also equipped with a supplemental inflatable restraint (SIR) system. Refer to [SIR System Description and Operation](#).

### Front Seat Belt System

The front seat belt system includes a driver and passenger seat belt pretensioner retractor. Both front seat belt pretensioners includes a seat belt switch in the seat buckle which controls a reminder lamp and a tone alarm.

**Note:** The front passenger seat is equipped with a passenger presence detection system, which detects an occupant. If the passenger presence detection system detects an empty front passenger seat, then the passenger fasten safety belt indicator will be disable.

- When the driver seat belt is buckled, the driver door is closed, and the ignition switch is turned ON, the following events will occur:
  - The tone alarm will not operate.
  - The reminder lamp will not operate.
- When the passenger seat belt is buckled with an occupant sitting in the passenger front seat, and the passenger door is closed, then the ignition switch is turned ON, the following events will occur:
  - The tone alarm will not operate.
  - The reminder lamp, which is located within the passenger presence detection system status indicator for the passenger seat, will not be turned ON.
- When the driver seat belt is not buckled, the driver door is closed, and the ignition switch is in the ON position, the following events will occur:
  - The tone alarm will operate for 4-8 seconds and then go OFF.
  - The fasten safety belt indicator will turn ON for 20 seconds, until the driver seat belt is buckled.
- When the passenger seat belt is not buckled with an occupant sitting in the passenger front seat, and the passenger door is closed, then the ignition switch is turned ON, the following events will occur:
  - The tone alarm will operate for 4-8 seconds and then go OFF.
  - The reminder lamp, which is located within the passenger presence detection system status indicator for the passenger seat, will be turned ON.

### Rear Seat Belt System

The Rear Seat Belt System includes the following components:

- The rear seat belt retractor is located at the wheelhouse panel and attached to the floor panel by the rear seat shoulder belt retractor bracket.
- The rear seat belt buckles and the center seat belt buckle are attached to each seat.

### Child Seat Restraint System

**Warning:** A child in a rear-facing child restraint can be seriously injured if the right-front passengers air bag inflates. This is because the back of a rear-facing child restraint would be very close to the inflating air bag. NEVER use a rear-facing child restraint in this vehicle. If a forward-facing child restraint is suitable for your child, ALWAYS move the front passenger seat as far back as it will go and then install the child restraint. Be sure the child restraint position does not conflict with any additional requirements provided by the manufacturer. For more information, refer to the vehicle owners manual and the instruction that came with the child restraint.

The child seat may only be used in a forward facing seating location. The child seat should be installed and secured according to the manufacturer's directions. If the child seat has a top strap, the seat will need to be anchored. Passengers should not be allowed to sit at locations where the seat belts are being used to secure the child seat.

All vehicles are equipped with a dual-mode type retractor with emergency and automatic locking features. The automatic locking feature is for restraint of a child seat. The child seat can be secured by pulling the seat belt all the way out to lock it. Then tighten the seat belt around the child seat.



If a child seat is to be used in the second seat position, a special dealer-installed anchor must be used in order to anchor the child seat top strap. This only applies to the seats designed with the top strap provision and for the vehicles sold in Canada. In order to ensure the correct top strap angle, the child seat is only to be used at the seating position for which the top strap anchor is installed.

**Fasten Safety Belt Indicators**

There are 2 fasten safety belt indicators for this vehicle. The driver fasten safety belt reminder is monitored on the instrument cluster and the passenger fasten safety belt reminder is located in the PASSENGER AIR BAG ON/OFF status indicator near the center of the instrument panel. The fasten safety belt indicator may only be ON during RUN. The instrument cluster illuminates the fasten safety belt indicator under the following conditions:

- During the bulb check
- The inflatable restraint sensing and diagnostic module (SDM) sends the status of the driver and passenger seat belt switch to the instrument cluster via a serial data. If the seat belt is unfastened, the instrument cluster will send a message requesting a chime sound to be turned ON after a bulb check.

