

2007 Cadillac Escalade

2007 ACCESSORIES & EQUIPMENT Seat Belts - Avalanche, Escalade, Suburban, Tahoe & Yukon

2007 ACCESSORIES & EQUIPMENT

Seat Belts - Avalanche, Escalade, Suburban, Tahoe & Yukon

SPECIFICATIONS

FASTENER TIGHTENING SPECIFICATIONS

Fastener Tightening Specifications

Application	Specification	
	Metric	English
Seat Belt Anchor Plate Bolts	70 N.m	52 lb ft
Seat Belt Assembly Bolts	52 N.m	38 lb ft
Seat Belt Assembly Nuts	52 N.m	38 lb ft
Seat Belt Bracket Screws	2 N.m	18 lb in
Seat Belt Guide Adjuster Bolts	50 N.m	37 lb ft
Seat Belt Retractor Assembly Bolts	43 N.m	32 lb ft

SCHEMATIC AND ROUTING DIAGRAMS

SEAT BELT SCHEMATICS

2007 ACCESSORIES & EQUIPMENT Seat Belts - Avalanche, Escalade, Suburban, Tahoe & Yukon

COMPONENT LOCATOR

SEAT BELT COMPONENT VIEWS

2007 Cadillac Escalade

2007 ACCESSORIES & EQUIPMENT Seat Belts - Avalanche, Escalade, Suburban, Tahoe & Yukon

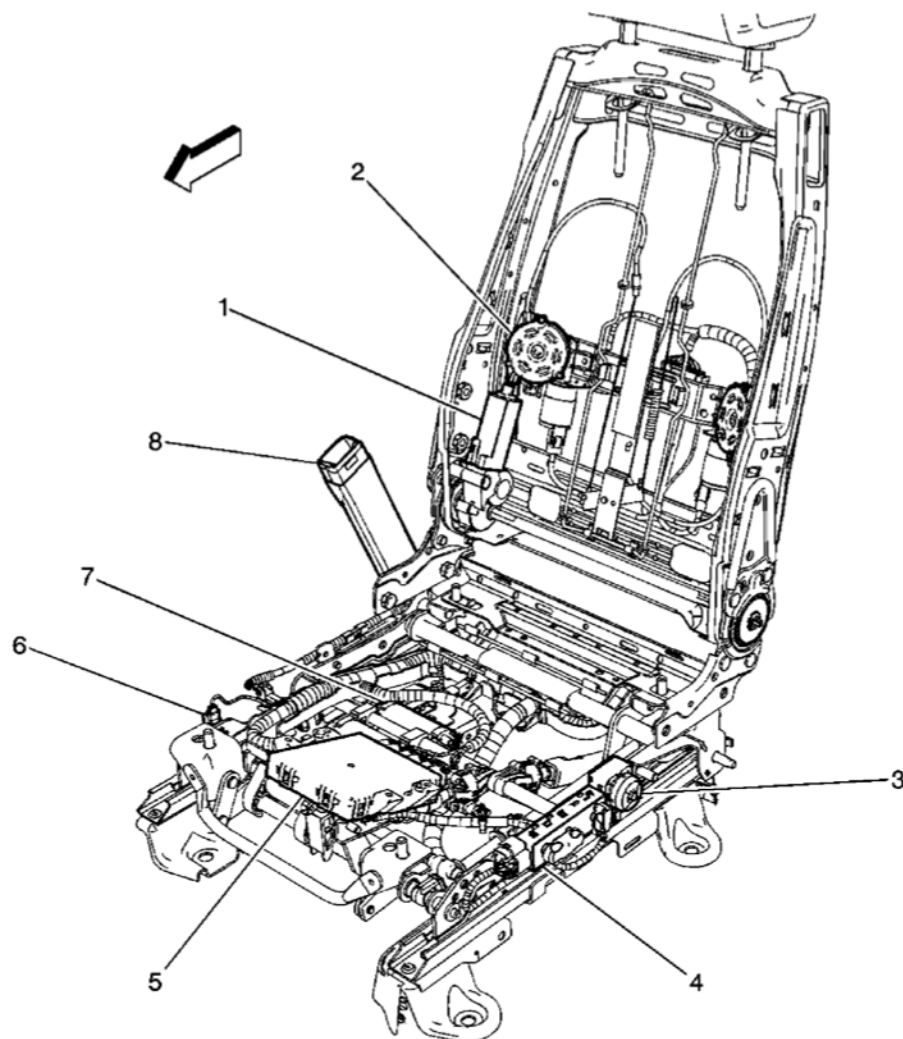


Fig. 2: Driver Seat

Courtesy of GENERAL MOTORS CORP.

Callouts For Fig. 2

Callout	Component Name
1	Seat Recline Motor - Driver (AN3)
2	Lumbar Adjuster Assembly - Driver (AN3)
3	Seat Lumbar Switch - Driver (AN3)
4	Seat Adjuster Switch - Driver
5	Memory Seat Module (AN3)
6	Inflatable Restraint Seat Position Sensor (SPS) - Left
7	Seat Adjuster Assembly - Driver
8	Seat Belt Buckle

2007 Cadillac Escalade

2007 ACCESSORIES & EQUIPMENT Seat Belts - Avalanche, Escalade, Suburban, Tahoe & Yukon

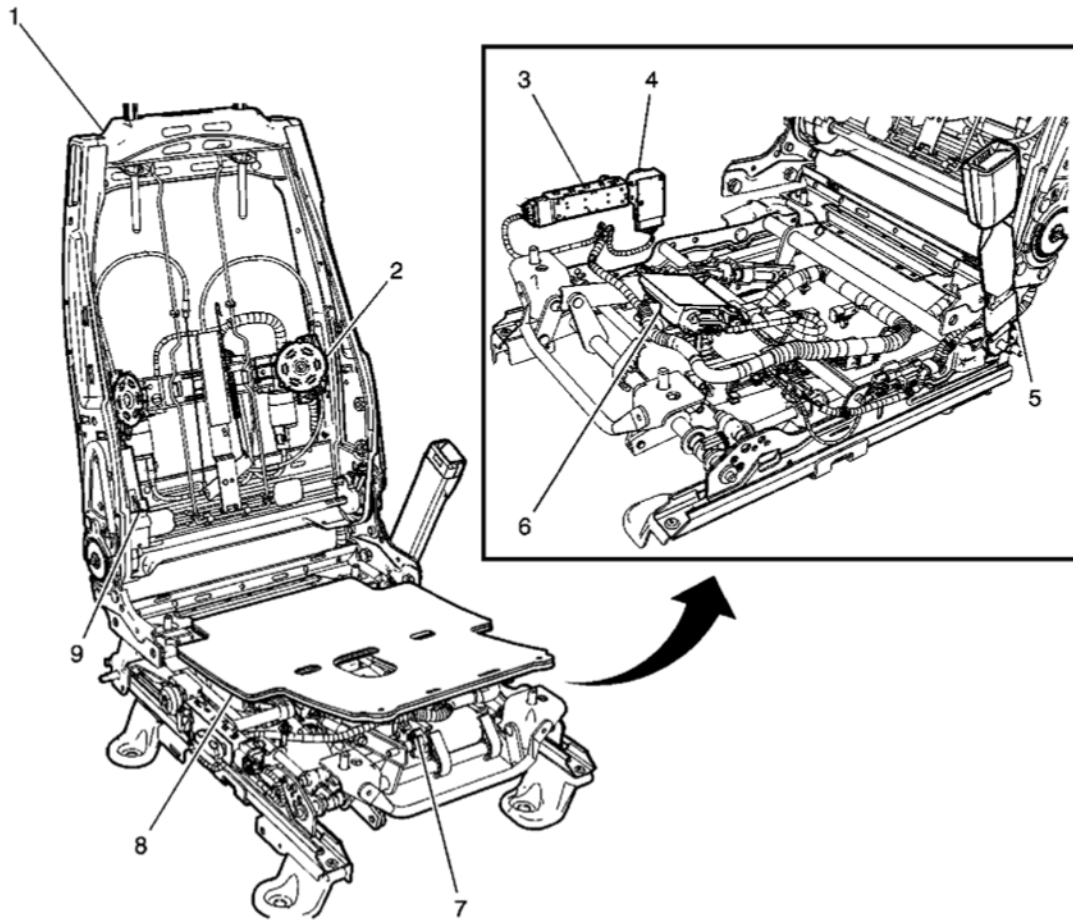


Fig. 3: Passenger Seat
Courtesy of GENERAL MOTORS CORP.

Callouts For Fig. 3

Callout	Component Name
1	Seat Frame
2	Lumbar Adjuster Assembly - Passenger (AN3)
3	Seat Adjuster Switch - Passenger
4	Seat Lumbar Switch - Passenger (AN3)
5	Seat Belt Buckle
6	Inflatable Restraint Front Passenger Presence System (PPS) Module
7	Seat Adjuster Assembly - Passenger
8	Inflatable Restraint Front Passenger Presence System (PPS) Sensor
9	Seat Recline Motor - Passenger (AN3)

SEAT BELT CONNECTOR END VIEWS

2007 Cadillac Escalade

2007 ACCESSORIES & EQUIPMENT Seat Belts - Avalanche, Escalade, Suburban, Tahoe & Yukon

Seat Belt Buckle - Driver

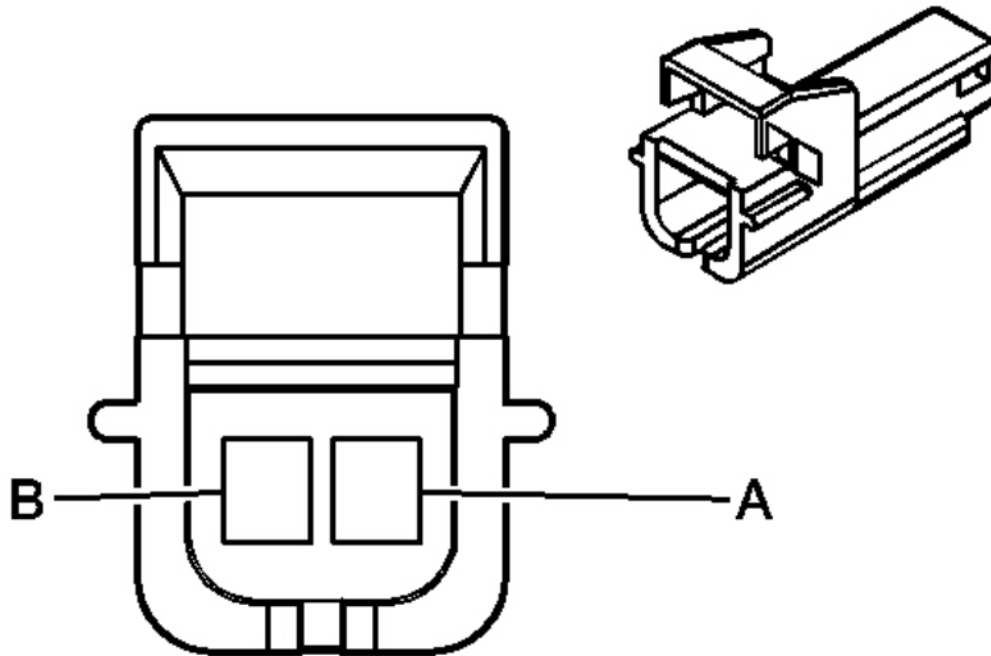


Fig. 4: Seat Belt Buckle - Driver Connector End View
Courtesy of GENERAL MOTORS CORP.

Seat Belt Buckle - Driver Connector Parts Information

Connector Part Information

- OEM: 12052833
- Service: 12117275
- Description: 2-Way M Metri-Pack 150 Series (BK)

Terminal Part Information

- Terminal/Tray: 12047767/2
- Core/Insulation Crimp: E/A
- Release Tool/Test Probe: 12094429/J-35616-2A (GY)

Seat Belt Buckle - Driver Connector Terminal Identification

Pin	Wire Color	Circuit No.	Function

2007 Cadillac Escalade

2007 ACCESSORIES & EQUIPMENT Seat Belts - Avalanche, Escalade, Suburban, Tahoe & Yukon

A	TN/WH	238	Driver Seat Belt Switch Signal
B	PK	5057	Low Reference

Seat Belt Buckle - Passenger C1

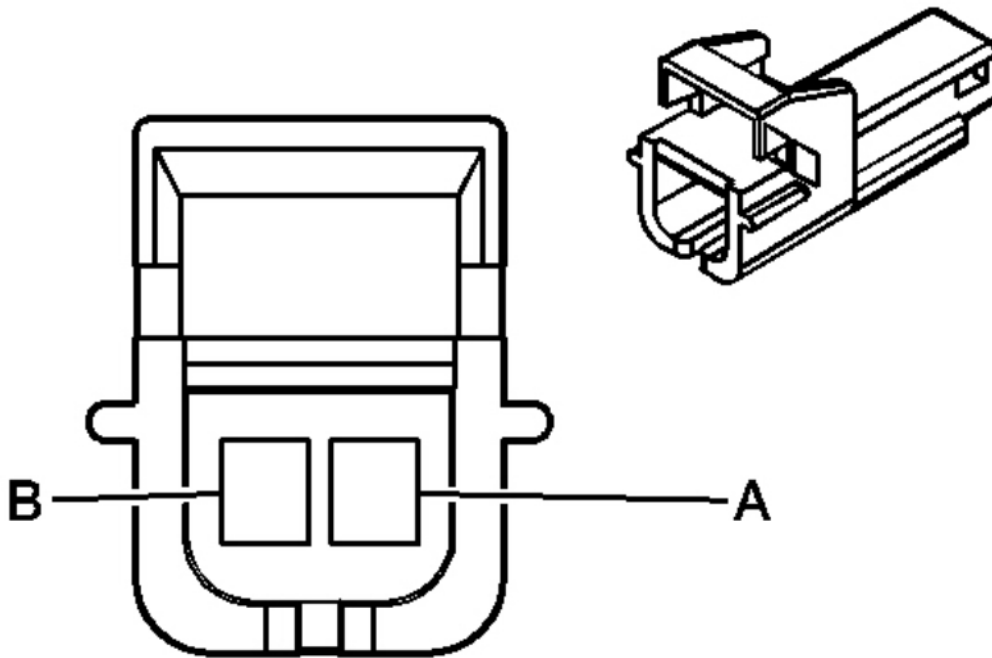


Fig. 5: Seat Belt Buckle - Passenger C1 Connector End View
Courtesy of GENERAL MOTORS CORP.

Seat Belt Buckle - Passenger C1 Connector Parts Information

Connector Part Information

- OEM: 12052833
- Service: 12117275
- Description: 2-Way M Metri-Pack 150 Series (BK)

Terminal Part Information

- Terminal/Tray: 12047767/2
- Core/Insulation Crimp: E/A
- Release Tool/Test Probe: 12094429/J-35616-2A (GY)

2007 Cadillac Escalade

2007 ACCESSORIES & EQUIPMENT Seat Belts - Avalanche, Escalade, Suburban, Tahoe & Yukon

Seat Belt Buckle - Passenger C1 Connector Terminal Identification

Pin	Wire Color	Circuit No.	Function
A	OG	1362	Passenger Seat Belt Switch Signal
B	PK	5057	Low Reference

Seat Belt Buckle - Passenger C2

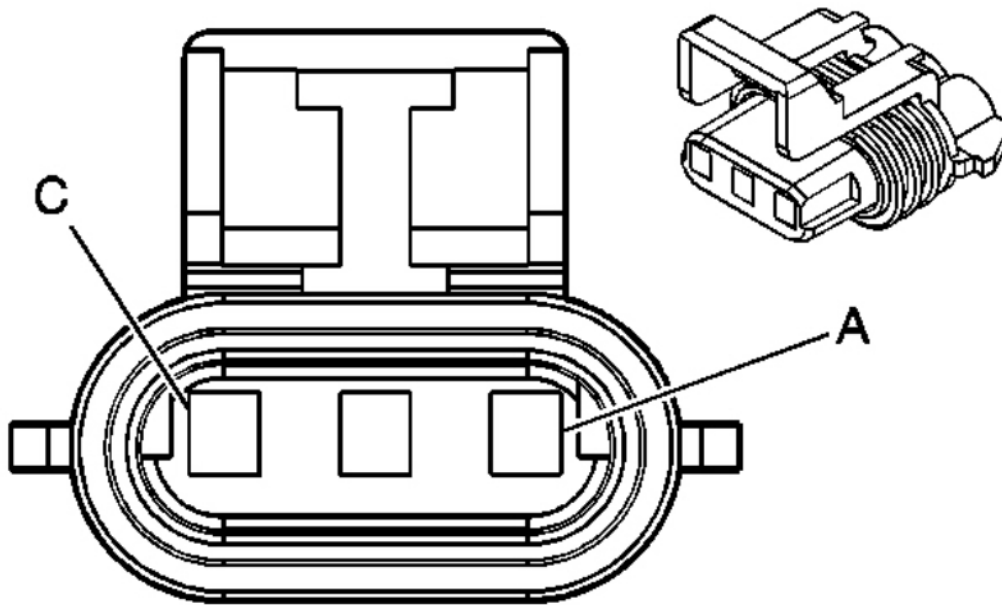


Fig. 6: Seat Belt Buckle - Passenger C2 Connector End View
Courtesy of GENERAL MOTORS CORP.

Seat Belt Buckle - Passenger C2 Connector Parts Information

Connector Part Information

- OEM: 12110293
- Service: 12117025
- Description: 3-Way F Metri-Pack 150 Series, Sealed (BK)

Terminal Part Information

- Terminal/Tray: TBD
- Core/Insulation Crimp: TBD
- Release Tool/Test Probe: TBD

2007 Cadillac Escalade

2007 ACCESSORIES & EQUIPMENT Seat Belts - Avalanche, Escalade, Suburban, Tahoe & Yukon

Seat Belt Buckle - Passenger C2 Connector Terminal Identification

Pin	Wire Color	Circuit No.	Function
A	L-BU	5612	Low Reference
B	TN	5613	Passenger Seat Belt Tension Sensor Voltage Reference
C	PU	5611	Passenger Seat Belt Tension Sensor Signal

DIAGNOSTIC INFORMATION AND PROCEDURES

DIAGNOSTIC STARTING POINT - SEAT BELTS

Begin the system diagnosis by reviewing the **Seat Belt System Description and Operation**. Reviewing the Description and Operation will help identify the correct symptom diagnostic procedure when a malfunction exists. The Description and Operation will also assist in determining if the condition described by the customer is normal system operation. Refer to **Symptoms - Seat Belts** in order to identify the correct procedure for diagnosing the system and where the procedure is located.

OPERATIONAL AND FUNCTIONAL CHECKS

IMPORTANT: If the vehicle has been in a collision, refer to **Repairs and Inspections Required After a Collision** for additional information.

Perform the following inspection from the driver seat:

1. Turn the ignition switch to the ON position. Verify proper operation of the seat belt reminder lamp with the belt buckled and with the belt unbuckled.
2. Inspect the shoulder belt guide in order to ensure that the following conditions are met:
 - The shoulder belt guide swivels freely in the rear seat position.
 - The seat belt webbing is seated flatly in the guide slot.
 - The seat belt webbing does not bind.
3. Verify that the seat belt buckle faces inboard and is accessible.
4. Verify that the seat belt retractor units are securely attached.
5. Verify that the seat belt anchor bolts are secure.
6. Fully extend the seat belt webbing. Verify that the seat belt webbing does not have any twists or tears.
7. Allow the seat belt webbing to retract. Verify that the seat belt webbing returns freely and completely back into the retractor.
8. Snap the seat belt latch plate into the buckle.
9. Sharply tug on the seat belt latch plate and the buckle. Verify that the seat belt latch plate and the buckle remain locked when tugged.
10. Push the button on the buckle.
 - Verify that the seat belt latch plate releases easily from the buckle.
 - Verify that the button returns to its original position.

2007 Cadillac Escalade

2007 ACCESSORIES & EQUIPMENT Seat Belts - Avalanche, Escalade, Suburban, Tahoe & Yukon

Repeat the inspection procedure, steps 2-10, from the front passenger seat.

Test the function of the automatic locking child restraint feature:

1. To engage the automatic locking feature, pull the belt to the fully extended position. Allow the belt to retract to the proper position for the child seat and fasten the latch plate to the buckle. As the belt retracts, a ratcheting sound should be heard.
2. To disengage the automatic locking feature, allow the belt to retract to the fully stowed position. Before the belt is completely stowed, the cinch feature will reset, the ratcheting sound will stop and the belt will extract freely.

Perform the following steps in order to inspect the center seat belts:

1. Verify that the center seat belts are accessible.
2. Verify that the center seat belts have no twists or tears in the webbing.
3. Snap the center seat belt latch plate into the buckle.
4. Sharply tug on the seat belt latch plate and the buckle. Verify that the seat belt latch plate and the buckle remain locked when tugged.
5. Push the button on the buckle.
 - Verify that the seat belt latch plate releases easily from the buckle.
 - Verify that the button returns to its original position.

Repeat the inspection procedure, steps 2-10, from the rear seats. The child restraint feature is located on the outboard position for the rear seat.

Repeat the center seat belt inspection procedure, steps 1-5, from the rear seat.

For information on removal of the rear seats cushions refer to **Rear Seat Cushion Cover and Pad Replacement (Avalanche/Escalade EXT)** or **Rear Seat Cushion Cover and Pad Replacement (Tahoe/Yukon/Escalade with Bucket)** or **Rear Seat Cushion Cover and Pad Replacement (Tahoe/Yukon/Escalade with Split Bench)** .

Emergency Locking Retractors

CAUTION: Perform this test in an area clear of other vehicles or obstructions. Do not conduct this test on the open road. A large, empty parking lot is suitable. Failure to observe this precaution may result in damage to the vehicle and possible personal injury.

1. Fasten the seat belts, an assistant is needed when the retractor under test is not part of the driver seat belt.
2. Accelerate the vehicle slowly to 16 km/h (10 mph) and apply the brakes firmly.
3. Verify that the seat belt locks when braking firmly.
4. If the belt does not lock, proceed with the following steps.
 1. Remove the seat belt retractor assembly.

2. Tilt the seat belt retractor slowly.

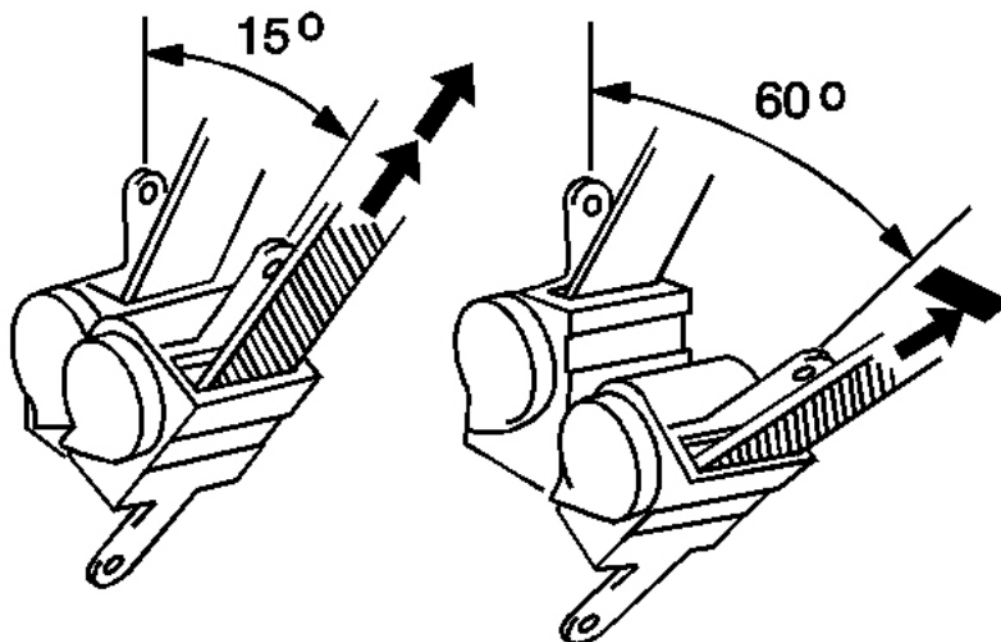


Fig. 7: Seat Belt Webbing Angles

Courtesy of GENERAL MOTORS CORP.

3. Ensure that the seat belt webbing can be pulled from the retractor at an inclination of 15 degrees or less and cannot be pulled from the retractor at an inclination of 60 degrees or more.
4. If the seat belt retractor does not operate as described, replace the retractor assembly. Refer to the following procedures:
 - **Seat Belt Retractor Pretensioner Replacement - Front**
 - **Seat Belt Retractor Replacement - No. 1 Rear (Avalanche/Escalade EXT) or Seat Belt Retractor Replacement - No. 1 Rear (Suburban/Yukon XL/Escalade ESV) or Seat Belt Retractor Replacement - No. 1 Rear (Tahoe/Yukon/Escalade)**
 - **Seat Belt Retractor Replacement - No. 1 Rear Center (Split Bench)**
 - **Seat Belt Retractor Replacement - No. 2 Rear**

SYMPTOMS - SEAT BELTS

IMPORTANT: Review the seat belt system description and operation in order to familiarize yourself with the system and how it functions. Refer to **Seat Belt System**

2007 Cadillac Escalade

2007 ACCESSORIES & EQUIPMENT Seat Belts - Avalanche, Escalade, Suburban, Tahoe & Yukon

Description and Operation.

Visual/Physical Inspection

- Inspect for aftermarket devices which could affect the operation of the seat belt system. Refer to **Checking Aftermarket Accessories** .
- Inspect the easily accessible or visible system components for obvious damage or conditions which could cause the symptom.

Intermittent

Faulty electrical connections or wiring may be the cause of intermittent conditions. Refer to **Testing for Intermittent Conditions and Poor Connections** .

Symptom List

- Refer to **Seat Belt Indicator Circuit Malfunction - Driver** in order to diagnose the symptom.
- Refer to **Seat Belt Indicator Circuit Malfunction - Passenger** in order to diagnose the symptom.

SEAT BELT INDICATOR CIRCUIT MALFUNCTION - DRIVER

Diagnostic Fault Information

IMPORTANT: Always perform the **Diagnostic System Check - Vehicle** prior to using this diagnostic procedure.

Circuit/System Description

The inflatable restraint sensing and diagnostic module (SDM) sends the status of the driver seat belt switch to the instrument panel cluster (IPC) via a serial data communication message. If the seat belt is unfastened, the SDM will send a message to the IPC to illuminate the fasten safety belt indicator for 72 seconds or until the seat belt is fastened.

Reference Information

Schematic Reference

Seat Belt Schematics

Connector End View Reference

Seat Belt Connector End Views

Electrical Information Reference

- **Circuit Testing**

2007 Cadillac Escalade

2007 ACCESSORIES & EQUIPMENT Seat Belts - Avalanche, Escalade, Suburban, Tahoe & Yukon

- **Connector Repairs**
- **Testing for Intermittent Conditions and Poor Connections**
- **Wiring Repairs**

Circuit/System Testing

IMPORTANT: When removing connectors inspect for damage or corrosion. Damage or corrosion in the following requires repair or replacement of the affected component/connector.

- The seat belt switch - left
 - The SDM module
 - The seat belt switch - left wiring harness connector
 - The SDM wiring harness connector
1. Observe the fasten seat belt indicator located in the IPC. Turn ON the ignition and use the scan tool. Buckle the driver seat belt and monitor the Driver Side Belt Status parameter in the SIR scan tool data list in the scan tool. Verify that the Seat Belt indicator turns ON while the scan tool shows the driver seat belt is buckled.
 - If the scan tool displays the driver seat belt is buckled and the driver seat belt indicator does not turn ON, replace the IPC.
 2. Sit in the front driver seat with the ignition ON and with a scan tool. Monitor the scan tool and while buckling and unbuckling the driver seat belt, verify the scan tool is showing the driver seat belt is buckling and unbuckling.
 - If the scan tool indicates that the driver seat belt does perform as described, turn OFF the ignition, remove the SDM connector and the driver seat belt buckle connector. Test and repair both seat belt switch - left signal and ground circuit for an open, high resistance or replace the seat belt switch - left.

Repair Procedures

IMPORTANT: Always perform the **Diagnostic Repair Verification** after completing the diagnostic procedure.

- **Front Seat Belt Buckle Replacement**
- **Control Module References** for SDM and IPC replacement, setup, and programming

SEAT BELT INDICATOR CIRCUIT MALFUNCTION - PASSENGER

Diagnostic Fault Information

IMPORTANT: Always perform the **Diagnostic System Check - Vehicle** prior to using this diagnostic procedure.

2007 Cadillac Escalade

2007 ACCESSORIES & EQUIPMENT Seat Belts - Avalanche, Escalade, Suburban, Tahoe & Yukon

Circuit/System Description

The inflatable restraint sensing and diagnostic module (SDM) sends the status of the passenger seat belt switch to the Passenger Air Bag ON/OFF indicator via a serial data communication message. The instrument panel cluster (IPC) controls the passenger seat belt indicator by using the serial data communication message from the SDM. If the seat belt is unfastened, only if an occupant is seated in the front passenger seat, the SDM will send a message to the IPC to illuminate the fasten safety belt indicator for 72 seconds or until the seat belt is fastened.

Reference Information

Schematic Reference

Seat Belt Schematics

Connector End View Reference

Seat Belt Connector End Views

Electrical Information Reference

- Circuit Testing
- Connector Repairs
- Testing for Intermittent Conditions and Poor Connections
- Wiring Repairs

Circuit/System Testing

IMPORTANT: When removing connectors inspect for damage or corrosion. Damage or corrosion in the following requires repair or replacement of the affected component/connector.

- The seat belt switch - right
 - The SDM module
 - The seat belt switch - right wiring harness connector
 - The SDM wiring harness connector
1. Observe the Passenger Air Bag ON/OFF status indicator located in the instrument panel (I/P). Turn ON the ignition, both ON and OFF indicators will turn ON for 5 seconds. Verify that the Passenger Air Bag ON/OFF status indicator illuminates.
 - If the Passenger Air Bag ON/OFF status indicator does not illuminate, refer to **Passenger Presence System Indicator Circuit Malfunction**.
 2. Sit in the front passenger seat with the ignition ON and observe the Passenger Air Bag ON/OFF indicator, which contains the passenger seat belt indicator. Monitor the passenger seat belt indicator while buckling and unbuckling the passenger seat belt. The passenger seat belt indicator should turn OFF and ON when

2007 Cadillac Escalade

2007 ACCESSORIES & EQUIPMENT Seat Belts - Avalanche, Escalade, Suburban, Tahoe & Yukon

the passenger seat belt is unbuckled and buckled. Verify that the passenger seat belt indicator turns ON and OFF.

- If the indicator does perform as described, turn OFF the ignition, then remove the SDM connector and the passenger seat belt buckle connector. Refer to **SDM replacement** in Repair Instructions for connector location.
 - Test and repair both seat belt switch - right signal and ground circuit for an open, high resistance. If both circuits test normal then replace the seat belt switch - right.
3. Ignition OFF, remove the IPC connector and the Passenger Air Bag ON/OFF connector. Refer to **Instrument Panel Inflatable Restraint Module Indicator Replacement (w/o U19)** or **Instrument Panel Inflatable Restraint Module Indicator Replacement (w/U19)** . Test the Passenger Seat Belt Indicator Control circuit between the IPC and the passenger Air Bag ON/OFF connector for an open or high resistance. Verify that an open or high resistance does not exist.
- If any of the above conditions are found, make the appropriate repair.

Repair Procedures

IMPORTANT: Always perform the **Diagnostic Repair Verification** after completing the diagnostic procedure.

- **Front Seat Belt Buckle Replacement**
- **Instrument Panel Inflatable Restraint Module Indicator Replacement (w/o U19)** or **Instrument Panel Inflatable Restraint Module Indicator Replacement (w/U19)**
- **Control Module References** for SDM and BCM replacement, setup, and programming

SEAT BELT SERVICE PRECAUTIONS

IMPORTANT: If the vehicle has been in a collision, refer to **Repairs and Inspections Required After a Collision** for additional information.

- Do not bleach or dye the seat belt webbing. Use only the following items in order to clean the seat belt webbing:
 - A mild soap and water solution
 - A soft brush or cloth
- Keep sharp edges and damaging objects away from the seat belts. Do not bend or damage any part of the seat belt buckle or the latch plate. Replace any seat belts that are cut or damaged in any manner.
- Use only the correct seat belt anchor nuts/bolts. Tighten the correct seat belt anchor nut/bolt/screw to the correct torque value. Refer to **Fastener Tightening Specifications**.
- Some seat belts and retractors require service as a set with service replacement components only. Do not repair individual components that must require service as a set.
- Verify that the replacement part number is correct for the vehicle at that seating position. Do not substitute a seat belt from a different seating position.

REPAIR INSTRUCTIONS

REPAIRS AND INSPECTIONS REQUIRED AFTER A COLLISION

CAUTION: 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.

FRONT SEAT BELT BUCKLE REPLACEMENT

2007 Cadillac Escalade

2007 ACCESSORIES & EQUIPMENT Seat Belts - Avalanche, Escalade, Suburban, Tahoe & Yukon

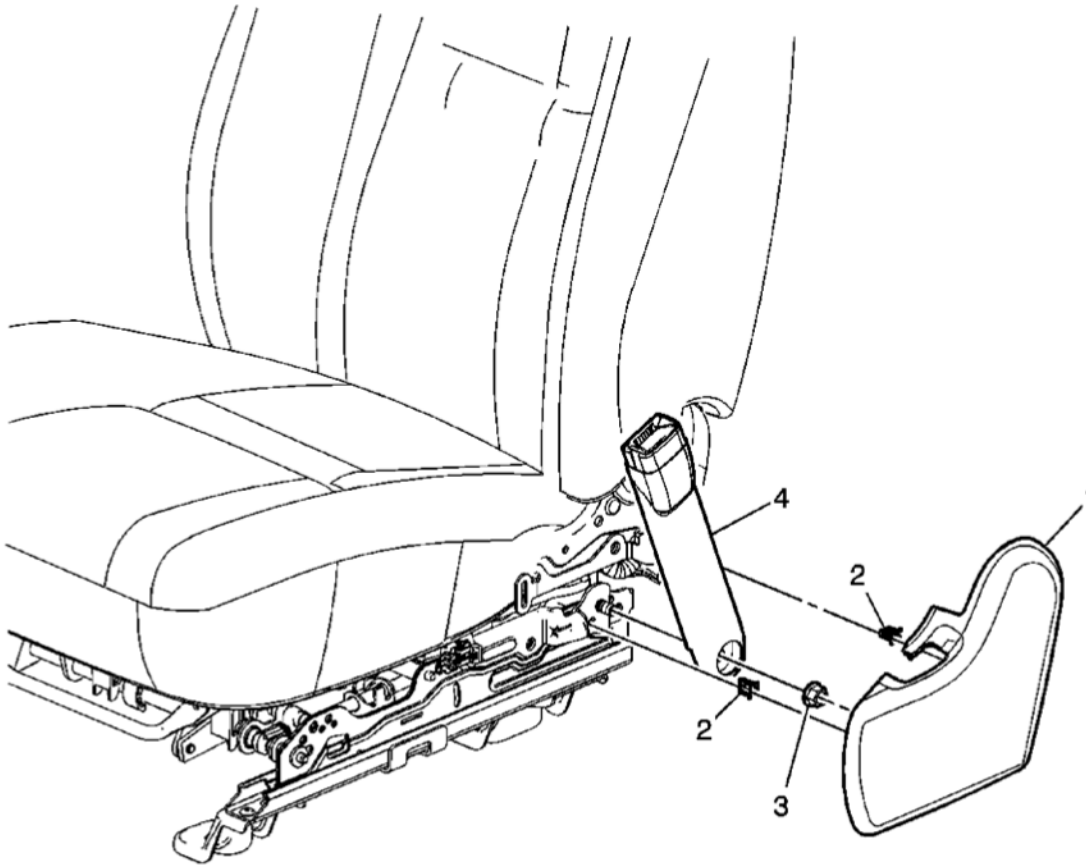


Fig. 8: View Of Seat Belt Buckle & Components
Courtesy of GENERAL MOTORS CORP.

Front Seat Belt Buckle Replacement

Callout	Component Name
NOTE: Refer to <u>Fastener Notice</u> .	
Fastener Tightening Specifications: Refer to <u>Fastener Tightening Specifications</u> . Preliminary Procedures: Remove front bucket seat. Refer to <u>Front Seat Replacement - Bucket</u> .	
1	Front Seat (Buckle Side) Belt Cover
2	Front Seat (Buckle Side) Belt Cover Retainer (Qty: 2)
3	Front Seat (Buckle Side) Belt Nut Tighten: 52 N.m (38 lb ft)
4	Front Seat (Buckle Side) Belt Assembly Tip: Disconnect electrical connector.

REAR SEAT BELT BUCKLE REPLACEMENT (SPLIT BENCH)

2007 Cadillac Escalade

2007 ACCESSORIES & EQUIPMENT Seat Belts - Avalanche, Escalade, Suburban, Tahoe & Yukon

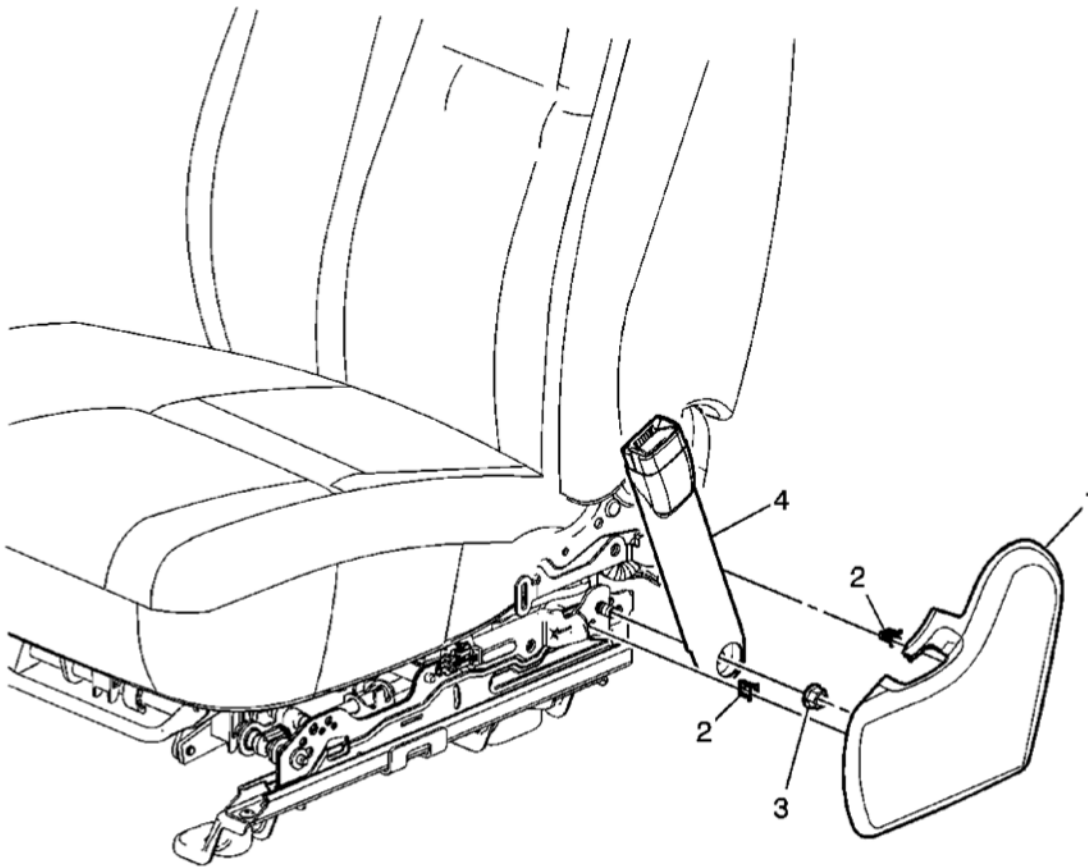


Fig. 9: View Of Seat Belt Buckle & Components
Courtesy of GENERAL MOTORS CORP.

Rear Seat Belt Buckle Replacement (Split Bench)

Callout	Component Name
NOTE: Refer to <u>Fastener Notice</u> .	
Fastener Tightening Specifications: Refer to <u>Fastener Tightening Specifications</u> .	
Preliminary Procedure	
1. Remove rear bench seat. Refer to <u>Rear Seat Replacement (Avalanche/Escalade EXT)</u> or <u>Rear Seat Replacement (Tahoe/Yukon/Escalade with Bucket)</u> or <u>Rear Seat Replacement (Tahoe/Yukon/Escalade with Split Bench)</u> .	
2. Remove seat cushion. Refer to <u>Rear Seat Cushion Cover and Pad Replacement (Avalanche/Escalade EXT)</u> or <u>Rear Seat Cushion Cover and Pad Replacement (Tahoe/Yukon/Escalade with Bucket)</u> or <u>Rear Seat Cushion Cover and Pad Replacement (Tahoe/Yukon/Escalade with Split Bench)</u> .	

2007 Cadillac Escalade

2007 ACCESSORIES & EQUIPMENT Seat Belts - Avalanche, Escalade, Suburban, Tahoe & Yukon

1	Rear Seat (Buckle Side) Belt Bolt (Qty: 3) Tighten: 52 N.m (38 lb ft)
2	Rear Seat (Buckle Side) Belt Assembly Tip: Tilt 60 percent split forward to access 40 percent split assembly.
3	Rear Seat (Buckle Side) Belt Assembly Cover
4	Rear Seat (Buckle Side) Belt Assembly Cover Retainer (Qty: 2)

REAR SEAT BELT BUCKLE REPLACEMENT (BUCKET)

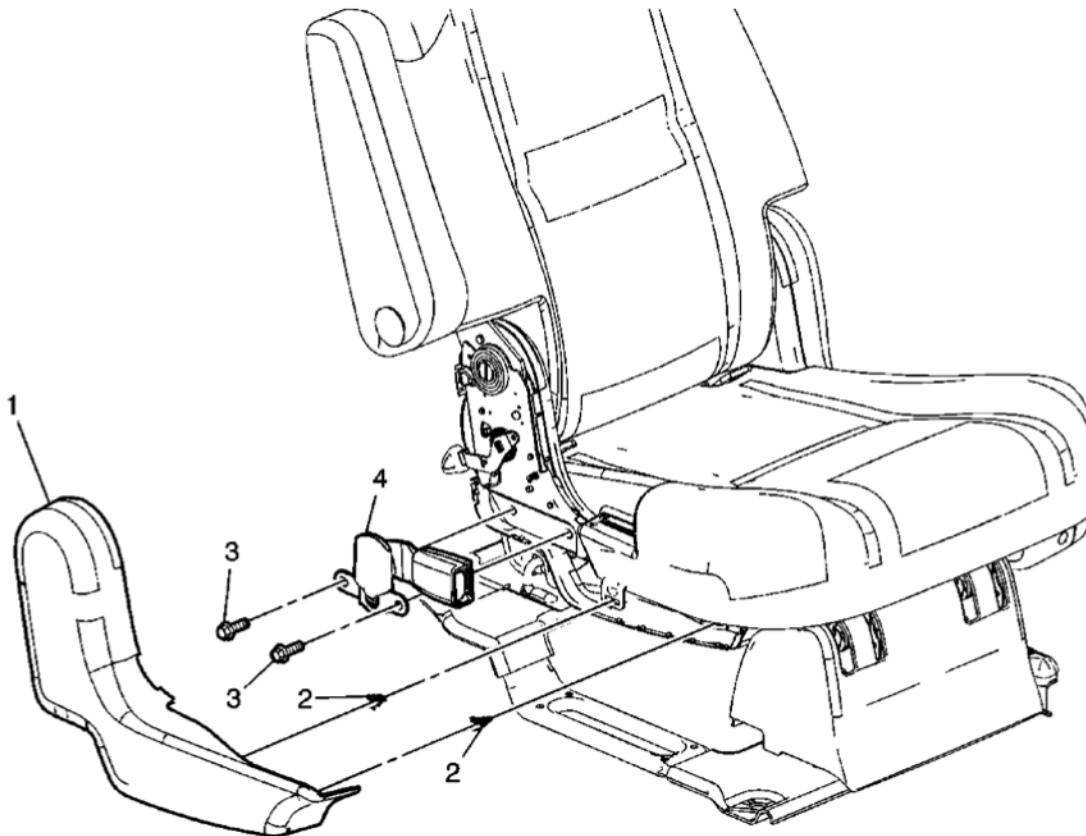


Fig. 10: View Of Rear Seat Belt Buckle & Components

Courtesy of GENERAL MOTORS CORP.

Rear Seat Belt Buckle Replacement (Bucket)

Callout	Component Name
NOTE: Refer to <u>Fastener Notice</u> .	
Fastener Tightening Specifications: Refer to <u>Fastener Tightening Specifications</u> . Preliminary Procedure: Remove rear bucket seat. Refer to <u>Rear Seat Replacement (Avalanche/Escalade EXT)</u> or	

2007 Cadillac Escalade

2007 ACCESSORIES & EQUIPMENT Seat Belts - Avalanche, Escalade, Suburban, Tahoe & Yukon

Rear Seat Replacement (Tahoe/Yukon/Escalade with Bucket) or Rear Seat Replacement (Tahoe/Yukon/Escalade with Split Bench) .

1	Rear Seat (Buckle Side) Belt Cover
2	Rear Seat (Buckle Side) Belt Cover Retainer (Qty: 2)
3	Rear Seat (Buckle Side) Belt Bolt (Qty: 2) Tighten: 52 N.m (38 lb ft)
4	Rear Seat (Buckle Side) Belt Assembly

SEAT BELT BUCKLE REPLACEMENT - NO. 2 REAR

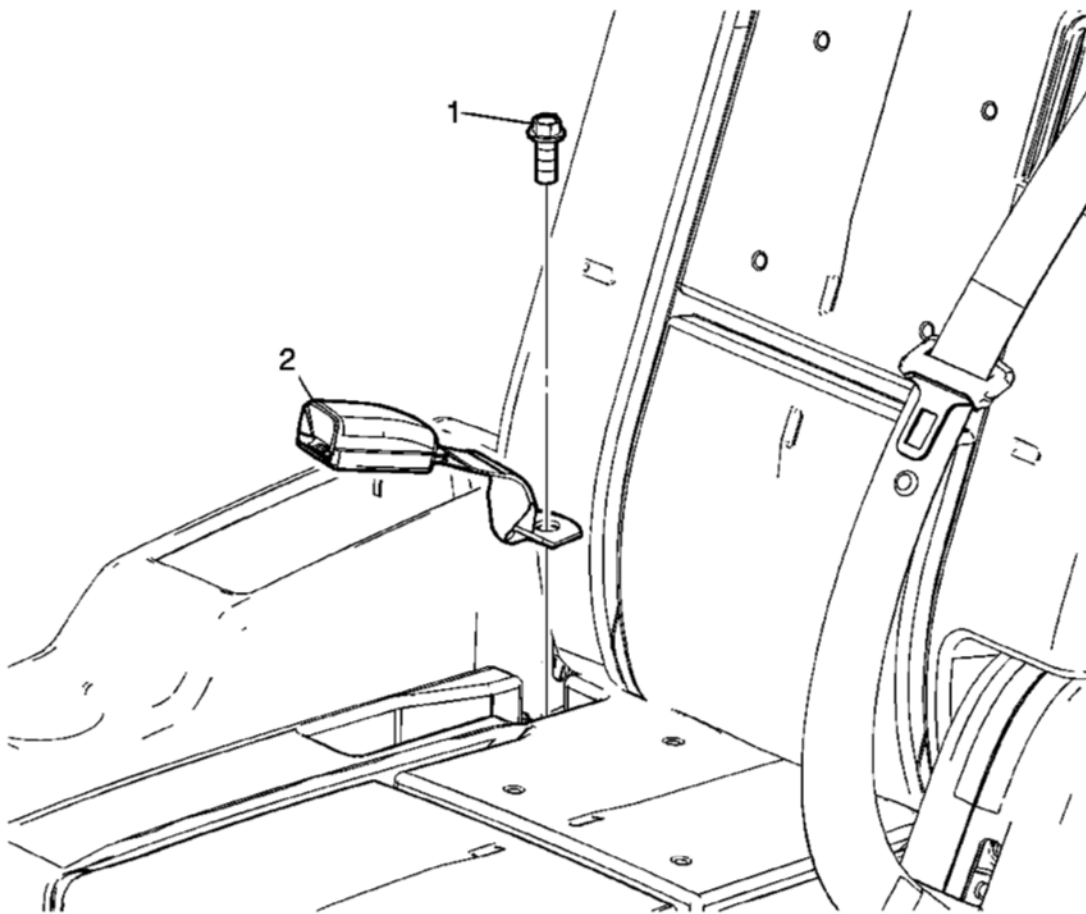


Fig. 11: View Of Rear Seat Belt Buckle & Components
Courtesy of GENERAL MOTORS CORP.

Seat Belt Buckle Replacement - No. 2 Rear

Callout	Component Name
NOTE: Refer to <u>Fastener Notice</u> .	

2007 Cadillac Escalade

2007 ACCESSORIES & EQUIPMENT Seat Belts - Avalanche, Escalade, Suburban, Tahoe & Yukon

Fastener Tightening Specifications: Refer to Fastener Tightening Specifications.

Preliminary Procedure

1. Remove third row seat. Refer to Rear Number 2 Seat Replacement (Suburban/Yukon XL) or Rear Number 2 Seat Replacement (Tahoe/Yukon/Escalade) .
2. Remove seat back pad and cover. Refer to Seat Back Cover and Pad Replacement - Rear No. 2 .

1	Rear Seat No.2 (Buckle Side) Belt Bolt Tighten: 52 N.m (38 lb ft)
2	Rear Seat No.2 (Buckle Side) Belt Assembly

SHOULDER BELT GUIDE ADJUSTER REPLACEMENT - FRONT

2007 Cadillac Escalade

2007 ACCESSORIES & EQUIPMENT Seat Belts - Avalanche, Escalade, Suburban, Tahoe & Yukon

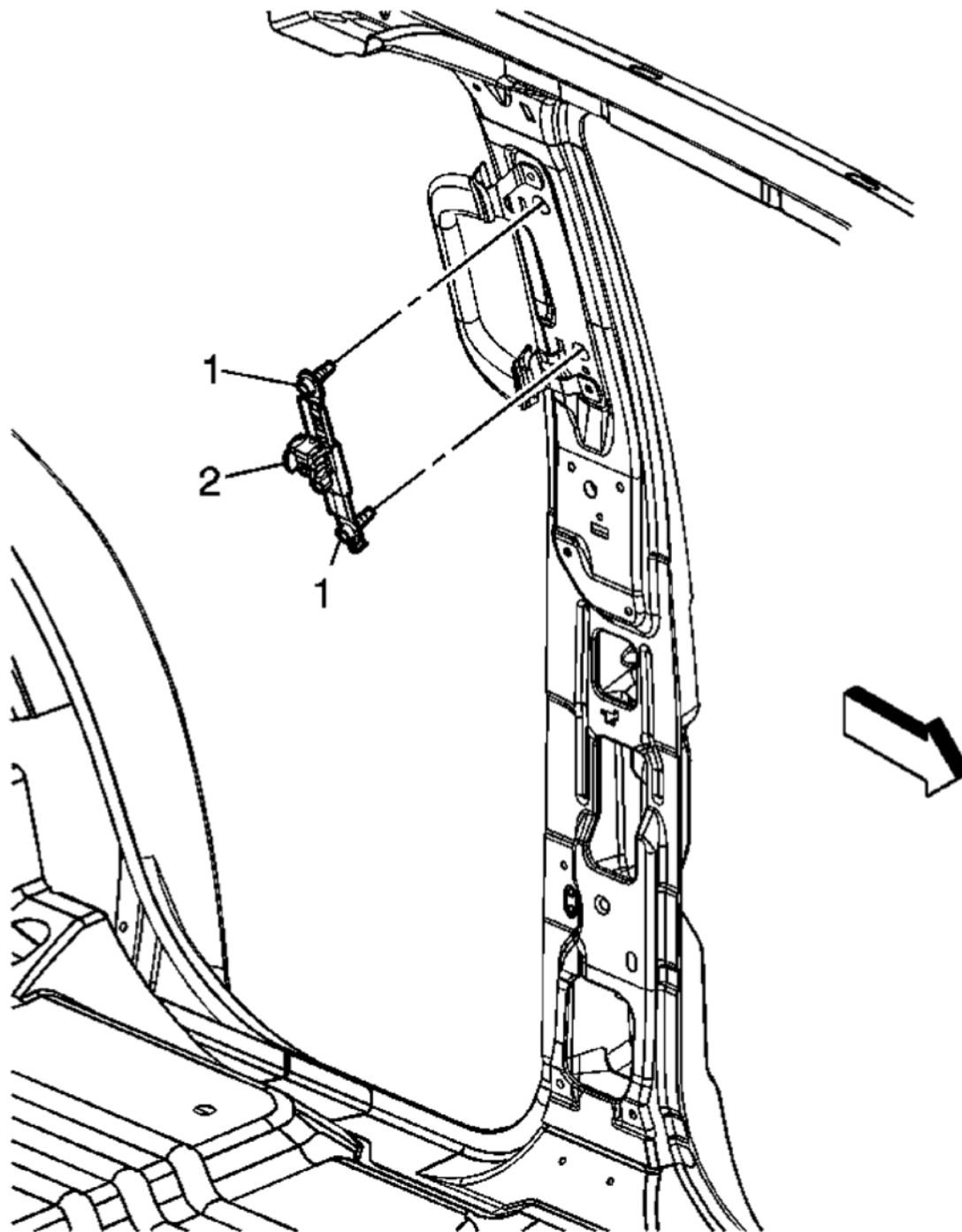


Fig. 12: Shoulder Belt Guide Adjuster Assembly & Bolts
Courtesy of GENERAL MOTORS CORP.

Shoulder Belt Guide Adjuster Replacement - Front

Callout	Component Name

2007 Cadillac Escalade

2007 ACCESSORIES & EQUIPMENT Seat Belts - Avalanche, Escalade, Suburban, Tahoe & Yukon

NOTE:

Refer to [Fastener Notice](#) .

Fastener Tightening Specifications: Refer to [Fastener Tightening Specifications](#) .

Preliminary Procedure

1. Remove front door sill plate. Refer to [Front Side Door Sill Plate Replacement](#) .
2. Remove rear door sill plate. Refer to [Rear Side Door Sill Plate Replacement \(Extended Wheelbase\)](#) or [Rear Side Door Sill Plate Replacement \(Standard Wheelbase\)](#) .
3. Remove front seat shoulder belt adjuster cover. Refer to [Seat Belt Height Adjuster Knob Replacement - Front](#).
4. Remove center pillar lower garnish molding. Refer to [Garnish Molding Replacement - Center Pillar Lower](#) .
5. Remove center pillar upper garnish molding. Refer to [Garnish Molding Replacement - Center Pillar Upper](#) .
6. Remove front seat belt. Refer to [Seat Belt Retractor Pretensioner Replacement - Front](#) .

1	Front Seat Shoulder Belt Guide Adjuster Bolt (Qty: 2) Tighten: 50 N.m (37 lb ft)
2	Front Seat Shoulder Belt Guide Adjuster Assembly

SEAT BELT HEIGHT ADJUSTER KNOB REPLACEMENT - FRONT

2007 Cadillac Escalade

2007 ACCESSORIES & EQUIPMENT Seat Belts - Avalanche, Escalade, Suburban, Tahoe & Yukon

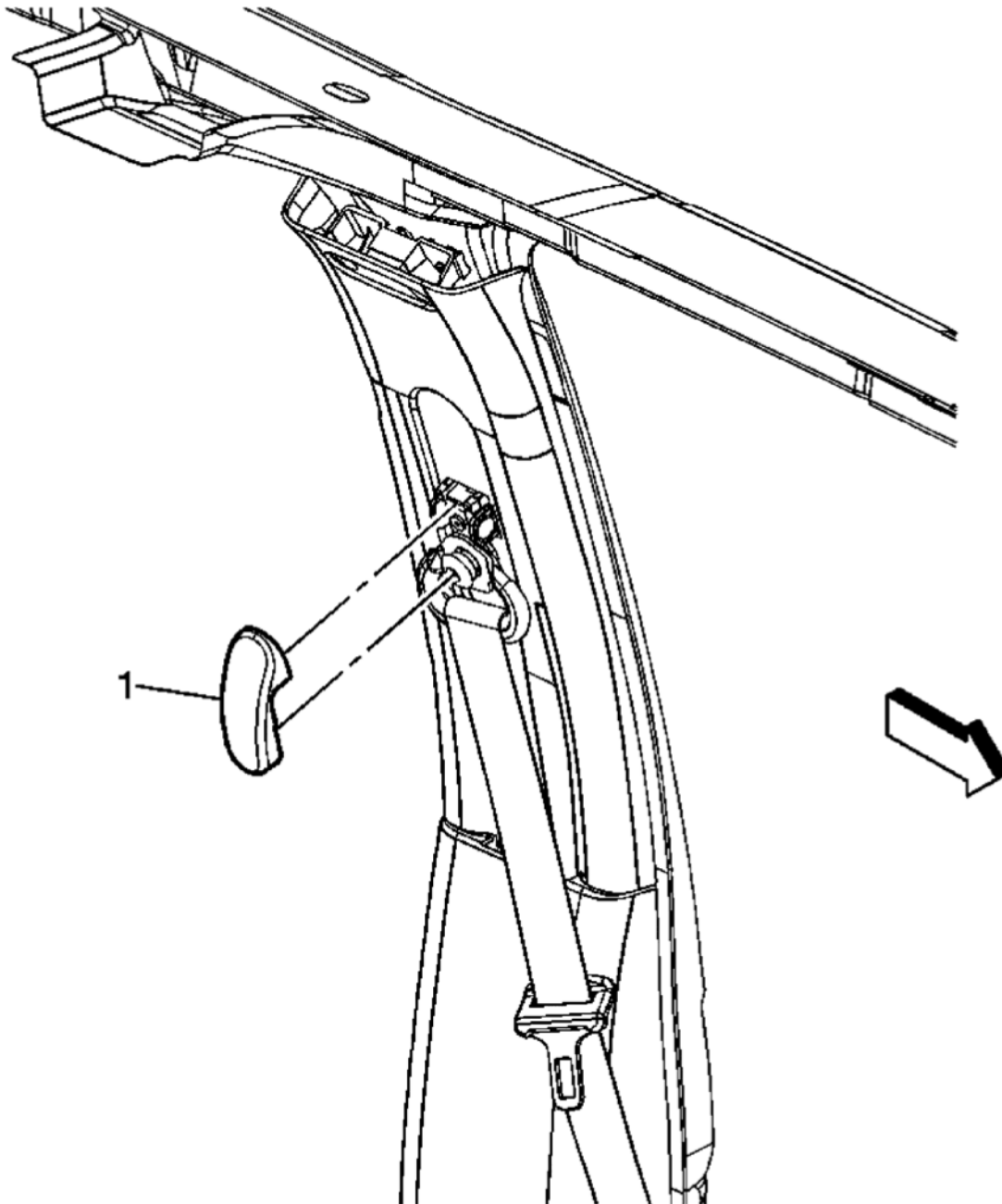


Fig. 13: View Of Front Seat Belt Height Adjuster Knob
Courtesy of GENERAL MOTORS CORP.

Seat Belt Height Adjuster Knob Replacement - Front

Callout	Component Name
1	Front Seat Belt Height Adjuster Knob

SEAT BELT RETRACTOR REPLACEMENT - NO. 1 REAR (AVALANCHE/ESCALADE EXT)

2007 Cadillac Escalade

2007 ACCESSORIES & EQUIPMENT Seat Belts - Avalanche, Escalade, Suburban, Tahoe & Yukon

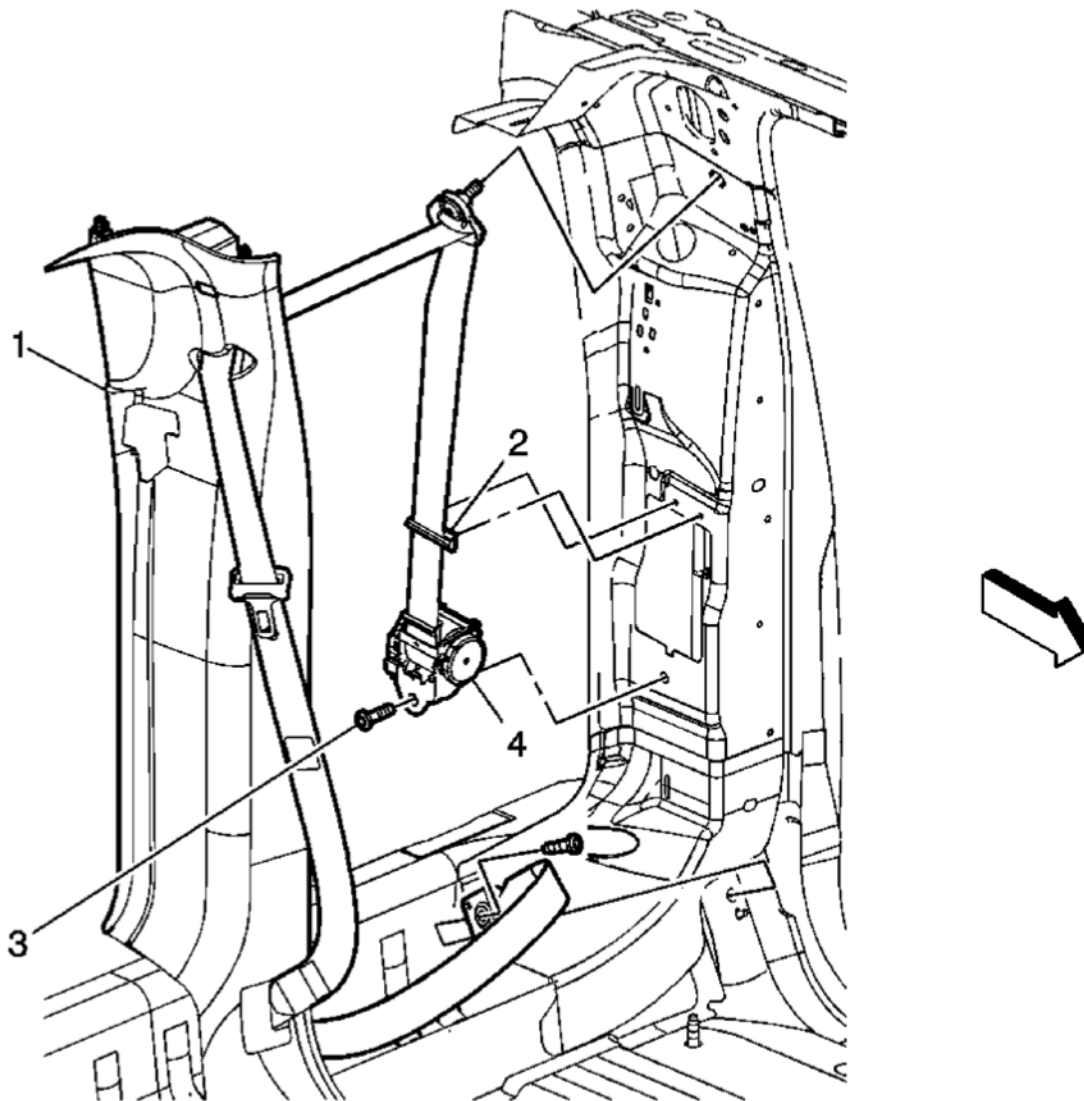


Fig. 14: View Of Seat Belt Retractor Assembly & Components
Courtesy of GENERAL MOTORS CORP.

Seat Belt Retractor Replacement - No. 1 Rear (Avalanche/Escalade EXT)

Callout	Component Name
NOTE: Refer to <u>Fastener Notice</u> .	
Fastener Tightening Specifications: Refer to <u>Fastener Tightening Specifications</u> .	
Preliminary Procedure	
1. Disable roof rail SIR system. Refer to SIR Disabling and Enabling .	

2007 Cadillac Escalade

2007 ACCESSORIES & EQUIPMENT Seat Belts - Avalanche, Escalade, Suburban, Tahoe & Yukon

2. Remove rear side door sill plate. Refer to **Rear Side Door Sill Plate Replacement (Extended Wheelbase)** or **Rear Side Door Sill Plate Replacement (Standard Wheelbase)** .

1	Body Lock Pillar Garnish Molding Assembly Refer to <u>Body Lock Pillar Garnish Molding Replacement (Avalanche/Escalade EXT)</u> or <u>Body Lock Pillar Garnish Molding Replacement (Suburban/Yukon XL/Escalade ESV)</u> or <u>Body Lock Pillar Garnish Molding Replacement (Tahoe/Yukon/Escalade)</u> .
2	Rear Seat Shoulder Belt Guide
3	Rear Seat Shoulder Belt Retractor Bolt Tighten: 43 N.m (32 lb ft)
4	Rear Seat Shoulder Belt Retractor Assembly

SEAT BELT RETRACTOR REPLACEMENT - NO. 1 REAR (SUBURBAN/YUKON XL/ESCALADE ESV)

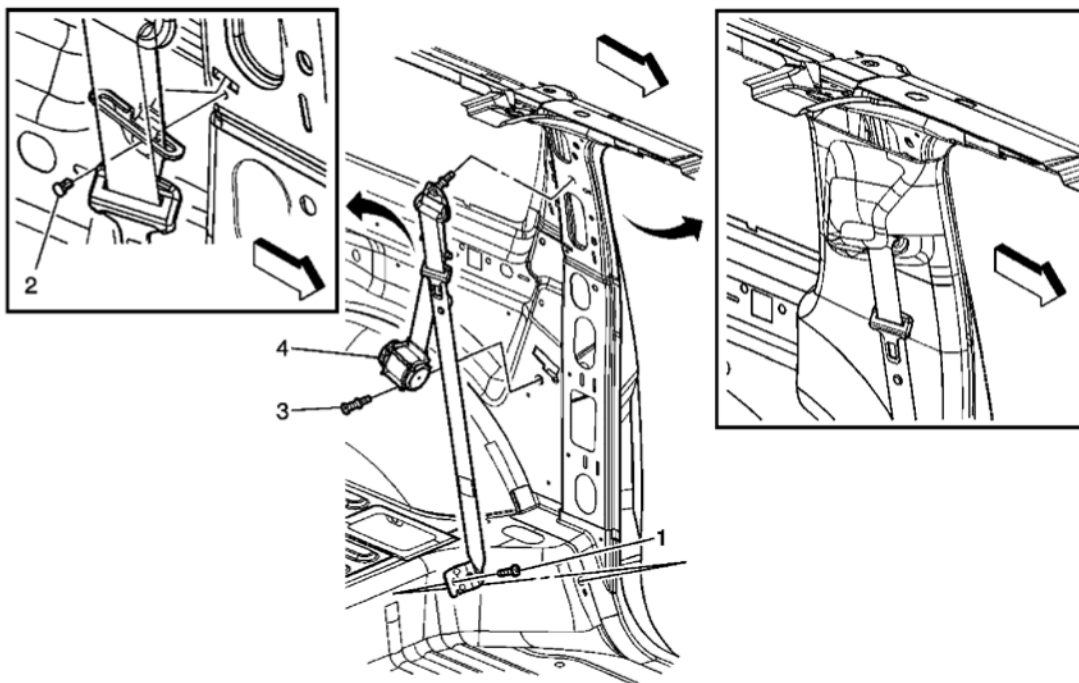


Fig. 15: View Of Rear Seat Belt Retractor Assembly & Components
Courtesy of GENERAL MOTORS CORP.

Seat Belt Retractor Replacement - No. 1 Rear (Suburban/Yukon XL/Escalade ESV)

Callout	Component Name
NOTE: Refer to <u>Fastener Notice</u> .	
Fastener Tightening Specifications: Refer to <u>Fastener Tightening Specifications</u> .	

Preliminary Procedure

1. Disable roof rail SIR system. Refer to **SIR Disabling and Enabling** .
2. Remove rear side door sill plate. Refer to **Rear Side Door Sill Plate Replacement (Extended Wheelbase)** or **Rear Side Door Sill Plate Replacement (Standard Wheelbase)** .
3. Remove body lock pillar garnish molding. Refer to **Body Lock Pillar Garnish Molding Replacement (Avalanche/Escalade EXT)** or **Body Lock Pillar Garnish Molding Replacement (Suburban/Yukon XL/Escalade ESV)** or **Body Lock Pillar Garnish Molding Replacement (Tahoe/Yukon/Escalade)** .

1	Rear Seat Shoulder Belt Anchor Plate Bolt Tighten: 43 N.m (32 lb ft)
2	Rear Seat Shoulder Belt Guide Retainer
3	Rear Seat Shoulder Belt Retractor Bolt Tighten: 43 N.m (32 lb ft)
4	Rear Seat Shoulder Belt Retractor Assembly

SEAT BELT RETRACTOR REPLACEMENT - NO. 1 REAR (TAHOE/YUKON/ESCALADE)

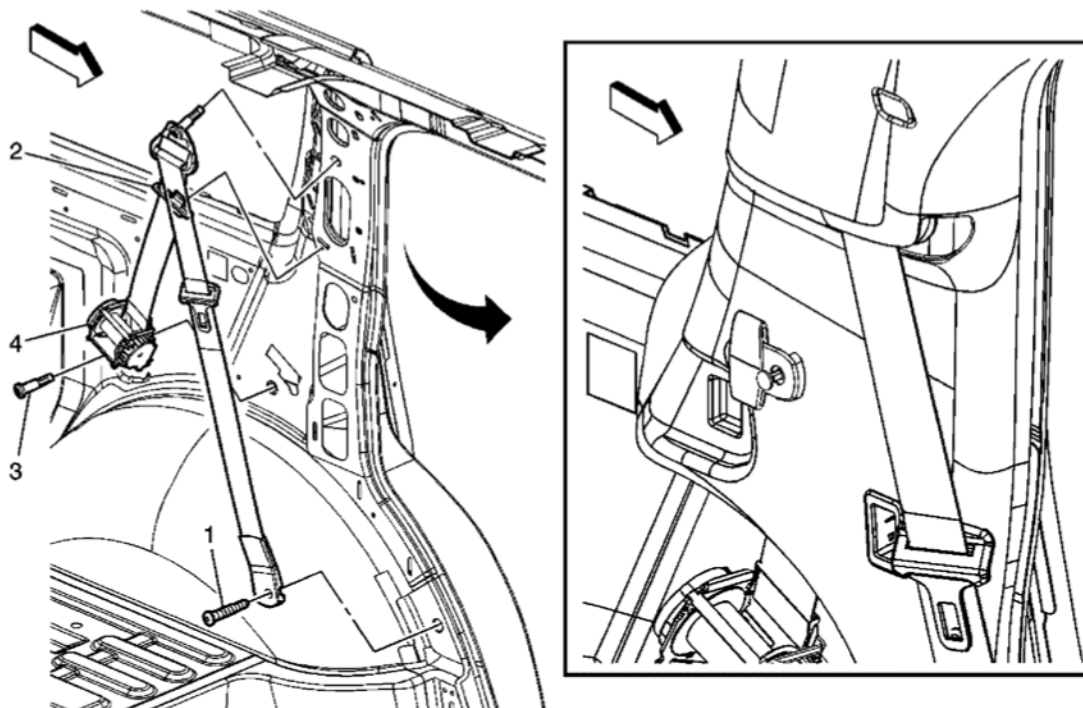


Fig. 16: View Of Rear Seat Belt Retractor Assembly & Components
Courtesy of GENERAL MOTORS CORP.

2007 Cadillac Escalade

2007 ACCESSORIES & EQUIPMENT Seat Belts - Avalanche, Escalade, Suburban, Tahoe & Yukon

Seat Belt Retractor Replacement - No. 1 Rear (Tahoe/Yukon/Escalade)

Callout	Component Name
NOTE: Refer to <u>Fastener Notice</u> .	
Fastener Tightening Specifications: Refer to <u>Fastener Tightening Specifications</u> .	
Preliminary Procedure 1. Disable roof rail SIR system. Refer to <u>SIR Disabling and Enabling</u> . 2. Remove rear side door sill plate. Refer to <u>Rear Side Door Sill Plate Replacement (Extended Wheelbase)</u> or <u>Rear Side Door Sill Plate Replacement (Standard Wheelbase)</u> . 3. Remove body lock pillar garnish molding. Refer to <u>Body Lock Pillar Garnish Molding Replacement (Avalanche/Escalade EXT)</u> or <u>Body Lock Pillar Garnish Molding Replacement (Suburban/Yukon XL/Escalade ESV)</u> or <u>Body Lock Pillar Garnish Molding Replacement (Tahoe/Yukon/Escalade)</u> .	
1	Rear Seat Shoulder Belt Anchor Bolt Tighten: 43 N.m (32 lb ft)
2	Rear Seat Shoulder Belt Guide
3	Rear Seat Shoulder Belt Retractor Bolt Tighten: 43 N.m (32 lb ft)
4	Rear Seat Shoulder Belt Retractor Assembly

SEAT BELT RETRACTOR REPLACEMENT - NO. 1 REAR CENTER (SPLIT BENCH)

2007 Cadillac Escalade

2007 ACCESSORIES & EQUIPMENT Seat Belts - Avalanche, Escalade, Suburban, Tahoe & Yukon

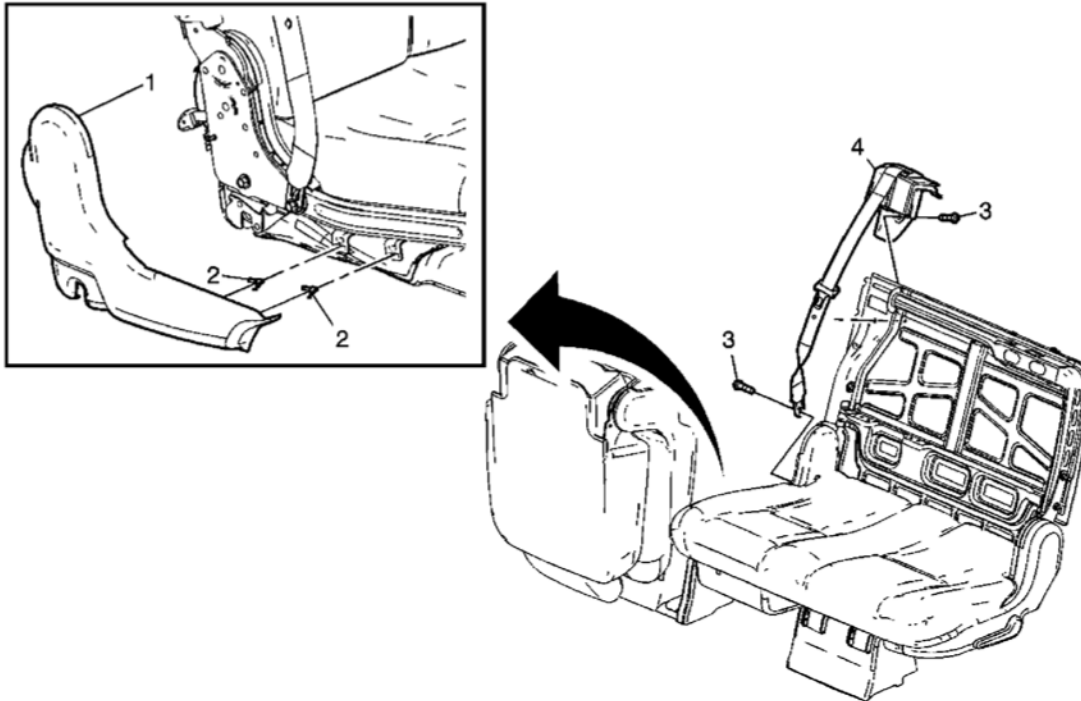


Fig. 17: View Of Rear Seat Center Belt Assembly & Components
Courtesy of GENERAL MOTORS CORP.

Seat Belt Retractor Replacement - No. 1 Rear Center (Split Bench)

Callout	Component Name
NOTE: Refer to <u>Fastener Notice</u> .	
Fastener Tightening Specifications: Refer to <u>Fastener Tightening Specifications</u> .	
Preliminary Procedure	
1. Remove rear bench seat. Refer to <u>Rear Seat Replacement (Avalanche/Escalade EXT)</u> or <u>Rear Seat Replacement (Tahoe/Yukon/Escalade with Bucket)</u> or <u>Rear Seat Replacement (Tahoe/Yukon/Escalade with Split Bench)</u> .	
2. Remove seat back pad and cover. Refer to <u>Rear Seat Back Cushion Cover and Pad Replacement (Avalanche/Escalade EXT)</u> or <u>Rear Seat Back Cushion Cover and Pad Replacement (Tahoe/Yukon/Escalade with Bucket)</u> or <u>Rear Seat Back Cushion Cover and Pad Replacement (Tahoe/Yukon/Escalade with Split Bench)</u> .	
1	Rear Seat Center Belt Assembly Cover Tip: Tilt 40 percent split forward for access.
2	Rear Seat Center Belt Retainer
3	Rear Seat Center Belt Bolt (Qty: 2)

2007 Cadillac Escalade

2007 ACCESSORIES & EQUIPMENT Seat Belts - Avalanche, Escalade, Suburban, Tahoe & Yukon

Tighten: 52 N.m (38 lb ft)

4 Rear Seat Center Belt Assembly

SEAT BELT RETRACTOR REPLACEMENT - NO. 2 REAR

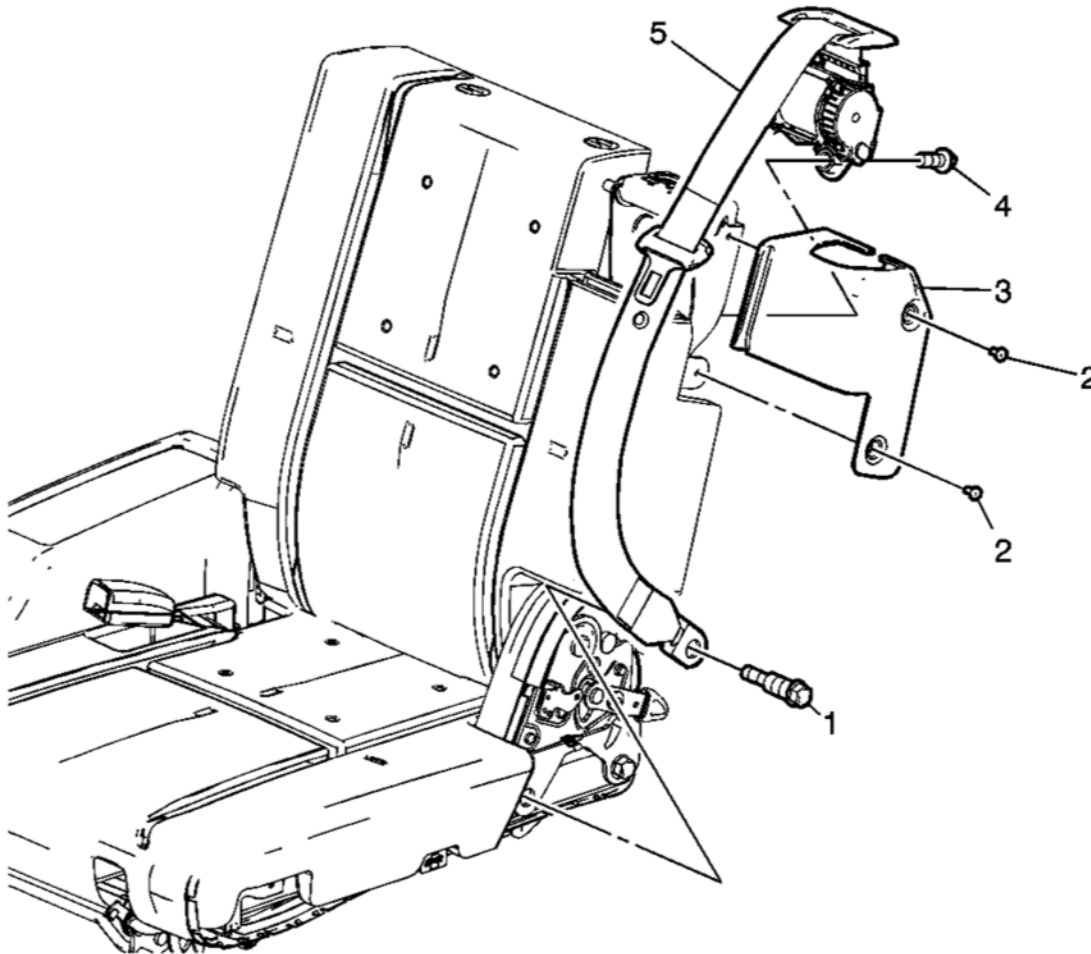


Fig. 18: View Of Rear Seat Belt Retractor & Components
Courtesy of GENERAL MOTORS CORP.

Seat Belt Retractor Replacement - No. 2 Rear

Callout	Component Name
Preliminary Procedure	
1.	Remove third row seat. Refer to <u>Rear Number 2 Seat Replacement (Suburban/Yukon XL)</u> or <u>Rear Number 2 Seat Replacement (Tahoe/Yukon/Escalade)</u> .
2.	Remove third row seat hinge finish cover. Refer to <u>Rear Seat Number 2 Hinge Finish Cover Replacement</u> .
3.	Remove third row seat back pad and cover. Refer to Seat Back Cover and Pad Replacement -

2007 Cadillac Escalade

2007 ACCESSORIES & EQUIPMENT Seat Belts - Avalanche, Escalade, Suburban, Tahoe & Yukon

Rear No. 2 .

1	Rear Seat No. 2 Belt Bolt Tighten: 52 N.m (38 lb ft) NOTE: Refer to <u>Fastener Notice</u> .
2	Rear Seat No. 2 Belt Bracket Screw (Qty: 2) Tighten: 2 N.m (18 in)
3	Rear Seat No. 2 Belt Bracket Assembly
4	Rear Seat No. 2 Belt Bolt Tighten: 52 N.m (38 lb ft)
5	Rear Seat No. 2 Belt Assembly

DESCRIPTION AND OPERATION

SEAT BELT SYSTEM DESCRIPTION AND OPERATION

Restraint System

Seat belts are the primary means of occupant restraint.

Seat belts help to keep occupants inside the passenger compartment and to gradually reduce the impact forces.

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 the vehicle speed
- An abrupt change in the vehicle direction
- Operation of the vehicle on a steep upgrade
- Operation of the vehicle on a steep downgrade

The seat belts, except for the driver seat belt, have an automatic locking feature, or a cinch feature. The cinch feature is recommended for securing a child seat. The cinch feature is engaged by fully extending the seat belt from the retractor. Once engaged, the seat belt can retract, but cannot be extended again until the cinch feature is cancelled. The cinch feature is cancelled when the seat belt has fully retracted.

2007 Cadillac Escalade

2007 ACCESSORIES & EQUIPMENT Seat Belts - Avalanche, Escalade, Suburban, Tahoe & Yukon

This vehicle is also equipped with a supplemental inflatable restraint (SIR) system. Refer to **SIR System Description and Operation** for a description of the seat belt pretensioner system.

Front Seat Belt System

The front seat belt system includes the following components:

- The driver and passenger seat belt buckles, attached to the inboard side of the seat frame
- The driver and passenger seat belt pretensioners.
- The driver and passenger seat belt switch located in the seat belt buckles.

Seat Belt System Circuit Description

There are two fasten safety belt indicators for this vehicle. The driver fasten safety belt indicator is located on the instrument panel cluster (IPC) and the passenger fasten safety belt indicator is located near the center of the instrument panel (I/P). Both indicators are controlled by the IPC at the request of the inflatable restraint sensing and diagnostic module (SDM). The driver and passenger indicators when initiated will illuminate for 20 seconds followed by 55 seconds of flashing. Audible warnings will initiate simultaneously with visual warnings and last for 8 seconds. Subsequently, similar events will occur until the seat belts are buckled or the ignition is returned to the OFF position.

The driver fasten safety belt indicator will illuminate when any of the following occur:

- The driver seat belt is unbuckled while the ignition is ON.
- The driver seat belt remains unbuckled and vehicle speed is greater than 5 mph (8 km/h).
- Three minutes after previous seat belt status reminder event
- The IPC performs the displays test at the start of each ignition cycle.

IMPORTANT: The front passenger seat is equipped with a passenger presence system (PPS), which detects an occupant. If the PPS detects an empty front passenger seat, then the passenger fasten safety belt indicator will be disabled.

The passenger fasten safety belt indicator will illuminate when any of the following occur:

- Twenty-five seconds after the ignition is ON and the front passenger seat belt remains unbuckled with passenger present
- The front passenger seat belt remains unbuckled with passenger present and vehicle speed is greater than 5 mph (8 km/h).
- Three minutes after previous seat belt status reminder event
- The IPC performs the displays test at the start of each ignition cycle.

Refer to **Symptoms - Seat Belts** in order to diagnose faults of the fasten safety belt indicators.