

Fastener Tightening Specifications

Application	Specification	
	Metric	English
Driver Knee Bolster Bracket to Instrument Panel Nuts	10 N·m	88 lb in
Driver Knee Bolster Trim Panel to Instrument Panel Nuts	3.5 N·m	31 lb in
HVAC Duct Assembly to Instrument Panel Bolts	2 N·m	18 lb in
Instrument Cluster to Instrument Panel Screws	2 N·m	18 lb in
Instrument Panel Cluster Trim Plate Bezel Nuts	6 N·m	53 lb in
Instrument Panel Compartment to Instrument Panel Screws	2 N·m	18 lb in
Instrument Panel Extension Bolts	10 N·m	88 lb in
Instrument Panel to Body Bolts	50 N·m	37 lb ft
Instrument Panel Trim Pad to Instrument Panel Screws	3 N·m	26 lb in
Instrument Panel Trim Plate Extension Screws and Nuts	3 N·m	26 lb in
Instrument Panel Upper Trim Pad to Instrument Panel Screws	3 N·m	26 lb in
Passenger Knee Bolster Bracket to Instrument Panel Nuts	10 N·m	88 lb in
Passenger Knee Bolster Trim Panel to Instrument Panel Nuts	3.5 N·m	31 lb in
Relay Center Bracket to Knee Bolster Inner and Outer Bracket Screws	2 N·m	18 lb in

Fuel Level Specifications

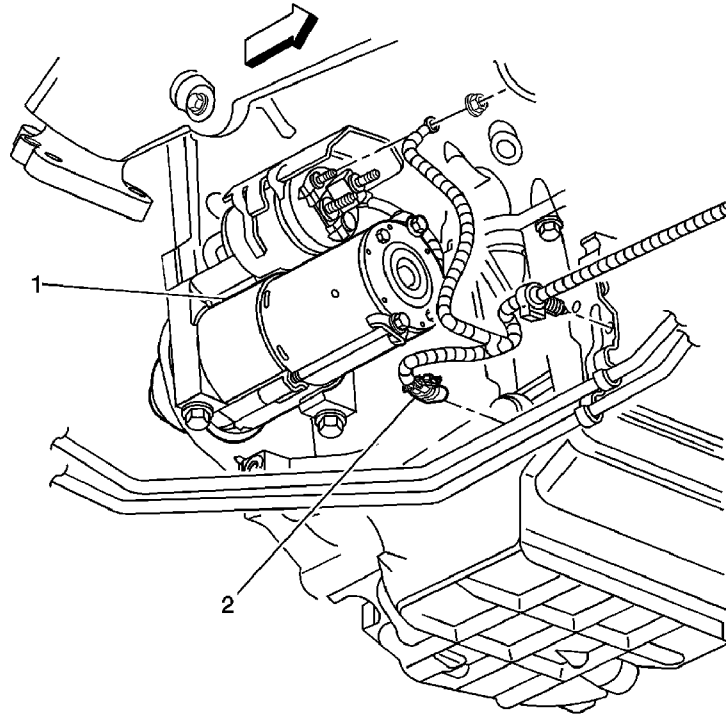
The information in this table is intended for use with the [J 33431-C](#) Signal Generator and Instrument Panel Tester. The fuel level sensor values represent the test values to be used on the Signal Generator to drive the fuel gage display to the indicated positions. Vehicles that require more than one fuel level sensor calculate gage position from many possible resistance combinations of fuel levels between the two tanks. Therefore, the values in the table may not correlate directly to readings taken from the vehicle primary or secondary sending units.

The values in the table are approximate values based on information obtained from properly operating vehicles. Actual results may vary slightly.

The resistance values for the dual fuel tanks only reflect the specified fuel level when the signal circuits for both the primary and secondary fuel tanks are connected to each other.

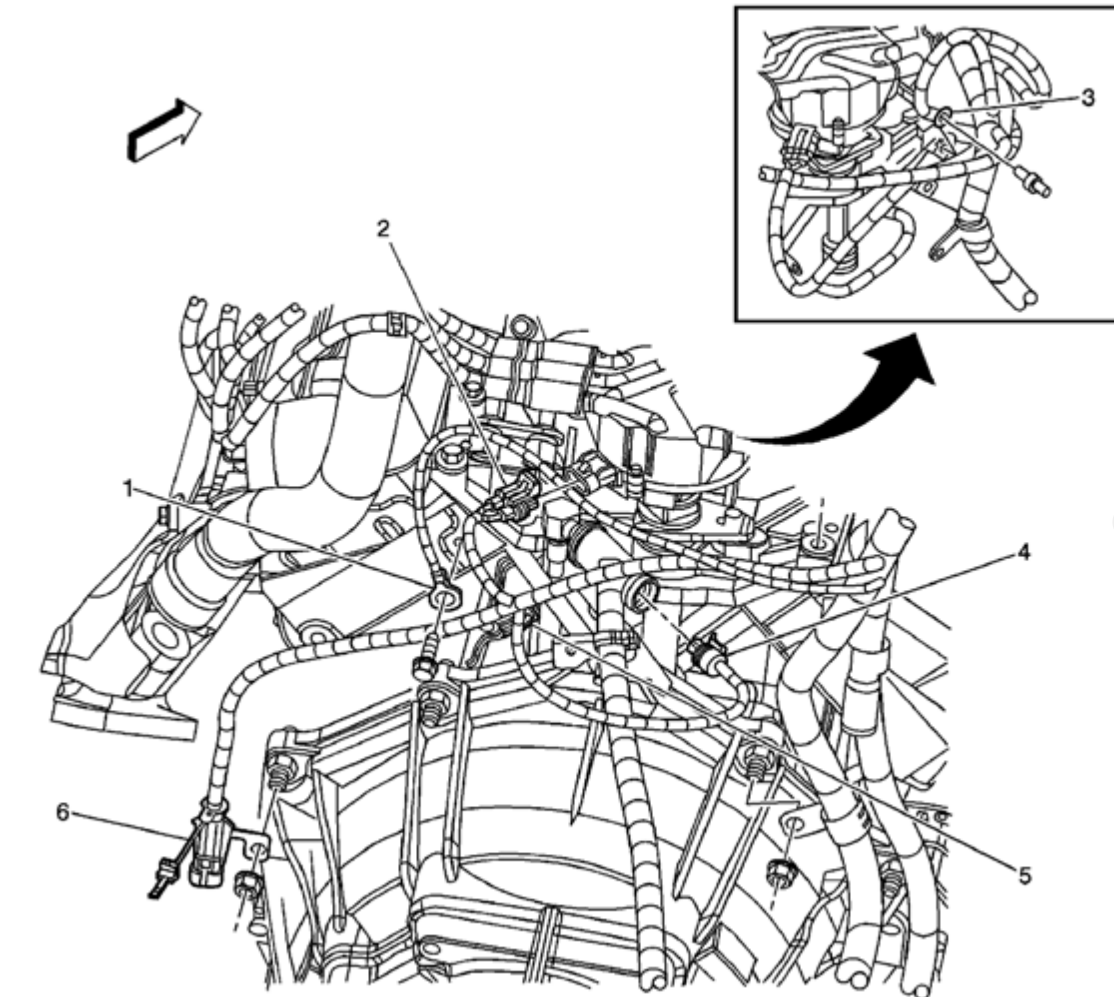
Fuel Gage Display	Sensor Resistance (Ohms)	Fuel Tank Level Remaining	Fuel Level Sensor Voltage
<i>30.6 Gallon Tank</i>			
E	46	7%	0.8 V
1/4	93.6	25%	1.4 V
1/2	148	50%	1.9 V
3/4	209	75%	2.3 V
F	245	88%	2.5 V
Low Fuel Indicator On	80	20%	1.2 V
Low Fuel Indicator Off	91.6	24%	1.4 V

Right Side of the Engine



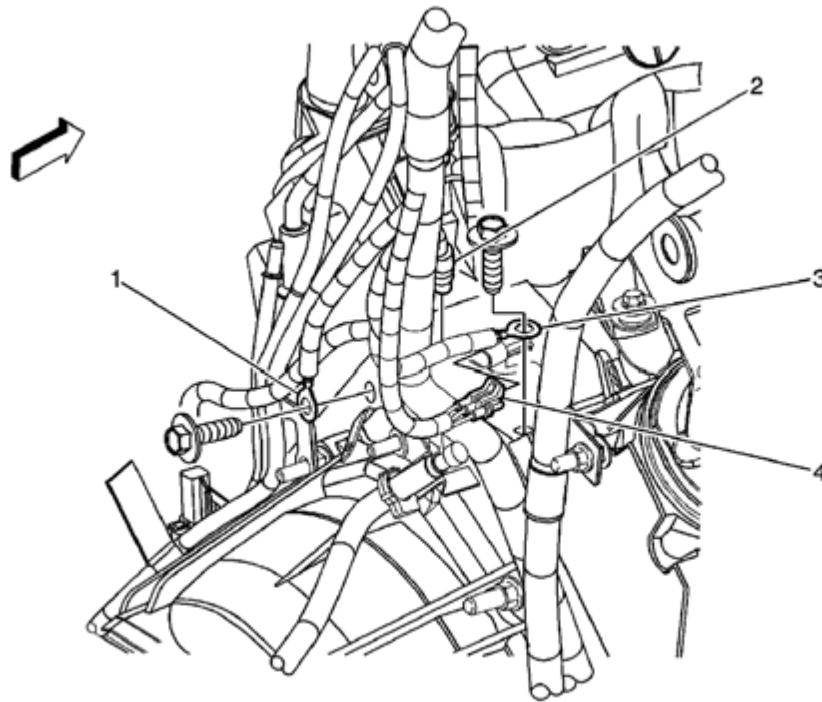
- (1) Starter
- (2) Engine Oil Level Switch Connector

Engine Harness - Back of the Engine (4.3L)



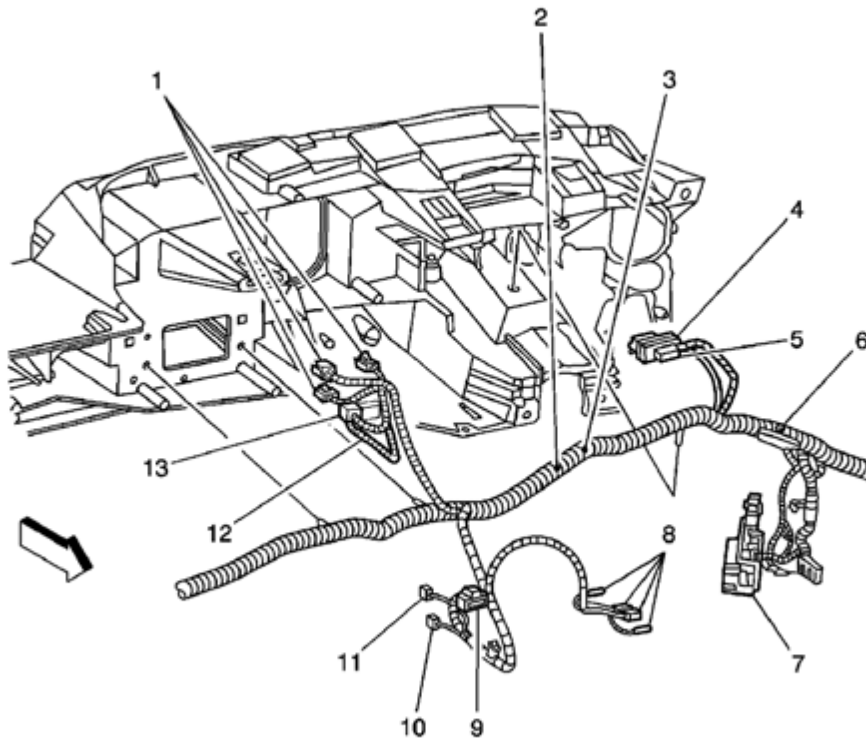
- (1) G102
- (2) Camshaft Position (CMP) Sensor Connector
- (3) G103
- (4) Engine Oil Pressure (EOP) Sensor Connector
- (5) Knock Sensor (KS) Connector
- (6) Heated Oxygen Sensor (HO2S) Bank 1 Sensor 1 Connector

Engine Harness - Back of the Engine (4.8L / 5.3L / 6.0L)



- (1) G103
- (2) Engine Oil Pressure (EOP) Sensor Connector
- (3) G102
- (4) Camshaft Position (CMP) Sensor Connector

I/P Harness Routing - Center of the I/P



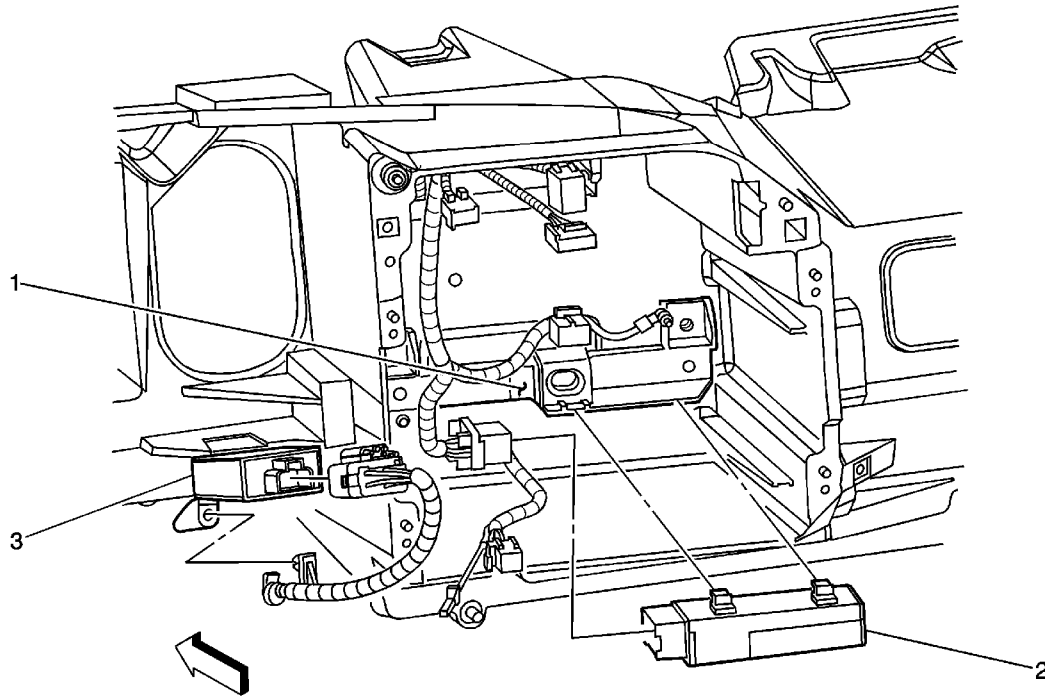
- (1) HVAC Control Assembly Connectors
- (2) S246 (DE7)
- (3) S245 (DE7)
- (4) Instrument Panel Cluster (IPC) Connector
- (5) Remote Control Door Lock Receiver (RCDLR) Connector (AU0)
- (6) S248
- (7) C200
- (8) Vehicle Communication Interface Module (VCIM) - C1, C2, C5, C6 (UE1)
- (9) Turn Signal/Hazard Flasher Module Connector
- (10) Cigar Lighter Connector
- (11) Tow/Haul Switch Connector

(12) Antenna Connector

(13) Radio - C1, C2

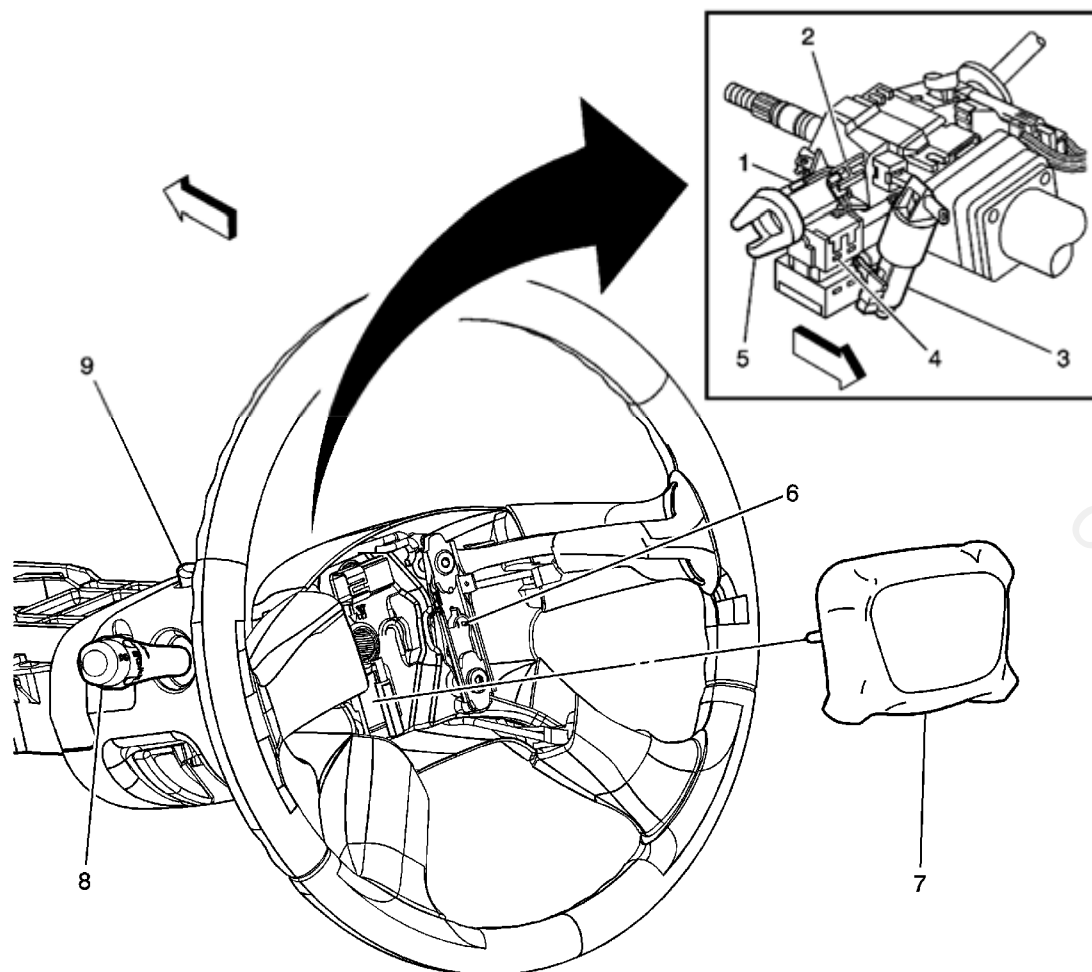
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Center of the I/P



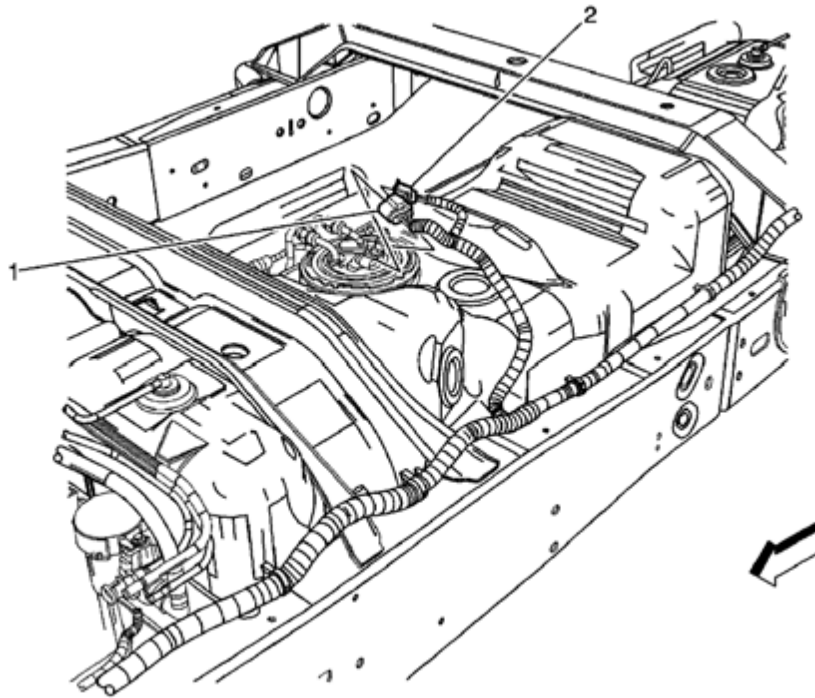
- (1) I/P Carrier
- (2) Chime Module (UL5)
- (3) Turn Signal/Hazard Flasher Module

Upper Steering Column



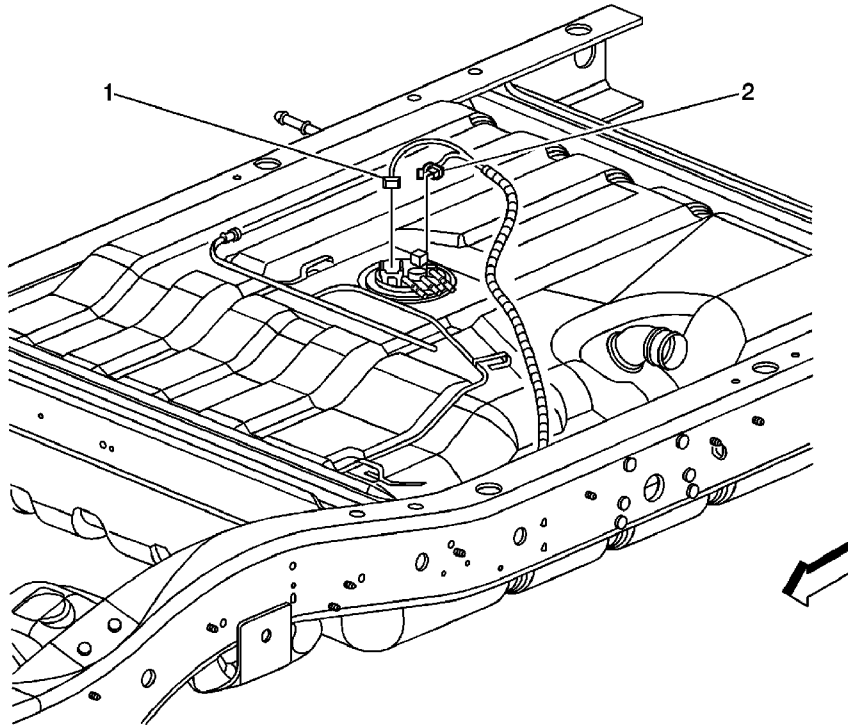
- (1) Passlock Sensor
- (2) Ignition Key Alarm Switch
- (3) Ignition Lock Cylinder Control Actuator
- (4) Ignition Switch
- (5) Ignition Key Cylinder
- (6) Horn Switch
- (7) Inflatable Restraint Steering Wheel Module
- (8) Turn Signal/Multifunction Switch
- (9) Hazard Warning Switch

Fuel Tank (without NE7)



- (1) Fuel Pump and Sender Assembly Connector
- (2) Fuel Tank Pressure (FTP) Sensor Connector

Fuel Tank (NE7)



- (1) Fuel Tank Pressure (FTP) Sensor Connector
- (2) Fuel Pump and Sender Assembly Connector

Instrument Panel, Gages, and Console Connector End Views

Table 1: [Chime Module \(UL5\)](#)

Table 2: [Engine Oil Level Switch](#)

Table 3: [Engine Oil Pressure \(EOP\) Sensor](#)

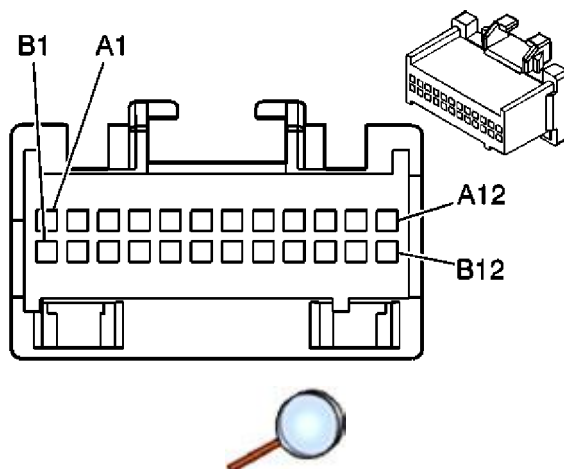
Table 4: [Fuel Pump and Sender Assembly \(NE7\)](#)

Table 5: [Fuel Pump and Sender Assembly \(w/o NE7\)](#)

Table 6: [Ignition Key Alarm Switch](#)

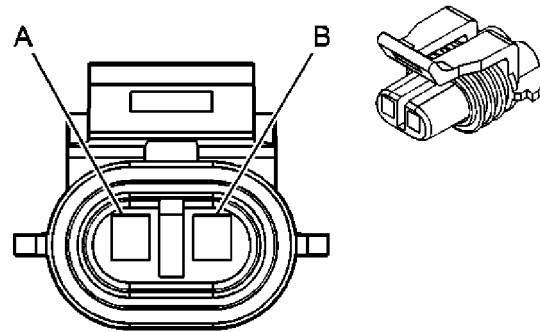
Table 7: [Instrument Panel Cluster \(IPC\)](#)

Chime Module (UL5)



Connector Part Information		• 12110088 • 24-Way F Micro-Pack 100 Series (GRY)	
Pin	Wire Color	Circuit No.	Function
A1	ORN	1044	Class 2 Serial Data
A2-A11	--	--	Not Used
A12	BLK/WHT	351	Ground
B1	RED/WHT	340	Battery Positive Voltage
B2-B12	--	--	Not Used

Engine Oil Level Switch

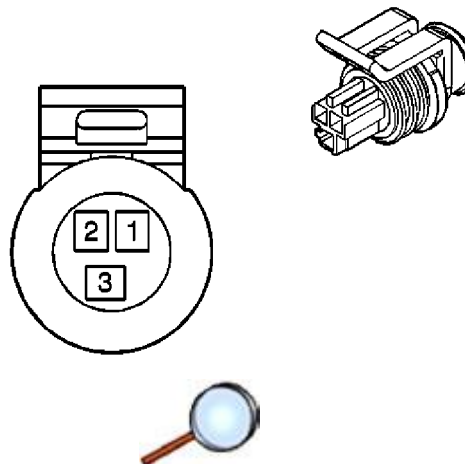


Connector Part Information

- 12052641
- 2-Way F Metri-Pack 150 Series (BLK)

Pin	Wire Color	Circuit No.	Function
A	BRN	1174	Oil Level Switch Signal
B	BLK/WHT	1551	Ground

Engine Oil Pressure (EOP) Sensor

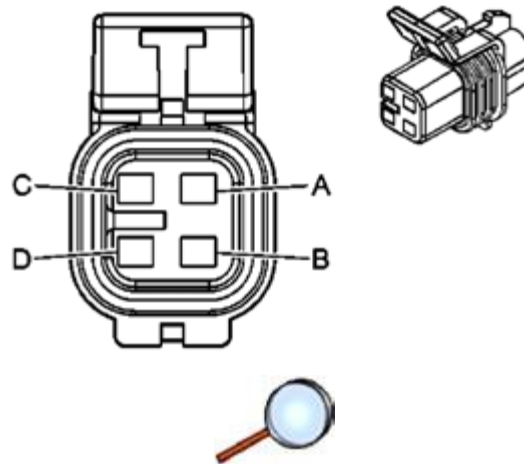


Connector Part Information

- 15344137
- 3-Way F GT 150 Sealed 5.2 (BLK)

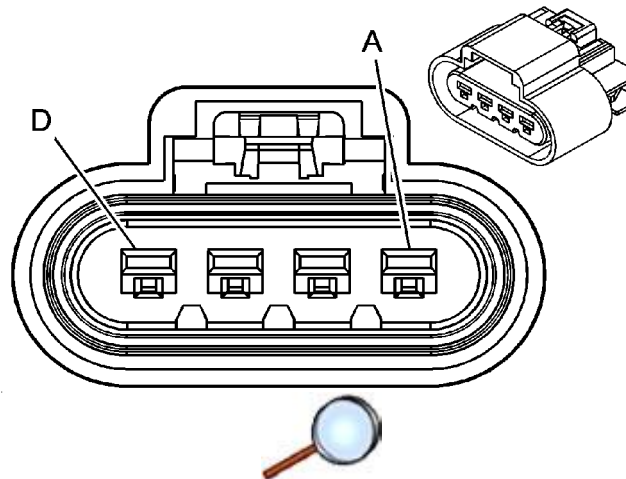
Pin	Wire Color	Circuit No.	Function
1	BLK	2755	Low Reference
2	GRY	2705	5 Volt Reference
3	TAN/WHT	331	Oil Pressure Sensor Signal

Fuel Pump and Sender Assembly (NE7)

**Connector Part Information**

- 12160482
- 4-Way F Metri-Pack 150 Series- Sealed (BLK)

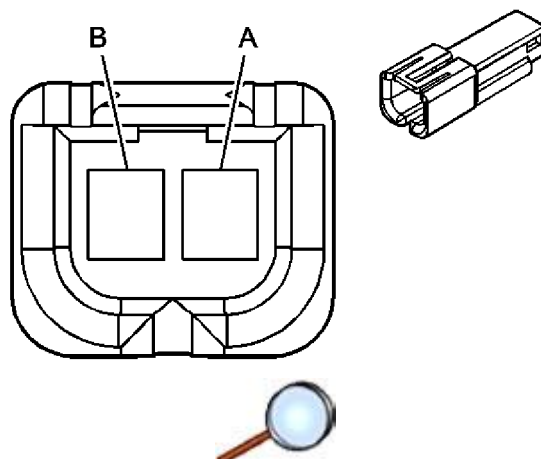
Pin	Wire Color	Circuit No.	Function
A	PPL	1589	Fuel Level Sensor Signal
B	GRY	120	Fuel Pump Supply Voltage
C	BLK	150	Ground
D	TAN	2759	Low Reference

Fuel Pump and Sender Assembly (w/o NE7)**Connector Part Information**

- 15326631
- 4-Way F GT 280 Sealed 5.8 (BLK)

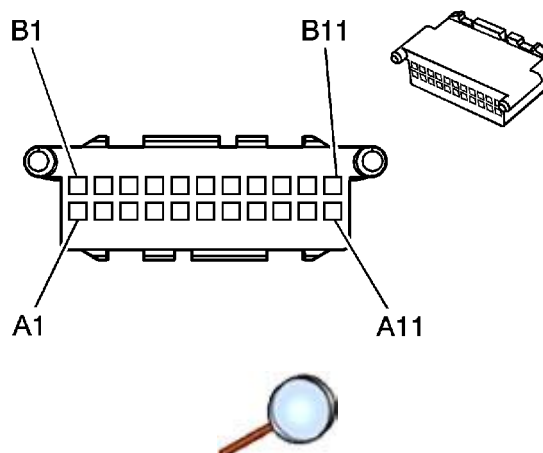
Pin	Wire Color	Circuit No.	Function
A	BLK	150	Ground
B	PPL	1589	Fuel Level Sensor Signal
C	TAN	2759	Low Reference
D	GRY	120	Fuel Pump Supply Voltage

Ignition Key Alarm Switch

**Connector Part Information**

- 12059254
- 2-Way M Metri-Pack 150 Series (GRN)

Pin	Wire Color	Circuit No.	Function
A	LT GRN	80	Key In Ignition Switch Signal
B	BLK	350	Ground

Instrument Panel Cluster (IPC)**Connector Part Information**

- 12065804
- 22-Way F Micro-Pack 100 Series (BLK)

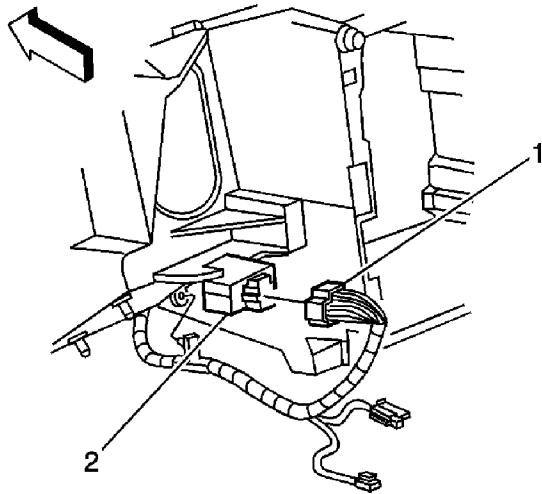
Pin	Wire Color	Circuit No.	Function
A1	BRN/WHT	419	MIL Control
A2	DK BLU/WHT	1315	Right Front Turn Signal Lamp Supply Voltage
A3	YEL	1491	Backlight Lamps Control
A4	TAN/WHT	33	Brake Warning Indicator Control (UJ1)
A5-A8	--	--	Not Used
A9	LT BLU/WHT	1314	Left Front Turn Signal Lamp Supply Voltage
A10-A11	--	--	Not Used

B1	--	--	Not Used
B2	RED/WHT	2340	Battery Positive Voltage
B3	BLK	350	Ground
B4	BLK/WHT	351	Ground
B5	PNK	739	Ignition 1 Voltage
B6-B8	--	--	Not Used
B9	GRY	1036	Class 2 Serial Data
B10-B11	--	--	Not Used

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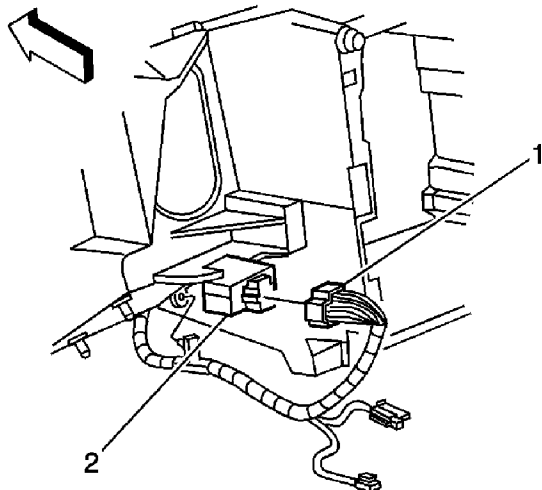
Multifunction Alarm Module Replacement

Removal Procedure



1. Remove the drivers side knee bolster. Refer to [Driver Knee Bolster Bracket Replacement](#) .
2. Disconnect the multi-function audio alarm module (2) electrical connector (1).
3. Remove the multi-function audio alarm module (2) from the vehicle.

Installation Procedure



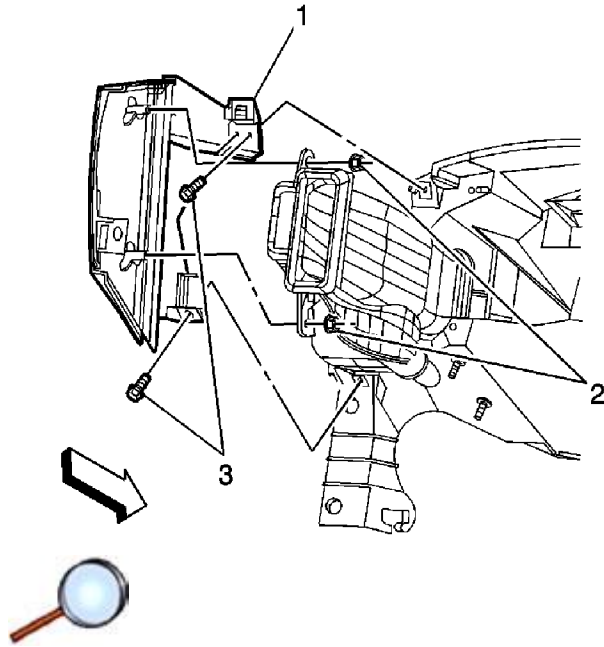


1. Install the multi-function audio alarm module (2) to the mag beam.
2. Connect the electrical connector (1) to the multi-function audio alarm module (2).
3. Install the drivers side knee bolster. Refer to [Driver Knee Bolster Bracket Replacement](#) .

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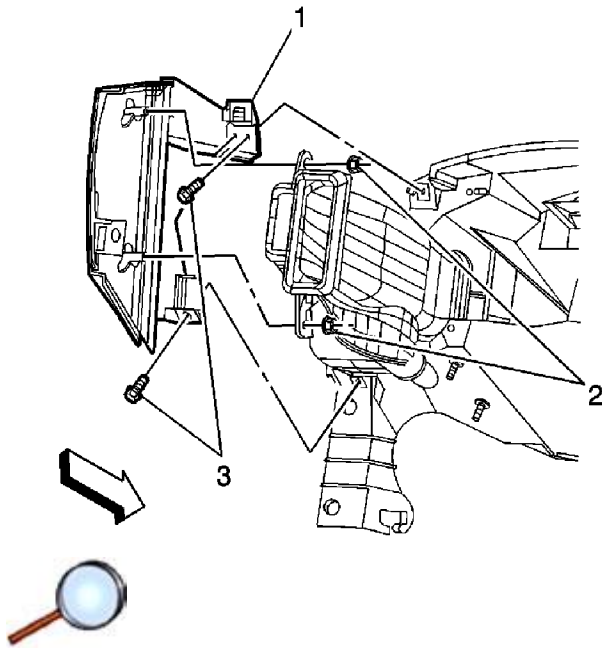
Instrument Panel Extension Trim Plate Replacement Removal Procedure

Caution: Refer to [SIR Caution](#) in the Preface section.



1. Disable the SIR. Refer to [SIR Disabling and Enabling](#) in SIR.
2. Remove the knee bolster trim panel. Refer to [Passenger Knee Bolster Replacement](#).
3. Remove the instrument panel (I/P) upper trim pad. Refer to [Instrument Panel Upper Trim Pad Replacement](#).
4. Remove the nuts (2) retaining the I/P extension to HVAC duct.
5. Remove the screws (3) from the I/P extension.
6. Remove the I/P extension (1).

Installation Procedure



1. Install the I/P extension (1) to the I/P.

Notice: Refer to [Fastener Notice](#) in the Preface section.

2. Install the screws (3).

Tighten

Tighten the screws (3) to 3 N·m (26 lb in).

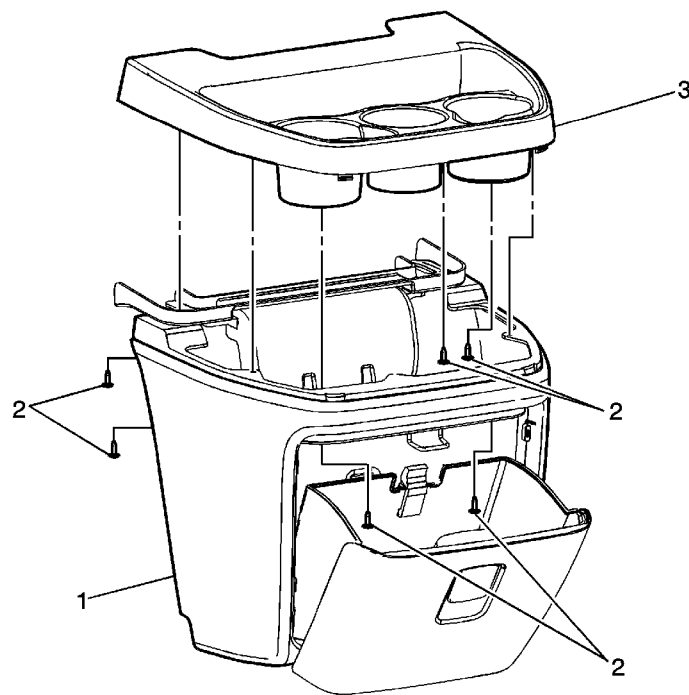
3. Install the nuts (2) that retain the HVAC duct to the I/P extension.

Tighten

Tighten the screws (2) to 3 N·m (26 lb in).

4. Install the I/P upper trim pad. Refer to [Instrument Panel Upper Trim Pad Replacement](#).
5. Install the knee bolster trim panel. Refer to [Passenger Knee Bolster Replacement](#).
6. Enable the SIR. Refer to [SIR Disabling and Enabling](#) in SIR.

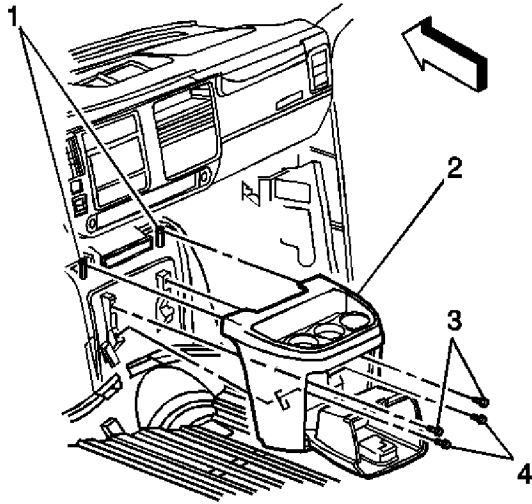
Instrument Panel Lower Extension Tray Replacement



Callout	Component Name
1	Instrument Panel Extension. Refer to Instrument Panel Extension Replacement
2	Instrument Panel Extension Tray Screws (Qty: 8) Notice: Refer to Fastener Notice in the Preface section. Tighten 3 N·m (27 lb in)
3	Instrument Panel Extension Tray Procedure When replacing the instrument panel extension tray, transfer all necessary components.

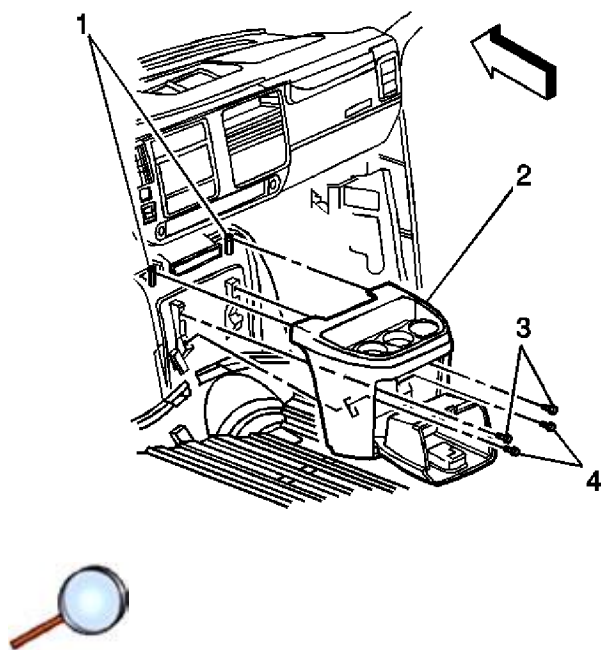
Instrument Panel Extension Replacement

Removal Procedure



1. Fully open the instrument panel I/P extension door, if equipped.
2. Remove the lower I/P extension bolts (4).
3. Remove the upper I/P extension bolts (3).
4. Remove the I/P lower extension from the vehicle (2).

Installation Procedure



Important: Ensure the HVAC duct engages the I/P extension duct.

1. Install the I/P lower extension (2) to the vehicle.

An audible click indicates I/P lower extension has engaged the retainer pins (1).

Notice: Use the correct fastener in the correct location. Replacement fasteners must be the correct part number for that application. Fasteners requiring replacement or fasteners requiring the use of thread locking compound or sealant are identified in the service procedure. Do not use paints, lubricants, or corrosion inhibitors on fasteners or fastener joint surfaces unless specified. These coatings affect fastener torque and joint clamping force and may damage the fastener. Use the correct tightening sequence and specifications when installing fasteners in order to avoid damage to parts and systems.

2. Install the upper (3) and lower (4) bolts to the I/P lower extension (2).

Tighten

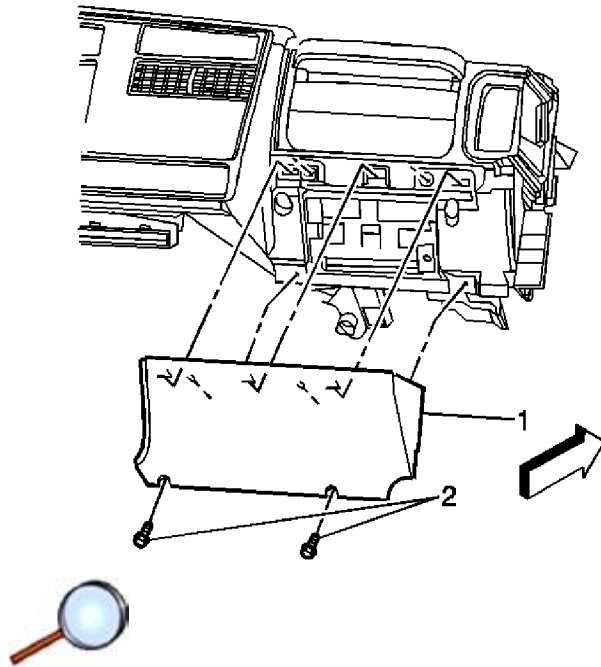
Tighten the bolts (3, 4) to 10 N·m (89 lb in).

3. Close the I/P extension door, if equipped.

Passenger Knee Bolster Replacement

Removal Procedure

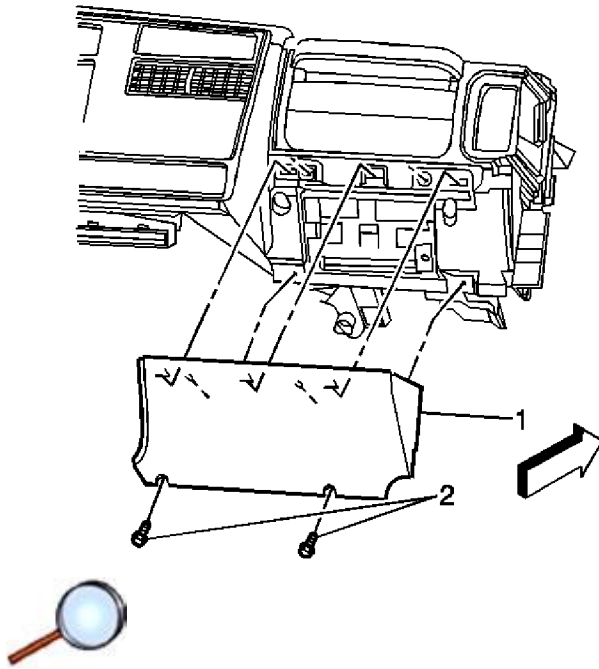
Caution: Refer to [SIR Caution](#) in the Preface section.



1. Remove the bolts (2) from the lower edge of the instrument panel (I/P) passenger knee bolster panel (1).
2. Pull on the I/P passenger knee bolster panel (1) in order to disengage the retainers.
3. Remove the I/P passenger knee bolster panel (1) from the vehicle.
4. Inspect the I/P passenger knee bolster panel (1) for broken or missing retainers.

Replace the retainers as needed.

Installation Procedure



1. Position the I/P passenger knee bolster panel to the vehicle.
2. Align the retainers on the I/P passenger knee bolster panel (1) with the slots at the top of the knee bolster bracket.
3. Press on the I/P passenger knee bolster panel (1) in order to engage the retainers.

Notice: Use the correct fastener in the correct location. Replacement fasteners must be the correct part number for that application. Fasteners requiring replacement or fasteners requiring the use of thread locking compound or sealant are identified in the service procedure. Do not use paints, lubricants, or corrosion inhibitors on fasteners or fastener joint surfaces unless specified. These coatings affect fastener torque and joint clamping force and may damage the fastener. Use the correct tightening sequence and specifications when installing fasteners in order to avoid damage to parts and systems.

4. Install the knee bolster panel (1) bolts (2).

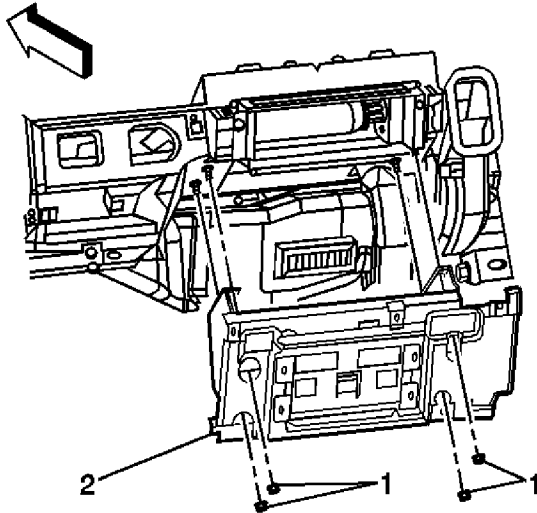
Tighten

Tighten the bolts to 3.5 N·m (31 lb in).

Passenger Knee Bolster Bracket Replacement

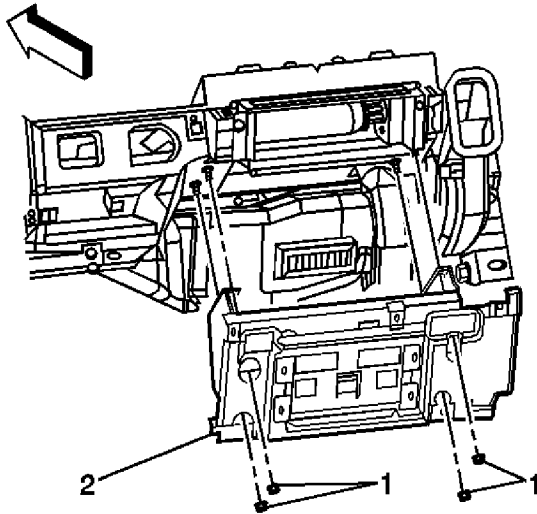
Removal Procedure

Caution: Refer to [SIR Caution](#) in the Preface section.



1. Remove the knee bolster trim panel. Refer to [Passenger Knee Bolster Replacement](#).
2. Remove the body control module (BCM). Refer to [Body Control Module Replacement](#) in Body Control Systems.
3. Remove the nuts (1) securing the knee bolster bracket to the instrument panel (I/P).
4. Remove the knee bolster bracket (2).

Installation Procedure



1. Align the knee bolster bracket (2) to the I/P.

Notice: Refer to [Fastener Notice](#) in the Preface section.

2. Install the nuts (1).

Tighten

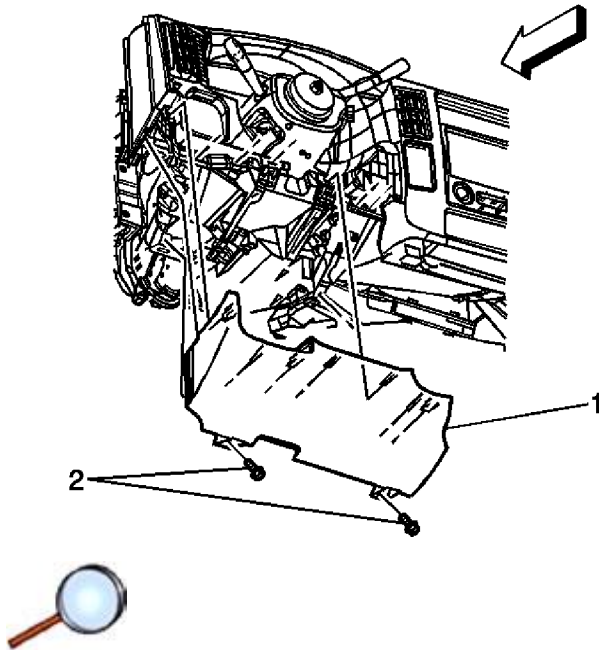
Tighten the nuts (1) to 10 N·m (88 lb in).

3. Install the knee bolster trim panel. Refer to [Passenger Knee Bolster Replacement](#).
4. Install the body control module. Refer to [Body Control Module Replacement](#) in Body Control Systems.

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Driver Knee Bolster Replacement

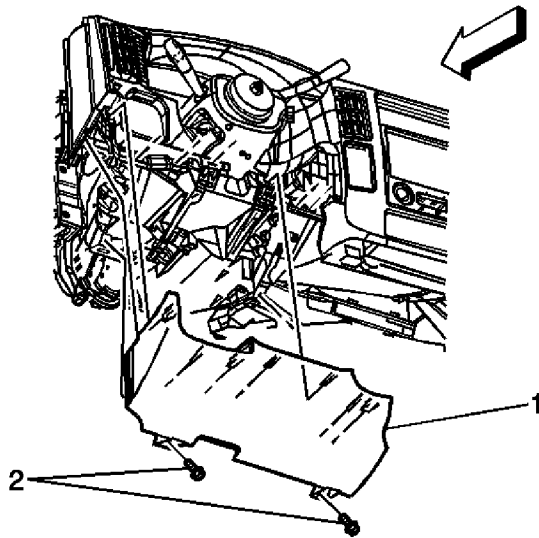
Removal Procedure



1. Remove the bolts (2) from the lower edge of the instrument panel (I/P) driver knee bolster panel (1).
2. Pull the I/P driver knee bolster panel (1) towards the rear of the vehicle in order to disengage the retainers.
3. Remove the I/P driver knee bolster panel (1) from the vehicle.
4. Inspect the I/P driver knee bolster panel (1) for broken or missing retainers.

Replace the retainers as needed.

Installation Procedure



1. Position the I/P driver knee bolster panel to the vehicle.
2. Align the retainers on the I/P driver knee bolster panel (1) with the slots at the top of the knee bolster bracket.
3. Press towards the front of the vehicle in order to engage the I/P driver knee bolster panel (1) retainers.

Notice: Refer to [Fastener Notice](#) in the Preface section.

4. Install the knee bolster panel (1) bolts (2).

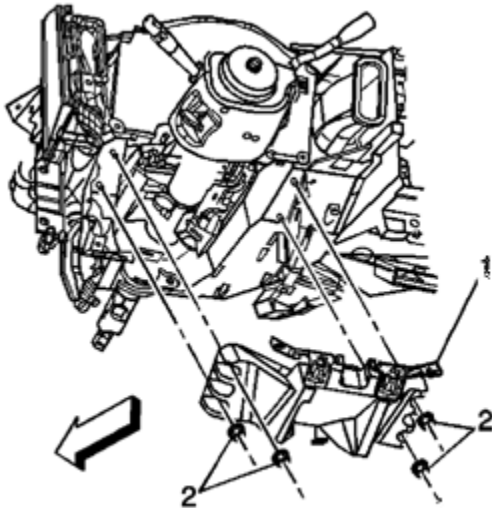
Tighten

Tighten the bolts to 3.5 N·m (31 lb in).

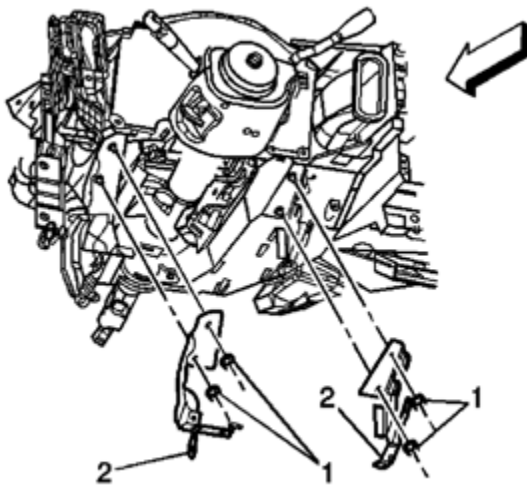
Driver Knee Bolster Bracket Replacement

Removal Procedure

Caution: Refer to [SIR Caution](#) in the Preface section.

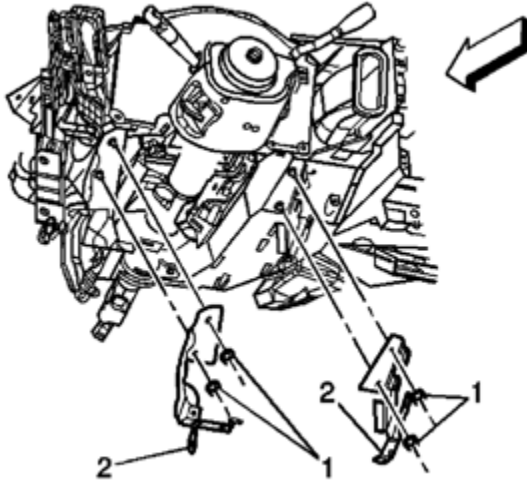


1. Remove the knee bolster trim panel. Refer to [Driver Knee Bolster Replacement](#) .
2. Remove the nuts (2) securing the knee bolster (1) to the knee bolster brackets.
3. Remove the knee bolster (1).



4. Remove the nuts (1) securing the inner and outer knee bolster brackets (2) to the instrument panel (I/P).
5. Remove the knee bolster brackets (2).

Installation Procedure



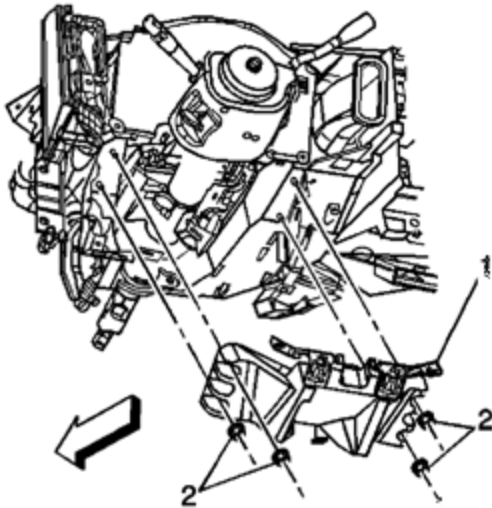
1. Align the inner and outer knee bolster brackets (2) to the I/P.

Notice: Refer to [Fastener Notice](#) in the Preface section.

2. Install the nuts (1).

Tighten

Tighten the nuts to 10 N·m (88 lb in).



3. Install the knee bolster (1) to the knee bolster brackets.
4. Install the nuts (2).

Tighten

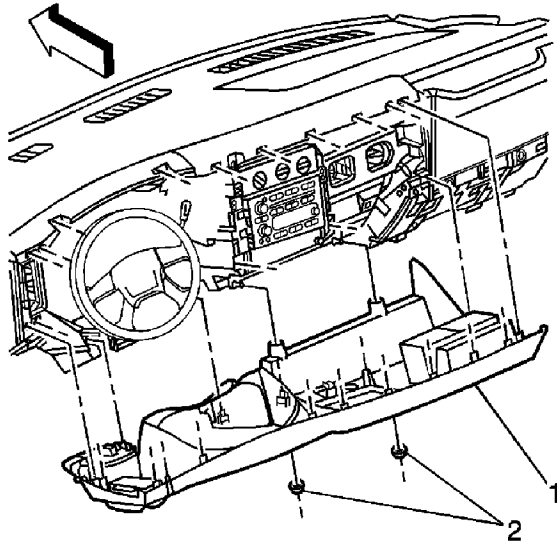
Tighten the nuts to 10 N·m (88 lb in).

5. Install the knee bolster trim panel. Refer to [Driver Knee Bolster Replacement](#) .

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Instrument Panel Cluster Trim Plate Bezel Replacement Removal Procedure

Caution: Refer to [SIR Caution](#) in the Preface section.



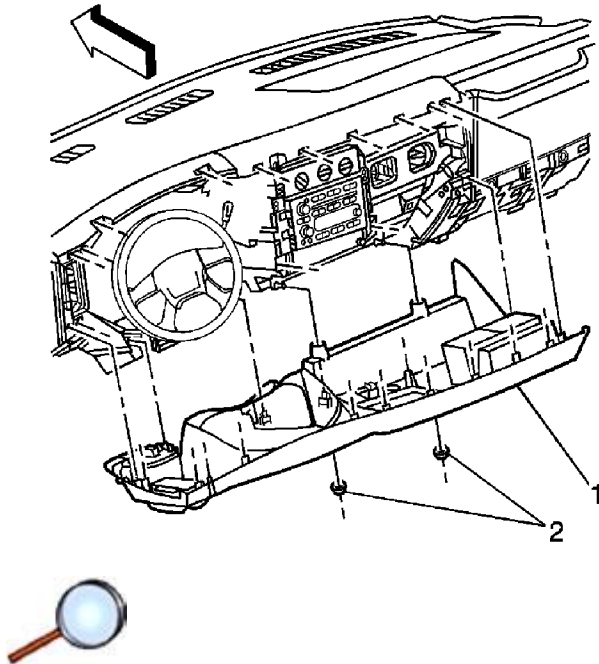
1. Set the parking brake.
2. Block the wheels.
3. Remove the instrument cluster trim bezel nuts (2).
4. Lower the steering column. Refer to [Steering Column Replacement](#) in Steering Wheel and Column.
5. Move the shift lever to the first gear position.
6. Pull on the instrument panel cluster (IPC) trim plate bezel (1) in order to disengage the retainers.

Pull in the following sequence in order to disengage the retainers.

- 6.1. Pull on the bottom.
- 6.2. Pull at the left corner.
- 6.3. Pull at the right corner.
- 6.4. Pull at the top.
7. Disconnect the electrical connectors from the switches and power ports mounted on the IPC trim plate bezel (1).
8. Remove the IPC trim plate bezel (1) from the vehicle.
9. Inspect the IPC trim plate bezel (1) for broken or missing retainers.

Replace the retainers as necessary.

Installation Procedure



1. Align the trim plate bezel to the instrument panel (I/P) (1).
2. Connect the electrical connectors to the switches and power ports mounted to the IPC trim plate bezel (1).
3. Install the steering column. Refer to [Steering Column Replacement](#) in Steering Wheel and Column.
4. Install the driver knee bolster bracket. Refer to [Driver Knee Bolster Bracket Replacement](#).
5. Press the IPC trim plate bezel (1) towards the I/P in order to engage the retainers.

Notice: Refer to [Fastener Notice](#) in the Preface section.

6. Install the IPC trim plate bezel nuts (2).

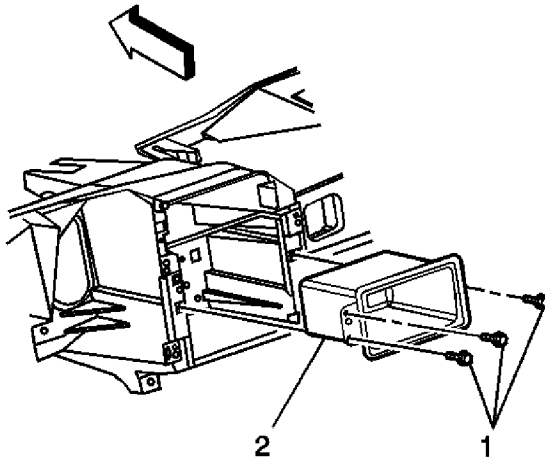
Tighten

Tighten the nuts (2) to 6 N·m (53 lb in).

7. Remove the blocks from the wheels.
8. Release the parking brake.

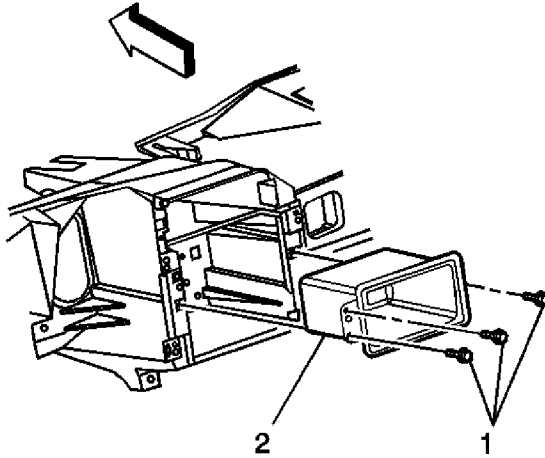
Instrument Panel Compartment Replacement

Removal Procedure



1. Remove the instrument panel (I/P) cluster trim plate bezel. Refer to [Instrument Panel Cluster Trim Plate Bezel Replacement](#).
2. Remove the I/P compartment screws (1).
3. Remove the I/P compartment (2).

Installation Procedure



1. Install the I/P compartment (2) to the I/P.

Notice: Refer to [Fastener Notice](#) in the Preface section.

2. Install the I/P compartment screws (1).

Tighten

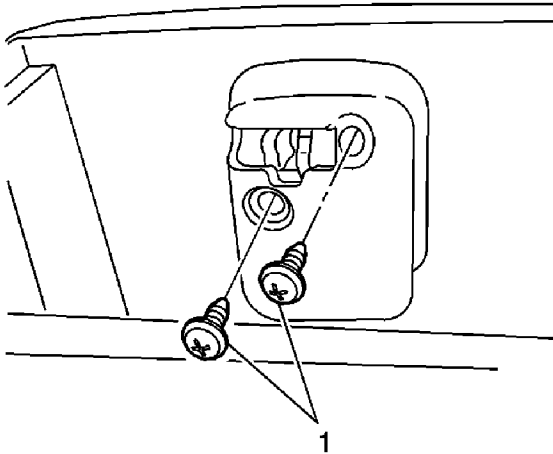
Tighten the screws to 2 N·m (18 lb in).

3. Install the instrument panel (I/P) cluster trim plate bezel. Refer to [Instrument Panel Cluster Trim Plate Bezel Replacement](#) .

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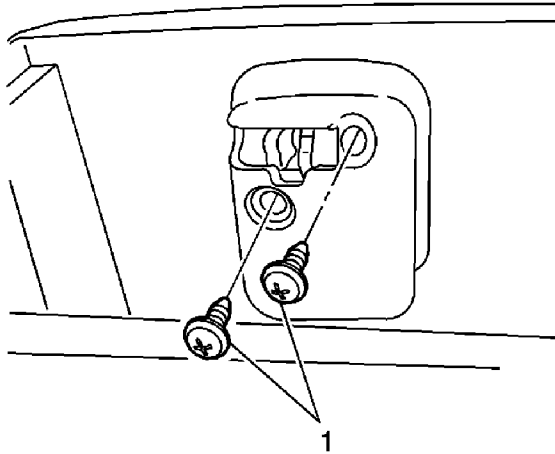
Instrument Panel Compartment Door Latch Replacement

Removal Procedure



1. Open the instrument panel (I/P) compartment door.
2. Remove the screws (1) from the I/P compartment latch.
3. Remove the I/P compartment latch from the I/P compartment door.

Installation Procedure



1. Install the instrument panel (I/P) compartment latch to the I/P compartment door.

Notice: Use the correct fastener in the correct location. Replacement fasteners must be the correct part number for that application. Fasteners requiring replacement or fasteners requiring the use of thread locking compound or sealant are identified in the service procedure. Do not use paints, lubricants, or corrosion inhibitors on fasteners or fastener joint surfaces unless specified. These coatings affect fastener torque and joint clamping force and may damage the fastener. Use the correct tightening sequence and specifications when installing fasteners in order to avoid damage to parts and systems.

2. Install the screws (1) to I/P compartment latch.

Tighten

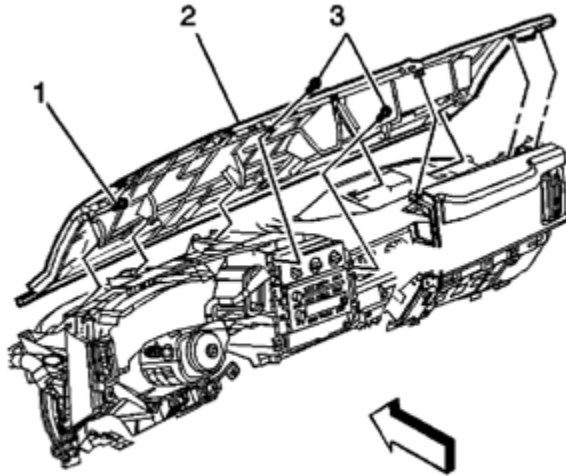
Tighten the I/P compartment latch screws (1) to 1 N·m (9 lb in).

3. Close the I/P compartment door.

Instrument Panel Upper Trim Pad Replacement

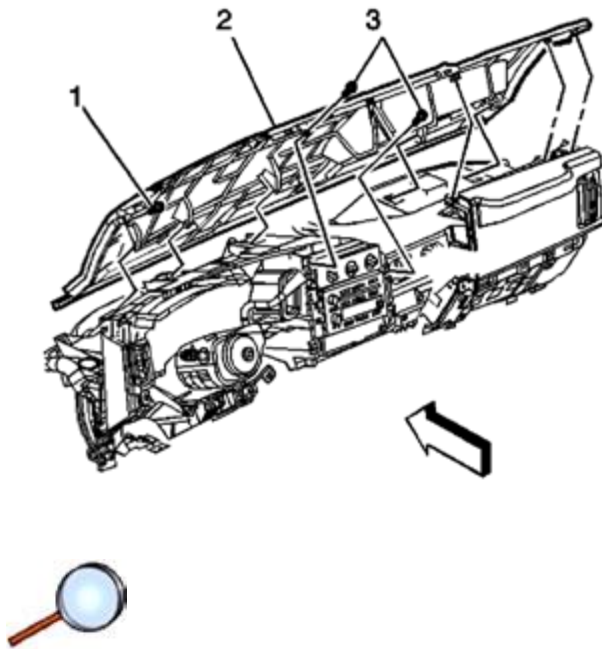
Removal Procedure

Caution: Refer to [SIR Caution](#) in the Preface section.



1. Remove the left and right windshield garnish moldings. Refer to [Windshield Garnish Molding Replacement](#) in Interior Trim.
2. Remove the instrument panel (I/P) cluster trim plate bezel. Refer to [Instrument Panel Cluster Trim Plate Bezel Replacement](#).
3. Remove the screws (1, 3) from the I/P upper trim pad (2).
4. Lift the I/P upper trim pad (2) on an angle and slide rearward in order to disengage the retainers at front of I/P.
5. Remove the I/P upper trim pad (2) from the vehicle.

Installation Procedure



1. Slide the I/P upper trim pad (2) forward in order to engage the front hooks of the I/P upper trim pad (2) to the I/P carrier.

Notice: Use the correct fastener in the correct location. Replacement fasteners must be the correct part number for that application. Fasteners requiring replacement or fasteners requiring the use of thread locking compound or sealant are identified in the service procedure. Do not use paints, lubricants, or corrosion inhibitors on fasteners or fastener joint surfaces unless specified. These coatings affect fastener torque and joint clamping force and may damage the fastener. Use the correct tightening sequence and specifications when installing fasteners in order to avoid damage to parts and systems.

2. Install the I/P upper trim pad screws (1, 3).

Tighten

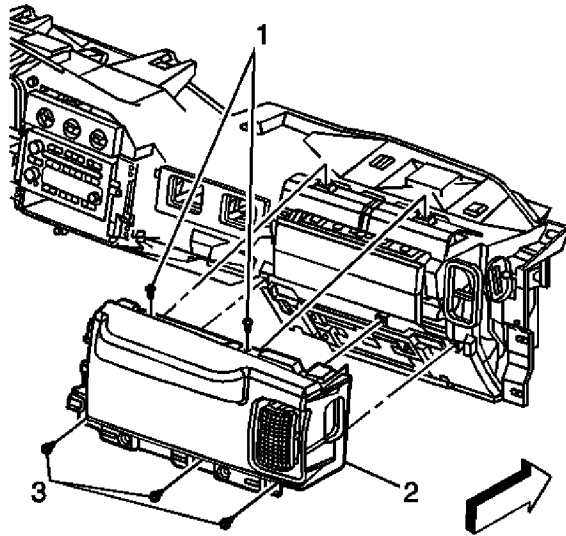
Tighten the I/P upper trim pad screws to 3 N·m (18 lb in).

3. Install the cluster trim plate bezel. Refer to [Instrument Panel Cluster Trim Plate Bezel Replacement](#).
4. Install the left and right windshield garnish moldings. Refer to [Windshield Garnish Molding Replacement](#) in Interior Trim.

Instrument Panel Trim Pad Replacement

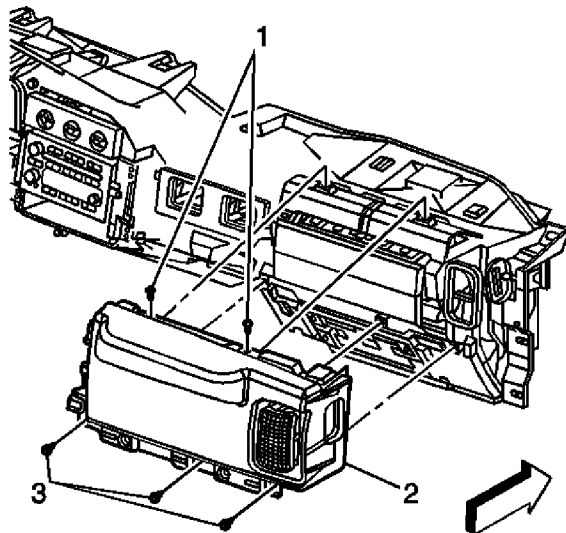
Removal Procedure

Caution: Refer to [SIR Caution](#) in the Preface section.



1. Disable the SIR. Refer to [SIR Disabling and Enabling](#) in SIR.
2. Remove the knee bolster trim panel. Refer to [Passenger Knee Bolster Replacement](#).
3. Remove the instrument panel (I/P) upper trim pad. Refer to [Instrument Panel Upper Trim Pad Replacement](#).
4. Remove the screws (1, 3) from the I/P trim pad.
5. Remove the I/P trim pad (2).

Installation Procedure



1. Install the I/P trim pad (2) to the I/P.

Notice: Refer to [Fastener Notice](#) in the Preface section.

2. Install the screws (1, 3).

Tighten

Tighten the screws (1, 3) to 3 N·m (26 lb in).

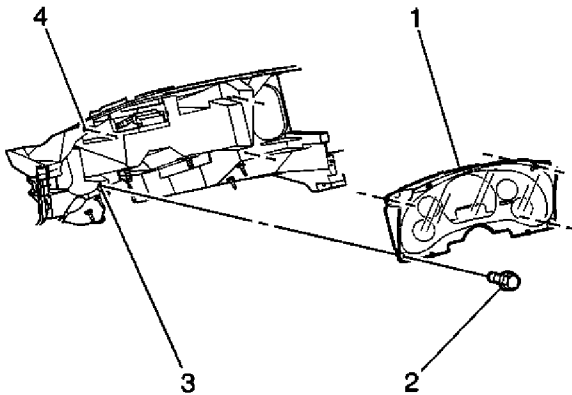
3. Install the I/P upper trim pad. Refer to [Instrument Panel Upper Trim Pad Replacement](#).
4. Install the knee bolster trim panel. Refer to [Passenger Knee Bolster Replacement](#).
5. Enable the SIR. Refer to [SIR Disabling and Enabling](#) in SIR.

Instrument Cluster Replacement

Removal Procedure

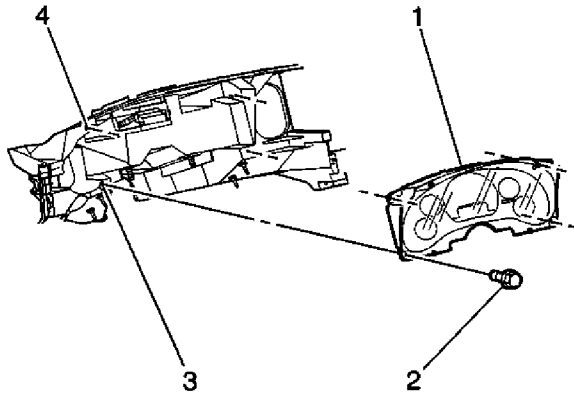
Caution: Refer to [Battery Disconnect Caution](#) in the Preface section.

1. Disconnect the battery negative cable. Refer to [Battery Negative Cable Disconnection and Connection](#).
2. Remove the instrument panel cluster trim plate. Refer to [Instrument Panel Cluster Trim Plate Bezel Replacement](#).
3. Tilt the steering column fully down, if equipped with tilt steering.



4. Remove the screws (2) that retain the instrument cluster to the instrument panel carrier.
5. Remove the instrument cluster (1) from the vehicle.

Installation Procedure



1. Position the instrument cluster (1) to the vehicle.

Notice: Refer to [Fastener Notice](#) in the Preface section.

2. Install the screws (2) that retain the instrument cluster to the instrument panel carrier.

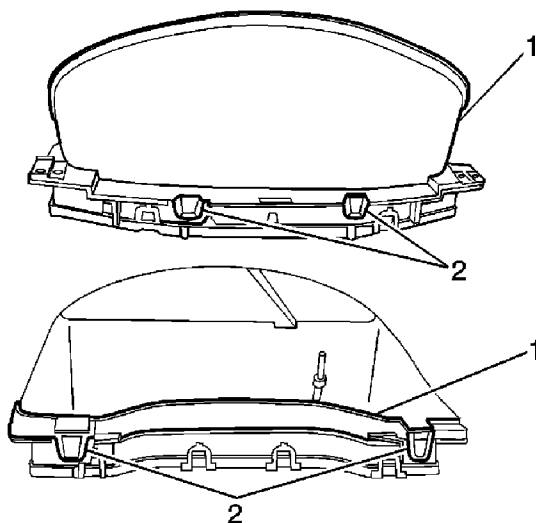
Tighten

Tighten the screws to 2 N·m (18 lb in).

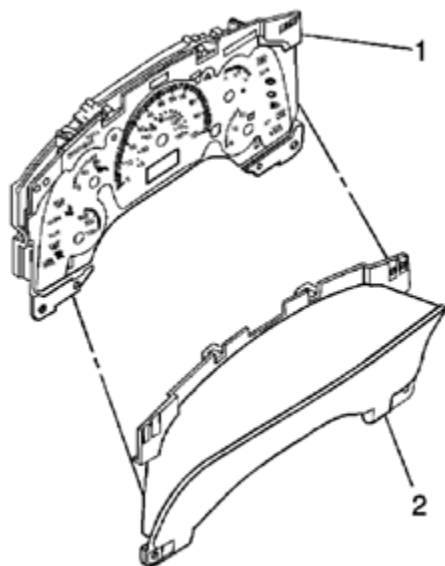
3. Install the instrument panel cluster trim plate. Refer to [Instrument Panel Cluster Trim Plate Bezel Replacement](#).
4. Tilt the steering column to the up position, if equipped with tilt steering.
5. Connect the battery negative cable. Refer to [Battery Negative Cable Disconnection and Connection](#).
6. If a replacement cluster was installed, program the cluster. Refer to [Service Programming System \(SPS\)](#).

Instrument Cluster Lens Replacement

Removal Procedure

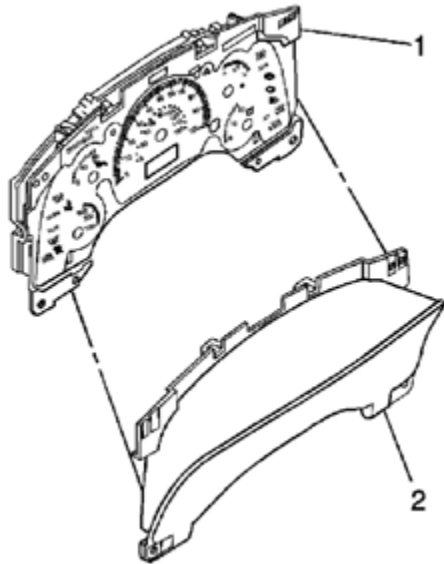


1. Remove the IP cluster. Refer to [Instrument Cluster Replacement](#) .
2. Use a flat-bladed tool in order to disengage the snap retainers (2) at the cluster lens and carrier (1) to the cluster housing.

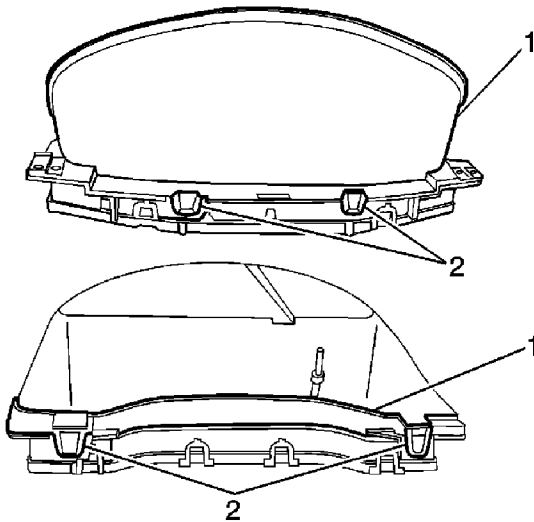


3. Remove the IP cluster lens and carrier (2).

Installation Procedure



1. Align the IP cluster lens and carrier (2) to the IP cluster (1).



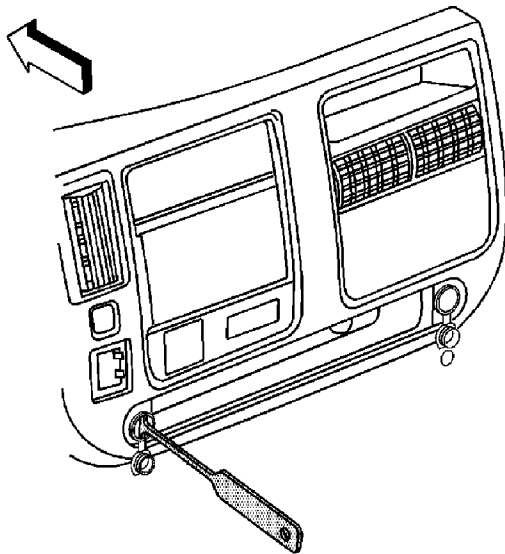
2. Push the IP cluster lens and carrier (1) toward the IP cluster (2) to engage the snap retainers.
3. Install the IP cluster. Refer to [Instrument Cluster Replacement](#).

Cigar Lighter Housing Replacement

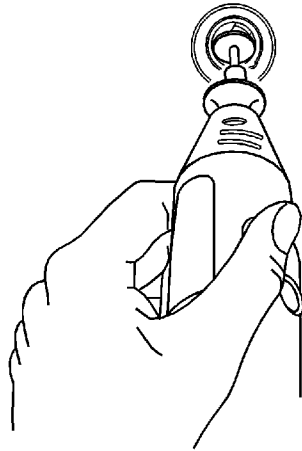
Tools Required

[J 42059](#) Cigar Lighter Socket Remover

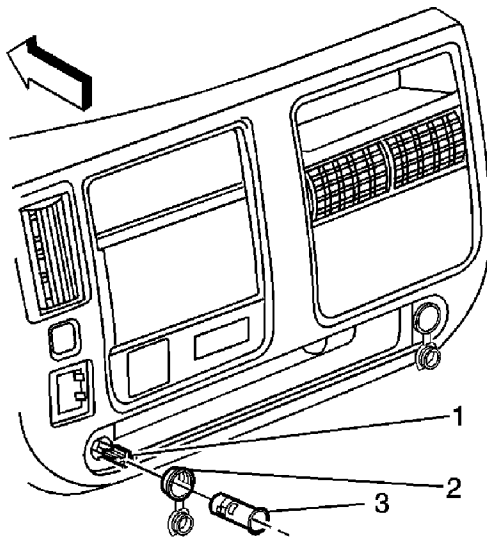
Removal Procedure



1. Remove the cigar lighter fuse.
2. Remove the cigar lighter element.
3. Using the [J 42059](#) , perform the following procedure to remove the cigar lighter socket:
 - 3.1. Place one side of the T-portion of the J 42059 tool into the tab window in the lighter socket.
 - 3.2. Rotate the tool into the opposite tab window in the lighter socket.
 - 3.3. Once J 42059 tool is engaged in both tabs, pull the lighter socket straight out.

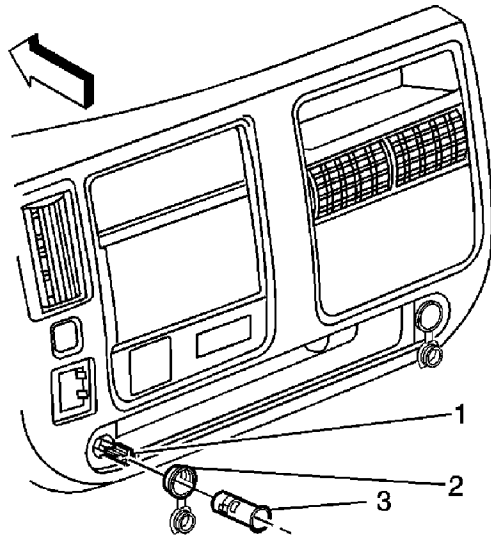


4. If J 42059 tool fails to release the lighter socket from the retainer, use the following alternate method:
 - 4.1. Insert a small grinding tool with a cutoff wheel into the socket.
 - 4.2. Remove the plastic latches in the 3 mm (0.11 in) square windows.
 - 4.3. Use the [J 42059](#) as directed above to remove the socket.
5. Remove the tool from the lighter socket.



6. Pull the cigar lighter socket (3) and cigar lighter retainer (2) out of the trim plate.
7. Disconnect the electrical connector (1) from the cigar lighter (3).
8. Remove the cigar lighter retainer (2) from the cigar lighter socket (3).

Installation Procedure



1. Install the cigar lighter retainer (2) to the trim plate by pressing the retainer (2) into place until fully seated.
2. Connect the electrical connector (1) to the cigar lighter socket (3).
3. Align the cigar lighter socket (3) key way to the key slot in the retainer ring (2).
4. Press the cigar lighter socket (3) into place until the cigar lighter socket (3) is fully seated.
5. Install the cigar lighter fuse.

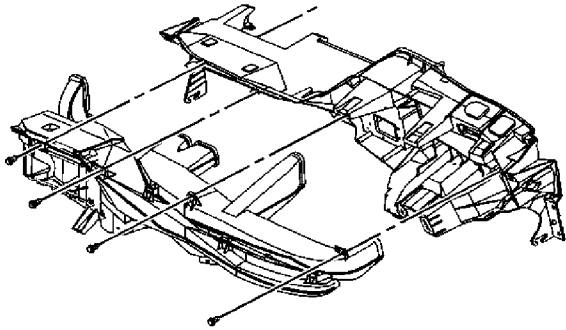
Instrument Panel Carrier Replacement

Removal Procedure

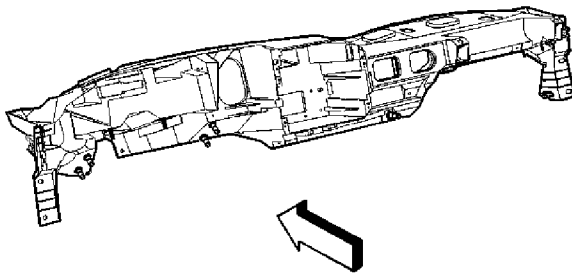
Caution: Refer to [SIR Caution](#) in the Preface section.

Caution: Unless directed otherwise, the ignition and start switch must be in the OFF or LOCK position, and all electrical loads must be OFF before servicing any electrical component. Disconnect the negative battery cable to prevent an electrical spark should a tool or equipment come in contact with an exposed electrical terminal. Failure to follow these precautions may result in personal injury and/or damage to the vehicle or its components.

1. Disconnect the battery negative cable(s). Refer to [Battery Negative Cable Disconnection and Connection](#) in Engine Electrical.
2. Remove the right knee bolster. Refer to [Passenger Knee Bolster Replacement](#).
3. Remove the body control module (BCM). Refer to [Body Control Module Replacement](#) in Body Control System.
4. Disable the SIR system. Refer to [SIR Disabling and Enabling](#) and [SIR Disabling and Enabling](#) in SIR.
5. Remove the left knee bolster. Refer to [Driver Knee Bolster Replacement](#).
6. Remove the left knee bolster bracket. Refer to [Driver Knee Bolster Bracket Replacement](#).
7. Remove the steering column. Refer to [Steering Column Replacement](#) in Steering Wheel and Column.
8. Remove the instrument panel I/P cluster trim plate bezel. Refer to [Instrument Panel Cluster Trim Plate Bezel Replacement](#).
9. Remove the instrument cluster assembly. Refer to [Instrument Cluster Replacement](#).
10. Remove the left hinge pillar trim panel. Refer to [Body Hinge Pillar Trim Panel Replacement](#) in Interior Trim.
11. Remove the right hinge pillar trim panel. Refer to [Body Hinge Pillar Trim Panel Replacement](#) in Interior Trim.
12. Remove the right knee bolster bracket. Refer to [Passenger Knee Bolster Bracket Replacement](#).
13. Remove the passenger side SIR module. Refer to [Inflatable Restraint Instrument Panel Module Replacement](#) in SIR.
14. Remove the I/P upper trim pad. Refer to [Instrument Panel Upper Trim Pad Replacement](#).
15. Remove the engine cover. Refer to [Engine Cover Replacement](#) in Interior Trim.
16. Remove the radio and mounting bracket, if equipped. Refer to [Radio Replacement](#) in Entertainment.
17. Remove the I/P compartment, if equipped. Refer to [Instrument Panel Compartment Replacement](#).
18. Remove the heater and the A/C control. Refer to [Heater and Air Conditioning Control Replacement](#) in Heating, Ventilation and Air Conditioning.
19. Remove the steering column wiring harness from the instrument panel carrier.
20. Remove the bolts that retain the I/P carrier to the vehicle.
21. Rotate the I/P carrier out and downward in order to gain access to the HVAC ducts and the electrical harness.

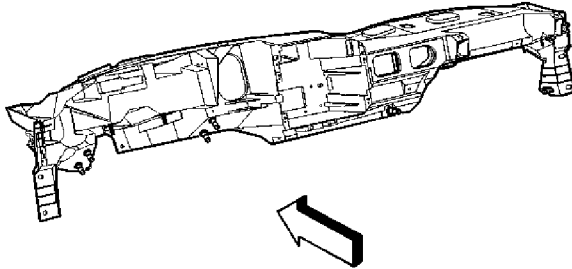


22. Remove the bolts that retain the air ducts to the I/P carrier.
23. Remove the HVAC air distribution duct from the I/P carrier. Refer to [Air Distributor Duct Replacement](#) in Heating, Ventilation, and Air Conditioning.
24. Remove the wiring harness from the I/P carrier.

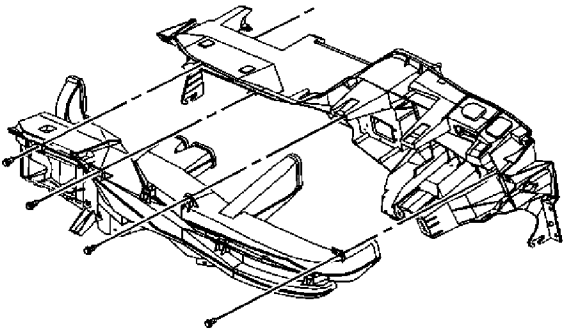


25. Remove the I/P carrier from the vehicle.

Installation Procedure



1. Install the I/P carrier to the vehicle.
2. Install the wiring harness to the I/P carrier.



3. Install the HVAC air distribution duct to the I/P carrier. Refer to [Air Distributor Duct Replacement](#) in Heating, Ventilation, and Air Conditioning.
4. Carefully rotate the I/P carrier up to install the additional components.

Notice: Use the correct fastener in the correct location. Replacement fasteners must be the correct part number for that application. Fasteners requiring replacement or fasteners requiring the use of thread locking compound or sealant are identified in the service procedure. Do not use paints, lubricants, or corrosion inhibitors on fasteners or fastener joint surfaces unless specified. These coatings affect fastener torque and joint clamping force and may damage the fastener. Use the correct tightening sequence and specifications when installing fasteners in order to avoid damage to parts and systems.

5. Install the bolts that retain the I/P carrier to the vehicle.

Tighten

Tighten the bolts to 50 N·m (37 lb ft).

6. Install the instrument cluster wiring harness to the I/P carrier.
7. Install the steering column wiring harness to the I/P carrier.
8. Install the radio, the heater, and the A/C wiring harnesses to the I/P carrier.
9. Install the heater and the A/C control. Refer to [Heater and Air Conditioning Control Replacement](#) in Heating, Ventilation, and Air Conditioning.
10. Install the I/P compartment, if equipped. Refer to [Instrument Panel Compartment Replacement](#).
11. Install the mounting bracket and radio, if equipped. Refer to [Radio Replacement](#) in Entertainment.
12. Install the engine cover. Refer to [Engine Cover Replacement](#) in Interior Trim.
13. Install the I/P upper trim pad. Refer to [Instrument Panel Upper Trim Pad Replacement](#).
14. Install the passenger side SIR module. Refer to [Inflatable Restraint Instrument Panel Module Replacement](#) in SIR.
15. Install the right hinge pillar trim panel. Refer to [Body Hinge Pillar Trim Panel Replacement](#) in Interior Trim.
16. Install the left hinge pillar trim panel. Refer to [Body Hinge Pillar Trim Panel Replacement](#) in Interior Trim.
17. Install the instrument cluster assembly. Refer to [Instrument Cluster Replacement](#).
18. Install the I/P cluster trim plate bezel. Refer to [Instrument Panel Cluster Trim Plate Bezel Replacement](#).
19. Install the steering column. Refer to [Steering Column Replacement](#) in Steering Wheel and Column.
20. Install the left knee bolster. Refer to [Driver Knee Bolster Replacement](#).
21. Install the left knee bolster bracket. Refer to [Driver Knee Bolster Bracket Replacement](#).
22. Enable the SIR system. Refer to [SIR Disabling and Enabling](#) and [SIR Disabling and Enabling](#) in SIR.
23. Install the right knee bolster bracket. Refer to [Passenger Knee Bolster Bracket Replacement](#).
24. Install the BCM. Refer to [Body Control Module Replacement](#) in Body Control System.
25. Install the right knee bolster. Refer to [Passenger Knee Bolster Replacement](#).
26. Connect the battery negative cable(s). Refer to [Battery Negative Cable Disconnection and Connection](#) in Engine Electrical.