**Steering Column Replacement**

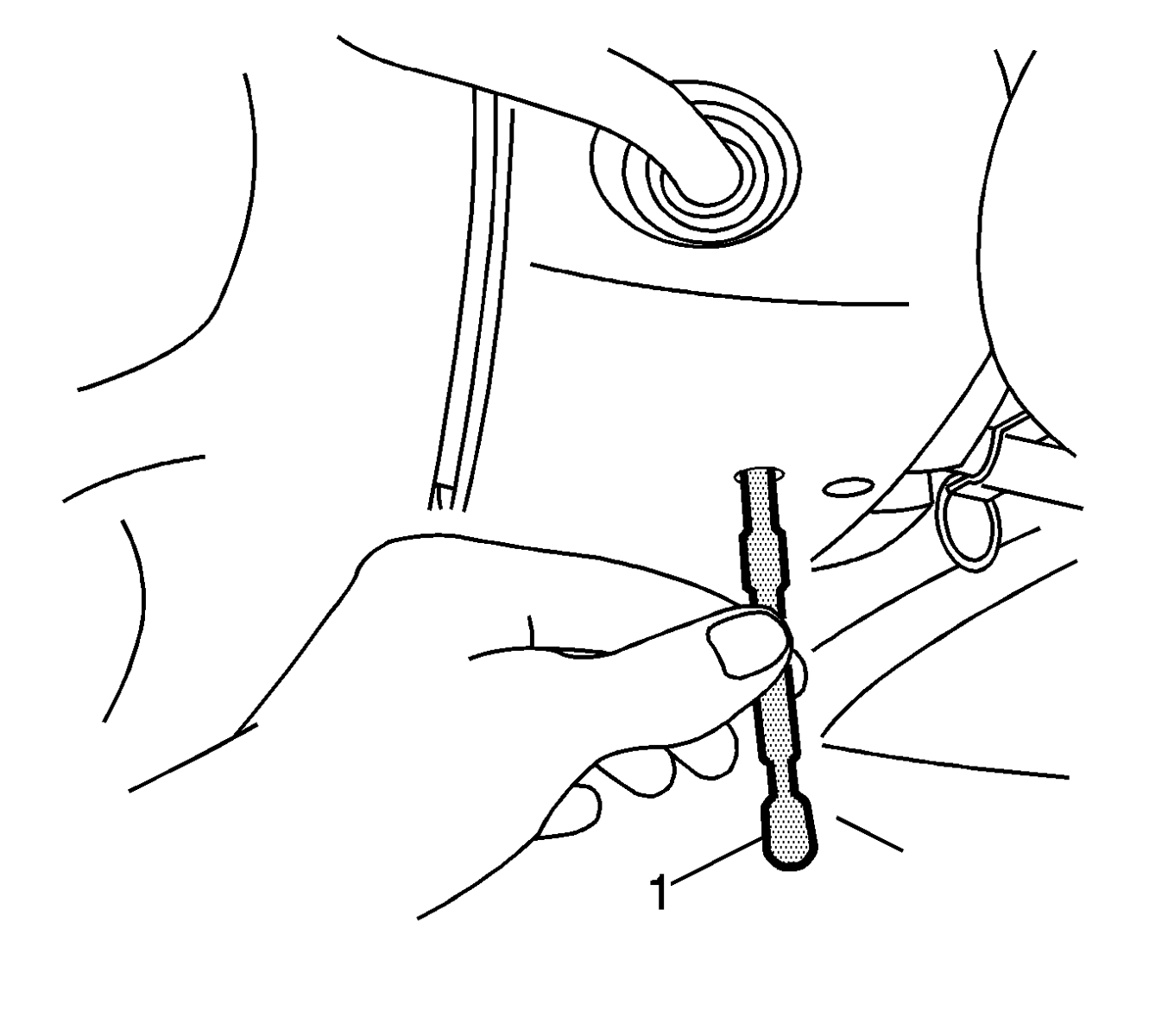
**Tools Required**

[**J 42640**](https://gsi.ext.gm.com/gsi/showTif.do?image=261779) Steering Column Anti-Rotation Pin

[**Removal Procedure**](https://gsi.ext.gm.com/gsi/showDoc.do?laborOpCode=&docSyskey=822762&cellId=58809&pubObjSyskey=4029426&from=sm&pubCellSyskey=1036797#d81779e18)

**Caution:**Refer to [SIR Caution](https://gsi.ext.gm.com/gsi/cellHandler.do?cellId=10110&refDoc=822762&from=sm) in Cautions and Notices.

1. Disable the supplemental inflatable restraint (SIR) system. Refer to [SIR Disabling and Enabling](https://gsi.ext.gm.com/gsi/cellHandler.do?cellId=73107&refDoc=822762&from=sm) in SIR.
2. Remove the knee bolster. Refer to [Knee Bolster Replacement](https://gsi.ext.gm.com/gsi/cellHandler.do?cellId=50671&refDoc=822762&from=sm) in Instrument Panel, Gauges and Console.

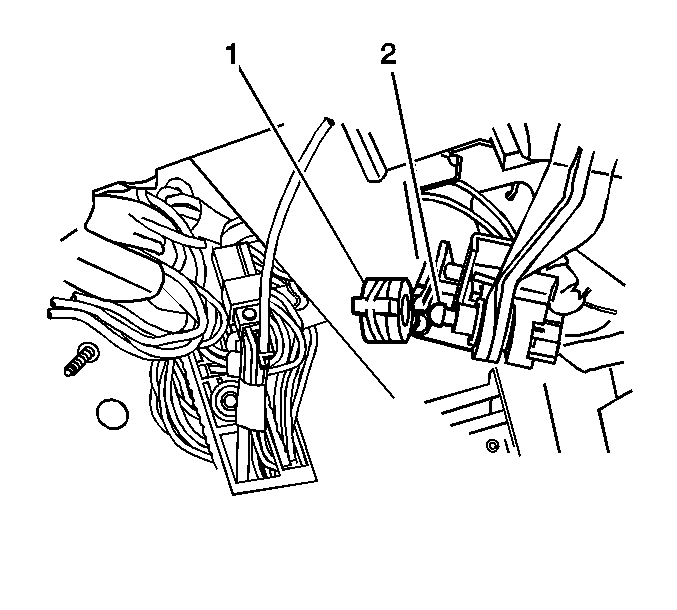
[lick here for detailed picture of the image.](https://gsi.ext.gm.com/gsi/showTif.do?image=333146)

**Notice:**With wheels of the vehicle facing straight ahead, secure the steering wheel utilizing steering column anti-rotation pin, steering column lock, or a strap to prevent rotation. Locking of the steering column will prevent damage and a possible malfunction of the SIR system. The steering wheel must be secured in position before disconnecting the following components:

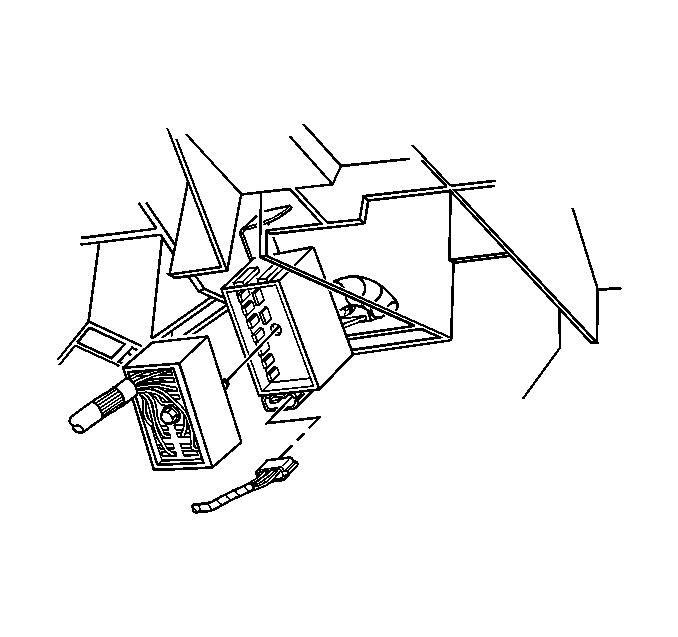
* + The steering column
  + The intermediate shaft(s)
  + The steering gear

After disconnecting these components, do not rotate the steering wheel or move the front tires and wheels. Failure to follow this procedure may cause the SIR coil assembly to become un-centered and cause possible damage to the SIR coil. If you think the SIR coil has became un-centered, refer to your specific SIR coil’s centering procedure to re-center SIR Coil.

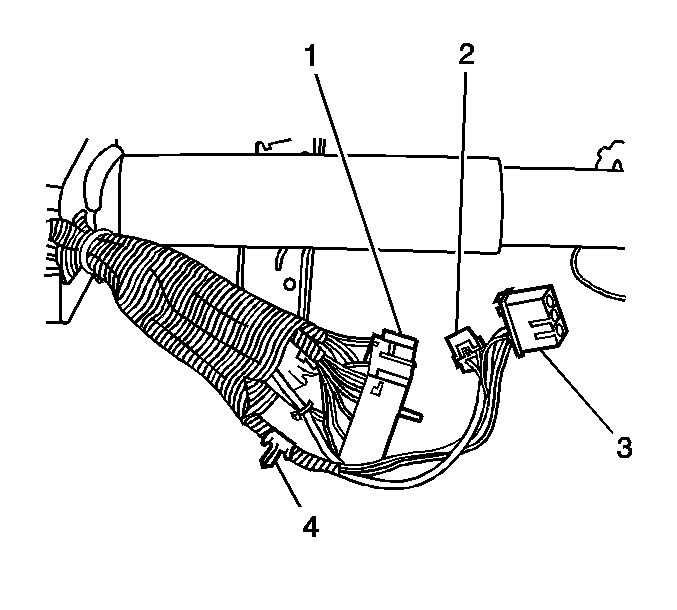
1. Lock the steering column through the access hole in the lower trim cover using [**J 42640**](https://gsi.ext.gm.com/gsi/showTif.do?image=261779).
2. Remove the body control module bracket. Do not disconnect the harness from the body control module. Refer to [Body Control Module Replacement](https://gsi.ext.gm.com/gsi/cellHandler.do?cellId=9004&refDoc=822762&from=sm) in Body Control System.

[lick here for detailed picture of the image.](https://gsi.ext.gm.com/gsi/showTif.do?image=748882)

1. Disconnect the transmission shift cable (1) from the column.

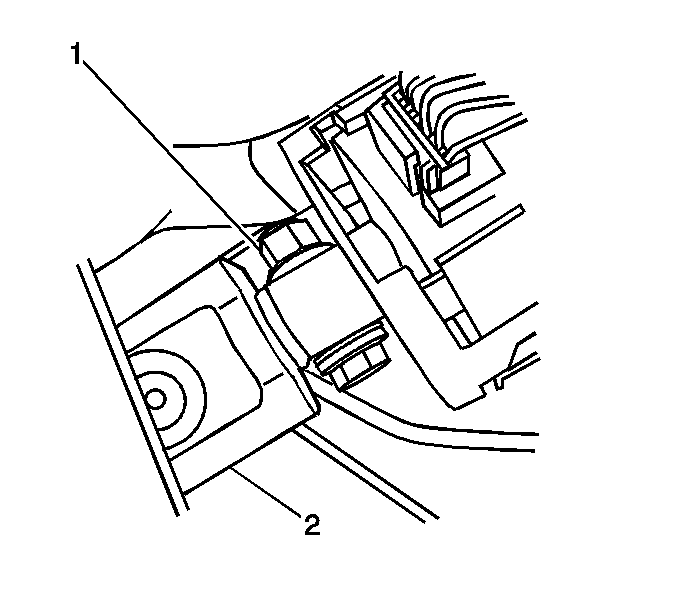
[lick here for detailed picture of the image.](https://gsi.ext.gm.com/gsi/showTif.do?image=401496)

1. Disconnect the steering column electrical connectors.

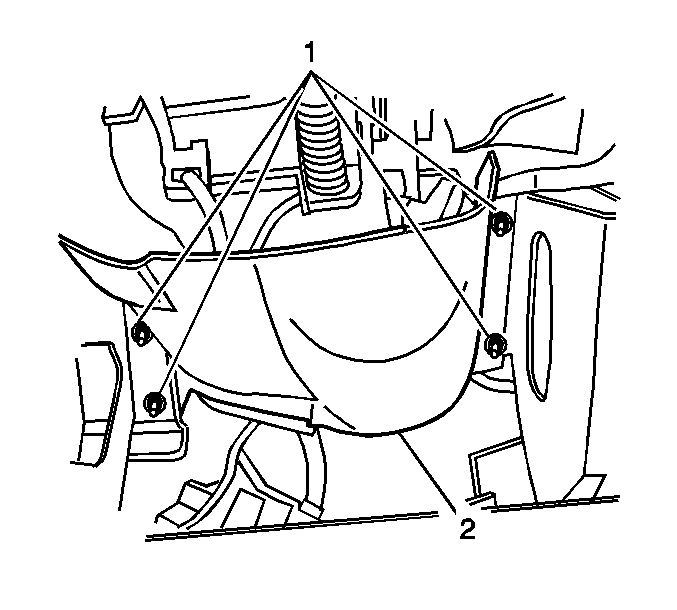
[lick here for detailed picture of the image.](https://gsi.ext.gm.com/gsi/showTif.do?image=748881)

**Notice:**During removal of the steering column the wire harness retaining clip must be removed and reinstalled after installing the steering column or damage may occur to the wire harness.

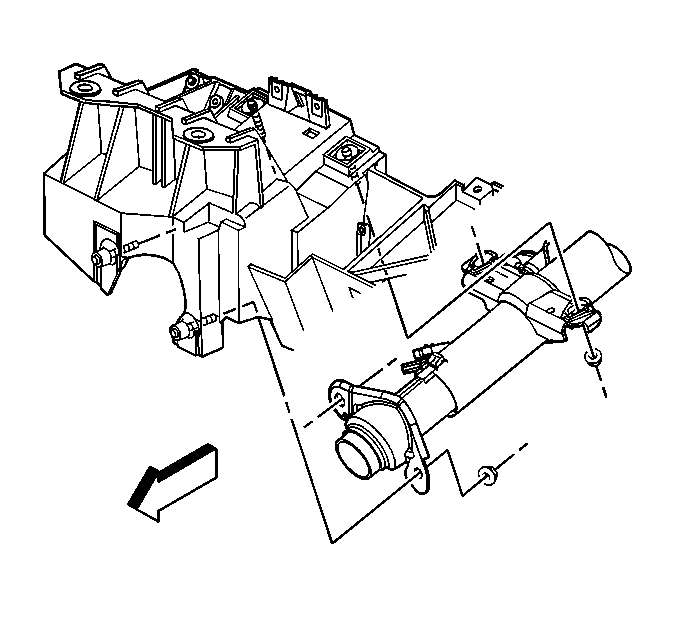
1. Remove the wiring harness retaining pin (4) from the instrument panel.

[lick here for detailed picture of the image.](https://gsi.ext.gm.com/gsi/showTif.do?image=748880)

1. Remove the upper intermediate shaft pinch bolt (1) from the steering column, and remove the shaft from the steering column.

[lick here for detailed picture of the image.](https://gsi.ext.gm.com/gsi/showTif.do?image=748879)

1. Remove the nuts (1) from the knee bolster deflector.

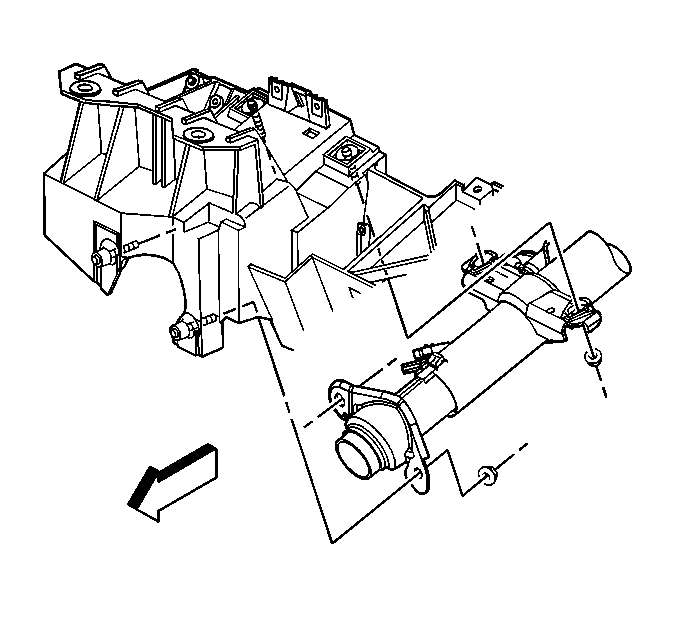
[lick here for detailed picture of the image.](https://gsi.ext.gm.com/gsi/showTif.do?image=374713)

1. Remove the nuts from the upper support brackets.
2. Remove the nuts from the lower support brackets.

**Notice:**Once the steering column is removed from the vehicle, the column is extremely susceptible to damage. Dropping the column assembly on the end could collapse the steering shaft or loosen the plastic injections, which maintain column rigidity. Leaning on the column assembly could cause the jacket to bend or deform. Any of the above damage could impair the columns collapsible design. Do NOT hammer on the end of the shaft, because hammering could loosen the plastic injections, which maintain column rigidity. If you need to remove the steering wheel, refer to the Steering Wheel Replacement procedure in this section.

1. Remove the steering column from the vehicle.

[**Installation Procedure**](https://gsi.ext.gm.com/gsi/showDoc.do?laborOpCode=&docSyskey=822762&cellId=58809&pubObjSyskey=4029426&from=sm&pubCellSyskey=1036797#d81779e145)

[lick here for detailed picture of the image.](https://gsi.ext.gm.com/gsi/showTif.do?image=374713)

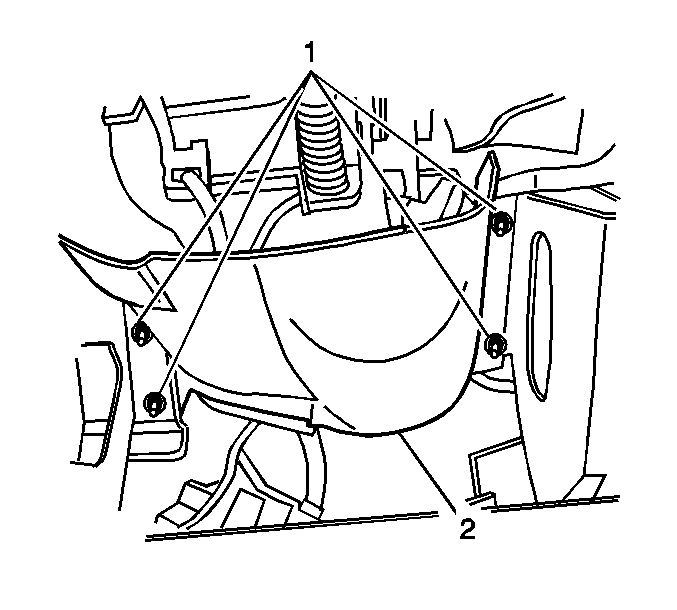
**Caution:**In order to ensure the intended function of the steering column in a vehicle during a crash and in order to avoid personal injury to the driver, perform the following:

* + Tighten the steering column lower fasteners before you tighten the steering column upper fasteners. Failure to do this can damage the steering column.
  + Tighten the steering column fasteners to the specified torque. Overtightening the upper steering column fasteners could affect the steering column collapse.

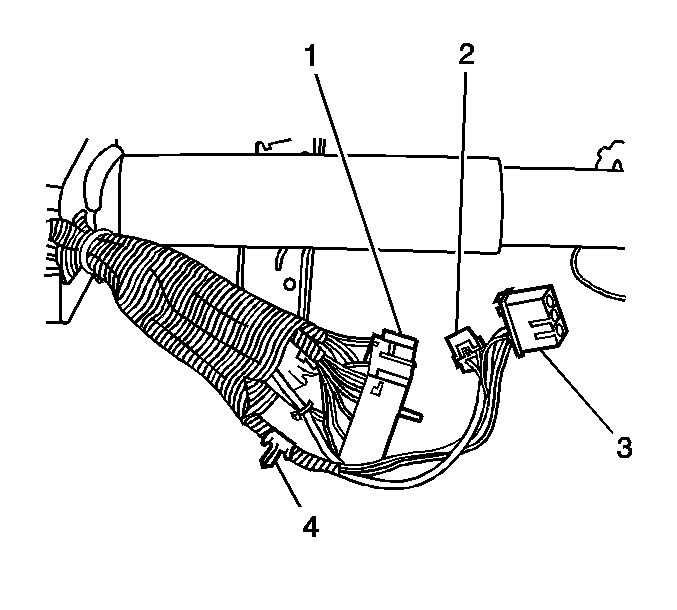
1. Install the steering column to the vehicle.

**Notice:**Refer to [**Fastener Notice**](https://gsi.ext.gm.com/gsi/showDoc.do?docSyskey=706&from=sm) in Cautions and Notices.

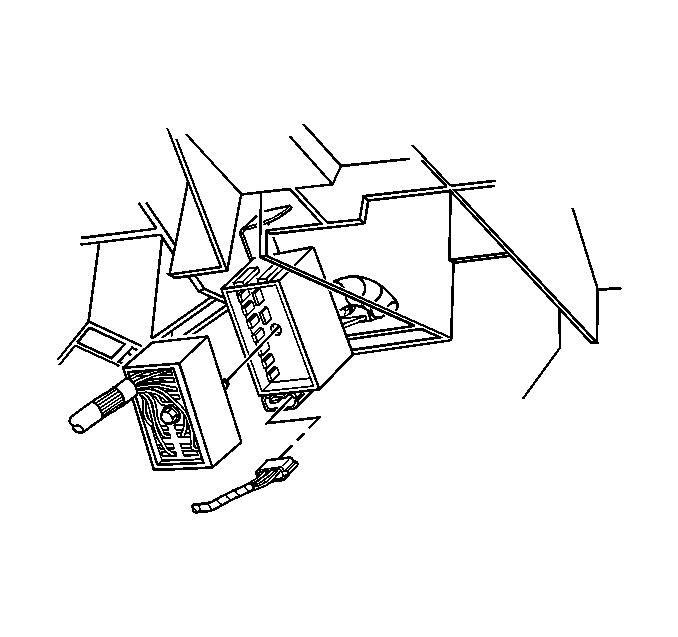
1. Install the lower column nuts.  
   **Tighten**  
   Tighten the nuts to 30 Y (22 lb ft).
2. Install the nuts to upper support brackets.  
   **Tighten**  
   Tighten the nuts to 30 Y (22 lb ft).

[lick here for detailed picture of the image.](https://gsi.ext.gm.com/gsi/showTif.do?image=748879)

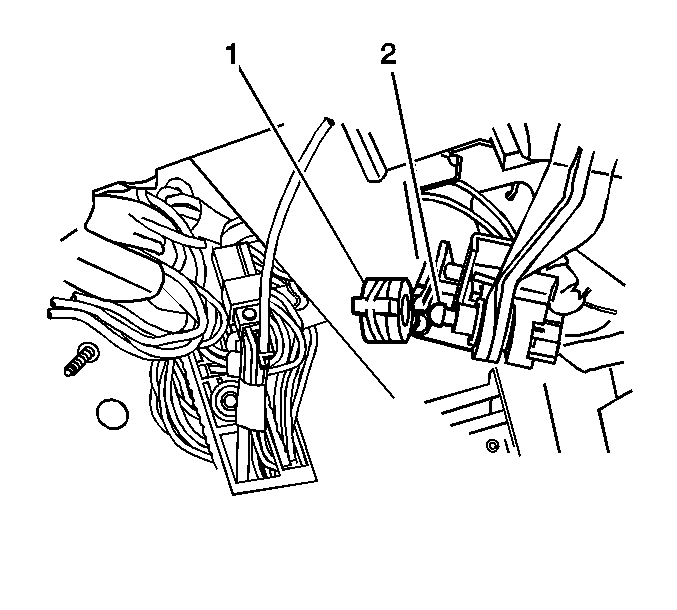
1. Install the nuts (1) which retain the knee bolster deflector to the instrument panel.  
   **Tighten**  
   Tighten the retaining nuts to 9 Y (80 lb in).

[lick here for detailed picture of the image.](https://gsi.ext.gm.com/gsi/showTif.do?image=748881)

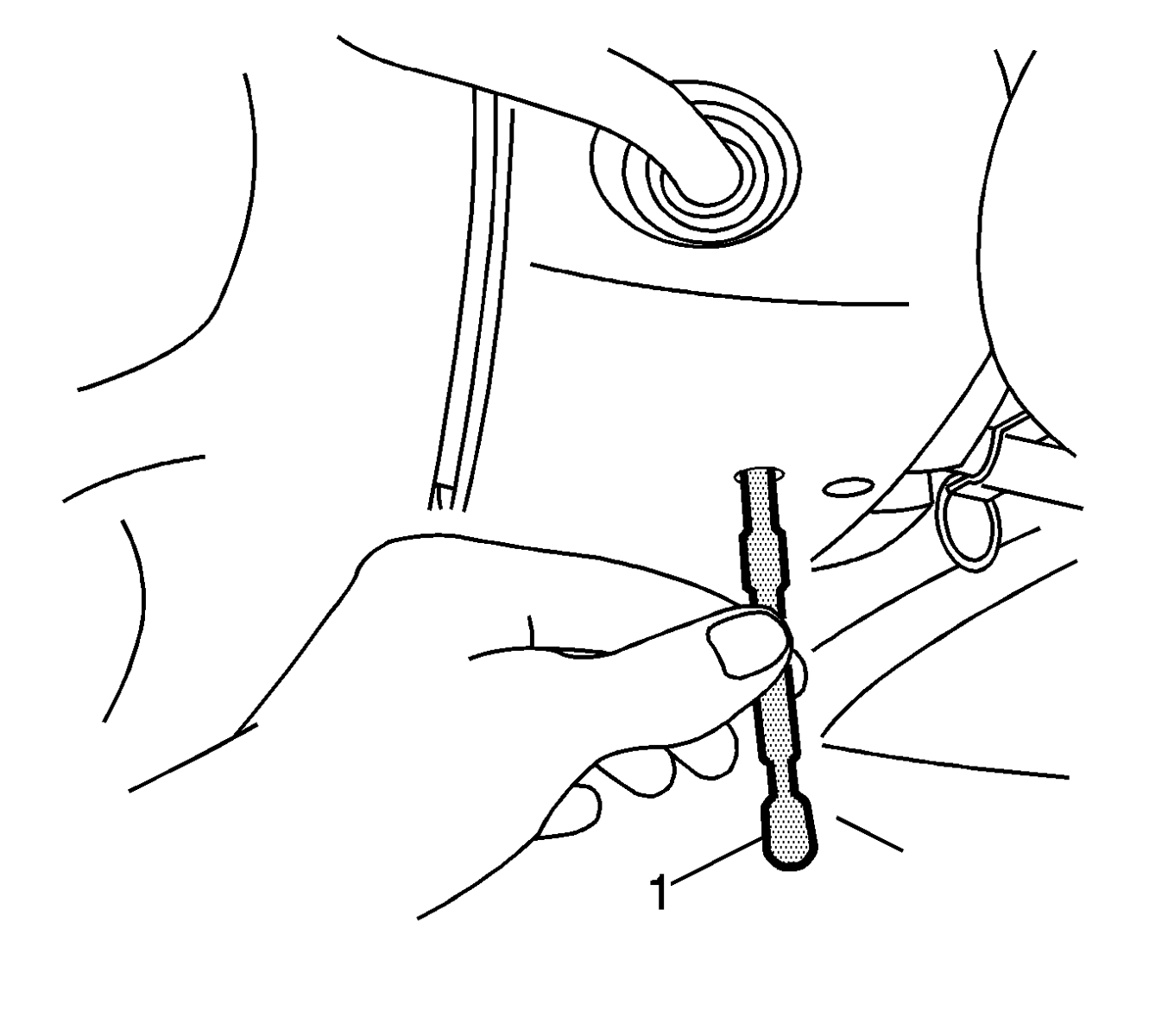
1. Install the wiring harness retaining (4) pin to the instrument panel.

[lick here for detailed picture of the image.](https://gsi.ext.gm.com/gsi/showTif.do?image=401496)

1. Connect the steering column electrical connectors to the vehicle wiring harness.  
   **Tighten**  
   Tighten the connector to 6 Y (53 lb in).

[lick here for detailed picture of the image.](https://gsi.ext.gm.com/gsi/showTif.do?image=748882)

1. Connect the transmission shift cable (1) to the steering column.
2. Install the body control module bracket. Refer to [Body Control Module Replacement](https://gsi.ext.gm.com/gsi/cellHandler.do?cellId=9004&refDoc=822762&from=sm) in Body Control System.
3. Install the knee bolster. Refer to [Knee Bolster Replacement](https://gsi.ext.gm.com/gsi/cellHandler.do?cellId=50671&refDoc=822762&from=sm) in Instrument Panel, Gauges, and Console.
4. Enable the SIR system. Refer to [SIR Disabling and Enabling](https://gsi.ext.gm.com/gsi/cellHandler.do?cellId=73107&refDoc=822762&from=sm) in SIR.

[lick here for detailed picture of the image.](https://gsi.ext.gm.com/gsi/showTif.do?image=333146)

1. Remove [**J 42640**](https://gsi.ext.gm.com/gsi/showTif.do?image=261779) from the steering column.

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