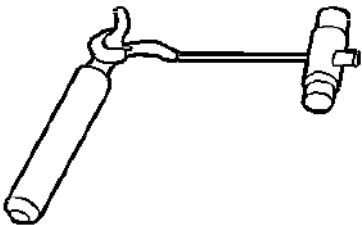
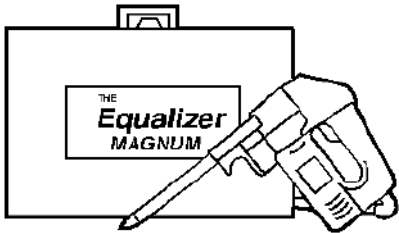


WARNING: Refer to Assistant Driving Warning .

Interior windnoise is not heard when the window is lowered. Interior windnoise is caused by the air leaving the inside of the vehicle through a seal or a seam.

1. Tape over the relief valves to cause added air pressure within the vehicle.
2. Test drive the vehicle and listen for windnoise or a whistle.
3. Pull the vehicle over and make the temporary repairs using masking tape. If you cannot determine the source of the windnoise, perform one or more of the following diagnostic tests:
 - Air Pressure Test
 - Soap Suds or Bubble Test
 - Tracing Powder or Chalk Test

SPECIAL TOOLS AND EQUIPMENT**SPECIAL TOOLS**

Illustration	Tool Number/Description
	CH-39570 J 39570 Chassis Ear
	GE-41416 J 41416 Ultrasonic Leak Detector

3. Test for less than 2 ohms between the ground terminal C and the signal terminal B.
 - If greater than the specified range, replace the hood ajar switch.
4. With the switch in the hood open position, test for infinite resistance between the ground terminal C and the signal terminal B.
 - If not infinite, replace the hood ajar switch.
5. Test for less than 2 ohms between the ground terminal C and the signal terminal A.
 - If greater than the specified range, replace the hood ajar switch.

Repair Instructions

Perform the **Diagnostic Repair Verification** after completing the diagnostic procedure.

- **Hood Primary and Secondary Latch Replacement**
- **Control Module References** for BCM or instrument cluster replacement, programming and setup

REPAIR INSTRUCTIONS

FRONT END UPPER TIE BAR SUPPORT REPLACEMENT (ACADIA, ENCLAVE, TRAVERSE)

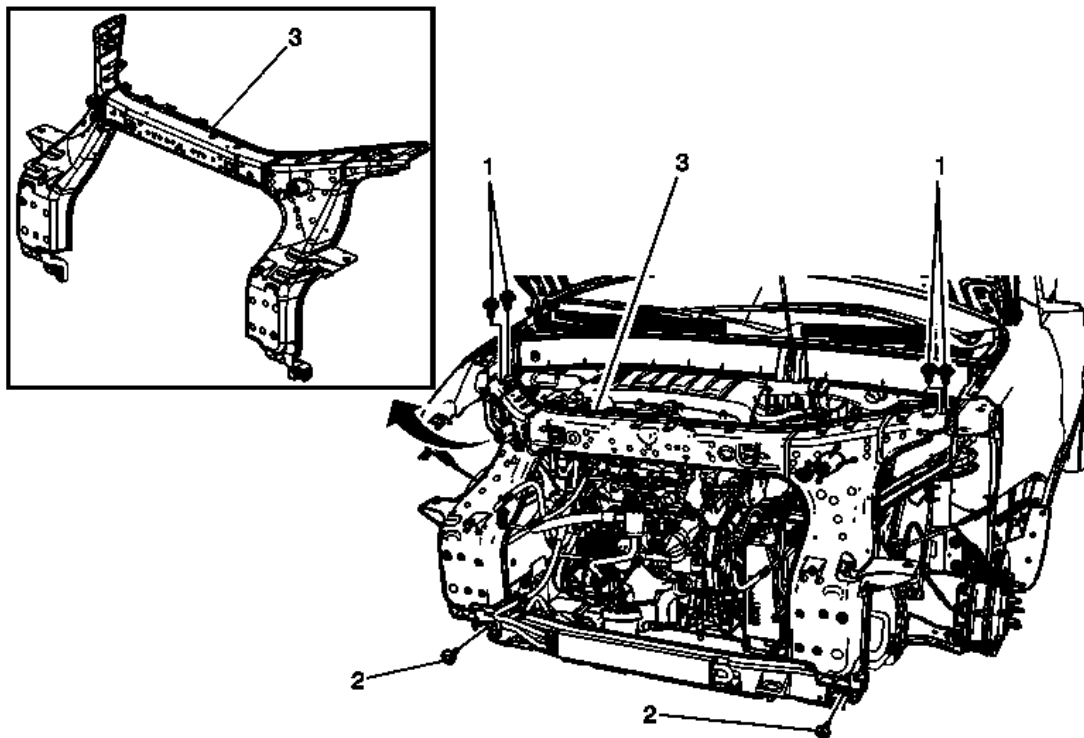


Fig. 2: Front End Upper Tie Bar Support
Courtesy of GENERAL MOTORS COMPANY

Front End Upper Tie Bar Support Replacement (Acadia, Enclave, Traverse)

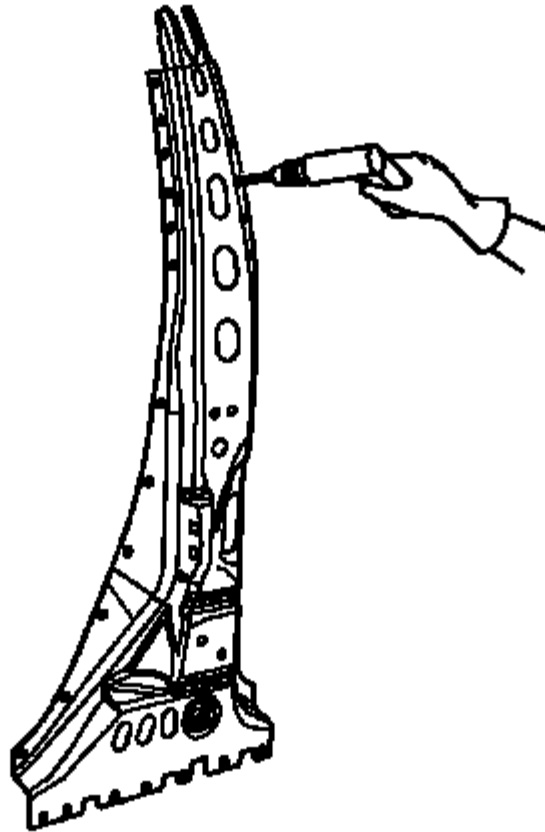


Fig. 125: View Of Drilling Plug Weld Holes In B-Pillar Reinforcement
Courtesy of GENERAL MOTORS COMPANY

NOTE: If the location of the original plug weld holes can not be determined, space the plug weld holes every 40 mm (1 1/2 in) apart.

2. Prepare all mating surfaces as necessary.
3. Apply GM-approved Weld-Thru coating or equivalent to all mating surfaces. Refer to **Anti-Corrosion Treatment and Repair** .
4. Position the service B-pillar reinforcement assembly to the vehicle using 3-dimensional measuring equipment. Clamp into place.

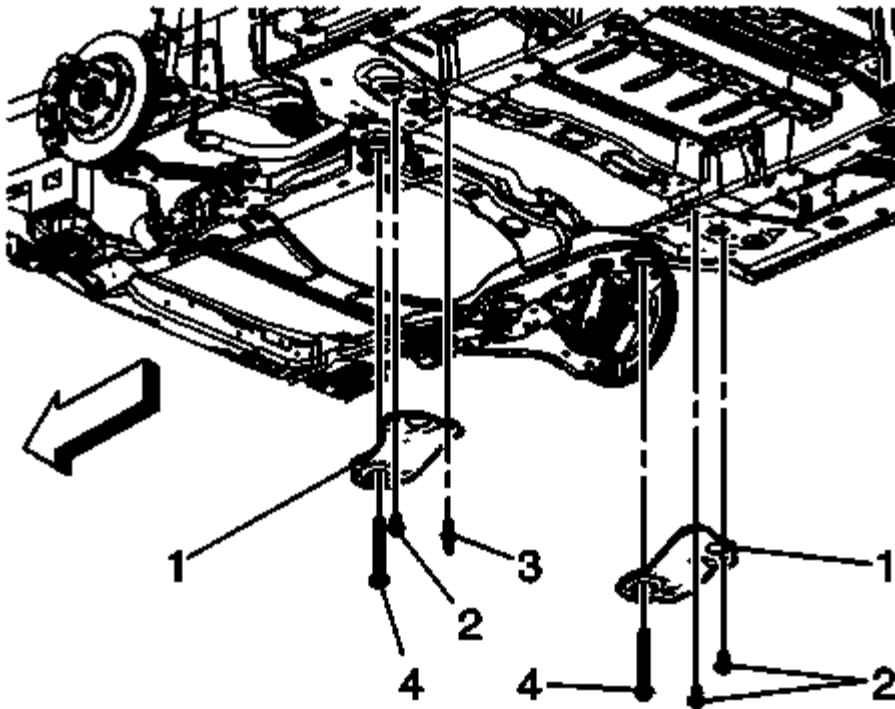


Fig. 24: Locating Reinforcements, Frame To Body Bolts, Reinforcement Bolts & Studs
Courtesy of GENERAL MOTORS COMPANY

13. Install the NEW rear frame to body bolts (4) and tighten to 110 N.m (81 lb ft) plus 90°.
14. Install the reinforcement bolts (2) and tighten to 60 N.m (44 lb ft).
15. Install the reinforcement studs (3) and tighten to 60 N.m (44 lb ft).
16. Remove the alignment pins from the frame.
17. Install the underbody rear side rail. Refer to **Underbody Rear Side Rail Replacement**.
18. Apply threadlocker GM P/N 12345382 (Canadian P/N 10953489) to the engine and transmission mount threads.

Object Detection Schematics

Connector End View Reference

COMPONENT CONNECTOR END VIEWS - INDEX

Description and Operation

Object Detection Description and Operation (with Rearview Camera, UVC), Object Detection Description and Operation (with Park Assist, UD7), Object Detection Description and Operation (with Side Blind Zone Alert, UFT), Object Detection Description and Operation (with Rear Cross Traffic Alert, UFT), Object Detection Description and Operation (with Lane Departure Warning, UFL), Object Detection Description and Operation (with Forward Collision Alert, UEU)

Electrical Information Reference

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

Scan Tool Reference

Control Module References for scan tool information

Circuit/System Verification

1. Ignition ON.
2. Verify that B094B 45 or B094C 45 is not set.
 - **If DTC is set**
 1. Program the appropriate B218 Side Object Sensor Module.
 2. Verify the DTC does not set.
 - If the DTC sets, replace the appropriate B218 Side Object Sensor Module.
 - If the DTC does not set
 - 3. All OK.
 - **If DTC is not set**
3. Verify that B094B 00, B094C 00, B094B 08, B094C 08, B094B 54 or B094C 54 is not set.
 - **If DTC is set**

Replace the appropriate B218 Side Object Sensor Module.

- **If the DTC is not set**
4. Verify that B094B 58 or B094C 58 is not set.

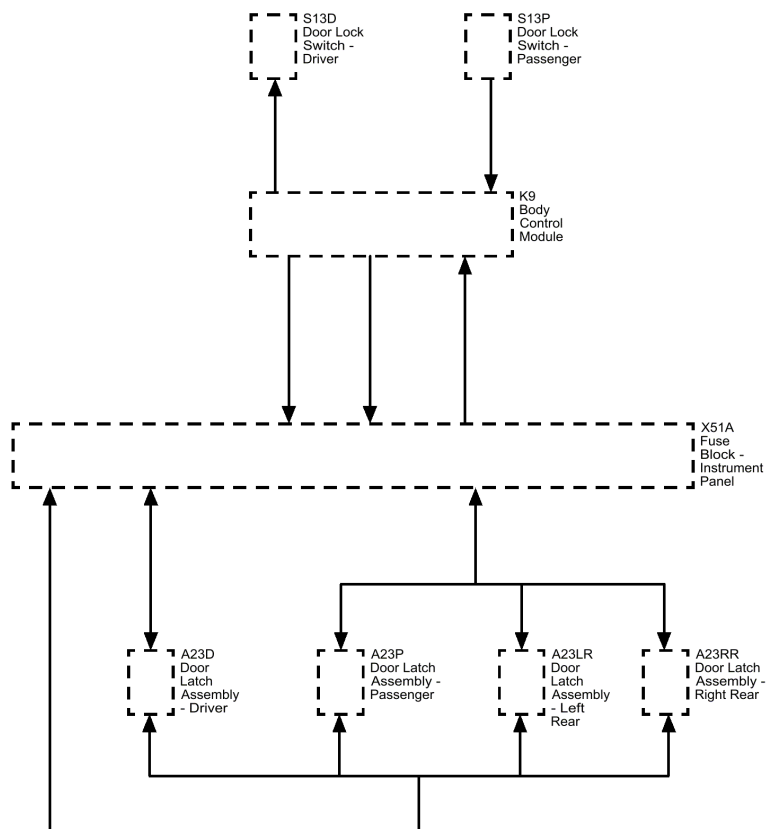
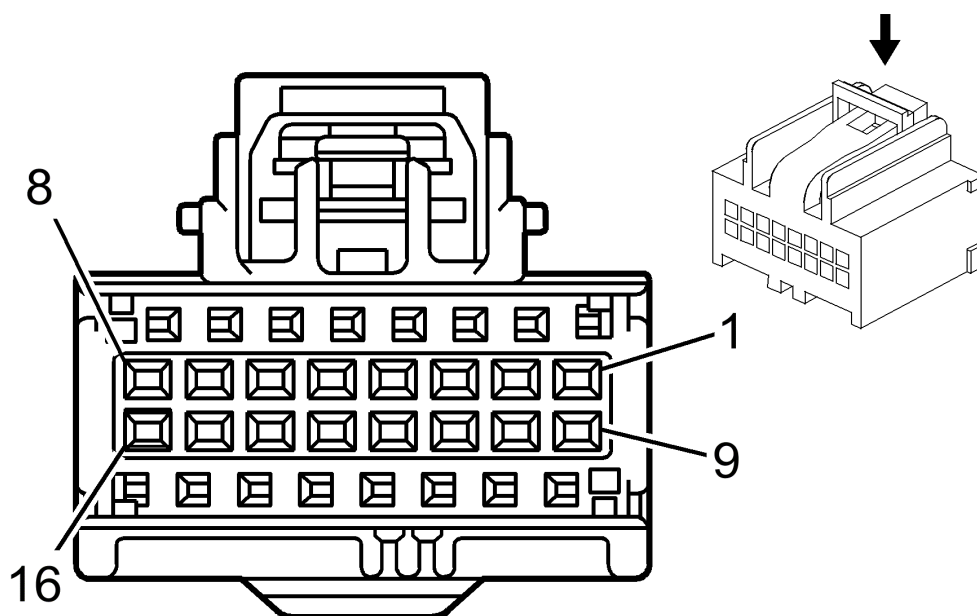


Fig. 59: Power Door Locks Without AXE Block Diagram
 Courtesy of GENERAL MOTORS COMPANY

Callout	Component Name
HW	Hard-Wired
HW	Hard-Wired
HW	Hard-Wired
HW	Hard-Wired
HW	Hard-Wired
HW	Hard-Wired
HW	Hard-Wired
HW	Hard-Wired
S13D	S13D Door Lock Switch - Driver
S13P	S13P Door Lock Switch - Passenger
K9	K9 Body Control Module
X51A	X51A Fuse Block - Instrument Panel

2014 GMC Acadia Denali

2014 ELECTRICAL Wiring Systems and Power Management - Component Locator - Component Connector End Views - Acadia, Enclave And Traverse



Connector Part Information

- Harness Type: Instrument Panel
- OEM Connector: 15136073
- Service Connector: 15136073
- Description: 16-Way F Kaizen 64 Series (BK)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray	Core Crimp	Insulation Crimp
I	13575845	J-35616-64B (L-BU)	J-38125-215A	SAIT-A03T-M064	14	P	P
II	19303596	J-35616-35 (VT)	J-38125-11A	Not Available	Not Available	Not Available	Not Available

T3 Audio Amplifier X3 (UQA or UQS)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	WH	6763	Subwoofer Low Level Audio Signal	I	UQS
2	0.5	OG	6761	Center Channel Low Level Audio Signal (-)	I	UQS

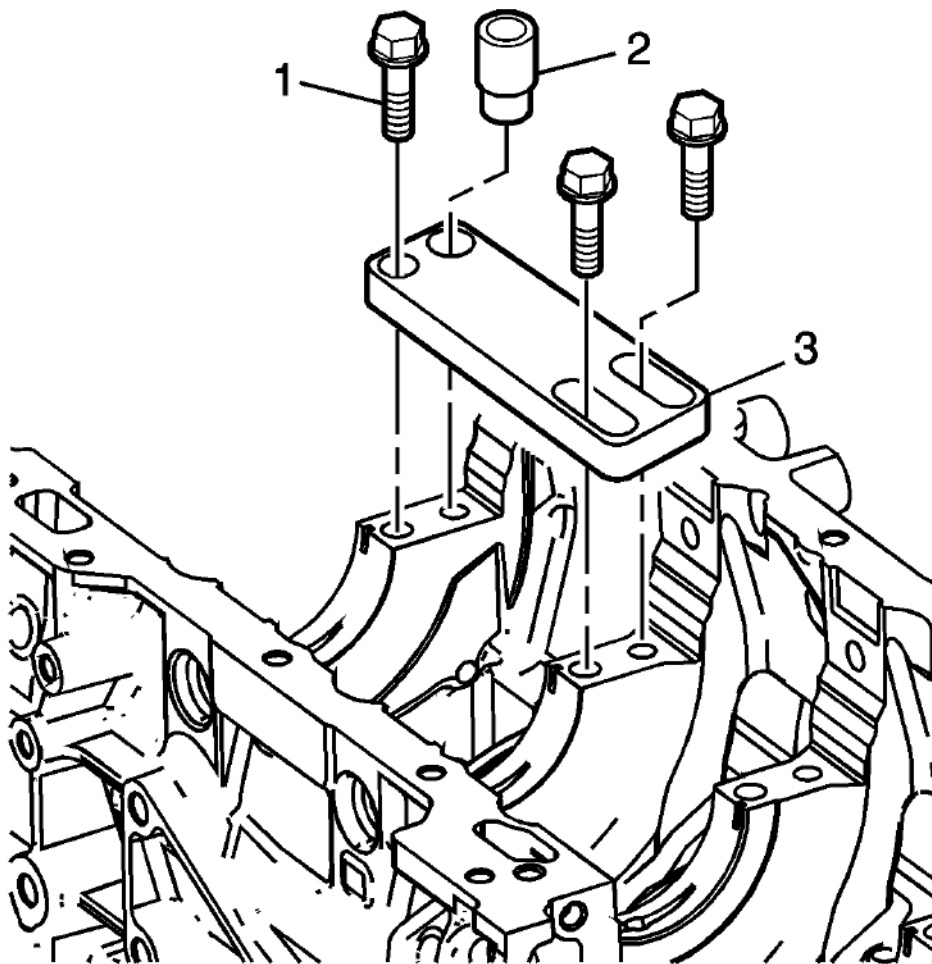


Fig. 425: Identifying Fixture Plate Over Crankshaft Main Cap Bolt Hole
Courtesy of GENERAL MOTORS COMPANY

1. Position the fixture plate (3) with the bushing (2) installed over the crankshaft main cap bolt hole to be repaired.
2. Loosely install the fixture plate bolts (1) into the remaining crankshaft main cap bolt holes.

2014 GMC Acadia Denali

2014 ENGINE PERFORMANCE Engine Controls and Fuel - 3.6L (LLT) - Diagnostic Information and Procedures - Acadia, Enclave And Traverse

Diagnostic Instructions

- Perform **Diagnostic System Check - Vehicle** prior to using this diagnostic procedure.
- Review **Strategy Based Diagnosis** for an overview of the diagnostic approach.
- **Diagnostic Procedure Instructions** provides an overview of each diagnostic category.

DTC Descriptors

DTC P0351

Ignition Coil 1 Control Circuit

DTC P0352

Ignition Coil 2 Control Circuit

DTC P0353

Ignition Coil 3 Control Circuit

DTC P0354

Ignition Coil 4 Control Circuit

DTC P0355

Ignition Coil 5 Control Circuit

DTC P0356

Ignition Coil 6 Control Circuit

DTC P2300

Ignition Coil 1 Control Circuit Low Voltage

DTC P2301

Ignition Coil 1 Control Circuit High Voltage

DTC P2303

Ignition Coil 2 Control Circuit Low Voltage

DTC P2304

2014 GMC Acadia Denali

2014 GENERAL INFORMATION General Information - Acadia, Enclave And Traverse

4	Style	K	Four Door Cab/Utility
5-6	Chassis/Series	R/A	Enclave Convenience Group (FWD)
		R/B	Enclave Leather Group (FWD)
		R/C	Enclave Premium Group (FWD)
		R/F	Traverse LS (FWD)
		R/G	Traverse 1LT (FWD)
		R/H	Traverse 2LT (FWD)
		R/J	Traverse LTZ (FWD)
		R/N	Acadia SLE 1 (FWD)
		R/P	Acadia SLE 2 (FWD)
		R/R	Acadia SLT 1 (FWD)
		R/S	Acadia SLT 2 (FWD)
		R/T	Acadia Denali (FWD)
		R/7	Enclave FWD (Export - Non US, Non Canada)
		R/8	Traverse FWD (Export - Non US, Non Canada)
		R/9	Acadia FWD (Export - Non US, Non Canada)
		V/A	Enclave Convenience Group (AWD)
		V/B	Enclave Leather Group (AWD)
		V/C	Enclave Premium Group (AWD)
		V/F	Traverse LS (AWD)
		V/G	Traverse 1LT (AWD)
		V/H	Traverse 2LT (AWD)
		V/J	Traverse LTZ (AWD)
		V/N	Acadia SLE 1 (AWD)
		V/P	Acadia SLE 2 (AWD)
		V/R	Acadia SLT 1 (AWD)
		V/S	Acadia SLT 2 (AWD)
		V/T	Acadia Denali (AWD)
		V/7	Enclave AWD (Export - Non US, Non Canada)
		V/8	Traverse AWD (Export - Non US, Non Canada)
		V/9	Acadia AWD (Export - Non US, Non Canada)
7	Restraint System	E	Active Manual Belts, Airbags - Driver and Passenger Front (1st row), Front Seat Side (1st row), Roof Side (All seating rows)
			Active Manual Belts, Airbags - Driver

2014 GMC Acadia Denali

2014 GENERAL INFORMATION Vibration Diagnosis and Correction - Acadia, Enclave And Traverse

7	Runout Measurement - Off Vehicle. Does the runout measurement indicate a runout concern?	Go to Step 19	Go to Step 8
8	Is the vehicle equipped with run-flat tires?	Go to Step 12	Go to Step 9
9	Are any of the tire and wheel assembly runout measurements marginal; within acceptable limits, but close to the maximum?	Go to Step 10	Go to Step 15
10	NOTE: Ensure that each tire and wheel assembly that is match-mounted is properly balanced before reinstalling to the vehicle. 1. Match-mount the tire-to-wheel for each tire and wheel assembly with marginal runout. Refer to <u>Tire-to-Wheel Match-Mounting (Vectoring)</u>. 2. Measure the runout of each match-mounted tire and wheel assembly. Refer to <u>Tire and Wheel Assembly Runout Measurement - Off Vehicle</u>. Were you able to significantly reduce the amount of tire and wheel assembly runout?	Go to Step 11	Go to Step 19
11	Re-measure the on-vehicle runout of the tire and wheel assemblies. Refer to <u>Tire and Wheel Assembly Runout Measurement - On-Vehicle</u> . Does the measurement indicate a runout concern?	Go to Step 15	Go to Step 23
12	Inspect the balance of the tire and wheel assemblies. Refer to <u>Tire and Wheel Assembly Balancing - Off Vehicle</u> . Are any or the tire and wheel assemblies out of balance?	Go to Step 13	Go to Step 14
13	Balance the tire and wheel assemblies as necessary. Refer to <u>Tire and Wheel Assembly Balancing - Off Vehicle</u> . Were you able to achieve balance?	Go to Step 23	Go to Vibration Diagnostic Aids
14	1. Inspect the brake rotors and brake drums, if equipped, for damage. 2. Inspect the balance of the brake rotors and brake drums, if equipped. Refer to <u>Brake Rotor/Drum Balance Inspection</u>. 3. Replace brake rotors and/or brake drums, if equipped, that are damaged and/or out of balance. Did you find and correct a condition?	Go to Step 23	Go to Step 17

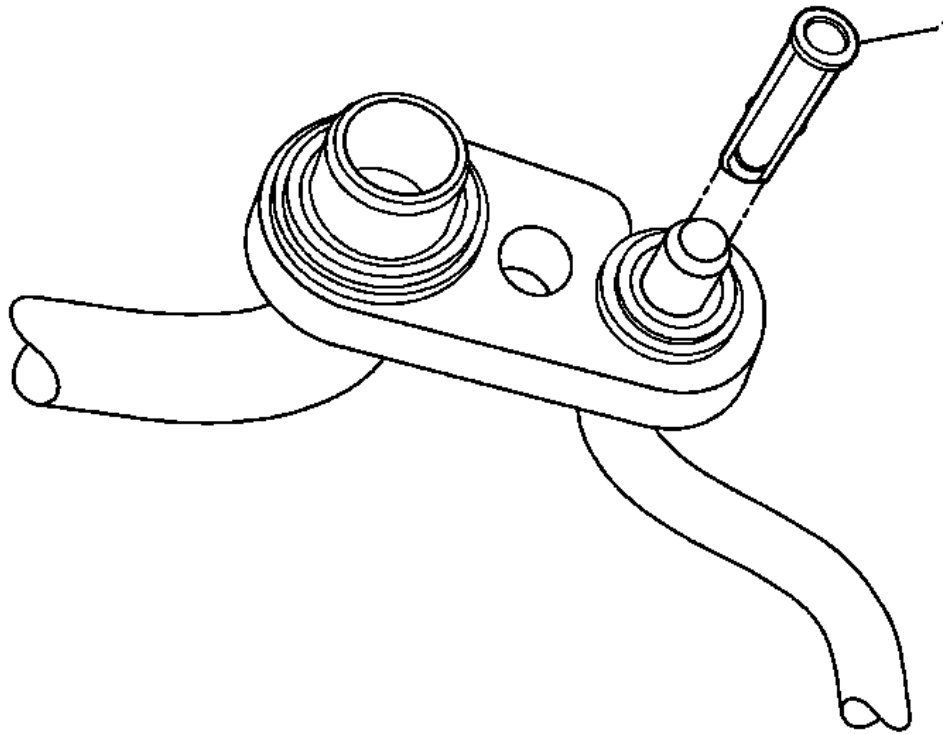


Fig. 33: Locating Air Conditioning (AC) Refrigerant Filter (Auxiliary)
 Courtesy of GENERAL MOTORS COMPANY

Air Conditioning (AC) Refrigerant Filter Replacement

Callout	Component Name
Preliminary Procedure	
Remove the Auxiliary A/C Evaporator Tube. Refer to <u>Auxiliary Air Conditioning Evaporator Tube Replacement</u>	
1	Auxiliary A/C Refrigerant Filter.

AIR CONDITIONING REFRIGERANT SERVICE VALVE CORE REPLACEMENT

Special Tools

- **GE 50078** Electronic Leak Detector
- **GE 46246** Valve Core Tool

For equivalent regional tools. Refer to **Special Tools**.

Removal Procedure

1. Recover the refrigerant from the A/C system. Refer to **Refrigerant Recovery and Recharging**.

1. Verify that DTC B0052 00 is not set.

○ **If DTC B0052 00 is set**

Clear the DTC. If the DTC will not clear, replace the K36 Inflatable Restraint Sensing and Diagnostic Module.

○ **If DTC B0052 00 is not set**

2. Verify that DTC B0052 56 is not set.

○ **If DTC B0052 56 is set**

Replace the K36 Inflatable Restraint Sensing and Diagnostic Module.

○ **If DTC B0052 56 is not set**

3. All OK.

Repair Instructions

Perform the **Diagnostic Repair Verification** after completing the repair.

Control Module References for inflatable restraint sensing and diagnostic module replacement, programming and setup

DTC B0074: PASSENGER PRESENCE SENSOR

Diagnostic Instructions

- Perform the **Diagnostic System Check - Vehicle** prior to using this diagnostic procedure.
- Review **Strategy Based Diagnosis** for an overview of the diagnostic approach.
- **Diagnostic Procedure Instructions** provides an overview of each diagnostic category.

DTC Descriptors

DTC B0074 00

Passenger Presence Sensor

DTC B0074 0D

Passenger Presence Sensor Circuit Resistance Above Threshold

DTC B0074 0E

Passenger Presence Sensor Circuit Resistance Below Threshold

DTC B0074 0F

2014 GMC Acadia Denali**2014 SUSPENSION GMC WHEEL ALIGNMENT SPECIFICATIONS**

Right Toe Out, Outward (°)	0	0	0
Left Max Turn, Inward (°)	0	0	0
Right Max Turn, Inward (°)	0	0	0
Left Max Turn, Outward (°)	0	0	0
Right Max Turn, Outward (°)	0	-	-

**SIERRA (1500 Regular Cab) and Denali (1500 Regular Cab) Regular Box (6' 6")
w/QXR,QXN,QXQ,RBX,QGI**

Measurement	Minimum	Preferred	Maximum
Left Front Caster (°)	1.35	2.35	3.35
Right Front Caster (°)	1.25	2.25	3.25
Left Front Camber (°)	-0.9	-0.1	0.7
Right Front Camber (°)	-0.9	-0.1	0.7
Front Toe (°)	-0.1	0.1	0.3
Left SAI (°)	0	0	0
Right SAI (°)	0	0	0
Left Rear Camber (°)	0	0	0
Right Rear Camber (°)	0	0	0
Rear Toe (°)	0	0	0
Thrust Angle	0.4	0	0
Left Toe Out, Inward (°)	0	0	0
Right Toe Out, Inward (°)	0	0	0
Left Toe Out, Outward (°)	0	0	0
Right Toe Out, Outward (°)	0	0	0
Left Max Turn, Inward (°)	0	0	0
Right Max Turn, Inward (°)	0	0	0
Left Max Turn, Outward (°)	0	0	0
Right Max Turn, Outward (°)	0	-	-

SIERRA (2500 and 3500 Crew Cab - Diesel) CK 2500 Long Box (8' 0") (Box Delete) SRW W/O QXT

Measurement	Minimum	Preferred	Maximum
Left Front Caster (°)	1.3	2.3	3.3
Right Front Caster (°)	1.3	2.3	3.3
Left Front Camber (°)	-0.3	0.5	1.3
Right Front Camber (°)	-0.3	0.5	1.3
Front Toe (°)	-0.1	0.1	0.3
Left SAI (°)	0	0	0
Right SAI (°)	0	0	0
Left Rear Camber (°)	0	0	0
Right Rear Camber (°)	0	0	0
Rear Toe (°)	0	0	0

510

1

Manual Shift Shaft Pin

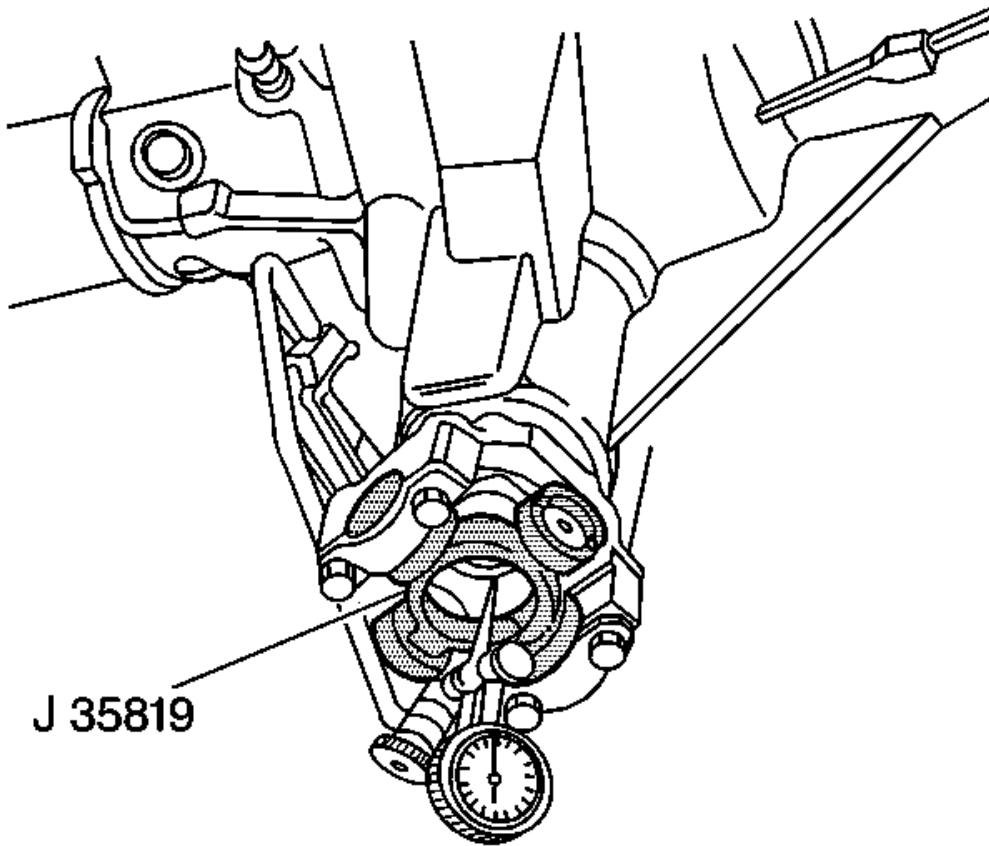
A/Trans Service Seal Kit 24256112

Fig. 7: Automatic Transmission Service Seal Kit 24256112
Courtesy of GENERAL MOTORS COMPANY

NOTE: Callouts with boxes around them indicate part is included in the service kit.
Callouts without boxes are shown for relationship purposes only.

A/Trans Service Seal Kit 24256112

Callout	Quantity	Component Name
58	1	Front Differential Drive Pinion Gear Lube Dam
61	1	Front Wheel Drive Shaft Oil Seal Assembly
224	1	Front Differential Drive Pinion Gear Lube Dam
226	1	Front Wheel Drive Shaft Oil (RHS) Seal Assembly