

## 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.