

Safety Belt System



WARNING: After any crash, all of the following safety belt assemblies and attaching hardware must be inspected by an authorized dealer to verify correct function:

- Retractors
- Buckles
- Belt tension sensor (BTS) (if equipped)
- Front safety belt buckle support assemblies (slide bar) (if equipped)
- Safety belt shoulder belt height adjusters (if equipped)
- Child safety seat tether bracket assemblies
- Automatic locking retractor (ALR) feature for child safety seats (passenger seating positions only)

If any safety belt assembly is damaged, does not operate correctly or does not pass all of the Functional Tests in the Diagnosis and Testing portion of this section, a new safety belt assembly must be installed. If any safety belt assembly attaching areas are damaged or distorted, the sheet metal must be restored to its original structural integrity and new safety belt assembly and attaching hardware must be installed. Failure to install new safety belt assemblies and attaching hardware may increase the risk of serious personal injury or death in a crash.

After any crash that results in deployment of the driver and/or front outboard passenger safety belt pretensioners, new driver and/or front outboard passenger safety belt systems (including retractors, buckles and height adjusters) must be installed. Failure to install new safety belt systems increases the risk of serious personal injury or death in a crash.

When installing any new active occupant restraint components, use only Ford-specified service parts.

The active restraint system consists of the following serviceable items:

- Front safety belt buckles, attached to the inboard side of the seats
- Front safety belt retractors and pretensioners, located behind the LH and RH lower B-pillar trim panels
- Rear safety belt retractors, mounted to the rear package tray (coupe only)
- Rear safety belt retractors, mounted to a stanchion behind the rear seat backrest (convertible only)
- Rear safety belt buckle assemblies, attached to the floor pan
- Rear lower anchors and tethers for children at both seating positions, attached to the floor pan

The rear child safety seat tether anchors, at both seating positions, are welded to the underside of the package tray (coupe only) and are not serviceable.

Safety Belt Retractors

The safety belt retractors consist of the following features:

- Safety belt pretensioner (front only)
- Dual locking mode
 - Emergency Locking Retractor (ELR)
 - Automatic Locking Retractor (ALR) (all except driver seat)
- Belt Tension Sensor (BTS) (front passenger safety belt retractor only)

Safety Belt Retractor and Pretensioner

The pretensioner is a pyrotechnic device that deploys when activated by the Restraints Control Module (RCM) to remove excess safety belt webbing from the shoulder and lap safety belt in the event of an impact. If a

deployment of the safety belt retractor and pretensioners occurs, a new assembly must be installed. Refer to [Safety Belt Retractor and Pretensioner](#) in this section.

Each front safety belt shoulder guide includes a 2-position safety belt presenter arm that rotates rearward to allow for occupant rear seat access (stowed position) and forward for front seat occupant use (worn position).

For safety belt retractor and pretensioner diagnostic and disposal information, refer to [Section 501-20B](#).

Emergency Locking Retractor (ELR)

Every safety belt retractor is a 3-point restraint with the [ELR](#) feature. The safety belt retractor is designed to allow the occupant freedom of movement in normal operation. The [ELR](#) is a vehicle sensitive feature designed to activate and lock the safety belt webbing when braking hard, cornering hard or in an impact of approximately 8 km/h (5 mph). The [ELR](#) feature helps to reduce the forward movement of the driver and passengers. Refer to the appropriate Functional Test procedure in [Safety Belt System](#) in this section.

Automatic Locking Retractor (ALR)

The [ALR](#) feature does not allow freedom of movement. The [ALR](#) mode is used when locking a child seat in an outboard seating position or when a tight belt fit is desired. The [ALR](#) mode is automatically activated when the safety belt webbing is fully extracted from the retractor and then allowed to retract. As the safety belt webbing is retracted back onto the spool, an audible clicking sound is made indicating the safety belt retractor is in [ALR](#) mode and the safety belt webbing will not pull back out of the safety belt retractor. To disengage the [ALR](#) mode, allow the safety belt webbing to fully retract back onto the spool. The [ALR](#) mode is disengaged when the webbing is free to extract and retract back into the retractor. Refer to the appropriate Functional Test procedure in [Safety Belt System](#) in this section.

Belt Tension Sensor (BTS)

The safety [BTS](#) is part of the passenger front outboard safety belt and retractor assembly and is not serviced separately. The safety [BTS](#) is located at the safety belt anchor point and operates as part of the Occupant Classification Sensor (OCS) system on the front passenger seat. To diagnose the [BTS](#) or [OCS](#) system, refer to [Section 501-20B](#).

Safety Belt Buckles

The front seat safety belt buckles are attached to the front seat tracks and can be serviced separately.

The rear seat safety belt buckles are attached to the floor pan behind the rear seat cushion and can be serviced separately.

Child Safety Seat Restraints

The child safety seat restraints include the following items:

- Non-serviceable child safety seat tether anchors located at both rear seating positions, welded to the underside of the package tray (coupe only)
- Serviceable lower anchors and tethers for children attachments mounted to the floor pan behind the rear seat cushion

If a child safety seat was in use during a collision, inspect the vehicle portion of the system for damage. Inspect the vehicle structure at the child safety seat component mounting areas and repair any damage to the original production configuration.

Lower Anchors and Tethers for Children

The lower anchors and tethers for children system is a standardized and uniform attachment system for installing child safety seats in passenger seating locations. The lower anchors and tethers for children system-equipped child safety seats have 2 lower attachments that connect to 2 attachment points (6-mm wires) that protrude from the bight-line between the seat cushion and seat backrest.

If any of the lower anchors and tethers for children attachment points (6-mm wires) are damaged, a new component(s) must be installed. Refer to [Child Safety Seat Tether Anchor — LATCH](#) in this section.
