

2018 HVAC**Heating, Ventilation, And Air Conditioning - Equinox & Terrain****SPECIFICATIONS****FASTENER SPECIFICATIONS****Single Use Non-Threaded Fasteners/Components****NOTE:**

All fasteners/components listed in this table MUST BE DISCARDED and replaced with NEW after removal.

Application
Air Conditioning System Sealing Washer
Heater Core Inlet Tube Clamp
Heater Core Outlet Tube Clamp
O-Ring Seal

Reusable Threaded Fastener Tightening Specifications**NOTE:**

All fasteners listed in this table can be reused after removal.

Application	Specification
	Metric (English)
Air Conditioning Compressor Bolt	22 N.m (16 lb ft)
Air Conditioning Compressor Bracket Bolt	22 N.m (16 lb ft)
Air Conditioning Compressor Drain Plug	15 N.m (11 lb ft)
Air Conditioning Compressor Nut	22 N.m (16 lb ft)
Air Conditioning Compressor Pressure Relief Valve	15 N.m (11 lb ft)
Air Conditioning Compressor Stud	9 N.m (80 lb in)
Air Conditioning Cycling and Fan Control Refrigerant Pressure Sensor	7 N.m (62 lb in)
Air Conditioning Evaporator Case Bolt	2.5 N.m (22 lb in)
Air Conditioning Evaporator Connector Hose/Tube and Compressor Hose Nut	22 N.m (16 lb ft)
Air Conditioning Evaporator Thermal Expansion Valve Bolt	9 N.m (80 lb in)
Air Conditioning Evaporator Thermal Expansion Valveblock fitting nut	20 N.m (15 lb ft)
Air Conditioning Refrigerant Desiccant	12 N.m (106 lb in)
Air Conditioning Refrigerant Heat Exchanger Nut	22 N.m (16 lb ft)
Air Conditioning Refrigerant Service Valve (High Side Port)	2 N.m (18 lb in)
Air Inlet Duct Nut	5 N.m (44 lb in)
Air Inlet Housing Bolt	2.5 N.m (22 lb in)
Auxiliary Heater Core Screw	2.5 N.m (22 lb in)
Blower Motor Bolt	1.2 N.m (11 lb in)
Floor Front Air Outlet Duct Bolt	2.5 N.m (22 lb in)
Heater and Air Conditioning Evaporator and Blower Module Nut	9 N.m (80 lb in)
Heater Core Bracket Bolt	2.5 N.m (22 lb in)
Heater Core Tube Bracket Bolt	2.5 N.m (22 lb in)
Heater Inlet Hose Bracket Bolt	9 N.m (80 lb in)

NOTE:

All fasteners listed in this table can be reused after removal.

Application	Specification
	Metric (English)
Heater Inlet Pipe Bracket Bolt	9 N.m (80 lb in)
Heater Water Auxiliary Pump Inlet Hose Nut	9 N.m (80 lb in)
Instrument Panel Center Air Outlet Bolt	2.5 N.m (22 lb in)
Instrument Panel Center Air Outlet Duct Bolt	2.5 N.m (22 lb in)
Instrument Panel Outer Air Outlet Bolt	2.5 N.m (22 lb in)
Side Window Defogger Outlet Duct Bolt	2.5 N.m (22 lb in)
Windshield Defroster Outlet Duct Bolt	1.5 N.m (13 lb in)

APPROXIMATE FLUID CAPACITIES

Refrigerant System Capacities

Application	Specification	
	Metric	English
Abrupt Refrigerant Loss	45 ml ¹	1.5 oz ¹
PAG Oil-Refer to Adhesives, Fluids, Lubricants, and Sealers .		
Compressor Replacement		
NOTE: Compressor failure can occur if the oil removed during refrigerant recovery is not replaced. The service compressor is precharged with one of the following specified amounts of PAG oil. Refer to the instruction sheet included with the service compressor.	40 ml ²	1.4 oz ²
Condenser Replacement	45 ml ²	1.5 oz ²
Evaporator Replacement	45 ml ²	1.5 oz ²
Receiver/Dehydrator	7.5 ml ²	0.3 oz ²
Any Line Set (Hose/Tube or Tube Assembly) Replacement	22.5 ml ²	0.8 oz ²
Total System PAG Oil Capacity	150.0 ml	5.1 oz
R-134a (Without KRV)		
Refrigerant Charge	0.54 kg	17.4 oz
R-1234yf (With KRV)		
Refrigerant Charge	0.45 kg	14.5 oz

¹ Abrupt refrigerant loss due to large leak, hose rupture, collision, or pressure relief valve opening. Conditions that allow the refrigerant to seep or bleed off over time do not cause this oil loss. Upon replacement of a component that caused a large refrigerant loss, also add the required amount of oil for the particular component.

² If more than the specified amount of PAG oil was drained from a component, add the amount drained.

ADHESIVES, FLUIDS, LUBRICANTS, AND SEALERS

Application	Type of Material	GM Part Number	
		United States	Canada
Cooling Coil Coating Applicator Kit	Coating	12346391	88865439
Cooling Coil Coating Applicator Kit - Refil Kit	Coating	12346390	88865440

Application	Type of Material	GM Part Number	
		United States	Canada
PAG Oil (R-134a)	Lubricant	88901445	88900060
PAG Oil (R-1234yf)	Lubricant	19354657	19354658

VISUAL IDENTIFICATION

REFRIGERANT LABEL SYMBOLS

Air Conditioning Service Fittings

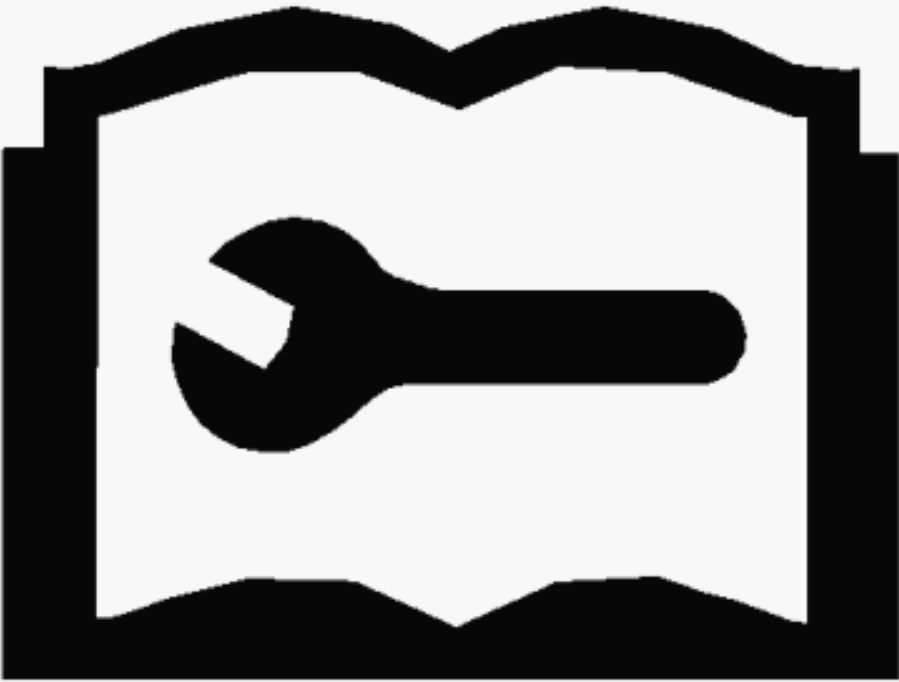
Service fittings meeting SAE J639 are used on this vehicle for R-1234yf refrigerant. GM has chosen gray caps to designate systems with R-1234yf.

Refrigerant Charge Label Symbols

Symbols	Description
	Caution

Symbols	Description
	Air Conditioning System- Mobile Air Conditioning

Symbols	Description
	MAC System Lubricant Type

Symbols	Description
	See Vehicle Service Information for MAC Service Information

Symbols	Description
	Requires Registered Technician to Service MAC System

Symbols	Description
	Flammable Refrigerant

Symbols	Description
	For Safety System Components Shall Be Replaced- Shall Not Be Repaired or Salvaged for Reuse

DIAGNOSTIC INFORMATION AND PROCEDURES

HANDLING OF REFRIGERANT LINES AND FITTINGS

CAUTION: To avoid system damage use only R-1234yf and R-134a dedicated tools when servicing the A/C system.

- Keep all metal tubing lines free of dents or kinks. Any line restrictions will cause the loss of system capacity.
- Never bend a flexible hose line to a radius of less than four times the diameter of the hose.
- Never allow a flexible hose line to come within 65 mm (2 - 1/2 in) of the exhaust manifold.
- Inspect flexible hose lines regularly for leaks or brittleness.
- Replace flexible hose lines with new lines if you find signs of deterioration or leaking.
- Discharge the refrigeration system of all refrigerant before disconnecting any fitting in the refrigeration system.
- Proceed very cautiously regardless of the gauge readings.

WARNING: For personal protection, goggles and lint-free gloves should be worn and a clean cloth wrapped around fittings, valves, and connections when doing work that includes opening the refrigerant system. If refrigerant comes in contact with any part of the body severe frostbite and personal injury can result. The exposed area should be flushed immediately with cold water and prompt medical help should be obtained.

- Open the fittings very slowly.

- If you notice pressure when you loosen a fitting, allow the pressure to bleed off as described Discharging, Adding Oil, Evacuating, and Charging Procedures for A/C System.
- Cap or tape any refrigerant line immediately after it is opened. This will prevent the entrance of moisture and dirt, which can cause internal compressor wear or plugged lines in the condenser, the evaporator core, the expansion valve, or the compressor inlet screens.

NOTE: Use two proper wrenches to connect the fittings.

- Back up the opposing fitting to prevent distortion of the connecting lines or the components.
- Keep the sealing surfaces in perfect condition. A burr or a piece of dirt may cause a refrigerant leak.
- When seal washers are used, always install the seal washer without lubrication.
- When O-rings are used, always lightly coat the new O-ring seal with the proper viscosity and type refrigerant oil prior to installation.

SYMPTOMS - HEATING, VENTILATION, AND AIR CONDITIONING

NOTE: The following steps must be completed before using the symptom tables.

1. Perform the [Diagnostic Starting Point - Vehicle](#) before using the symptom tables in order to verify that all of the following are true:
 - There are no DTCs set
 - The control modules can communicate via the serial data link
2. Review the system operation in order to familiarize yourself with the system functions. [Automatic HVAC Description and Operation](#) , or [Manual HVAC Description and Operation](#) , or [Heating and Air Conditioning System Description and Operation](#)

Visual/Physical Inspection

- Inspect for aftermarket devices which could affect the operation of the HVAC System. [Checking Aftermarket Accessories](#)
- Inspect the easily accessible or visible system components for obvious damage or conditions which could cause the symptom.
- Verify the A/C compressor clutch turns freely and is not seized.
- The A/C compressor will not operate in cold outside air temperatures.
- The following could cause window fogging:
 - Wet carpet or mats
 - High humidity
 - Interior water leak
 - Blocked A/C evaporator drain tube
 - Maximum passenger capacity
 - Blocked body pressure relief valves
- Inspect the air distribution system for causes of reduced air flow:
 - Obstructed or dirty passenger compartment air filter, if equipped
 - Blocked or damaged air inlet or outlet vents

Intermittent

Faulty electrical connections or wiring may be the cause of intermittent conditions. [Testing for Intermittent Conditions and Poor Connections](#)

Symptom List

Refer to a symptom diagnostic procedure from the following list in order to diagnose the symptom:

- [Leak Testing \(R-134a\)](#)[Leak Testing \(R-1234yf\)](#)
- [Noise Diagnosis - HVAC Module](#)
- [Noise Diagnosis - Air Conditioning \(A/C\) System](#)

- [Noise Diagnosis - Blower Motor](#)
- [Odor Diagnosis](#)

LEAK TESTING (R-134A)

Special Tools

- **GE-41447** A/C Tracer Dye-Box of 24
- **GE-42220** Universal 12V Leak Detection Lamp
- **GE-43872** Fluorescent Dye Cleaner
- **GE-50078** Electronic Leak Detector
- **GE-50744** R-1234yf PAG Oil Injection Hose
- **GE-50745** R-1234yf POG Oil Injection Hose

Equivalent regional tools: [Special Tools](#)

Refrigerant Leak Testing

Technicians repairing or servicing motor vehicle air conditioning (MVAC) systems must be trained and certified by an Environmental Protection Agency (EPA) approved organization. Certification is obtained by passing an EPA approved examination. (<http://www.epa.gov/ozone/title6/609/technicians/609certs.html>)

WARNING: Technicians must only use a SAE J2913 certified electronic leak detector when checking for leaks in an R-1234yf A/C refrigerant system. Other, non - certified, leak detection devices could serve as ignition sources in the presence of hydrocarbons or other flammable refrigerants. Failure to follow these precautions may cause personal injury and/or damage to the vehicle or its components.

WARNING: Refer to [R-1234yf Proper Service Procedures Warning](#)

WARNING: *R1234-yf is considered a mildly flammable refrigerant and proper refrigerant leak testing should be completed to ensure safe and proper operation. Failure to follow these precautions may cause personal injury and/or damage to the vehicle or its components.*

CAUTION: Leak detection shall only be done with the refrigerant that is specified for the system. Do not attempt to increase pressure of the A/C refrigerant system with shop air or another type of refrigerant. Failure to follow the above guidelines could result in damage to the vehicle or its components.

NOTE: General Motors vehicles are manufactured with fluorescent dye installed in the Air Conditioning (A/C) refrigerant system.

The fluorescent dye mixes and flows with the A/C compressor oil throughout the refrigerant system.

NOTE: The only time adding additional fluorescent dye is required is after flushing the A/C system.

Verifying some passive leaks may require using **GE-50078** Electronic Leak Detector or a SAE J2913 certified electronic leak detector, even though the refrigerant system contains fluorescent dye.

Fluorescent Leak Detection

Fluorescent dye will assist in locating any leaks in the A/C system.

- Condensation on the evaporator core or the refrigerant lines may wash the compressor oil and fluorescent dye away from the actual leak. Condensation may also carry dye through the Heating Ventilation and Air Conditioning (HVAC) module drain.
- Leaks in the A/C system will be indicated in a light green or yellow color when using the leak detection lamp.

Use the leak detection lamp in the following areas:

- All fittings or connections that use seal washers or O-rings
 - All of the A/C components
 - The A/C compressor shaft seal
 - The A/C hoses and pressure switches
 - The HVAC module drain tube, if the evaporator core is suspected of leaking
 - The service port sealing caps
 - The sealing cap is the primary seal for the service ports
- Follow the instructions supplied with **GE-42220** Universal 12V Leak Detection Lamp.
 - To prevent false diagnosis in the future, thoroughly clean the residual dye from any area where leaks were found. Use a rag and the approved **GE-43872** Fluorescent Dye Cleaner.

Fluorescent Dye Injection

NOTE: Use only fluorescent dye approved by General Motors.

- Not all of the fluorescent dyes are compatible with all air conditioning oils. Some types of dye decrease the oil viscosity or may chemically react with the oil.
- **GE-41447** A/C Tracer Dye-Box of 24 can be poured directly into a removed A/C component.

NOTE: Do NOT overcharge the A/C system with dye.

- If the A/C system has been repaired and oil is needed in the system, use either the **GE-50744** R-1234yf PAG Oil Injection Hose or **GE-50745** R-1234yf POG Oil Injection Hose.
- Leak detection dye requires time to work. Depending upon the leak rate, a leak may not become visible for between 15 minutes and 7 days.
- To prevent false diagnosis, thoroughly clean any residual dye from the service port with a rag and the approved **GE-43872** Fluorescent Dye Cleaner.

Electronic Leak Detector - SAE J2913 Certified

Ensure that the vehicle has at least 15 percent of the specified refrigerant charge in the A/C refrigeration system in order to perform a leak test. Refer to [Refrigerant Recovery and Recharging \(R-134a\)](#)[Refrigerant Recovery and Recharging \(R-1234yf\)](#).

NOTE: Follow a continuous path in order to ensure that you will not miss any possible leaks. Test all areas of the system for leaks.

Follow the manufacturer instructions supplied with **GE-50078** Electronic Leak Detector or a SAE J2913 certified electronic leak detector.

LEAK TESTING (R-1234YF)

Special Tools

- **GE-41447** Air Conditioning Tracer Dye-Box of 24
- **GE-42220** Universal 12V Leak Detection Lamp
- **GE-43872** Fluorescent Dye Cleaner
- **GE-50078** Electronic Leak Detector

Equivalent regional tools: [Special Tools](#)

Refrigerant Leak Testing

In certain regions, technicians repairing or servicing motor vehicle air conditioning (MVAC) systems must be trained and certified by the appropriate regional or national regulatory agency.

- In the USA, refer to the EPA website for MVAC training requirements.
<http://www.epa.gov/ozone/title6/609/technicians/609certs.html>

- In Canada, refer to the Environment Canada website for MVAC training requirements. <http://www.ec.gc.ca/ozone/default.asp?lang=En&n=943E1CAB-1#ws4E6F6835>
- In Europe, refer to Commission Regulation (EC) No 307/2008 for MVAC training requirements. <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2008:092:0025:0027:EN:PDF>

WARNING: Technicians must only use a SAE J2913 certified electronic leak detector when checking for leaks in an R-1234yf A/C refrigerant system. Other, non - certified, leak detection devices could serve as ignition sources in the presence of hydrocarbons or other flammable refrigerants. Failure to follow these precautions may cause personal injury and/or damage to the vehicle or its components.

WARNING: R-1234yf Proper Service Procedures Warning

WARNING: *R1234-yf is considered a mildly flammable refrigerant and proper refrigerant leak testing should be completed to ensure safe and proper operation. Failure to follow these precautions may cause personal injury and/or damage to the vehicle or its components.*

WARNING: Evaporators in vehicles equipped with R-1234yf refrigerant systems must never be repaired or replaced with an evaporator removed from another or salvage vehicle. Use only new SAE J2842 certified and labeled evaporator(s) as replacement parts. Failure to follow this guideline could pose a health and/or safety risk to the vehicle occupant(s).

CAUTION: Leak detection shall only be done with the refrigerant that is specified for the system. Do not attempt to increase pressure of the A/C refrigerant system with shop air or another type of refrigerant. Failure to follow the above guidelines could result in damage to the vehicle or its components.

NOTE: General Motors vehicles are manufactured with fluorescent dye installed in the air conditioning refrigerant system.

The fluorescent dye mixes and flows with the air conditioning compressor oil throughout the refrigerant system.

NOTE: The only time adding additional fluorescent dye is required is after flushing the air conditioning system.

Verifying some passive leaks may require using **GE-50078** Electronic Leak Detector or a SAE J2913 certified electronic leak detector, even though the refrigerant system contains fluorescent dye.

Fluorescent Leak Detection

Fluorescent dye will assist in locating any leaks in the air conditioning system.

- Condensation on the evaporator core or the refrigerant lines may wash the compressor oil and fluorescent dye away from the actual leak. Condensation may also carry dye through the HVAC module drain.
- Leaks in the air conditioning system will be indicated in a light green or yellow color when using the leak detection lamp.

Use the leak detection lamp in the following areas:

- All fittings or connections that use seal washers or O-rings
- All of the air conditioning components
- The air conditioning compressor shaft seal
- The air conditioning hoses and pressure switches
- The HVAC module drain tube, if the evaporator core is suspected of leaking
- The service port sealing caps
- The sealing cap is the primary seal for the service ports.
- Engine drive belt(s) - (Replace if contaminated with fluorescent dye)

- Air conditioning compressor high pressure relief valve (HPRV)
- Air conditioning compressor high pressure relief valve (HPRV) Cap
- Follow the instructions supplied with **GE-42220** Universal 12V Leak Detection Lamp.
- To prevent false diagnosis in the future, thoroughly clean the residual dye from any area where leaks were found. Use a rag and the approved **GE-43872** Fluorescent Dye Cleaner.

Fluorescent Dye Injection

NOTE: Use only fluorescent dye approved by General Motors.

- Not all of the fluorescent dyes are compatible with all air conditioning oils. Some types of dye decrease the oil viscosity or may chemically react with the oil.
- **GE-41447** A/C Tracer Dye-Box of 24 can be poured directly into a removed air conditioning component.

NOTE: Do NOT overcharge the air conditioning system with dye.

- Leak detection dye requires time to work. Depending upon the leak rate, a leak may not become visible for between 15 minutes and 7 days.
- To prevent false diagnosis, thoroughly clean any residual dye from the service port with a rag and the approved **GE-43872** Fluorescent Dye Cleaner.

Electronic Leak Detector - SAE J2913 Certified

Ensure that the vehicle has at least 15 percent of the specified refrigerant charge in the air conditioning refrigeration system in order to perform a leak test. **Refrigerant Recovery and Recharging (R-134a)****Refrigerant Recovery and Recharging (R-1234yf)**

NOTE: Follow a continuous path in order to ensure that you will not miss any possible leaks. Test all areas of the system for leaks.

Follow the manufacturer instructions supplied with **GE-50078** Electronic Leak Detector or a SAE J2913 certified electronic leak detector.

AIR CONDITIONING (A/C) SYSTEM PERFORMANCE TEST (R-134A)

This test measures the operating efficiency of the A/C system under the following conditions:

- The current ambient air temperature
- The current relative humidity
- The high side pressure of the A/C system
- The low side pressure of the A/C system
- The temperature of the air being discharged into the passenger compartment

Test Description

The numbers below refer to the step numbers on the diagnostic table.

1

This step determines if the A/C system has at least the minimum refrigerant charge required to operate the system without damage.

2

This step measures the performance of the A/C system.

3

This step is to allow for vehicle variations as well as high ambient temperatures.

Step	Action	Values	Yes	No

Step	Action	Values	Yes	No
NOTE: - The ambient air temperature must be at least 16Â°C (60Â°F). - Do not induce additional air flow across the front of the vehicle during the test. - If you were sent here from a DTC diagnostic table, clear the DTC upon completion of this test.				
1	- Park the vehicle inside or in the shade. - Update the ambient air temperature display using a scan tool. - Open the windows in order to ventilate the interior of the vehicle. - If the A/C system was operating, allow the A/C system to equalize for about 2 minutes. - Turn OFF the ignition. - Install the J 43600 ACR 2000 Air Conditioning Service Center. - Record the ambient air temperature displayed on the J 43600 ACR 2000 Air Conditioning Service Center. - Record the low and high side STATIC pressure readings. Are both the low side and high side pressures within the specified value?	More than 16Â°C (60Â°F) - 345 kPa (50 psi) More than 24Â°C (75Â°F) - 483 kPa (70 psi) More than 33Â°C (90Â°F) - 690 kPa (100 psi)	Go to Step 2	Go to Leak Testing (R-134a)

Step	Action	Values	Yes	No
2	NOTE: Record the relative humidity and the ambient air temperature at the time of the test. 1. Close the vehicle doors and windows. 2. Open the drivers door window 12.7 - 15.2 cm (5 - 6 in). 3. Select the following HVAC control settings: • The A/C is ON • The coldest temperature setting • The maximum blower speed • Recirculation mode • The panel outlet mode • All panel outlets are OPEN 4. Install the temperature probes of the J 43600 ACR 2000 Air Conditioning Service Center in the left and right center panel air outlets. 5. Apply the parking brake. 6. Place the transaxle/transmission in PARK. 7. Start the engine. 8. Operate the A/C system for 5 minutes. 9. Inspect A/C components for the following conditions: • Abnormal frost areas • Unusual noises 10. Print the following information: • The panel outlet air temperatures • The low-side pressure • The high-side pressure 11. Compare the low and high side pressures and the panel output temperatures to the A/C performance table below. Does all the data recorded fall within the specified ranges of the A/C performance table?	-	Go to Step 5	Go to Step 3
3	If the pressures and temperatures recorded do not fall within the specified ranges: 1. Continue to operate the A/C system for an additional 5 minutes. 2. RESET the J 43600 ACR 2000 Air Conditioning Service Center and record the pressures and temperatures again. 3. Compare the low and high side pressures and the panel output temperature to the A/C performance table. Does all the data recorded fall within the specified ranges of the A/C performance table?	-	Go to Step 5	Go to Step 4
4	Perform the necessary repairs. A/C Diagnostics Chart. Is the action complete?	-	Go to Step 5	-

Step	Action	Values	Yes	No
5	Operate the system in order to verify the test results. Did you find the same results?	-	System OK	Go to Symptoms - HVAC Systems - Automatic

A/C Performance Table

Ambient Temperature	Relative Humidity	Low Side Service Port Pressure	High Side Service Port Pressure	Maximum Left Center Discharge Air Temperature
13 - 18°C (55 - 65°F)	0 - 100%	151 - 220 kPa (22 - 32 psi)	613 - 909 kPa (89 - 132 psi)	8°C (45°F)
19 - 24°C (66 - 75°F)	Below 40%	151 - 213 kPa (22 - 31 psi)	716 - 1026 kPa (104 - 149 psi)	7°C (43°F)
	Above 40%	151 - 248 kPa (22 - 36 psi)	771 - 1088 kPa (112 - 158 psi)	9°C (48°F)
25 - 29°C (76 - 85°F)	Below 35%	151 - 227 kPa (22 - 33 psi)	923 - 1178 kPa (134 - 171 psi)	8°C (46°F)
	35 - 50%	165 - 241 kPa (24 - 35 psi)	950 - 1198 kPa (138 - 174 psi)	8°C (46°F)
	Above 50%	179 - 261 kPa (26 - 38 psi)	971 - 1240 kPa (141 - 180 psi)	10°C (50°F)
30 - 35°C (86 - 95°F)	Below 30%	172 - 248 kPa (25 - 36 psi)	1067 - 1357 kPa (155 - 197 psi)	10°C (50°F)
	30 - 50%	186 - 261 kPa (27 - 38 psi)	1088 - 1378 kPa (158 - 200 psi)	12°C (52°F)
	Above 50%	199 - 275 kPa (29 - 40 psi)	1123 - 1419 kPa (163 - 206 psi)	13°C (54°F)
36 - 41°C (96 - 105°F)	Below 20%	199 - 275 kPa (29 - 40 psi)	1247 - 1259 kPa (181 - 222 psi)	13°C (54°F)
	20 - 40%	206 - 282 kPa (30 - 41 psi)	1260 - 1557 kPa (183 - 226 psi)	13°C (55°F)
	Above 40%	213 - 282 kPa (31 - 41 psi)	1288 - 1577 kPa (187 - 229 psi)	14°C (57°F)
42 - 46°C (106 - 115°F)	Below 20%	234 - 296 kPa (34 - 43 psi)	1440 - 1688 kPa (209 - 245 psi)	14°C (57°F)
	Above 20%	234 - 303 kPa (34 - 44 psi)	1446 - 1708 kPa (210 - 248 psi)	15°C (59°F)
47 - 49°C (116 - 120°F)	Below 30%	254 - 323 kPa (37 - 47 psi)	1612 - 1853 kPa (234 - 269 psi)	18°C (63°F)

AIR CONDITIONING (A/C) SYSTEM PERFORMANCE TEST (R-1234YF)

This test measures the operating efficiency of the A/C system under the following conditions:

- The current ambient air temperature
- The current relative humidity
- The high side pressure of the A/C system
- The low side pressure of the A/C system
- The temperature of the air being discharged into the passenger compartment

Test Description

The numbers below refer to the step numbers on the diagnostic table.

1

This step determines if the A/C system has at least the minimum refrigerant charge required to operate the system without damage.

2

This step measures the performance of the A/C system.

3

This step is to allow for vehicle variations as well as high ambient temperatures.

Step	Action	Values	Yes	No
NOTE: - The ambient air temperature must be at least 16°C (60°F). - Do not induce additional air flow across the front of the vehicle during the test. - If you were sent here from a DTC diagnostic table, clear the DTC upon completion of this test.				
1	1. Park the vehicle inside or in the shade. 2. Update the ambient air temperature display using a scan tool. 3. Open the windows in order to ventilate the interior of the vehicle. 4. If the A/C system was operating, allow the A/C system to equalize for about 2 minutes. 5. Turn OFF the ignition. 6. Install the GE 50300-A R-1234yf A/C Refrigerant Recovery/ Recharge Cart. 7. Record the ambient air temperature displayed on the GE 50300-A R-1234yf A/C Refrigerant Recovery/ Recharge Cart. 8. Record the low and high side STATIC pressure readings. Are both the low side and high side pressures within the specified value?	More than 16°C (60°F) - 345 kPa (50 psi) More than 24°C (75°F) - 483 kPa (70 psi) More than 33°C (90°F) - 690 kPa (100 psi)	Go to Step 2	Go to Leak Testing (R-1234yf)

Step	Action	Values	Yes	No
2	NOTE: Record the relative humidity and the ambient air temperature at the time of the test. 1. Close the vehicle doors and windows. 2. Open the drivers door window 12.7 - 15.2 cm (5 - 6 in). 3. Select the following HVAC control settings: • The A/C is ON • The coldest temperature setting • The maximum blower speed • Recirculation mode • The panel outlet mode • All panel outlets are OPEN 4. Install suitable temperature probes in the left and right center panel air outlets. 5. Apply the parking brake. 6. Place the transaxle/transmission in PARK. 7. Start the engine. 8. Operate the A/C system for 5 minutes. 9. Inspect A/C components for the following conditions: • Abnormal frost areas • Unusual noises 10. Print the following information: • The panel outlet air temperatures • The low-side pressure • The high-side pressure 11. Compare the low and high side pressures and the panel output temperatures to the A/C performance table below. Does all the data recorded fall within the specified ranges of the A/C performance table?	-	Go to Step 5	Go to Step 3
3	If the pressures and temperatures recorded do not fall within the specified ranges: 1. Continue to operate the A/C system for an additional 5 minutes. 2. RESET the GE 50300-A R-1234yf A/C Refrigerant Recovery/ Recharge Cart and record the pressures and temperatures again. 3. Compare the low and high side pressures and the panel output temperature to the A/C performance table. Does all the data recorded fall within the specified ranges of the A/C performance table?	-	Go to Step 5	Go to Step 4
4	Perform the necessary repairs. <u>A/C Diagnostics Chart.</u> Is the action complete?	-	Go to Step 5	-

Step	Action	Values	Yes	No
5	Operate the system in order to verify the test results. Did you find the same results?	-	System OK	Go to Symptoms - HVAC Systems - Automatic

A/C Performance Table

Ambient Temperature	Relative Humidity	Low Side Service Port Pressure	High Side Service Port Pressure	Maximum Left Center Discharge Air Temperature
13 - 18Â°C (55 - 65Â°F)	0 - 100%	179 - 254 kPa (26 - 37 psi)	757 - 868 kPa (110 - 126 psi)	7Â°C (43Â°F)
19 - 24Â°C (66 - 75Â°F)	Below 40%	165 - 248 kPa (24 - 36 psi)	950 - 1102 kPa (138 - 160 psi)	7Â°C (43Â°F)
	Above 40%	186 - 268 kPa (27 - 39 psi)	881 - 1040 kPa (128 - 151 psi)	8Â°C (45Â°F)
25 - 29Â°C (76 - 85Â°F)	Below 35%	192 - 254 kPa (28 - 37 psi)	1061 - 1233 kPa (154 - 179 psi)	8Â°C (45Â°F)
	35 - 50%	199 - 261 kPa (29 - 38 psi)	1026 - 1212 kPa (149 - 176 psi)	8Â°C (45Â°F)
	Above 50%	213 - 268 kPa (31 - 39 psi)	1012 - 1178 kPa (147 - 171 psi)	8Â°C (46Â°F)
30 - 35Â°C (86 - 95Â°F)	Below 30%	213 - 275 kPa (31 - 40 psi)	1171 - 1371 kPa (170 - 199 psi)	9Â°C (48Â°F)
	30 - 50%	213 - 275 kPa (31 - 40)	1150 - 1357 kPa (167 - 197 psi)	9Â°C (48Â°F)
	Above 50%	220 - 275 kPa (32 - 40 psi)	1129 - 1350 kPa (164 - 196 psi)	9Â°C (48Â°F)
36 - 41Â°C (96 - 105Â°F)	Below 20%	234 - 296 kPa (34 - 43 psi)	1288 - 1502 kPa (187 - 218 psi)	12Â°C (52Â°F)
	20 - 40%	234 - 289 kPa (34 - 42 psi)	1288 - 1508 kPa (187 - 219 psi)	12Â°C (52Â°F)
	Above 40%	234 - 289 kPa (34 - 42 psi)	1281 - 1508 kPa (186 - 219 psi)	12Â°C (52Â°F)
42 - 46Â°C (106 - 115Â°F)	Below 20%	261 - 316 kPa (38 - 46 psi)	1419 - 1612 kPa (206 - 234 psi)	13Â°C (55Â°F)
	Above 20%	254 - 303 kPa (37 - 44 psi)	1419 - 1632 kPa (206 - 237 psi)	13Â°C (55Â°F)
47 - 49Â°C (116 - 120Â°F)	Below 30%	275 - 323 kPa (40 - 47 psi)	1529 - 1729 kPa (222 - 251 psi)	15Â°C (59Â°F)

A/C DIAGNOSTICS CHART

A/C System Concern		Potential Causes
Compressor Inoperative		Electrical Wiring Issue
		No or Low Refrigerant Charge
		Compressor Internal Malfunction
		Compressor Clutch Malfunction
		A/C Pressure Sensor Malfunction
		Evaporator Air Temperature (EAT) Malfunction
		HVAC Controls Malfunction
Low Side Gauge Reading	High Side Gauge Reading	Potential Causes
Same as High Side	Same as Low Side	No or Low Refrigerant Charge
		Compressor Malfunction
		A/C Pressure Sensor Malfunction
		EAT Malfunction
		HVAC Controls Malfunction

A/C System Concern		Potential Causes
Normal	Normal	Temperature Actuator Malfunction
		Temperature Door Malfunction
Low	Low	Low Refrigerant Charge
		Restriction between the Compressor Outlet and Low Side Port
	Low/Normal	Evaporator Freezing/EAT Malfunction
Normal/High	High	Compressor Stuck at Maximum Displacement/EAT Malfunction
	Normal/High	PAG or POE Oil Overcharge
High	Low	Restriction between the Low Side Port and Compressor Inlet
		Expansion Device Stuck Open
		Compressor has Low Displacement or Internal Malfunction
	High	Malfunctioning Cooling Fans
		Refrigerant Overcharge
		Restricted Condenser Air Flow
		Air in A/C System

NOTE:

Restrictions can occur in any part of an A/C system and may result in various gauge pressure values, depending on the system design and service port locations. The use of a non-contact, infrared thermometer can help diagnose a restricted A/C system with the ability to quickly observe significant, unexpected temperature changes in components and plumbing due to debris, contamination, pinched/damaged hoses, etc.

HEATING PERFORMANCE DIAGNOSTIC

Step	Action	Yes	No
1	Were you sent here from Symptoms or another diagnostic table?	Go to Step 2	Go to Symptoms - HVAC Systems - Manual or Go to Symptoms - HVAC Systems - Automatic
2	1. Start the engine. 2. Allow the engine to idle. Does the engine reach a normal operating temperature?	Go to Step 3	Go to Step 9
3	WARNING: Refer to Moving Parts and Hot Surfaces Warning . 1. Allow the engine to idle. 2. Select the FLOOR mode. 3. Select the minimum blower speed. 4. Select the warmest temperature setting. 5. Feel the temperature of the inlet and outlet heater hoses at the heater core. Does the inlet heater hose feel warmer than the outlet heater hose?	Go to Step 7	Go to Step 4

Step	Action	Yes	No
4	1. Install a thermometer into the center IP PANEL air outlet. 2. Secure a thermometer to the heater core outlet hose. 3. Select the PANEL mode. 4. Select the maximum blower speed. 5. Select the warmest temperature setting. 6. Record the temperature at the following locations: • The center IP PANEL air outlet • The heater core outlet hose 7. Compare the recorded temperatures. Are the two temperature readings about equal?	Go to Step 5	Go to Step 6
5	1. Inspect and repair the following areas of the vehicle for cold air leaks: • The cowl • The recirculation door • The HVAC module case 2. Perform the necessary repairs. Are the repairs complete?	Go to Step 10	-
6	1. Inspect the temperature door operation. Diagnostic System Check - Vehicle 2. Perform any necessary repairs. Are the repairs complete?	Go to Step 10	-
7	1. Turn OFF the engine. 2. Backflush the heater core. 3. Start the engine. 4. Select the FLOOR mode. 5. Select the minimum blower speed. 6. Select the warmest temperature setting. 7. Feel the temperature of the inlet and outlet heater hoses at the heater core. Does the inlet heater hose feel warmer than the outlet heater hose?	Go to Step 8	Go to Step 10
8	Replace the heater core. Heater Core Replacement Is the repair complete?	Go to Step 10	-
9	Repair the low engine temperature concern. Engine Fails To Reach Normal Operating Temperature Is the repair complete?	Go to Step 10	-
10	Operate the system in order to verify the repair. Did you find and correct the condition?	System OK	Go to Step 2

DEFROSTING INSUFFICIENT

Step	Action	Yes	No

Step	Action	Yes	No
1	Were you sent here from Symptoms or another diagnostic table?	Go to Step 2	Go to Symptoms - HVAC Systems - Manual or Go to Symptoms - HVAC Systems - Automatic
2	1. Start the engine. 2. Select the DEFROST mode. 3. Select the maximum blower speed. Does sufficient air flow from the defroster outlets?	Go to Step 3	Go to Step 10
3	Measure the engine operating temperature. Does engine reach a normal operating temperature?	Go to Step 4	Go to Step 8
4	1. Select the minimum blower speed. 2. Select the warmest temperature setting. WARNING: Refer to Moving Parts and Hot Surfaces Warning . 3. Feel the temperature of the inlet and outlet hoses at the heater core. Does the inlet heater hose feel warmer than the outlet heater hose?	Go to Step 11	Go to Step 5
5	Test the operation of the A/C compressor clutch. Does the A/C compressor clutch engage?	Go to Step 7	Go to Step 6
6	Repair the A/C compressor clutch. Air Conditioning Compressor Malfunction , for the automatic system or to Air Conditioning Compressor Malfunction for the manual system. Is the repair complete?	Go to Step 14	-
7	Perform the A/C system performance test. Air Conditioning (A/C) System Performance Test (R-134a) Air Conditioning (A/C) System Performance Test (R-1234yf) . Is the A/C system operating within the specifications?	Go to Step 9	Go to Step 12
8	Repair the low engine temperature concern. Engine Fails To Reach Normal Operating Temperature Is the repair complete?	Go to Step 14	-
9	Inspect for correct operation of the recirculation door. Is the recirculation door operating correctly?	Go to Step 14	Go to Step 13
10	Repair the air delivery concern. Diagnostic Starting Point - Vehicle Is the repair complete?	Go to Step 14	-
11	Repair the heating concern. Heating Performance Diagnostic Is the repair complete?	Go to Step 14	-
12	Repair the A/C performance concern. Air Conditioning (A/C) System Performance Test (R-134a) Air Conditioning (A/C) System Performance Test (R-1234yf) Is the repair complete?	Go to Step 14	-
13	Repair the recirculation door concern. Diagnostic Starting Point - Vehicle Is the repair complete?	Go to Step 14	-

Step	Action	Yes	No
14	Operate the system in order to verify the repair. Did you find and correct the condition?	System OK	Go to Step 2

NOISE DIAGNOSIS - BLOWER MOTOR

Step	Action	Yes	No
DEFINITION: Noise originating from the blower motor.			
1	Were you sent here from Symptoms or another diagnostic table?	Go to Step 2	Go to Symptoms - HVAC Systems - Automatic , or Symptoms - HVAC Systems - Manual
2	Inspect the air inlet grille for debris. Is debris present?	Go to Step 8	Go to Step 3
3	1. Sit inside the vehicle. 2. Close the vehicle doors and windows. 3. Turn ON the ignition, with the engine OFF. 4. Cycle the blower motor through all of the speeds and modes in order to determine where and when the noise occurs. Is a noise evident during the blower operation?	Go to Step 4	Go to Step 11
4	Inspect for vibration at each blower motor speed by feeling the blower case. Is vibration present?	Go to Step 6	Go to Step 5
5	Listen to the blower motor at each speed. Is the blower motor making a squeaking or chirping noise?	Go to Step 9	Go to Step 11
6	1. Remove the blower motor. Blower Motor Replacement 2. Inspect the blower motor impeller for deposits of foreign material. 3. Inspect the blower motor for deposits of foreign material. Did you find any foreign material on the blower motor or blower motor impeller?	Go to Step 8	Go to Step 7
7	Inspect the blower motor for the following conditions: • Cracked blades • A loose impeller retainer • Improper impeller alignment Did you find any of these conditions?	Go to Step 9	Go to Step 10
8	Remove the foreign material. Is the action complete?	Go to Step 10	-
9	Replace the blower motor. Blower Motor Replacement Is the repair complete?	Go to Step 11	-
10	Install the blower motor. Blower Motor Replacement Is the action complete?	Go to Step 11	-
11	Operate the system in order to verify the repair. Did you find and correct the condition?	System OK	Go to Step 2

AIR CONDITIONING COMPRESSOR OIL DIAGNOSIS

Condition	Corrective Action
CAUTION: Always ensure the correct refrigerant oil is used during A/C servicing of R-134a or R-1234YF systems. Failure to use the correct refrigerant oil could cause A/C performance issues and/or A/C system failure.	
NOTE: To avoid repeat compressor failure, always inspect the condition of the refrigerant oil and take the appropriate corrective action before installing the replacement compressor.	
Clean Oil no debris present	No corrective action necessary.
Clean Oil with debris present	- Inspect the suction port of the replacement compressor for presence of a suction screen. If the replacement compressor does NOT contain a suction screen, install suction screen in the line. - Replace desiccant or component containing the desiccant. - Replace desiccant filter if applicable. - Remove and inspect high pressure side filter (if applicable). - Remove, inspect, clean, or replace orifice tube. - If the system has a front orifice tube and is equipped with a filter in the rear auxiliary line, remove, inspect, clean, or replace the filter.
Dark brown/black and/or pungent/unusual odor with no debris present	- Replace desiccant or component containing the desiccant. - Replace desiccant filter if applicable. - Flush refrigerant system.
Dark brown/black and/or pungent/unusual odor with debris present	- Replace desiccant or component containing the desiccant. - Replace desiccant filter if applicable. - Flush refrigerant system. - Inspect the suction port of the replacement compressor for presence of a suction screen. If the replacement compressor does NOT contain a suction screen, install suction screen. - Remove and inspect high pressure side filter (if applicable). - Remove, inspect, clean, or replace orifice tube. - If the system has a front orifice tube and is equipped with a filter in the rear auxiliary line, remove, inspect, clean, or replace the filter.
Oil Overcharge	Flush refrigerant system.
Refrigerant Contamination	Flush refrigerant system.
Hybrid Polyester Refrigerant Oil (POE) Contamination	- Flush refrigerant system. - Replace desiccant or component containing the desiccant. - Replace desiccant filter if applicable.

NOISE DIAGNOSIS - AIR CONDITIONING (A/C) SYSTEM

Step	Action	Yes	No
1	Were you sent here from Symptoms or another diagnostic table?	Go to Step 2	Go to Symptoms - HVAC Systems - Automatic , or Symptoms - HVAC Systems - Manual

Step	Action	Yes	No
2	1. A/C system noises can be generally categorized into 3 areas: • Screeching, squealing, chirping noises • Moaning noises • Vibration/rattle noises 2. Start the engine. 3. Ensure that the A/C is ON. Is a screeching, squealing noise heard when the A/C is engaged?	Go to Step 3	Go to Step 9
3	With the engine OFF, inspect the drive belt for excessive wear. <u>Drive Belt Falls Off and Excessive Wear Diagnosis</u> Is the drive belt excessively worn?	Go to Step 18	Go to Step 4
4	Inspect the drive belt tension. <u>Drive Belt Tensioner Diagnosis</u> Is the drive belt tension correct?	Go to Step 5	Go to Step 19
5	Inspect the drive belt for excessive oil coverage. Is the drive belt covered with oil?	Go to Step 17	Go to Step 6
6	1. Start the engine. 2. Ensure that the A/C is ON. 3. Inspect the compressor and the clutch. Is the compressor locked up?	Go to Step 23	Go to Step 7
7	Is the A/C compressor clutch slipping?	Go to Step 23	Go to Step 8
8	Using a stethoscope, listen to the A/C compressor for any abnormal noises. Is the compressor causing an abnormal noise?	Go to Step 15	Go to Step 10
9	Does a moaning noise exist when the A/C clutch is engaged?	Go to Step 10	Go to Step 12
10	Listen to the A/C compressor components and mounting for noise concerns using a stethoscope. Are any of these components loose, damaged or excessively worn?	Go to Step 20	Go to Step 11
11	1. Idle the engine. 2. Engage the A/C compressor clutch. 3. Using a stethoscope, move around the entire refrigerant plumbing system, inspecting for any abnormal noises caused by component ground-out. Are any of the A/C components grounding out and causing a noise?	Go to Step 22	Go to Step 13
12	Does a vibration or rattle noise exist when the A/C clutch is engaged?	Go to Step 13	Go to Step 14
13	Does the noise stop when the A/C clutch is disengaged?	Go to Step 15	Go to Step 14
14	1. Idle the engine in PARK with the A/C compressor clutch engaged. 2. Using a stethoscope, move around the entire A/C system testing for any abnormal noises caused by a component. Do any of the A/C components cause an abnormal noise?	Go to Step 21	Go to Step 24

Step	Action	Yes	No
15	Verify that the A/C system is properly charged. Approximate Fluid Capacities Is the A/C system properly charged?	Go to Step 25	Go to Step 16
16	Recharge the A/C system to specification. Refrigerant Recovery and Recharging (R-134a) Refrigerant Recovery and Recharging (R-1234yf) Is the abnormal compressor noise still present?	Go to Step 24	Go to Step 25
17	Repair the oil leak. Refer to the appropriate repair procedure in Engine Mechanical. Is the repair complete?	Go to Step 25	-
18	Replace the drive belt. Drive Belt Replacement Is the replacement complete?	Go to Step 25	-
19	Replace the drive belt tensioner. Drive Belt Tensioner Replacement Is the replacement complete?	Go to Step 25	-
20	Repair or replace the A/C compressor mounting component. Is the repair complete?	Go to Step 25	-
21	Repair or replace the component which is causing the moaning concern as needed. Is the repair complete?	Go to Step 25	-
22	Correctly route or insulate the A/C component. Is the repair complete?	Go to Step 25	-
23	Replace the A/C compressor. Air Conditioning Compressor Replacement (LYX) Air Conditioning Compressor Replacement (LTG) Air Conditioning Compressor Replacement (LH7) Is the replacement complete?	Go to Step 25	-
24	The concern may be caused by an engine related component. Vibration Analysis - Engine Did you find and correct the condition?	Go to Step 25	-
25	Operate the system in order to verify the repair. Did you find and correct the condition?	System OK	Go to Step 2

NOISE DIAGNOSIS - HVAC MODULE

Step	Action	Yes	No
1	Were you sent here from Symptoms or another diagnostic table?	Go to Step 2	Go to Symptoms - HVAC Systems - Manual or Go to Symptoms - HVAC Systems - Automatic
2	- Start the engine. - Cycle through all of the following: - Blower motor speeds - HVAC modes - Temperature control settings - Determine the type of noise: - Scrape, pop - Tick/click, chirp or groaning - Air rush/whistle Is a scrape or pop noise evident when selecting modes or temperature settings?	Go to Step 6	Go to Step 3

Step	Action	Yes	No
3	Is a tick/click, chirping, groaning or scraping noise present, but decreases as blower motor speed is decreased?	Go to Step 6	Go to Step 4
4	Is an air rush/whistle noise evident in all modes but not all temperature settings?	Go to Step 6	Go to Step 5
5	Is an air rush/whistle noise evident only in defrost or floor mode?	Go to Step 6	Go to Step 12
6	Remove the instrument panel assembly. <u>Instrument Panel Assembly Replacement (Equinox)</u> . <u>Instrument Panel Assembly Replacement (Terrain)</u> . Is the action complete?	Go to Step 7	-
7	1. Remove the actuators. 2. Inspect the air flow doors for proper operation. 3. Inspect the ducts for obstructions or foreign materials. Were any of these conditions found?	Go to Step 10	Go to Step 8
8	Inspect the mode and temperature doors and seals for warping or cracking. Are the doors in normal condition?	Go to Step 11	Go to Step 9
9	Replace the appropriate door and/or seals. Is the repair complete?	Go to Step 11	-
10	Remove any obstructions or foreign material found. Is the action complete?	Go to Step 11	-
11	Install the instrument panel assembly. <u>Instrument Panel Assembly Replacement (Equinox)</u> . <u>Instrument Panel Assembly Replacement (Terrain)</u> . Is the action complete?	Go to Step 12	-
12	Operate the system to verify the repair. Did you find and correct the condition?	System OK	Go to Step 2

ODOR DIAGNOSIS

Step	Action	Yes	No
Symptom Definition: Odor originating or noticed through the heater and air conditioning evaporator and blower module and duct system. Cause of Odors • A musty odor caused by mold or mildew build-up on the carpet, evaporator core, heater core, passenger compartment air filter, or the heater and air conditioning evaporator and blower module or ducts. • A coolant odor cause by leaking heater core, or external coolant leak. • An oil odor cause by engine oil leaks, transmission fluid or power steering fluid leaks • Environment odors caused by the surrounding external environment. Examples other vehicles, trees, flower, or animals.			
1	• Have you verified the customers concern and identified the odor • Musty smell • Coolant smell • Oil smell	Go to Step 3 Go to Step 9 Go to Step 13	Go to Step 2

Step	Action	Yes	No
2	1. Sit inside the vehicle. 2. Close all of the doors and windows. 3. Start the engine. 4. Allow the engine to idle to normal operating temperature. 5. Select the maximum blower speed. 6. Select the Instrument panel air outlet mode. 7. Select the coldest temperature setting. 8. Cycle through all of the blower speeds, modes and temperatures to define what type of odor is present. • Musty smell • Coolant smell • Oil smell Does the odor have a musty smell?	Go to Step 3	Go to Step 8
3	Inspect the air inlet grille and passenger compartment air filter for signs of water and debris. Is there debris or signs of water present?	Go to Step 4	Go to Step 5
4	Remove any debris and replace the passenger compartment air filter. Is the repair complete?	Go to Step 16	-
5	Inspect for water leaks and a wet carpet. Is there a water leak or wet carpet?	Go to Step 6	Go to Step 14
6	Perform a water leak test to identify area of the leak. Inspect for the following areas for water leaks: • Blockage of the evaporator and blower module drain upper hose. • Water leaks around the windshield • Open body seams, grommets and seals • Sunroof drain tubes • Leaks around the door seals Is a leak present?	Go to Step 7	Go to Step 14
7	Repair the leak as necessary. Is the repair complete?	Go to Step 16	-
8	Does the odor have a coolant smell?	Go to Step 9	Go to Step 12
9	Inspect the external cooling system for leaks and repair. Loss of Coolant Was there external coolant leak found?	Go to Step 16	Go to Step 10
10	Inspect for coolant leaking inside the vehicle or for a film build-up on the windshield. Is the condition present?	Go to Step 11	Go to Step 16
11	Replace the heater core. Heater Core Replacement Is the repair complete?	Go to Step 16	-
12	Does the odor have an oily smell?	Go to Step 13	Go to Step 16

Step	Action	Yes	No
13	1. Inspect for engine oil leaks: - For LYX engine, refer to Oil Leak Diagnosis - For LH7 engine, refer to Oil Leak Diagnosis - For LTG engine, refer to Oil Leak Diagnosis 2. Inspect for transmission fluid leaks: - For MNH, MNK, and MHG automatic transmission, refer to Fluid Leak Diagnosis - For M3U, M3D, and M3H automatic transmission, refer to Fluid Leak Diagnosis 3. Repair any oil or fluid leaks. Is the repair complete?	Go to Step 16	-
14	Perform the odor correction procedure. Odor Correction Is the musty odor present.	Go to Step 15	Go to Step 16
15	Replace the air conditioning evaporator. Air Conditioning Evaporator Replacement (R-134a) Air Conditioning Evaporator Replacement (R-1234yf) Is the action complete?	Go to Step 16	-
16	Operate the system in order to verify the repair. Did you find and correct the condition?	System OK	Go to Step 2

REPAIR INSTRUCTIONS

ODOR CORRECTION

Eliminating Air Conditioning (A/C) Odor

Odors may be emitted from the heat and air conditioning system primarily at start up in hot, humid climates. When the blower motor fan is turned on, an unpleasant, musty odor may be released into the passenger compartment. The following conditions may cause the odor:

- Debris is present in the heater and air conditioning evaporator and blower module.
- Microbial growth is on the evaporator core

The following procedures should be completed to eliminate most common sources of odor:

- Use the scan tool to enable the afterblow function, if heater and air conditioning remote control has this functionality. [Afterblow Enabling](#)
- Ensure that the fresh air inlet is clear of debris.
- Verify that the heater and air conditioning evaporator and blower module drain is not blocked. If the drain is blocked, remove the debris and dry the heater and air conditioning evaporator and blower module performing the following procedure:
 - Start the engine and allow the engine to reach operating temperature.
 - Open the vehicle windows.
 - Select the hottest temperature setting.
 - Select the recirculation mode.
 - Run the blower motor on high for 10 minutes.
- If equipped, remove the passenger compartment air filter and examine for debris or odor. [Passenger Compartment Air Filter Replacement](#)
 - Take care upon passenger compartment air filter removal to prevent debris on top of the passenger compartment air filter from falling into the heater and air conditioning evaporator and blower module.
 - If the filter is dirty or suspected as the source of the odor, replace the passenger compartment air filter.
 - If the debris has fallen into heater and air conditioning evaporator and blower module, remove the blower motor to remove the debris. [Blower Motor Replacement](#)

5. If this procedure is unsuccessful in eliminating the odor, perform the AC Delco Cooling Coil Coating procedure if it is available in your market. If the AC Delco Cooling Coil Coating is not available in your market, perform the water and vinegar solution cleaning procedure.

AC Delco Cooling Coil Coating Procedure

The evaporator core and heater and air conditioning evaporator and blower module should be treated with AC Delco Cooling Coil Coating to eliminate microbial growth. [Adhesives, Fluids, Lubricants, and Sealers](#) Perform the following procedure:

1. Disable the air conditioning compressor clutch operation by disconnecting the air conditioning compressor clutch coil electrical connector.
2. Start the engine and let the engine idle.
3. Select the hottest temperature setting.
4. Select the heater and air conditioning evaporator and blower module controls to the recirculation mode.
5. Run the blower motor on high for 10 minutes.
6. Place a drain pan beneath the heater and air conditioning evaporator and blower module drain tube.
7. If equipped, remove the passenger compartment air filter.
8. Place protective shop cloths or equivalent over outlet ducts to prevent overspray.
9. Locate an area in the heater and air conditioning evaporator and blower module downstream of the blower, between the blower motor and the evaporator core. Drill a 3.175 mm (0.125 in) hole where the hole will not interfere with or damage the blower motor, blower motor speed controller, evaporator core, or any other operating part the of system.
10. Set the blower speed to maximum high speed.
11. Set heater and air conditioning evaporator and blower module controls to floor outlet mode.
12. Close all air conditioning outlet vents.
13. Wear an approved respirator mask, safety goggles, and latex gloves when applying the AC Delco Cooling Coil Coating.
14. Insert the applicator extension tube into the hole to the mark on the extension tube, ensuring the spray is aiming the same direction as the airflow. Coating should be applied in 3 second bursts with the nozzle being repositioned within the case between bursts until all 4 ounces of coating are applied.
15. Shut the engine OFF. Allow the vehicle to sit for 3 - 5 minutes.
16. Seal the 3.175 mm (0.125 in) hole with body sealer or RTV gasket compound.
17. To cure the Cooling Coil Coating:
 1. Start the engine and let the engine idle.
 2. Lower one side door window 1/2 inch, 12mm.
 3. Set the blower speed to maximum high speed.
 4. Set heater and air conditioning evaporator and blower module controls to floor outlet mode.
 5. Select the hottest temperature setting.
 6. Let the vehicle idle for 10 minutes.
18. Reconnect the air conditioning compressor clutch coil electrical connector.
19. Verify proper air conditioning compressor clutch operation.
20. Reinstall the passenger compartment air filter if necessary.
21. Remove the protective shop cloths from inside the vehicle.
22. Ensure the afterblow function has been enabled. [Afterblow Enabling](#)

Water And Vinegar Solution Cleaning Procedure

If the AC Delco Cooling Coil Coating is not available perform the following steps:

1. Remove the evaporator core. [Air Conditioning Evaporator Replacement \(R-134a\)](#)[Air Conditioning Evaporator Replacement \(R-1234yf\)](#)
2. Clean evaporator core with a solution of 40% vinegar and 60% water.
3. Reinstall the evaporator core. [Air Conditioning Evaporator Replacement \(R-134a\)](#)[Air Conditioning Evaporator Replacement \(R-1234yf\)](#)

Special Tools

- **GE-43600** ACR 2000 Air Conditioning Service Center
- **GR-45037** A/C Oil Injector

For equivalent regional tools, refer to [Special Tools](#).

WARNING: To prevent personal injury, avoid breathing A/C Refrigerant and lubricant vapor or mist. Work in a well ventilated area. To remove refrigerant from the A/C System, use service equipment designed for recovery that is certified to meet the requirements of the appropriate SAE Standards. If an accidental system discharge occurs, ventilate the work area before continuing service. Additional health and safety information may be obtained from the refrigerant, refrigerant recovery, and lubricant manufacturers.

WARNING: For personal protection, goggles and lint-free gloves should be worn and a clean cloth wrapped around fittings, valves, and connections when doing work that includes opening the refrigerant system. If refrigerant comes in contact with any part of the body severe frostbite and personal injury can result. The exposed area should be flushed immediately with cold water and prompt medical help should be obtained.

CAUTION: You must replace the desiccant if the A/C refrigerant system has been open to atmosphere for more than four hours, or if the A/C refrigerant oil has been contaminated. Failure to replace the desiccant will result in damage to the A/C refrigerant system.

CAUTION: R-134a is the only approved refrigerant for use in this vehicle. The use of any other refrigerant may result in poor system performance or component failure.

CAUTION: To avoid system damage use only R-134a dedicated tools when servicing the A/C system.

CAUTION: Use only Polyalkylene Glycol Synthetic Refrigerant Oil (PAG) for internal circulation through the R-134a A/C system and only 525 viscosity mineral oil on fitting threads and O-rings. If lubricants other than those specified are used, compressor failure and/or fitting seizure may result.

CAUTION: R-12 refrigerant and R-134a refrigerant must never be mixed, even in the smallest of amounts, as they are incompatible with each other. If the refrigerants are mixed, compressor failure is likely to occur. Refer to the manufacturer instructions included with the service equipment before servicing.

NOTE: In certain regions, technicians repairing or servicing motor vehicle air conditioning (MVAC) systems must be trained and certified by the appropriate regional or national regulatory agency.

- In the USA, refer to the EPA website for MVAC training requirements. <http://www.epa.gov/ozone/title6/609/technicians/609certs.html>
- In Canada, refer to the Environment Canada website for MVAC training requirements. <http://www.ec.gc.ca/ozone/default.asp?lang=En&n=943E1CAB-1#ws4E6F6835>
- In Europe, refer to Commission Regulation (EC) No 307/2008 for MVAC training requirements. <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2008:092:0025:0027:EN:PDF>

The **GR-43600** ACR 2000 Air Conditioning Service Center is a complete air conditioning service center for R-134a. The **GR-43600** ACR 2000 Air Conditioning Service Center recovers, recycles, evacuates and recharges A/C refrigerant quickly, accurately and automatically. The unit has a display screen that contains the function controls and displays prompts that will lead the technician through the recover, recycle, evacuate and recharge operations. R-134a is recovered into and charged out of an internal storage vessel. The **GR-43600** ACR 2000 Air Conditioning Service Center automatically replenishes this vessel from an external source tank in order to maintain a constant 5.45 - 6.82 kg (12 - 15 lbs) of A/C refrigerant.

The **GR-43600** ACR 2000 Air Conditioning Service Center has a built in A/C refrigerant identifier that will test for contamination, prior to recovery and will notify the technician if there are foreign gases present in the A/C system. If foreign gases are present, the **GR-43600** ACR 2000 Air Conditioning Service Center will not recover the refrigerant from the A/C system.

The **GR-43600** ACR 2000 Air Conditioning Service Center also features automatic air purge, single pass recycling and an automatic oil drain.

Refer to the **GR-43600** ACR 2000 Air Conditioning Service Center manual for operation and setup instruction. Always recharge the A/C System with the proper amount of R-134a. [**Approximate Fluid Capacities**](#)

A/C Refrigerant System Oil Charge Replenishing

If oil was removed from the A/C system during the recovery process or due to component replacement, the oil must be replenished. Oil can be injected into a charged system using **GE-45037** A/C oil injector. For the proper quantities of oil to add to the A/C refrigerant system, refer to [**Approximate Fluid Capacities**](#).

After completing the recharge process, install and torque the charge port caps to 1.3 N.m (12 lb in)

REFRIGERANT RECOVERY AND RECHARGING (R-1234YF)

Special Tools

- **GE-45037** A/C Oil Injector
- **GE-50078** Electronic Leak Detector
- **GE-50300** R-1234yf Air Conditioning Refrigerant Recovery/Recharge Cart
- **GE-50744** A/C R-1234yf PAG Oil Injector Hose
- **GE-50745** A/C R-1234yf POE Oil Injector Hose
- **GE-50957** Machine R-1234yf Contaminated Refrigerant

Equivalent regional tools: [**Special Tools**](#)

Refrigerant label symbols: [**Refrigerant Label Symbols**](#)

General Information

WARNING: Refer to [**R-1234yf Proper Service Procedures Warning**](#) .

R-1234yf (HFO-1234yf) - 2, 3, 3, 3 - Tetrafluoroprop-1-ene (CF₃CFCH₂), is an olefin containing hydrogen, fluorine and carbon with thermodynamic properties similar to R-134a. This refrigerant is a mildly flammable gas. It has a boiling point of -29.2Â°C, a vapor pressure of 583 kPa absolute at 20Â°C, no ozone depletion potential, and a global warming potential (GWP) of 4.

R-1234yf supply tank is white with red band to denote flammability.

NOTE: In certain regions, technicians repairing or servicing motor vehicle air conditioning (MVAC) systems must be trained and certified by the appropriate regional or national regulatory agency.

- In the USA, refer to the EPA website for MVAC training requirements. <http://www.epa.gov/ozone/title6/609/technicians/609certs.html>
- In Canada, refer to the Environment Canada website for MVAC training requirements. <http://www.ec.gc.ca/ozone/default.asp?lang=En&n=943E1CAB-1#ws4E6F6835>

- In Europe, refer to Commission Regulation (EC) No 307/2008 for MVAC training requirements. <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2008:092:0025:0027:EN:PDF>

MVAC service shops must certify to the EPA that they have acquired and are properly using approved refrigerant recovery equipment. Service shops must also verify (with on site documentation) that each person using the equipment has been properly trained and certified. MVAC service shops must maintain records of the names and addresses of facilities to which the refrigerant they recover is sent.
(<http://www.epa.gov/ozone/title6/609/technicians/appequip.html>)

Vehicles equipped with R-1234yf refrigerant systems have unique low and high side service fittings.

The proper handling procedures should be followed for all refrigerants as designated by the refrigerant manufacturer's Material Safety Data Sheet (MSDS).

Refrigerant Recovery and Recharging

To remove, recycle and install R-1234yf from/to a vehicles refrigerant system only use **GE-50300** R-1234yf Air Conditioning Refrigerant Recovery/Recharge Cart or refrigerant recovery recharge equipment certified to meet the requirements of Society of Automotive Engineers (SAE) J2843 and approved by the EPA.
(<http://www.epa.gov/ozone/title6/609/technicians/appequip.html>)

To remove contaminated refrigerant from a vehicles refrigerant system use **GE-50957** Machine R-1234yf Contaminated Refrigerant or only service equipment designed for contaminated refrigerant removal and certified to meet the requirements of SAE J2851. Refrigerant recovered by this equipment cannot be reused or recycled on site and must be sent to an EPA approved reclamation facility for reprocessing or disposal.
(<http://www.epa.gov/ozone/title6/608/reclamation/reclist.html>)

To prevent accidental release of refrigerant and minimize safety concerns, the installation of any refrigerant service equipment to the vehicle shall only be done with the engine off and after the refrigerant high side pressure has been reduced (approximately 2 - 3 minutes).

Open the windows and/or doors before charging the vehicle to prevent an accumulation of refrigerant in case of a major refrigerant leak.

WARNING: ***R-1234yf is heavier than air and may accumulate in low or pit areas - make sure these areas are properly ventilated. Failure to follow this precaution may cause personal injury.***

Refrigerant service equipment is required to ensure adequate refrigerant recovery to reduce emissions and provide for accurate recharging of mobile air conditioning systems. Venting refrigerant to the atmosphere is illegal per United States Environmental Protection Agency (EPA) Clean Air Act Section 608.

WARNING: ***To prevent personal injury, avoid breathing any refrigerant vapor and lubricant mist. Servicing of R-1234yf systems shall only be done in well ventilated work areas. To remove R-1234yf refrigerant from the A/C refrigerant system, recover using SAE J2843 certified equipment. Un-controlled release of R-1234yf refrigerant in the work area may result in high concentrations of R-1234yf that can be flammable. If an accidental system discharge occurs, ventilate the work area before continuing service. Failure to follow these precautions may cause personal injury and/or damage to the vehicle or its components.***

WARNING: For personal protection, goggles and lint-free gloves should be worn and a clean cloth wrapped around fittings, valves, and connections when doing work that includes opening the refrigerant system. If refrigerant comes in contact with any part of the body severe frostbite and personal injury can result. The exposed area should be flushed immediately with cold water and prompt medical help should be obtained.

CAUTION: Air Conditioning (A/C) desiccant must be replaced if the A/C refrigerant system has been open to atmosphere for more than four hours, or if the A/C refrigerant oil has

been contaminated. Failure to replace the A/C desiccant will result in damage to the A/C refrigerant system.

CAUTION: Use only the refrigerant and the charge amount specified in "Refrigerant System Specifications" found in HVAC Service Information or the vehicles under hood refrigerant label. Use of incorrect refrigerant or charge amounts may result in poor system performance and premature system failure.

CAUTION: Use only the lubricant specified for this vehicles refrigerant system. Do not mix refrigerant oils which may result in system contamination and unknown reaction by-products which may cause HVAC System failure.

To protect the refrigerant supply **GE-50300** R-1234yf Air Conditioning Refrigerant Recovery/Recharge Cart or SAE J-2843 equipment requires the refrigerant to be analyzed for purity prior to its recovery or transfer. The equipment is required to receive an acceptable reading from the integrated refrigerant identifier prior to recovery or transfer. An acceptable reading is $\geq 98\%$ -1/+2 R-1234yf.

If an unacceptable reading is received (and the presence of foreign gases detected) the refrigerant is considered contaminated and the equipment will not allow its recovery or transfer to an onboard storage vessel. If refrigerant is contaminated use **GE-50957** Machine R-1234yf Contaminated Refrigerant or SAE J2851 compliant equipment to recover for reclamation and/or disposal at an EPA approved facility (<http://www.epa.gov/ozone/title6/608/reclamation/reclist.html>).

As a safety precaution **GE-50300** R-1234yf Air Conditioning Refrigerant Recovery/Recharge Cart or SAE J2843 compliant equipment requires the Mobile Air Conditioning (MAC) system to pass a pre-charge leak test (to detect the possibility of a gross system leak prior to charging, >0.3 g/s) prior to allowing the MAC system to be charged. The pressurized portion of this test will require the technician set the vehicles Heater, Ventilation and Air Conditioning (HVAC) blower motor on high, A/C switch off and air distribution mode set to floor. The technician shall insert a **GE-50078** Electronic Leak Detector or GE-50078 compliant electronic leak detector, set to low sensitivity (14 grams/year leak rate) into the center of a floor duct outlet, as far as possible. When the technician confirms that the vehicle is set up for the pressurized leak check the **GE-50300** R-1234yf Air Conditioning Refrigerant Recovery/Recharge Cart will install 15% of the programmed charge into the vehicles refrigerant system. The technician monitors the electronic leak detector for 5 minutes or until the detector alarms.

The equipments display will then ask the following:

1. Was this test performed? If the technician replies Yes, the display next shall ask,
2. Was a leak found? If technician replies Yes, the machine shall only allow recovery and evacuation to allow repair. If the technician replies No, the display shall continue with,
3. Is there an auxiliary evaporator? If the technician replies No the machine shall permit completion of the recharge process. If the technician replies Yes, the display shall instruct the technician to perform a leak check with **GE-50078** Electronic Leak Detector or a GE-50078 compliant detector at a rear evaporator outlet, then ask,
4. Was an auxiliary evaporator leak check performed? If the technician replies Yes, the display will continue with Was a leak found? and if the answer is Yes, the machine shall only allow recovery and evacuation to allow repair. If the technician replies No, the machine shall permit completion of the recharge process.

A/C Refrigerant System Oil Charge Replenishing

If oil was removed from the A/C system during the recovery process or due to component replacement, the oil must be replenished. Oil can be injected into a charged system using **GE-45037** injector with **GE-50744** A/C R-1234yf PAG Oil Injector Hose or **GE-50745** A/C R-1234yf POE Oil Injector Hose. For the proper quantities of oil to add to the A/C refrigerant system, refer to [Approximate Fluid Capacities](#).

After completing the recharge process, install and torque the charge port caps to 1.3 N.m (12 lb in)

FLUSHING (R-134A)

Special Tools

- **J 41447** R-134A Air Conditioning Tracer Dye - Box of 24
- **J 42220** Universal 12V Leak Detection Lamp

- **J 43600** ACR 2000 Air Conditioning Service Center
- **J 45268** Air Conditioning Flushing Adapter Kit

NOTE: Flushing with the J 43600 ACR 2000 Air Conditioning Service Center is not intended to remove metal from the air conditioning system.

Flushing is intended to remove the following:

- Contaminated refrigerant oil
- Desiccant, following a desiccant bag failure
- Overcharge of refrigerant oil
- Refrigerant contamination

Forward Flushing Setup

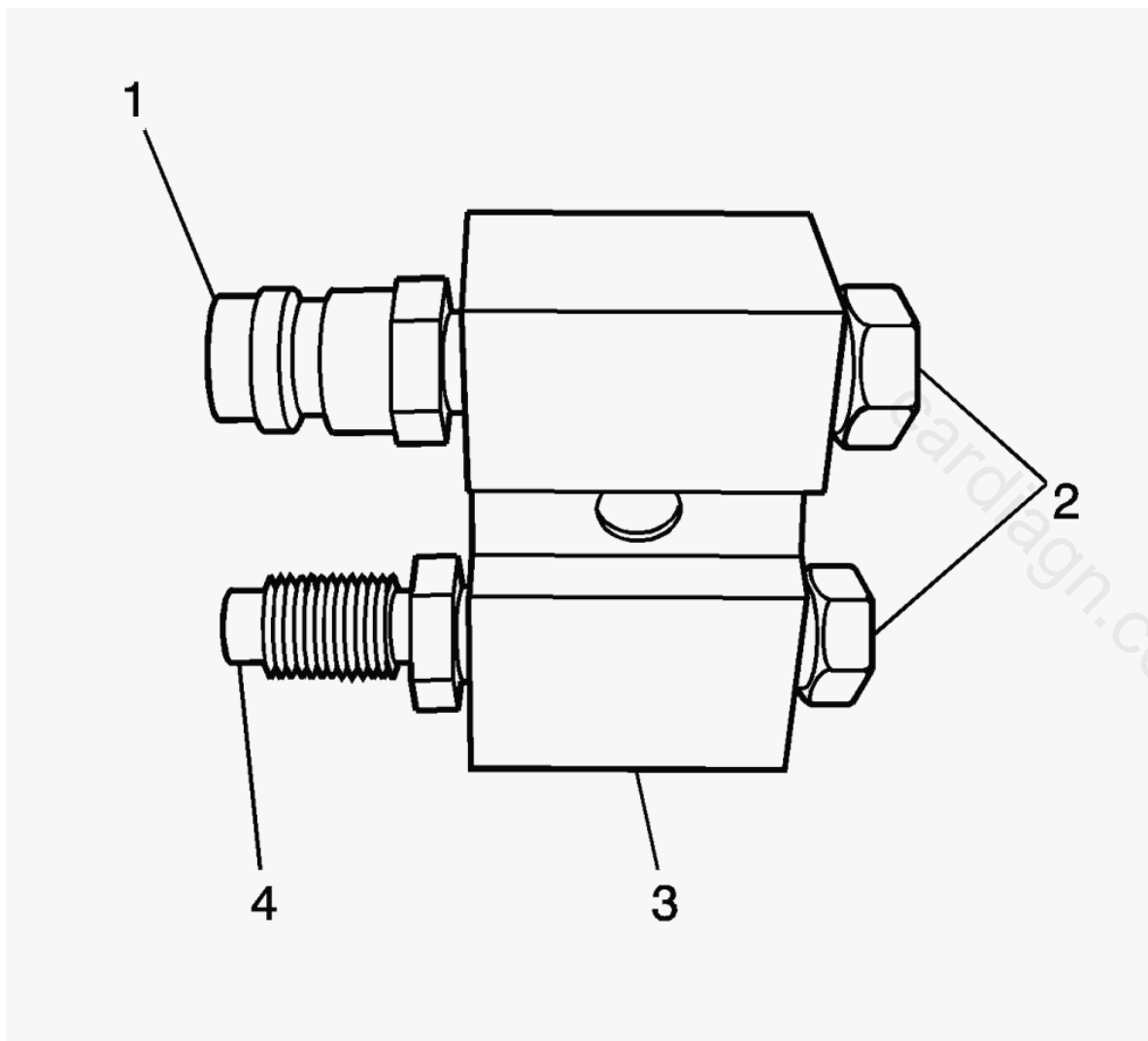


Fig. 1: Identifying J 45268-2, J 45268-7, J 45268-8, & J 45268-9

Courtesy of GENERAL MOTORS COMPANY

NOTE: Forward flow refrigerant flushing is recommended for contaminated refrigerant or refrigerant oil.

NOTE: Inspect and lubricate the J 45268 Air Conditioning Flushing Adapter Kit fitting O-rings. [Air Conditioning System Seal Replacement](#)

1. Install both J 45268-9 (2) onto the J 45268-10 (3).
2. Install the J 45268-7 (4) onto the suction side of the J 45268-10 (3).
3. Install the J 45268-8 (1) onto the discharge side of the J 45268-10 (3).

Reverse Flushing Setup

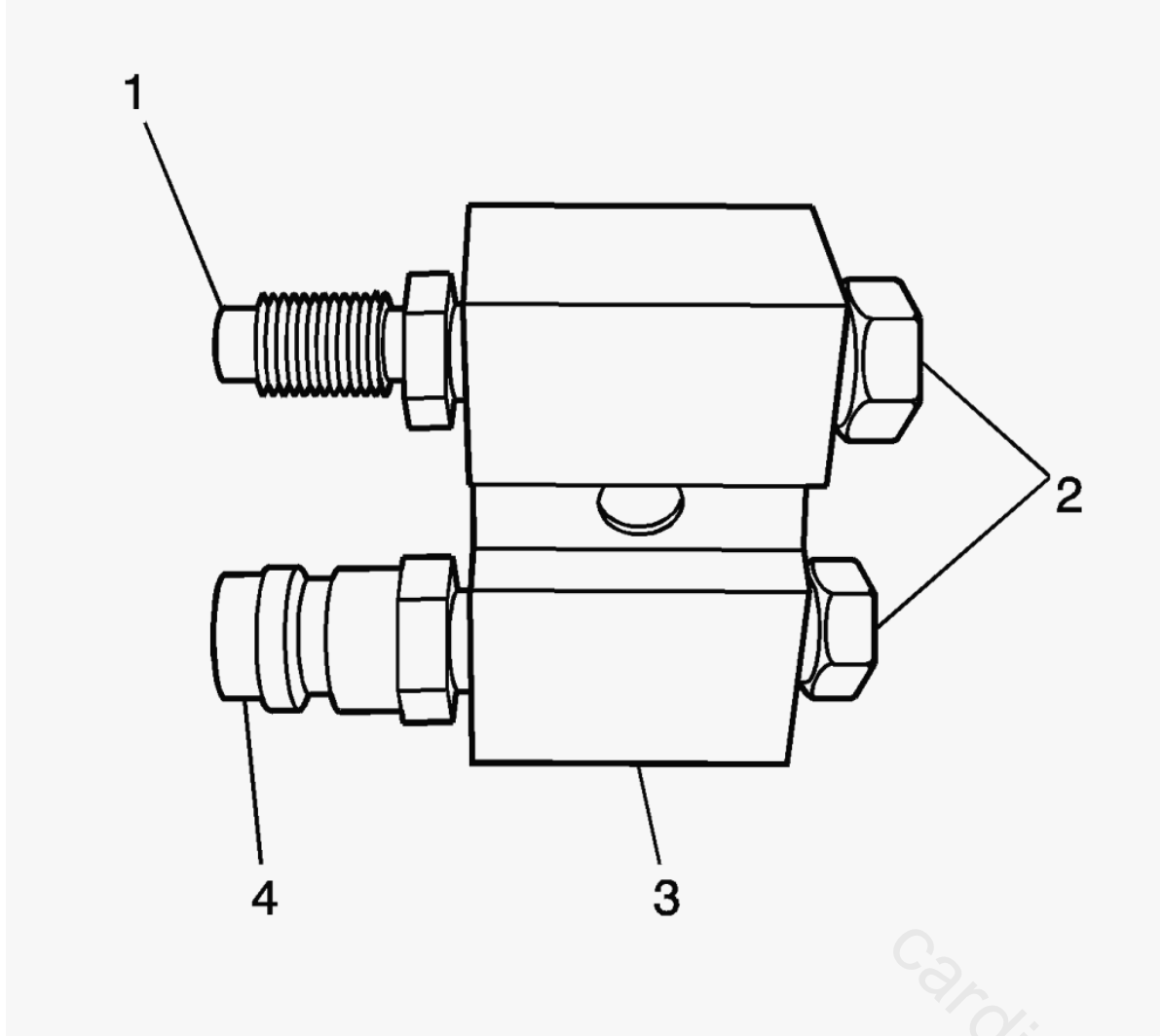


Fig. 2: Using J45268-9, J45268-8, J 45268-7, & J 45268-2
Courtesy of GENERAL MOTORS COMPANY

NOTE: Reverse flow refrigerant flush is recommended for desiccant bag failure. Replace the condenser/receiver dehydrator assembly when the air conditioning flush is complete and perform the following procedure:

NOTE: Inspect and lubricate the J 45268 Air Conditioning Flushing Adapter Kit fitting O-rings. [Air Conditioning System Seal Replacement](#)

1. Install both J 45268-9 (2) onto the J 45268-10 (3).
2. Install the J 45268-8 (1) onto the suction side of the J 45268-10 (3).
3. Install the J 45268-7 (4) onto the discharge side of the J 45268-10 (3).

Flush Procedure

NOTE: Warmer engine or ambient temperatures decreases the refrigerant recovery time during the air conditioning flush procedure.

1. Recover the refrigerant. [Refrigerant Recovery and Recharging \(R-134a\)](#)[Refrigerant Recovery and Recharging \(R-1234yf\)](#)
2. Remove the Air Conditioning Evaporator Thermal Expansion Valve. [Air Conditioning Evaporator Thermal Expansion Valve Replacement](#)

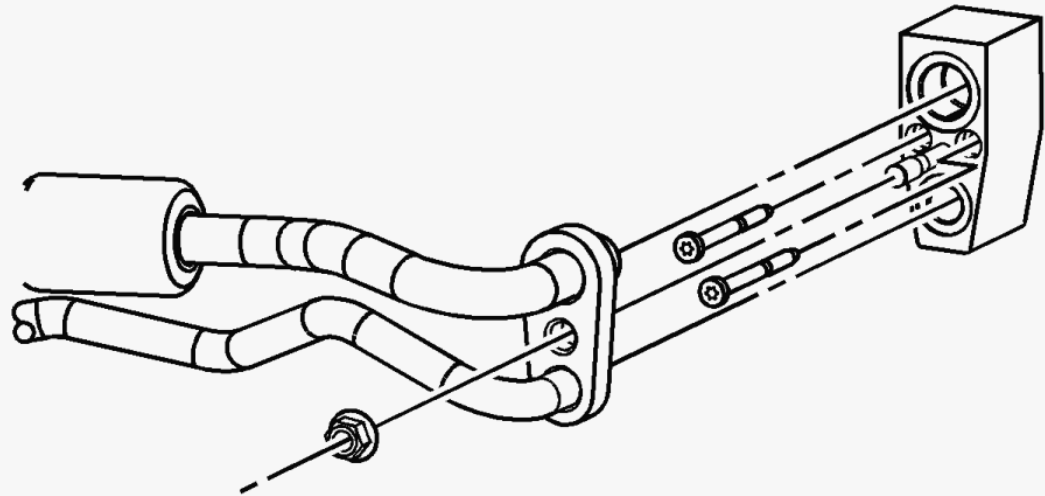


Fig. 3: J 45268-115 With TXV Components
Courtesy of GENERAL MOTORS COMPANY

3. Install the stud onto the J 45268-121.
4. Install new sealing washers onto the evaporator core. [Air Conditioning System Seal Replacement](#)
5. Install J 45268-121 in place of the Air Conditioning Evaporator Thermal Expansion Valve.

CAUTION: Refer to [Fastener Caution](#)

6. Install the Air Conditioning Evaporator Thermal Expansion Valve Bolt and tighten to 9 N.m (80 lb in).
7. Install new sealing washers onto the rear evaporator line assembly. [Air Conditioning System Seal Replacement](#)
8. Connect the rear evaporator line assembly to the J 45268-121.
9. Install the Air Conditioning Evaporator Thermal Expansion Valve block fitting nut and tighten to 20 N.m (15 lb ft).
10. Remove the air conditioning compressor. [Air Conditioning Compressor Replacement \(LYX\)](#)[Air Conditioning Compressor Replacement \(LTG\)](#)[Air Conditioning Compressor Replacement \(LH7\)](#)

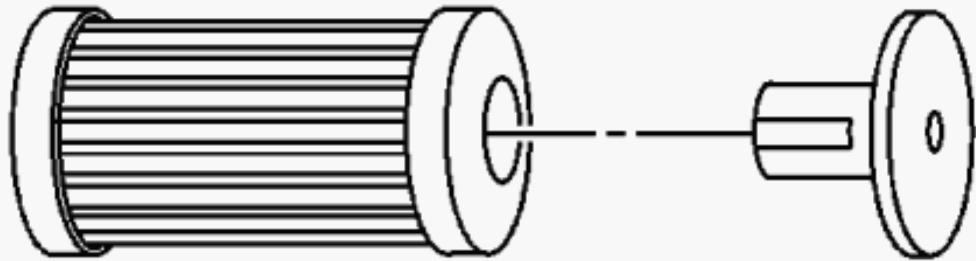


Fig. 4: View Of A/C Filter & Check Valve
Courtesy of GENERAL MOTORS COMPANY

NOTE: The filter inside J 45268-1 is serviceable. Remove and discard the check valve from the filter.

11. Service the filter with ACDelco P/N GF 470, before each flush.

NOTE: Install new sealing washers onto the compressor hose assembly. [Air Conditioning System Seal Replacement](#)

Assure that the suction and discharge ports on the J 45268-10 correspond to the suction and discharge ports on the compressor hose assembly.

12. Install the J 45268-10 to the compressor hose assembly.
13. Connect the J 45268-1 flush filter to the J 45268-7 flush adapter.

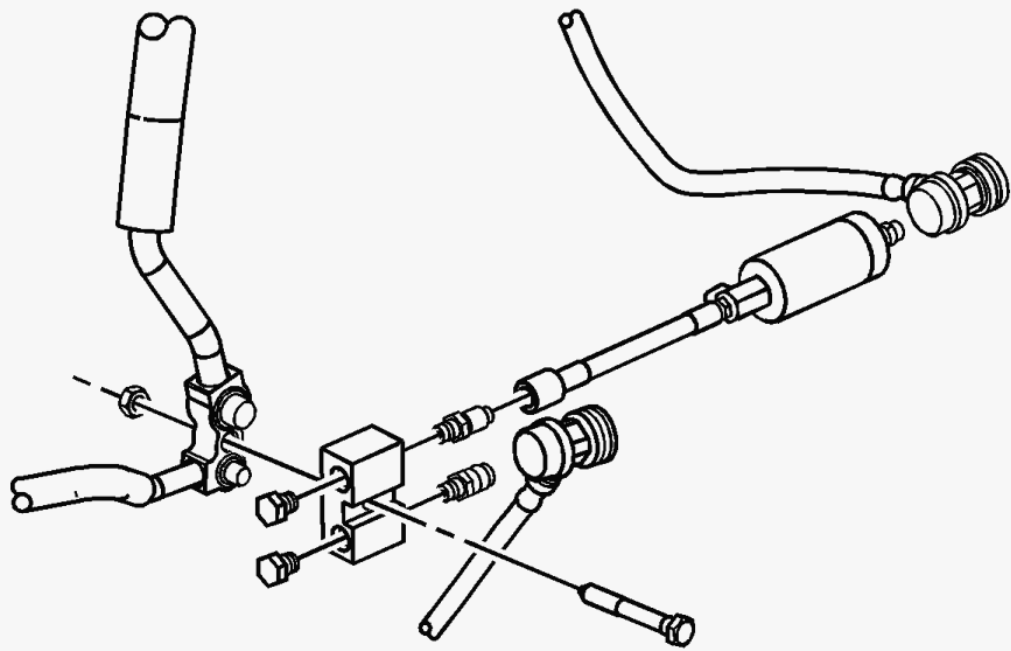


Fig. 5: Flush Adapters

Courtesy of GENERAL MOTORS COMPANY

14. Connect the blue hose from the **J 43600** ACR 2000 Air Conditioning Service Center to J 45268-1 flush filter adapter.
15. Connect the red hose from the **J 43600** ACR 2000 Air Conditioning Service Center to J 45268-8 flush adapter.

NOTE: Close the valve on the external refrigerant tank, before starting the flush process.

16. Flush the air conditioning system. Follow the instructions supplied with the **J 43600** ACR 2000 Air Conditioning Service Center.
17. Disconnect the red hose from the **J 43600** ACR 2000 Air Conditioning Service Center to J 45268-8 flush adapter.
18. Disconnect the blue hose from the **J 43600** ACR 2000 Air Conditioning Service Center to J 45268-1 flush filter adapter.
19. Disconnect the J 45268-1 flush filter from the J 45268-10 flush adapter.
20. Remove the J 45268-10 from the compressor hose assembly.

NOTE: Flushing will remove all the refrigerant oil from the air conditioning system.
The air conditioning system must be replenished with the correct amount of refrigerant oil.

21. If you will reinstall the removed air conditioning compressor, perform the following procedure:
 1. Drain the refrigerant oil from the air conditioning compressor. Rotate the compressor input shaft to assist in draining the refrigerant oil from the compressor.
 2. Add the total system capacity of refrigerant oil to the crankcase of the air conditioning compressor.

[Approximate Fluid Capacities](#)

NOTE: Flushing will remove the fluorescent leak detection dye from the air conditioning system.

3. Add one bottle of **J 41447** R-134A Air Conditioning Tracer Dye - Box of 24 directly to the air conditioning compressor.

NOTE: A new service compressor is shipped with 2.5 oz of refrigerant oil.
Approximate Fluid Capacities

22. Install the air conditioning compressor. [Air Conditioning Compressor Replacement \(LYX\)](#)[Air Conditioning Compressor Replacement \(LTG\)](#)[Air Conditioning Compressor Replacement \(LH7\)](#)
23. Remove the Air Conditioning Evaporator Thermal Expansion Valve block fitting nut.
24. Disconnect the rear evaporator line assembly from the J 45268-121.

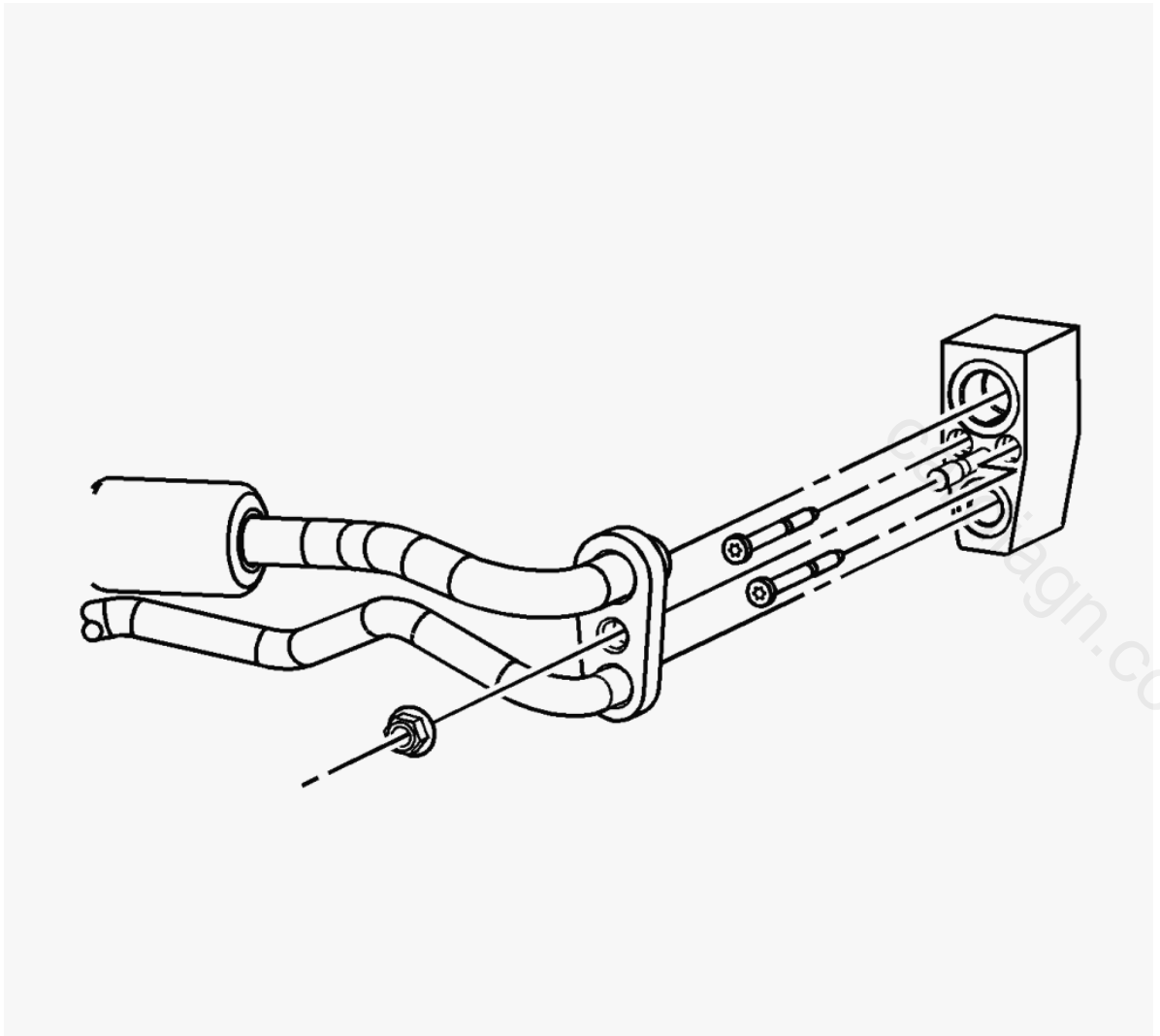


Fig. 6: J 45268-115 With TXV Components
Courtesy of GENERAL MOTORS COMPANY

25. Remove the Air Conditioning Evaporator Thermal Expansion Valve bolts retaining the J 45268-121.
26. Remove the J 45268-121.
27. Inspect the Air Conditioning Evaporator Thermal Expansion Valve for debris. Clean or replace as needed.
28. Install the Air Conditioning Evaporator Thermal Expansion Valve. [Air Conditioning Evaporator Thermal Expansion Valve Replacement](#)
29. Evacuate and recharge the air conditioning system. [Refrigerant Recovery and Recharging \(R-134a\)](#)[Refrigerant Recovery and Recharging \(R-1234yf\)](#)
30. Leak test the fittings using **J 42220** Universal 12V Leak Detection Lamp.

FLUSHING (R-1234YF)

Special Tools

- **GE-41447** Air Conditioning Tracer Dye-Box of 24
- **GE-50078** Enhanced Leak Detector
- **GE-45268** Air Conditioning Flush adapter Kit

For equivalent regional tools, [**Special Tools**](#).

General Information

R-1234yf (HFO-1234yf) - 2, 3, 3, 3 - Tetrafluoroprop-1-ene (CF₃CFCH₂), is an olefin containing hydrogen, fluorine and carbon with thermodynamic properties similar to R-134a. This refrigerant is a mildly flammable gas. It has a boiling point of -29.2Â°C, a vapor pressure of 583 kPa absolute at 20Â°C, no ozone depletion potential, and a global warming potential (GWP) of 4.

In certain regions, technicians repairing or servicing motor vehicle air conditioning (MVAC) systems must be trained and certified by the appropriate regional or national regulatory agency.

- In the USA, refer to the EPA website for MVAC training requirements.
<http://www.epa.gov/ozone/title6/609/technicians/609certs.html>
- In Canada, refer to the Environment Canada website for MVAC training requirements.
<http://www.ec.gc.ca/ozone/default.asp?lang=En&n=943E1CAB-1#ws4E6F6835>
- In Europe, refer to Commission Regulation (EC) No 307/2008 for MVAC training requirements. <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2008:092:0025:0027:EN:PDF>

WARNING: [**R-1234yf Proper Service Procedures Warning**](#) .

NOTE: **Flushing is not intended to remove metal from the air conditioning system.**

Flushing is intended to remove the following:

- Contaminated AC Compressor oil
- Desiccant, following a desiccant bag failure
- Overcharge of AC Compressor oil
- Refrigerant contamination

Forward Flushing Setup

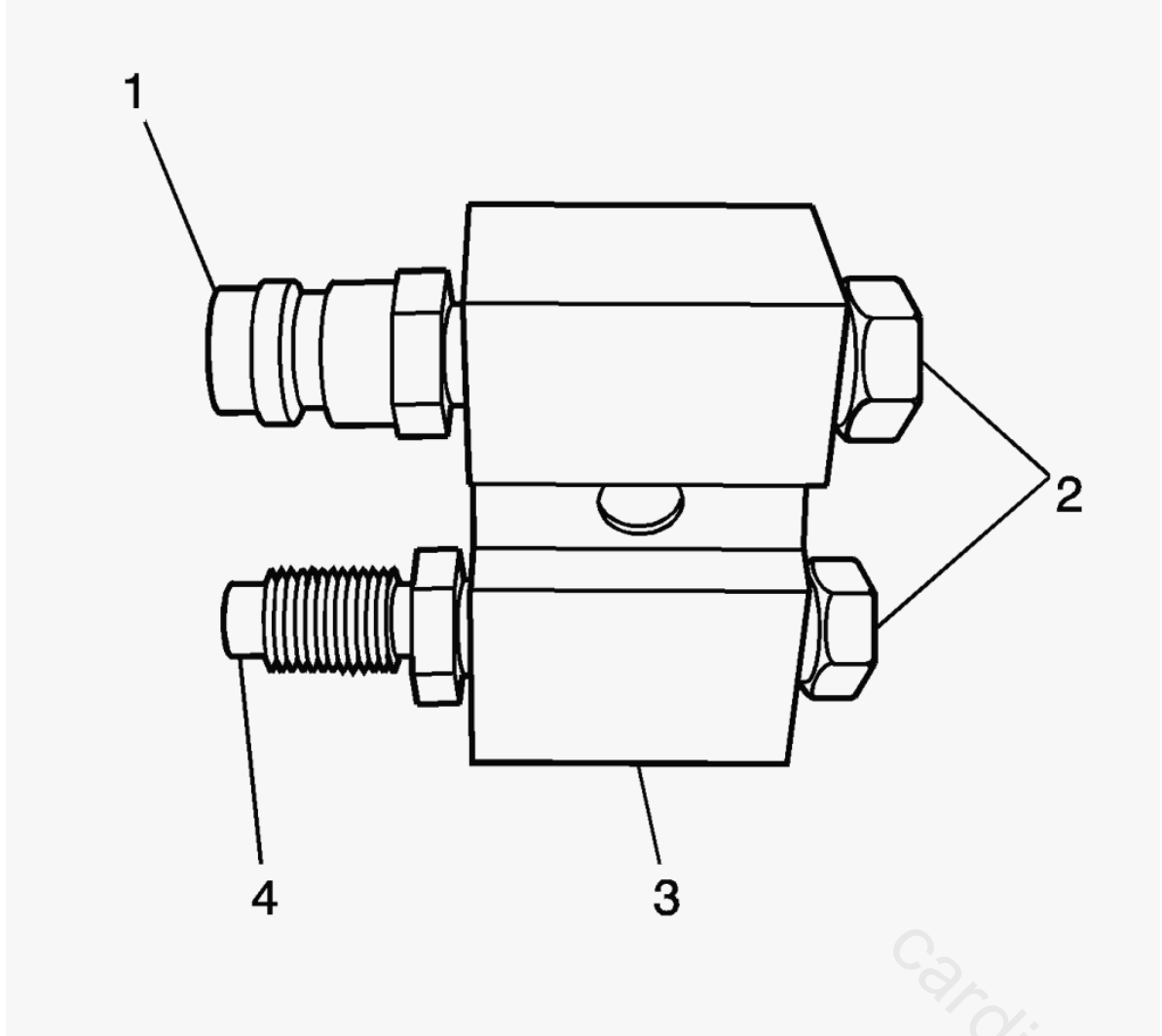


Fig. 7: Identifying J 45268-2, J 45268-7, J 45268-8, & J 45268-9
Courtesy of GENERAL MOTORS COMPANY

NOTE:

- Forward flow refrigerant flushing is recommended for contaminated refrigerant or AC Compressor oil.
- Inspect and lubricate GE-45268 adapter kit fitting O-rings. [Air Conditioning System Seal Replacement](#).

1. Install both GE-45268-9 fitting O-ring onto GE-45268-10 adapter.
2. Install GE-45268-131 fitting O-ring onto suction side of GE-45268-10 adapter.
3. Install GE-45268-7 fitting O-ring onto discharge side of GE-45268-10 adapter.

Reverse Flushing Setup

NOTE:

- Reverse flow refrigerant flush is recommended for desiccant bag failure. Replace condenser/receiver dehydrator assembly when air conditioning flush is complete and perform the following procedure:
- Inspect and lubricate GE - 45268 adapter kit fitting O-rings. [Air Conditioning System Seal Replacement](#).

1. Install both GE - 45268-9 fitting O-ring onto GE - 45268-10 adapter.
2. Install GE - 45268-7 fitting O-ring onto suction side of GE - 45268-10 adapter.
3. Install GE - 45268-131 fitting O-ring onto discharge side of GE - 45268-10 adapter.

Flush Procedure

NOTE:

Warmer engine or ambient temperatures decreases refrigerant recovery time during the Air Conditioning flush procedure.

1. Recover the refrigerant. [Refrigerant Recovery and Recharging \(R-134a\)](#)[Refrigerant Recovery and Recharging \(R-1234yf\)](#).
2. Remove the thermal expansion valve (TXV). [Air Conditioning Evaporator Thermal Expansion Valve Replacement](#).
3. Install the TXV stud onto **GE-45268-115** adapter.
4. Install new sealing washers onto evaporator core. [Air Conditioning System Seal Replacement](#).
5. Install **GE-45268-115** adapter in place of the TXV, using an oversized seal washer.

CAUTION: [Fastener Caution](#) .

6. Install the TXV mounting bolts and tighten to 15 N.m (11 lb ft).
7. Install new washers onto liquid line and suction hose. [Air Conditioning System Seal Replacement](#).
8. Connect liquid line and suction hose to **GE - 45268-115** adapter using an oversized seal washer.
9. Install the TXV block fitting nut and tighten to 19 N.m (14 lb ft).
10. Remove the air conditioning compressor. [Air Conditioning Compressor Replacement \(LYX\)](#)[Air Conditioning Compressor Replacement \(LTG\)](#)[Air Conditioning Compressor Replacement \(LH7\)](#).
11. Remove the receiver and dehydrator. .

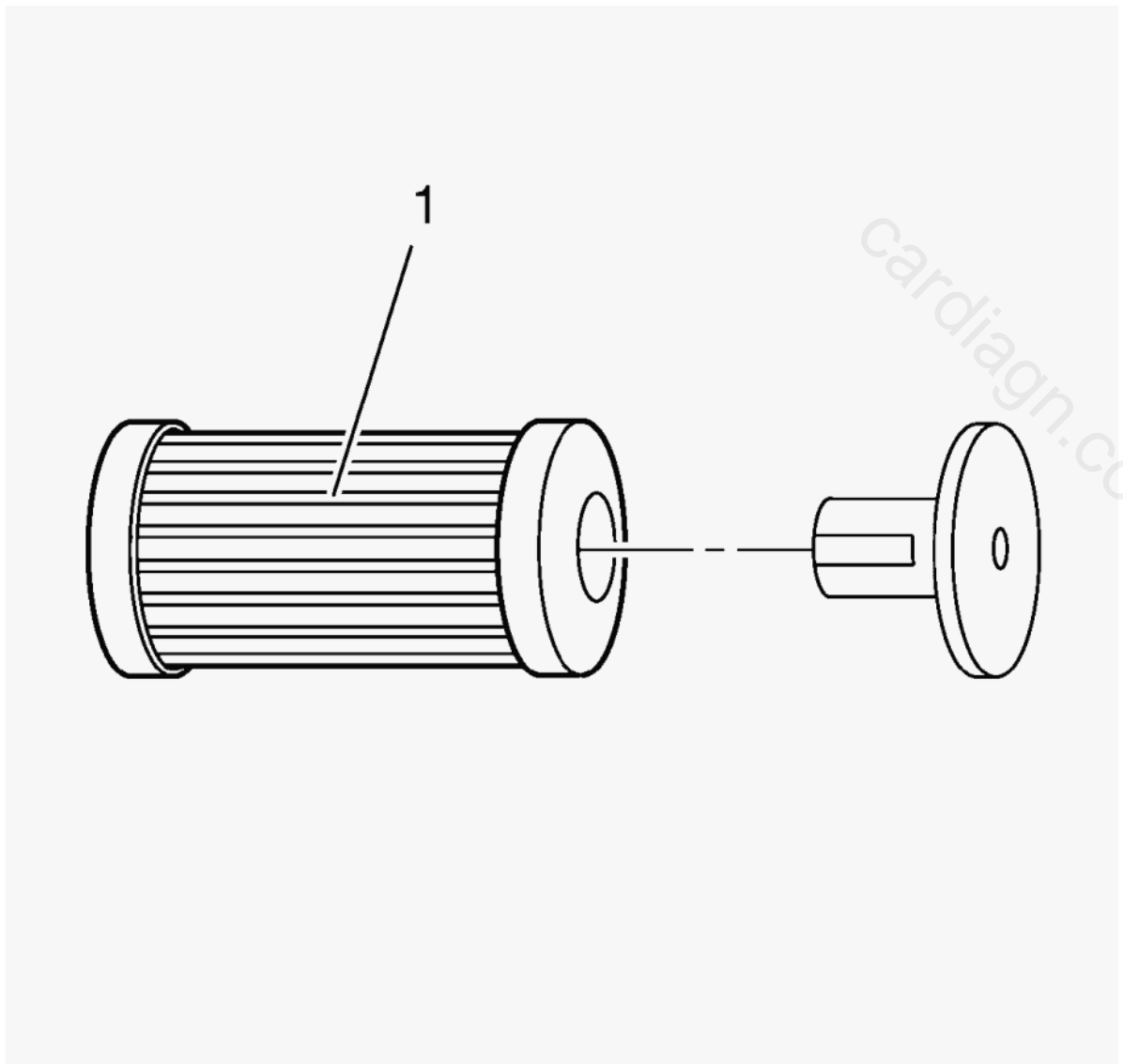


Fig. 8: A/C Refrigerant Filter

Courtesy of GENERAL MOTORS COMPANY

NOTE: The filter inside **GE-45628-1** adapter is serviceable. Remove and discard check valve from the filter.

12. Service the filter before each flush.

NOTE: Assure that suction and discharge ports on **GE-45268-10** correspond to

13. Install new sealing washers onto air conditioning compressor and condenser hose. [Air Conditioning System Seal Replacement](#). Assure that suction and discharge ports on **GE-45268-10** adapter correspond to suction and discharge ports on air conditioning compressor to condenser hose.
14. Install **GE-45268-10** filter adapter to the air conditioning compressor to condenser hose.
15. Inspect an available **GE-45268-1** filter assembly for **GE-45268-132** low side fitting for R-1234yf. If it is not installed, remove the existing adapter and install **GE-45268-132**, low side fitting.
16. Connect **GE-45268-1** filter to **GE-45268-7** adapter.
17. Connect blue hose from air conditioning filling device to **GE-45268** adapter.
18. Connect red hose from air conditioning filling device to **GE-45268** adapter.
19. Disconnect blue hose from air conditioning filling device to **GE-45268-1** adapter.
20. Disconnect **GE-45268-1** adapter from **GE-45268-10** adapter.
21. Remove **GE-45268-132** low side fitting from **GE-45268-1** filter if necessary and replace with the original adapter from step 15.
22. Remove **GE-45268-10** adapter from the air conditioning compressor to condenser hose.

NOTE: Flushing will remove all PAG oil from the air conditioning system. The air conditioning system must be replenished with the correct amount of PAG oil.

23. If you will reinstall the removed air conditioning compressor, perform the following procedure:
 - Remove the air conditioning compressor drain plug.
 - Drain PAG oil from the air conditioning compressor. Rotate compressor input shaft to assist in draining the PAG oil from compressor.
 - Add the total system capacity of PAG oil to air conditioning compressor. [Approximate Fluid Capacities](#).
 - Add one bottle of **GE-41447** air conditioning Tracer Dye.
 - Install the air conditioning compressor drain plug and tighten to 15 N.m (11 lb ft).

NOTE: Flushing will remove fluorescent leak detection dye from air conditioning system.

24. Install the air conditioning compressor. [Air Conditioning Compressor Replacement \(LYX\)](#)[Air Conditioning Compressor Replacement \(LTG\)](#)[Air Conditioning Compressor Replacement \(LH7\)](#).
25. Install new receiver and dehydrator. .
26. Remove the TXV block fitting nut.
27. Disconnect liquid line and suction line from **GE-45268-115** adapter.
28. Remove the TXV bolts retaining **GE - 45268-115** adapter.
29. Remove **GE - 45268-115** adapter.
30. Inspect the TXV for debris. Clean or replace as needed.
31. Install the TXV. [Air Conditioning Evaporator Thermal Expansion Valve Replacement](#).
32. Evacuate and recharge the air conditioning system. [Refrigerant Recovery and Recharging \(R-134a\)](#)[Refrigerant Recovery and Recharging \(R-1234yf\)](#).

WARNING: Evaporators in vehicles equipped with R-1234yf refrigerant systems must never be repaired or replaced with an evaporator removed from another or salvage vehicle. Use only new SAE J2842 certified and labeled evaporator(s) as replacement parts. Failure to follow this guideline could pose a health and/or safety risk to the vehicle occupant(s).

33. Leak test fittings using **GE-50078** enhanced leak detector.

AIR CONDITIONING COMPRESSOR OIL BALANCING

Draining Procedure



Fig. 9: Draining And Measuring Refrigerant Oil
Courtesy of GENERAL MOTORS COMPANY

NOTE: Drain and measure as much of the refrigerant oil as possible from the removed compressor.

1. Remove the compressor crankcase oil drain plug and drain the crankcase into a clean, graduated container.
2. Drain the oil from both the suction and discharge ports of the removed compressor (1) into the same container.

Rotate the compressor shaft to assist in draining the compressor (1).

3. Measure and record the amount of oil drained from the removed compressor (1).

This measurement will be used during installation of the replacement compressor (1).

4. Inspect oil drained from removed compressor (1). Refer to [Air Conditioning Compressor Oil Diagnosis](#).
5. Properly discard the used refrigerant oil.

Balancing Procedure

NOTE: The refrigerant oil in the A/C system must be balanced during compressor replacement.

NOTE: Check the oil volume in the replacement compressor.

1. The replacement compressor is shipped partially filled with refrigerant oil. The amount of oil has to be balanced according to below.



Fig. 10: Draining And Measuring Refrigerant Oil

Courtesy of GENERAL MOTORS COMPANY

2. Before installing the compressor (1) the refrigerant oil will have to be partially drained:
 1. Refer to the amount of refrigerant oil recorded during the compressor removal.
 2. Subtract the amount recorded from the total system capacity. Refer to [Approximate Fluid Capacities](#).

The difference between the total system capacity and the recorded amount is the calculated amount to be drained from the replacement compressor (1).
3. Drain the calculated amount of refrigerant oil from the replacement compressor.

AIR CONDITIONING COMPRESSOR OIL DRAIN PLUG REPLACEMENT (LYX)



Fig. 11: Air Conditioning Compressor Oil Drain Plug.(LYX)
Courtesy of GENERAL MOTORS COMPANY

Callout	Component Name
Preliminary Procedures <u>Refrigerant Recovery and Recharging (R-134a)</u> <u>Refrigerant Recovery and Recharging (R-1234yf)</u>	
1	Air Conditioning Compressor Oil Drain Plug CAUTION: Refer to <u>Component Fastener Tightening Caution</u> . Tighten 15 N.m (11 lb ft) Procedure Balance the compressor oil. <u>Air Conditioning Compressor Oil Balancing</u>

AIR CONDITIONING COMPRESSOR OIL DRAIN PLUG REPLACEMENT (LTG)

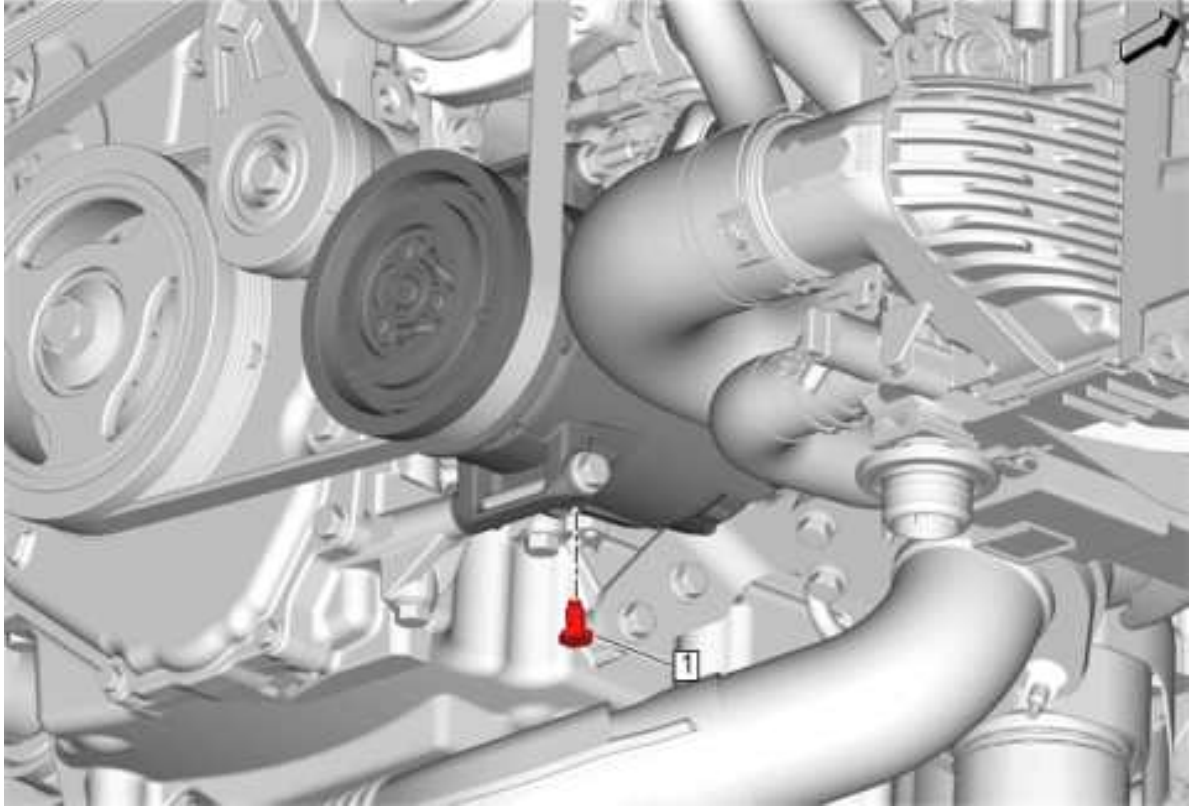


Fig. 12: Air Conditioning Compressor Oil Drain Plug.(LTG)

Courtesy of GENERAL MOTORS COMPANY

Callout	Component Name
Preliminary Procedures <u>Refrigerant Recovery and Recharging (R-134a)Refrigerant Recovery and Recharging (R-1234yf)</u>	
1	Air Conditioning Compressor Oil Drain Plug CAUTION: Refer to <u>Component Fastener Tightening Caution</u> . Tighten 15 N.m (11 lb ft) Procedure Balance the compressor oil. Refer to <u>Air Conditioning Compressor Oil Balancing</u>

AIR CONDITIONING COMPRESSOR OIL DRAIN PLUG REPLACEMENT (LH7)

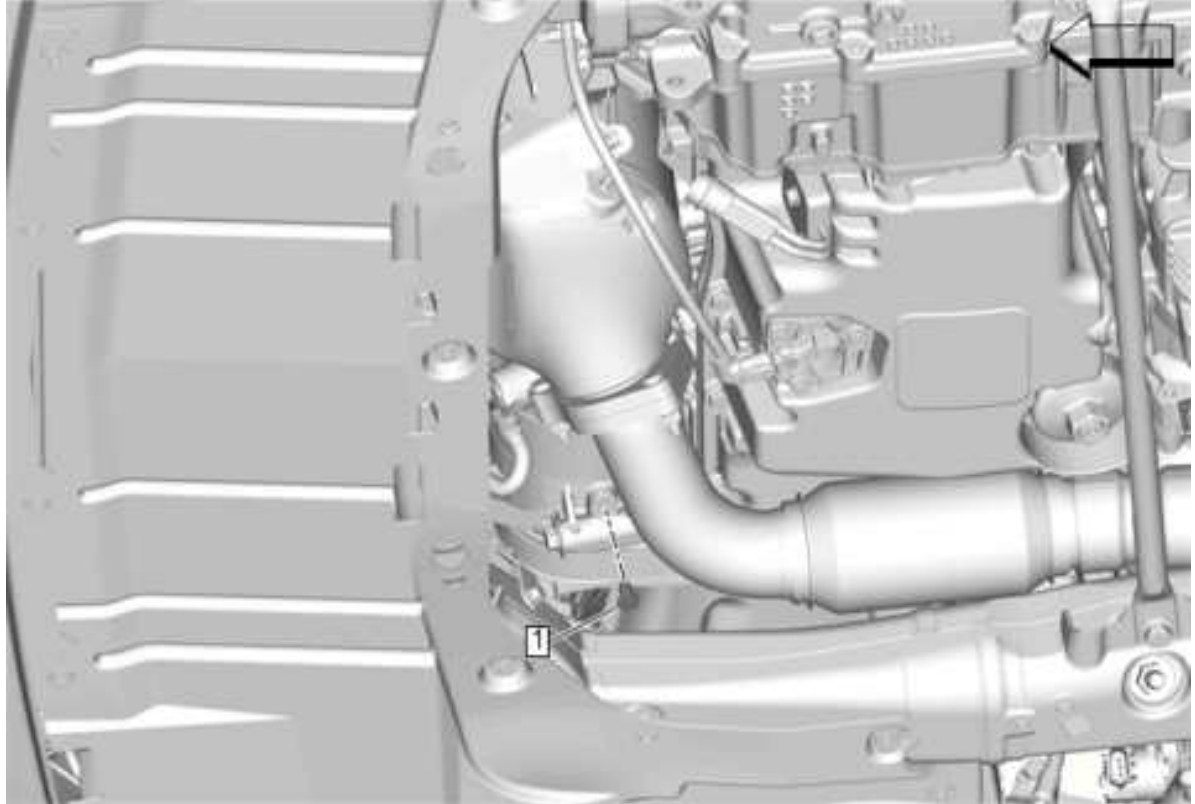


Fig. 13: Air Conditioning Compressor Oil Drain Plug.(LH7)

Courtesy of GENERAL MOTORS COMPANY

Callout	Component Name
Preliminary Procedures <u>Refrigerant Recovery and Recharging (R-134a)</u> <u>Refrigerant Recovery and Recharging (R-1234yf)</u>	
1	Air Conditioning Compressor Oil Drain Plug CAUTION: Refer to <u>Component Fastener Tightening Caution</u> . Tighten 15 N.m (11 lb ft) Procedure Balance the compressor oil. Refer to <u>Air Conditioning Compressor Oil Balancing</u>

AIR CONDITIONING COMPRESSOR REPLACEMENT (LYX)

Removal Procedure

WARNING: Refer to SAE J2913 Certified Electronic Leak Detectors Warning .

1. Recover the refrigerant. Refrigerant Recovery and Recharging (R-134a)Refrigerant Recovery and Recharging (R-1234yf)

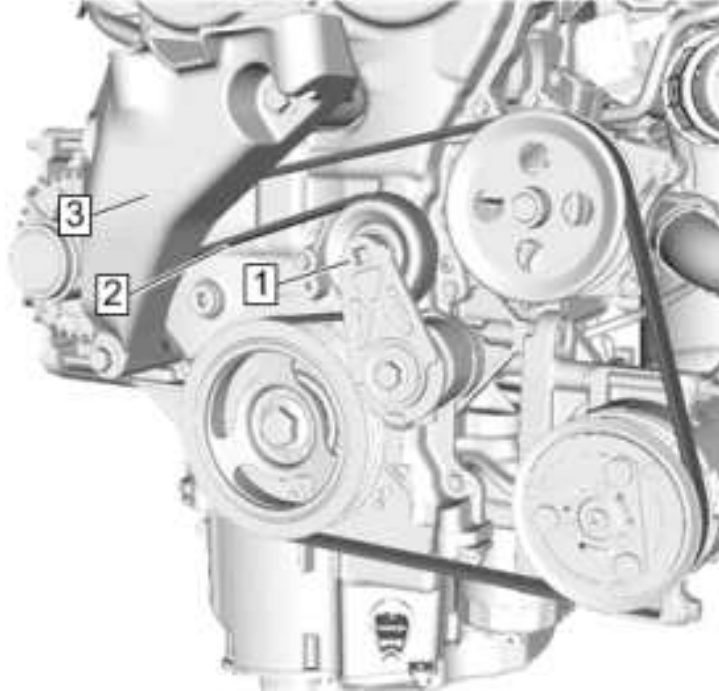


Fig. 14: Drive Belt Diagram

Courtesy of GENERAL MOTORS COMPANY

2. Remove Drive Belt (2) @Air Conditioning Compressor - [Drive Belt Replacement](#)

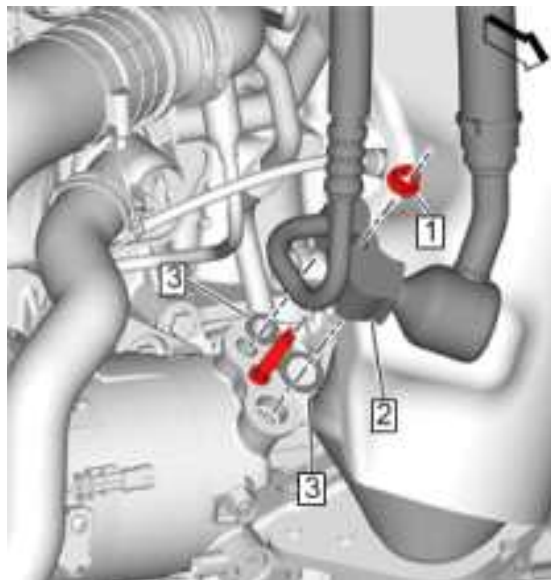


Fig. 15: Air Conditioning Evaporator Connector Hose/Tube and Compressor Hose

Courtesy of GENERAL MOTORS COMPANY

3. Remove Air Conditioning Evaporator Connector Hose/Tube and Compressor Hose (2) @Air Conditioning Compressor - [Air Conditioning Evaporator Connector Hose/Tube and Compressor Hose Replacement \(LYX\)](#)

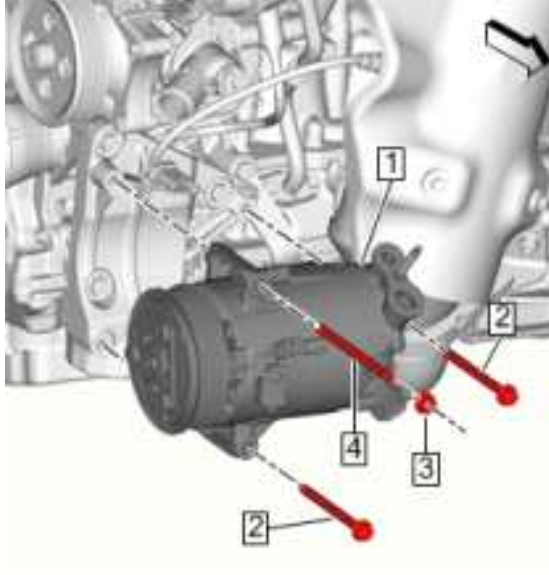


Fig. 16: Air Conditioning Compressor

Courtesy of GENERAL MOTORS COMPANY

4. Disconnect all electrical connectors.
5. Remove Air Conditioning Compressor Nut (3) @Air Conditioning Compressor (1)
6. Remove Air Conditioning Compressor Bolt (2) @Air Conditioning Compressor (1)
7. Remove Air Conditioning Compressor Stud (4) @Air Conditioning Compressor (1)
8. Remove the air conditioning compressor (1) from the vehicle.

Installation Procedure

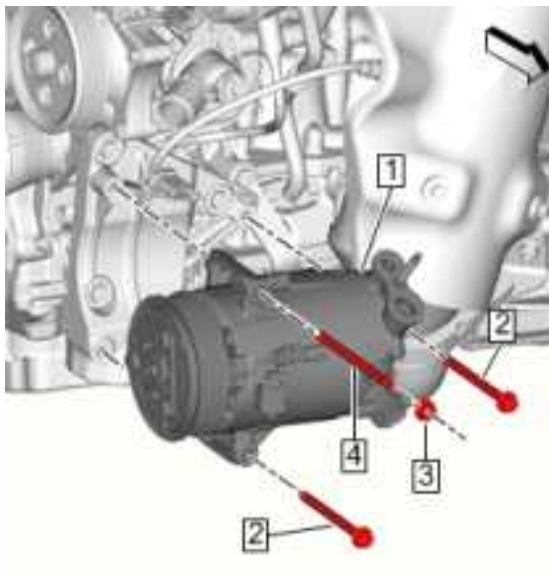


Fig. 17: Air Conditioning Compressor

Courtesy of GENERAL MOTORS COMPANY

1. Install the air conditioning compressor (1) to the vehicle.

CAUTION: Refer to **Fastener Caution** .

2. Install Air Conditioning Compressor Stud (4) @Air Conditioning Compressor (1) and tighten 9 N.m (80 lb in)
3. Install Air Conditioning Compressor Bolt (2) @Air Conditioning Compressor (1) and tighten (1) 22 N.m (16 lb ft)
4. Install Air Conditioning Compressor Nut (3) @Air Conditioning Compressor (1) and tighten 22 N.m (16 lb ft)
5. Connect all electrical connectors.

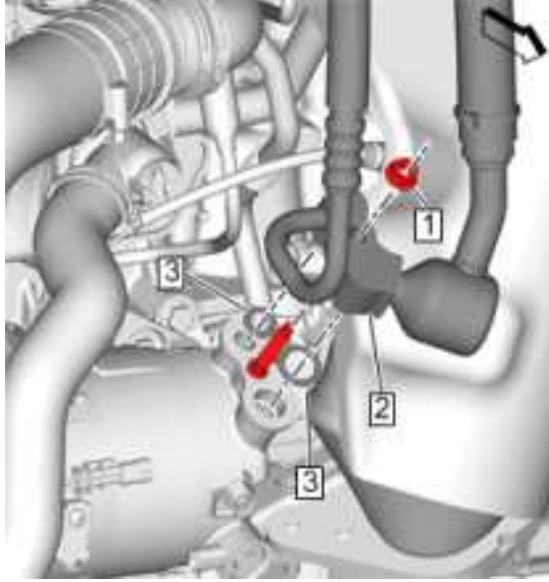


Fig. 18: Air Conditioning Evaporator Connector Hose/Tube and Compressor Hose
Courtesy of GENERAL MOTORS COMPANY

6. Install Air Conditioning Evaporator Connector Hose/Tube and Compressor Hose (2) @Air Conditioning Compressor - [Air Conditioning Evaporator Connector Hose/Tube and Compressor Hose Replacement \(LYX\)](#)

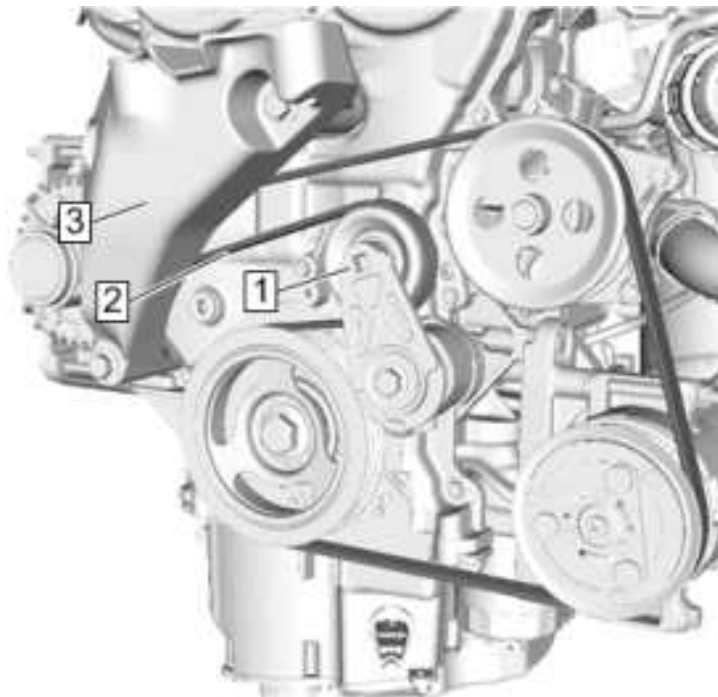


Fig. 19: Drive Belt
Courtesy of GENERAL MOTORS COMPANY

7. Remove Drive Belt (2) @Air Conditioning Compressor - [Drive Belt Replacement](#)
8. Recharge the refrigerant. [Refrigerant Recovery and Recharging \(R-134a\)](#)[Refrigerant Recovery and Recharging \(R-1234yf\)](#)
9. Inspect for refrigerant leaks.

AIR CONDITIONING COMPRESSOR REPLACEMENT (LTG)

Removal Procedure

1. Recover the refrigerant. [Refrigerant Recovery and Recharging \(R-134a\)](#)[Refrigerant Recovery and Recharging \(R-1234yf\)](#)
2. Remove Drive Belt@Air Conditioning Compressor - [Drive Belt Replacement](#)

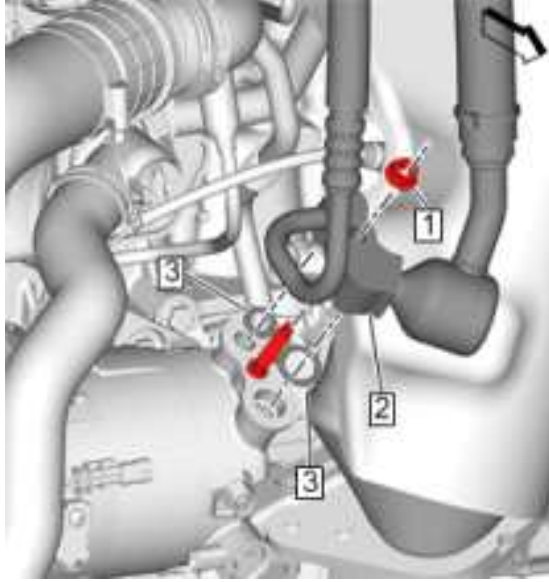


Fig. 20: Air Conditioning Evaporator Connector Hose/Tube and Compressor Hose
 Courtesy of GENERAL MOTORS COMPANY

3. Remove Air Conditioning Evaporator Connector Hose/Tube and Compressor Hose (2) @Air Conditioning Compressor - **Air Conditioning Evaporator Connector Hose/Tube and Compressor Hose Replacement (LTG)**

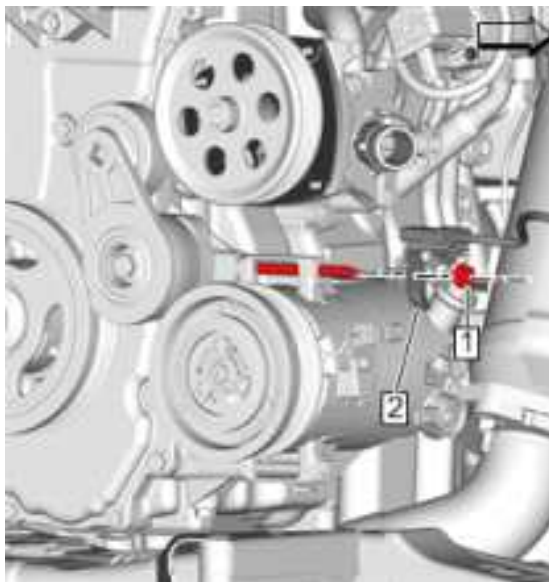


Fig. 21: Air Conditioning Compressor Nut And Engine Wiring Harness Bracket
 Courtesy of GENERAL MOTORS COMPANY

4. Remove Air Conditioning Compressor Nut (1) @Air Conditioning Compressor.
5. Remove Engine Wiring Harness Bracket (2) @Air Conditioning Compressor.

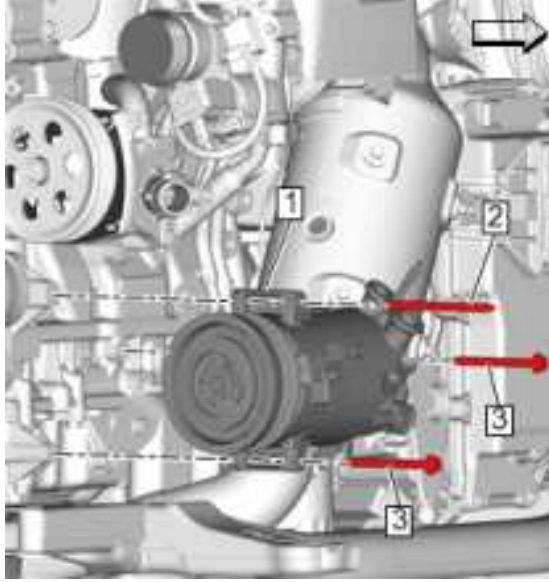


Fig. 22: Air Conditioning Compressor
Courtesy of GENERAL MOTORS COMPANY

6. Disconnect all electrical connectors.
7. Remove Air Conditioning Compressor Bolt (3) @Air Conditioning Compressor (1)
8. Remove Air Conditioning Compressor Stud (2) @Air Conditioning Compressor (1)
9. Remove the air conditioning compressor (1) from the vehicle.

Installation Procedure

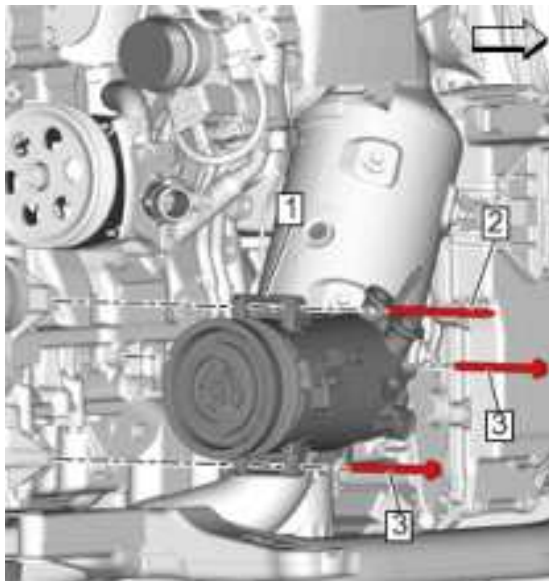


Fig. 23: Air Conditioning Compressor
Courtesy of GENERAL MOTORS COMPANY

1. Install the air conditioning compressor (1) to the vehicle.

CAUTION: Refer to **Fastener Caution** .

2. Install Air Conditioning Compressor Stud (2) @Air Conditioning Compressor (1) and tighten 9 N.m (80 lb in)
3. Install Air Conditioning Compressor Bolt (3) @Air Conditioning Compressor (1) and tighten 22 N.m (16 lb ft)

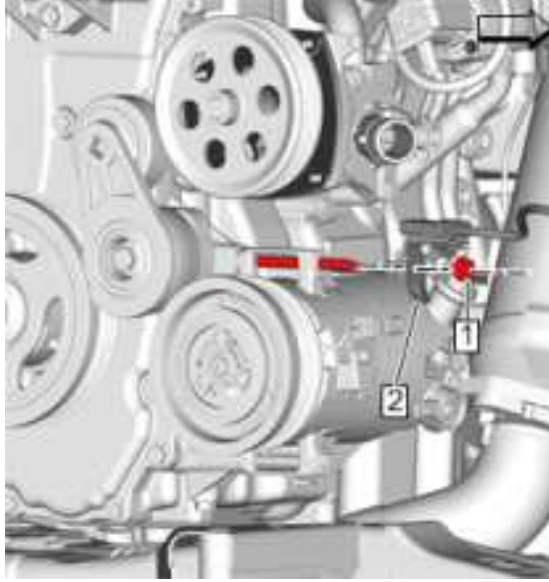


Fig. 24: Air Conditioning Compressor Nut And Engine Wiring Harness Bracket
Courtesy of GENERAL MOTORS COMPANY

4. Install Engine Wiring Harness Bracket (2) @Air Conditioning Compressor
5. Install Air Conditioning Compressor Nut (1) @Air Conditioning Compressor (3) and tighten 22 N.m (16 lb ft)
6. Connect all electrical connectors.

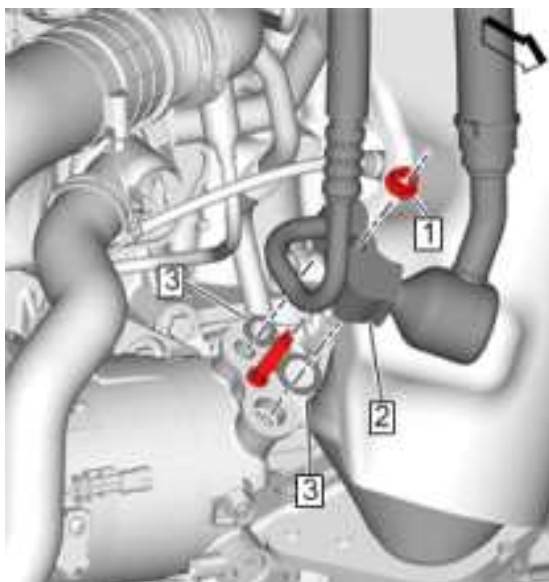


Fig. 25: Air Conditioning Evaporator Connector Hose/Tube and Compressor Hose
Courtesy of GENERAL MOTORS COMPANY

7. Install Air Conditioning Evaporator Connector Hose/Tube and Compressor Hose (2) @Air Conditioning Compressor - [Air Conditioning Evaporator Connector Hose/Tube and Compressor Hose Replacement \(LTG\)](#)
8. Install Drive Belt@Air Conditioning Compressor - [Drive Belt Replacement](#)
9. Recharge the refrigerant. [Refrigerant Recovery and Recharging \(R-134a\)](#)[Refrigerant Recovery and Recharging \(R-1234yf\)](#)
10. Inspect for refrigerant leaks.

AIR CONDITIONING COMPRESSOR REPLACEMENT (LH7)

Removal Procedure

1. Recover the refrigerant. [Refrigerant Recovery and Recharging \(R-134a\)](#)[Refrigerant Recovery and Recharging \(R-1234yf\)](#)
2. Remove Generator and Air Conditioning Compressor Belt@Air Conditioning Compressor - [Generator and Air Conditioning Compressor Belt Replacement](#)

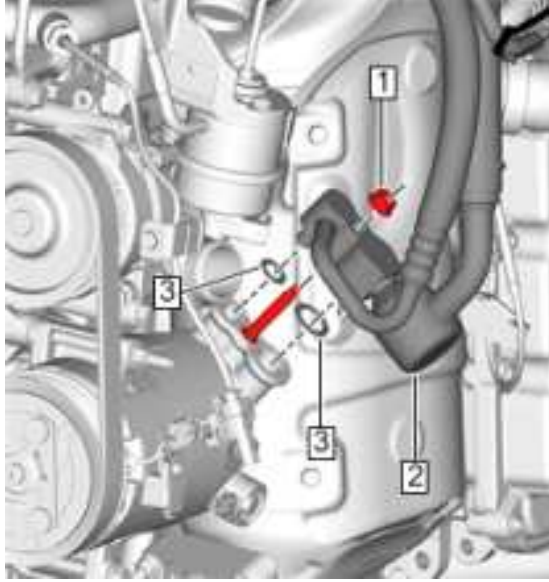


Fig. 26: A/C Evaporator Connector Hose/Tube And Compressor Hose, Seals And Retaining Nut
Courtesy of GENERAL MOTORS COMPANY

3. Remove Air Conditioning Evaporator Connector Hose/Tube and Compressor Hose (2) @Air Conditioning Compressor - **Air Conditioning Evaporator Connector Hose/Tube and Compressor Hose Replacement (LH7)**

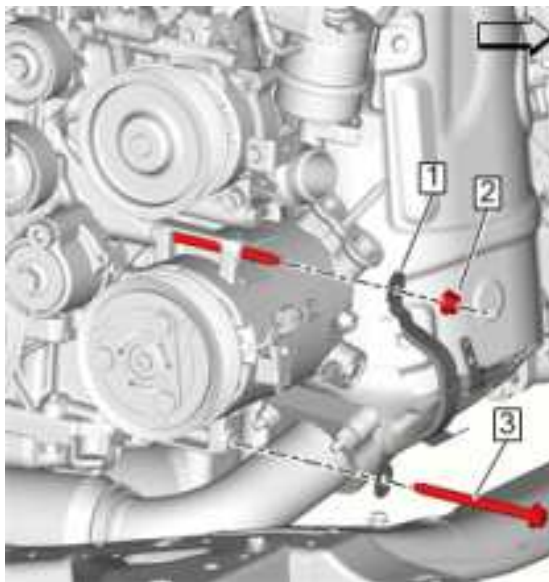


Fig. 27: Air Conditioning Compressor
Courtesy of GENERAL MOTORS COMPANY

4. Disconnect all electrical connectors.
5. Remove Air Conditioning Compressor Nut (2) @Air Conditioning Compressor.
6. Remove Air Conditioning Compressor Bolt (3) @Air Conditioning Compressor.
7. Remove Engine Wiring Harness Bracket (1) @Air Conditioning Compressor.

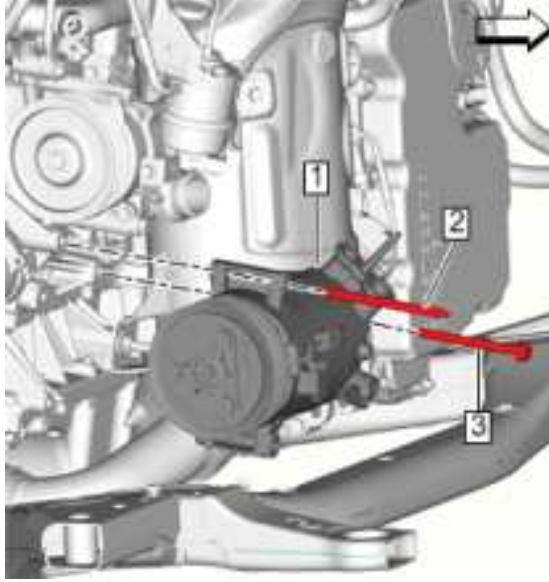


Fig. 28: Air Conditioning Compressor Bolt And Stud

Courtesy of GENERAL MOTORS COMPANY

8. Remove Air Conditioning Compressor Bolt (3) @Air Conditioning Compressor (1)
9. Remove Air Conditioning Compressor Stud (2) @Air Conditioning Compressor (1)
10. Remove the air conditioning compressor (1) from the vehicle.

Installation Procedure

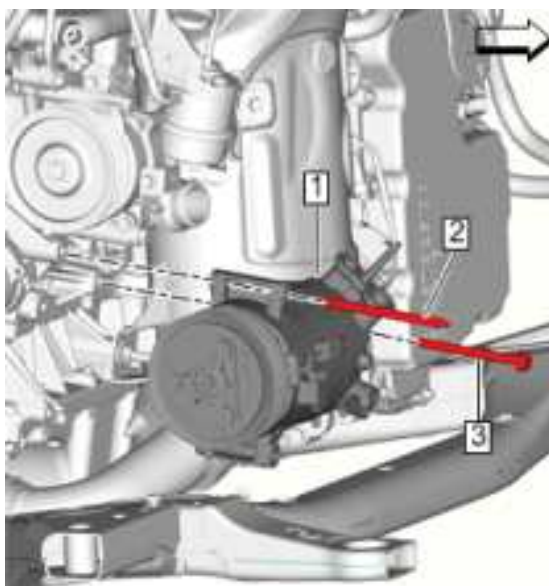


Fig. 29: Air Conditioning Compressor Bolt And Stud

Courtesy of GENERAL MOTORS COMPANY

1. Install the air conditioning compressor (1) to the vehicle.

CAUTION: Refer to **Fastener Caution** .

2. Install Air Conditioning Compressor Stud (2) @Air Conditioning Compressor (1) and tighten 9 N.m (80 lb in)
3. Install Air Conditioning Compressor Bolt (3) @Air Conditioning Compressor (1) and tighten 22 N.m (16 lb ft)

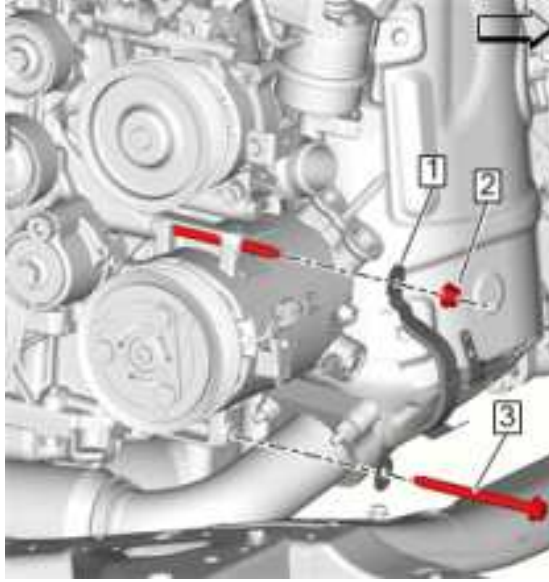


Fig. 30: Air Conditioning Compressor
Courtesy of GENERAL MOTORS COMPANY

4. Install Engine Wiring Harness Bracket (1) @Air Conditioning Compressor
5. Install Air Conditioning Compressor Bolt (3) @Air Conditioning Compressor and tighten 22 N.m (16 lb ft)
6. Install Air Conditioning Compressor Nut (2) @Air Conditioning Compressor and tighten 22 N.m (16 lb ft)
7. Connect all electrical connectors.

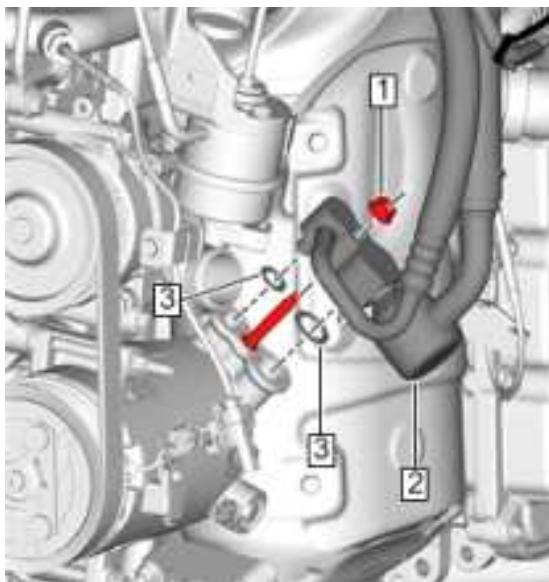


Fig. 31: A/C Evaporator Connector Hose/Tube And Compressor Hose, Seals And Retaining Nut
Courtesy of GENERAL MOTORS COMPANY

8. Install Air Conditioning Evaporator Connector Hose/Tube and Compressor Hose (2) @Air Conditioning Compressor - **Air Conditioning Evaporator Connector Hose/Tube and Compressor Hose Replacement (LH7)**
9. Install Generator and Air Conditioning Compressor Belt@Air Conditioning Compressor - **Generator and Air Conditioning Compressor Belt Replacement**
10. Recharge the refrigerant. **Refrigerant Recovery and Recharging (R-134a)Refrigerant Recovery and Recharging (R-1234yf)**
11. Inspect for refrigerant leaks.

COMPRESSOR PRESSURE RELIEF VALVE REPLACEMENT (LYX)

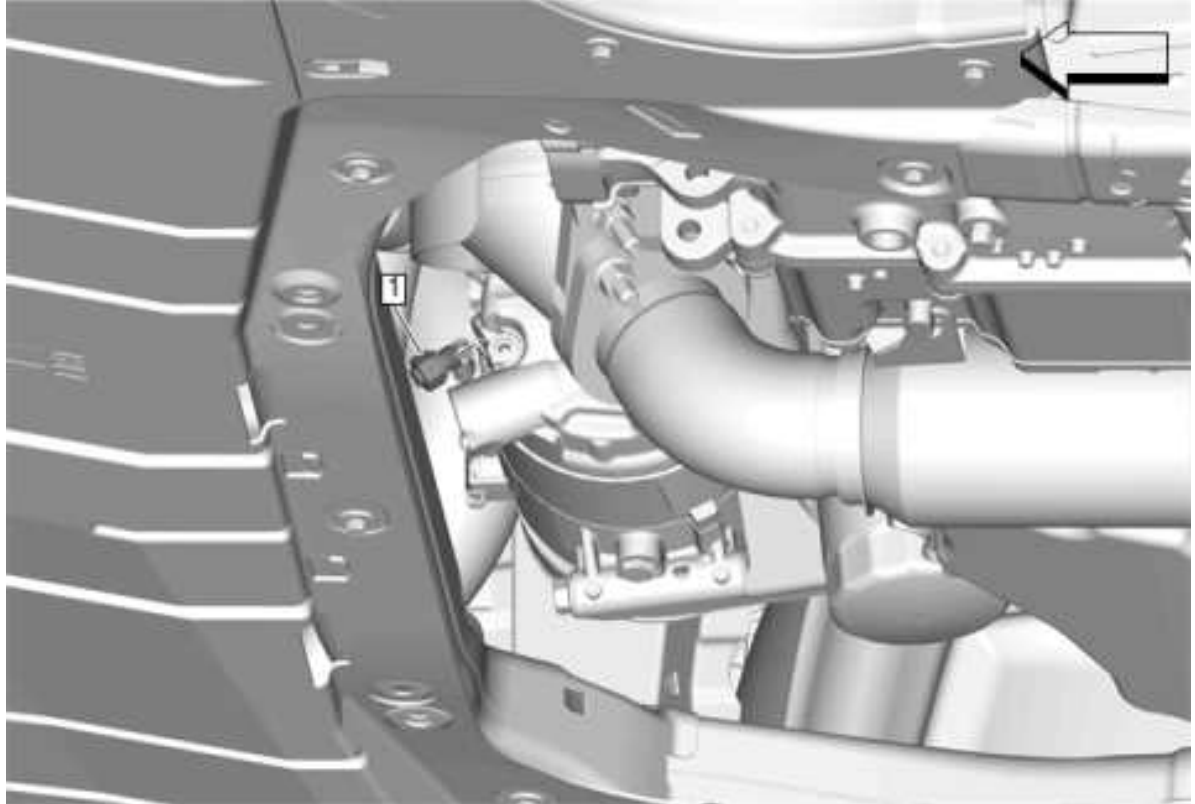


Fig. 32: Compressor Pressure Relief Valve
Courtesy of GENERAL MOTORS COMPANY

Callout	Component Name
Preliminary Procedures <u>Refrigerant Recovery and Recharging (R-134a)</u> <u>Refrigerant Recovery and Recharging (R-1234yf)</u>	
1	Air Conditioning Compressor Pressure Relief Valve CAUTION: Refer to <u>Component Fastener Tightening Caution</u> . Tighten 15 N.m (11 lb ft)

COMPRESSOR PRESSURE RELIEF VALVE REPLACEMENT (LTG)

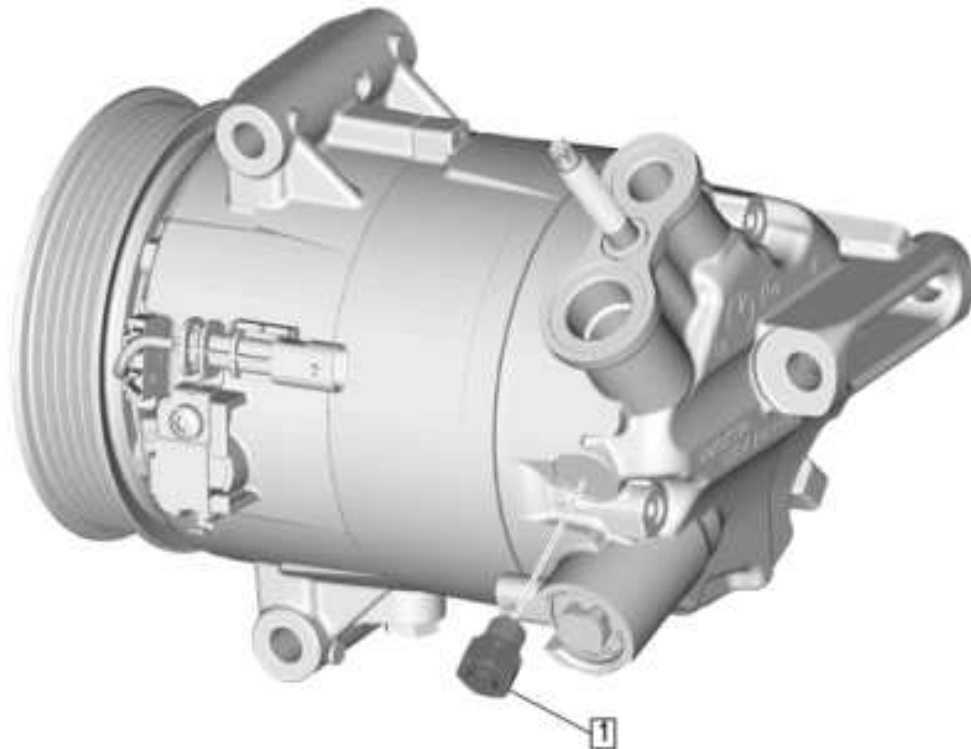


Fig. 33: Compressor Pressure Relief Valve
 Courtesy of GENERAL MOTORS COMPANY

Callout	Component Name
Preliminary Procedure <u>Refrigerant Recovery and Recharging (R-134a) Refrigerant Recovery and Recharging (R-1234yf)</u>	
1	Air Conditioning Compressor Pressure Relief Valve CAUTION: Refer to <u>Component Fastener Tightening Caution</u> . Tighten 15 N.m (11 lb ft)

COMPRESSOR PRESSURE RELIEF VALVE REPLACEMENT (LY7)

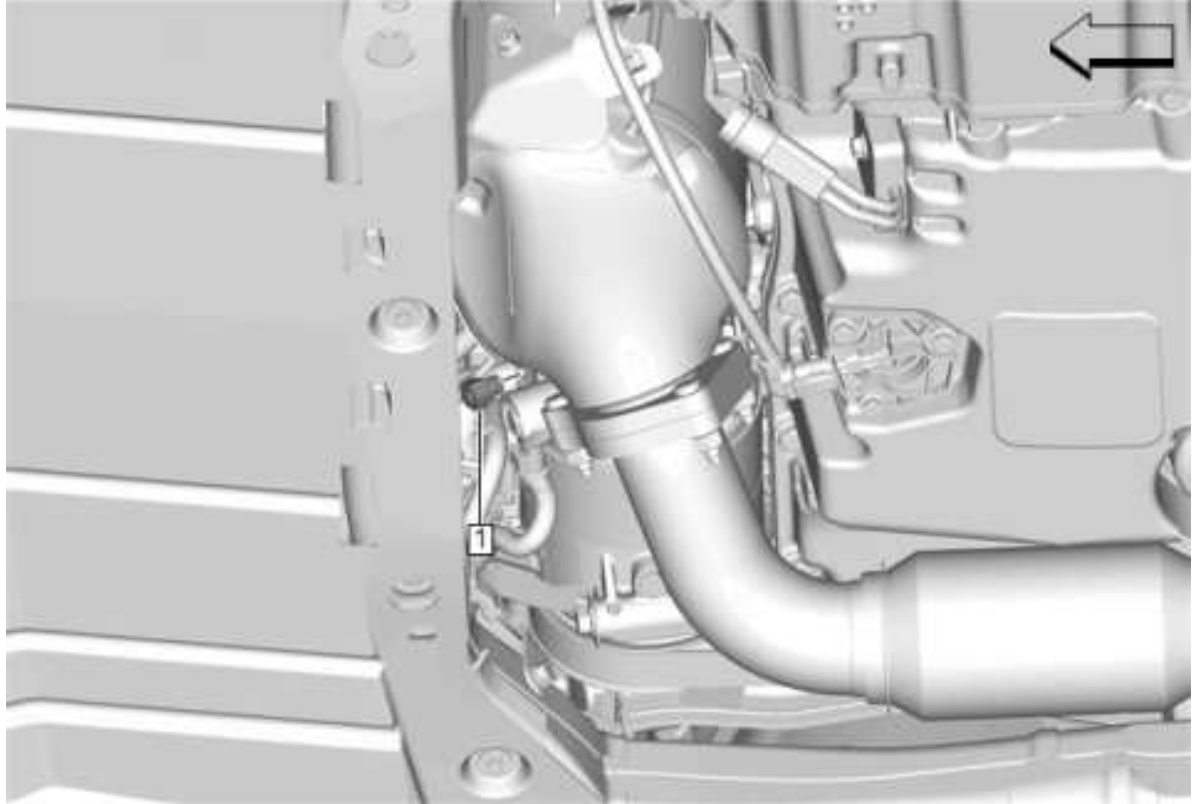


Fig. 34: Compressor Pressure Relief Valve
Courtesy of GENERAL MOTORS COMPANY

Callout	Component Name
Preliminary Procedure <u>Refrigerant Recovery and Recharging (R-134a)</u> <u>Refrigerant Recovery and Recharging (R-1234yf)</u>	
1	Air Conditioning Compressor Pressure Relief Valve CAUTION: Refer to <u>Component Fastener Tightening Caution</u> . Tighten 15 N.m (11 lb ft)

AIR CONDITIONING COMPRESSOR BRACKET REPLACEMENT (LYX)

Removal Procedure

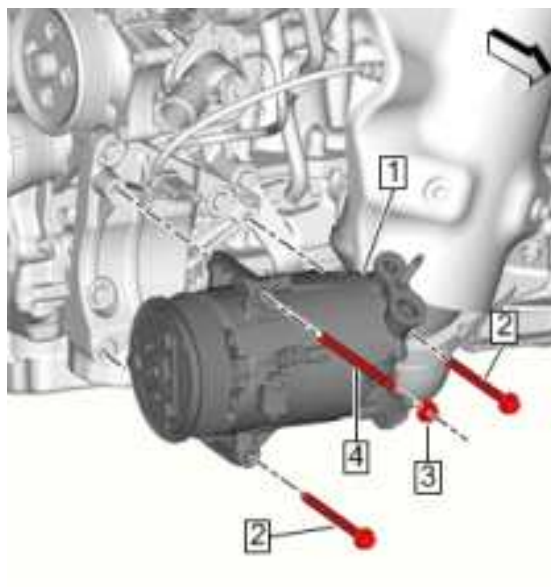


Fig. 35: Air Conditioning Compressor
Courtesy of GENERAL MOTORS COMPANY

1. Remove Air Conditioning Compressor (1) - [Air Conditioning Compressor Replacement \(LYX\)](#)

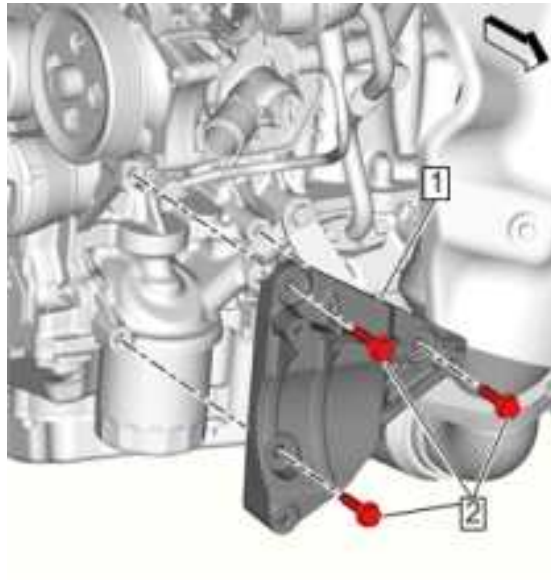


Fig. 36: Air Conditioning Compressor Bracket And Bolt
Courtesy of GENERAL MOTORS COMPANY

2. Remove Air Conditioning Compressor Bracket Bolt (2)
3. Remove Air Conditioning Compressor Bracket (1)

Installation Procedure

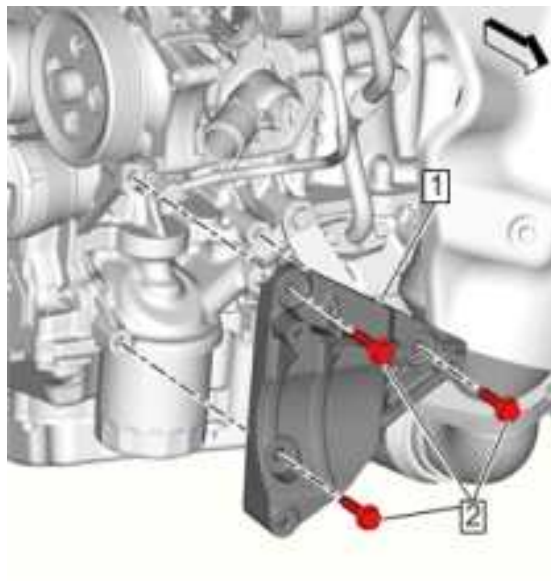


Fig. 37: Air Conditioning Compressor Bracket And Bolt
Courtesy of GENERAL MOTORS COMPANY

1. Install Air Conditioning Compressor Bracket (1)

CAUTION: Refer to [Fastener Caution](#) .

2. Install Air Conditioning Compressor Bracket Bolt (2) and tighten 22 N.m (16 lb ft)

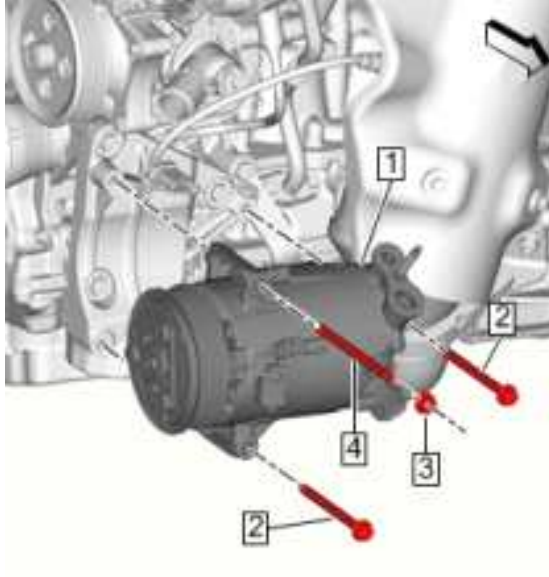


Fig. 38: Air Conditioning Compressor

Courtesy of GENERAL MOTORS COMPANY

3. Install Air Conditioning Compressor (1) [Air Conditioning Compressor Replacement \(LYX\)](#)

AIR CONDITIONING SYSTEM SEAL REPLACEMENT

Removal Procedure

1. Disassemble the A/C refrigerant components. Refer to the appropriate repair procedure.

NOTE: Cap or tape the open A/C refrigerant components immediately to prevent system contamination.

2. Cap or tape the A/C refrigerant components.

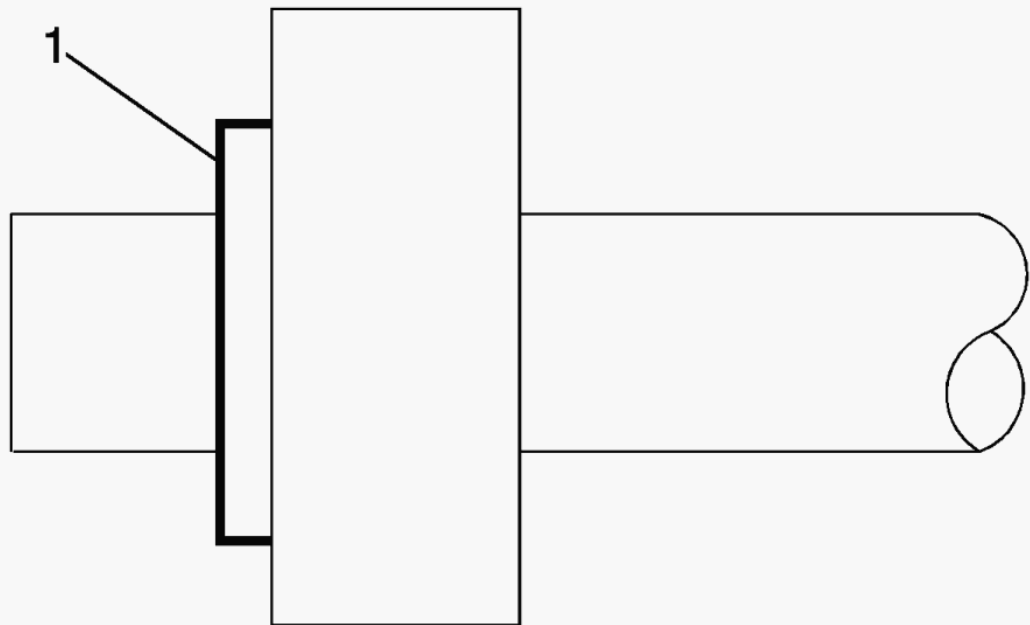


Fig. 39: A/C Refrigerant Sealing Washer
Courtesy of GENERAL MOTORS COMPANY

3. Remove the sealing washer (1) from the A/C refrigerant component.
4. Inspect the seal washer for signs of damage to help determine the root cause of the failure.
5. Inspect the A/C refrigerant components for damage or burrs. Repair if necessary.

NOTE: **DO NOT reuse sealing washer.**

6. DISCARD the sealing washer.

Installation Procedure

NOTE: **Flat washer type seals do not require lubrication.**

1. Inspect the new sealing washer for any signs of cracks, cuts, or damage.

Do not use a damaged sealing washer.

2. Remove the cap or tape from the A/C refrigerant components.

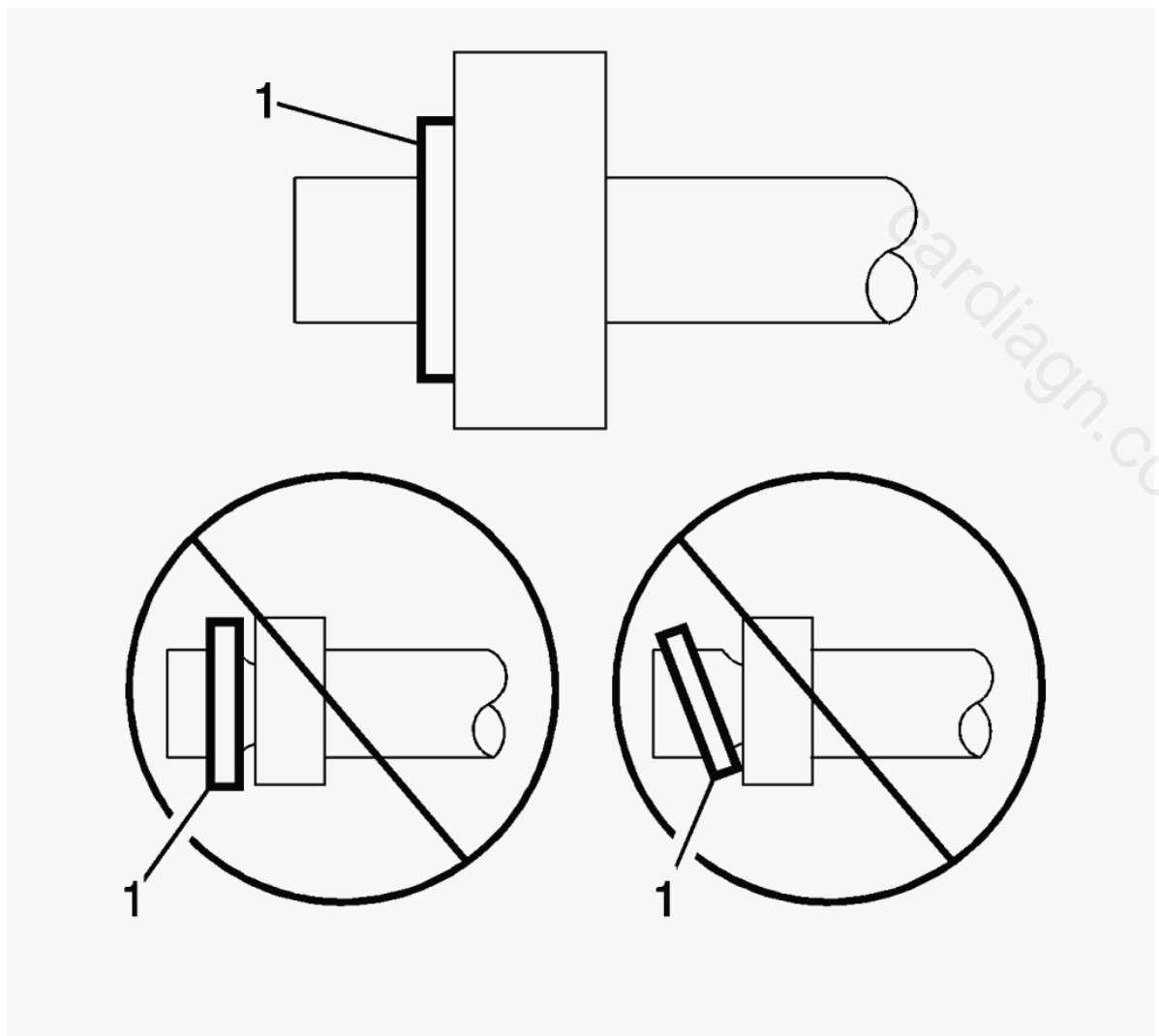


Fig. 40: Identifying Proper Seating Of A/C Refrigerant O-Ring
Courtesy of GENERAL MOTORS COMPANY

3. Using a lint-free clean, dry cloth, clean the sealing surfaces of the A/C refrigerant components.
4. Carefully install the NEW sealing washer (1) onto the A/C refrigerant component.

The sealing washer (1) must completely bottom against the surface of the fitting.

NOTE: **After tightening the A/C components, there should be a slight sealing gap of approximately 1.2 mm (3/64 in) between the A/C line and the A/C component.**

5. Assemble the remaining A/C refrigerant components. Refer to the appropriate repair procedure.

AIR CONDITIONING REFRIGERANT HEAT EXCHANGER REPLACEMENT (LYX)

Removal Procedure

1. Recover the refrigerant. [Refrigerant Recovery and Recharging \(R-134a\)](#)[Refrigerant Recovery and Recharging \(R-1234yf\)](#)

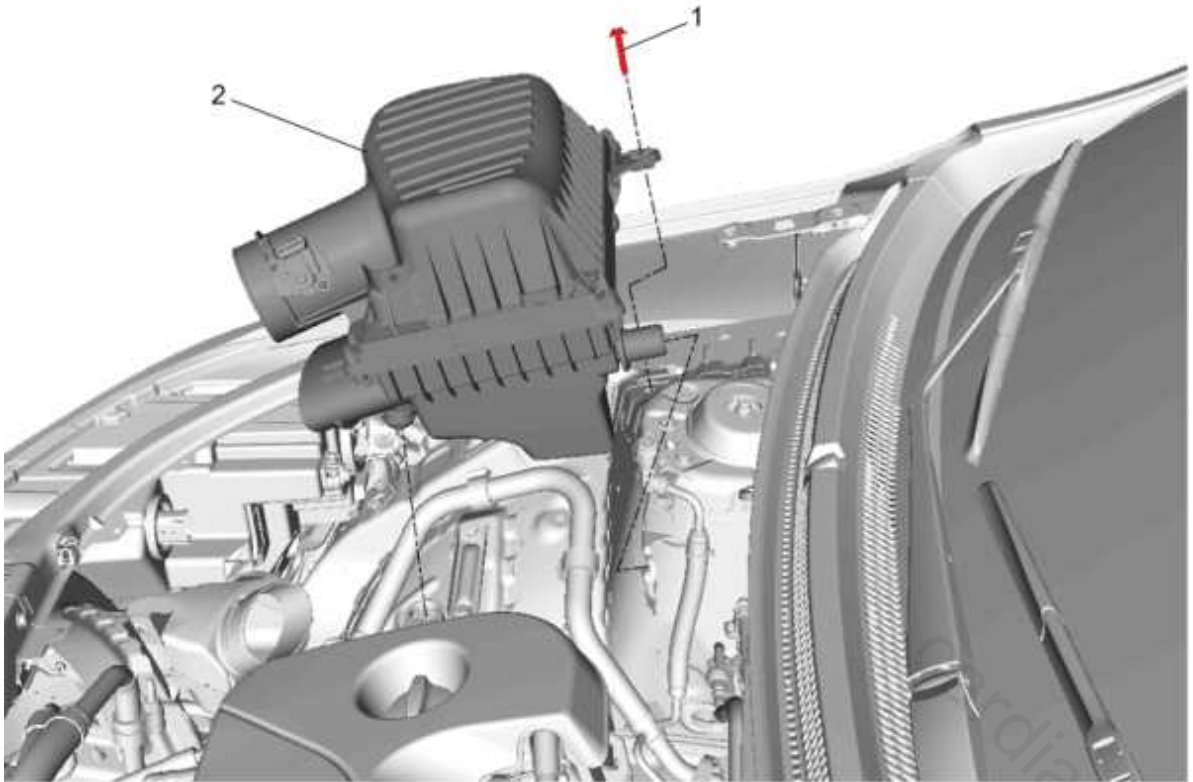


Fig. 41: Air Cleaner Assembly

Courtesy of GENERAL MOTORS COMPANY

2. Remove the air cleaner assembly.(2) [Air Cleaner Assembly Replacement](#)

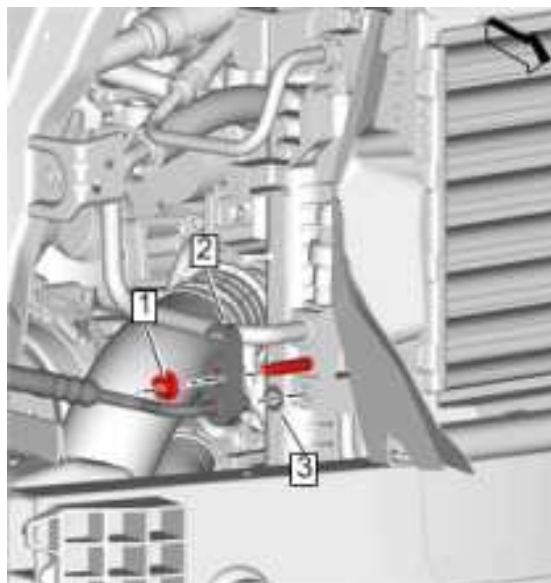


Fig. 42: Air Conditioning Refrigerant Heat Exchanger And Nut

Courtesy of GENERAL MOTORS COMPANY

3. Remove Air Conditioning Refrigerant Heat Exchanger Nut (1) @Air Conditioning Condenser
4. Remove Air Conditioning Refrigerant Heat Exchanger (2) @Air Conditioning Condenser
5. Remove and DISCARD the sealing washer.(3) [Air Conditioning System Seal Replacement](#)

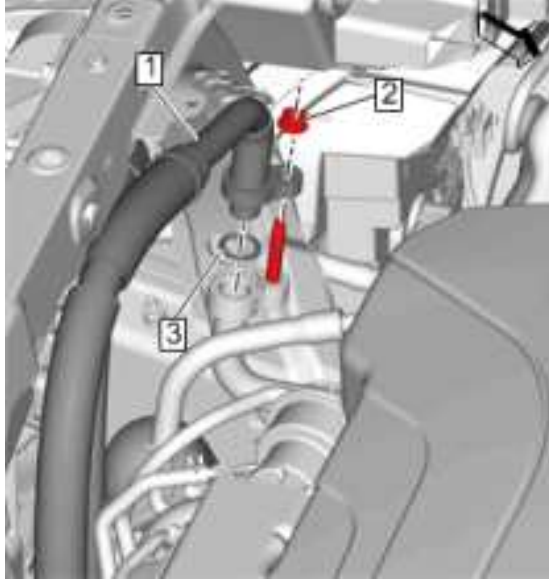


Fig. 43: Air Conditioning Evaporator Connector Hose/Tube and Compressor Hose
 Courtesy of GENERAL MOTORS COMPANY

6. Remove Air Conditioning Evaporator Connector Hose/Tube and Compressor Hose (1) @Air Conditioning Refrigerant Heat Exchanger - **Air Conditioning Evaporator Connector Hose/Tube and Compressor Hose Replacement (LYX)**

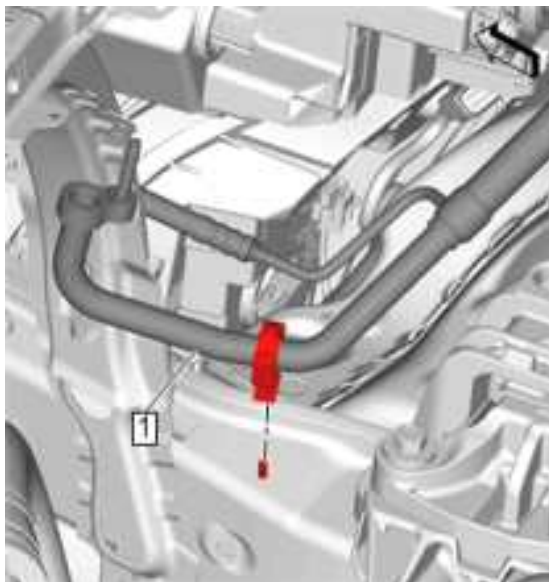


Fig. 44: Air Conditioning Refrigerant Heat Exchanger
 Courtesy of GENERAL MOTORS COMPANY

7. Remove Air Conditioning Refrigerant Heat Exchanger (1) @Front Compartment Inner Side Rail

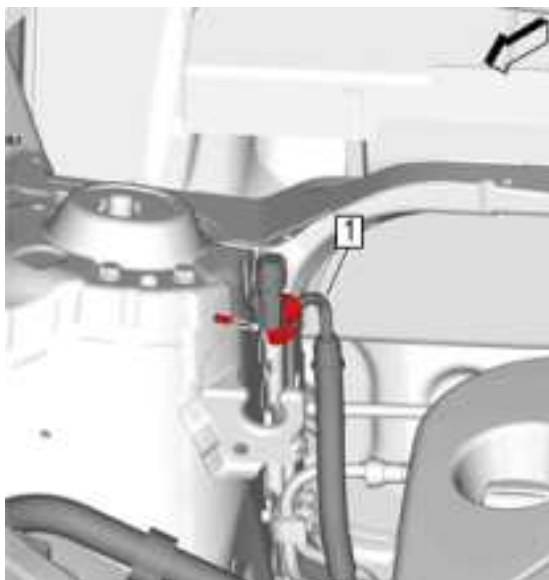


Fig. 45: Air Conditioning Refrigerant Heat Exchanger
Courtesy of GENERAL MOTORS COMPANY

8. Remove Air Conditioning Refrigerant Heat Exchanger (1) @Front Wheelhouse Front Panel

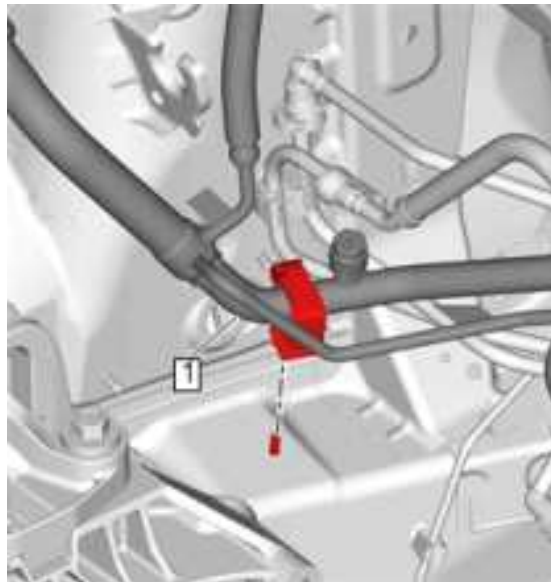


Fig. 46: Air Conditioning Refrigerant Heat Exchanger
Courtesy of GENERAL MOTORS COMPANY

9. Remove Air Conditioning Refrigerant Heat Exchanger (1) @Front Compartment Inner Side Rail

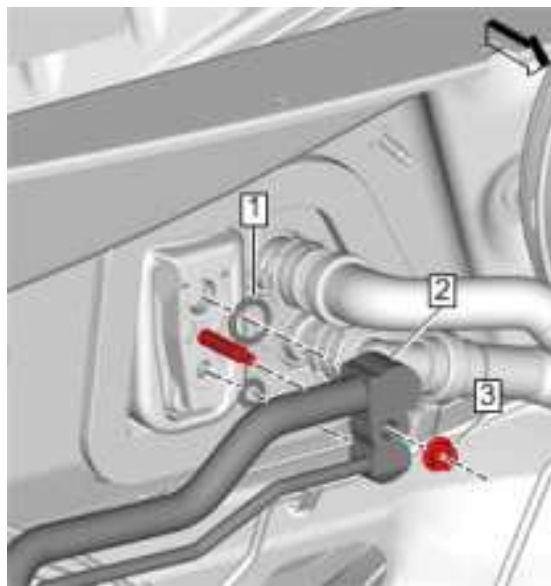


Fig. 47: Air Conditioning Refrigerant Heat Exchanger
Courtesy of GENERAL MOTORS COMPANY

10. Remove Air Conditioning Refrigerant Heat Exchanger Nut (3) @Air Conditioning Evaporator Thermal Expansion Valve
11. Remove Air Conditioning Refrigerant Heat Exchanger (2) @Air Conditioning Evaporator Thermal Expansion Valve
12. Remove and DISCARD the sealing washer.(1)[Air Conditioning System Seal Replacement](#)
13. Remove the air conditioning refrigerant heat exchanger from the vehicle.

Installation Procedure

1. Install the air conditioning refrigerant heat exchanger to the vehicle.

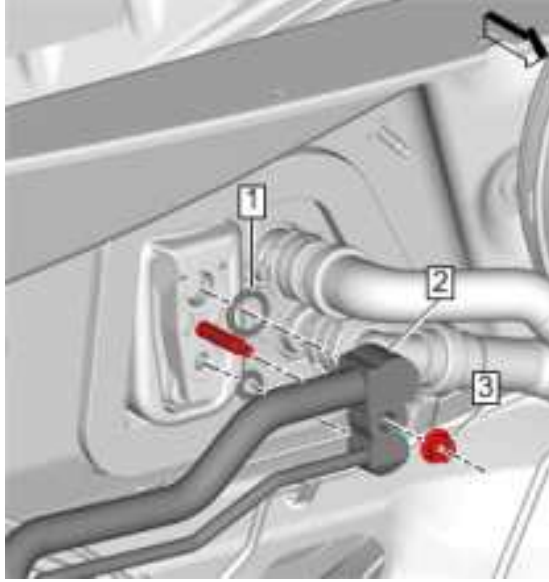


Fig. 48: Air Conditioning Refrigerant Heat Exchanger

Courtesy of GENERAL MOTORS COMPANY

2. Install a NEW sealing washer. (1) [Air Conditioning System Seal Replacement](#)
3. Install Air Conditioning Refrigerant Heat Exchanger (2) @Air Conditioning Evaporator Thermal Expansion Valve

CAUTION: Refer to [Fastener Caution](#) .

4. Install Air Conditioning Refrigerant Heat Exchanger Nut (3) @Air Conditioning Evaporator Thermal Expansion Valve and tighten 22 N.m (16 lb ft)

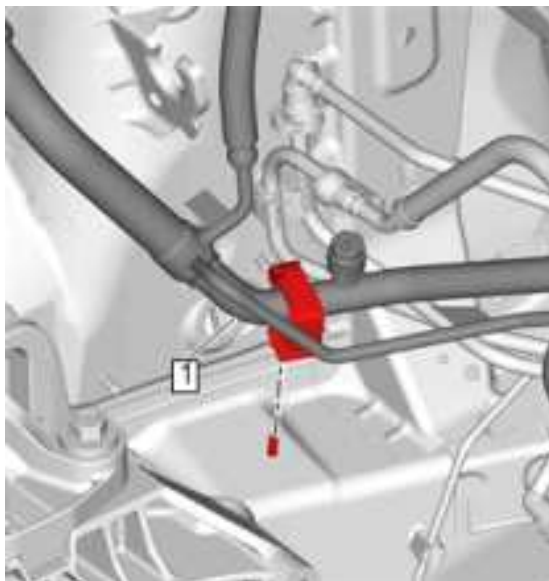


Fig. 49: Air Conditioning Refrigerant Heat Exchanger

Courtesy of GENERAL MOTORS COMPANY

5. Install Air Conditioning Refrigerant Heat Exchanger (1) @Front Compartment Inner Side Rail

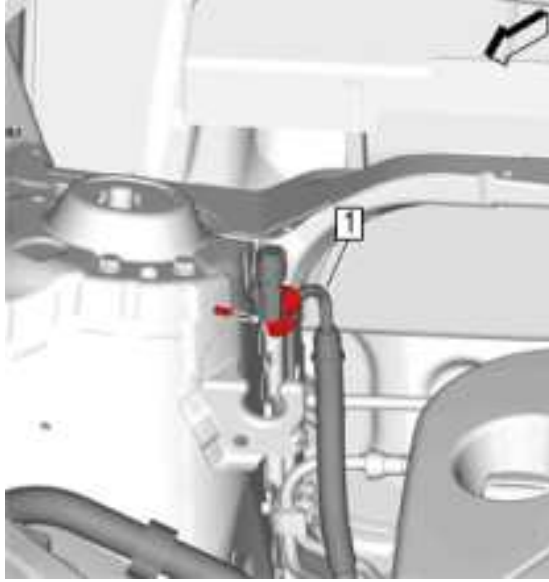


Fig. 50: Air Conditioning Refrigerant Heat Exchanger
Courtesy of GENERAL MOTORS COMPANY

6. Install Air Conditioning Refrigerant Heat Exchanger (1) @Front Wheelhouse Front Panel

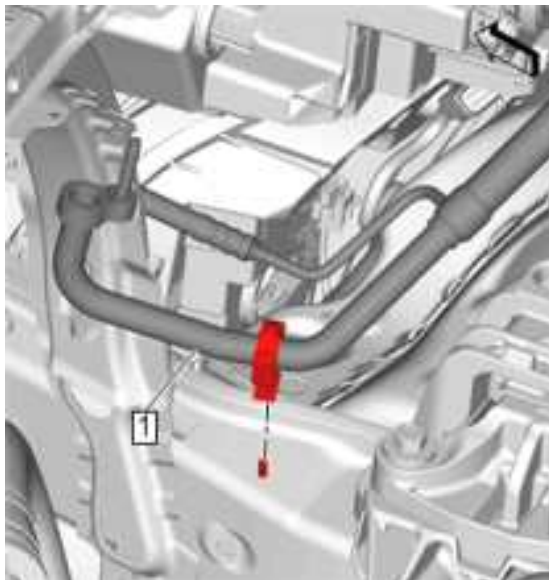


Fig. 51: Air Conditioning Refrigerant Heat Exchanger
Courtesy of GENERAL MOTORS COMPANY

7. Install Air Conditioning Refrigerant Heat Exchanger (1) @Front Compartment Inner Side Rail

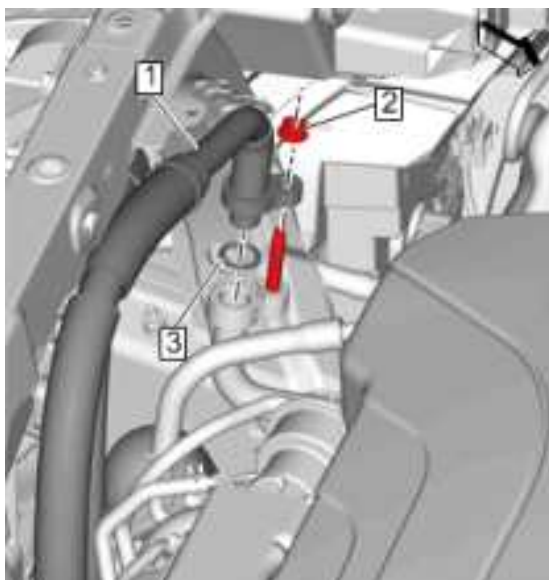


Fig. 52: Air Conditioning Evaporator Connector Hose/Tube and Compressor Hose
Courtesy of GENERAL MOTORS COMPANY

8. Install Air Conditioning Evaporator Connector Hose/Tube and Compressor Hose (1) @Air Conditioning Refrigerant Heat Exchanger -[Air Conditioning Evaporator Connector Hose/Tube and Compressor Hose Replacement \(LYX\)](#)

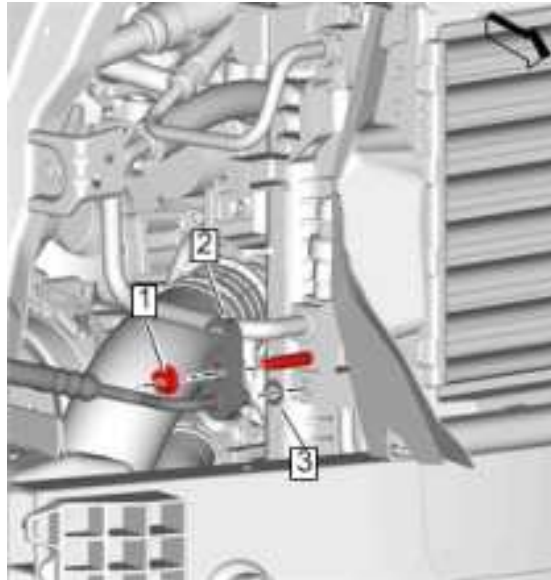


Fig. 53: Air Conditioning Refrigerant Heat Exchanger And Nut
Courtesy of GENERAL MOTORS COMPANY

9. Install a NEW sealing washer.(1)[Air Conditioning System Seal Replacement](#)
10. Install Air Conditioning Refrigerant Heat Exchanger (2) @Air Conditioning Condenser
11. Install Air Conditioning Refrigerant Heat Exchanger Nut (1) @Air Conditioning Condenser and tighten 22 N.m (16 lb ft)

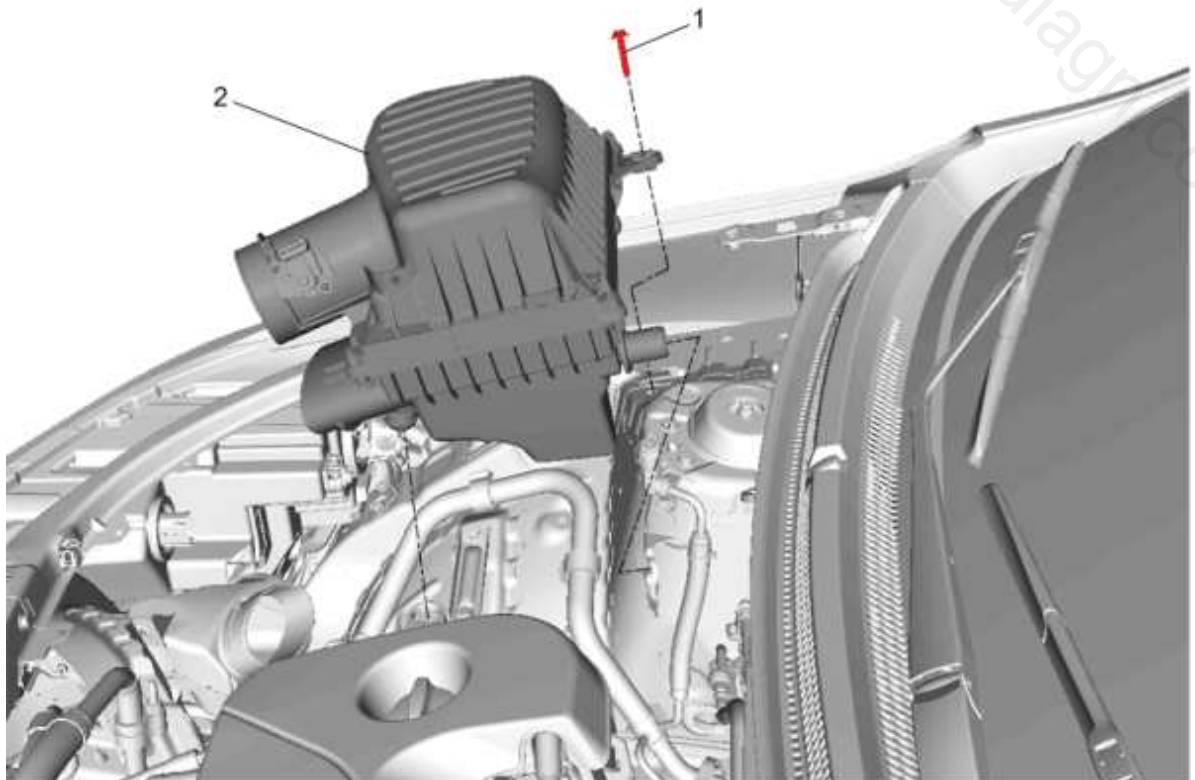


Fig. 54: Air Cleaner Assembly
Courtesy of GENERAL MOTORS COMPANY

12. Install the air cleaner assembly.(2) [Air Cleaner Assembly Replacement](#)
13. Recharge the refrigerant. [Refrigerant Recovery and Recharging \(R-134a\)](#)[Refrigerant Recovery and Recharging \(R-1234yf\)](#)

AIR CONDITIONING REFRIGERANT HEAT EXCHANGER REPLACEMENT (LTG)

Removal Procedure

1. Recover the refrigerant. [Refrigerant Recovery and Recharging \(R-134a\)](#)[Refrigerant Recovery and Recharging \(R-1234yf\)](#)

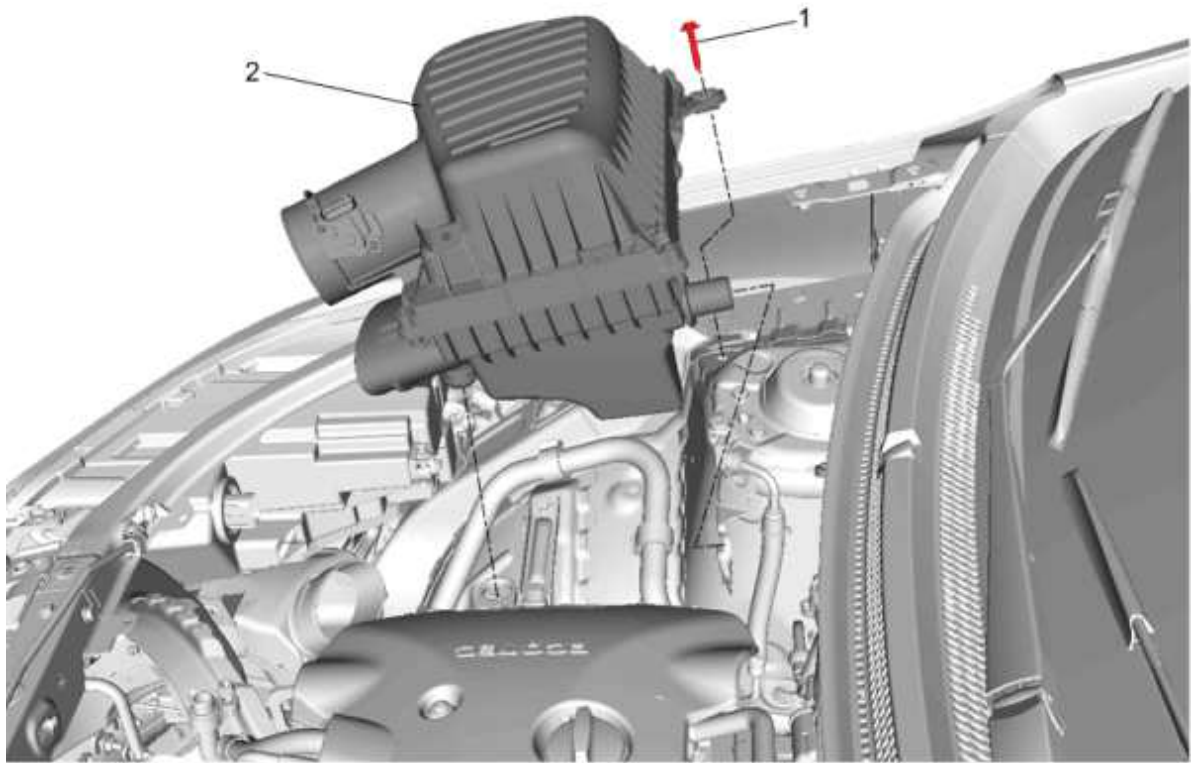


Fig. 55: Air Cleaner Assembly

Courtesy of GENERAL MOTORS COMPANY

2. Remove the air cleaner assembly. (2)[Air Cleaner Assembly Replacement](#)

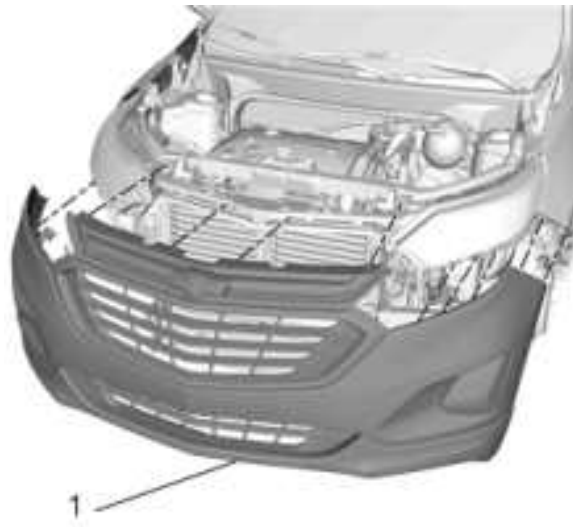


Fig. 56: Fascia

Courtesy of GENERAL MOTORS COMPANY

3. Remove Front Bumper Fascia (1)[Front Bumper Fascia Replacement \(Equinox\)](#) [Front Bumper Fascia Replacement \(Terrain\)](#)
4. Remove Headlamp-Right Side (2)[Headlamp Replacement \(Chevrolet\)](#) [Headlamp Replacement \(GMC\)](#)

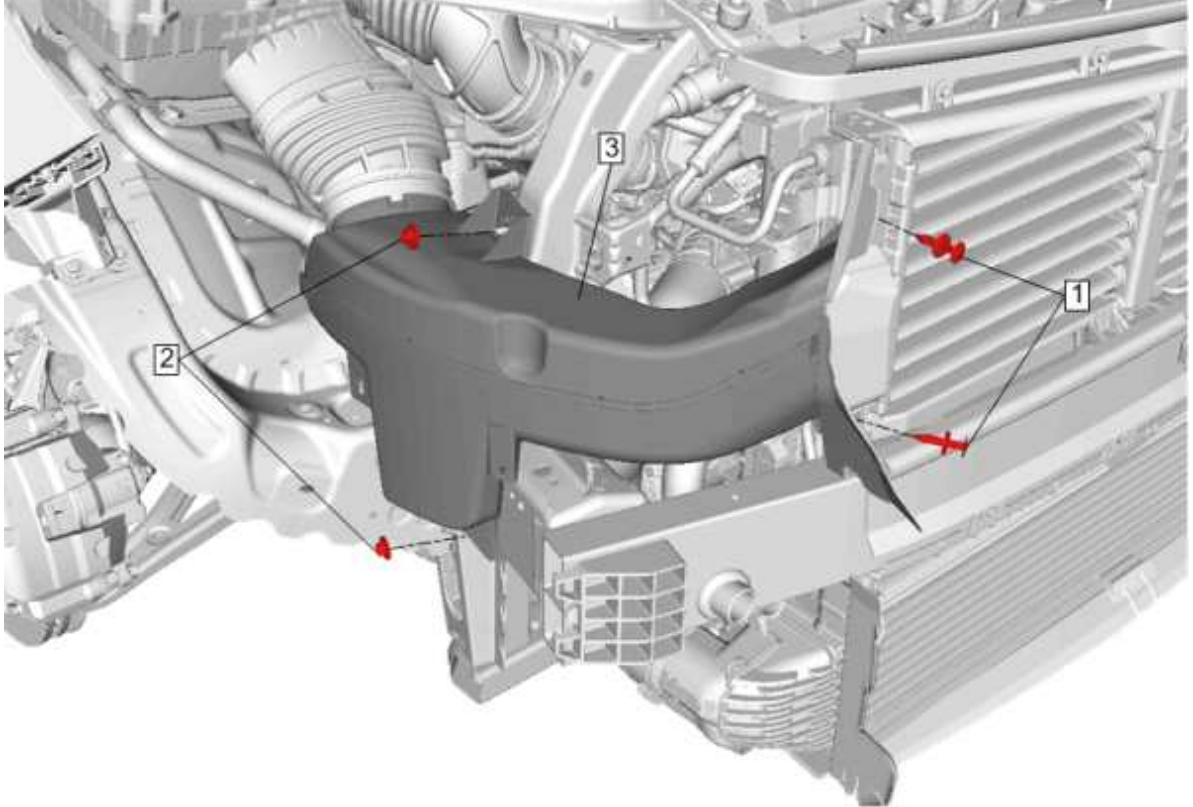


Fig. 57: Intake Air Baffle

Courtesy of GENERAL MOTORS COMPANY

5. Remove Intake Air Baffle (3) [Intake Air Baffle Replacement](#)

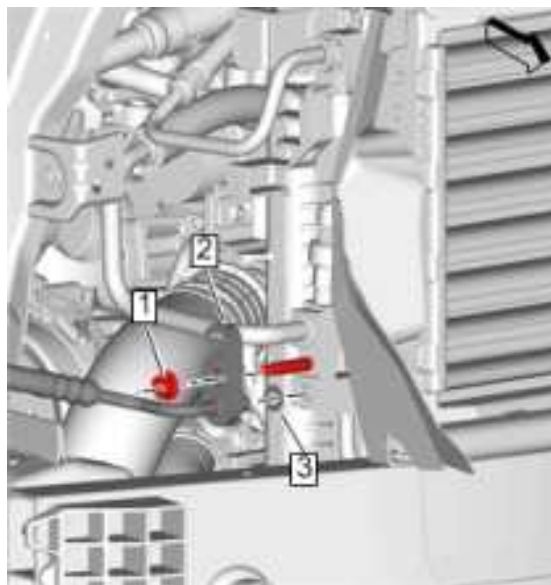


Fig. 58: Air Conditioning Refrigerant Heat Exchanger And Nut

Courtesy of GENERAL MOTORS COMPANY

6. Remove Air Conditioning Refrigerant Heat Exchanger Nut (1) @Air Conditioning Condenser
 7. Remove Air Conditioning Refrigerant Heat Exchanger (2) @Air Conditioning Condenser
 8. Remove and DISCARD the sealing washer.(3) [Air Conditioning System Seal Replacement](#)

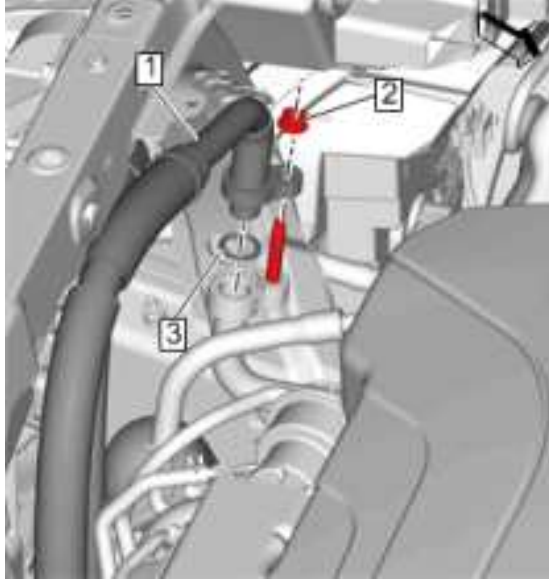


Fig. 59: Air Conditioning Evaporator Connector Hose/Tube and Compressor Hose
 Courtesy of GENERAL MOTORS COMPANY

9. Remove Air Conditioning Evaporator Connector Hose/Tube and Compressor Hose (1) @Air Conditioning Refrigerant Heat Exchanger -**Air Conditioning Evaporator Connector Hose/Tube and Compressor Hose Replacement (LTG)**

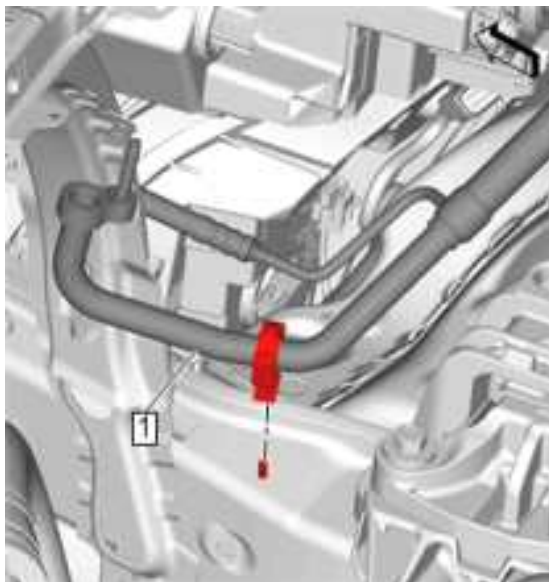


Fig. 60: Air Conditioning Refrigerant Heat Exchanger
 Courtesy of GENERAL MOTORS COMPANY

10. Remove Air Conditioning Refrigerant Heat Exchanger (1) @Front Compartment Inner Side Rail

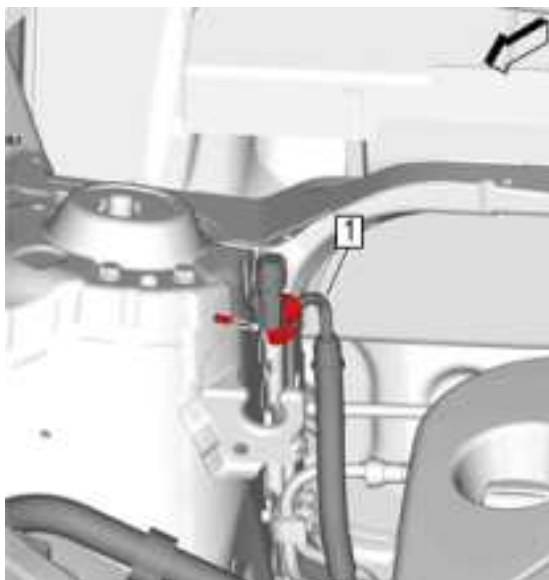


Fig. 61: Air Conditioning Refrigerant Heat Exchanger
Courtesy of GENERAL MOTORS COMPANY

11. Remove Air Conditioning Refrigerant Heat Exchanger (1) @Front Wheelhouse Front Panel

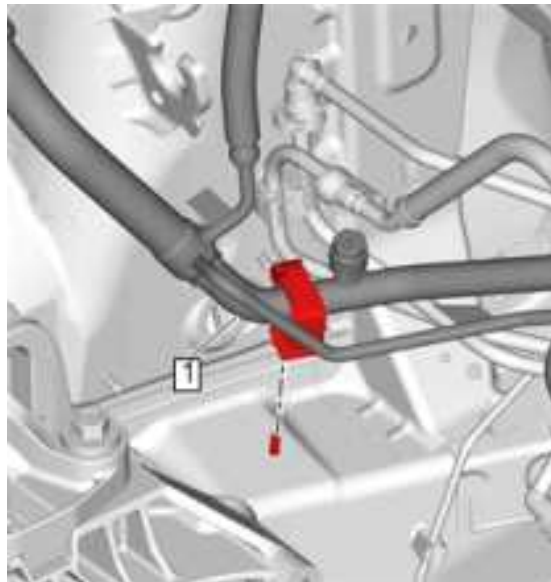


Fig. 62: Air Conditioning Refrigerant Heat Exchanger
Courtesy of GENERAL MOTORS COMPANY

12. Remove Air Conditioning Refrigerant Heat Exchanger (1) @Front Compartment Inner Side Rail

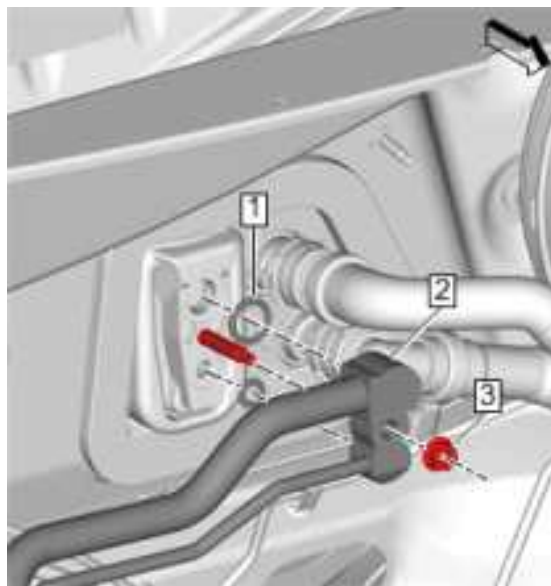


Fig. 63: Air Conditioning Refrigerant Heat Exchanger
Courtesy of GENERAL MOTORS COMPANY

13. Remove Air Conditioning Refrigerant Heat Exchanger Nut (3) @Air Conditioning Evaporator Thermal Expansion Valve
14. Remove Air Conditioning Refrigerant Heat Exchanger (2) @Air Conditioning Evaporator Thermal Expansion Valve
15. Remove and DISCARD the sealing washer.(1)[Air Conditioning System Seal Replacement](#)
16. Remove the air conditioning refrigerant heat exchanger from the vehicle.

Installation Procedure

1. Install the air conditioning refrigerant heat exchanger to the vehicle.

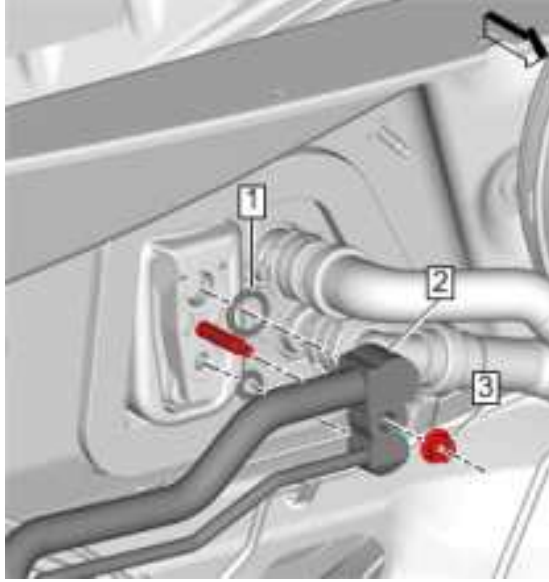


Fig. 64: Air Conditioning Refrigerant Heat Exchanger

Courtesy of GENERAL MOTORS COMPANY

2. Install a NEW sealing washer. (1) [Air Conditioning System Seal Replacement](#)
3. Install Air Conditioning Refrigerant Heat Exchanger (2) @Air Conditioning Evaporator Thermal Expansion Valve

CAUTION: Refer to [Fastener Caution](#) .

4. Install Air Conditioning Refrigerant Heat Exchanger Nut (3) @Air Conditioning Evaporator Thermal Expansion Valve and tighten 22 N.m (16 lb ft)

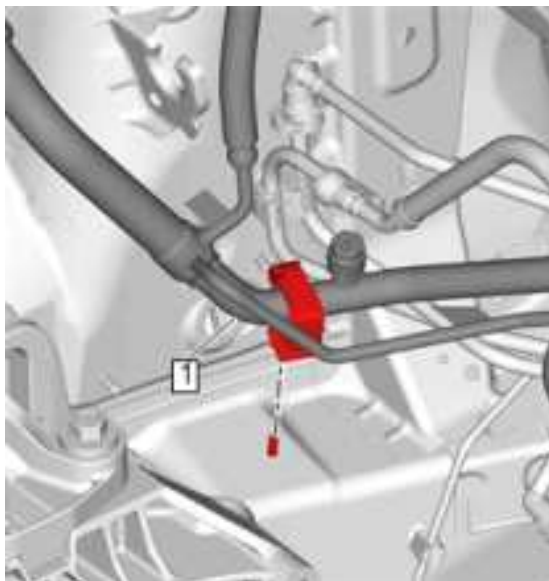


Fig. 65: Air Conditioning Refrigerant Heat Exchanger

Courtesy of GENERAL MOTORS COMPANY

5. Install Air Conditioning Refrigerant Heat Exchanger (1) @Front Compartment Inner Side Rail

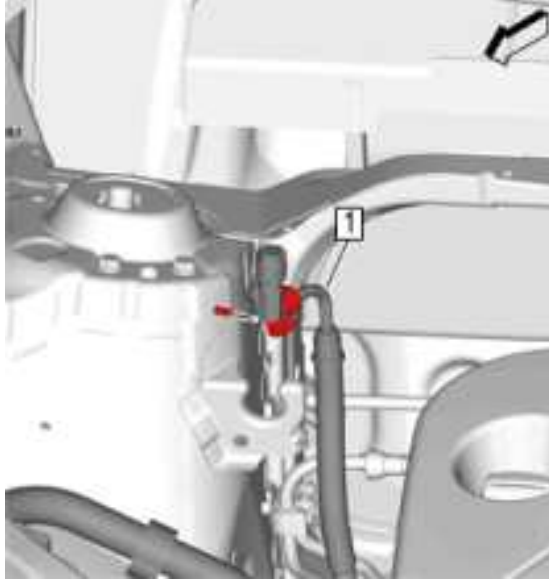


Fig. 66: Air Conditioning Refrigerant Heat Exchanger
Courtesy of GENERAL MOTORS COMPANY

6. Install Air Conditioning Refrigerant Heat Exchanger (1) @Front Wheelhouse Front Panel

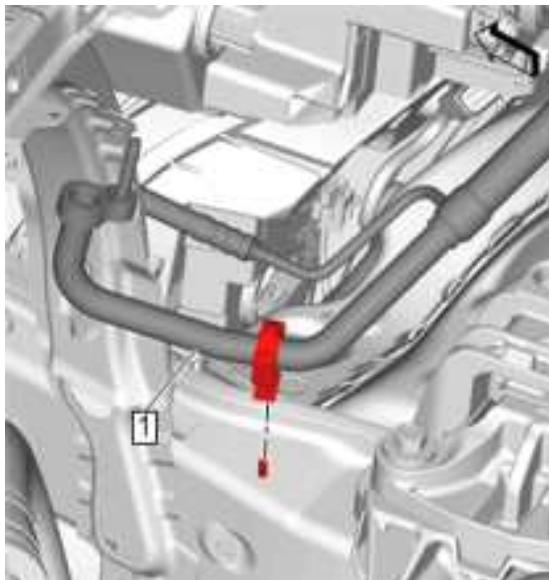


Fig. 67: Air Conditioning Refrigerant Heat Exchanger
Courtesy of GENERAL MOTORS COMPANY

7. Install Air Conditioning Refrigerant Heat Exchanger (1) @Front Compartment Inner Side Rail

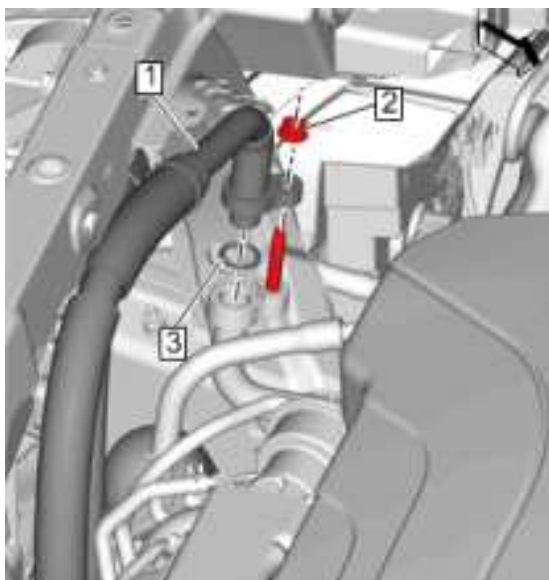


Fig. 68: Air Conditioning Evaporator Connector Hose/Tube and Compressor Hose
Courtesy of GENERAL MOTORS COMPANY

8. Install Air Conditioning Evaporator Connector Hose/Tube and Compressor Hose (1) @Air Conditioning Refrigerant Heat Exchanger - [Air Conditioning Evaporator Connector Hose/Tube and Compressor Hose Replacement \(LTG\)](#)

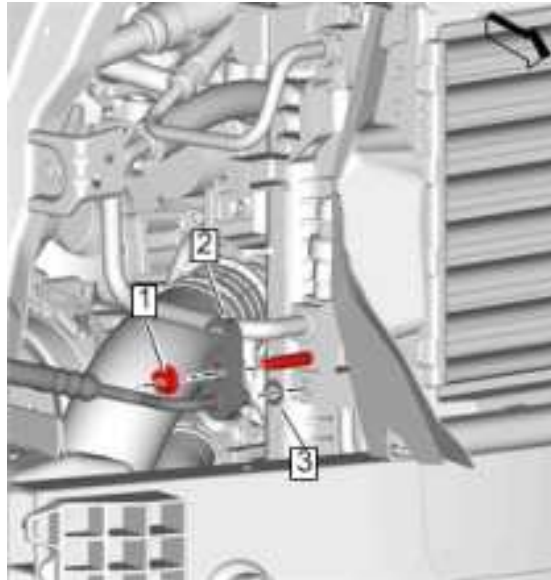


Fig. 69: Air Conditioning Refrigerant Heat Exchanger And Nut
Courtesy of GENERAL MOTORS COMPANY

9. Install a NEW sealing washer. (1) [Air Conditioning System Seal Replacement](#)
10. Install Air Conditioning Refrigerant Heat Exchanger (2) @Air Conditioning Condenser
11. Install Air Conditioning Refrigerant Heat Exchanger Nut (1) @Air Conditioning Condenser and tighten 22 N.m (16 lb ft)

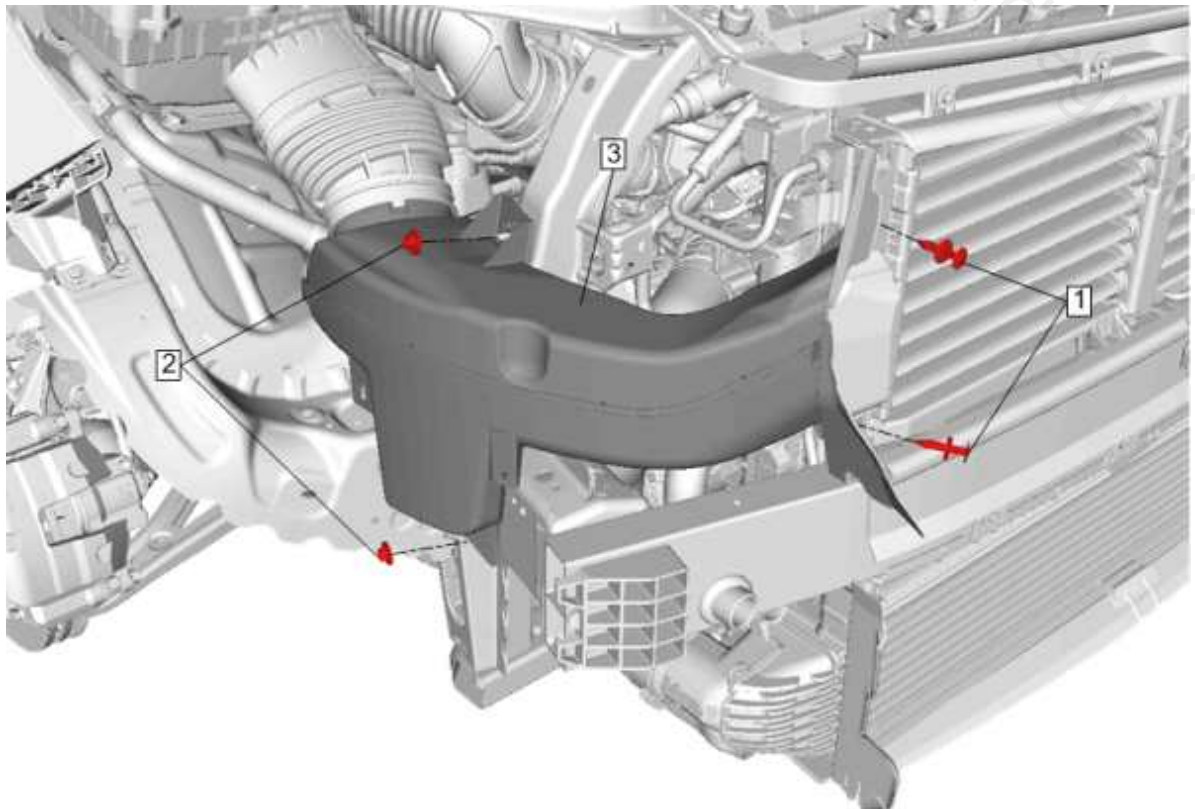


Fig. 70: Intake Air Baffle
Courtesy of GENERAL MOTORS COMPANY

12. Install Intake Air Baffle (3) [Intake Air Baffle Replacement](#)
13. Install Headlamp-Right Side (2) [Headlamp Replacement \(Chevrolet\)](#) [Headlamp Replacement \(GMC\)](#)

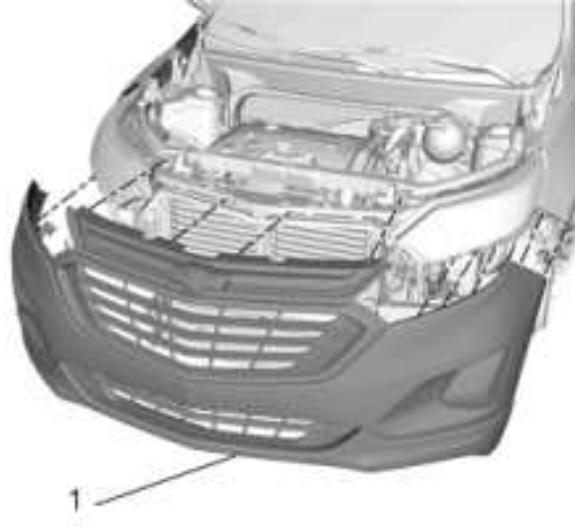


Fig. 71: Fascia

Courtesy of GENERAL MOTORS COMPANY

14. Install Front Bumper Fascia (1) [Front Bumper Fascia Replacement \(Equinox\)](#) [Front Bumper Fascia Replacement \(Terrain\)](#)

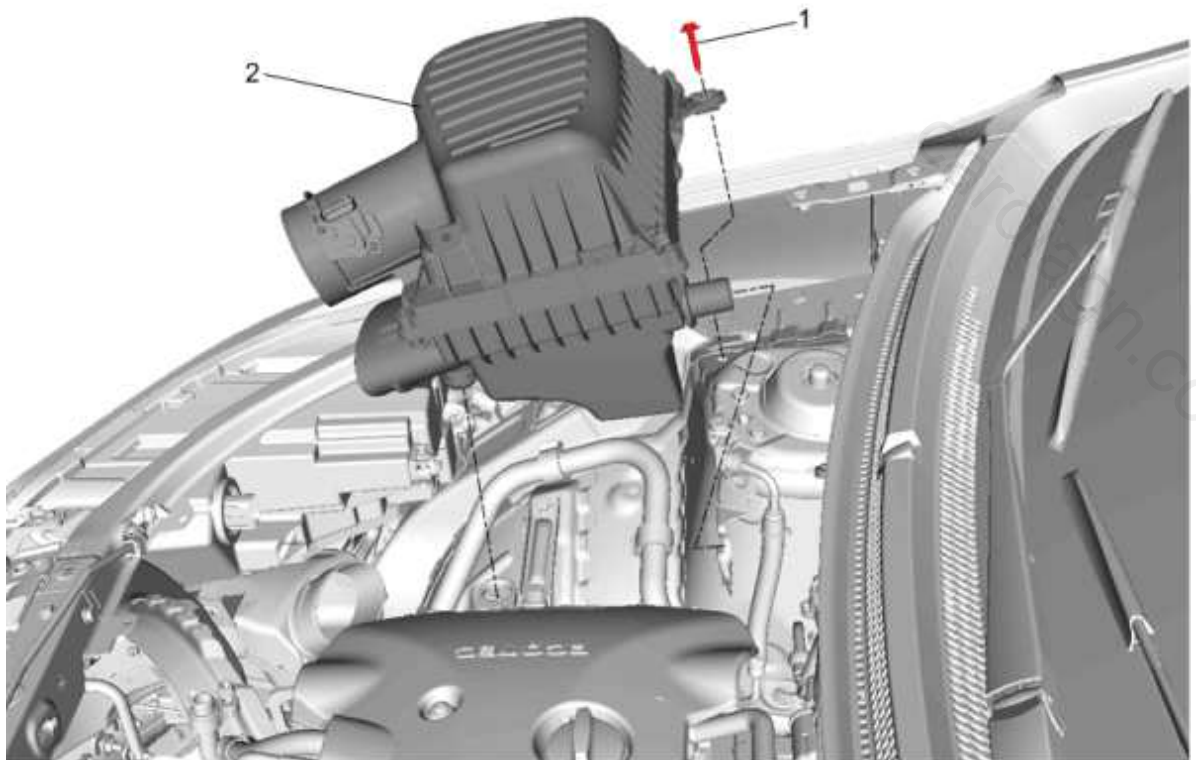


Fig. 72: Air Cleaner Assembly

Courtesy of GENERAL MOTORS COMPANY

15. Install the air cleaner assembly.(2) [Air Cleaner Assembly Replacement](#)
16. Recharge the refrigerant. [Refrigerant Recovery and Recharging \(R-134a\)](#)[Refrigerant Recovery and Recharging \(R-1234yf\)](#)

AIR CONDITIONING REFRIGERANT HEAT EXCHANGER REPLACEMENT (LH7)

Removal Procedure

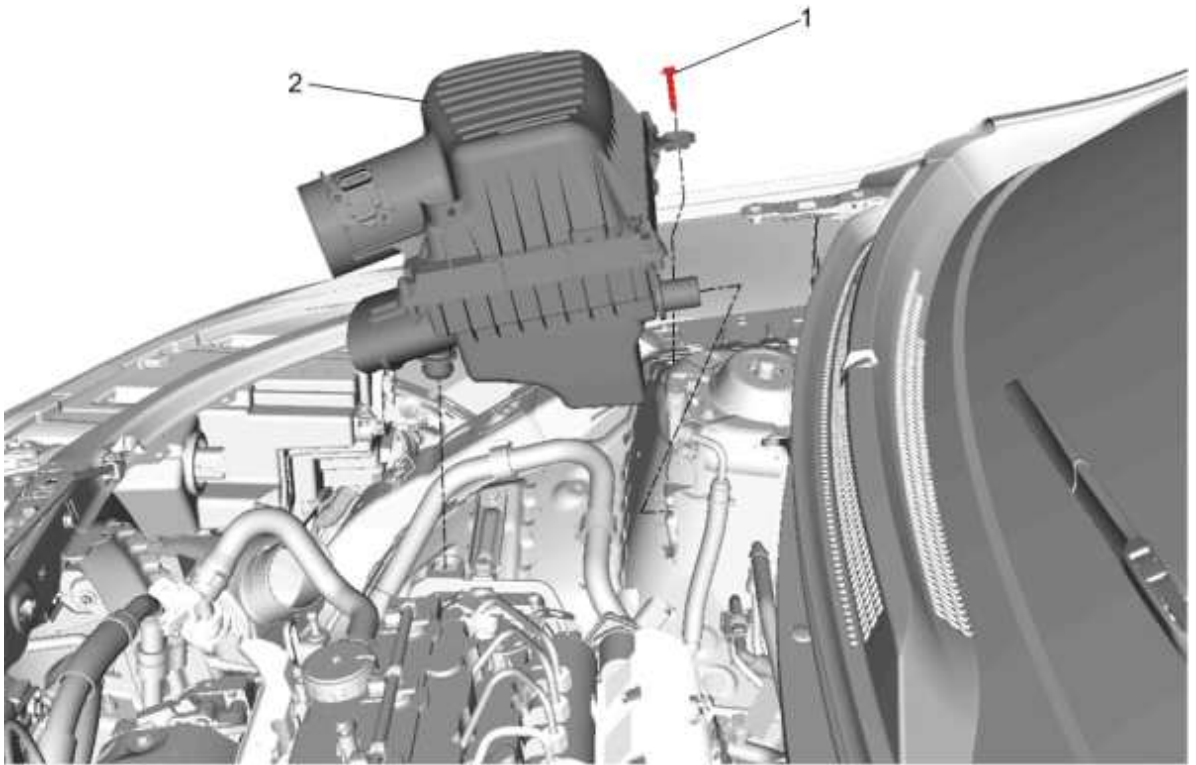


Fig. 73: Air Cleaner Assembly And Fastener
 Courtesy of GENERAL MOTORS COMPANY

1. Remove the air cleaner assembly.(2) [Air Cleaner Assembly Replacement](#)
2. Recover the refrigerant. [Refrigerant Recovery and Recharging \(R-134a\)](#)[Refrigerant Recovery and Recharging \(R-1234yf\)](#)

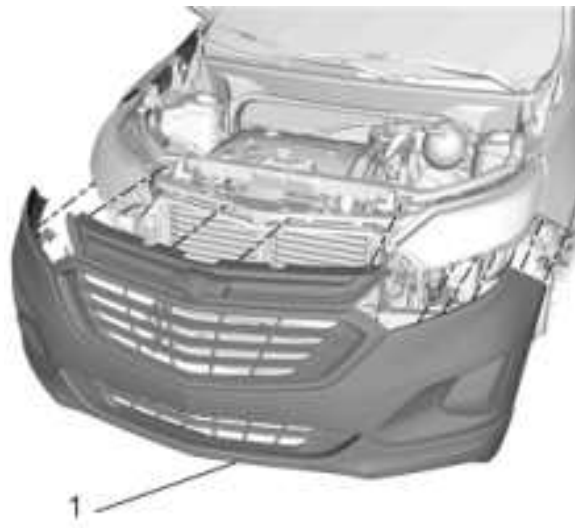


Fig. 74: Fascia
 Courtesy of GENERAL MOTORS COMPANY

3. Remove Front Bumper Fascia (1) [Front Bumper Fascia Replacement \(Equinox\)](#) [Front Bumper Fascia Replacement \(Terrain\)](#)
4. Remove Headlamp-Right Side (2) [Headlamp Replacement \(Chevrolet\)](#) [Headlamp Replacement \(GMC\)](#)

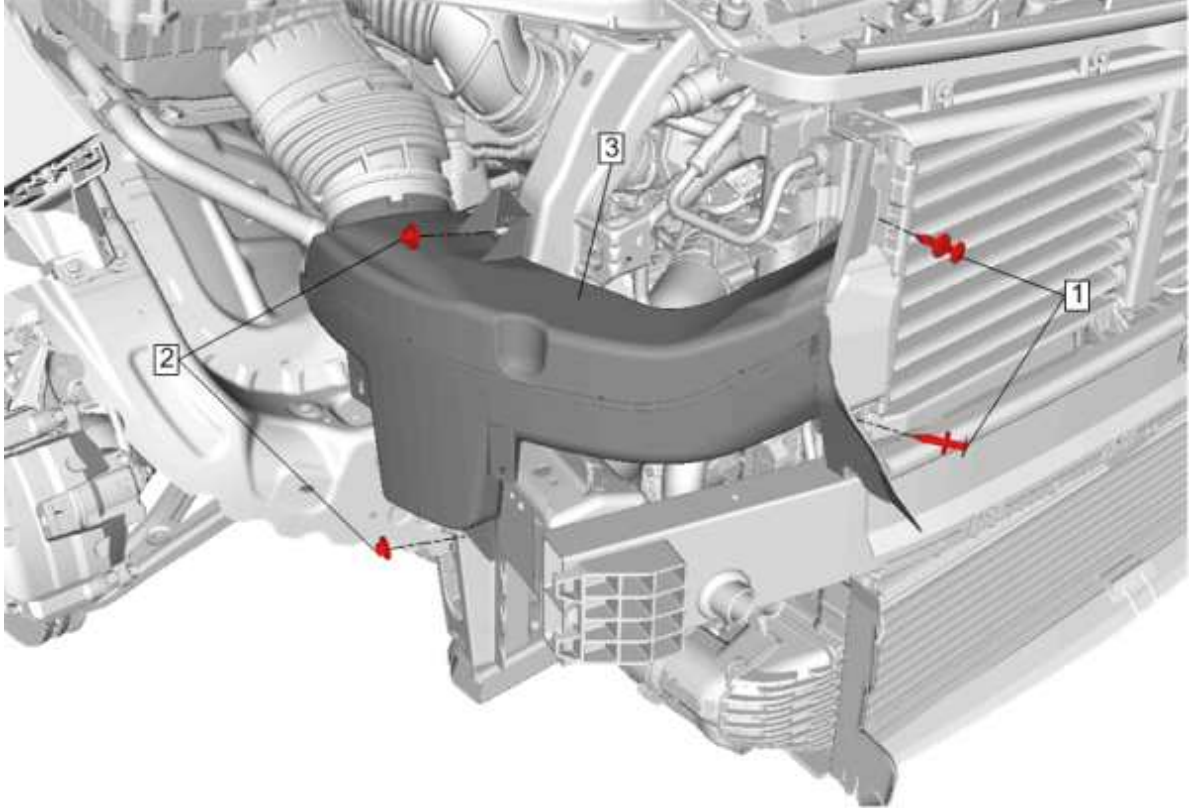


Fig. 75: Intake Air Baffle

Courtesy of GENERAL MOTORS COMPANY

5. Remove Intake Air Baffle (3) **Intake Air Baffle Replacement**

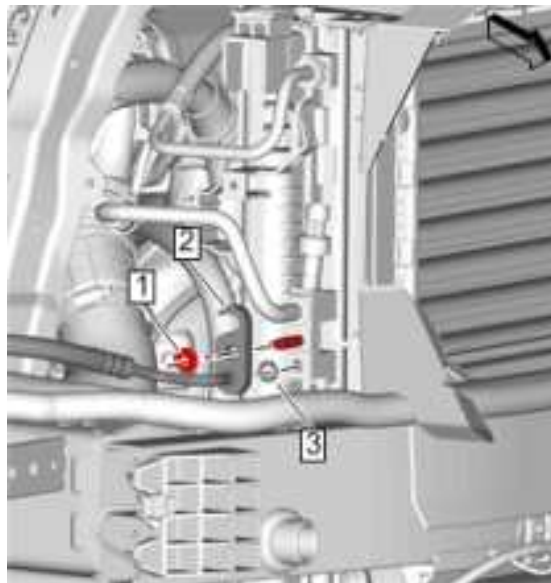


Fig. 76: Air Conditioning Refrigerant Heat Exchanger And Nut

Courtesy of GENERAL MOTORS COMPANY

6. Remove Air Conditioning Refrigerant Heat Exchanger Nut (1) @Air Conditioning Condenser
7. Remove Air Conditioning Refrigerant Heat Exchanger (2) @Air Conditioning Condenser
8. Remove and DISCARD the sealing washer.(3)**Air Conditioning System Seal Replacement**

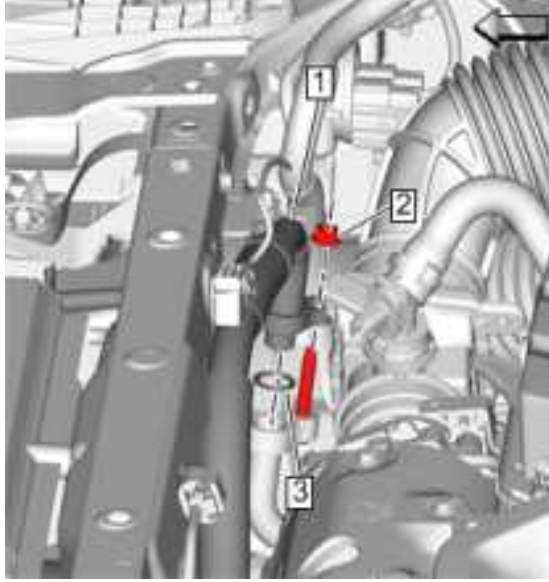


Fig. 77: Air Conditioning Evaporator Connector Hose/Tube and Compressor Hose
 Courtesy of GENERAL MOTORS COMPANY

9. Remove Air Conditioning Evaporator Connector Hose/Tube and Compressor Hose (1) @Air Conditioning Refrigerant Heat Exchanger -**Air Conditioning Evaporator Connector Hose/Tube and Compressor Hose Replacement (LH7)**

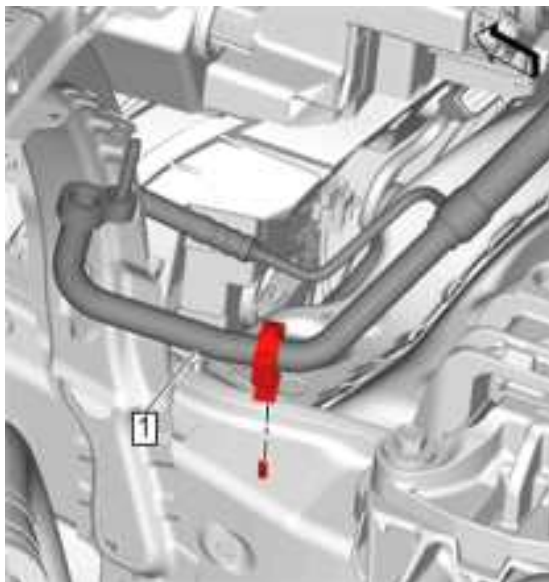


Fig. 78: Air Conditioning Refrigerant Heat Exchanger
 Courtesy of GENERAL MOTORS COMPANY

10. Remove Air Conditioning Refrigerant Heat Exchanger (1) @Front Compartment Inner Side Rail

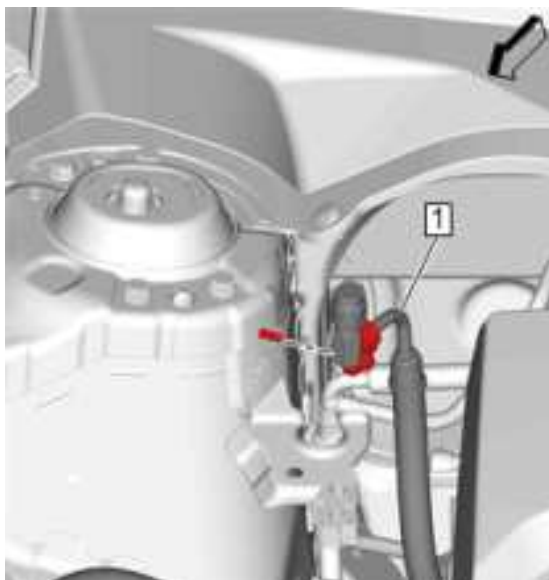


Fig. 79: Air Conditioning Refrigerant Heat Exchanger
Courtesy of GENERAL MOTORS COMPANY

11. Remove Air Conditioning Refrigerant Heat Exchanger (1) @Front Wheelhouse Front Panel



Fig. 80: Air Conditioning Refrigerant Heat Exchanger
Courtesy of GENERAL MOTORS COMPANY

12. Remove Air Conditioning Refrigerant Heat Exchanger (1) @Front Compartment Inner Side Rail

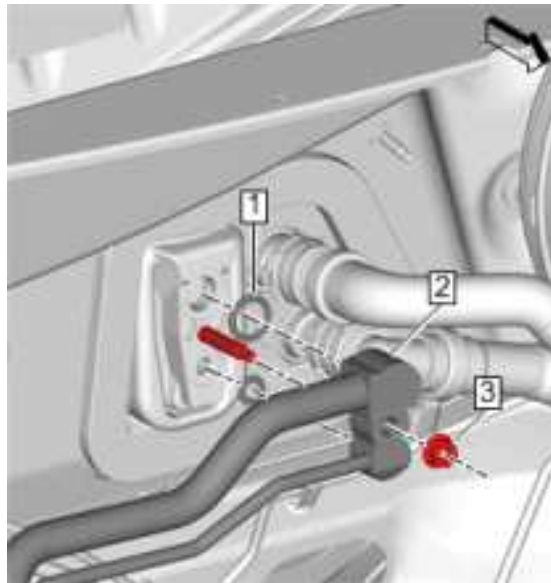


Fig. 81: Air Conditioning Refrigerant Heat Exchanger
Courtesy of GENERAL MOTORS COMPANY

13. Remove Air Conditioning Refrigerant Heat Exchanger Nut (3) @Air Conditioning Evaporator Thermal Expansion Valve
14. Remove Air Conditioning Refrigerant Heat Exchanger (2) @Air Conditioning Evaporator Thermal Expansion Valve
15. Remove and DISCARD the sealing washer. (1)[Air Conditioning System Seal Replacement](#)
16. Remove the air conditioning refrigerant heat exchanger from the vehicle.

Installation Procedure

1. Install the air conditioning refrigerant heat exchanger to the vehicle.

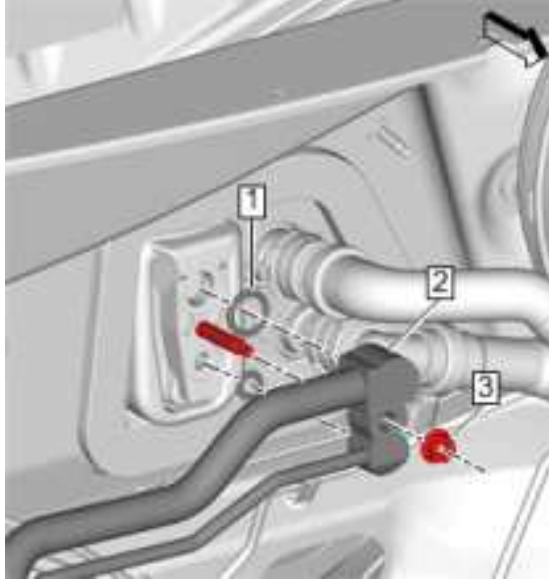


Fig. 82: Air Conditioning Refrigerant Heat Exchanger

Courtesy of GENERAL MOTORS COMPANY

2. Install a NEW sealing washer. (1) [Air Conditioning System Seal Replacement](#)
3. Install Air Conditioning Refrigerant Heat Exchanger (2) @Air Conditioning Evaporator Thermal Expansion Valve

CAUTION: Refer to [Fastener Caution](#) .

4. Install Air Conditioning Refrigerant Heat Exchanger Nut (3) @Air Conditioning Evaporator Thermal Expansion Valve and tighten 22 N.m (16 lb ft)

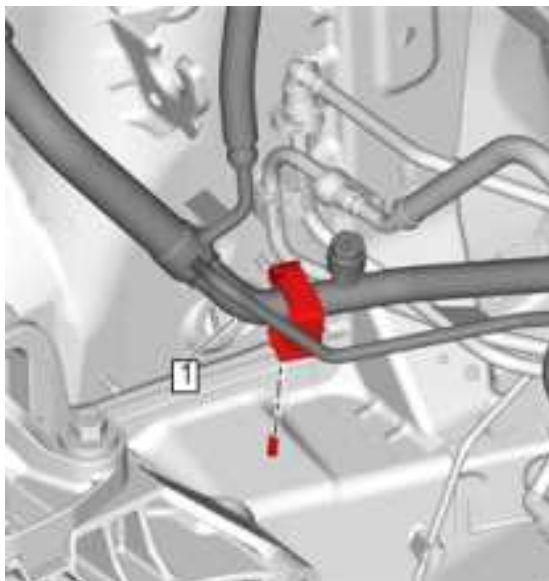


Fig. 83: Air Conditioning Refrigerant Heat Exchanger

Courtesy of GENERAL MOTORS COMPANY

5. Install Air Conditioning Refrigerant Heat Exchanger (1) @Front Compartment Inner Side Rail

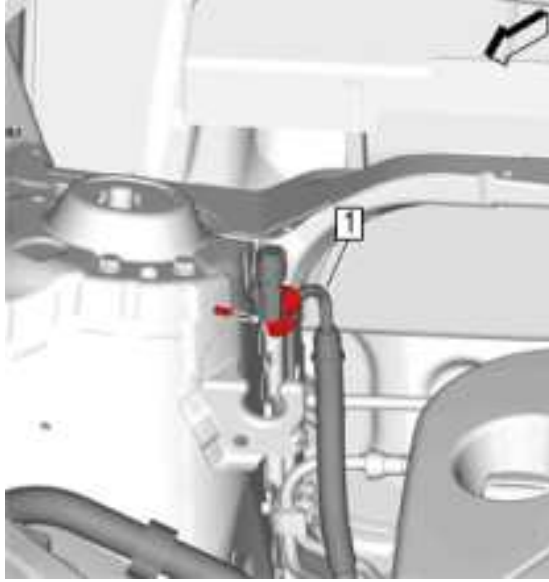


Fig. 84: Air Conditioning Refrigerant Heat Exchanger
Courtesy of GENERAL MOTORS COMPANY

6. Install Air Conditioning Refrigerant Heat Exchanger (1) @Front Wheelhouse Front Panel

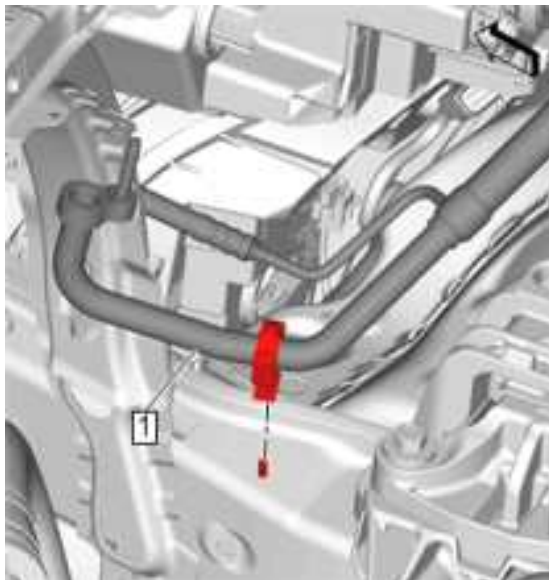


Fig. 85: Air Conditioning Refrigerant Heat Exchanger
Courtesy of GENERAL MOTORS COMPANY

7. Air Conditioning Refrigerant Heat Exchanger (1) @Front Compartment Inner Side Rail

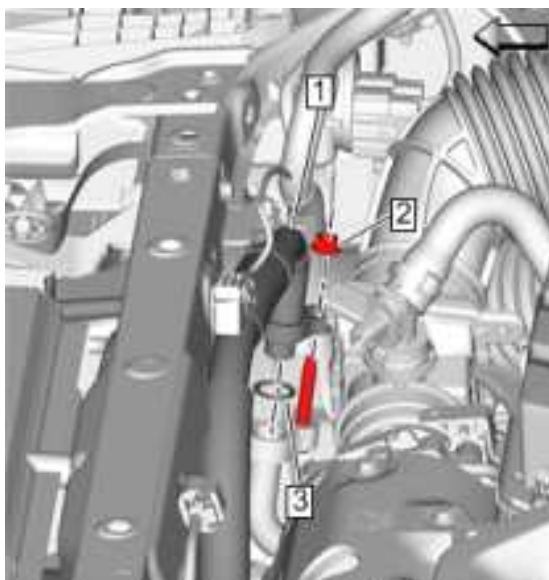


Fig. 86: Air Conditioning Evaporator Connector Hose/Tube and Compressor Hose
Courtesy of GENERAL MOTORS COMPANY

8. Install Air Conditioning Evaporator Connector Hose/Tube and Compressor Hose (1) @Air Conditioning Refrigerant Heat Exchanger - [Air Conditioning Evaporator Connector Hose/Tube and Compressor Hose Replacement \(LH7\)](#)

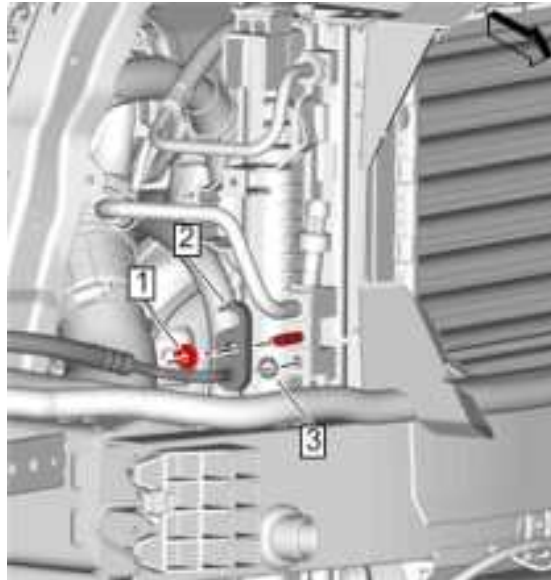


Fig. 87: Air Conditioning Refrigerant Heat Exchanger And Nut
Courtesy of GENERAL MOTORS COMPANY

9. Install a NEW sealing washer.(1)[Air Conditioning System Seal Replacement](#)
10. Install Air Conditioning Refrigerant Heat Exchanger (2) @Air Conditioning Condenser
11. Install Air Conditioning Refrigerant Heat Exchanger Nut (1) @Air Conditioning Condenser and tighten 22 N.m (16 lb ft)

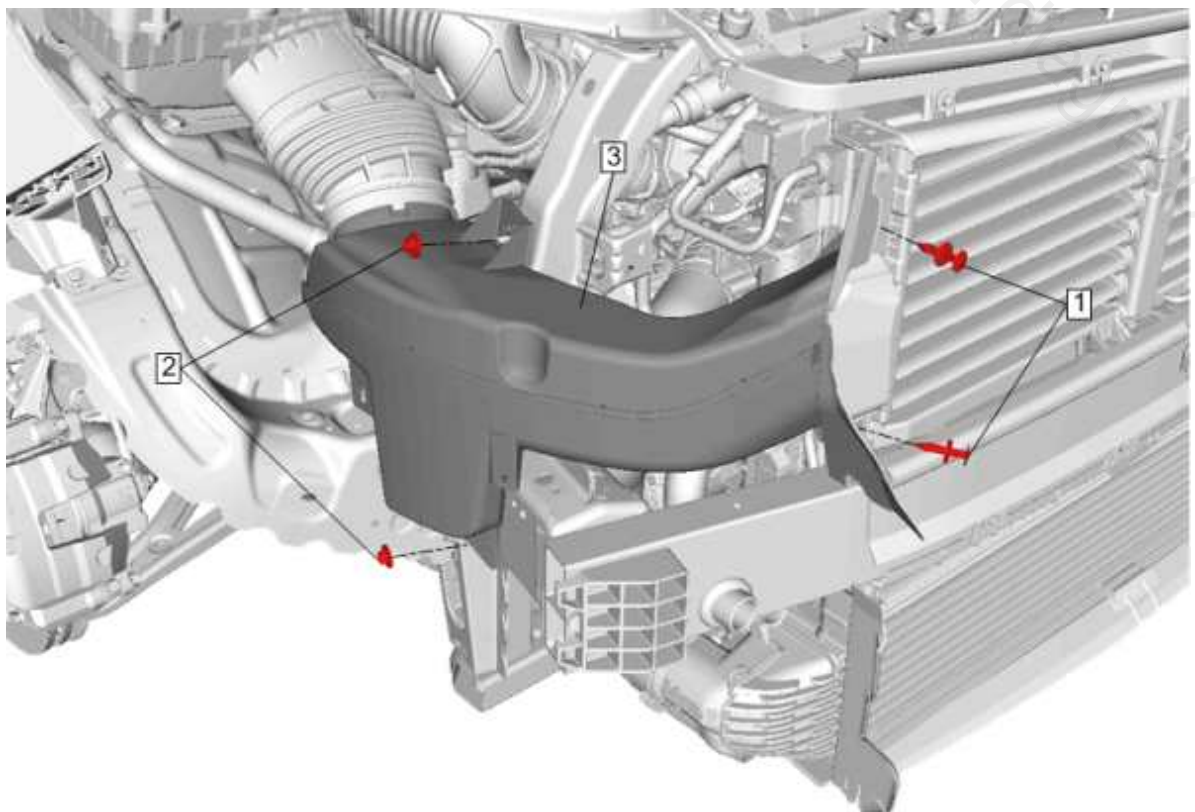


Fig. 88: Intake Air Baffle
Courtesy of GENERAL MOTORS COMPANY

12. Install Intake Air Baffle (3)[Intake Air Baffle Replacement](#)
13. Install Headlamp-Right Side (2)[Headlamp Replacement \(Chevrolet\)](#) [Headlamp Replacement \(GMC\)](#)

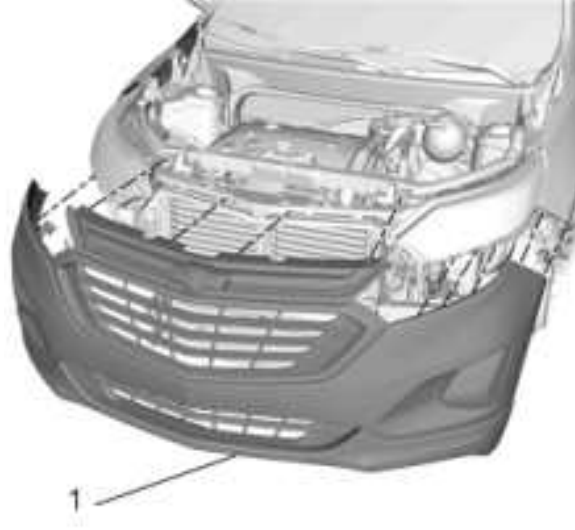


Fig. 89: Fascia

Courtesy of GENERAL MOTORS COMPANY

14. Install Front Bumper Fascia (1) [Front Bumper Fascia Replacement \(Equinox\)](#) [Front Bumper Fascia Replacement \(Terrain\)](#)
15. Recharge the refrigerant. [Refrigerant Recovery and Recharging \(R-134a\)](#) [Refrigerant Recovery and Recharging \(R-1234yf\)](#)

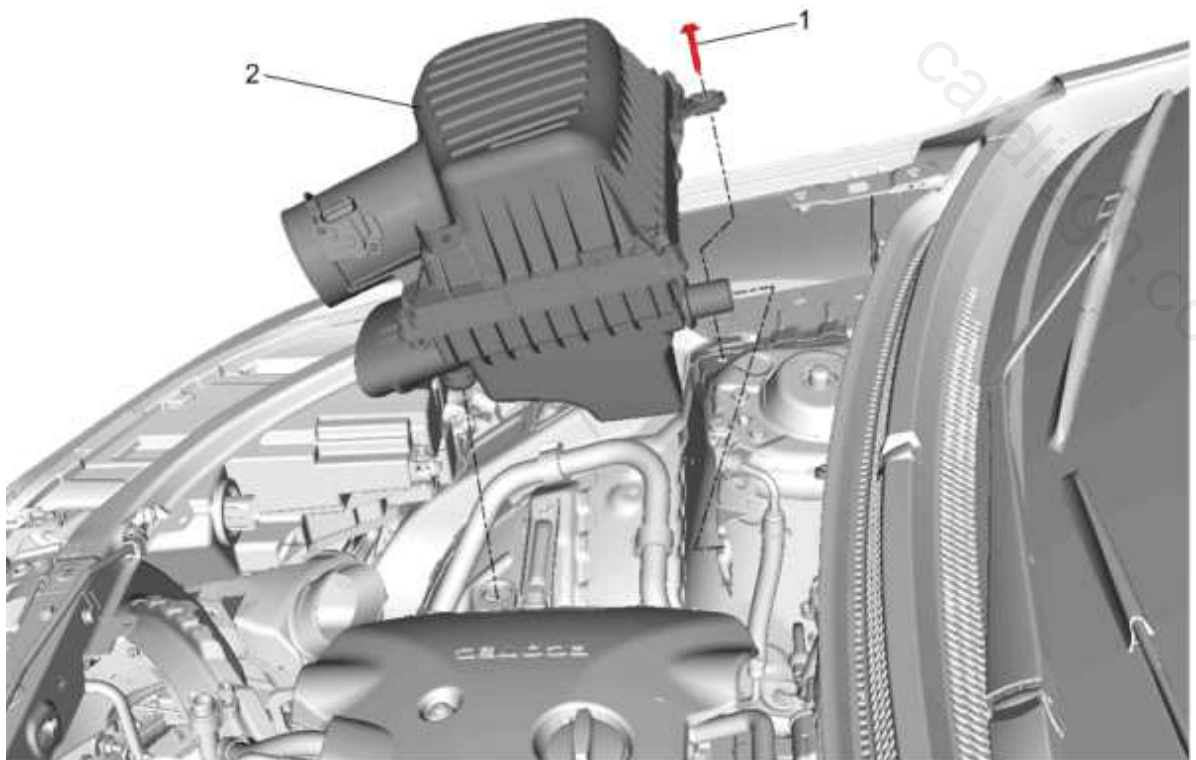


Fig. 90: Air Cleaner Assembly

Courtesy of GENERAL MOTORS COMPANY

16. Install the air cleaner assembly. (2) [Air Cleaner Assembly Replacement](#)
17. Inspect for refrigerant leaks.

AIR CONDITIONING REFRIGERANT DESICCANT REPLACEMENT (LYX)

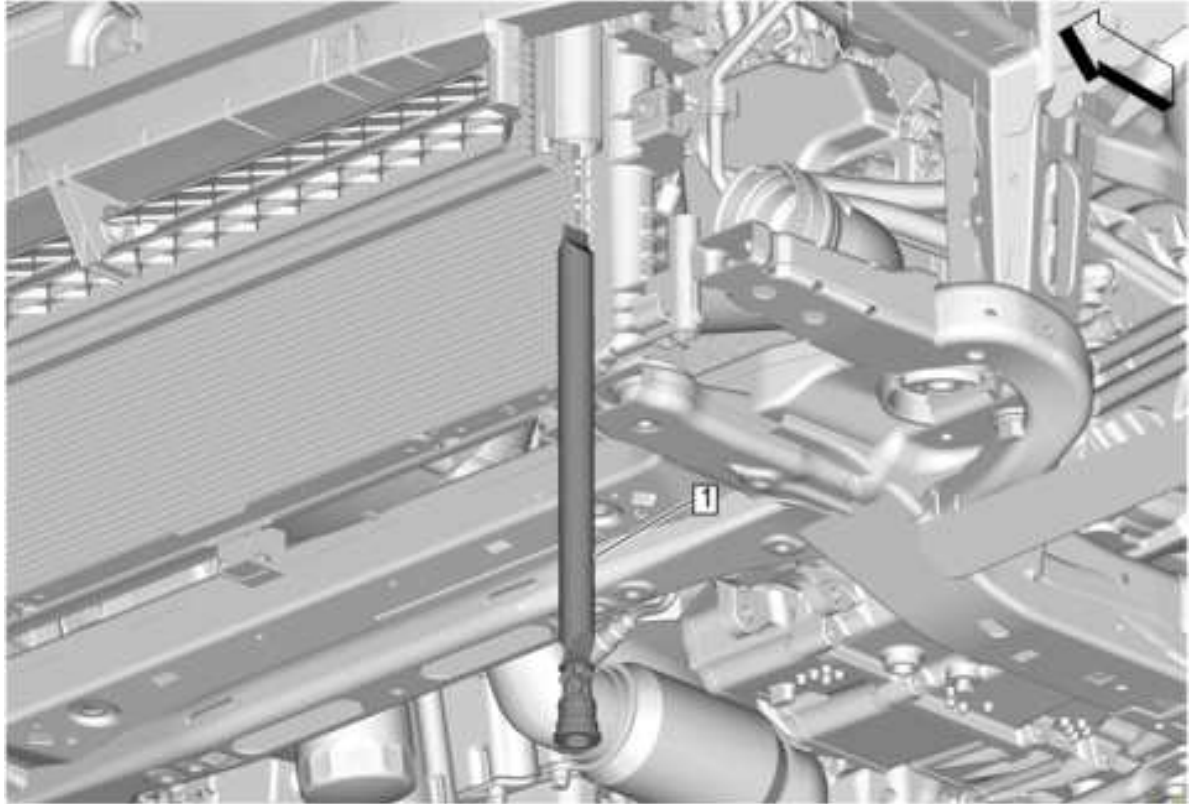


Fig. 91: Air Conditioning Refrigerant Desiccant
Courtesy of GENERAL MOTORS COMPANY

Callout	Component Name
Preliminary Procedures Refrigerant Recovery and Recharging (R-134a)Refrigerant Recovery and Recharging (R-1234yf) Front Bumper Fascia Replacement (Equinox) Front Bumper Fascia Replacement (Terrain) Charge Air Cooler Replacement	
1	Air Conditioning Refrigerant Desiccant CAUTION: Refer to Component Fastener Tightening Caution . Tighten 12 N.m (106 lb in)

AIR CONDITIONING REFRIGERANT DESICCANT REPLACEMENT (LTG)

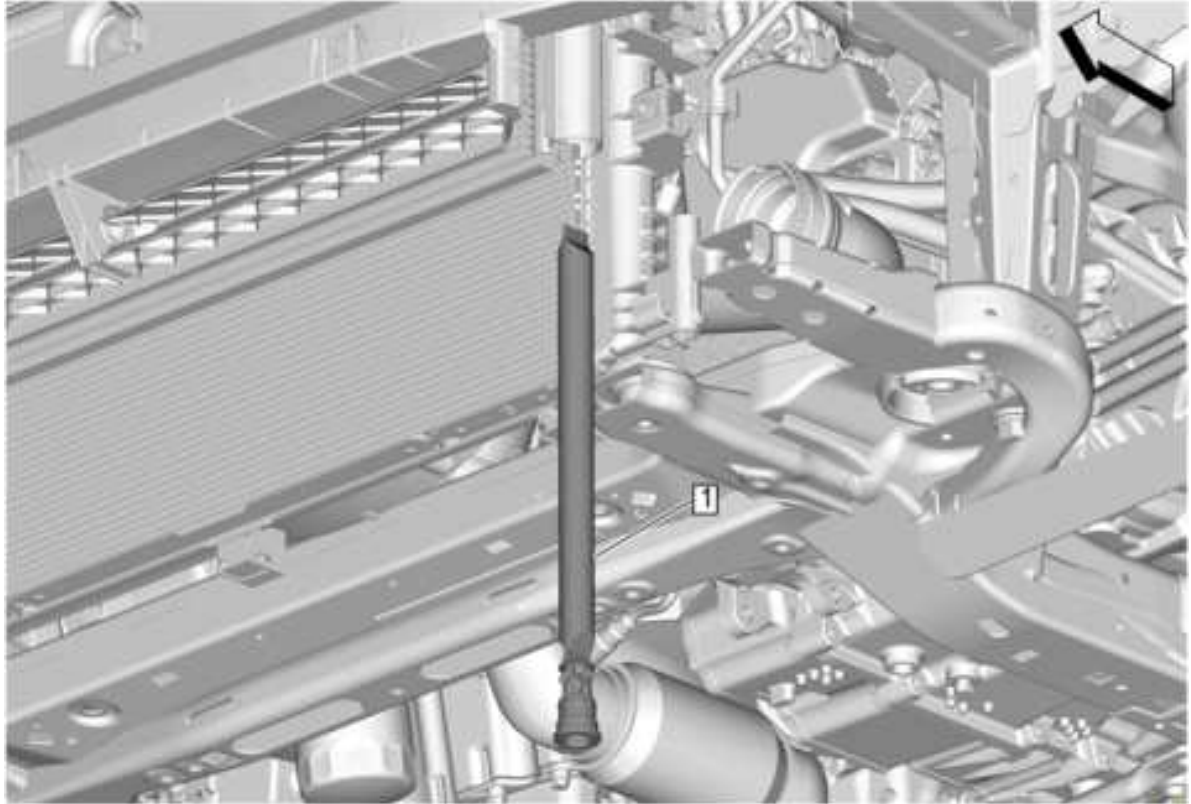


Fig. 92: Air Conditioning Refrigerant Desiccant
 Courtesy of GENERAL MOTORS COMPANY

Callout	Component Name
Preliminary Procedures Refrigerant Recovery and Recharging (R-134a)Refrigerant Recovery and Recharging (R-1234yf) Front Bumper Fascia Replacement (Equinox) Front Bumper Fascia Replacement (Terrain) Charge Air Cooler Replacement	
1	Air Conditioning Refrigerant Desiccant CAUTION: Refer to Component Fastener Tightening Caution . Tighten 12 N.m (106 lb in)

AIR CONDITIONING REFRIGERANT DESICCANT REPLACEMENT (LH7)

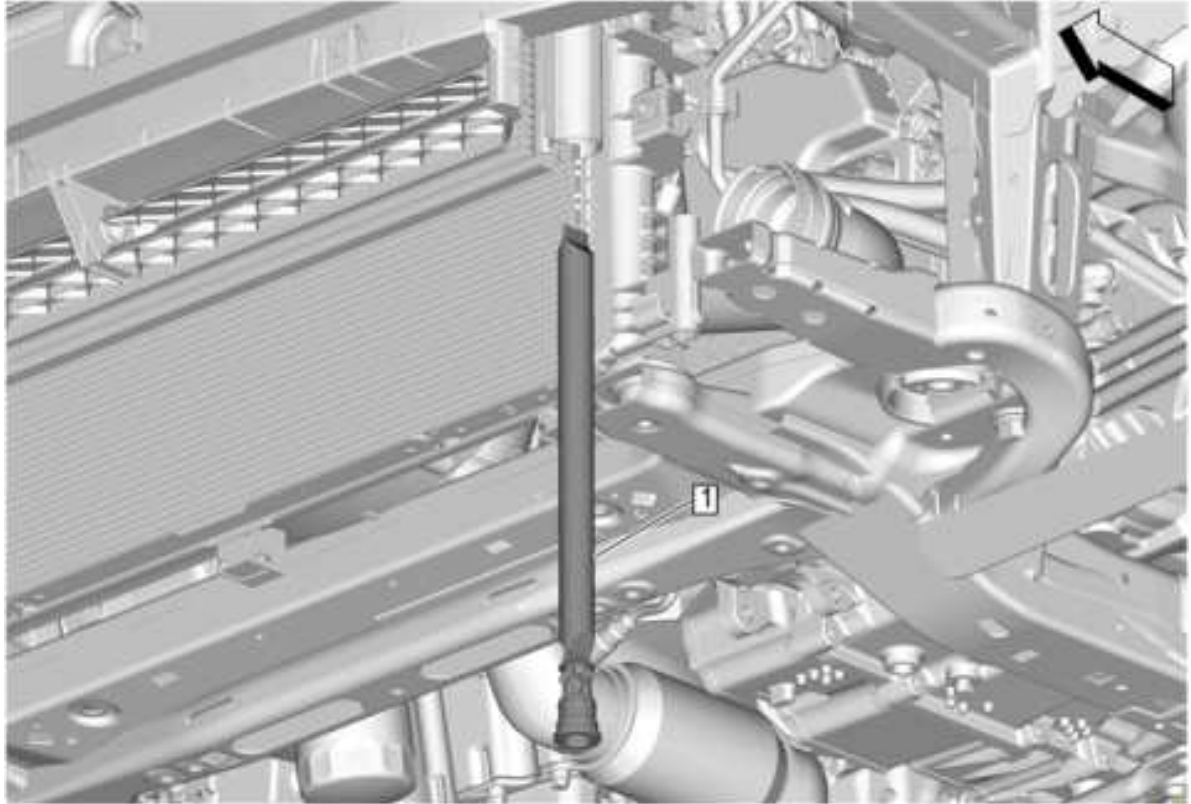


Fig. 93: Air Conditioning Refrigerant Desiccant
 Courtesy of GENERAL MOTORS COMPANY

Callout	Component Name
Preliminary Procedures Refrigerant Recovery and Recharging (R-134a)Refrigerant Recovery and Recharging (R-1234yf) Front Bumper Fascia Replacement (Equinox) Front Bumper Fascia Replacement (Terrain) Charge Air Cooler Replacement	
1	Air Conditioning Refrigerant Desiccant CAUTION: Refer to Component Fastener Tightening Caution . Tighten 12 N.m (106 lb in)

AIR CONDITIONING EVAPORATOR THERMAL EXPANSION VALVE REPLACEMENT

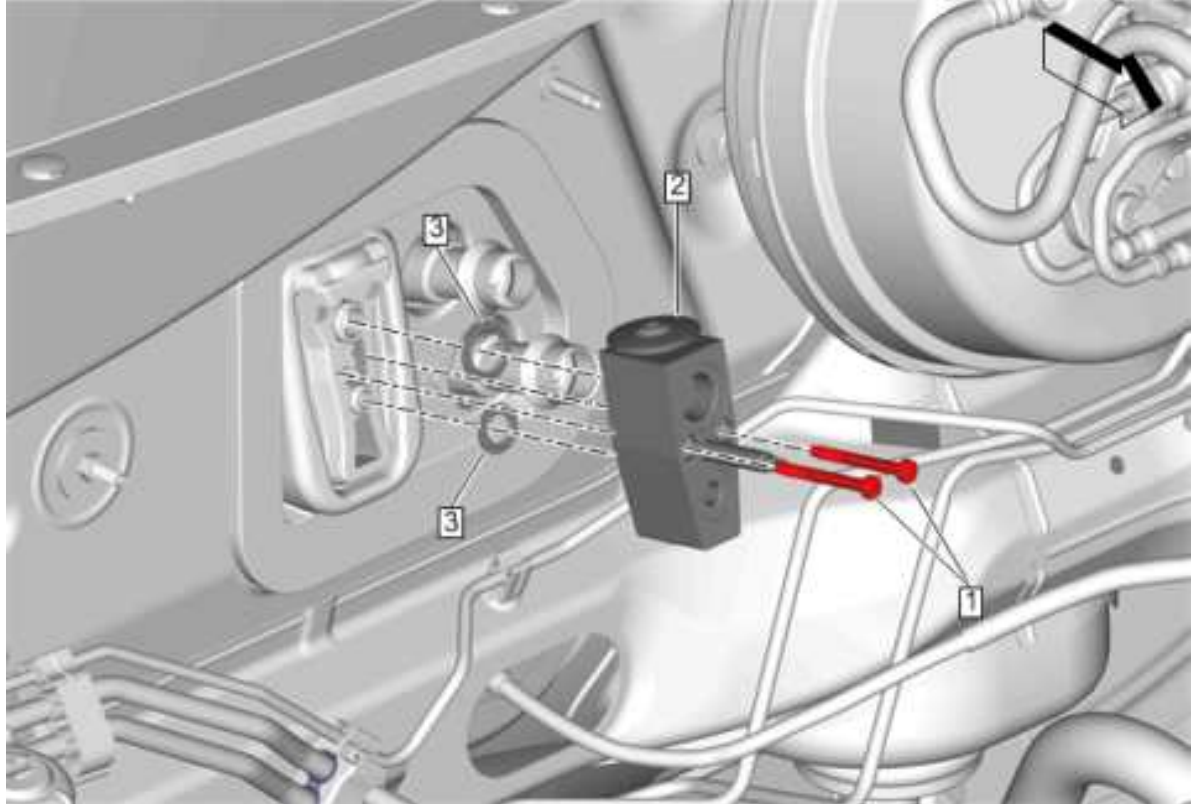


Fig. 94: Air Conditioning Evaporator Thermal Expansion Valve
 Courtesy of GENERAL MOTORS COMPANY

Callout	Component Name
Preliminary Procedures Refrigerant Recovery and Recharging (R-1234yf)Refrigerant Recovery and Recharging (R-1234yf) - Remove Air Conditioning Refrigerant Heat Exchanger@Air Conditioning Evaporator Thermal Expansion Valve - Air Conditioning Refrigerant Heat Exchanger Replacement (LYX)Air Conditioning Refrigerant Heat Exchanger Replacement (LYX)Air Conditioning Refrigerant Heat Exchanger Replacement (LTG)Air Conditioning Refrigerant Heat Exchanger Replacement (LH7)	
1	Air Conditioning Evaporator Thermal Expansion Valve Bolt (Qty: 2) CAUTION: Refer to Fastener Caution . Tighten 9 N.m (80 lb in)
2	Air Conditioning Evaporator Thermal Expansion Valve
3	Sealing Washer (Qty: 2) Procedure Remove and DISCARD the sealing washer. Air Conditioning System Seal Replacement

AIR CONDITIONING REFRIGERANT HIGH PRESSURE SERVICE VALVE REPLACEMENT (AT CONDENSER)

Special Tools

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

For equivalent regional tools. Refer to [Special Tools](#).

Removal Procedure

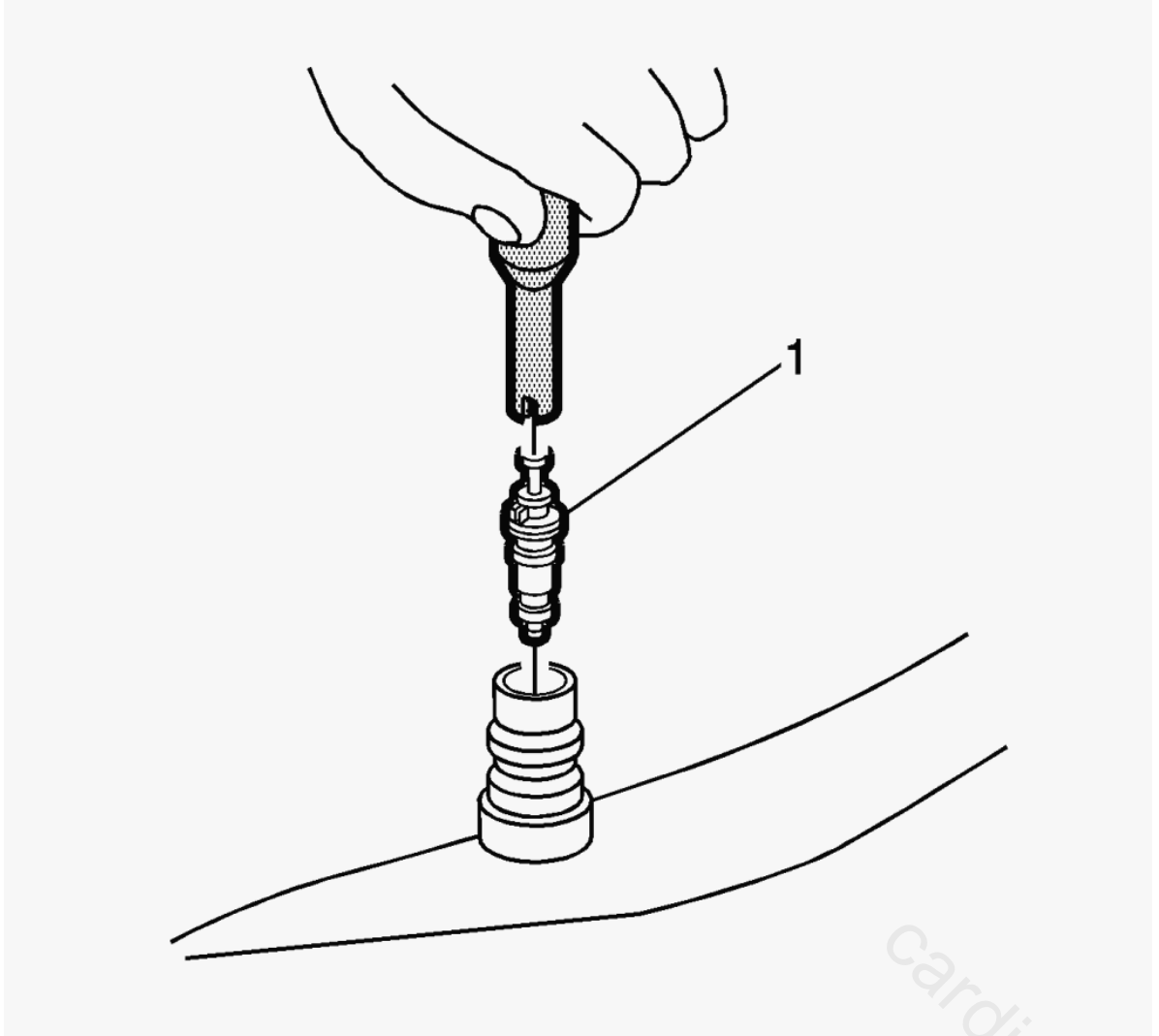


Fig. 95: Valve Core

Courtesy of GENERAL MOTORS COMPANY

1. Recover the refrigerant from the A/C system. Refer to [Refrigerant Recovery and Recharging \(R-134a\)](#) [Refrigerant Recovery and Recharging \(R-1234yf\)](#).
2. Using the **GE 46246** Valve Core Tool, remove the valve core (1) from the service port.

Installation Procedure

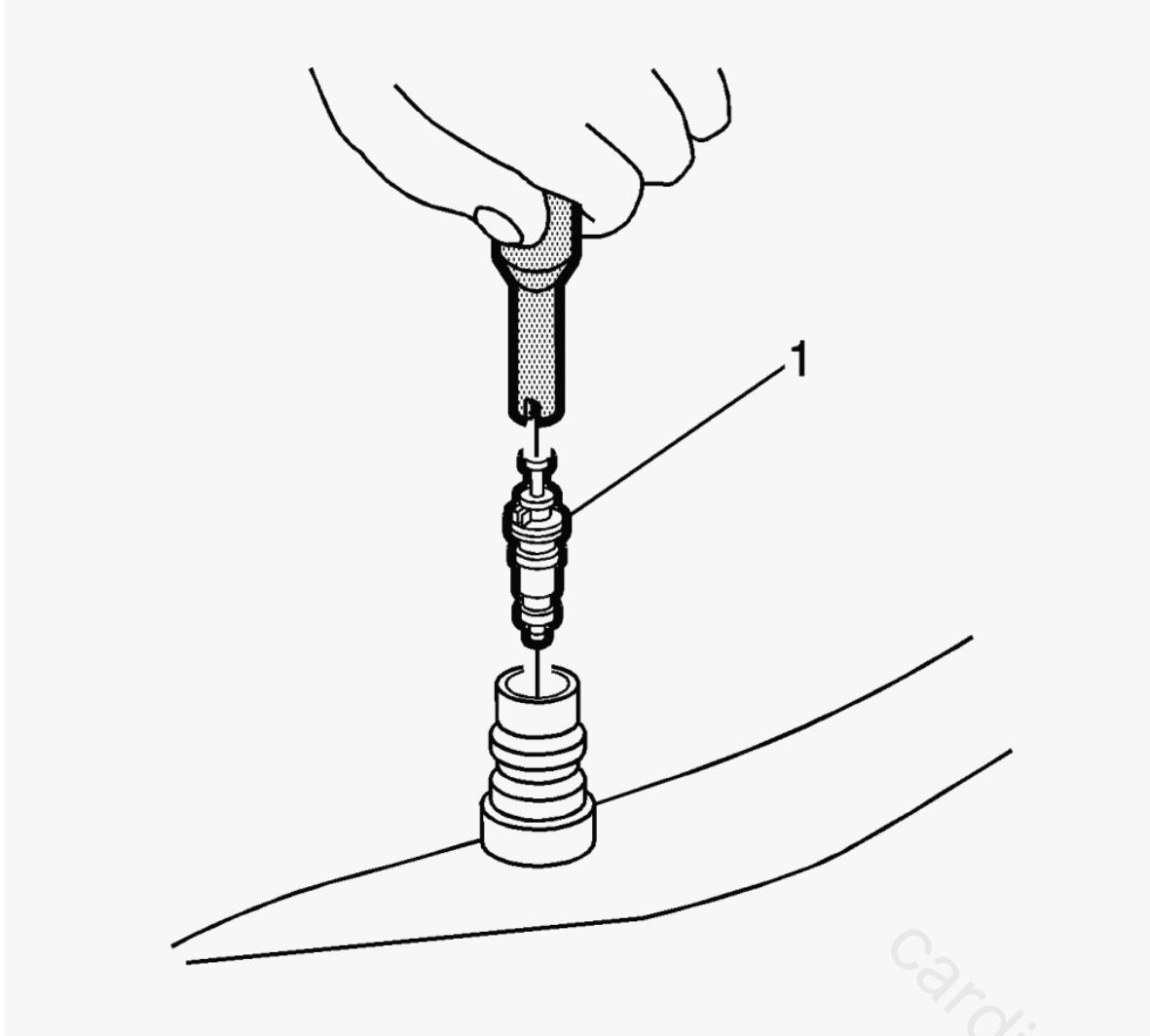


Fig. 96: Valve Core

Courtesy of GENERAL MOTORS COMPANY

CAUTION: Refer to Fastener Caution .

1. Install the valve core (1) to the service port.
2. Using the **GE 46246** Valve Core Tool, tighten the valve core.
3. Evacuate and recharge the A/C system. Refer to Refrigerant Recovery and Recharging (R-134a) Refrigerant Recovery and Recharging (R-1234yf).
4. Leak test the fittings of the component using **GE 50078** Electronic Leak Detector.

AIR CONDITIONING REFRIGERANT HIGH PRESSURE SERVICE VALVE REPLACEMENT (HIGH SIDE PORT)

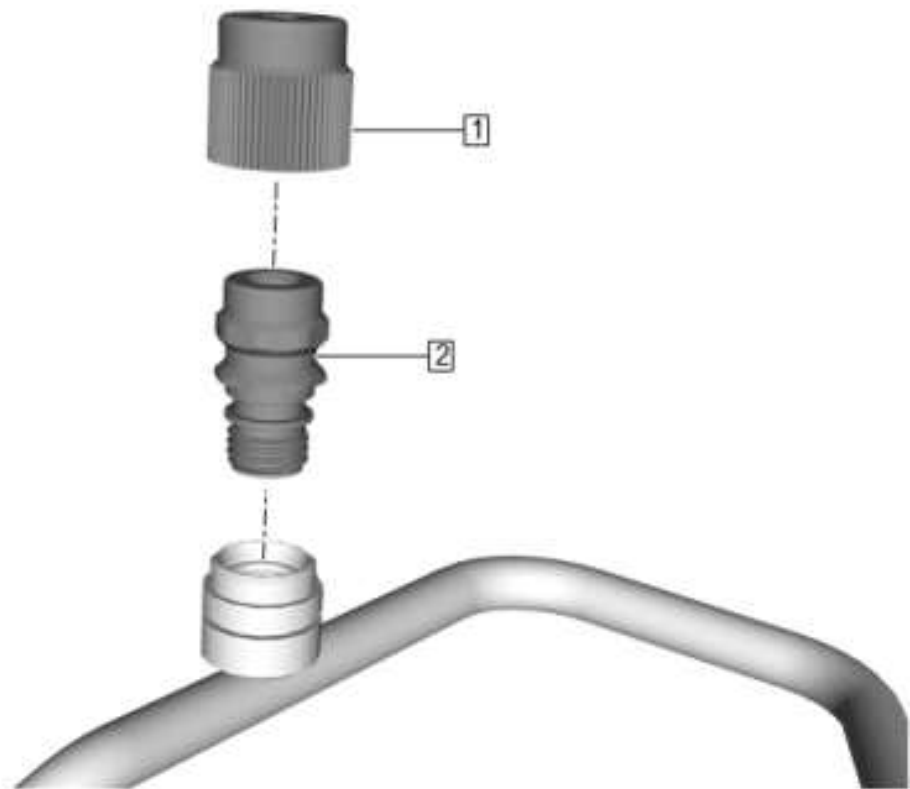


Fig. 97: Air Conditioning Refrigerant High Pressure Service Valve
Courtesy of GENERAL MOTORS COMPANY

Callout	Component Name
Preliminary Procedures 1. Remove the service port cap. 2. Recover the refrigerant. Refer to Refrigerant Recovery and Recharging (R-134a)Refrigerant Recovery and Recharging (R-1234yf)	
1	Air Conditioning Refrigerant Service Valve CAUTION: Refer to Fastener Caution . Procedure 1. Use the J 39037 Charge Valve Octagon Socket to remove the air conditioning refrigerant service valve. 2. Replace the O-ring. Tighten 2 N.m (18 lb in) Special Tools J 39037 Charge Valve Octagon Socket

AIR CONDITIONING CYCLING AND FAN CONTROL REFRIGERANT PRESSURE SENSOR REPLACEMENT

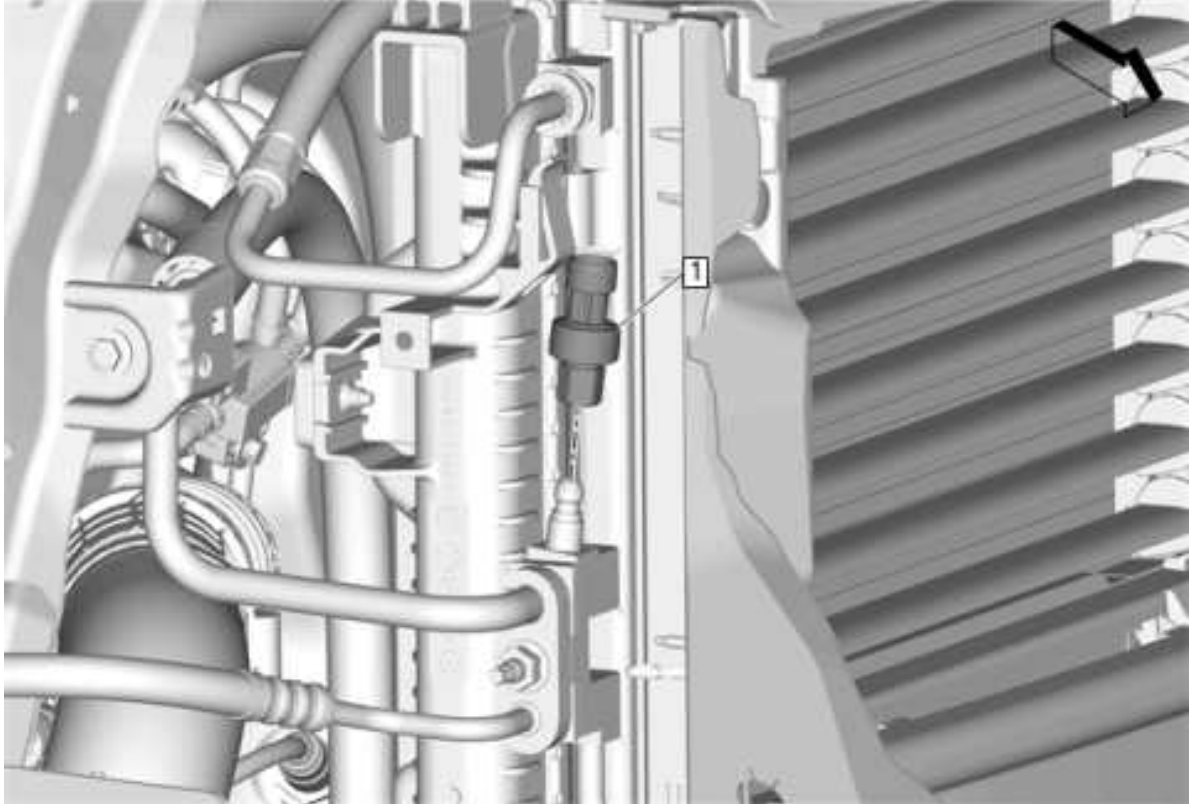


Fig. 98: Air Conditioning Cycling and Fan Control Refrigerant Pressure Sensor
 Courtesy of GENERAL MOTORS COMPANY

Callout	Component Name
Preliminary Procedures <u>Front Bumper Fascia Replacement (Equinox)</u> <u>Front Bumper Fascia Replacement (Terrain)</u> - Disconnect the electrical connector.	
1	Air Conditioning Cycling and Fan Control Refrigerant Pressure Sensor CAUTION: Refer to <u>Component Fastener Tightening Caution</u> . Tighten 7 N.m (62 lb in)

AIR CONDITIONING CONDENSER REPLACEMENT

Removal Procedure

- Recover the refrigerant. **Refrigerant Recovery and Recharging (R-134a)****Refrigerant Recovery and Recharging (R-1234yf)**

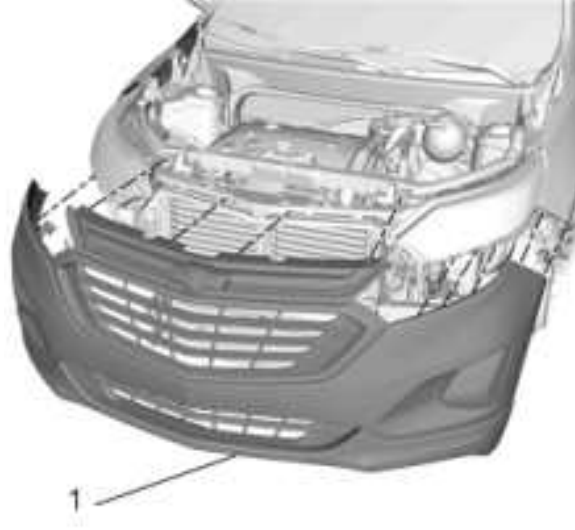


Fig. 99: Fascia

Courtesy of GENERAL MOTORS COMPANY

2. Remove Front Bumper Fascia (1) [Front Bumper Fascia Replacement \(Equinox\)](#) [Front Bumper Fascia Replacement \(Terrain\)](#)

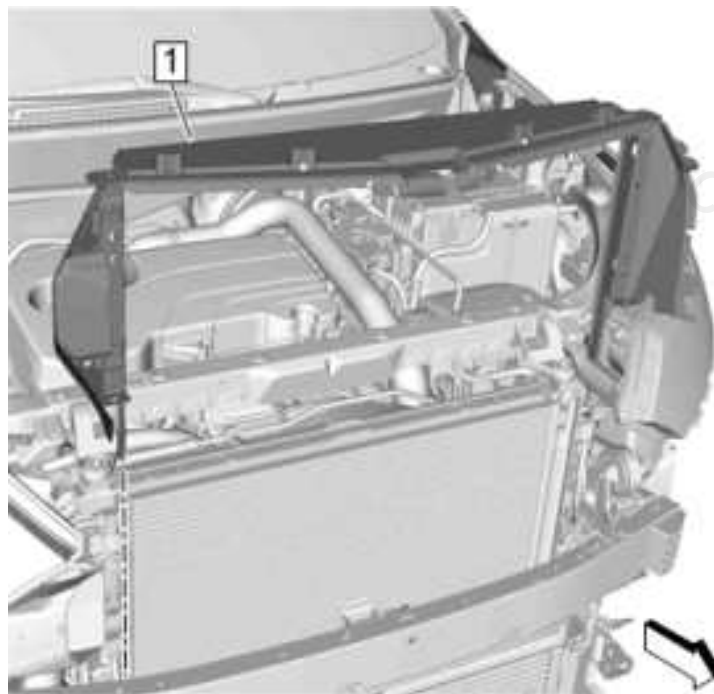


Fig. 100: Radiator Air Upper Baffle

Courtesy of GENERAL MOTORS COMPANY

3. Remove Radiator Air Upper Baffle (1) [Radiator Air Upper Baffle Replacement \(LH7 LTG LYX\)](#)

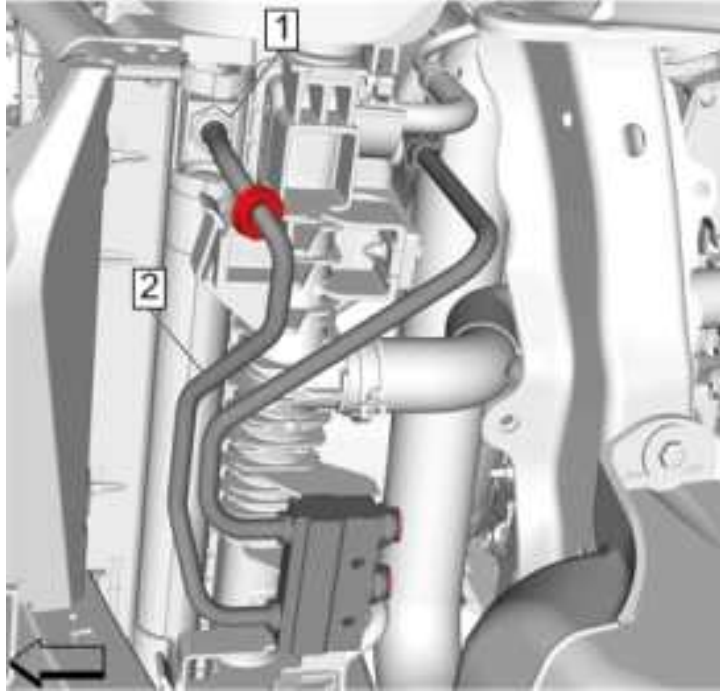


Fig. 101: Transmission Fluid Cooler Pipe
 Courtesy of GENERAL MOTORS COMPANY

4. Remove Transmission Fluid Cooler Pipe (2) @Air Conditioning Condenser - **Transmission Fluid Cooler Pipe Replacement**

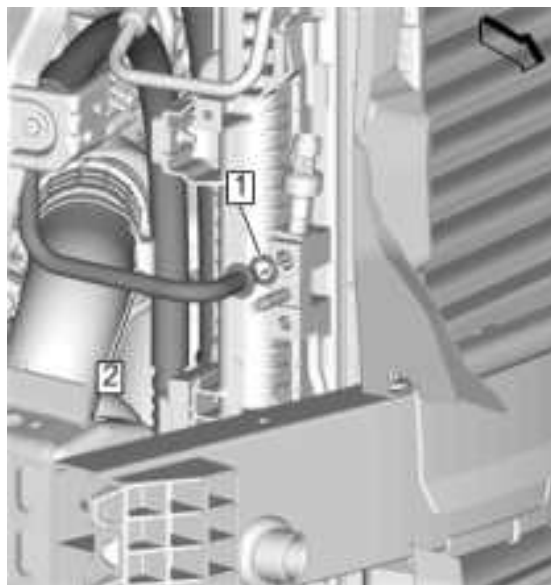


Fig. 102: Air Conditioning Evaporator Connector Hose/Tube and Compressor Hose
 Courtesy of GENERAL MOTORS COMPANY

5. Remove Air Conditioning Evaporator Connector Hose/Tube and Compressor Hose (2) @Air Conditioning Condenser - **Air Conditioning Evaporator Connector Hose/Tube and Compressor Hose Replacement (LYX)**
Air Conditioning Evaporator Connector Hose/Tube and Compressor Hose Replacement (LTG)
Air Conditioning Evaporator Connector Hose/Tube and Compressor Hose Replacement (LH7)
6. Disconnect the electrical connector.

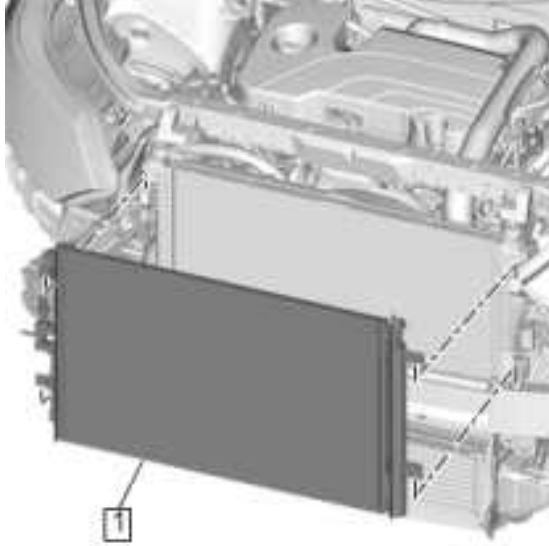


Fig. 103: Air Conditioning Condenser
Courtesy of GENERAL MOTORS COMPANY

7. Remove Air Conditioning Condenser (1)
8. Transfer components as necessary.

Installation Procedure

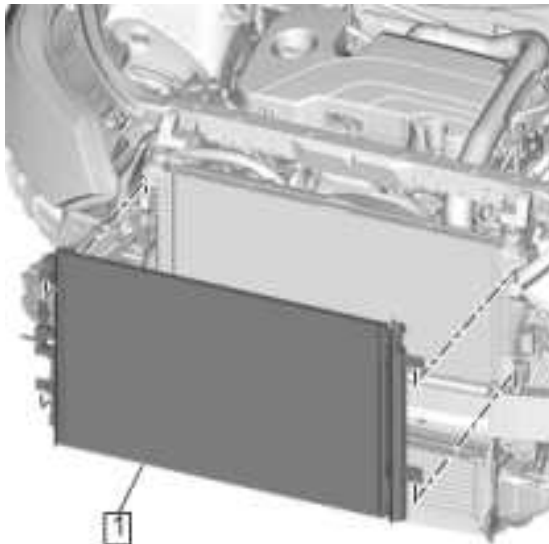


Fig. 104: Air Conditioning Condenser
Courtesy of GENERAL MOTORS COMPANY

1. Install Air Conditioning Condenser (1)

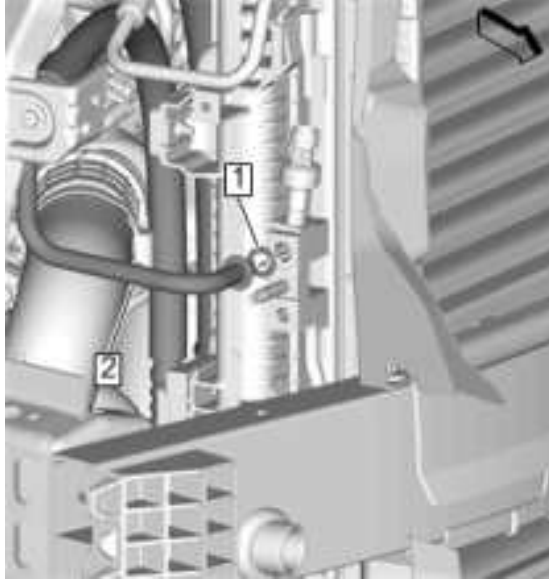


Fig. 105: Air Conditioning Evaporator Connector Hose/Tube and Compressor Hose
 Courtesy of GENERAL MOTORS COMPANY

2. Install Air Conditioning Evaporator Connector Hose/Tube and Compressor Hose (2) @Air Conditioning Condenser - [**Air Conditioning Evaporator Connector Hose/Tube and Compressor Hose Replacement \(LYX\)**](#)[**Air Conditioning Evaporator Connector Hose/Tube and Compressor Hose Replacement \(LTG\)**](#)[**Air Conditioning Evaporator Connector Hose/Tube and Compressor Hose Replacement \(LH7\)**](#)
3. Connect the electrical connector.

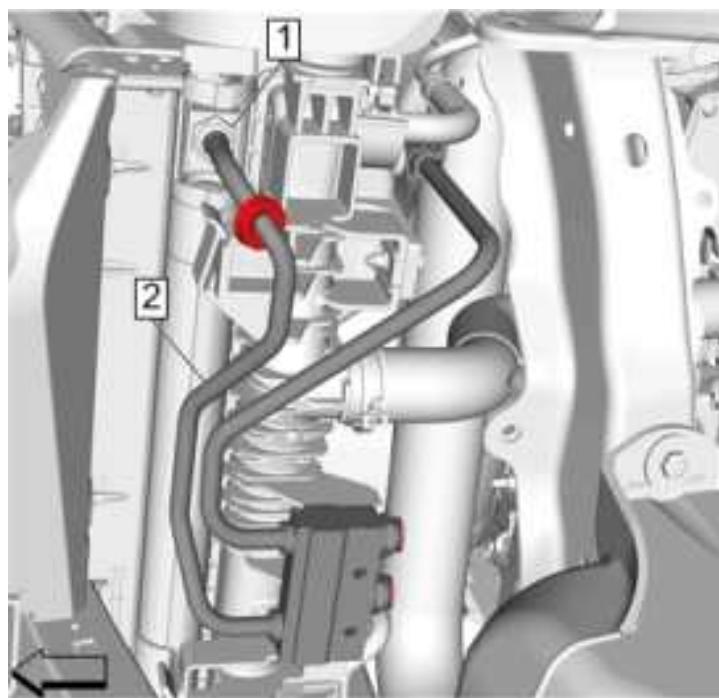


Fig. 106: Transmission Fluid Cooler Pipe
 Courtesy of GENERAL MOTORS COMPANY

4. Install Transmission Fluid Cooler Pipe (2) @Air Conditioning Condenser - [**Transmission Fluid Cooler Pipe Replacement**](#)

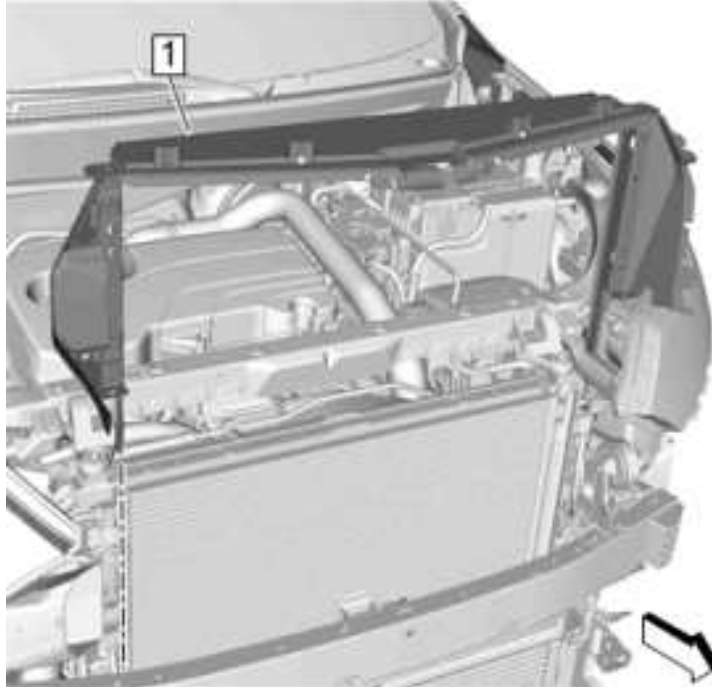


Fig. 107: Radiator Air Upper Baffle

Courtesy of GENERAL MOTORS COMPANY

5. Install Radiator Air Upper Baffle (1) [Radiator Air Upper Baffle Replacement \(LH7 LTG LYX\)](#)

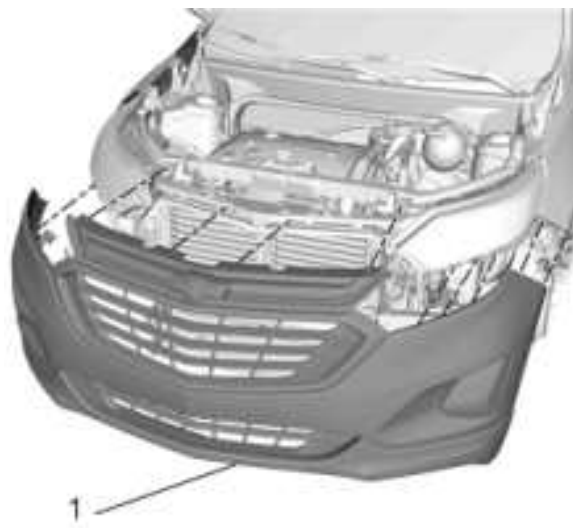


Fig. 108: Fascia

Courtesy of GENERAL MOTORS COMPANY

6. Install Front Bumper Fascia (1) [Front Bumper Fascia Replacement \(Equinox\)](#) [Front Bumper Fascia Replacement \(Terrain\)](#)
7. Recharge the refrigerant. [Refrigerant Recovery and Recharging \(R-134a\)](#) [Refrigerant Recovery and Recharging \(R-1234yf\)](#)

HEATER AND AIR CONDITIONING EVAPORATOR AND BLOWER MODULE REMOVAL AND INSTALLATION (EQUINOX LYX)

Removal Procedure

1. Disconnect the battery negative cable. [Battery Negative Cable Disconnection and Connection \(KL9\)](#)
2. Recover the refrigerant. [Refrigerant Recovery and Recharging \(R-134a\)](#) [Refrigerant Recovery and Recharging \(R-1234yf\)](#)
3. Drain the cooling system. [Cooling System Draining and Filling \(GE 47716\)](#) [Cooling System Draining and Filling \(Static\)](#)

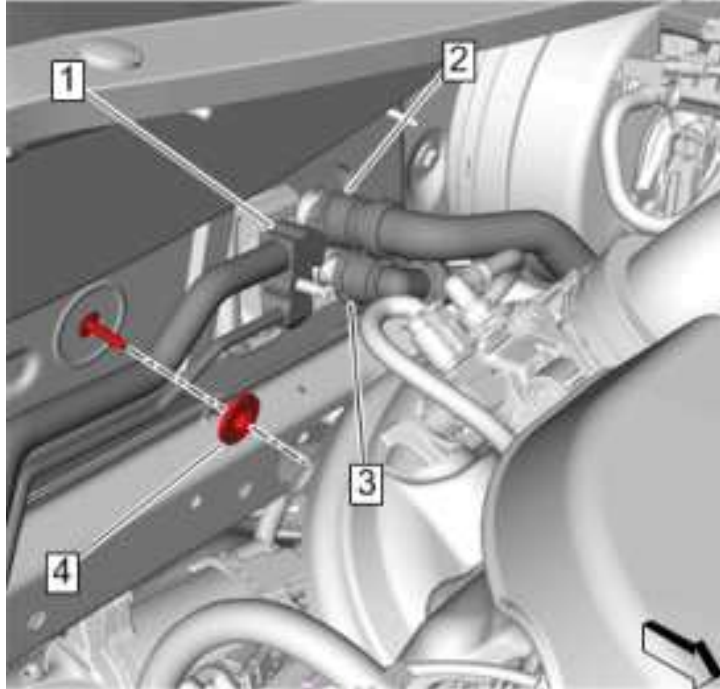


Fig. 109: Air Conditioning Refrigerant Heat Exchanger
 Courtesy of GENERAL MOTORS COMPANY

4. Remove Air Conditioning Refrigerant Heat Exchanger (1) @Air Conditioning Evaporator Thermal Expansion Valve - [Air Conditioning Refrigerant Heat Exchanger Replacement \(LYX\)](#)
5. Remove Heater Inlet Hose (2) @Heater Core Inlet Tube - [Heater Inlet Hose Replacement \(LYX AWD without KL9\)Heater Inlet Hose Replacement \(LYX with KL9\)](#)
6. Remove Heater Outlet Hose (3) @Heater Core Outlet Tube - [Heater Outlet Hose Replacement \(LYX without KL9\)Heater Outlet Hose Replacement \(LH7\)](#)
7. Remove Heater and Air Conditioning Evaporator and Blower Module Nut (4) @Cowl Panel

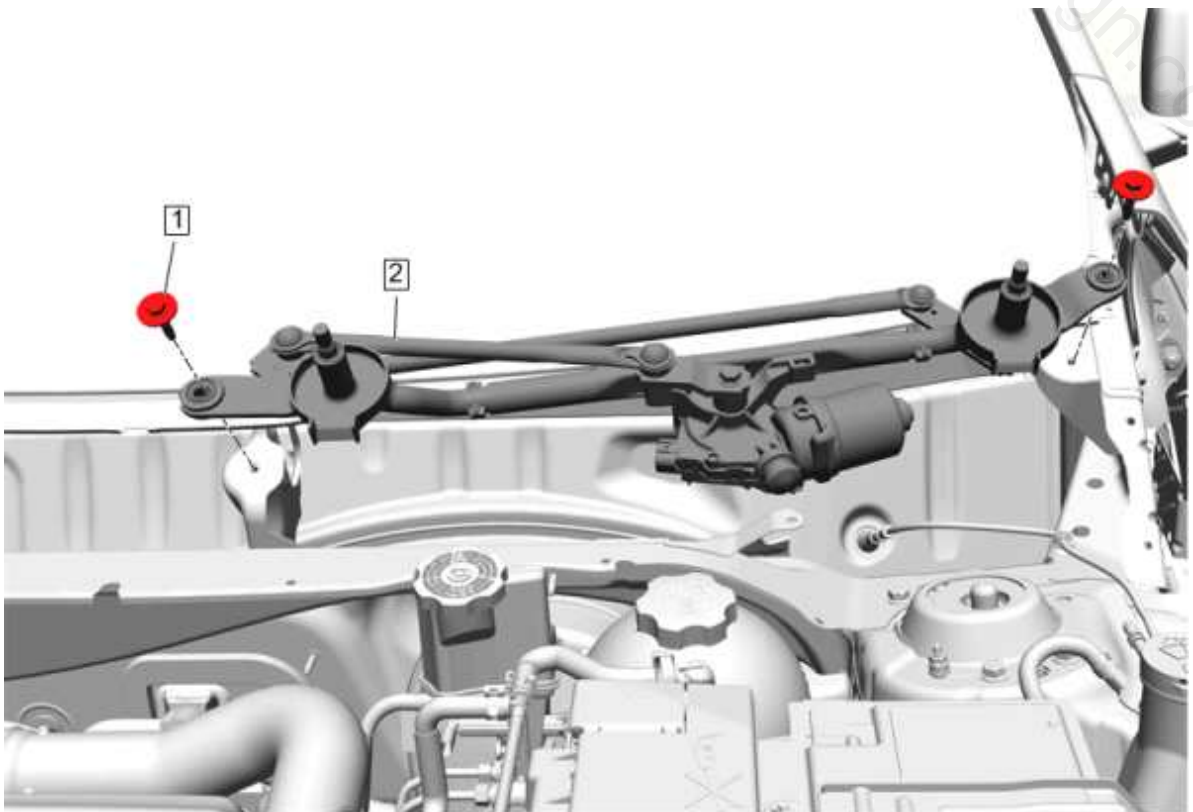


Fig. 110: Windshield Wiper Transmission
 Courtesy of GENERAL MOTORS COMPANY

8. Remove Windshield Wiper Transmission (2)[Windshield Wiper Transmission Replacement](#)

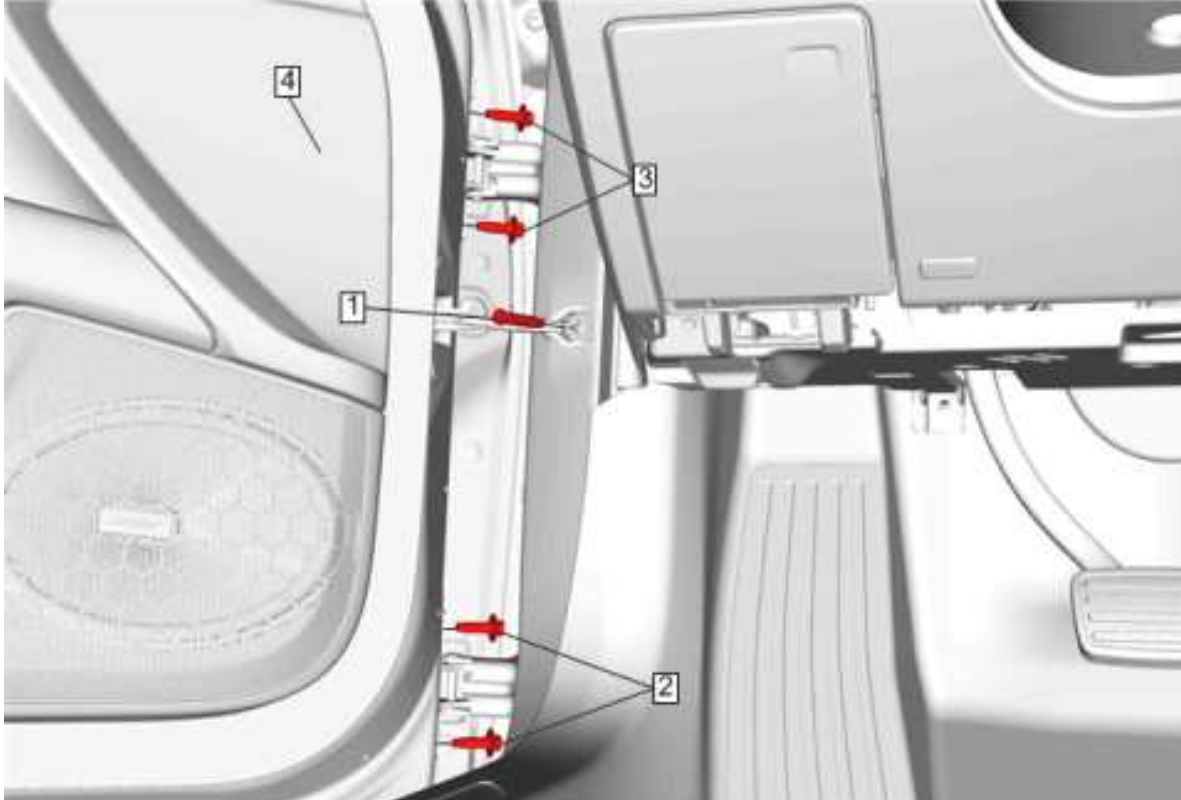


Fig. 111: Front Side Door

Courtesy of GENERAL MOTORS COMPANY

9. Remove the left and right front side door (4). [Front Side Door Replacement](#)
10. Remove Drivers Seat and Passengers Seat - [Driver or Passenger Seat Removal and Installation](#)

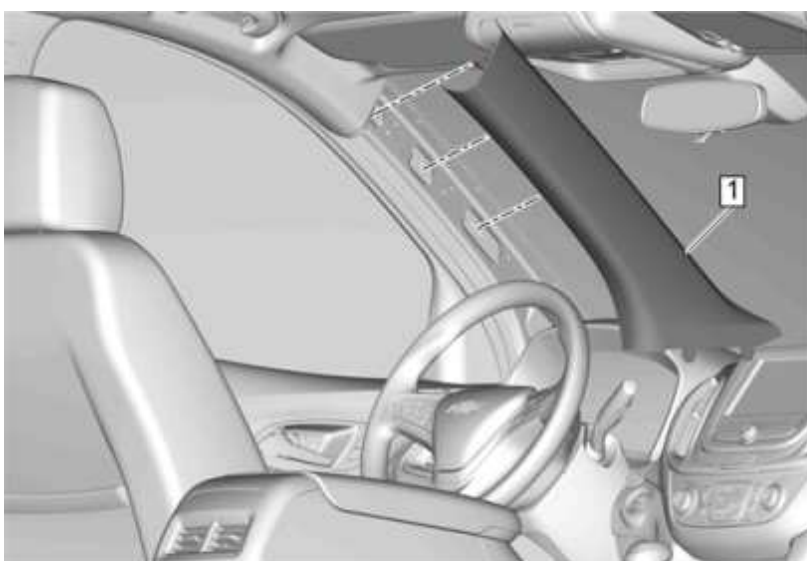


Fig. 112: Windshield Garnish Molding Replacement (Equinox)

Courtesy of GENERAL MOTORS COMPANY

11. Remove the left and right side windshield garnish molding (1 [Windshield Garnish Molding Replacement \(Equinox\)](#))



Fig. 113: Left And Right Instrument Panel Outer Trim Cover
 Courtesy of GENERAL MOTORS COMPANY

12. Remove the left and right instrument panel outer trim cover (1). [Instrument Panel Outer Trim Cover Replacement \(Equinox\)](#)

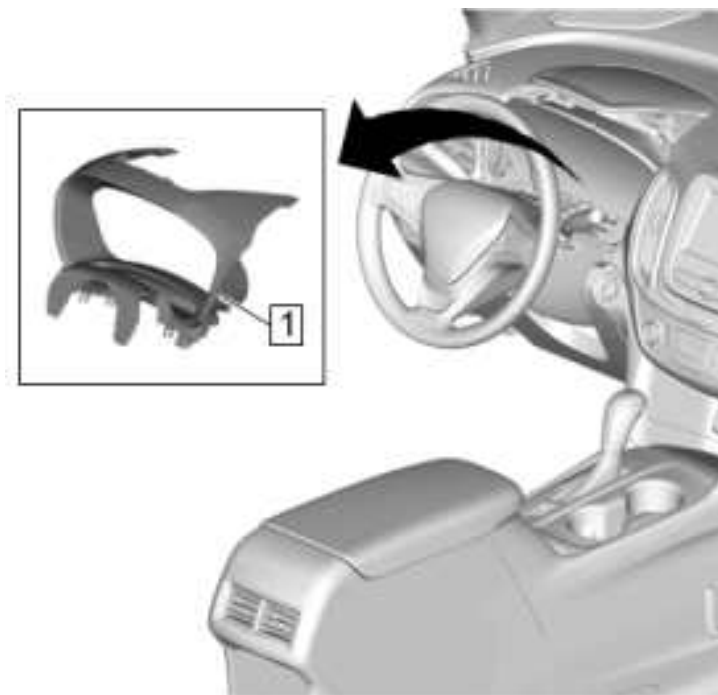


Fig. 114: Instrument Panel Cluster Trim Plate
 Courtesy of GENERAL MOTORS COMPANY

13. Remove Instrument Panel Cluster Trim Plate (1) [Instrument Panel Cluster Trim Plate Replacement \(Equinox\)](#)



Fig. 115: Instrument Panel Knee Bolster
Courtesy of GENERAL MOTORS COMPANY

14. Remove Instrument Panel Knee Bolster (1) **Instrument Panel Knee Bolster Replacement (Equinox)**

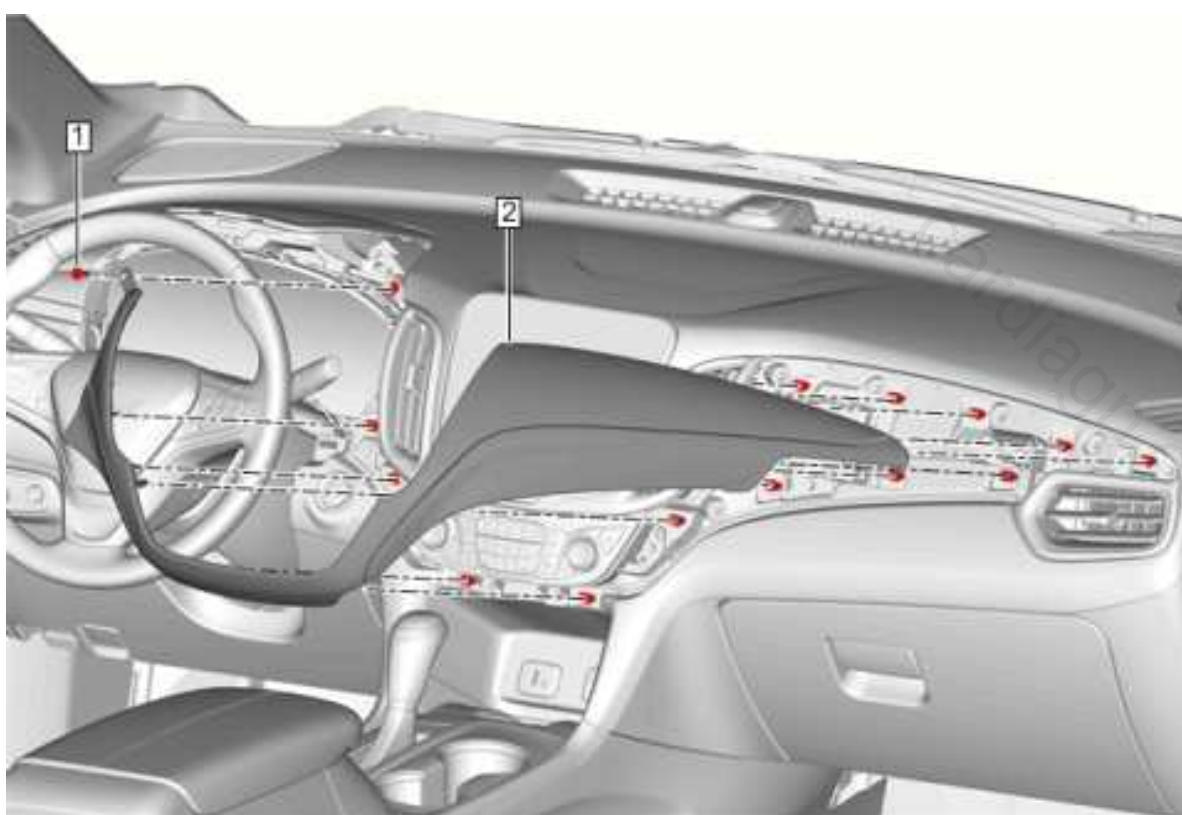


Fig. 116: Right Side Instrument Panel Trim Pad
Courtesy of GENERAL MOTORS COMPANY

15. Remove Instrument Panel Trim Pad - Right Side (2) **Instrument Panel Trim Pad Replacement - Right Side (Equinox)**

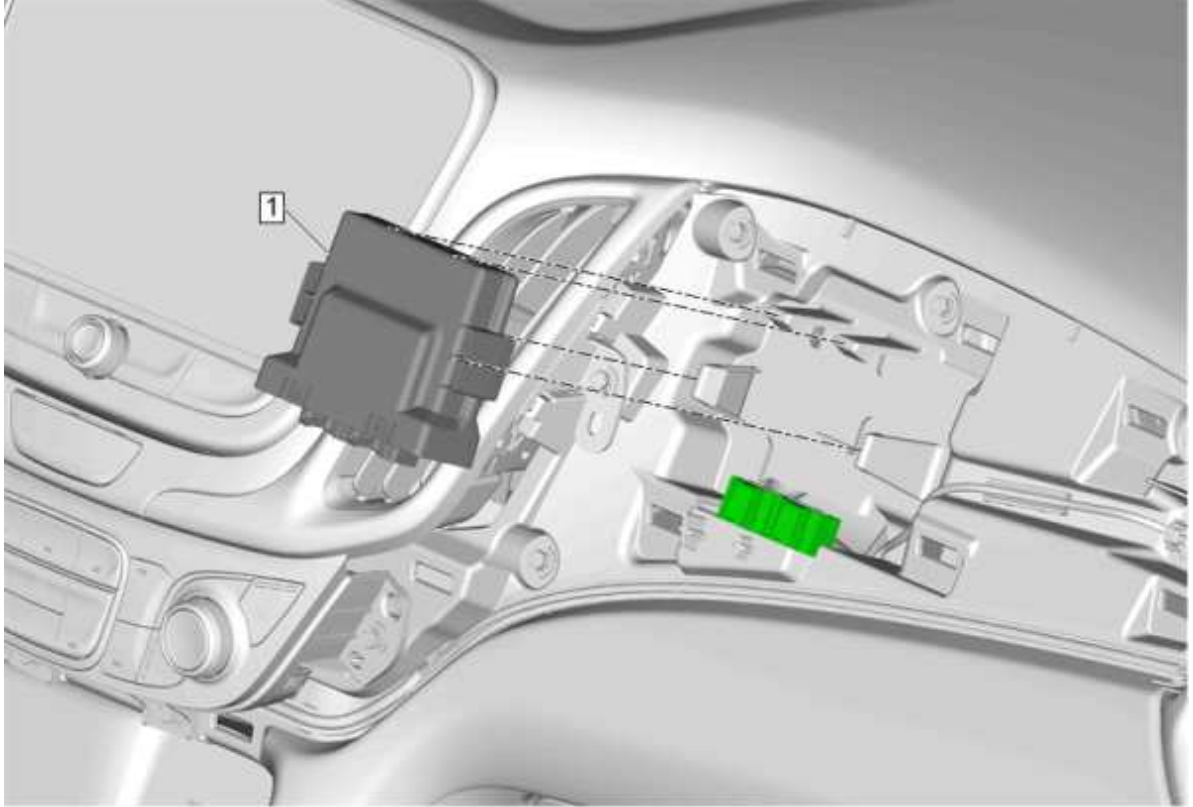


Fig. 117: Serial Data Gateway Module
Courtesy of GENERAL MOTORS COMPANY

16. Remove Serial Data Gateway Module (1) **Serial Data Gateway Module Replacement (Equinox)**.

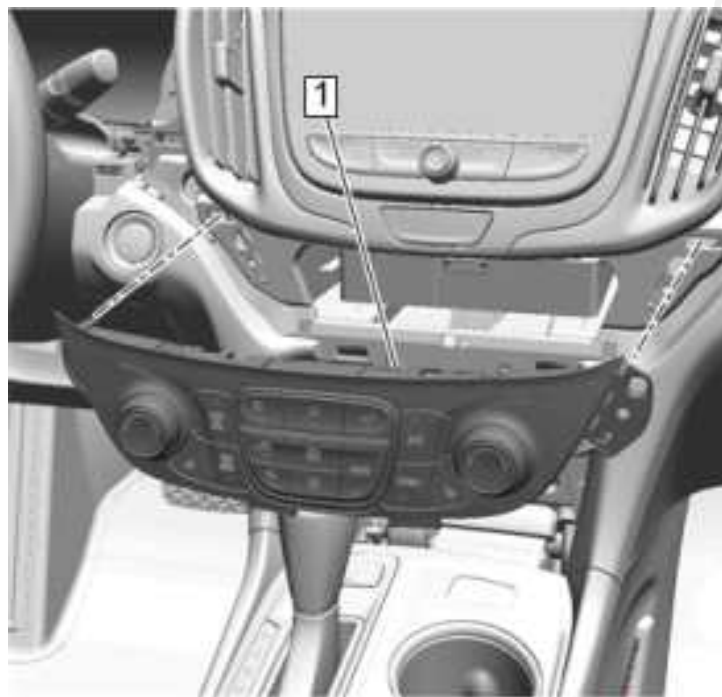


Fig. 118: Heater and Air Conditioning User Interface Control
Courtesy of GENERAL MOTORS COMPANY

17. Remove Heater and Air Conditioning User Interface Control (1) **Heater and Air Conditioning User Interface Control Replacement (Equinox)**.

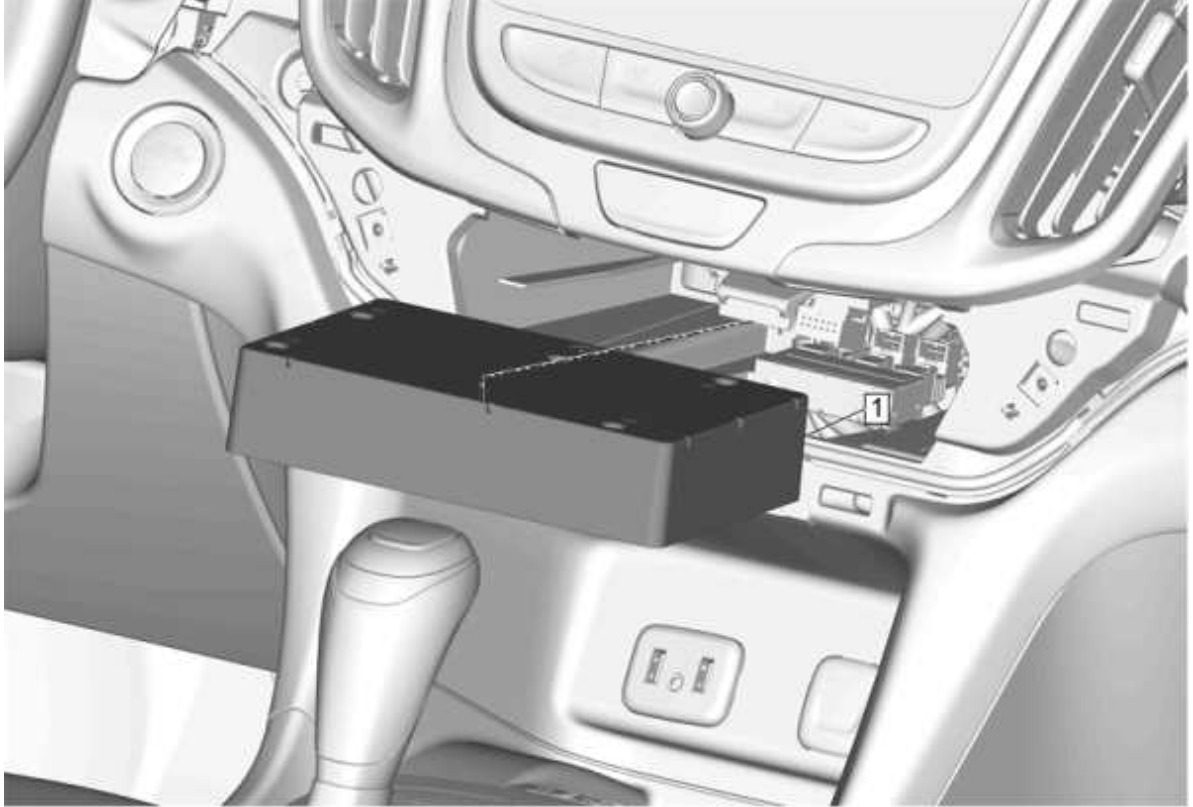


Fig. 119: Communication Interface Module
Courtesy of GENERAL MOTORS COMPANY

18. Remove Communication Interface Module (1) **Communication Interface Module Replacement (Equinox)**



Fig. 120: Radio Control Assembly
Courtesy of GENERAL MOTORS COMPANY

19. Remove Radio Control Assembly (1) **Radio Control Assembly Replacement (Equinox)**

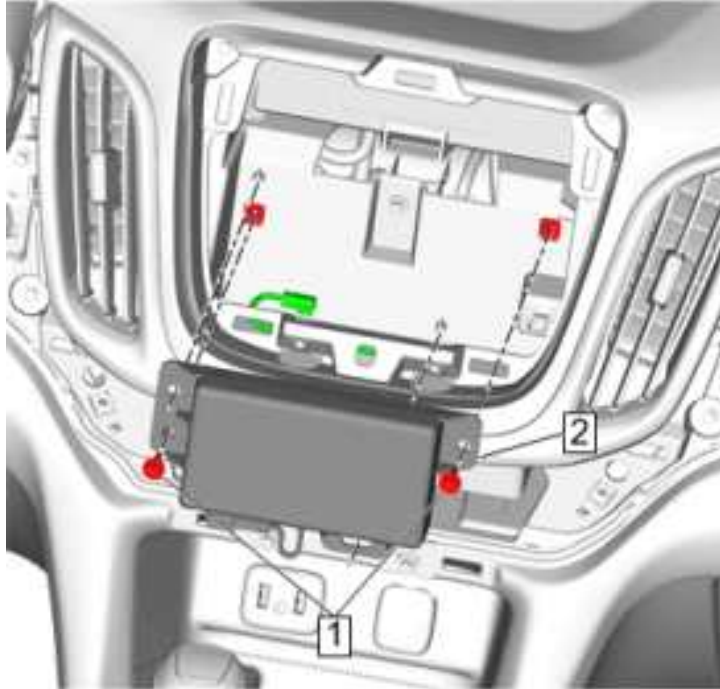


Fig. 121: Communication Interface Module Battery And Screws
Courtesy of GENERAL MOTORS COMPANY

20. Remove Communication Interface Module Battery (2) - [Communication Interface Module Battery Replacement](#)



Fig. 122: Heater And Air Conditioning Remote Control
Courtesy of GENERAL MOTORS COMPANY

21. Remove Heater and Air Conditioning Remote Control (1) [Heater and Air Conditioning Remote Control Replacement \(Equinox\)](#)

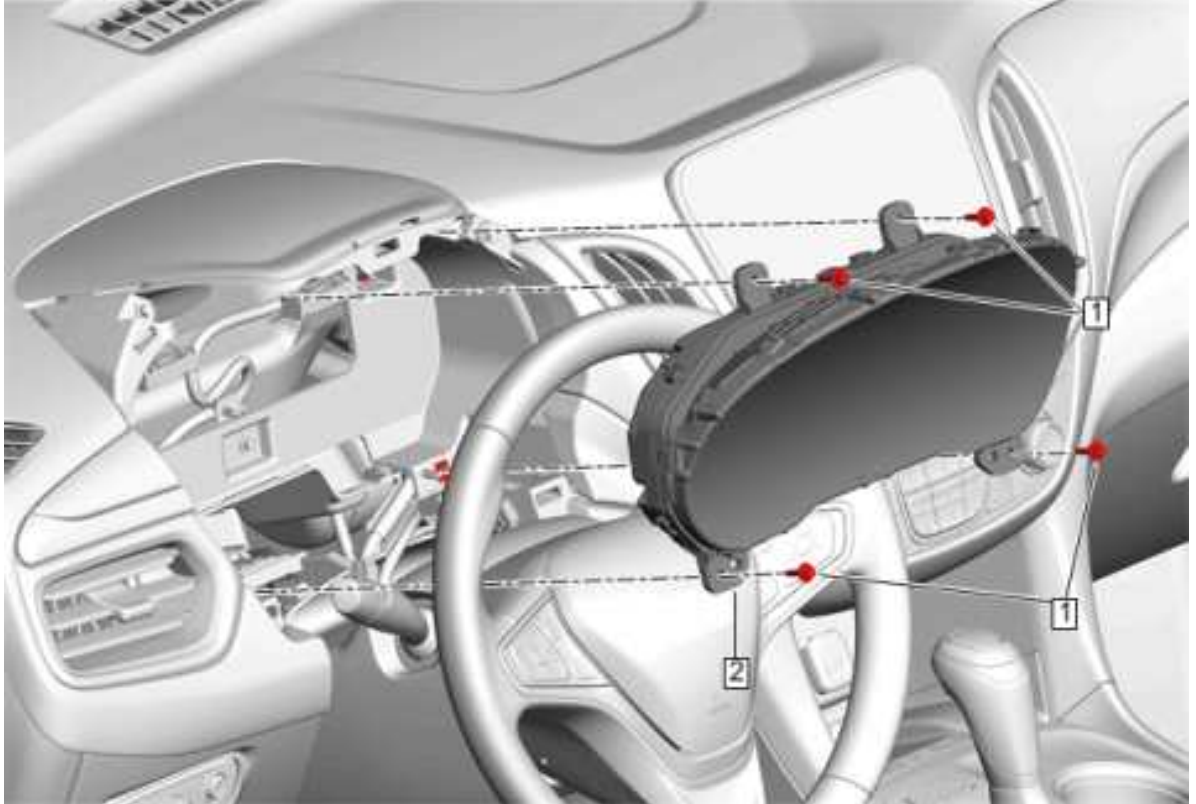


Fig. 123: Instrument Cluster And Screws
 Courtesy of GENERAL MOTORS COMPANY

22. Remove Instrument Cluster (2) **Instrument Cluster Replacement (Equinox)**

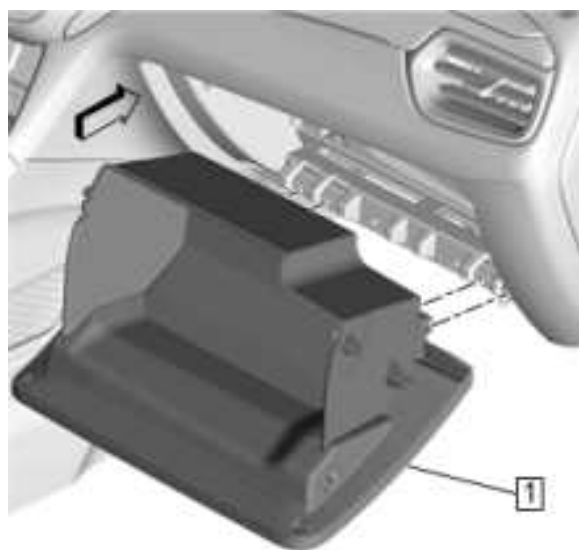


Fig. 124: Instrument Panel Compartment Door
 Courtesy of GENERAL MOTORS COMPANY

23. Remove Instrument Panel Compartment Door (1) **Instrument Panel Compartment Door Replacement (Equinox)**

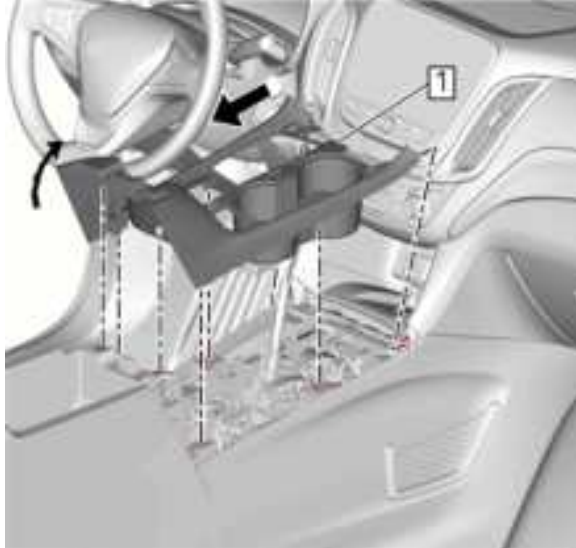


Fig. 125: Front Floor Console Applique
Courtesy of GENERAL MOTORS COMPANY

24. Remove Front Floor Console Applique (1) **Front Floor Console Applique Replacement (Equinox)**

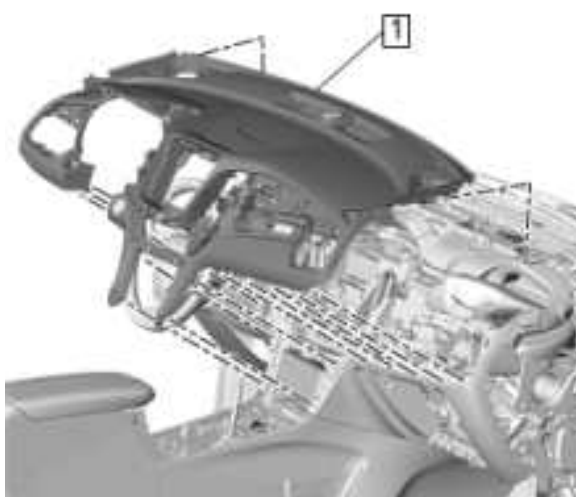


Fig. 126: Instrument Panel Upper Trim Panel
Courtesy of GENERAL MOTORS COMPANY

25. Remove Instrument Panel Upper Trim Panel (1) **Instrument Panel Upper Trim Panel Replacement (Equinox)**

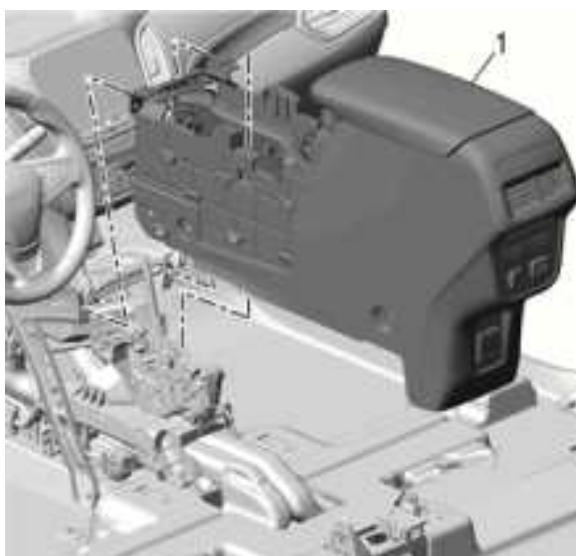


Fig. 127: Front Floor Console
Courtesy of GENERAL MOTORS COMPANY

26. Remove Front Floor Console (1)[Front Floor Console Replacement \(Equinox\)](#)

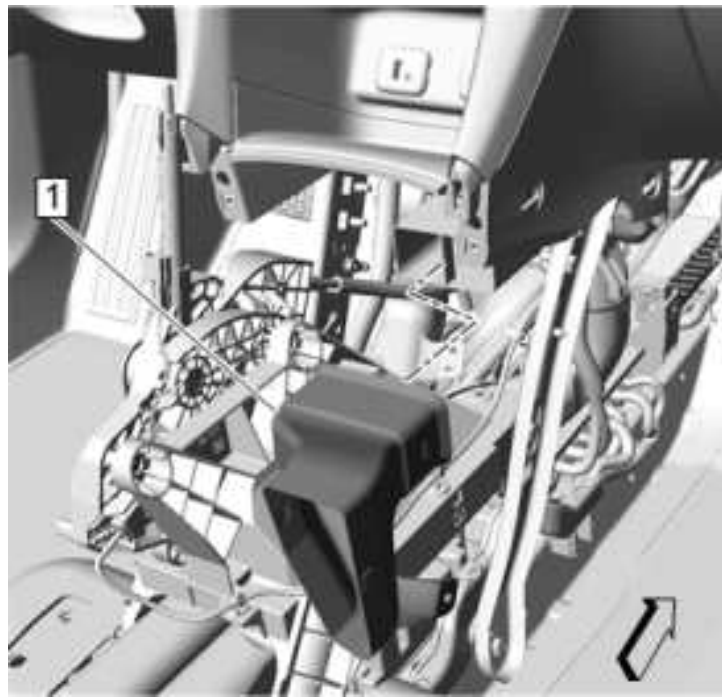


Fig. 128: Front Floor Console Rear Air Duct
Courtesy of GENERAL MOTORS COMPANY

27. Remove Front Floor Console Rear Air Duct (1)[Front Floor Console Rear Air Duct Replacement \(Equinox Front\)](#)[Front Floor Console Rear Air Duct Replacement \(Equinox Rear\)](#)

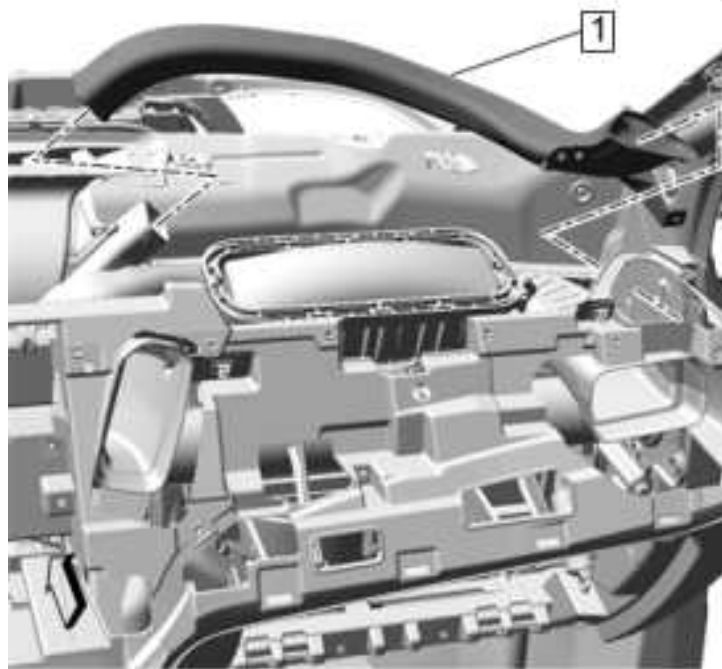


Fig. 129: Right Side Window Defogger Outlet Duct
Courtesy of GENERAL MOTORS COMPANY

28. Remove Side Window Defogger Outlet Duct - Right Side (1)[Side Window Defogger Outlet Duct Replacement - Right Side \(Equinox\)](#)



Fig. 130: Left Side Window Defogger Outlet Duct
 Courtesy of GENERAL MOTORS COMPANY

29. Remove Side Window Defogger Outlet Duct - Left Side (1) [Side Window Defogger Outlet Duct Replacement - Left Side \(Equinox\)](#)

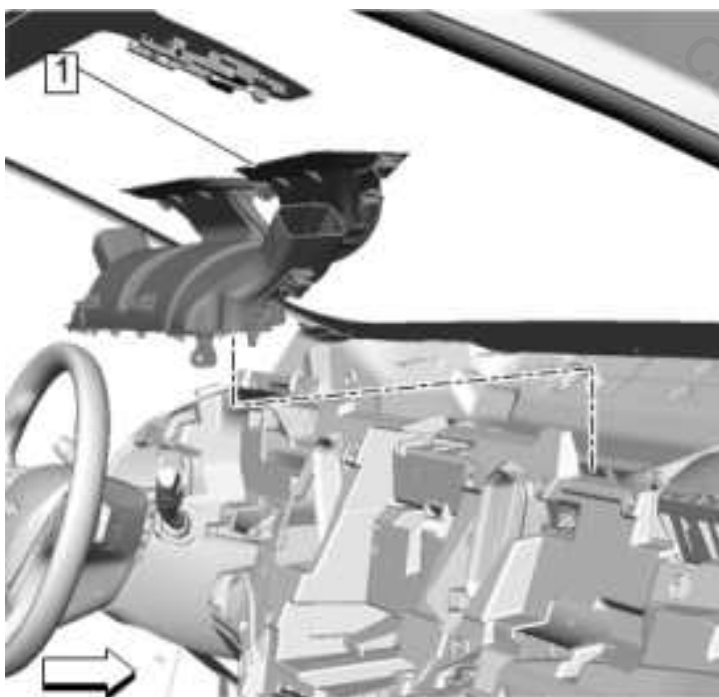


Fig. 131: Windshield Defroster Outlet Duct
 Courtesy of GENERAL MOTORS COMPANY

30. Remove Windshield Defroster Outlet Duct (1) [Windshield Defroster Outlet Duct Replacement \(Equinox\)](#)

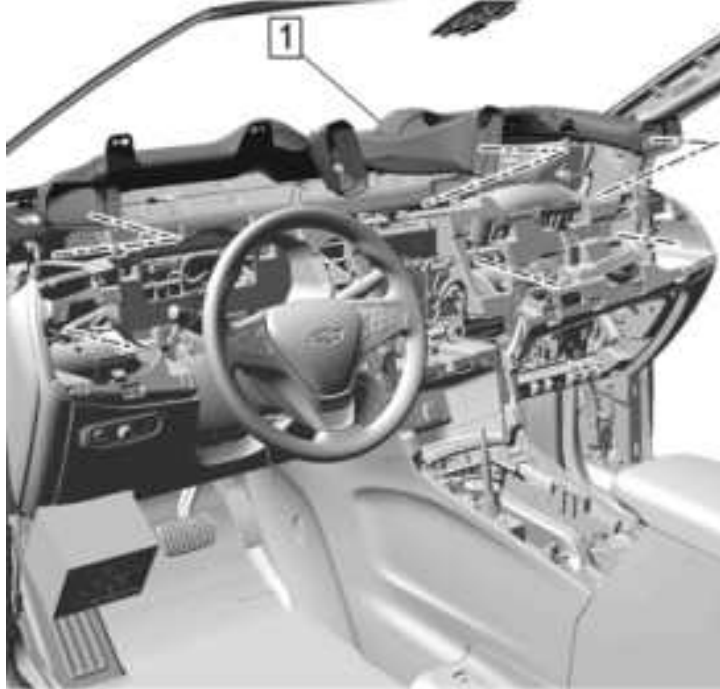


Fig. 132: Instrument Panel Center Air Outlet Duct
 Courtesy of GENERAL MOTORS COMPANY

31. Remove Instrument Panel Center Air Outlet Duct (1) **Instrument Panel Center Air Outlet Duct Replacement (Equinox)**

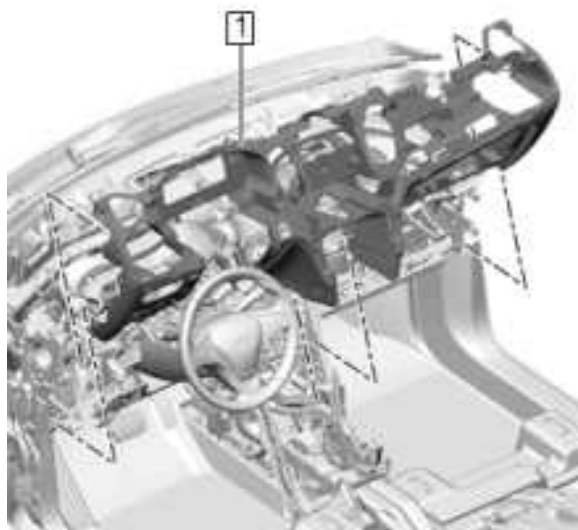


Fig. 133: Instrument Panel
 Courtesy of GENERAL MOTORS COMPANY

32. Remove Instrument Panel (1) **Instrument Panel Assembly Replacement (Equinox)**

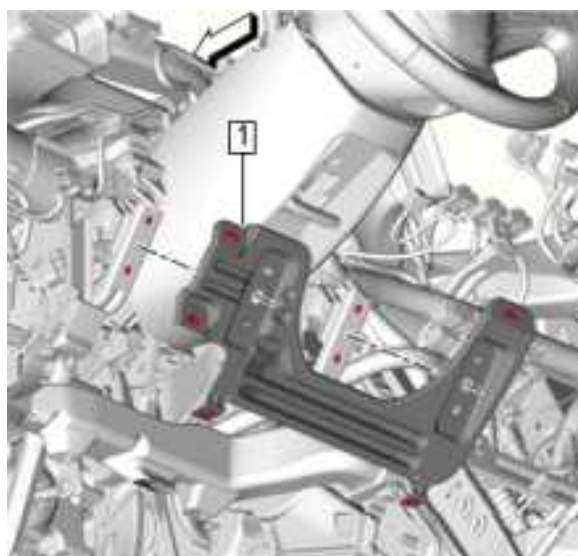


Fig. 134: Instrument Panel Knee Bolster Deflector
Courtesy of GENERAL MOTORS COMPANY

33. Remove Instrument Panel Knee Bolster Deflector (1)[Instrument Panel Knee Bolster Deflector Replacement \(Equinox\)](#)

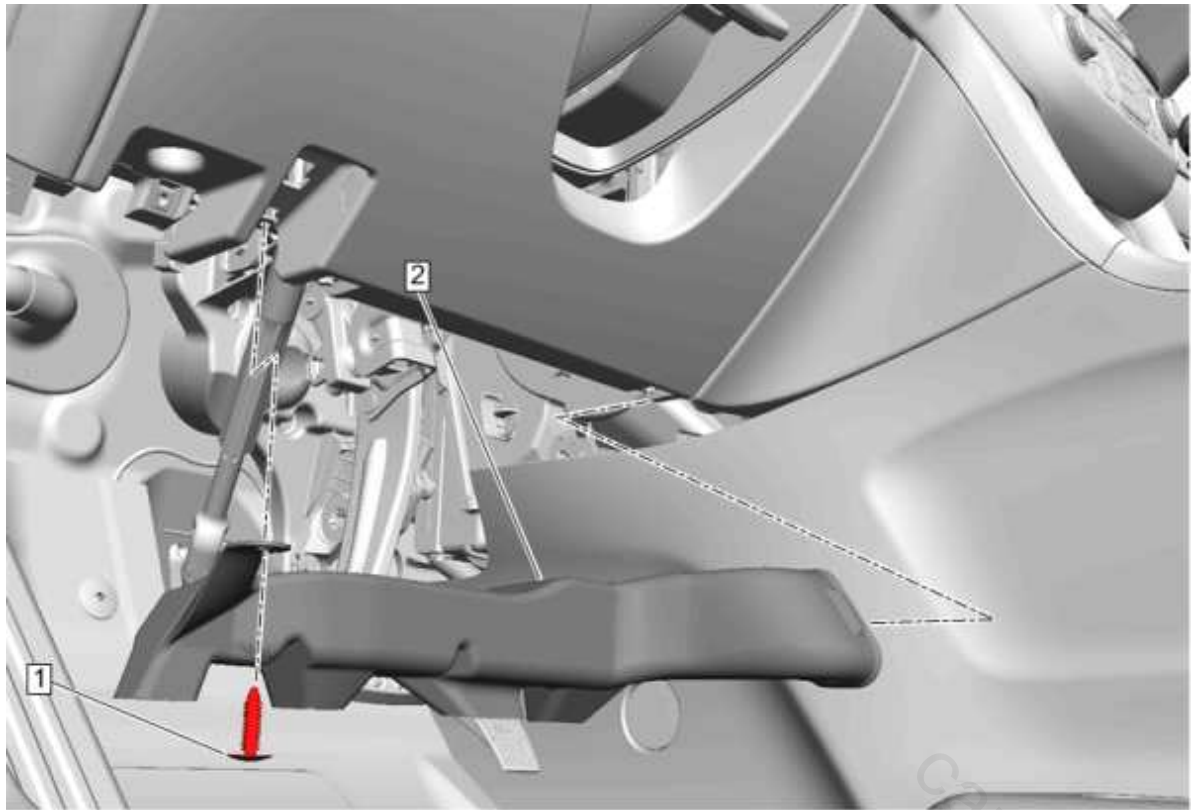


Fig. 135: Floor Front Air Outlet Duct
Courtesy of GENERAL MOTORS COMPANY

34. Remove Floor Front Air Outlet Duct - Left Side (2)[Floor Front Air Outlet Duct Replacement - Left Side](#)

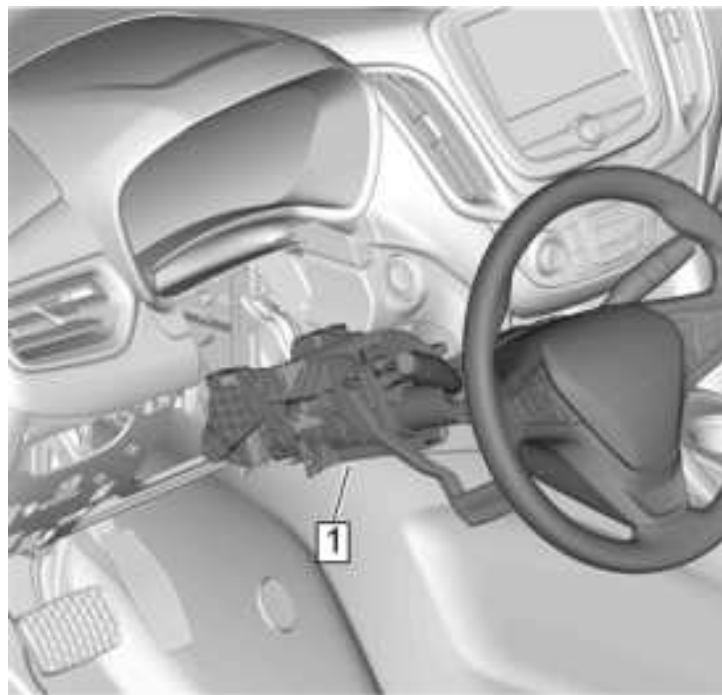


Fig. 136: Steering Column
Courtesy of GENERAL MOTORS COMPANY

35. Remove Steering Column (1)[Steering Column Replacement \(Equinox\)](#)

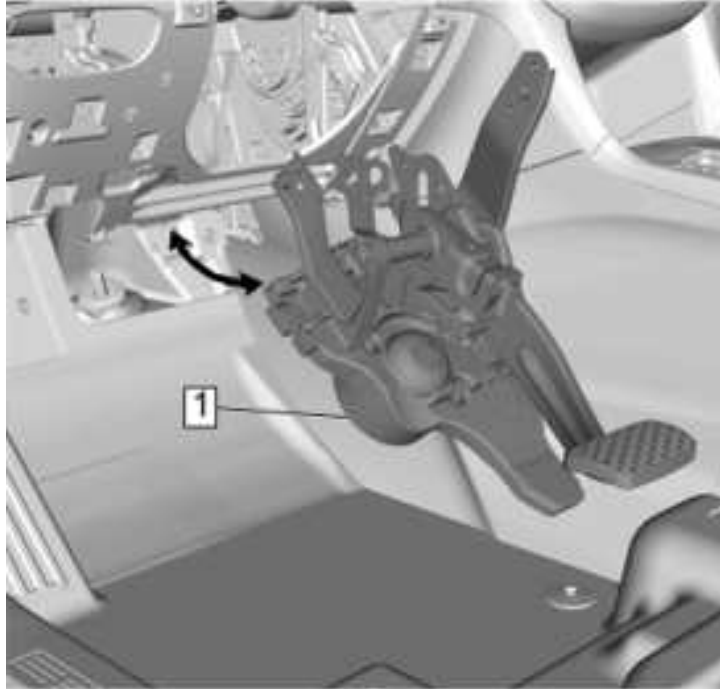


Fig. 137: Brake Pedal Assembly

Courtesy of GENERAL MOTORS COMPANY

36. Remove Brake and Accelerator Pedal Assembly (1) [Brake Pedal Assembly Replacement](#)

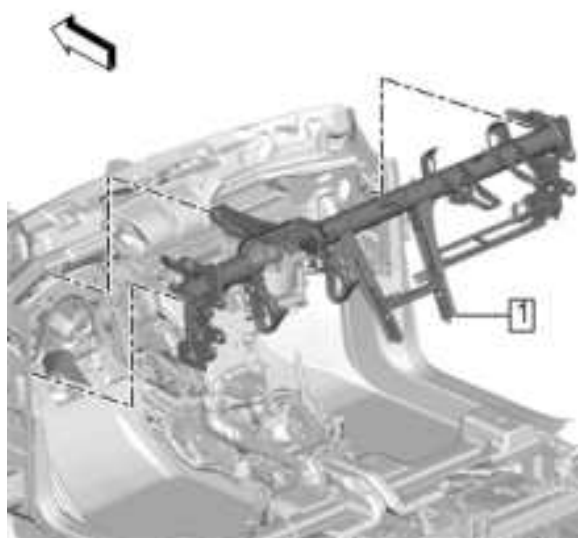


Fig. 138: Instrument Panel Tie Bar

Courtesy of GENERAL MOTORS COMPANY

37. Disconnect the instrument panel wiring connectors.
 38. Remove Instrument Panel Tie Bar (1) [Instrument Panel Tie Bar Replacement \(Equinox\)](#)

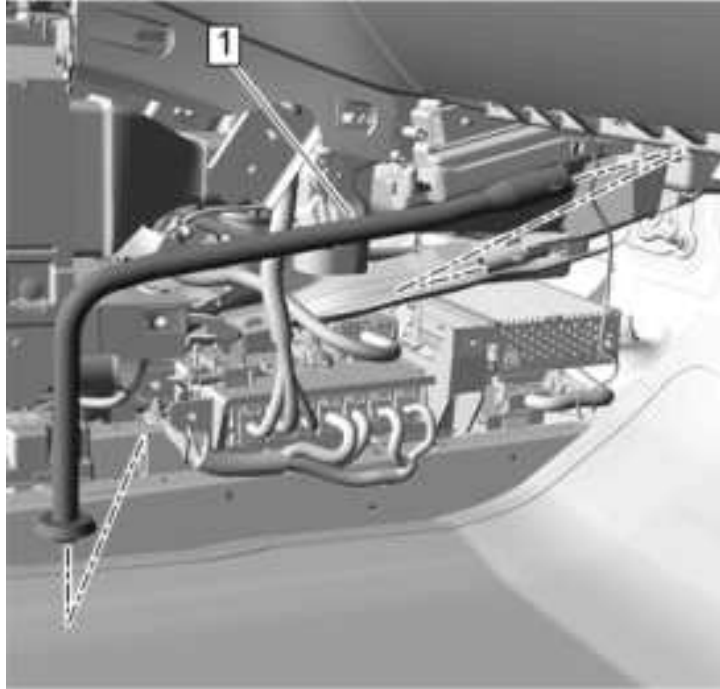


Fig. 139: Air Conditioning Evaporator and Blower Module Drain Hose
Courtesy of GENERAL MOTORS COMPANY

CAUTION: Refer to [HVAC Module Drain Tube Caution](#) .

39. Prior to removing the air conditioning evaporator and blower module drain tube/hose, use clean and absorbent shop clothes/towels to cover the electrical components protecting the electrical components from water damage.
40. Remove Air Conditioning Evaporator and Blower Module Drain Hose (1) @Heater and Air Conditioning Evaporator and Blower Module.
41. Support the heater and air conditioning evaporator and blower (HVAC) module assembly.

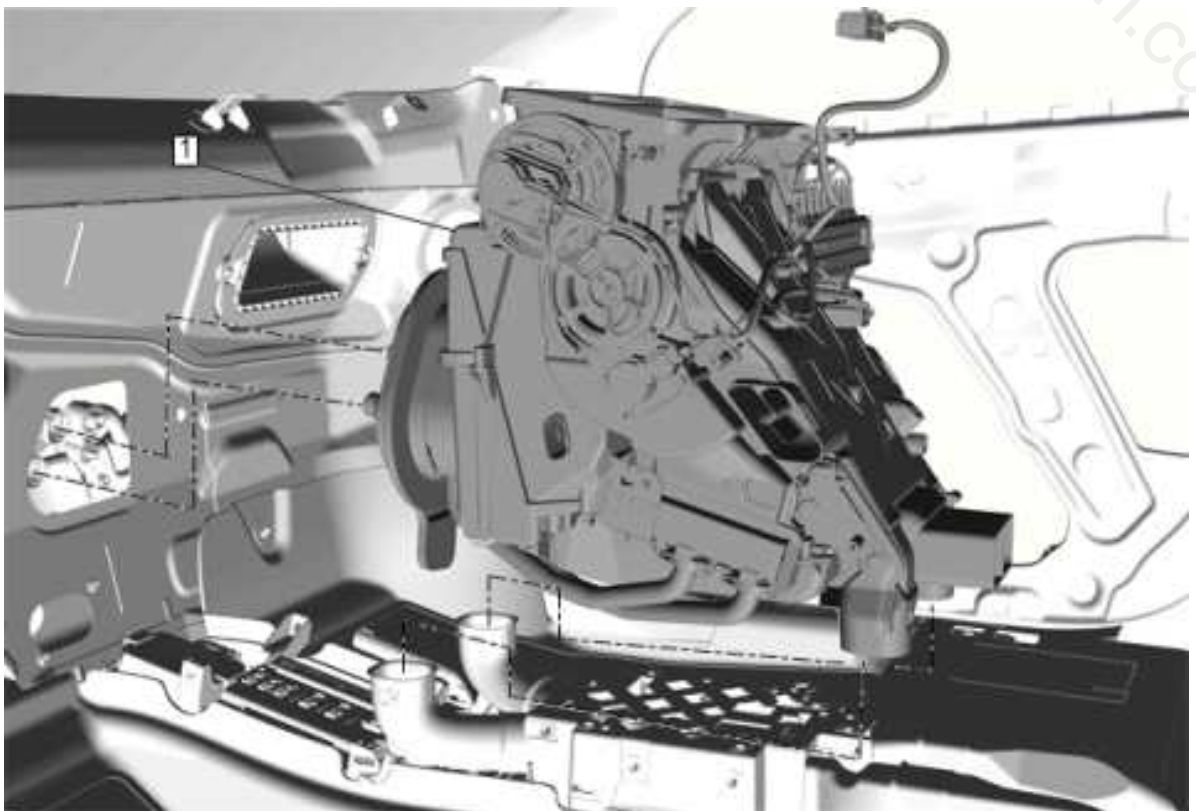


Fig. 140: Heater and Air Conditioning Evaporator and Blower Module
Courtesy of GENERAL MOTORS COMPANY

42. Remove Heater and Air Conditioning Evaporator and Blower Module (1) - from the vehicle.
43. Transfer all necessary components.

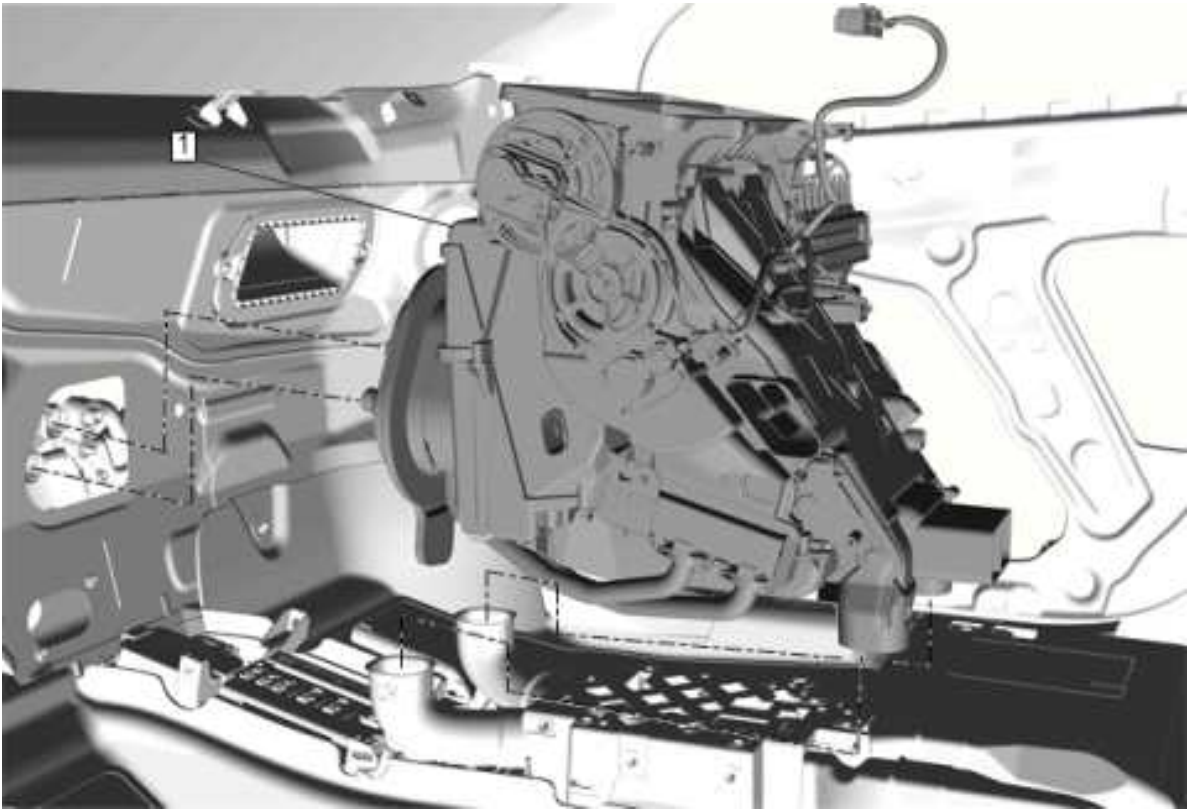


Fig. 141: Heater and Air Conditioning Evaporator and Blower Module
Courtesy of GENERAL MOTORS COMPANY

1. Install Heater and Air Conditioning Evaporator and Blower Module (1) - onto the vehicle.
2. Temporarily support HVAC module assembly.

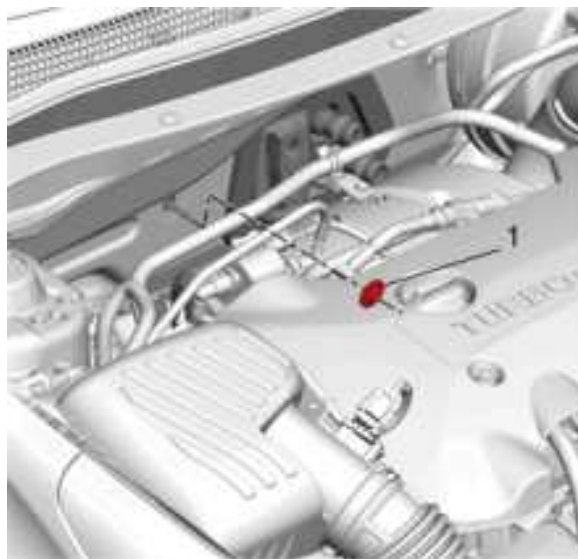


Fig. 142: Heater and Air Conditioning Evaporator and Blower Module Nut
Courtesy of GENERAL MOTORS COMPANY

CAUTION: Refer to **Fastener Caution** .

3. Install Heater and Air Conditioning Evaporator and Blower Module Nut (1) @Cowl Panel and tighten 9.0 N.m (80 lb in)

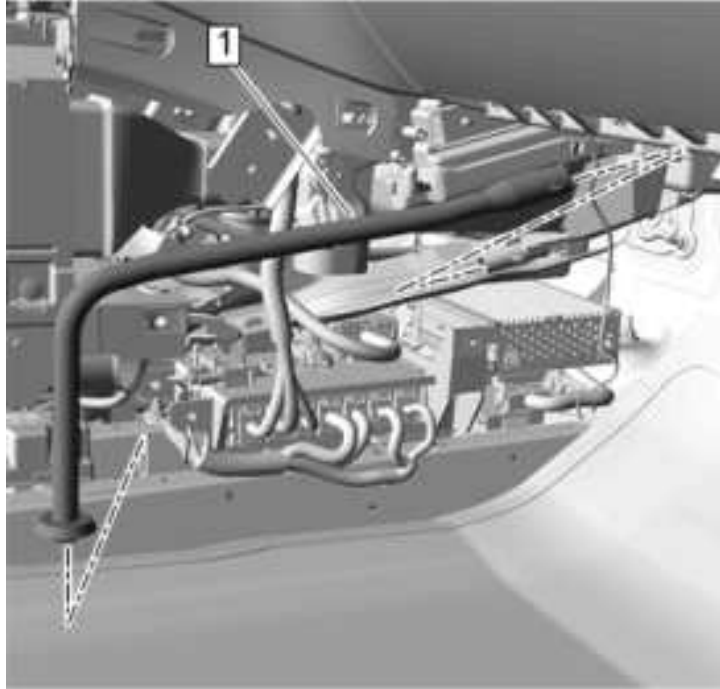


Fig. 143: Air Conditioning Evaporator and Blower Module Drain Hose
 Courtesy of GENERAL MOTORS COMPANY

CAUTION: Refer to [HVAC Module Drain Tube Caution](#) .

4. Install Air Conditioning Evaporator and Blower Module Drain Hose (1) @Heater and Air Conditioning Evaporator and Blower Module
5. Remove the absorbent shop clothes/towels covering the electrical components.

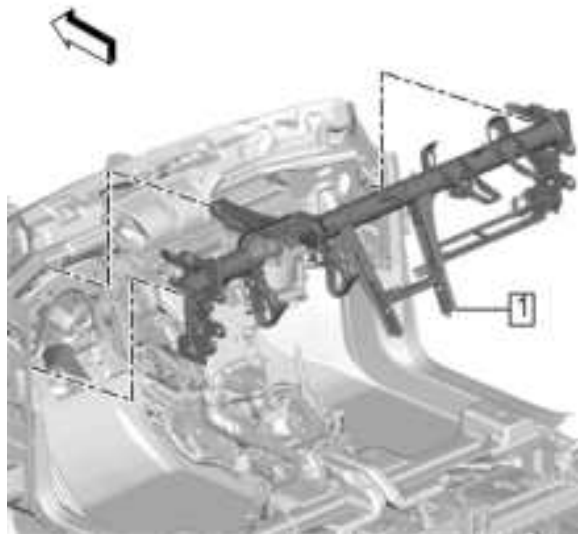


Fig. 144: Instrument Panel Tie Bar
 Courtesy of GENERAL MOTORS COMPANY

6. Install Instrument Panel Tie Bar (1)[Instrument Panel Tie Bar Replacement \(Equinox\)](#).
7. Connect the instrument panel wiring connectors.

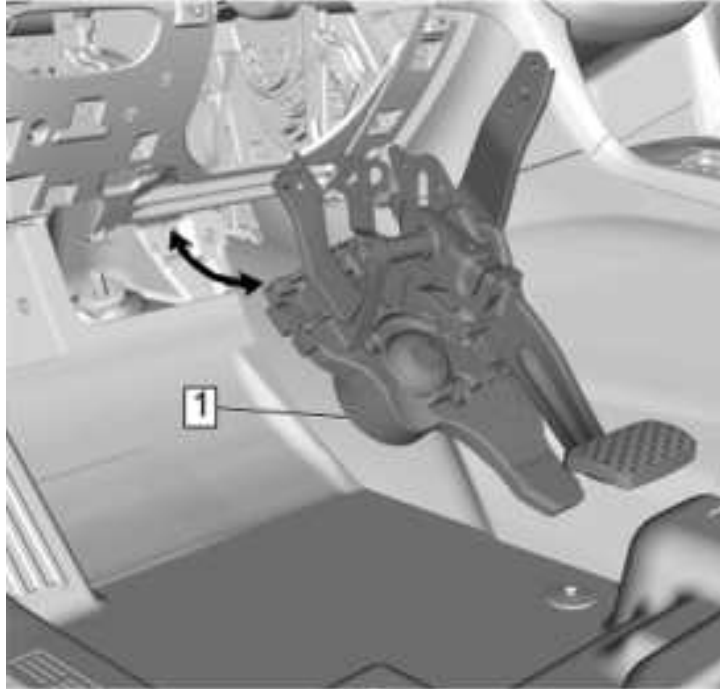


Fig. 145: Brake Pedal Assembly
Courtesy of GENERAL MOTORS COMPANY

8. Install Brake and Accelerator Pedal Assembly (1) [Brake Pedal Assembly Replacement](#)

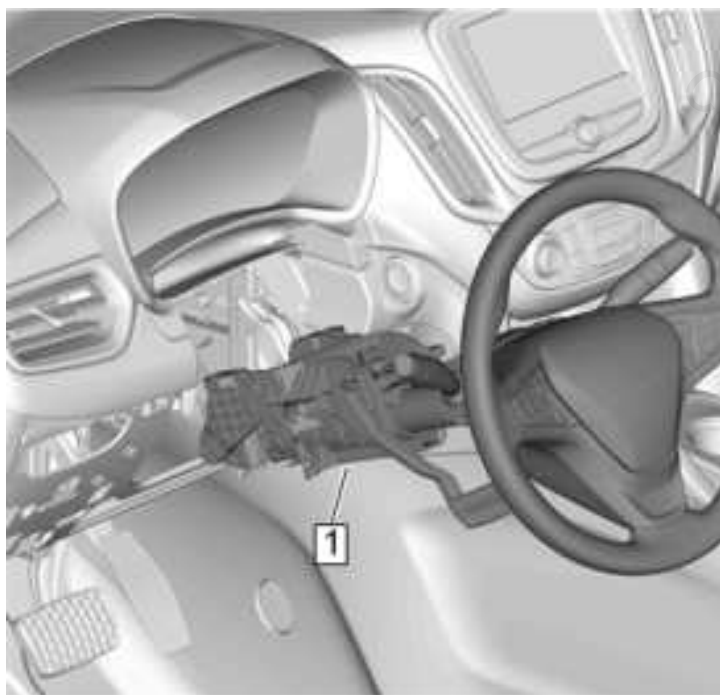


Fig. 146: Steering Column
Courtesy of GENERAL MOTORS COMPANY

9. Install Steering Column (1) [Steering Column Replacement \(Equinox\)](#)

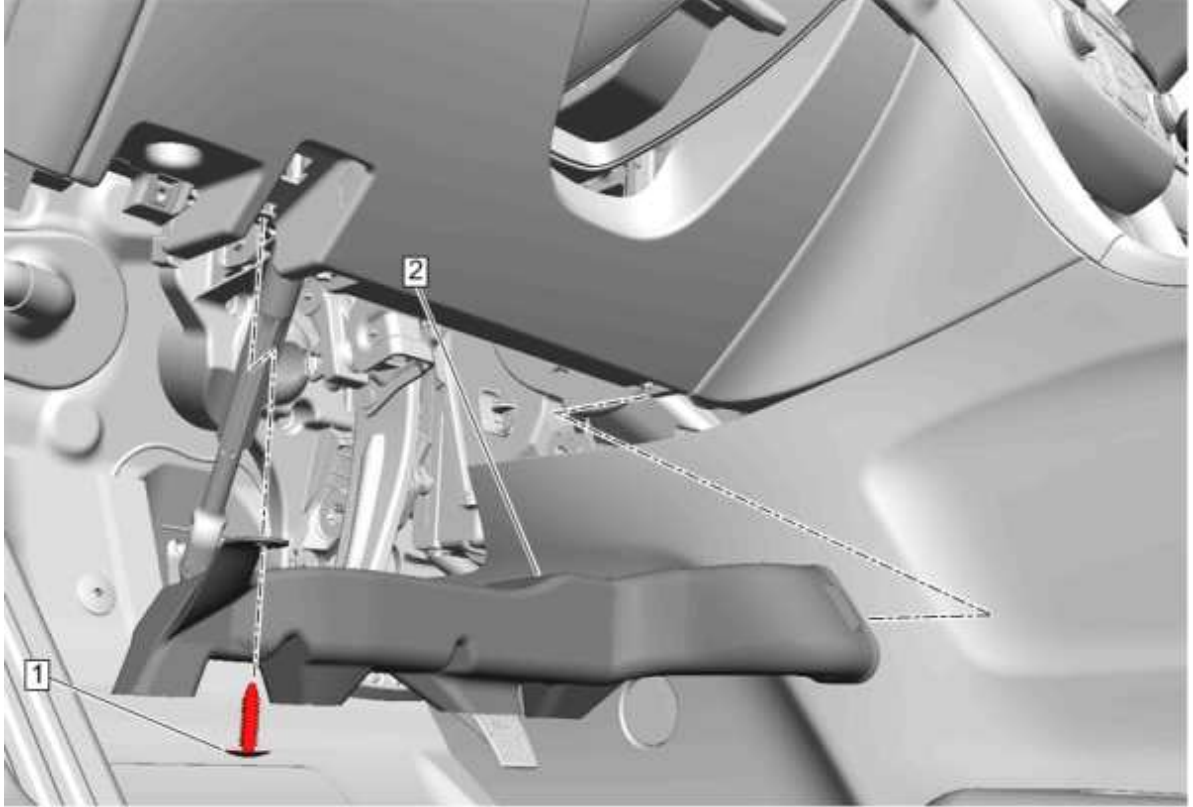


Fig. 147: Floor Front Air Outlet Duct
Courtesy of GENERAL MOTORS COMPANY

10. Install Floor Front Air Outlet Duct - Left Side (2) **Floor Front Air Outlet Duct Replacement - Left Side**

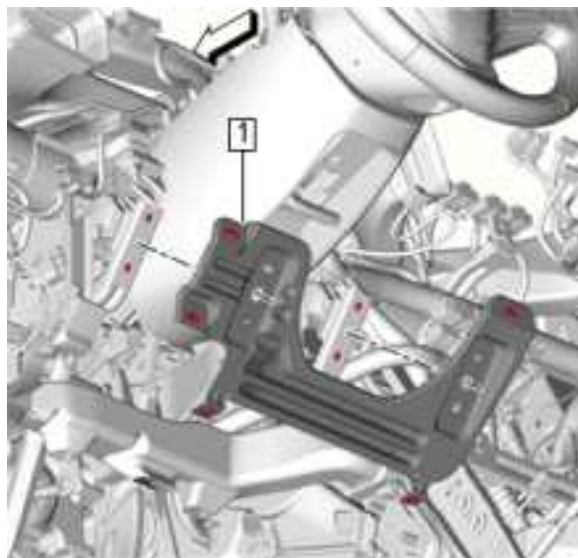


Fig. 148: Instrument Panel Knee Bolster Deflector
Courtesy of GENERAL MOTORS COMPANY

11. Install Instrument Panel Knee Bolster Deflector (1) **Instrument Panel Knee Bolster Deflector Replacement (Equinox)**

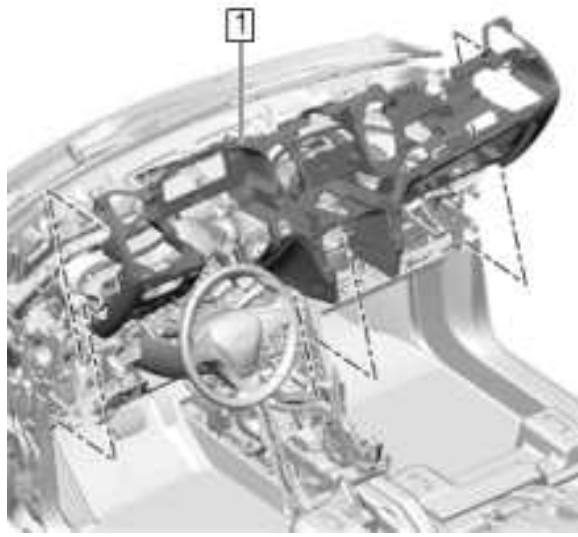


Fig. 149: Instrument Panel

Courtesy of GENERAL MOTORS COMPANY

12. Install Instrument Panel (1) [Instrument Panel Assembly Replacement \(Equinox\)](#)

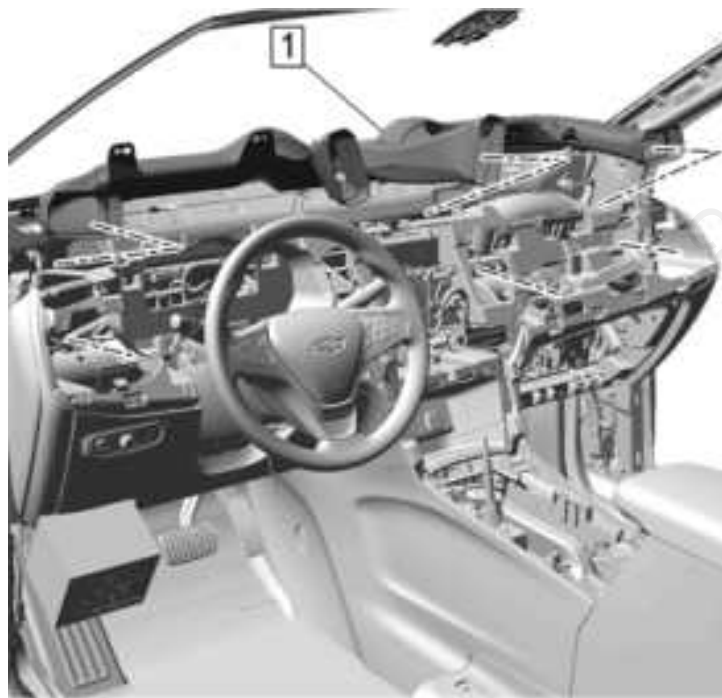


Fig. 150: Instrument Panel Center Air Outlet Duct

Courtesy of GENERAL MOTORS COMPANY

13. Install Instrument Panel Center Air Outlet Duct (1) [Instrument Panel Center Air Outlet Duct Replacement \(Equinox\)](#)

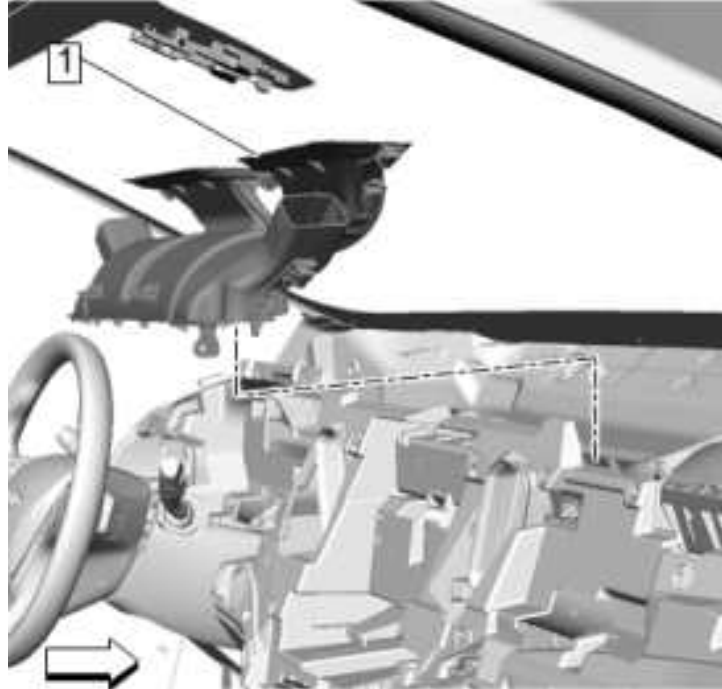


Fig. 151: Windshield Defroster Outlet Duct
 Courtesy of GENERAL MOTORS COMPANY

14. Install Windshield Defroster Outlet Duct (1) [Windshield Defroster Outlet Duct Replacement \(Equinox\)](#)



Fig. 152: Left Side Window Defogger Outlet Duct
 Courtesy of GENERAL MOTORS COMPANY

15. Install Side Window Defogger Outlet Duct - Left Side (1) [Side Window Defogger Outlet Duct Replacement - Left Side \(Equinox\)](#)

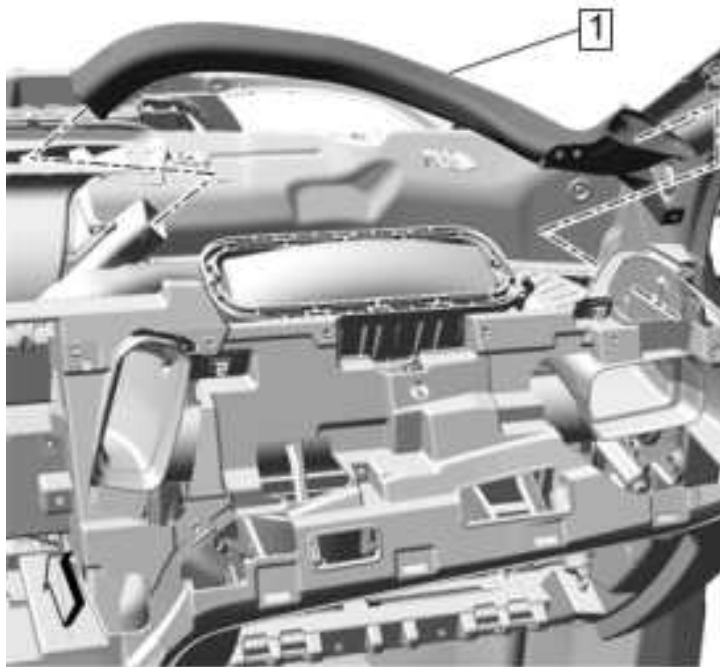


Fig. 153: Right Side Window Defogger Outlet Duct
 Courtesy of GENERAL MOTORS COMPANY

16. Install Side Window Defogger Outlet Duct - Right Side (1)[Side Window Defogger Outlet Duct Replacement - Right Side \(Equinox\)](#)

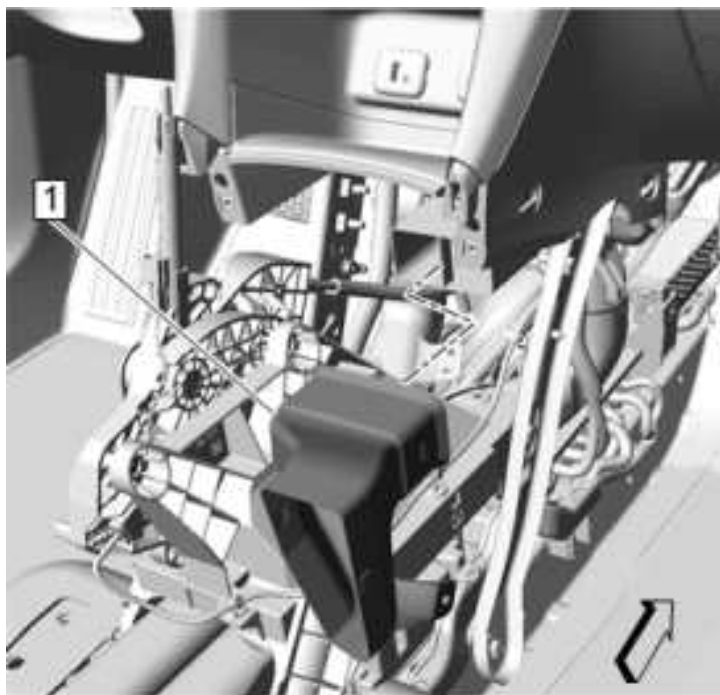


Fig. 154: Front Floor Console Rear Air Duct
 Courtesy of GENERAL MOTORS COMPANY

17. Install Front Floor Console Rear Air Duct (1)[Front Floor Console Rear Air Duct Replacement \(Equinox Front\)](#)[Front Floor Console Rear Air Duct Replacement \(Equinox Rear\)](#)

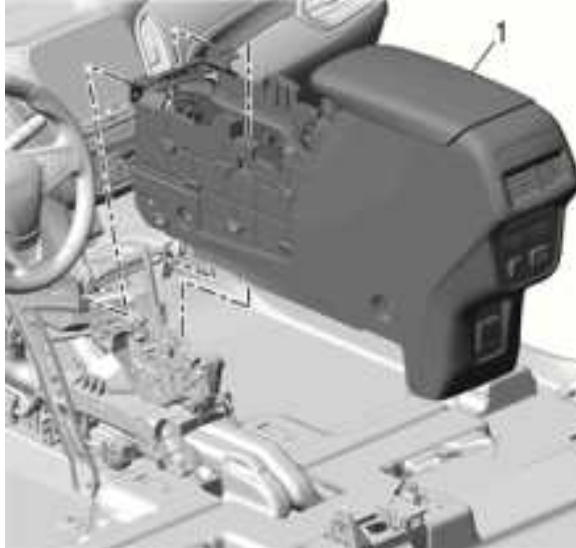


Fig. 155: Front Floor Console

Courtesy of GENERAL MOTORS COMPANY

18. Install Front Floor Console (1) [Front Floor Console Replacement \(Equinox\)](#)

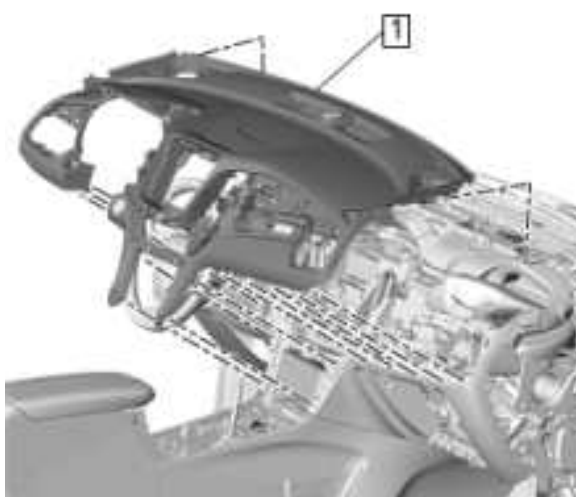


Fig. 156: Instrument Panel Upper Trim Panel

Courtesy of GENERAL MOTORS COMPANY

19. Install Instrument Panel Upper Trim Panel (1) [Instrument Panel Upper Trim Panel Replacement \(Equinox\)](#)

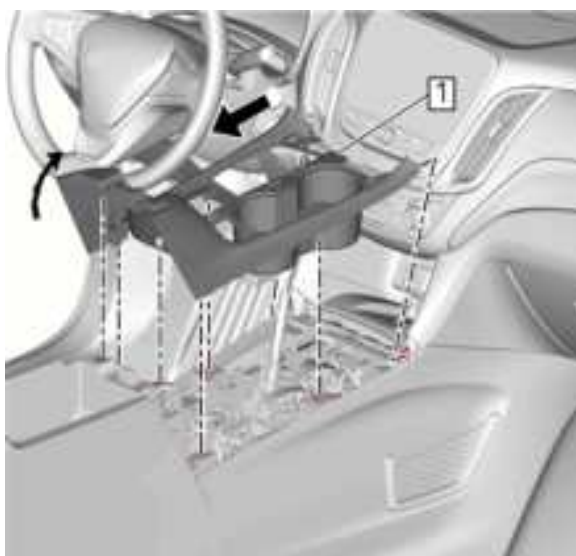


Fig. 157: Front Floor Console Applique

Courtesy of GENERAL MOTORS COMPANY

20. Install Front Floor Console Applique (1) [Front Floor Console Applique Replacement \(Equinox\)](#)

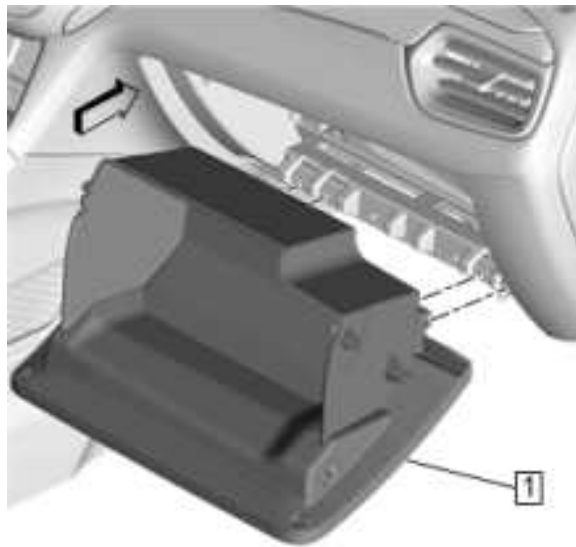


Fig. 158: Instrument Panel Compartment Door
Courtesy of GENERAL MOTORS COMPANY

21. Install Instrument Panel Compartment Door (1) [Instrument Panel Compartment Door Replacement \(Equinox\)](#)

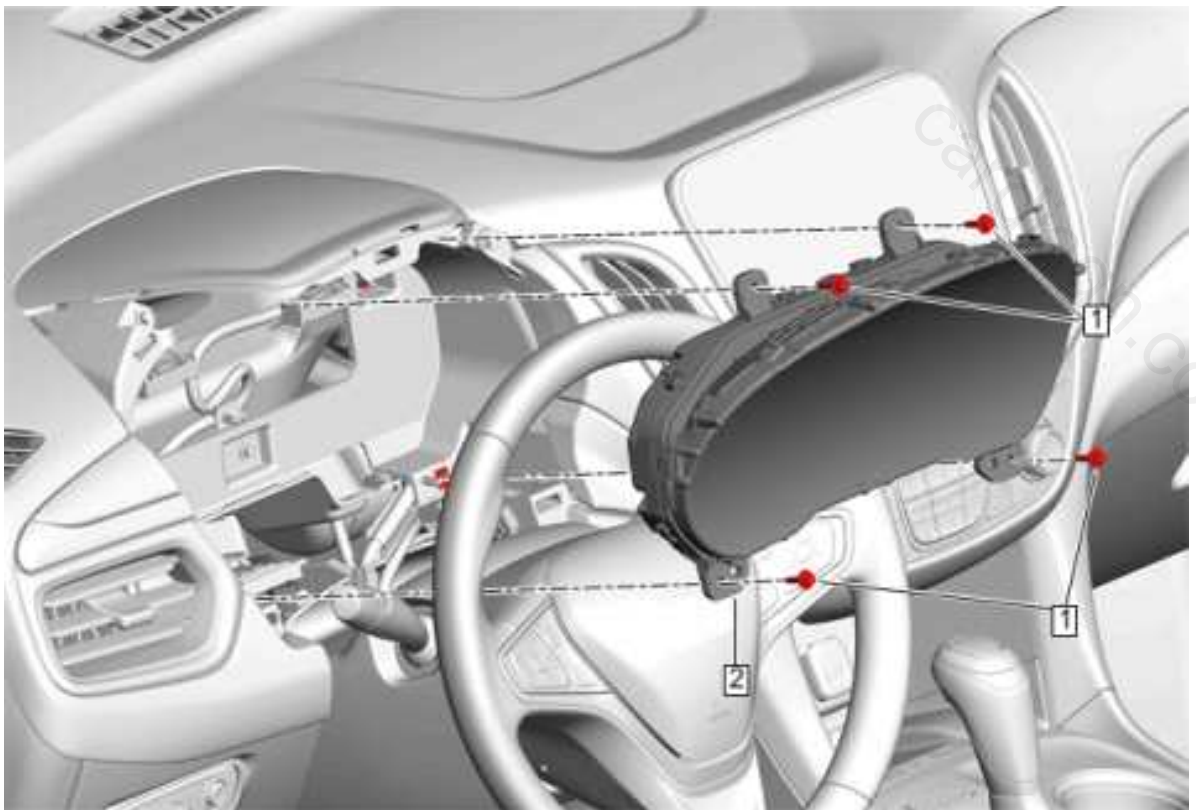


Fig. 159: Instrument Cluster And Screws
Courtesy of GENERAL MOTORS COMPANY

22. Install Instrument Cluster (2) [Instrument Cluster Replacement \(Equinox\)](#)

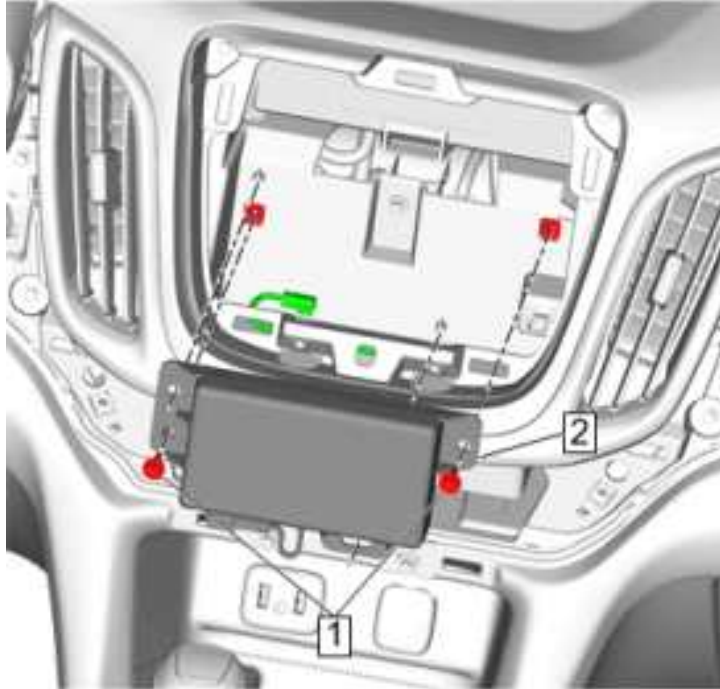


Fig. 160: Communication Interface Module Battery And Screws
 Courtesy of GENERAL MOTORS COMPANY

23. Install Communication Interface Module Battery (2) **Communication Interface Module Battery Replacement**



Fig. 161: Heater And Air Conditioning Remote Control
 Courtesy of GENERAL MOTORS COMPANY

24. Install Heater and Air Conditioning Remote Control (1) **Heater and Air Conditioning Remote Control Replacement (Equinox)**



Fig. 162: Radio Control Assembly
Courtesy of GENERAL MOTORS COMPANY

25. Install Radio Control Assembly (1) **Radio Control Assembly Replacement (Equinox)**

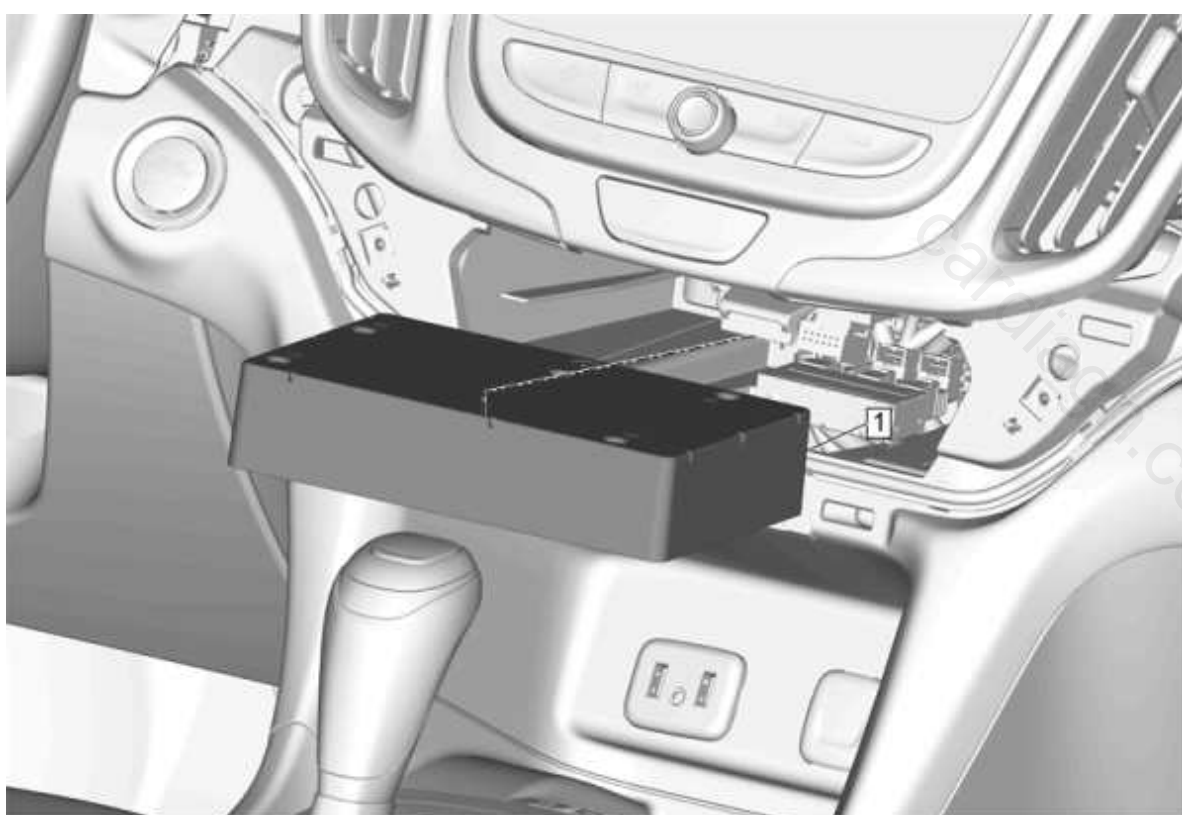


Fig. 163: Communication Interface Module
Courtesy of GENERAL MOTORS COMPANY

26. Install Communication Interface Module (1) **Communication Interface Module Replacement (Equinox)**

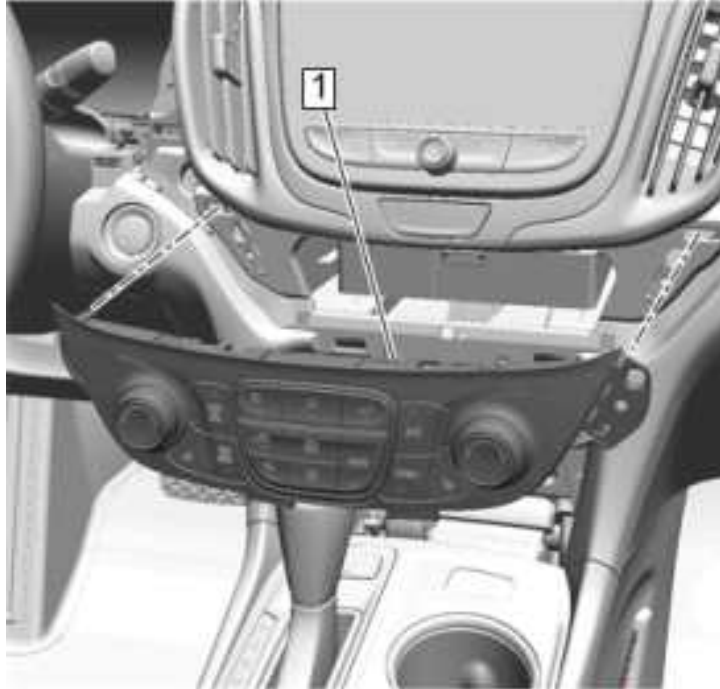


Fig. 164: Heater and Air Conditioning User Interface Control
 Courtesy of GENERAL MOTORS COMPANY

27. Install Heater and Air Conditioning User Interface Control (1)[Heater and Air Conditioning User Interface Control Replacement \(Equinox\)](#)

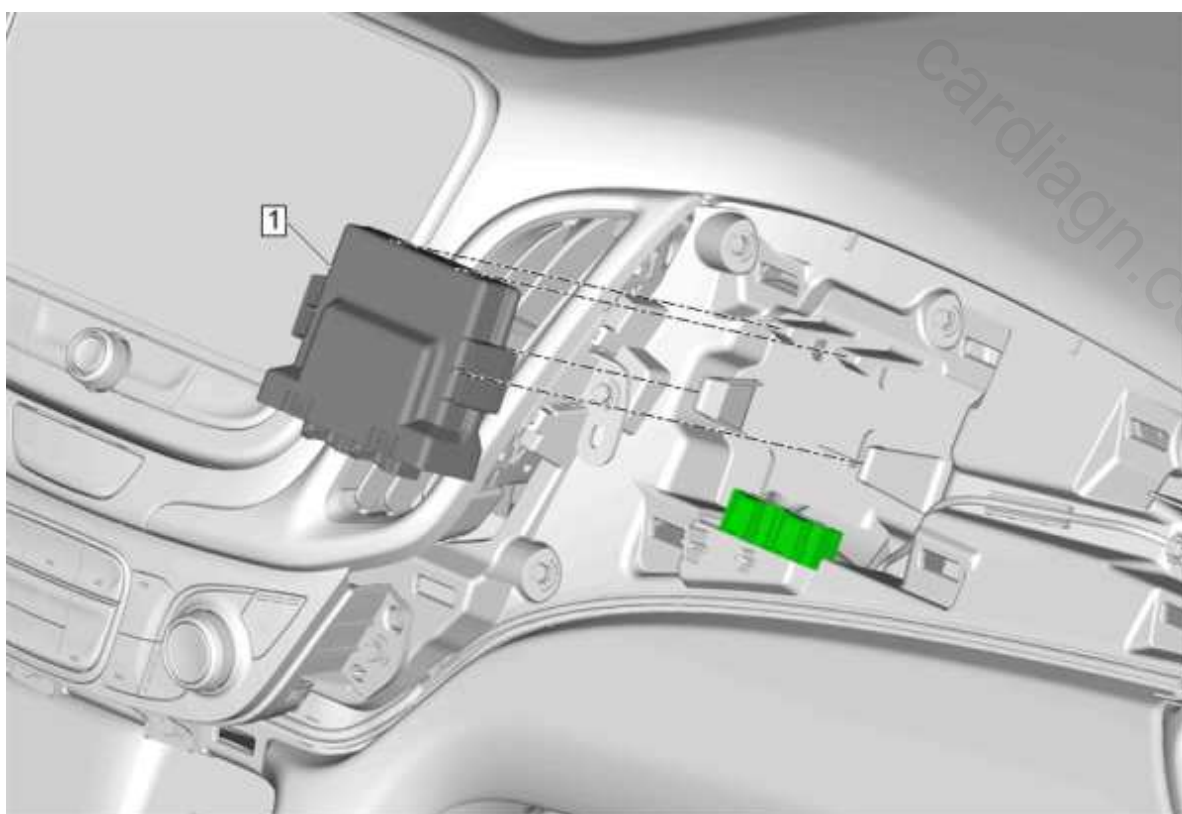


Fig. 165: Serial Data Gateway Module
 Courtesy of GENERAL MOTORS COMPANY

28. Install Serial Data Gateway Module (1)[Serial Data Gateway Module Replacement \(Equinox\)](#)

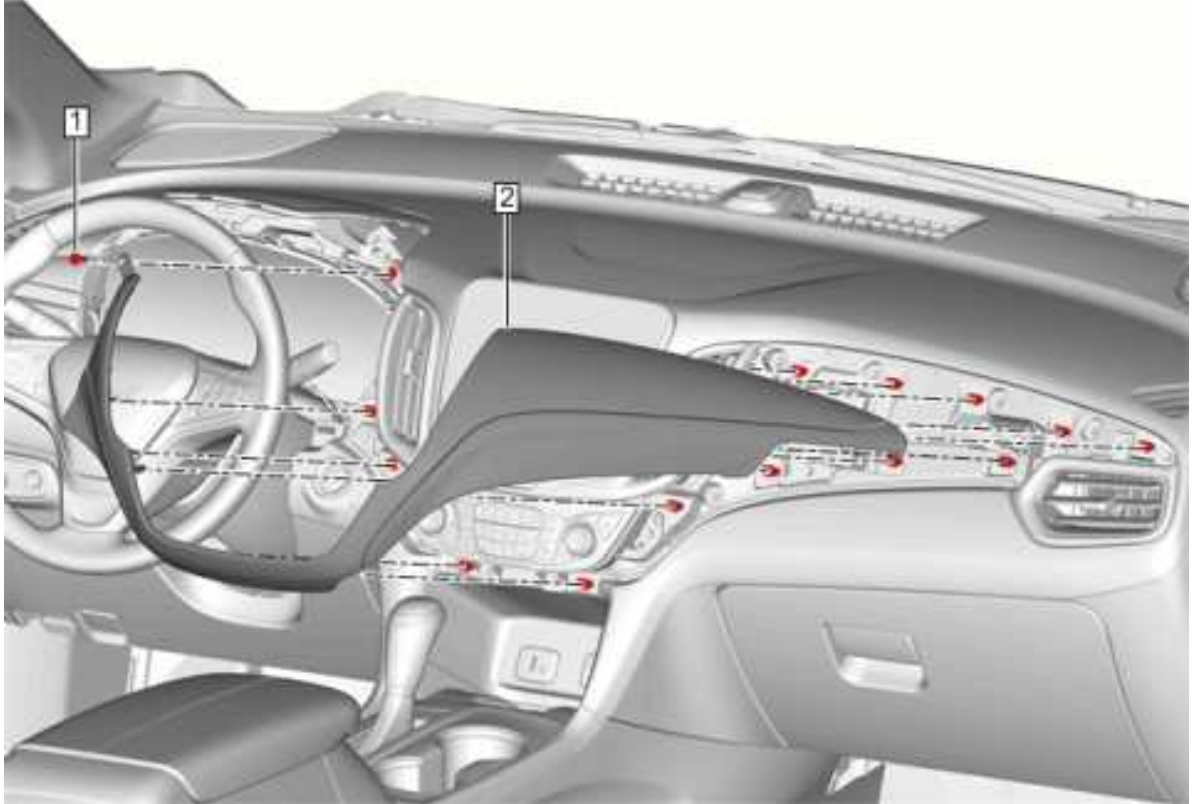


Fig. 166: Right Side Instrument Panel Trim Pad
 Courtesy of GENERAL MOTORS COMPANY

29. Install Instrument Panel Trim Pad - Right Side (2) [Instrument Panel Trim Pad Replacement - Right Side \(Equinox\)](#)



Fig. 167: Instrument Panel Knee Bolster
 Courtesy of GENERAL MOTORS COMPANY

30. Install Instrument Panel Knee Bolster (1) [Instrument Panel Knee Bolster Replacement \(Equinox\)](#)

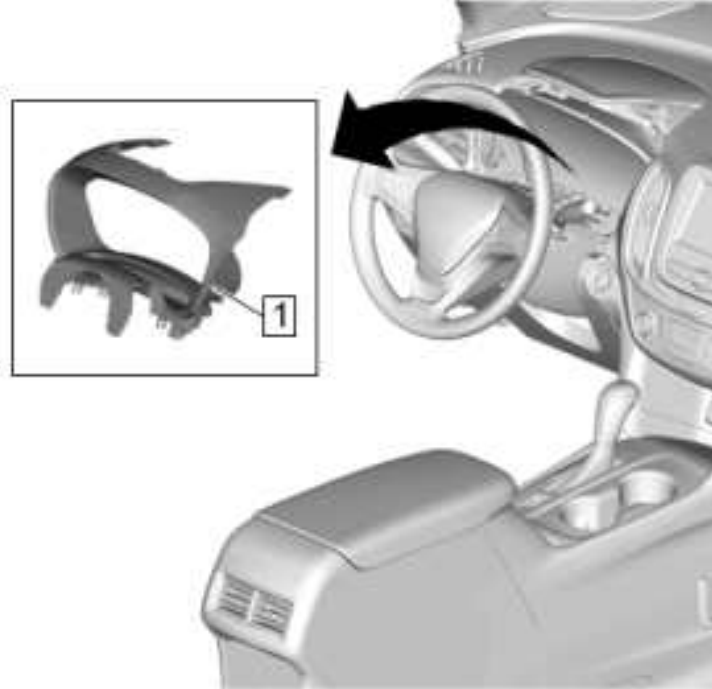


Fig. 168: Instrument Panel Cluster Trim Plate
 Courtesy of GENERAL MOTORS COMPANY

31. Install Instrument Panel Cluster Trim Plate (1) [Instrument Panel Cluster Trim Plate Replacement \(Equinox\)](#)



Fig. 169: Left And Right Instrument Panel Outer Trim Cover
 Courtesy of GENERAL MOTORS COMPANY

32. Install the left and right instrument panel outer trim cover (1). [Instrument Panel Outer Trim Cover Replacement \(Equinox\)](#)

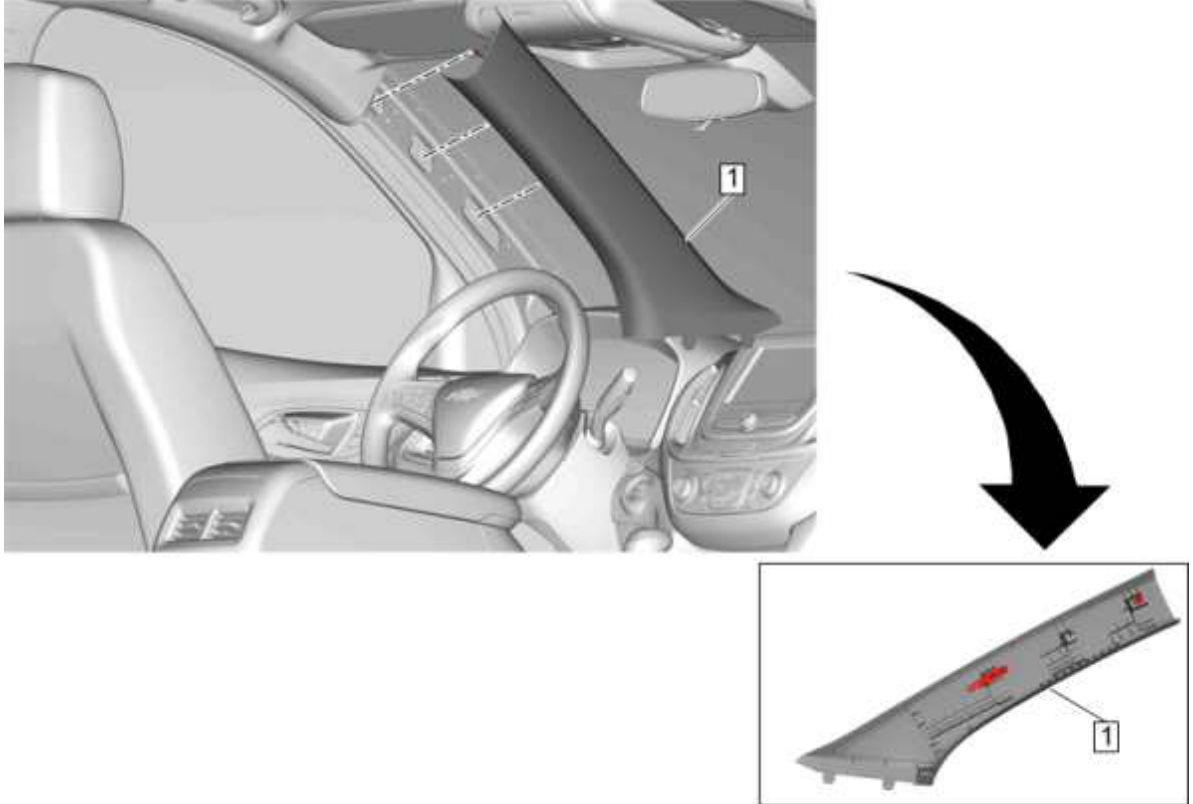


Fig. 170: Windshield Garnish Molding Replacement (Equinox)
Courtesy of GENERAL MOTORS COMPANY

33. Install the left and right side windshield garnish molding (1). [Windshield Garnish Molding Replacement \(Equinox\)](#)
34. Install Drivers Seat and Passengers Seat - [Driver or Passenger Seat Removal and Installation](#)

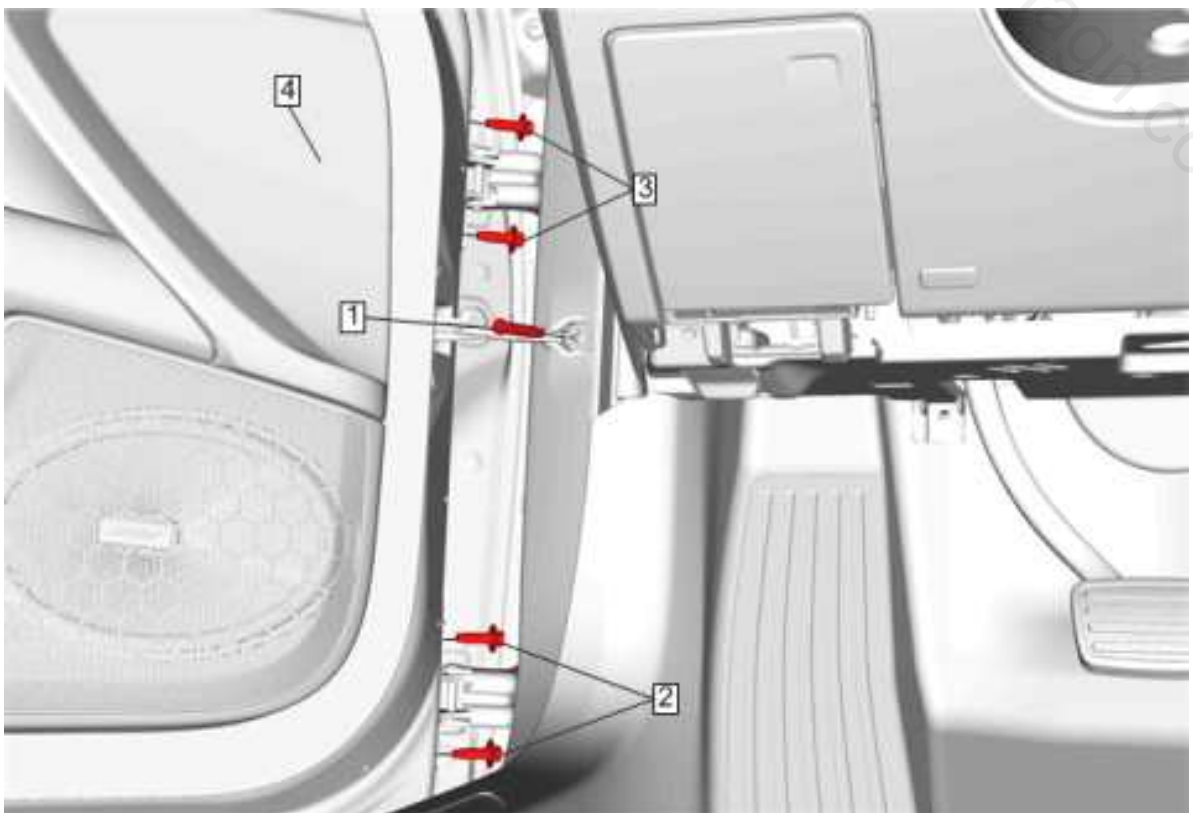


Fig. 171: Front Side Door
Courtesy of GENERAL MOTORS COMPANY

35. Install the left and right front side door (4). [Front Side Door Replacement](#)

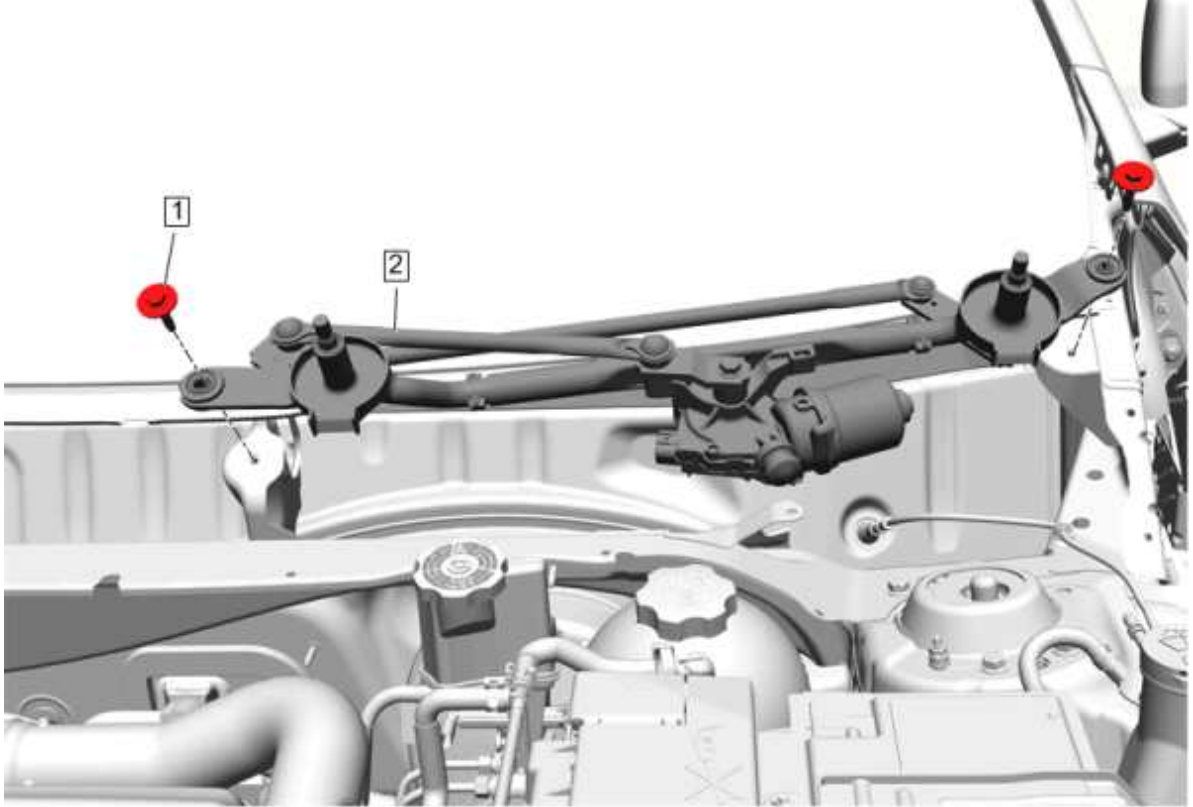


Fig. 172: Windshield Wiper Transmission
Courtesy of GENERAL MOTORS COMPANY

36. Install Windshield Wiper Transmission (2) [Windshield Wiper Transmission Replacement](#)

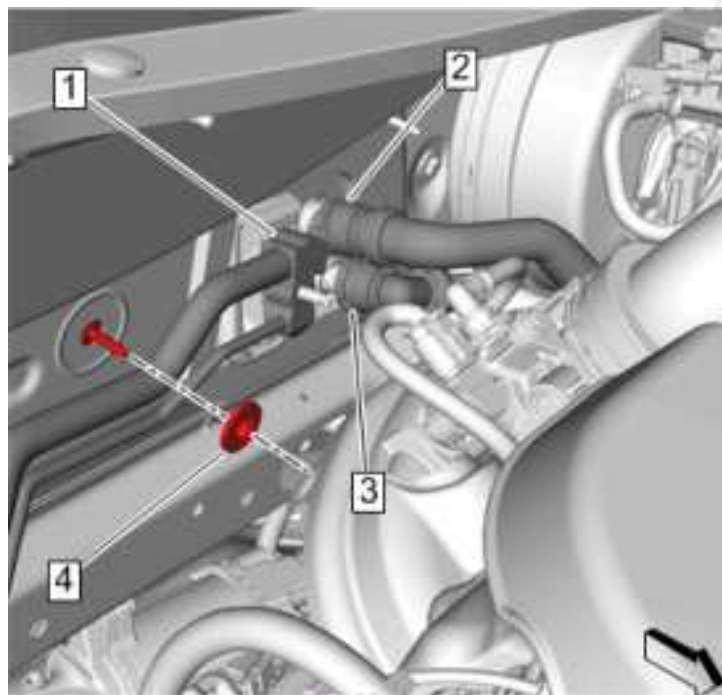


Fig. 173: Air Conditioning Refrigerant Heat Exchanger
Courtesy of GENERAL MOTORS COMPANY

37. Install Heater and Air Conditioning Evaporator and Blower Module Nut (4) @Cowl Panel
38. Install Heater Outlet Hose (3) @Heater Core Outlet Tube - [Heater Outlet Hose Replacement \(LYX without KL9\)](#)
39. Install Heater Inlet Hose (2) @Heater Core Inlet Tube - [Heater Inlet Hose Replacement \(LYX AWD without KL9\)](#)[Heater Inlet Hose Replacement \(LYX with KL9\)](#)
40. Install Air Conditioning Refrigerant Heat Exchanger (1) @Air Conditioning Evaporator Thermal Expansion Valve - [Air Conditioning Refrigerant Heat Exchanger Replacement \(LYX\)](#)
41. Fill the cooling system to the proper level. [Cooling System Draining and Filling \(GE 47716\)](#). [Cooling System Draining and Filling \(Static\)](#).

42. Evacuate and charge the refrigerant system. [Refrigerant Recovery and Recharging \(R-134a\) Refrigerant Recovery and Recharging \(R-1234yf\)](#)
43. Connect the battery negative cable. [Battery Negative Cable Disconnection and Connection \(KL9\)](#)
44. Inspect for coolant leaks.
45. Visually inspect for air conditioning system refrigerant leaks.

HEATER AND AIR CONDITIONING EVAPORATOR AND BLOWER MODULE REMOVAL AND INSTALLATION (EQUINOX LTG)

Removal Procedure

1. Disconnect the battery negative cable. [Battery Negative Cable Disconnection and Connection \(KL9\)](#)
2. Recover the refrigerant. [Refrigerant Recovery and Recharging \(R-134a\) Refrigerant Recovery and Recharging \(R-1234yf\)](#)
3. Drain the cooling system. [Cooling System Draining and Filling \(GE 47716\) Cooling System Draining and Filling \(Static\)](#)

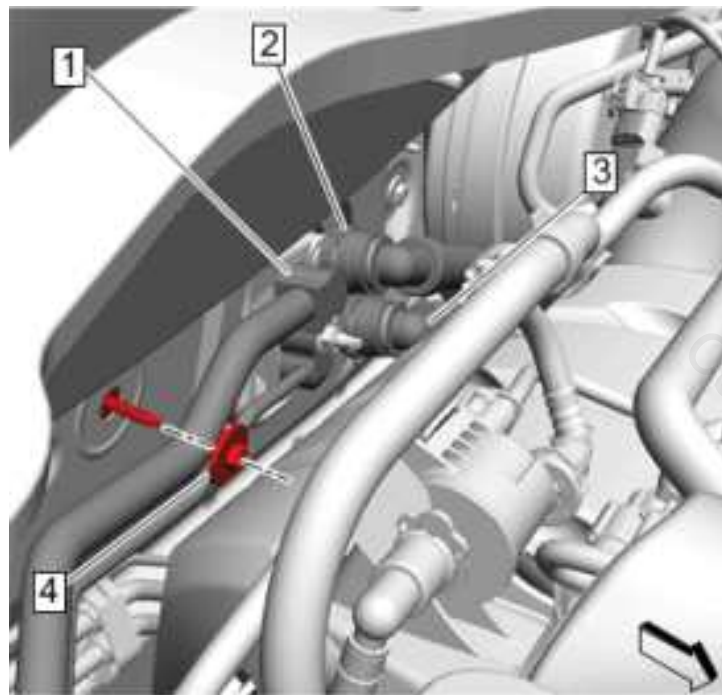


Fig. 174: Air Conditioning Refrigerant Heat Exchanger
Courtesy of GENERAL MOTORS COMPANY

4. Remove Air Conditioning Refrigerant Heat Exchanger (1) @Air Conditioning Evaporator Thermal Expansion Valve - [Air Conditioning Refrigerant Heat Exchanger Replacement \(LTG\)](#)
5. Remove Heater Inlet Hose (2) @Heater Core Inlet Tube - [Heater Inlet Hose Replacement \(LTG with KL9\)](#)
6. Remove Heater Water Auxiliary Pump Hose (3) @Heater Core Outlet Tube - [Heater Water Auxiliary Pump Hose Replacement \(LTG with KL9\)](#)
7. Remove Heater and Air Conditioning Evaporator and Blower Module Nut (4) @Cowl Panel

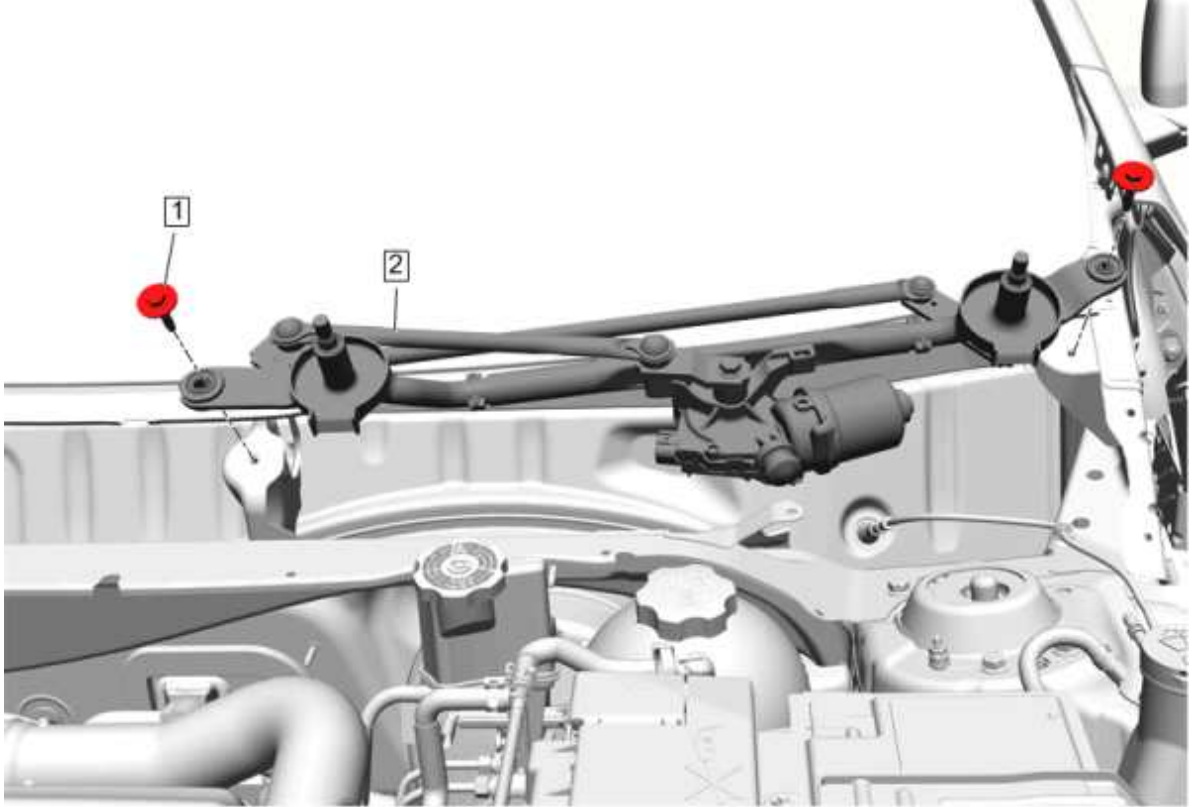


Fig. 175: Windshield Wiper Transmission
 Courtesy of GENERAL MOTORS COMPANY

8. Remove Windshield Wiper Transmission (2) [Windshield Wiper Transmission Replacement](#)

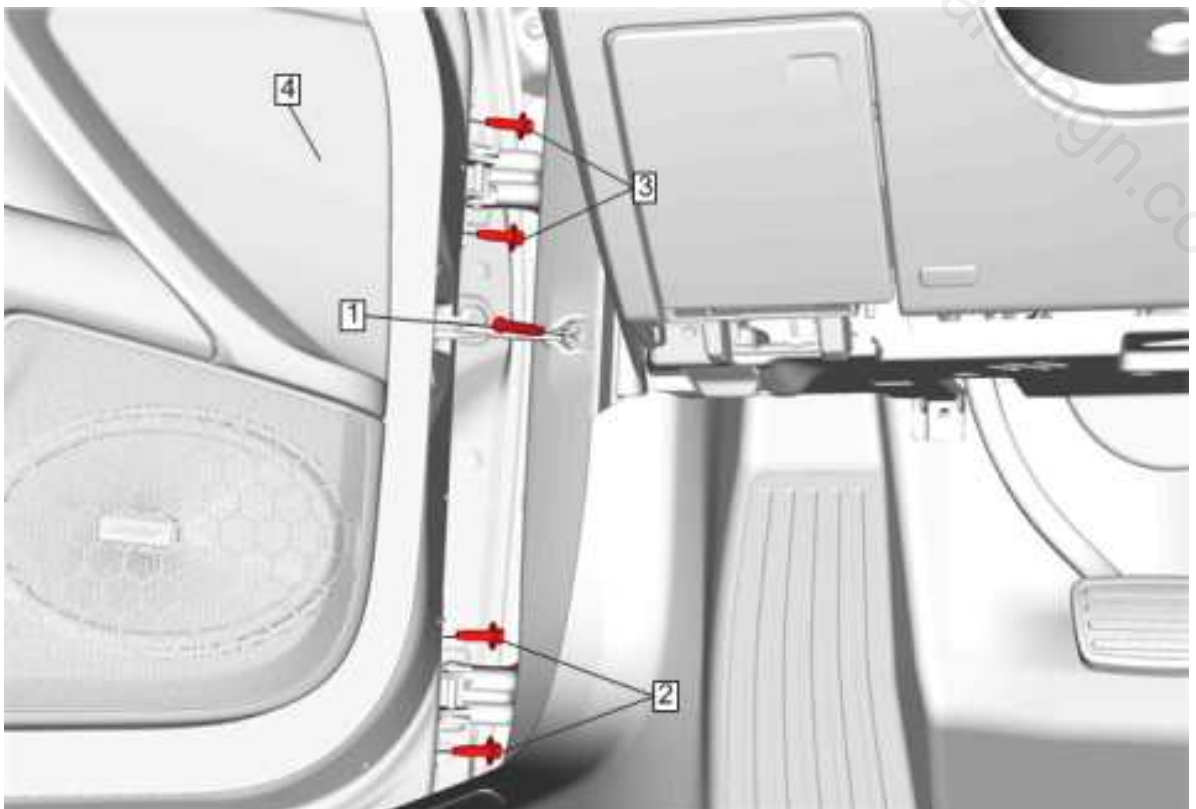


Fig. 176: Front Side Door
 Courtesy of GENERAL MOTORS COMPANY

9. Remove the left and right front side door (4). [Front Side Door Replacement](#)
 10. Remove Drivers Seat and Passengers Seat - [Driver or Passenger Seat Removal and Installation](#)

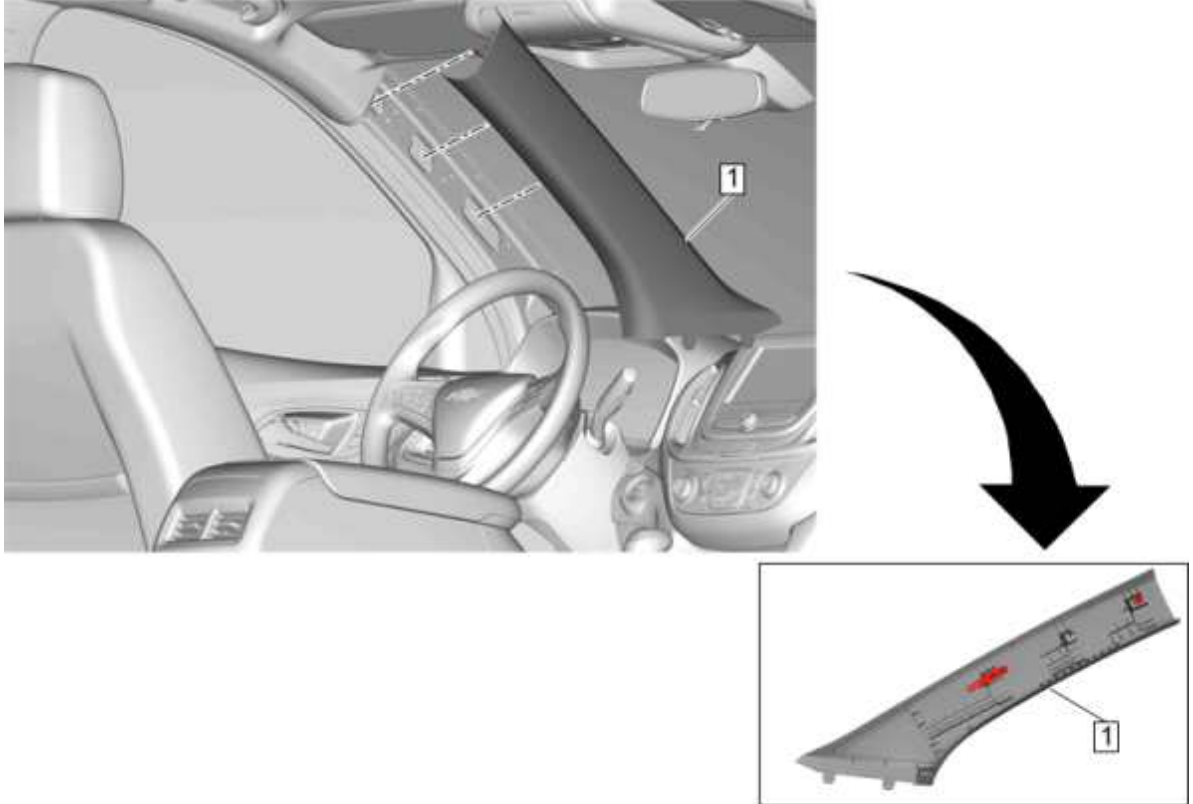


Fig. 177: Windshield Garnish Molding Replacement (Equinox)
 Courtesy of GENERAL MOTORS COMPANY

11. Remove the left and right side windshield garnish molding (1). [Windshield Garnish Molding Replacement \(Equinox\)](#)



Fig. 178: Left And Right Instrument Panel Outer Trim Cover
 Courtesy of GENERAL MOTORS COMPANY

12. Remove the left and right instrument panel outer trim cover (1). [Instrument Panel Outer Trim Cover Replacement \(Equinox\)](#)

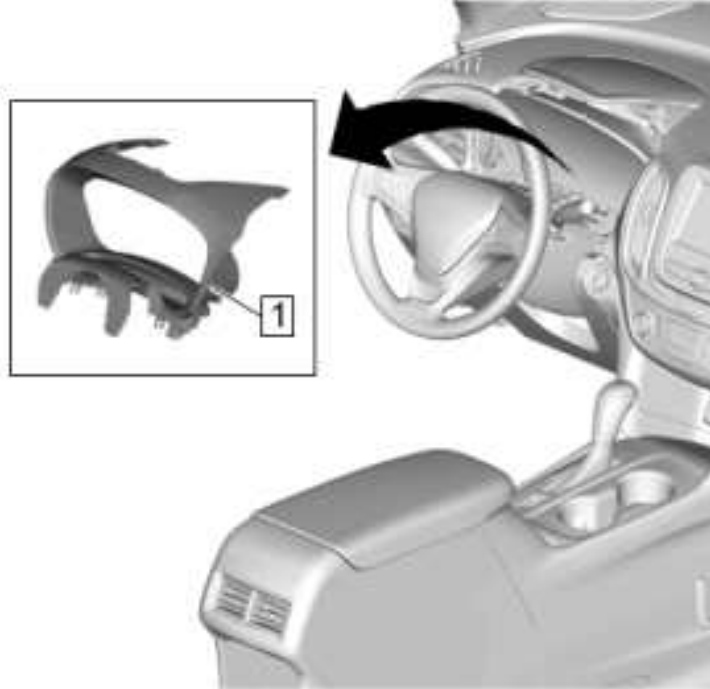


Fig. 179: Instrument Panel Cluster Trim Plate
 Courtesy of GENERAL MOTORS COMPANY

13. Remove Instrument Panel Cluster Trim Plate (1) **Instrument Panel Cluster Trim Plate Replacement (Equinox)**



Fig. 180: Instrument Panel Knee Bolster
 Courtesy of GENERAL MOTORS COMPANY

14. Remove Instrument Panel Knee Bolster (1) **Instrument Panel Knee Bolster Replacement (Equinox)**

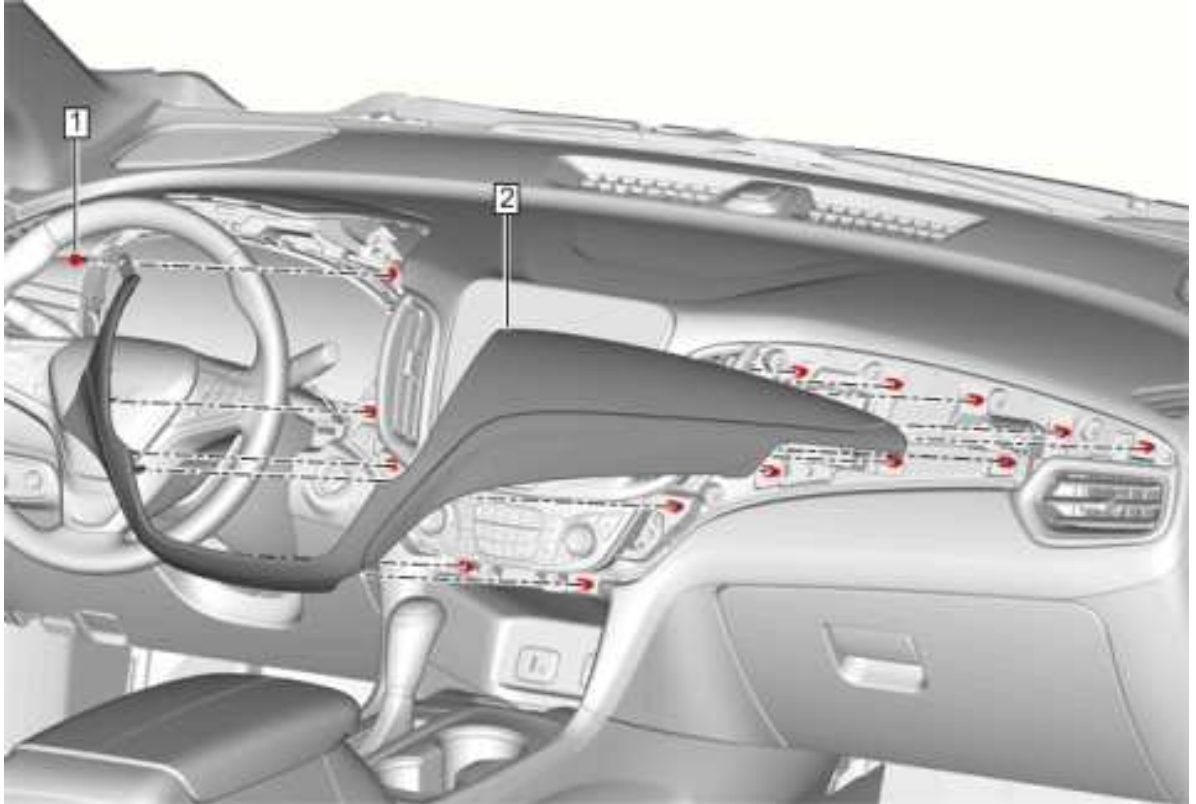


Fig. 181: Right Side Instrument Panel Trim Pad
Courtesy of GENERAL MOTORS COMPANY

15. Remove Instrument Panel Trim Pad - Right Side (2)[Instrument Panel Trim Pad Replacement - Right Side \(Equinox\)](#)

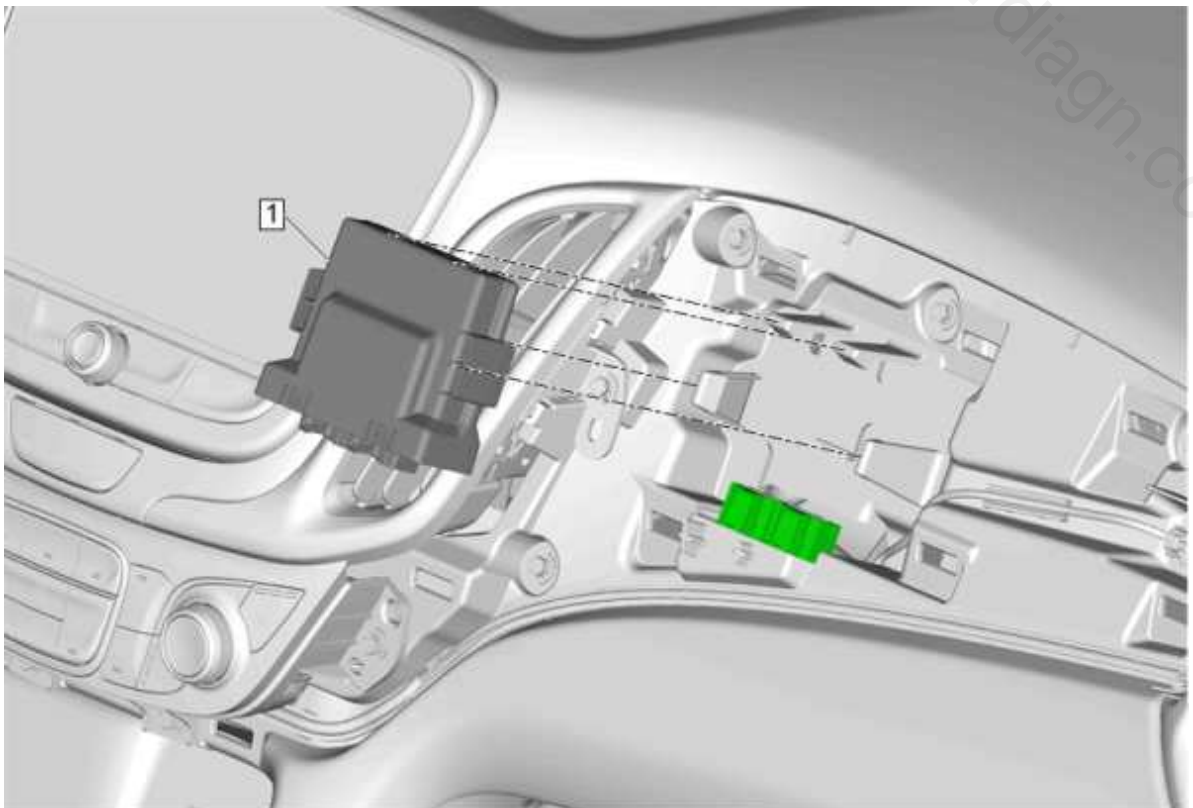


Fig. 182: Serial Data Gateway Module
Courtesy of GENERAL MOTORS COMPANY

16. Remove Serial Data Gateway Module (1)[Serial Data Gateway Module Replacement \(Equinox\)](#)

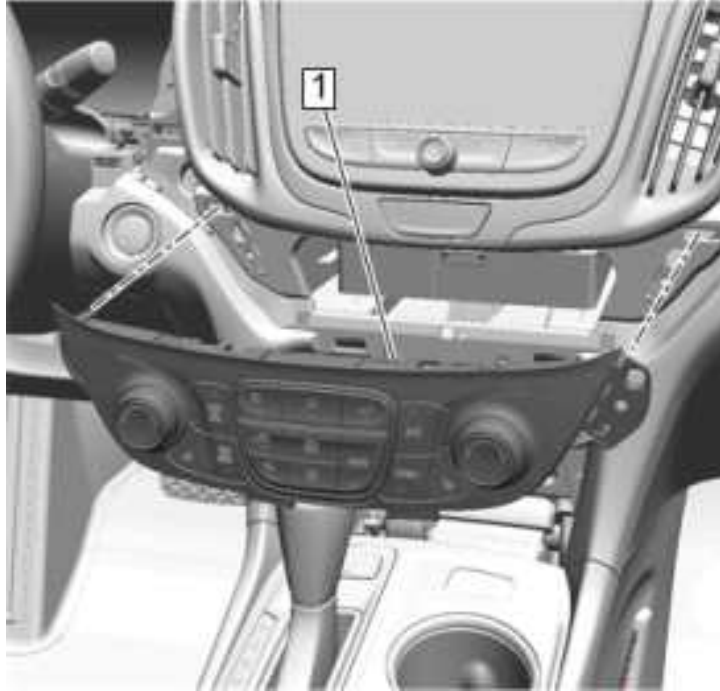


Fig. 183: Heater and Air Conditioning User Interface Control
 Courtesy of GENERAL MOTORS COMPANY

17. Remove Heater and Air Conditioning User Interface Control (1) **Heater and Air Conditioning User Interface Control Replacement (Equinox)**

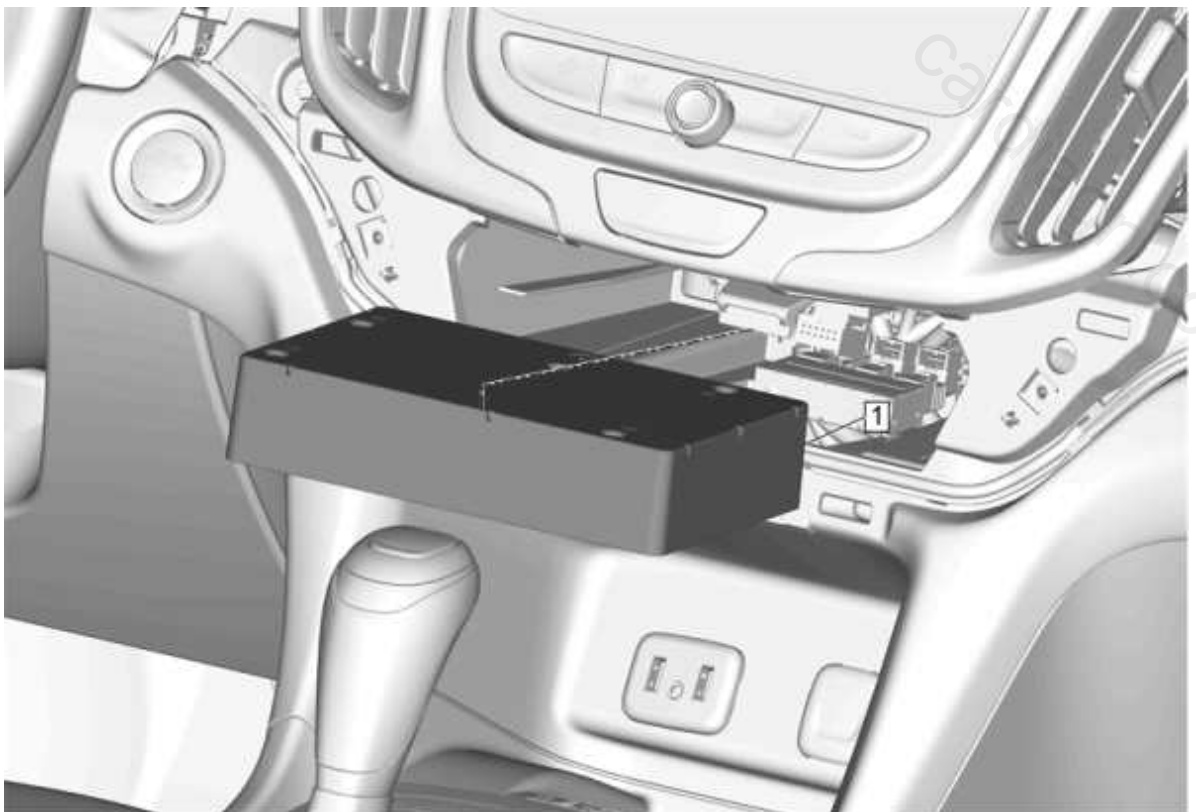


Fig. 184: Communication Interface Module
 Courtesy of GENERAL MOTORS COMPANY

18. Remove Communication Interface Module (1) **Communication Interface Module Replacement (Equinox)**



Fig. 185: Radio Control Assembly
 Courtesy of GENERAL MOTORS COMPANY

19. Remove Radio Control Assembly (1) [Radio Control Assembly Replacement \(Equinox\)](#)

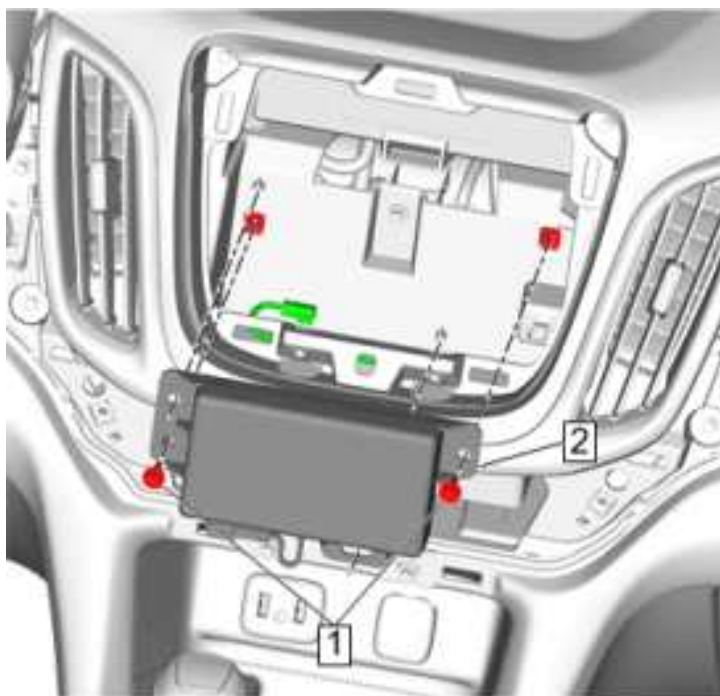


Fig. 186: Communication Interface Module Battery And Screws
 Courtesy of GENERAL MOTORS COMPANY

20. Remove Communication Interface Module Battery (2) [Communication Interface Module Battery Replacement](#)



Fig. 187: Heater And Air Conditioning Remote Control
Courtesy of GENERAL MOTORS COMPANY

21. Remove Heater and Air Conditioning Remote Control (1) [Heater and Air Conditioning Remote Control Replacement \(Equinox\)](#)

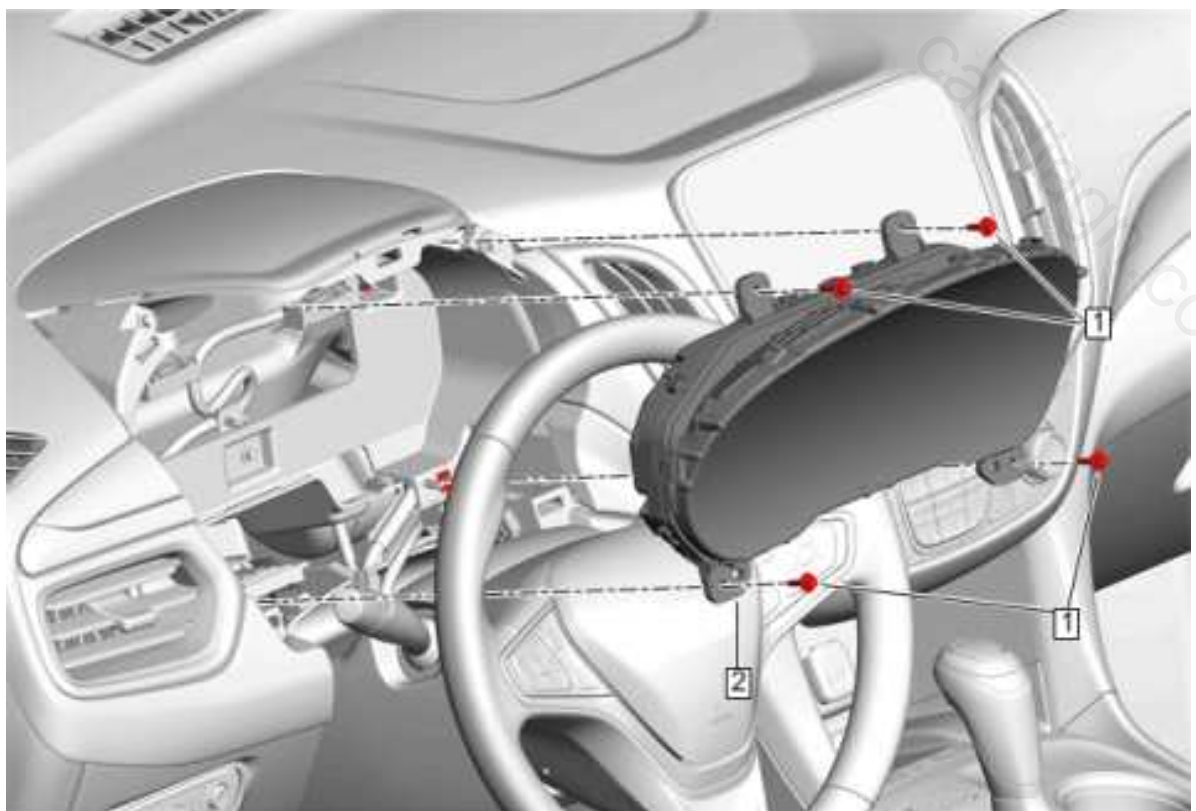


Fig. 188: Instrument Cluster And Screws
Courtesy of GENERAL MOTORS COMPANY

22. Remove Instrument Cluster (2) [Instrument Cluster Replacement \(Equinox\)](#)

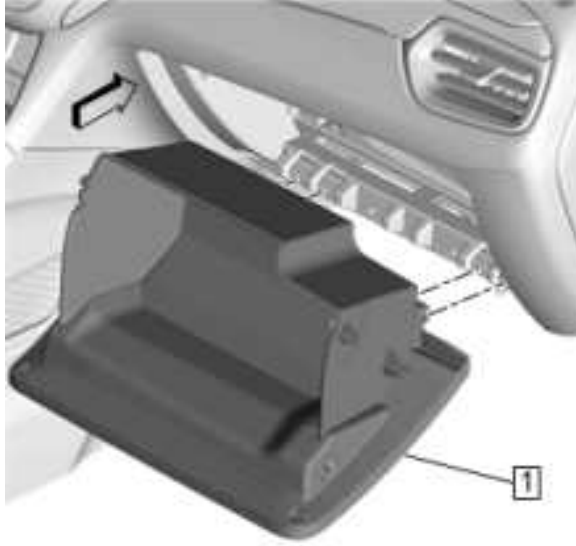


Fig. 189: Instrument Panel Compartment Door
Courtesy of GENERAL MOTORS COMPANY

23. Remove Instrument Panel Compartment Door (1) **Instrument Panel Compartment Door Replacement (Equinox)**

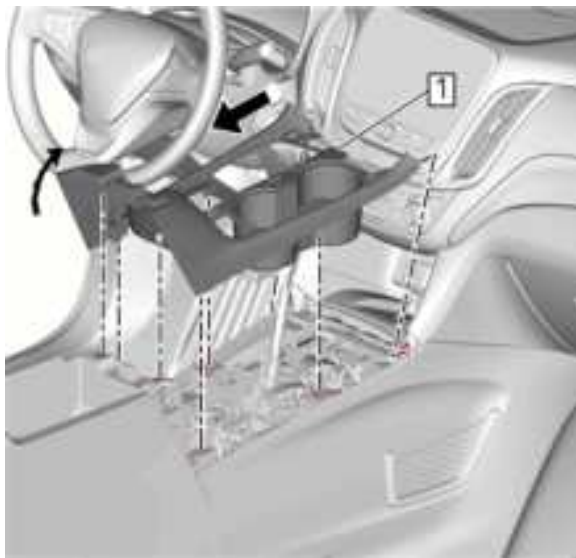


Fig. 190: Front Floor Console Applique
Courtesy of GENERAL MOTORS COMPANY

24. Remove Front Floor Console Applique (1) **Front Floor Console Applique Replacement (Equinox)**

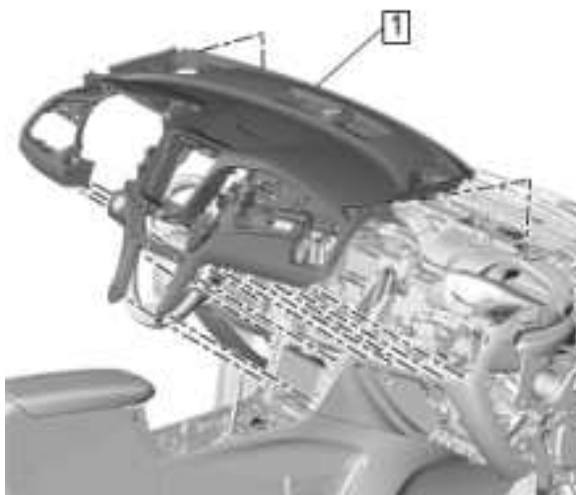


Fig. 191: Instrument Panel Upper Trim Panel
Courtesy of GENERAL MOTORS COMPANY

25. Remove Instrument Panel Upper Trim Panel (1)[Instrument Panel Upper Trim Panel Replacement \(Equinox\)](#)

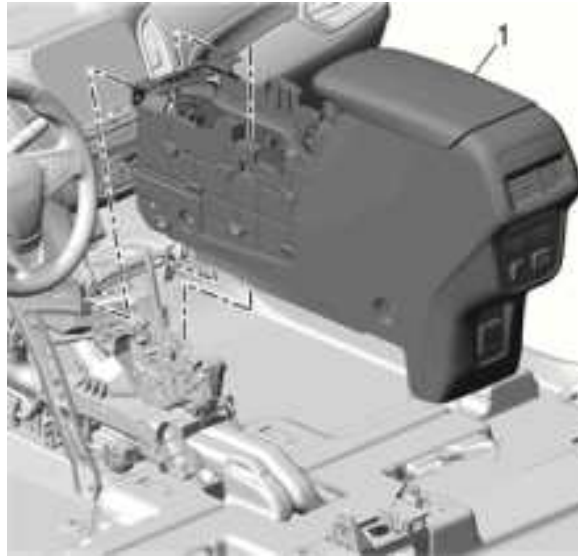


Fig. 192: Front Floor Console

Courtesy of GENERAL MOTORS COMPANY

26. Remove Front Floor Console (1)[Front Floor Console Replacement \(Equinox\)](#)

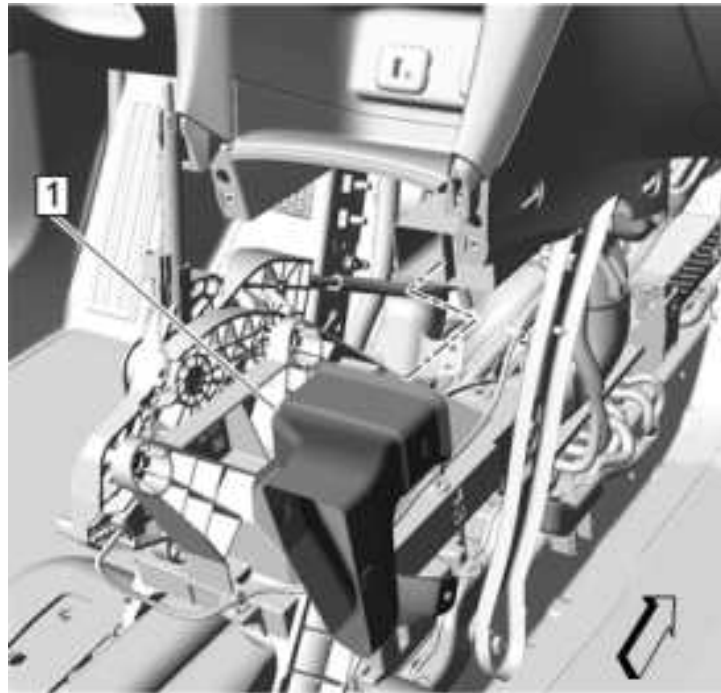


Fig. 193: Front Floor Console Rear Air Duct

Courtesy of GENERAL MOTORS COMPANY

27. Remove Front Floor Console Rear Air Duct (1)[Front Floor Console Rear Air Duct Replacement \(Equinox Front\)](#)[Front Floor Console Rear Air Duct Replacement \(Equinox Rear\)](#)

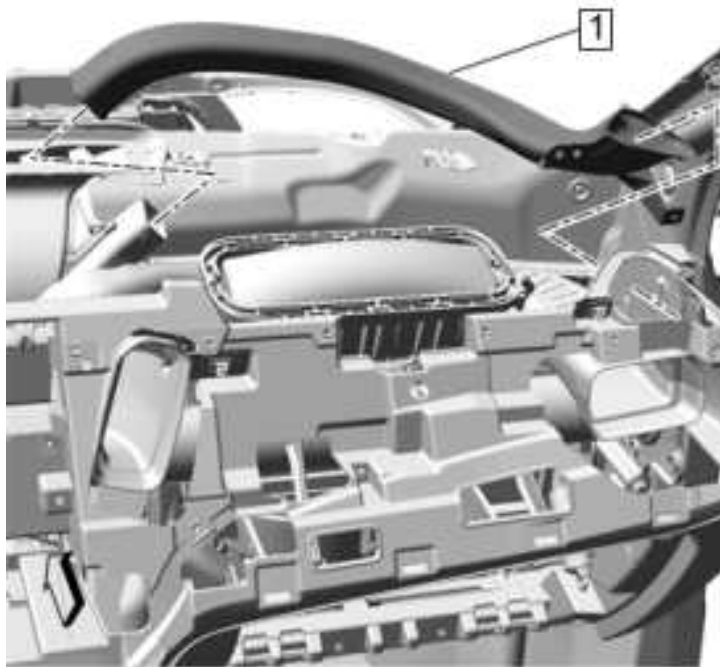


Fig. 194: Right Side Window Defogger Outlet Duct
 Courtesy of GENERAL MOTORS COMPANY

28. Remove Side Window Defogger Outlet Duct - Right Side (1) [Side Window Defogger Outlet Duct Replacement - Right Side \(Equinox\)](#)



Fig. 195: Left Side Window Defogger Outlet Duct
 Courtesy of GENERAL MOTORS COMPANY

29. Remove Side Window Defogger Outlet Duct - Left Side (1) [Side Window Defogger Outlet Duct Replacement - Left Side \(Equinox\)](#)

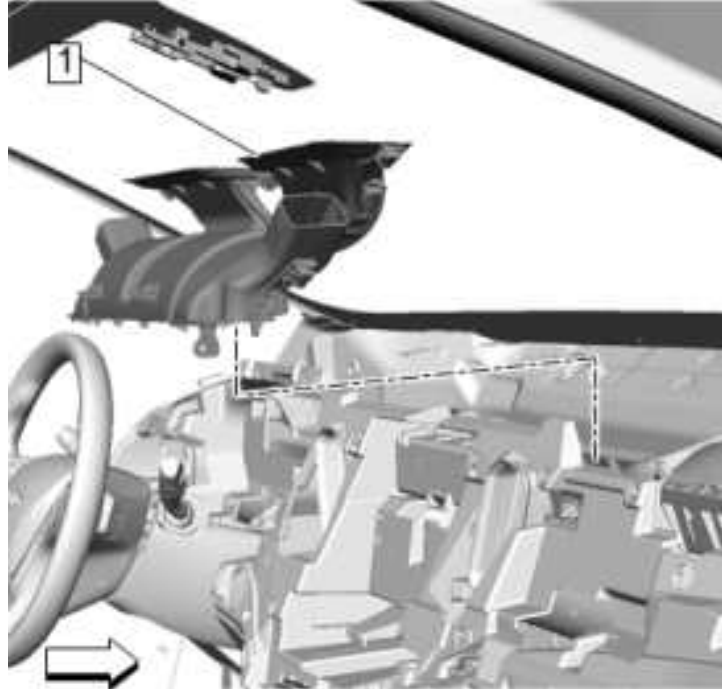


Fig. 196: Windshield Defroster Outlet Duct
 Courtesy of GENERAL MOTORS COMPANY

30. Remove Windshield Defroster Outlet Duct (1) [Windshield Defroster Outlet Duct Replacement \(Equinox\)](#)

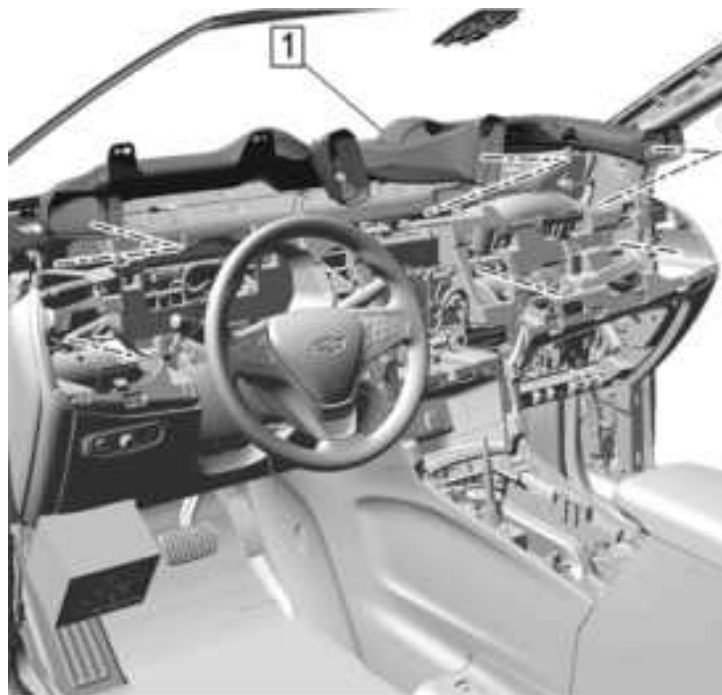


Fig. 197: Instrument Panel Center Air Outlet Duct
 Courtesy of GENERAL MOTORS COMPANY

31. Remove Instrument Panel Center Air Outlet Duct (1) [Instrument Panel Center Air Outlet Duct Replacement \(Equinox\)](#)

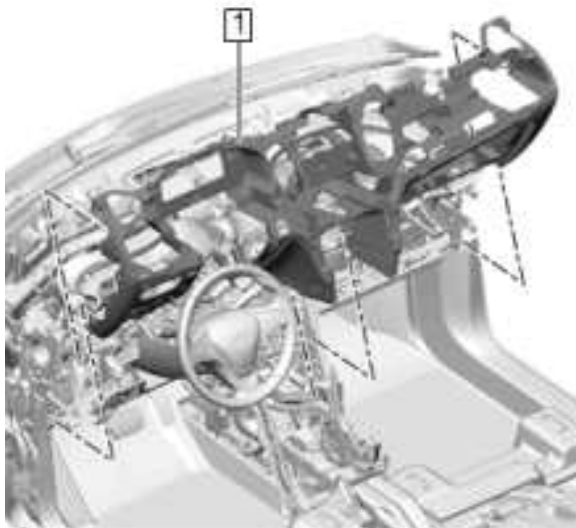


Fig. 198: Instrument Panel

Courtesy of GENERAL MOTORS COMPANY

32. Remove Instrument Panel (1) [Instrument Panel Assembly Replacement \(Equinox\)](#)

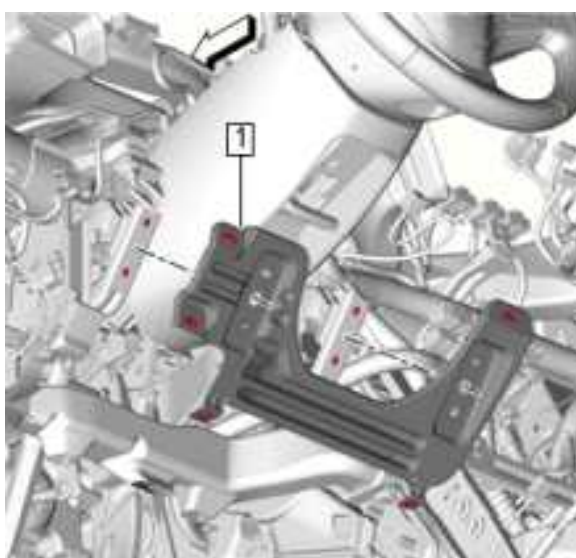


Fig. 199: Instrument Panel Knee Bolster Deflector

Courtesy of GENERAL MOTORS COMPANY

33. Remove Instrument Panel Knee Bolster Deflector (1) [Instrument Panel Knee Bolster Deflector Replacement \(Equinox\)](#)

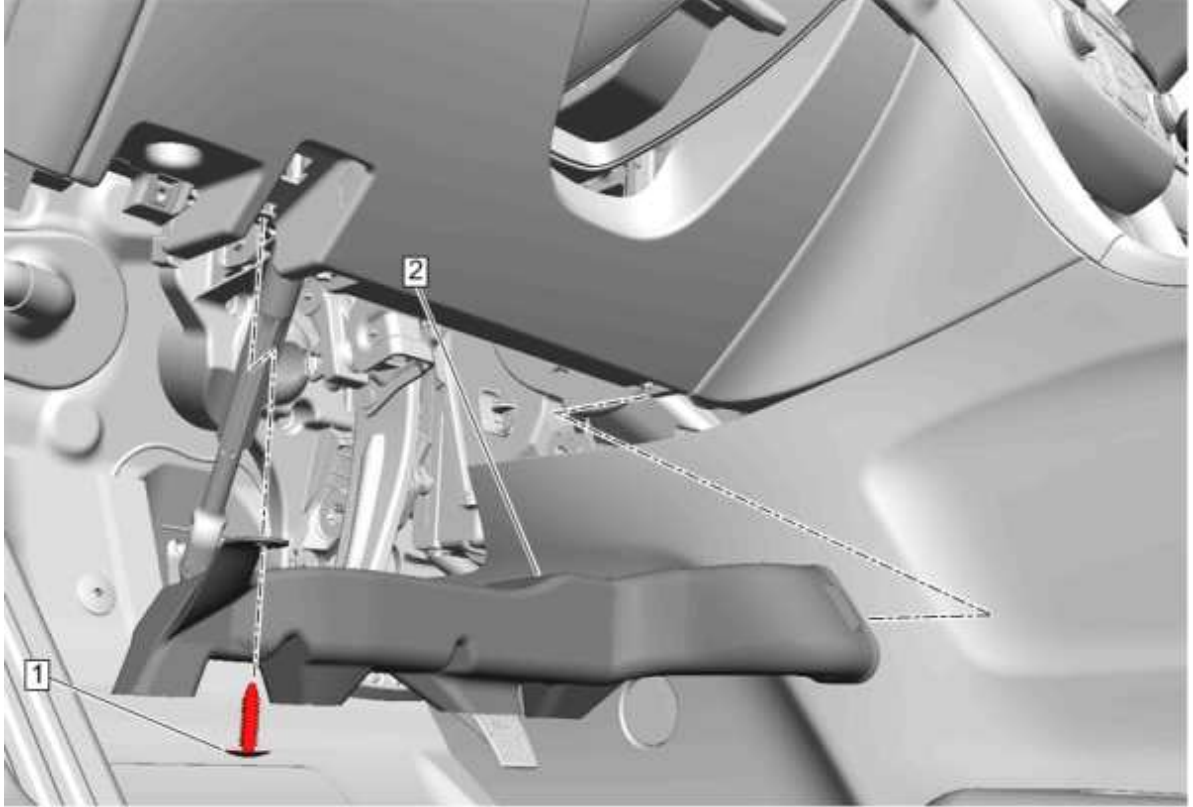


Fig. 200: Floor Front Air Outlet Duct
Courtesy of GENERAL MOTORS COMPANY

34. Remove Floor Front Air Outlet Duct - Left Side (2)[Floor Front Air Outlet Duct Replacement - Left Side](#)

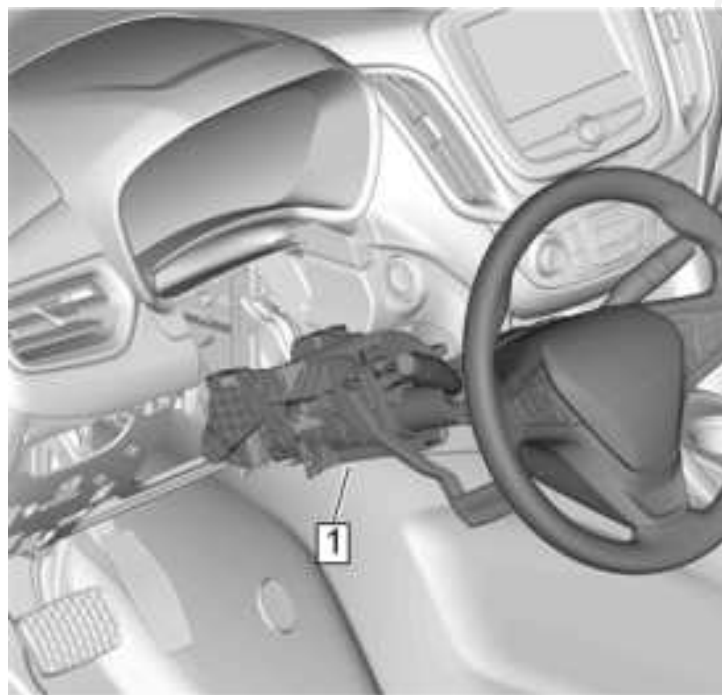


Fig. 201: Steering Column
Courtesy of GENERAL MOTORS COMPANY

35. Remove Steering Column (1)[Steering Column Replacement \(Equinox\)](#)

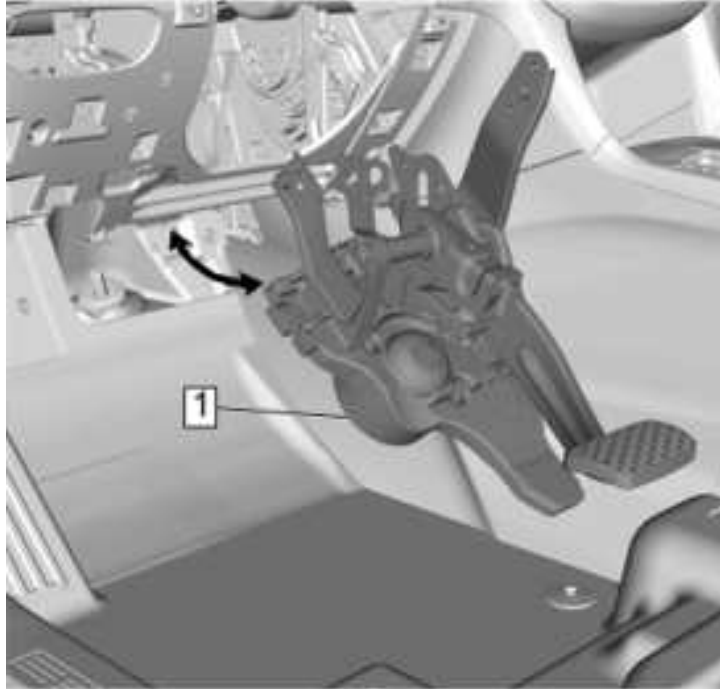


Fig. 202: Brake Pedal Assembly

Courtesy of GENERAL MOTORS COMPANY

36. Remove Brake and Accelerator Pedal Assembly (1) [Brake Pedal Assembly Replacement](#)

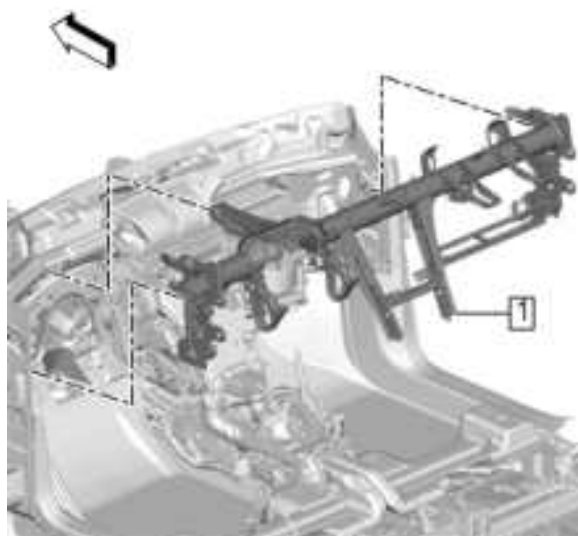


Fig. 203: Instrument Panel Tie Bar

Courtesy of GENERAL MOTORS COMPANY

37. Disconnect the instrument panel wiring connectors.
 38. Remove Instrument Panel Tie Bar (1) [Instrument Panel Tie Bar Replacement \(Equinox\)](#)

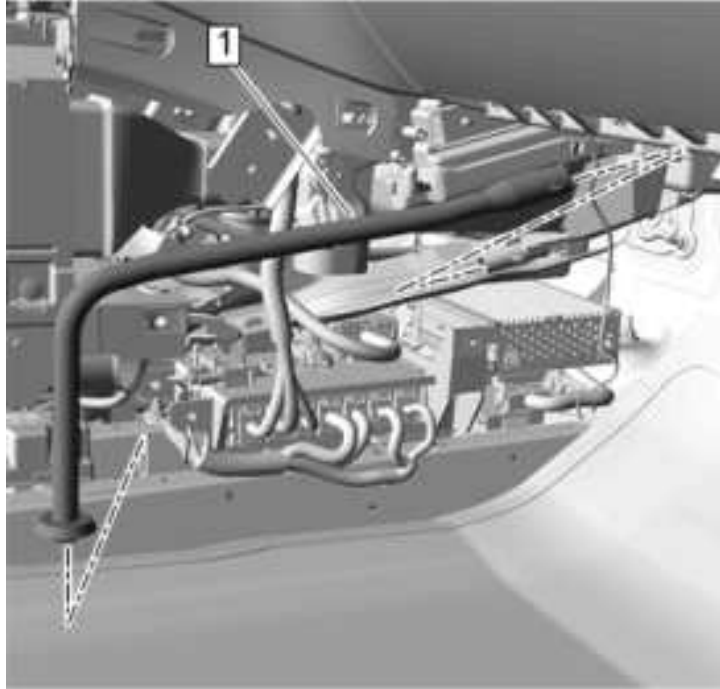


Fig. 204: Air Conditioning Evaporator and Blower Module Drain Hose
Courtesy of GENERAL MOTORS COMPANY

CAUTION: Refer to [HVAC Module Drain Tube Caution](#) .

39. Prior to removing the air conditioning evaporator and blower module drain tube/hose, use clean and absorbent shop clothes/towels to cover the electrical components protecting the electrical components from water damage.
40. Remove Air Conditioning Evaporator and Blower Module Drain Hose (1) @Heater and Air Conditioning Evaporator and Blower Module
41. Support the heater and air conditioning evaporator and blower (HVAC) module assembly.

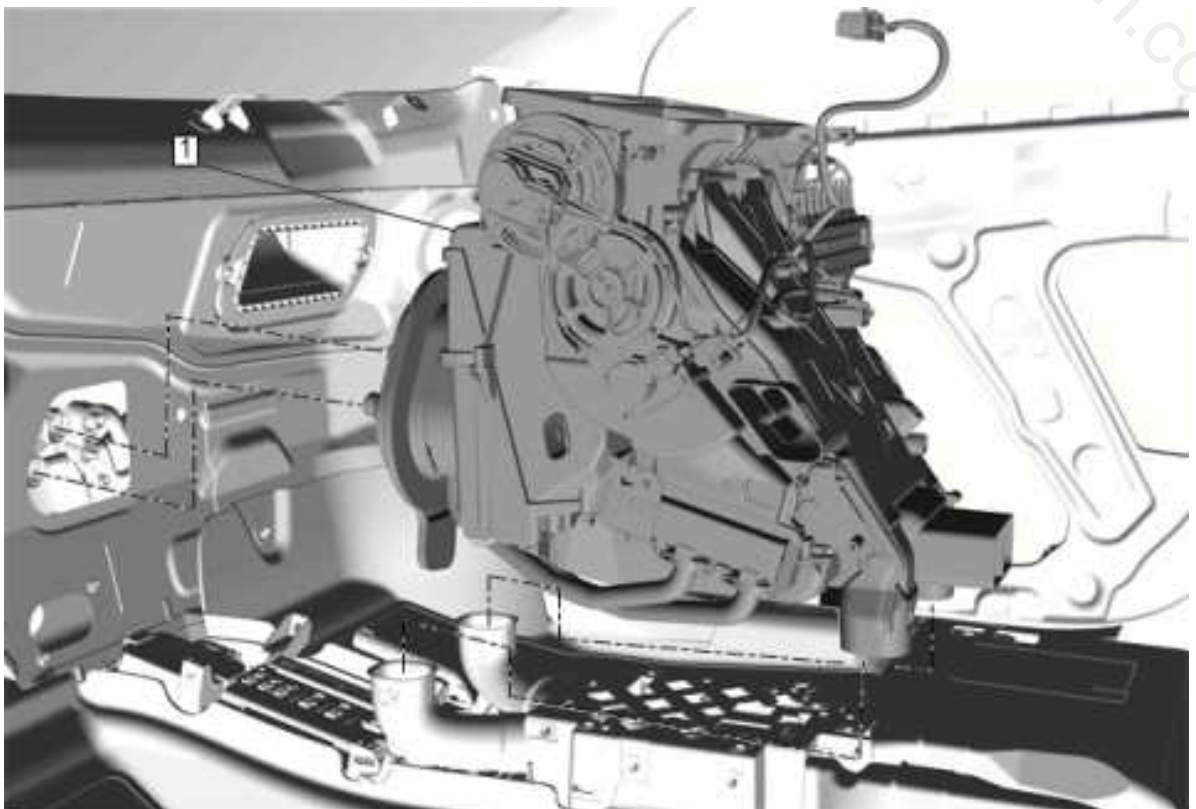


Fig. 205: Heater and Air Conditioning Evaporator and Blower Module
Courtesy of GENERAL MOTORS COMPANY

42. Remove Heater and Air Conditioning Evaporator and Blower Module (1) - from the vehicle.
43. Transfer all necessary components.

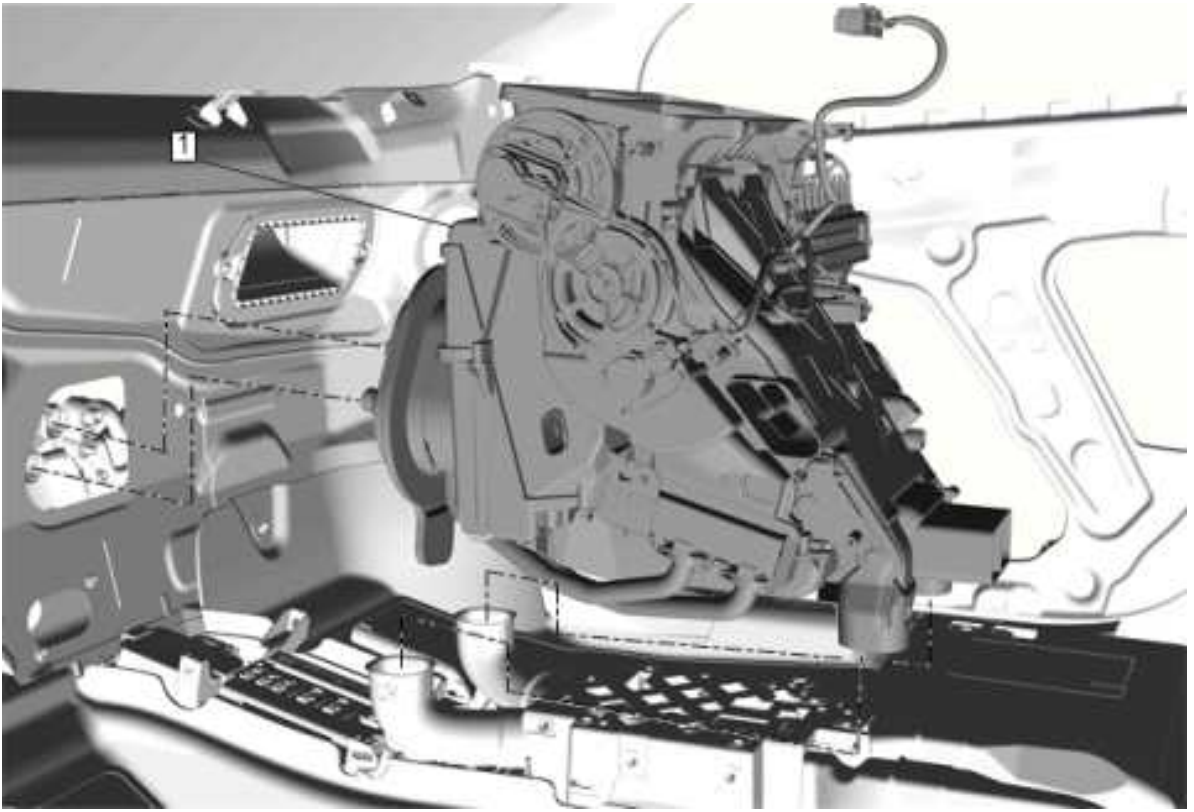


Fig. 206: Heater and Air Conditioning Evaporator and Blower Module
Courtesy of GENERAL MOTORS COMPANY

1. Install Heater and Air Conditioning Evaporator and Blower Module (1) - onto the vehicle.
2. Temporarily support HVAC module assembly.

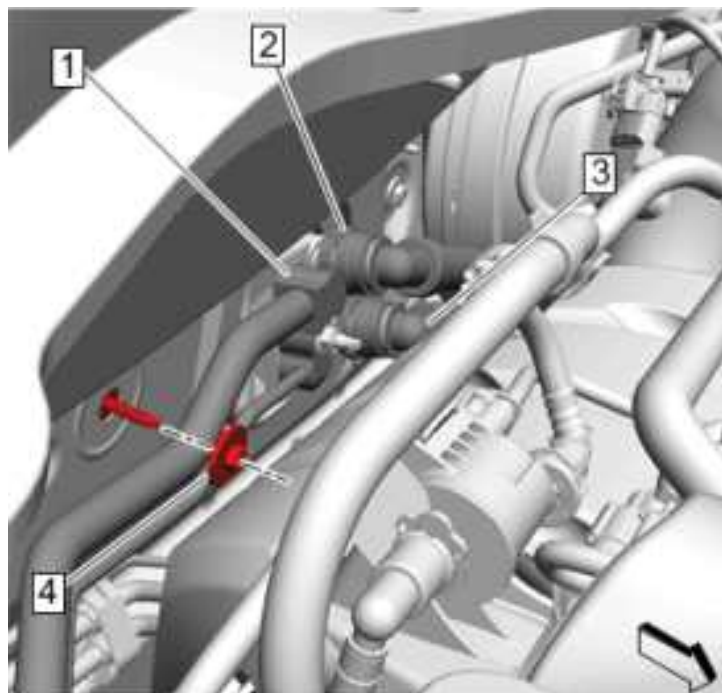


Fig. 207: Air Conditioning Refrigerant Heat Exchanger
Courtesy of GENERAL MOTORS COMPANY

CAUTION: Refer to [Fastener Caution](#) .

3. Install Heater and Air Conditioning Evaporator and Blower Module Nut (4) @Cowl Panel and tighten 9.0 N.m (80 lb in)

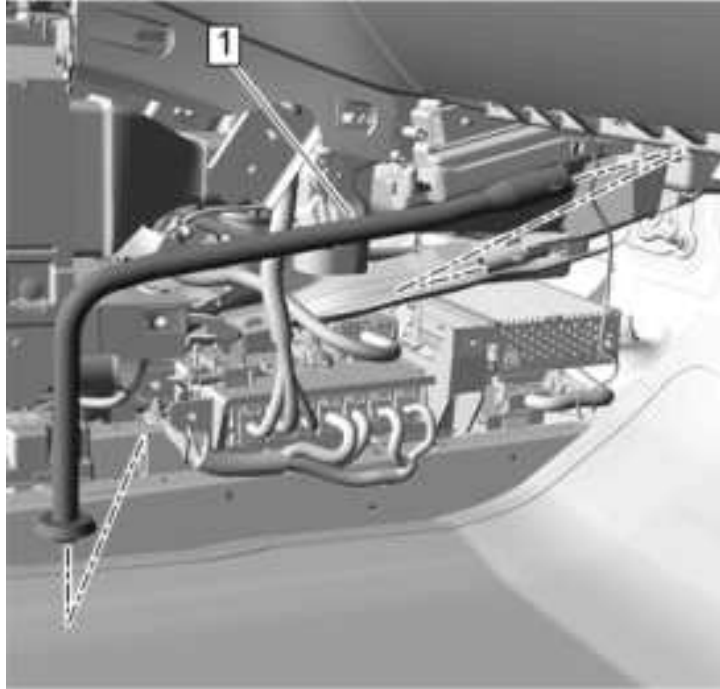


Fig. 208: Air Conditioning Evaporator and Blower Module Drain Hose
 Courtesy of GENERAL MOTORS COMPANY

CAUTION: Refer to [HVAC Module Drain Tube Caution](#) .

4. Install Air Conditioning Evaporator and Blower Module Drain Hose (1) @Heater and Air Conditioning Evaporator and Blower Module
5. Remove the absorbent shop clothes/towels covering the electrical components.

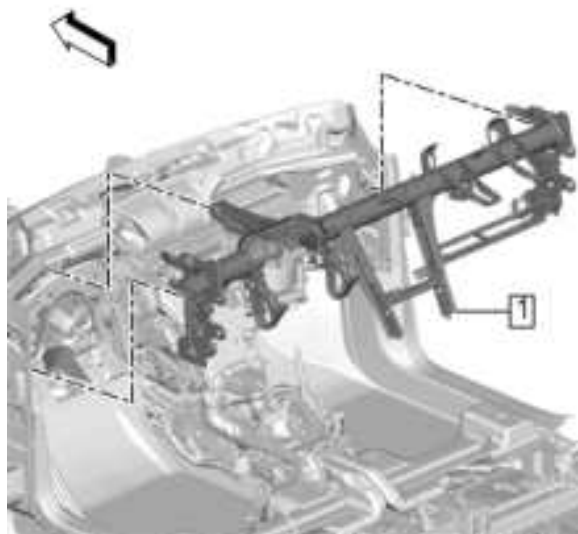


Fig. 209: Instrument Panel Tie Bar
 Courtesy of GENERAL MOTORS COMPANY

6. Install Instrument Panel Tie Bar (1) [Instrument Panel Tie Bar Replacement \(Equinox\)](#).
7. Connect the instrument panel wiring connectors.

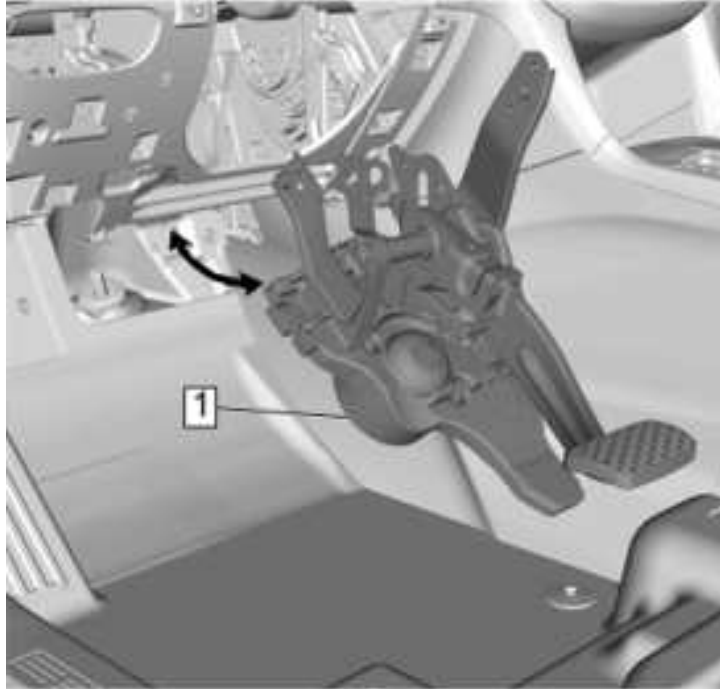


Fig. 210: Brake Pedal Assembly

Courtesy of GENERAL MOTORS COMPANY

8. Install Brake and Accelerator Pedal Assembly (1) [Brake Pedal Assembly Replacement](#)

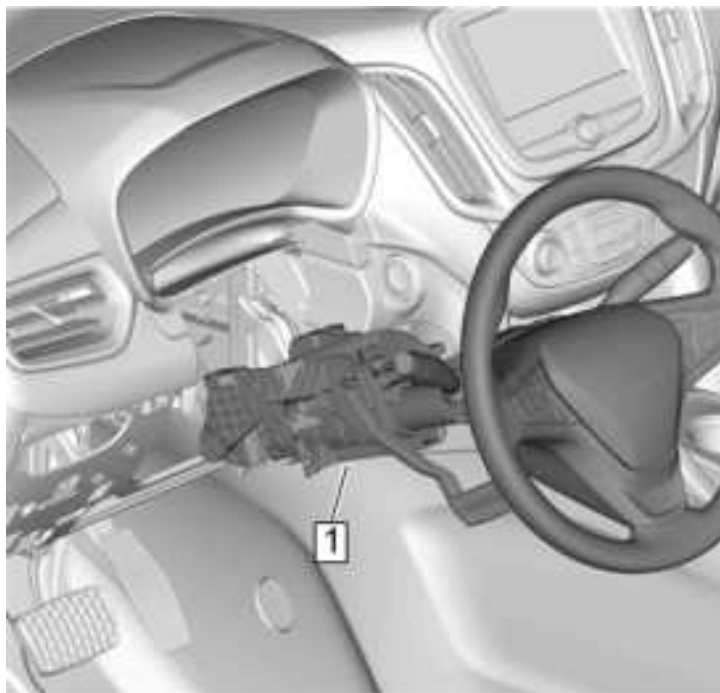


Fig. 211: Steering Column

Courtesy of GENERAL MOTORS COMPANY

9. Install Steering Column (1) [Steering Column Replacement \(Equinox\)](#)

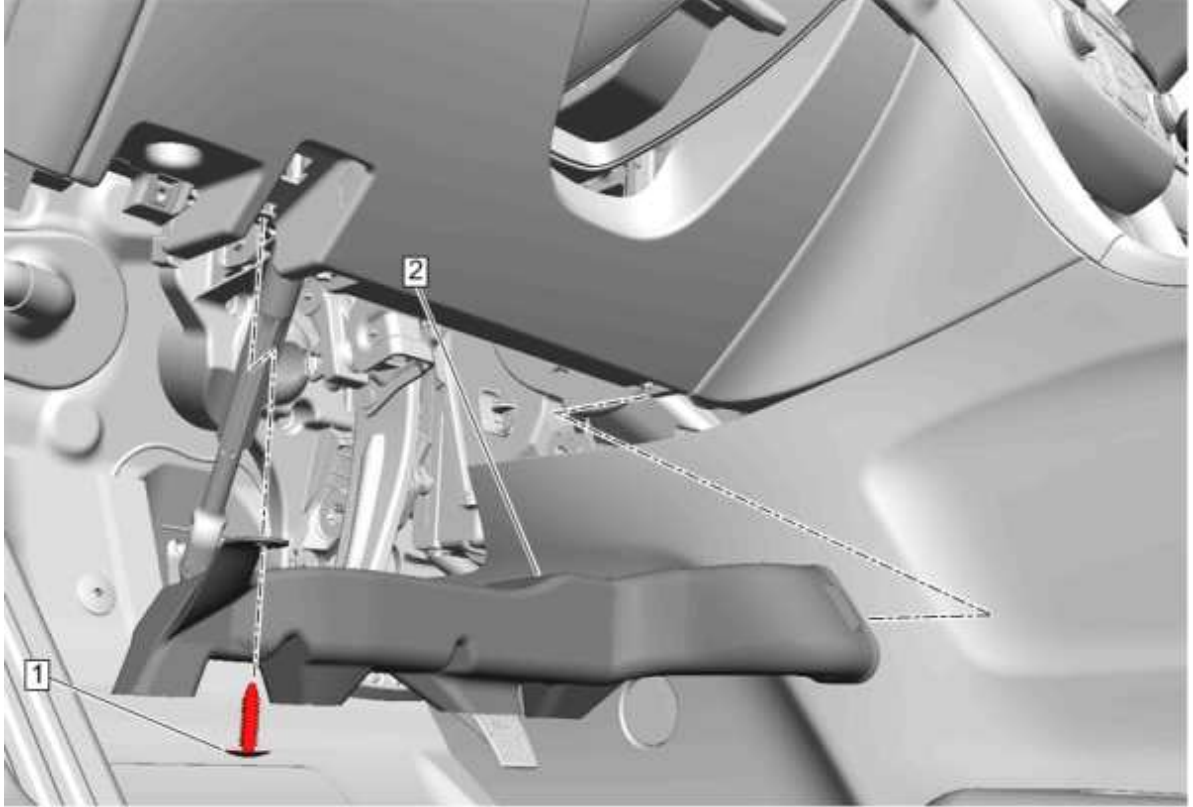


Fig. 212: Floor Front Air Outlet Duct
Courtesy of GENERAL MOTORS COMPANY

10. Install Floor Front Air Outlet Duct - Left Side (2) **Floor Front Air Outlet Duct Replacement - Left Side**

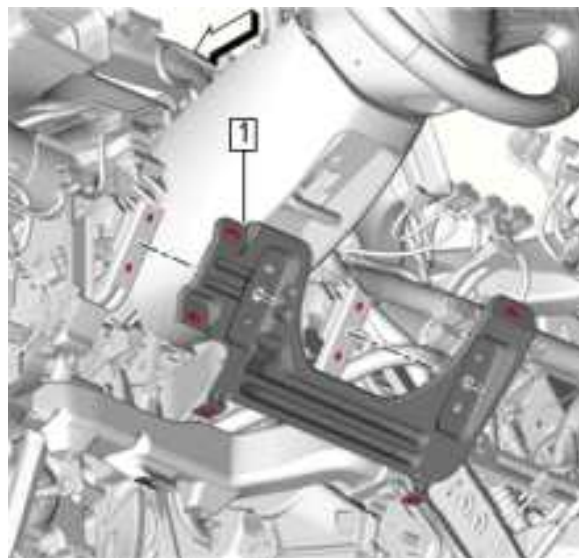


Fig. 213: Instrument Panel Knee Bolster Deflector
Courtesy of GENERAL MOTORS COMPANY

11. Install Instrument Panel Knee Bolster Deflector (1) **Instrument Panel Knee Bolster Deflector Replacement (Equinox)**

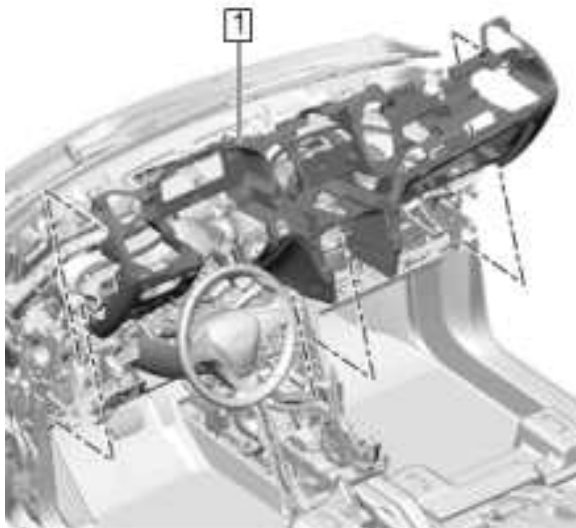


Fig. 214: Instrument Panel

Courtesy of GENERAL MOTORS COMPANY

12. Install Instrument Panel (1) [Instrument Panel Assembly Replacement \(Equinox\)](#)

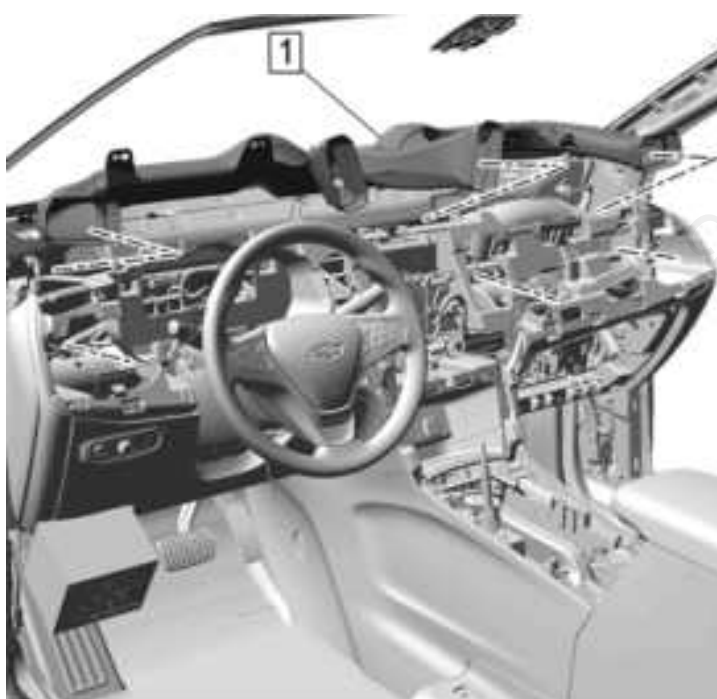


Fig. 215: Instrument Panel Center Air Outlet Duct

Courtesy of GENERAL MOTORS COMPANY

13. Install Instrument Panel Center Air Outlet Duct (1) [Instrument Panel Center Air Outlet Duct Replacement \(Equinox\)](#)

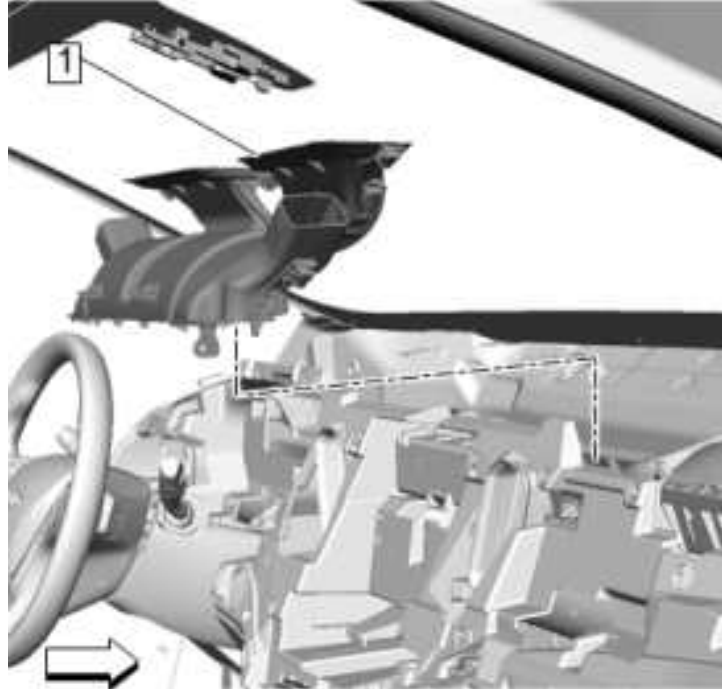


Fig. 216: Windshield Defroster Outlet Duct
 Courtesy of GENERAL MOTORS COMPANY

14. Install Windshield Defroster Outlet Duct (1) [Windshield Defroster Outlet Duct Replacement \(Equinox\)](#)



Fig. 217: Left Side Window Defogger Outlet Duct
 Courtesy of GENERAL MOTORS COMPANY

15. Install Side Window Defogger Outlet Duct - Left Side (1) [Side Window Defogger Outlet Duct Replacement - Left Side \(Equinox\)](#)

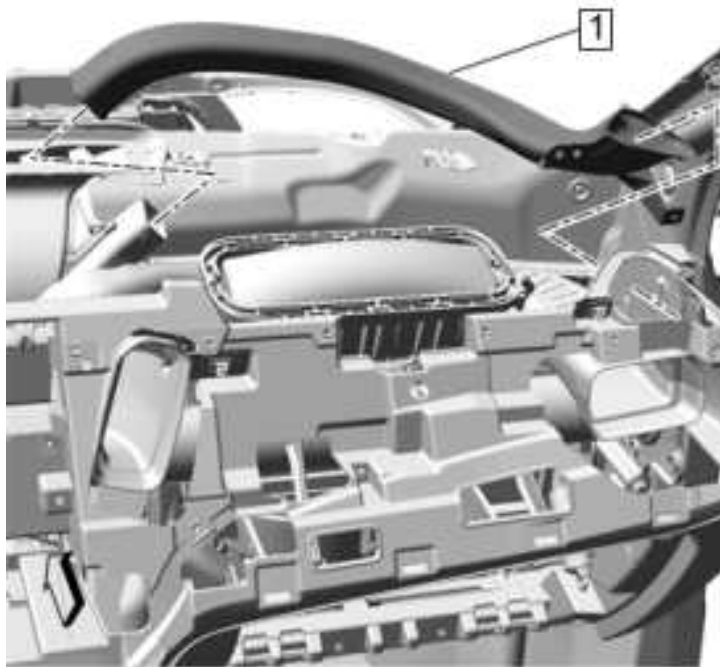


Fig. 218: Right Side Window Defogger Outlet Duct
 Courtesy of GENERAL MOTORS COMPANY

16. Install Side Window Defogger Outlet Duct - Right Side (1)[Side Window Defogger Outlet Duct Replacement - Right Side \(Equinox\)](#)

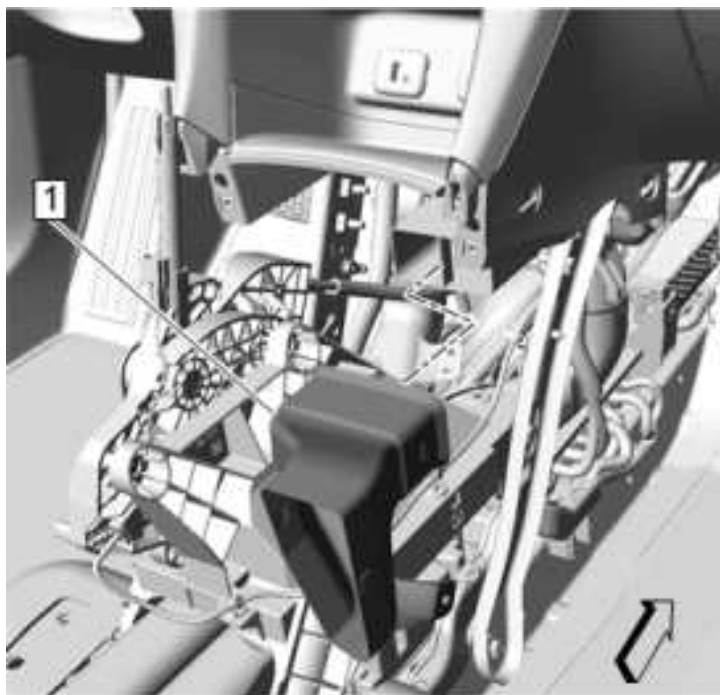


Fig. 219: Front Floor Console Rear Air Duct
 Courtesy of GENERAL MOTORS COMPANY

17. Install Front Floor Console Rear Air Duct (1)[Front Floor Console Rear Air Duct Replacement \(Equinox Front\)](#)[Front Floor Console Rear Air Duct Replacement \(Equinox Rear\)](#)

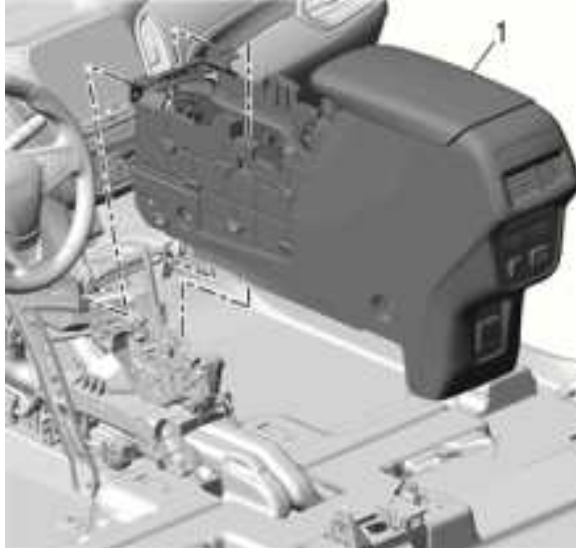


Fig. 220: Front Floor Console

Courtesy of GENERAL MOTORS COMPANY

18. Install Front Floor Console (1) [Front Floor Console Replacement \(Equinox\)](#)

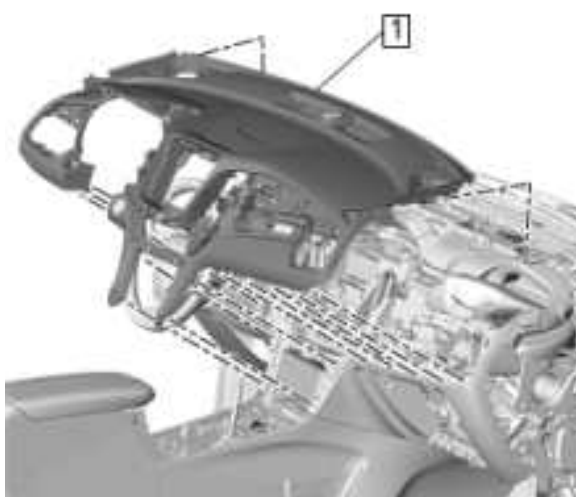


Fig. 221: Instrument Panel Upper Trim Panel

Courtesy of GENERAL MOTORS COMPANY

19. Install Instrument Panel Upper Trim Panel (1) [Instrument Panel Upper Trim Panel Replacement \(Equinox\)](#)

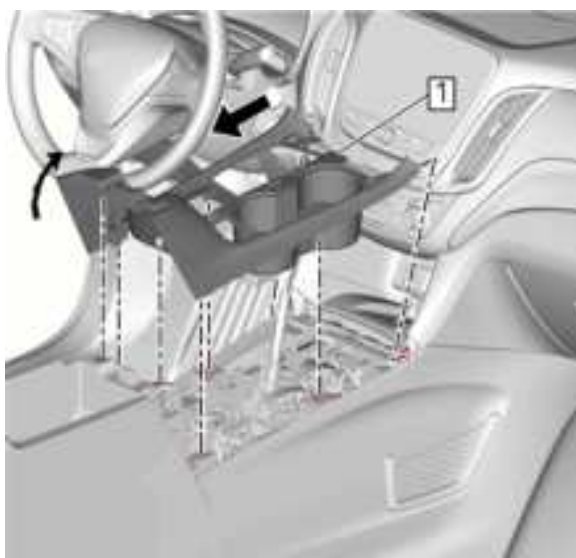


Fig. 222: Front Floor Console Applique

Courtesy of GENERAL MOTORS COMPANY

20. Install Front Floor Console Applique (1) [Front Floor Console Applique Replacement \(Equinox\)](#)

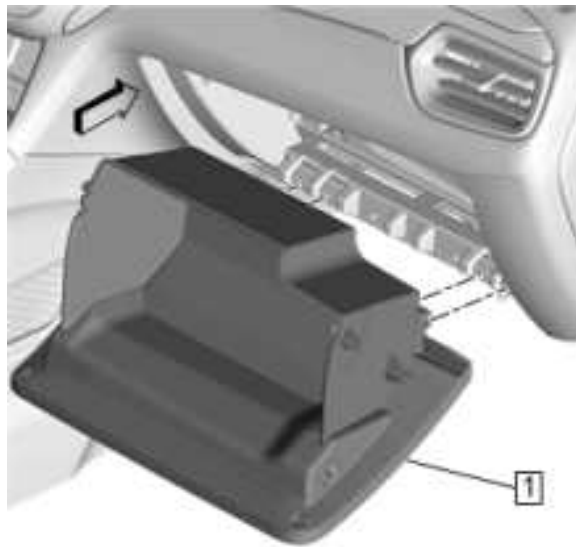


Fig. 223: Instrument Panel Compartment Door
Courtesy of GENERAL MOTORS COMPANY

21. Install Instrument Panel Compartment Door (1) [Instrument Panel Compartment Door Replacement \(Equinox\)](#)

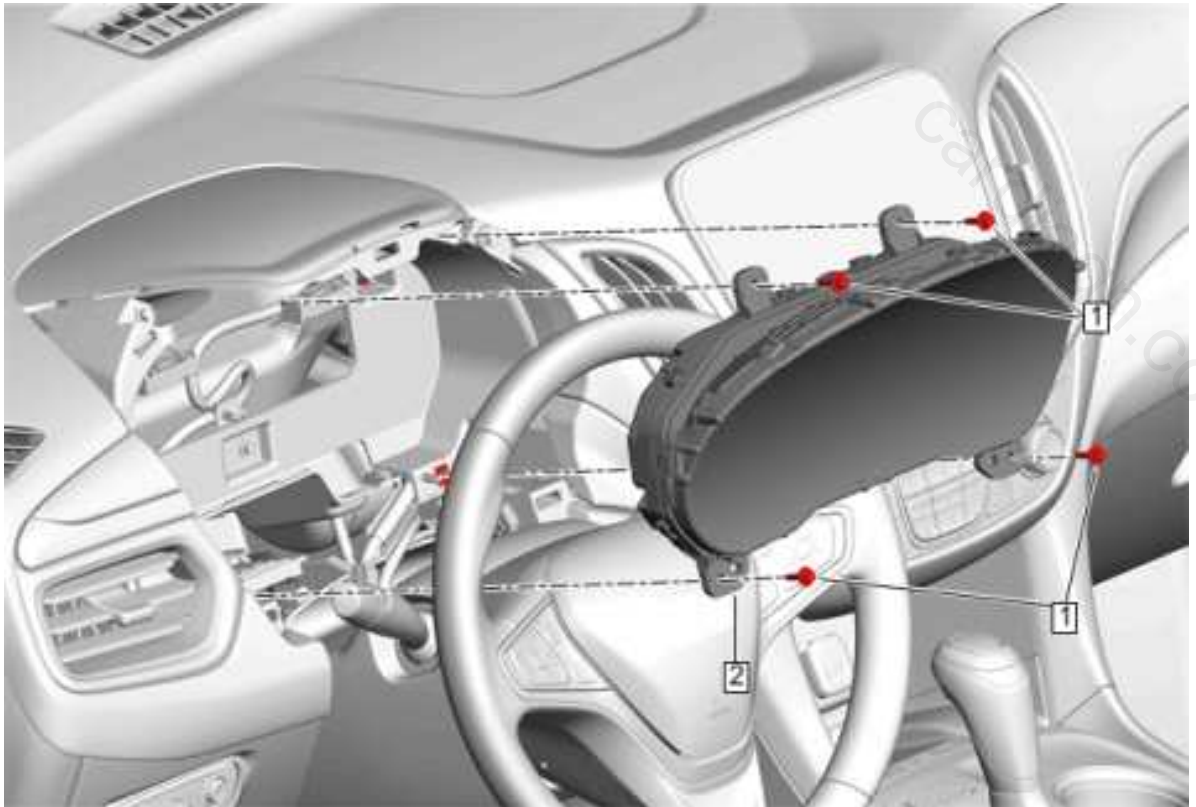


Fig. 224: Instrument Cluster And Screws
Courtesy of GENERAL MOTORS COMPANY

22. Install Instrument Cluster (2) [Instrument Cluster Replacement \(Equinox\)](#)

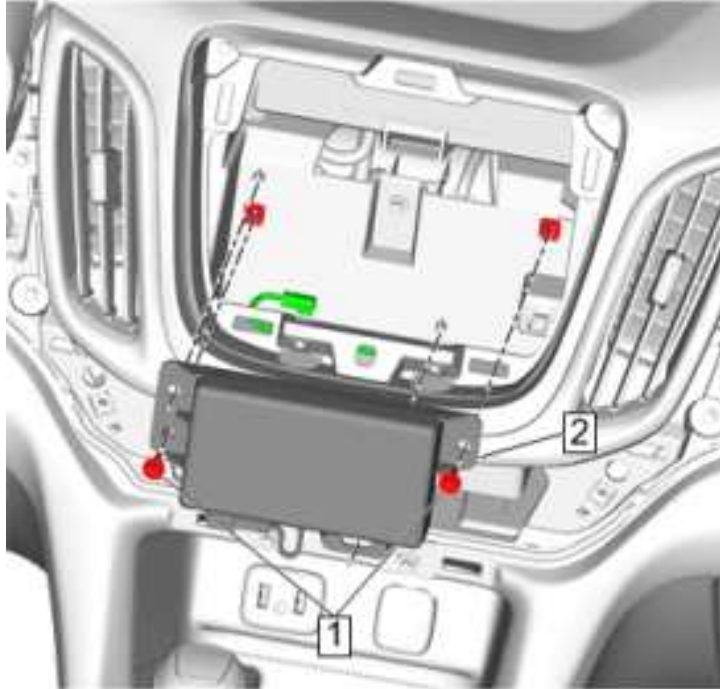


Fig. 225: Communication Interface Module Battery And Screws
 Courtesy of GENERAL MOTORS COMPANY

23. Install Communication Interface Module Battery (2) **Communication Interface Module Battery Replacement**



Fig. 226: Heater And Air Conditioning Remote Control
 Courtesy of GENERAL MOTORS COMPANY

24. Install Heater and Air Conditioning Remote Control (1) **Heater and Air Conditioning Remote Control Replacement (Equinox)**



Fig. 227: Radio Control Assembly
Courtesy of GENERAL MOTORS COMPANY

25. Install Radio Control Assembly (1) **Radio Control Assembly Replacement (Equinox)**

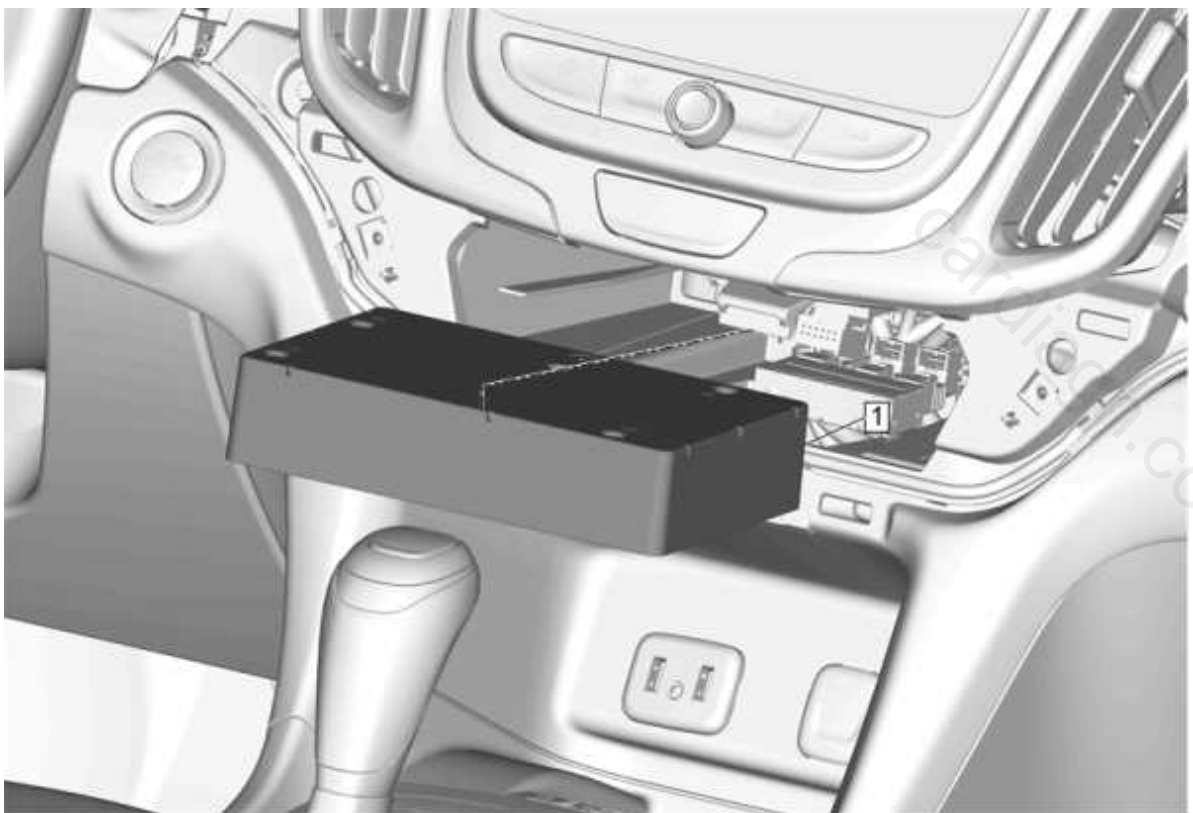


Fig. 228: Communication Interface Module
Courtesy of GENERAL MOTORS COMPANY

26. Install Communication Interface Module (1) **Communication Interface Module Replacement (Equinox)**

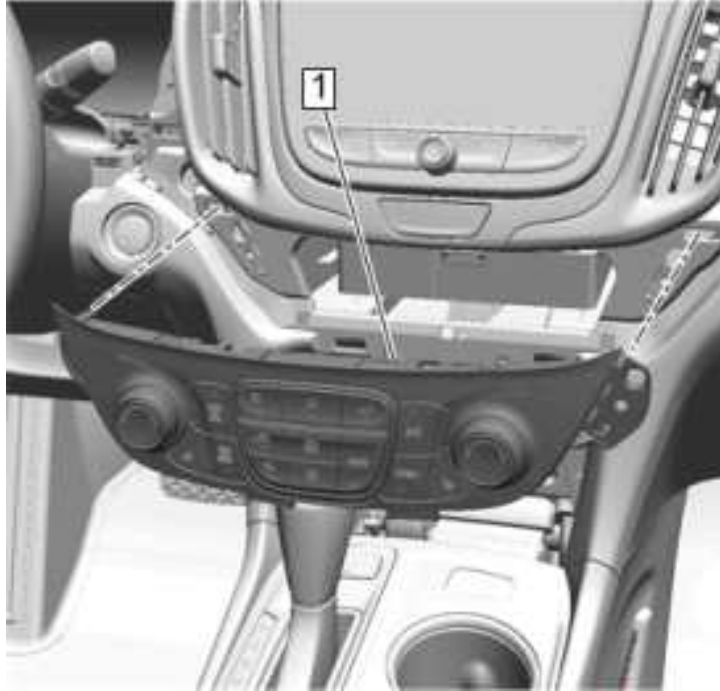


Fig. 229: Heater and Air Conditioning User Interface Control
 Courtesy of GENERAL MOTORS COMPANY

27. Install Heater and Air Conditioning User Interface Control (1)[Heater and Air Conditioning User Interface Control Replacement \(Equinox\)](#)

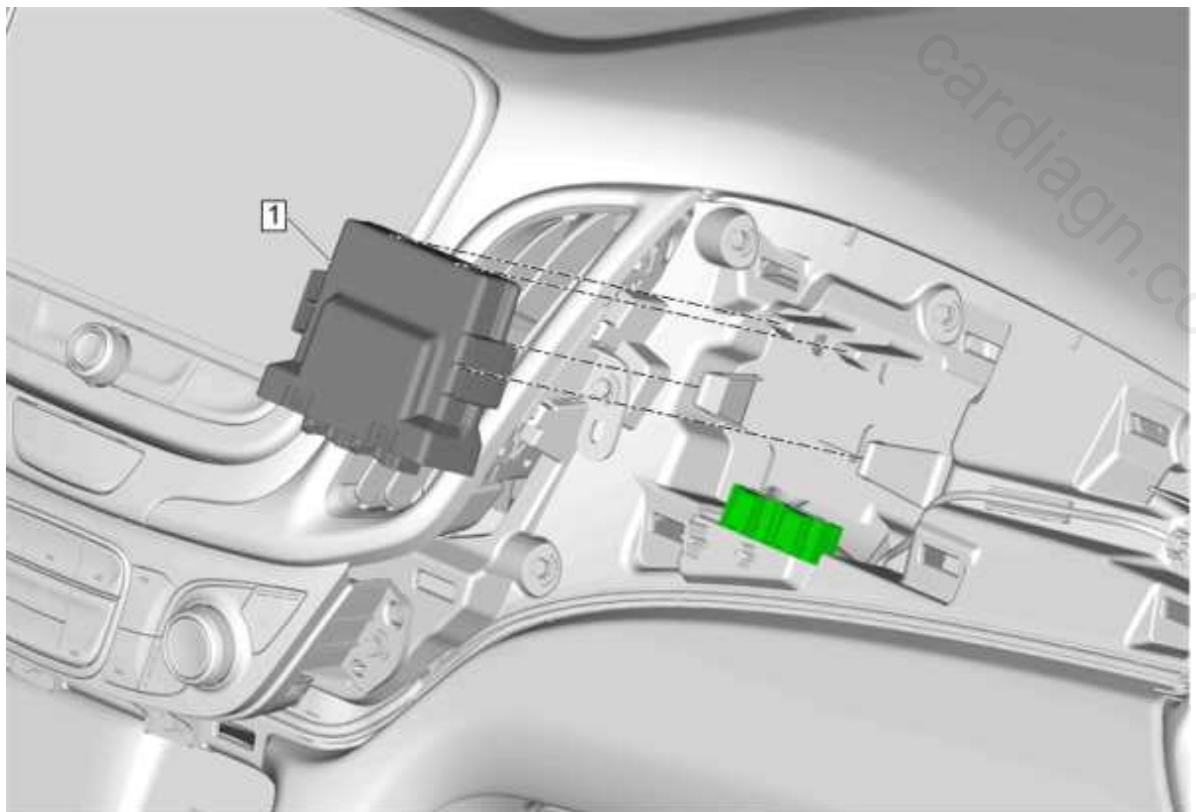


Fig. 230: Serial Data Gateway Module
 Courtesy of GENERAL MOTORS COMPANY

28. Install Serial Data Gateway Module (1)[Serial Data Gateway Module Replacement \(Equinox\)](#)

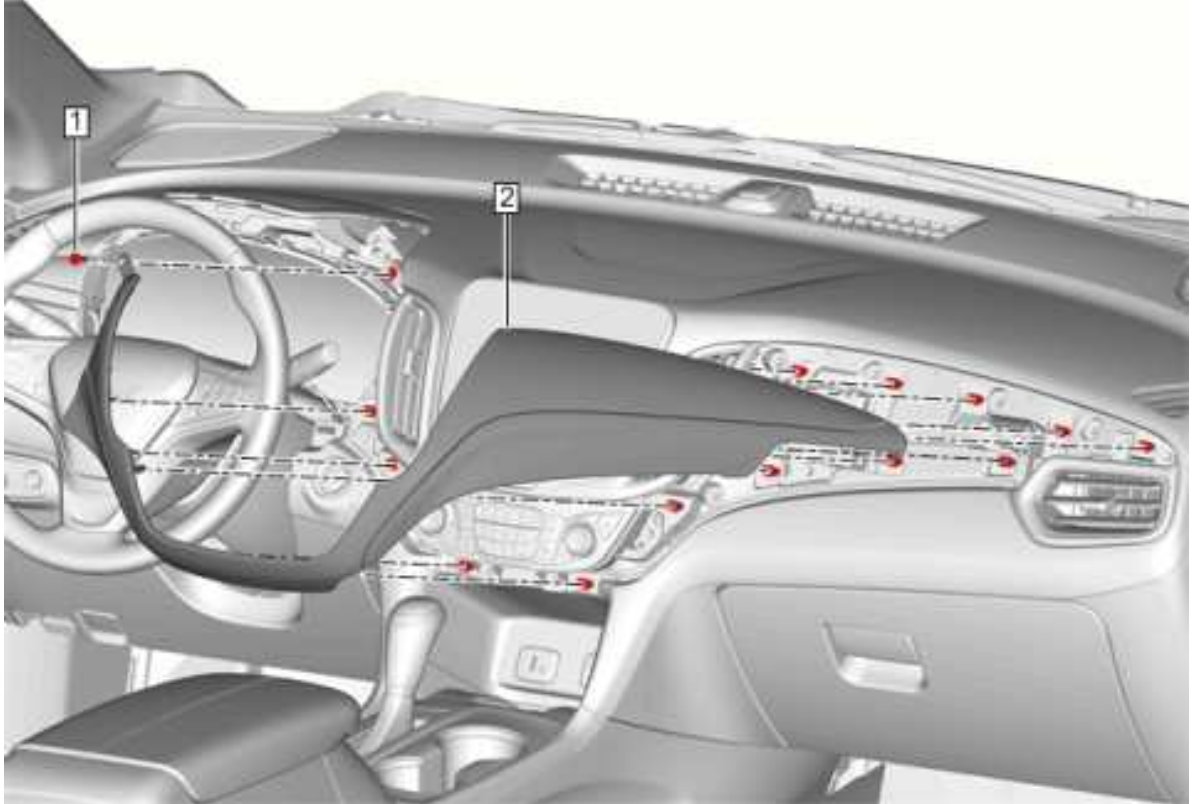


Fig. 231: Right Side Instrument Panel Trim Pad
 Courtesy of GENERAL MOTORS COMPANY

29. Install Instrument Panel Trim Pad - Right Side (2) [Instrument Panel Trim Pad Replacement - Right Side \(Equinox\)](#)



Fig. 232: Instrument Panel Knee Bolster
 Courtesy of GENERAL MOTORS COMPANY

30. Install Instrument Panel Knee Bolster (1) [Instrument Panel Knee Bolster Replacement \(Equinox\)](#)

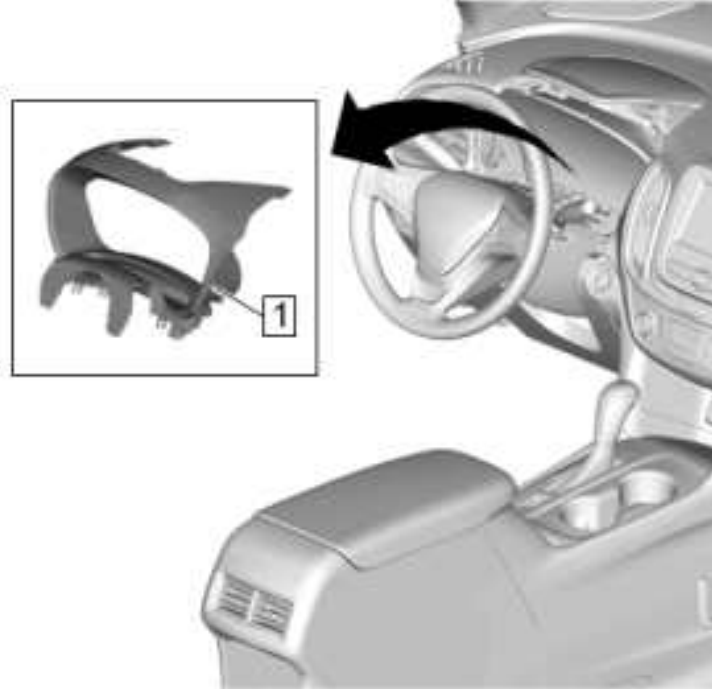


Fig. 233: Instrument Panel Cluster Trim Plate
 Courtesy of GENERAL MOTORS COMPANY

31. Install Instrument Panel Cluster Trim Plate (1) [Instrument Panel Cluster Trim Plate Replacement \(Equinox\)](#)



Fig. 234: Left And Right Instrument Panel Outer Trim Cover
 Courtesy of GENERAL MOTORS COMPANY

32. Install the left and right instrument panel outer trim cover (1). [Instrument Panel Outer Trim Cover Replacement \(Equinox\)](#)

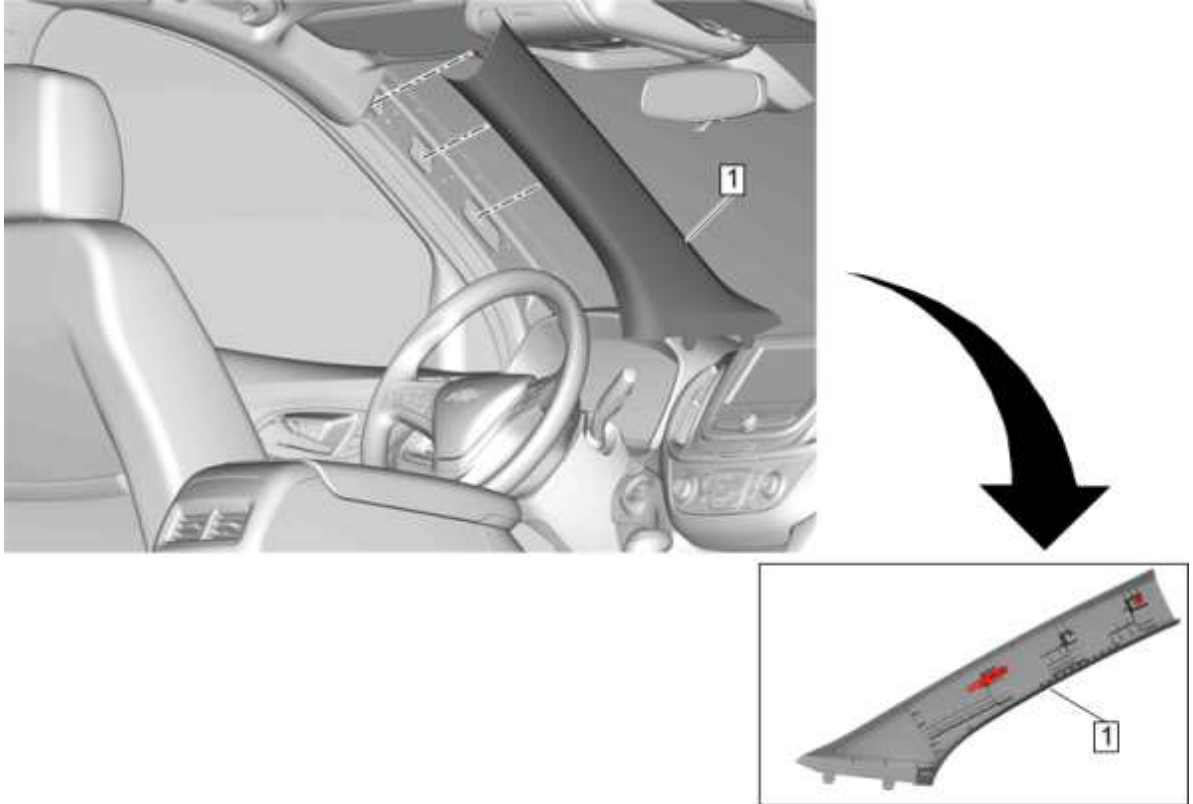


Fig. 235: Windshield Garnish Molding Replacement (Equinox).
Courtesy of GENERAL MOTORS COMPANY

33. Install the left and right side windshield garnish molding (1) **Windshield Garnish Molding Replacement (Equinox)**
34. Install Drivers Seat and Passengers Seat - **Driver or Passenger Seat Removal and Installation**

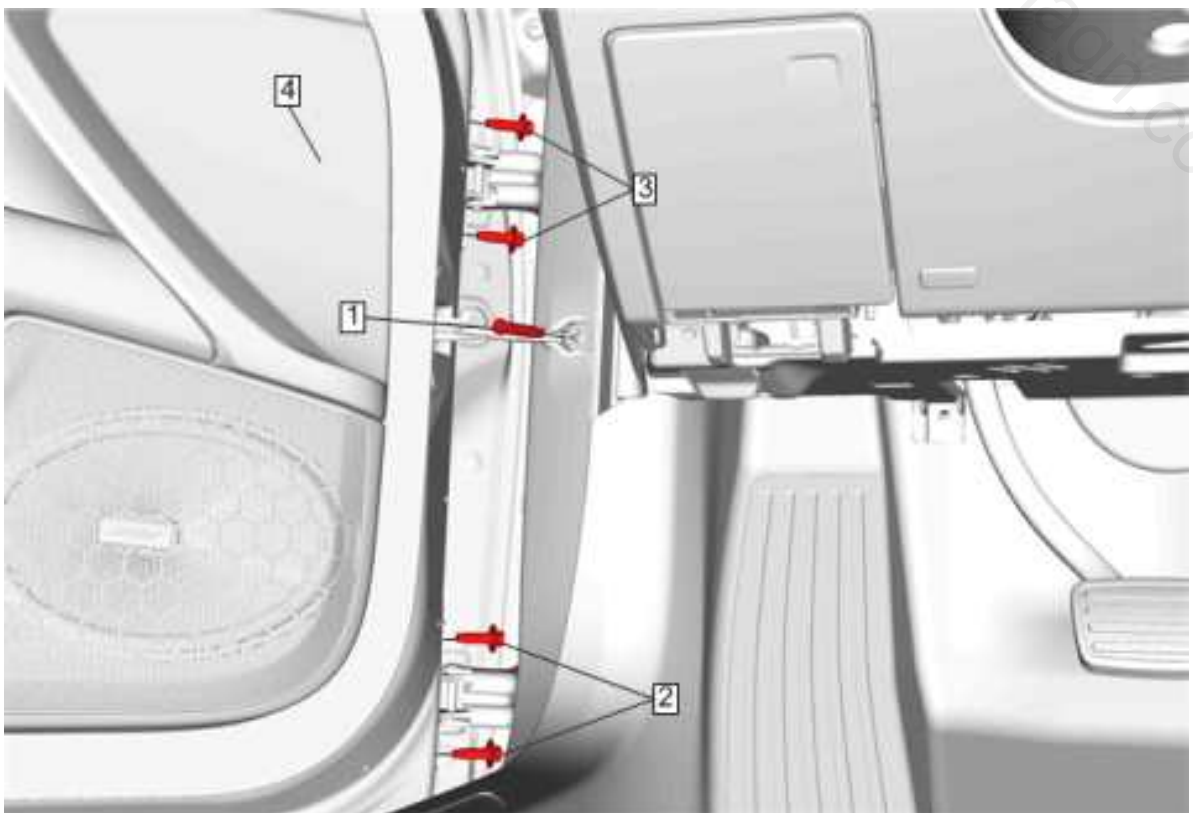


Fig. 236: Front Side Door
Courtesy of GENERAL MOTORS COMPANY

35. Install the left and right front side door (4). **Front Side Door Replacement**

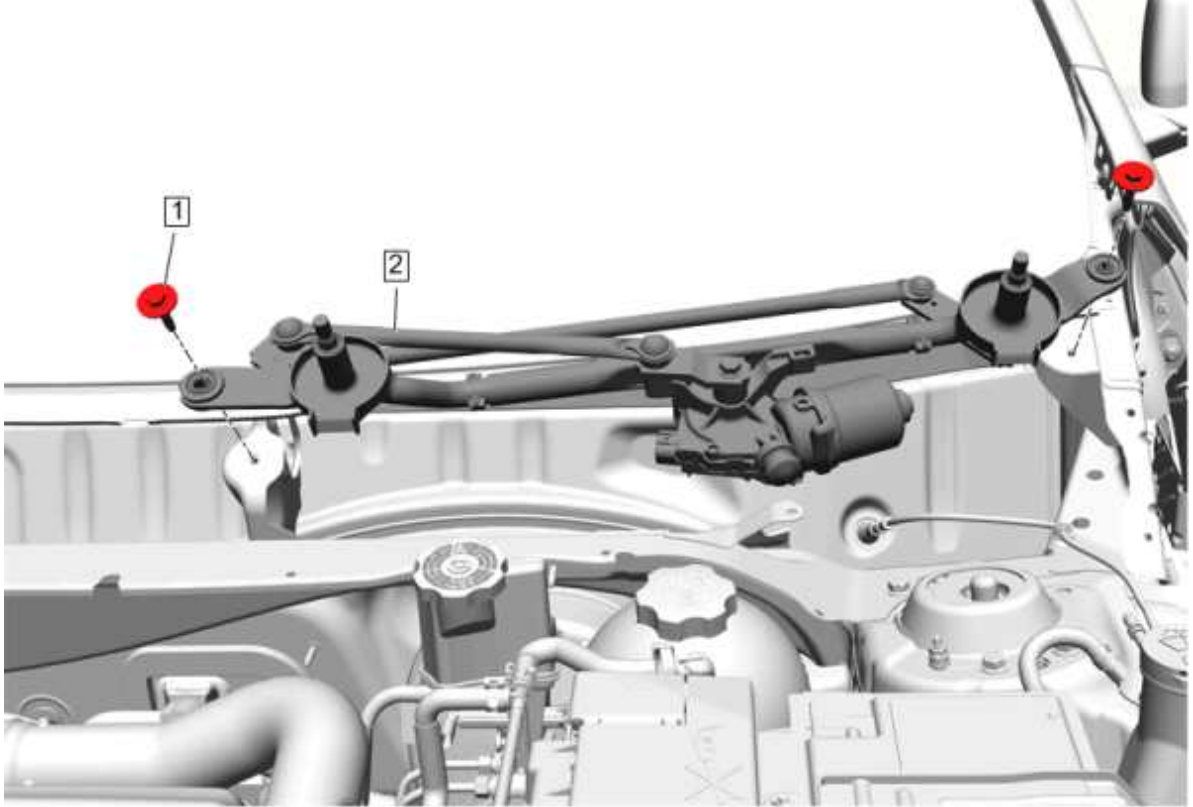


Fig. 237: Windshield Wiper Transmission
 Courtesy of GENERAL MOTORS COMPANY

36. Install Windshield Wiper Transmission (2) [Windshield Wiper Transmission Replacement](#)

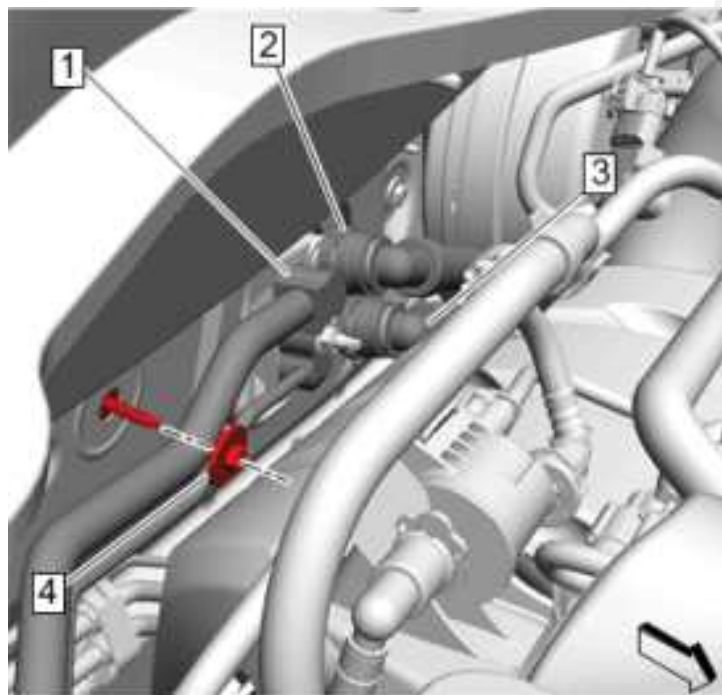


Fig. 238: Air Conditioning Refrigerant Heat Exchanger
 Courtesy of GENERAL MOTORS COMPANY

37. Install Heater Water Auxiliary Pump Hose (3) @Heater Core Outlet Tube - [Heater Water Auxiliary Pump Hose Replacement \(LTG with KL9\)](#)
38. Install Heater Inlet Hose (2) @Heater Core Inlet Tube - [Heater Inlet Hose Replacement \(LTG with KL9\)](#)
39. Install Air Conditioning Refrigerant Heat Exchanger (1) @Air Conditioning Evaporator Thermal Expansion Valve - [Air Conditioning Refrigerant Heat Exchanger Replacement \(LTG\)](#)
40. Fill the cooling system to the proper level. [Cooling System Draining and Filling \(GE 47716\) Cooling System Draining and Filling \(Static\)](#) .
41. Evacuate and charge the refrigerant system. [Refrigerant Recovery and Recharging \(R-134a\) Refrigerant Recovery and Recharging \(R-1234yf\)](#)
42. Connect the battery negative cable. [Battery Negative Cable Disconnection and Connection \(KL9\)](#)

43. Inspect for coolant leaks.

44. Visually inspect for air conditioning system refrigerant leaks.

HEATER AND AIR CONDITIONING EVAPORATOR AND BLOWER MODULE REMOVAL AND INSTALLATION (EQUINOX LH7)

Removal Procedure

1. Disconnect the battery negative cable. [Battery Negative Cable Disconnection and Connection \(KL9\)](#)
2. Recover the refrigerant. [Refrigerant Recovery and Recharging \(R-134a\)](#)[Refrigerant Recovery and Recharging \(R-1234yf\)](#)
3. Drain the cooling system. [Cooling System Draining and Filling \(GE 47716\)](#) [Cooling System Draining and Filling \(Static\)](#)
4. Remove Intake Manifold Cover - [Intake Manifold Cover Replacement](#)

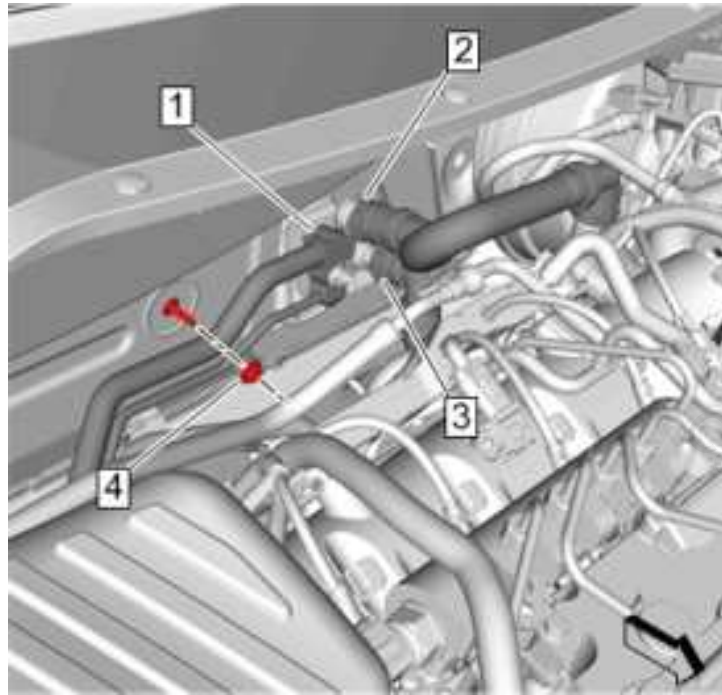


Fig. 239: Air Conditioning Evaporator and Blower Module Nut
Courtesy of GENERAL MOTORS COMPANY

5. Remove Air Conditioning Refrigerant Heat Exchanger (1) @Air Conditioning Evaporator Thermal Expansion Valve - [Air Conditioning Refrigerant Heat Exchanger Replacement \(LH7\)](#)
6. Remove Heater Inlet Hose (2) @Heater Core Inlet Tube - [Heater Inlet Hose Replacement \(LH7 Equinox\)](#)
7. Remove Auxiliary Heater Outlet Hose (3) @Heater Core Outlet Tube - [Auxiliary Heater Outlet Hose Replacement \(LH7 Equinox\)](#)
8. Remove Heater and Air Conditioning Evaporator and Blower Module Nut (3) @Cowl Panel

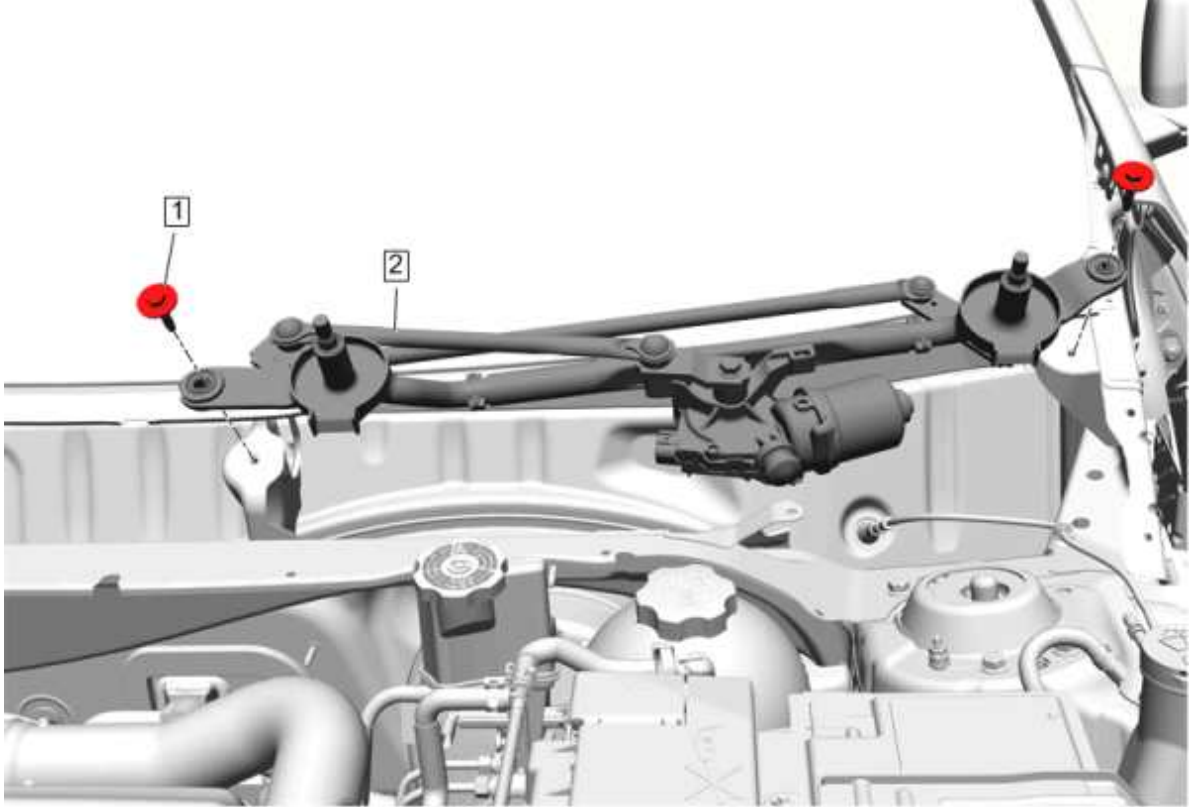


Fig. 240: Windshield Wiper Transmission
 Courtesy of GENERAL MOTORS COMPANY

9. Remove Windshield Wiper Transmission (2) [Windshield Wiper Transmission Replacement](#)

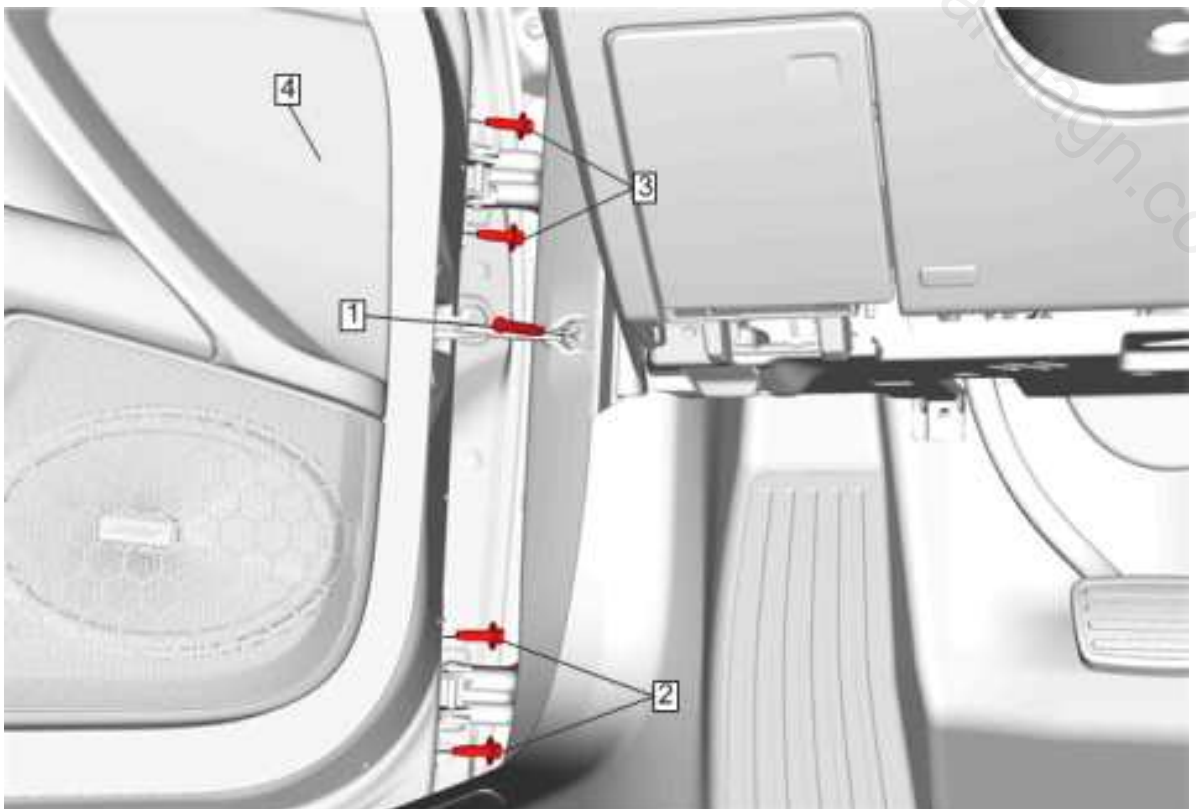


Fig. 241: Front Side Door
 Courtesy of GENERAL MOTORS COMPANY

10. Remove the left and right front side door (4). [Front Side Door Replacement](#)
 11. Remove Drivers Seat and Passengers Seat - [Driver or Passenger Seat Removal and Installation](#)

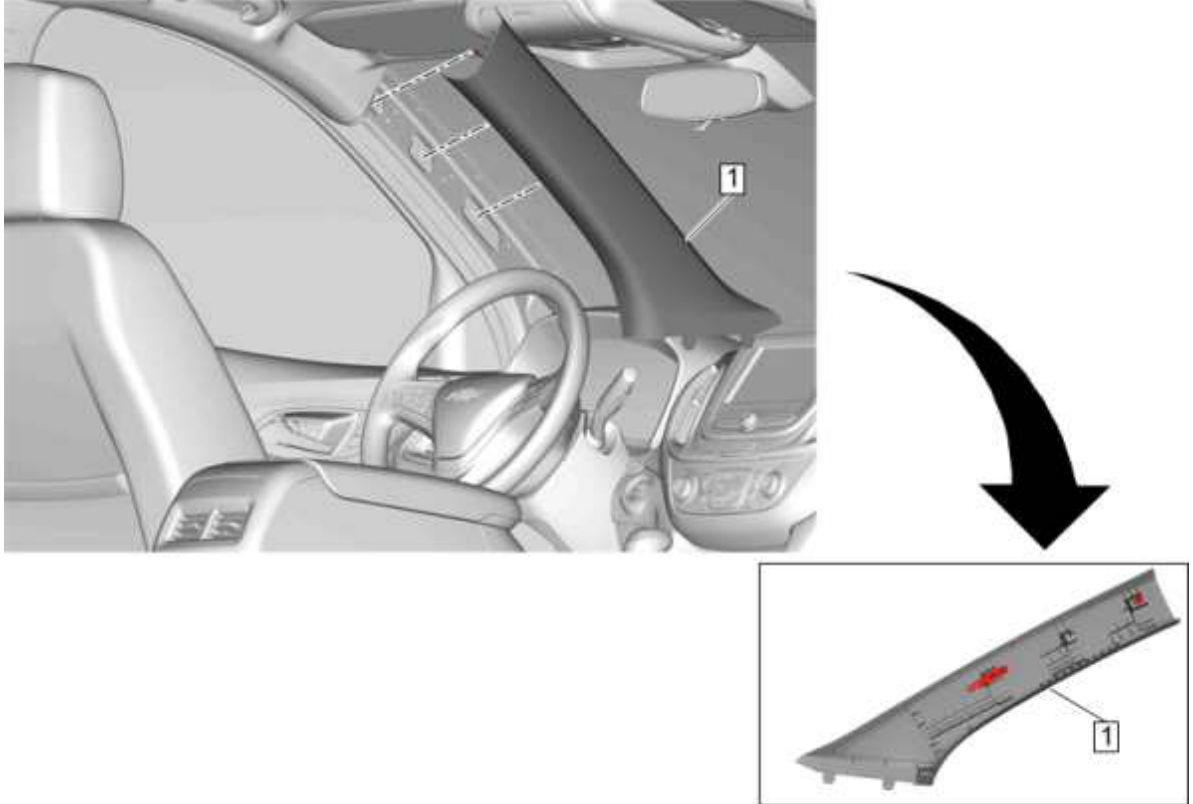


Fig. 242: Windshield Garnish Molding Replacement (Equinox).
 Courtesy of GENERAL MOTORS COMPANY

12. Remove the left and right side windshield garnish molding (1) **Windshield Garnish Molding Replacement (Equinox)**



Fig. 243: Left And Right Instrument Panel Outer Trim Cover
 Courtesy of GENERAL MOTORS COMPANY

13. Remove the left and right instrument panel outer trim cover (1). **Instrument Panel Outer Trim Cover Replacement (Equinox)**

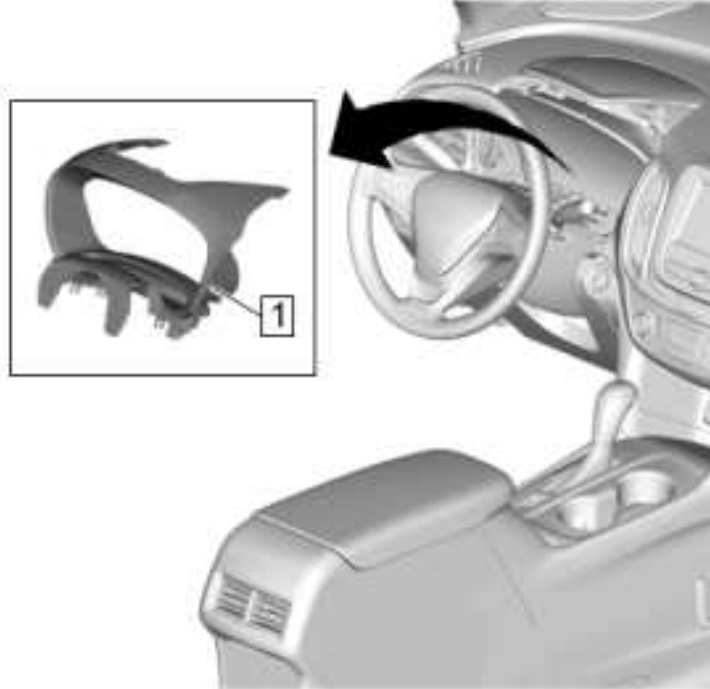


Fig. 244: Instrument Panel Cluster Trim Plate
 Courtesy of GENERAL MOTORS COMPANY

14. Remove Instrument Panel Cluster Trim Plate (1) **Instrument Panel Cluster Trim Plate Replacement (Equinox)**



Fig. 245: Instrument Panel Knee Bolster
 Courtesy of GENERAL MOTORS COMPANY

15. Remove Instrument Panel Knee Bolster (1) **Instrument Panel Knee Bolster Replacement (Equinox)**

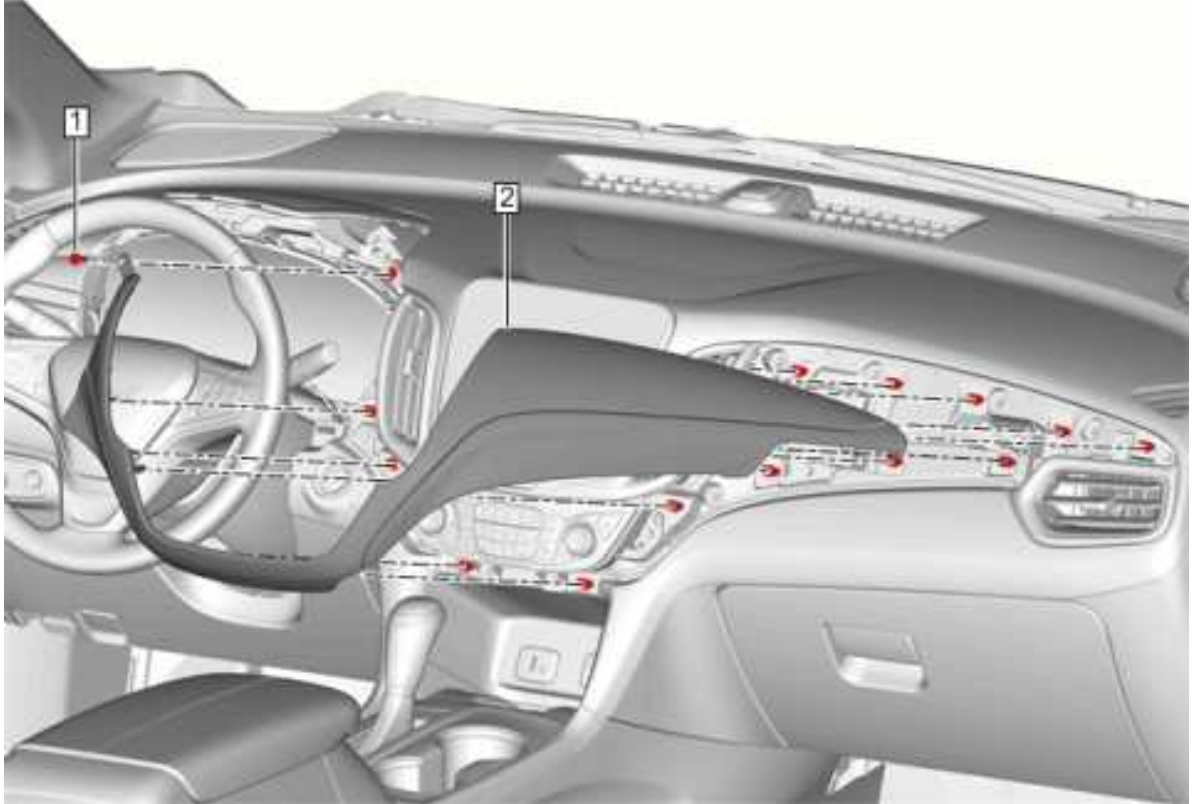


Fig. 246: Right Side Instrument Panel Trim Pad
 Courtesy of GENERAL MOTORS COMPANY

16. Remove Instrument Panel Trim Pad - Right Side (2) **Instrument Panel Trim Pad Replacement - Right Side (Equinox)**

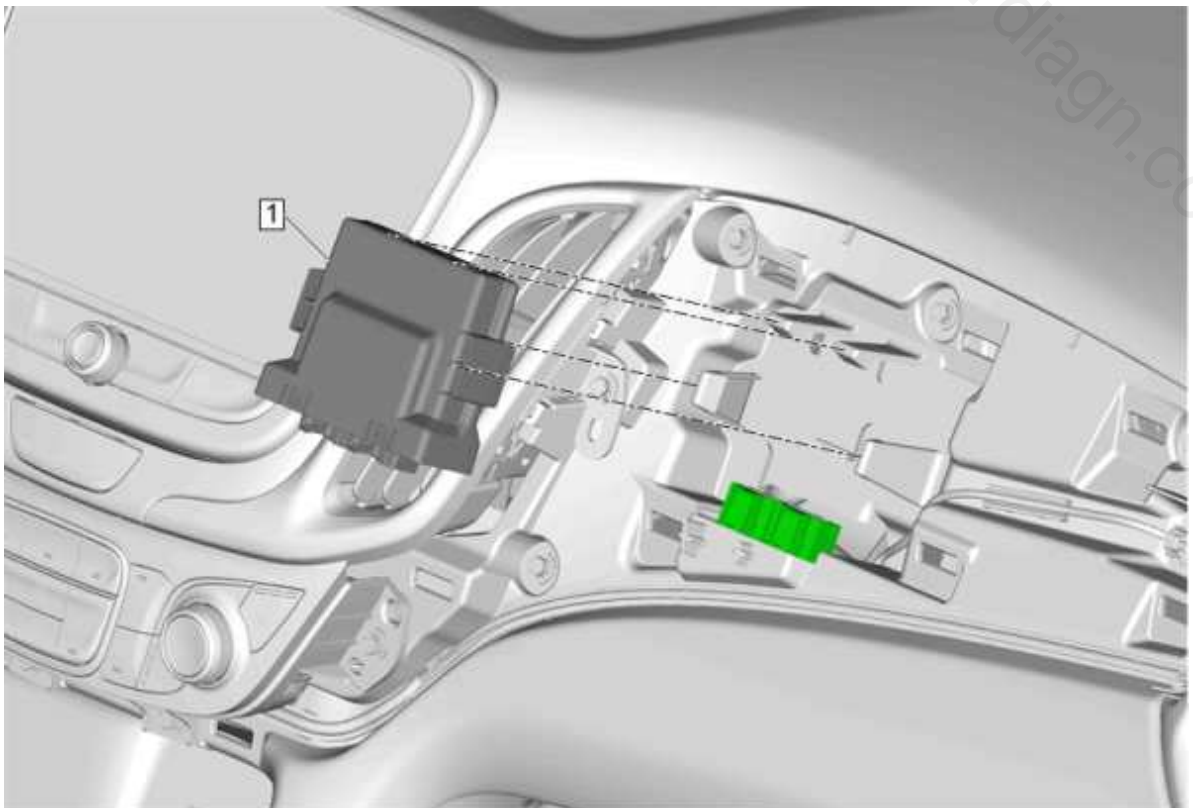


Fig. 247: Serial Data Gateway Module
 Courtesy of GENERAL MOTORS COMPANY

17. Remove Serial Data Gateway Module (1) **Serial Data Gateway Module Replacement (Equinox)**

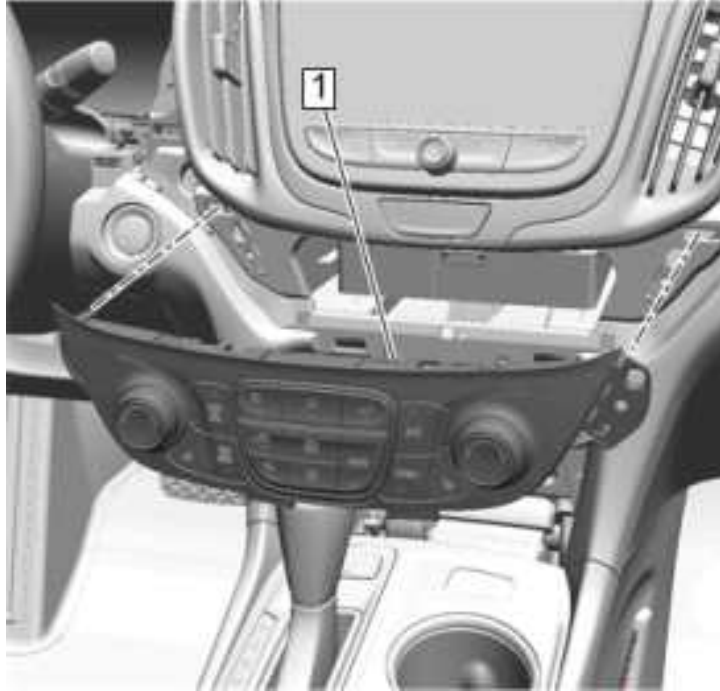


Fig. 248: Heater and Air Conditioning User Interface Control
 Courtesy of GENERAL MOTORS COMPANY

18. Remove Heater and Air Conditioning User Interface Control (1) **Heater and Air Conditioning User Interface Control Replacement (Equinox)**

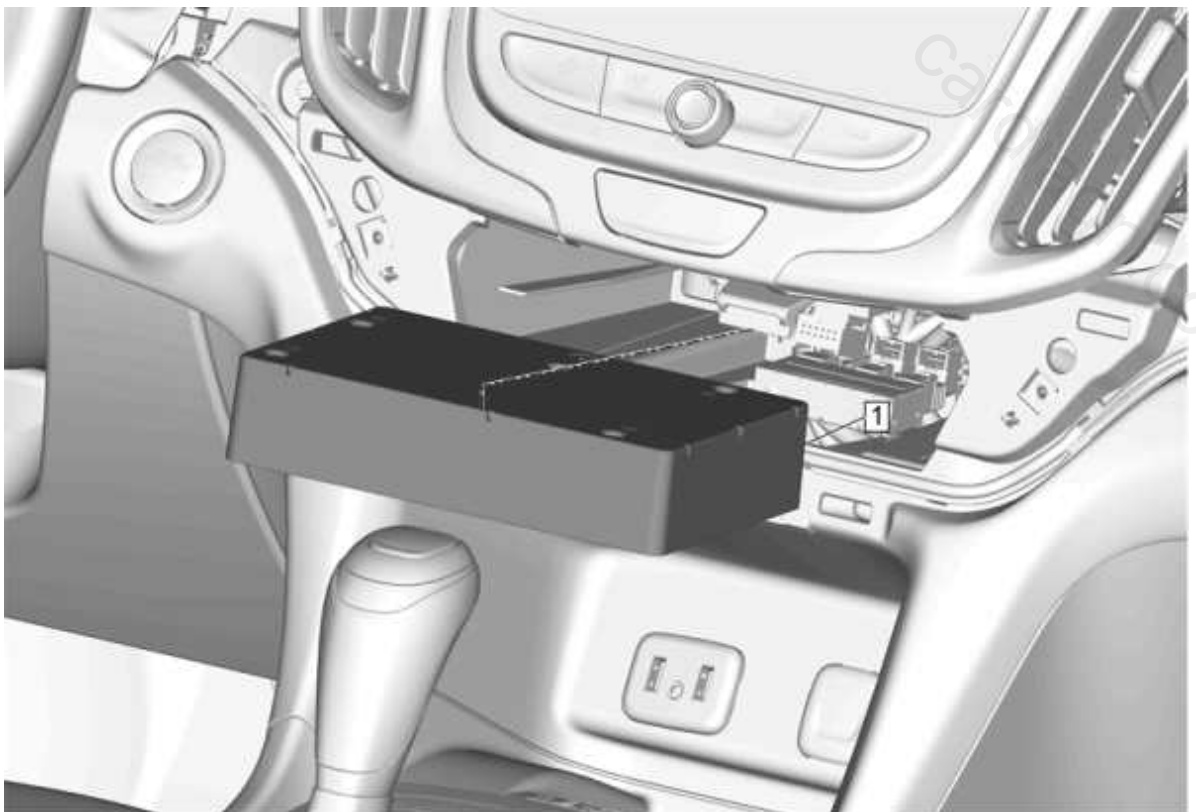


Fig. 249: Communication Interface Module
 Courtesy of GENERAL MOTORS COMPANY

19. Remove Communication Interface Module (1) **Communication Interface Module Replacement (Equinox)**



Fig. 250: Radio Control Assembly
 Courtesy of GENERAL MOTORS COMPANY

20. Remove Radio Control Assembly (1) [Radio Control Assembly Replacement \(Equinox\)](#)

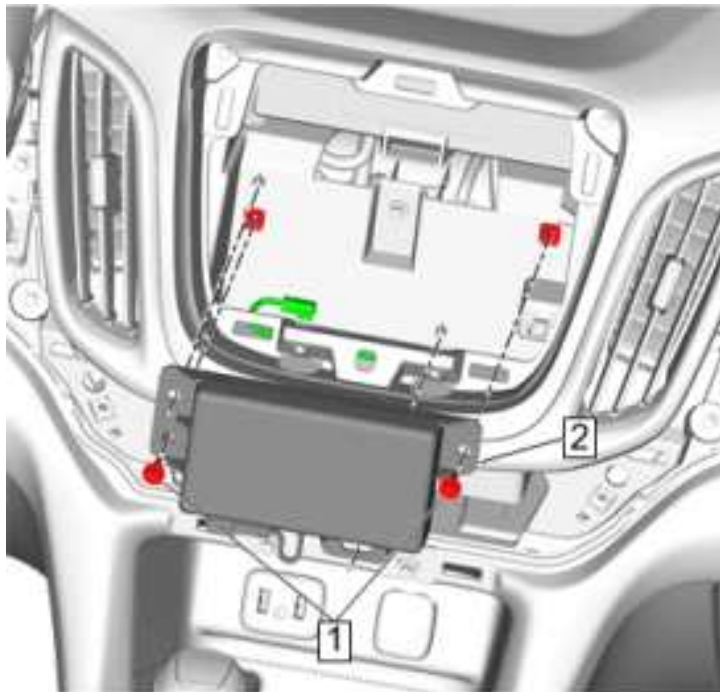


Fig. 251: Communication Interface Module Battery And Screws
 Courtesy of GENERAL MOTORS COMPANY

21. Remove Communication Interface Module Battery (2) [Communication Interface Module Battery Replacement](#)



Fig. 252: Heater And Air Conditioning Remote Control
 Courtesy of GENERAL MOTORS COMPANY

22. Remove Heater and Air Conditioning Remote Control (1) [Heater and Air Conditioning Remote Control Replacement \(Equinox\)](#)

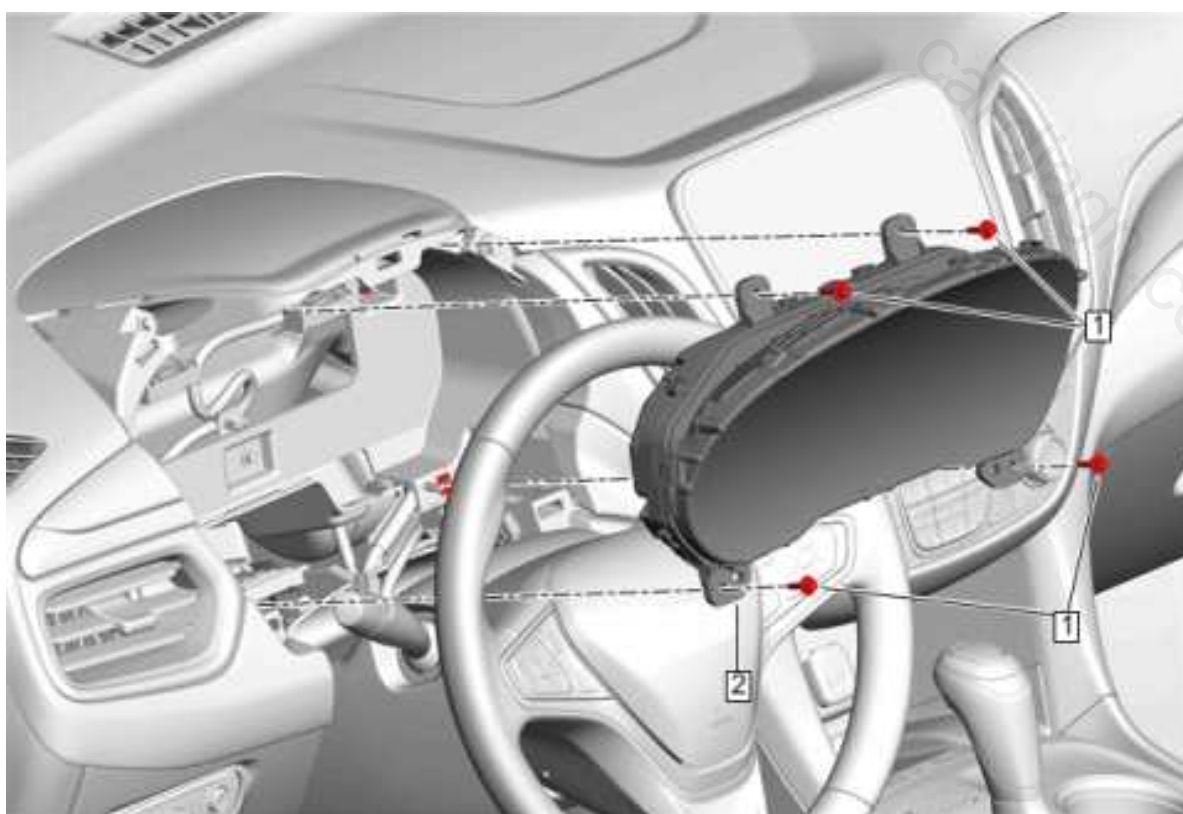


Fig. 253: Instrument Cluster And Screws
 Courtesy of GENERAL MOTORS COMPANY

23. Remove Instrument Cluster (2) [Instrument Cluster Replacement \(Equinox\)](#)

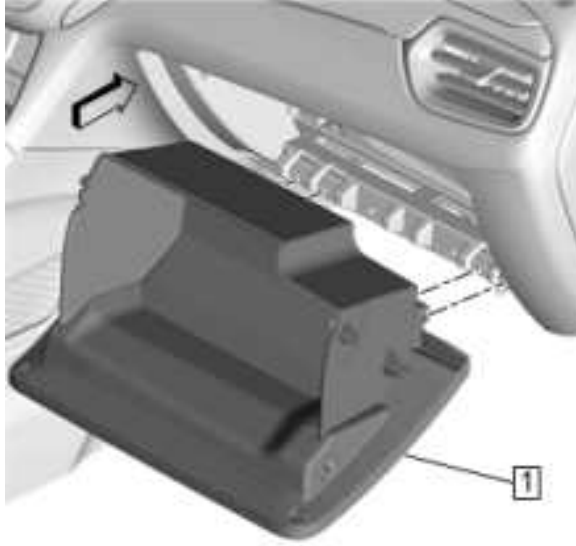


Fig. 254: Instrument Panel Compartment Door
Courtesy of GENERAL MOTORS COMPANY

24. Remove Instrument Panel Compartment Door (1) **Instrument Panel Compartment Door Replacement (Equinox)**

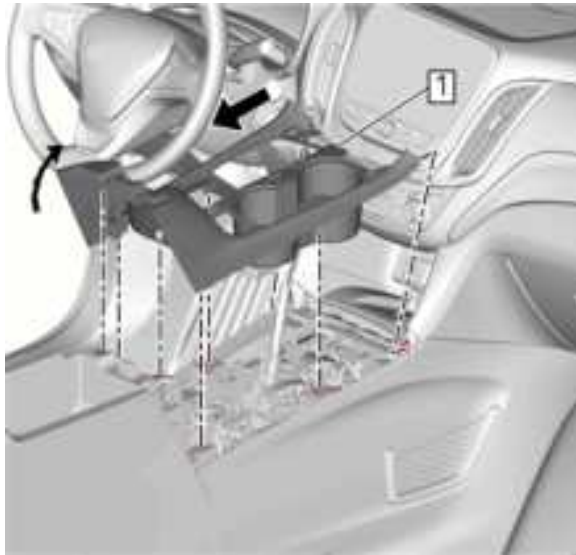


Fig. 255: Front Floor Console Applique
Courtesy of GENERAL MOTORS COMPANY

25. Remove Front Floor Console Applique (1) **Front Floor Console Applique Replacement (Equinox)**

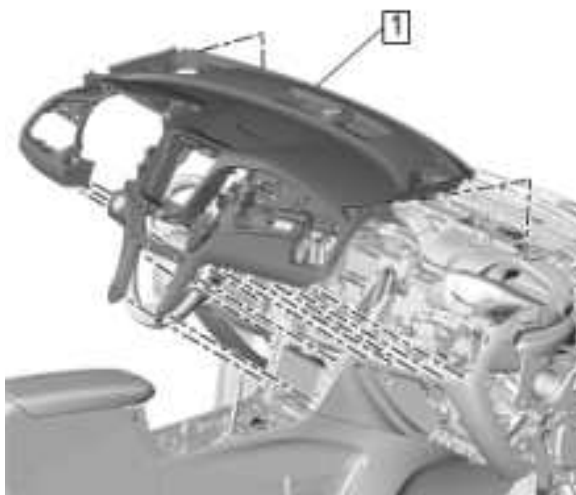


Fig. 256: Instrument Panel Upper Trim Panel
Courtesy of GENERAL MOTORS COMPANY

26. Remove Instrument Panel Upper Trim Panel (1) [Instrument Panel Upper Trim Panel Replacement \(Equinox\)](#).

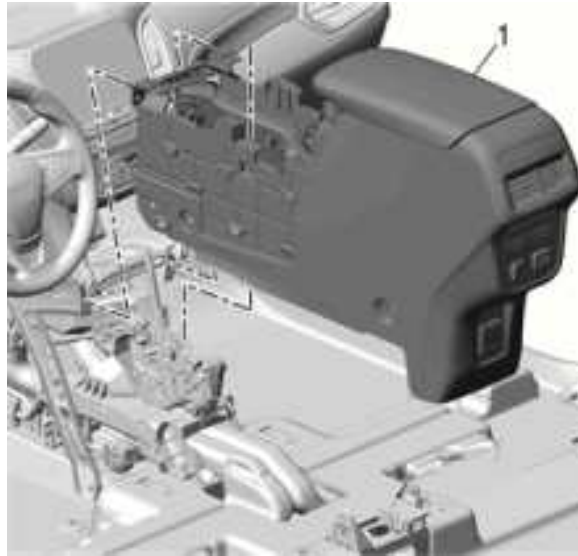


Fig. 257: Front Floor Console

Courtesy of GENERAL MOTORS COMPANY

27. Remove Front Floor Console (1) [Front Floor Console Replacement \(Equinox\)](#).

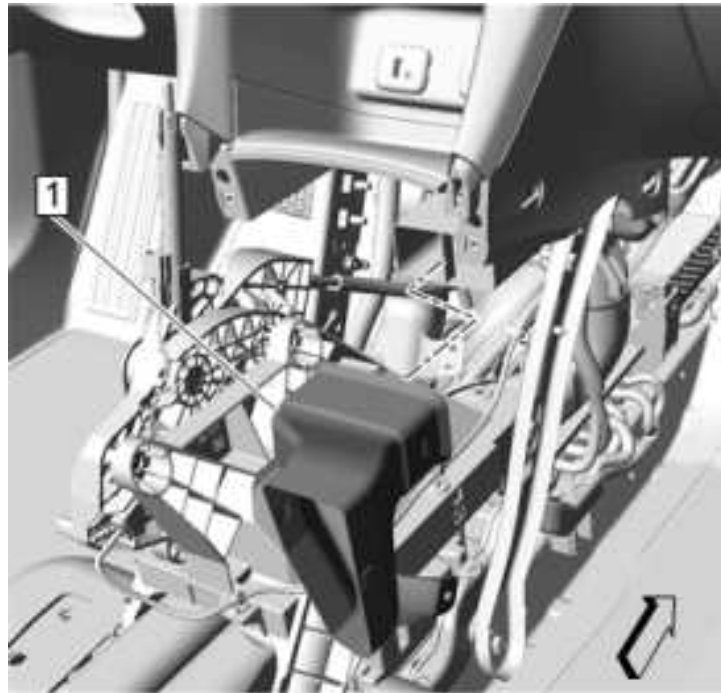


Fig. 258: Front Floor Console Rear Air Duct

Courtesy of GENERAL MOTORS COMPANY

28. Remove Front Floor Console Rear Air Duct (1) [Front Floor Console Rear Air Duct Replacement \(Equinox Front\)](#) [Front Floor Console Rear Air Duct Replacement \(Equinox Rear\)](#).

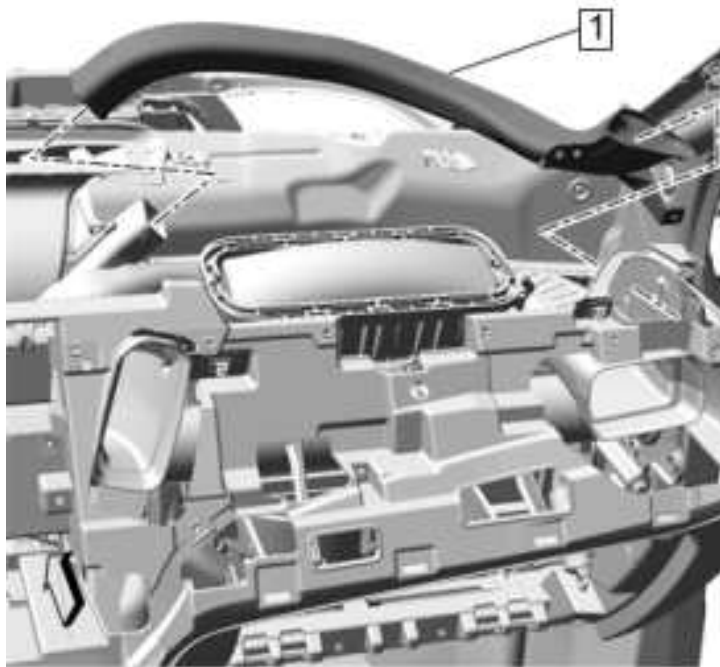


Fig. 259: Right Side Window Defogger Outlet Duct
 Courtesy of GENERAL MOTORS COMPANY

29. Remove Side Window Defogger Outlet Duct - Right Side (1) - [Side Window Defogger Outlet Duct Replacement - Right Side \(Equinox\)](#)



Fig. 260: Left Side Window Defogger Outlet Duct
 Courtesy of GENERAL MOTORS COMPANY

30. Remove Side Window Defogger Outlet Duct - Left Side (1) - [Side Window Defogger Outlet Duct Replacement - Left Side \(Equinox\)](#)

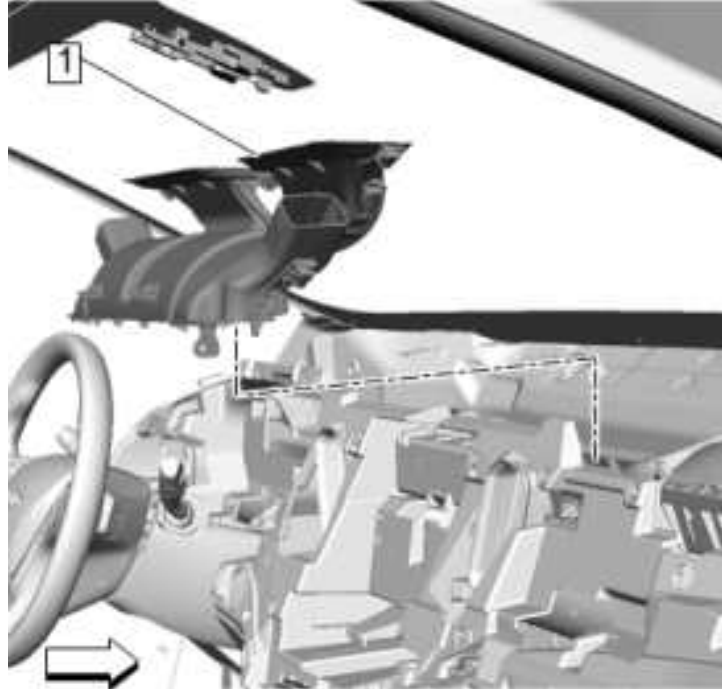


Fig. 261: Windshield Defroster Outlet Duct
 Courtesy of GENERAL MOTORS COMPANY

31. Remove Windshield Defroster Outlet Duct (1) - [Windshield Defroster Outlet Duct Replacement \(Equinox\)](#)

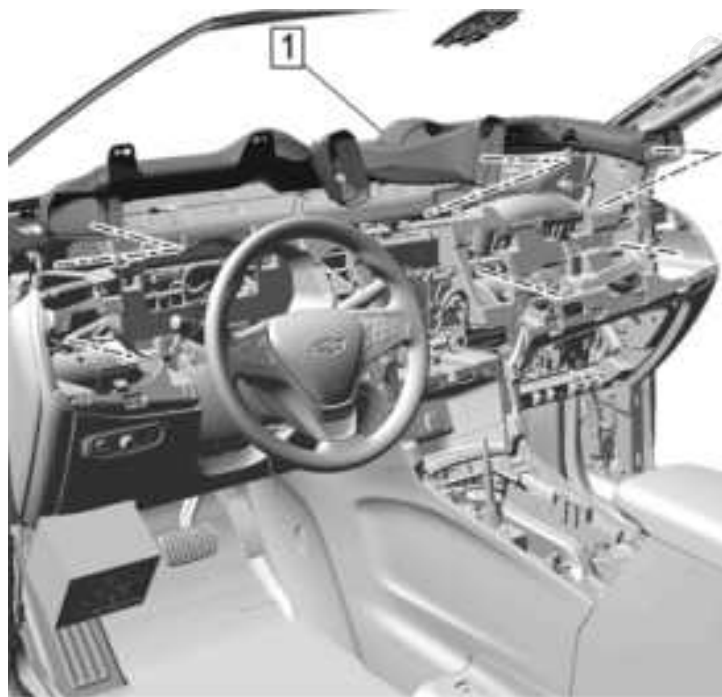


Fig. 262: Instrument Panel Center Air Outlet Duct
 Courtesy of GENERAL MOTORS COMPANY

32. Remove Instrument Panel Center Air Outlet Duct (1) - [Instrument Panel Center Air Outlet Duct Replacement \(Equinox\)](#)

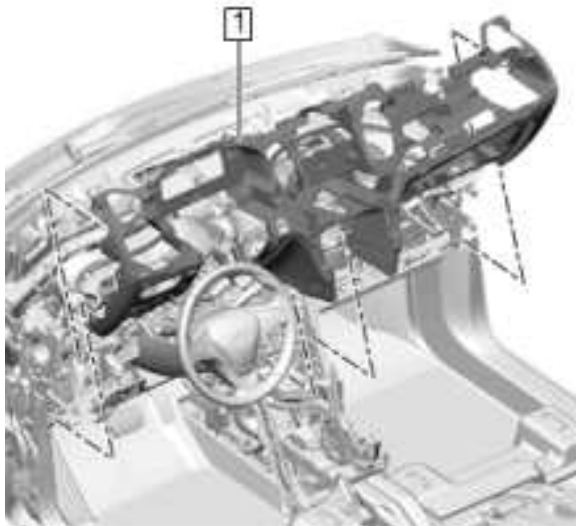


Fig. 263: Instrument Panel

Courtesy of GENERAL MOTORS COMPANY

33. Remove Instrument Panel (1) - [Instrument Panel Assembly Replacement \(Equinox\)](#).

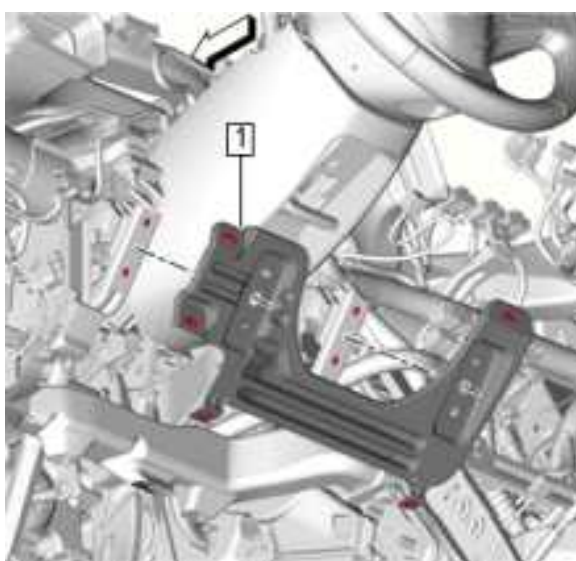


Fig. 264: Instrument Panel Knee Bolster Deflector

Courtesy of GENERAL MOTORS COMPANY

34. Remove Instrument Panel Knee Bolster Deflector (1) - [Instrument Panel Knee Bolster Deflector Replacement \(Equinox\)](#).

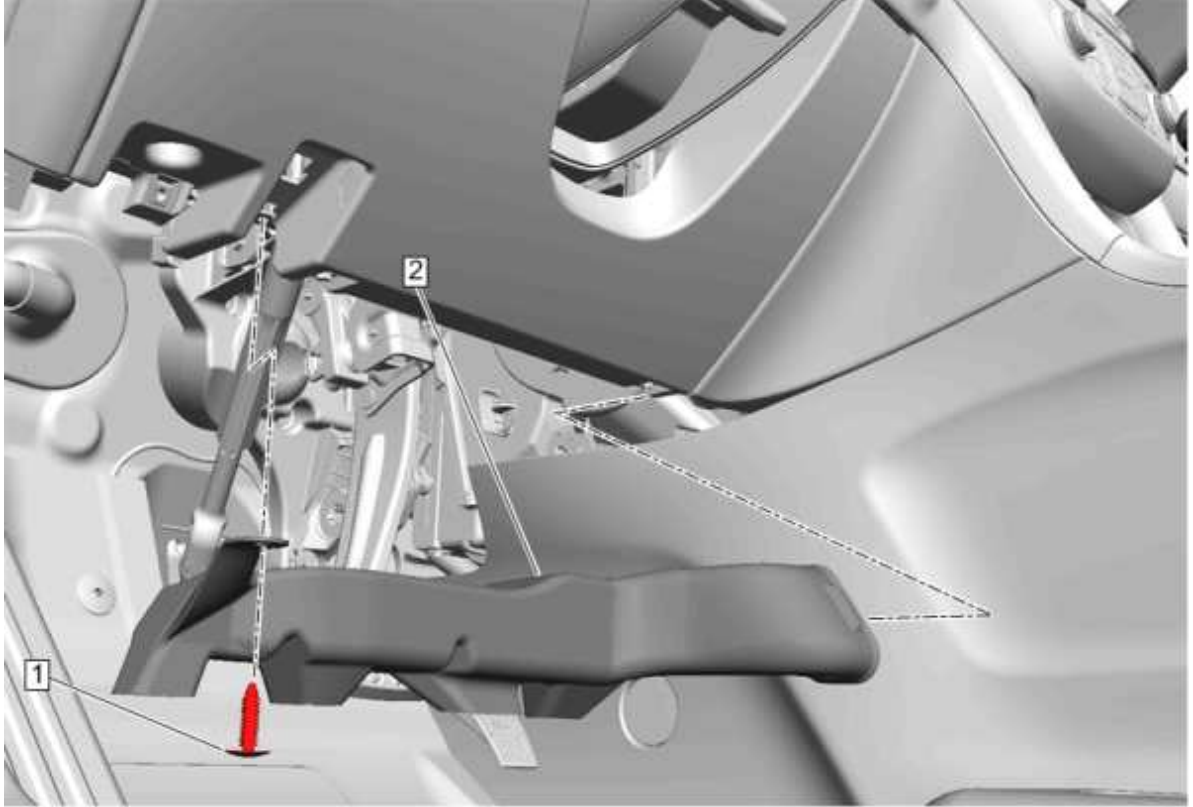


Fig. 265: Floor Front Air Outlet Duct
Courtesy of GENERAL MOTORS COMPANY

35. Remove Floor Front Air Outlet Duct - Left Side (2) - [Floor Front Air Outlet Duct Replacement - Left Side](#)

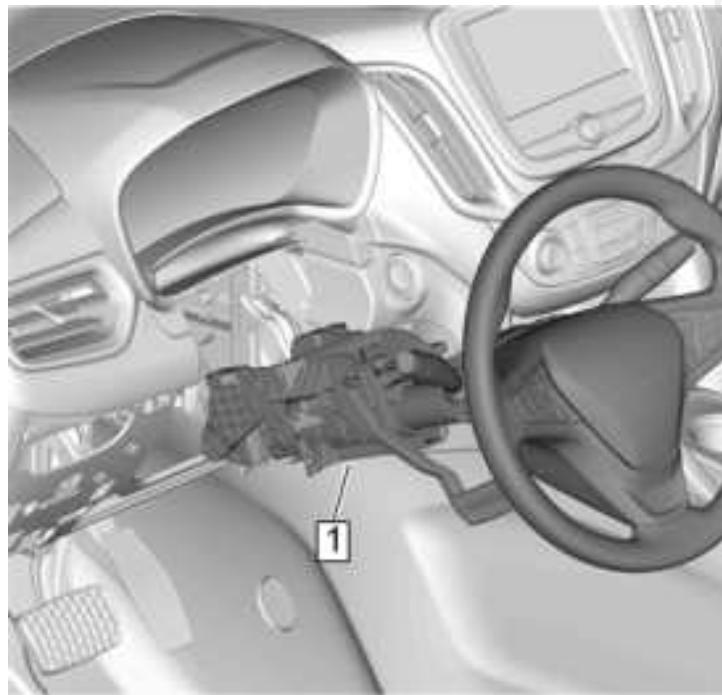


Fig. 266: Steering Column
Courtesy of GENERAL MOTORS COMPANY

36. Remove Steering Column (1) - [Steering Column Replacement \(Equinox\)](#)

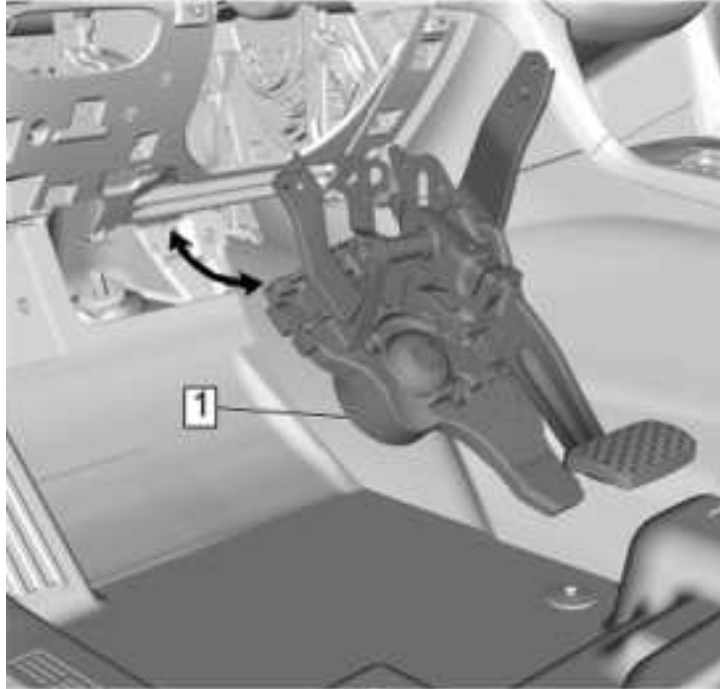


Fig. 267: Brake Pedal Assembly

Courtesy of GENERAL MOTORS COMPANY

37. Remove Brake and Accelerator Pedal Assembly (1) - [Brake Pedal Assembly Replacement](#)

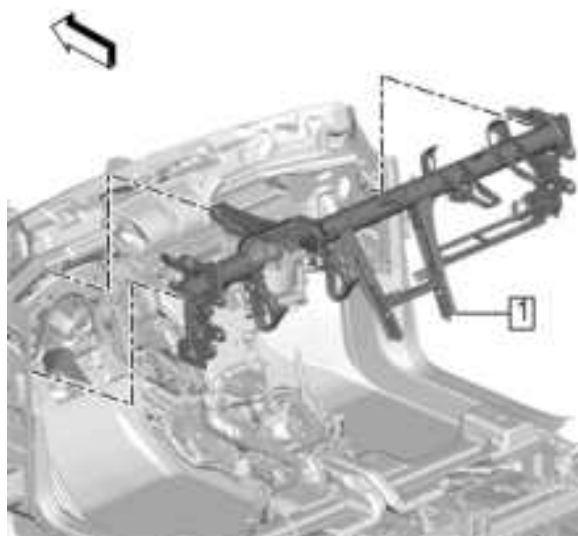


Fig. 268: Instrument Panel Tie Bar

Courtesy of GENERAL MOTORS COMPANY

38. Disconnect the instrument panel wiring connectors.
 39. Remove Instrument Panel Tie Bar (1) - [Instrument Panel Tie Bar Replacement \(Equinox\)](#)

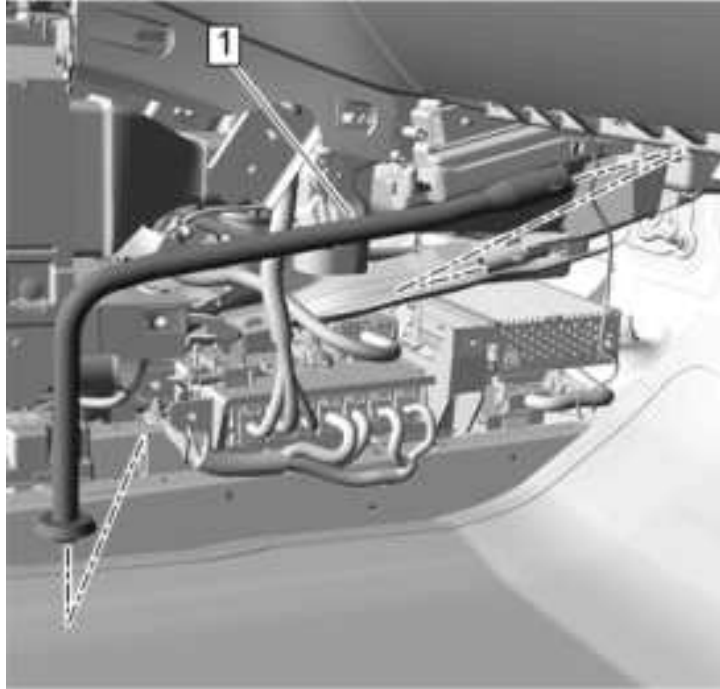


Fig. 269: Air Conditioning Evaporator and Blower Module Drain Hose
Courtesy of GENERAL MOTORS COMPANY

CAUTION: Refer to [HVAC Module Drain Tube Caution](#) .

40. Prior to removing the air conditioning evaporator and blower module drain tube/hose, use clean and absorbent shop clothes/towels to cover the electrical components protecting the electrical components from water damage.
41. Remove Air Conditioning Evaporator and Blower Module Drain Hose (1) @Heater and Air Conditioning Evaporator and Blower Module
42. Support the heater and air conditioning evaporator and blower (HVAC) module assembly.

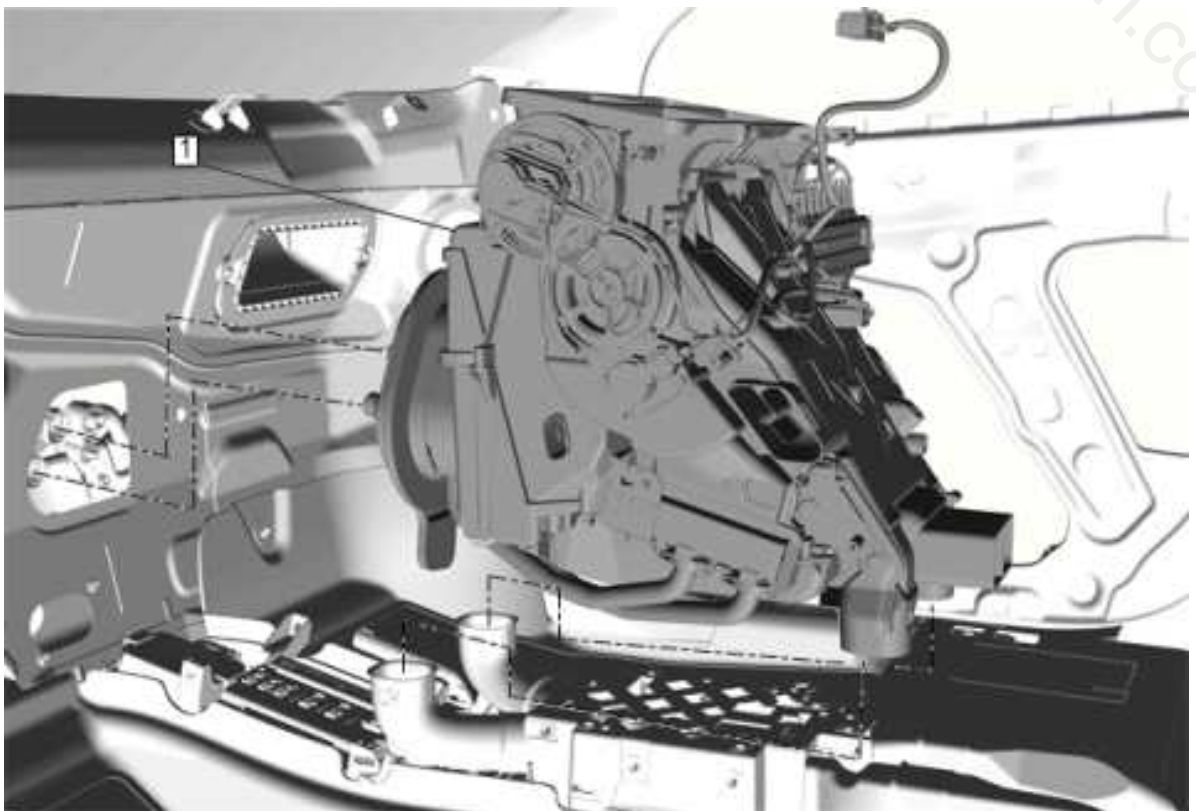


Fig. 270: Heater and Air Conditioning Evaporator and Blower Module
Courtesy of GENERAL MOTORS COMPANY

43. Remove Heater and Air Conditioning Evaporator and Blower Module (1) - from the vehicle.
44. Transfer all necessary components.

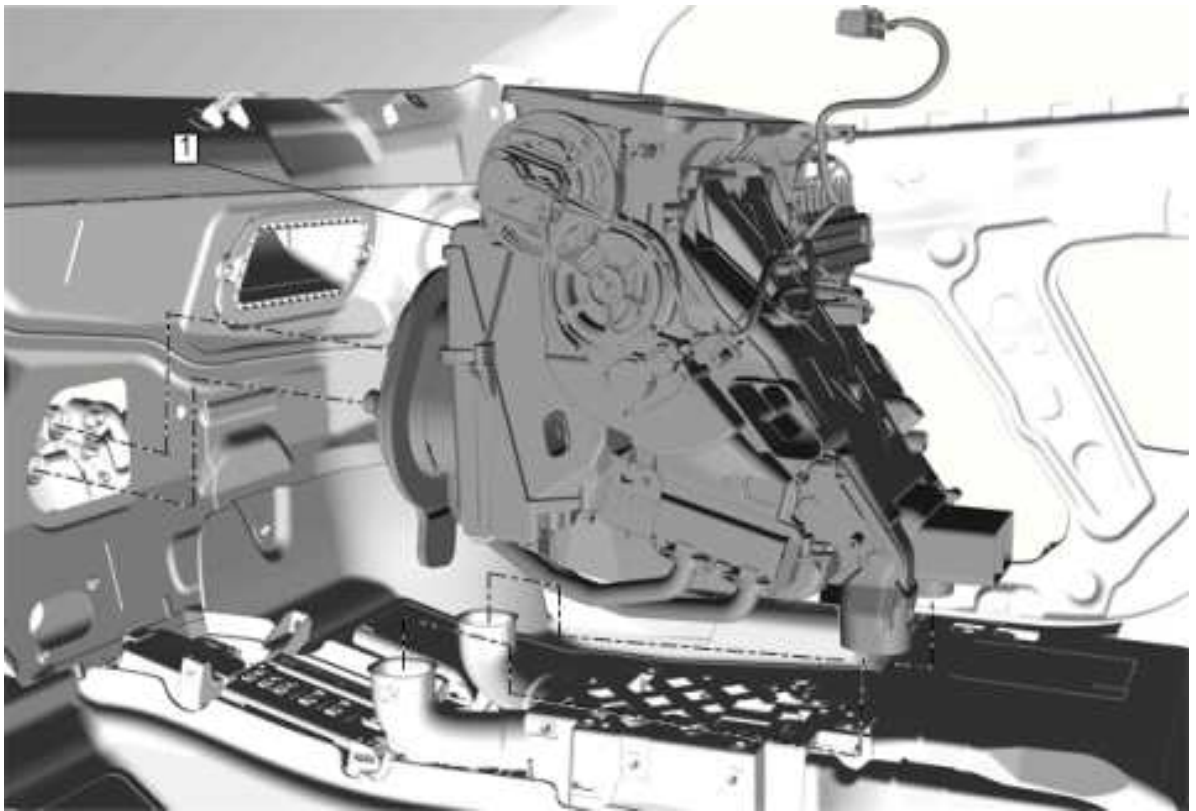


Fig. 271: Heater and Air Conditioning Evaporator and Blower Module
Courtesy of GENERAL MOTORS COMPANY

1. Install Heater and Air Conditioning Evaporator and Blower Module (1) - onto the vehicle.
2. Temporarily support HVAC module assembly.

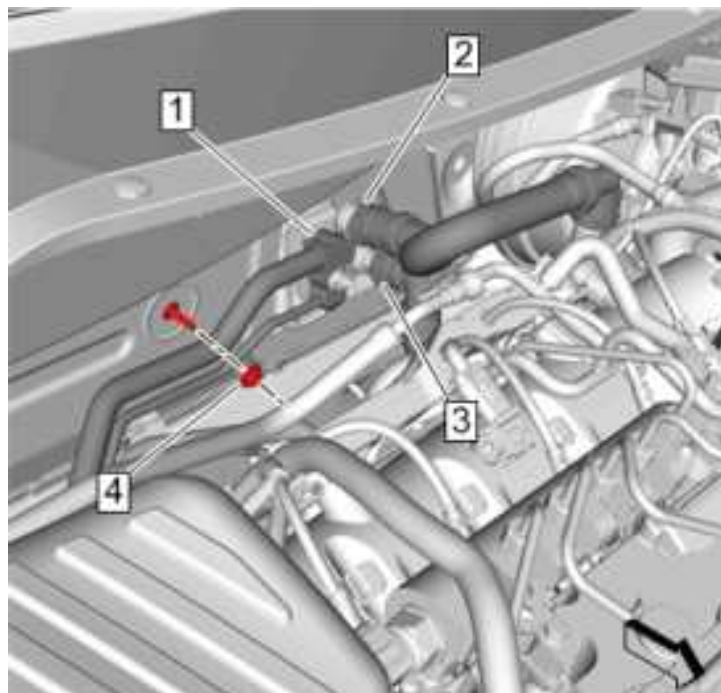


Fig. 272: Air Conditioning Evaporator and Blower Module Nut
Courtesy of GENERAL MOTORS COMPANY

CAUTION: Refer to [Fastener Caution](#) .

3. Heater and Air Conditioning Evaporator and Blower Module Nut (4) @Cowl Panel and tighten 9.0 N.m (80 lb in)

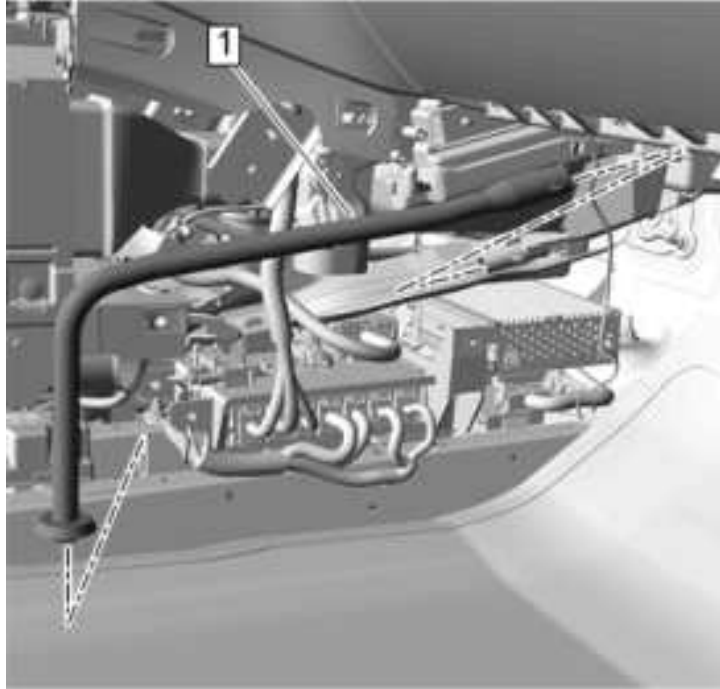


Fig. 273: Air Conditioning Evaporator and Blower Module Drain Hose
 Courtesy of GENERAL MOTORS COMPANY

CAUTION: Refer to [HVAC Module Drain Tube Caution](#) .

4. Install Air Conditioning Evaporator and Blower Module Drain Hose (1) @Heater and Air Conditioning Evaporator and Blower Module
5. Remove the absorbent shop clothes/towels covering the electrical components.

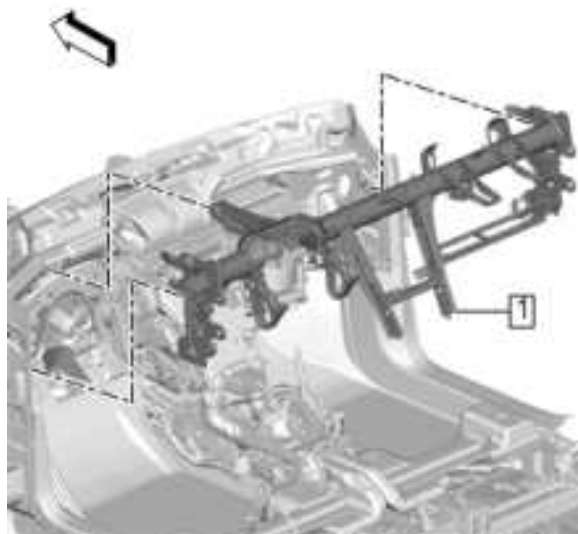


Fig. 274: Instrument Panel Tie Bar
 Courtesy of GENERAL MOTORS COMPANY

6. Install Instrument Panel Tie Bar (1) - [Instrument Panel Tie Bar Replacement \(Equinox\)](#).
7. Connect the instrument panel wiring connectors.

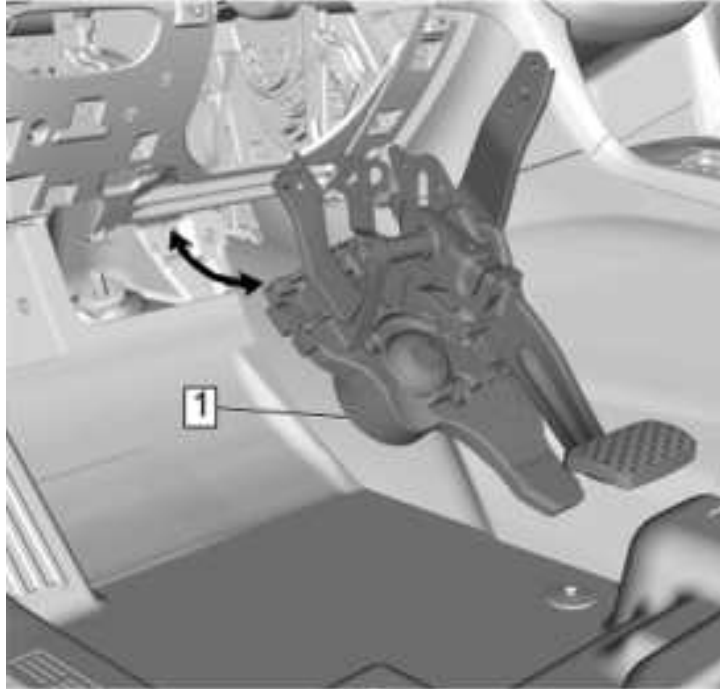


Fig. 275: Brake Pedal Assembly

Courtesy of GENERAL MOTORS COMPANY

8. Install Brake and Accelerator Pedal Assembly (1) - [Brake Pedal Assembly Replacement](#)

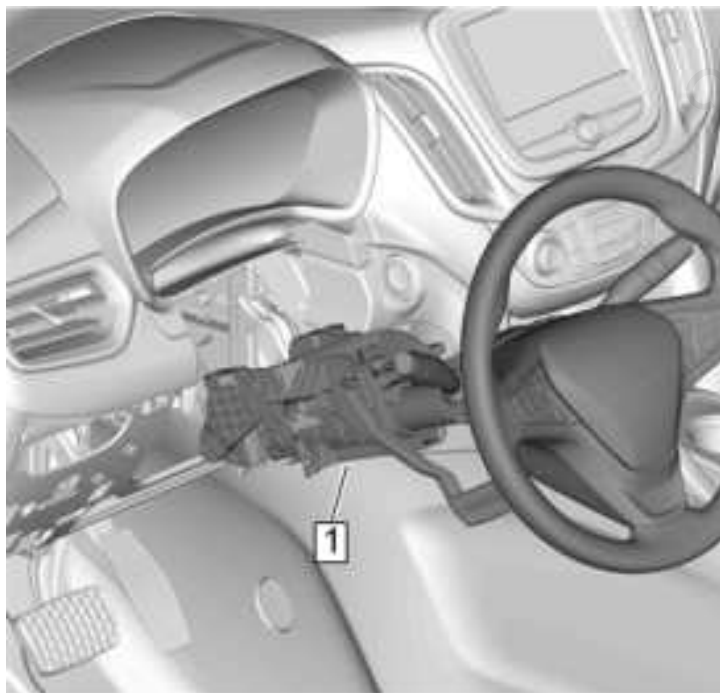


Fig. 276: Steering Column

Courtesy of GENERAL MOTORS COMPANY

9. Install Steering Column (1) - [Steering Column Replacement \(Equinox\)](#)

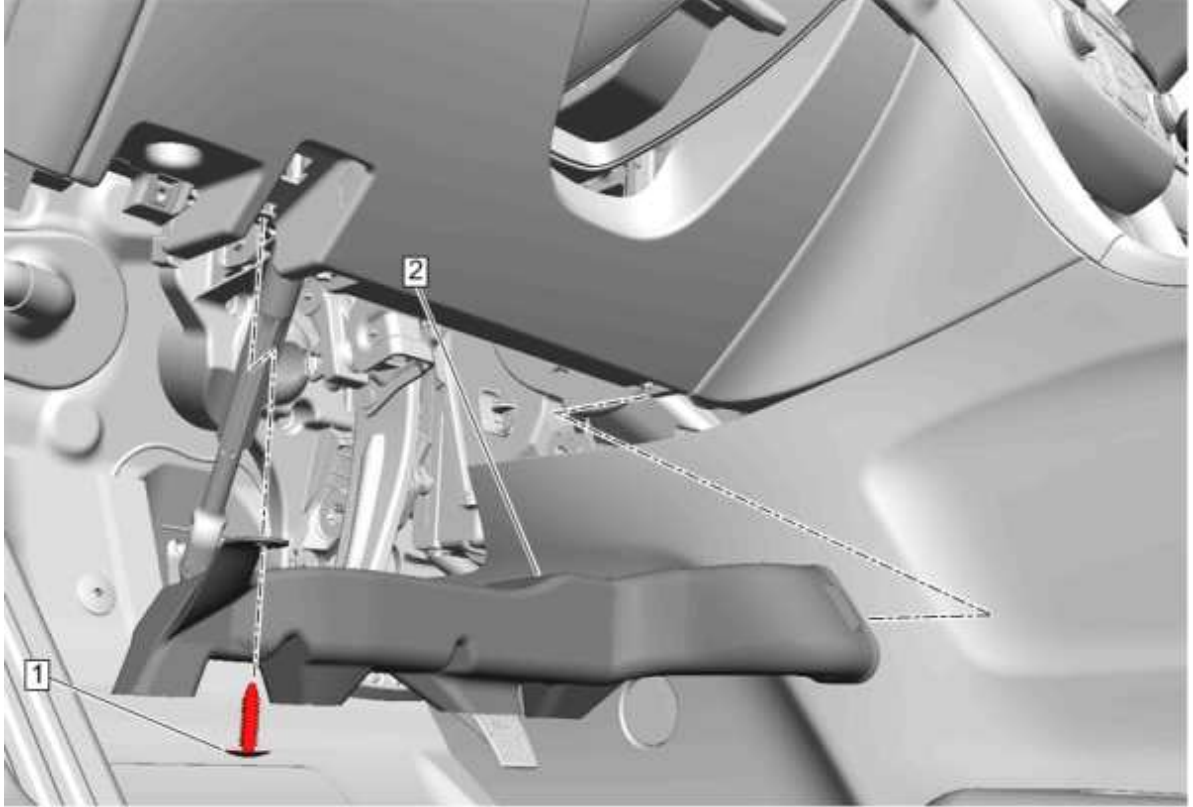


Fig. 277: Floor Front Air Outlet Duct
Courtesy of GENERAL MOTORS COMPANY

10. Install Floor Front Air Outlet Duct - Left Side (2) - **Floor Front Air Outlet Duct Replacement - Left Side**

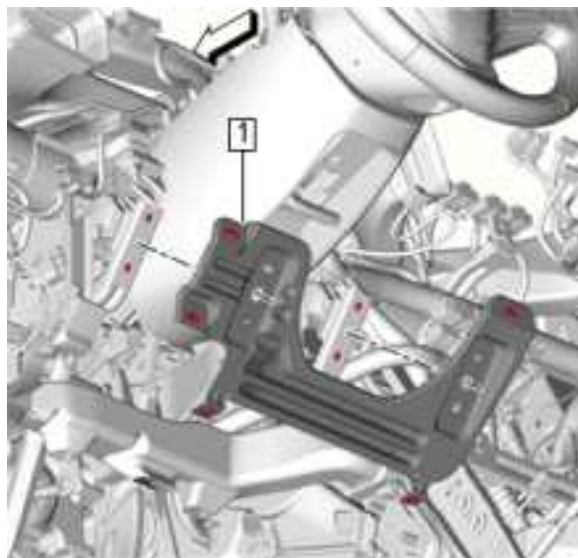


Fig. 278: Instrument Panel Knee Bolster Deflector
Courtesy of GENERAL MOTORS COMPANY

11. Install Instrument Panel Knee Bolster Deflector (1) - **Instrument Panel Knee Bolster Deflector Replacement (Equinox)**

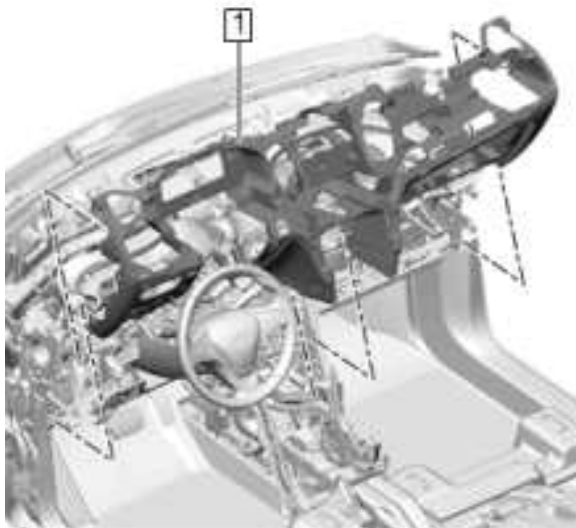


Fig. 279: Instrument Panel

Courtesy of GENERAL MOTORS COMPANY

12. Install Instrument Panel (1) [Instrument Panel Assembly Replacement \(Equinox\)](#)

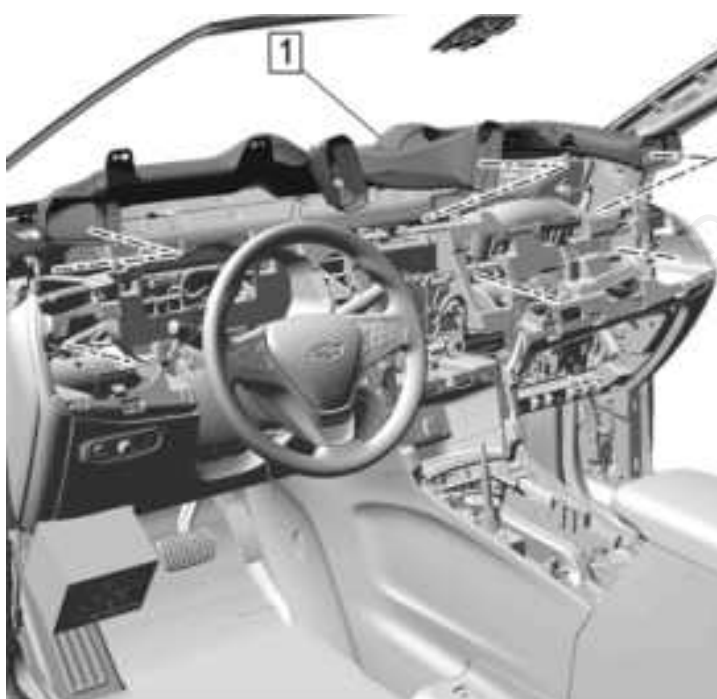


Fig. 280: Instrument Panel Center Air Outlet Duct

Courtesy of GENERAL MOTORS COMPANY

13. Install Instrument Panel Center Air Outlet Duct (1) [Instrument Panel Center Air Outlet Duct Replacement \(Eqionox\)](#)

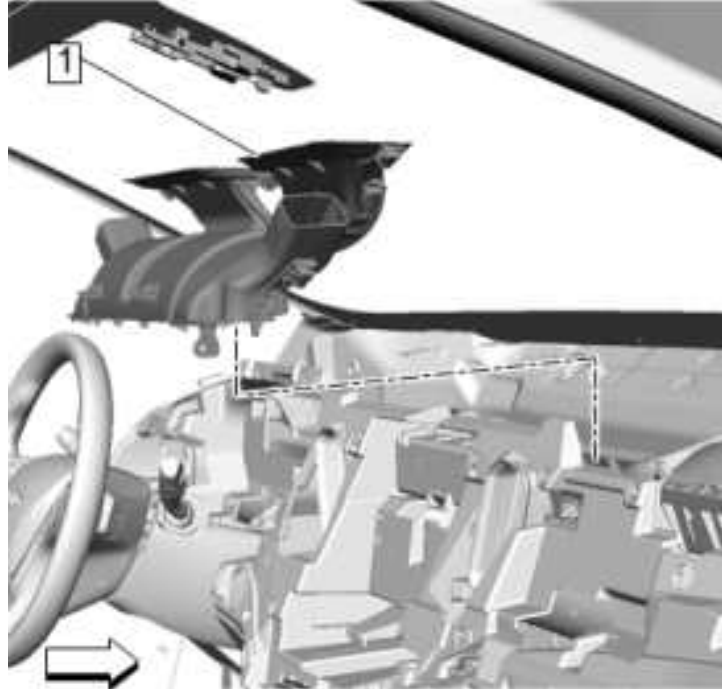


Fig. 281: Windshield Defroster Outlet Duct
 Courtesy of GENERAL MOTORS COMPANY

14. Install Windshield Defroster Outlet Duct (1) [Windshield Defroster Outlet Duct Replacement \(Equinox\)](#)



Fig. 282: Left Side Window Defogger Outlet Duct
 Courtesy of GENERAL MOTORS COMPANY

15. Install Side Window Defogger Outlet Duct - Left Side (1) [Side Window Defogger Outlet Duct Replacement - Left Side \(Equinox\)](#)

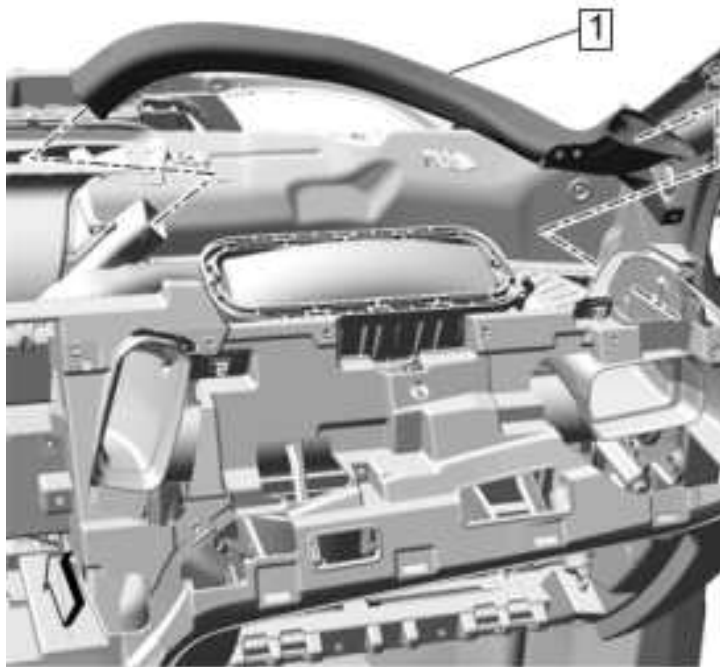


Fig. 283: Right Side Window Defogger Outlet Duct
 Courtesy of GENERAL MOTORS COMPANY

16. Install Side Window Defogger Outlet Duct - Right Side (1)[Side Window Defogger Outlet Duct Replacement - Right Side \(Equinox\)](#)

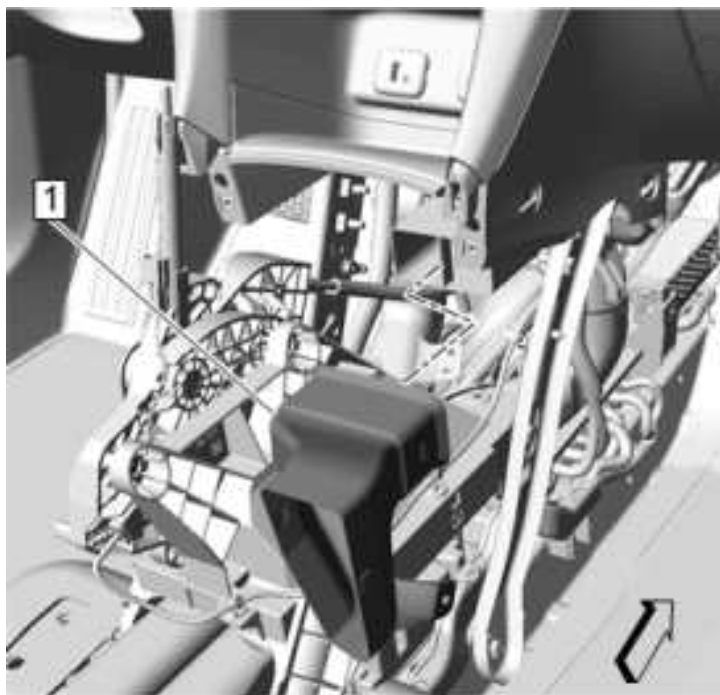


Fig. 284: Front Floor Console Rear Air Duct
 Courtesy of GENERAL MOTORS COMPANY

17. Install Front Floor Console Rear Air Duct (1)[Front Floor Console Rear Air Duct Replacement \(Equinox Front\)](#)[Front Floor Console Rear Air Duct Replacement \(Equinox Rear\)](#)

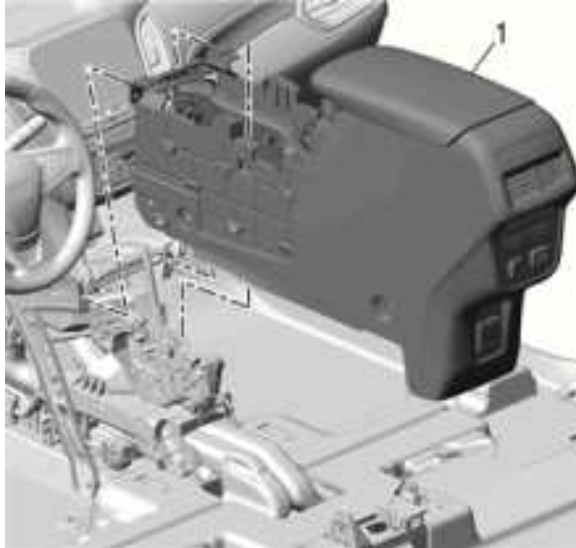


Fig. 285: Front Floor Console

Courtesy of GENERAL MOTORS COMPANY

18. Install Front Floor Console (1) [Front Floor Console Replacement \(Equinox\)](#)

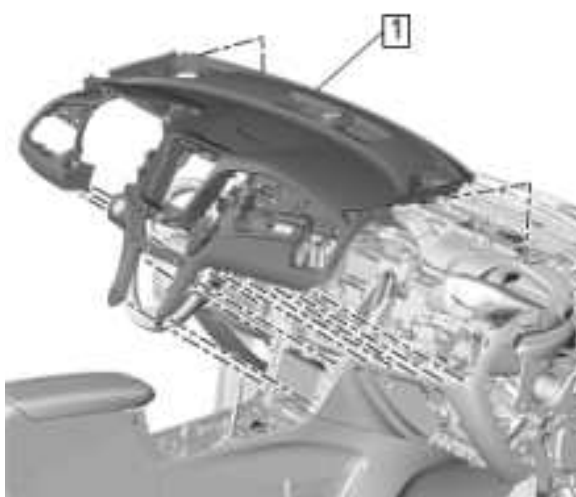


Fig. 286: Instrument Panel Upper Trim Panel

Courtesy of GENERAL MOTORS COMPANY

19. Install Instrument Panel Upper Trim Panel (1) [Instrument Panel Upper Trim Panel Replacement \(Equinox\)](#)

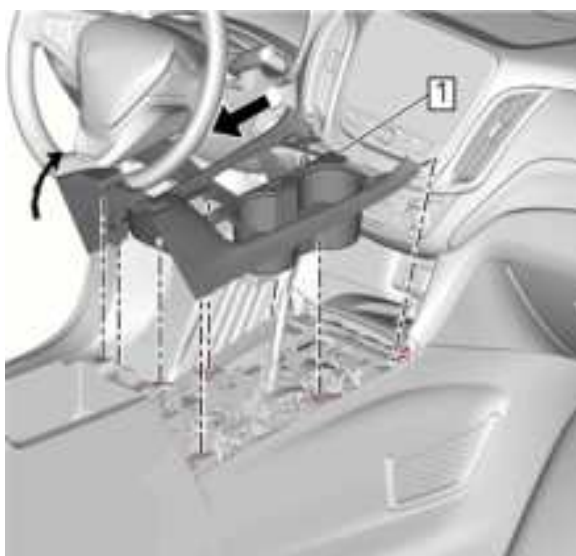


Fig. 287: Front Floor Console Applique

Courtesy of GENERAL MOTORS COMPANY

20. Install Front Floor Console Applique (1) [Front Floor Console Applique Replacement \(Equinox\)](#)

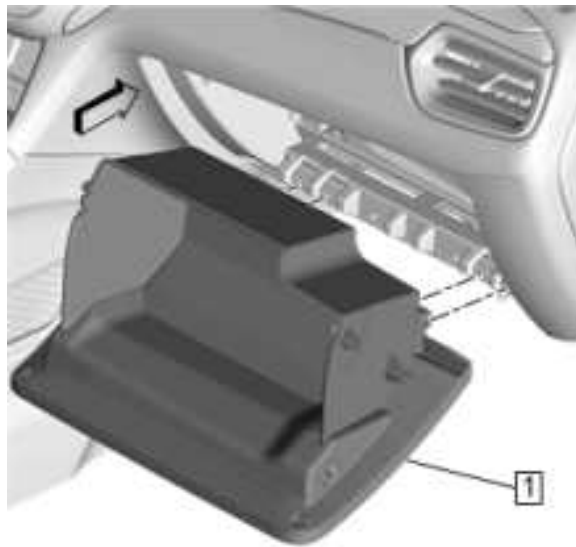


Fig. 288: Instrument Panel Compartment Door
Courtesy of GENERAL MOTORS COMPANY

21. Install Instrument Panel Compartment Door (1) [Instrument Panel Compartment Door Replacement \(Equinox\)](#)

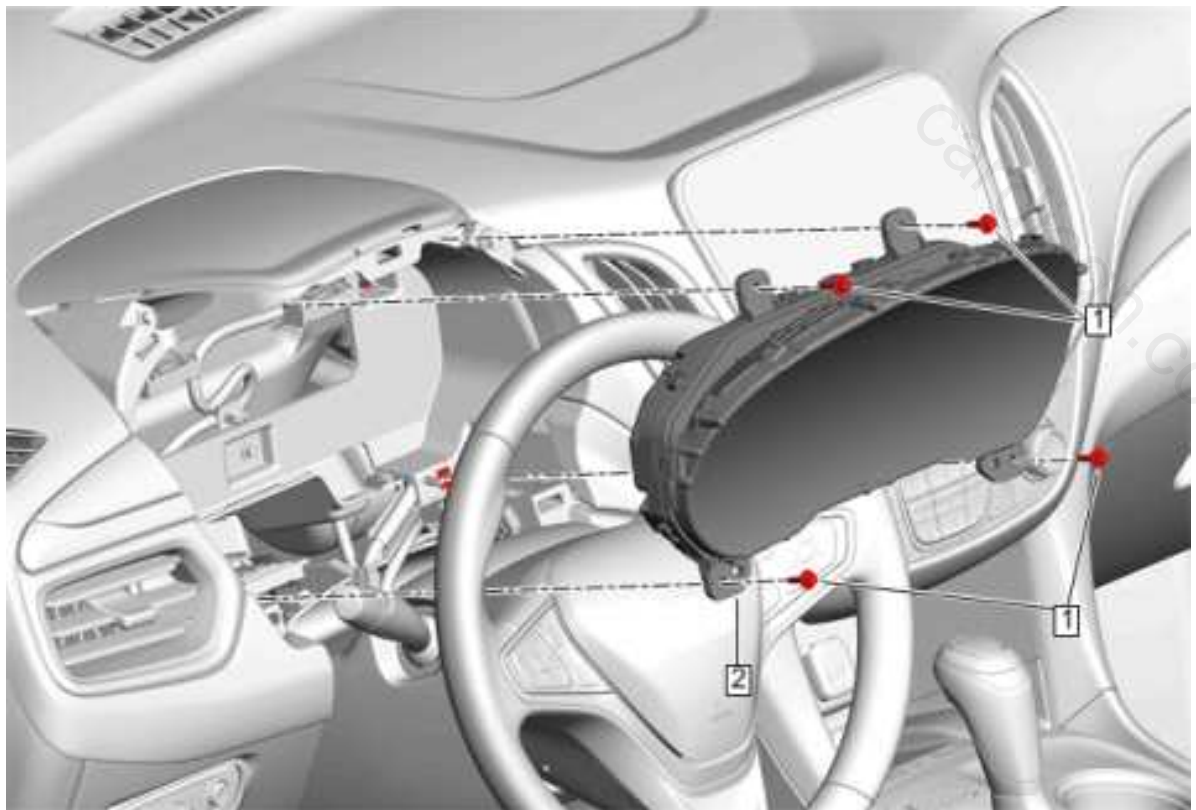


Fig. 289: Instrument Cluster And Screws
Courtesy of GENERAL MOTORS COMPANY

22. Install Instrument Cluster (2) [Instrument Cluster Replacement \(Equinox\)](#)

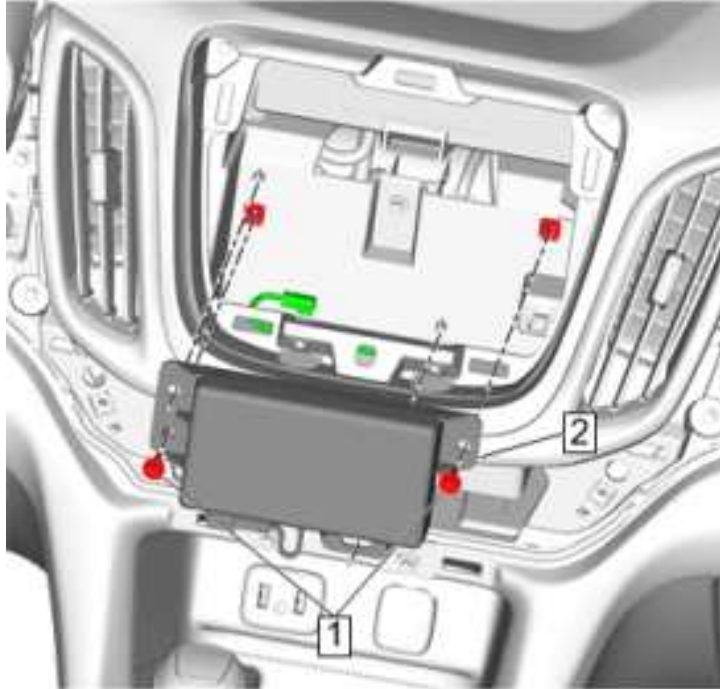


Fig. 290: Communication Interface Module Battery And Screws
 Courtesy of GENERAL MOTORS COMPANY

23. Install Communication Interface Module Battery (2) **Communication Interface Module Battery Replacement**



Fig. 291: Heater And Air Conditioning Remote Control
 Courtesy of GENERAL MOTORS COMPANY

24. Install Heater and Air Conditioning Remote Control (1) **Heater and Air Conditioning Remote Control Replacement (Equinox)**



Fig. 292: Radio Control Assembly
Courtesy of GENERAL MOTORS COMPANY

25. Install Radio Control Assembly (1) [Radio Control Assembly Replacement \(Equinox\)](#).

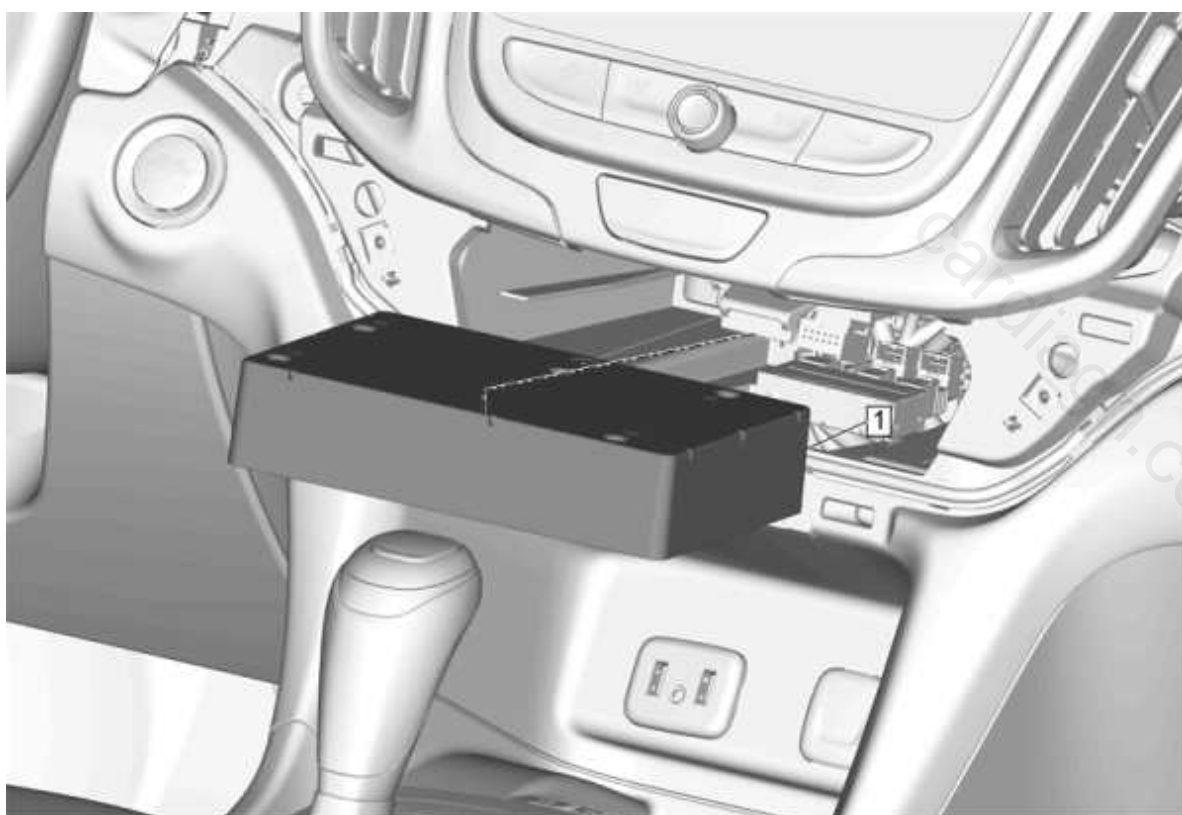


Fig. 293: Communication Interface Module
Courtesy of GENERAL MOTORS COMPANY

26. Install Communication Interface Module (1) [Communication Interface Module Replacement \(Equinox\)](#).

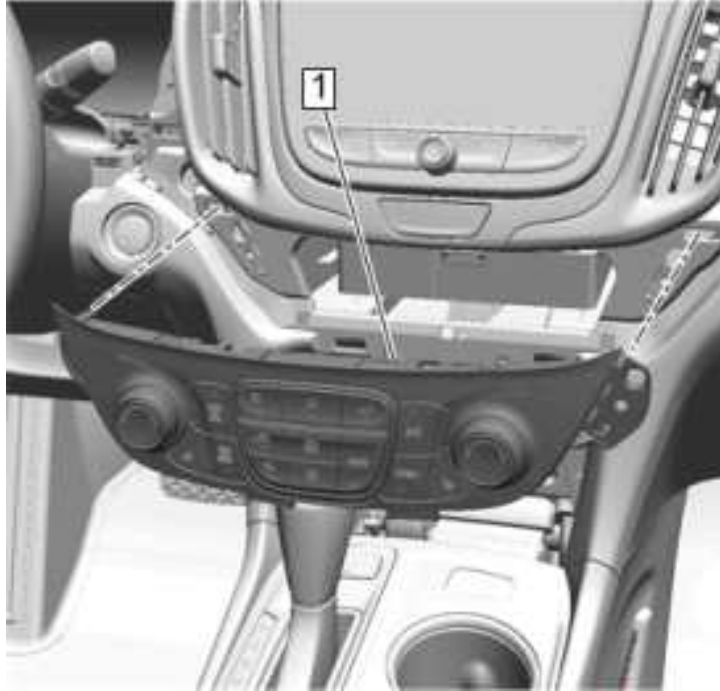


Fig. 294: Heater and Air Conditioning User Interface Control
 Courtesy of GENERAL MOTORS COMPANY

27. Install Heater and Air Conditioning User Interface Control (1)[Heater and Air Conditioning User Interface Control Replacement \(Equinox\)](#)

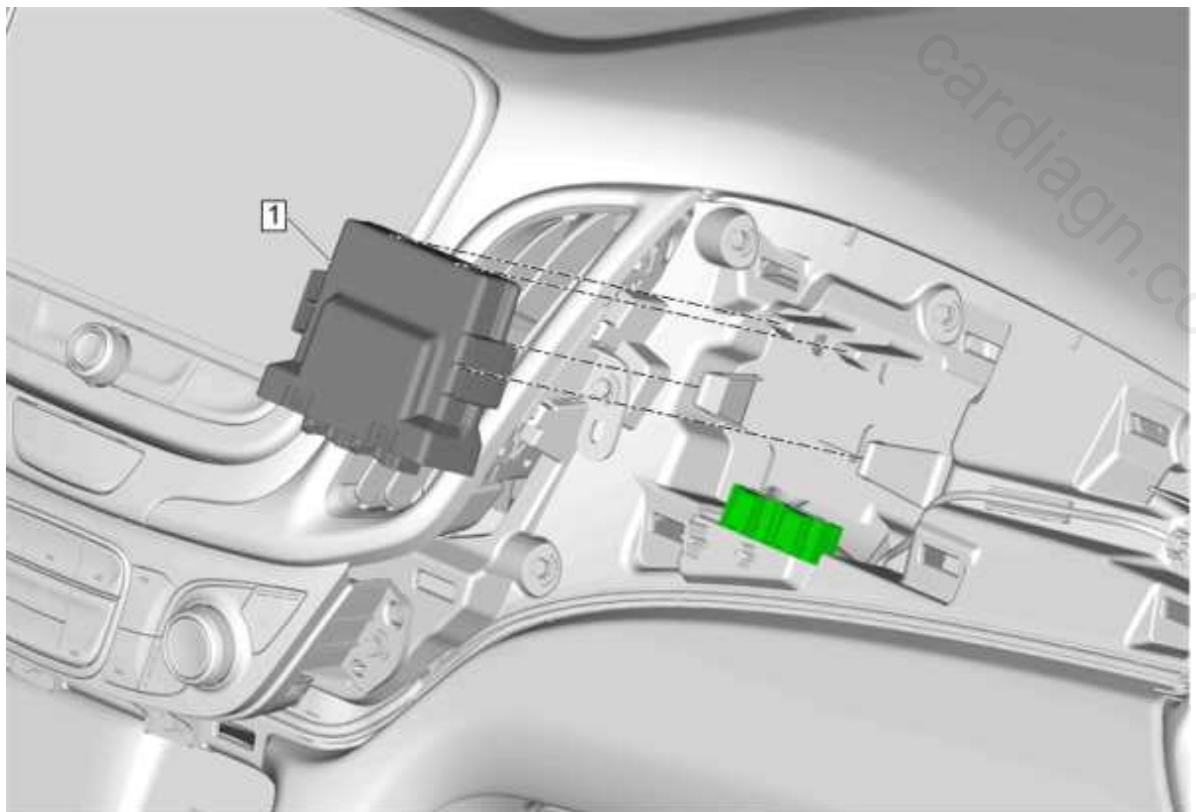


Fig. 295: Serial Data Gateway Module
 Courtesy of GENERAL MOTORS COMPANY

28. Install Serial Data Gateway Module (1)[Serial Data Gateway Module Replacement \(Equinox\)](#)

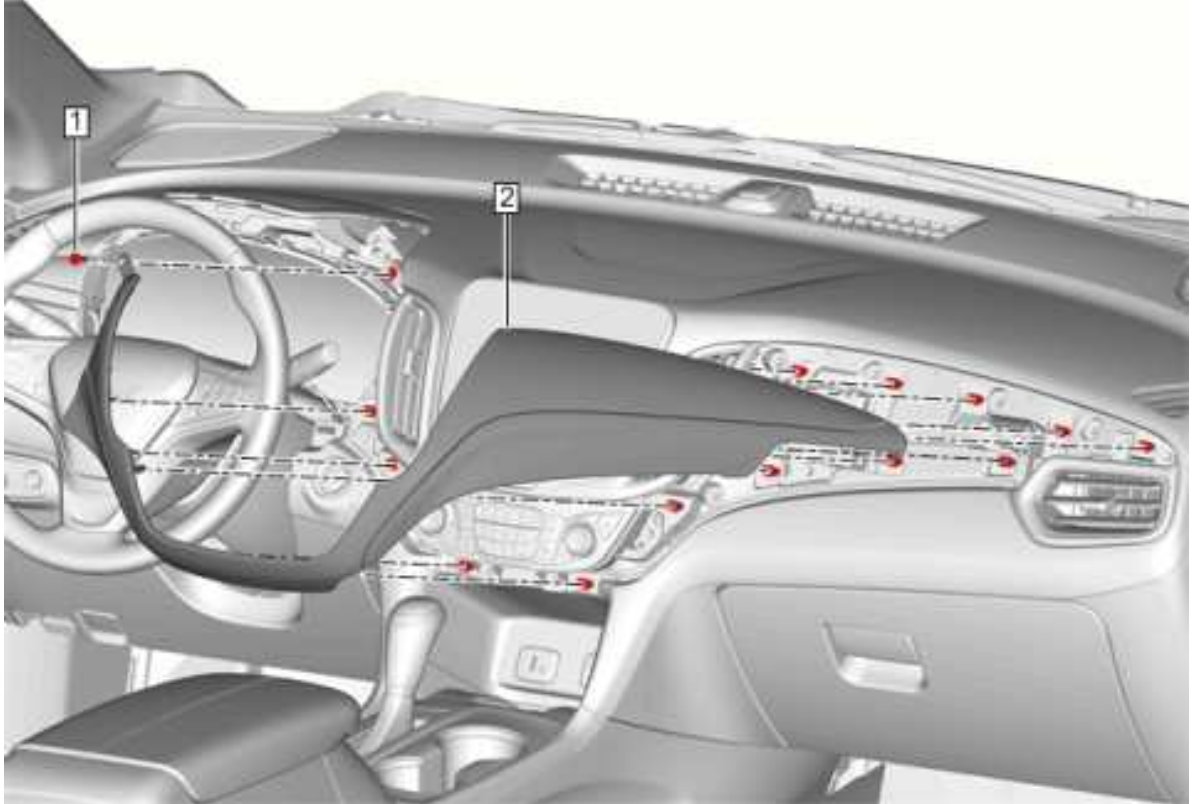


Fig. 296: Right Side Instrument Panel Trim Pad
 Courtesy of GENERAL MOTORS COMPANY

29. Install Instrument Panel Trim Pad - Right Side (2) [Instrument Panel Trim Pad Replacement - Right Side \(Equinox\)](#)



Fig. 297: Instrument Panel Knee Bolster
 Courtesy of GENERAL MOTORS COMPANY

30. Install Instrument Panel Knee Bolster (1) [Instrument Panel Knee Bolster Replacement \(Equinox\)](#)

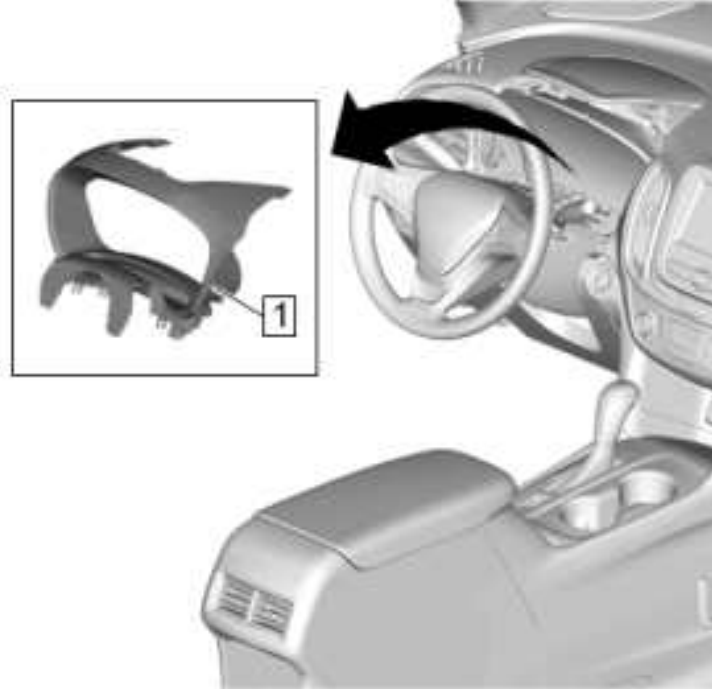


Fig. 298: Instrument Panel Cluster Trim Plate
 Courtesy of GENERAL MOTORS COMPANY

31. Install Instrument Panel Cluster Trim Plate (1) [Instrument Panel Cluster Trim Plate Replacement \(Equinox\)](#)



Fig. 299: Left And Right Instrument Panel Outer Trim Cover
 Courtesy of GENERAL MOTORS COMPANY

32. Install the left and right instrument panel outer trim cover (1). [Instrument Panel Outer Trim Cover Replacement \(Equinox\)](#)

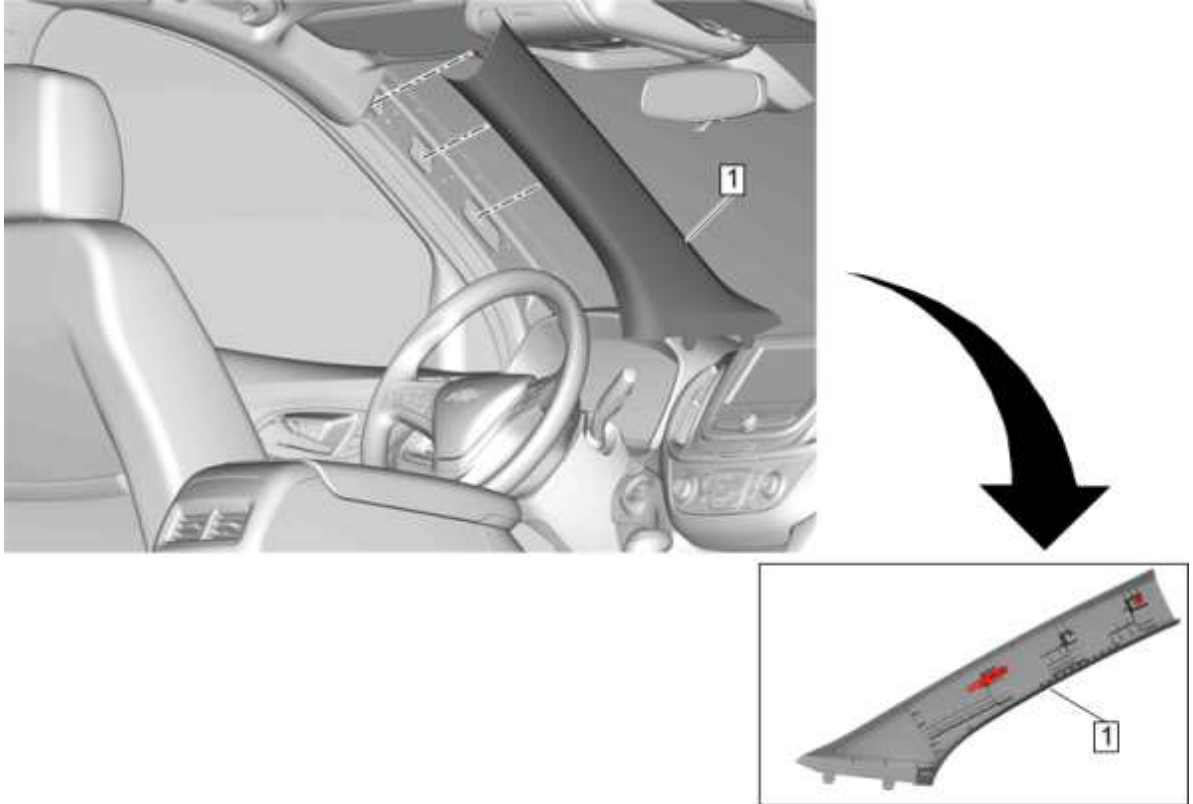


Fig. 300: Windshield Garnish Molding Replacement (Equinox)
Courtesy of GENERAL MOTORS COMPANY

33. Install the left and right side windshield garnish molding (1) **Windshield Garnish Molding Replacement (Equinox)**
34. Install Drivers Seat and Passengers Seat - **Driver or Passenger Seat Removal and Installation**

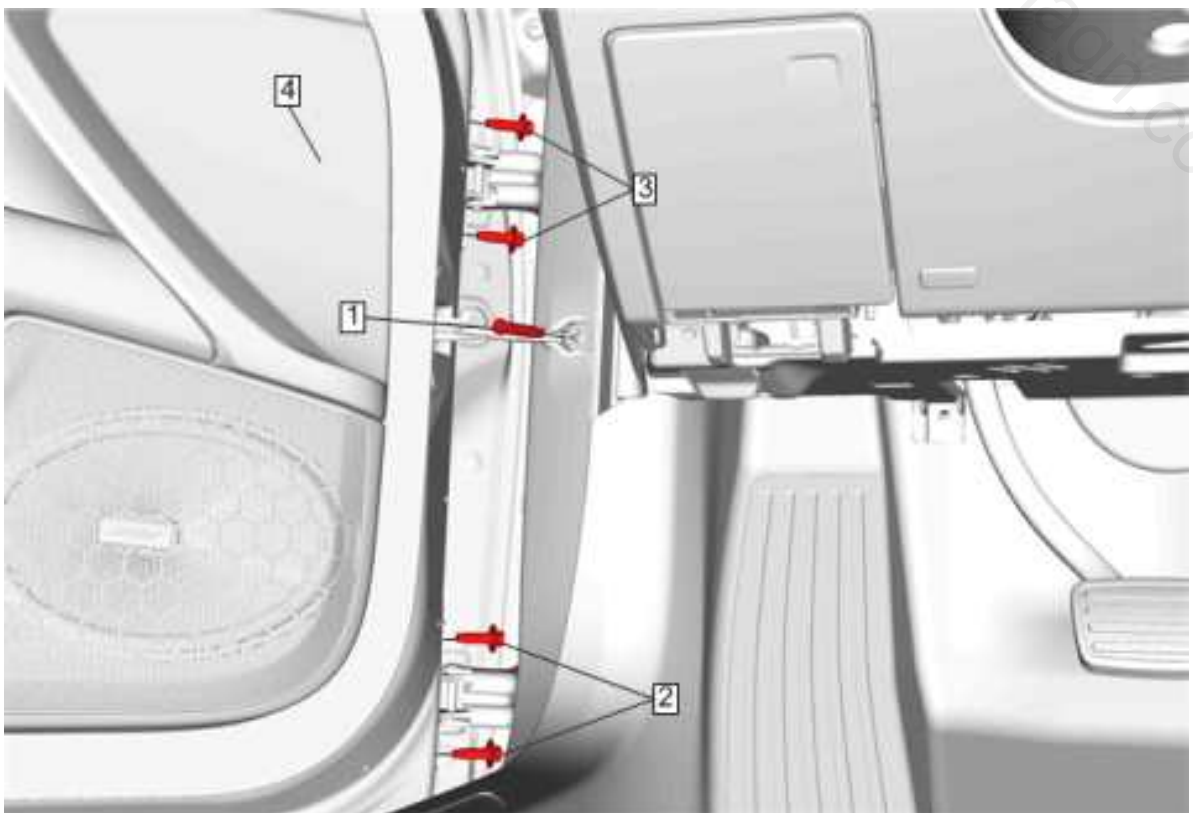


Fig. 301: Front Side Door
Courtesy of GENERAL MOTORS COMPANY

35. Install the left and right front side door (4). **Front Side Door Replacement**

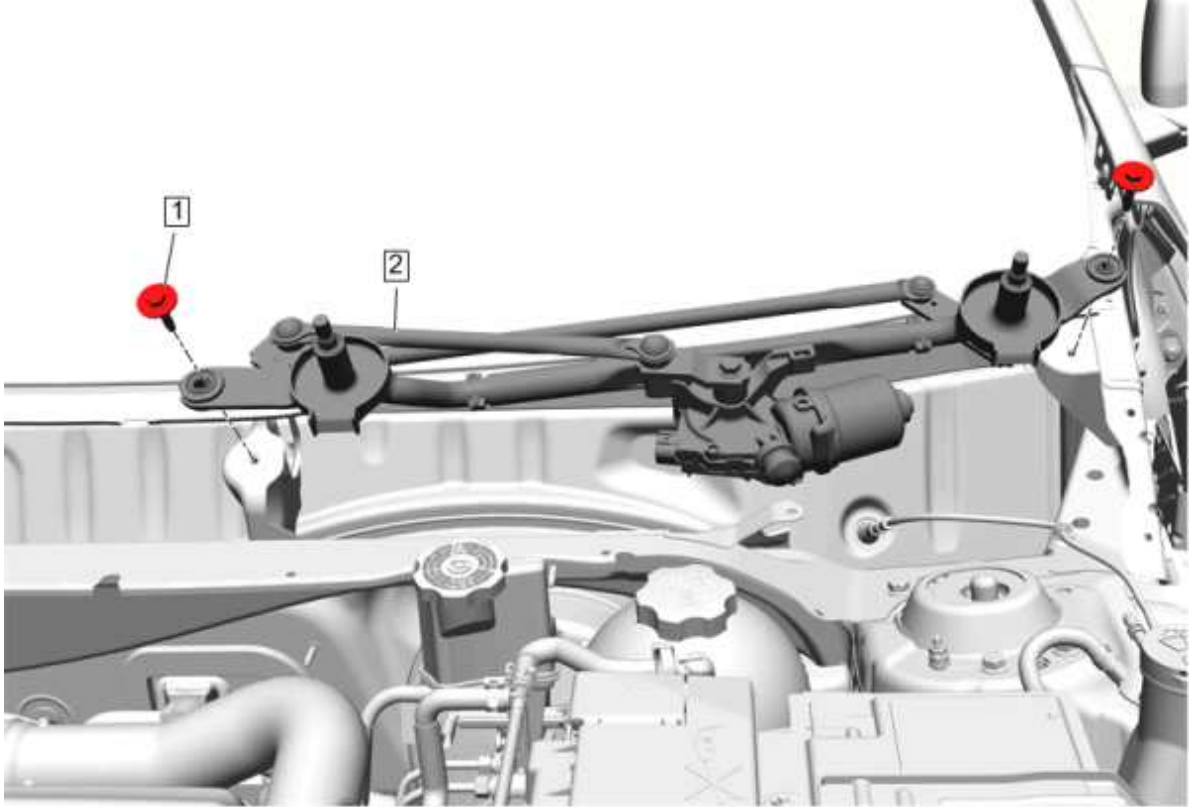


Fig. 302: Windshield Wiper Transmission
 Courtesy of GENERAL MOTORS COMPANY

36. Install Windshield Wiper Transmission (2) [Windshield Wiper Transmission Replacement](#)

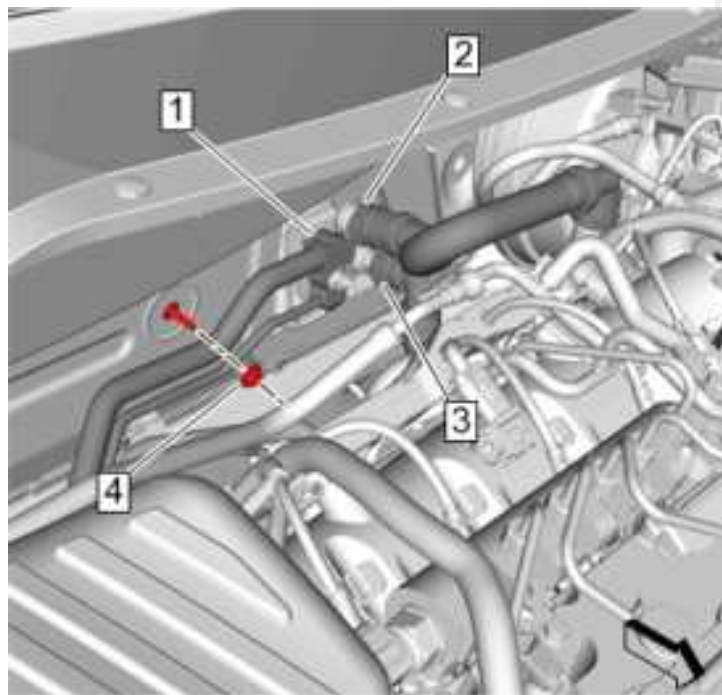


Fig. 303: Air Conditioning Evaporator and Blower Module Nut
 Courtesy of GENERAL MOTORS COMPANY

37. Install Auxiliary Heater Outlet Hose (3) @Heater Core Outlet Tube - [Auxiliary Heater Outlet Hose Replacement \(LH7 Equinox\)](#)
38. Install Heater Inlet Hose (2) @Heater Core Inlet Tube - [Heater Inlet Hose Replacement \(LYX AWD without KL9\)](#)[Heater Inlet Hose Replacement \(LYX with KL9\)](#)[Heater Inlet Hose Replacement \(LH7 Terrain\)](#)[Heater Inlet Hose Replacement \(LH7 Equinox\)](#)[Heater Inlet Hose Replacement \(LTG with KL9\)](#)
39. Install Air Conditioning Refrigerant Heat Exchanger (1) @Air Conditioning Evaporator Thermal Expansion Valve - [Air Conditioning Refrigerant Heat Exchanger Replacement \(LH7\)](#)
40. Install Intake Manifold Cover - [Intake Manifold Cover Replacement](#)

41. Fill the cooling system to the proper level. [Cooling System Draining and Filling \(GE 47716\) Cooling System Draining and Filling \(Static\)](#) .
42. Evacuate and charge the refrigerant system. [Refrigerant Recovery and Recharging \(R-134a\) Refrigerant Recovery and Recharging \(R-1234yf\)](#)
43. Connect the battery negative cable. [Battery Negative Cable Disconnection and Connection \(KL9\)](#)
44. Inspect for coolant leaks.
45. Visually inspect for air conditioning system refrigerant leaks.

HEATER AND AIR CONDITIONING EVAPORATOR AND BLOWER MODULE REMOVAL AND INSTALLATION (TERRAIN LH7)

Removal Procedure

1. Disconnect the battery negative cable. [Battery Negative Cable Disconnection and Connection \(KL9\)](#)
2. Recover the refrigerant. [Refrigerant Recovery and Recharging \(R-134a\) Refrigerant Recovery and Recharging \(R-1234yf\)](#)
3. Drain the cooling system. [Cooling System Draining and Filling \(GE 47716\) Cooling System Draining and Filling \(Static\)](#)
4. Remove Intake Manifold Cover - [Intake Manifold Cover Replacement](#)

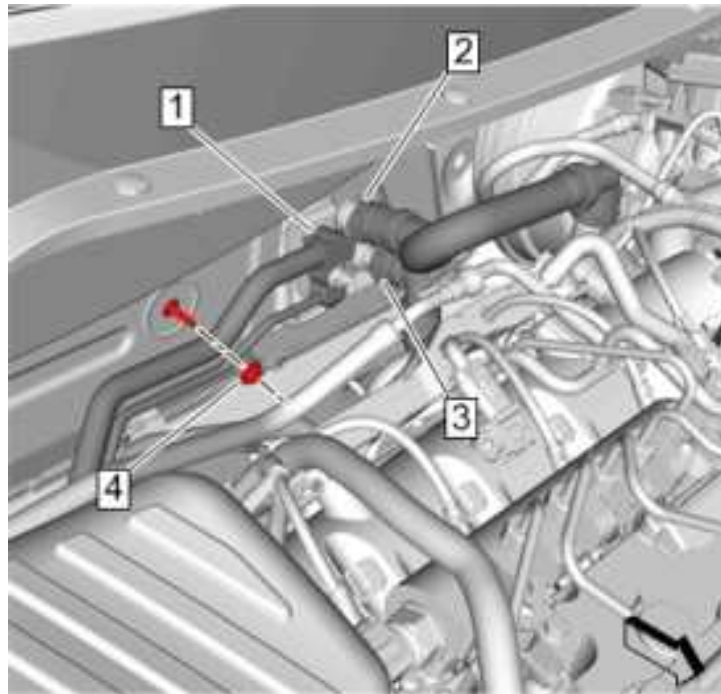


Fig. 304: Air Conditioning Evaporator and Blower Module Nut

Courtesy of GENERAL MOTORS COMPANY

5. Remove Air Conditioning Refrigerant Heat Exchanger (1) @Air Conditioning Evaporator Thermal Expansion Valve - [Air Conditioning Refrigerant Heat Exchanger Replacement \(LH7\)](#)
6. Remove Heater Inlet Hose (2) @Heater Core Inlet Tube - [Heater Inlet Hose Replacement \(LH7 Terrain\)](#)
7. Remove Auxiliary Heater Outlet Hose (3) @Heater Core Outlet Tube - [Auxiliary Heater Outlet Hose Replacement \(LH7 Terrain\)](#)
8. Remove Heater and Air Conditioning Evaporator and Blower Module Nut (4) @Cowl Panel

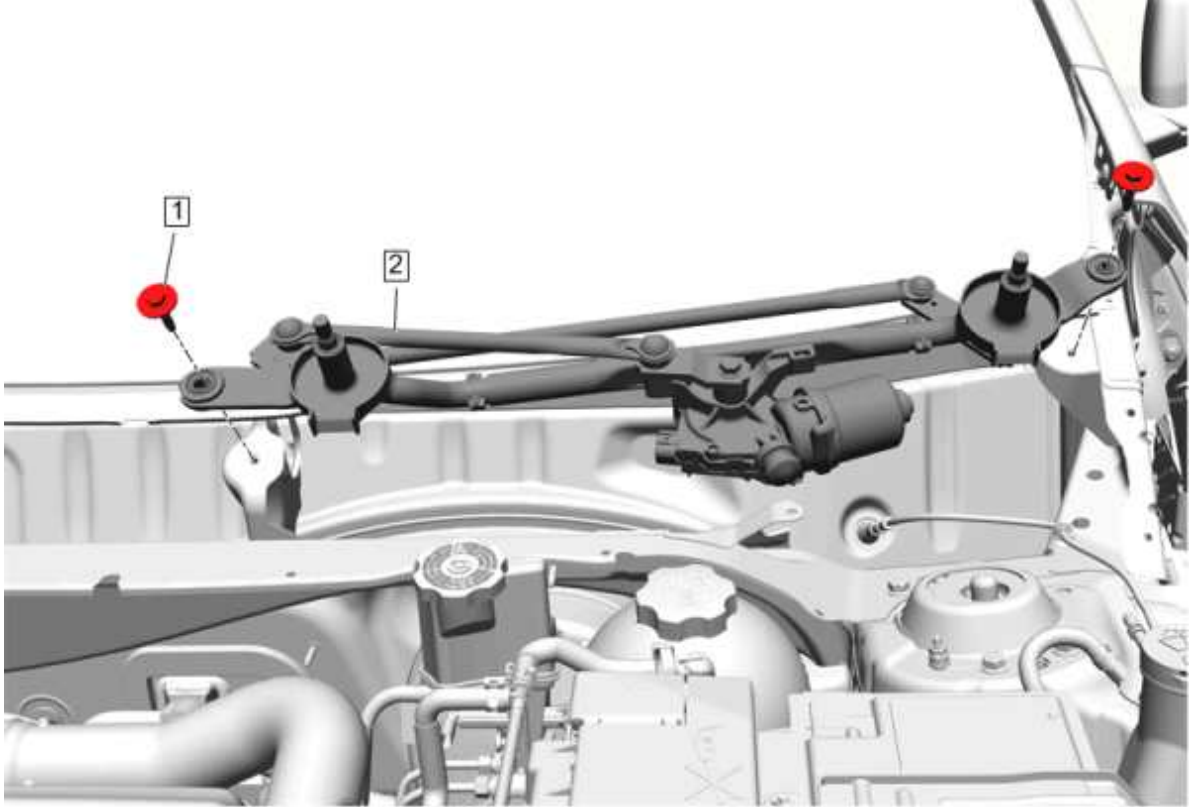


Fig. 305: Windshield Wiper Transmission
 Courtesy of GENERAL MOTORS COMPANY

9. Remove Windshield Wiper Transmission (2) [Windshield Wiper Transmission Replacement](#)

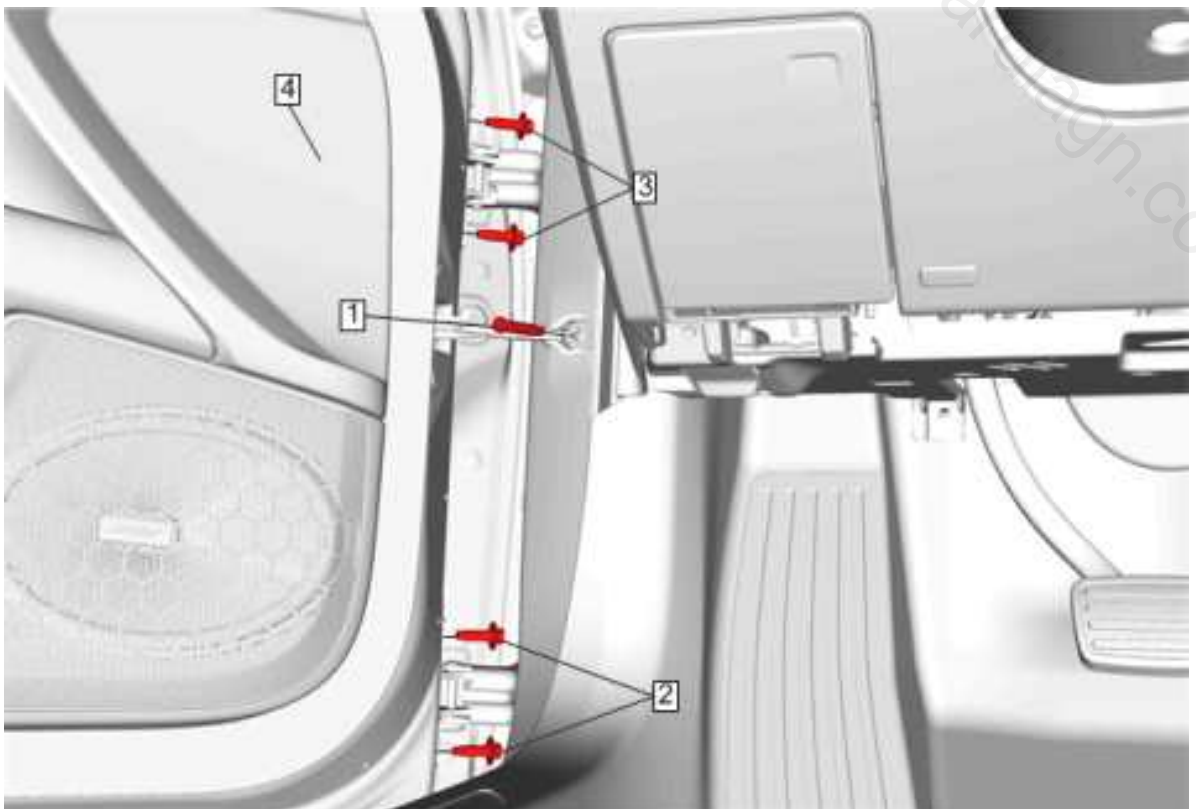


Fig. 306: Front Side Door
 Courtesy of GENERAL MOTORS COMPANY

10. Remove the left and right front side door (4). [Front Side Door Replacement](#)
 11. Remove Drivers Seat and Passengers Seat [Driver or Passenger Seat Removal and Installation](#)
 12. Remove the left and right side windshield garnish molding. [Windshield Garnish Molding Replacement \(Terrain\)](#)

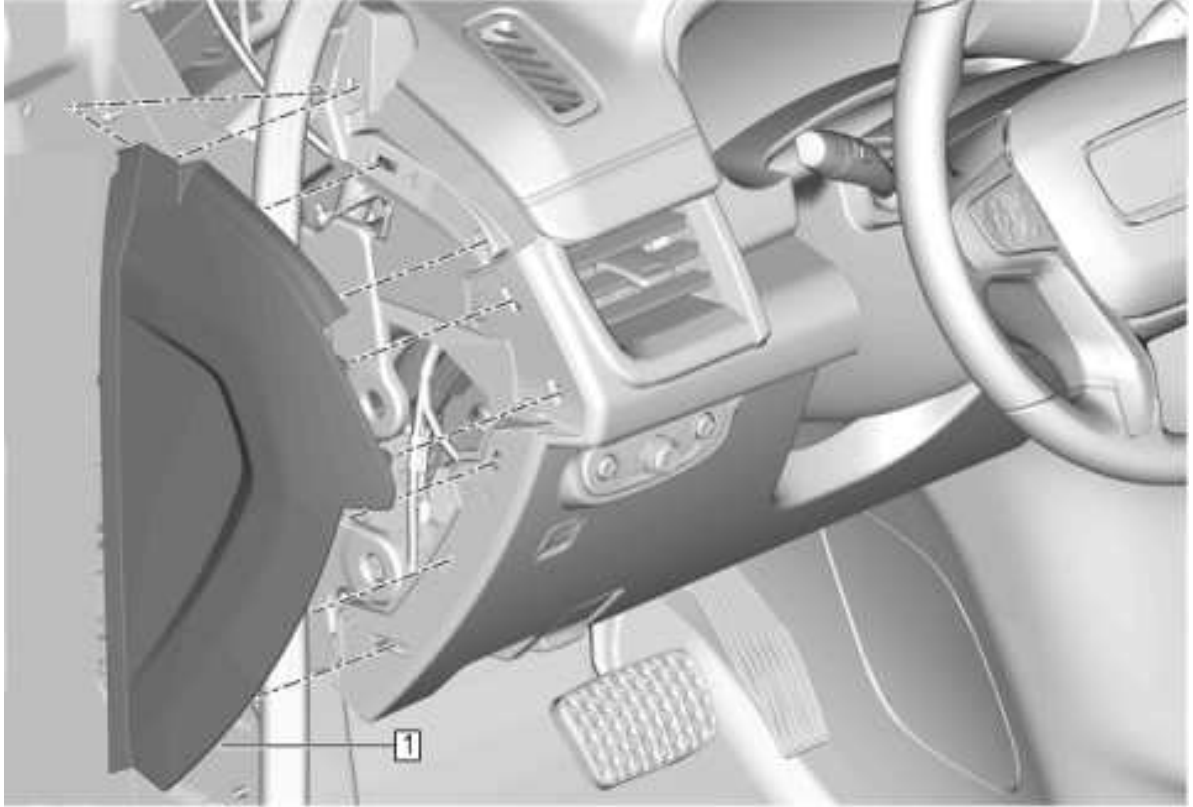


Fig. 307: Instrument Panel Outer Trim Cover (Terrain)
Courtesy of GENERAL MOTORS COMPANY

13. Remove the left and right instrument panel outer trim cover (1). **Instrument Panel Outer Trim Cover Replacement (Terrain)**

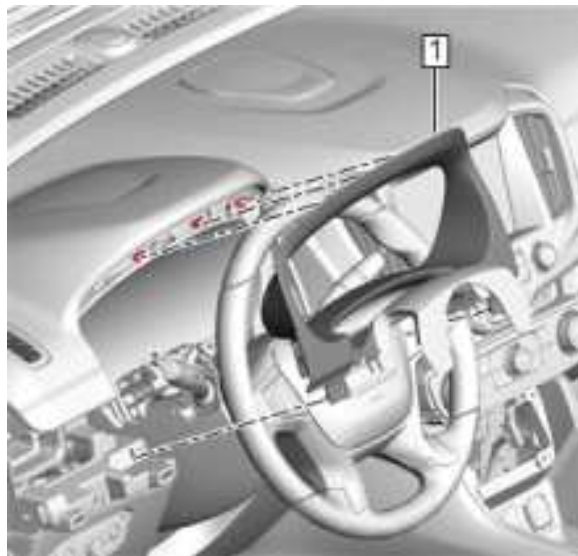


Fig. 308: Instrument Panel Cluster Trim Plate
Courtesy of GENERAL MOTORS COMPANY

14. Remove Instrument Panel Cluster Trim Plate (1) **Instrument Panel Cluster Trim Plate Replacement (Equinox)** **Instrument Panel Cluster Trim Plate Replacement (Terrain)**

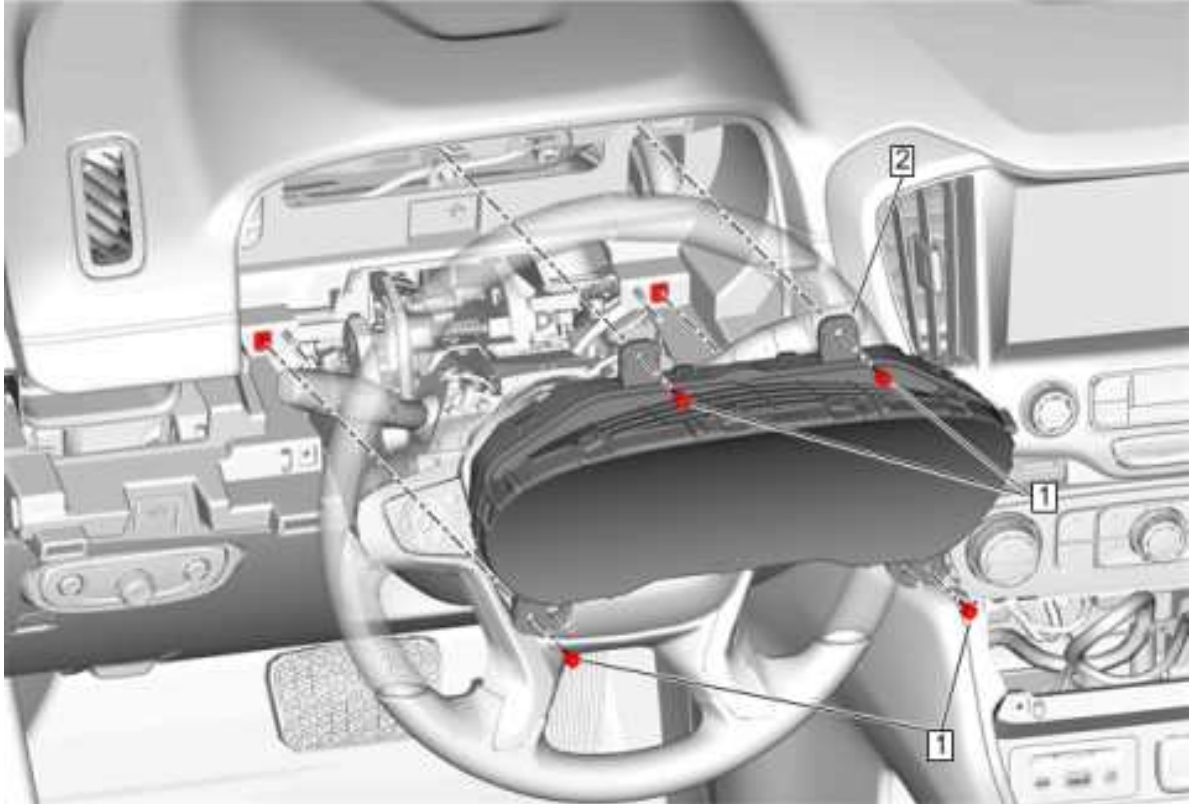


Fig. 309: Instrument Cluster And Screws
Courtesy of GENERAL MOTORS COMPANY

15. Remove Instrument Cluster (2) **Instrument Cluster Replacement (Terrain)**



Fig. 310: Left Side Instrument Panel Trim Pad
Courtesy of GENERAL MOTORS COMPANY

16. Remove Instrument Panel Trim Pad - Left Side (1) **Instrument Panel Trim Pad Replacement - Left Side (Terrain)**

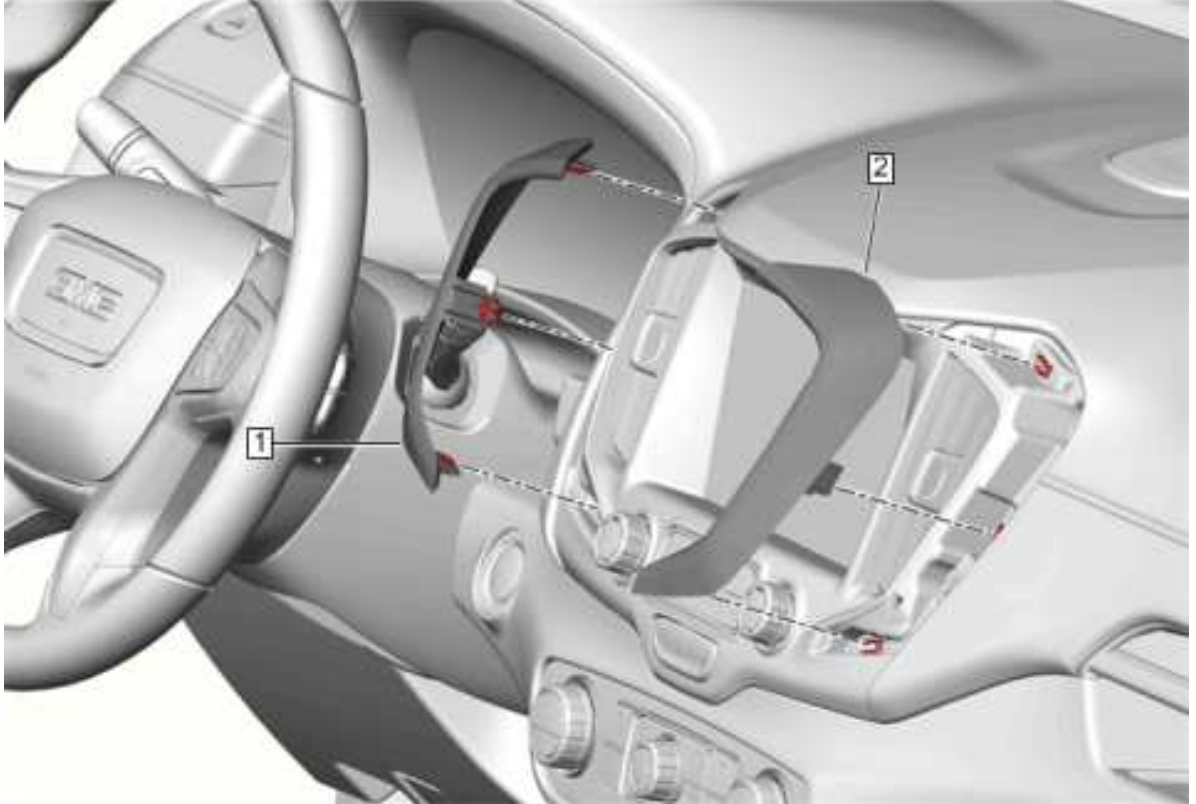


Fig. 311: Instrument Panel Center Trim Plate Appliques

Courtesy of GENERAL MOTORS COMPANY

17. Remove Instrument Panel Center Trim Plate Applique - Left Side (1) - [Instrument Panel Center Trim Plate Applique Replacement \(Terrain\)](#)
18. Remove Instrument Panel Center Trim Plate Applique - Right Side (2) - [Instrument Panel Center Trim Plate Applique Replacement \(Terrain\)](#)



Fig. 312: Front Floor Console Transmission Shift Opening Bezel

Courtesy of GENERAL MOTORS COMPANY

19. Remove Front Floor Console Transmission Shift Opening Bezel (1) - [Front Floor Console Transmission Shift Opening Bezel Replacement \(Terrain\)](#)

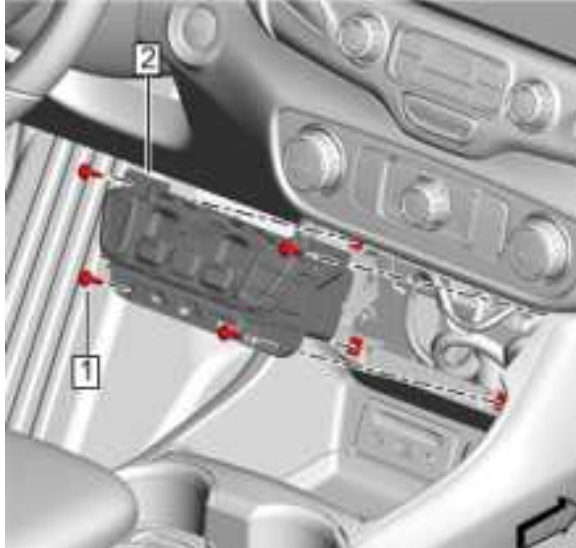


Fig. 313: Automatic Transmission Control Bolts And Electronic Transmission Shift Control Pushbutton

Courtesy of GENERAL MOTORS COMPANY

20. Remove Electronic Transmission Shift Control Pushbutton (2) - [Electronic Transmission Shift Control Pushbutton Replacement](#)

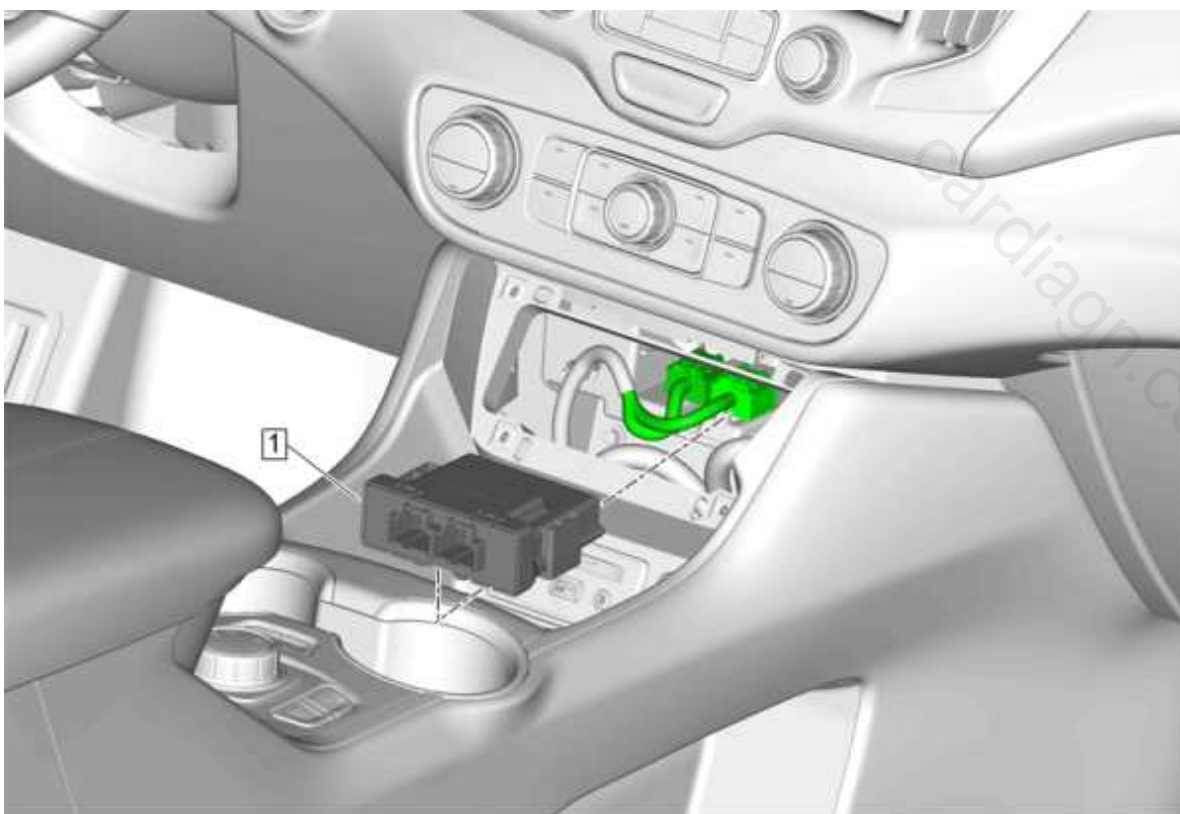


Fig. 314: Serial Data Gateway Module

Courtesy of GENERAL MOTORS COMPANY

21. Remove Serial Data Gateway Module (1) - [Serial Data Gateway Module Replacement \(Terrain with MNH, NMK, or MHG\)](#) [Serial Data Gateway Module Replacement \(Terrain with M3U, M3D, or M3H\)](#)

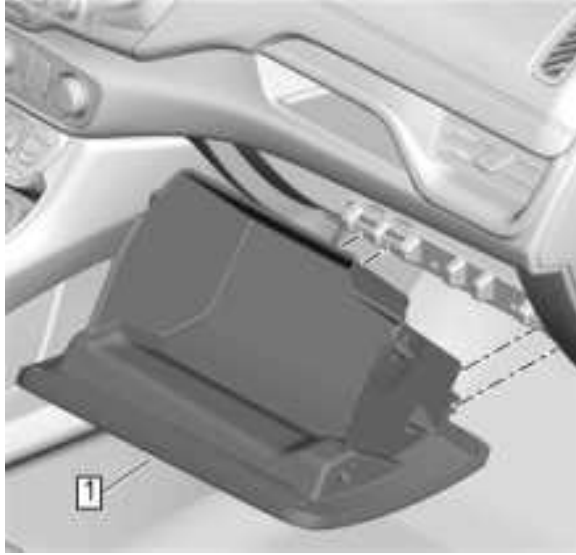


Fig. 315: Instrument Panel Compartment Door
Courtesy of GENERAL MOTORS COMPANY

22. Remove Instrument Panel Compartment Door (1) - [Instrument Panel Compartment Door Replacement \(Terrain\)](#)

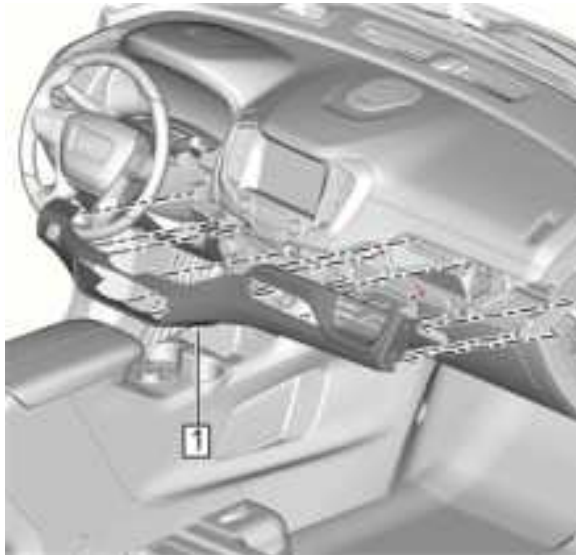


Fig. 316: Right Side Instrument Panel Trim Pad
Courtesy of GENERAL MOTORS COMPANY

23. Remove Instrument Panel Trim Pad - Right Side (1) - [Instrument Panel Trim Pad Replacement - Right Side \(Terrain\)](#)

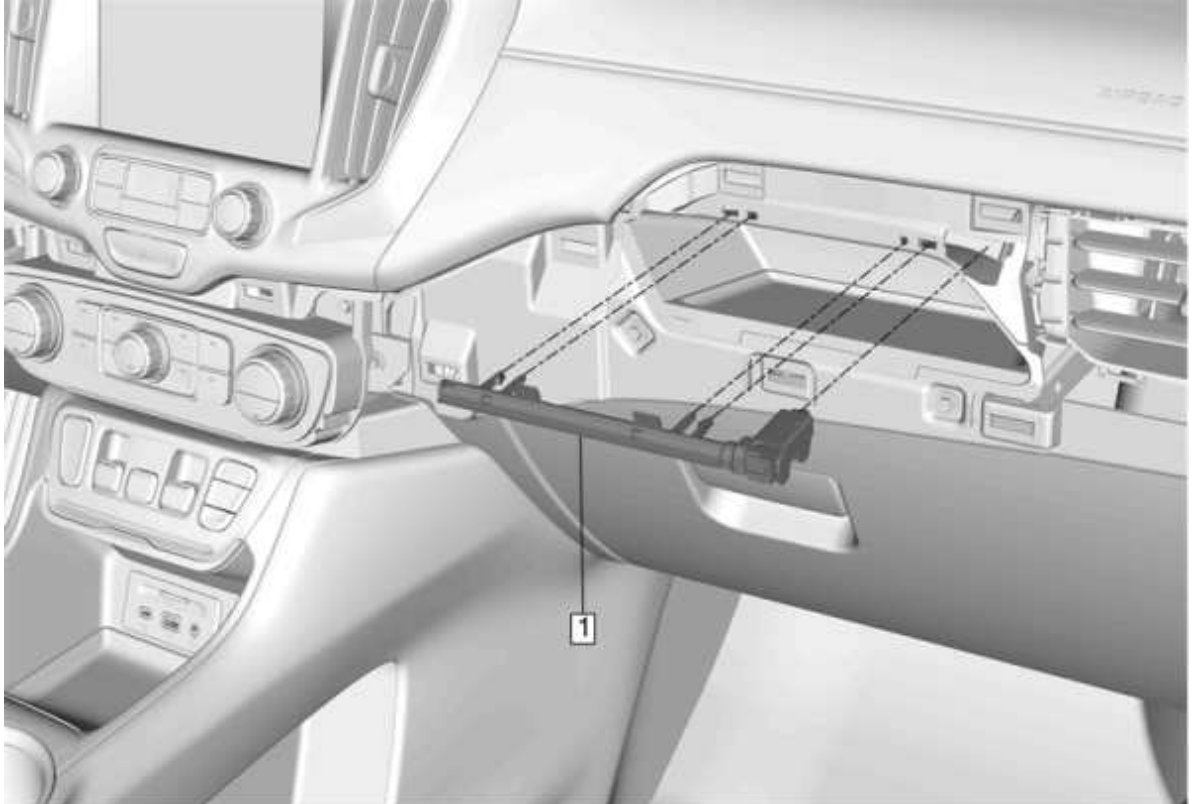


Fig. 317: Instrument Panel Light Conductor Lamp
 Courtesy of GENERAL MOTORS COMPANY

24. Remove Instrument Panel Light Conductor Lamp (1) - [Instrument Panel Light Conductor Lamp Replacement \(GMC\)](#)

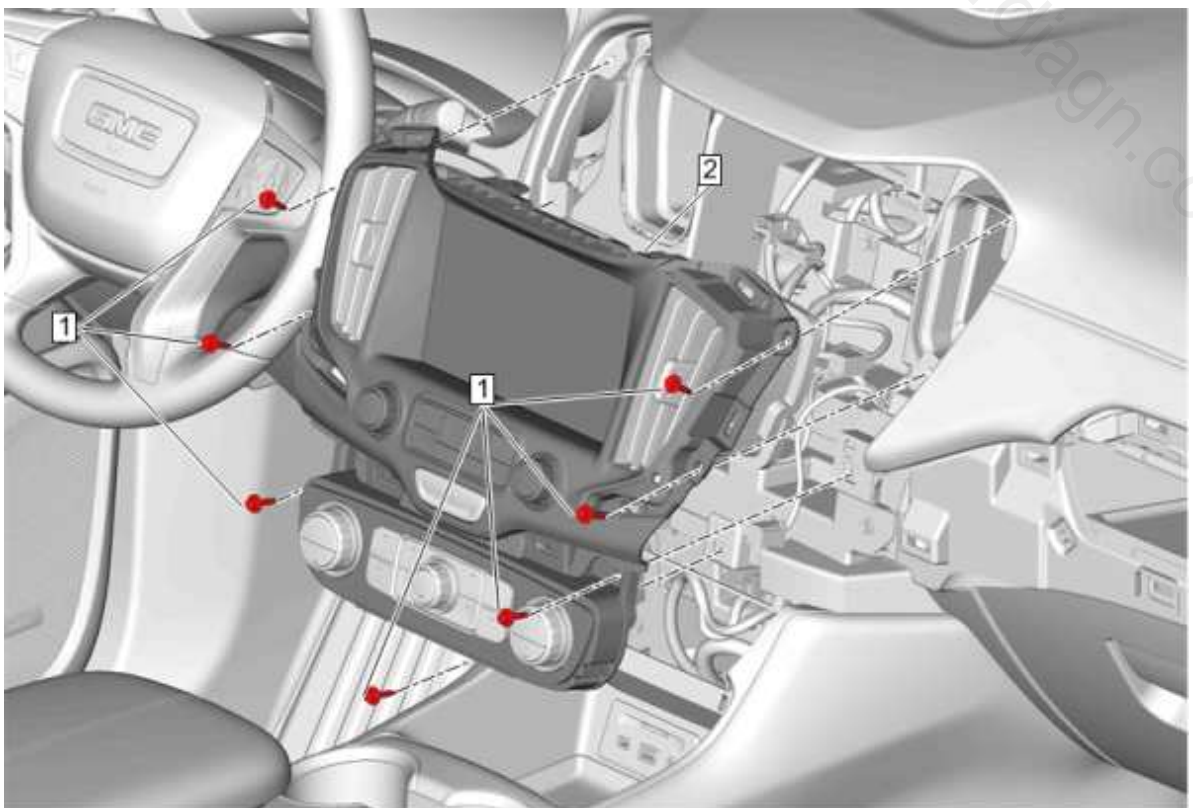


Fig. 318: Radio Control Assembly And Screws
 Courtesy of GENERAL MOTORS COMPANY

25. Remove Radio Control Assembly (2) - [Radio Control Assembly Replacement \(Terrain\)](#)
 26. Disconnect all electrical connectors.



Fig. 319: Radio Front Center Speaker
Courtesy of GENERAL MOTORS COMPANY

27. Remove Radio Front Center Speaker (2) - **Radio Front Center Speaker Replacement (Terrain)**

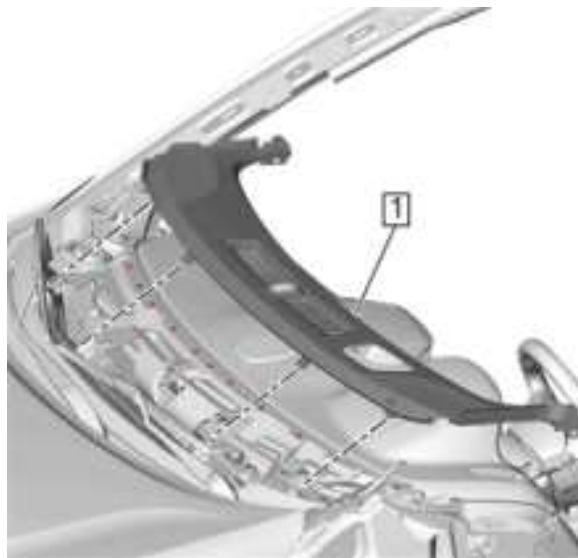


Fig. 320: Instrument Panel Extension
Courtesy of GENERAL MOTORS COMPANY

28. Remove Instrument Panel Extension (1) **Instrument Panel Extension Replacement (Terrain)**

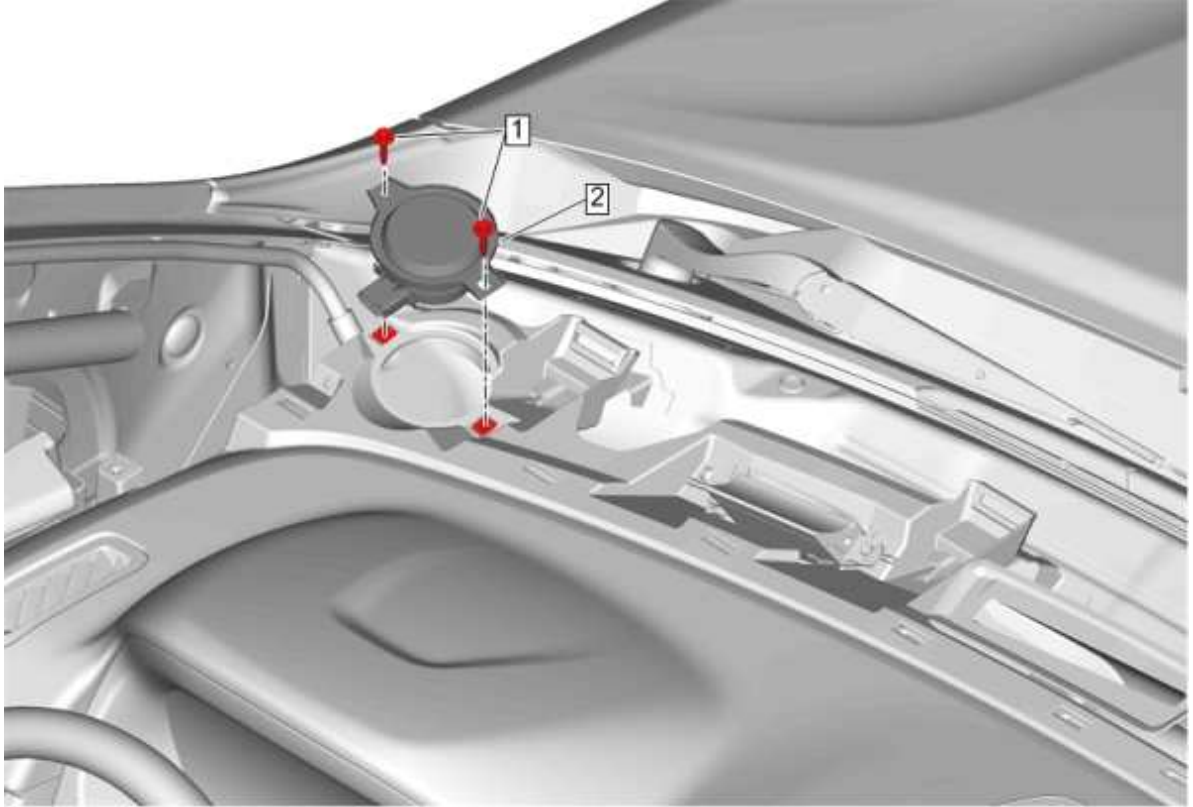


Fig. 321: Radio Front Speaker

Courtesy of GENERAL MOTORS COMPANY

29. Remove the left and right side radio front speakers. (2) [Radio Front Speaker Replacement \(Terrain\)](#)

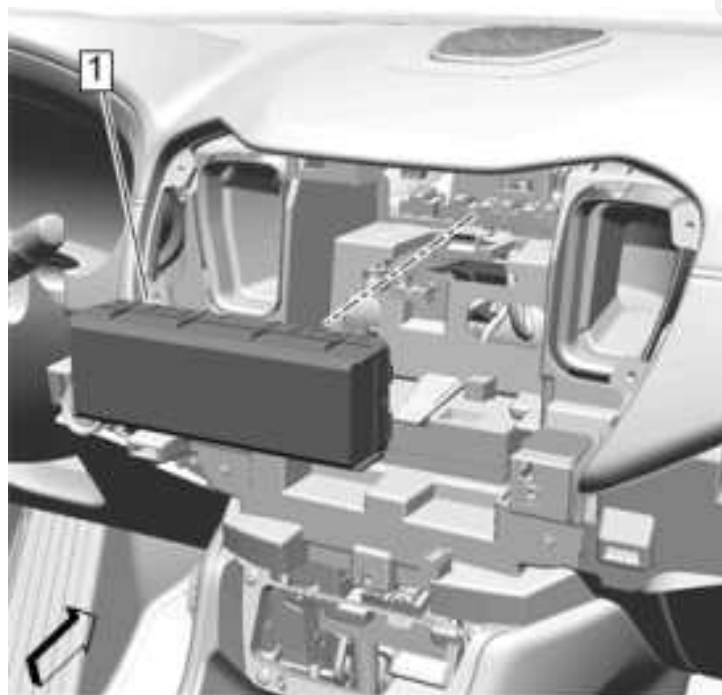


Fig. 322: Heater And Air Conditioning Remote Control

Courtesy of GENERAL MOTORS COMPANY

30. Remove Heater and Air Conditioning Remote Control (1) - [Heater and Air Conditioning Remote Control Replacement \(Terrain\)](#)

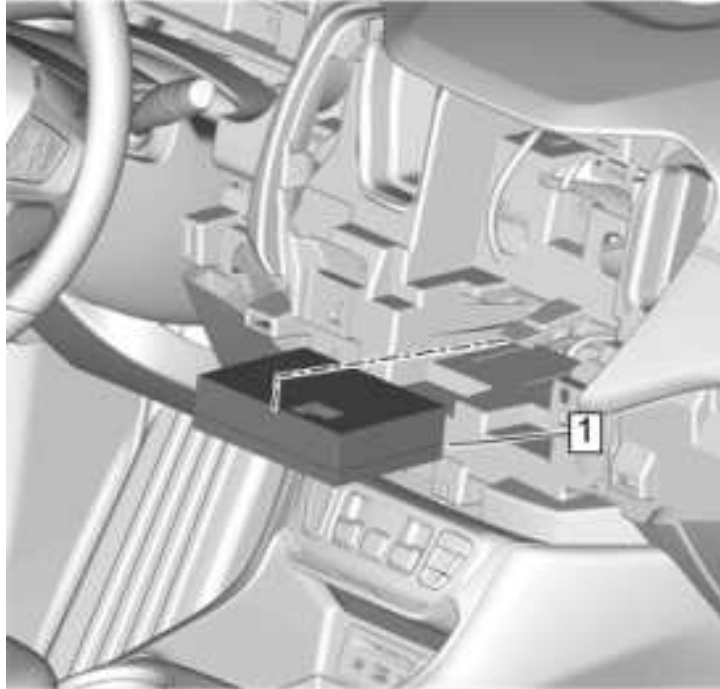


Fig. 323: Communication Interface Module
 Courtesy of GENERAL MOTORS COMPANY

31. Remove Communication Interface Module (1) [Communication Interface Module Replacement \(Terrain with IOS, IOT, IOU\)](#) [Communication Interface Module Replacement \(Terrain with IOR\)](#)

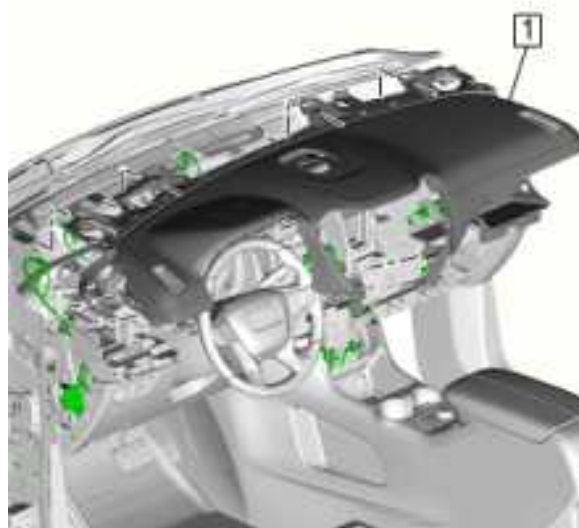


Fig. 324: Instrument Panel Upper Trim Panel
 Courtesy of GENERAL MOTORS COMPANY

32. Remove Instrument Panel Upper Trim Panel (1) - [Instrument Panel Upper Trim Panel Replacement \(Terrain\)](#)

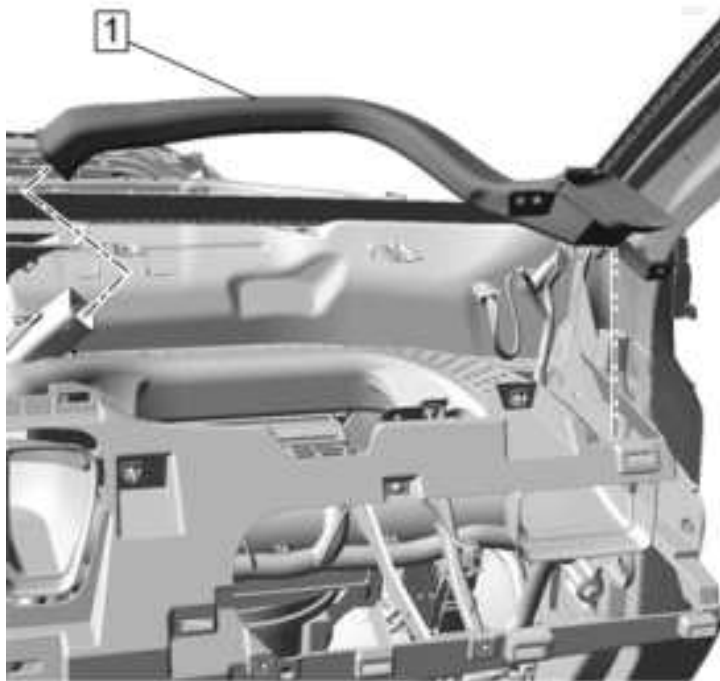


Fig. 325: Right Side Window Defogger Outlet Duct
 Courtesy of GENERAL MOTORS COMPANY

33. Remove Side Window Defogger Outlet Duct - Right Side (1) - [Side Window Defogger Outlet Duct Replacement - Right Side \(Terrain\)](#)

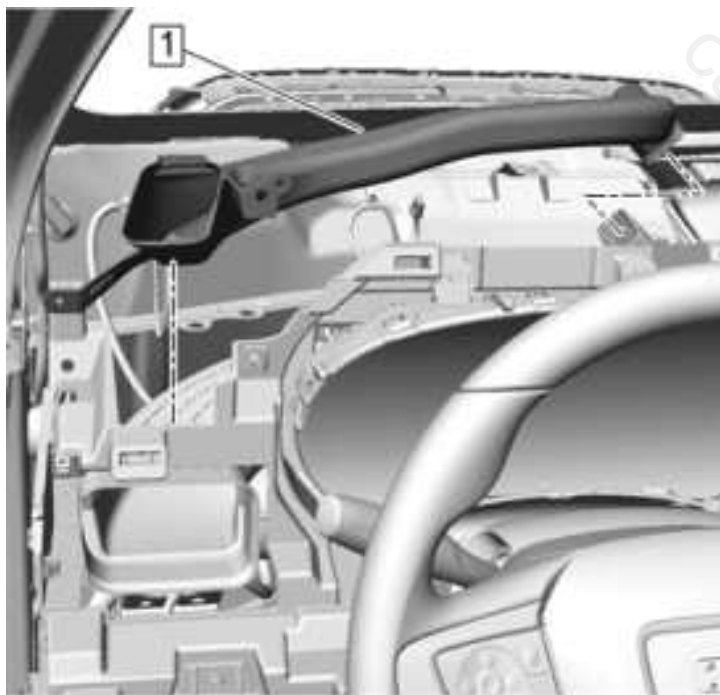


Fig. 326: Left Side Window Defogger Outlet Duct
 Courtesy of GENERAL MOTORS COMPANY

34. Remove Side Window Defogger Outlet Duct - Left Side (1) - [Side Window Defogger Outlet Duct Replacement - Left Side \(Terrain\)](#)

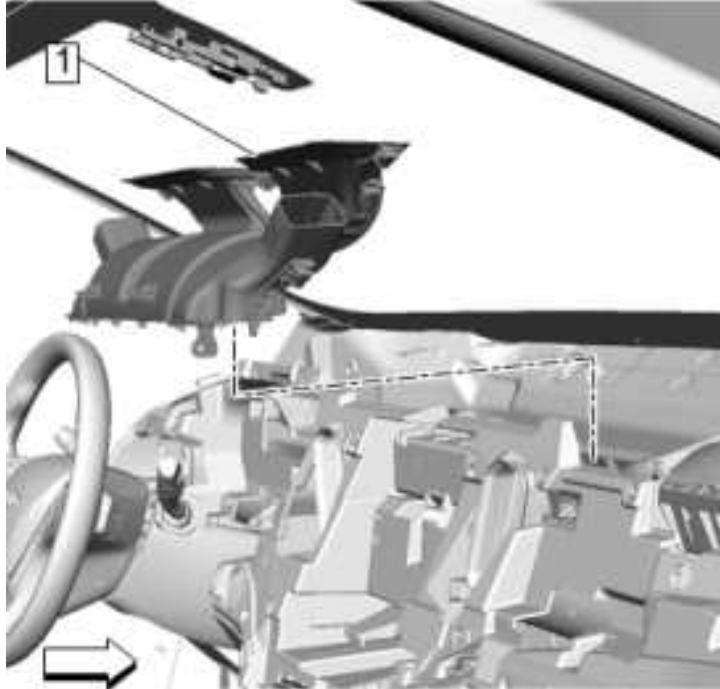


Fig. 327: Windshield Defroster Outlet Duct
 Courtesy of GENERAL MOTORS COMPANY

35. Remove Windshield Defroster Outlet Duct (1) - [Windshield Defroster Outlet Duct Replacement \(Terrain\)](#)
36. Disconnect and reposition harness as necessary.

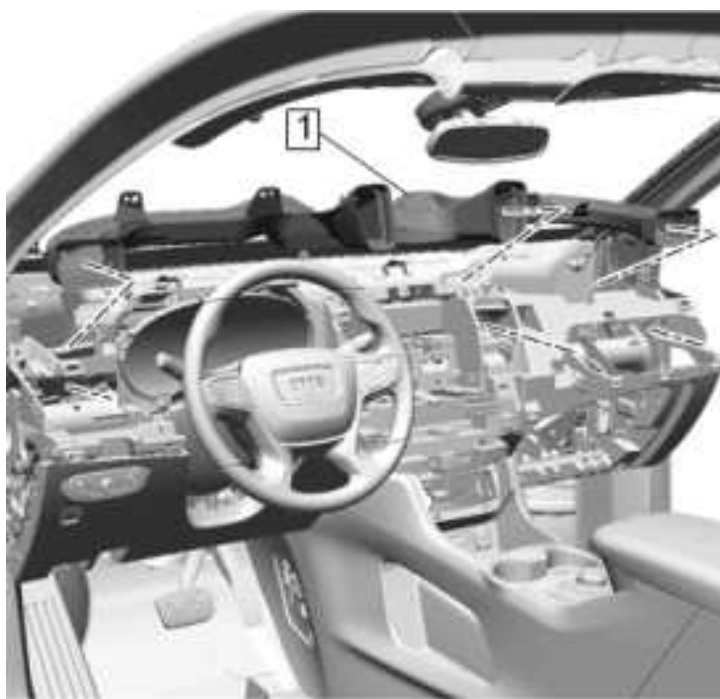


Fig. 328: Instrument Panel Center Air Outlet Duct
 Courtesy of GENERAL MOTORS COMPANY

37. Remove Instrument Panel Center Air Outlet Duct (1) - [Instrument Panel Center Air Outlet Duct Replacement \(Terrain\)](#)

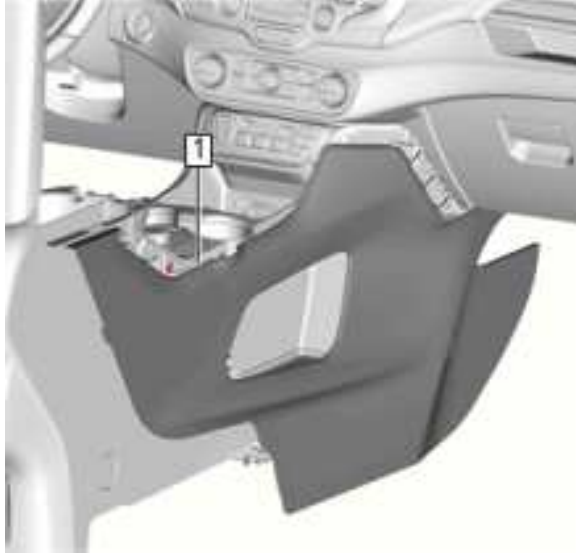


Fig. 329: Right Front Floor Console Extension Panel

Courtesy of GENERAL MOTORS COMPANY

38. Remove Front Floor Console Extension Panel - Right (1) - **Front Floor Console Extension Panel Replacement - Right Side (Terrain)**

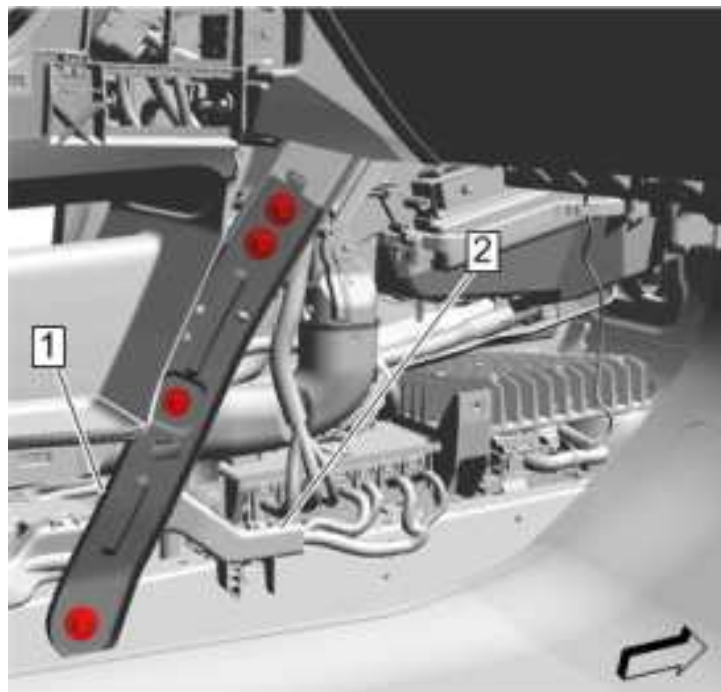


Fig. 330: Instrument Panel Center Lower Bracket

Courtesy of GENERAL MOTORS COMPANY

39. Remove Instrument Panel Center Lower Bracket-Right Side (1) - **Instrument Panel Center Lower Bracket Replacement (Terrain - Left Side) Instrument Panel Center Lower Bracket Replacement (Terrain - Right Side)**

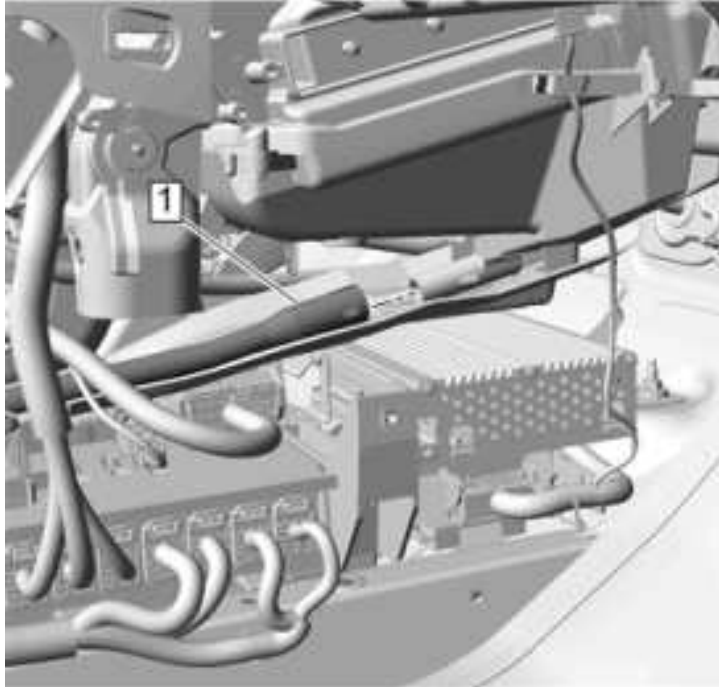


Fig. 331: Air Conditioning Evaporator and Blower Module Drain Hose
 Courtesy of GENERAL MOTORS COMPANY

CAUTION: Refer to [HVAC Module Drain Tube Caution](#) .

40. Prior to removing the air conditioning evaporator and blower module drain tube/hose, use clean and absorbent shop clothes/towels to cover the electrical components protecting the electrical components from water damage.
41. Remove Air Conditioning Evaporator and Blower Module Drain Hose (1) @Heater and Air Conditioning Evaporator and Blower Lower Case - [Air Conditioning Evaporator and Blower Module Drain Hose Replacement \(Terrain\)](#)



Fig. 332: Left Front Floor Console Extension Panel
 Courtesy of GENERAL MOTORS COMPANY

42. Remove Front Floor Console Extension Panel - Left (1) - [Front Floor Console Extension Panel Replacement - Left Side \(Terrain\)](#)

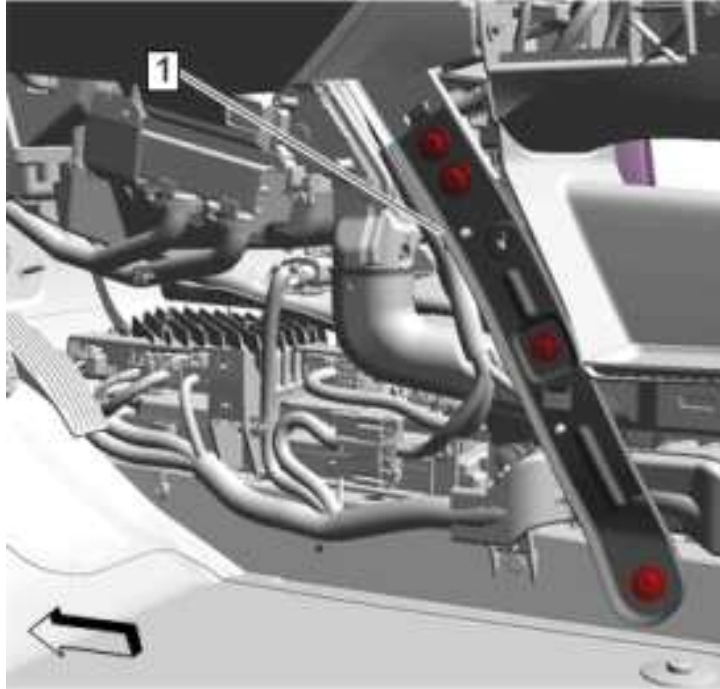


Fig. 333: Instrument Panel Center Lower Bracket-Left Side
 Courtesy of GENERAL MOTORS COMPANY

43. Remove Instrument Panel Center Lower Bracket-Left Side (1) - **Instrument Panel Center Lower Bracket Replacement (Terrain - Left Side)**

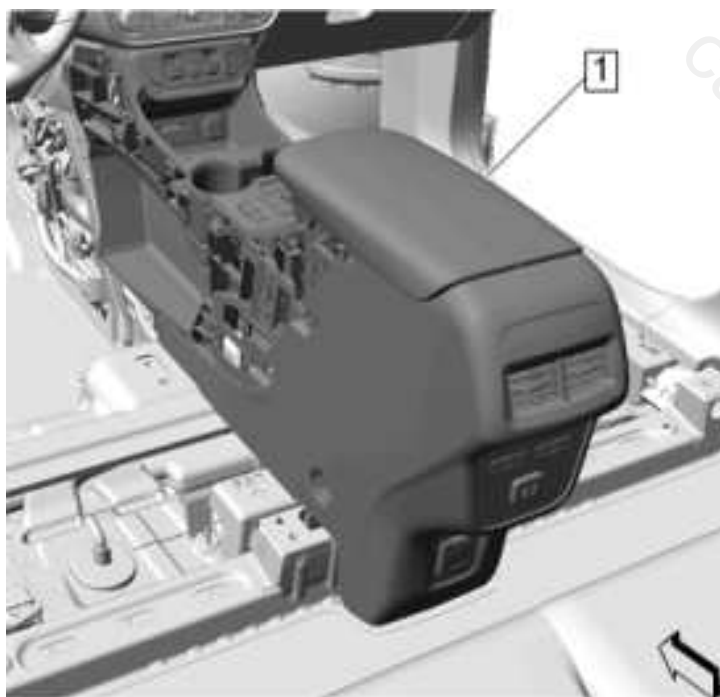


Fig. 334: Front Floor Console
 Courtesy of GENERAL MOTORS COMPANY

44. Remove Front Floor Console (1) - **Front Floor Console Replacement (Terrain)**
45. Disconnect the electrical connectors.

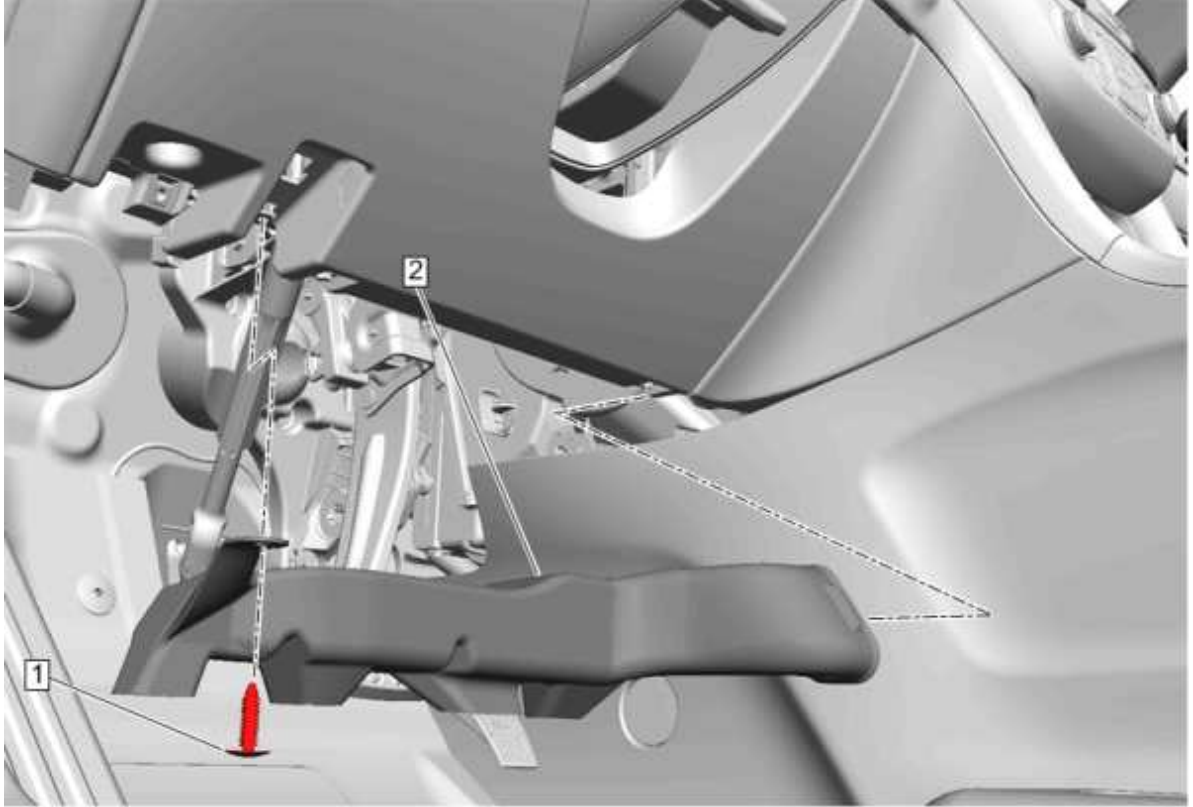


Fig. 335: Floor Front Air Outlet Duct
Courtesy of GENERAL MOTORS COMPANY

46. Remove Floor Front Air Outlet Duct - Left Side (2) - **Floor Front Air Outlet Duct Replacement - Left Side**



Fig. 336: Instrument Panel Knee Bolster
Courtesy of GENERAL MOTORS COMPANY

47. Remove Instrument Panel Knee Bolster (1) - **Instrument Panel Knee Bolster Replacement (Terrain)**

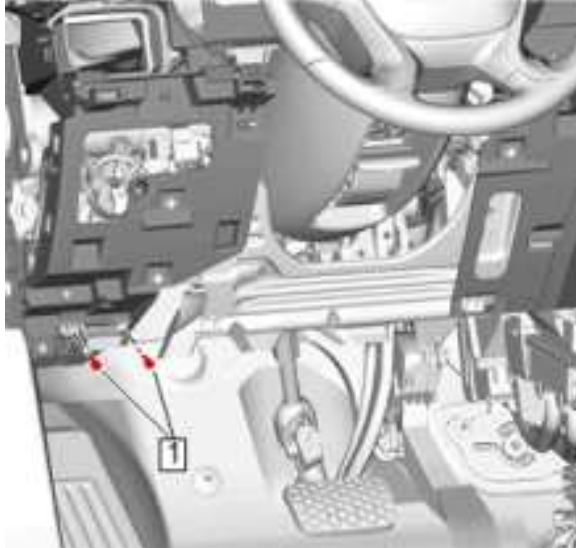


Fig. 337: Data Link Connector Bolts
Courtesy of GENERAL MOTORS COMPANY

48. Remove Data Link Connector Bolt (1)

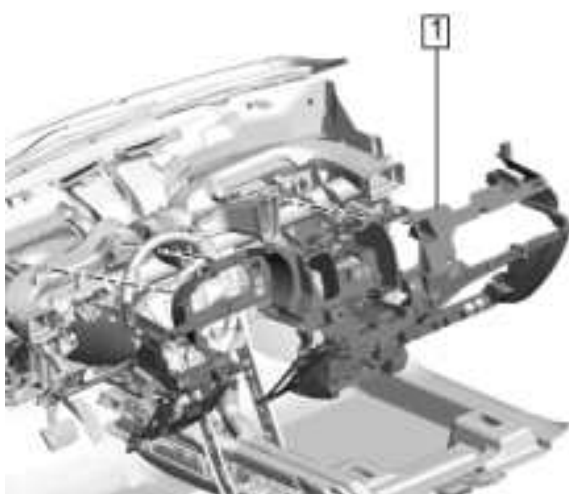


Fig. 338: Instrument Panel
Courtesy of GENERAL MOTORS COMPANY

49. Remove Instrument Panel Assembly (1) - **Instrument Panel Assembly Replacement (Terrain)**

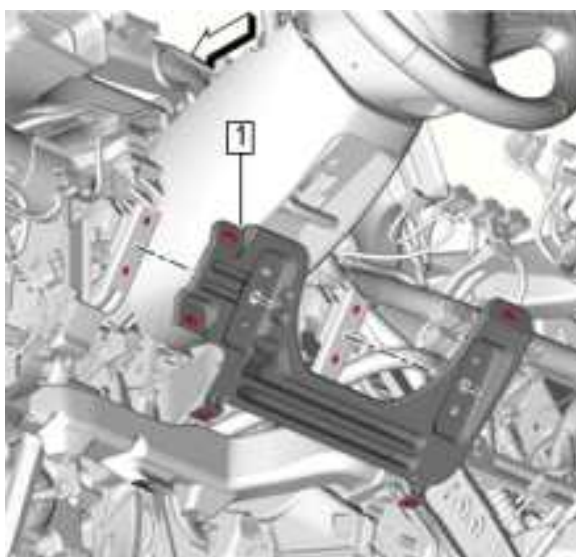


Fig. 339: Instrument Panel Knee Bolster Deflector
Courtesy of GENERAL MOTORS COMPANY

50. Remove Instrument Panel Knee Bolster Deflector (1) - [Instrument Panel Knee Bolster Deflector Replacement \(Terrain\)](#).

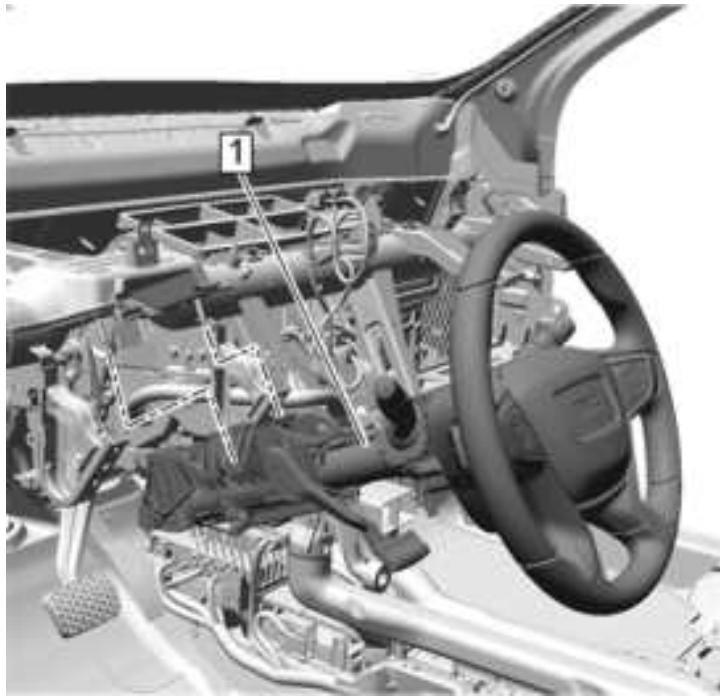


Fig. 340: Steering Column

Courtesy of GENERAL MOTORS COMPANY

51. Remove Steering Column (1) - [Steering Column Replacement \(Terrain\)](#).

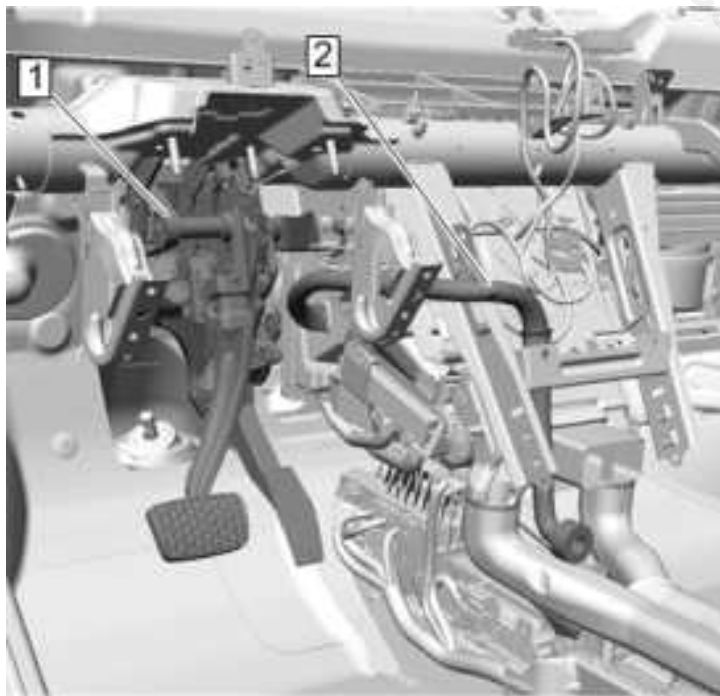


Fig. 341: Brake Pedal Assembly

Courtesy of GENERAL MOTORS COMPANY

52. Remove the brake pedal assembly. (1)[Brake Pedal Assembly Replacement](#)
53. Remove Instrument Panel Compartment Air Duct (2)
54. Detach the instrument panel electrical wiring harness from the instrument panel tie bar.

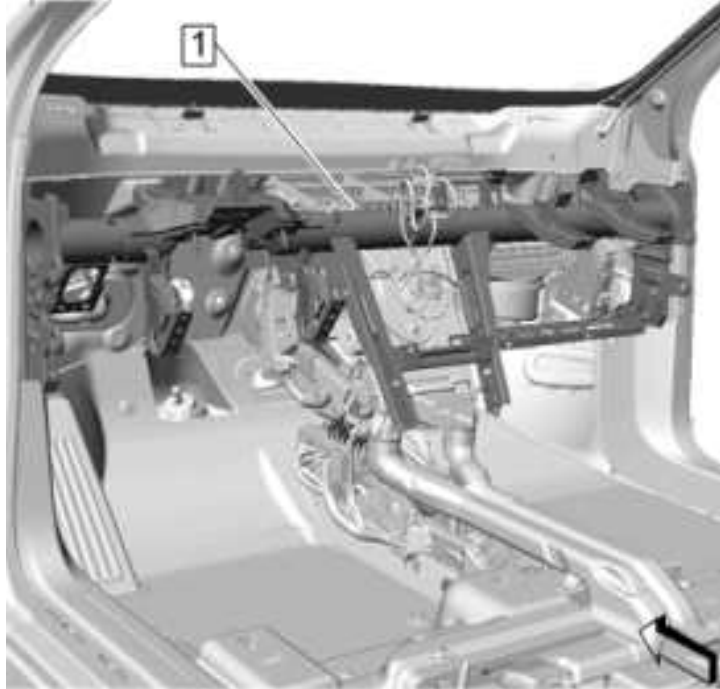


Fig. 342: Instrument Panel Tie Bar
 Courtesy of GENERAL MOTORS COMPANY

55. Remove Instrument Panel Tie Bar (1) - **Instrument Panel Tie Bar Replacement (Terrain)**.
56. Support the heater and air conditioning evaporator and blower (HVAC) module assembly.

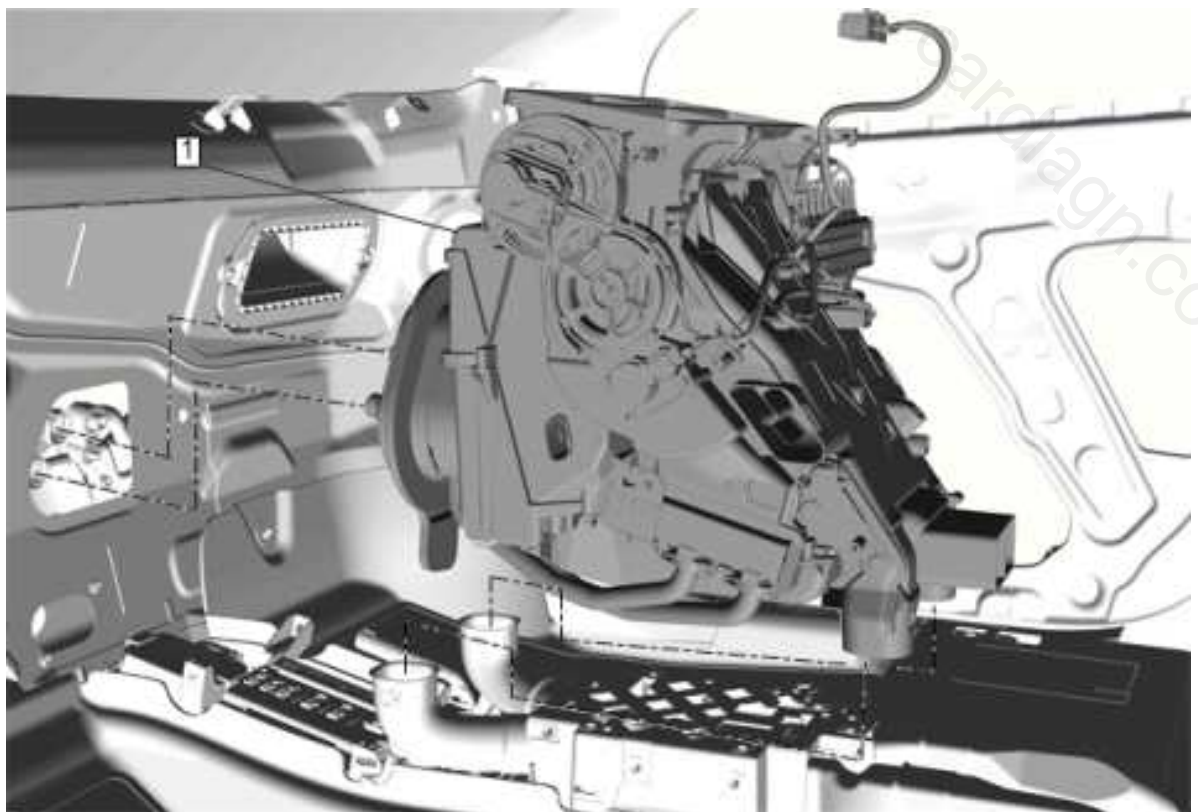


Fig. 343: Heater and Air Conditioning Evaporator and Blower Module
 Courtesy of GENERAL MOTORS COMPANY

57. Remove Heater and Air Conditioning Evaporator and Blower Module (1) - from the vehicle.
58. Transfer all necessary components.

Installation Procedure

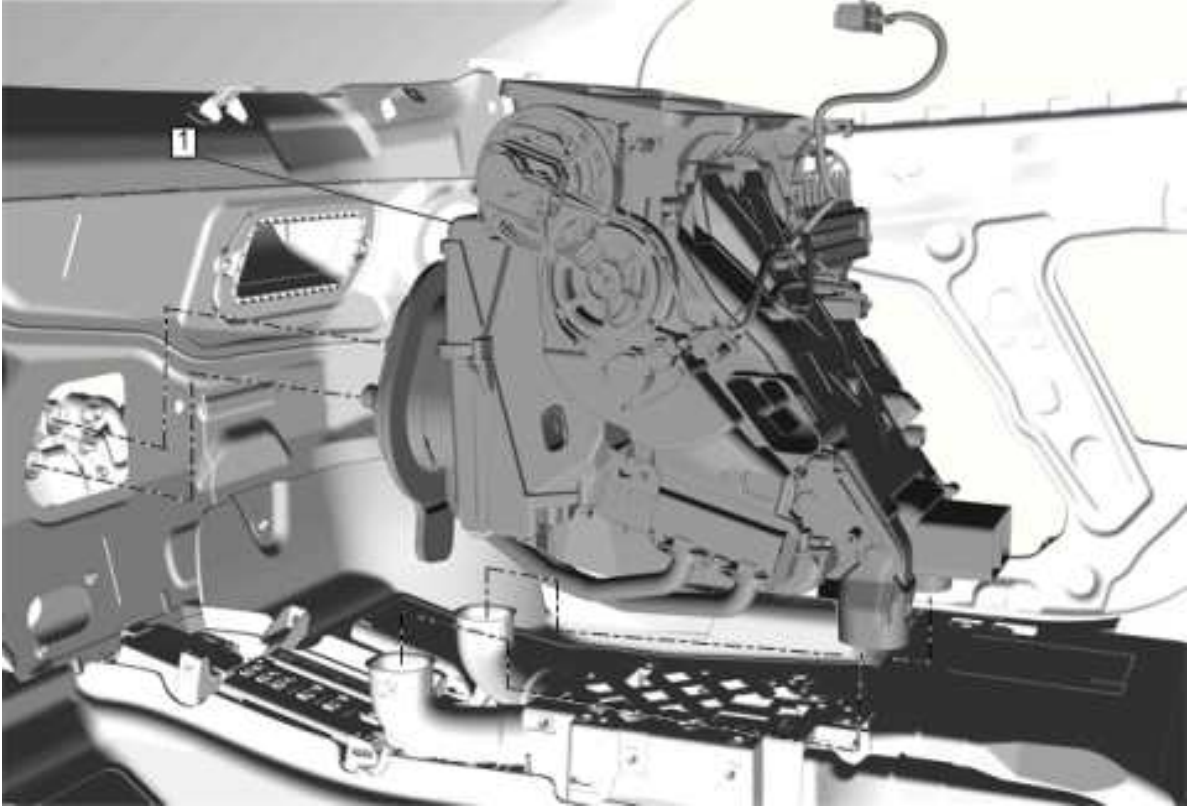


Fig. 344: Heater and Air Conditioning Evaporator and Blower Module
Courtesy of GENERAL MOTORS COMPANY

1. Install Heater and Air Conditioning Evaporator and Blower Module (1) onto the vehicle.
2. Temporarily support HVAC module assembly.

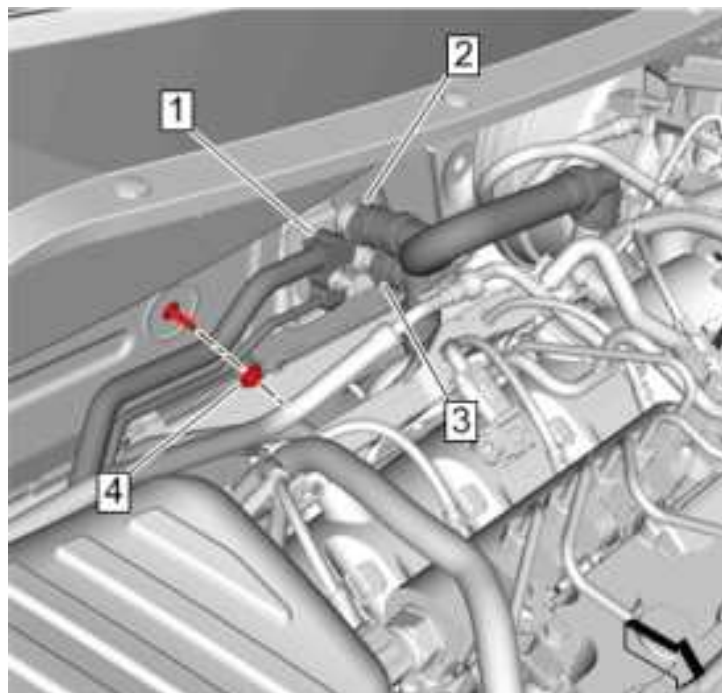


Fig. 345: Air Conditioning Evaporator and Blower Module Nut
Courtesy of GENERAL MOTORS COMPANY

CAUTION: Refer to **Fastener Caution** .

3. Install Heater and Air Conditioning Evaporator and Blower Module Nut (4) @Cowl Panel and tighten 9.0 N.m (80 lb in)

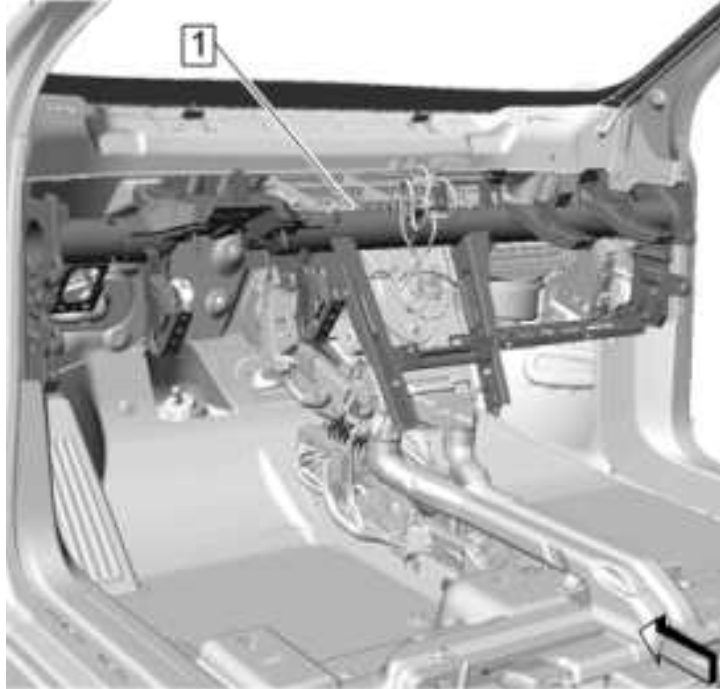


Fig. 346: Instrument Panel Tie Bar

Courtesy of GENERAL MOTORS COMPANY

4. Install Instrument Panel Tie Bar (1) [Instrument Panel Tie Bar Replacement \(Terrain\)](#)
5. Attach the instrument panel electrical wiring harness onto the instrument panel tie bar.

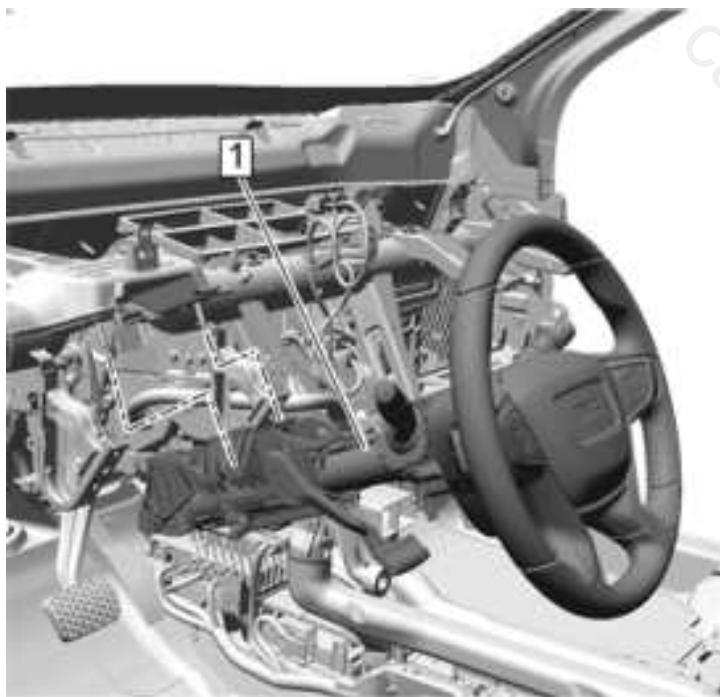


Fig. 347: Steering Column

Courtesy of GENERAL MOTORS COMPANY

6. Install Steering Column (1) - [Steering Column Replacement \(Terrain\)](#)

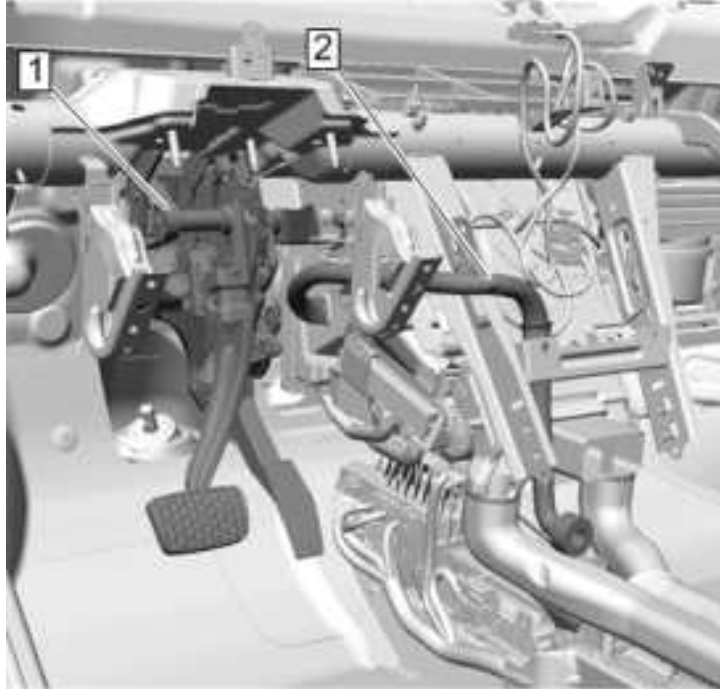


Fig. 348: Brake Pedal Assembly
Courtesy of GENERAL MOTORS COMPANY

7. Install the brake pedal assembly. (1)[Brake Pedal Assembly Replacement](#)
8. Install Instrument Panel Compartment Air Duct (2)

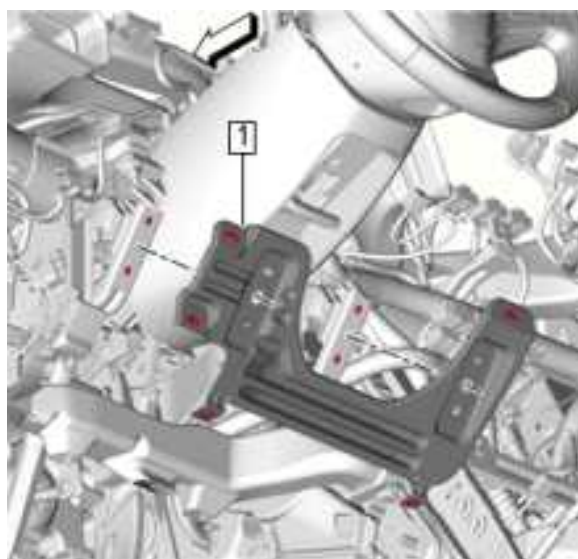


Fig. 349: Instrument Panel Knee Bolster Deflector
Courtesy of GENERAL MOTORS COMPANY

9. Install Instrument Panel Knee Bolster Deflector (1)[Instrument Panel Knee Bolster Deflector Replacement \(Terrain\)](#)

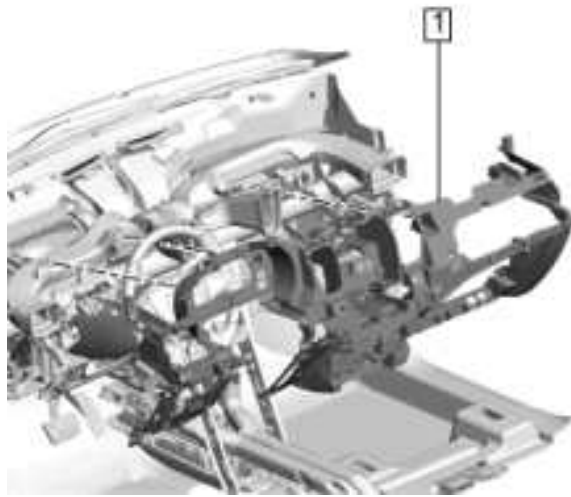


Fig. 350: Instrument Panel

Courtesy of GENERAL MOTORS COMPANY

10. Install Instrument Panel Assembly (1) [Instrument Panel Assembly Replacement \(Terrain\)](#)

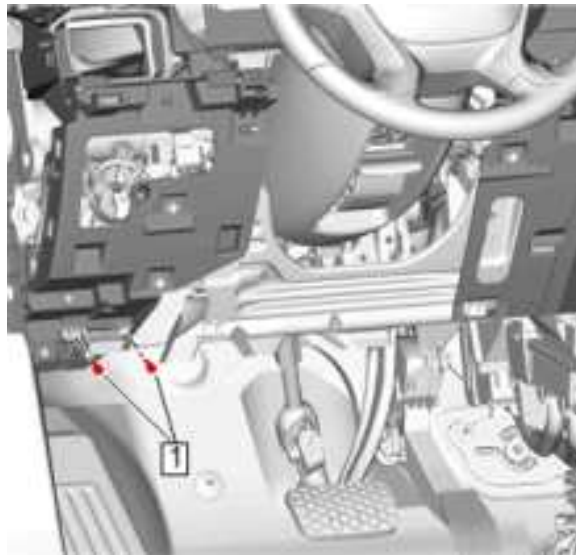


Fig. 351: Data Link Connector Bolts

Courtesy of GENERAL MOTORS COMPANY

11. Install Data Link Connector Bolt (1) and tighten 2.5 N.m (22 lb in)



Fig. 352: Instrument Panel Knee Bolster

Courtesy of GENERAL MOTORS COMPANY

12. Install Instrument Panel Knee Bolster (1) [Instrument Panel Knee Bolster Replacement \(Terrain\)](#)

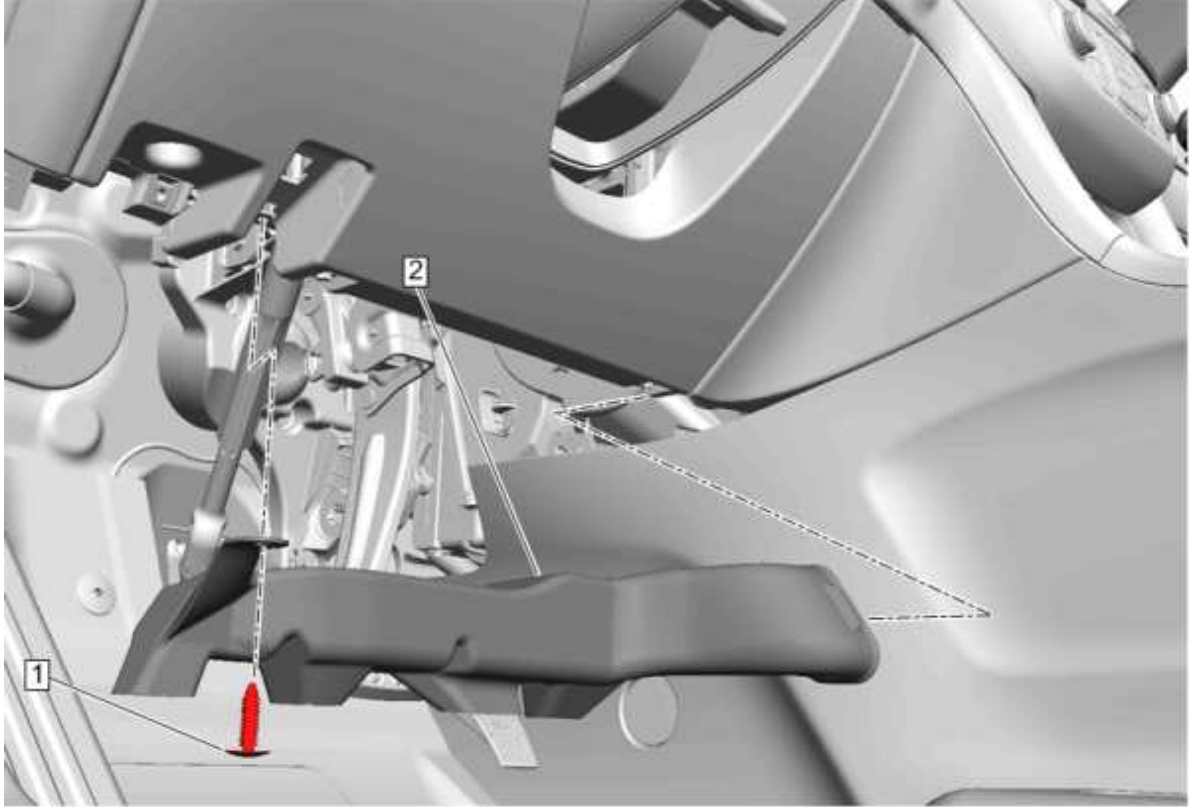


Fig. 353: Floor Front Air Outlet Duct
Courtesy of GENERAL MOTORS COMPANY

13. Install Floor Front Air Outlet Duct - Left Side (2)[Floor Front Air Outlet Duct Replacement - Left Side](#)

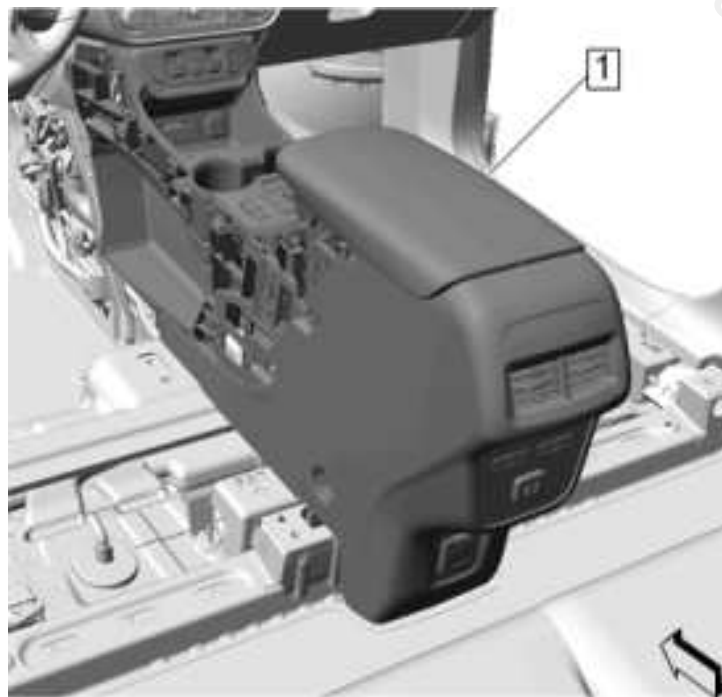


Fig. 354: Front Floor Console
Courtesy of GENERAL MOTORS COMPANY

14. Connect the electrical connectors.
 15. Install Front Floor Console (1)[Front Floor Console Replacement \(Terrain\)](#)

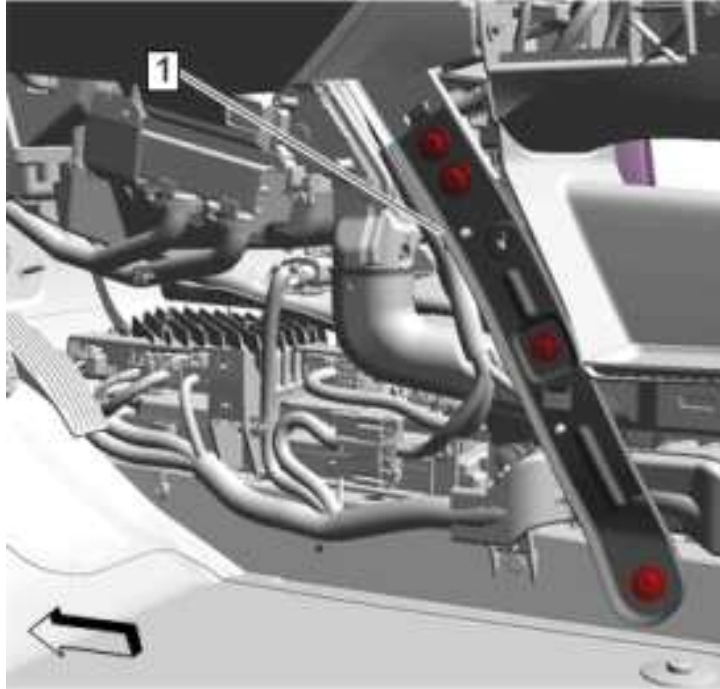


Fig. 355: Instrument Panel Center Lower Bracket-Left Side
 Courtesy of GENERAL MOTORS COMPANY

16. Install Instrument Panel Center Lower Bracket-Left Side (1) **Instrument Panel Center Lower Bracket Replacement (Terrain - Left Side)**



Fig. 356: Left Front Floor Console Extension Panel
 Courtesy of GENERAL MOTORS COMPANY

17. Install Front Floor Console Extension Panel - Left (1) **Front Floor Console Extension Panel Replacement - Left Side (Terrain)**

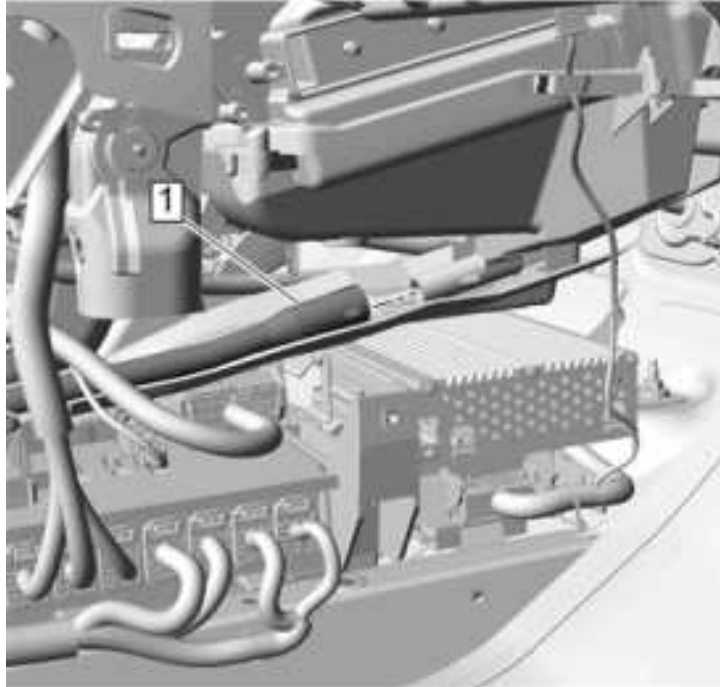


Fig. 357: Air Conditioning Evaporator and Blower Module Drain Hose
 Courtesy of GENERAL MOTORS COMPANY

CAUTION: Refer to [HVAC Module Drain Tube Caution](#) .

18. Install Air Conditioning Evaporator and Blower Module Drain Hose (1) @Heater and Air Conditioning Evaporator and Blower Lower Case
19. Remove the absorbent shop clothes/towels covering the electrical components.

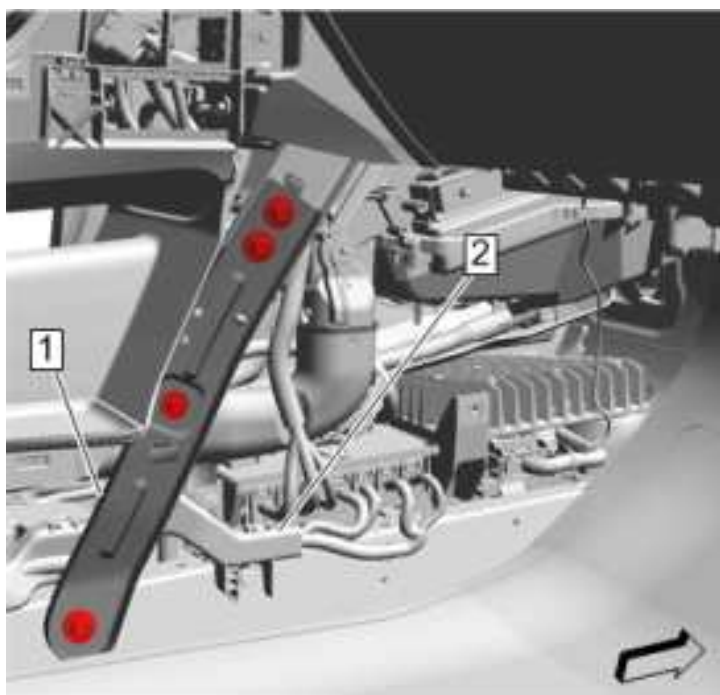


Fig. 358: Instrument Panel Center Lower Bracket
 Courtesy of GENERAL MOTORS COMPANY

20. Install Instrument Panel Center Lower Bracket-Right Side (1) - [Instrument Panel Center Lower Bracket Replacement \(Terrain - Right Side\)](#).

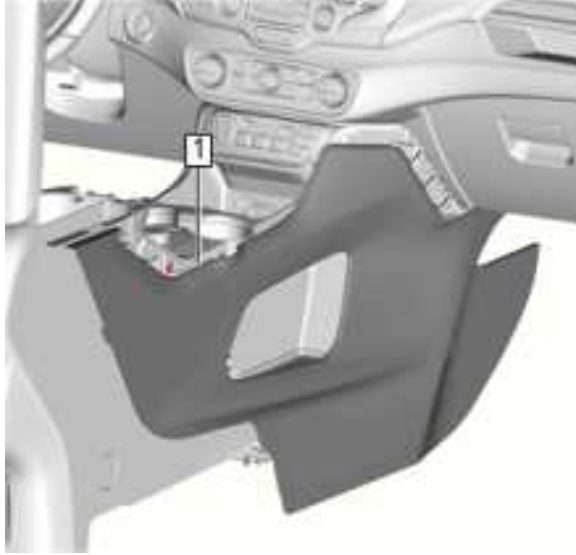


Fig. 359: Right Front Floor Console Extension Panel
Courtesy of GENERAL MOTORS COMPANY

21. Install Front Floor Console Extension Panel - Right (1) - **Front Floor Console Extension Panel Replacement - Right Side (Terrain)**



Fig. 360: Instrument Panel Center Air Outlet Duct
Courtesy of GENERAL MOTORS COMPANY

22. Install Instrument Panel Center Air Outlet Duct (1) - **Instrument Panel Center Lower Bracket Replacement (Terrain - Left Side) Instrument Panel Center Lower Bracket Replacement (Terrain - Right Side)**

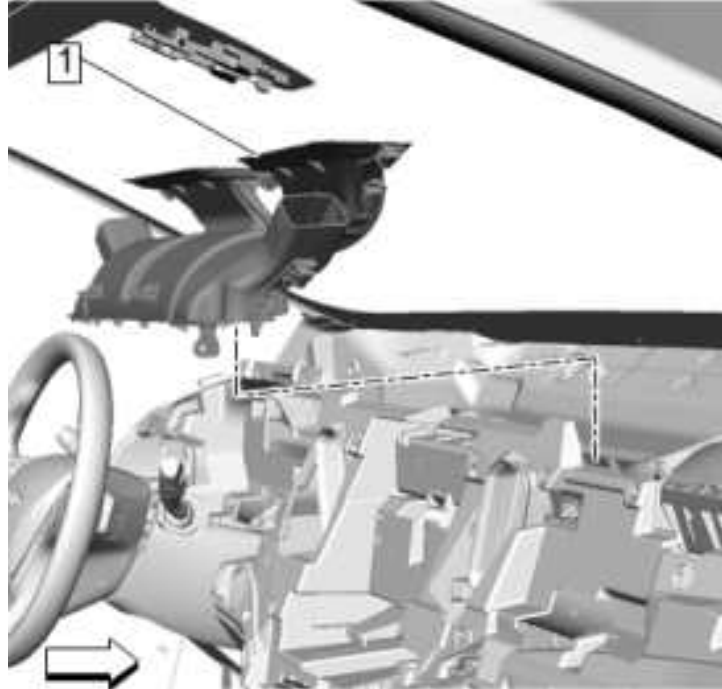


Fig. 361: Windshield Defroster Outlet Duct
 Courtesy of GENERAL MOTORS COMPANY

23. Attach the wiring harness and connect the electrical connectors as necessary.
24. Install Windshield Defroster Outlet Duct (1) - [Windshield Defroster Outlet Duct Replacement \(Terrain\)](#)

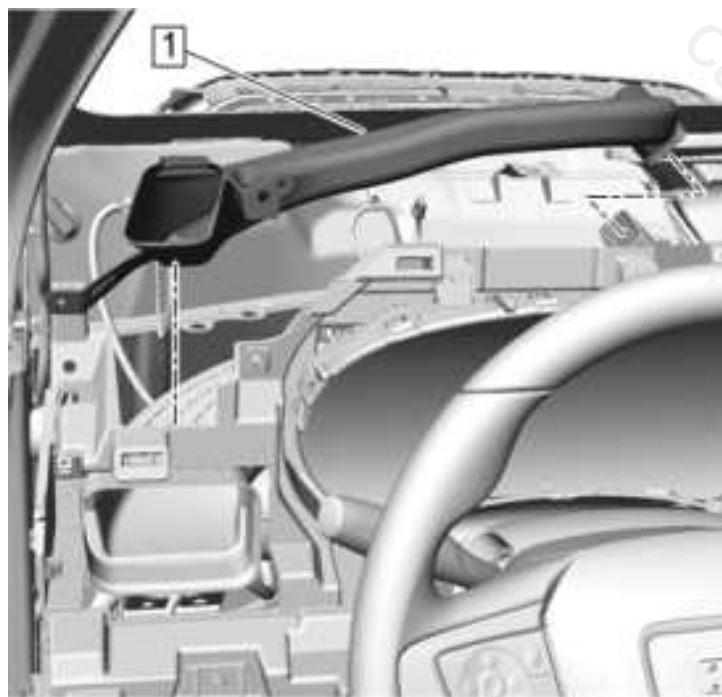


Fig. 362: Left Side Window Defogger Outlet Duct
 Courtesy of GENERAL MOTORS COMPANY

25. Install Side Window Defogger Outlet Duct - Left Side (1) - [Side Window Defogger Outlet Duct Replacement - Left Side \(Terrain\)](#)

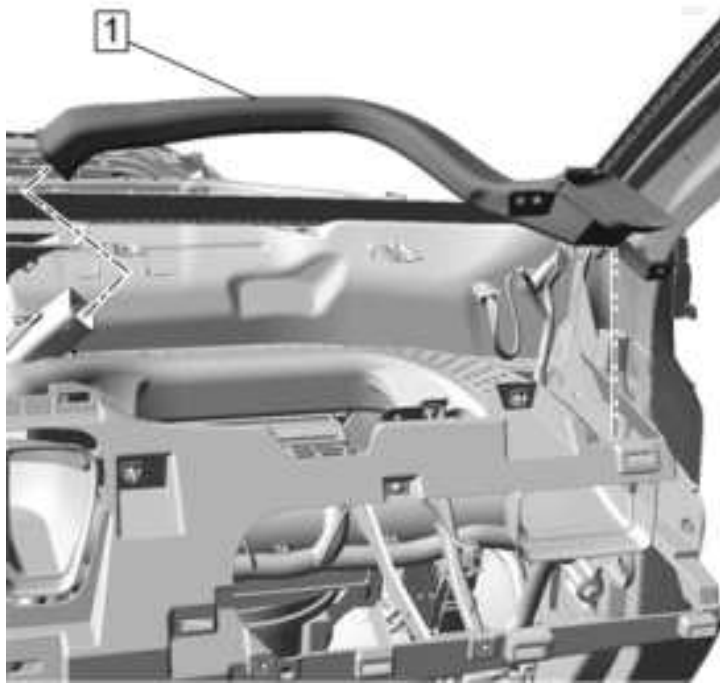


Fig. 363: Right Side Window Defogger Outlet Duct
 Courtesy of GENERAL MOTORS COMPANY

26. Install Side Window Defogger Outlet Duct - Right Side (1) - **Side Window Defogger Outlet Duct Replacement - Right Side (Terrain)**

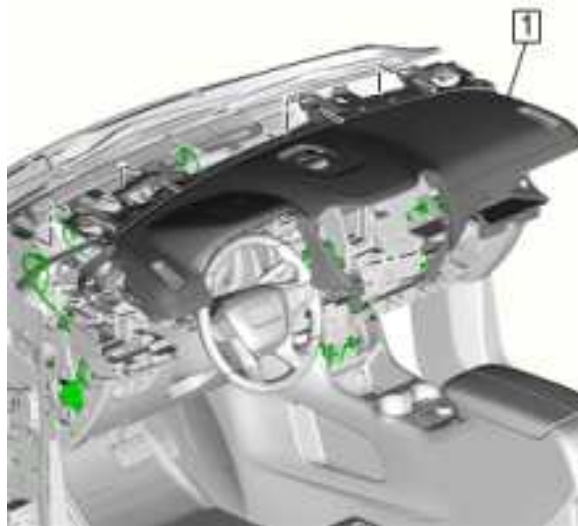


Fig. 364: Instrument Panel Upper Trim Panel
 Courtesy of GENERAL MOTORS COMPANY

27. Install Instrument Panel Upper Trim Panel (1) - **Instrument Panel Upper Trim Panel Replacement (Terrain)**

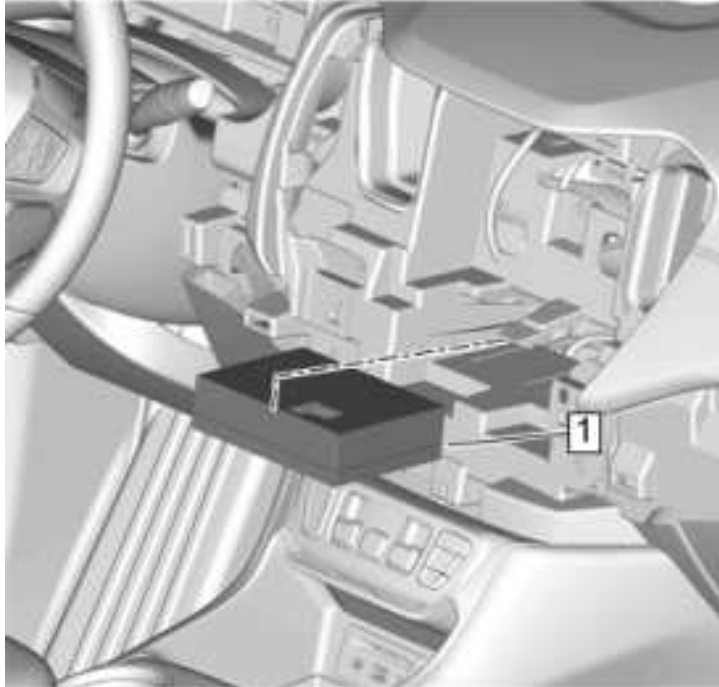


Fig. 365: Communication Interface Module
Courtesy of GENERAL MOTORS COMPANY

28. Install Communication Interface Module (1) - [Communication Interface Module Replacement \(Terrain with IOS, IOT, IOU\)](#) [Communication Interface Module Replacement \(Terrain with IOR\)](#)

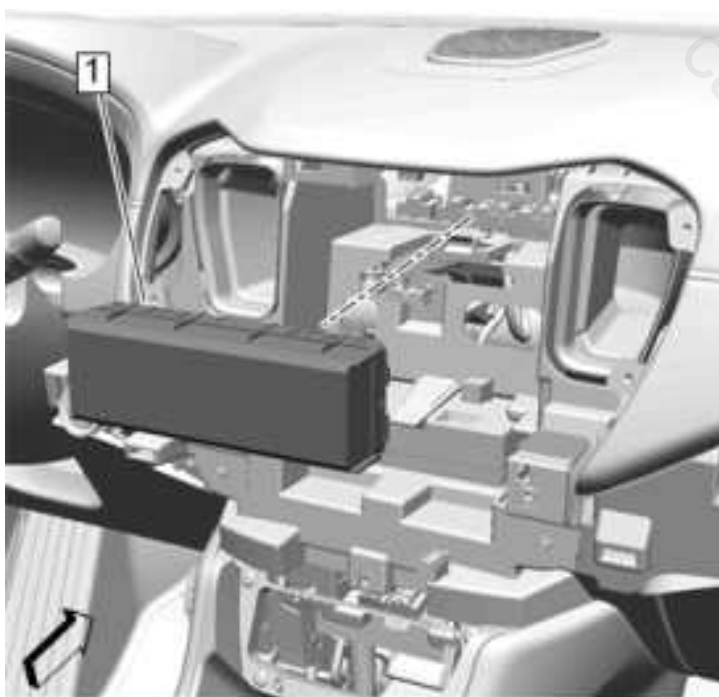


Fig. 366: Heater And Air Conditioning Remote Control
Courtesy of GENERAL MOTORS COMPANY

29. Install Heater and Air Conditioning Remote Control (1) - [Heater and Air Conditioning Remote Control Replacement \(Terrain\)](#)

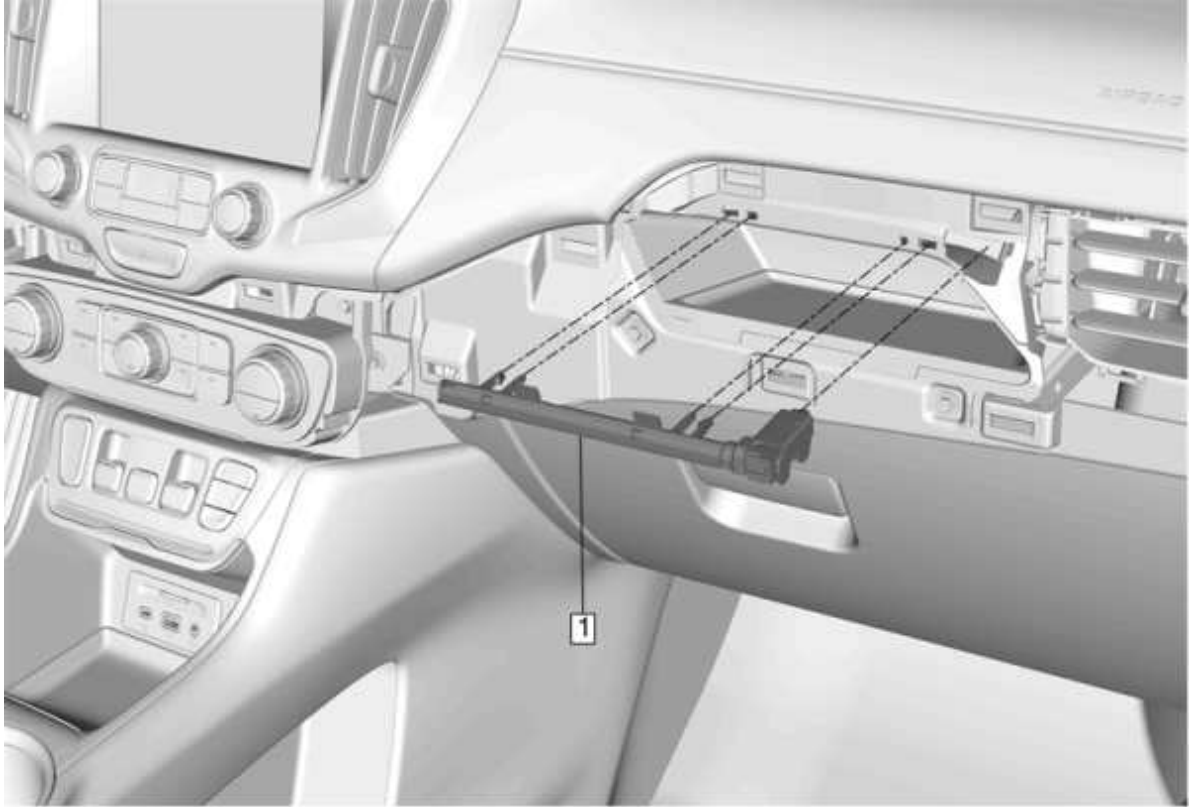


Fig. 367: Instrument Panel Light Conductor Lamp
 Courtesy of GENERAL MOTORS COMPANY

30. Install Instrument Panel Light Conductor Lamp (1) - **Instrument Panel Light Conductor Lamp Replacement (GMC)**

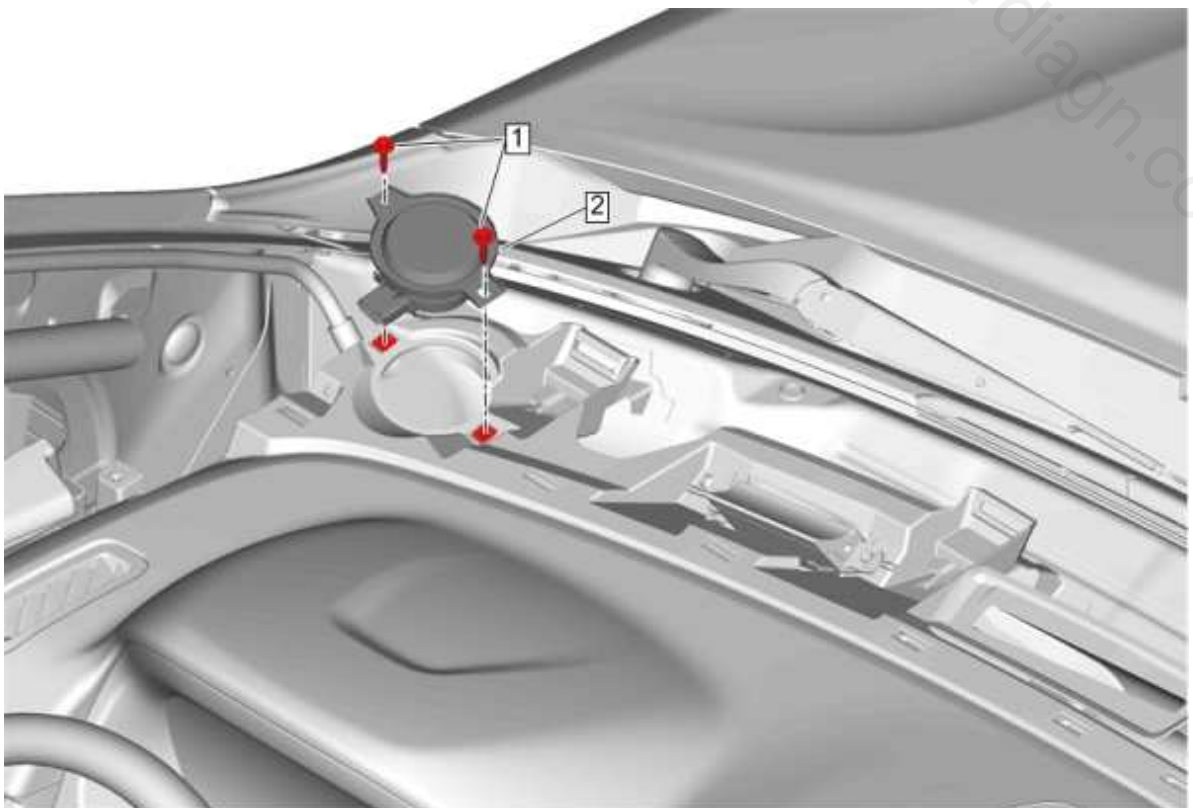


Fig. 368: Radio Front Speaker
 Courtesy of GENERAL MOTORS COMPANY

31. Install the left and right side radio front speakers. (2) **Radio Front Speaker Replacement (Terrain)**

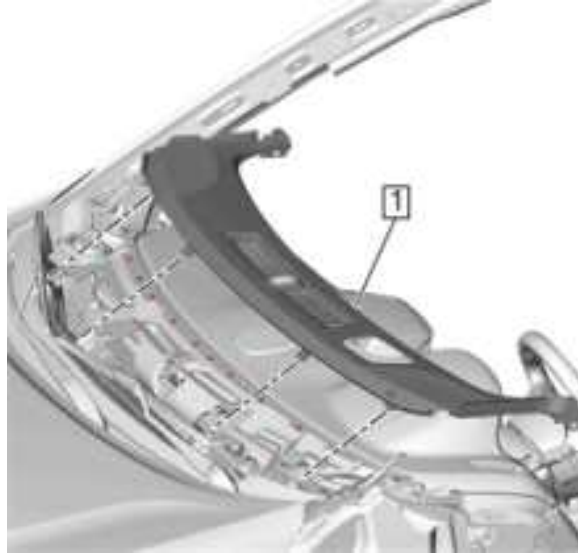


Fig. 369: Instrument Panel Extension
Courtesy of GENERAL MOTORS COMPANY

32. Install Instrument Panel Extension (1) - **Instrument Panel Extension Replacement (Terrain)**



Fig. 370: Radio Front Center Speaker
Courtesy of GENERAL MOTORS COMPANY

33. Install Radio Front Center Speaker (2) - **Radio Front Center Speaker Replacement (Terrain)**

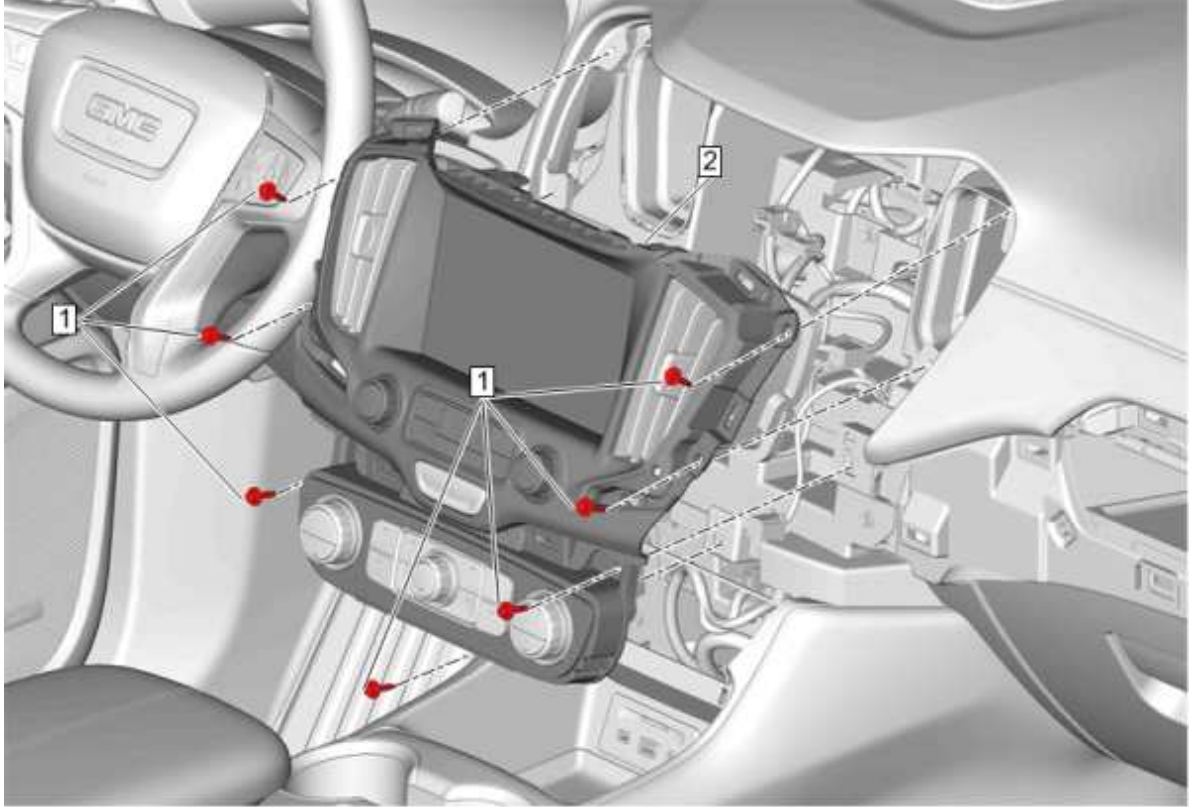


Fig. 371: Radio Control Assembly And Screws
Courtesy of GENERAL MOTORS COMPANY

34. Connect the electrical connectors.
35. Install Radio Control Assembly (2) - [Radio Control Assembly Replacement \(Terrain\)](#)

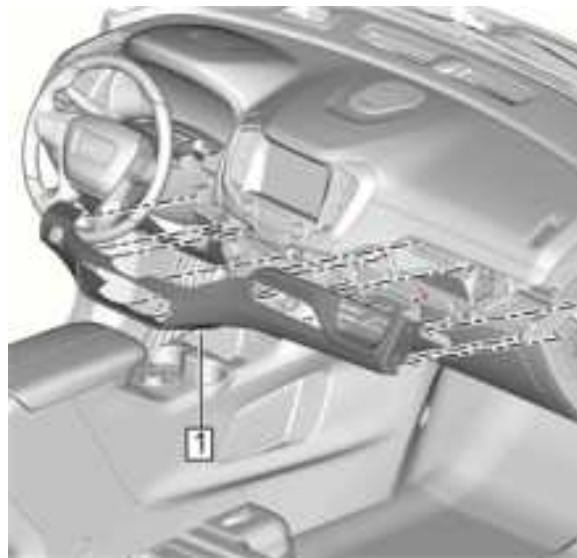


Fig. 372: Right Side Instrument Panel Trim Pad
Courtesy of GENERAL MOTORS COMPANY

36. Install Instrument Panel Trim Pad - Right Side (1) - [Instrument Panel Trim Pad Replacement - Right Side \(Terrain\)](#)

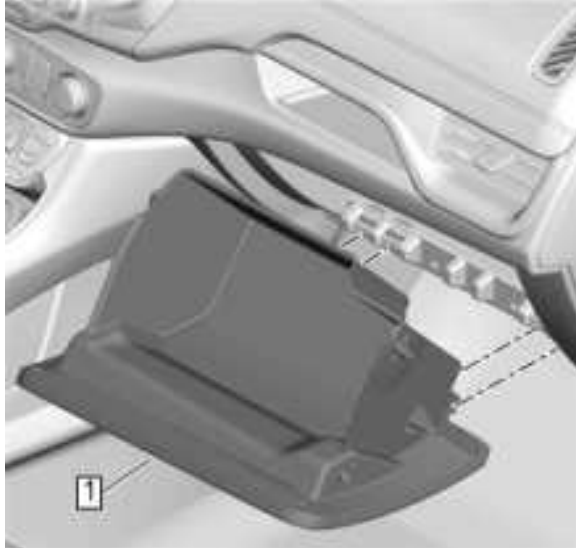


Fig. 373: Instrument Panel Compartment Door
 Courtesy of GENERAL MOTORS COMPANY

37. Install Instrument Panel Compartment Door (1) - [Instrument Panel Compartment Door Replacement \(Terrain\)](#)

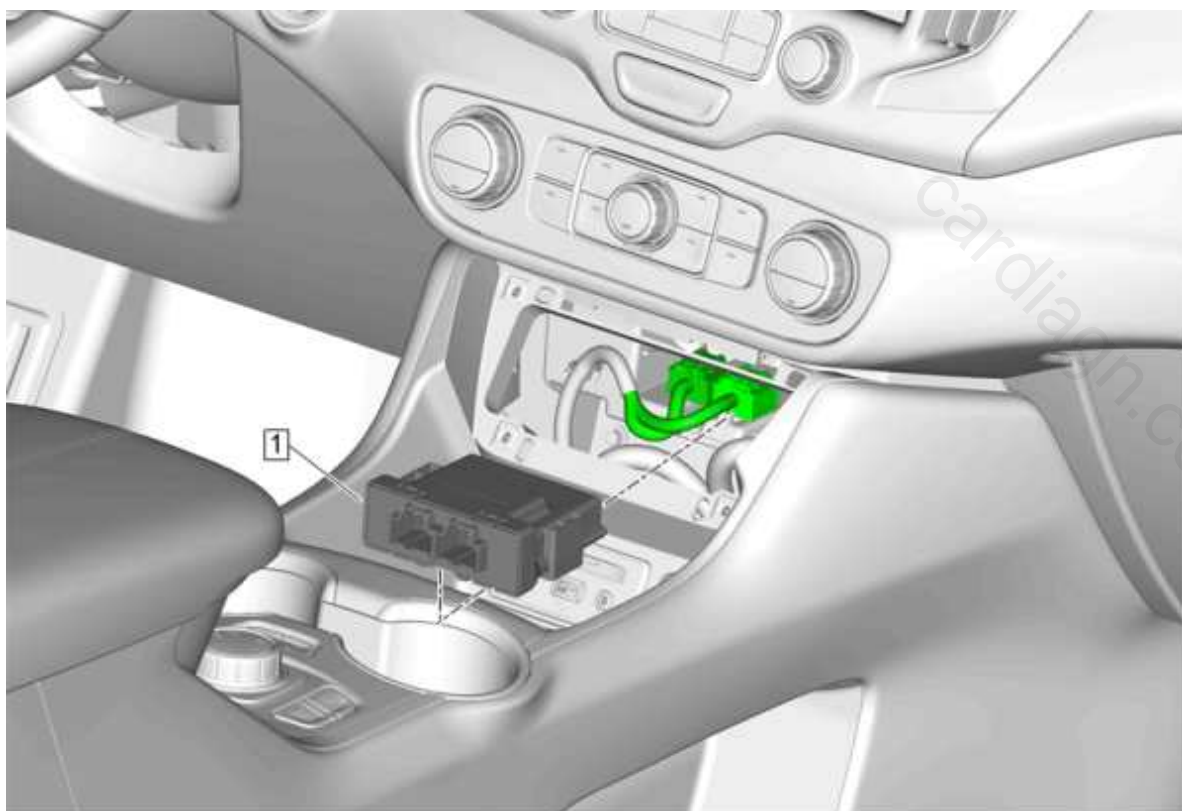


Fig. 374: Serial Data Gateway Module
 Courtesy of GENERAL MOTORS COMPANY

38. Install Serial Data Gateway Module (1) - [Serial Data Gateway Module Replacement \(Terrain with MNH, NMK, or MHG\)](#) [Serial Data Gateway Module Replacement \(Terrain with M3U, M3D, or M3H\)](#)

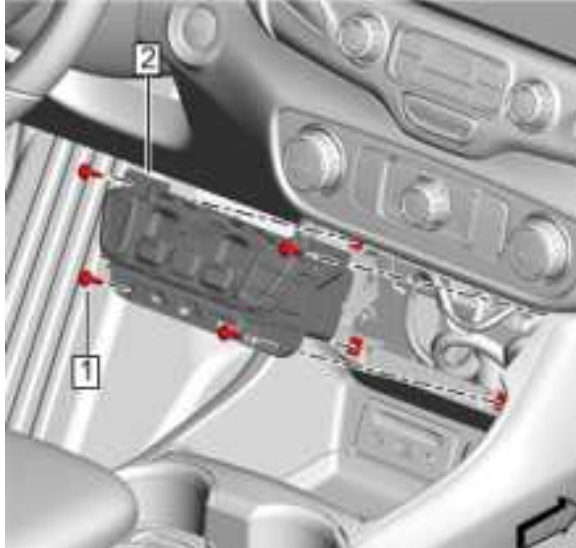


Fig. 375: Automatic Transmission Control Bolts And Electronic Transmission Shift Control Pushbutton

Courtesy of GENERAL MOTORS COMPANY

39. Install Electronic Transmission Shift Control Pushbutton (2) - [Electronic Transmission Shift Control Pushbutton Replacement](#)



Fig. 376: Front Floor Console Transmission Shift Opening Bezel

Courtesy of GENERAL MOTORS COMPANY

40. Install Front Floor Console Transmission Shift Opening Bezel (1) - [Front Floor Console Transmission Shift Opening Bezel Replacement \(Terrain\)](#)

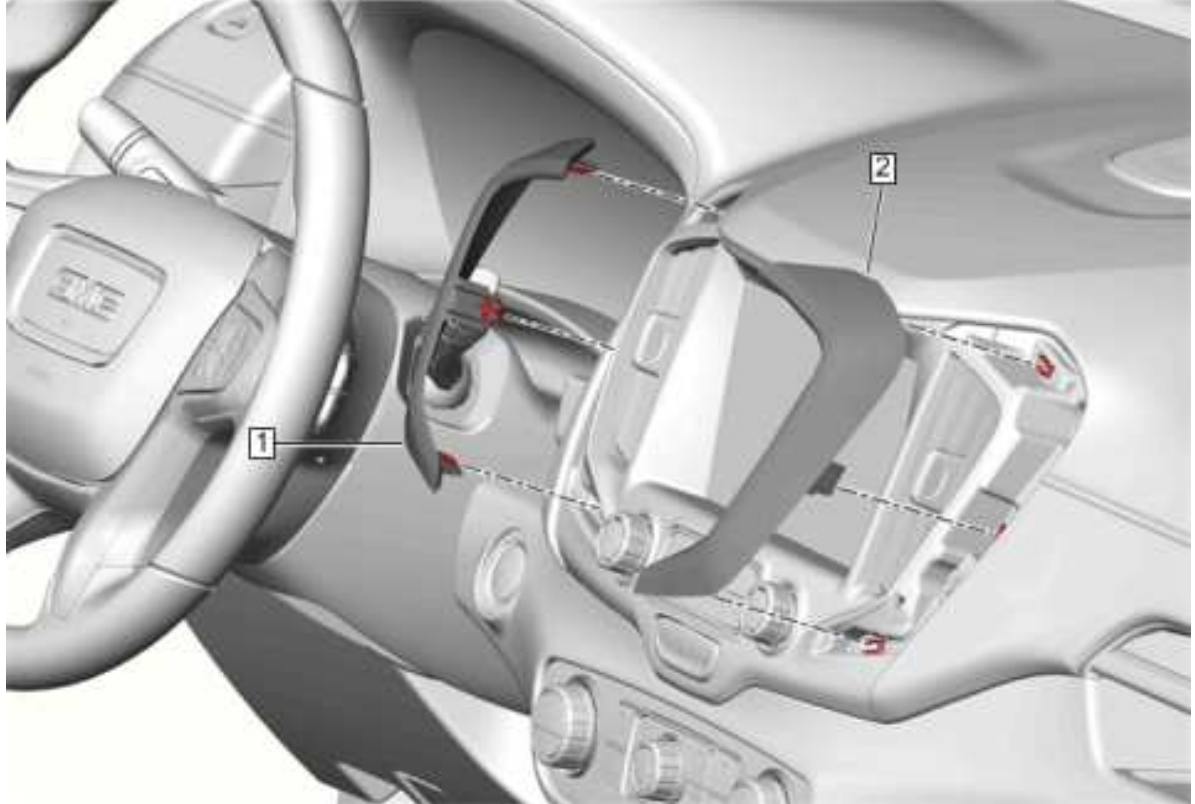


Fig. 377: Instrument Panel Center Trim Plate Appliques

Courtesy of GENERAL MOTORS COMPANY

41. Install Instrument Panel Center Trim Plate Applique - Left Side (1) - [Instrument Panel Center Trim Plate Applique Replacement \(Terrain\)](#)
42. Install Instrument Panel Center Trim Plate Applique - Right Side (2) - [Instrument Panel Center Trim Plate Applique Replacement \(Terrain\)](#)



Fig. 378: Left Side Instrument Panel Trim Pad

Courtesy of GENERAL MOTORS COMPANY

43. Install Instrument Panel Trim Pad - Left Side (1) - [Instrument Panel Trim Pad Replacement - Left Side \(Terrain\)](#)

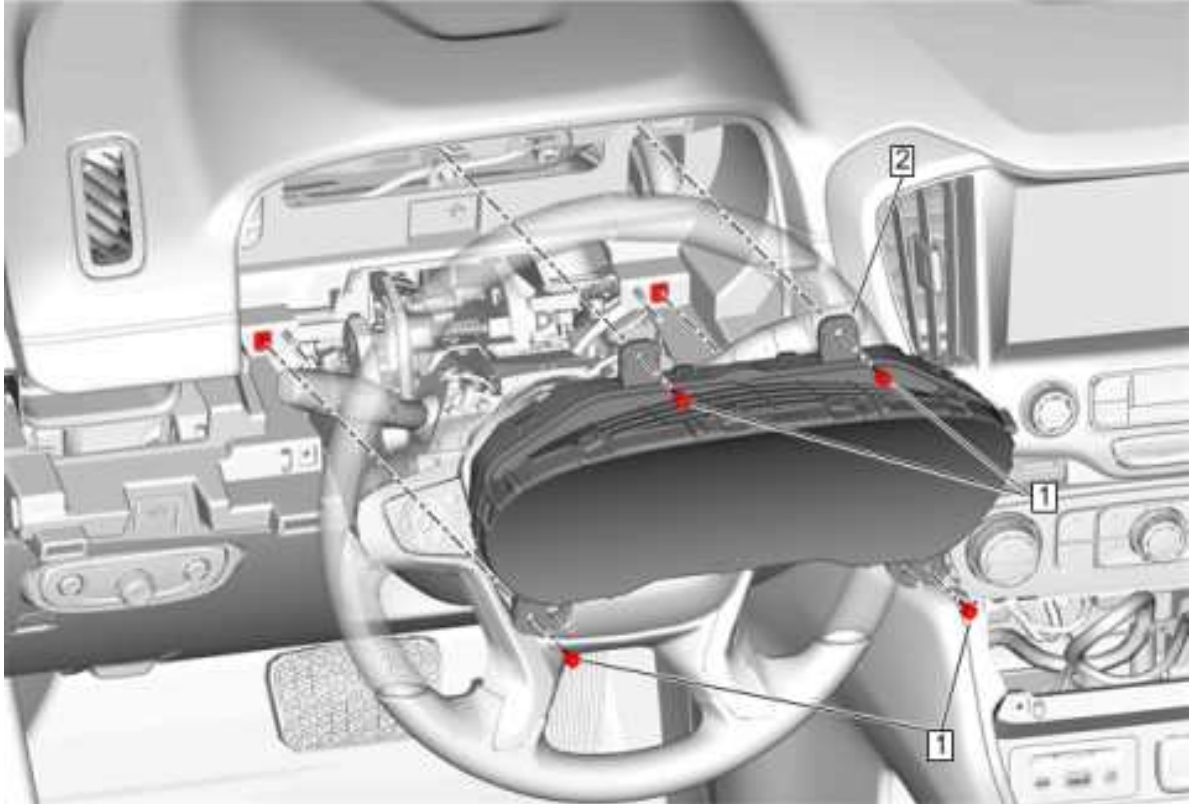


Fig. 379: Instrument Cluster And Screws
Courtesy of GENERAL MOTORS COMPANY

44. Install Instrument Cluster (2) - **Instrument Cluster Replacement (Terrain)**

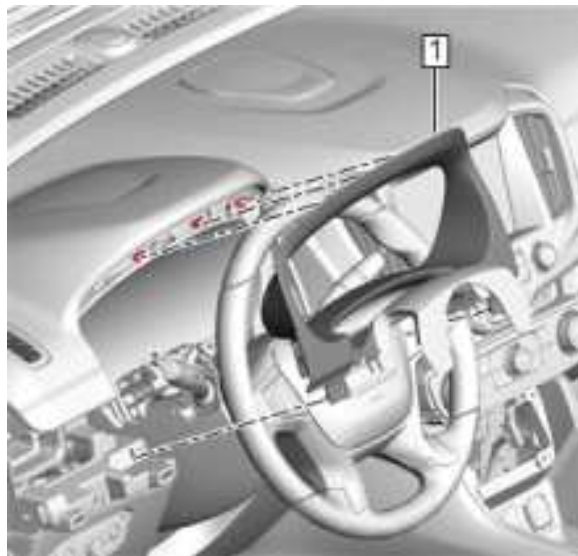


Fig. 380: Instrument Panel Cluster Trim Plate
Courtesy of GENERAL MOTORS COMPANY

45. Install Instrument Panel Cluster Trim Plate (1) - **Instrument Panel Cluster Trim Plate Replacement (Terrain)**

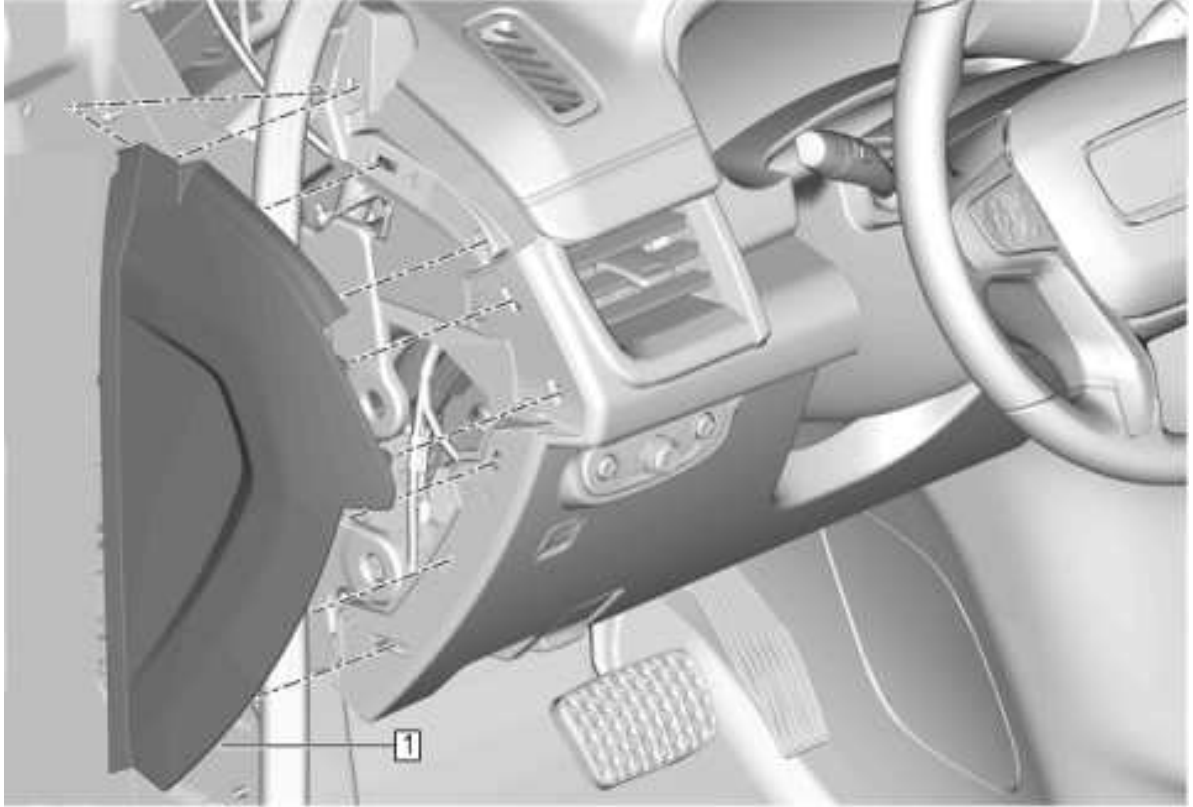


Fig. 381: Instrument Panel Outer Trim Cover (Terrain)
 Courtesy of GENERAL MOTORS COMPANY

46. Install the left and right instrument panel outer trim cover (1). [Instrument Panel Outer Trim Cover Replacement \(Terrain\)](#)
47. Install the left and right side windshield garnish molding. [Windshield Garnish Molding Replacement \(Terrain\)](#)
48. Install Drivers Seat and Passengers Seat - [Driver or Passenger Seat Removal and Installation](#)

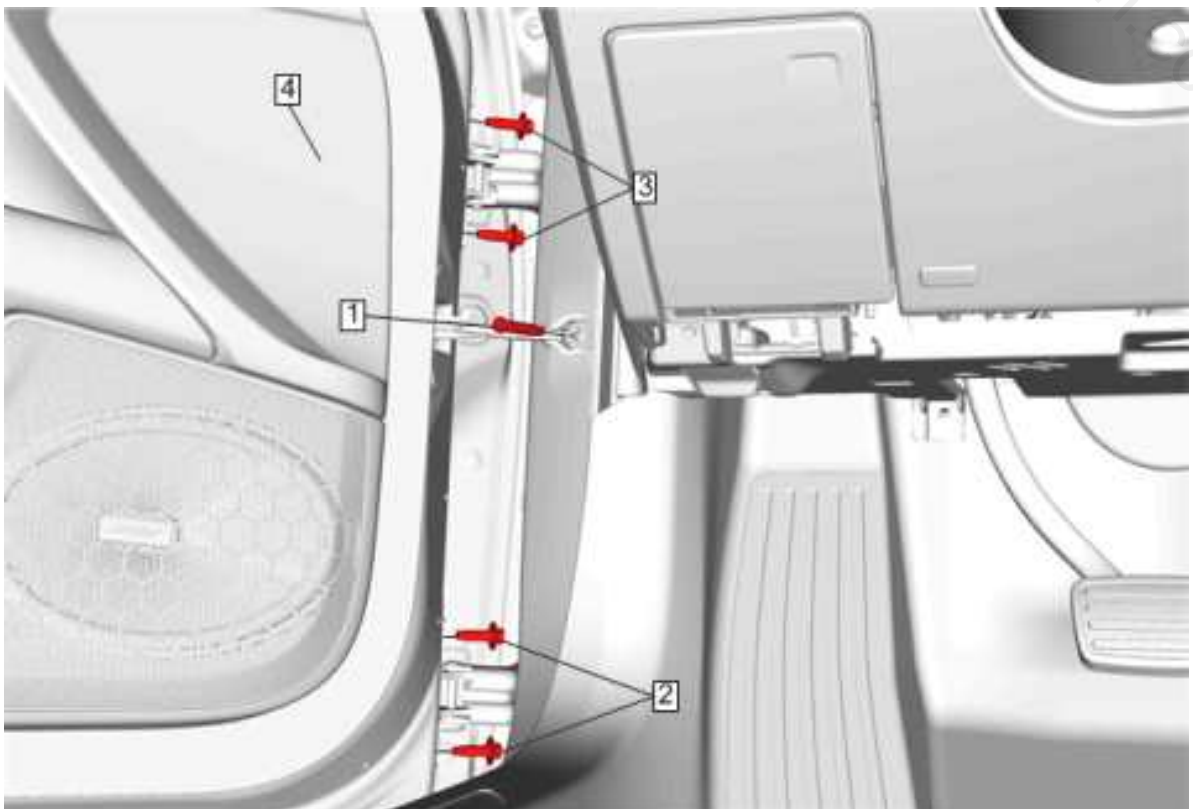


Fig. 382: Front Side Door
 Courtesy of GENERAL MOTORS COMPANY

49. Install the left and right front side door (4). [Front Side Door Replacement](#)

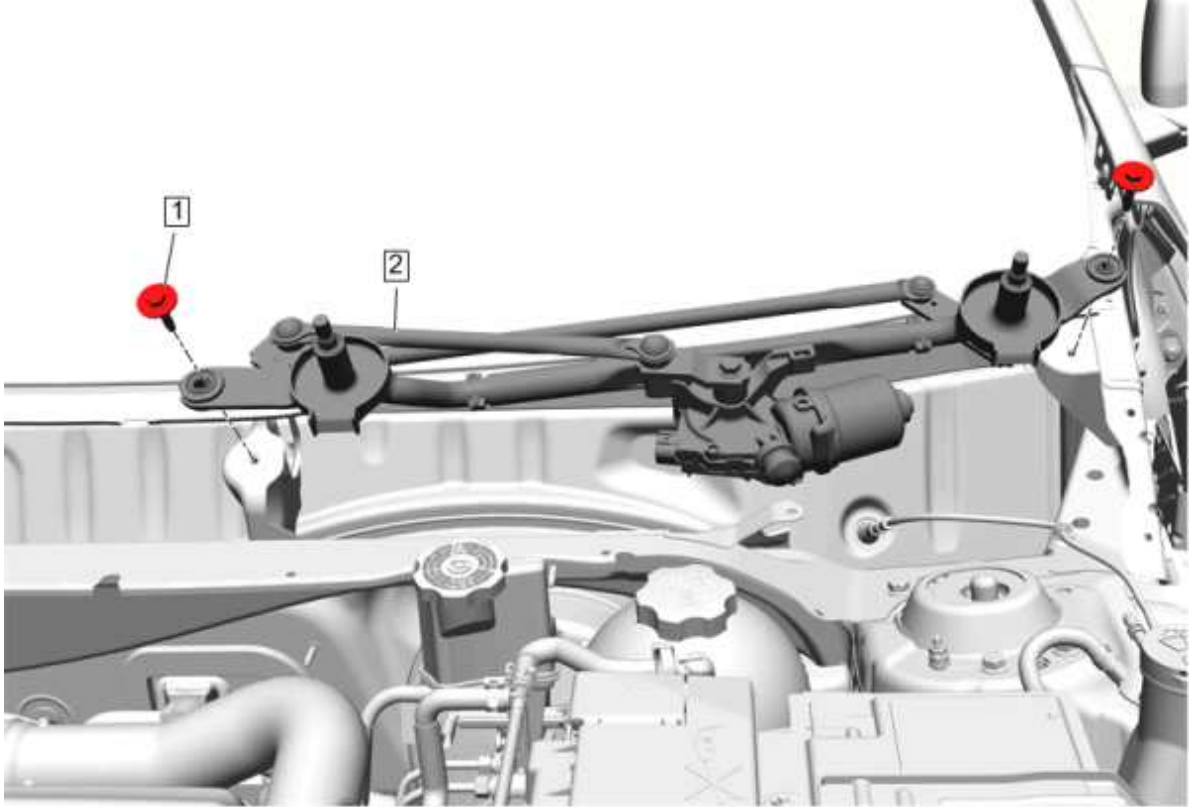


Fig. 383: Windshield Wiper Transmission
 Courtesy of GENERAL MOTORS COMPANY

50. Install Windshield Wiper Transmission (2) - [Windshield Wiper Transmission Replacement](#)

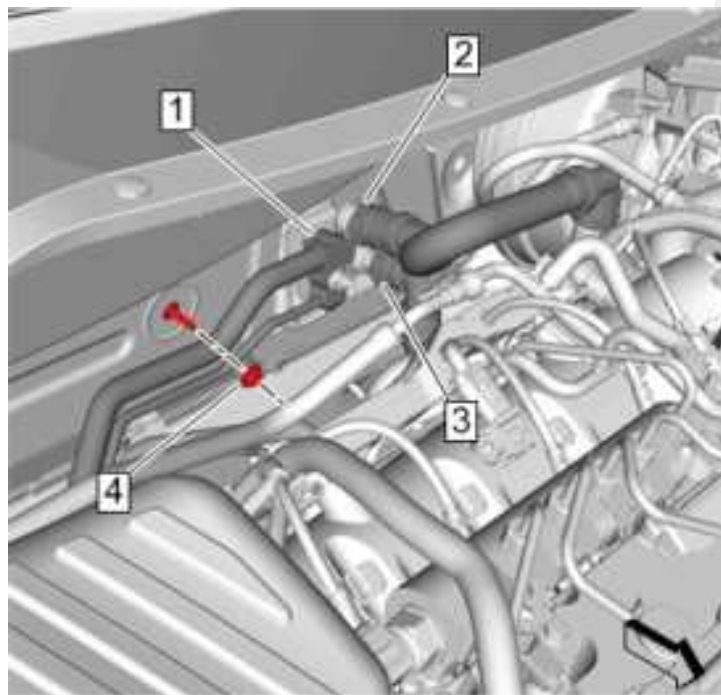


Fig. 384: Air Conditioning Evaporator and Blower Module Nut
 Courtesy of GENERAL MOTORS COMPANY

51. Install Auxiliary Heater Outlet Hose (3) @Heater Core Outlet Tube - [Auxiliary Heater Outlet Hose Replacement \(LH7 Terrain\)](#)
52. Install Heater Inlet Hose (2) @Heater Core Inlet Tube - [Heater Inlet Hose Replacement \(LH7 Terrain\)](#)
53. Install Air Conditioning Refrigerant Heat Exchanger (1) @Air Conditioning Evaporator Thermal Expansion Valve - [Air Conditioning Refrigerant Heat Exchanger Replacement \(LH7\)](#)
54. Install Intake Manifold Cover - [Intake Manifold Cover Replacement](#)
55. Fill the cooling system to the proper level. [Cooling System Draining and Filling \(GE 47716\) Cooling System Draining and Filling \(Static\)](#) .
56. Evacuate and charge the refrigerant system. [Refrigerant Recovery and Recharging \(R-134a\)Refrigerant Recovery and Recharging \(R-1234yf\)](#)

57. Connect the battery negative cable. [Battery Negative Cable Disconnection and Connection \(KL9\)](#)
58. Inspect for coolant leaks.
59. Visually inspect for air conditioning system refrigerant leaks.

HEATER AND AIR CONDITIONING EVAPORATOR AND BLOWER MODULE REMOVAL AND INSTALLATION (TERRAIN LTG)

Removal Procedure

1. Disconnect the battery negative cable. [Battery Negative Cable Disconnection and Connection \(KL9\)](#)
2. Recover the refrigerant. [Refrigerant Recovery and Recharging \(R-134a\)](#) [Refrigerant Recovery and Recharging \(R-1234yf\)](#)
3. Drain the cooling system. [Cooling System Draining and Filling \(GE 47716\)](#) [Cooling System Draining and Filling \(Static\)](#)

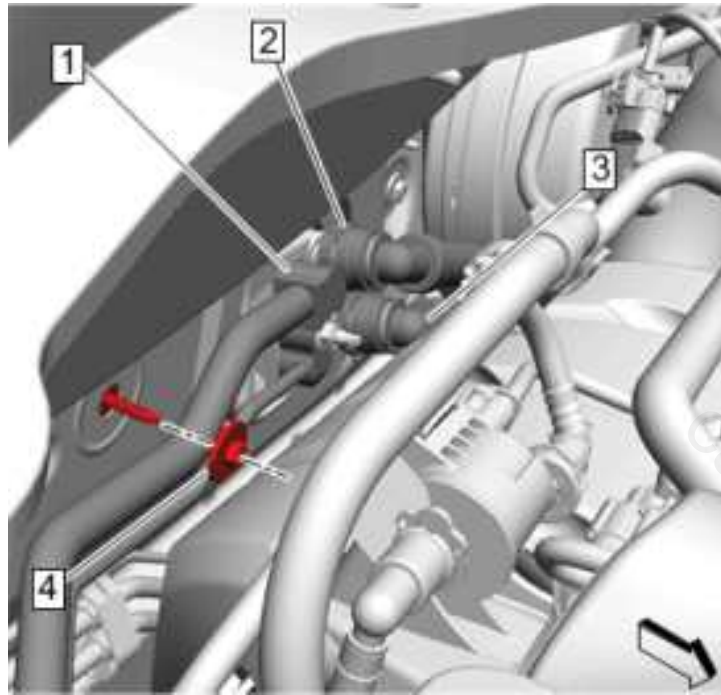


Fig. 385: Air Conditioning Refrigerant Heat Exchanger
Courtesy of GENERAL MOTORS COMPANY

4. Remove Air Conditioning Refrigerant Heat Exchanger (1) @Air Conditioning Evaporator Thermal Expansion Valve - [Air Conditioning Refrigerant Heat Exchanger Replacement \(LTG\)](#)
5. Remove Heater Inlet Hose (2) @Heater Core Inlet Tube - [Heater Inlet Hose Replacement \(LTG with KL9\)](#)
6. Remove Heater Water Auxiliary Pump Hose (3) @Heater Core Outlet Tube - [Heater Water Auxiliary Pump Hose Replacement \(LTG with KL9\)](#)
7. Remove Heater and Air Conditioning Evaporator and Blower Module Nut (4) @Cowl Panel

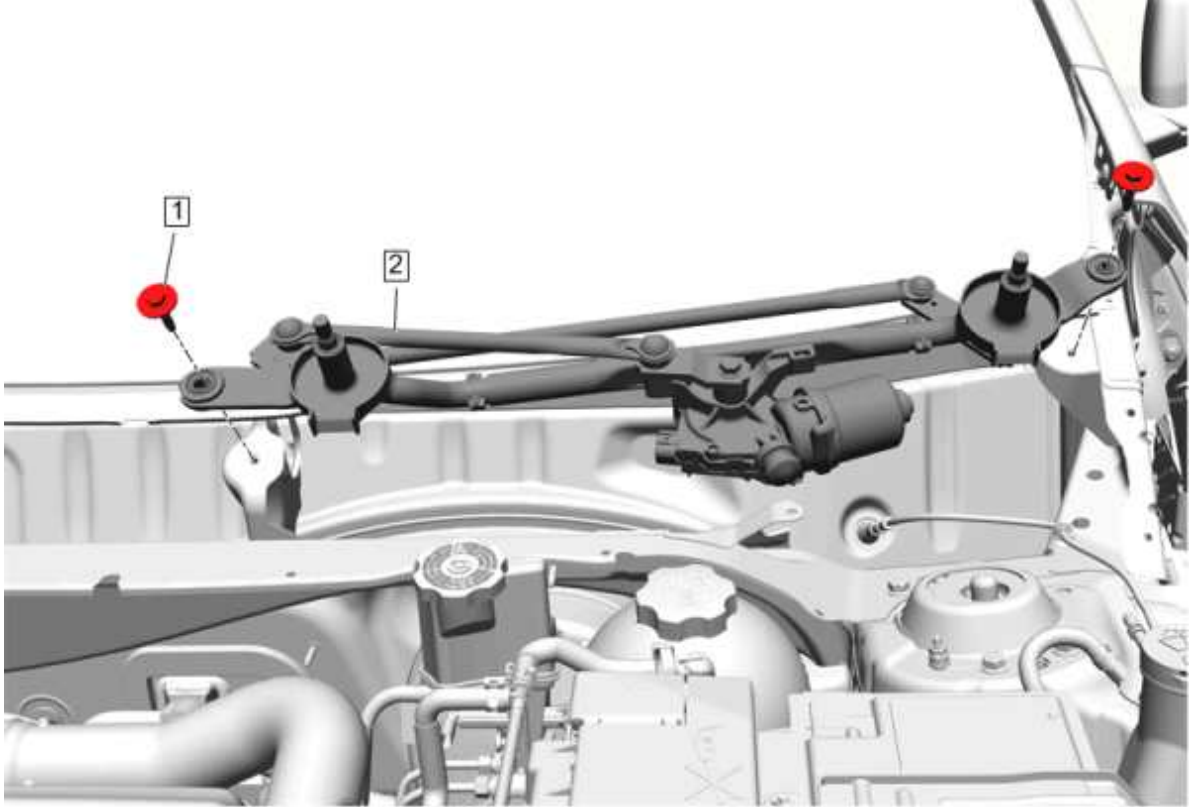


Fig. 386: Windshield Wiper Transmission
 Courtesy of GENERAL MOTORS COMPANY

8. Remove Windshield Wiper Transmission (2) - [Windshield Wiper Transmission Replacement](#)

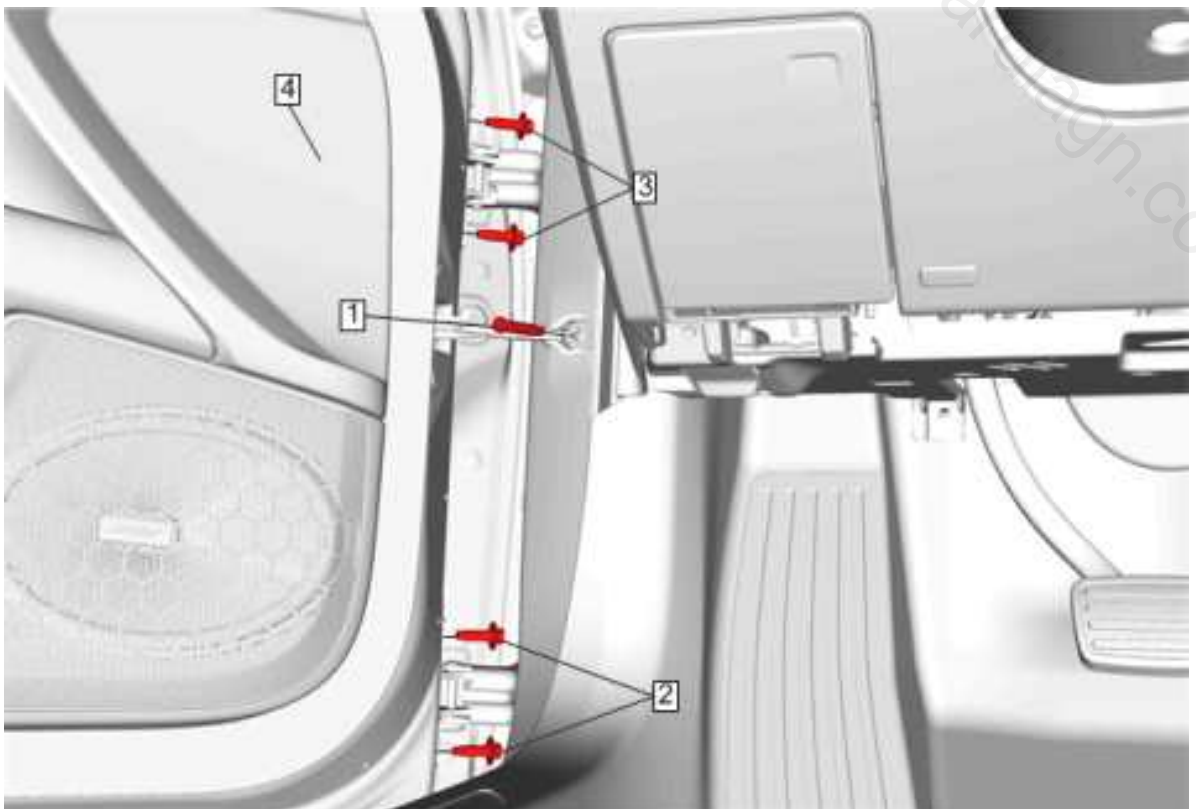


Fig. 387: Front Side Door
 Courtesy of GENERAL MOTORS COMPANY

9. Remove the left and right front side door (4). [Front Side Door Replacement](#)
10. Remove Drivers Seat and Passengers Seat - [Driver or Passenger Seat Removal and Installation](#)
11. Remove the left and right side windshield garnish molding. [Windshield Garnish Molding Replacement \(Terrain\)](#)

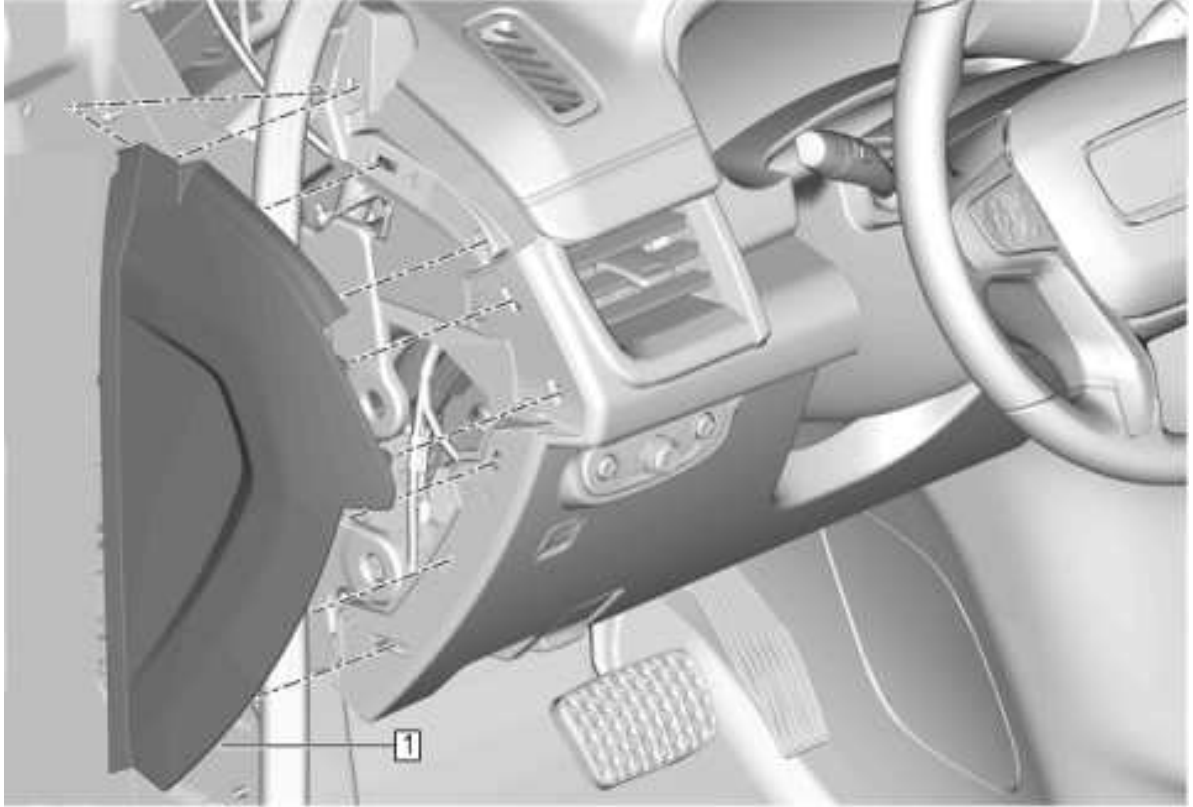


Fig. 388: Instrument Panel Outer Trim Cover (Terrain)
Courtesy of GENERAL MOTORS COMPANY

12. Remove the left and right instrument panel outer trim cover (1). **Instrument Panel Outer Trim Cover Replacement (Terrain)**

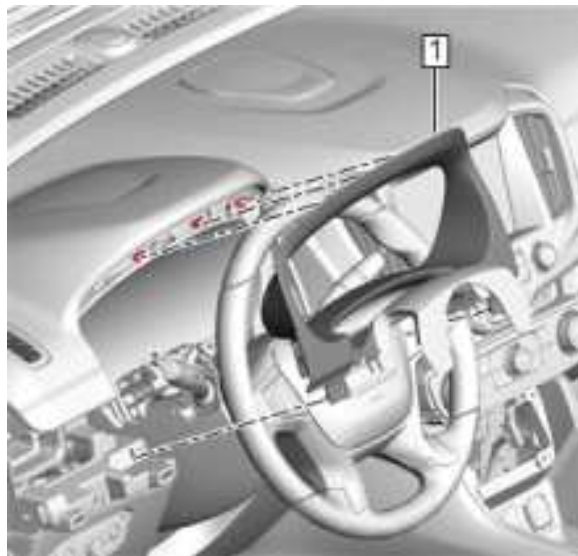


Fig. 389: Instrument Panel Cluster Trim Plate
Courtesy of GENERAL MOTORS COMPANY

13. Remove Instrument Panel Cluster Trim Plate (1) - **Instrument Panel Cluster Trim Plate Replacement (Terrain)**

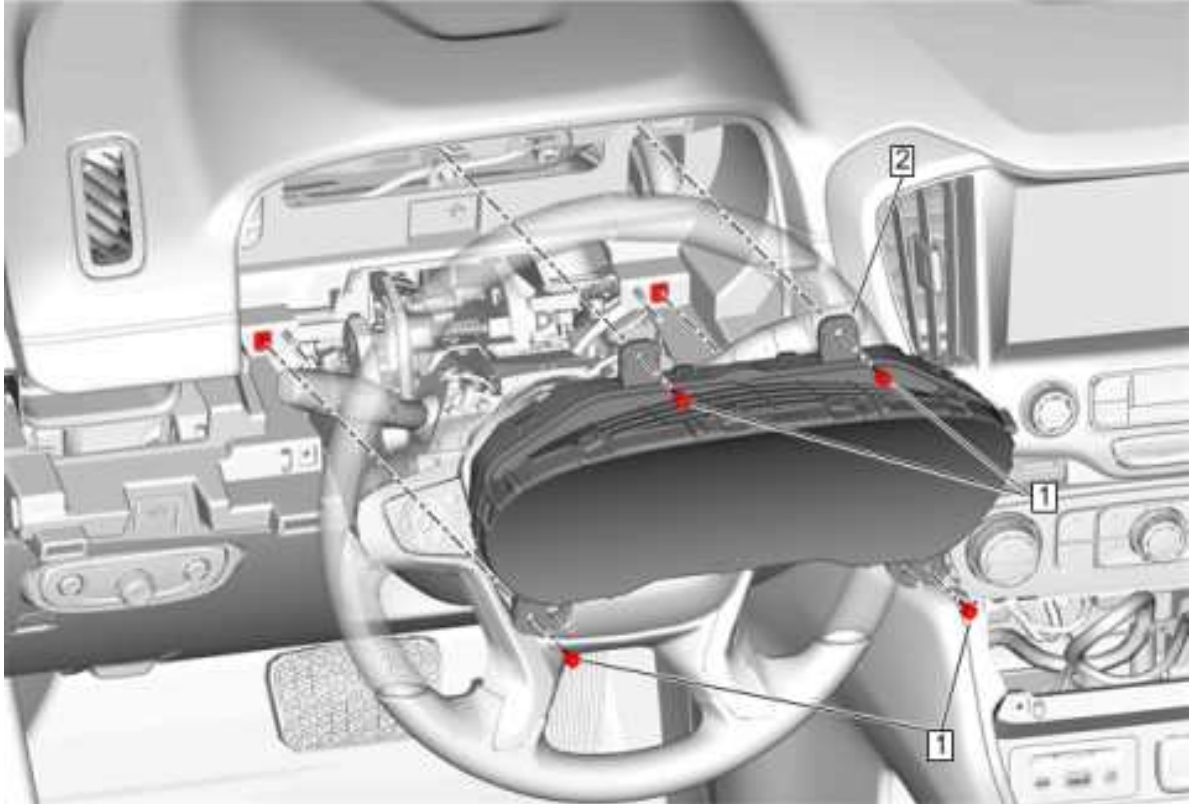


Fig. 390: Instrument Cluster And Screws
Courtesy of GENERAL MOTORS COMPANY

14. Remove Instrument Cluster (2) - **Instrument Cluster Replacement (Terrain)**



Fig. 391: Left Side Instrument Panel Trim Pad
Courtesy of GENERAL MOTORS COMPANY

15. Remove Instrument Panel Trim Pad - Left Side (1) - **Instrument Panel Trim Pad Replacement - Left Side (Terrain)**

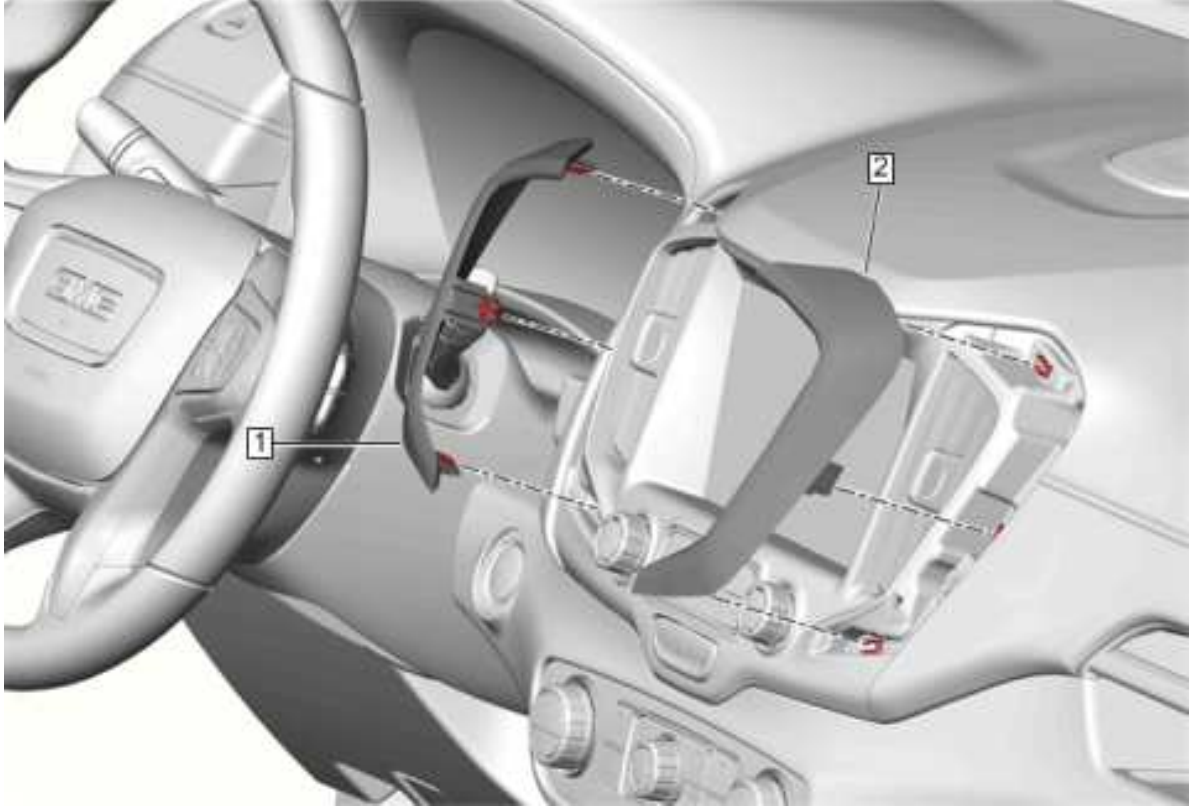


Fig. 392: Instrument Panel Center Trim Plate Appliques

Courtesy of GENERAL MOTORS COMPANY

16. Remove Instrument Panel Center Trim Plate Applique - Left Side (1) - [Instrument Panel Center Trim Plate Applique Replacement \(Terrain\)](#)
17. Remove Instrument Panel Center Trim Plate Applique - Right Side (2) - [Instrument Panel Center Trim Plate Applique Replacement \(Terrain\)](#)



Fig. 393: Front Floor Console Transmission Shift Opening Bezel

Courtesy of GENERAL MOTORS COMPANY

18. Remove Front Floor Console Transmission Shift Opening Bezel (1) - [Front Floor Console Transmission Shift Opening Bezel Replacement \(Terrain\)](#)

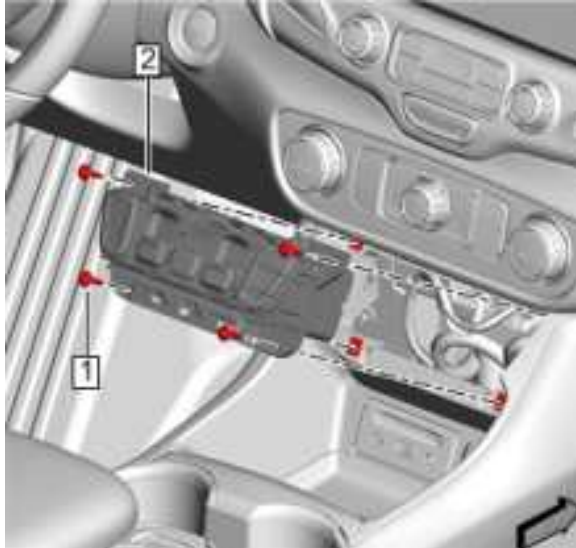


Fig. 394: Automatic Transmission Control Bolts And Electronic Transmission Shift Control Pushbutton

Courtesy of GENERAL MOTORS COMPANY

19. Remove Electronic Transmission Shift Control Pushbutton (2) - [Electronic Transmission Shift Control Pushbutton Replacement](#)

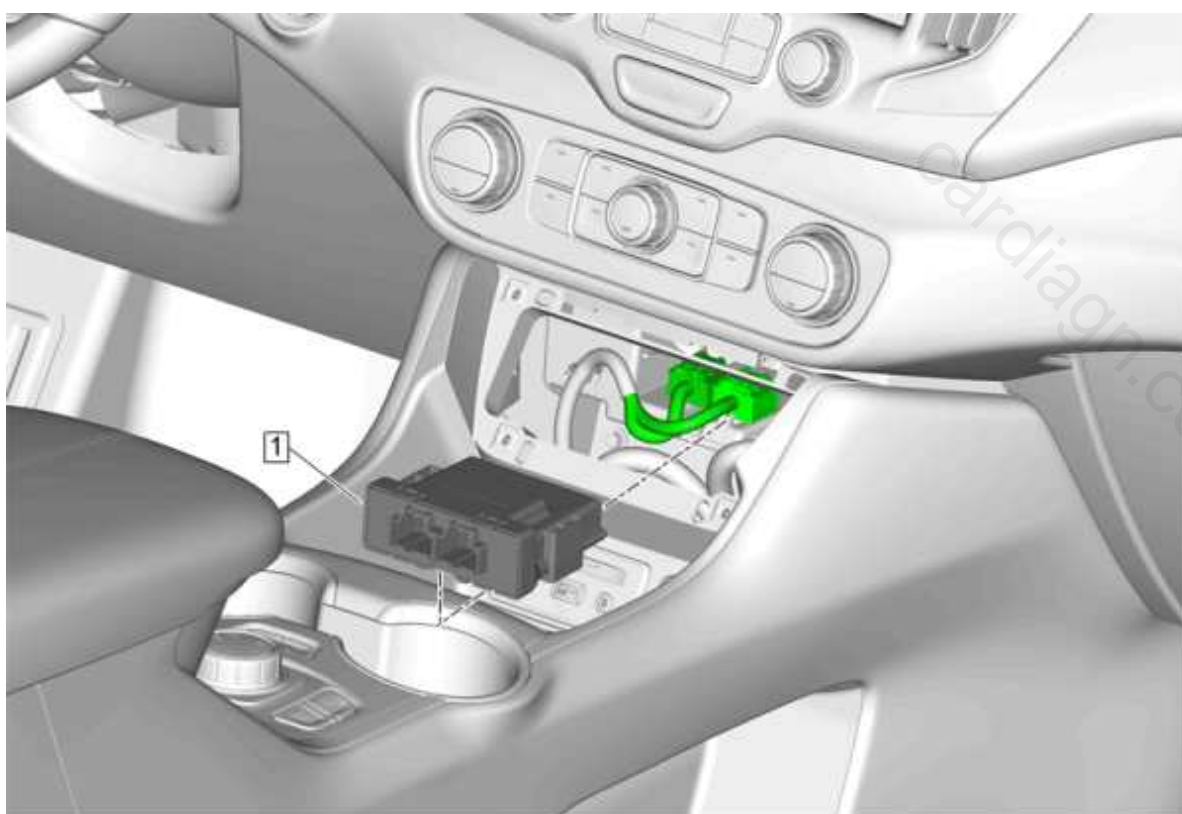


Fig. 395: Serial Data Gateway Module

Courtesy of GENERAL MOTORS COMPANY

20. Remove Serial Data Gateway Module (1) - [Serial Data Gateway Module Replacement \(Terrain with MNH, NMK, or MHG\)](#) [Serial Data Gateway Module Replacement \(Terrain with M3U, M3D, or M3H\)](#)

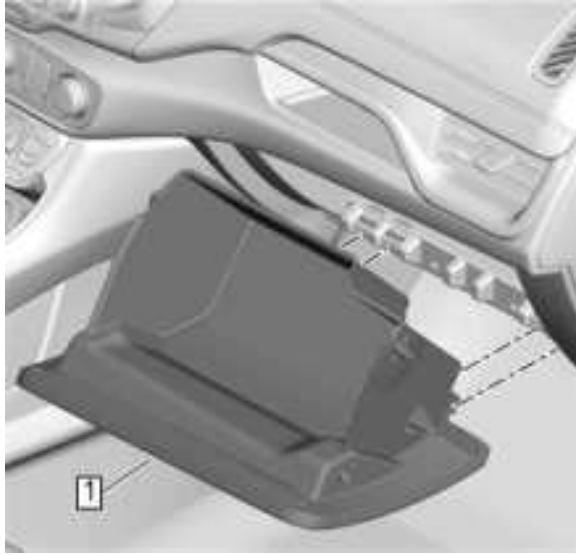


Fig. 396: Instrument Panel Compartment Door
Courtesy of GENERAL MOTORS COMPANY

21. Remove Instrument Panel Compartment Door (1) - [Instrument Panel Compartment Door Replacement \(Terrain\)](#)

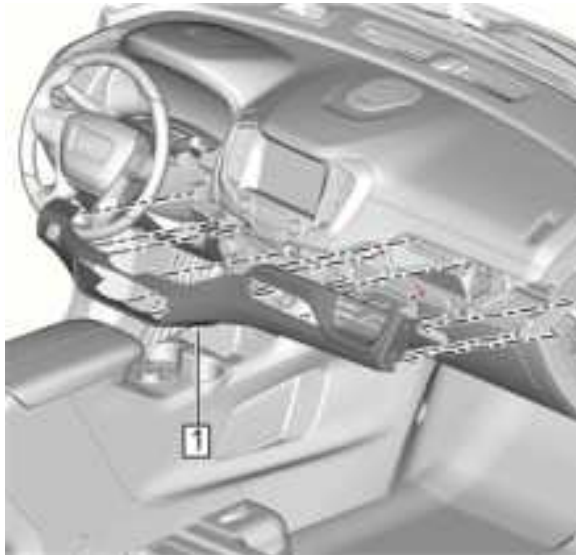


Fig. 397: Right Side Instrument Panel Trim Pad
Courtesy of GENERAL MOTORS COMPANY

22. Remove Instrument Panel Trim Pad - Right Side (1) - [Instrument Panel Trim Pad Replacement - Right Side \(Terrain\)](#)

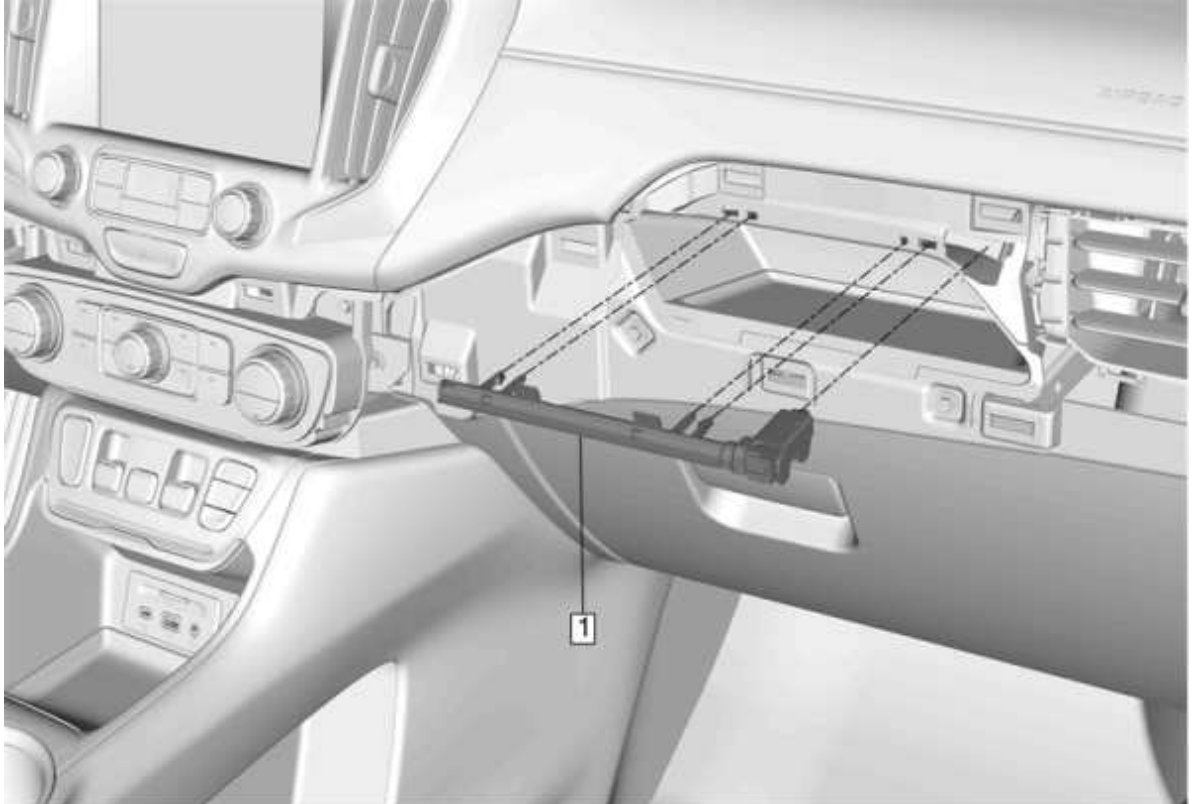


Fig. 398: Instrument Panel Light Conductor Lamp
 Courtesy of GENERAL MOTORS COMPANY

23. Remove Instrument Panel Light Conductor Lamp (1) - **Instrument Panel Light Conductor Lamp Replacement (GMC)**

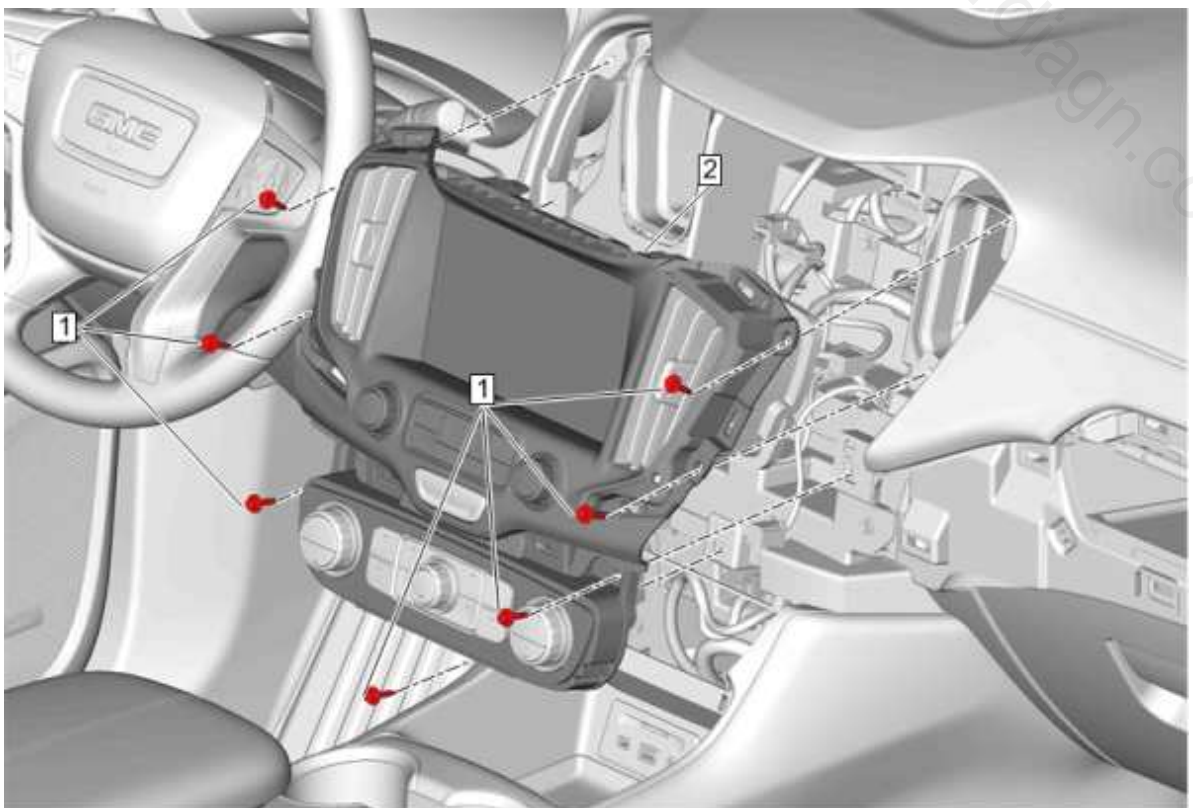


Fig. 399: Radio Control Assembly And Screws
 Courtesy of GENERAL MOTORS COMPANY

24. Remove Radio Control Assembly (2) - **Radio Control Assembly Replacement (Terrain)**
25. Disconnect all electrical connectors.



Fig. 400: Radio Front Center Speaker
Courtesy of GENERAL MOTORS COMPANY

26. Remove Radio Front Center Speaker (2) - **Radio Front Center Speaker Replacement (Terrain)**.

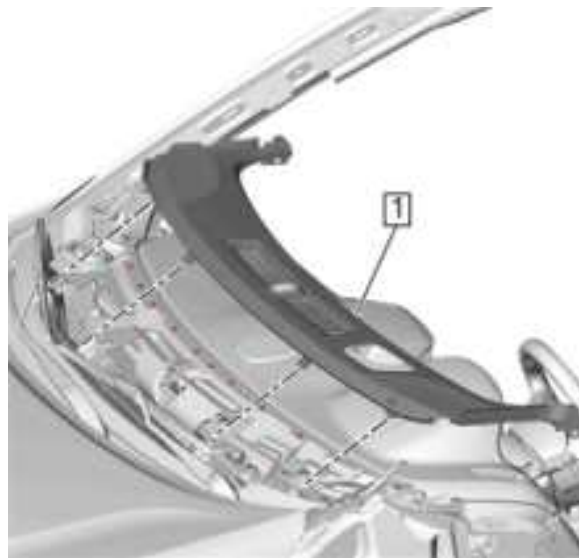


Fig. 401: Instrument Panel Extension
Courtesy of GENERAL MOTORS COMPANY

27. Remove Instrument Panel Extension (1) - **Instrument Panel Extension Replacement (Terrain)**.

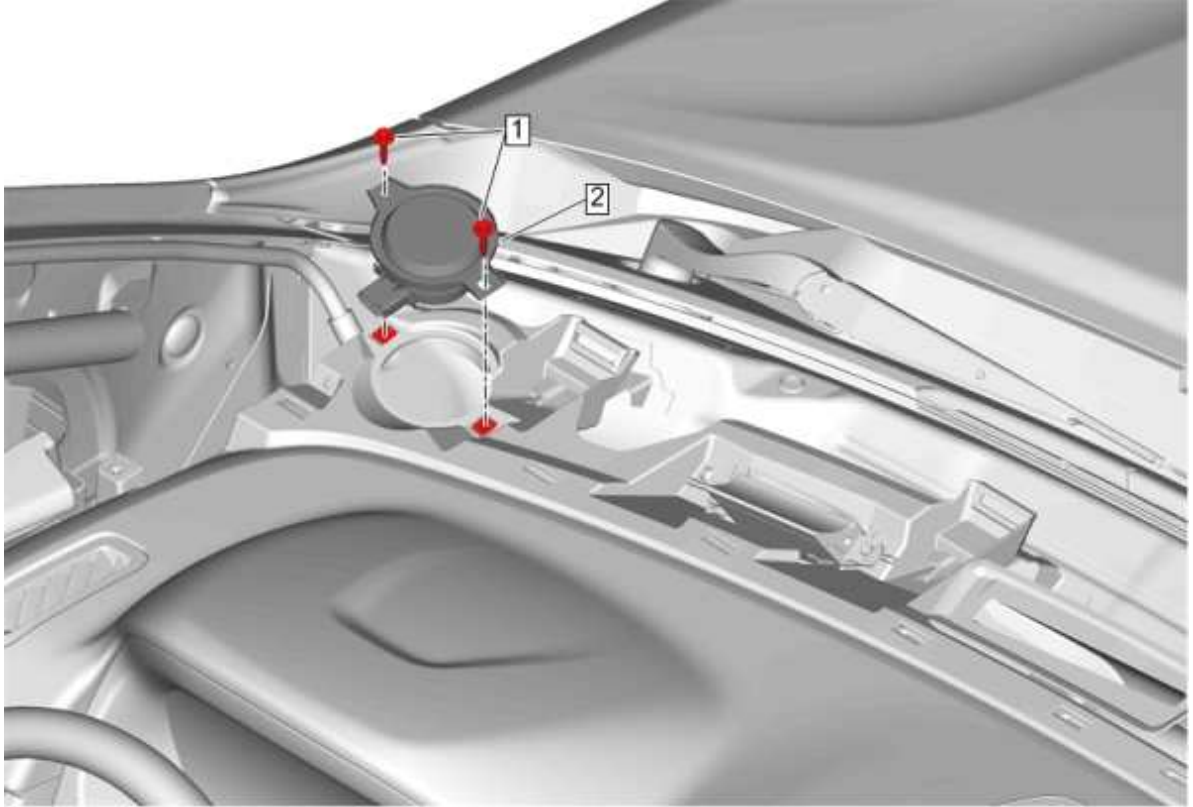


Fig. 402: Radio Front Speaker

Courtesy of GENERAL MOTORS COMPANY

28. Remove the left and right side radio front speakers. (2) **Radio Front Speaker Replacement (Terrain)**

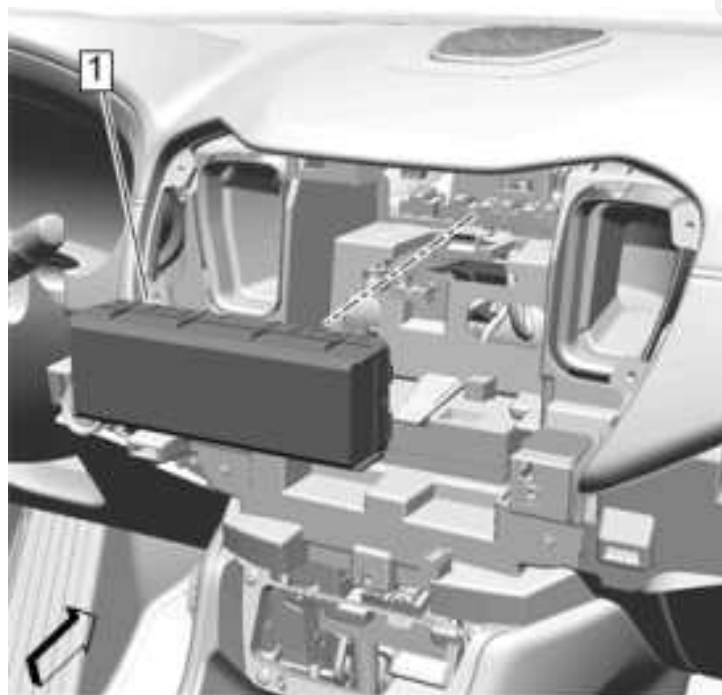


Fig. 403: Heater And Air Conditioning Remote Control

Courtesy of GENERAL MOTORS COMPANY

29. Remove Heater and Air Conditioning Remote Control (1) - **Heater and Air Conditioning Remote Control Replacement (Terrain)**

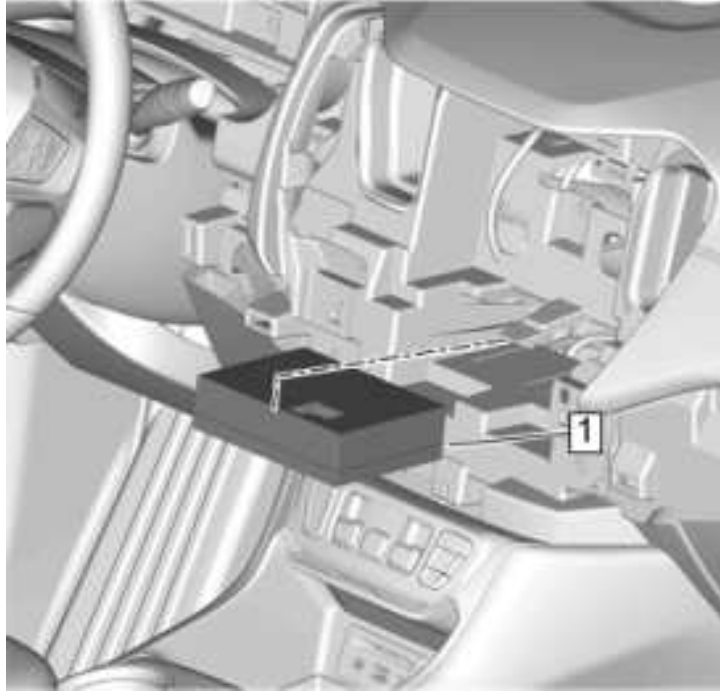


Fig. 404: Communication Interface Module
 Courtesy of GENERAL MOTORS COMPANY

30. Remove Communication Interface Module (1) - **Communication Interface Module Replacement (Terrain with IOS, IOT, IOU) Communication Interface Module Replacement (Terrain with IOR)**

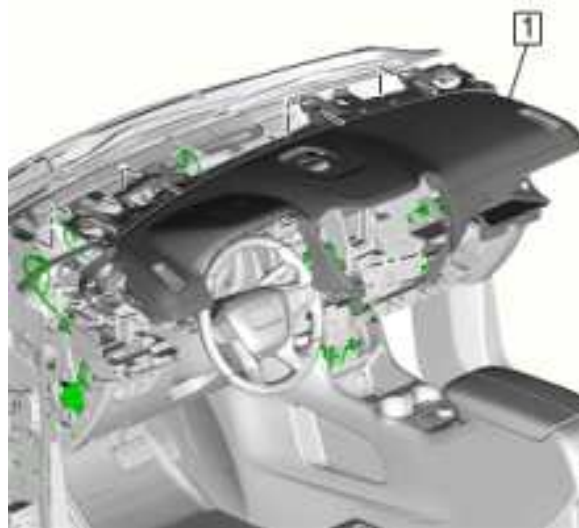


Fig. 405: Instrument Panel Upper Trim Panel
 Courtesy of GENERAL MOTORS COMPANY

31. Remove Instrument Panel Upper Trim Panel (1) - **Instrument Panel Upper Trim Panel Replacement (Terrain)**

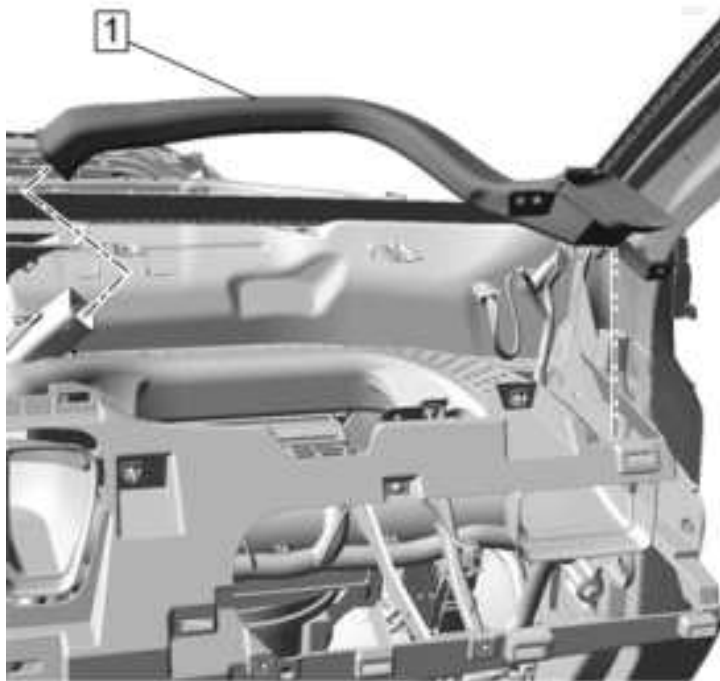


Fig. 406: Right Side Window Defogger Outlet Duct
 Courtesy of GENERAL MOTORS COMPANY

32. Remove Side Window Defogger Outlet Duct - Right Side (1) - [Side Window Defogger Outlet Duct Replacement - Right Side \(Terrain\)](#)

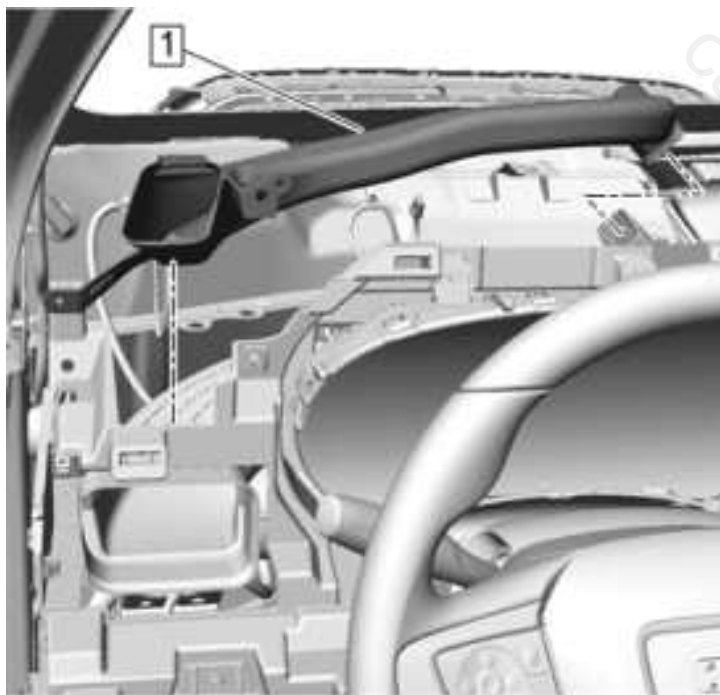


Fig. 407: Left Side Window Defogger Outlet Duct
 Courtesy of GENERAL MOTORS COMPANY

33. Remove Side Window Defogger Outlet Duct - Left Side (1) - [Side Window Defogger Outlet Duct Replacement - Left Side \(Terrain\)](#)

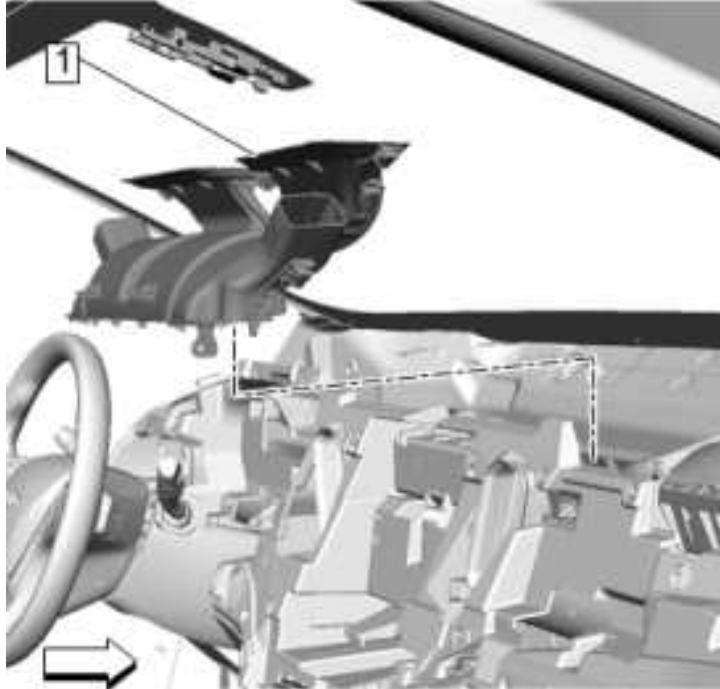


Fig. 408: Windshield Defroster Outlet Duct
 Courtesy of GENERAL MOTORS COMPANY

34. Remove Windshield Defroster Outlet Duct (1) - [Windshield Defroster Outlet Duct Replacement \(Terrain\)](#)
35. Disconnect and reposition harness as necessary.

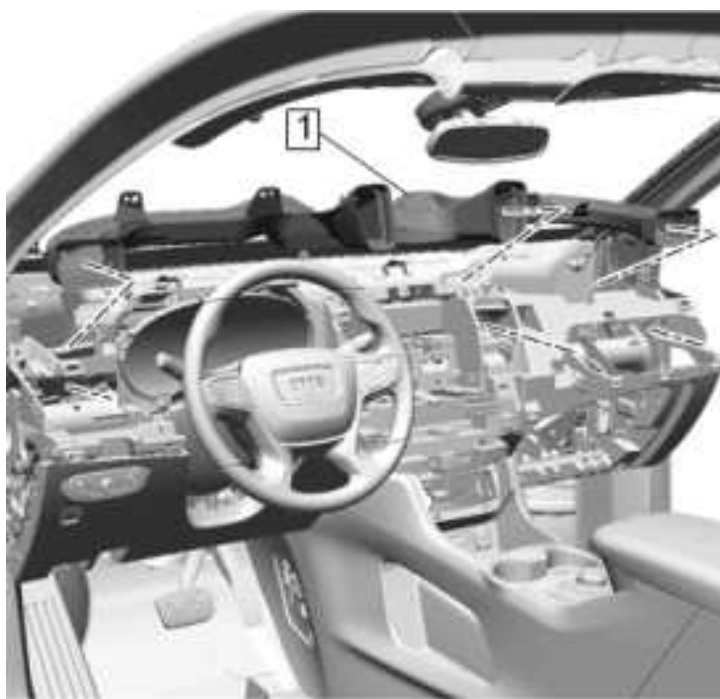


Fig. 409: Instrument Panel Center Air Outlet Duct
 Courtesy of GENERAL MOTORS COMPANY

36. Remove Instrument Panel Center Air Outlet Duct (1) - [Instrument Panel Center Air Outlet Duct Replacement \(Terrain\)](#)

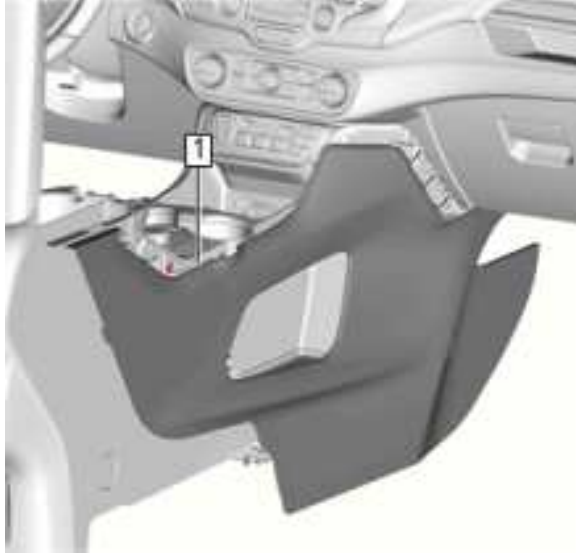


Fig. 410: Right Front Floor Console Extension Panel

Courtesy of GENERAL MOTORS COMPANY

37. Remove Front Floor Console Extension Panel - Right (1) - **Front Floor Console Extension Panel Replacement - Right Side (Terrain)**

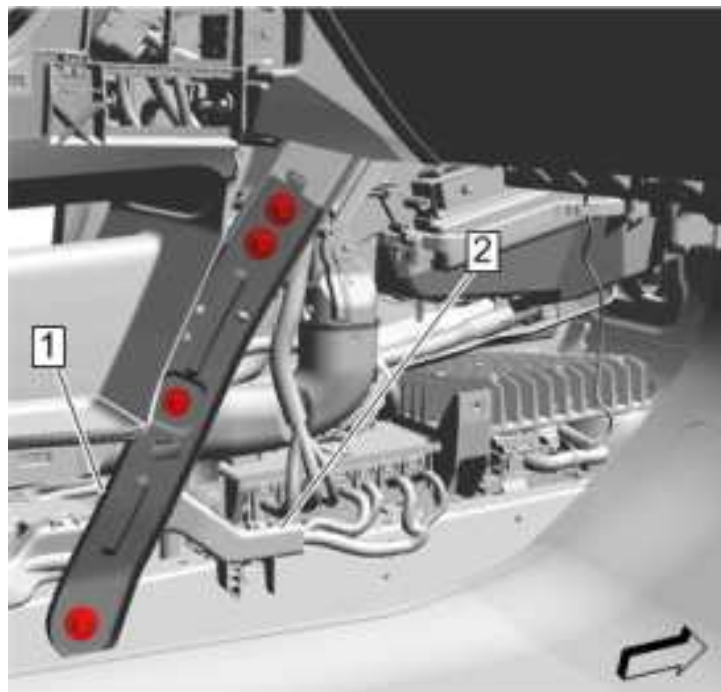


Fig. 411: Instrument Panel Center Lower Bracket

Courtesy of GENERAL MOTORS COMPANY

38. Remove Instrument Panel Center Lower Bracket-Right Side (1) - **Instrument Panel Center Lower Bracket Replacement (Terrain - Right Side)**

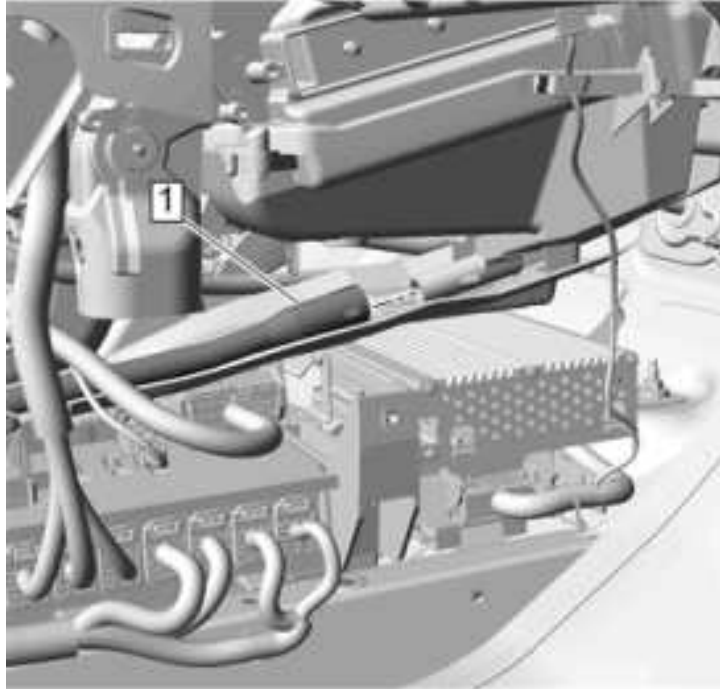


Fig. 412: Air Conditioning Evaporator and Blower Module Drain Hose
 Courtesy of GENERAL MOTORS COMPANY

CAUTION: Refer to [HVAC Module Drain Tube Caution](#) .

39. Prior to removing the air conditioning evaporator and blower module drain tube/hose, use clean and absorbent shop clothes/towels to cover the electrical components protecting the electrical components from water damage.
40. Remove Air Conditioning Evaporator and Blower Module Drain Hose (1) @Heater and Air Conditioning Evaporator and Blower Lower Case - [Air Conditioning Evaporator and Blower Module Drain Hose Replacement \(Terrain\)](#)



Fig. 413: Left Front Floor Console Extension Panel
 Courtesy of GENERAL MOTORS COMPANY

41. Remove Front Floor Console Extension Panel - Left (1) - [Front Floor Console Extension Panel Replacement - Left Side \(Terrain\)](#)

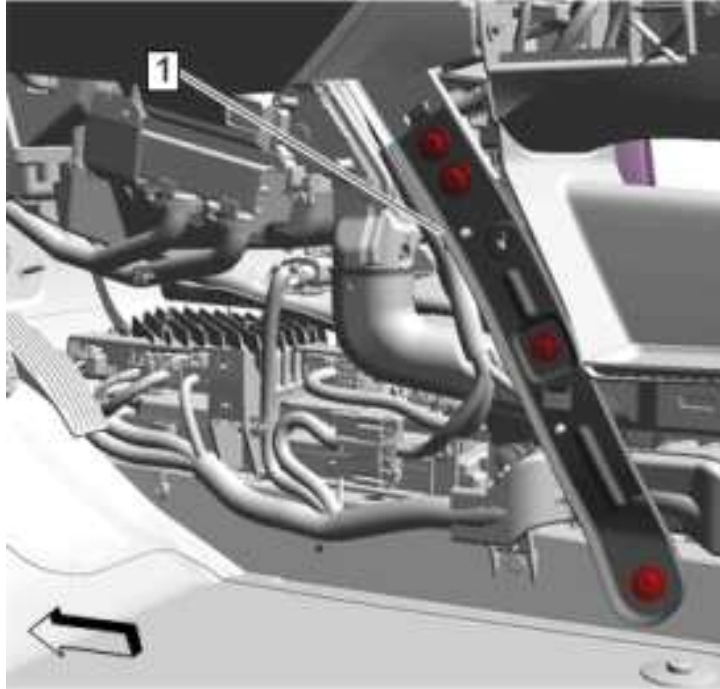


Fig. 414: Instrument Panel Center Lower Bracket-Left Side
 Courtesy of GENERAL MOTORS COMPANY

42. Remove Instrument Panel Center Lower Bracket-Left Side (3) - **Instrument Panel Center Lower Bracket Replacement (Terrain - Left Side)** **Instrument Panel Center Lower Bracket Replacement (Terrain - Right Side)**

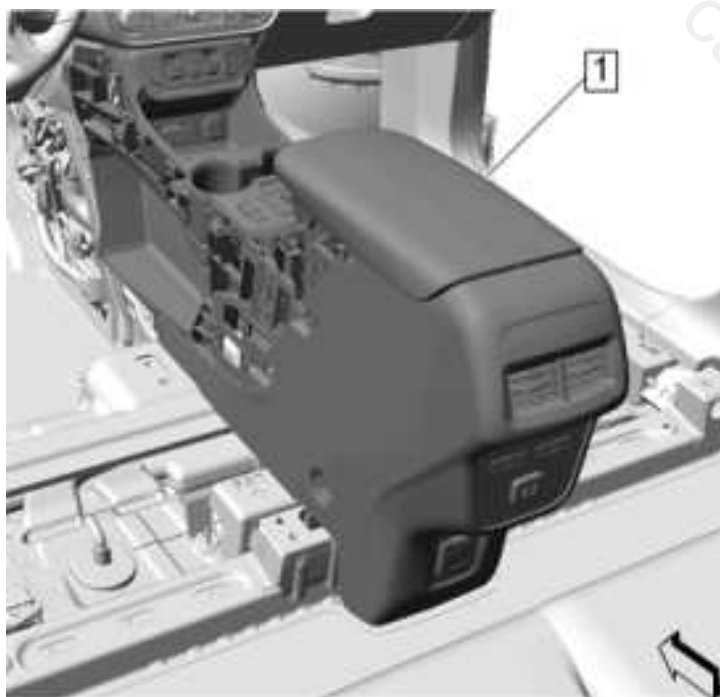


Fig. 415: Front Floor Console
 Courtesy of GENERAL MOTORS COMPANY

43. Remove Front Floor Console (1) - **Front Floor Console Replacement (Terrain)**
 44. Disconnect the electrical connectors.

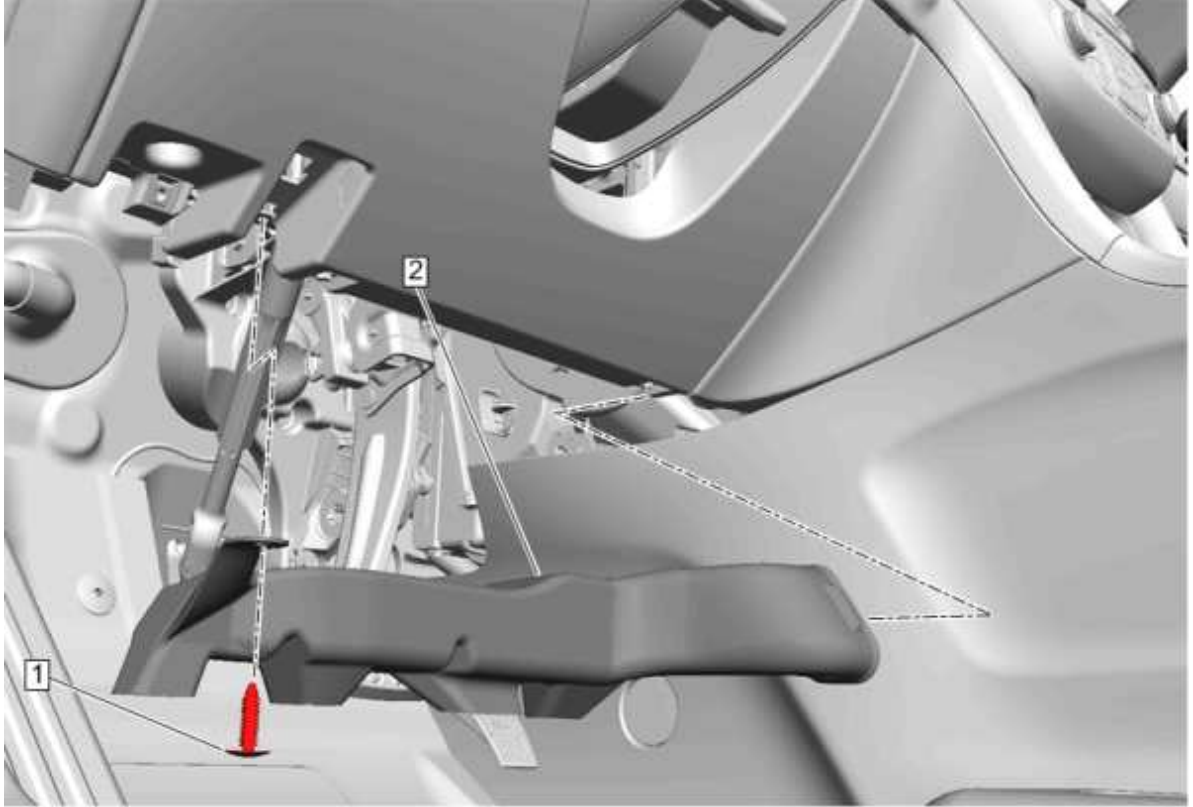


Fig. 416: Floor Front Air Outlet Duct
Courtesy of GENERAL MOTORS COMPANY

45. Remove Floor Front Air Outlet Duct - Left Side (2) - **Floor Front Air Outlet Duct Replacement - Left Side**



Fig. 417: Instrument Panel Knee Bolster
Courtesy of GENERAL MOTORS COMPANY

46. Remove Instrument Panel Knee Bolster (1) - **Instrument Panel Knee Bolster Replacement (Terrain)**

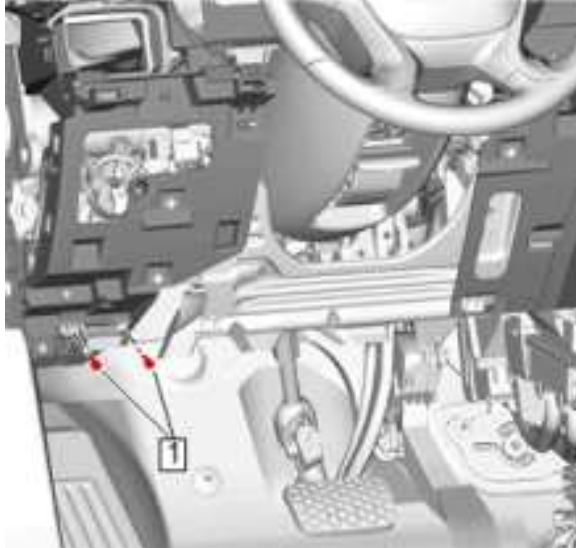


Fig. 418: Data Link Connector Bolts
Courtesy of GENERAL MOTORS COMPANY

47. Remove Data Link Connector Bolt (1)

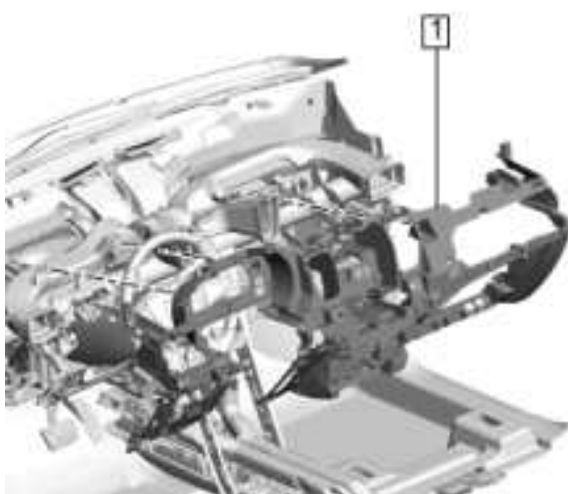


Fig. 419: Instrument Panel
Courtesy of GENERAL MOTORS COMPANY

48. Remove Instrument Panel Assembly (1) **Instrument Panel Assembly Replacement (Terrain)**

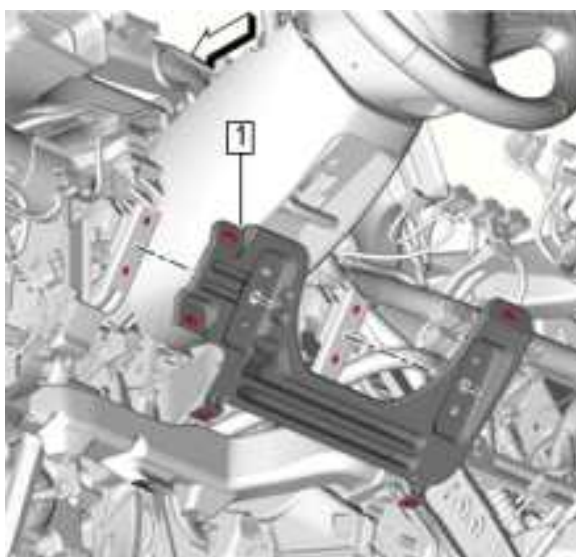


Fig. 420: Instrument Panel Knee Bolster Deflector
Courtesy of GENERAL MOTORS COMPANY

49. Remove Instrument Panel Knee Bolster Deflector (1) [Instrument Panel Knee Bolster Deflector Replacement \(Terrain\)](#).

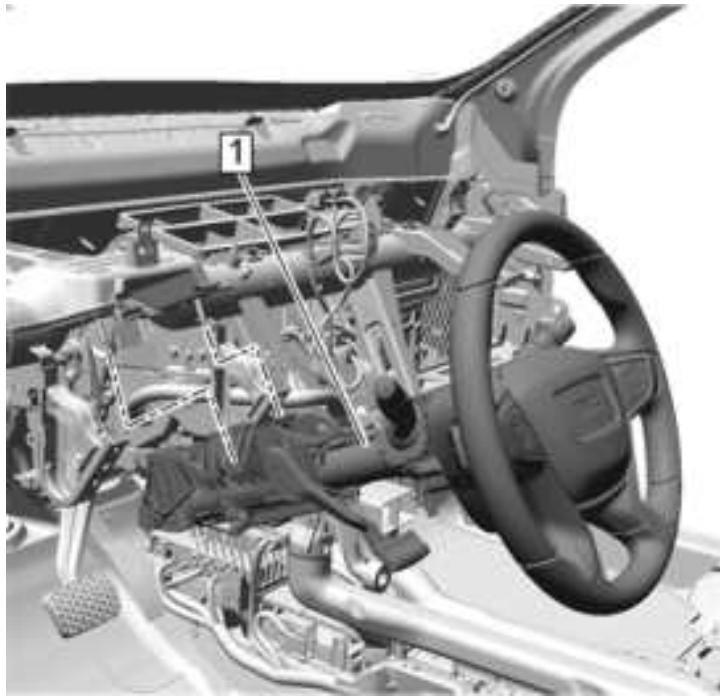


Fig. 421: Steering Column

Courtesy of GENERAL MOTORS COMPANY

50. Remove Steering Column (1) [Steering Column Replacement \(Terrain\)](#).

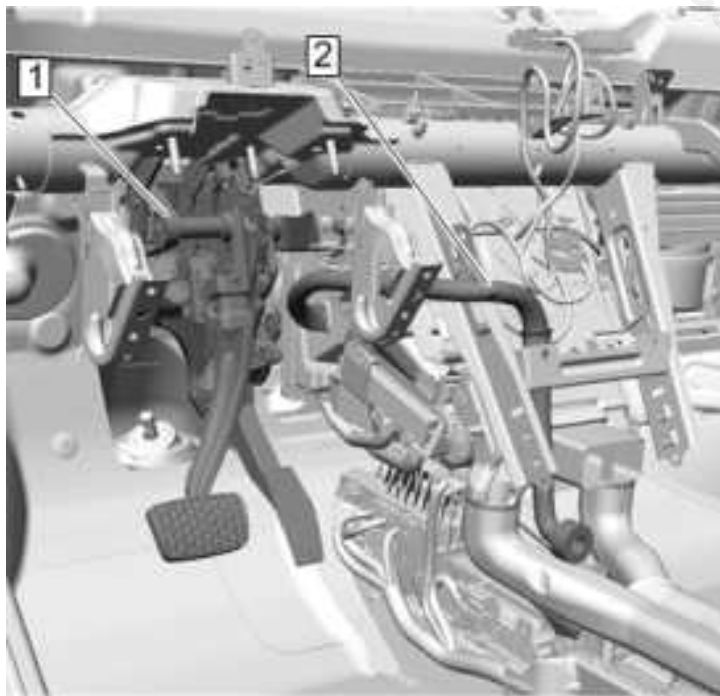


Fig. 422: Brake Pedal Assembly

Courtesy of GENERAL MOTORS COMPANY

51. Remove the brake pedal assembly. (1) [Brake Pedal Assembly Replacement](#)
52. Remove Instrument Panel Compartment Air Duct (2)
53. Detach the instrument panel electrical wiring harness from the instrument panel tie bar.

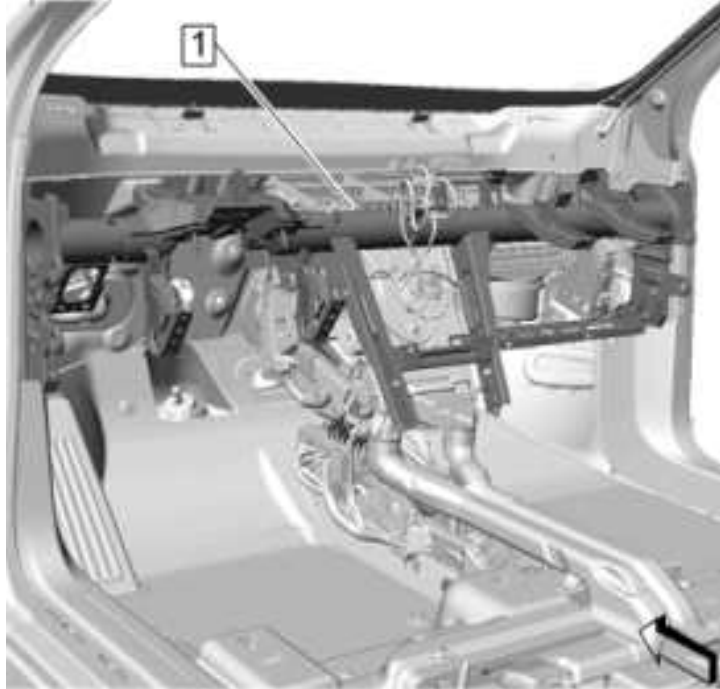


Fig. 423: Instrument Panel Tie Bar
 Courtesy of GENERAL MOTORS COMPANY

54. Remove Instrument Panel Tie Bar (1) **Instrument Panel Tie Bar Replacement (Terrain)**
55. Support the heater and air conditioning evaporator and blower (HVAC) module assembly.

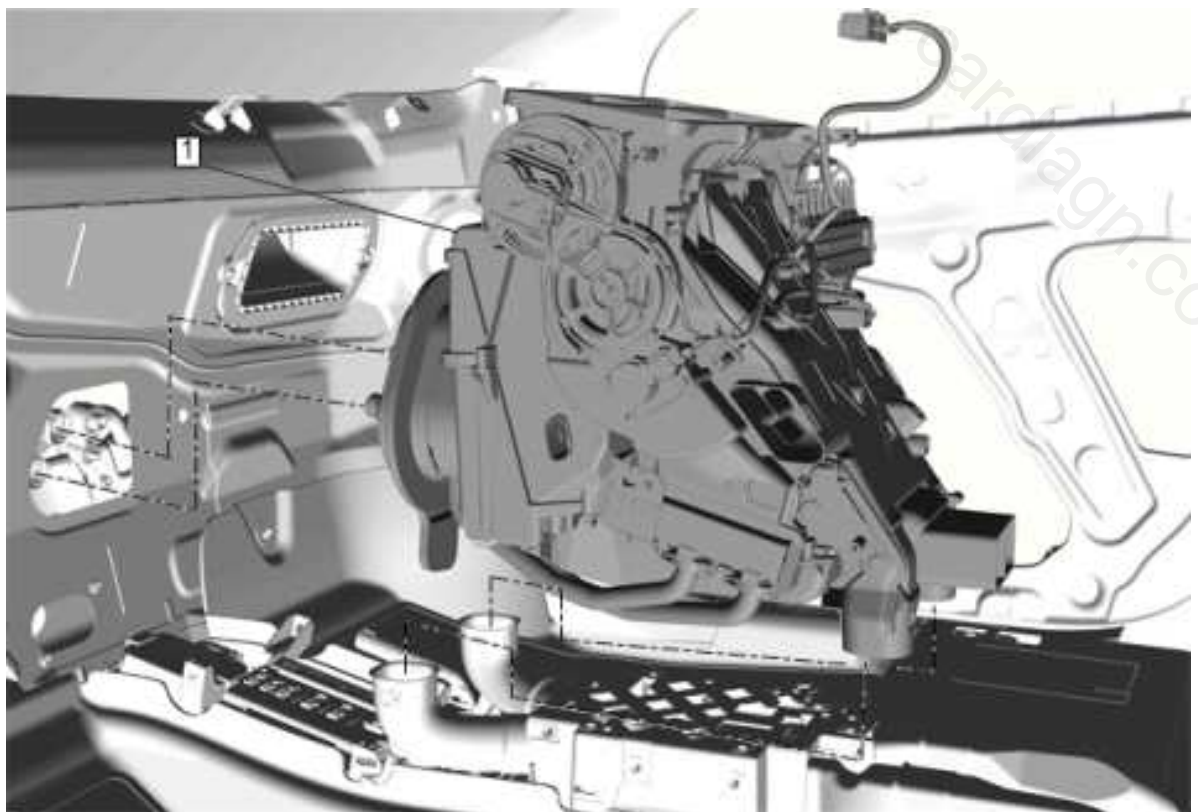


Fig. 424: Heater and Air Conditioning Evaporator and Blower Module
 Courtesy of GENERAL MOTORS COMPANY

56. Remove Heater and Air Conditioning Evaporator and Blower Module (1) - from the vehicle.
57. Transfer all necessary components.

Installation Procedure

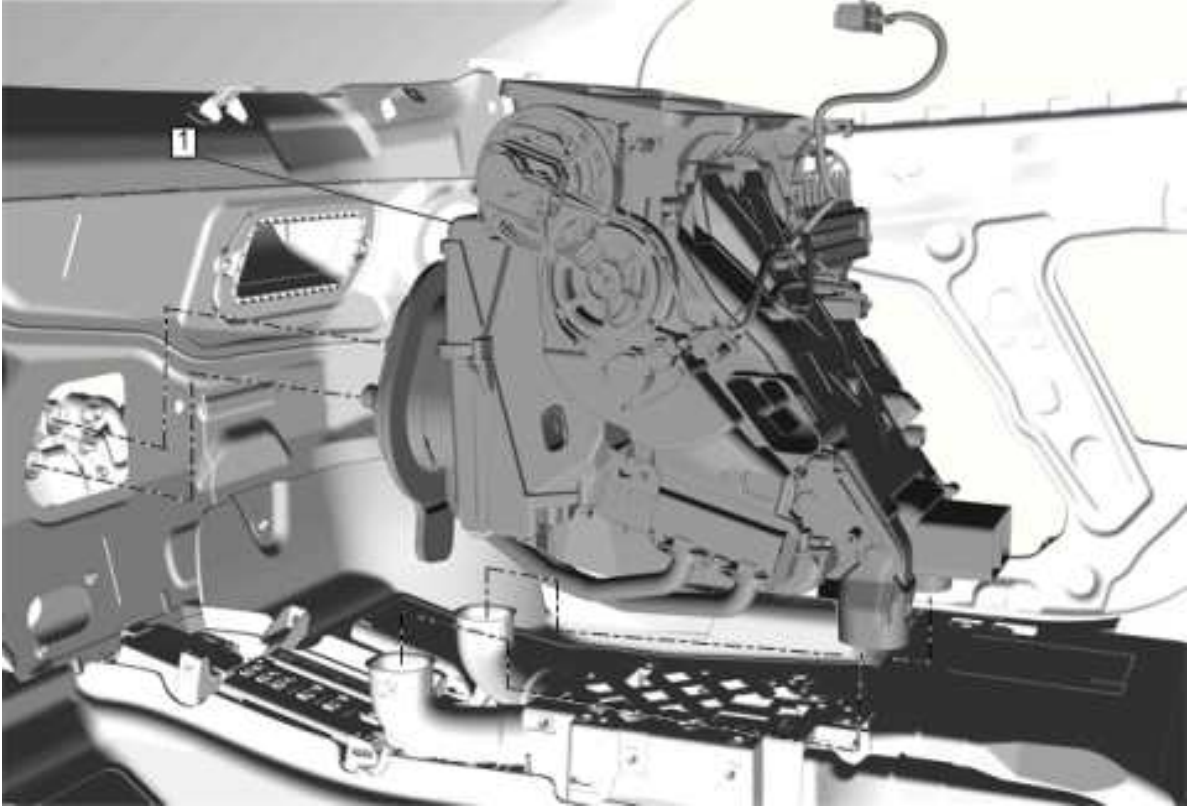


Fig. 425: Heater and Air Conditioning Evaporator and Blower Module
Courtesy of GENERAL MOTORS COMPANY

1. Install Heater and Air Conditioning Evaporator and Blower Module (1) onto the vehicle.
2. Temporarily support HVAC module assembly.

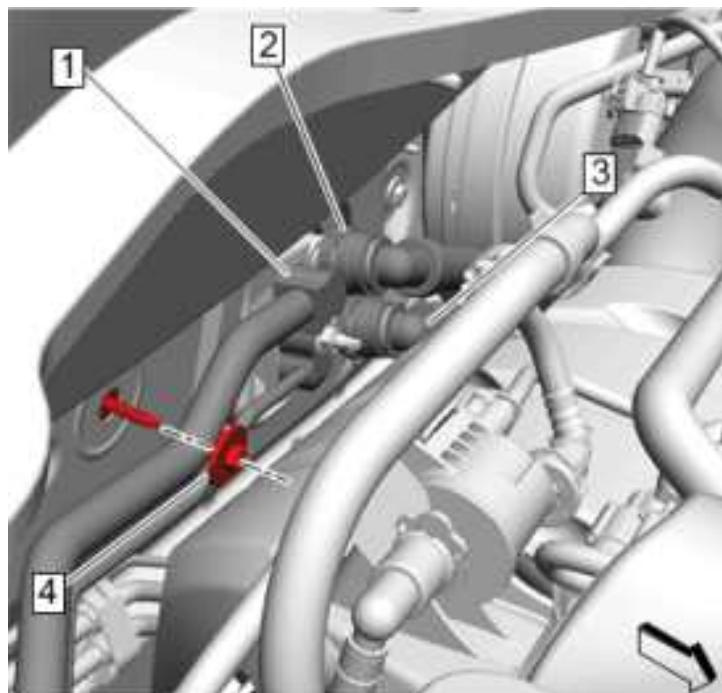


Fig. 426: Air Conditioning Refrigerant Heat Exchanger
Courtesy of GENERAL MOTORS COMPANY

CAUTION: Refer to **Fastener Caution** .

3. Install Heater and Air Conditioning Evaporator and Blower Module Nut (4) @Cowl Panel and tighten 9.0 N.m (80 lb in)

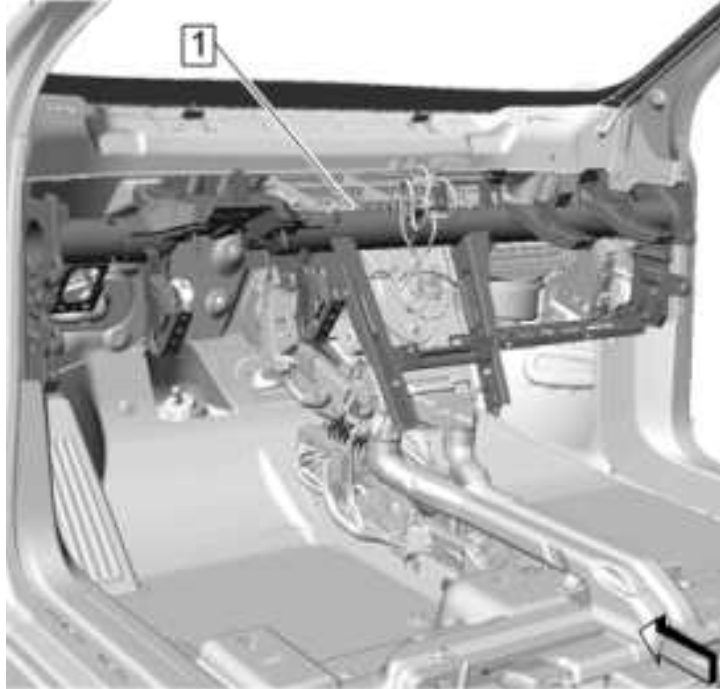


Fig. 427: Instrument Panel Tie Bar

Courtesy of GENERAL MOTORS COMPANY

4. Install Instrument Panel Tie Bar (1) [Instrument Panel Tie Bar Replacement \(Terrain\)](#)
5. Attach the instrument panel electrical wiring harness onto the instrument panel tie bar.

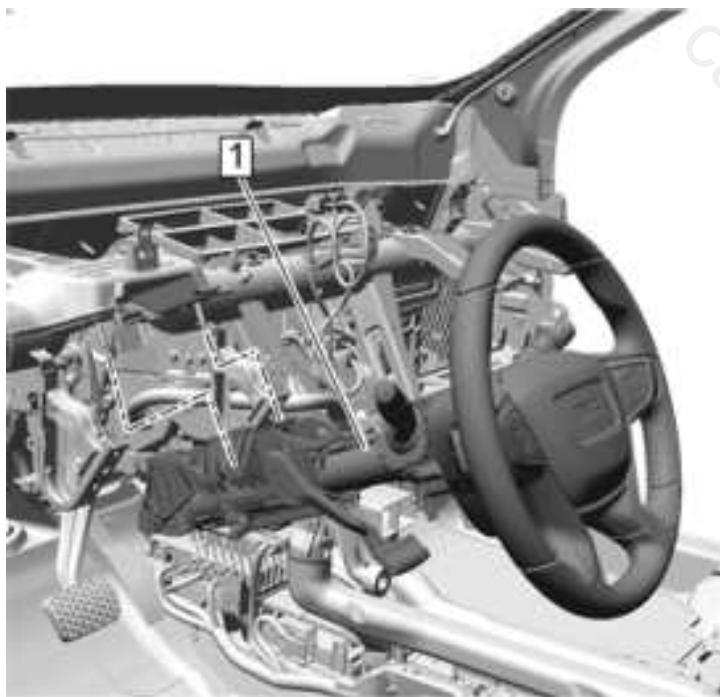


Fig. 428: Steering Column

Courtesy of GENERAL MOTORS COMPANY

6. Install Install Steering Column (1) [Steering Column Replacement \(Terrain\)](#)

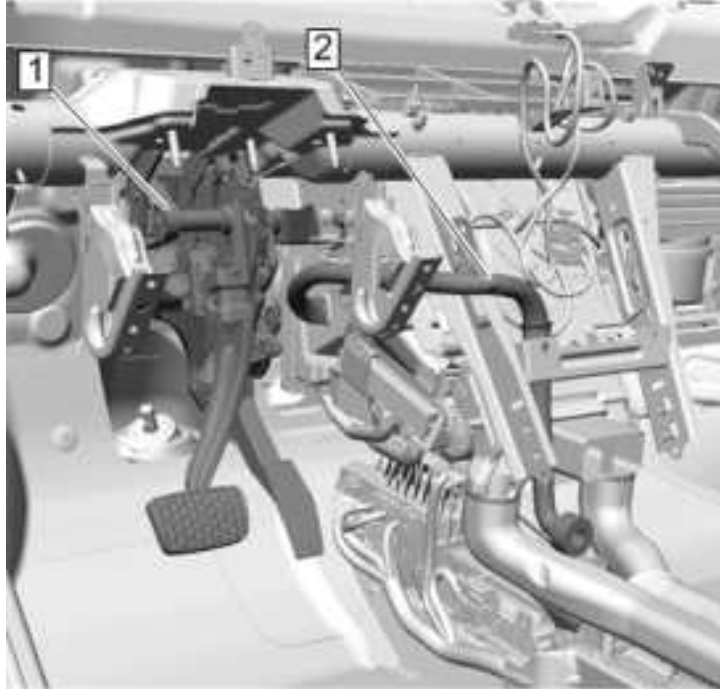


Fig. 429: Brake Pedal Assembly
 Courtesy of GENERAL MOTORS COMPANY

7. Install the brake pedal assembly.(1)[Brake Pedal Assembly Replacement](#)
8. Install Instrument Panel Compartment Air Duct (2)

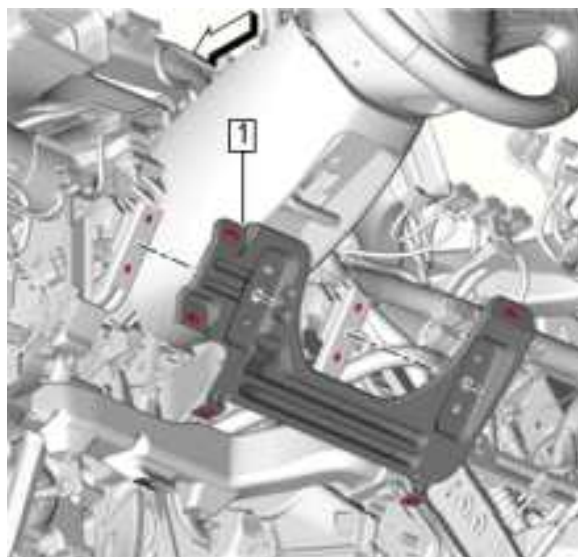


Fig. 430: Instrument Panel Knee Bolster Deflector
 Courtesy of GENERAL MOTORS COMPANY

9. Install Instrument Panel Knee Bolster Deflector (1) - [Instrument Panel Knee Bolster Deflector Replacement \(Terrain\)](#)

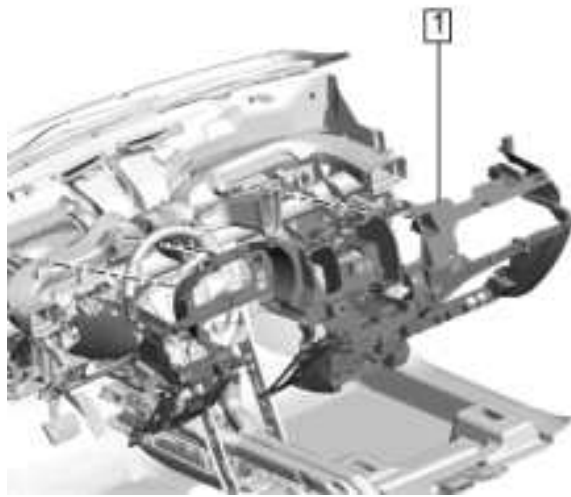


Fig. 431: Instrument Panel

Courtesy of GENERAL MOTORS COMPANY

10. Install Instrument Panel Assembly (1) [Instrument Panel Assembly Replacement \(Terrain\)](#)

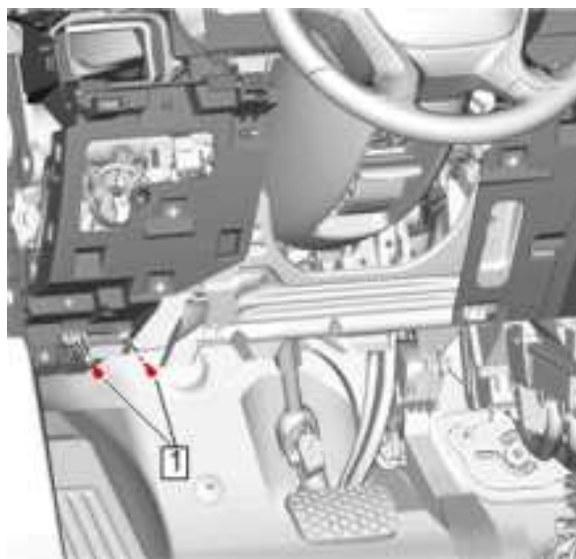


Fig. 432: Data Link Connector Bolts

Courtesy of GENERAL MOTORS COMPANY

11. Install Data Link Connector Bolt (1) and tighten 2.5 N.m (22 lb in)



Fig. 433: Instrument Panel Knee Bolster

Courtesy of GENERAL MOTORS COMPANY

12. Install Instrument Panel Knee Bolster (1) - [Instrument Panel Knee Bolster Replacement \(Terrain\)](#)

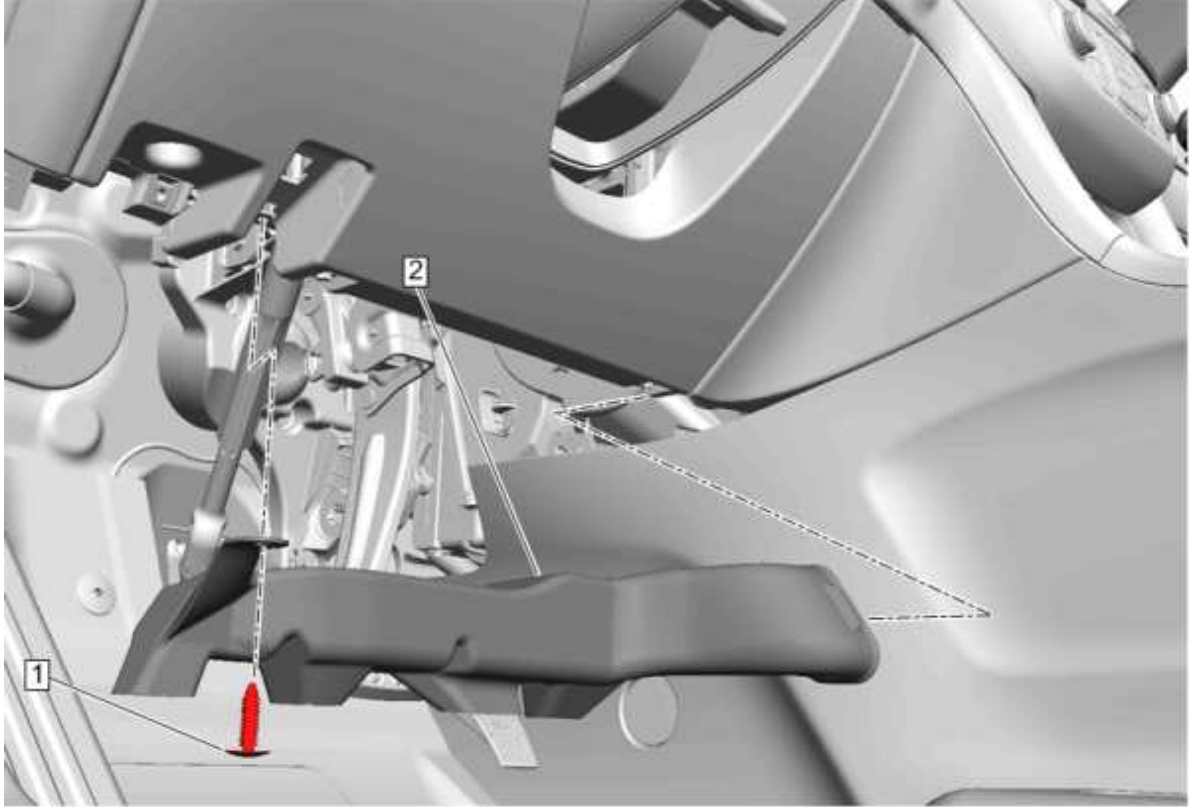


Fig. 434: Floor Front Air Outlet Duct
Courtesy of GENERAL MOTORS COMPANY

13. Install Floor Front Air Outlet Duct - Left Side (2) - **Floor Front Air Outlet Duct Replacement - Left Side**

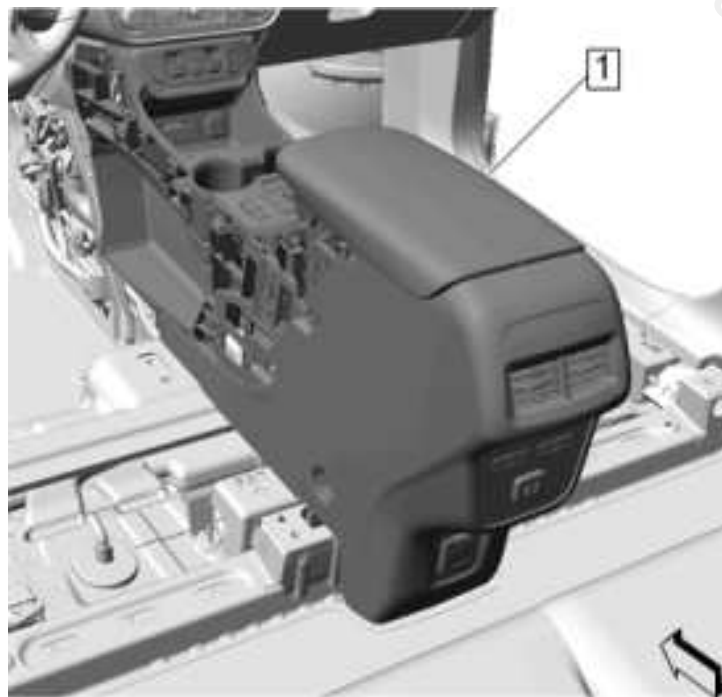


Fig. 435: Front Floor Console
Courtesy of GENERAL MOTORS COMPANY

14. Connect the electrical connectors.
15. Install Front Floor Console (1) - **Front Floor Console Replacement (Terrain)**

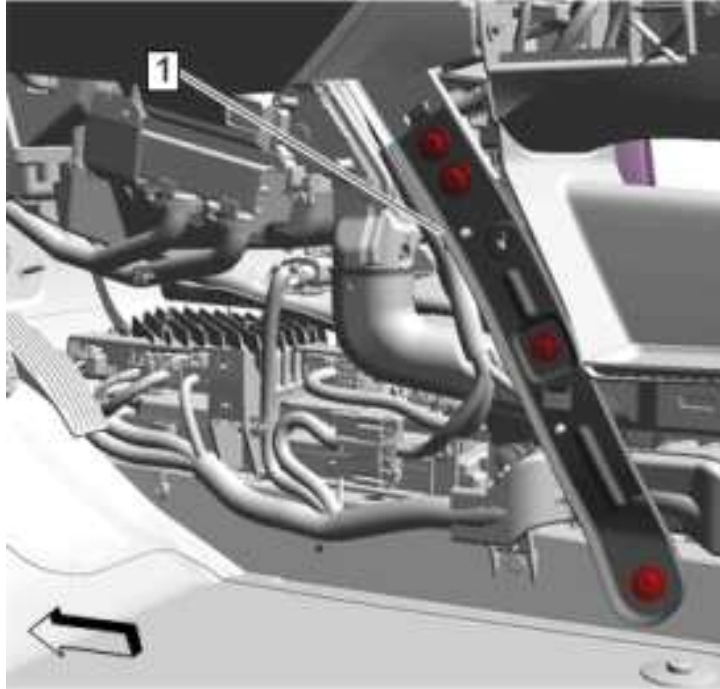


Fig. 436: Instrument Panel Center Lower Bracket-Left Side
 Courtesy of GENERAL MOTORS COMPANY

16. Install Instrument Panel Center Lower Bracket-Left Side (3) - **Instrument Panel Center Lower Bracket Replacement (Terrain - Left Side)**



Fig. 437: Left Front Floor Console Extension Panel
 Courtesy of GENERAL MOTORS COMPANY

17. Install Front Floor Console Extension Panel - Left (1) - **Front Floor Console Extension Panel Replacement - Left Side (Equinox)**

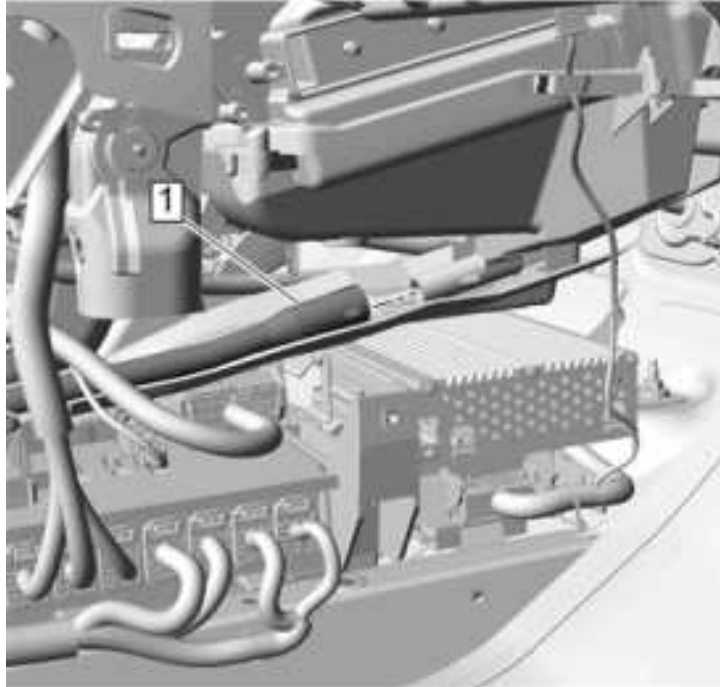


Fig. 438: Air Conditioning Evaporator and Blower Module Drain Hose
Courtesy of GENERAL MOTORS COMPANY

CAUTION: Refer to [HVAC Module Drain Tube Caution](#) .

18. Install Air Conditioning Evaporator and Blower Module Drain Hose (1) @Heater and Air Conditioning Evaporator and Blower Lower Case
19. Remove the absorbent shop clothes/towels covering the electrical components.

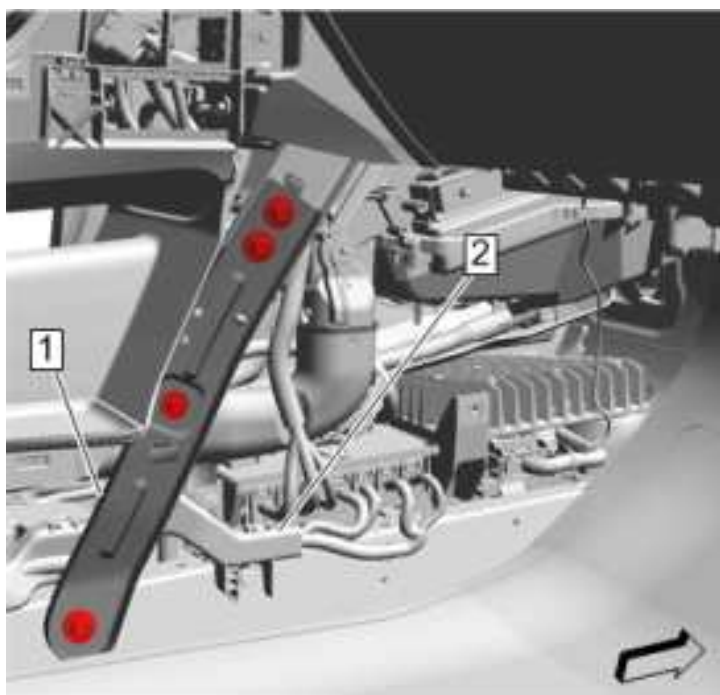


Fig. 439: Instrument Panel Center Lower Bracket
Courtesy of GENERAL MOTORS COMPANY

20. Install Instrument Panel Center Lower Bracket-Right Side (1) - [Instrument Panel Center Lower Bracket Replacement \(Terrain - Left Side\)](#) [Instrument Panel Center Lower Bracket Replacement \(Terrain - Right Side\)](#)

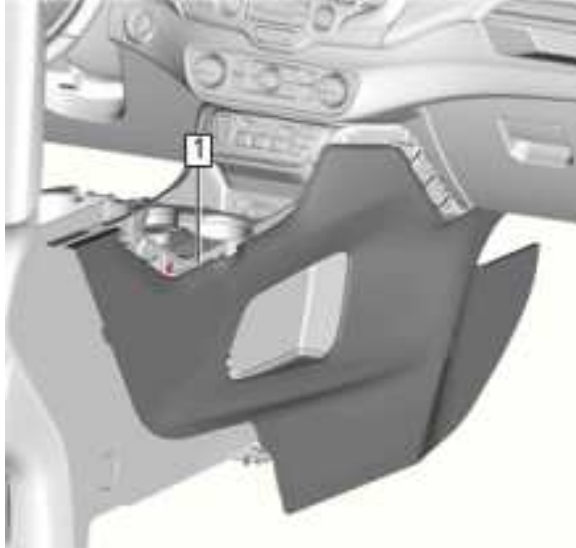


Fig. 440: Right Front Floor Console Extension Panel

Courtesy of GENERAL MOTORS COMPANY

21. Install Front Floor Console Extension Panel - Right (1) [Front Floor Console Extension Panel Replacement - Right Side \(Terrain\)](#)

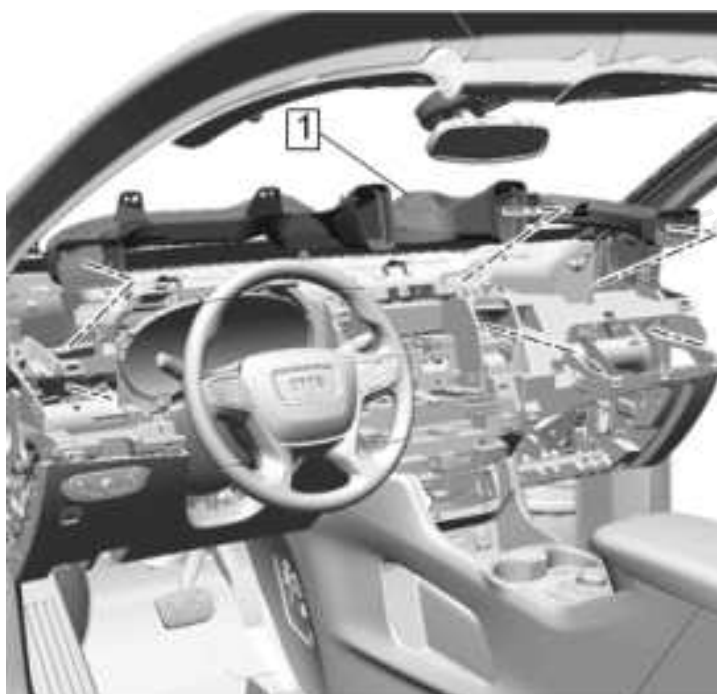


Fig. 441: Instrument Panel Center Air Outlet Duct

Courtesy of GENERAL MOTORS COMPANY

22. Install Instrument Panel Center Air Outlet Duct (1) [Instrument Panel Center Lower Bracket Replacement \(Terrain - Left Side\)](#) [Instrument Panel Center Lower Bracket Replacement \(Terrain - Right Side\)](#)

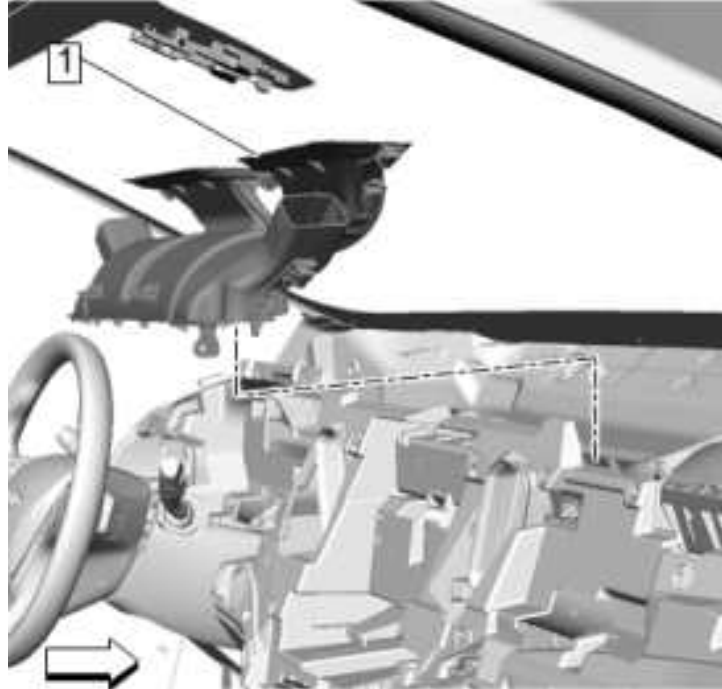


Fig. 442: Windshield Defroster Outlet Duct
 Courtesy of GENERAL MOTORS COMPANY

23. Attach the wiring harness and connect the electrical connectors as necessary.
24. Install Windshield Defroster Outlet Duct (1) - [Windshield Defroster Outlet Duct Replacement \(Terrain\)](#)

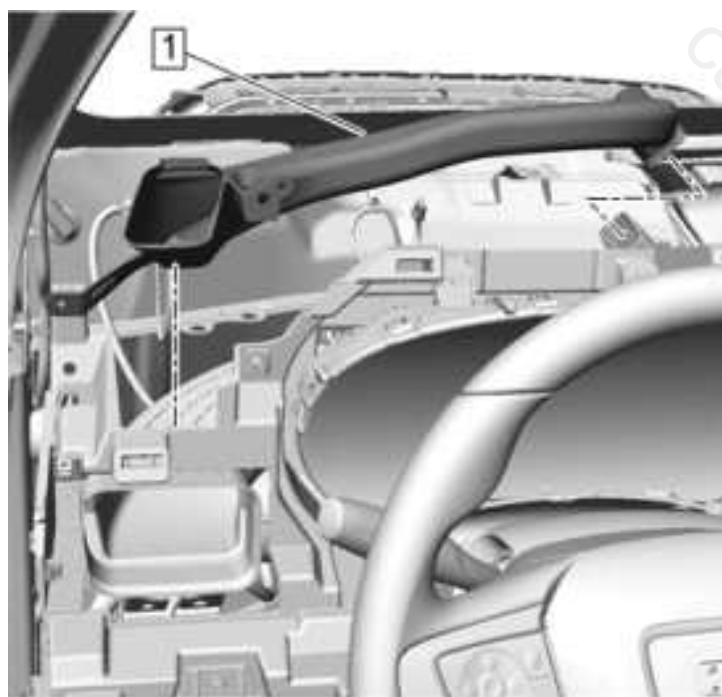


Fig. 443: Left Side Window Defogger Outlet Duct
 Courtesy of GENERAL MOTORS COMPANY

25. Install Side Window Defogger Outlet Duct - Left Side (1) - [Side Window Defogger Outlet Duct Replacement - Left Side \(Terrain\)](#)

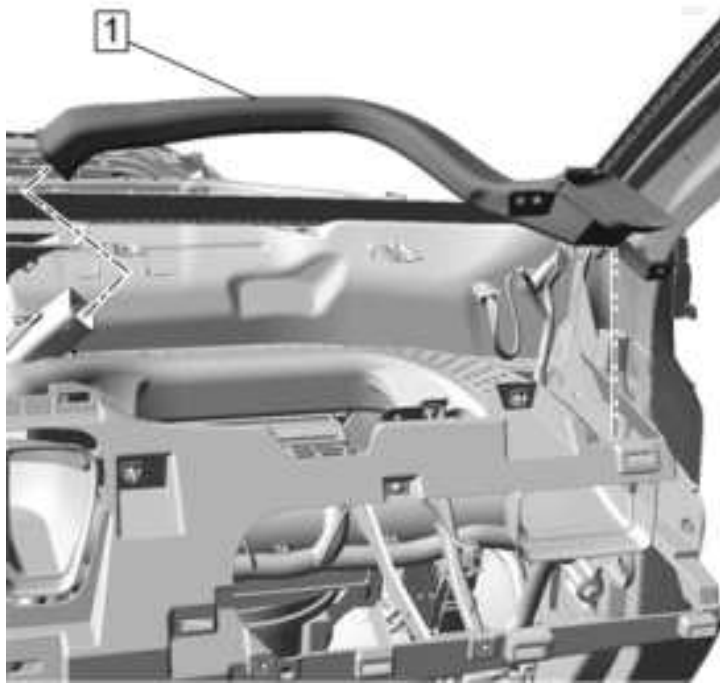


Fig. 444: Right Side Window Defogger Outlet Duct
 Courtesy of GENERAL MOTORS COMPANY

26. Install Side Window Defogger Outlet Duct - Right Side (1) - **Side Window Defogger Outlet Duct Replacement - Right Side (Terrain)**

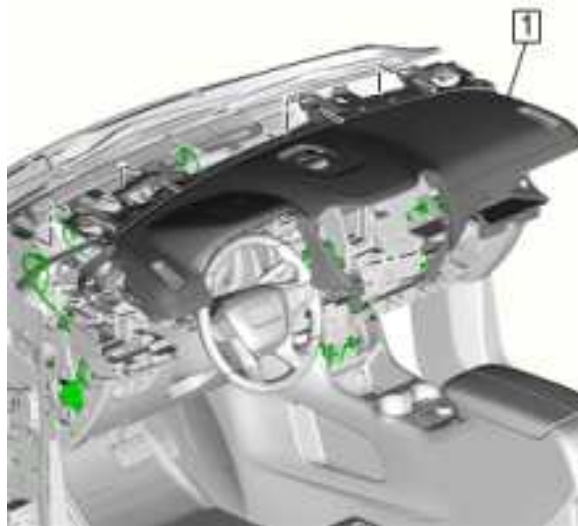


Fig. 445: Instrument Panel Upper Trim Panel
 Courtesy of GENERAL MOTORS COMPANY

27. Install Instrument Panel Upper Trim Panel (1) - **Instrument Panel Upper Trim Panel Replacement (Terrain)**

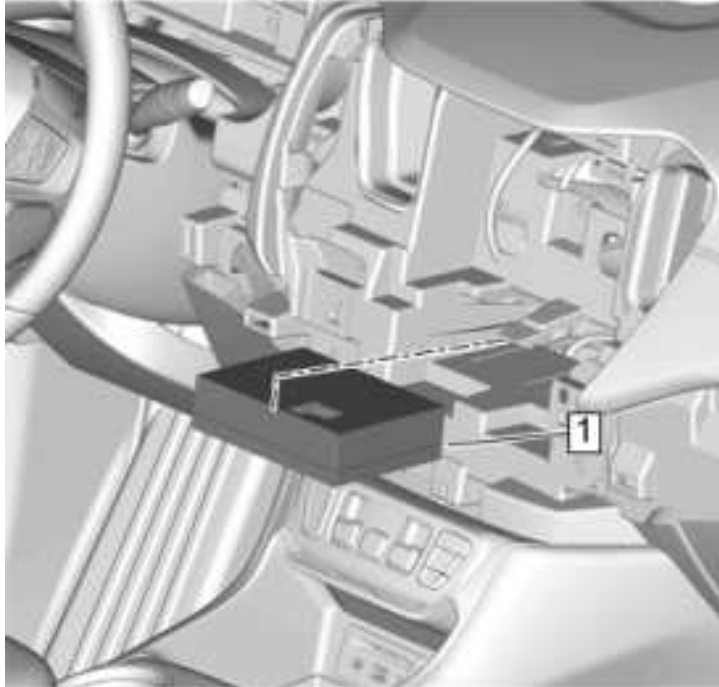


Fig. 446: Communication Interface Module
Courtesy of GENERAL MOTORS COMPANY

28. Install Communication Interface Module (1) - [Communication Interface Module Replacement \(Terrain with IOS, IOT, IOU\)](#) [Communication Interface Module Replacement \(Terrain with IOR\)](#)

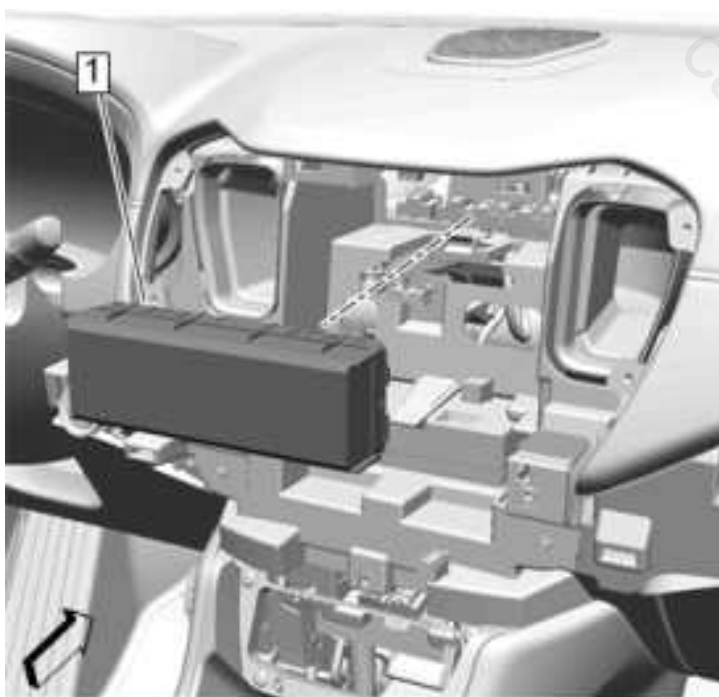


Fig. 447: Heater And Air Conditioning Remote Control
Courtesy of GENERAL MOTORS COMPANY

29. Install Heater and Air Conditioning Remote Control (1) - [Heater and Air Conditioning Remote Control Replacement \(Terrain\)](#)

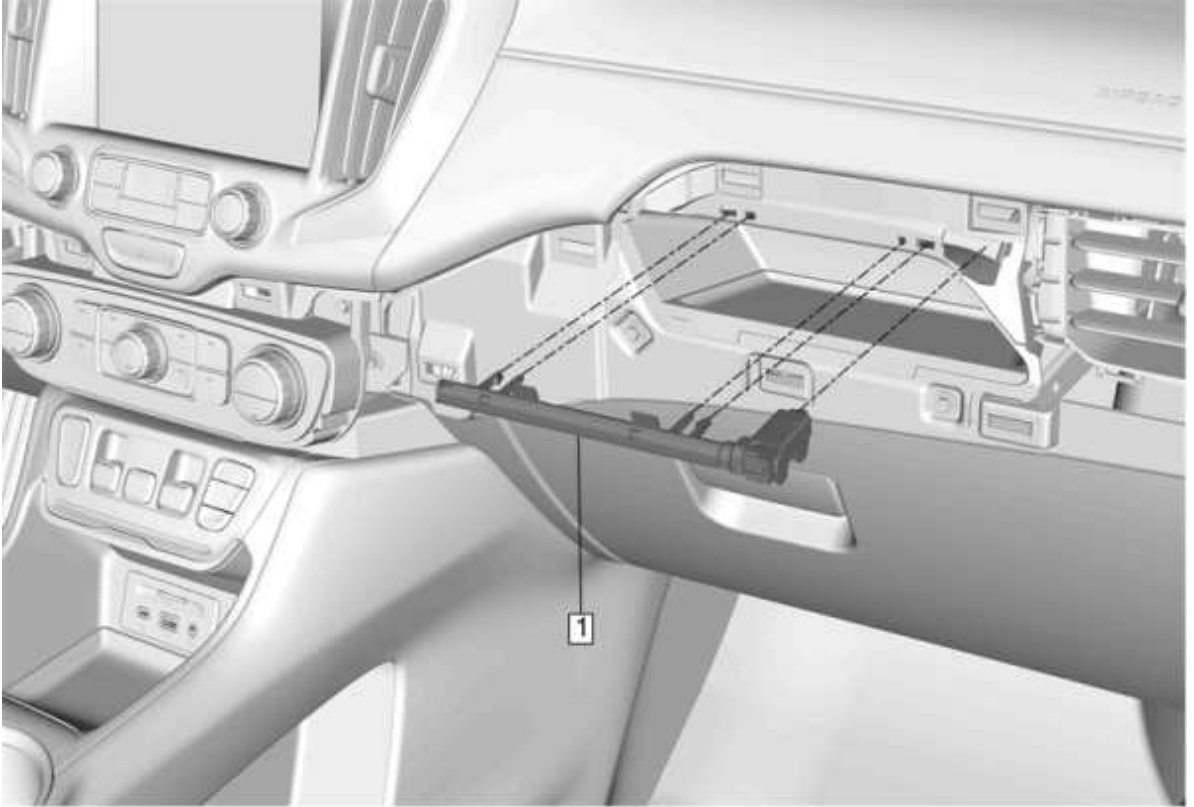


Fig. 448: Instrument Panel Light Conductor Lamp
 Courtesy of GENERAL MOTORS COMPANY

30. Install Instrument Panel Light Conductor Lamp (1) - **Instrument Panel Light Conductor Lamp Replacement (GMC)**

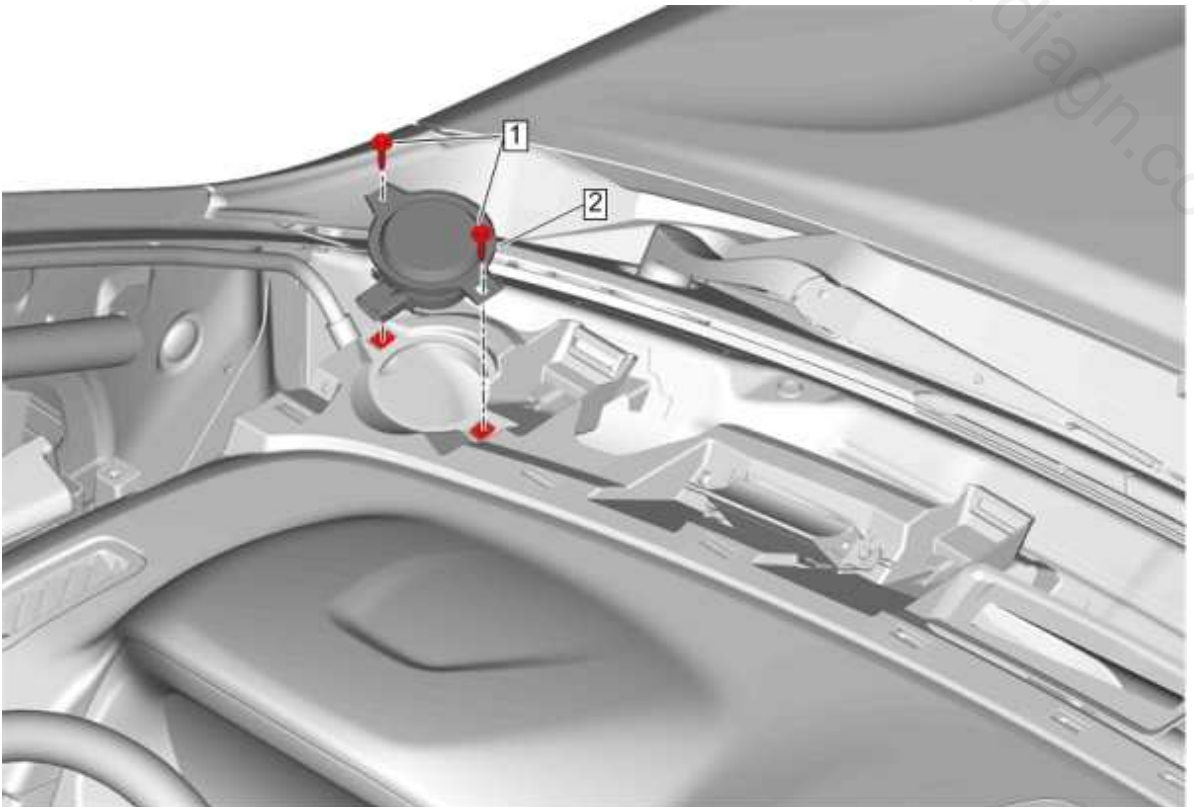


Fig. 449: Radio Front Speaker
 Courtesy of GENERAL MOTORS COMPANY

31. Install the left and right side radio front speakers. (2) **Radio Front Speaker Replacement (Terrain)**

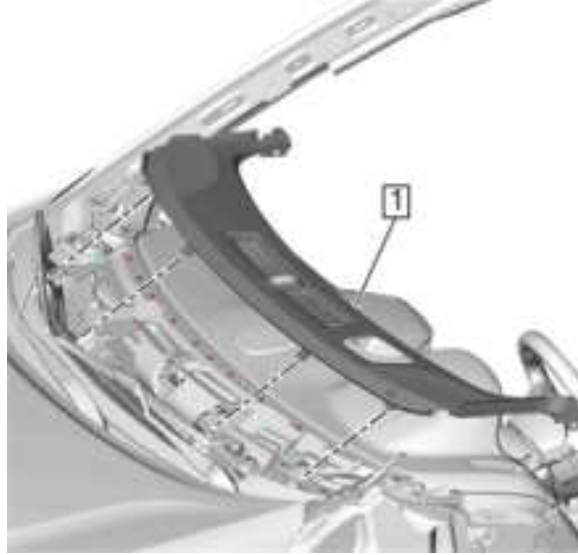


Fig. 450: Instrument Panel Extension
Courtesy of GENERAL MOTORS COMPANY

32. Install Instrument Panel Extension (1) - **Instrument Panel Extension Replacement (Terrain)**



Fig. 451: Radio Front Center Speaker
Courtesy of GENERAL MOTORS COMPANY

33. Install Radio Front Center Speaker (2) - **Radio Front Center Speaker Replacement (Terrain)**

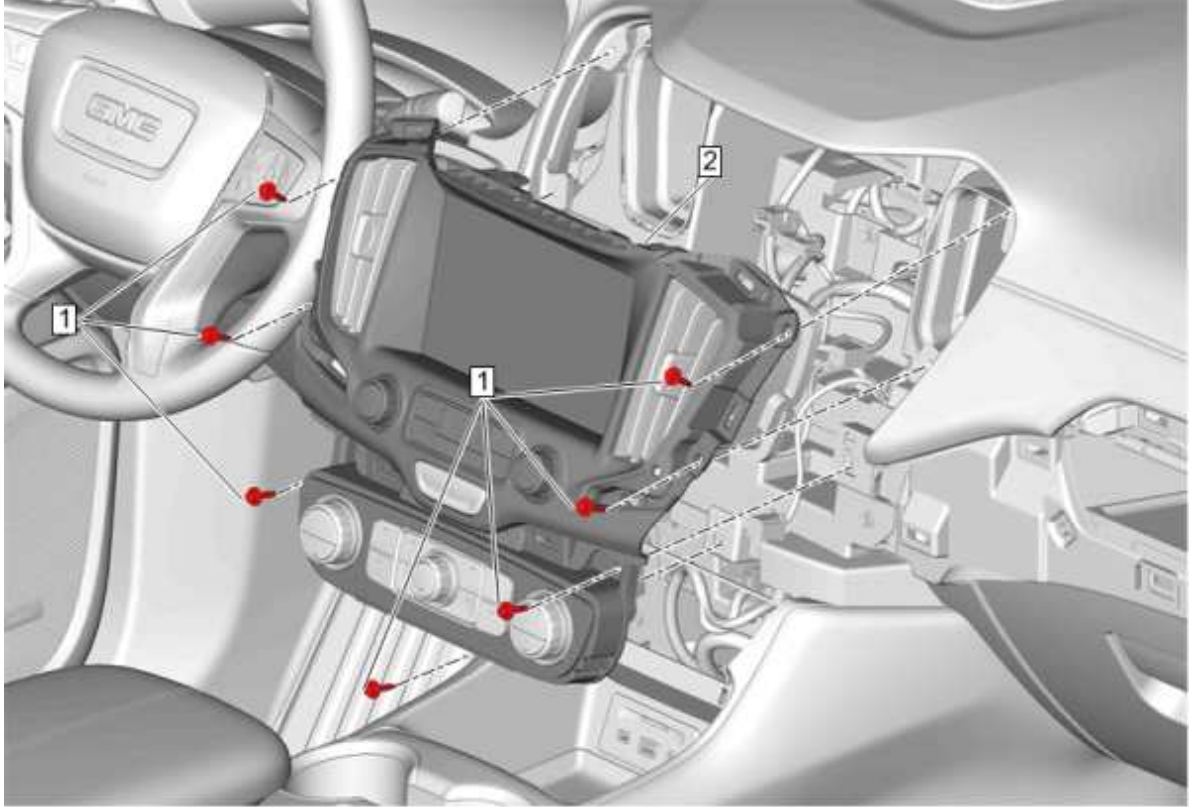


Fig. 452: Radio Control Assembly And Screws
Courtesy of GENERAL MOTORS COMPANY

34. Connect the electrical connectors.
35. Install Radio Control Assembly (2) [Radio Control Assembly Replacement \(Terrain\)](#)

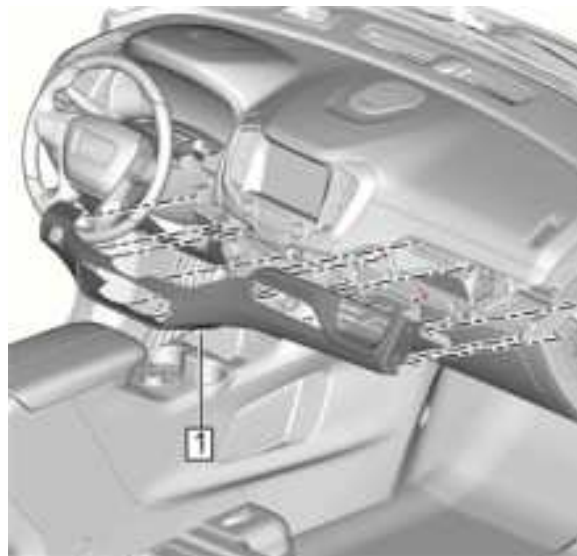


Fig. 453: Right Side Instrument Panel Trim Pad
Courtesy of GENERAL MOTORS COMPANY

36. Install Instrument Panel Trim Pad - Right Side (1) - [Instrument Panel Trim Pad Replacement - Right Side \(Terrain\)](#)

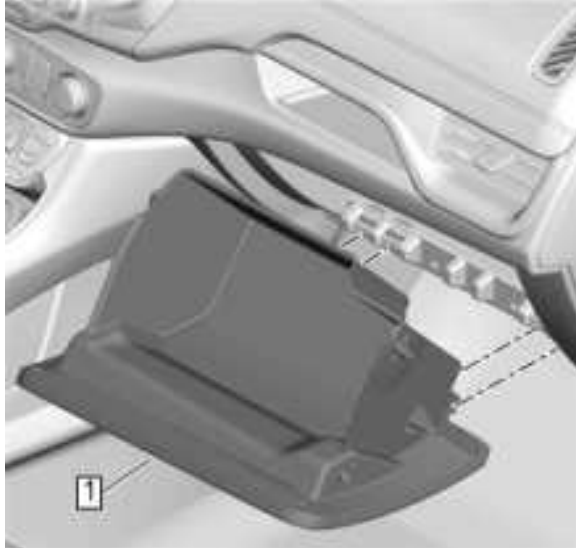


Fig. 454: Instrument Panel Compartment Door
 Courtesy of GENERAL MOTORS COMPANY

37. Install Instrument Panel Compartment Door (1) [Instrument Panel Compartment Door Replacement \(Terrain\)](#)

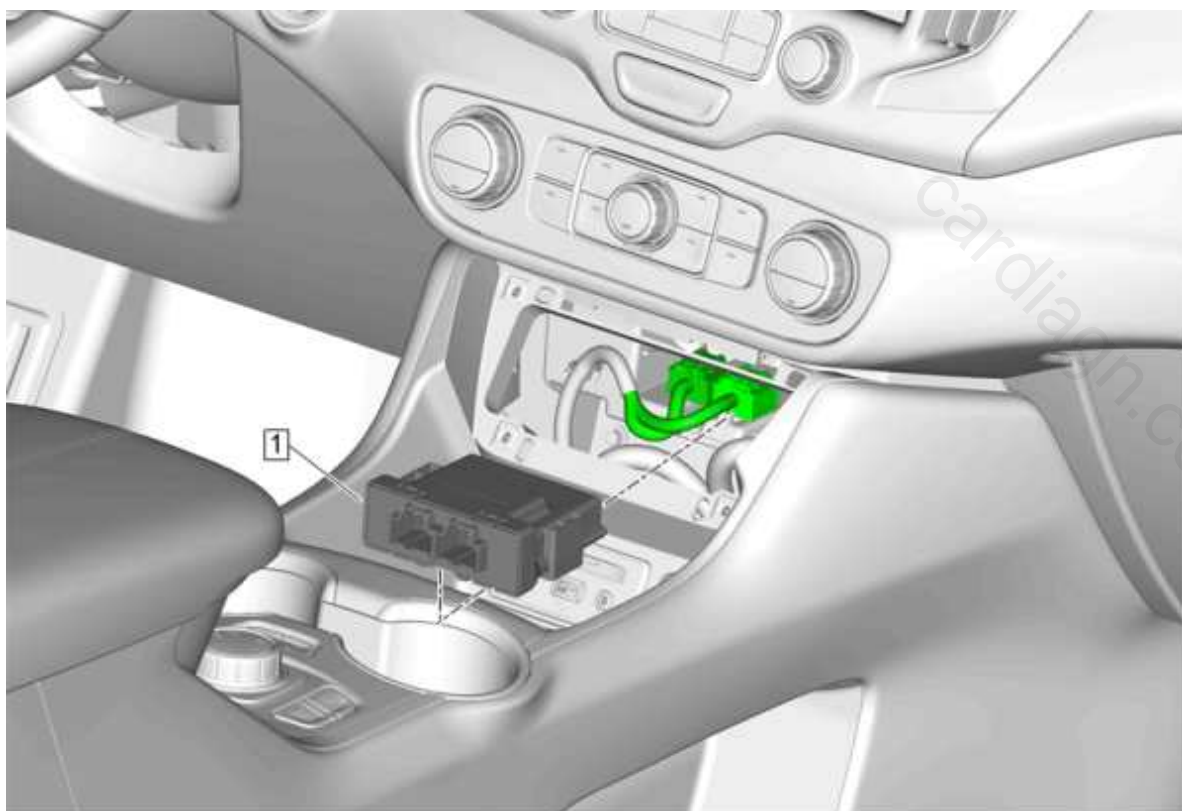


Fig. 455: Serial Data Gateway Module
 Courtesy of GENERAL MOTORS COMPANY

38. Install Serial Data Gateway Module (1) [Serial Data Gateway Module Replacement \(Terrain with MNH, NMK, or MHG\)](#) [Serial Data Gateway Module Replacement \(Terrain with M3U, M3D, or M3H\)](#)

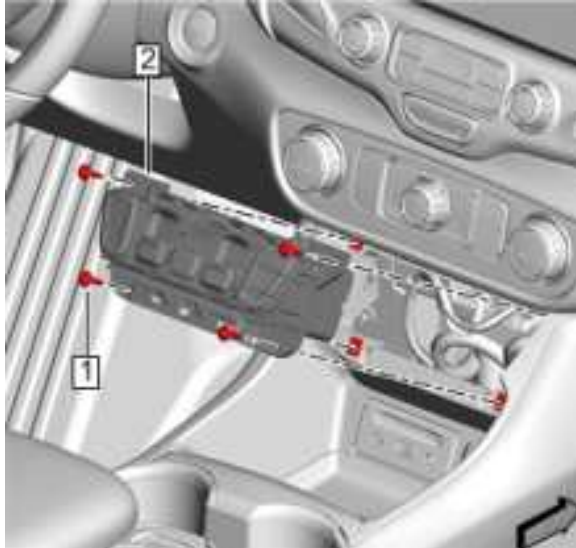


Fig. 456: Automatic Transmission Control Bolts And Electronic Transmission Shift Control Pushbutton

Courtesy of GENERAL MOTORS COMPANY

39. Install Electronic Transmission Shift Control Pushbutton (2) - [Electronic Transmission Shift Control Pushbutton Replacement](#)



Fig. 457: Front Floor Console Transmission Shift Opening Bezel

Courtesy of GENERAL MOTORS COMPANY

40. Install Front Floor Console Transmission Shift Opening Bezel (1) [Front Floor Console Transmission Shift Opening Bezel Replacement \(Terrain\)](#)

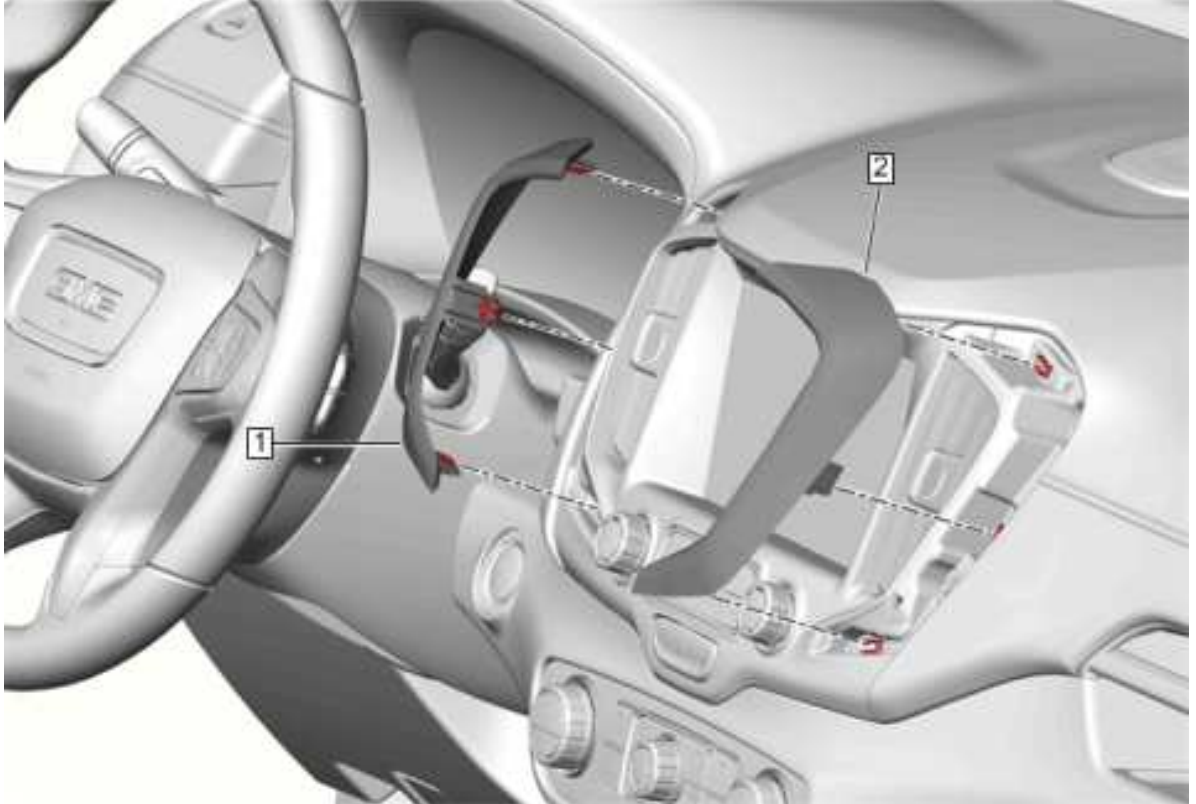


Fig. 458: Instrument Panel Center Trim Plate Appliques
 Courtesy of GENERAL MOTORS COMPANY

41. Install Instrument Panel Center Trim Plate Applique - Left Side (1) - [Instrument Panel Center Trim Plate Applique Replacement \(Terrain\)](#)
42. Install Instrument Panel Center Trim Plate Applique - Right Side (2) - [Instrument Panel Center Trim Plate Applique Replacement \(Terrain\)](#)



Fig. 459: Left Side Instrument Panel Trim Pad
 Courtesy of GENERAL MOTORS COMPANY

43. Install Instrument Panel Trim Pad - Left Side (1) - [Instrument Panel Trim Pad Replacement - Left Side \(Terrain\)](#)

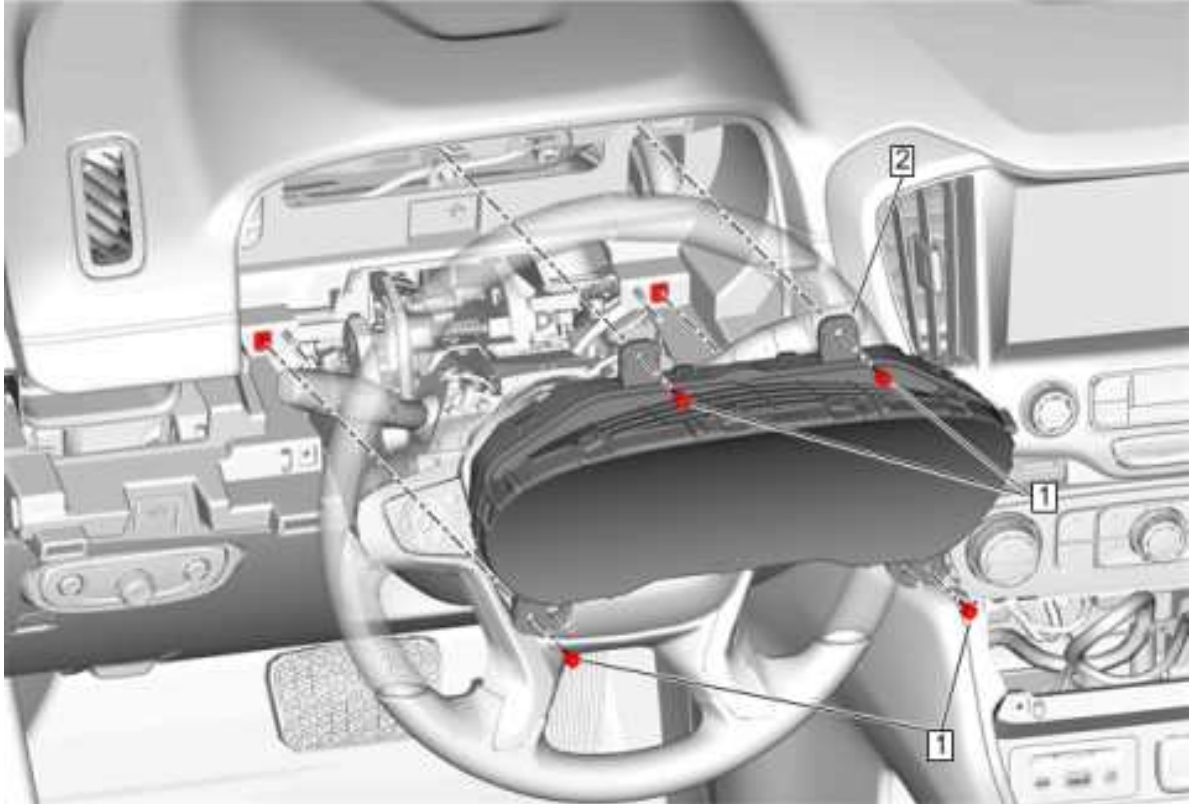


Fig. 460: Instrument Cluster And Screws
Courtesy of GENERAL MOTORS COMPANY

44. Install Instrument Cluster (2) - **Instrument Cluster Replacement (Terrain)**



Fig. 461: Instrument Panel Cluster Trim Plate
Courtesy of GENERAL MOTORS COMPANY

45. Install Instrument Panel Cluster Trim Plate (1) - **Instrument Panel Cluster Trim Plate Replacement (Terrain)**

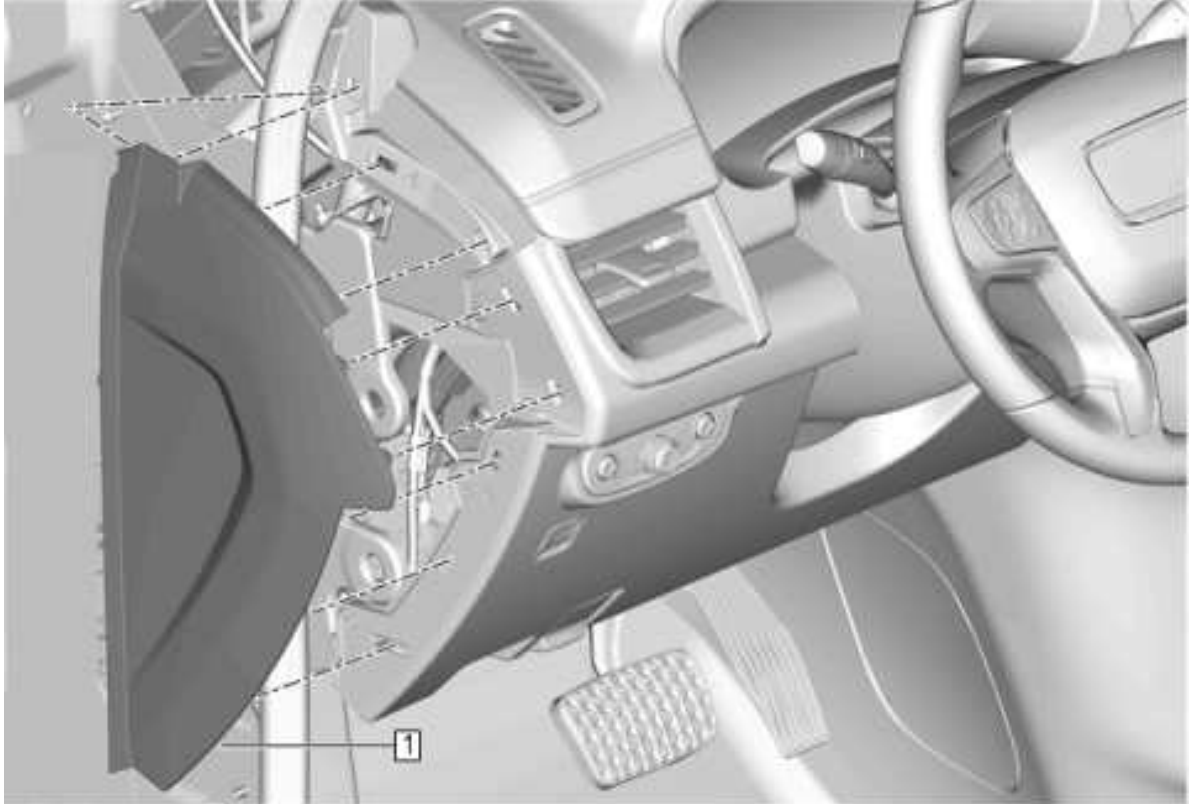


Fig. 462: Instrument Panel Outer Trim Cover (Terrain)
 Courtesy of GENERAL MOTORS COMPANY

46. Install the left and right instrument panel outer trim cover (1). [Instrument Panel Outer Trim Cover Replacement \(Terrain\)](#)
47. Install the left and right side windshield garnish molding. [Windshield Garnish Molding Replacement \(Terrain\)](#)
48. Install Drivers Seat and Passengers Seat - [Driver or Passenger Seat Removal and Installation](#)

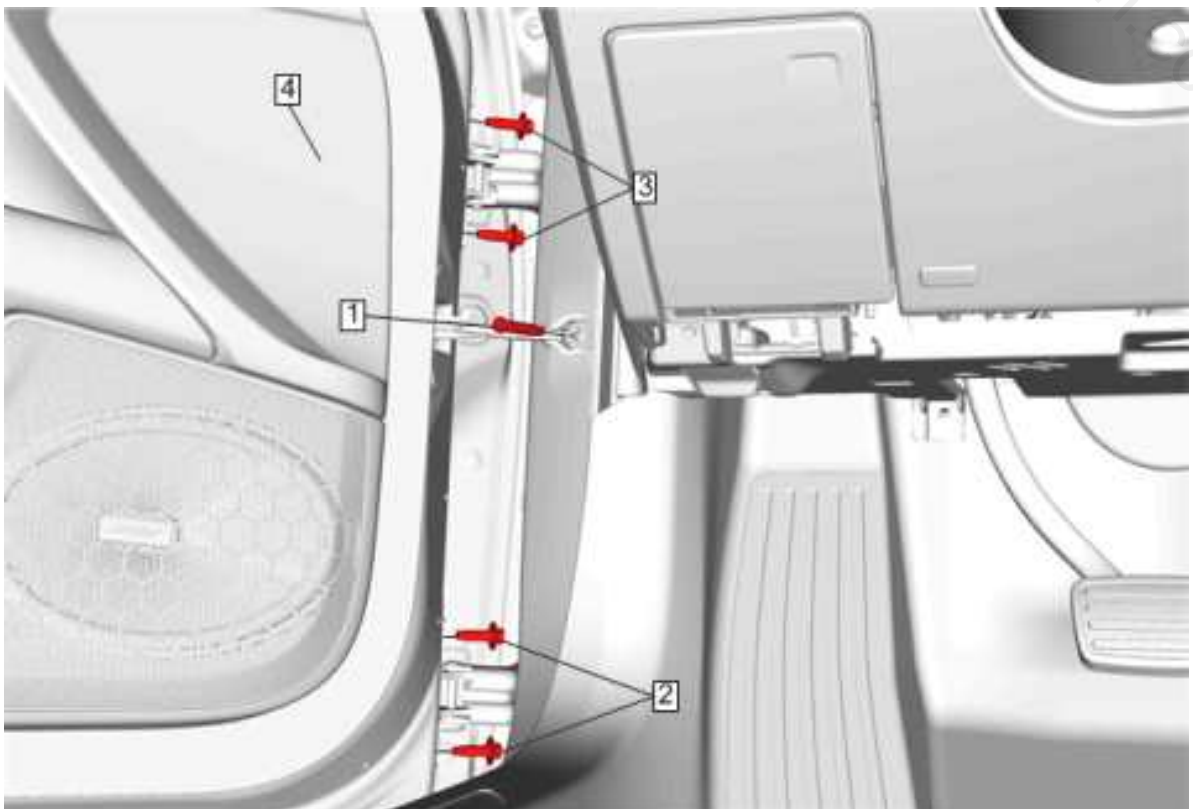


Fig. 463: Front Side Door
 Courtesy of GENERAL MOTORS COMPANY

49. Install the left and right front side door (4). [Front Side Door Replacement](#)

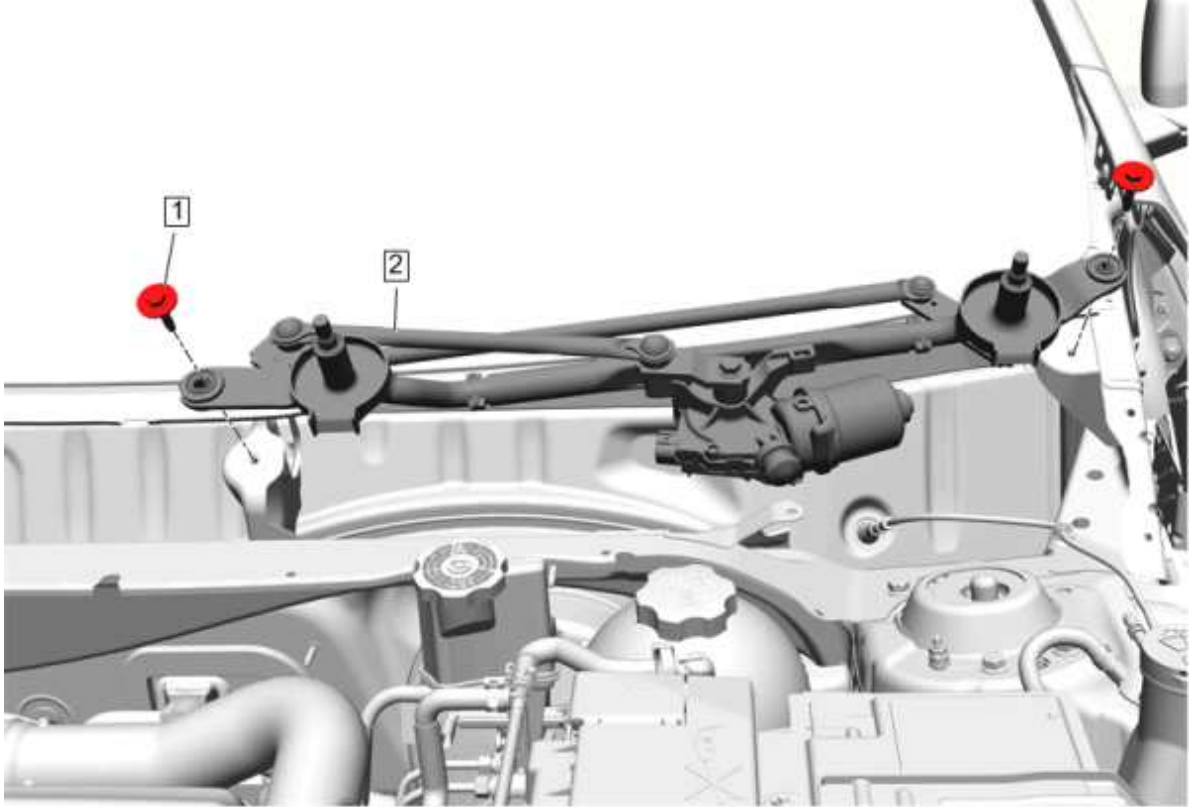


Fig. 464: Windshield Wiper Transmission
 Courtesy of GENERAL MOTORS COMPANY

50. Install Windshield Wiper Transmission (2) - [Windshield Wiper Transmission Replacement](#)

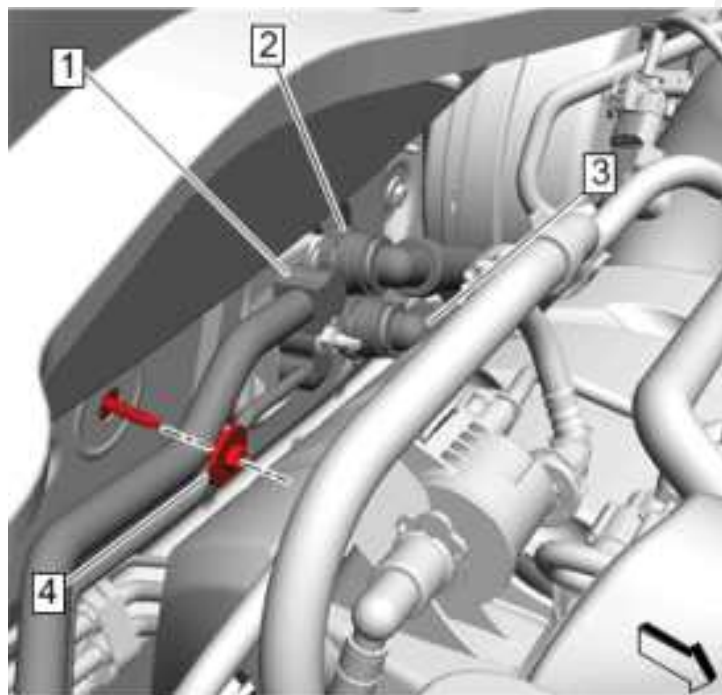


Fig. 465: Air Conditioning Refrigerant Heat Exchanger
 Courtesy of GENERAL MOTORS COMPANY

51. Install Heater Water Auxiliary Pump Hose (3) @Heater Core Outlet Tube - [Heater Water Auxiliary Pump Hose Replacement \(LTG with KL9\)](#)
52. Install Heater Inlet Hose (2) @Heater Core Inlet Tube - [Heater Inlet Hose Replacement \(LTG with KL9\)](#)
53. Install Air Conditioning Refrigerant Heat Exchanger (1) @Air Conditioning Evaporator Thermal Expansion Valve - [Air Conditioning Refrigerant Heat Exchanger Replacement \(LTG\)](#)
54. Fill the cooling system to the proper level. [Cooling System Draining and Filling \(GE 47716\)](#). [Cooling System Draining and Filling \(Static\)](#) .
55. Evacuate and charge the refrigerant system. [Refrigerant Recovery and Recharging \(R-134a\)](#)[Refrigerant Recovery and Recharging \(R-1234yf\)](#)
56. Connect the battery negative cable. [Battery Negative Cable Disconnection and Connection \(KL9\)](#)

57. Inspect for coolant leaks.

58. Visually inspect for air conditioning system refrigerant leaks.

HEATER AND AIR CONDITIONING EVAPORATOR AND BLOWER MODULE REMOVAL AND INSTALLATION (TERRAIN LYX WITH KL9)

Removal Procedure

1. Disconnect the battery negative cable. [Battery Negative Cable Disconnection and Connection \(KL9\)](#)
2. Recover the refrigerant. [Refrigerant Recovery and Recharging \(R-134a\)](#)[Refrigerant Recovery and Recharging \(R-1234yf\)](#)
3. Drain the cooling system. [Cooling System Draining and Filling \(GE 47716\)](#) [Cooling System Draining and Filling \(Static\)](#)

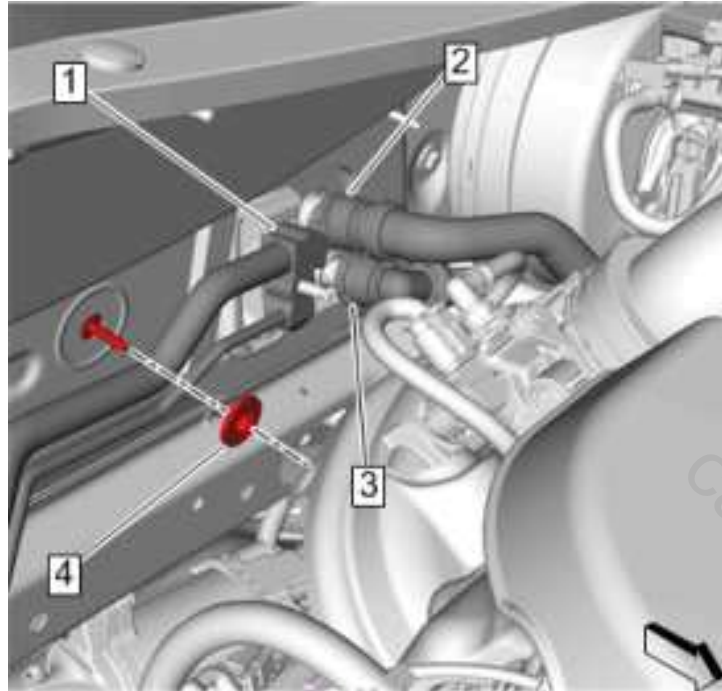


Fig. 466: Air Conditioning Refrigerant Heat Exchanger
Courtesy of GENERAL MOTORS COMPANY

4. Air Conditioning Refrigerant Heat Exchanger (1) @Air Conditioning Evaporator Thermal Expansion Valve - [Air Conditioning Refrigerant Heat Exchanger Replacement \(LYX\)](#)
5. Remove Heater Inlet Hose (2) @Heater Core Inlet Tube - [Heater Inlet Hose Replacement \(LYX with KL9\)](#)
6. Remove Heater Water Auxiliary Pump Hose (3) @Heater Core Outlet Tube - [Heater Water Auxiliary Pump Hose Replacement \(LYX with KL9\)](#)
7. Remove Heater and Air Conditioning Evaporator and Blower Module Nut (4) @Cowl Panel

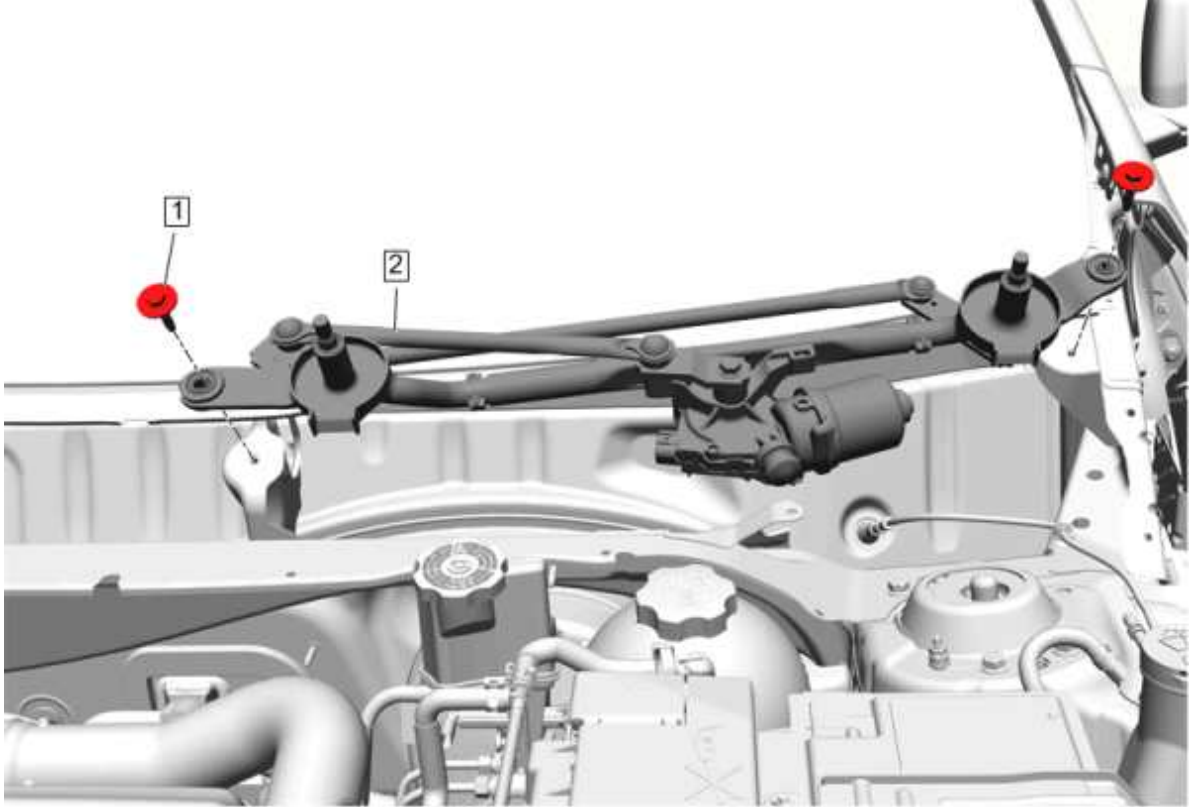


Fig. 467: Windshield Wiper Transmission
Courtesy of GENERAL MOTORS COMPANY

8. Remove Windshield Wiper Transmission (2) - [Windshield Wiper Transmission Replacement](#)

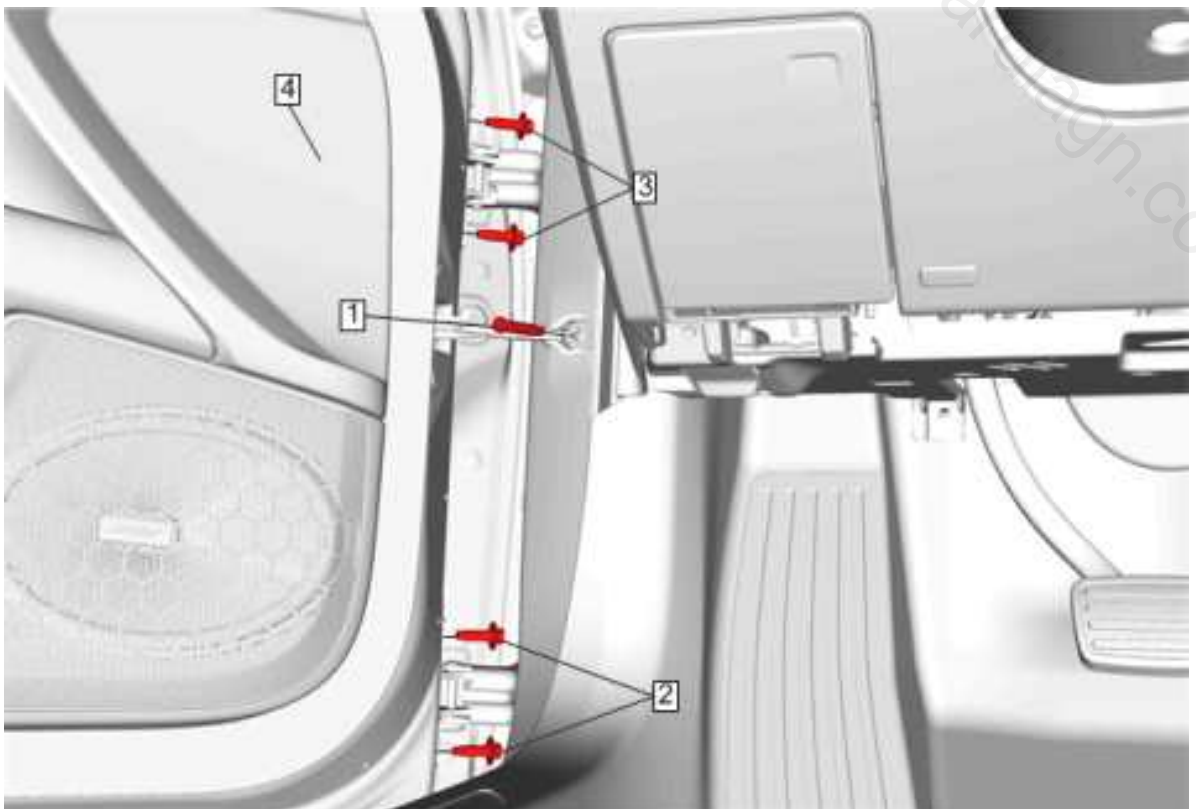


Fig. 468: Front Side Door
Courtesy of GENERAL MOTORS COMPANY

9. Remove the left and right front side door (4). [Front Side Door Replacement](#)
10. Remove Drivers Seat and Passengers Seat - [Driver or Passenger Seat Removal and Installation](#)
11. Remove the left and right side windshield garnish molding. [Windshield Garnish Molding Replacement \(Terrain\)](#)

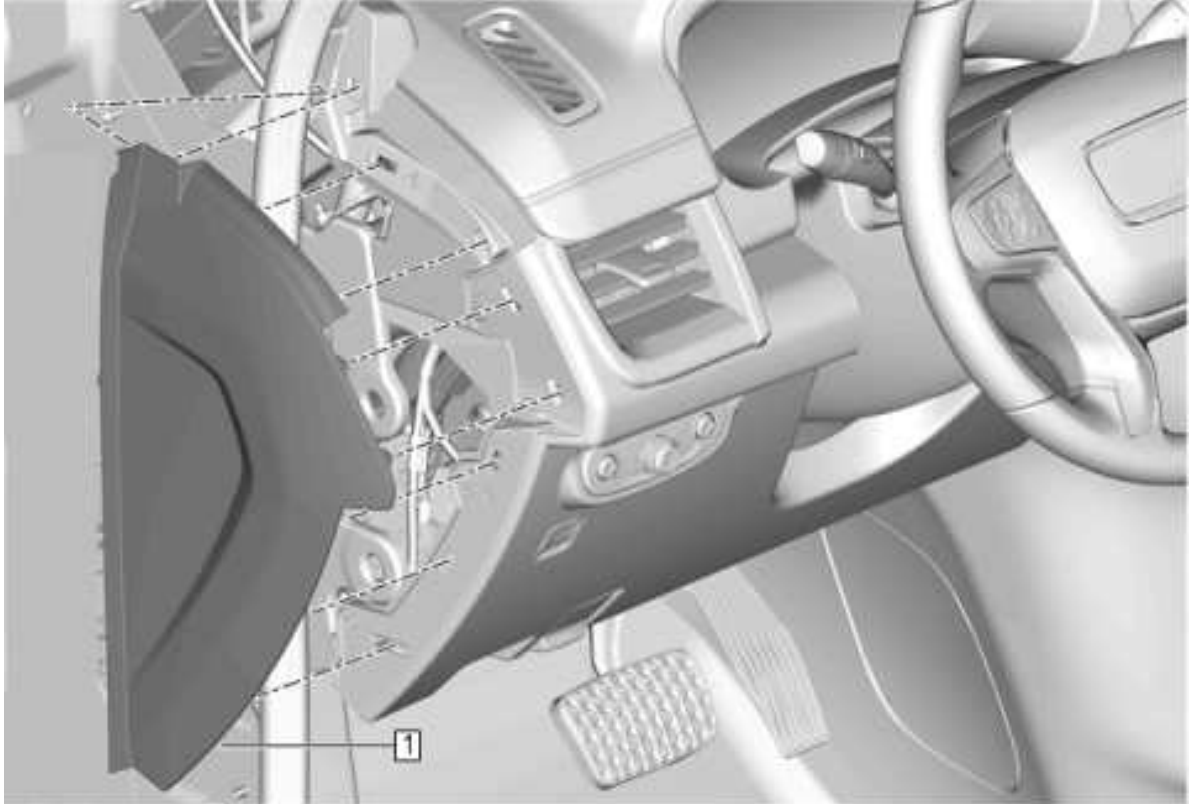


Fig. 469: Instrument Panel Outer Trim Cover (Terrain)
Courtesy of GENERAL MOTORS COMPANY

12. Remove the left and right instrument panel outer trim cover (1). **Instrument Panel Outer Trim Cover Replacement (Terrain)**

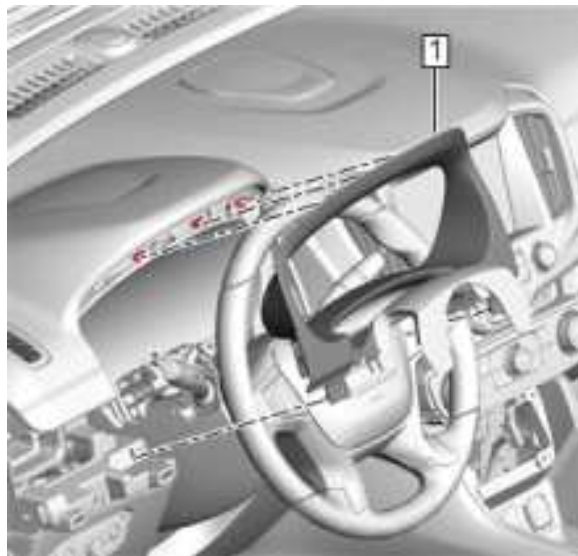


Fig. 470: Instrument Panel Cluster Trim Plate
Courtesy of GENERAL MOTORS COMPANY

13. Remove Instrument Panel Cluster Trim Plate (1) - **Instrument Panel Cluster Trim Plate Replacement (Terrain)**

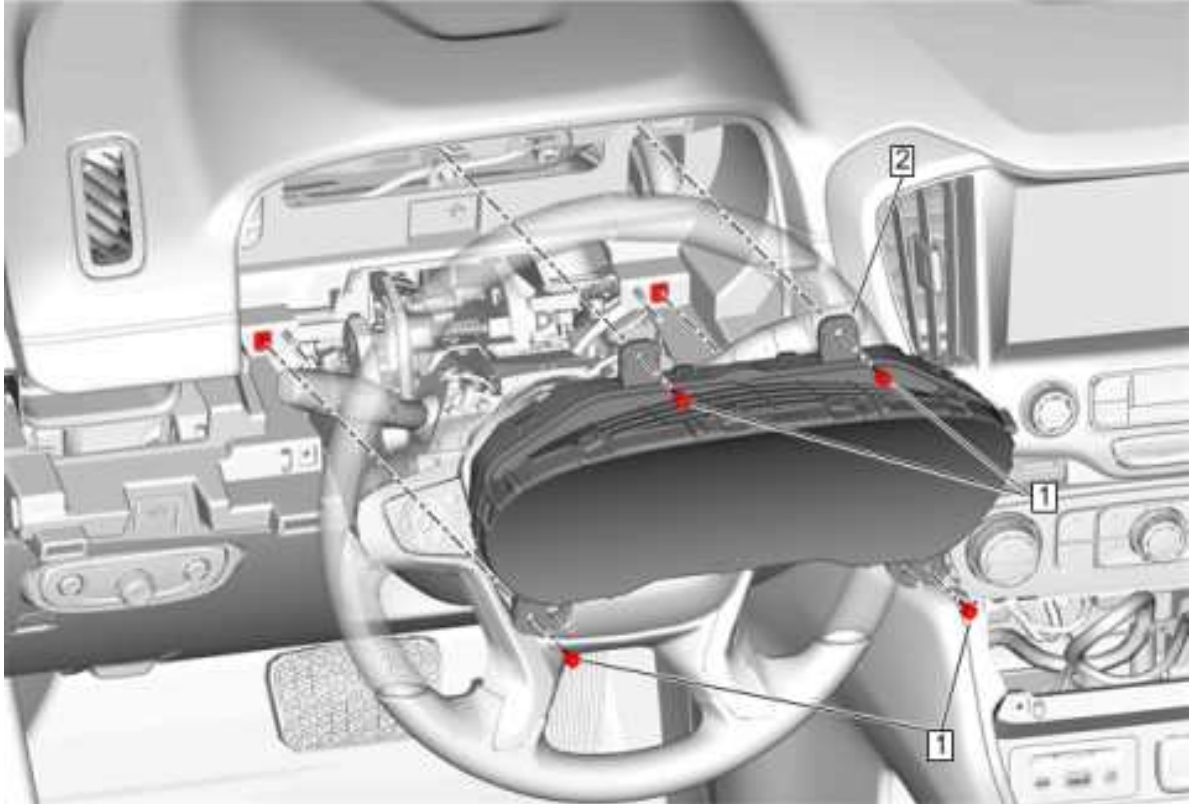


Fig. 471: Instrument Cluster And Screws
Courtesy of GENERAL MOTORS COMPANY

14. Remove Instrument Cluster (2) - **Instrument Cluster Replacement (Terrain)**



Fig. 472: Left Side Instrument Panel Trim Pad
Courtesy of GENERAL MOTORS COMPANY

15. Remove Instrument Panel Trim Pad - Left Side (1) - **Instrument Panel Trim Pad Replacement - Left Side (Terrain)**

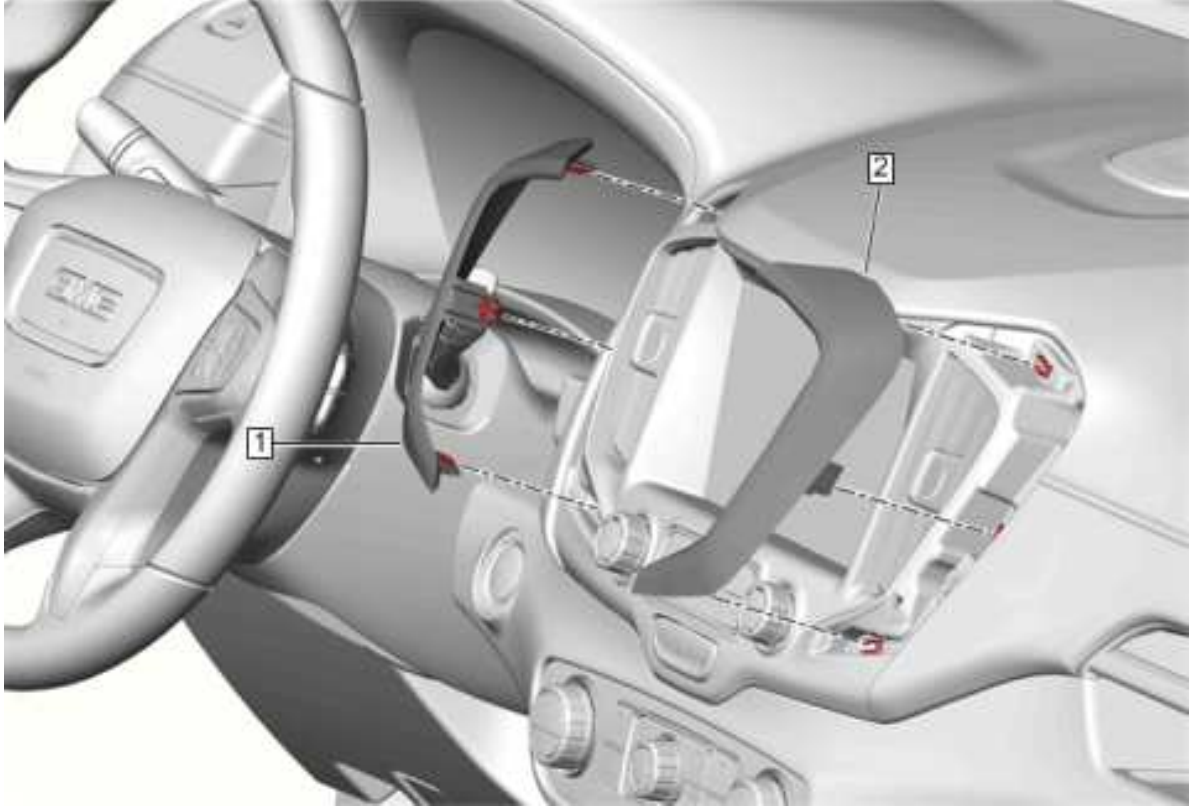


Fig. 473: Instrument Panel Center Trim Plate Appliques

Courtesy of GENERAL MOTORS COMPANY

16. Remove Instrument Panel Center Trim Plate Applique - Left Side (1) - [Instrument Panel Center Trim Plate Applique Replacement \(Terrain\)](#)
17. Remove Instrument Panel Center Trim Plate Applique - Right Side (2) - [Instrument Panel Center Trim Plate Applique Replacement \(Terrain\)](#)



Fig. 474: Front Floor Console Transmission Shift Opening Bezel

Courtesy of GENERAL MOTORS COMPANY

18. Remove Front Floor Console Transmission Shift Opening Bezel (1) - [Front Floor Console Transmission Shift Opening Bezel Replacement \(Terrain\)](#)

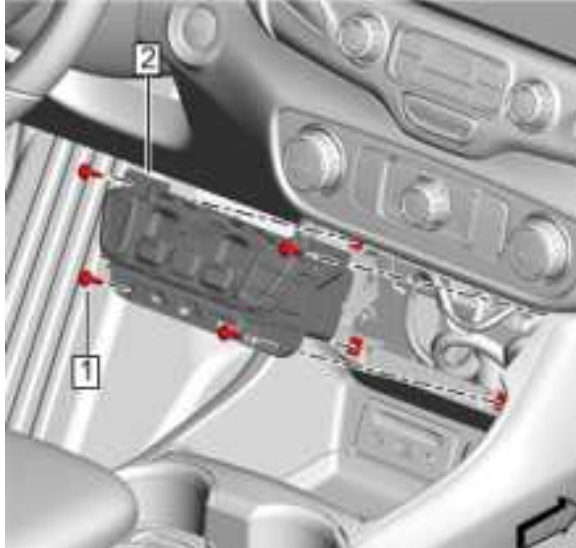


Fig. 475: Automatic Transmission Control Bolts And Electronic Transmission Shift Control Pushbutton

Courtesy of GENERAL MOTORS COMPANY

19. Remove Electronic Transmission Shift Control Pushbutton (2) - [Electronic Transmission Shift Control Pushbutton Replacement](#)

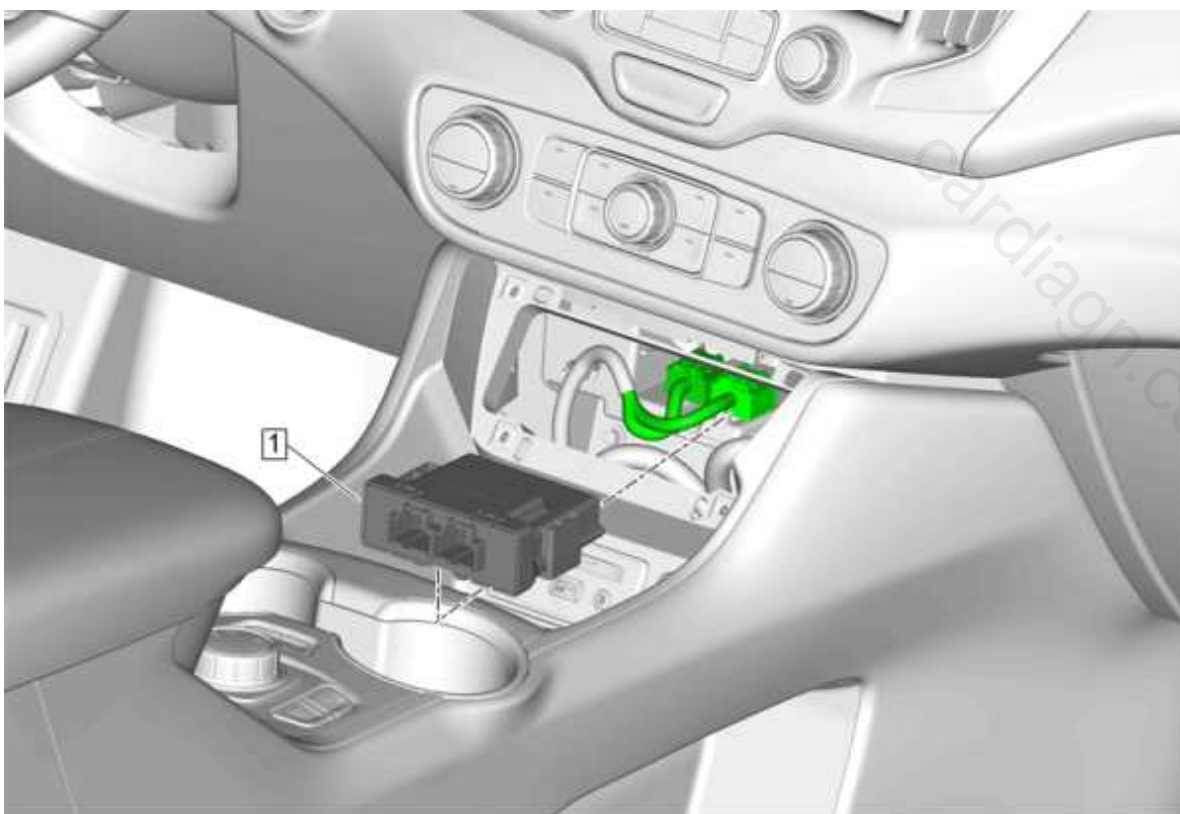


Fig. 476: Serial Data Gateway Module

Courtesy of GENERAL MOTORS COMPANY

20. Remove Serial Data Gateway Module (1) [Serial Data Gateway Module Replacement \(Terrain with MNH, NMK, or MHG\)](#) [Serial Data Gateway Module Replacement \(Terrain with M3U, M3D, or M3H\)](#)

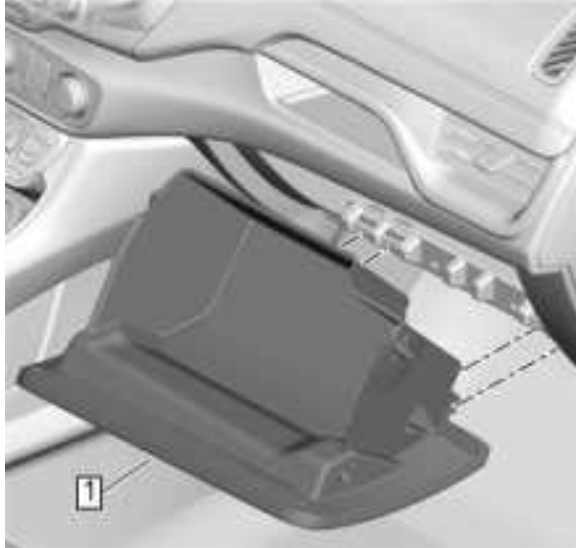


Fig. 477: Instrument Panel Compartment Door
Courtesy of GENERAL MOTORS COMPANY

21. Remove Instrument Panel Compartment Door (1) [Instrument Panel Compartment Door Replacement \(Terrain\)](#)

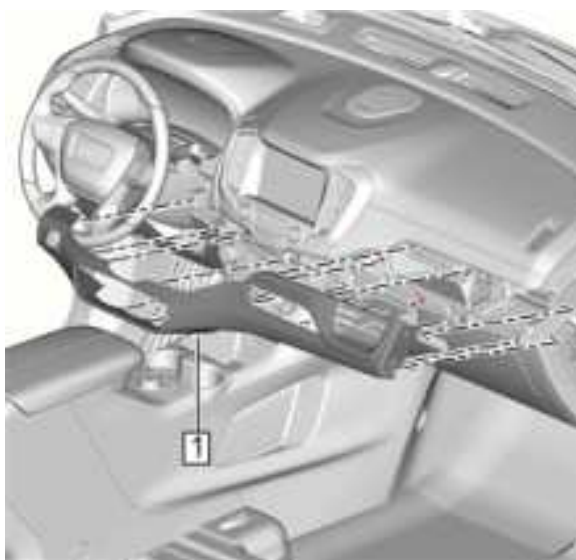


Fig. 478: Right Side Instrument Panel Trim Pad
Courtesy of GENERAL MOTORS COMPANY

22. Remove Instrument Panel Trim Pad - Right Side (1) - [Instrument Panel Trim Pad Replacement - Right Side \(Terrain\)](#)

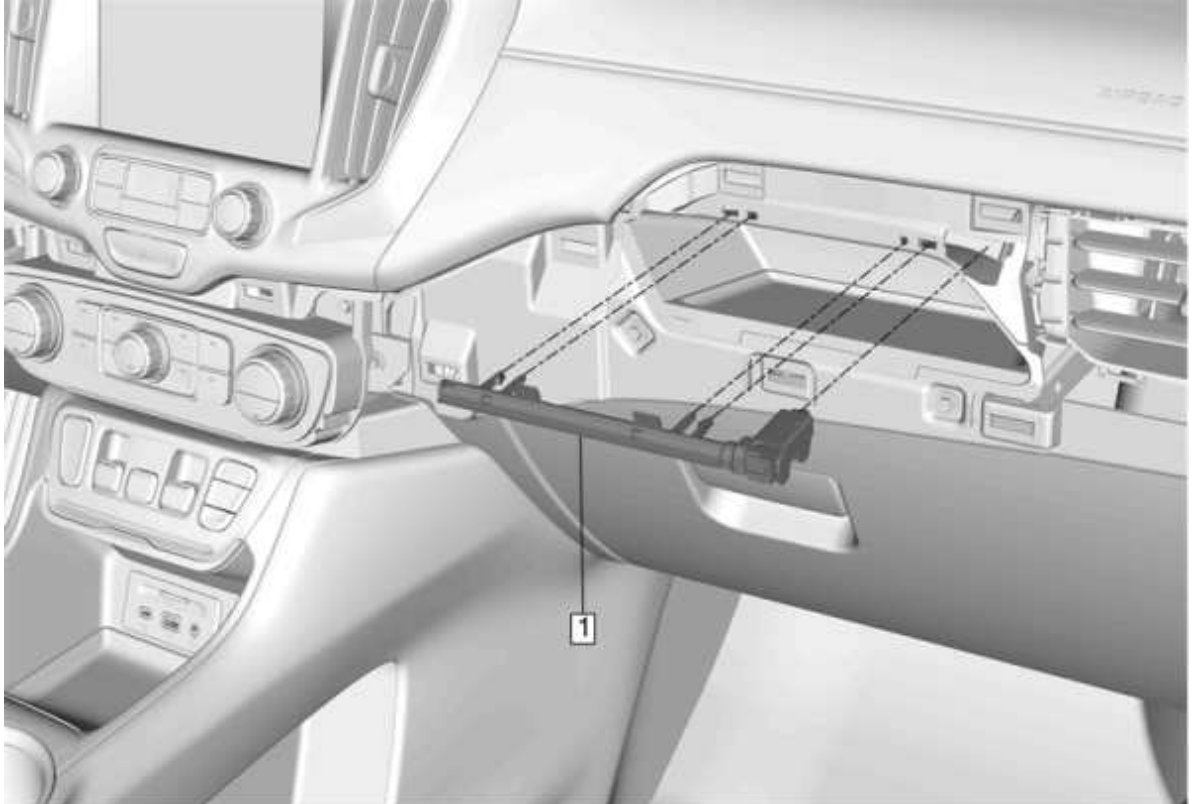


Fig. 479: Instrument Panel Light Conductor Lamp
 Courtesy of GENERAL MOTORS COMPANY

23. Remove Instrument Panel Light Conductor Lamp (1) - **Instrument Panel Light Conductor Lamp Replacement (GMC)**

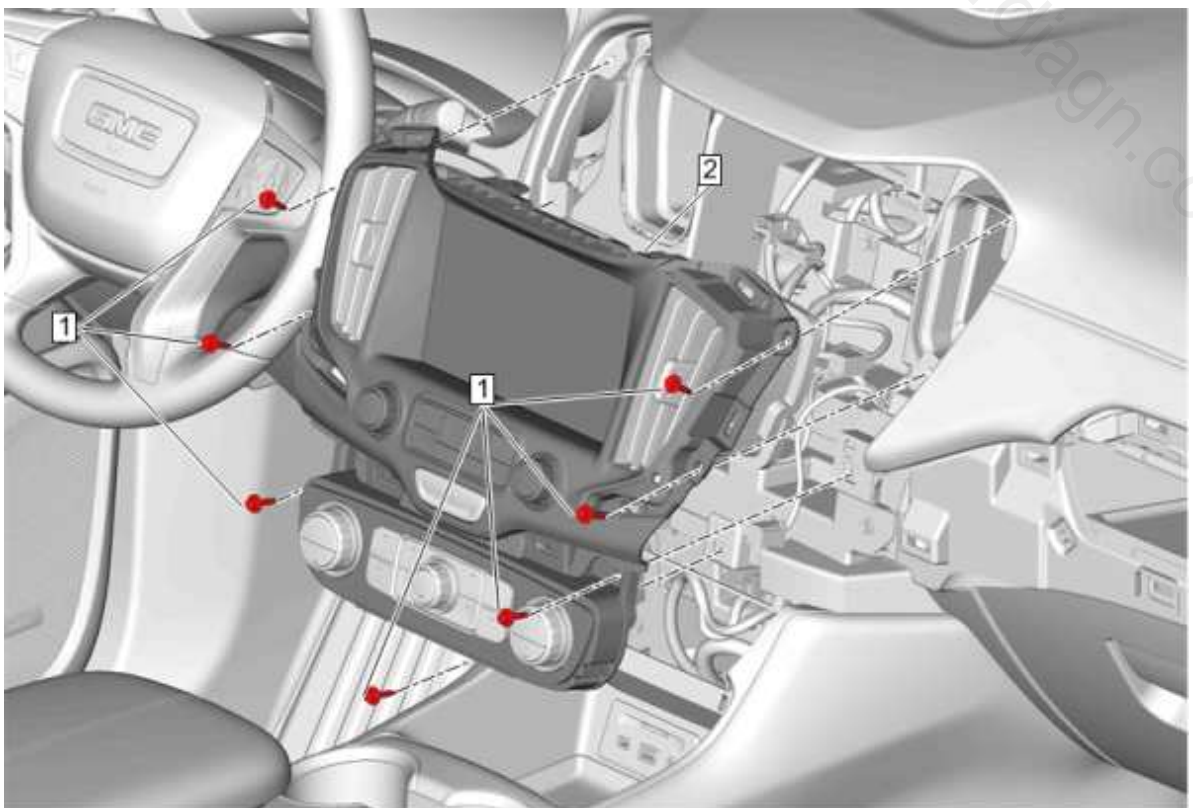


Fig. 480: Radio Control Assembly And Screws
 Courtesy of GENERAL MOTORS COMPANY

24. Remove Radio Control Assembly (2) **Radio Control Assembly Replacement (Terrain)**
 25. Disconnect all electrical connectors.



Fig. 481: Radio Front Center Speaker
Courtesy of GENERAL MOTORS COMPANY

26. Remove { If equipped } Radio Front Center Speaker (2) **Radio Front Center Speaker Replacement (Terrain)**

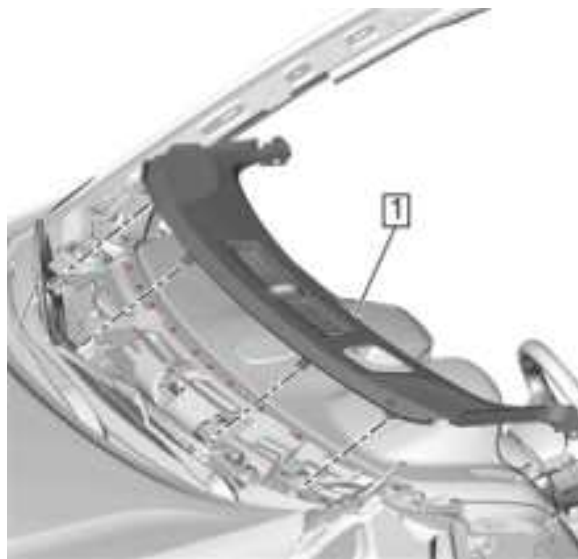


Fig. 482: Instrument Panel Extension
Courtesy of GENERAL MOTORS COMPANY

27. Remove Instrument Panel Extension (1) **Instrument Panel Extension Replacement (Terrain)**

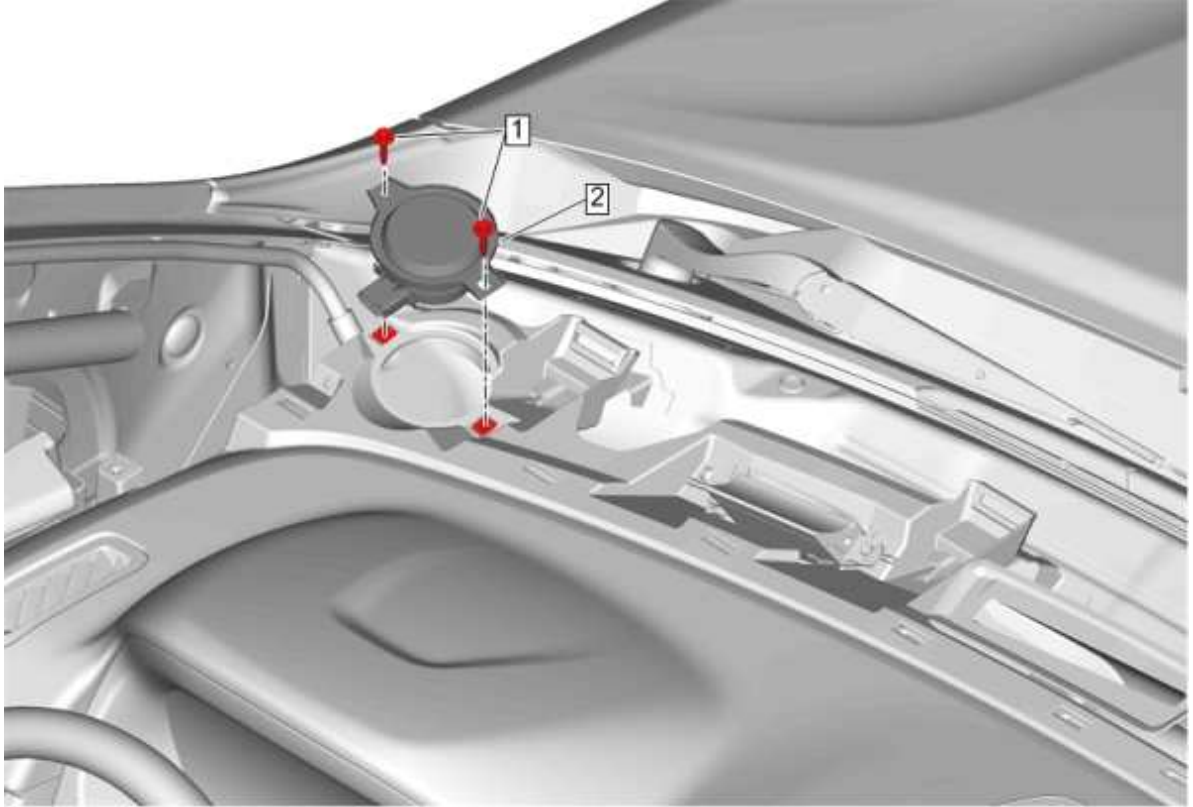


Fig. 483: Radio Front Speaker

Courtesy of GENERAL MOTORS COMPANY

28. Remove the left and right side radio front speakers.(2)[Radio Front Speaker Replacement \(Terrain\)](#)

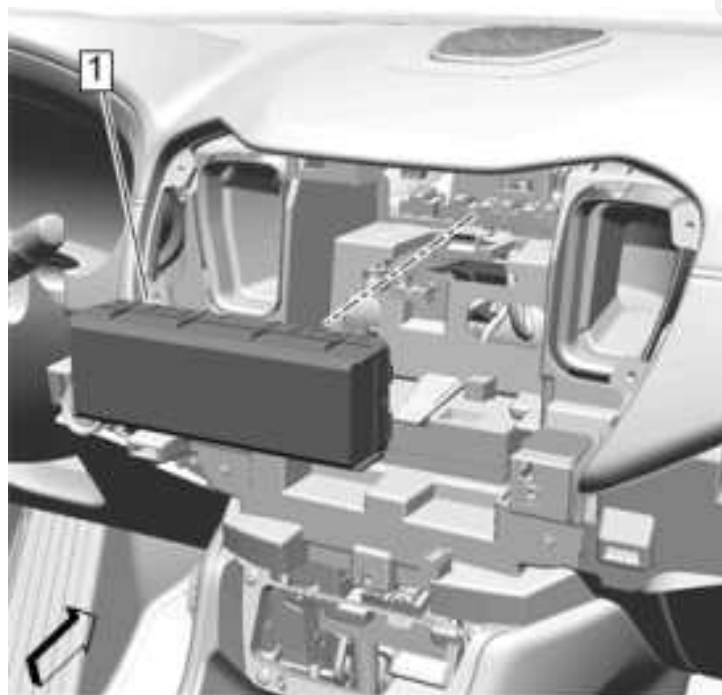


Fig. 484: Heater And Air Conditioning Remote Control

Courtesy of GENERAL MOTORS COMPANY

29. Remove Heater and Air Conditioning Remote Control (1)- [Heater and Air Conditioning Remote Control Replacement \(Terrain\)](#)

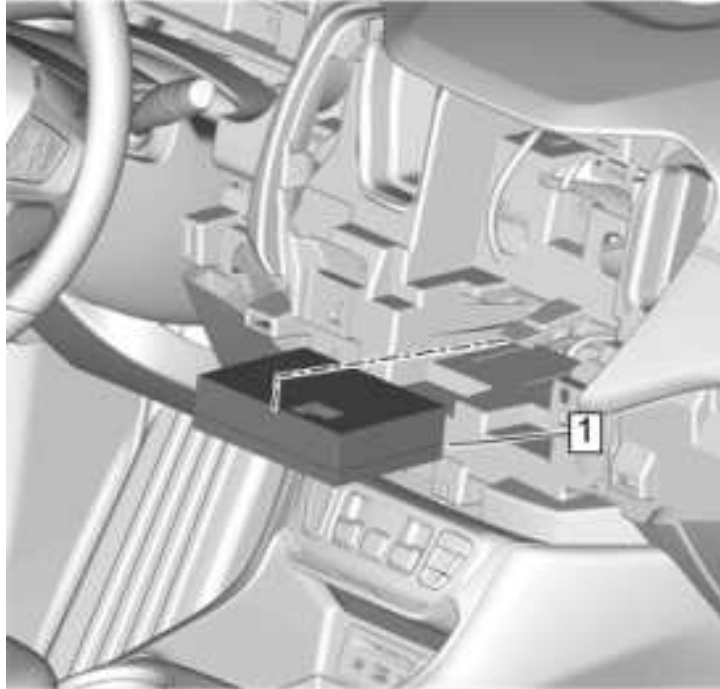


Fig. 485: Communication Interface Module
 Courtesy of GENERAL MOTORS COMPANY

30. Remove Communication Interface Module (1) [Communication Interface Module Replacement \(Terrain with IOS, IOT, IOU\)](#) [Communication Interface Module Replacement \(Terrain with IOR\)](#)

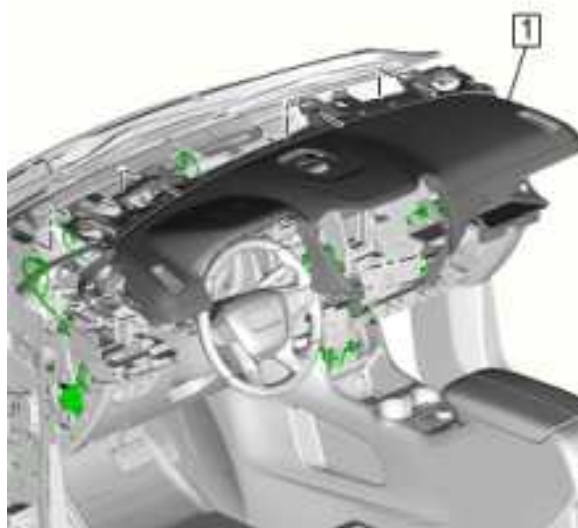


Fig. 486: Instrument Panel Upper Trim Panel
 Courtesy of GENERAL MOTORS COMPANY

31. Remove Instrument Panel Upper Trim Panel (1) - [Instrument Panel Upper Trim Panel Replacement \(Terrain\)](#)

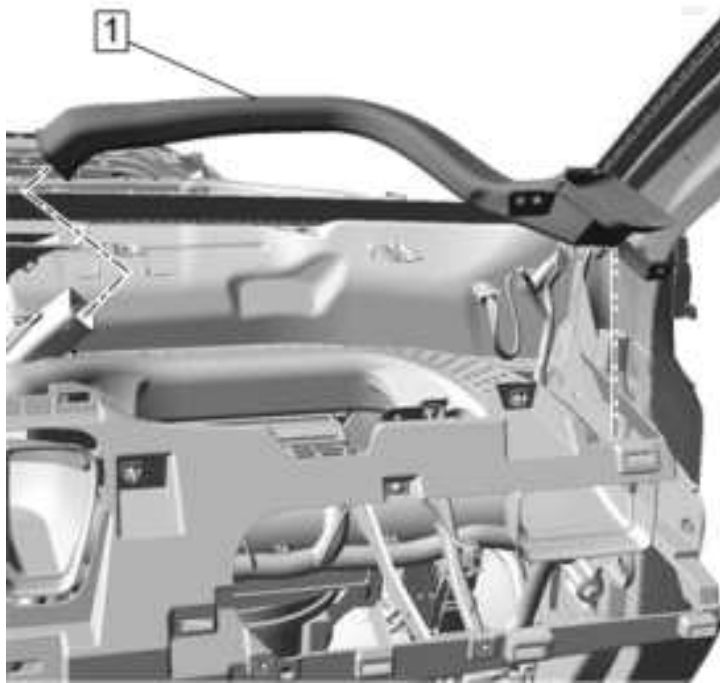


Fig. 487: Right Side Window Defogger Outlet Duct
 Courtesy of GENERAL MOTORS COMPANY

32. Remove Side Window Defogger Outlet Duct - Right Side (1) - [Side Window Defogger Outlet Duct Replacement - Right Side \(Terrain\)](#)

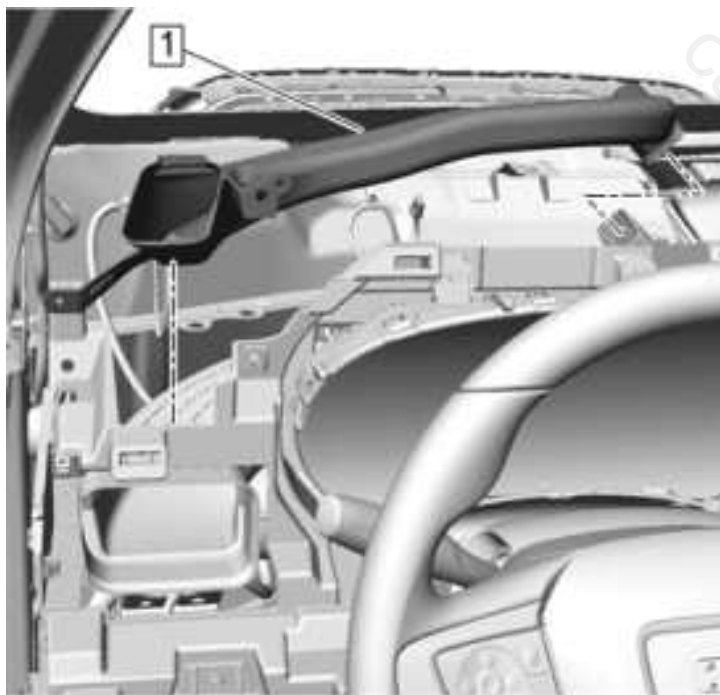


Fig. 488: Left Side Window Defogger Outlet Duct
 Courtesy of GENERAL MOTORS COMPANY

33. Remove Side Window Defogger Outlet Duct - Left Side (1) - [Side Window Defogger Outlet Duct Replacement - Left Side \(Terrain\)](#)

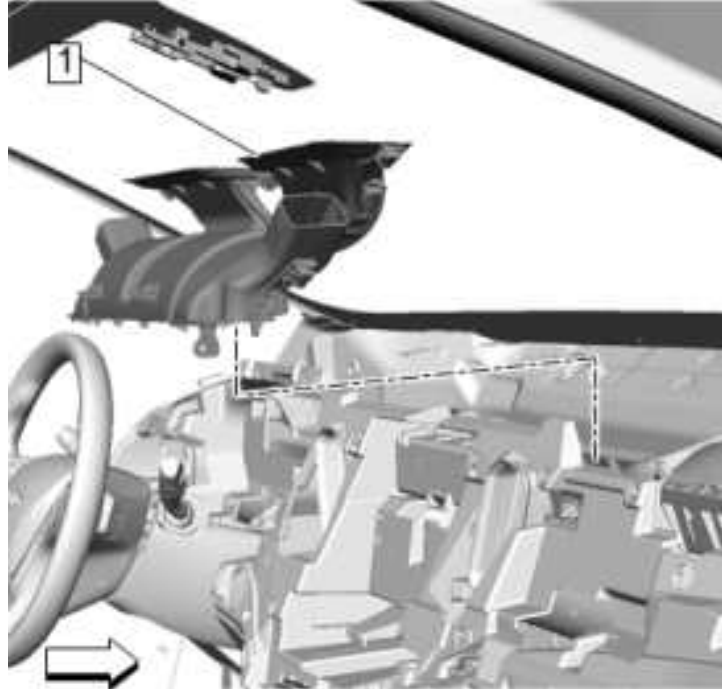


Fig. 489: Windshield Defroster Outlet Duct
 Courtesy of GENERAL MOTORS COMPANY

34. Remove Windshield Defroster Outlet Duct (1) - [Windshield Defroster Outlet Duct Replacement \(Terrain\)](#)
35. Disconnect and reposition harness as necessary.



Fig. 490: Instrument Panel Center Air Outlet Duct
 Courtesy of GENERAL MOTORS COMPANY

36. Remove Instrument Panel Center Air Outlet Duct (1) - [Instrument Panel Center Air Outlet Duct Replacement \(Terrain\)](#)

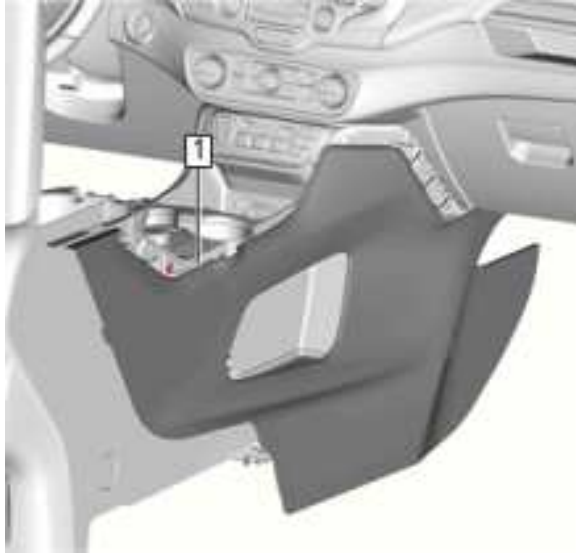


Fig. 491: Right Front Floor Console Extension Panel
 Courtesy of GENERAL MOTORS COMPANY

37. Remove Front Floor Console Extension Panel - Right (1) - **Front Floor Console Extension Panel Replacement - Right Side (Terrain)**

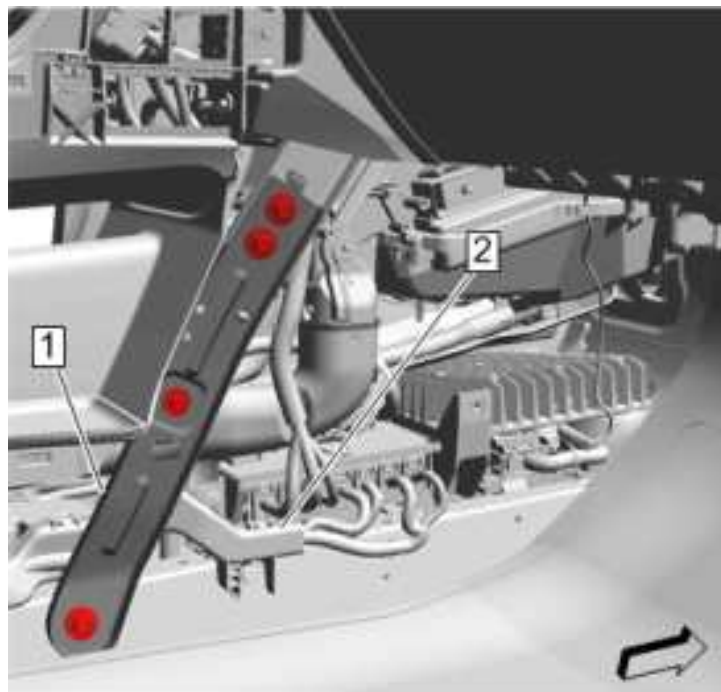


Fig. 492: Instrument Panel Center Lower Bracket
 Courtesy of GENERAL MOTORS COMPANY

38. Remove Instrument Panel Center Lower Bracket-Right Side (1) - **Instrument Panel Center Lower Bracket Replacement (Terrain - Right Side)**

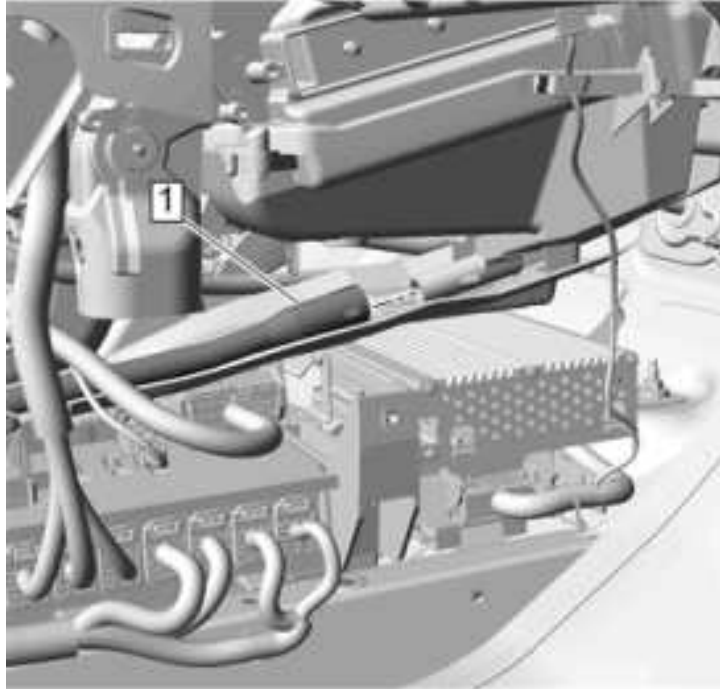


Fig. 493: Air Conditioning Evaporator and Blower Module Drain Hose
 Courtesy of GENERAL MOTORS COMPANY

CAUTION: Refer to [HVAC Module Drain Tube Caution](#) .

39. Prior to removing the air conditioning evaporator and blower module drain tube/hose, use clean and absorbent shop clothes/towels to cover the electrical components protecting the electrical components from water damage.
40. Remove Air Conditioning Evaporator and Blower Module Drain Hose (1) @Heater and Air Conditioning Evaporator and Blower Lower Case - [Air Conditioning Evaporator and Blower Module Drain Hose Replacement \(Terrain\)](#)



Fig. 494: Left Front Floor Console Extension Panel
 Courtesy of GENERAL MOTORS COMPANY

41. Remove Front Floor Console Extension Panel - Left (1) [Front Floor Console Extension Panel Replacement - Left Side \(Terrain\)](#)

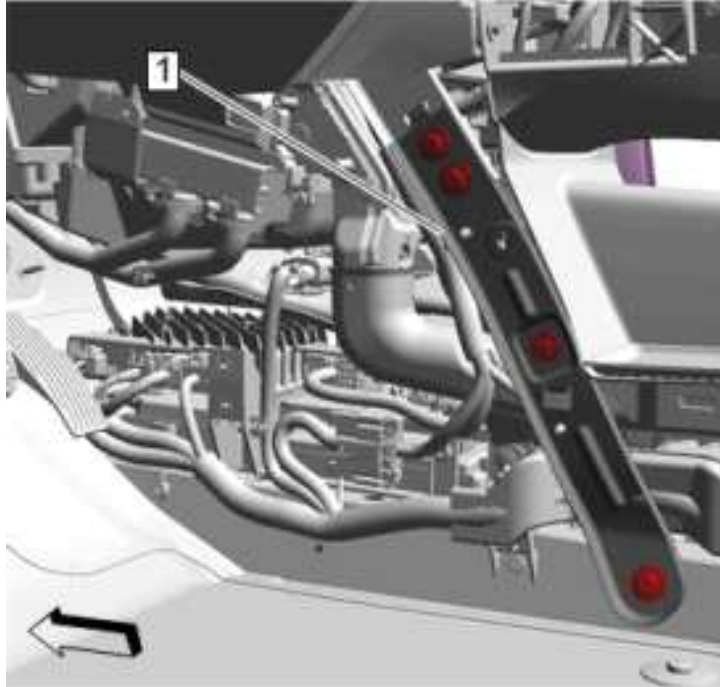


Fig. 495: Instrument Panel Center Lower Bracket-Left Side
 Courtesy of GENERAL MOTORS COMPANY

42. Remove Instrument Panel Center Lower Bracket-Left Side (3) - **Instrument Panel Center Lower Bracket Replacement (Terrain - Left Side)**

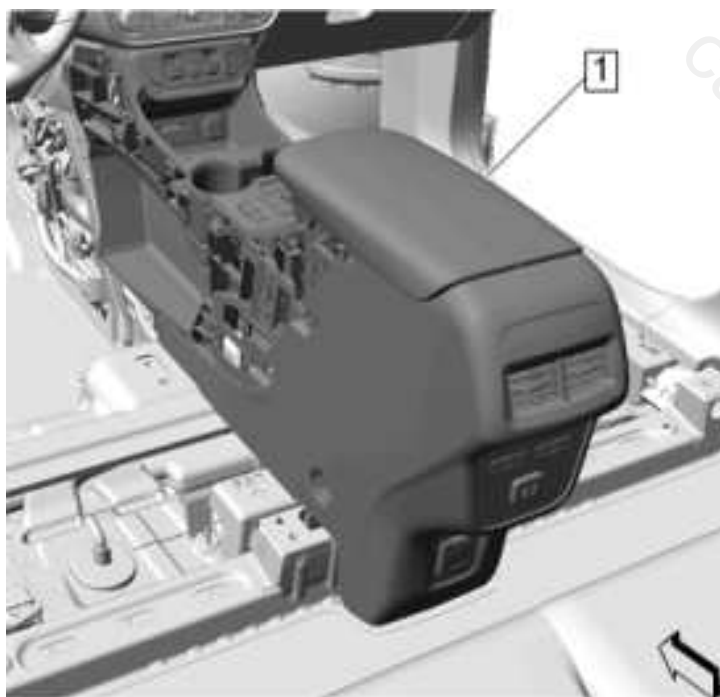


Fig. 496: Front Floor Console
 Courtesy of GENERAL MOTORS COMPANY

43. Remove Front Floor Console (1) **Front Floor Console Replacement (Terrain)**
 44. Disconnect the electrical connectors.

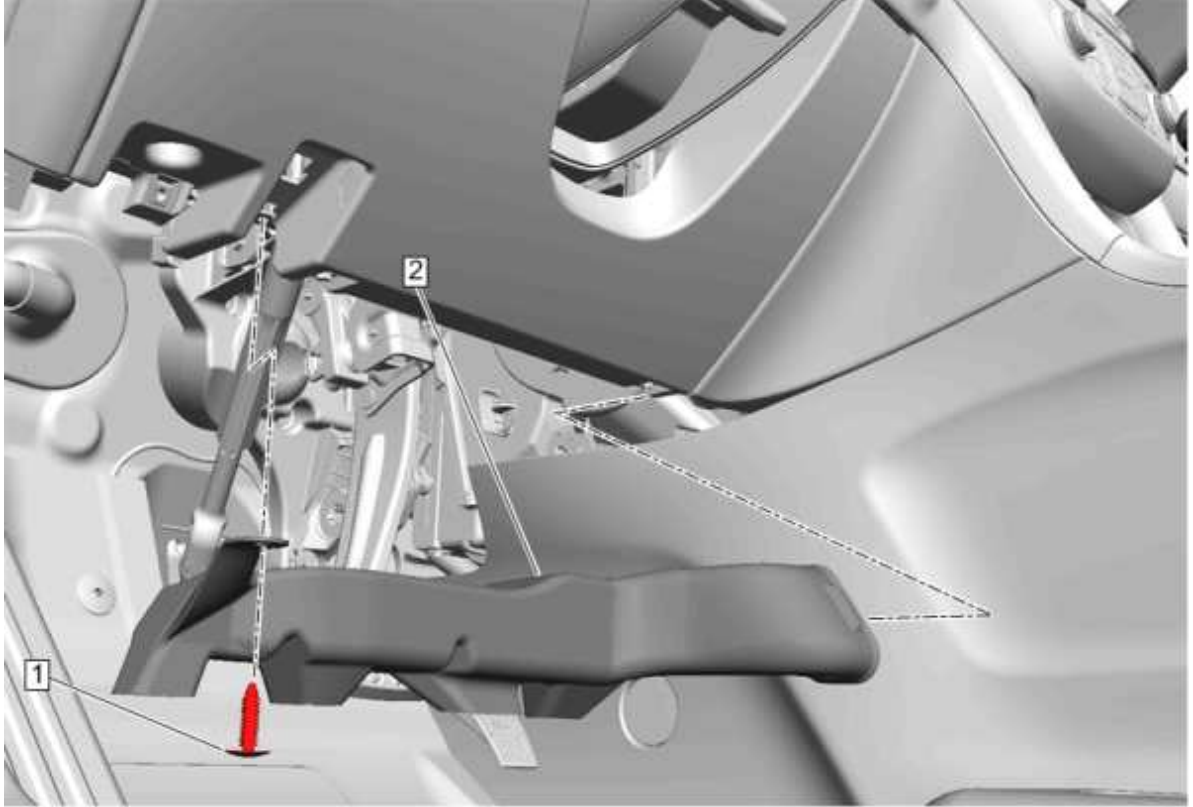


Fig. 497: Floor Front Air Outlet Duct
Courtesy of GENERAL MOTORS COMPANY

45. Remove Floor Front Air Outlet Duct - Left Side (2) **Floor Front Air Outlet Duct Replacement - Left Side**



Fig. 498: Instrument Panel Knee Bolster
Courtesy of GENERAL MOTORS COMPANY

46. Remove Instrument Panel Knee Bolster (1) - **Instrument Panel Knee Bolster Replacement (Terrain)**

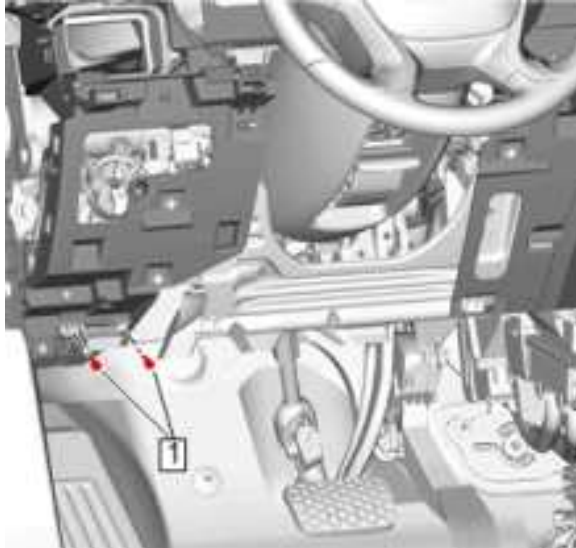


Fig. 499: Data Link Connector Bolts
Courtesy of GENERAL MOTORS COMPANY

47. Remove Data Link Connector Bolt (1)

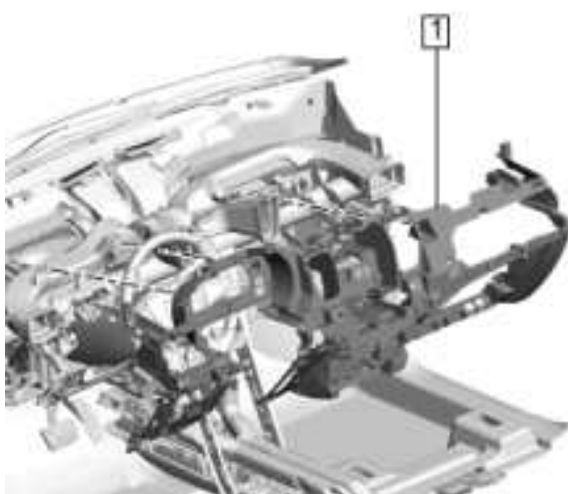


Fig. 500: Instrument Panel
Courtesy of GENERAL MOTORS COMPANY

48. Remove Instrument Panel Assembly (1) **Instrument Panel Assembly Replacement (Terrain)**

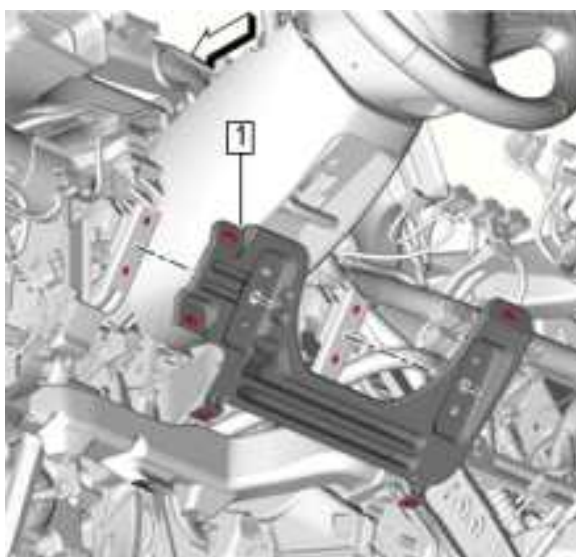


Fig. 501: Instrument Panel Knee Bolster Deflector
Courtesy of GENERAL MOTORS COMPANY

49. Remove Instrument Panel Knee Bolster Deflector (1) [Instrument Panel Knee Bolster Deflector Replacement \(Terrain\)](#)

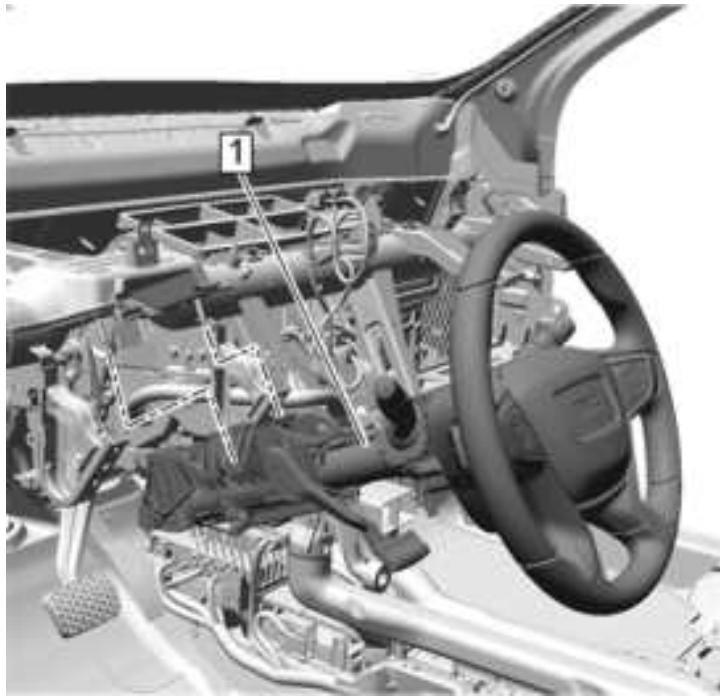


Fig. 502: Steering Column

Courtesy of GENERAL MOTORS COMPANY

50. Remove Steering Column (1) [Steering Column Replacement \(Equinox\)](#) [Steering Column Replacement \(Terrain\)](#)

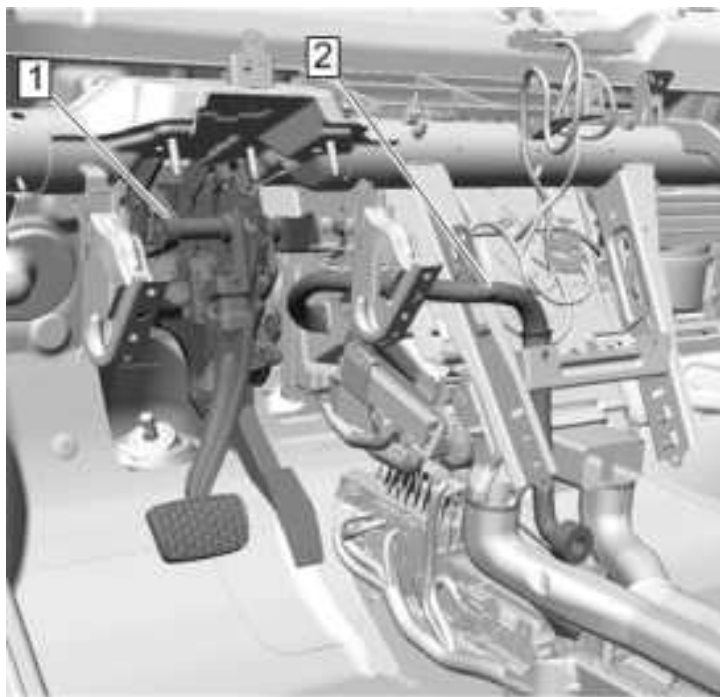


Fig. 503: Brake Pedal Assembly

Courtesy of GENERAL MOTORS COMPANY

51. Remove the brake pedal assembly.(1) [Brake Pedal Assembly Replacement](#)
52. Remove { If equipped } Instrument Panel Compartment Air Duct (2)
53. Detach the instrument panel electrical wiring harness from the instrument panel tie bar.

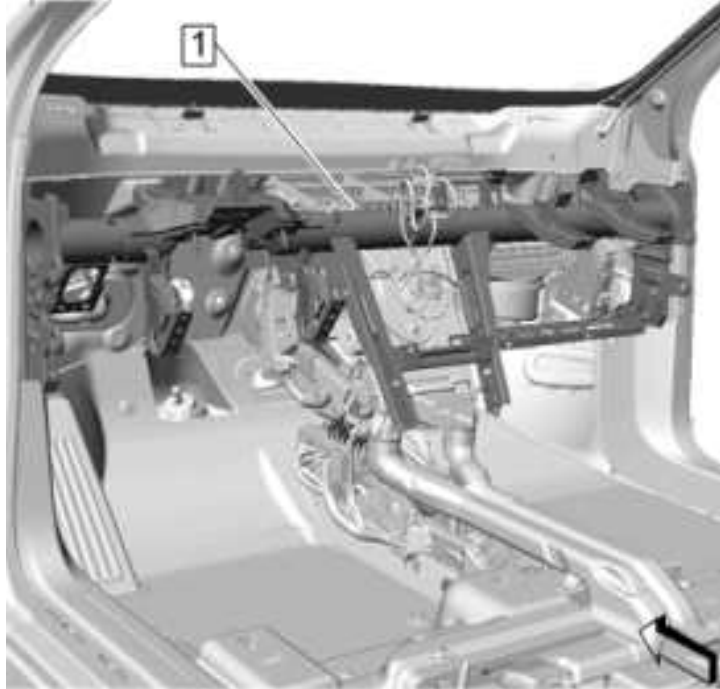


Fig. 504: Instrument Panel Tie Bar
Courtesy of GENERAL MOTORS COMPANY

- 54. Remove Instrument Panel Tie Bar (1) - **Instrument Panel Tie Bar Replacement (Terrain)**
- 55. Support the heater and air conditioning evaporator and blower (HVAC) module assembly.

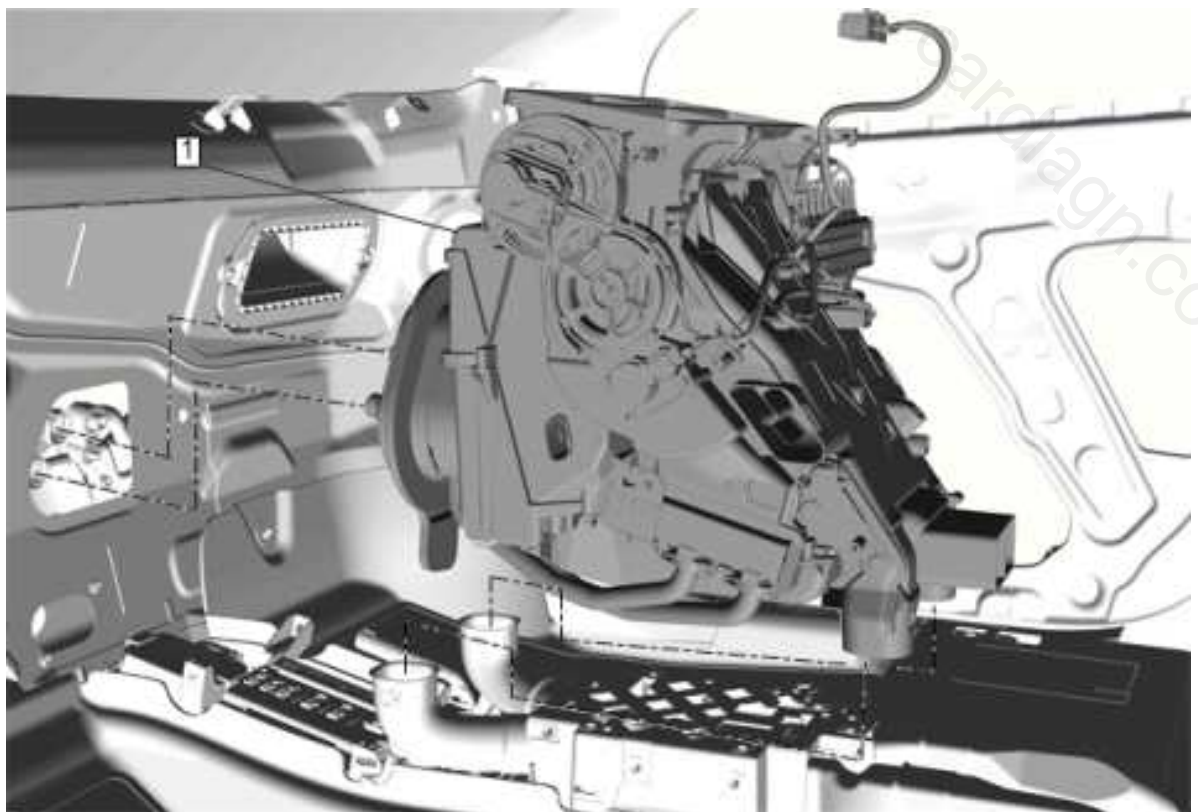


Fig. 505: Heater and Air Conditioning Evaporator and Blower Module
Courtesy of GENERAL MOTORS COMPANY

- 56. Remove Heater and Air Conditioning Evaporator and Blower Module (1) - from the vehicle.
- 57. Transfer all necessary components.

Installation Procedure

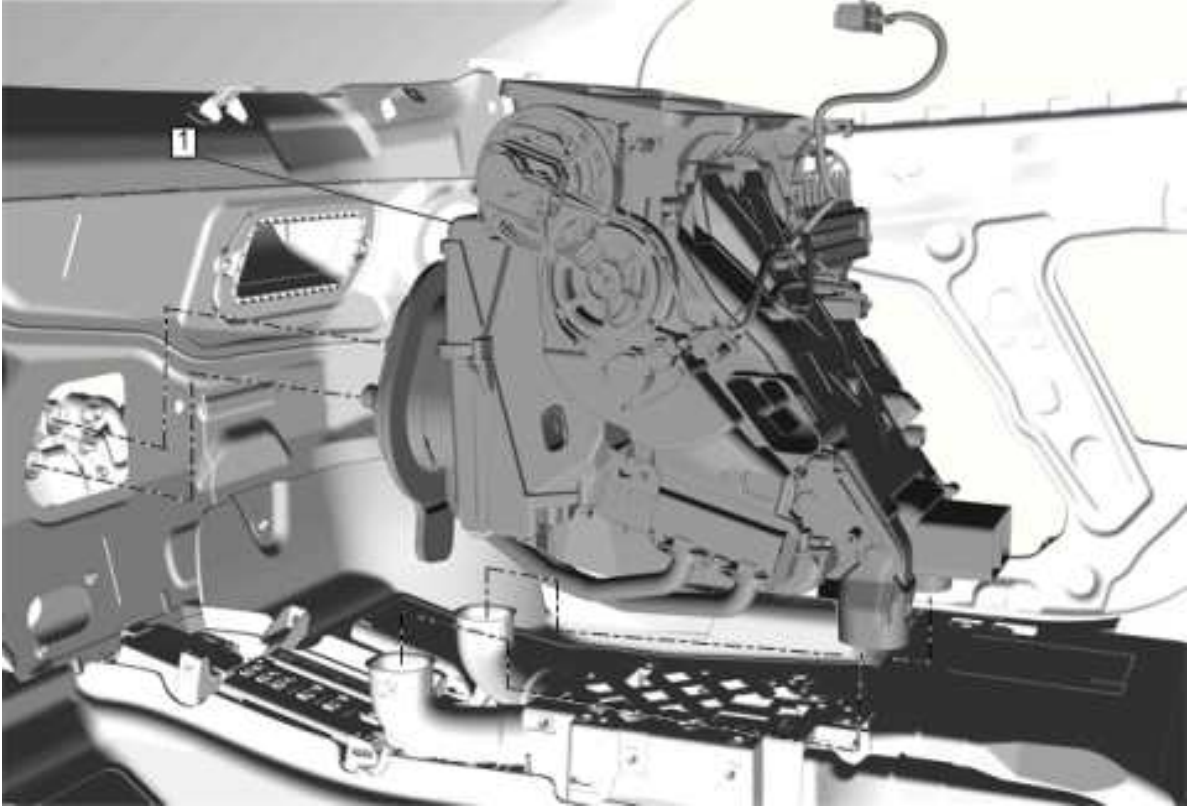


Fig. 506: Heater and Air Conditioning Evaporator and Blower Module
Courtesy of GENERAL MOTORS COMPANY

1. Install Heater and Air Conditioning Evaporator and Blower Module (1) onto the vehicle.
2. Temporarily support HVAC module assembly.

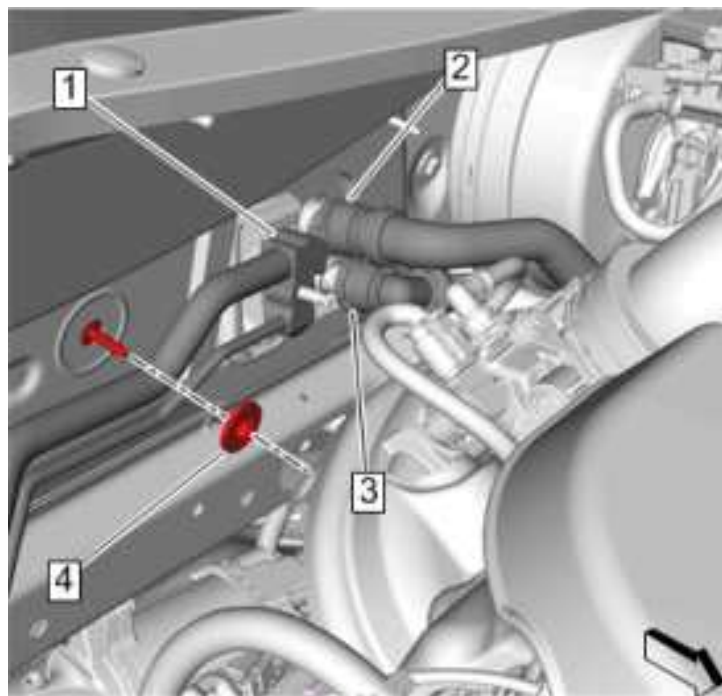


Fig. 507: Air Conditioning Refrigerant Heat Exchanger
Courtesy of GENERAL MOTORS COMPANY

CAUTION: Refer to **Fastener Caution** .

3. Install Heater and Air Conditioning Evaporator and Blower Module Nut (4) @Cowl Panel and tighten 9.0 N.m (80 lb in)

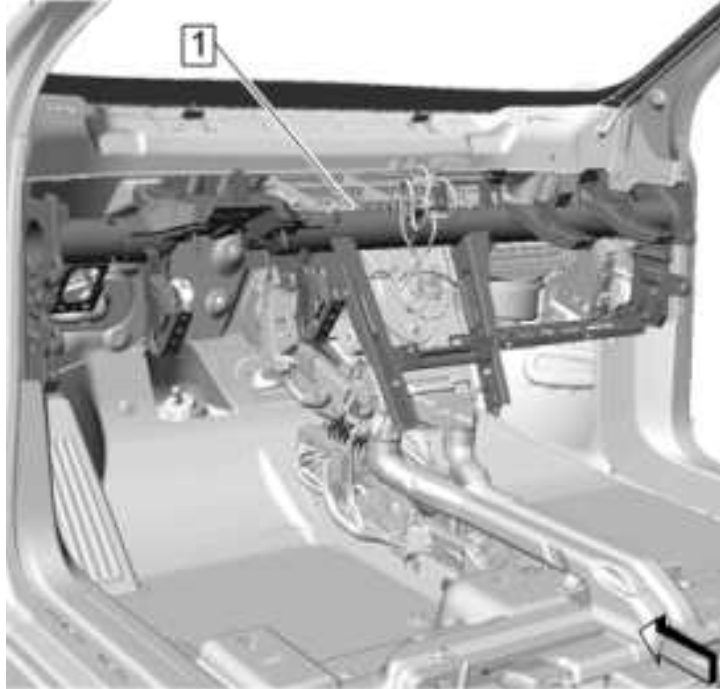


Fig. 508: Instrument Panel Tie Bar

Courtesy of GENERAL MOTORS COMPANY

4. Install Instrument Panel Tie Bar (1) [Instrument Panel Tie Bar Replacement \(Terrain\)](#)
5. Attach the instrument panel electrical wiring harness onto the instrument panel tie bar.

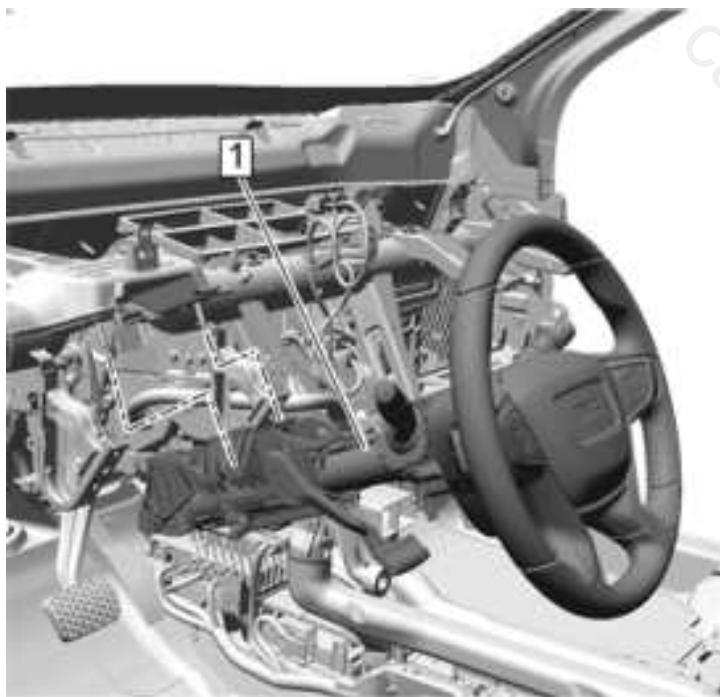


Fig. 509: Steering Column

Courtesy of GENERAL MOTORS COMPANY

6. Install Steering Column (1) [Steering Column Replacement \(Terrain\)](#)

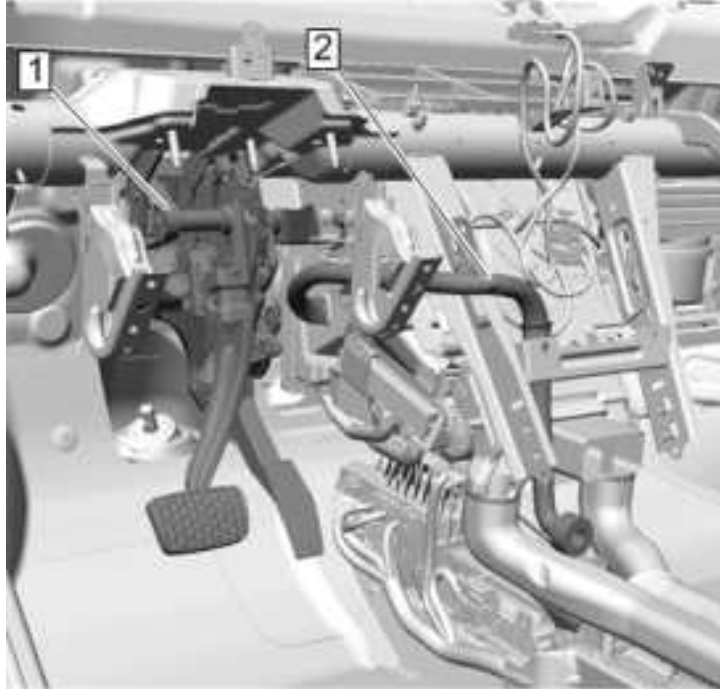


Fig. 510: Brake Pedal Assembly
 Courtesy of GENERAL MOTORS COMPANY

7. Install the brake pedal assembly. (1) [Brake Pedal Assembly Replacement](#)
8. Install { If equipped } Instrument Panel Compartment Air Duct (2)

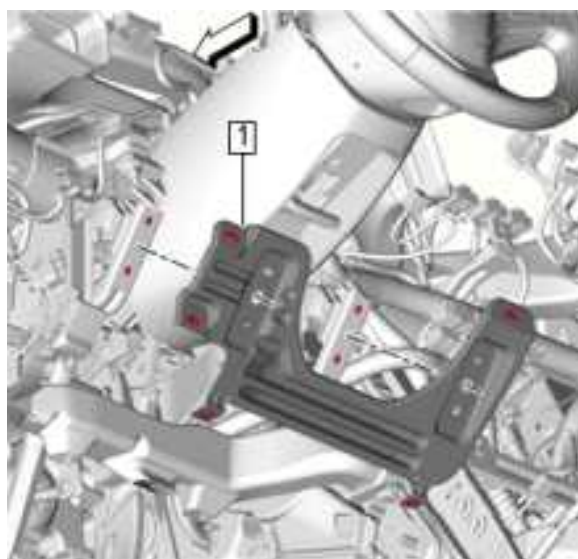


Fig. 511: Instrument Panel Knee Bolster Deflector
 Courtesy of GENERAL MOTORS COMPANY

9. Install Instrument Panel Knee Bolster Deflector (1) [Instrument Panel Knee Bolster Deflector Replacement \(Terrain\)](#)

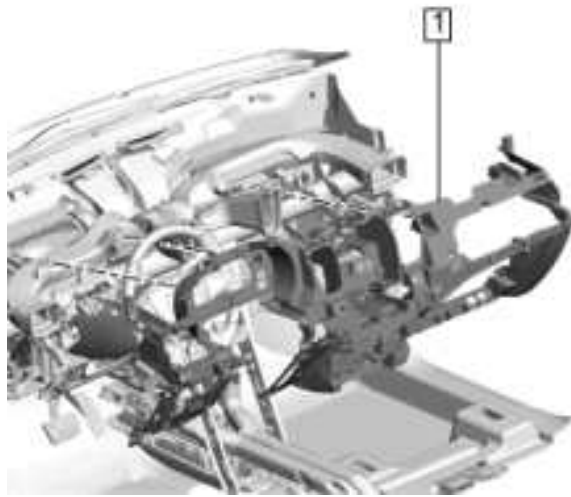


Fig. 512: Instrument Panel

Courtesy of GENERAL MOTORS COMPANY

10. Install Instrument Panel Assembly (1) [Instrument Panel Assembly Replacement \(Terrain\)](#)

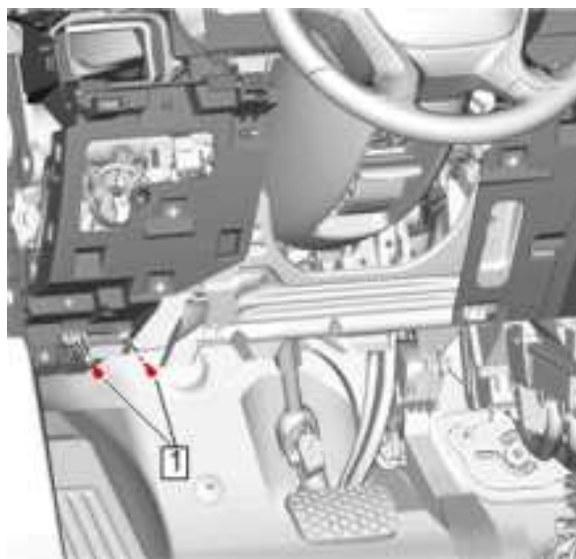


Fig. 513: Data Link Connector Bolts

Courtesy of GENERAL MOTORS COMPANY

11. Install Data Link Connector Bolt (1) and tighten 2.5 N.m (22 lb in)



Fig. 514: Instrument Panel Knee Bolster

Courtesy of GENERAL MOTORS COMPANY

12. Install Instrument Panel Knee Bolster (1) [Instrument Panel Knee Bolster Replacement \(Terrain\)](#)

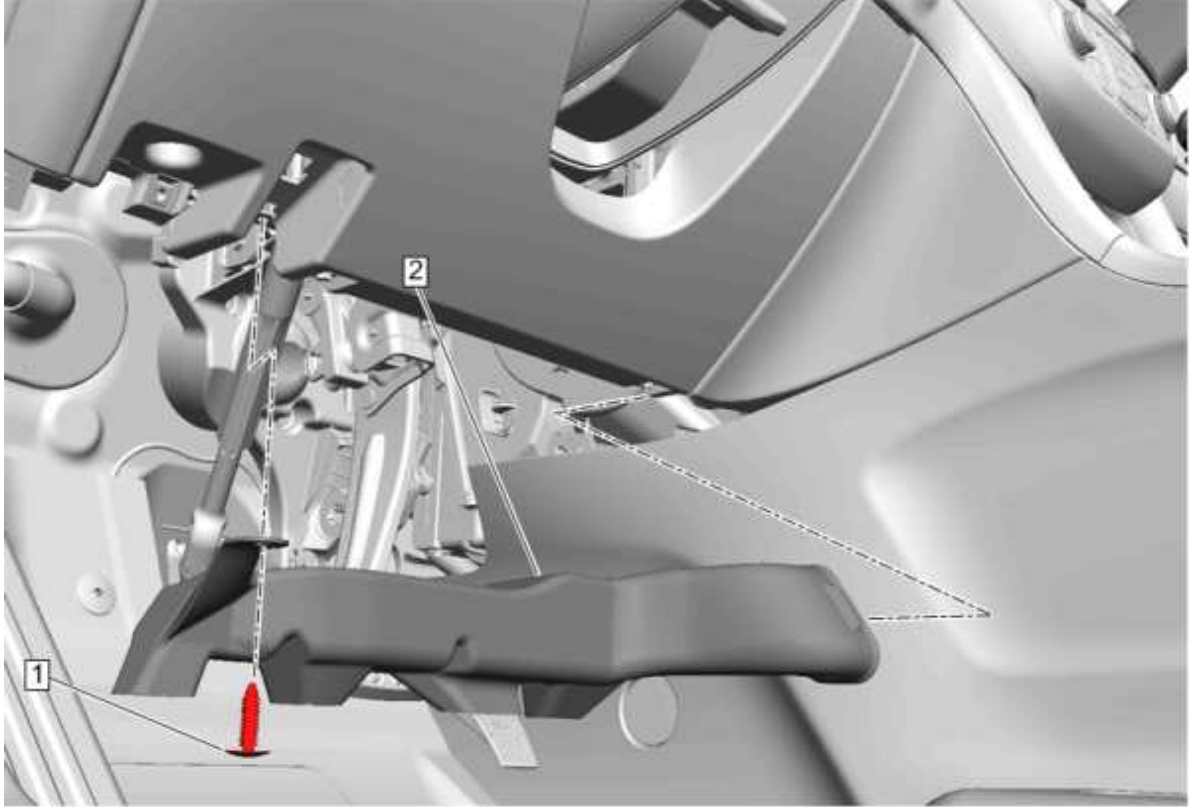


Fig. 515: Floor Front Air Outlet Duct
Courtesy of GENERAL MOTORS COMPANY

13. Install Floor Front Air Outlet Duct - Left Side (2) **Floor Front Air Outlet Duct Replacement - Left Side**

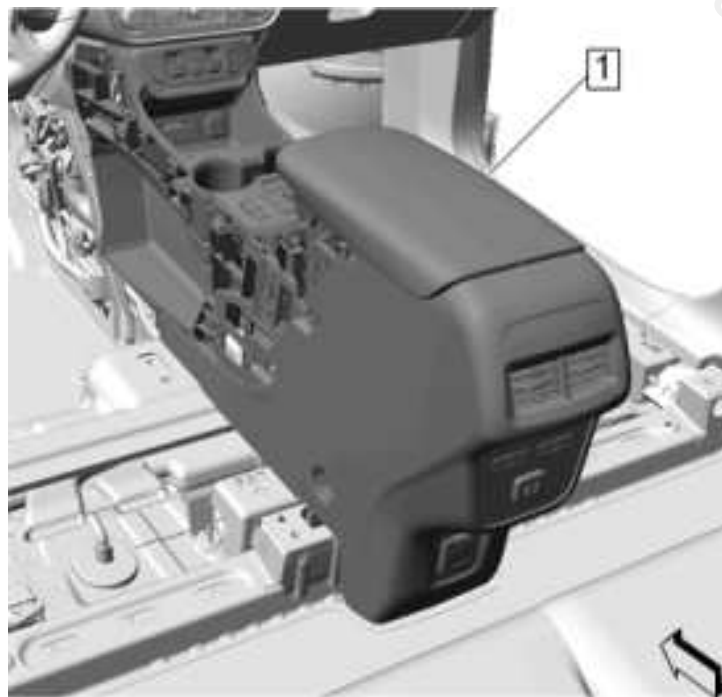


Fig. 516: Front Floor Console
Courtesy of GENERAL MOTORS COMPANY

14. Connect the electrical connectors.
15. Install Front Floor Console (1) **Front Floor Console Replacement (Terrain)**

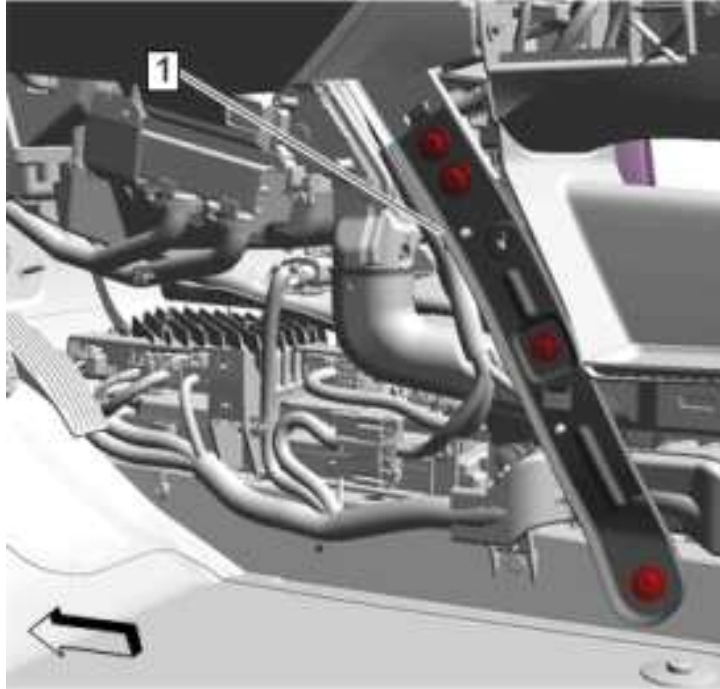


Fig. 517: Instrument Panel Center Lower Bracket-Left Side
 Courtesy of GENERAL MOTORS COMPANY

16. Install Instrument Panel Center Lower Bracket-Left Side (3) - **Instrument Panel Center Lower Bracket Replacement (Terrain - Left Side)**



Fig. 518: Left Front Floor Console Extension Panel
 Courtesy of GENERAL MOTORS COMPANY

17. Install Front Floor Console Extension Panel - Left (1) - **Front Floor Console Extension Panel Replacement - Left Side (Terrain)**

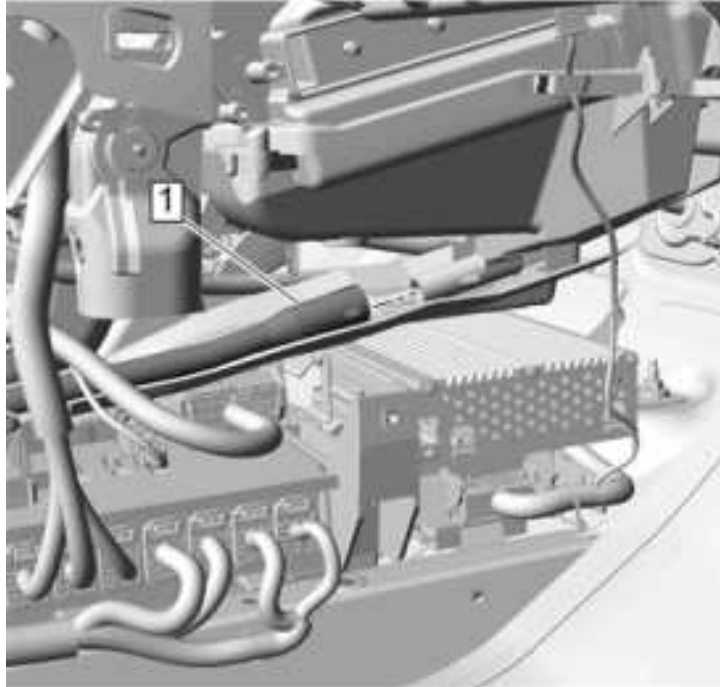


Fig. 519: Air Conditioning Evaporator and Blower Module Drain Hose
 Courtesy of GENERAL MOTORS COMPANY

CAUTION: Refer to [HVAC Module Drain Tube Caution](#) .

18. Install Air Conditioning Evaporator and Blower Module Drain Hose (1) @Heater and Air Conditioning Evaporator and Blower Lower Case
19. Remove the absorbent shop clothes/towels covering the electrical components.

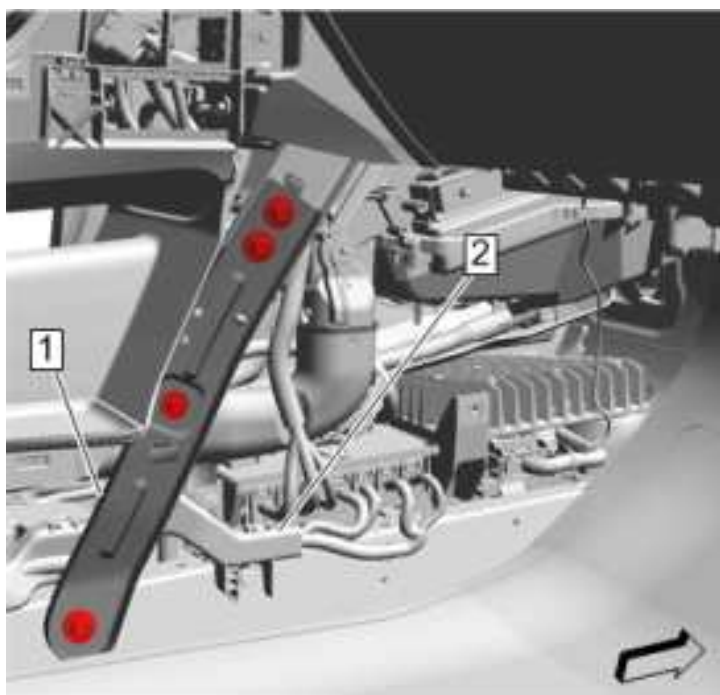


Fig. 520: Instrument Panel Center Lower Bracket
 Courtesy of GENERAL MOTORS COMPANY

20. Install Instrument Panel Center Lower Bracket-Right Side (1) - [Instrument Panel Center Lower Bracket Replacement \(Terrain - Right Side\)](#).

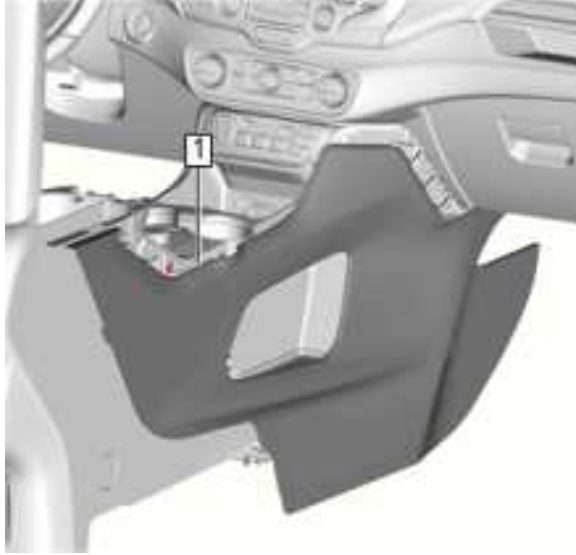


Fig. 521: Right Front Floor Console Extension Panel
 Courtesy of GENERAL MOTORS COMPANY

21. Install Front Floor Console Extension Panel - Right (1) - **Front Floor Console Extension Panel Replacement - Right Side (Terrain)**



Fig. 522: Instrument Panel Center Air Outlet Duct
 Courtesy of GENERAL MOTORS COMPANY

22. Install Instrument Panel Center Air Outlet Duct (1) - **Instrument Panel Center Air Outlet Duct Replacement (Terrain)**

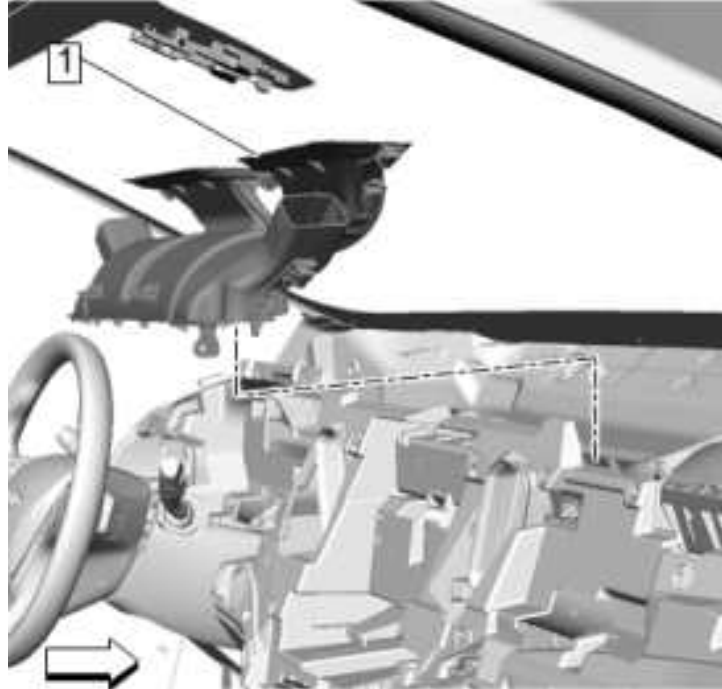


Fig. 523: Windshield Defroster Outlet Duct
 Courtesy of GENERAL MOTORS COMPANY

23. Attach the wiring harness and connect the electrical connectors as necessary.
24. Install Windshield Defroster Outlet Duct (1) - [Windshield Defroster Outlet Duct Replacement \(Terrain\)](#)

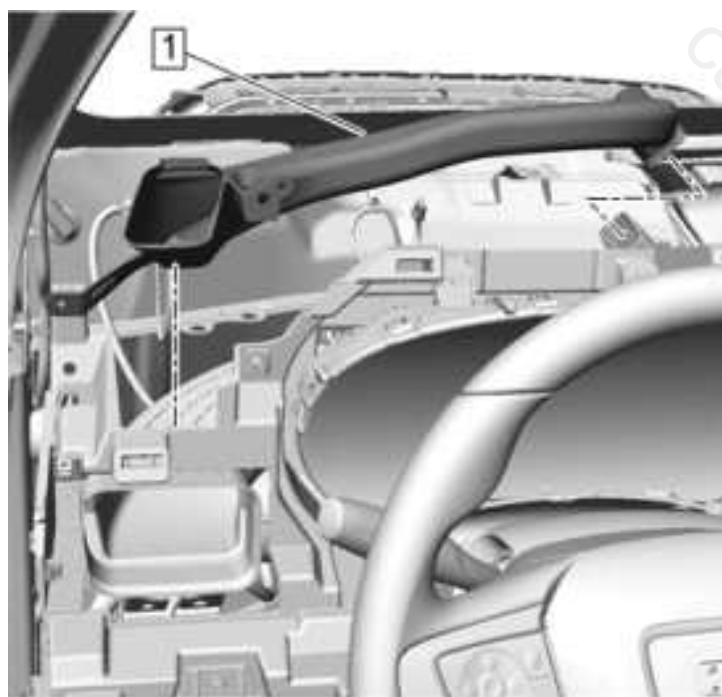


Fig. 524: Left Side Window Defogger Outlet Duct
 Courtesy of GENERAL MOTORS COMPANY

25. Install Side Window Defogger Outlet Duct - Left Side (1) - [Side Window Defogger Outlet Duct Replacement - Left Side \(Terrain\)](#)

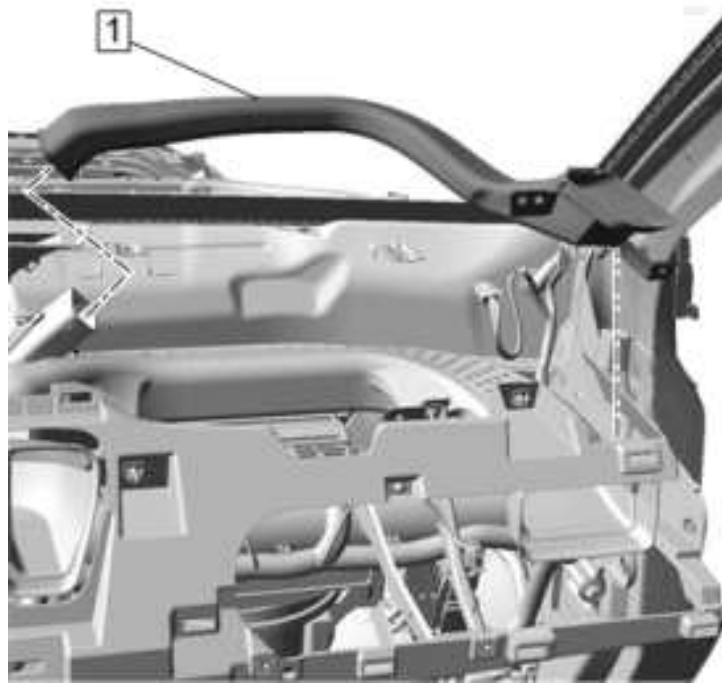


Fig. 525: Right Side Window Defogger Outlet Duct
 Courtesy of GENERAL MOTORS COMPANY

26. Install Side Window Defogger Outlet Duct - Right Side (1) - **Side Window Defogger Outlet Duct Replacement - Right Side (Terrain)**

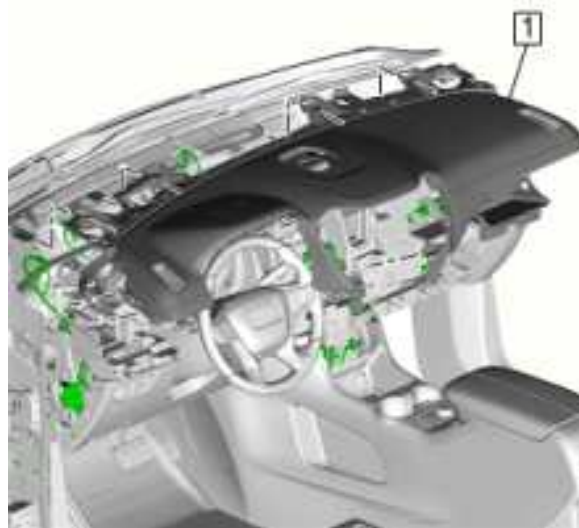


Fig. 526: Instrument Panel Upper Trim Panel
 Courtesy of GENERAL MOTORS COMPANY

27. Install Instrument Panel Upper Trim Panel (1) - **Instrument Panel Upper Trim Panel Replacement (Terrain)**

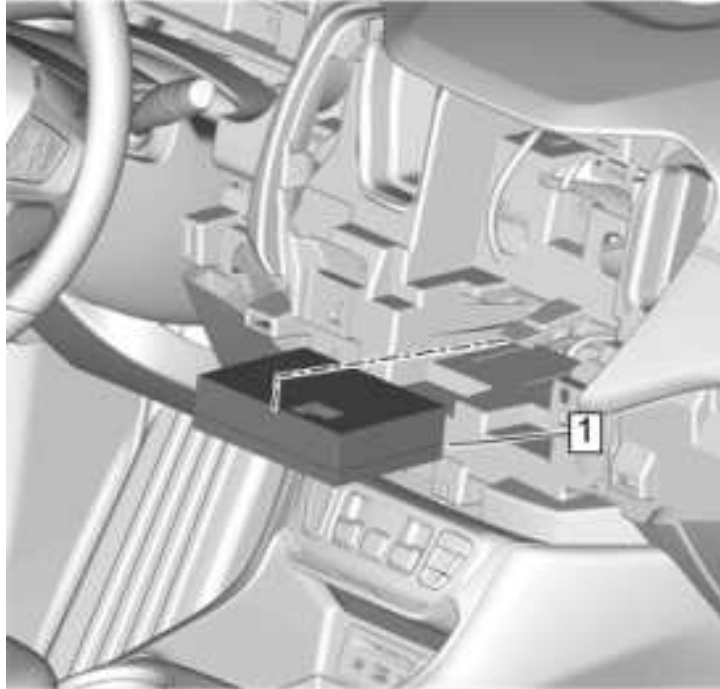


Fig. 527: Communication Interface Module
Courtesy of GENERAL MOTORS COMPANY

28. Install Communication Interface Module (1) - [Communication Interface Module Replacement \(Terrain with IOS, IOT, IOU\)](#) [Communication Interface Module Replacement \(Terrain with IOR\)](#)

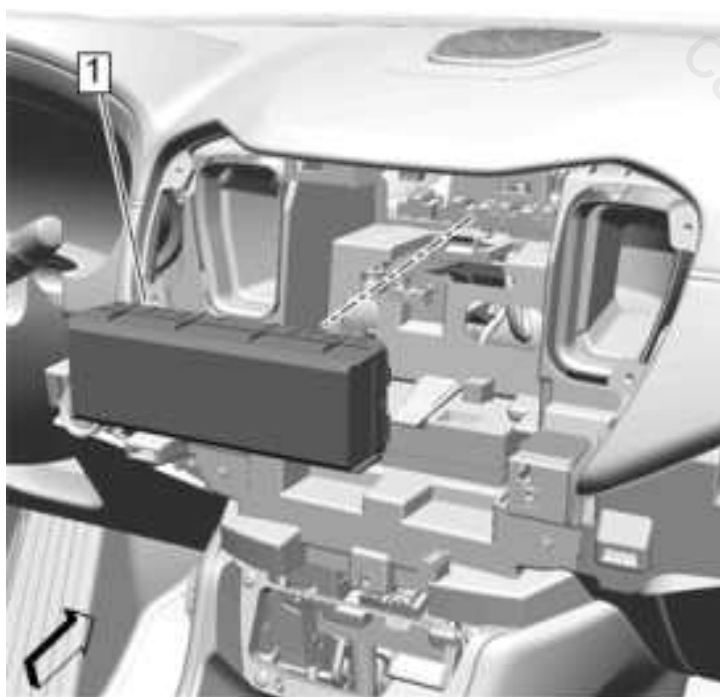


Fig. 528: Heater And Air Conditioning Remote Control
Courtesy of GENERAL MOTORS COMPANY

29. Install Heater and Air Conditioning Remote Control (1) - [Heater and Air Conditioning Remote Control Replacement \(Terrain\)](#)

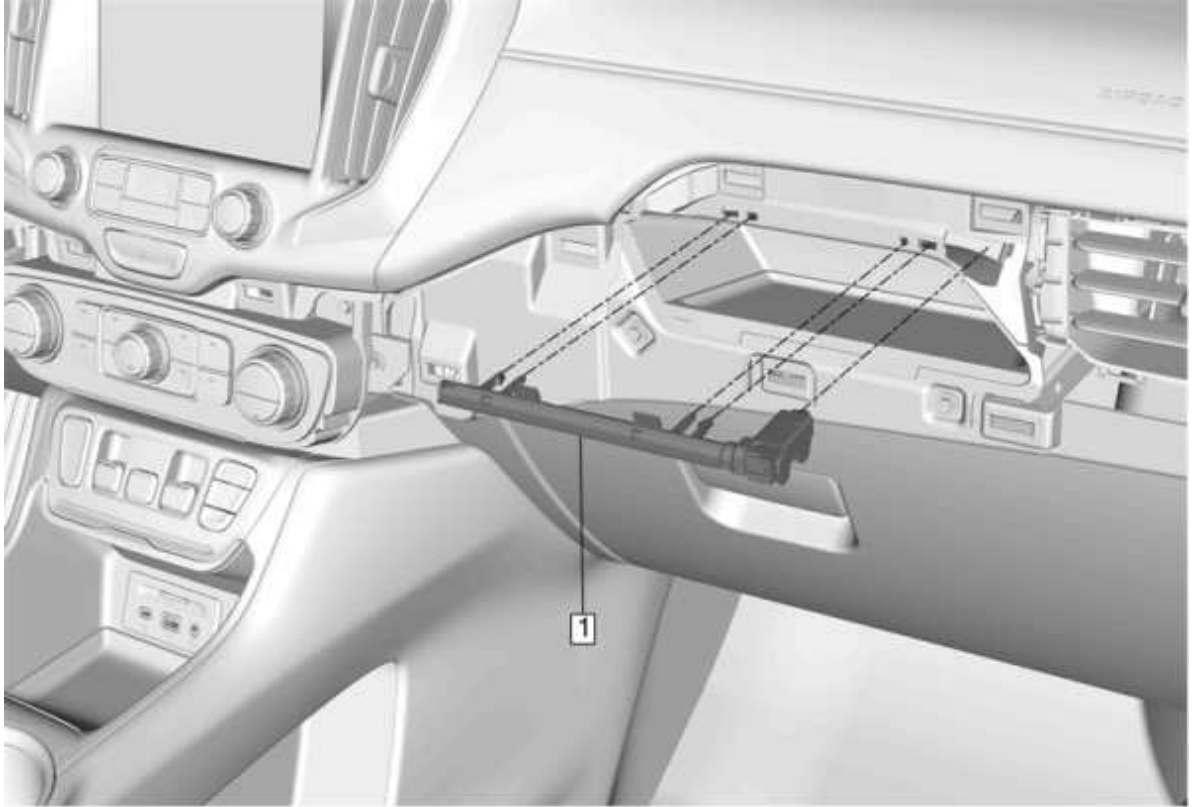


Fig. 529: Instrument Panel Light Conductor Lamp
 Courtesy of GENERAL MOTORS COMPANY

30. Install Instrument Panel Light Conductor Lamp (1) - **Instrument Panel Light Conductor Lamp Replacement (GMC)**

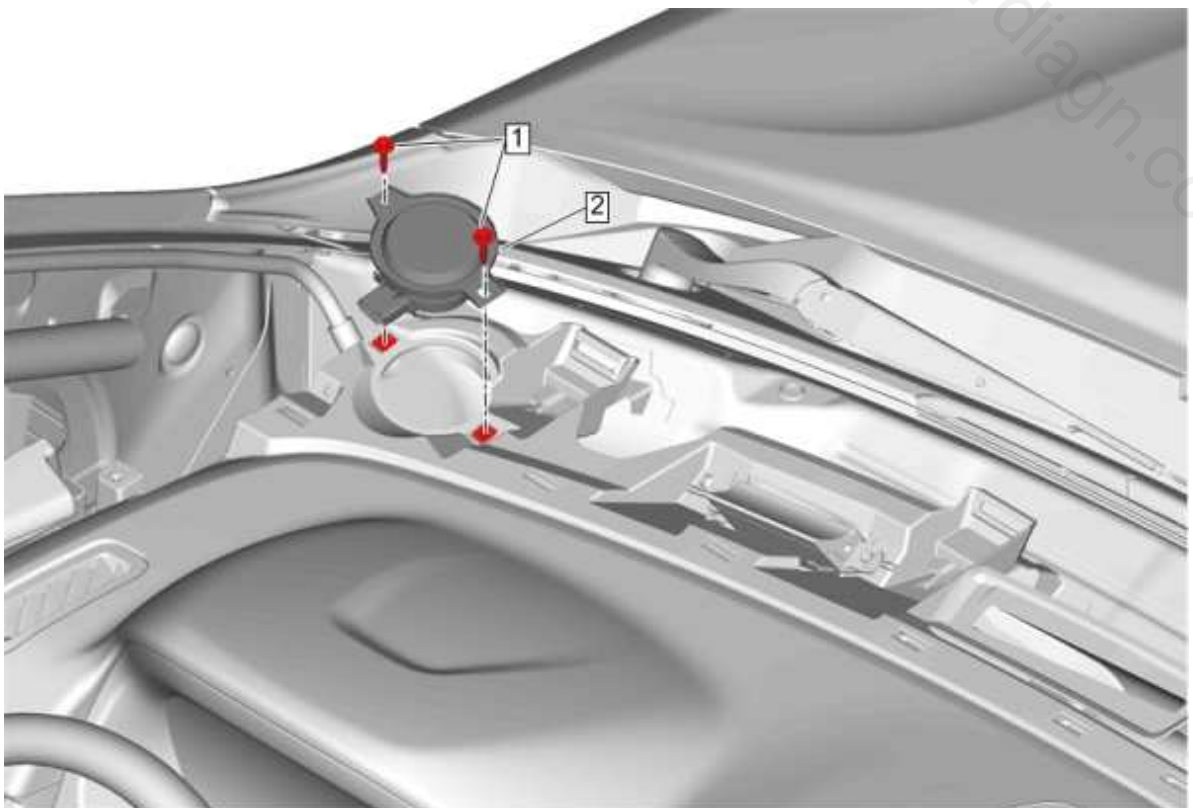


Fig. 530: Radio Front Speaker
 Courtesy of GENERAL MOTORS COMPANY

31. Install the left and right side radio front speakers. (2) **Radio Front Speaker Replacement (Terrain)**

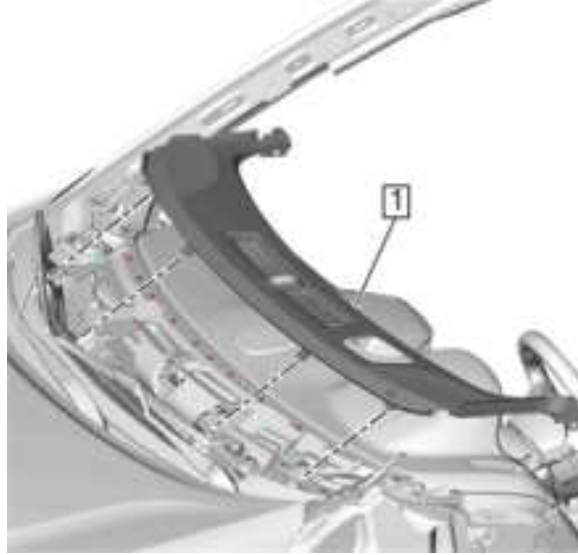


Fig. 531: Instrument Panel Extension

Courtesy of GENERAL MOTORS COMPANY

32. Install Instrument Panel Extension (1) - [Instrument Panel Extension Replacement \(Terrain\)](#)



Fig. 532: Radio Front Center Speaker

Courtesy of GENERAL MOTORS COMPANY

33. Install { If equipped } Radio Front Center Speaker (2) - [Radio Front Center Speaker Replacement \(Equinox\)](#) [Radio Front Center Speaker Replacement \(Terrain\)](#)

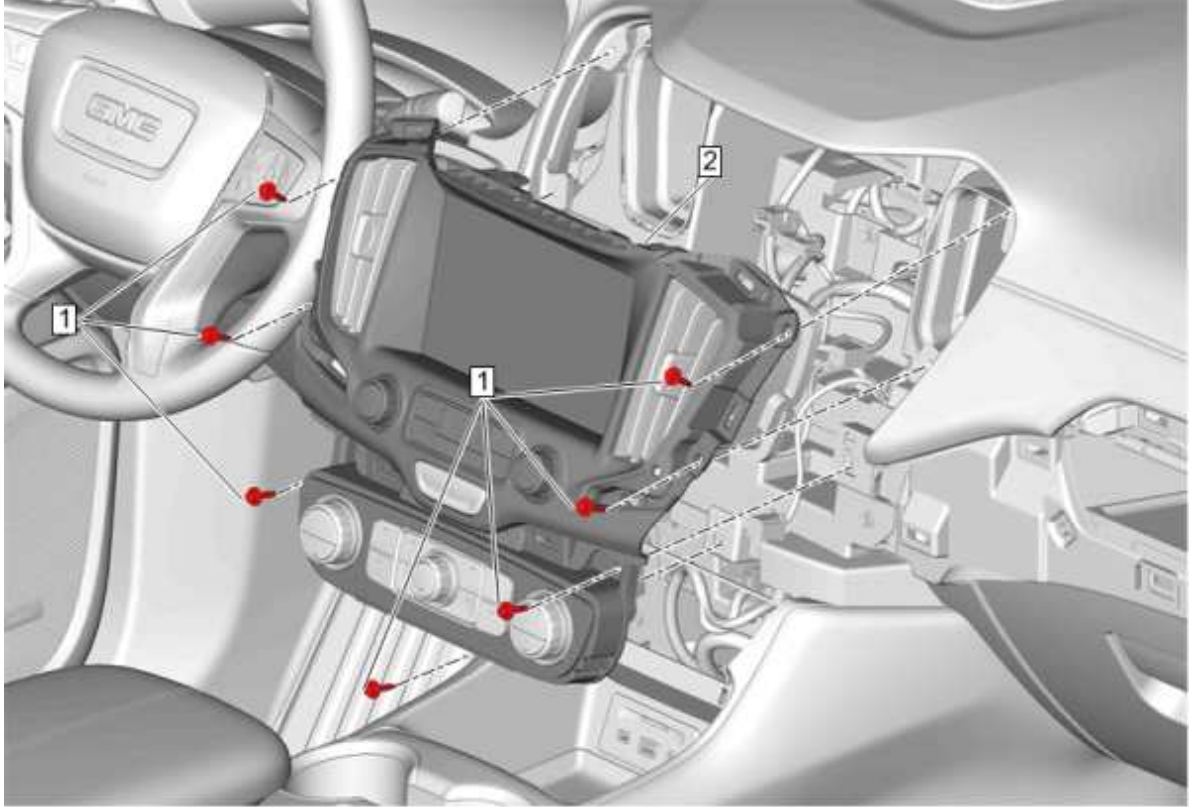


Fig. 533: Radio Control Assembly And Screws
 Courtesy of GENERAL MOTORS COMPANY

34. Connect the electrical connectors.
35. Install Radio Control Assembly (2) - [Radio Control Assembly Replacement \(Terrain\)](#)

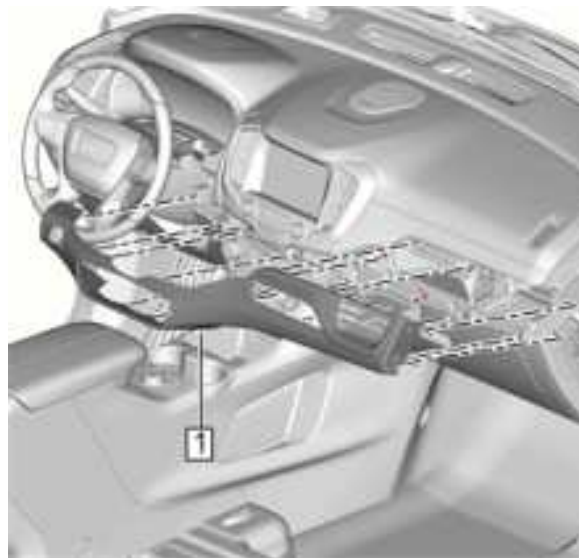


Fig. 534: Right Side Instrument Panel Trim Pad
 Courtesy of GENERAL MOTORS COMPANY

36. Install Instrument Panel Trim Pad - Right Side (1) - [Instrument Panel Trim Pad Replacement - Right Side \(Terrain\)](#)

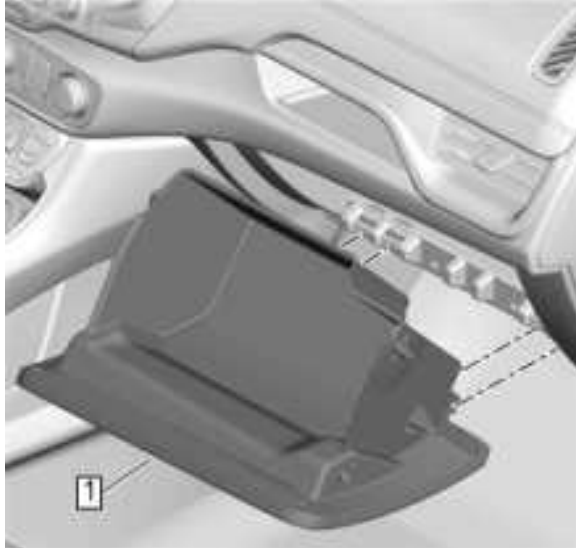


Fig. 535: Instrument Panel Compartment Door
 Courtesy of GENERAL MOTORS COMPANY

37. Install Instrument Panel Compartment Door (1) - [Instrument Panel Compartment Door Replacement \(Terrain\)](#)

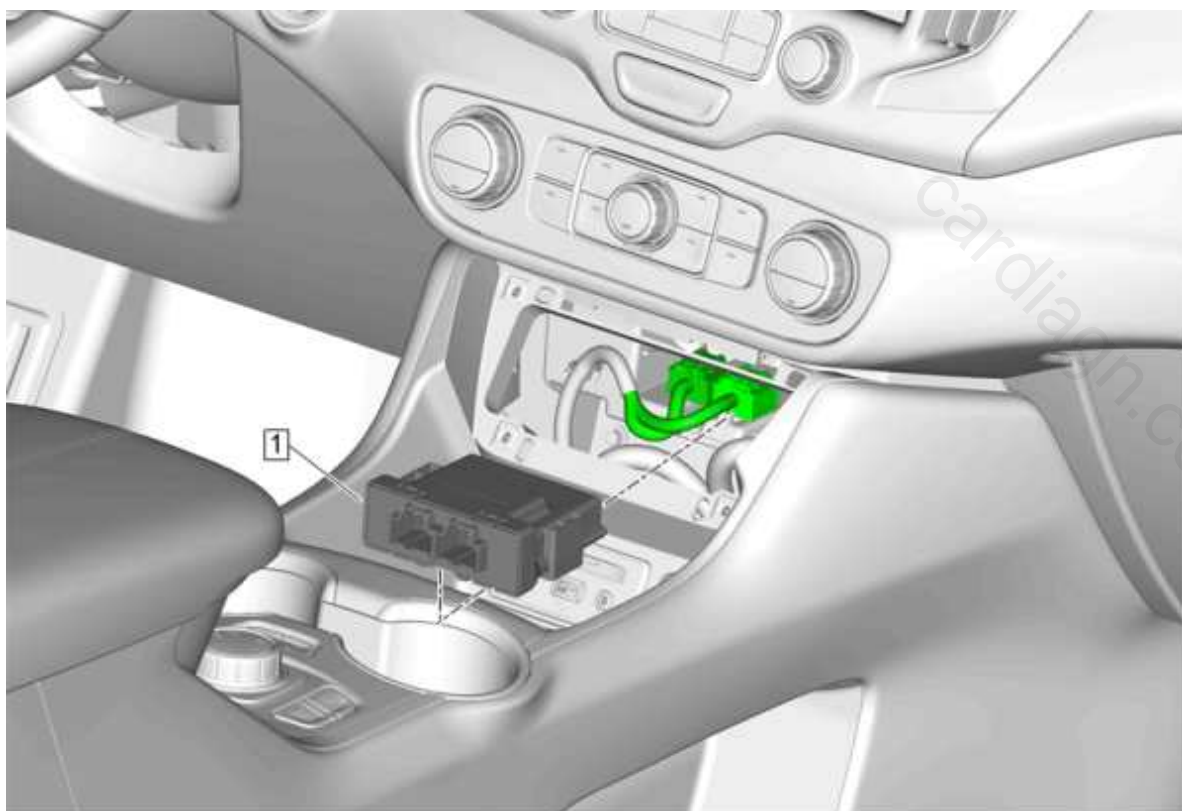


Fig. 536: Serial Data Gateway Module
 Courtesy of GENERAL MOTORS COMPANY

38. Install Serial Data Gateway Module (1) - [Serial Data Gateway Module Replacement \(Terrain with MNH, NMK, or MHG\)](#) [Serial Data Gateway Module Replacement \(Terrain with M3U, M3D, or M3H\)](#)

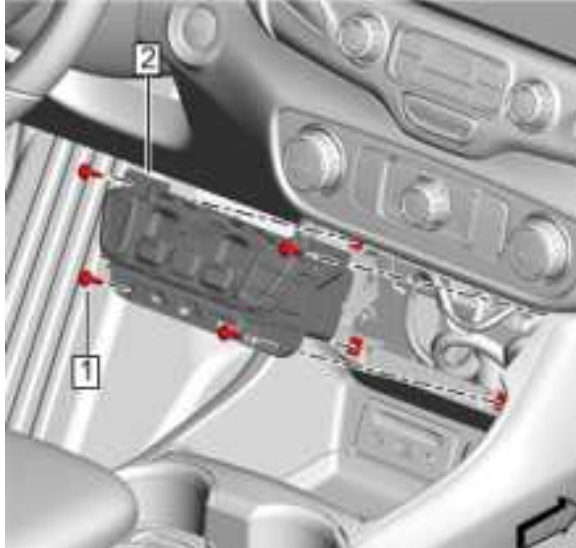


Fig. 537: Automatic Transmission Control Bolts And Electronic Transmission Shift Control Pushbutton

Courtesy of GENERAL MOTORS COMPANY

39. Install Electronic Transmission Shift Control Pushbutton (2) - [Electronic Transmission Shift Control Pushbutton Replacement](#)



Fig. 538: Front Floor Console Transmission Shift Opening Bezel

Courtesy of GENERAL MOTORS COMPANY

40. Install Front Floor Console Transmission Shift Opening Bezel (1) - [Front Floor Console Transmission Shift Opening Bezel Replacement \(Terrain\)](#)

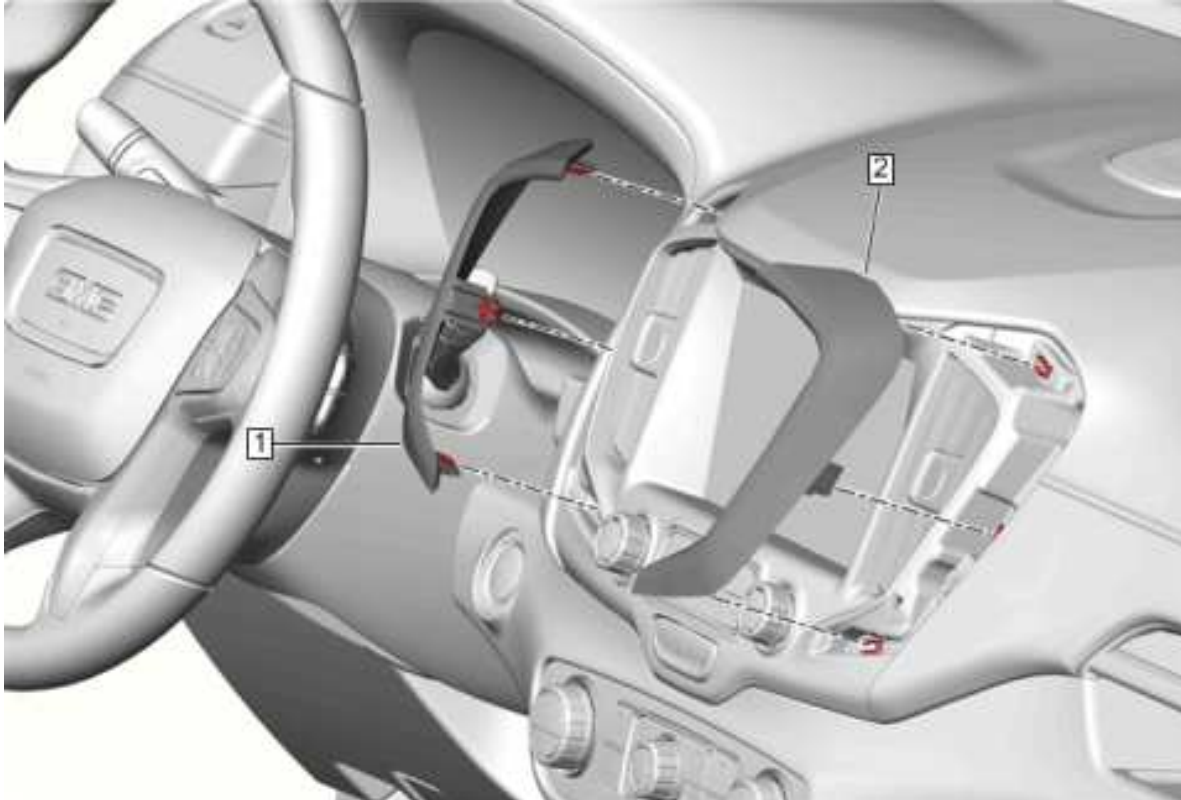


Fig. 539: Instrument Panel Center Trim Plate Appliques

Courtesy of GENERAL MOTORS COMPANY

41. Install Instrument Panel Center Trim Plate Applique - Left Side (1) - [Instrument Panel Center Trim Plate Applique Replacement \(Terrain\)](#)
42. Install Instrument Panel Center Trim Plate Applique - Right Side (2)- [Instrument Panel Center Trim Plate Applique Replacement \(Terrain\)](#)



Fig. 540: Left Side Instrument Panel Trim Pad

Courtesy of GENERAL MOTORS COMPANY

43. Install Instrument Panel Trim Pad - Left Side (1) [Instrument Panel Trim Pad Replacement - Left Side \(Terrain\)](#)

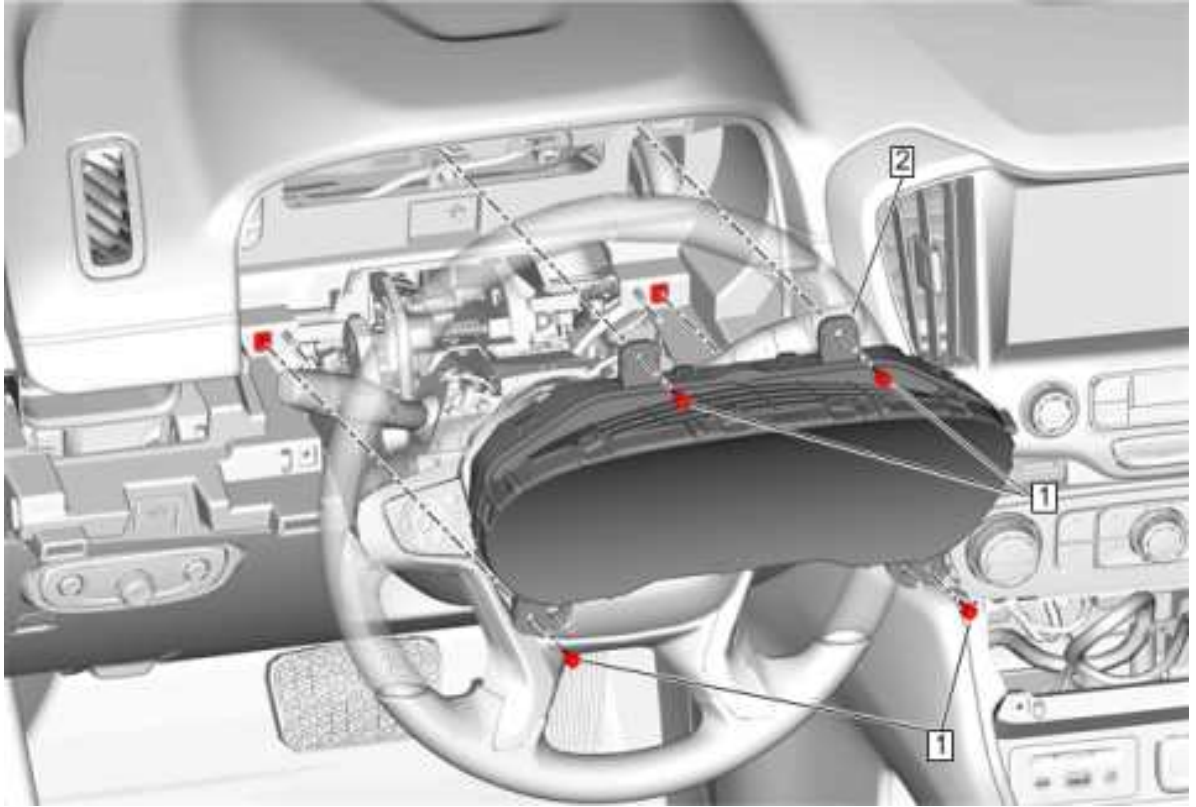


Fig. 541: Instrument Cluster And Screws
Courtesy of GENERAL MOTORS COMPANY

44. Install Instrument Cluster (2) - **Instrument Cluster Replacement (Terrain)**



Fig. 542: Instrument Panel Cluster Trim Plate
Courtesy of GENERAL MOTORS COMPANY

45. Install Instrument Panel Cluster Trim Plate (1) - **Instrument Panel Cluster Trim Plate Replacement (Terrain)**

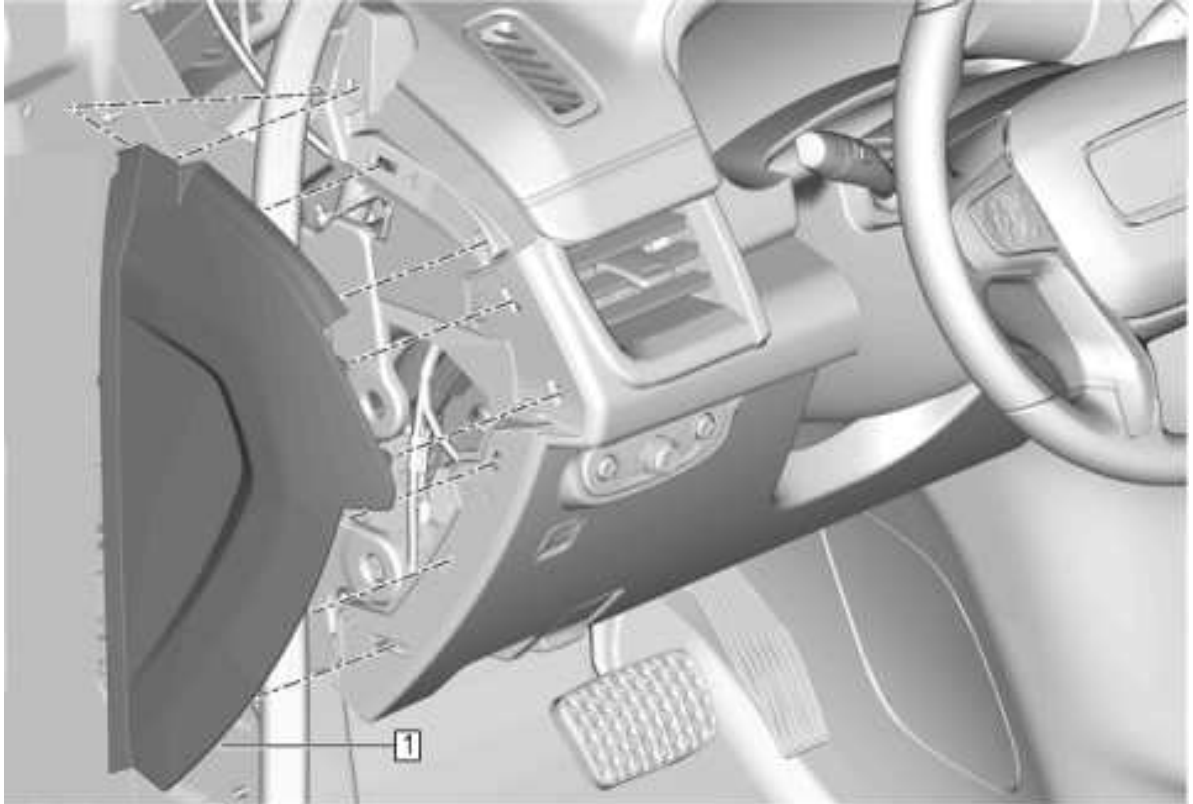


Fig. 543: Instrument Panel Outer Trim Cover (Terrain)
Courtesy of GENERAL MOTORS COMPANY

46. Install the left and right instrument panel outer trim cover (1). [Instrument Panel Outer Trim Cover Replacement \(Terrain\)](#)
47. Install the left and right side windshield garnish molding. [Windshield Garnish Molding Replacement \(Terrain\)](#)
48. Install Drivers Seat and Passengers Seat - [Driver or Passenger Seat Removal and Installation](#)

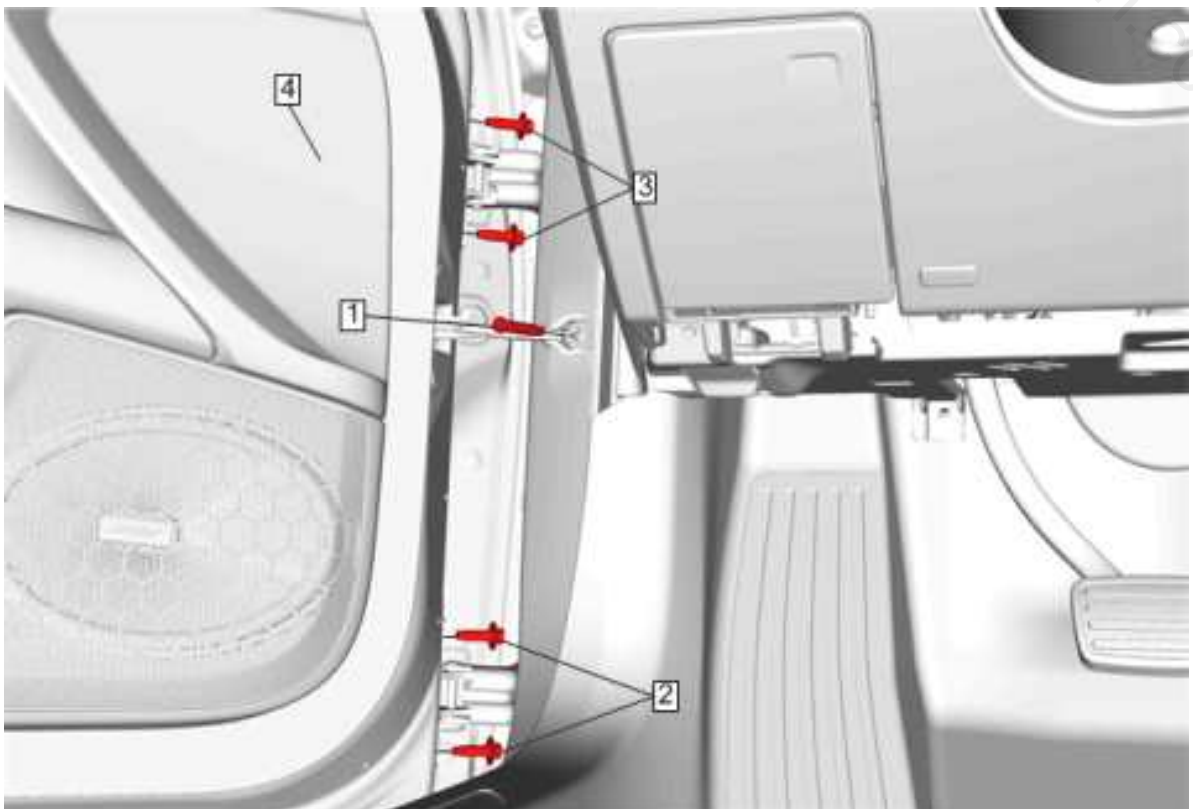


Fig. 544: Front Side Door
Courtesy of GENERAL MOTORS COMPANY

49. Install the left and right front side door (4). [Front Side Door Replacement](#)

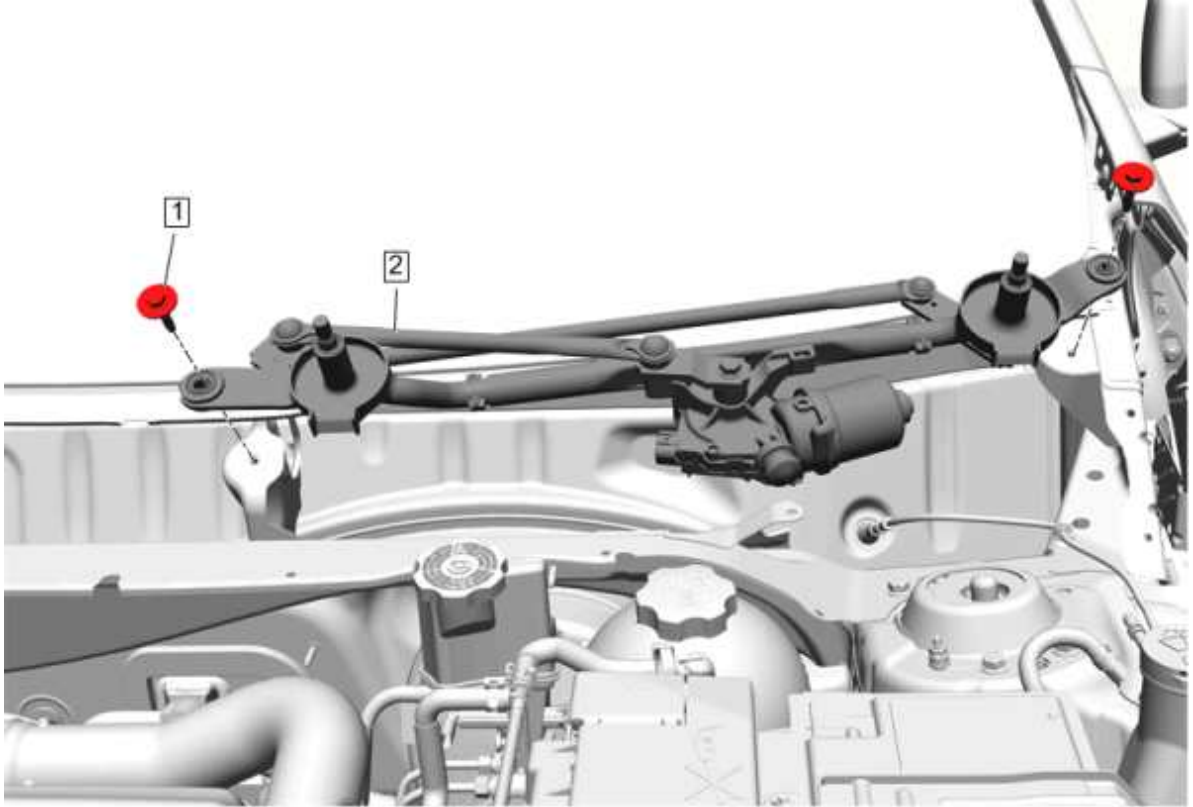


Fig. 545: Windshield Wiper Transmission
 Courtesy of GENERAL MOTORS COMPANY

50. Install Windshield Wiper Transmission (2) [Windshield Wiper Transmission Replacement](#)

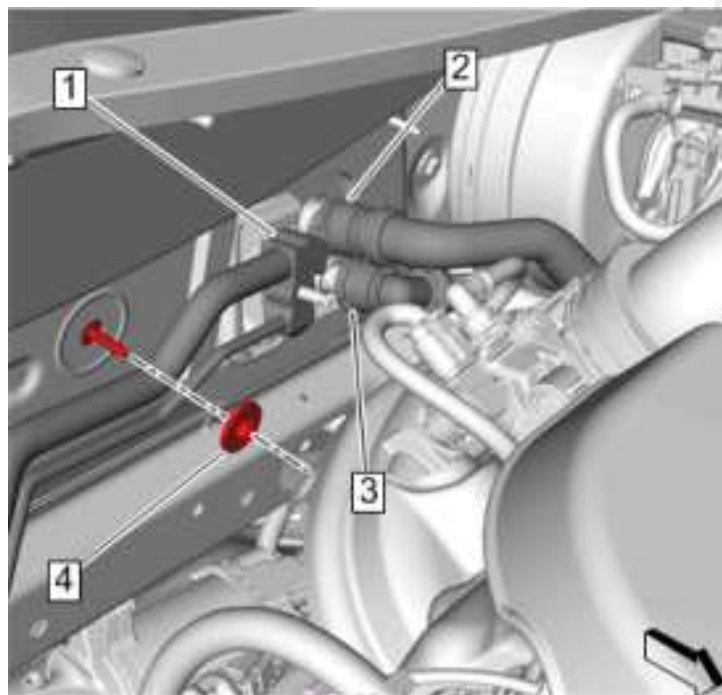


Fig. 546: Air Conditioning Refrigerant Heat Exchanger
 Courtesy of GENERAL MOTORS COMPANY

51. Install Heater Water Auxiliary Pump Hose (3) @Heater Core Outlet Tube - [Heater Water Auxiliary Pump Hose Replacement \(LYX with KL9\)](#)
52. Install Heater Inlet Hose (2) @Heater Core Inlet Tube - [Heater Inlet Hose Replacement \(LYX with KL9\)](#)
53. Install Air Conditioning Refrigerant Heat Exchanger (1) @Air Conditioning Evaporator Thermal Expansion Valve - [Air Conditioning Refrigerant Heat Exchanger Replacement \(LYX\)](#)
54. Fill the cooling system to the proper level. [Cooling System Draining and Filling \(GE 47716\) Cooling System Draining and Filling \(Static\)](#) .
55. Evacuate and charge the refrigerant system. [Refrigerant Recovery and Recharging \(R-134a\) Refrigerant Recovery and Recharging \(R-1234yf\)](#)
56. Connect the battery negative cable. [Battery Negative Cable Disconnection and Connection \(KL9\)](#)

57. Inspect for coolant leaks.

58. Visually inspect for air conditioning system refrigerant leaks.

HEATER AND AIR CONDITIONING EVAPORATOR AND BLOWER MODULE REMOVAL AND INSTALLATION (TERRAIN LYX)

Removal Procedure

1. Disconnect the battery negative cable. [Battery Negative Cable Disconnection and Connection \(KL9\)](#)
2. Recover the refrigerant. [Refrigerant Recovery and Recharging \(R-134a\)](#)[Refrigerant Recovery and Recharging \(R-1234yf\)](#)
3. Drain the cooling system. [Cooling System Draining and Filling \(GE 47716\)](#) [Cooling System Draining and Filling \(Static\)](#)

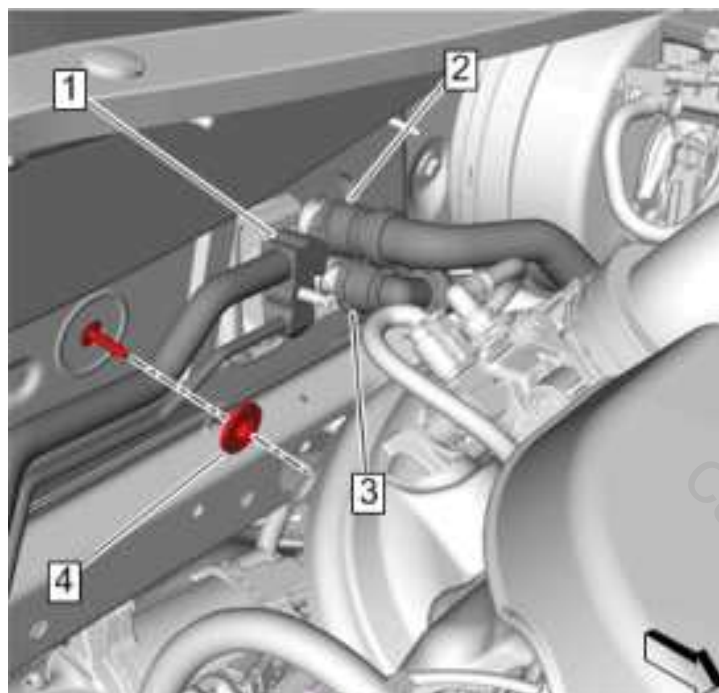


Fig. 547: Air Conditioning Refrigerant Heat Exchanger
Courtesy of GENERAL MOTORS COMPANY

4. Remove Air Conditioning Refrigerant Heat Exchanger (1) @Air Conditioning Evaporator Thermal Expansion Valve - [Air Conditioning Refrigerant Heat Exchanger Replacement \(LYX\)](#)
5. Remove Heater Inlet Hose (2) @Heater Core Inlet Tube - [Heater Inlet Hose Replacement \(LYX AWD without KL9\)](#)[Heater Inlet Hose Replacement \(LYX with KL9\)](#)
6. Remove Heater Outlet Hose (3) @Heater Core Outlet Tube - [Heater Outlet Hose Replacement \(LYX without KL9\)](#)
7. Remove Heater and Air Conditioning Evaporator and Blower Module Nut (4) @Cowl Panel

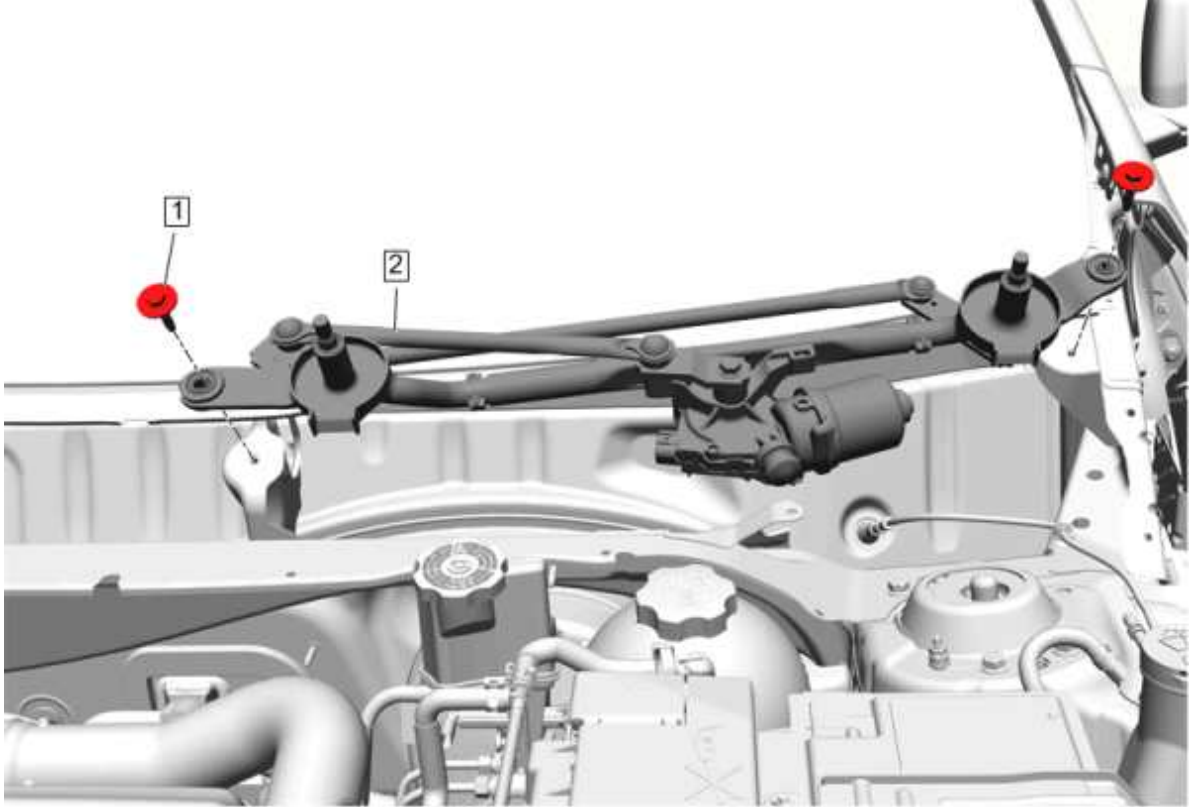


Fig. 548: Windshield Wiper Transmission
 Courtesy of GENERAL MOTORS COMPANY

8. Remove Windshield Wiper Transmission (2) - [Windshield Wiper Transmission Replacement](#)

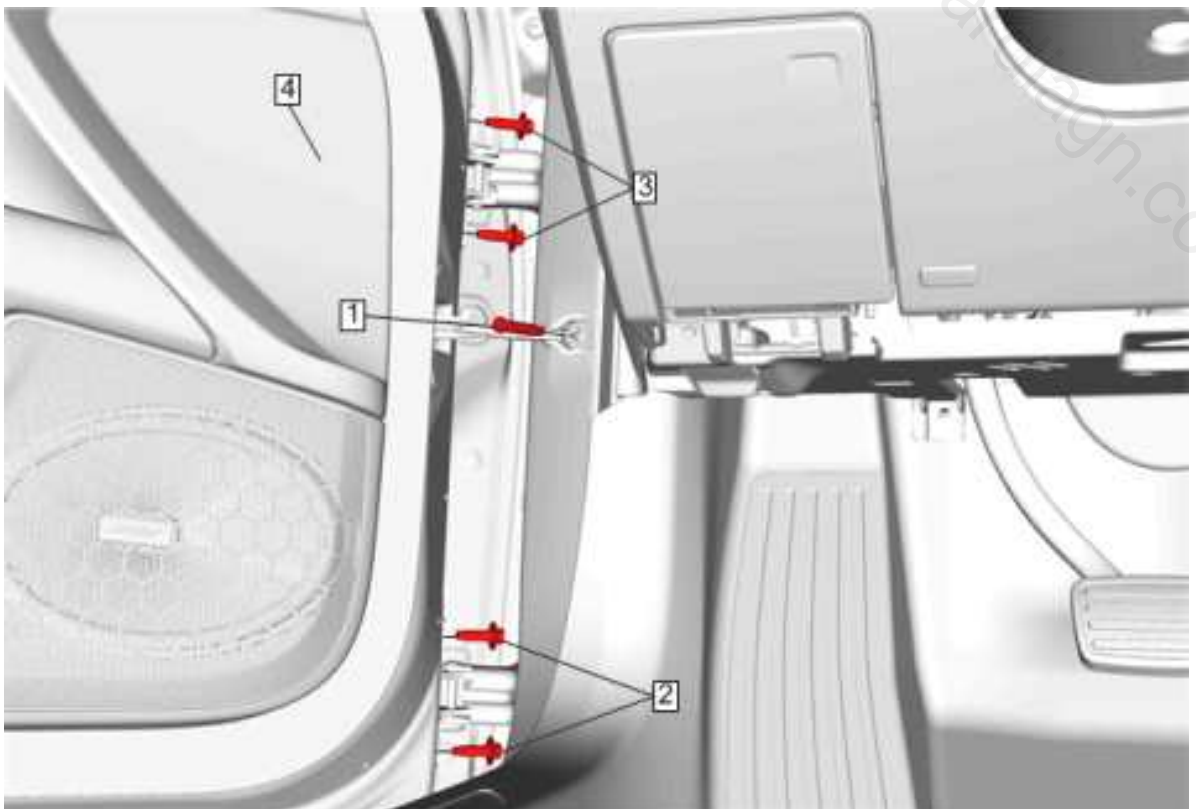


Fig. 549: Front Side Door
 Courtesy of GENERAL MOTORS COMPANY

9. Remove the left and right front side door (4). [Front Side Door Replacement](#)
10. Remove Drivers Seat and Passengers Seat - [Driver or Passenger Seat Removal and Installation](#)
11. Remove the left and right side windshield garnish molding. [Windshield Garnish Molding Replacement \(Terrain\)](#)

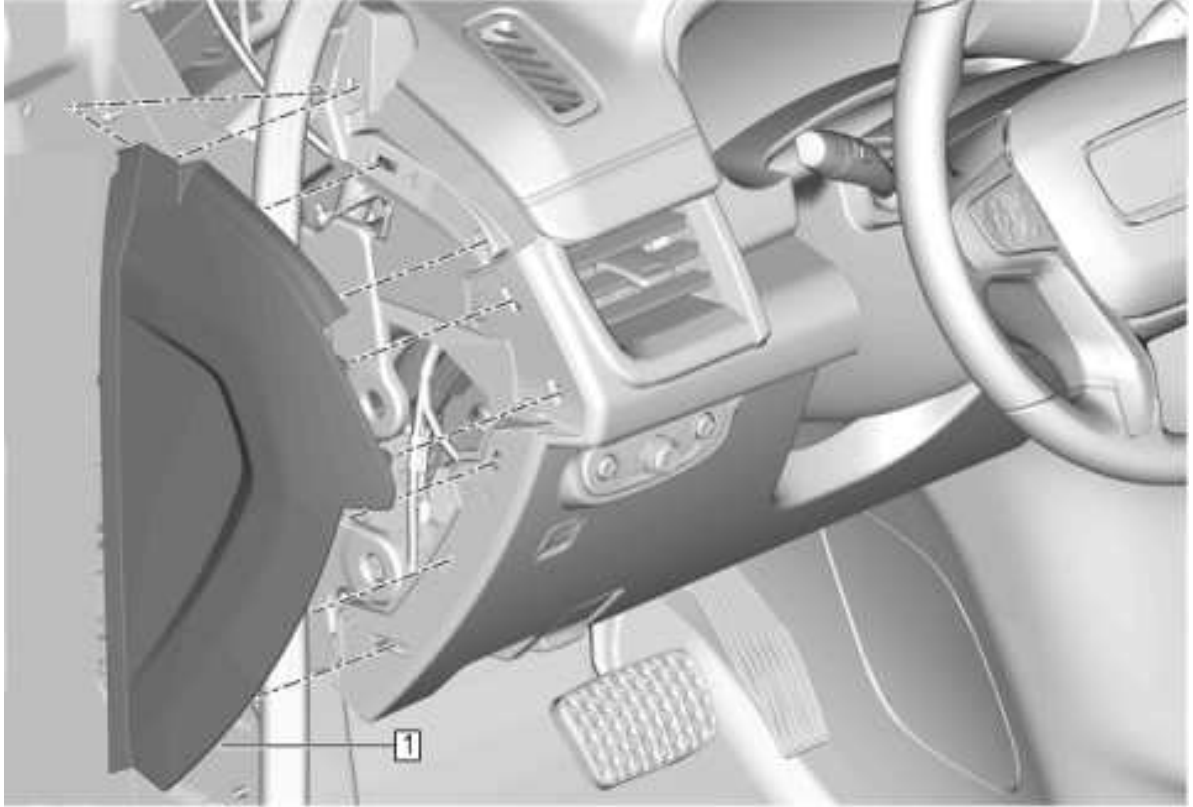


Fig. 550: Instrument Panel Outer Trim Cover (Terrain)
 Courtesy of GENERAL MOTORS COMPANY

12. Remove the left and right instrument panel outer trim cover (1). **Instrument Panel Outer Trim Cover Replacement (Terrain)**

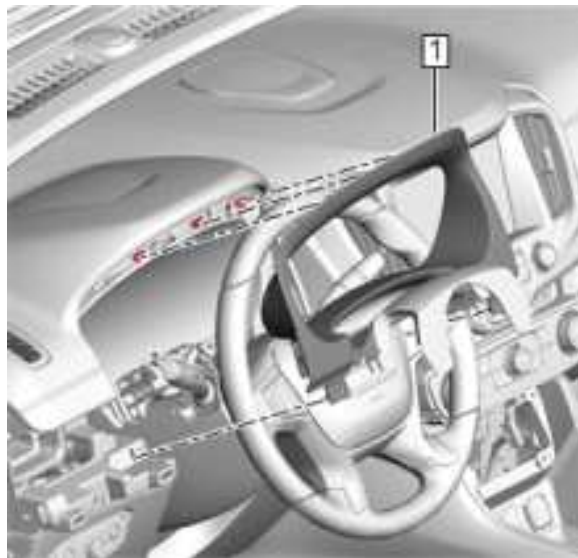


Fig. 551: Instrument Panel Cluster Trim Plate
 Courtesy of GENERAL MOTORS COMPANY

13. Remove Instrument Panel Cluster Trim Plate (1) - **Instrument Panel Cluster Trim Plate Replacement (Terrain)**

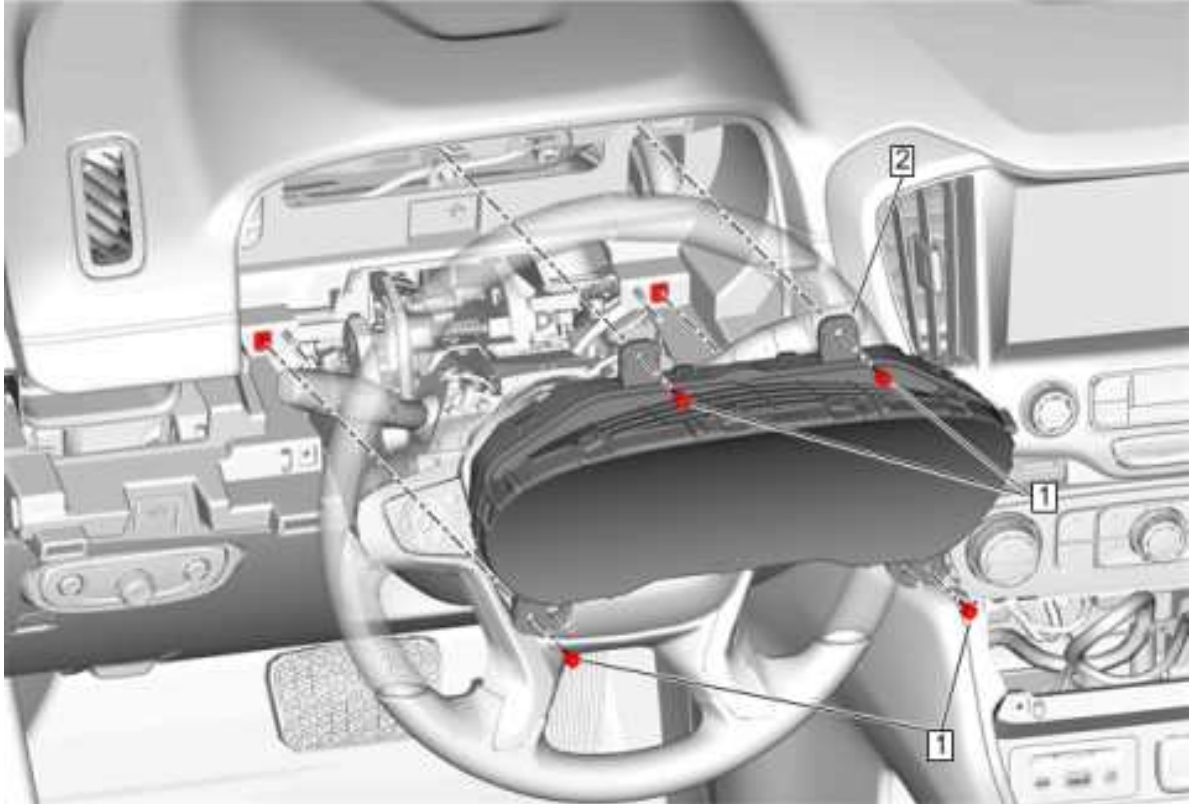


Fig. 552: Instrument Cluster And Screws
Courtesy of GENERAL MOTORS COMPANY

14. Remove Instrument Cluster (2) - **Instrument Cluster Replacement (Terrain)**



Fig. 553: Left Side Instrument Panel Trim Pad
Courtesy of GENERAL MOTORS COMPANY

15. Remove Instrument Panel Trim Pad - Left Side (1) - **Instrument Panel Trim Pad Replacement - Left Side (Terrain)**

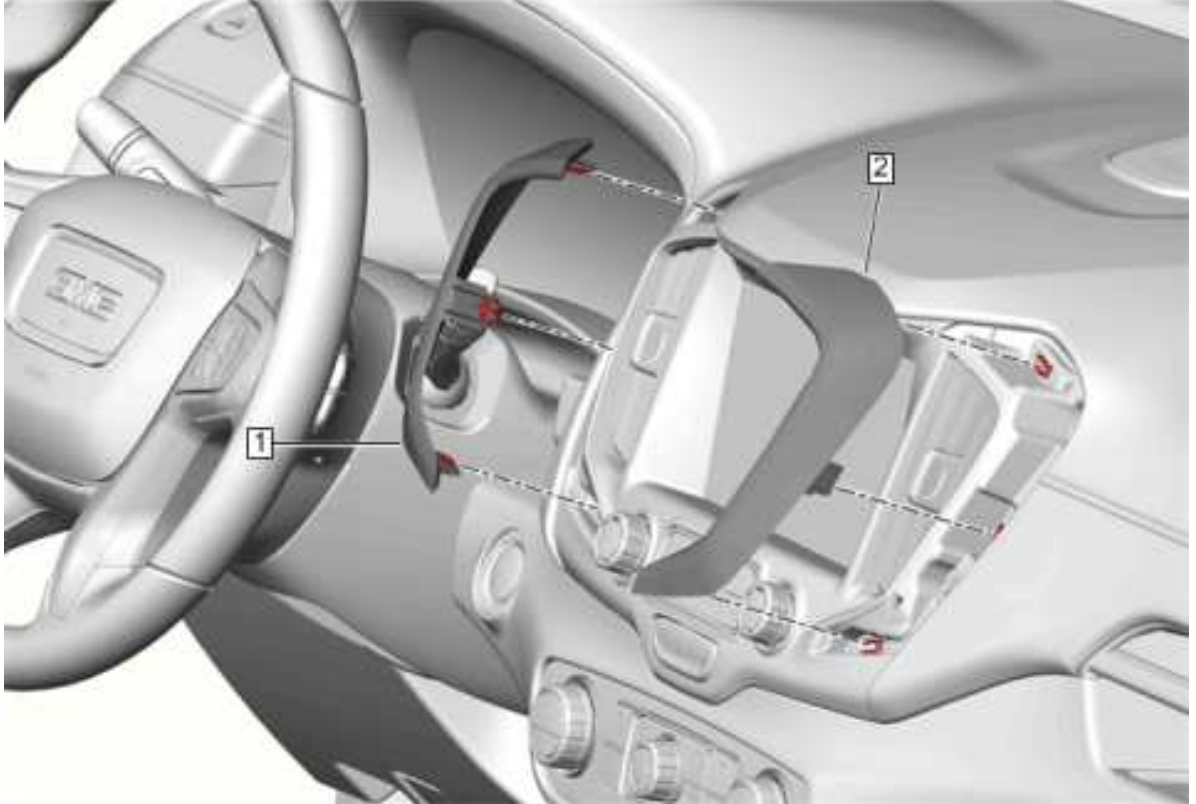


Fig. 554: Instrument Panel Center Trim Plate Appliques

Courtesy of GENERAL MOTORS COMPANY

16. Remove Instrument Panel Center Trim Plate Applique - Left Side (1) - [Instrument Panel Center Trim Plate Applique Replacement \(Terrain\)](#)
17. Remove Instrument Panel Center Trim Plate Applique - Right Side (2) - [Instrument Panel Center Trim Plate Applique Replacement \(Terrain\)](#)



Fig. 555: Front Floor Console Transmission Shift Opening Bezel

Courtesy of GENERAL MOTORS COMPANY

18. Remove Front Floor Console Transmission Shift Opening Bezel (1) - [Front Floor Console Transmission Shift Opening Bezel Replacement \(Terrain\)](#)

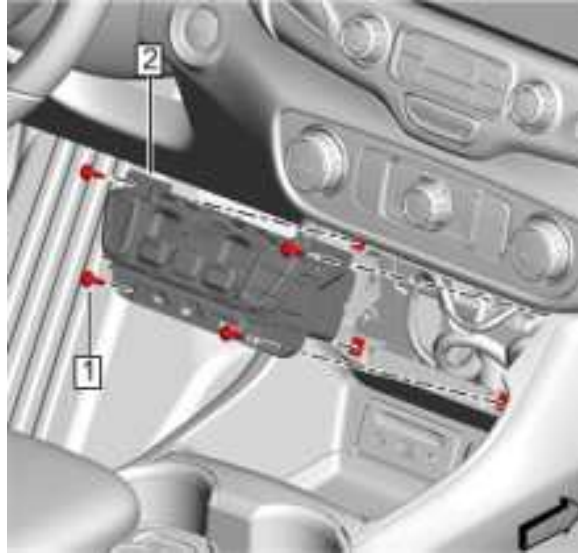


Fig. 556: Automatic Transmission Control Bolts And Electronic Transmission Shift Control Pushbutton

Courtesy of GENERAL MOTORS COMPANY

19. Remove Electronic Transmission Shift Control Pushbutton (2) - [Electronic Transmission Shift Control Pushbutton Replacement](#)

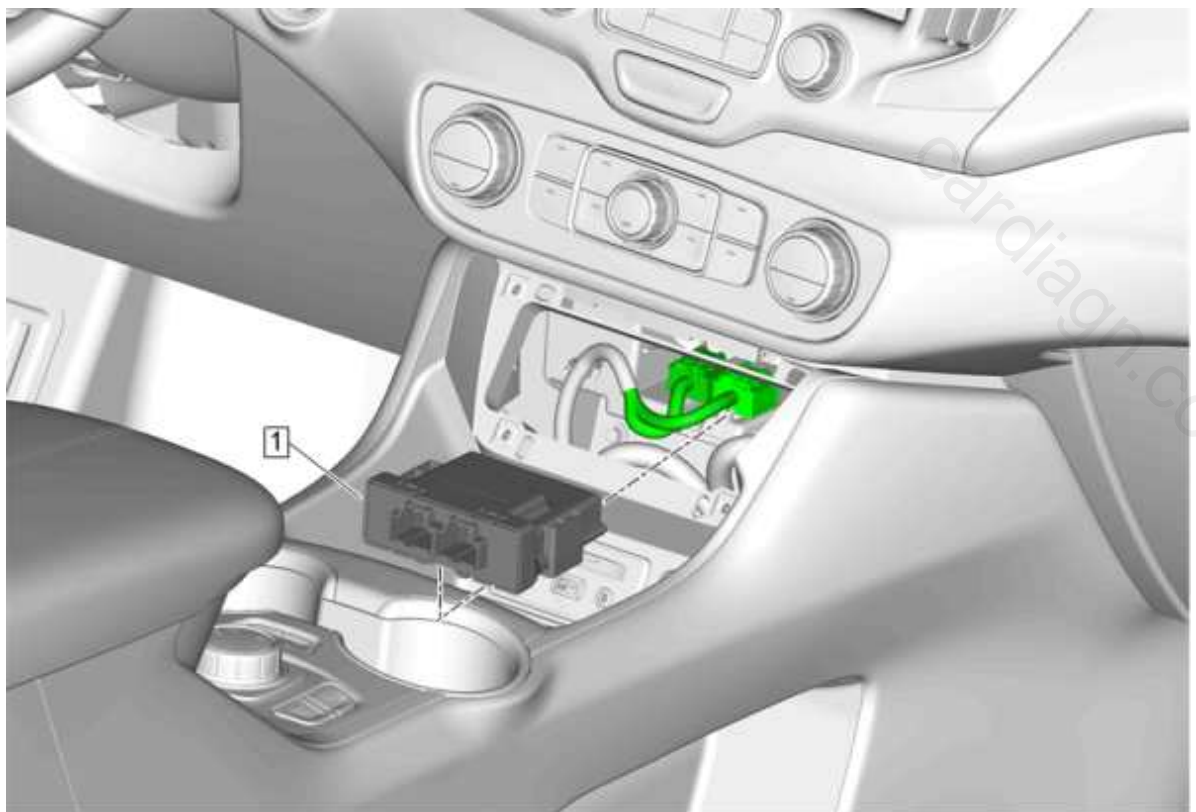


Fig. 557: Serial Data Gateway Module

Courtesy of GENERAL MOTORS COMPANY

20. Remove Serial Data Gateway Module (1) - [Serial Data Gateway Module Replacement \(Terrain with MNH, NMK, or MHG\)](#) [Serial Data Gateway Module Replacement \(Terrain with M3U, M3D, or M3H\)](#)

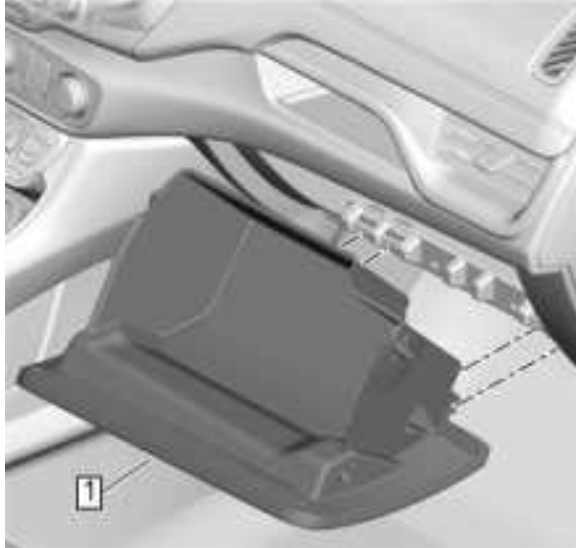


Fig. 558: Instrument Panel Compartment Door
Courtesy of GENERAL MOTORS COMPANY

21. Remove Instrument Panel Compartment Door (1) - [Instrument Panel Compartment Door Replacement \(Terrain\)](#)

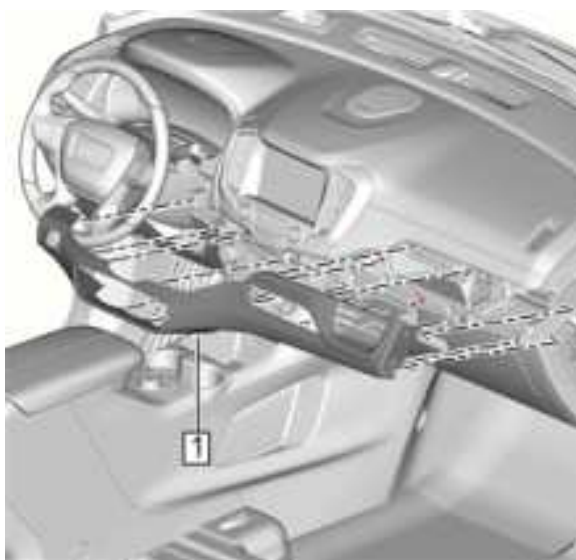


Fig. 559: Right Side Instrument Panel Trim Pad
Courtesy of GENERAL MOTORS COMPANY

22. Remove Instrument Panel Trim Pad - Right Side (1) - [Instrument Panel Trim Pad Replacement - Right Side \(Terrain\)](#)

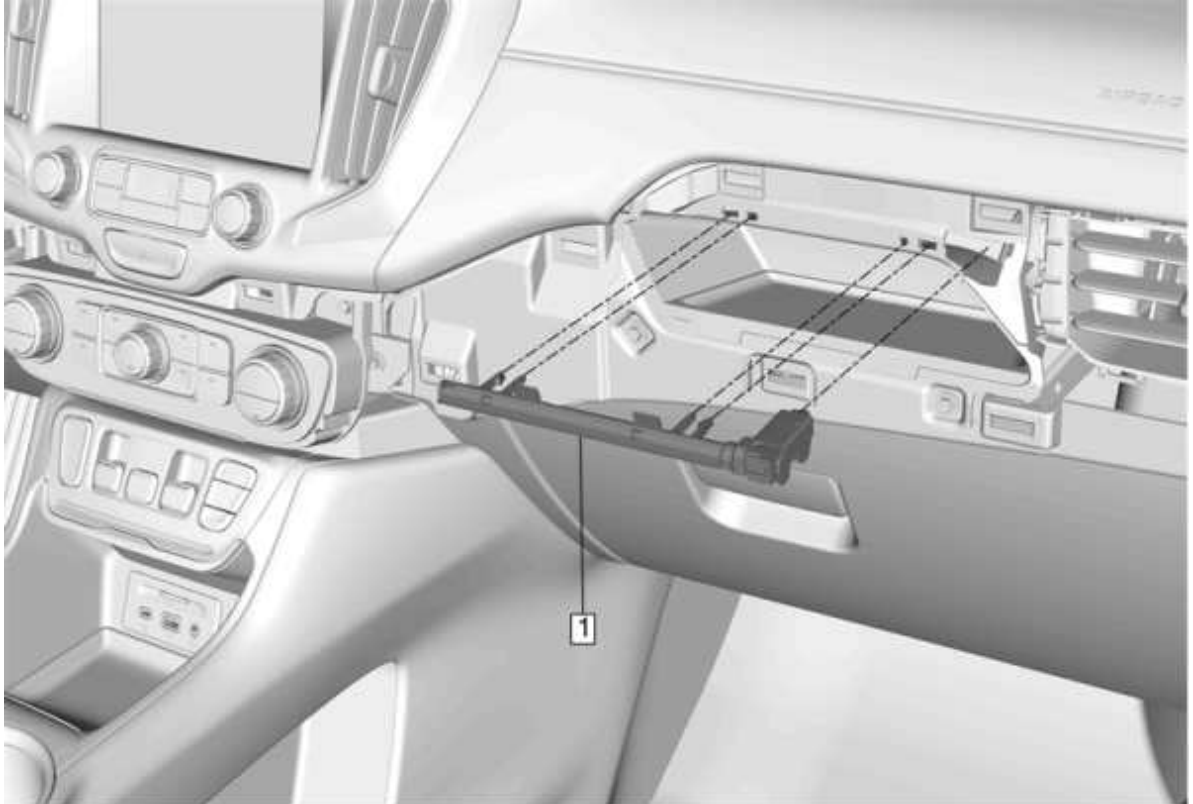


Fig. 560: Instrument Panel Light Conductor Lamp
 Courtesy of GENERAL MOTORS COMPANY

23. Remove Instrument Panel Light Conductor Lamp (1) - **Instrument Panel Light Conductor Lamp Replacement (GMC)**

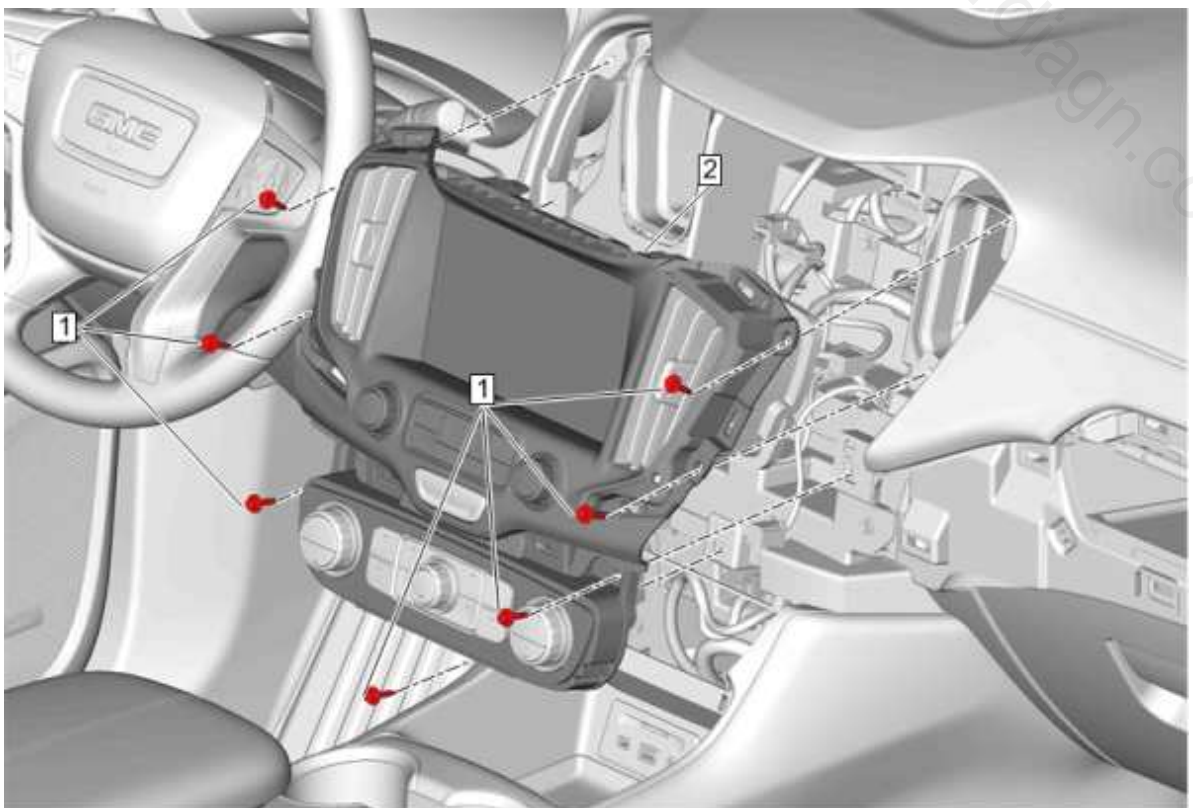


Fig. 561: Radio Control Assembly And Screws
 Courtesy of GENERAL MOTORS COMPANY

24. Remove Radio Control Assembly (2) - **Radio Control Assembly Replacement (Terrain)**
25. Disconnect all electrical connectors.



Fig. 562: Radio Front Center Speaker
Courtesy of GENERAL MOTORS COMPANY

26. Remove Radio Front Center Speaker (2) - [Radio Front Center Speaker Replacement \(Terrain\)](#).

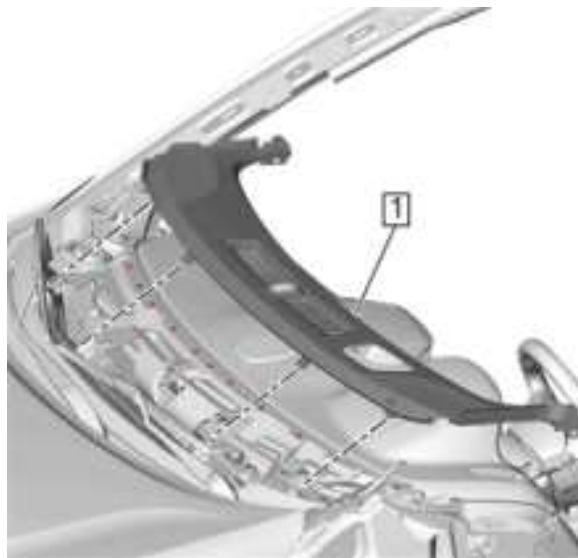


Fig. 563: Instrument Panel Extension
Courtesy of GENERAL MOTORS COMPANY

27. Remove Instrument Panel Extension (1) - [Instrument Panel Extension Replacement \(Terrain\)](#).

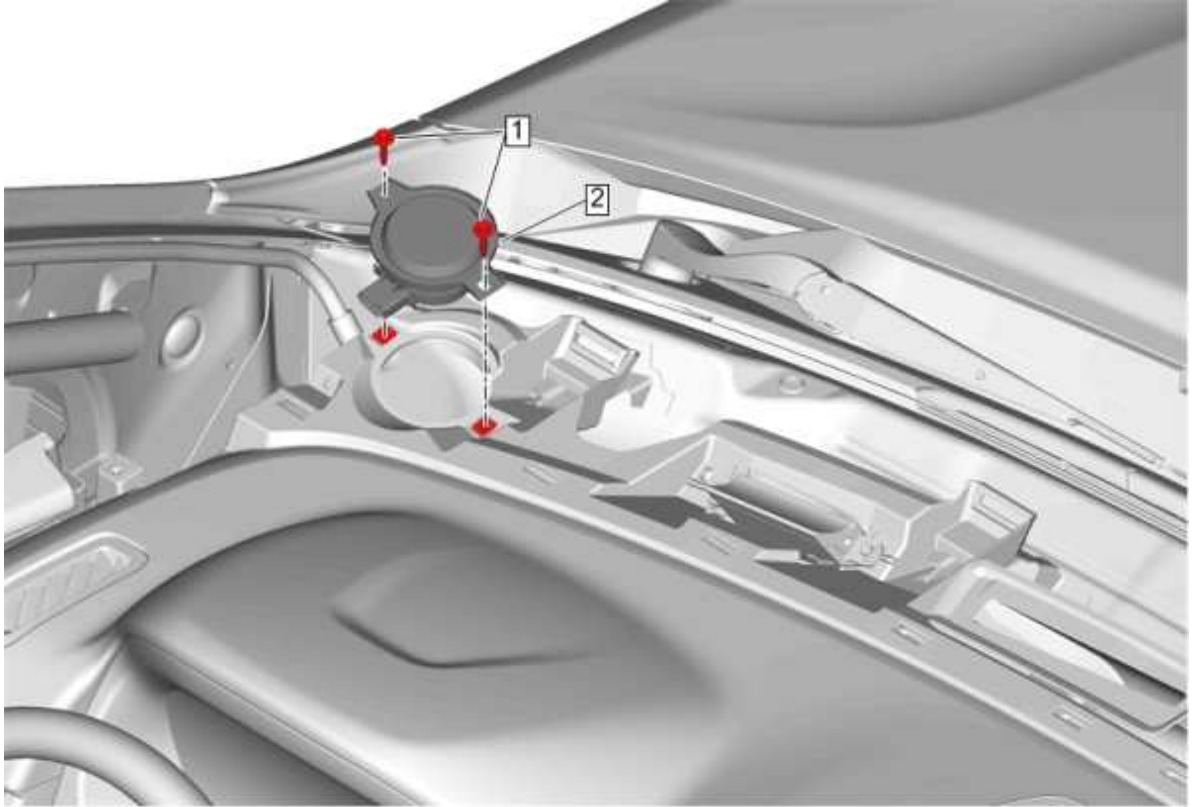


Fig. 564: Radio Front Speaker

Courtesy of GENERAL MOTORS COMPANY

28. Remove the left and right side radio front speakers. (2) [Radio Front Speaker Replacement \(Terrain\)](#)

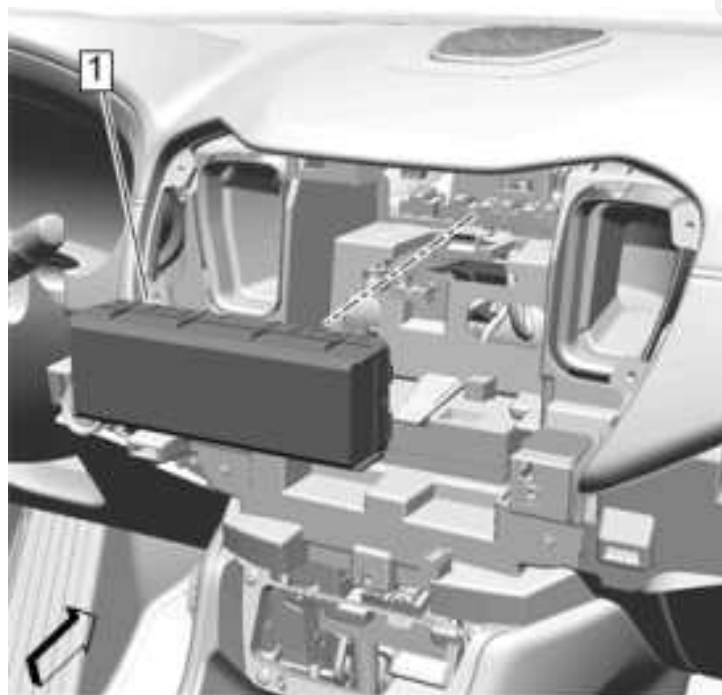


Fig. 565: Heater And Air Conditioning Remote Control

Courtesy of GENERAL MOTORS COMPANY

29. Remove Heater and Air Conditioning Remote Control (1) - [Heater and Air Conditioning Remote Control Replacement \(Terrain\)](#)

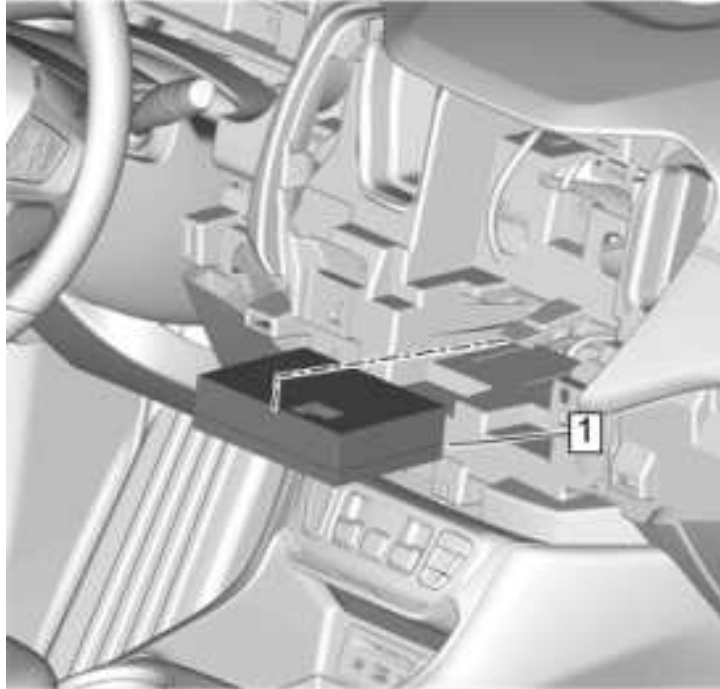


Fig. 566: Communication Interface Module
 Courtesy of GENERAL MOTORS COMPANY

30. Remove Communication Interface Module (1) - **Communication Interface Module Replacement (Terrain with IOS, IOT, IOU) Communication Interface Module Replacement (Terrain with IOR)**

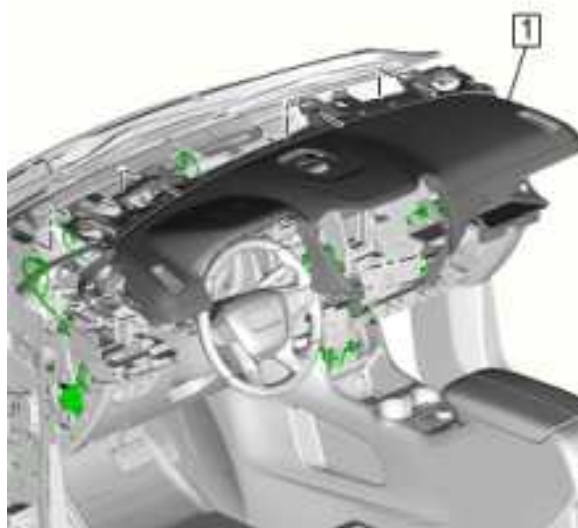


Fig. 567: Instrument Panel Upper Trim Panel
 Courtesy of GENERAL MOTORS COMPANY

31. Remove Instrument Panel Upper Trim Panel (1) - **Instrument Panel Upper Trim Panel Replacement (Terrain)**

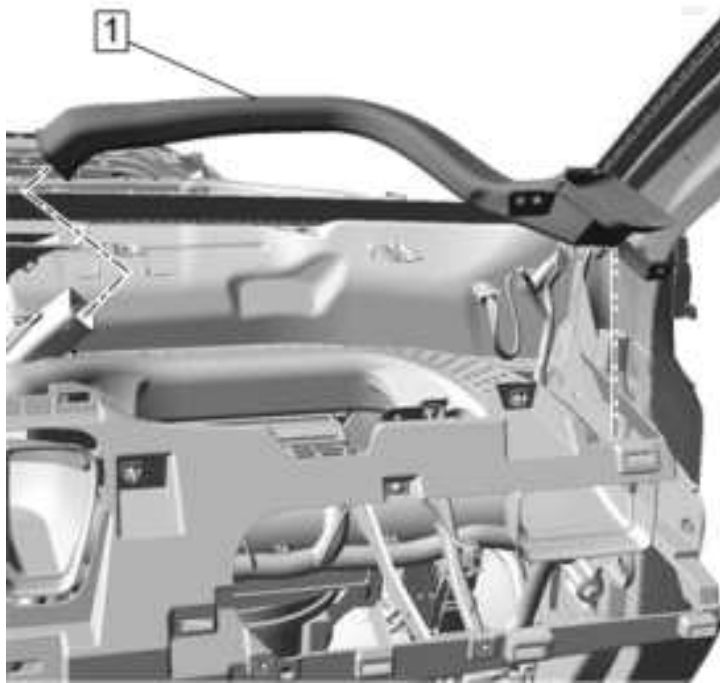


Fig. 568: Right Side Window Defogger Outlet Duct
 Courtesy of GENERAL MOTORS COMPANY

32. Remove Side Window Defogger Outlet Duct - Right Side (1) - [Side Window Defogger Outlet Duct Replacement - Right Side \(Terrain\)](#)

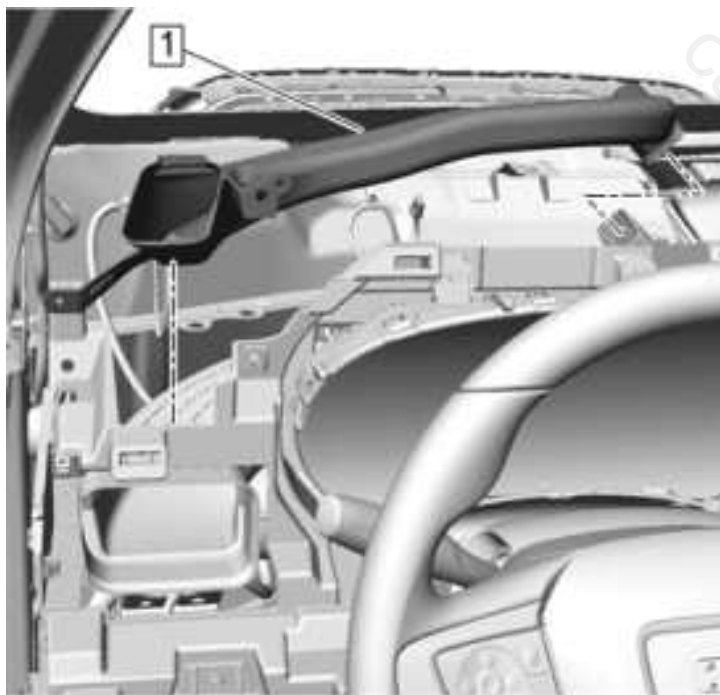


Fig. 569: Left Side Window Defogger Outlet Duct
 Courtesy of GENERAL MOTORS COMPANY

33. Remove Side Window Defogger Outlet Duct - Left Side (1) - [Side Window Defogger Outlet Duct Replacement - Left Side \(Terrain\)](#)

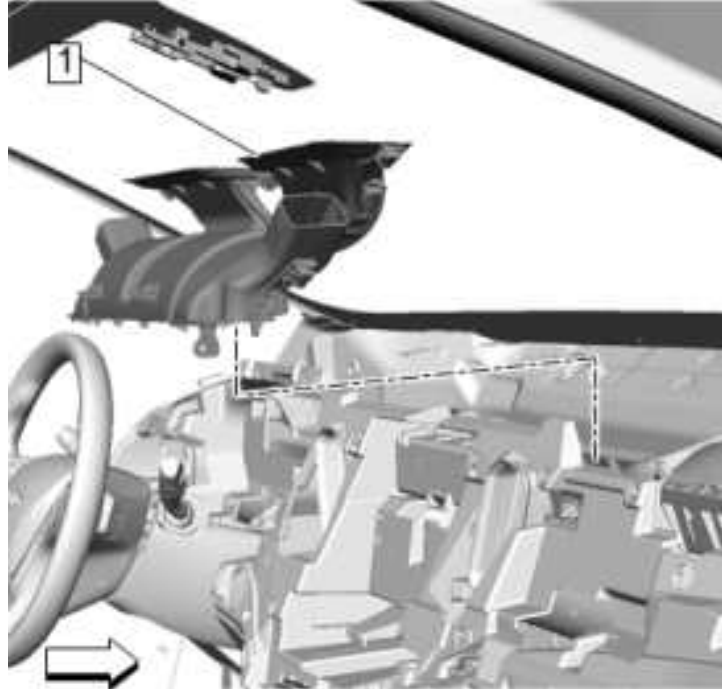


Fig. 570: Windshield Defroster Outlet Duct
 Courtesy of GENERAL MOTORS COMPANY

34. Remove Windshield Defroster Outlet Duct (1) - [Windshield Defroster Outlet Duct Replacement \(Terrain\)](#)
35. Disconnect and reposition harness as necessary.



Fig. 571: Instrument Panel Center Air Outlet Duct
 Courtesy of GENERAL MOTORS COMPANY

36. Remove Instrument Panel Center Air Outlet Duct (1) - [Instrument Panel Center Air Outlet Duct Replacement \(Terrain\)](#)

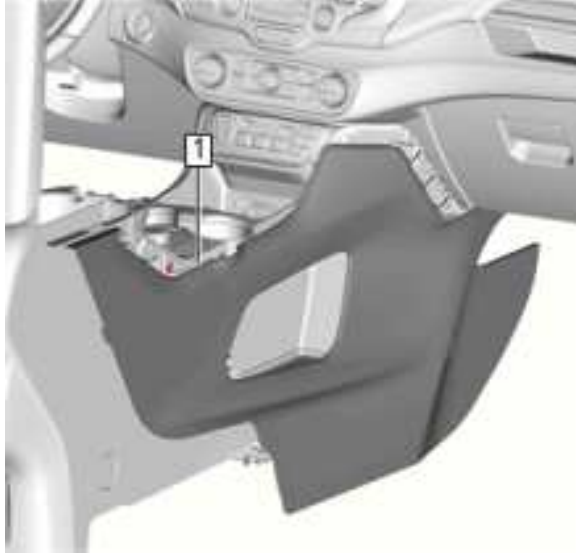


Fig. 572: Right Front Floor Console Extension Panel
 Courtesy of GENERAL MOTORS COMPANY

37. Remove Front Floor Console Extension Panel - Right (1) - **Front Floor Console Extension Panel Replacement - Right Side (Terrain)**

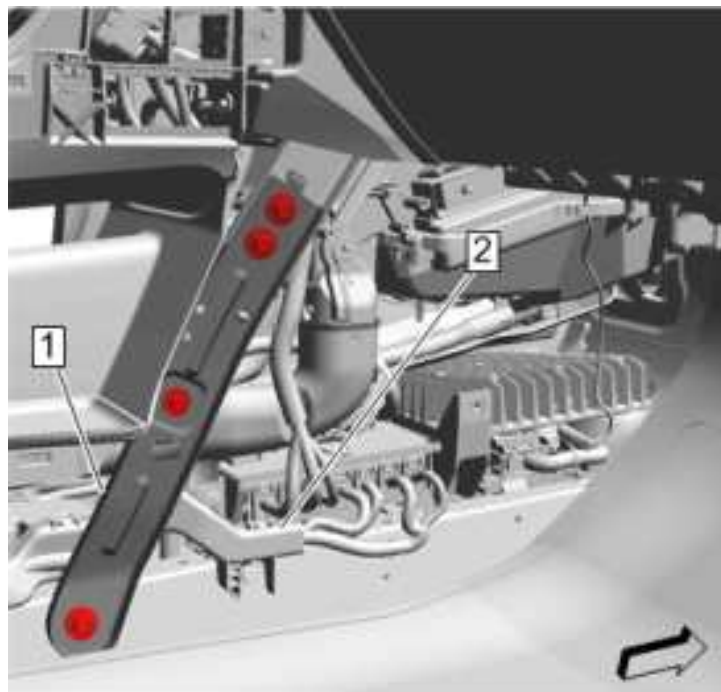


Fig. 573: Instrument Panel Center Lower Bracket
 Courtesy of GENERAL MOTORS COMPANY

38. Remove Instrument Panel Center Lower Bracket-Right Side (1) - **Instrument Panel Center Lower Bracket Replacement (Terrain - Left Side) Instrument Panel Center Lower Bracket Replacement (Terrain - Right Side)**

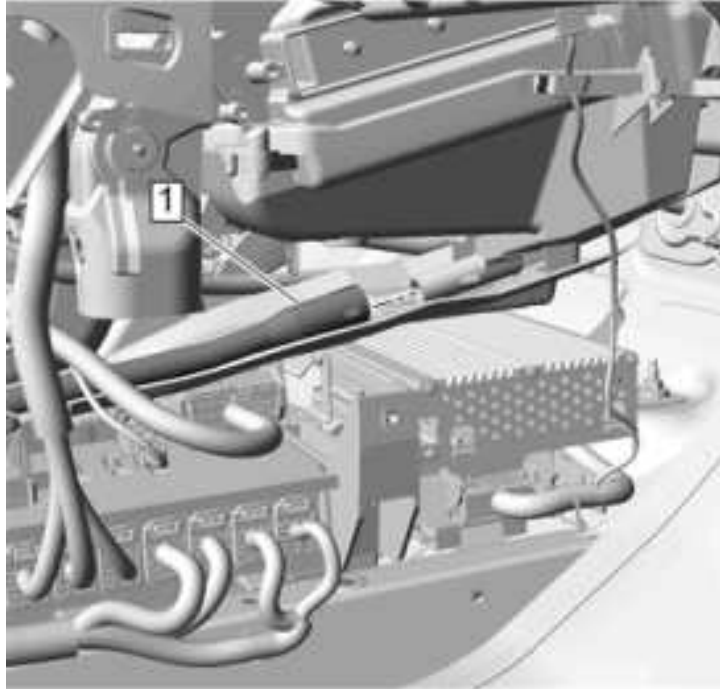


Fig. 574: Air Conditioning Evaporator and Blower Module Drain Hose
 Courtesy of GENERAL MOTORS COMPANY

CAUTION: Refer to [HVAC Module Drain Tube Caution](#) .

39. Prior to removing the air conditioning evaporator and blower module drain tube/hose, use clean and absorbent shop clothes/towels to cover the electrical components protecting the electrical components from water damage.
40. Remove Air Conditioning Evaporator and Blower Module Drain Hose (1) @Heater and Air Conditioning Evaporator and Blower Lower Case - [Air Conditioning Evaporator and Blower Module Drain Hose Replacement \(Terrain\)](#)



Fig. 575: Left Front Floor Console Extension Panel
 Courtesy of GENERAL MOTORS COMPANY

41. Remove Front Floor Console Extension Panel - Left (1) - [Front Floor Console Extension Panel Replacement - Left Side \(Terrain\)](#)

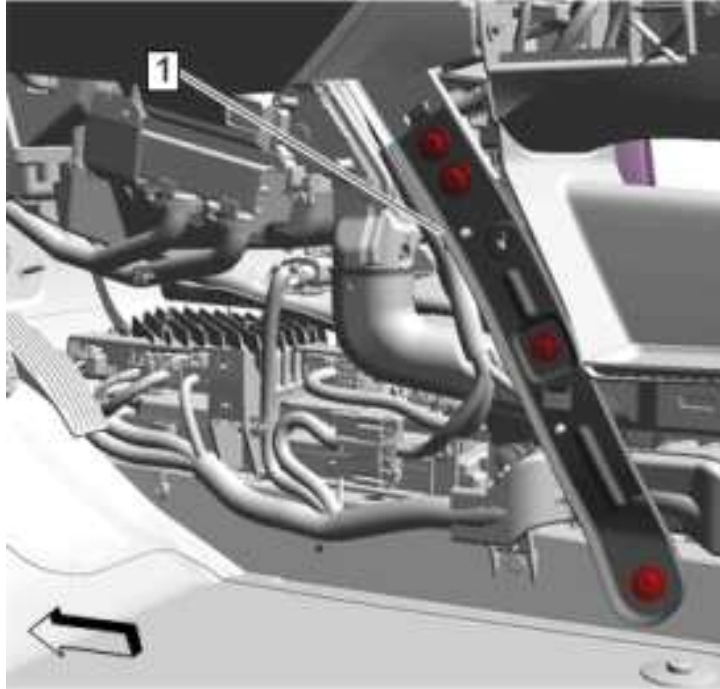


Fig. 576: Instrument Panel Center Lower Bracket-Left Side
 Courtesy of GENERAL MOTORS COMPANY

42. Remove Instrument Panel Center Lower Bracket-Left Side (1) - **Instrument Panel Center Lower Bracket Replacement (Terrain - Left Side)**

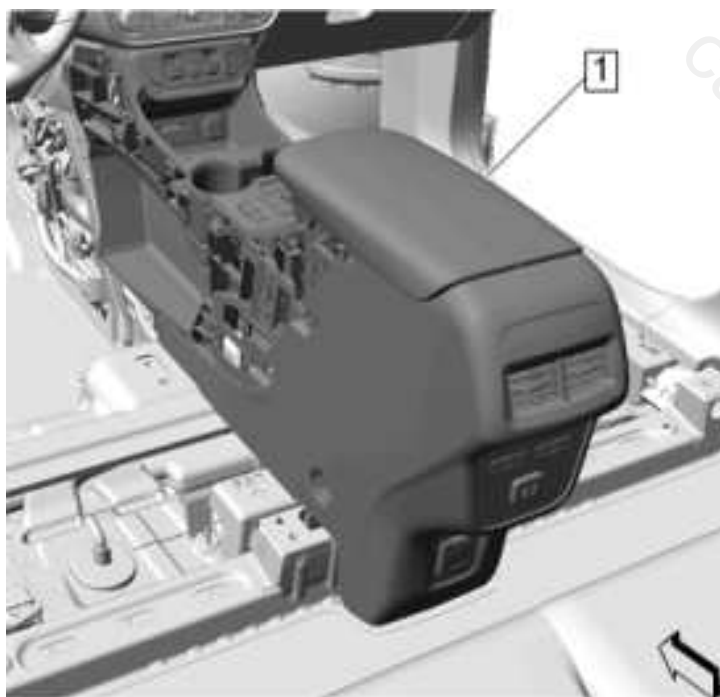


Fig. 577: Front Floor Console
 Courtesy of GENERAL MOTORS COMPANY

43. Remove Front Floor Console (1) - **Front Floor Console Replacement (Terrain)**
44. Disconnect the electrical connectors.

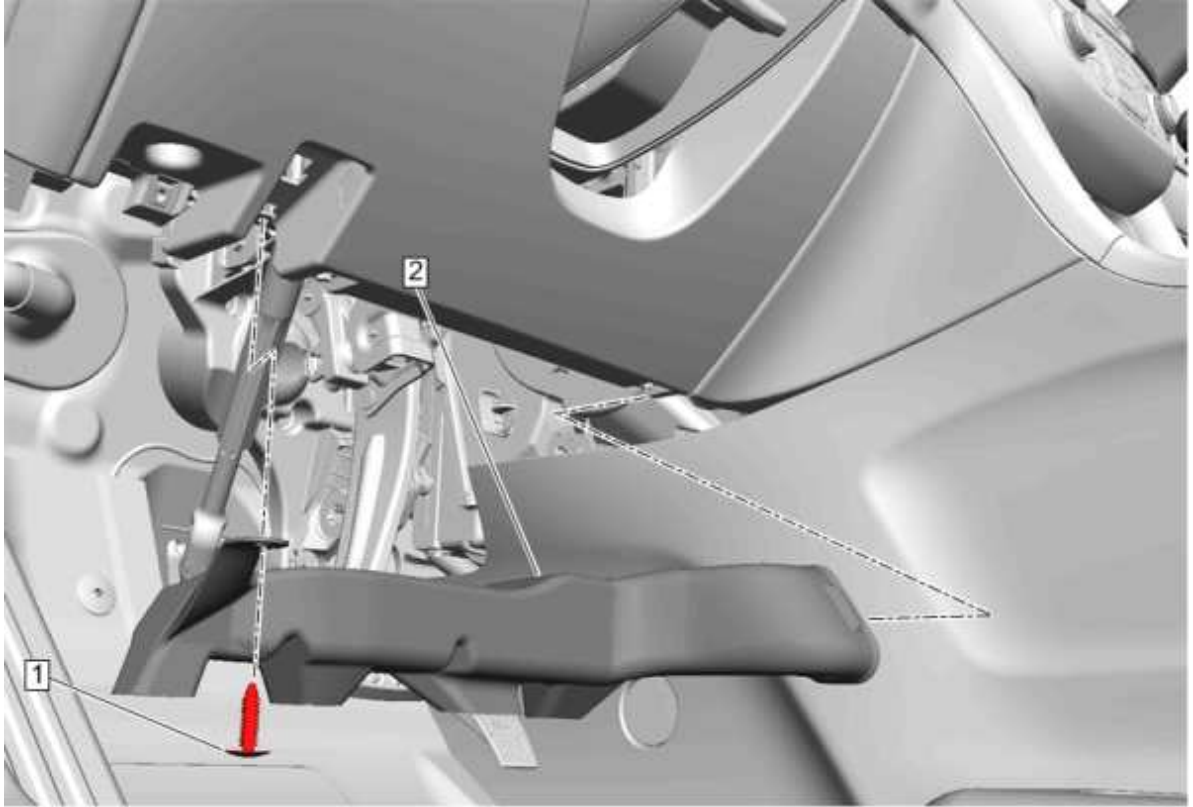


Fig. 578: Floor Front Air Outlet Duct
Courtesy of GENERAL MOTORS COMPANY

45. Remove Floor Front Air Outlet Duct - Left Side (2) - **Floor Front Air Outlet Duct Replacement - Left Side**



Fig. 579: Instrument Panel Knee Bolster
Courtesy of GENERAL MOTORS COMPANY

46. Remove Instrument Panel Knee Bolster (1) - **Instrument Panel Knee Bolster Replacement (Terrain)**

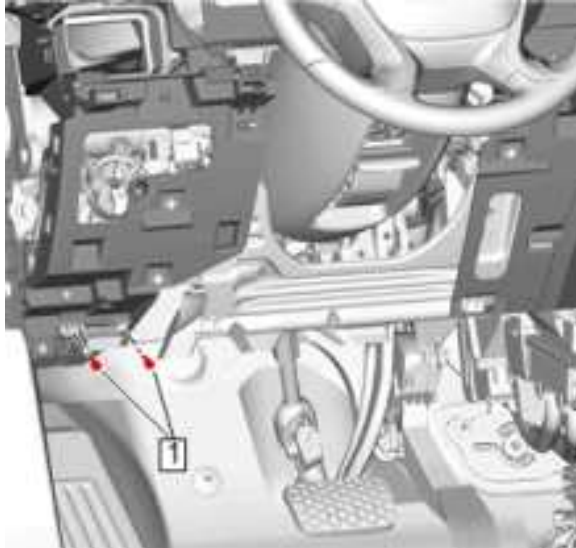


Fig. 580: Data Link Connector Bolts
Courtesy of GENERAL MOTORS COMPANY

47. Remove Data Link Connector Bolt (1)

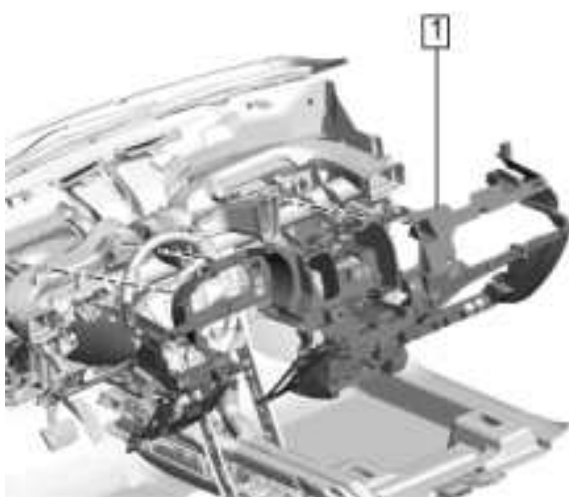


Fig. 581: Instrument Panel
Courtesy of GENERAL MOTORS COMPANY

48. Remove Instrument Panel Assembly (1) - **Instrument Panel Assembly Replacement (Terrain)**

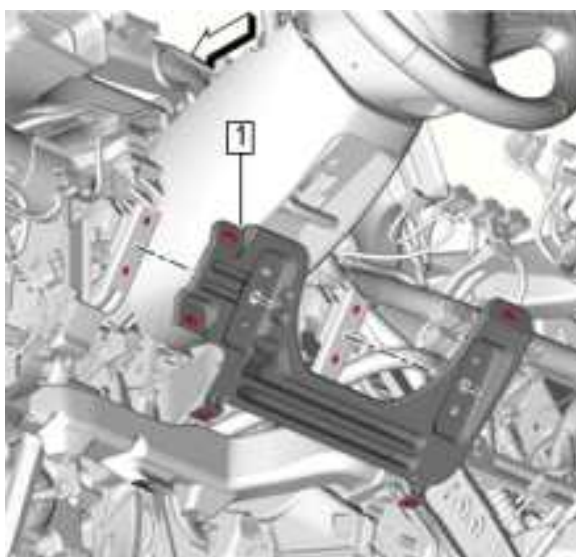


Fig. 582: Instrument Panel Knee Bolster Deflector
Courtesy of GENERAL MOTORS COMPANY

49. Remove Instrument Panel Knee Bolster Deflector (1) - [Instrument Panel Knee Bolster Deflector Replacement \(Terrain\)](#).

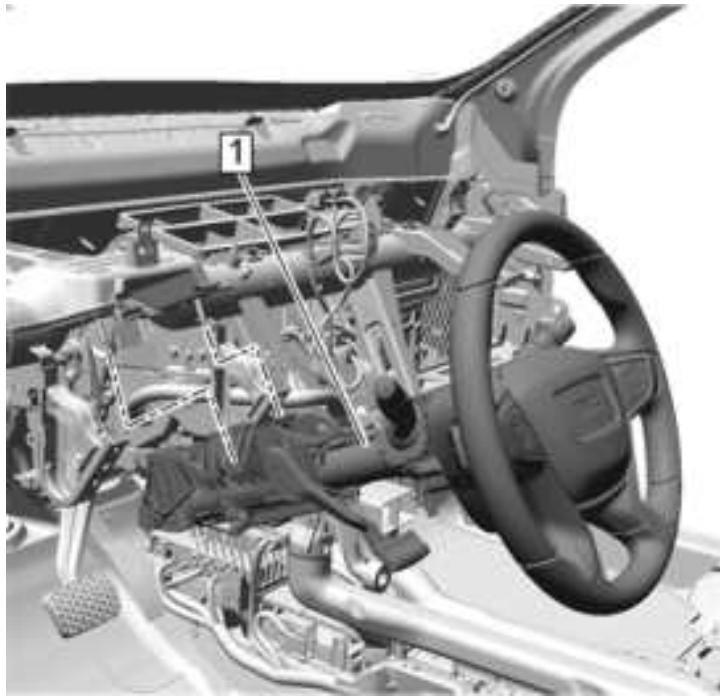


Fig. 583: Steering Column

Courtesy of GENERAL MOTORS COMPANY

50. Remove Steering Column (1) - [Steering Column Replacement \(Terrain\)](#)

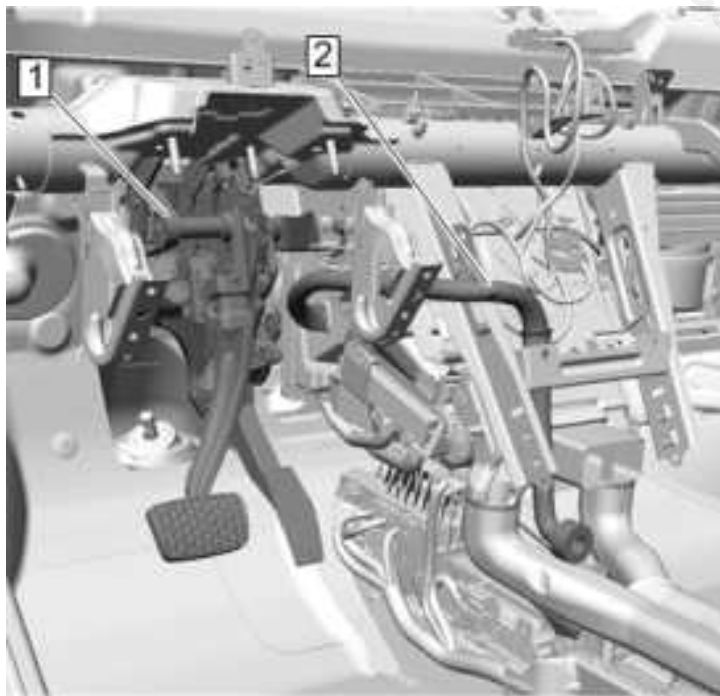


Fig. 584: Brake Pedal Assembly

Courtesy of GENERAL MOTORS COMPANY

51. Remove the brake pedal assembly.(1) [Brake Pedal Assembly Replacement](#)
52. Remove Instrument Panel Compartment Air Duct (2)
53. Detach the instrument panel electrical wiring harness from the instrument panel tie bar.

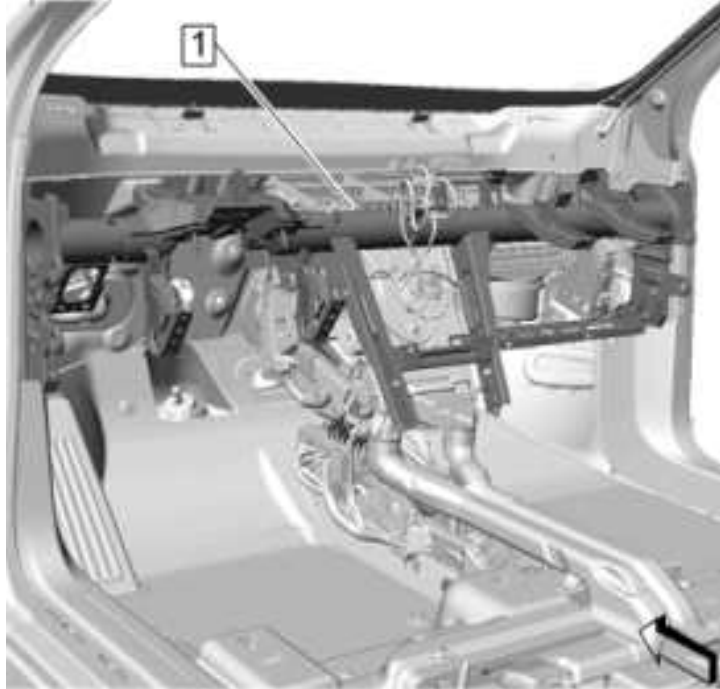


Fig. 585: Instrument Panel Tie Bar
 Courtesy of GENERAL MOTORS COMPANY

54. Remove Instrument Panel Tie Bar (1) - **Instrument Panel Tie Bar Replacement (Terrain)**
55. Support the heater and air conditioning evaporator and blower (HVAC) module assembly.

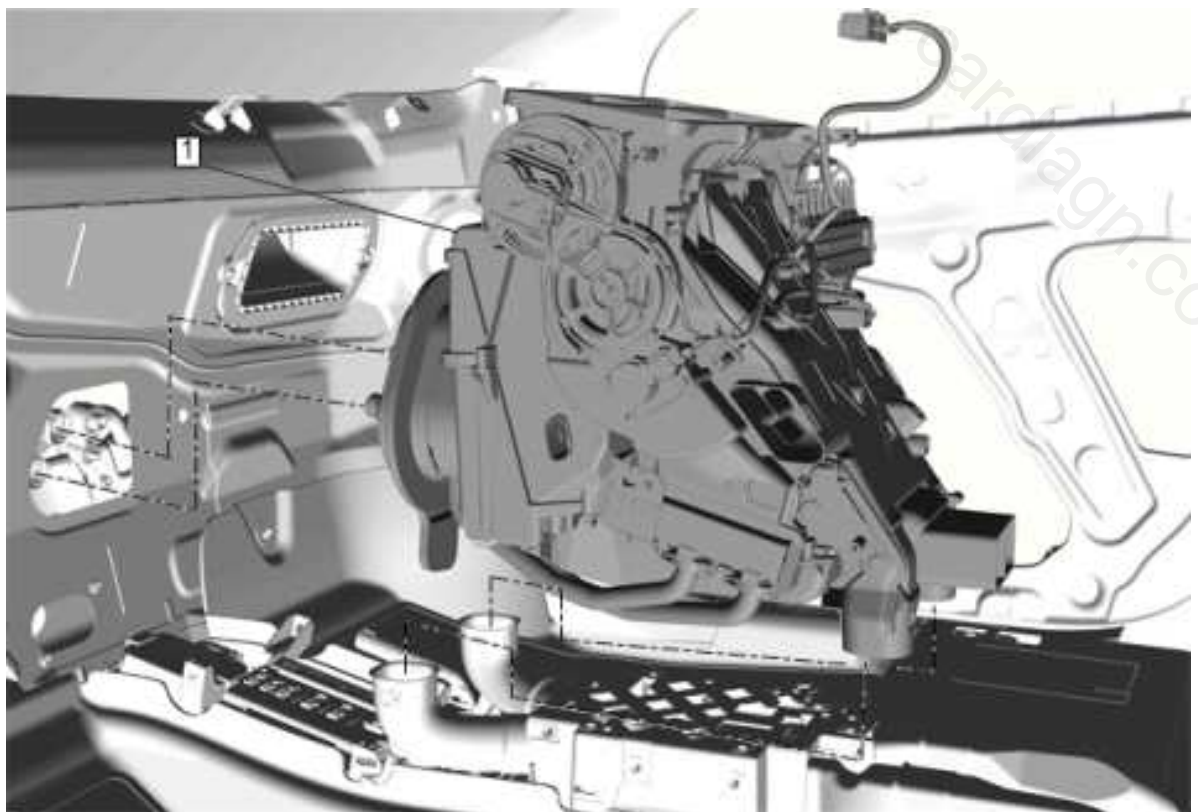


Fig. 586: Heater and Air Conditioning Evaporator and Blower Module
 Courtesy of GENERAL MOTORS COMPANY

56. Remove Heater and Air Conditioning Evaporator and Blower Module (1) - from the vehicle.
57. Transfer all necessary components.

Installation Procedure

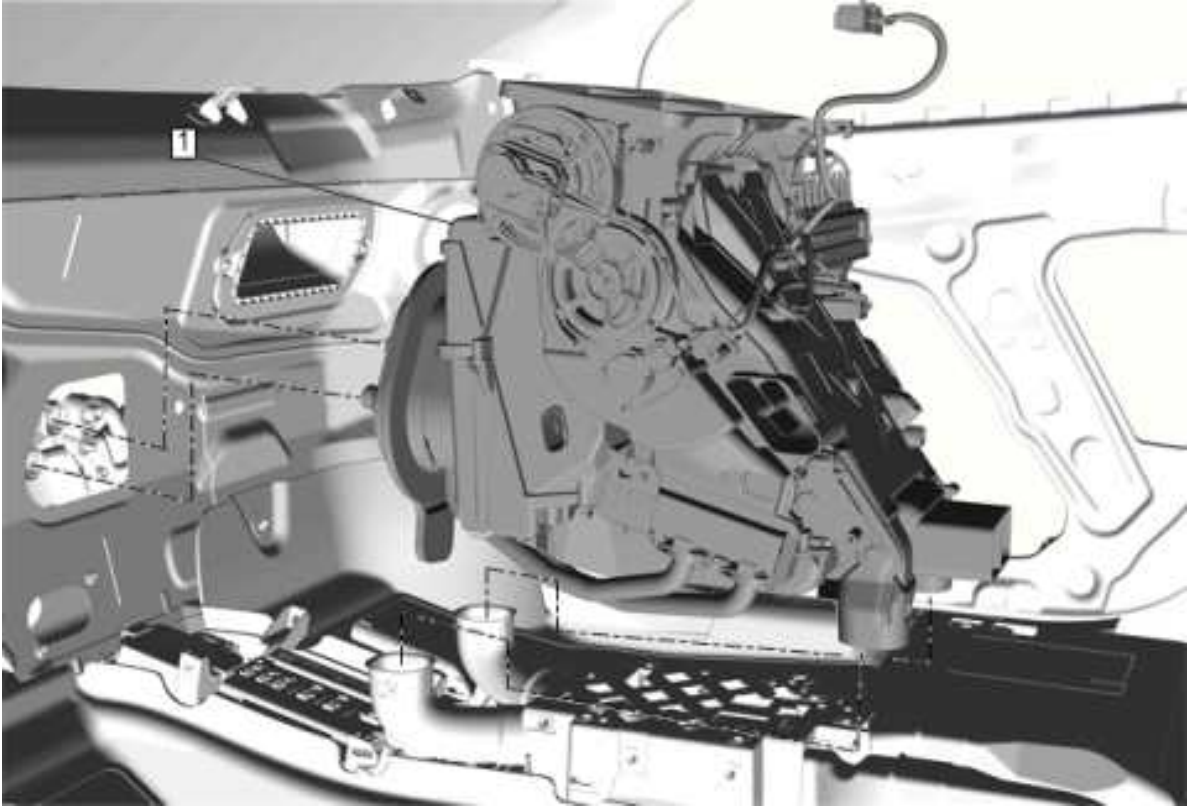


Fig. 587: Heater and Air Conditioning Evaporator and Blower Module
 Courtesy of GENERAL MOTORS COMPANY

1. Install Heater and Air Conditioning Evaporator and Blower Module (1) onto the vehicle.
2. Temporarily support HVAC module assembly.

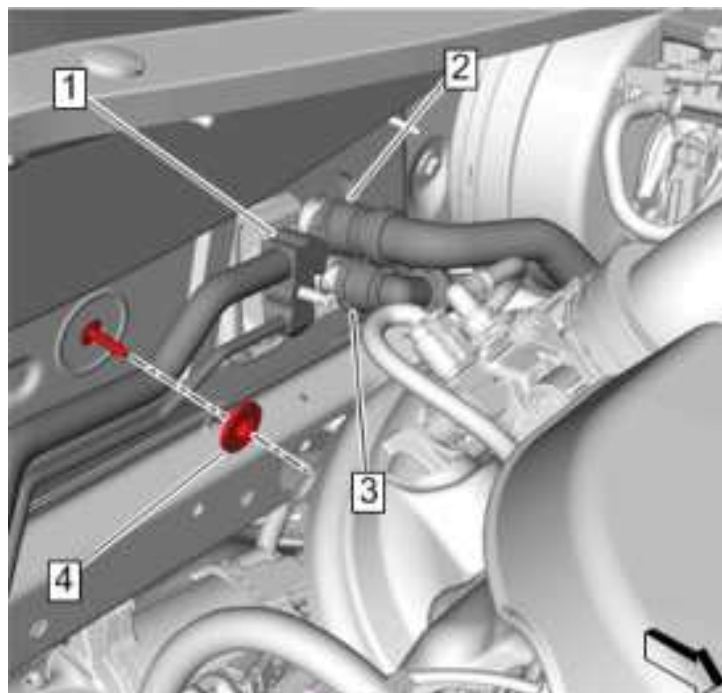


Fig. 588: Air Conditioning Refrigerant Heat Exchanger
 Courtesy of GENERAL MOTORS COMPANY

CAUTION: Refer to **Fastener Caution** .

3. Install Heater and Air Conditioning Evaporator and Blower Module Nut (4) @Cowl Panel and tighten 9.0 N.m (80 lb in)

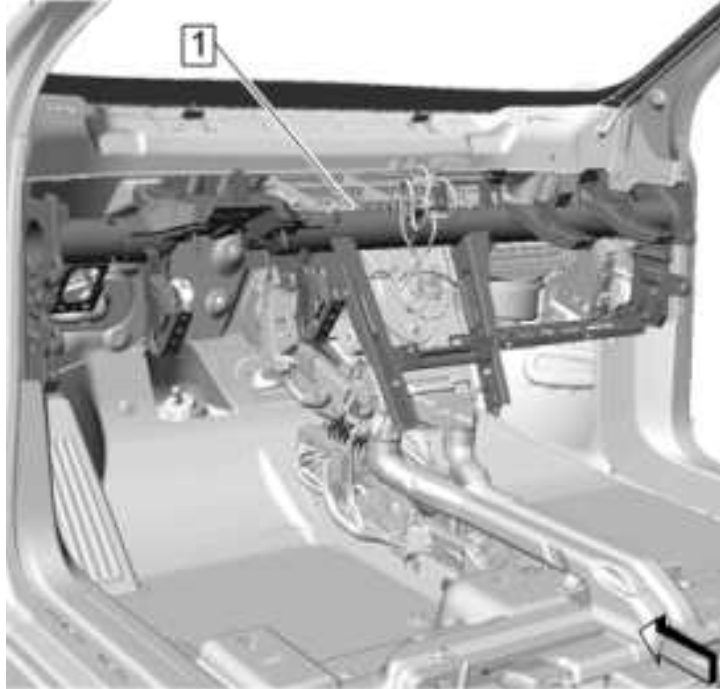


Fig. 589: Instrument Panel Tie Bar

Courtesy of GENERAL MOTORS COMPANY

4. Install Instrument Panel Tie Bar (1) - [Instrument Panel Tie Bar Replacement \(Terrain\)](#)
5. Attach the instrument panel electrical wiring harness onto the instrument panel tie bar.

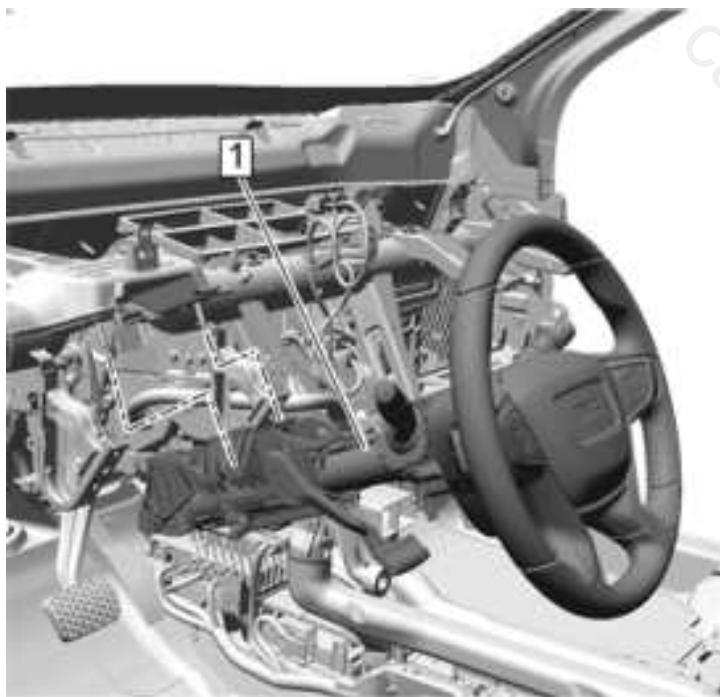


Fig. 590: Steering Column

Courtesy of GENERAL MOTORS COMPANY

6. Install Steering Column (1) - [Steering Column Replacement \(Terrain\)](#)

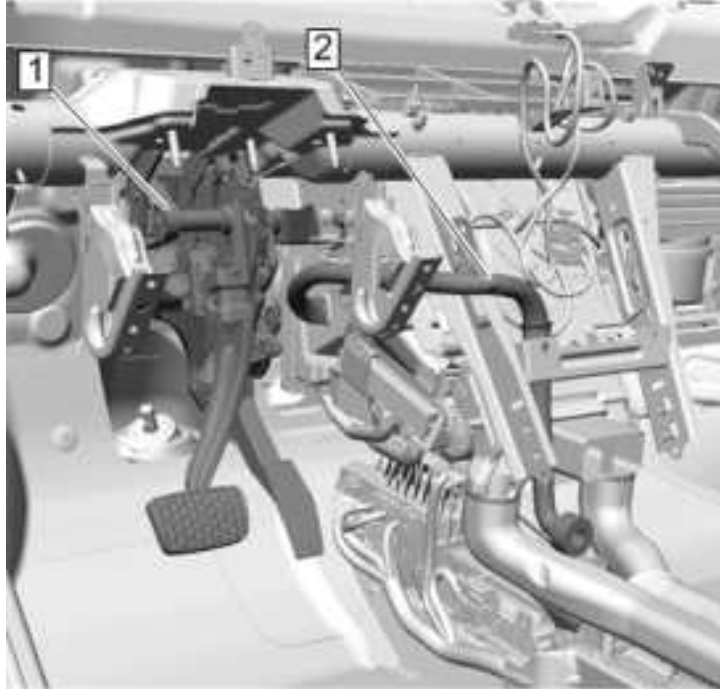


Fig. 591: Brake Pedal Assembly

Courtesy of GENERAL MOTORS COMPANY

7. Install the brake pedal assembly. (1) [Brake Pedal Assembly Replacement](#)
8. Install Instrument Panel Compartment Air Duct (2)

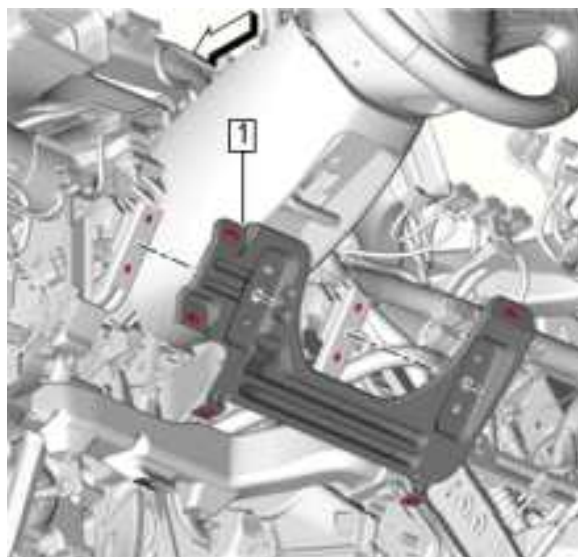


Fig. 592: Instrument Panel Knee Bolster Deflector

Courtesy of GENERAL MOTORS COMPANY

9. Install Instrument Panel Knee Bolster Deflector (1) - [Instrument Panel Knee Bolster Deflector Replacement \(Terrain\)](#)

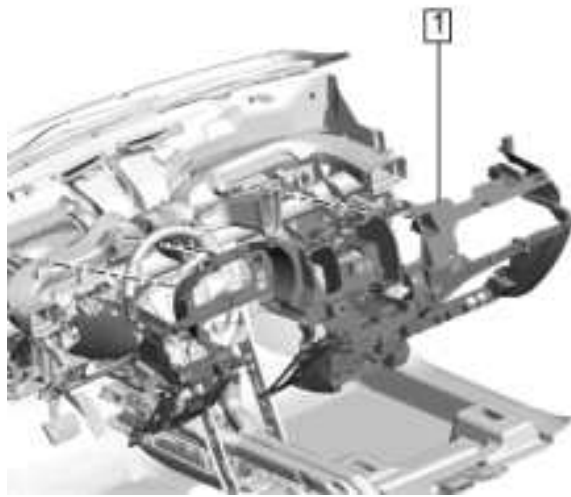


Fig. 593: Instrument Panel

Courtesy of GENERAL MOTORS COMPANY

10. Install Instrument Panel Assembly (1) - [Instrument Panel Assembly Replacement \(Terrain\)](#)

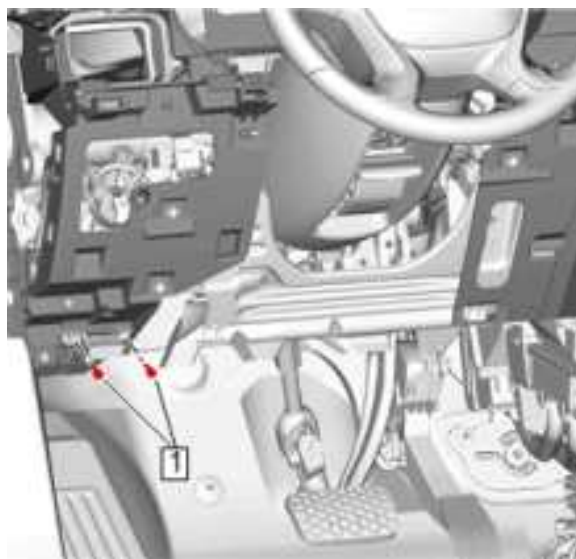


Fig. 594: Data Link Connector Bolts

Courtesy of GENERAL MOTORS COMPANY

11. Install Data Link Connector Bolt (1) and tighten 2.5 N.m (22 lb in)



Fig. 595: Instrument Panel Knee Bolster

Courtesy of GENERAL MOTORS COMPANY

12. Install Instrument Panel Knee Bolster (1) - [Instrument Panel Knee Bolster Replacement \(Terrain\)](#)

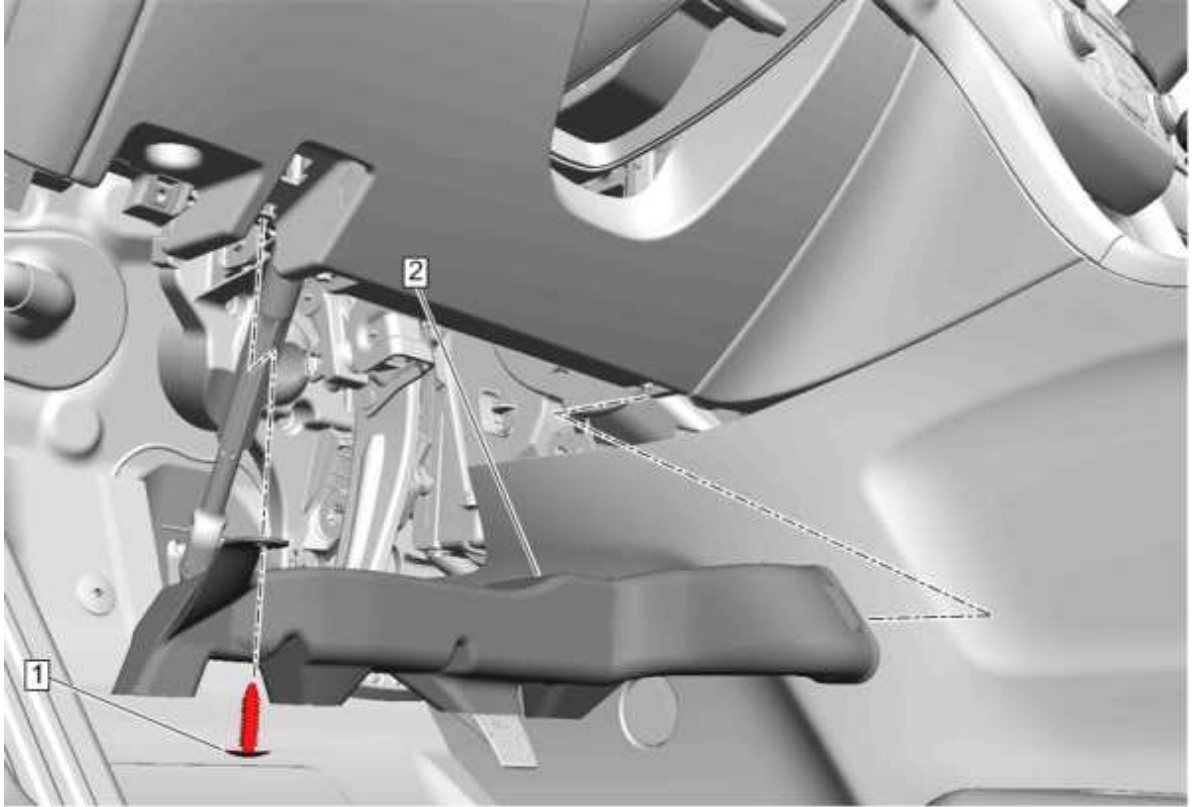


Fig. 596: Floor Front Air Outlet Duct
Courtesy of GENERAL MOTORS COMPANY

13. Install Floor Front Air Outlet Duct - Left Side (2) - **Floor Front Air Outlet Duct Replacement - Left Side**

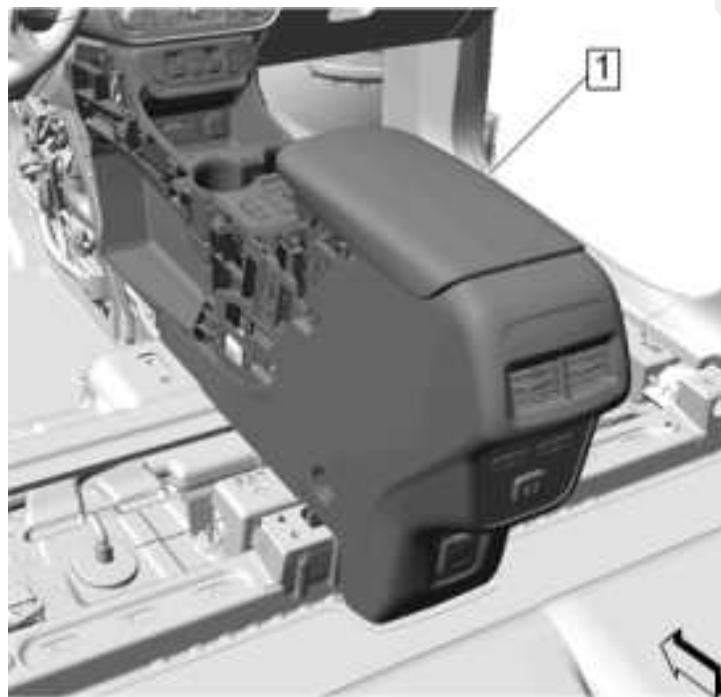


Fig. 597: Front Floor Console
Courtesy of GENERAL MOTORS COMPANY

14. Connect the electrical connectors.
15. Install Front Floor Console (1) - **Front Floor Console Replacement (Terrain)**

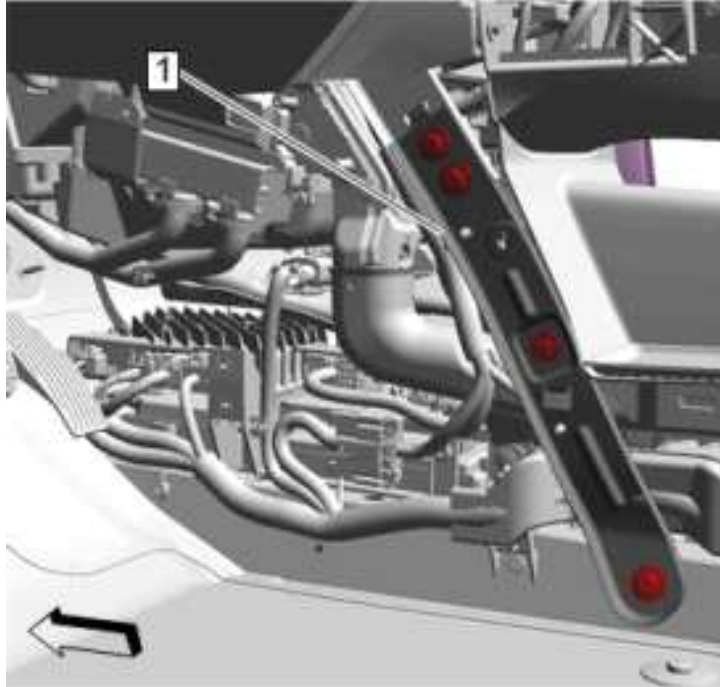


Fig. 598: Instrument Panel Center Lower Bracket-Left Side
 Courtesy of GENERAL MOTORS COMPANY

16. Install Instrument Panel Center Lower Bracket-Left Side (3) - **Instrument Panel Center Lower Bracket Replacement (Terrain - Left Side)** **Instrument Panel Center Lower Bracket Replacement (Terrain - Right Side)**



Fig. 599: Left Front Floor Console Extension Panel
 Courtesy of GENERAL MOTORS COMPANY

17. Install Front Floor Console Extension Panel - Left (1) - **Front Floor Console Extension Panel Replacement - Left Side (Equinox)** **Front Floor Console Extension Panel Replacement - Left Side (Terrain)**

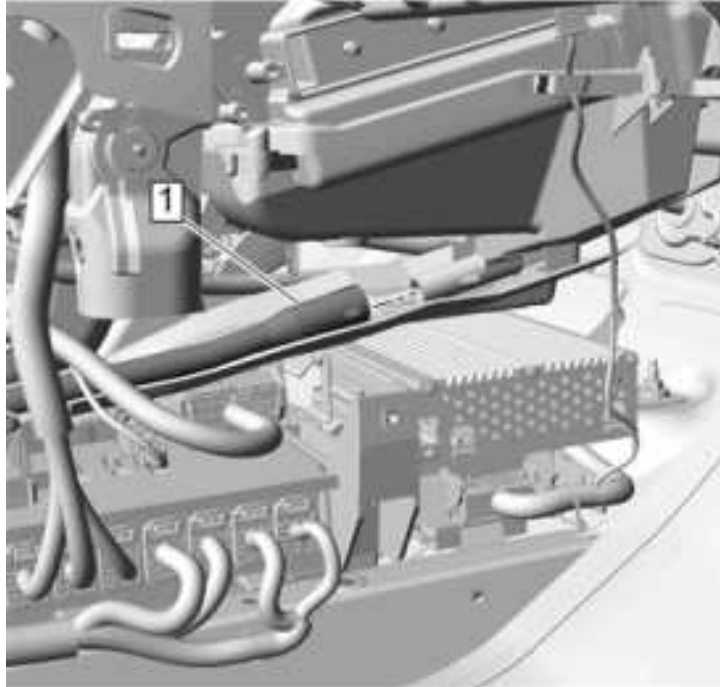


Fig. 600: Air Conditioning Evaporator and Blower Module Drain Hose
Courtesy of GENERAL MOTORS COMPANY

CAUTION: Refer to [HVAC Module Drain Tube Caution](#) .

18. Install Air Conditioning Evaporator and Blower Module Drain Hose (1) @Heater and Air Conditioning Evaporator and Blower Lower Case
19. Remove the absorbent shop clothes/towels covering the electrical components.

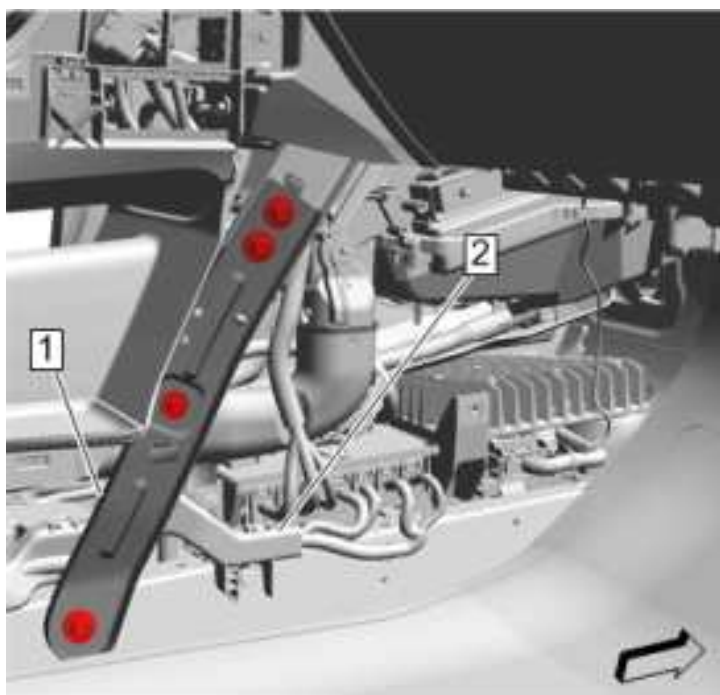


Fig. 601: Instrument Panel Center Lower Bracket
Courtesy of GENERAL MOTORS COMPANY

20. Install Instrument Panel Center Lower Bracket-Right Side (1) - [Instrument Panel Center Lower Bracket Replacement \(Terrain - Left Side\)](#) [Instrument Panel Center Lower Bracket Replacement \(Terrain - Right Side\)](#)

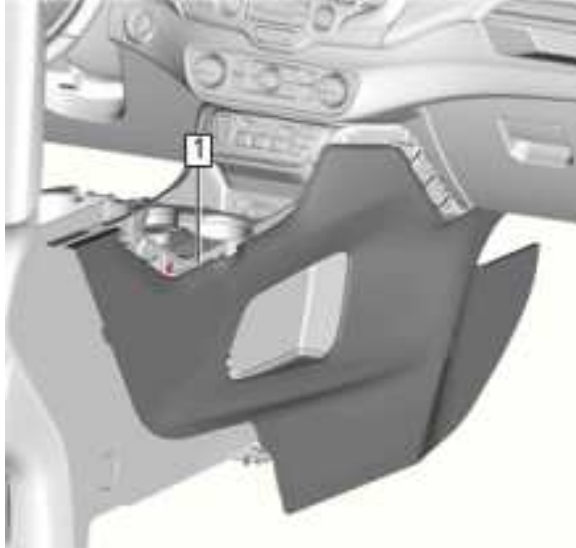


Fig. 602: Right Front Floor Console Extension Panel

Courtesy of GENERAL MOTORS COMPANY

21. Install Front Floor Console Extension Panel - Right (1) - **Front Floor Console Extension Panel Replacement - Right Side (Terrain)**

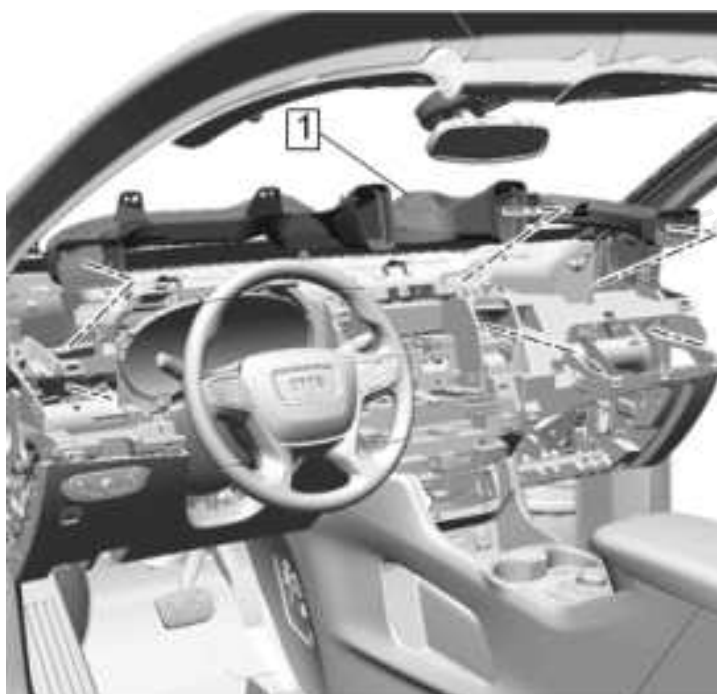


Fig. 603: Instrument Panel Center Air Outlet Duct

Courtesy of GENERAL MOTORS COMPANY

22. Install Instrument Panel Center Air Outlet Duct (1) - **Instrument Panel Center Lower Bracket Replacement (Terrain - Left Side) Instrument Panel Center Lower Bracket Replacement (Terrain - Right Side)**

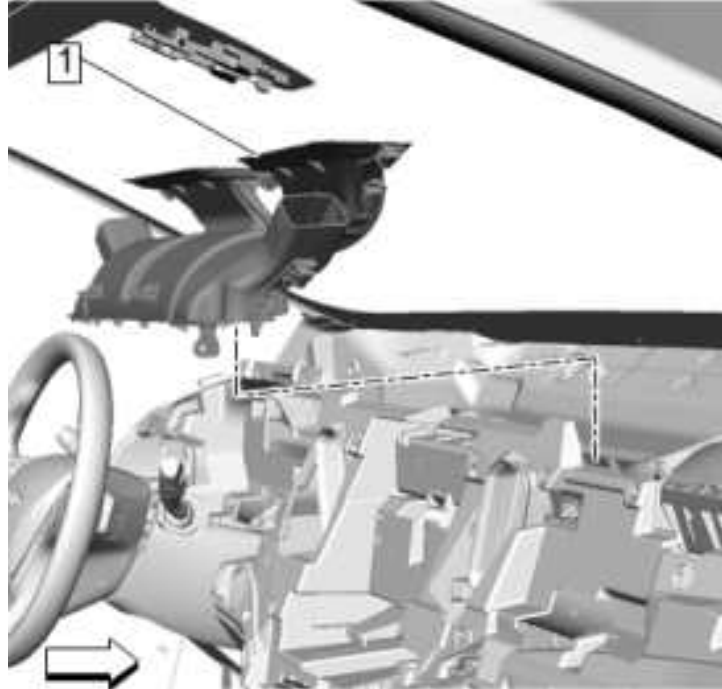


Fig. 604: Windshield Defroster Outlet Duct
 Courtesy of GENERAL MOTORS COMPANY

23. Attach the wiring harness and connect the electrical connectors as necessary.
24. Install Windshield Defroster Outlet Duct (1) - [Windshield Defroster Outlet Duct Replacement \(Terrain\)](#)

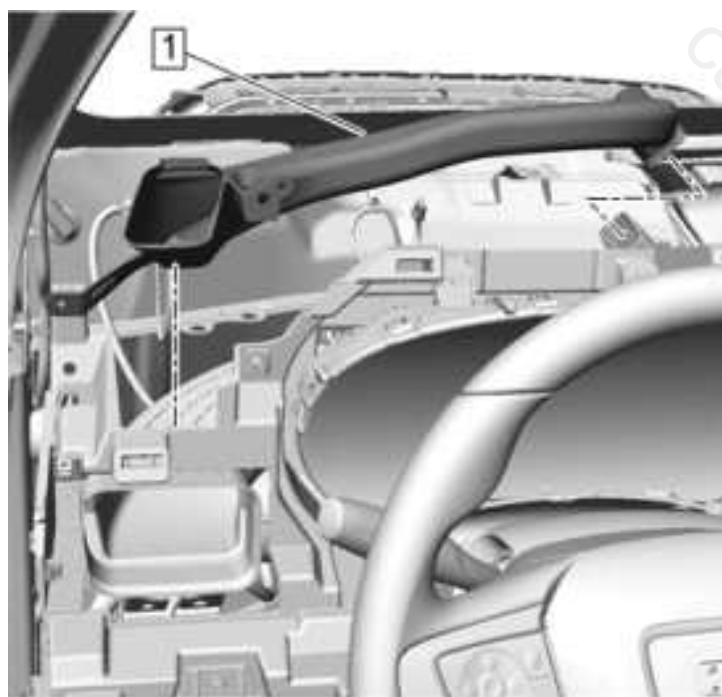


Fig. 605: Left Side Window Defogger Outlet Duct
 Courtesy of GENERAL MOTORS COMPANY

25. Install Side Window Defogger Outlet Duct - Left Side (1) - [Side Window Defogger Outlet Duct Replacement - Left Side \(Terrain\)](#)

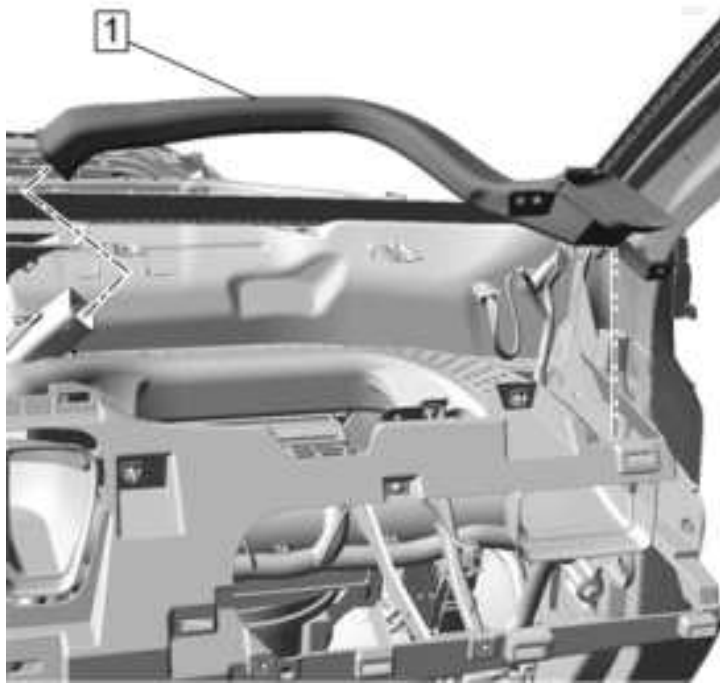


Fig. 606: Right Side Window Defogger Outlet Duct
 Courtesy of GENERAL MOTORS COMPANY

26. Install Side Window Defogger Outlet Duct - Right Side (1) - **Side Window Defogger Outlet Duct Replacement - Right Side (Terrain)**

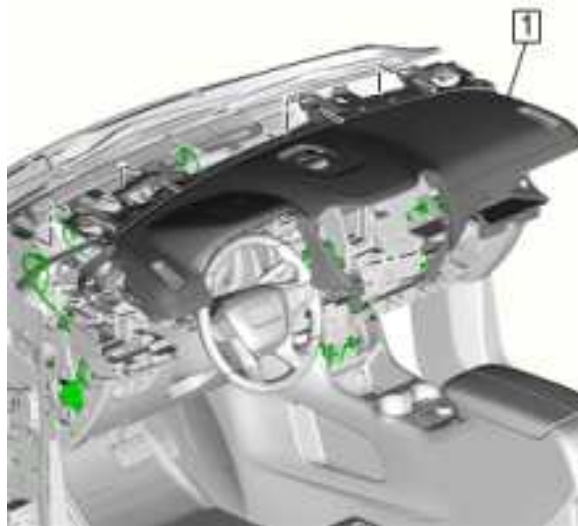


Fig. 607: Instrument Panel Upper Trim Panel
 Courtesy of GENERAL MOTORS COMPANY

27. Install Instrument Panel Upper Trim Panel (1) - **Instrument Panel Upper Trim Panel Replacement (Terrain)**

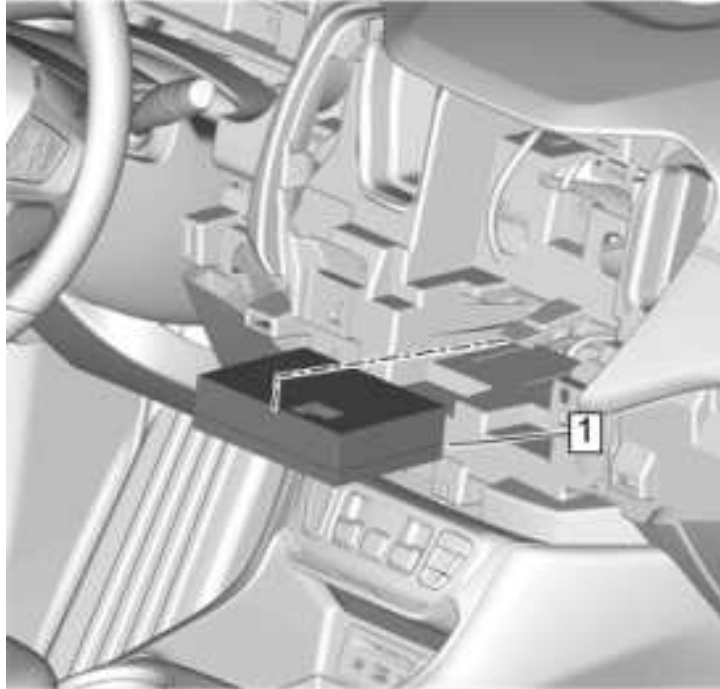


Fig. 608: Communication Interface Module
Courtesy of GENERAL MOTORS COMPANY

28. Install Communication Interface Module (1) - [Communication Interface Module Replacement \(Terrain with IOS, IOT, IOU\)](#) [Communication Interface Module Replacement \(Terrain with IOR\)](#)

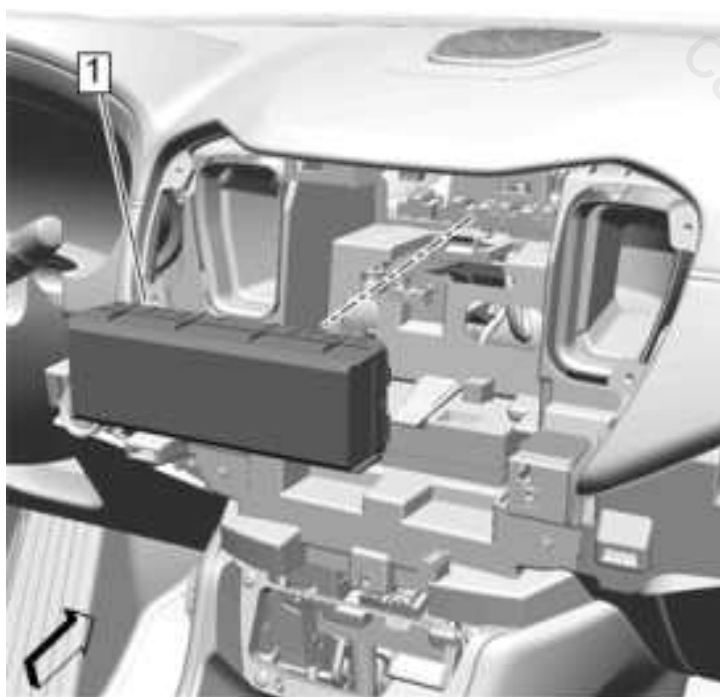


Fig. 609: Heater And Air Conditioning Remote Control
Courtesy of GENERAL MOTORS COMPANY

29. Install Heater and Air Conditioning Remote Control (1) - [Heater and Air Conditioning Remote Control Replacement \(Terrain\)](#)

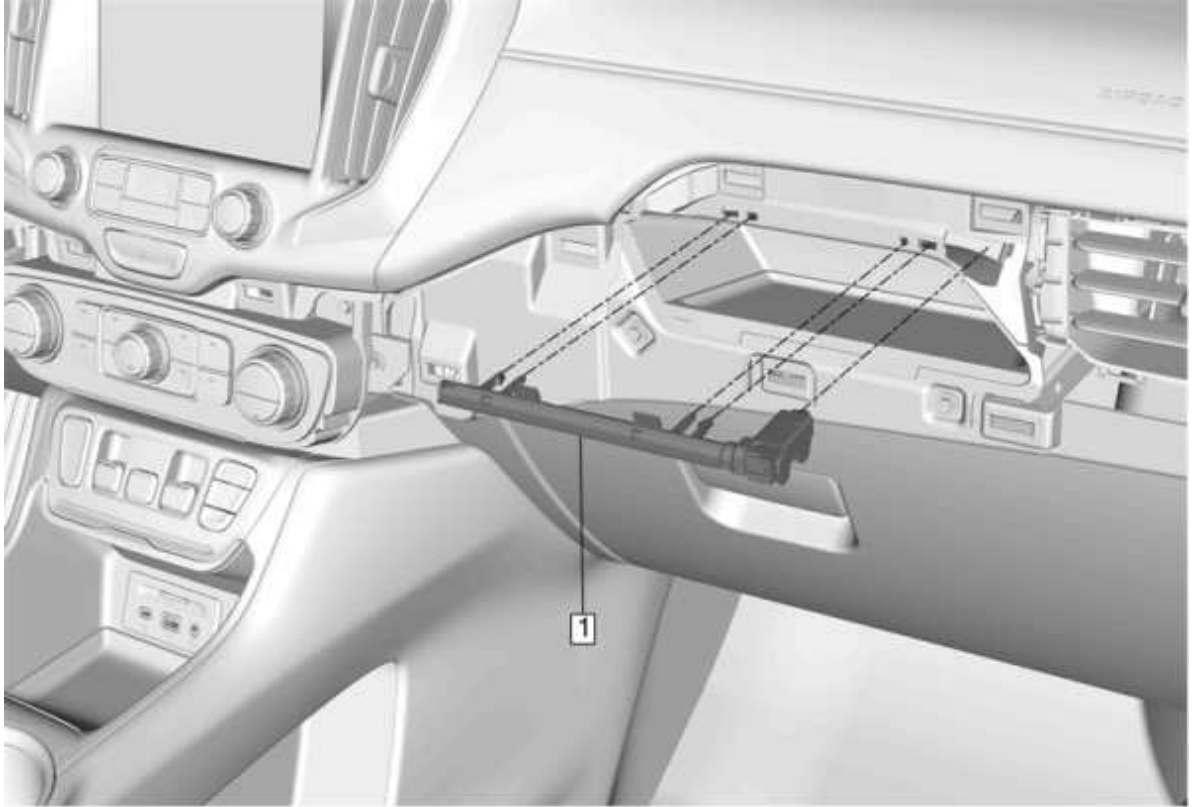


Fig. 610: Instrument Panel Light Conductor Lamp
Courtesy of GENERAL MOTORS COMPANY

30. Install Instrument Panel Light Conductor Lamp (1) - **Instrument Panel Light Conductor Lamp Replacement (GMC)**

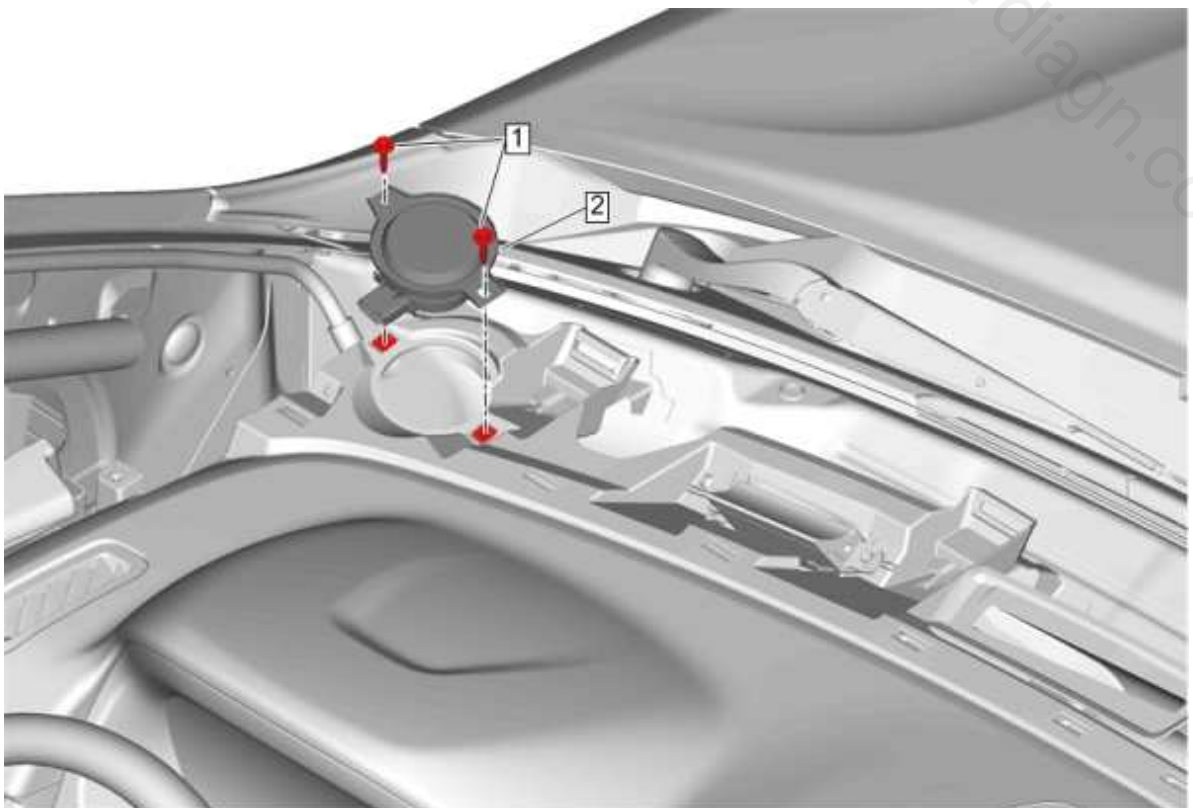


Fig. 611: Radio Front Speaker
Courtesy of GENERAL MOTORS COMPANY

31. Install the left and right side radio front speakers. (2) **Radio Front Speaker Replacement (Terrain)**



Fig. 612: Instrument Panel Extension
Courtesy of GENERAL MOTORS COMPANY

32. Install Instrument Panel Extension (1) - **Instrument Panel Extension Replacement (Terrain)**



Fig. 613: Radio Front Center Speaker
Courtesy of GENERAL MOTORS COMPANY

33. Install Radio Front Center Speaker (2) - **Radio Front Center Speaker Replacement (Terrain)**

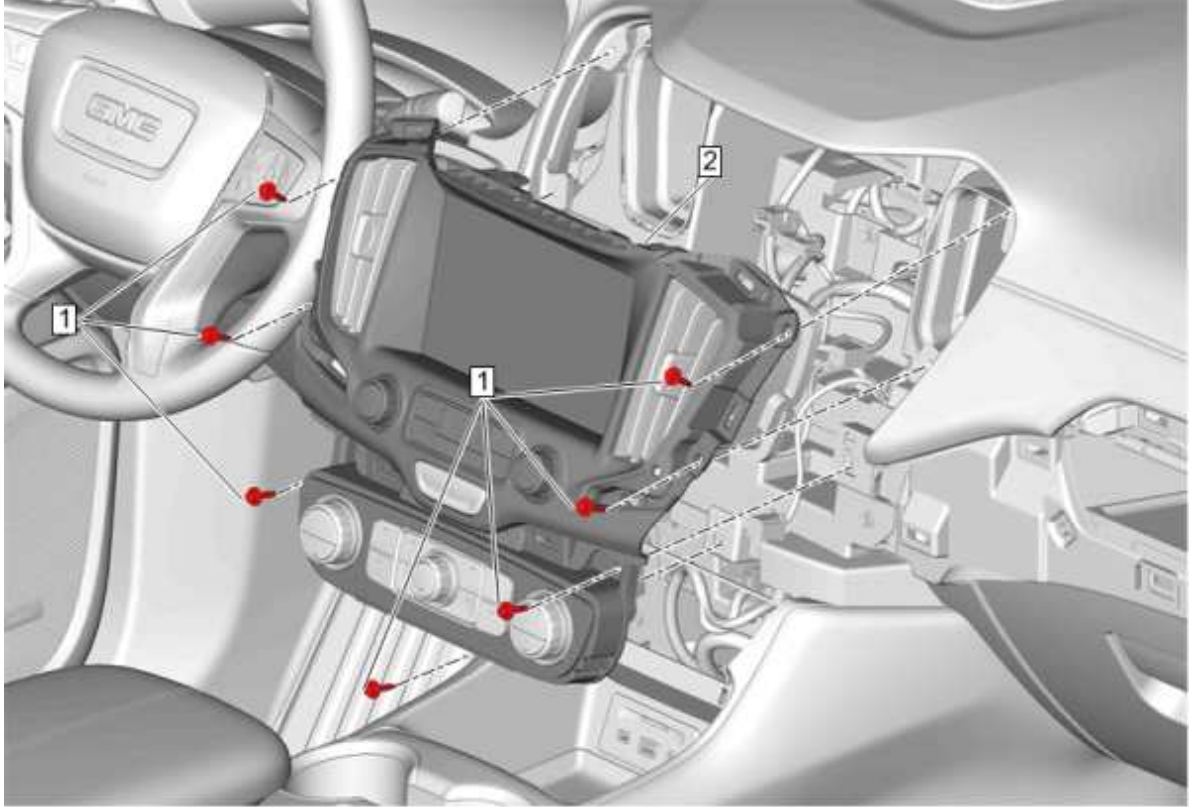


Fig. 614: Radio Control Assembly And Screws
Courtesy of GENERAL MOTORS COMPANY

34. Connect the electrical connectors.
35. Install Radio Control Assembly (2) - [Radio Control Assembly Replacement \(Terrain\)](#)

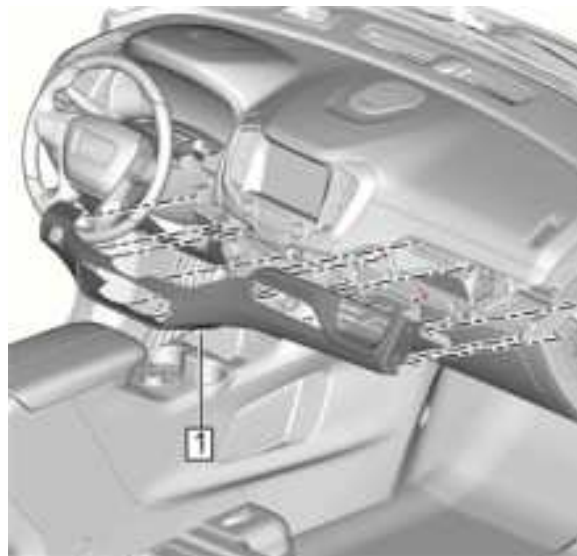


Fig. 615: Right Side Instrument Panel Trim Pad
Courtesy of GENERAL MOTORS COMPANY

36. Install Instrument Panel Trim Pad - Right Side (1) - [Instrument Panel Trim Pad Replacement - Right Side \(Terrain\)](#)

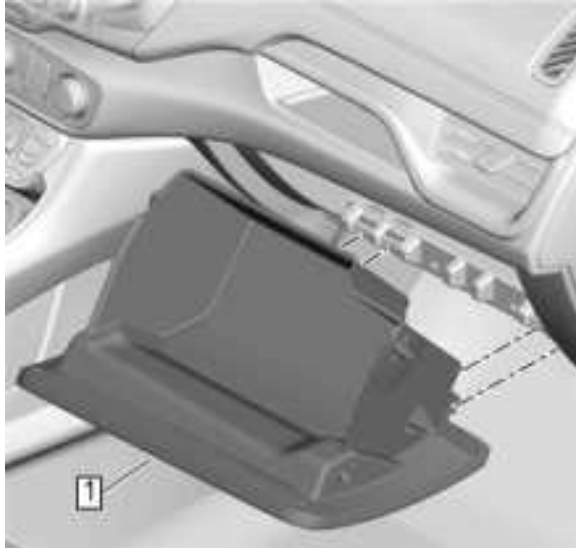


Fig. 616: Instrument Panel Compartment Door
 Courtesy of GENERAL MOTORS COMPANY

37. Install Instrument Panel Compartment Door (1) - [Instrument Panel Compartment Door Replacement \(Terrain\)](#)

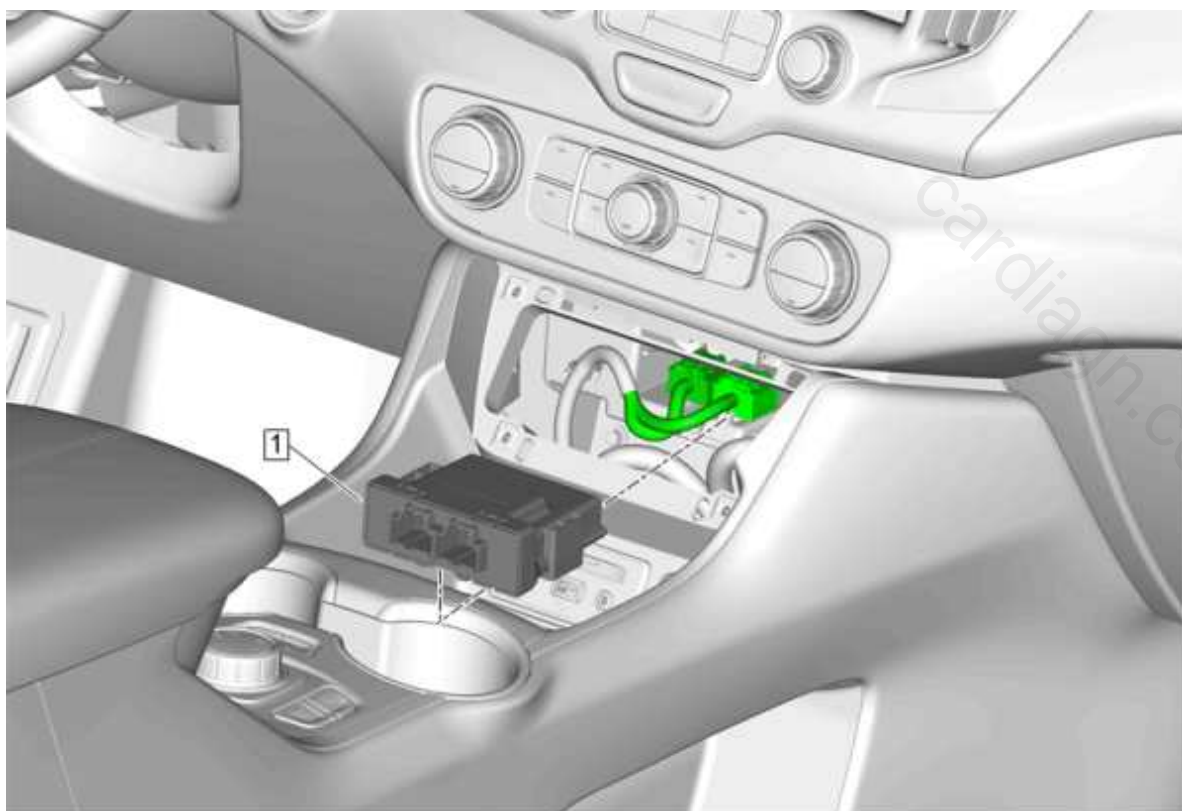


Fig. 617: Serial Data Gateway Module
 Courtesy of GENERAL MOTORS COMPANY

38. Install Serial Data Gateway Module (1) - [Serial Data Gateway Module Replacement \(Terrain with MNH, NMK, or MHG\)](#) [Serial Data Gateway Module Replacement \(Terrain with M3U, M3D, or M3H\)](#)

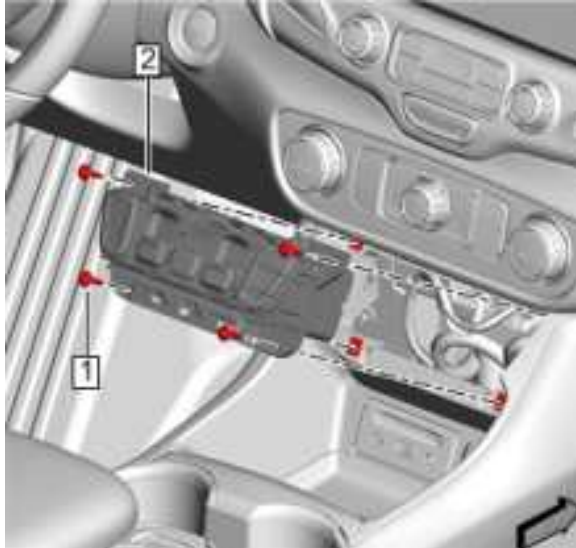


Fig. 618: Automatic Transmission Control Bolts And Electronic Transmission Shift Control Pushbutton

Courtesy of GENERAL MOTORS COMPANY

39. Install Electronic Transmission Shift Control Pushbutton (2) - [Electronic Transmission Shift Control Pushbutton Replacement](#)



Fig. 619: Front Floor Console Transmission Shift Opening Bezel

Courtesy of GENERAL MOTORS COMPANY

40. Install Front Floor Console Transmission Shift Opening Bezel (1) - [Front Floor Console Transmission Shift Opening Bezel Replacement \(Terrain\)](#)

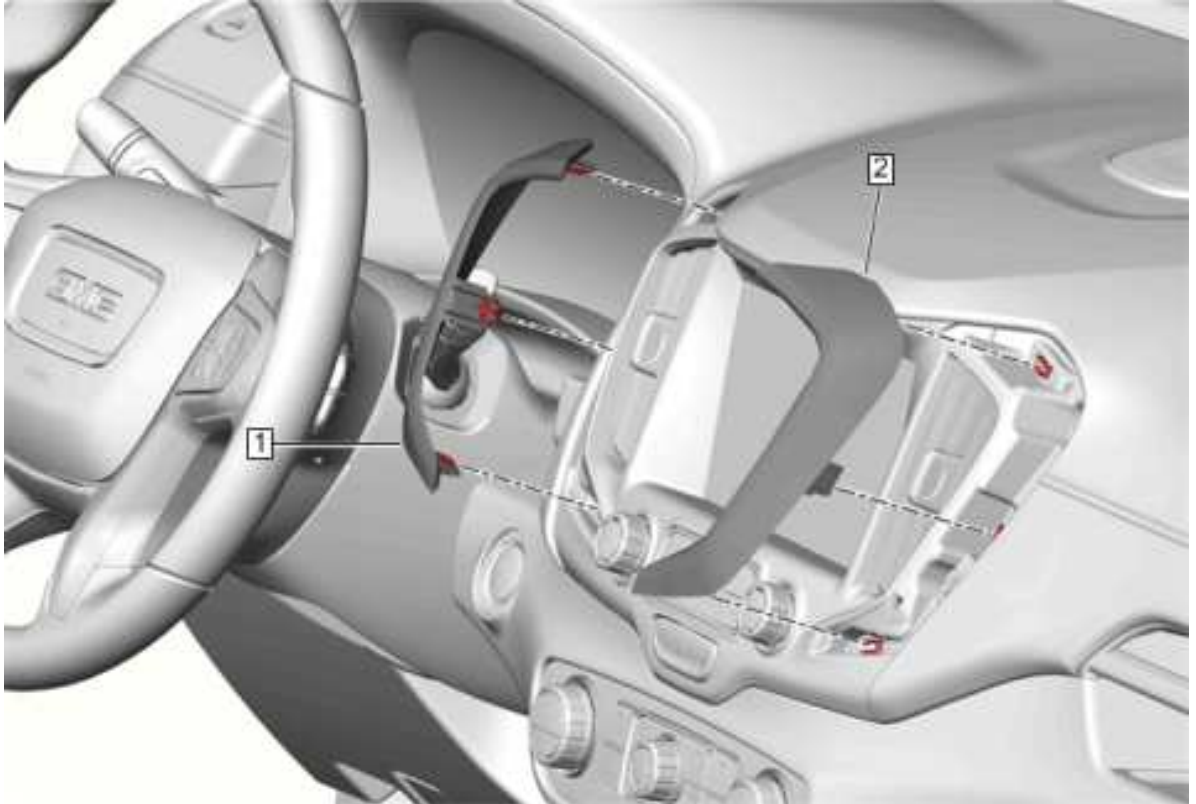


Fig. 620: Instrument Panel Center Trim Plate Appliques

Courtesy of GENERAL MOTORS COMPANY

41. Install Instrument Panel Center Trim Plate Applique - Left Side (1) - [Instrument Panel Center Trim Plate Applique Replacement \(Terrain\)](#)
42. Install Instrument Panel Center Trim Plate Applique - Right Side (2) - [Instrument Panel Center Trim Plate Applique Replacement \(Terrain\)](#)



Fig. 621: Left Side Instrument Panel Trim Pad

Courtesy of GENERAL MOTORS COMPANY

43. Install Instrument Panel Trim Pad - Left Side (1) - [Instrument Panel Trim Pad Replacement - Left Side \(Terrain\)](#)

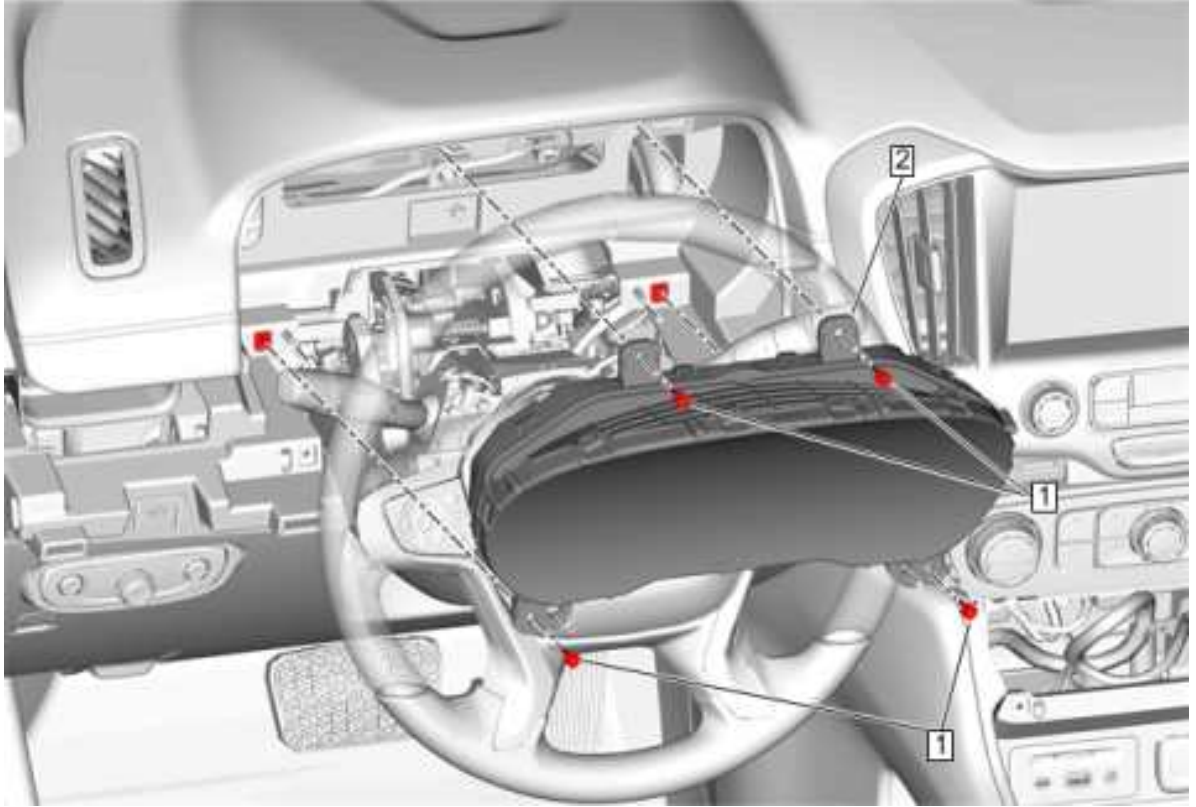


Fig. 622: Instrument Cluster And Screws
Courtesy of GENERAL MOTORS COMPANY

44. Install Instrument Cluster (2) - **Instrument Cluster Replacement (Terrain)**



Fig. 623: Instrument Panel Cluster Trim Plate
Courtesy of GENERAL MOTORS COMPANY

45. Install Instrument Panel Cluster Trim Plate (1) - **Instrument Panel Cluster Trim Plate Replacement (Terrain)**

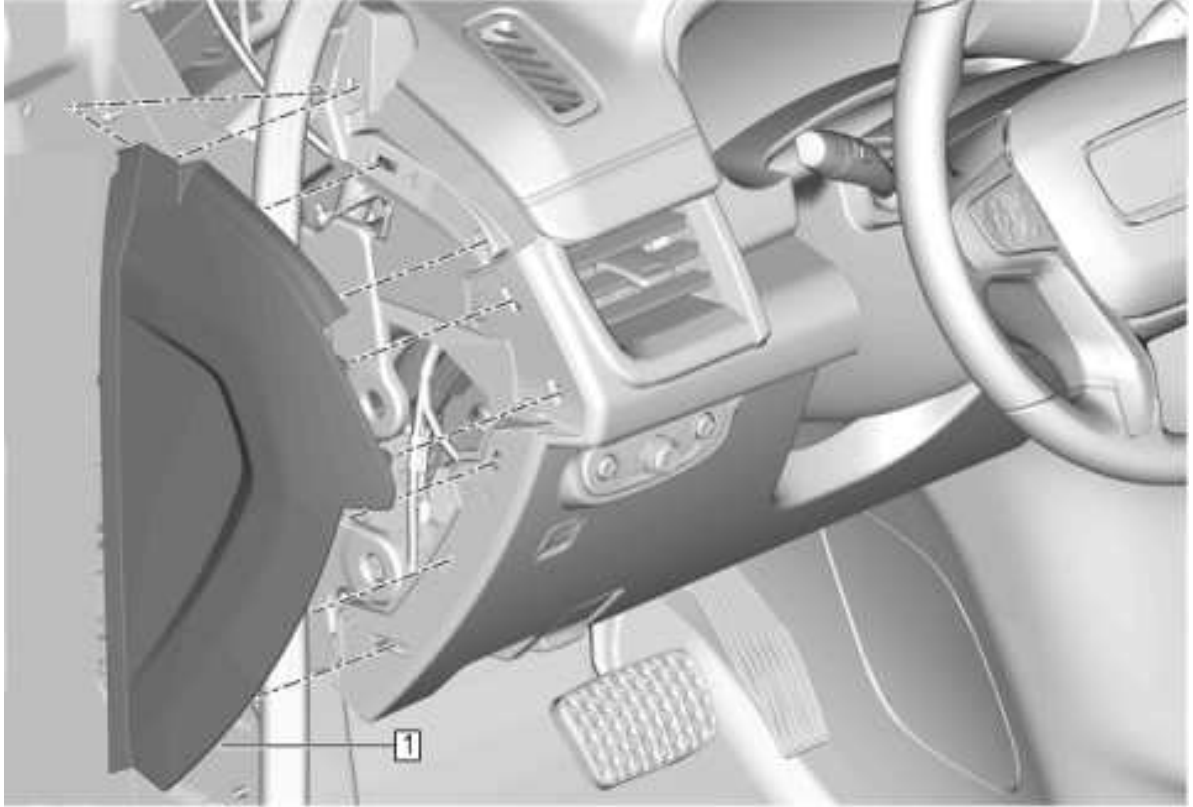


Fig. 624: Instrument Panel Outer Trim Cover (Terrain)
 Courtesy of GENERAL MOTORS COMPANY

46. Install the left and right instrument panel outer trim cover (1). [Instrument Panel Outer Trim Cover Replacement \(Terrain\)](#)
47. Install the left and right side windshield garnish molding. [Windshield Garnish Molding Replacement \(Terrain\)](#)
48. Install Drivers Seat and Passengers Seat - [Driver or Passenger Seat Removal and Installation](#)

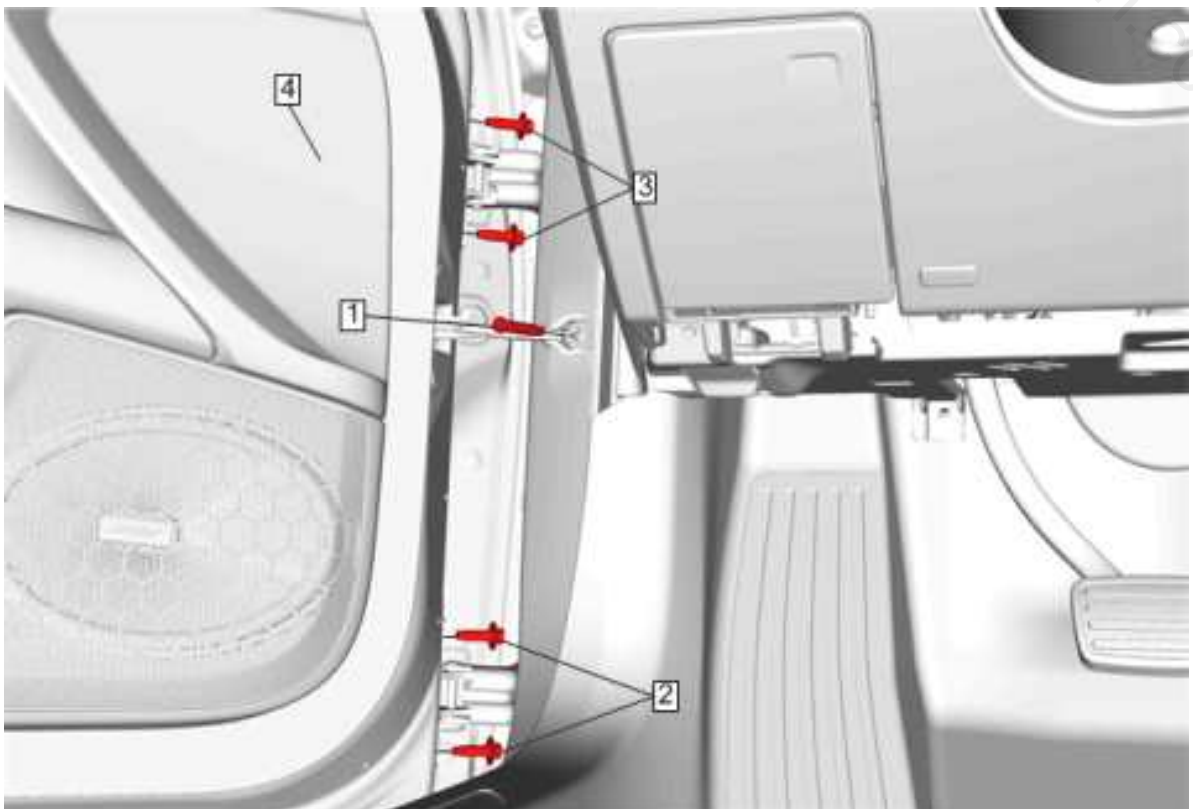


Fig. 625: Front Side Door
 Courtesy of GENERAL MOTORS COMPANY

49. Install the left and right front side door (4). [Front Side Door Replacement](#)

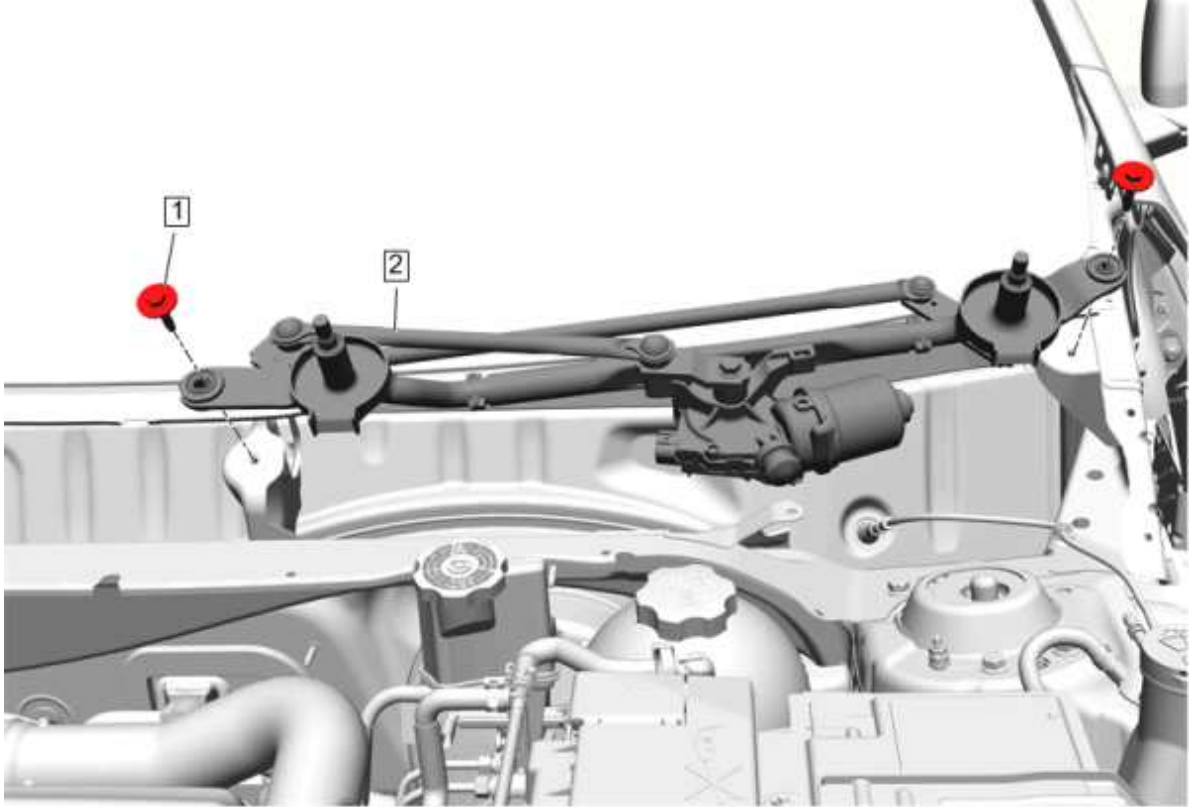


Fig. 626: Windshield Wiper Transmission
Courtesy of GENERAL MOTORS COMPANY

50. Install Windshield Wiper Transmission (2) - [Windshield Wiper Transmission Replacement](#)

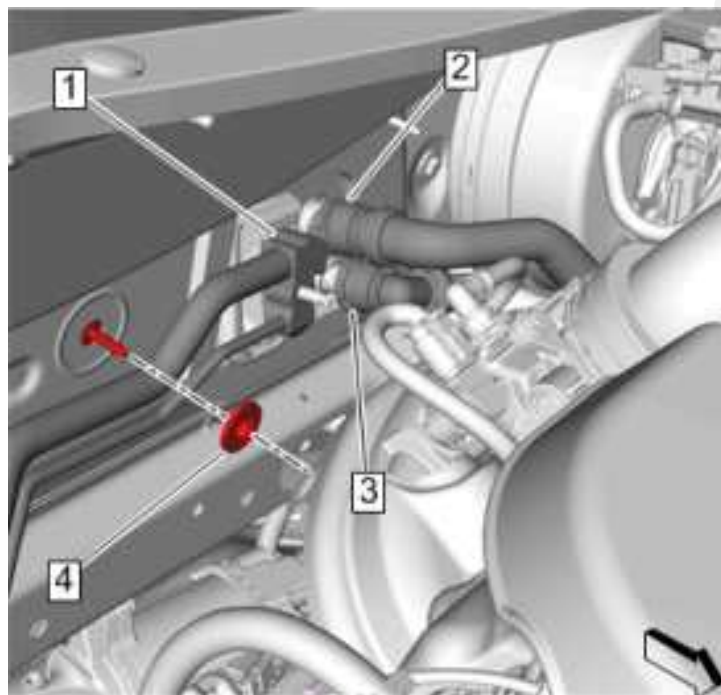


Fig. 627: Air Conditioning Refrigerant Heat Exchanger
Courtesy of GENERAL MOTORS COMPANY

51. Install Heater Outlet Hose (3) @Heater Core Outlet Tube - [Heater Outlet Hose Replacement \(LYX without KL9\)](#)
52. Install Heater Inlet Hose (2) @Heater Core Inlet Tube - [Heater Inlet Hose Replacement \(LYX AWD without KL9\)](#)[Heater Inlet Hose Replacement \(LYX with KL9\)](#)
53. Install Air Conditioning Refrigerant Heat Exchanger (1) @Air Conditioning Evaporator Thermal Expansion Valve - [Air Conditioning Refrigerant Heat Exchanger Replacement \(LYX\)](#)
54. Fill the cooling system to the proper level. [Cooling System Draining and Filling \(GE 47716\)](#) [Cooling System Draining and Filling \(Static\)](#) .
55. Evacuate and charge the refrigerant system. [Refrigerant Recovery and Recharging \(R-134a\)](#)[Refrigerant Recovery and Recharging \(R-1234yf\)](#)

56. Connect the battery negative cable. [Battery Negative Cable Disconnection and Connection \(KL9\)](#).
57. Inspect for coolant leaks.
58. Visually inspect for air conditioning system refrigerant leaks.

HEATER AND AIR CONDITIONING EVAPORATOR AND BLOWER MODULE REMOVAL AND INSTALLATION (EQUINOX LYX WITH KL9)

Removal Procedure

1. Disconnect the battery negative cable. [Battery Negative Cable Disconnection and Connection \(KL9\)](#).
2. Recover the refrigerant. [Refrigerant Recovery and Recharging \(R-134a\)](#) [Refrigerant Recovery and Recharging \(R-1234yf\)](#).
3. Drain the cooling system. [Cooling System Draining and Filling \(GE 47716\)](#) [Cooling System Draining and Filling \(Static\)](#).

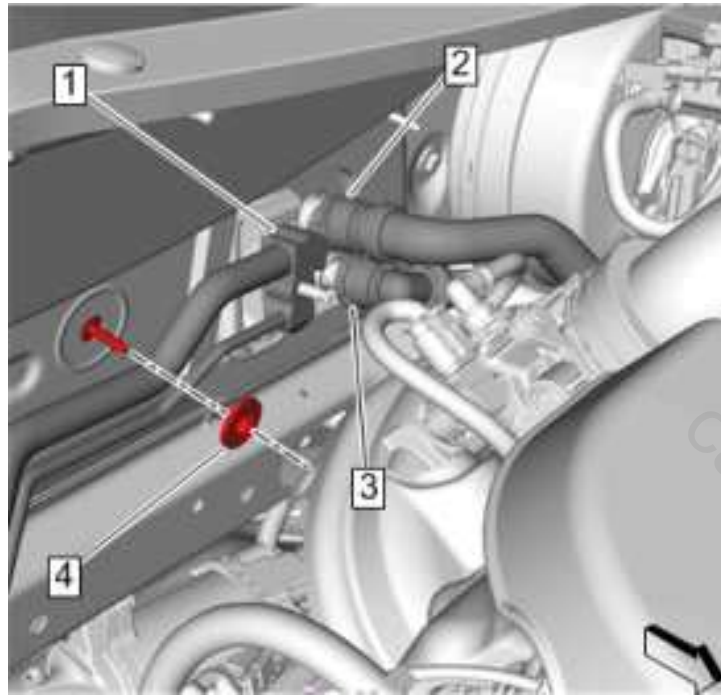


Fig. 628: Air Conditioning Refrigerant Heat Exchanger
Courtesy of GENERAL MOTORS COMPANY

4. Remove Air Conditioning Refrigerant Heat Exchanger (1) @Air Conditioning Evaporator Thermal Expansion Valve - [Air Conditioning Refrigerant Heat Exchanger Replacement \(LYX\)](#).
5. Remove Heater Inlet Hose (2) @Heater Core Inlet Tube - [Heater Inlet Hose Replacement \(LYX with KL9\)](#).
6. Remove Heater Water Auxiliary Pump Hose (3) @Heater Core Outlet Tube - [Heater Water Auxiliary Pump Hose Replacement \(LYX with KL9\)](#).
7. Remove Heater and Air Conditioning Evaporator and Blower Module Nut (4) @Cowl Panel

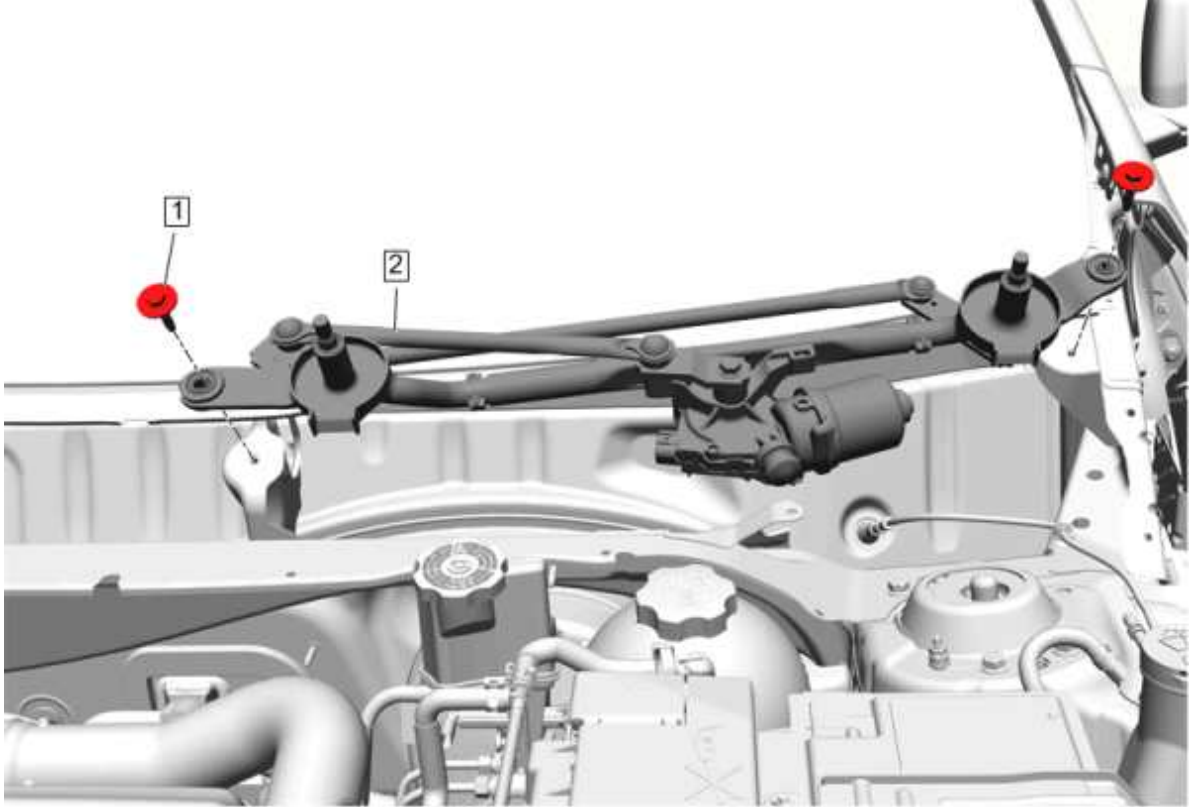


Fig. 629: Windshield Wiper Transmission
 Courtesy of GENERAL MOTORS COMPANY

8. Remove Windshield Wiper Transmission (2) - [Windshield Wiper Transmission Replacement](#)

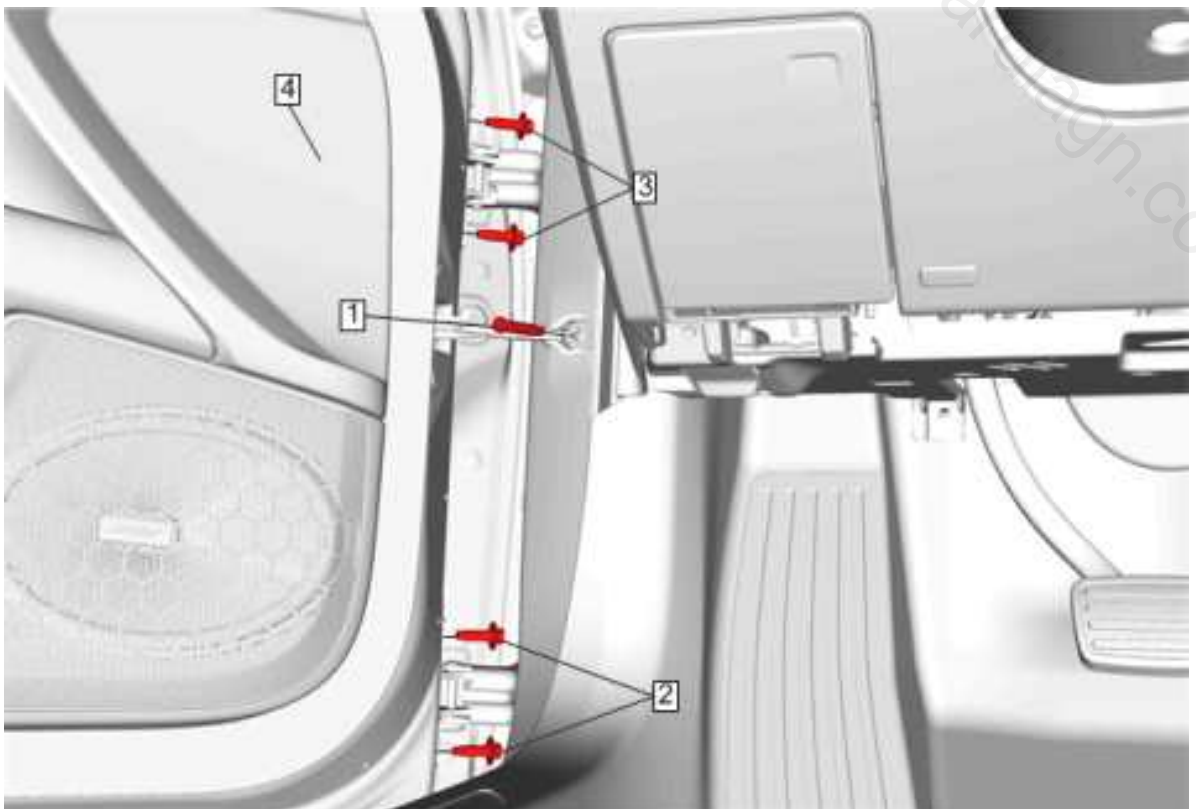


Fig. 630: Front Side Door
 Courtesy of GENERAL MOTORS COMPANY

9. Remove the left and right front side door (4). [Front Side Door Replacement](#)
 10. Remove Drivers Seat and Passengers Seat - [Driver or Passenger Seat Removal and Installation](#)

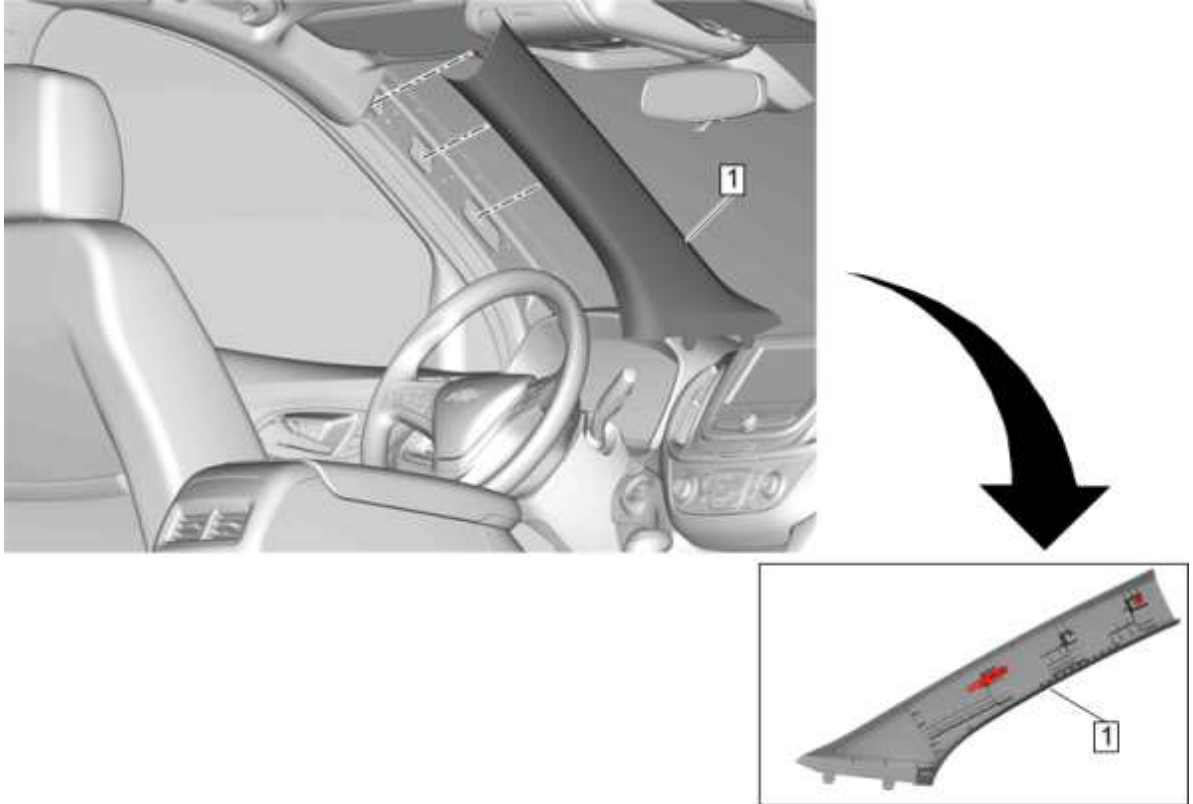


Fig. 631: Windshield Garnish Molding Replacement (Equinox)
 Courtesy of GENERAL MOTORS COMPANY

11. Remove the left and right side windshield garnish molding (4). [Windshield Garnish Molding Replacement \(Equinox\)](#)



Fig. 632: Left And Right Instrument Panel Outer Trim Cover
 Courtesy of GENERAL MOTORS COMPANY

12. Remove the left and right instrument panel outer trim cover (1). [Instrument Panel Outer Trim Cover Replacement \(Equinox\)](#)

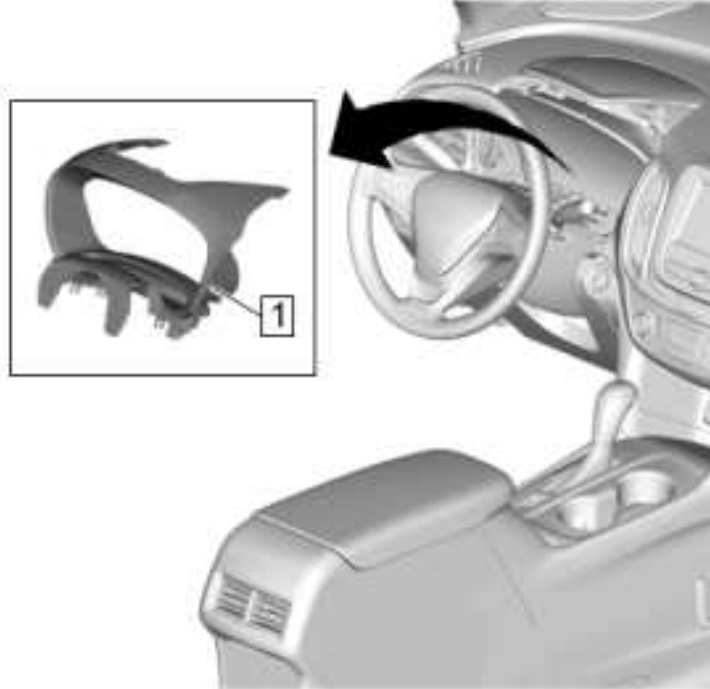


Fig. 633: Instrument Panel Cluster Trim Plate
 Courtesy of GENERAL MOTORS COMPANY

13. Remove Instrument Panel Cluster Trim Plate (1) - [Instrument Panel Cluster Trim Plate Replacement \(Equinox\)](#)



Fig. 634: Instrument Panel Knee Bolster
 Courtesy of GENERAL MOTORS COMPANY

14. Remove Instrument Panel Knee Bolster (1) - [Instrument Panel Knee Bolster Replacement \(Equinox\)](#)

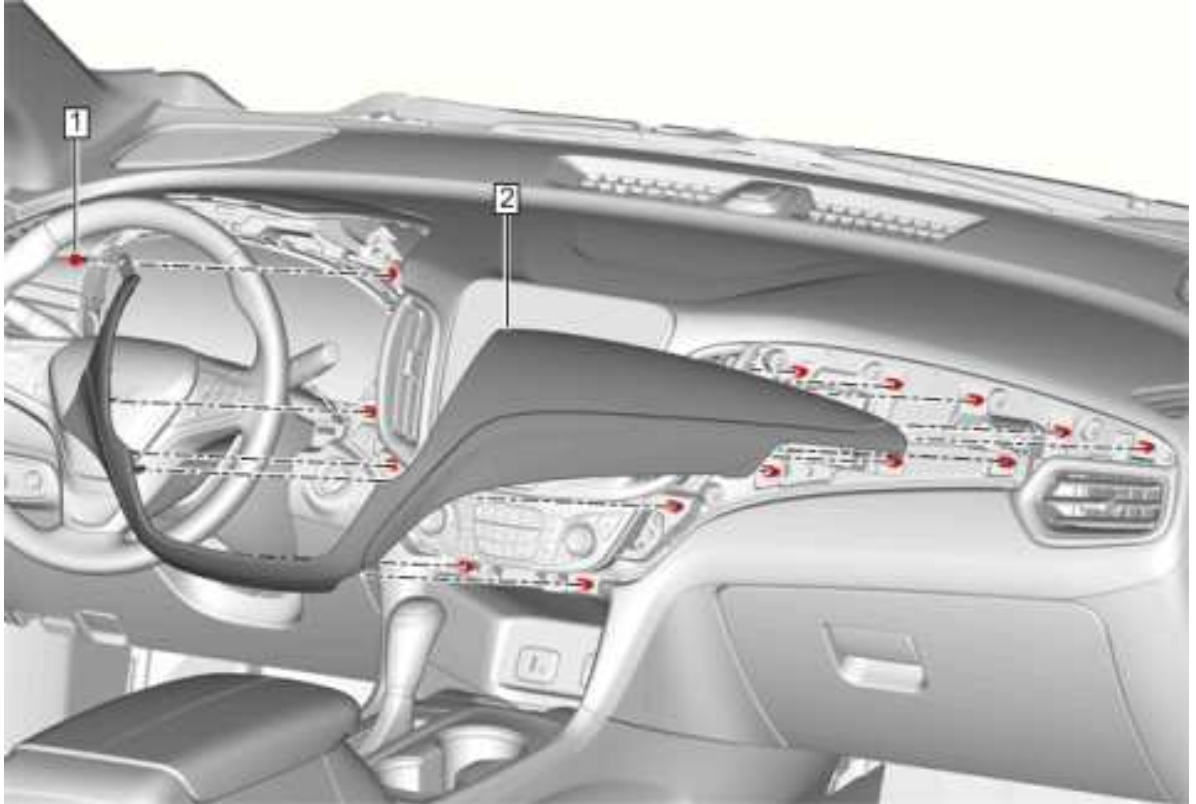


Fig. 635: Right Side Instrument Panel Trim Pad
 Courtesy of GENERAL MOTORS COMPANY

15. Remove Instrument Panel Trim Pad - Right Side (2) - [Instrument Panel Trim Pad Replacement - Right Side \(Equinox\)](#)

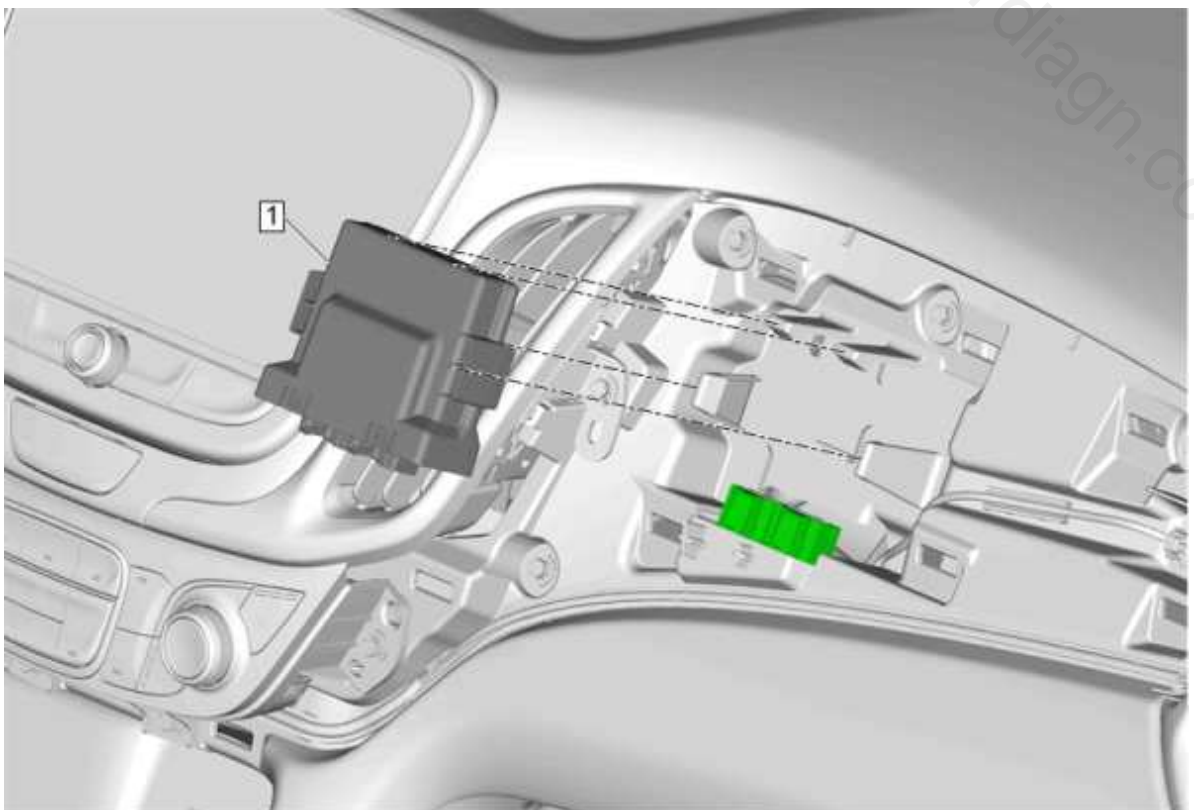


Fig. 636: Serial Data Gateway Module
 Courtesy of GENERAL MOTORS COMPANY

16. Remove Serial Data Gateway Module (1) - [Serial Data Gateway Module Replacement \(Equinox\)](#)

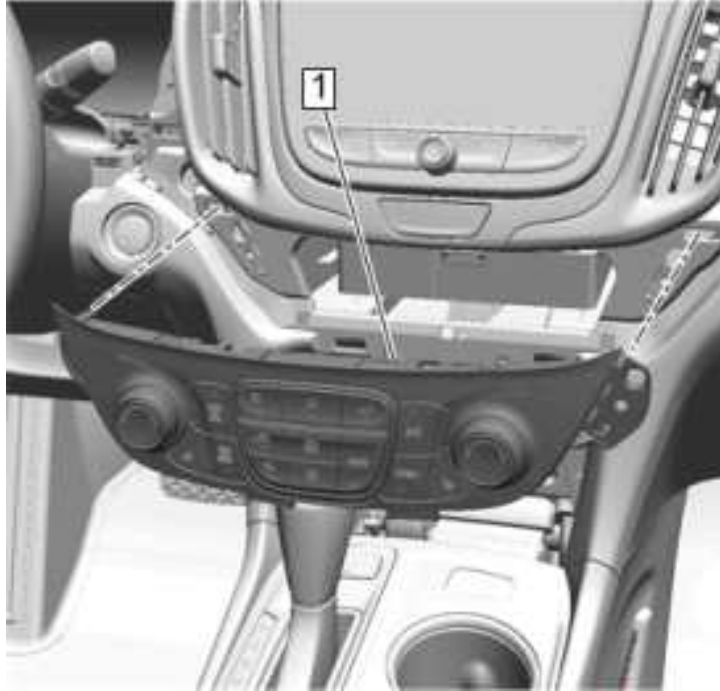


Fig. 637: Heater and Air Conditioning User Interface Control
 Courtesy of GENERAL MOTORS COMPANY

17. Remove Heater and Air Conditioning User Interface Control (1) - **Heater and Air Conditioning User Interface Control Replacement (Equinox)**

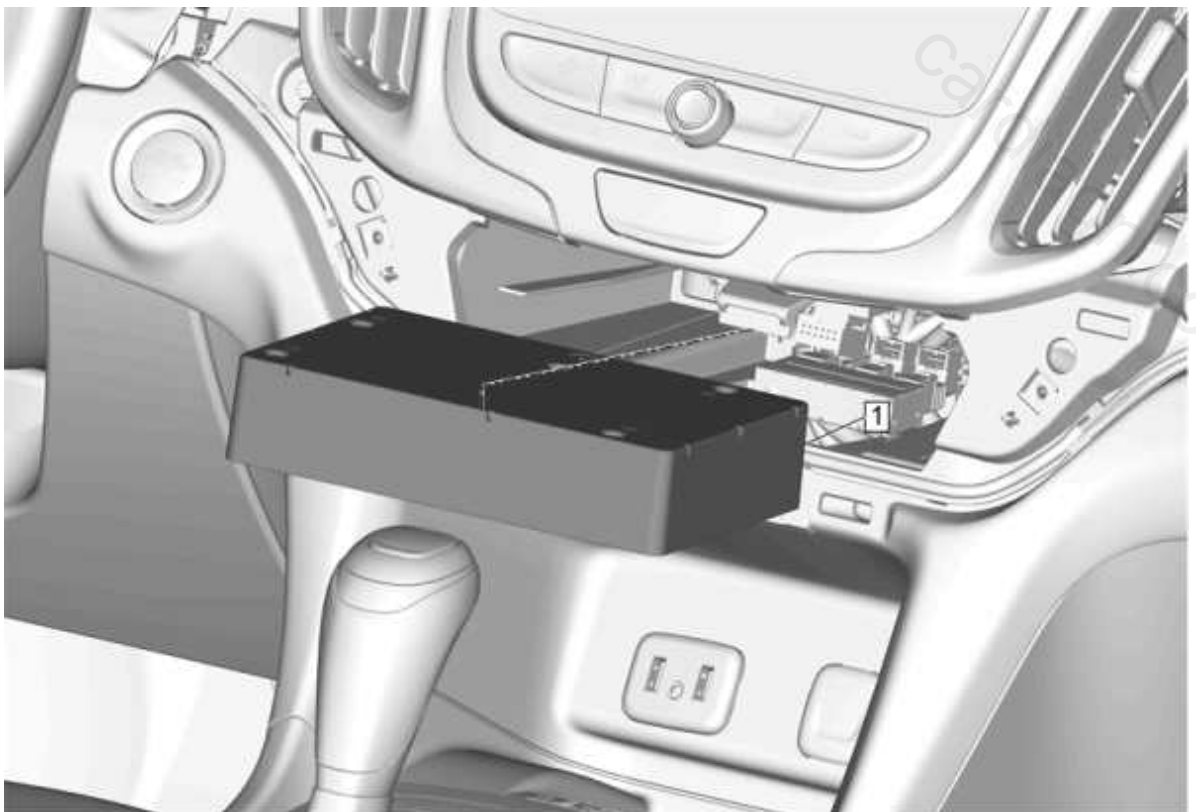


Fig. 638: Communication Interface Module
 Courtesy of GENERAL MOTORS COMPANY

18. Remove Communication Interface Module (1) - **Communication Interface Module Replacement (Equinox)**



Fig. 639: Radio Control Assembly
 Courtesy of GENERAL MOTORS COMPANY

19. Remove Radio Control Assembly (1) - [Radio Control Assembly Replacement \(Equinox\)](#)

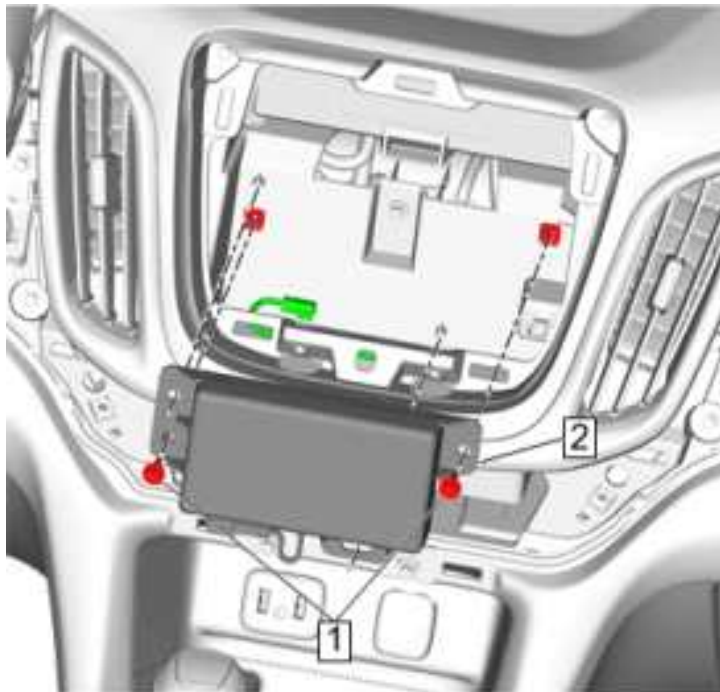


Fig. 640: Communication Interface Module Battery And Screws
 Courtesy of GENERAL MOTORS COMPANY

20. Remove Communication Interface Module Battery (2) [Communication Interface Module Battery Replacement](#)



Fig. 641: Heater And Air Conditioning Remote Control
 Courtesy of GENERAL MOTORS COMPANY

21. Remove Heater and Air Conditioning Remote Control (1) - [Heater and Air Conditioning Remote Control Replacement \(Equinox\)](#)

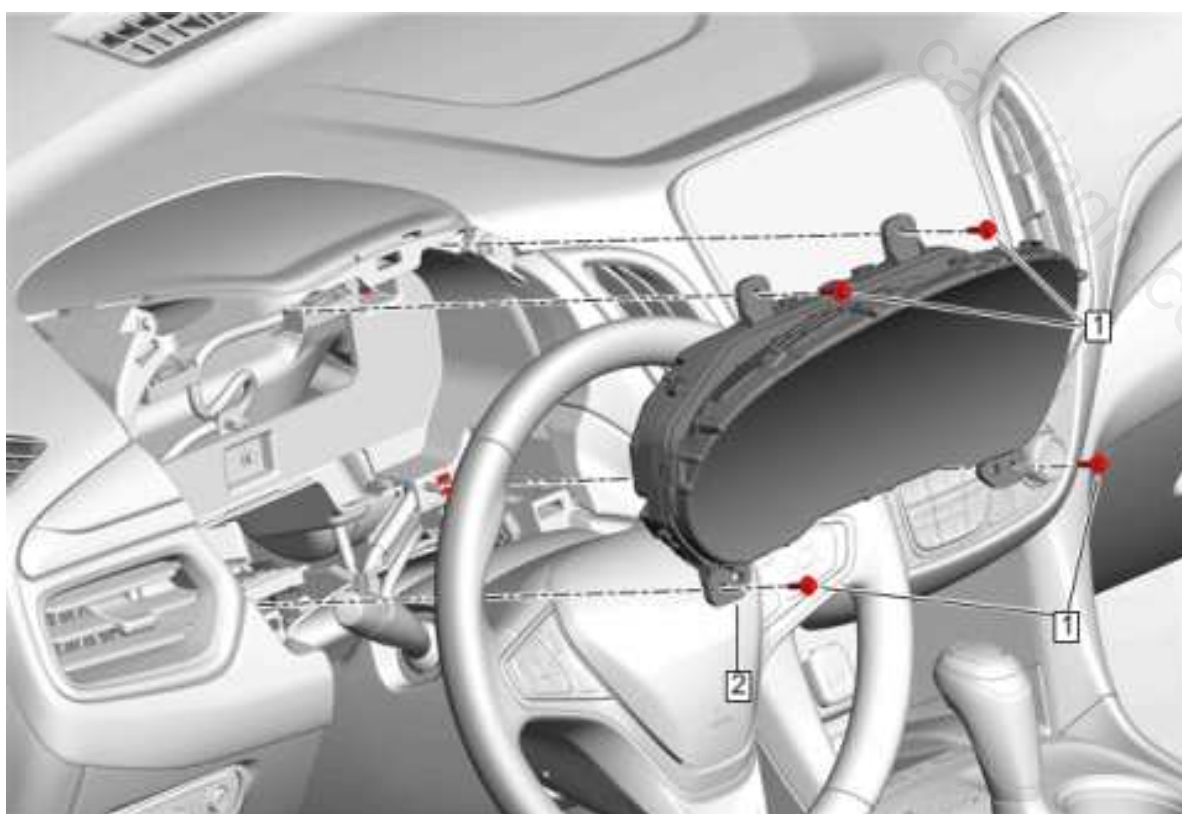


Fig. 642: Instrument Cluster And Screws
 Courtesy of GENERAL MOTORS COMPANY

22. Remove Instrument Cluster (2) - [Instrument Cluster Replacement \(Equinox\)](#)

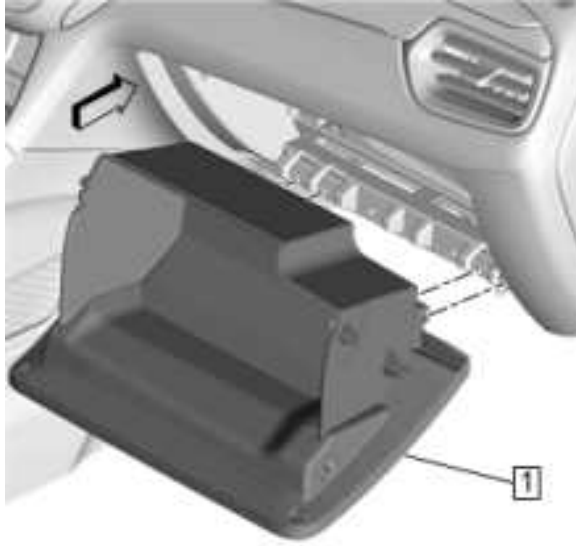


Fig. 643: Instrument Panel Compartment Door
 Courtesy of GENERAL MOTORS COMPANY

23. Remove Instrument Panel Compartment Door (1) - **Instrument Panel Compartment Door Replacement (Equinox)**

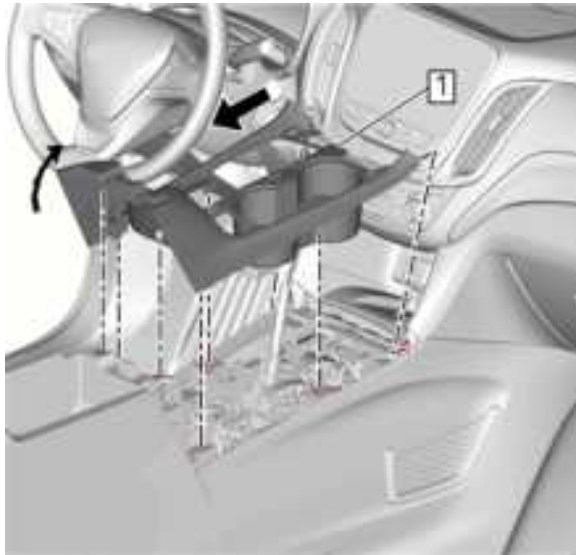


Fig. 644: Front Floor Console Applique
 Courtesy of GENERAL MOTORS COMPANY

24. Remove Front Floor Console Applique (1) - **Front Floor Console Applique Replacement (Equinox)**

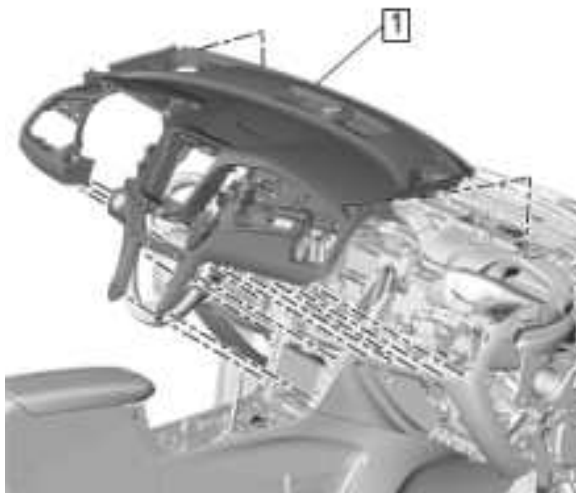


Fig. 645: Instrument Panel Upper Trim Panel
 Courtesy of GENERAL MOTORS COMPANY

25. Remove Instrument Panel Upper Trim Panel (1) - [Instrument Panel Upper Trim Panel Replacement \(Equinox\)](#).

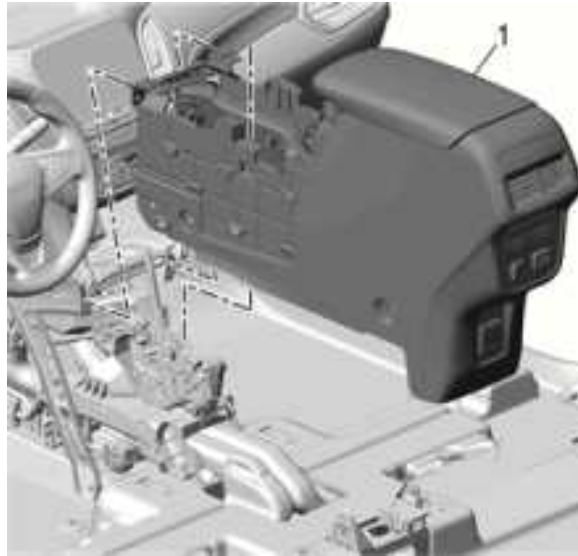


Fig. 646: Front Floor Console

Courtesy of GENERAL MOTORS COMPANY

26. Remove Front Floor Console (1) - [Front Floor Console Replacement \(Equinox\)](#)

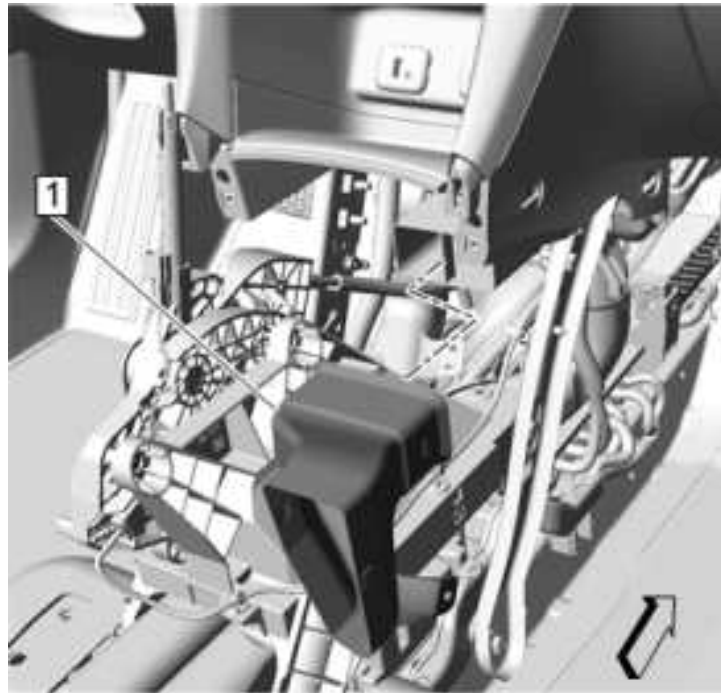


Fig. 647: Front Floor Console Rear Air Duct

Courtesy of GENERAL MOTORS COMPANY

27. Remove Front Floor Console Rear Air Duct (1) - [Front Floor Console Rear Air Duct Replacement \(Equinox Front\)](#)[Front Floor Console Rear Air Duct Replacement \(Equinox Rear\)](#)

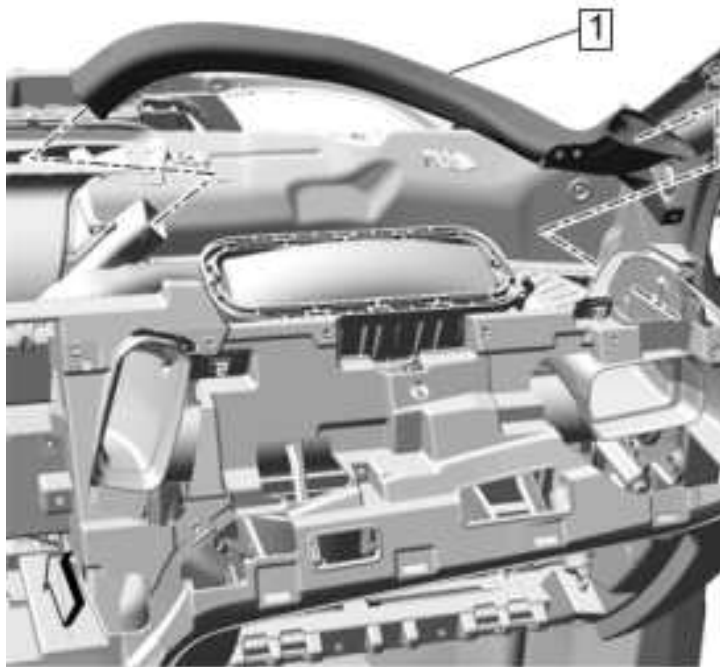


Fig. 648: Right Side Window Defogger Outlet Duct
 Courtesy of GENERAL MOTORS COMPANY

28. Remove Side Window Defogger Outlet Duct - Right Side (1) - [Side Window Defogger Outlet Duct Replacement - Right Side \(Equinox\)](#)



Fig. 649: Left Side Window Defogger Outlet Duct
 Courtesy of GENERAL MOTORS COMPANY

29. Remove Side Window Defogger Outlet Duct - Left Side (1) - [Side Window Defogger Outlet Duct Replacement - Left Side \(Equinox\)](#)

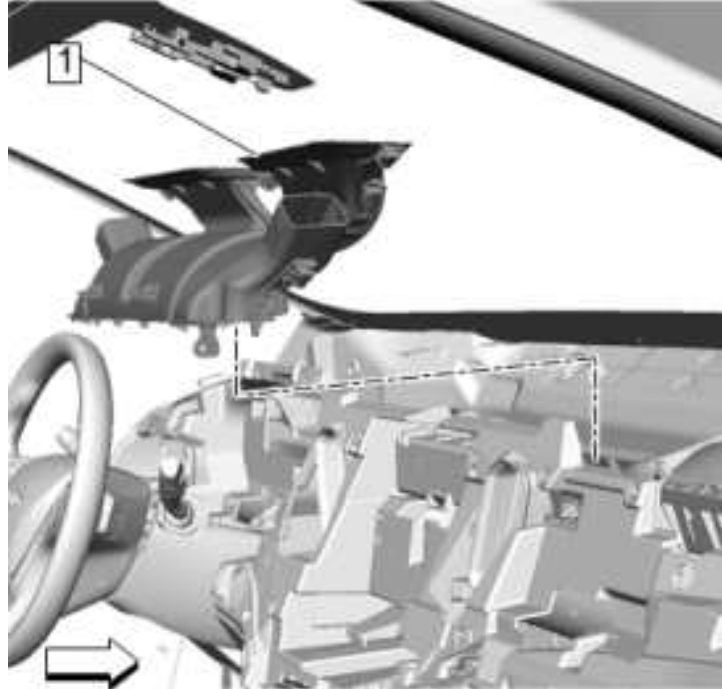


Fig. 650: Windshield Defroster Outlet Duct
 Courtesy of GENERAL MOTORS COMPANY

30. Remove Windshield Defroster Outlet Duct (1) - [Windshield Defroster Outlet Duct Replacement \(Equinox\)](#)

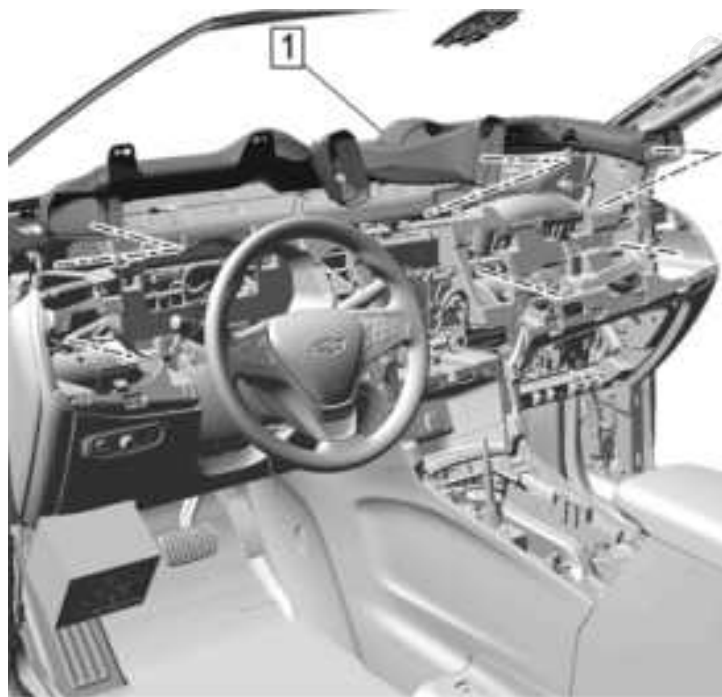


Fig. 651: Instrument Panel Center Air Outlet Duct
 Courtesy of GENERAL MOTORS COMPANY

31. Remove Instrument Panel Center Air Outlet Duct (1) - [Instrument Panel Center Air Outlet Duct Replacement \(Equinox\)](#)

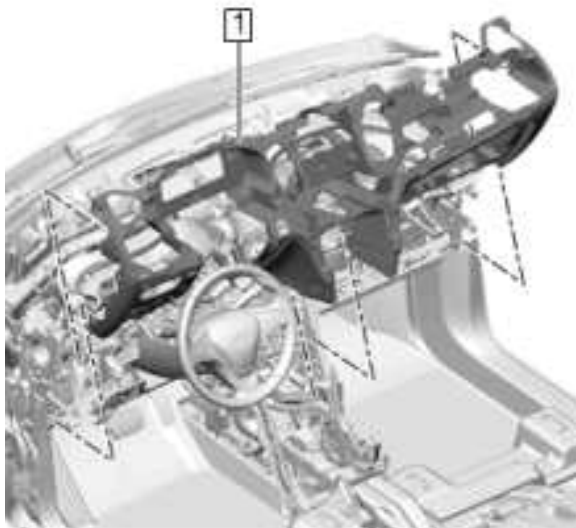


Fig. 652: Instrument Panel

Courtesy of GENERAL MOTORS COMPANY

32. Remove Instrument Panel (1) - [Instrument Panel Assembly Replacement \(Equinox\)](#)

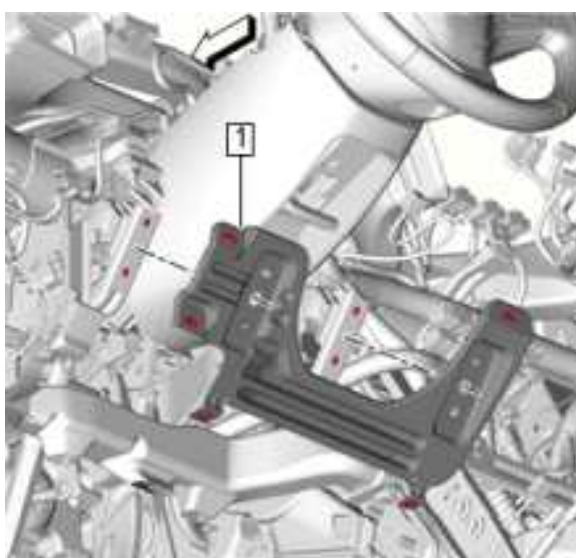


Fig. 653: Instrument Panel Knee Bolster Deflector

Courtesy of GENERAL MOTORS COMPANY

33. Remove Instrument Panel Knee Bolster Deflector (1) - [Instrument Panel Knee Bolster Deflector Replacement \(Equinox\)](#)

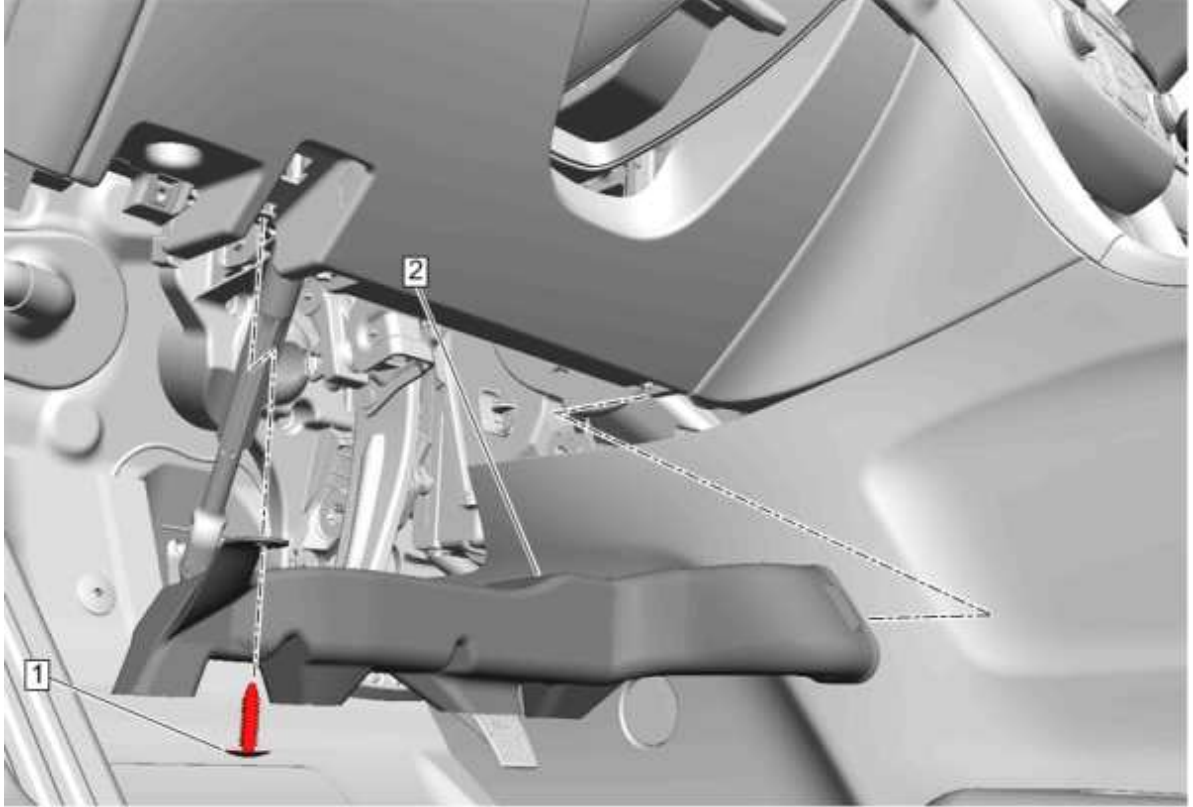


Fig. 654: Floor Front Air Outlet Duct
Courtesy of GENERAL MOTORS COMPANY

34. Remove Floor Front Air Outlet Duct - Left Side (2) - [Floor Front Air Outlet Duct Replacement - Left Side](#)

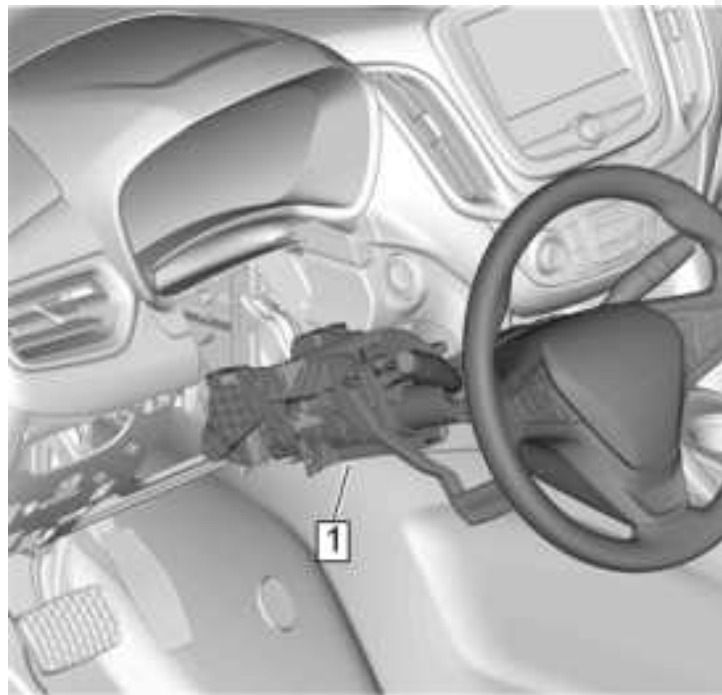


Fig. 655: Steering Column
Courtesy of GENERAL MOTORS COMPANY

35. Remove Steering Column (1) - [Steering Column Replacement \(Equinox\)](#)

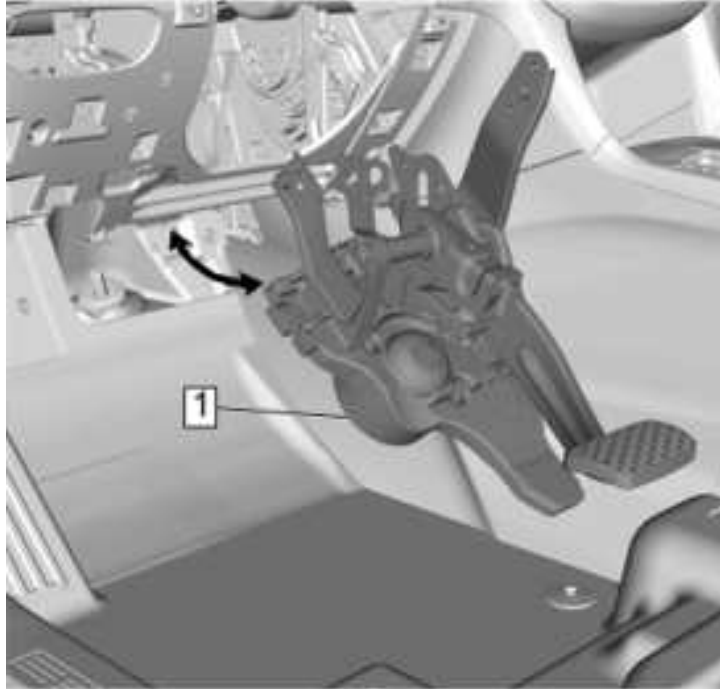


Fig. 656: Brake Pedal Assembly

Courtesy of GENERAL MOTORS COMPANY

36. Remove Brake and Accelerator Pedal Assembly (1) - [Brake Pedal Assembly Replacement](#)

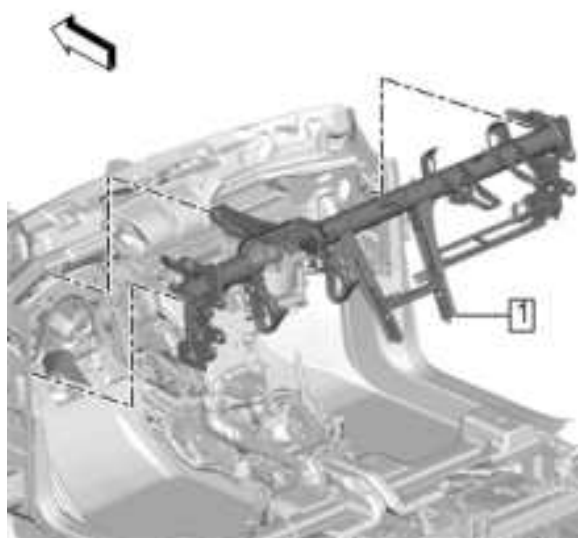


Fig. 657: Instrument Panel Tie Bar

Courtesy of GENERAL MOTORS COMPANY

37. Disconnect the instrument panel wiring connectors.
 38. Remove Instrument Panel Tie Bar (1) - [Instrument Panel Tie Bar Replacement \(Equinox\)](#)

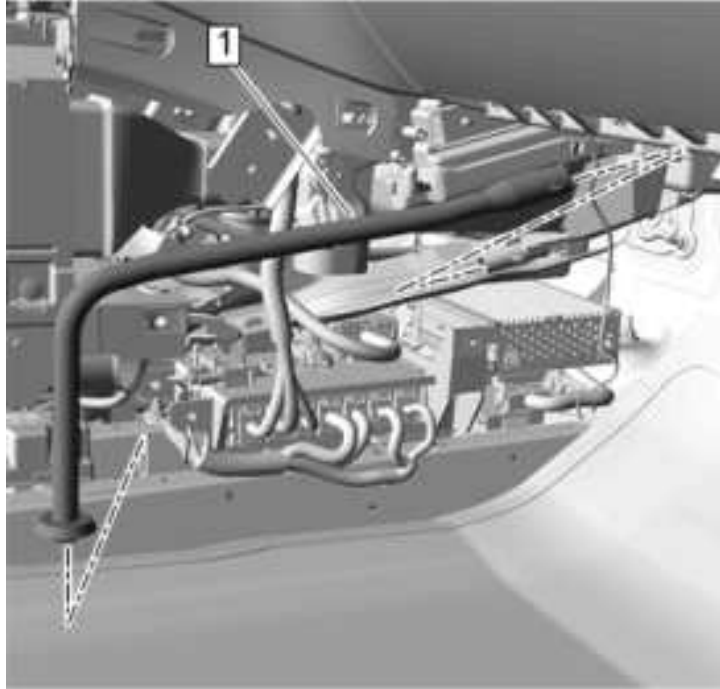


Fig. 658: Air Conditioning Evaporator and Blower Module Drain Hose
Courtesy of GENERAL MOTORS COMPANY

CAUTION: Refer to [HVAC Module Drain Tube Caution](#) .

39. Prior to removing the air conditioning evaporator and blower module drain tube/hose, use clean and absorbent shop clothes/towels to cover the electrical components protecting the electrical components from water damage.
40. Remove Air Conditioning Evaporator and Blower Module Drain Hose (1) @Heater and Air Conditioning Evaporator and Blower Module
41. Support the heater and air conditioning evaporator and blower (HVAC) module assembly.

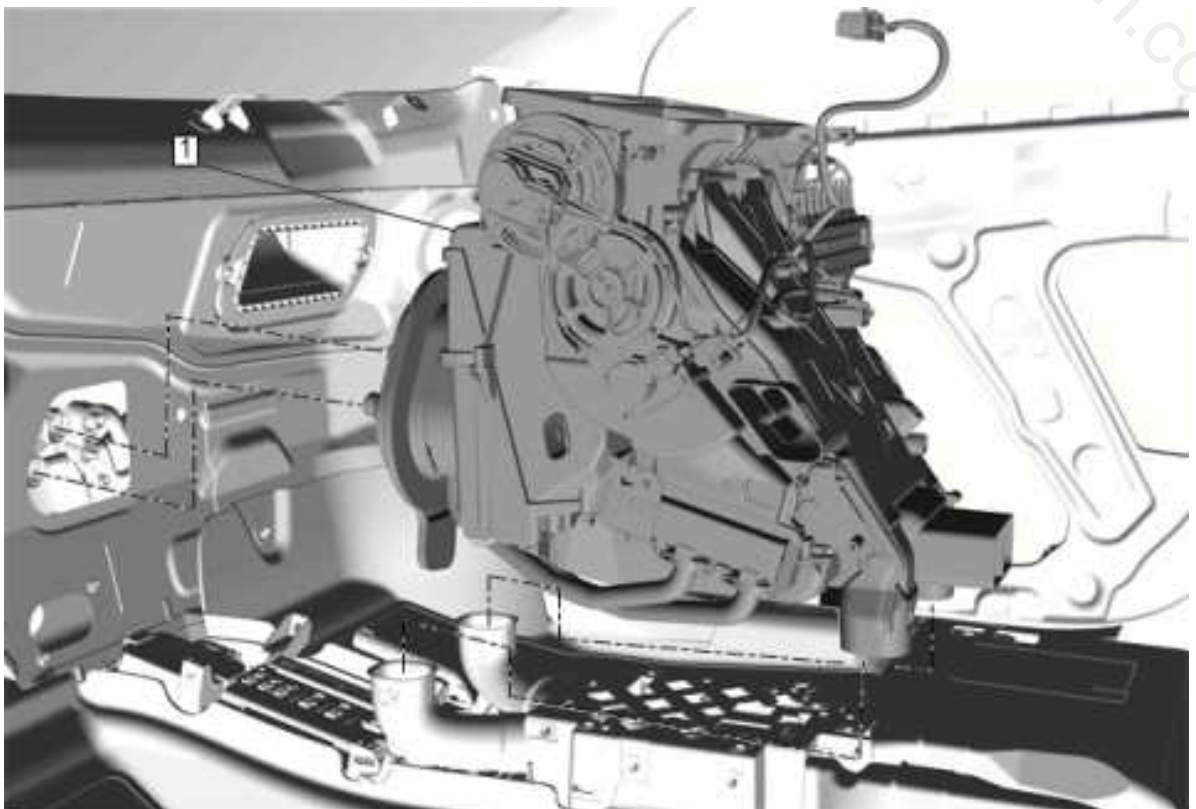


Fig. 659: Heater and Air Conditioning Evaporator and Blower Module
Courtesy of GENERAL MOTORS COMPANY

42. Remove Heater and Air Conditioning Evaporator and Blower Module (1) - from the vehicle.
43. Transfer all necessary components.

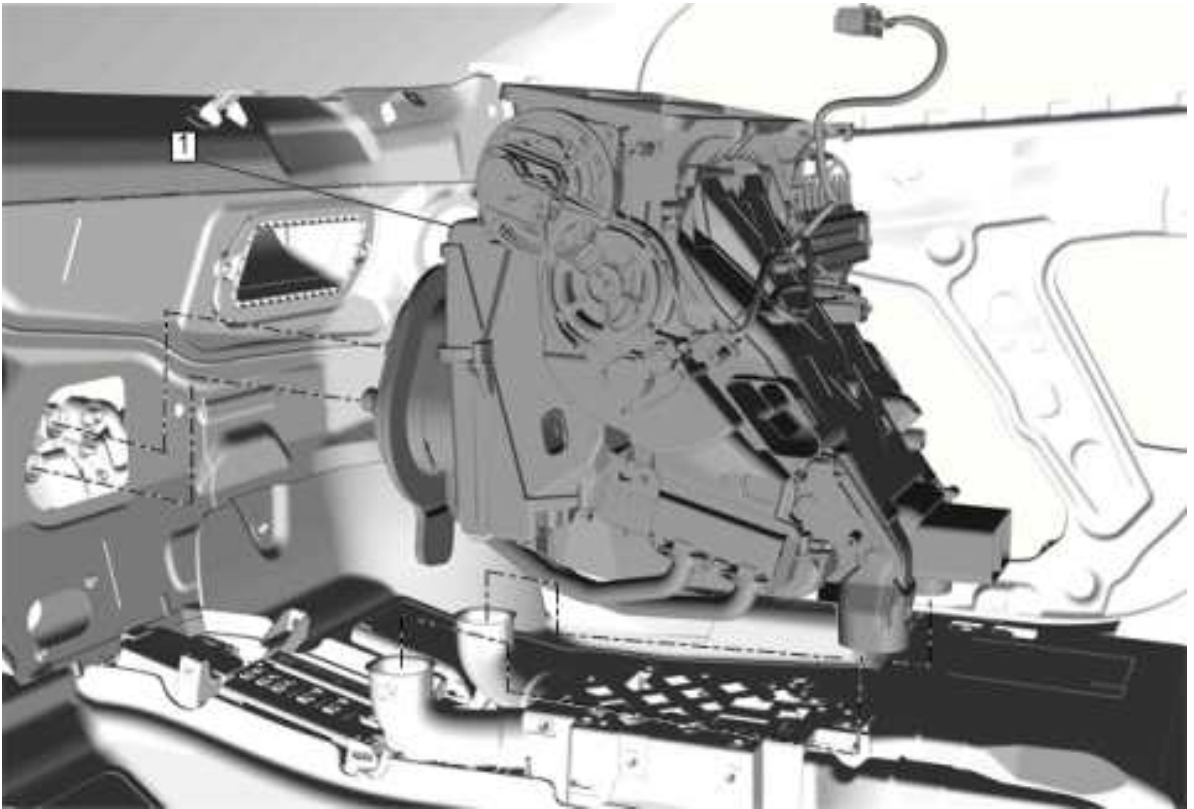


Fig. 660: Heater and Air Conditioning Evaporator and Blower Module
Courtesy of GENERAL MOTORS COMPANY

1. Install Heater and Air Conditioning Evaporator and Blower Module (1) - onto the vehicle.
2. Temporarily support HVAC module assembly.



Fig. 661: Heater and Air Conditioning Evaporator and Blower Module Nut
Courtesy of GENERAL MOTORS COMPANY

CAUTION: Refer to **Fastener Caution** .

3. Install Heater and Air Conditioning Evaporator and Blower Module Nut (1) @Cowl Panel and tighten 9.0 N.m (80 lb in)

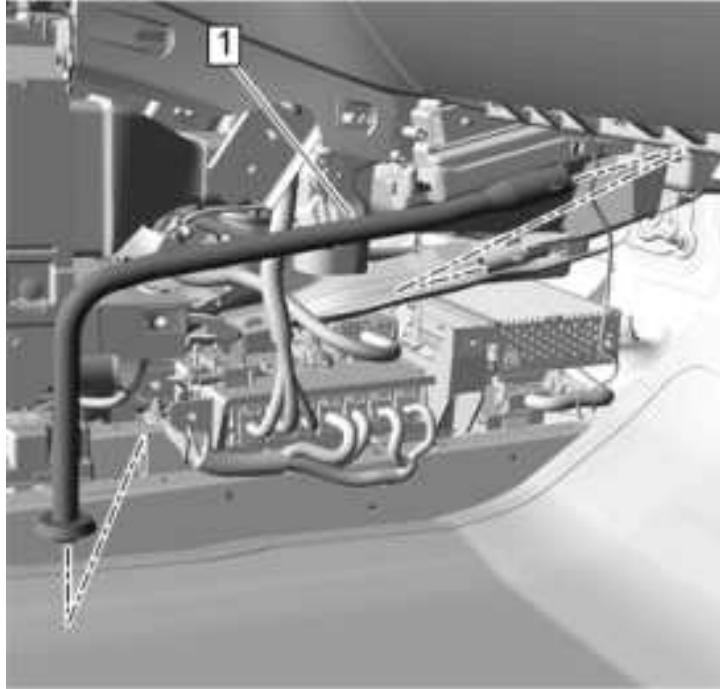


Fig. 662: Air Conditioning Evaporator and Blower Module Drain Hose
 Courtesy of GENERAL MOTORS COMPANY

CAUTION: Refer to [HVAC Module Drain Tube Caution](#) .

4. Install Air Conditioning Evaporator and Blower Module Drain Hose (1) @Heater and Air Conditioning Evaporator and Blower Module
5. Remove the absorbent shop clothes/towels covering the electrical components.

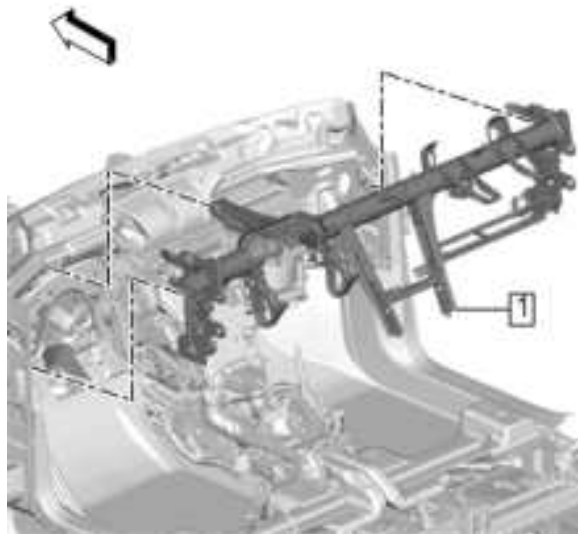


Fig. 663: Instrument Panel Tie Bar
 Courtesy of GENERAL MOTORS COMPANY

6. Install Instrument Panel Tie Bar (1) - [Instrument Panel Tie Bar Replacement \(Equinox\)](#)
7. Connect the instrument panel wiring connectors.

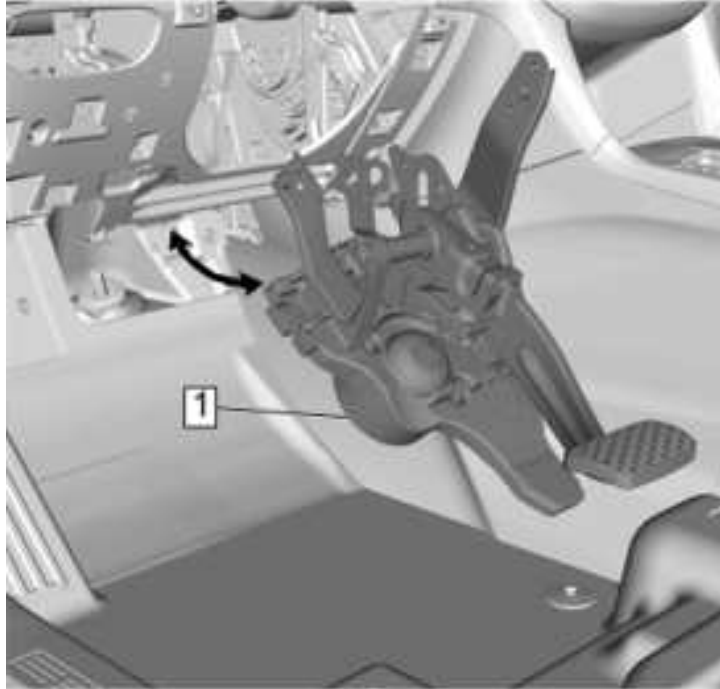


Fig. 664: Brake Pedal Assembly
Courtesy of GENERAL MOTORS COMPANY

8. Install Brake and Accelerator Pedal Assembly (1) - [Brake Pedal Assembly Replacement](#)

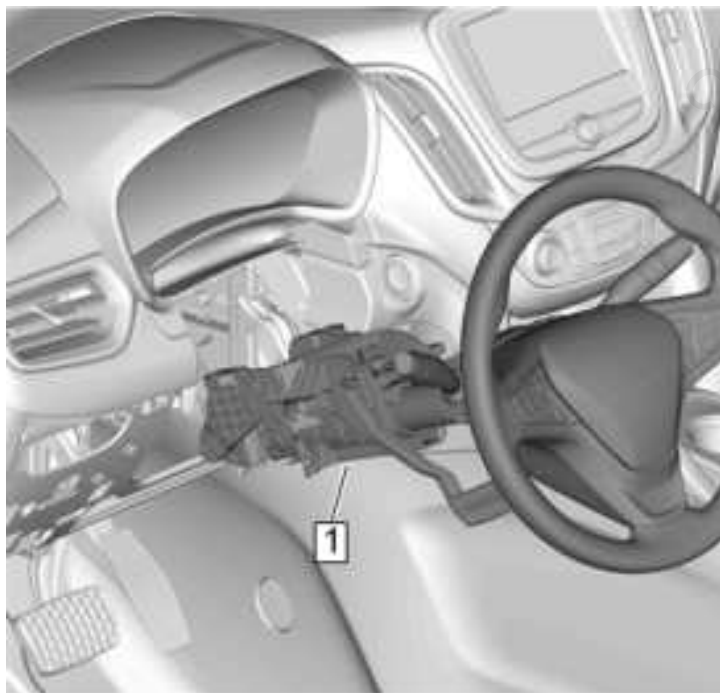


Fig. 665: Steering Column
Courtesy of GENERAL MOTORS COMPANY

9. Install Steering Column (1) - [Steering Column Replacement \(Equinox\)](#)

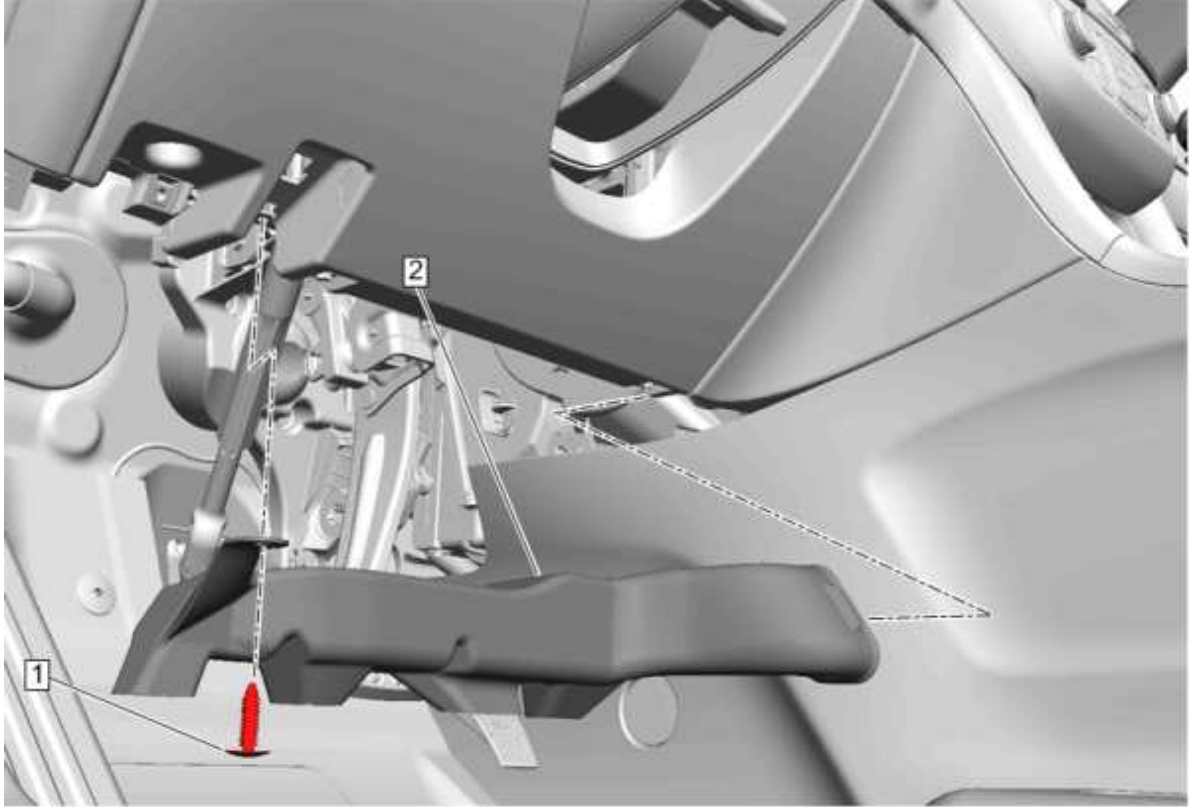


Fig. 666: Floor Front Air Outlet Duct
Courtesy of GENERAL MOTORS COMPANY

10. Install Floor Front Air Outlet Duct - Left Side (2) - **Floor Front Air Outlet Duct Replacement - Left Side**

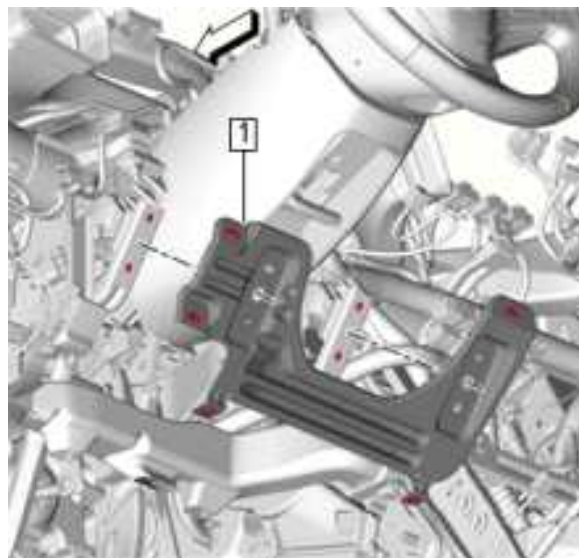


Fig. 667: Instrument Panel Knee Bolster Deflector
Courtesy of GENERAL MOTORS COMPANY

11. Install Instrument Panel Knee Bolster Deflector (1) - **Instrument Panel Knee Bolster Deflector Replacement (Equinox)**

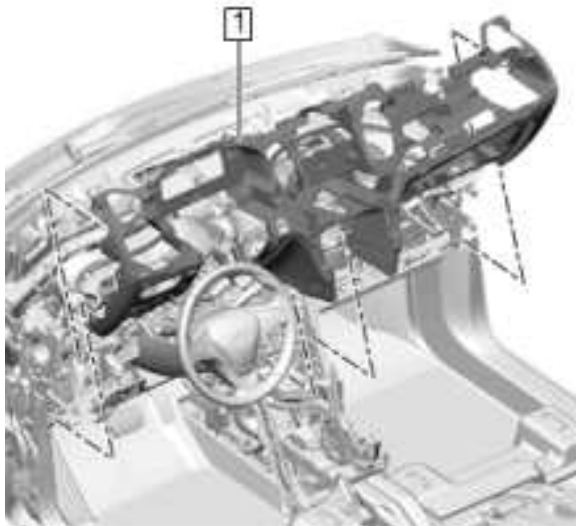


Fig. 668: Instrument Panel

Courtesy of GENERAL MOTORS COMPANY

12. Install Instrument Panel (1) - **Instrument Panel Assembly Replacement (Equinox)**

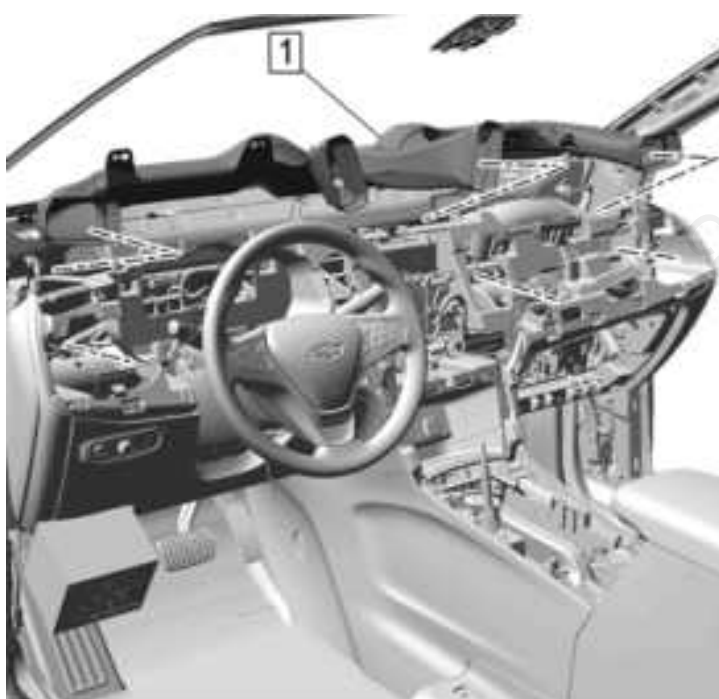


Fig. 669: Instrument Panel Center Air Outlet Duct

Courtesy of GENERAL MOTORS COMPANY

13. Install Instrument Panel Center Air Outlet Duct (1) - **Instrument Panel Center Air Outlet Duct Replacement (Equinox)**

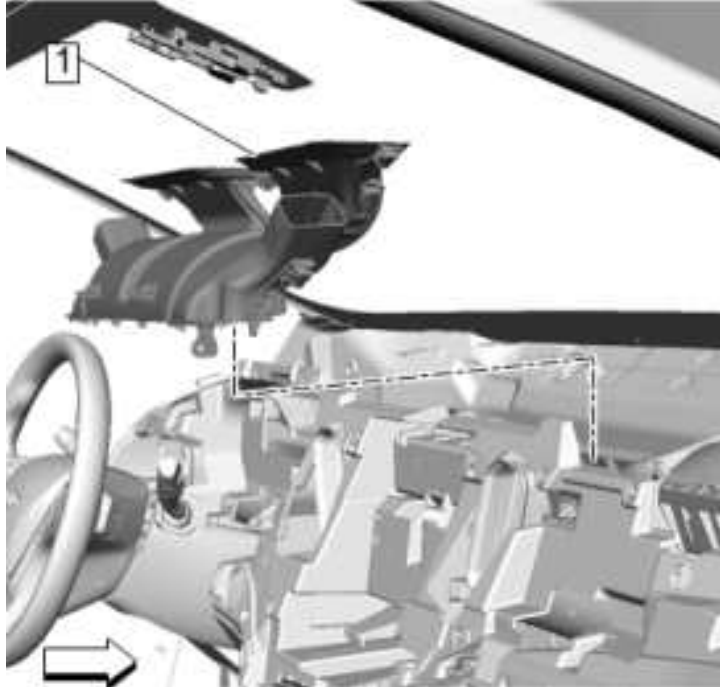


Fig. 670: Windshield Defroster Outlet Duct
 Courtesy of GENERAL MOTORS COMPANY

14. Install Windshield Defroster Outlet Duct (1) - [Windshield Defroster Outlet Duct Replacement \(Equinox\)](#)



Fig. 671: Left Side Window Defogger Outlet Duct
 Courtesy of GENERAL MOTORS COMPANY

15. Install Side Window Defogger Outlet Duct - Left Side (1) - [Side Window Defogger Outlet Duct Replacement - Left Side \(Equinox\)](#)

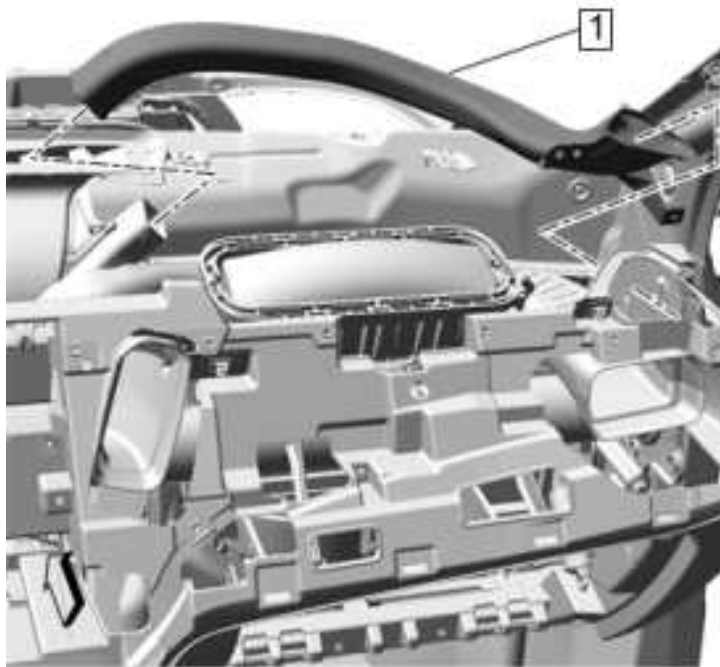


Fig. 672: Right Side Window Defogger Outlet Duct
 Courtesy of GENERAL MOTORS COMPANY

16. Install Side Window Defogger Outlet Duct - Right Side (1) - [Side Window Defogger Outlet Duct Replacement - Right Side \(Equinox\)](#)

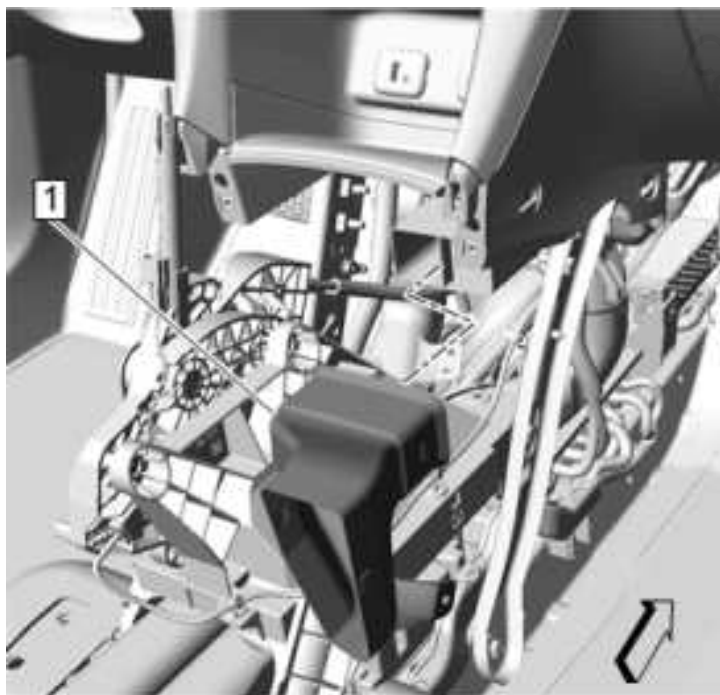


Fig. 673: Front Floor Console Rear Air Duct
 Courtesy of GENERAL MOTORS COMPANY

17. Install Front Floor Console Rear Air Duct (1) - [Front Floor Console Rear Air Duct Replacement \(Equinox Front\)Front Floor Console Rear Air Duct Replacement \(Equinox Rear\)](#)

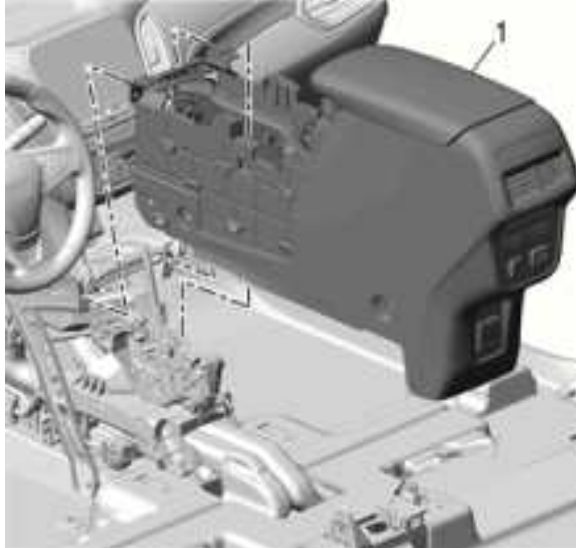


Fig. 674: Front Floor Console

Courtesy of GENERAL MOTORS COMPANY

18. Install Front Floor Console (1) - [Front Floor Console Replacement \(Equinox\)](#)

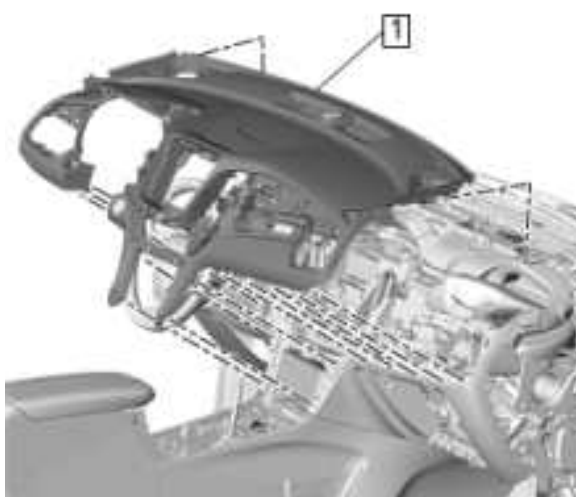


Fig. 675: Instrument Panel Upper Trim Panel

Courtesy of GENERAL MOTORS COMPANY

19. Install Instrument Panel Upper Trim Panel (1) - [Instrument Panel Upper Trim Panel Replacement \(Equinox\)](#)

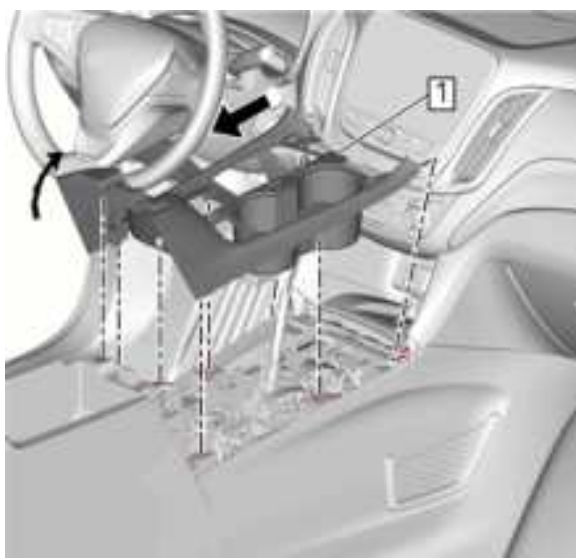


Fig. 676: Front Floor Console Applique

Courtesy of GENERAL MOTORS COMPANY

20. Install Front Floor Console Applique (1) - [Front Floor Console Applique Replacement \(Equinox\)](#)

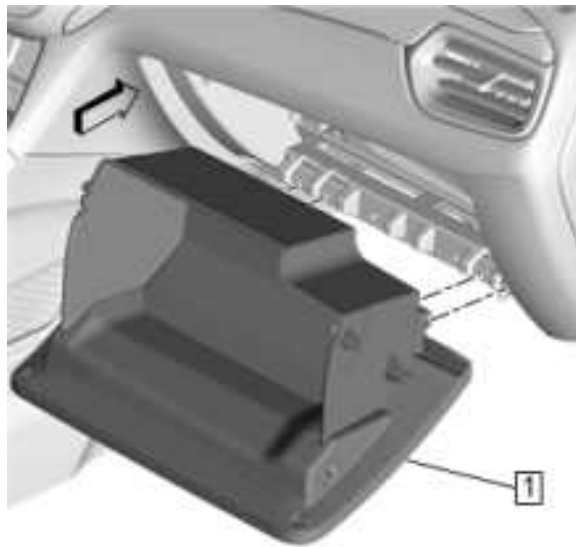


Fig. 677: Instrument Panel Compartment Door
Courtesy of GENERAL MOTORS COMPANY

21. Install Instrument Panel Compartment Door (1) - [Instrument Panel Compartment Door Replacement \(Equinox\)](#)

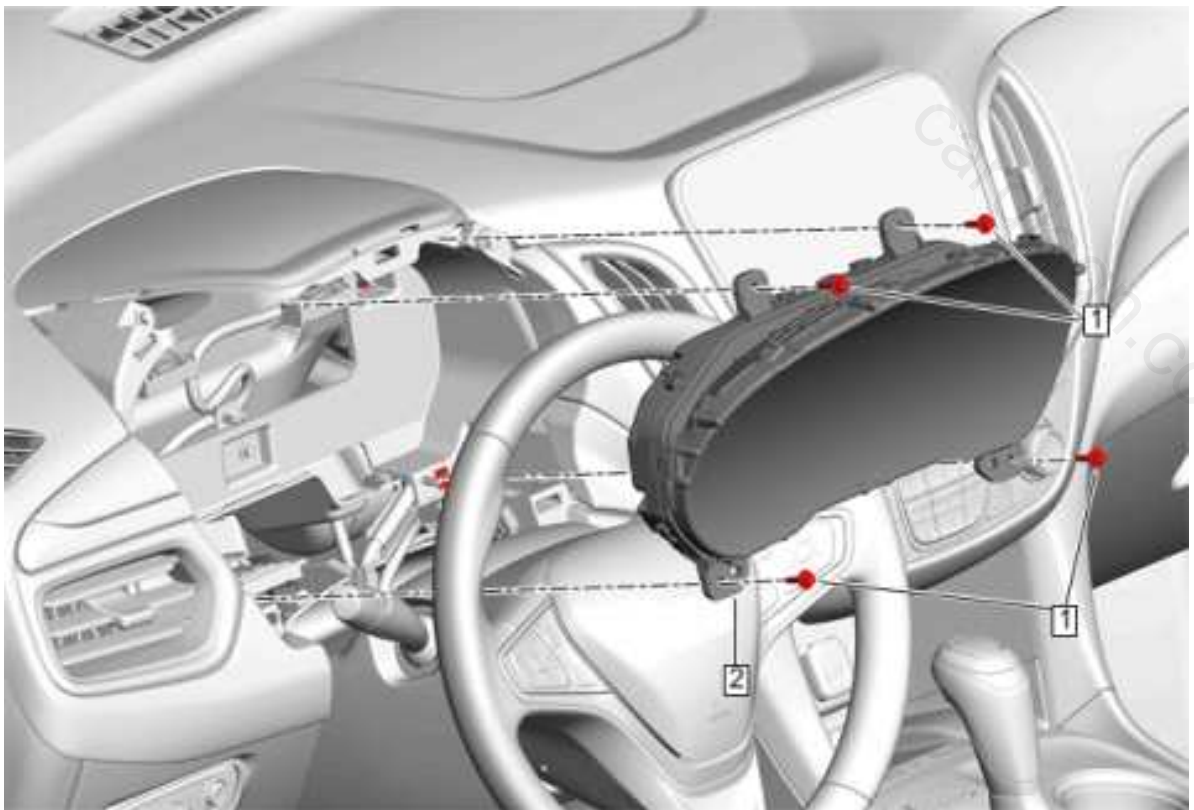


Fig. 678: Instrument Cluster And Screws
Courtesy of GENERAL MOTORS COMPANY

22. Install Instrument Cluster (2) - [Instrument Cluster Replacement \(Equinox\)](#)

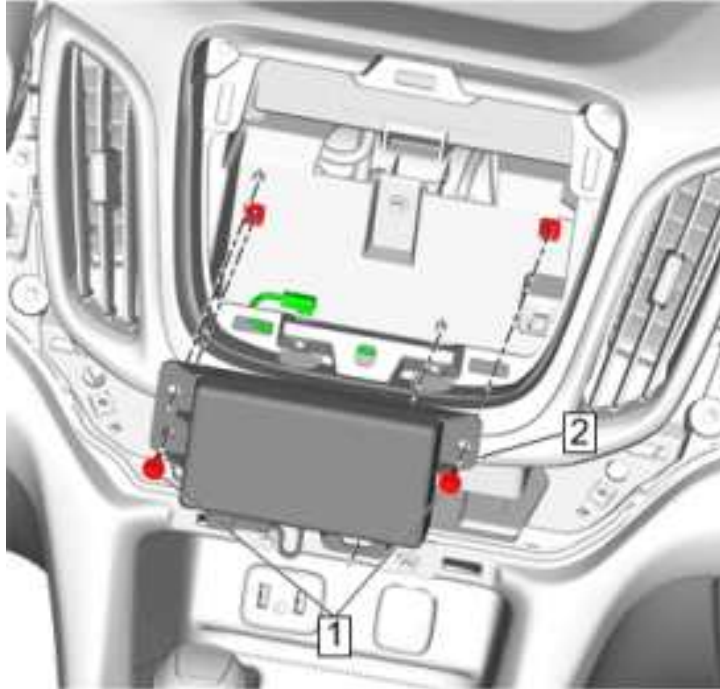


Fig. 679: Communication Interface Module Battery And Screws
 Courtesy of GENERAL MOTORS COMPANY

23. Install Communication Interface Module Battery (2) - [Communication Interface Module Battery Replacement](#)



Fig. 680: Heater And Air Conditioning Remote Control
 Courtesy of GENERAL MOTORS COMPANY

24. Install Heater and Air Conditioning Remote Control (1) - [Heater and Air Conditioning Remote Control Replacement \(Equinox\)](#)



Fig. 681: Radio Control Assembly
Courtesy of GENERAL MOTORS COMPANY

25. Install Radio Control Assembly (1) - [Radio Control Assembly Replacement \(Equinox\)](#)

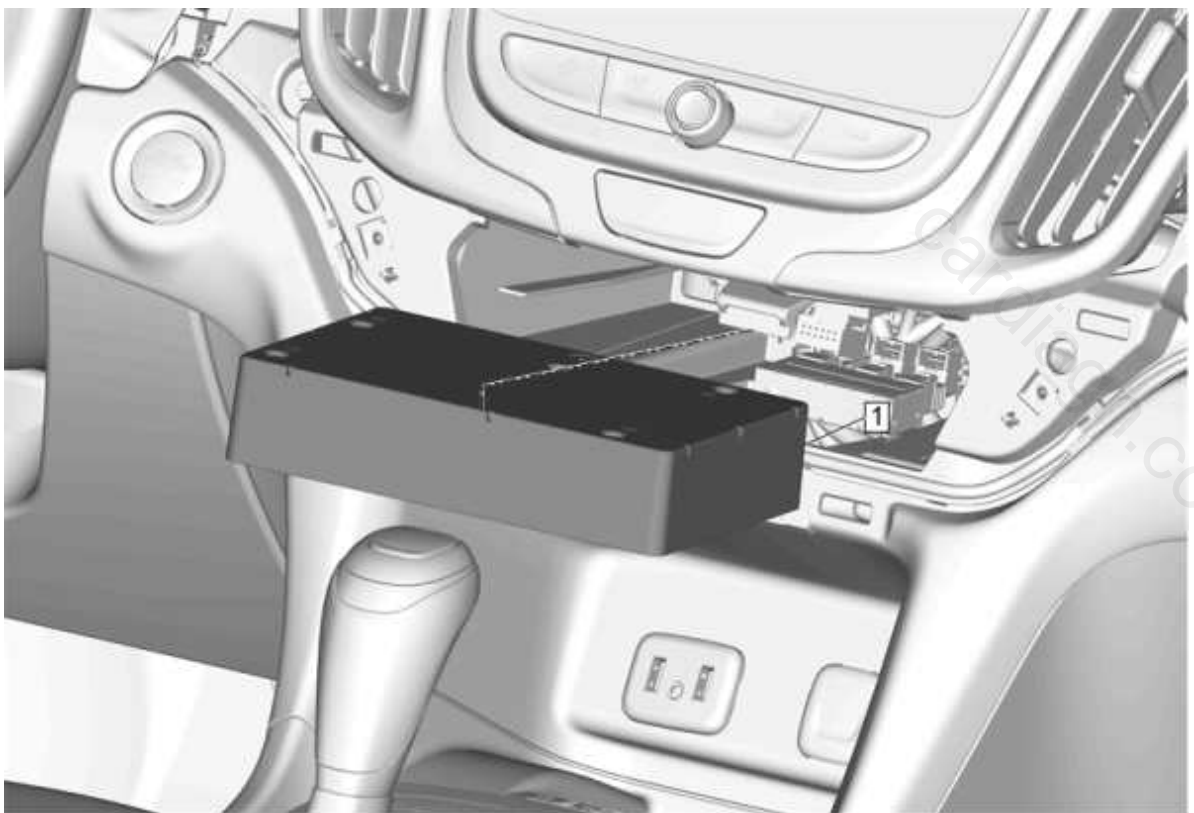


Fig. 682: Communication Interface Module
Courtesy of GENERAL MOTORS COMPANY

26. Install Communication Interface Module (1) - [Communication Interface Module Replacement \(Equinox\)](#)

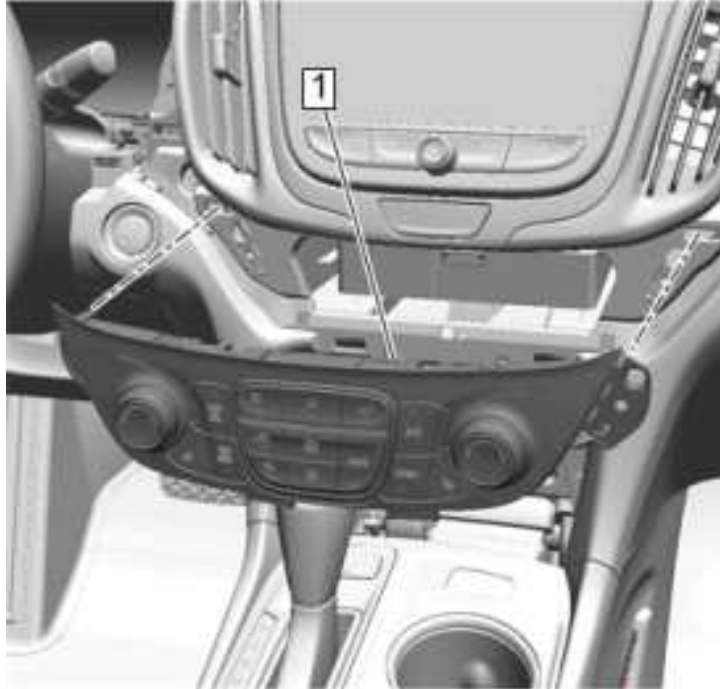


Fig. 683: Heater and Air Conditioning User Interface Control
 Courtesy of GENERAL MOTORS COMPANY

27. Install Heater and Air Conditioning User Interface Control (1) - [Heater and Air Conditioning User Interface Control Replacement \(Equinox\)](#)

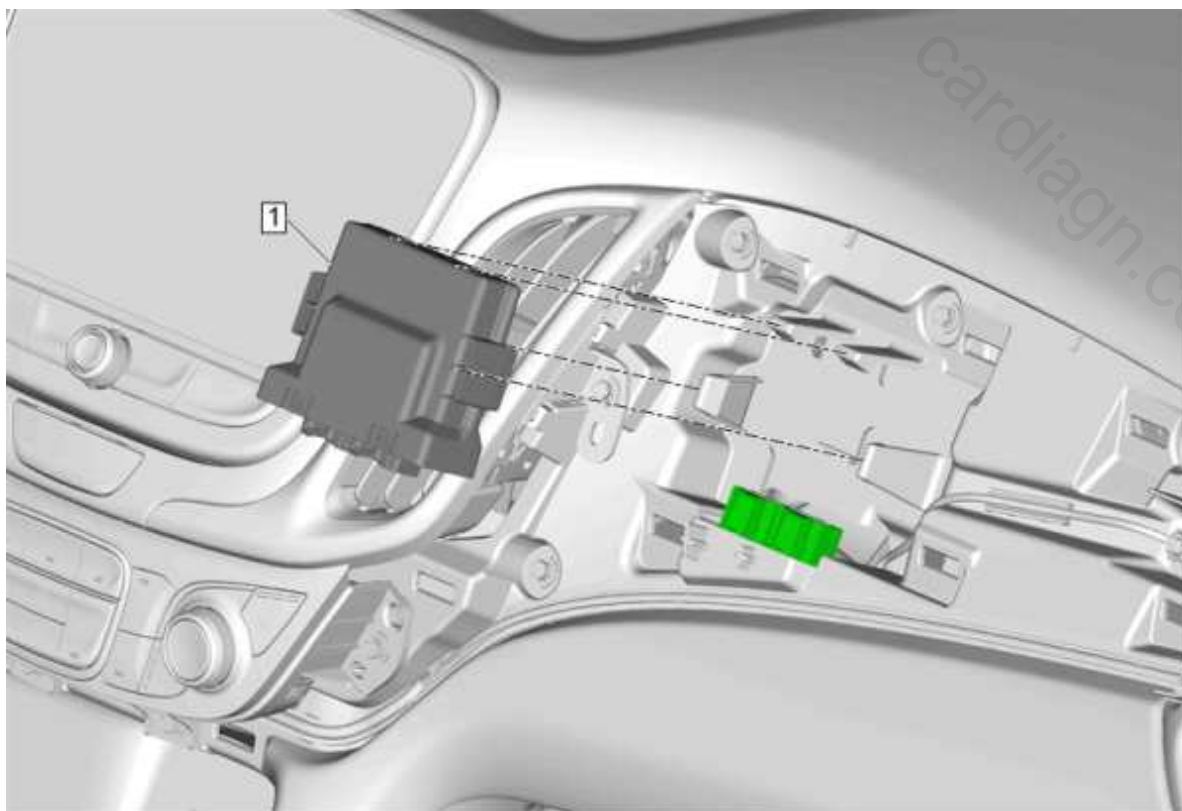


Fig. 684: Serial Data Gateway Module
 Courtesy of GENERAL MOTORS COMPANY

28. Install Serial Data Gateway Module (1) - [Serial Data Gateway Module Replacement \(Equinox\)](#)

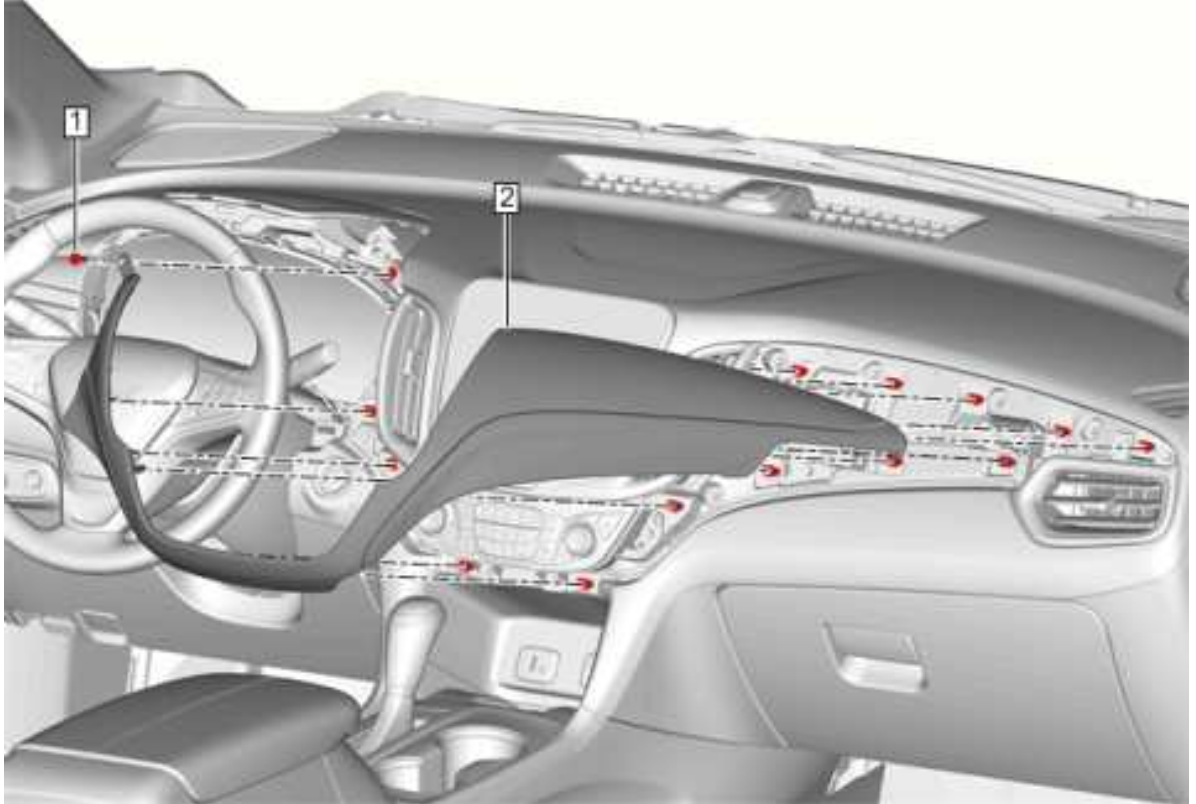


Fig. 685: Right Side Instrument Panel Trim Pad
 Courtesy of GENERAL MOTORS COMPANY

29. Install Instrument Panel Trim Pad - Right Side (2) - [Instrument Panel Trim Pad Replacement - Right Side \(Equinox\)](#)



Fig. 686: Instrument Panel Knee Bolster
 Courtesy of GENERAL MOTORS COMPANY

30. Install Instrument Panel Knee Bolster (1) - [Instrument Panel Knee Bolster Replacement \(Equinox\)](#)

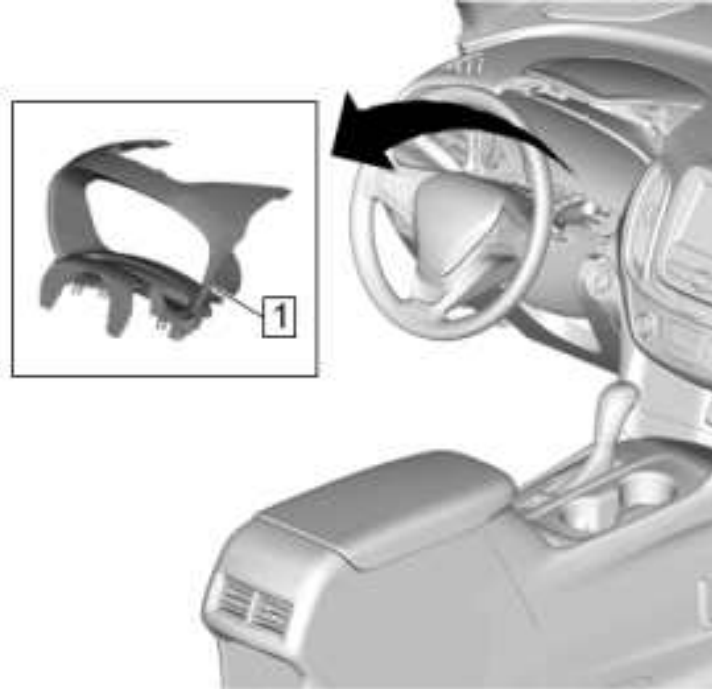


Fig. 687: Instrument Panel Cluster Trim Plate
 Courtesy of GENERAL MOTORS COMPANY

31. Install Instrument Panel Cluster Trim Plate (1) - [Instrument Panel Cluster Trim Plate Replacement \(Equinox\)](#)



Fig. 688: Left And Right Instrument Panel Outer Trim Cover
 Courtesy of GENERAL MOTORS COMPANY

32. Install the left and right instrument panel outer trim cover (1). [Instrument Panel Outer Trim Cover Replacement \(Equinox\)](#)

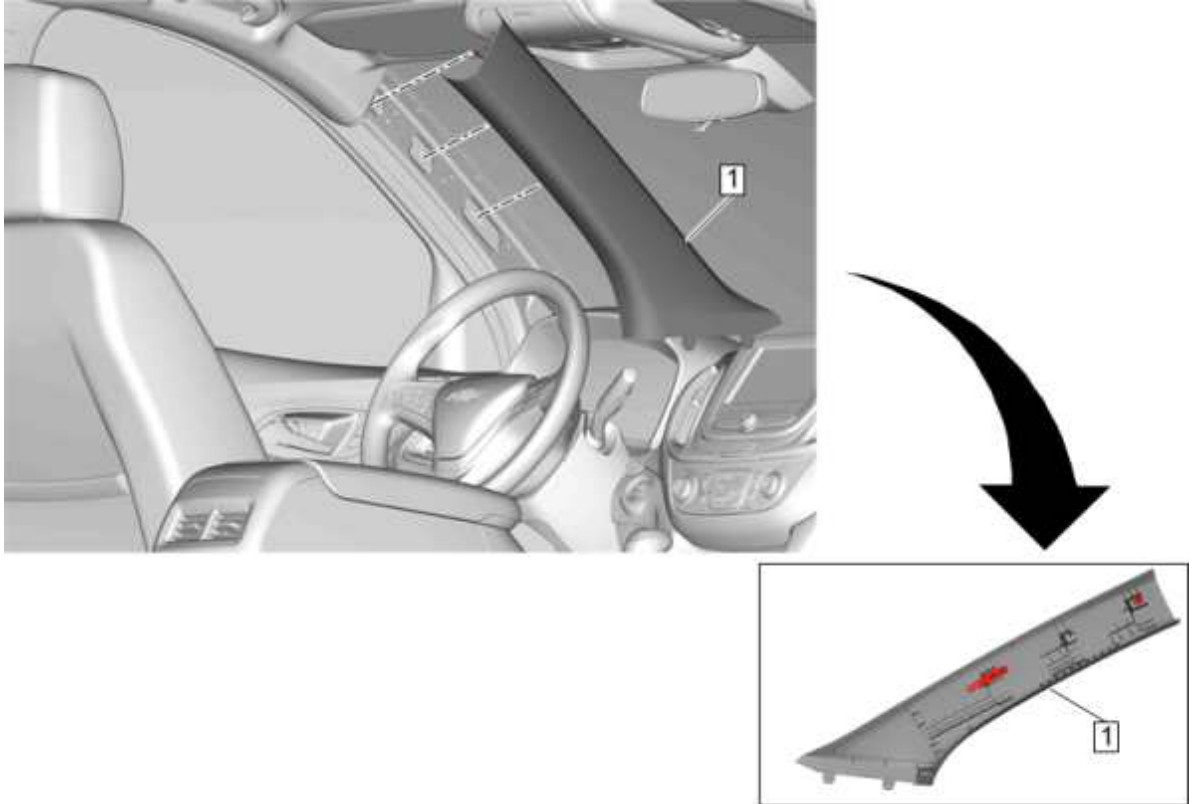


Fig. 689: Windshield Garnish Molding Replacement (Equinox)
Courtesy of GENERAL MOTORS COMPANY

33. Install the left and right side windshield garnish molding (1). [Windshield Garnish Molding Replacement \(Equinox\)](#)
34. Install Drivers Seat and Passengers Seat - [Driver or Passenger Seat Removal and Installation](#)

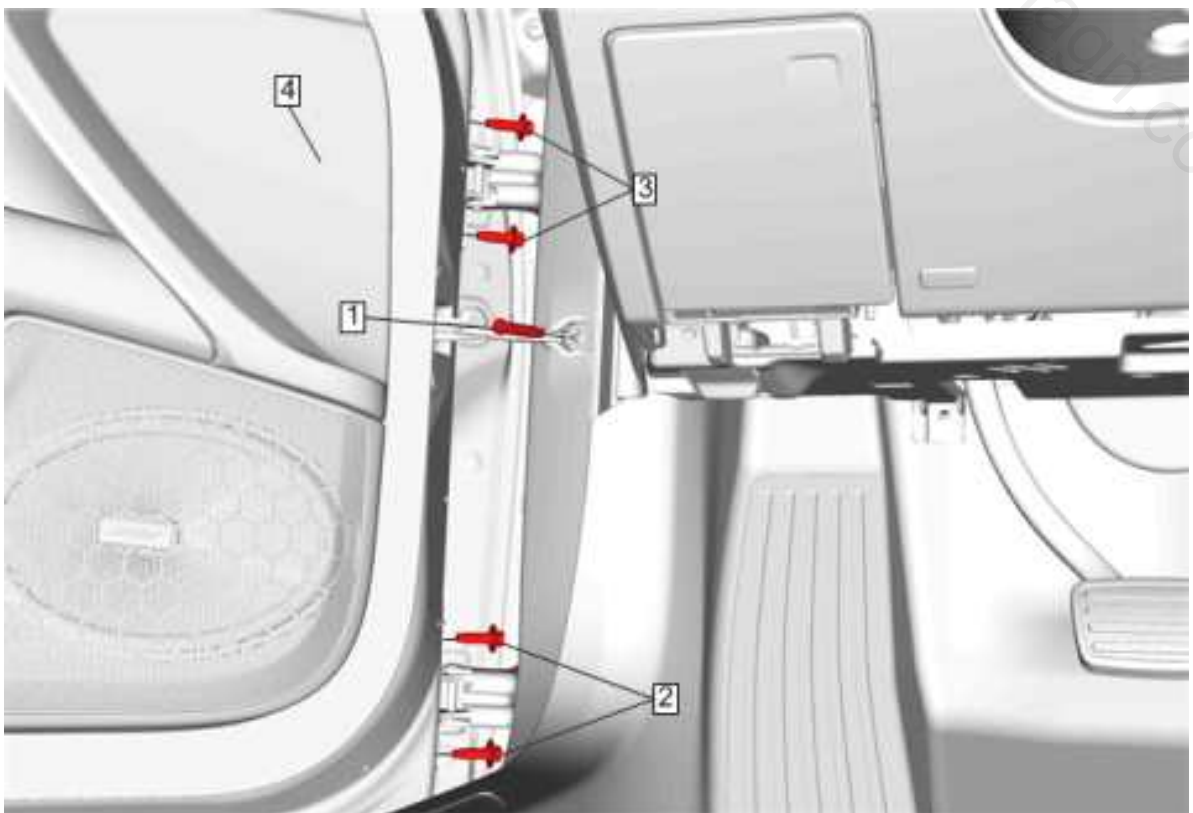


Fig. 690: Front Side Door
Courtesy of GENERAL MOTORS COMPANY

35. Install the left and right front side door (4). [Front Side Door Replacement](#)

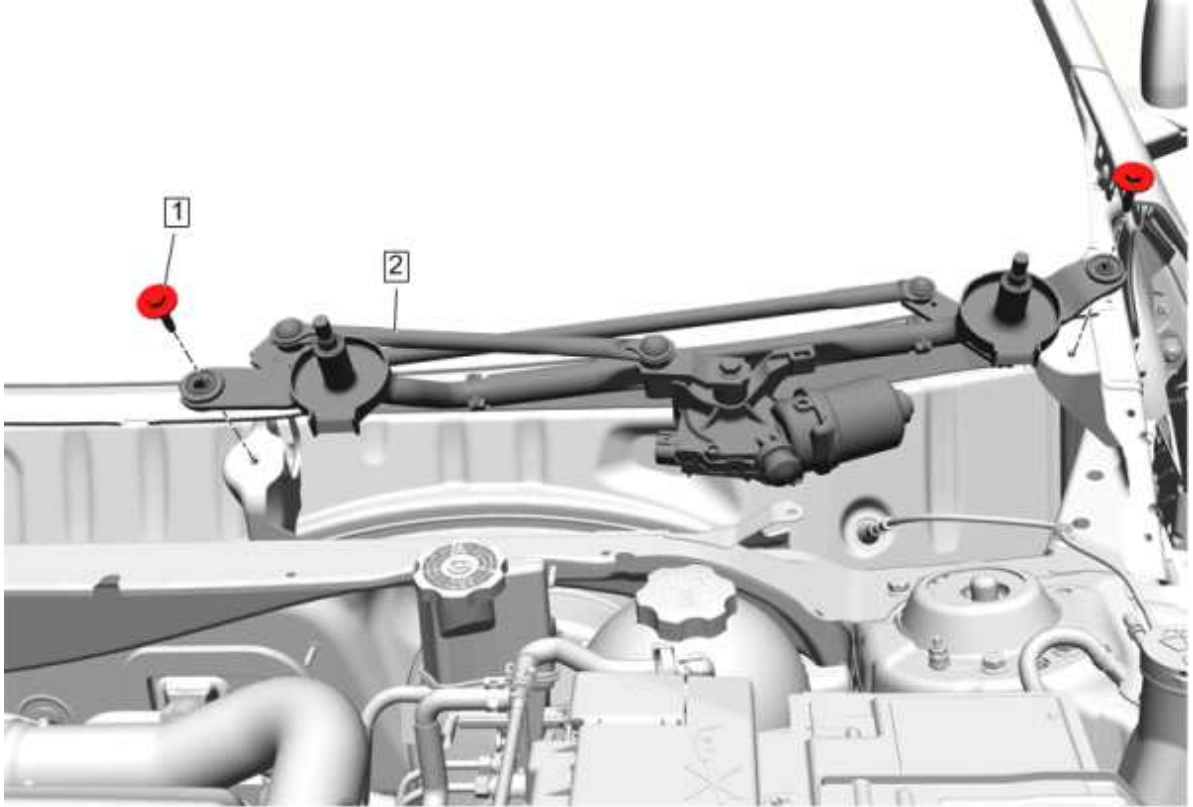


Fig. 691: Windshield Wiper Transmission
Courtesy of GENERAL MOTORS COMPANY

36. Install Windshield Wiper Transmission (2) - [Windshield Wiper Transmission Replacement](#)

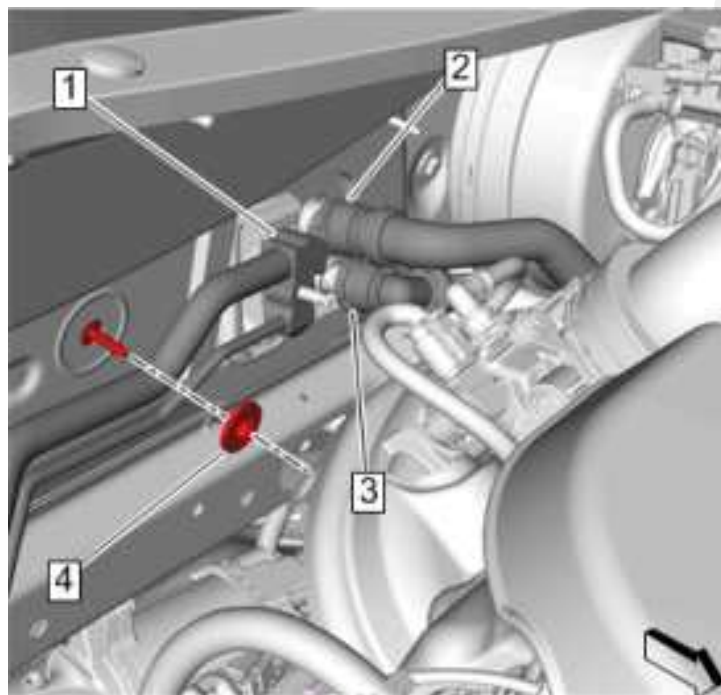


Fig. 692: Air Conditioning Refrigerant Heat Exchanger
Courtesy of GENERAL MOTORS COMPANY

37. Install Heater and Air Conditioning Evaporator and Blower Module Nut (4) @Cowl Panel
38. Install Heater Water Auxiliary Pump Hose (3) @Heater Core Outlet Tube - [Heater Water Auxiliary Pump Hose Replacement \(LYX with KL9\)](#)
39. Install Heater Inlet Hose (2) @Heater Core Inlet Tube - [Heater Inlet Hose Replacement \(LYX with KL9\)](#)
40. Install Air Conditioning Refrigerant Heat Exchanger (1) @Air Conditioning Evaporator Thermal Expansion Valve - [Air Conditioning Refrigerant Heat Exchanger Replacement \(LYX\)](#)
41. Fill the cooling system to the proper level. [Cooling System Draining and Filling \(GE 47716\) Cooling System Draining and Filling \(Static\)](#) .
42. Evacuate and charge the refrigerant system. [Refrigerant Recovery and Recharging \(R-134a\)Refrigerant Recovery and Recharging \(R-1234yf\)](#)

43. Connect the battery negative cable. [Battery Negative Cable Disconnection and Connection \(KL9\)](#)
44. Inspect for coolant leaks.
45. Visually inspect for air conditioning system refrigerant leaks.

AIR CONDITIONING EVAPORATOR LOWER CASE REPLACEMENT

Removal Procedure

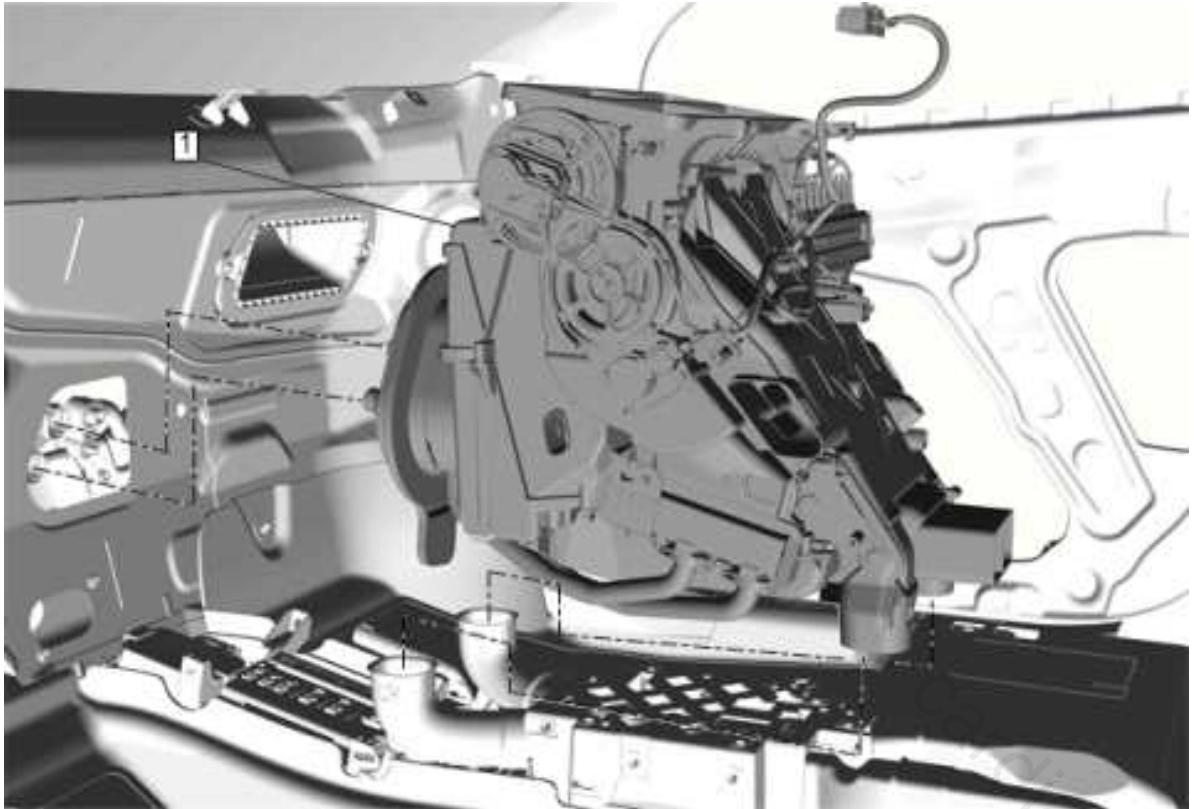


Fig. 693: Heater and Air Conditioning Evaporator and Blower Module
Courtesy of GENERAL MOTORS COMPANY

1. Remove Heater and Air Conditioning Evaporator and Blower Module (1) - [Heater and Air Conditioning Evaporator and Blower Module Removal and Installation \(Equinox LYX\)](#)[Heater and Air Conditioning Evaporator and Blower Module Removal and Installation \(Equinox LTG\)](#)[Heater and Air Conditioning Evaporator and Blower Module Removal and Installation \(Equinox LH7\)](#)[Heater and Air Conditioning Evaporator and Blower Module Removal and Installation \(Terrain LH7\)](#)[Heater and Air Conditioning Evaporator and Blower Module Removal and Installation \(Terrain LTG\)](#)[Heater and Air Conditioning Evaporator and Blower Module Removal and Installation \(Terrain LYX With KL9\)](#)[Heater and Air Conditioning Evaporator and Blower Module Removal and Installation \(Terrain LYX\)](#)[Heater and Air Conditioning Evaporator and Blower Module Removal and Installation \(Equinox LYX With KL9\)](#)

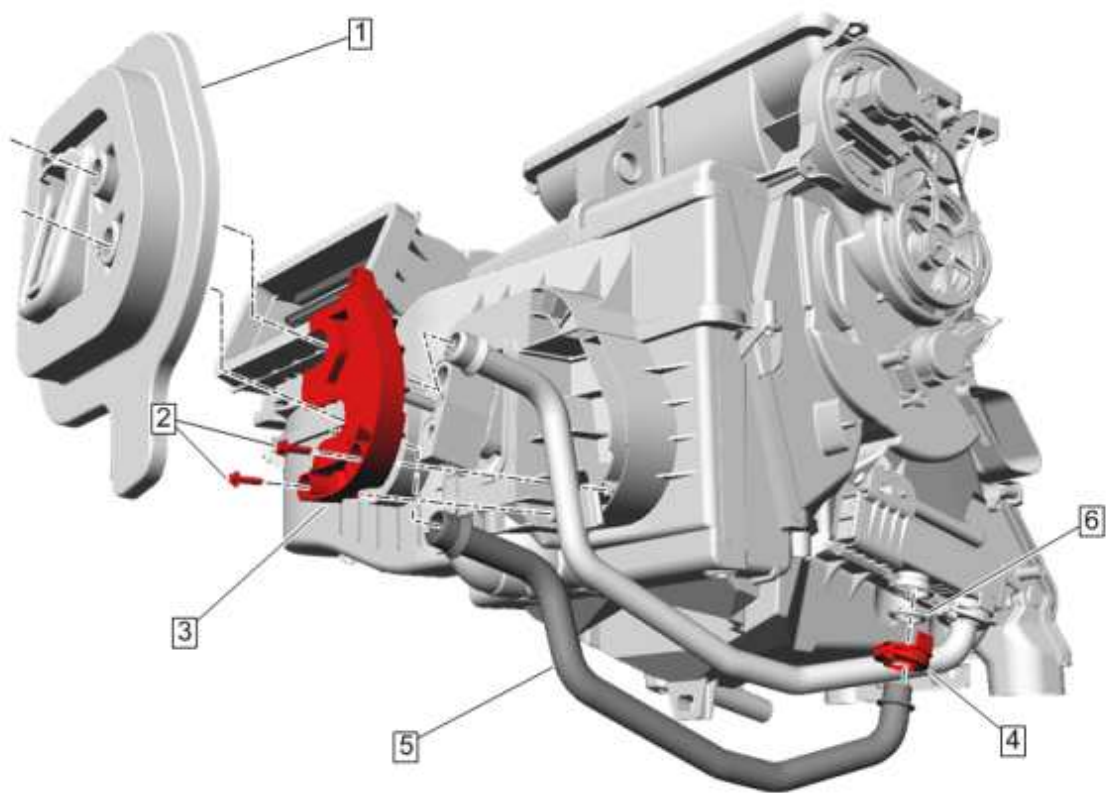


Fig. 694: Heater Core Outlet Tube
 Courtesy of GENERAL MOTORS COMPANY

2. Remove Heater Core Outlet Tube (5) - [Heater Core Outlet Tube Replacement](#)

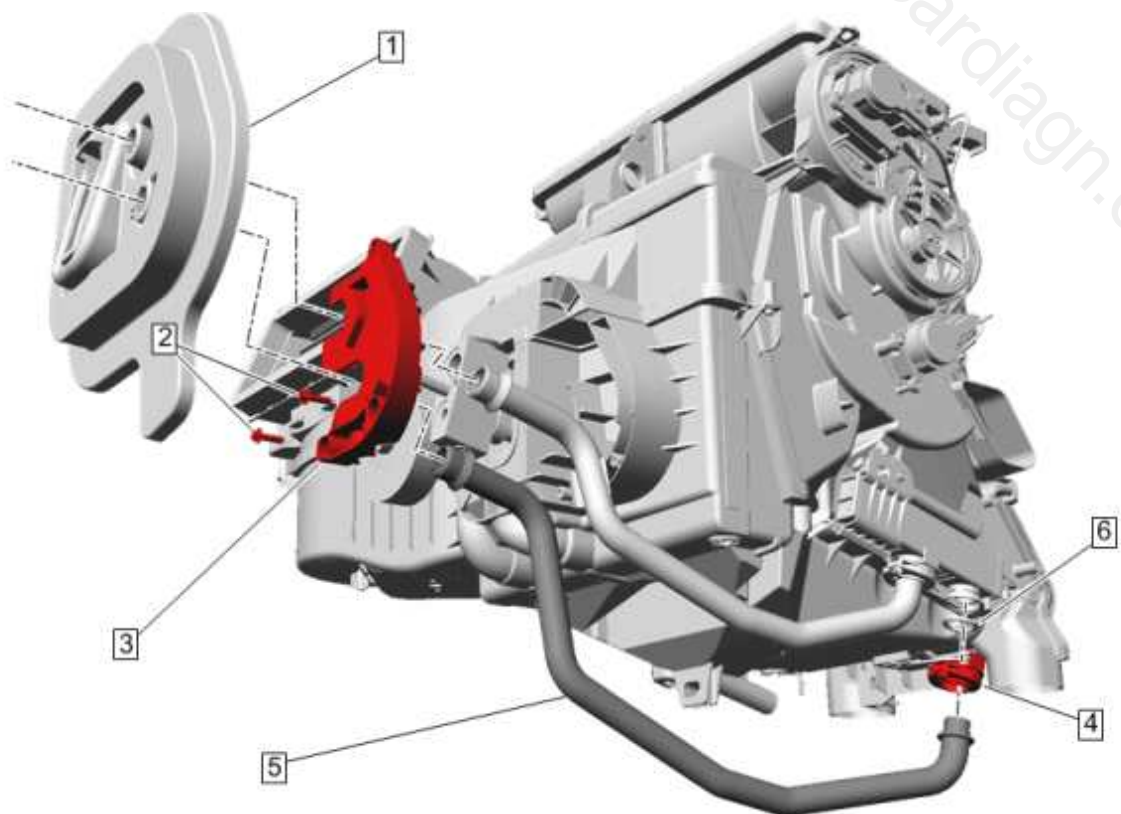


Fig. 695: Heater Core Inlet Tube
 Courtesy of GENERAL MOTORS COMPANY

3. Remove Heater Core Inlet Tube (5) - [Heater Core Inlet Tube Replacement](#)

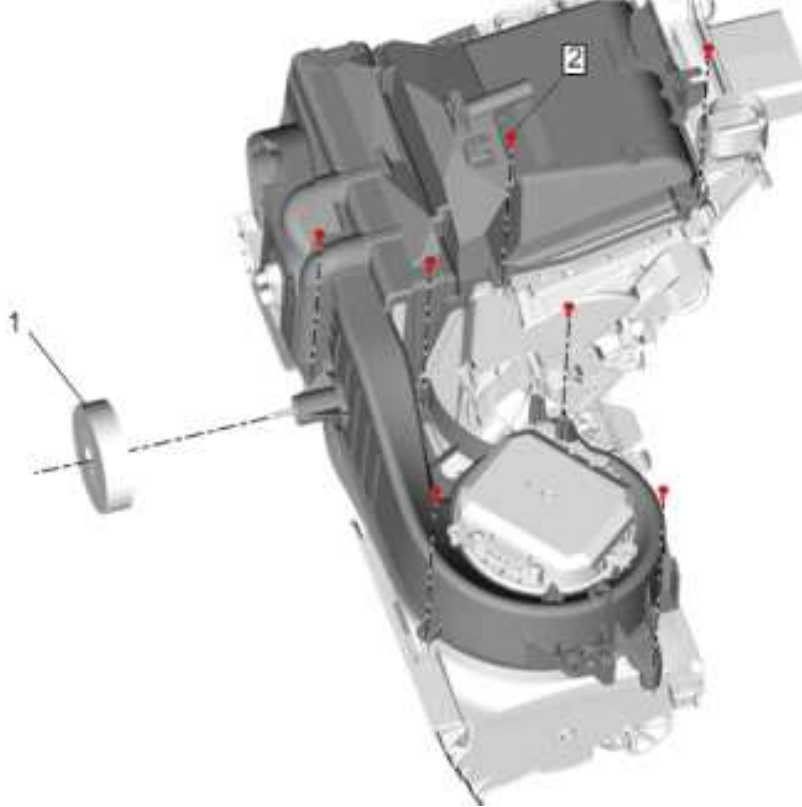


Fig. 696: Heater and Air Conditioning Evaporator and Blower Module Seal
Courtesy of GENERAL MOTORS COMPANY

4. Remove Heater and Air Conditioning Evaporator and Blower Module Seal (1)
5. Remove Air Conditioning Evaporator Case Bolt (2) [7x]

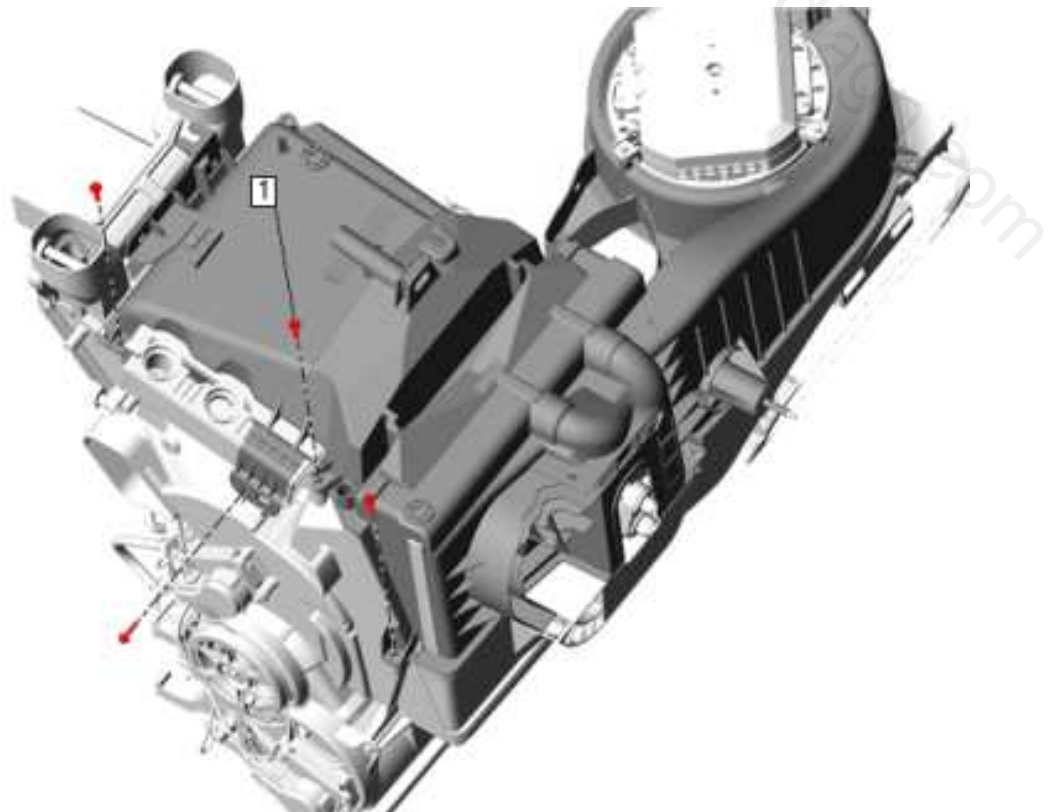


Fig. 697: Air Conditioning Evaporator Case Bolt
Courtesy of GENERAL MOTORS COMPANY

6. Remove Air Conditioning Evaporator Case Bolt (1) [4x]

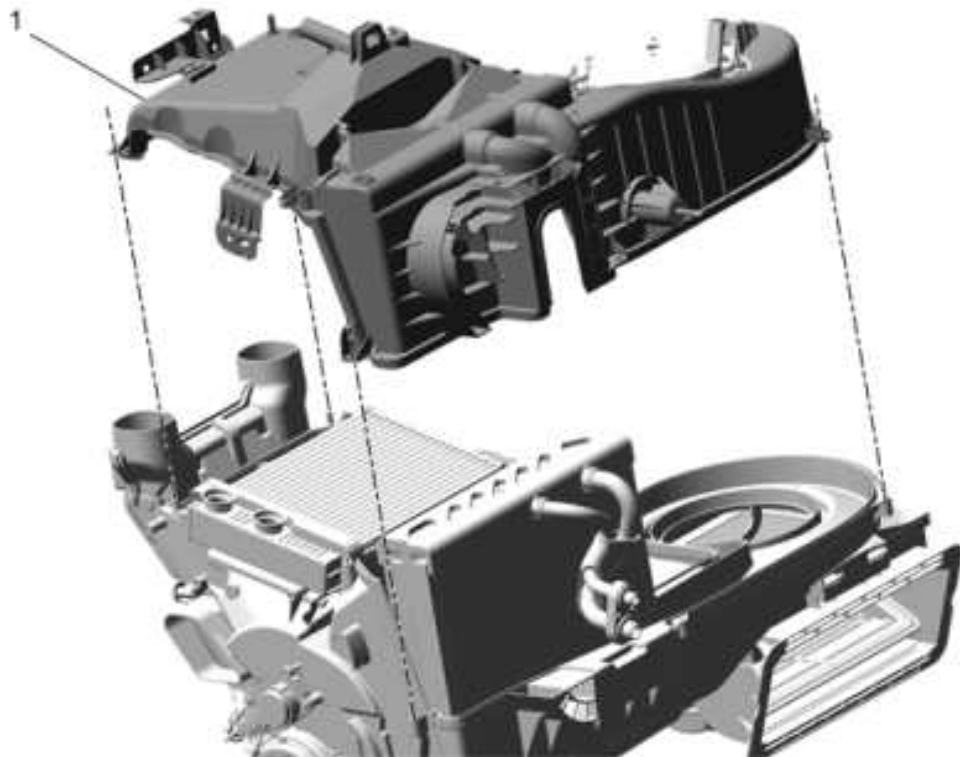


Fig. 698: Air Conditioning Evaporator Lower Case Assembly
Courtesy of GENERAL MOTORS COMPANY

7. Remove Air Conditioning Evaporator Lower Case Assembly (1)
8. Transfer components as necessary.

Installation Procedure

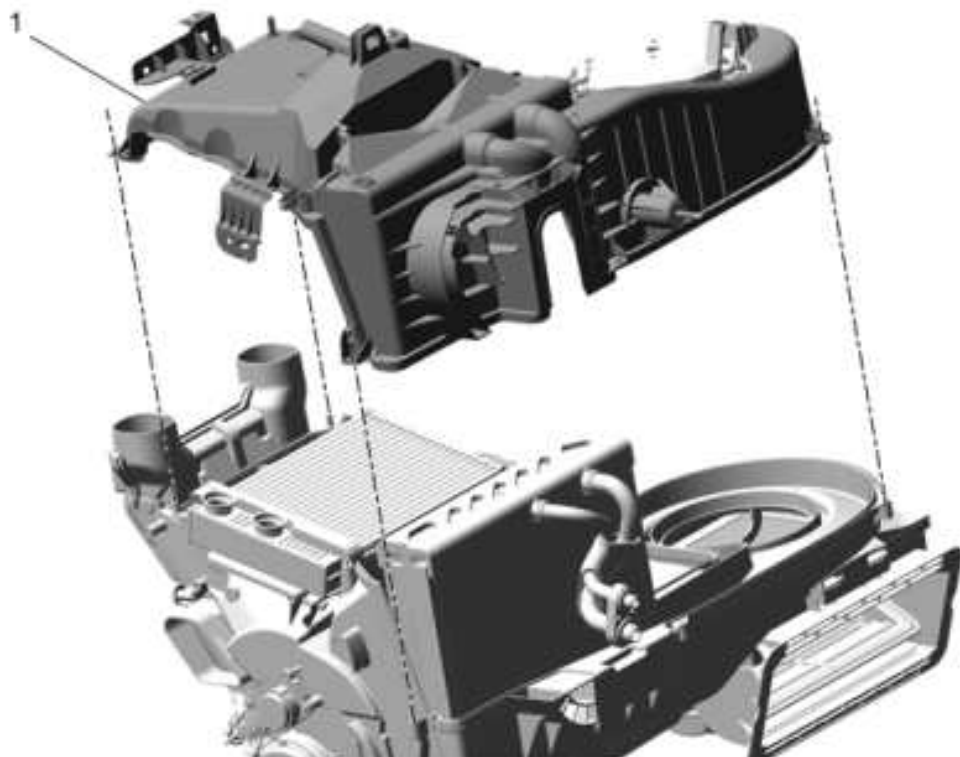


Fig. 699: Air Conditioning Evaporator Lower Case Assembly
Courtesy of GENERAL MOTORS COMPANY

1. Install Air Conditioning Evaporator Lower Case Assembly (1)

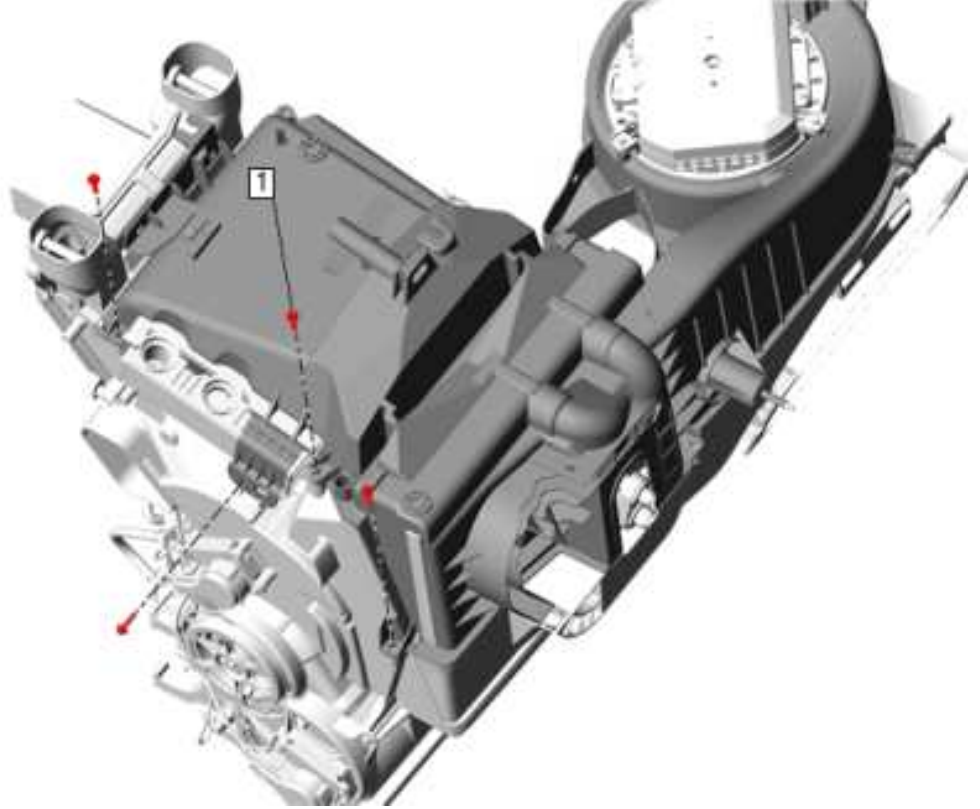


Fig. 700: Air Conditioning Evaporator Case Bolt
Courtesy of GENERAL MOTORS COMPANY

CAUTION: Refer to **Fastener Caution** .

2. Install Air Conditioning Evaporator Case Bolt (1) [4x] 2.5 N.m (22 lb in)

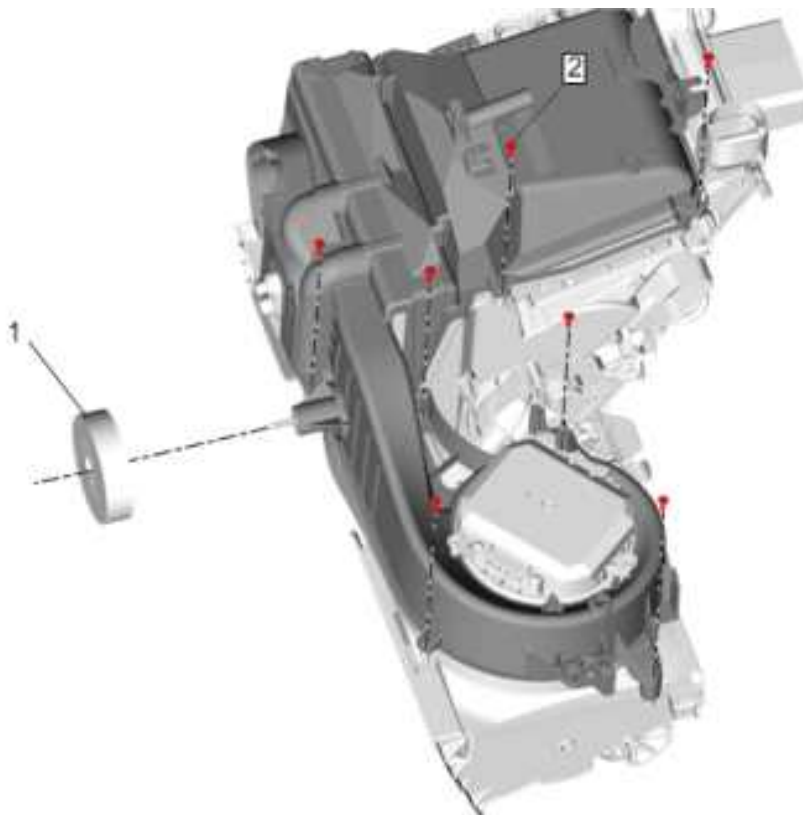


Fig. 701: Heater and Air Conditioning Evaporator and Blower Module Seal
Courtesy of GENERAL MOTORS COMPANY

3. Install Air Conditioning Evaporator Case Bolt (2) [7x] 2.5 N.m (22 lb in)
4. Install Heater and Air Conditioning Evaporator and Blower Module Seal (1)

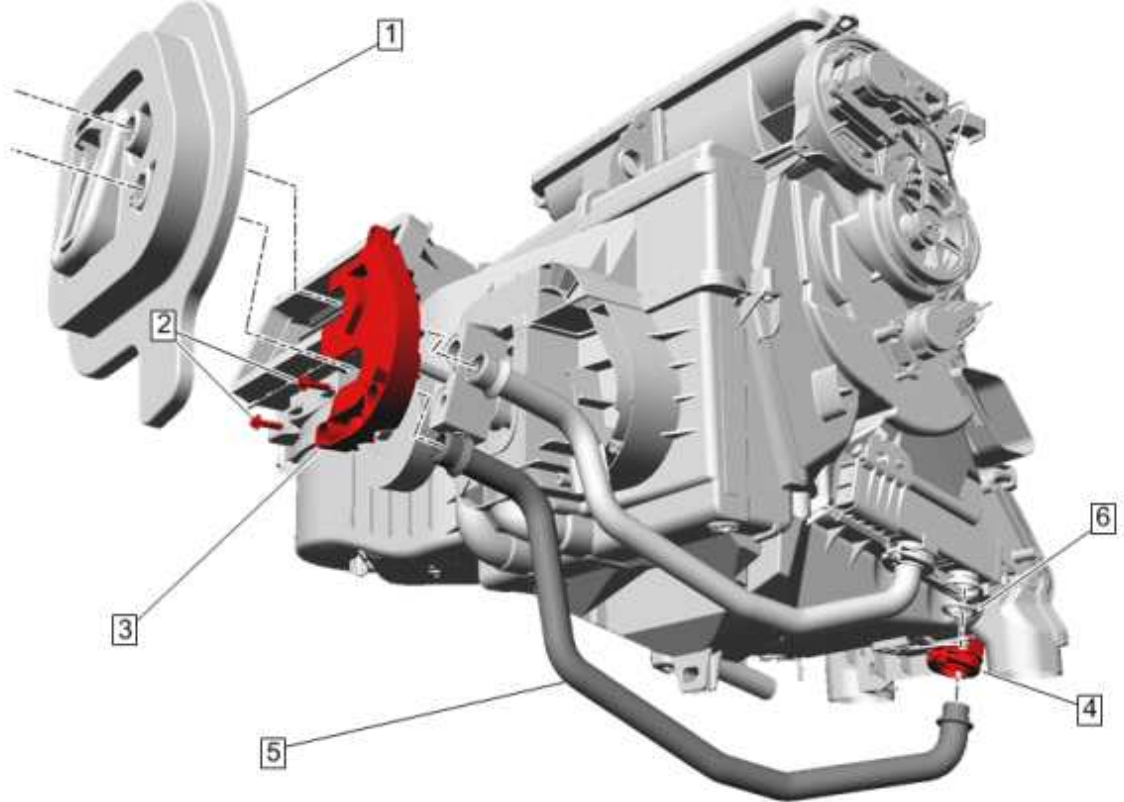


Fig. 702: Heater Core Inlet Tube
 Courtesy of GENERAL MOTORS COMPANY

5. Remove Heater Core Inlet Tube (5) - [Heater Core Inlet Tube Replacement](#)

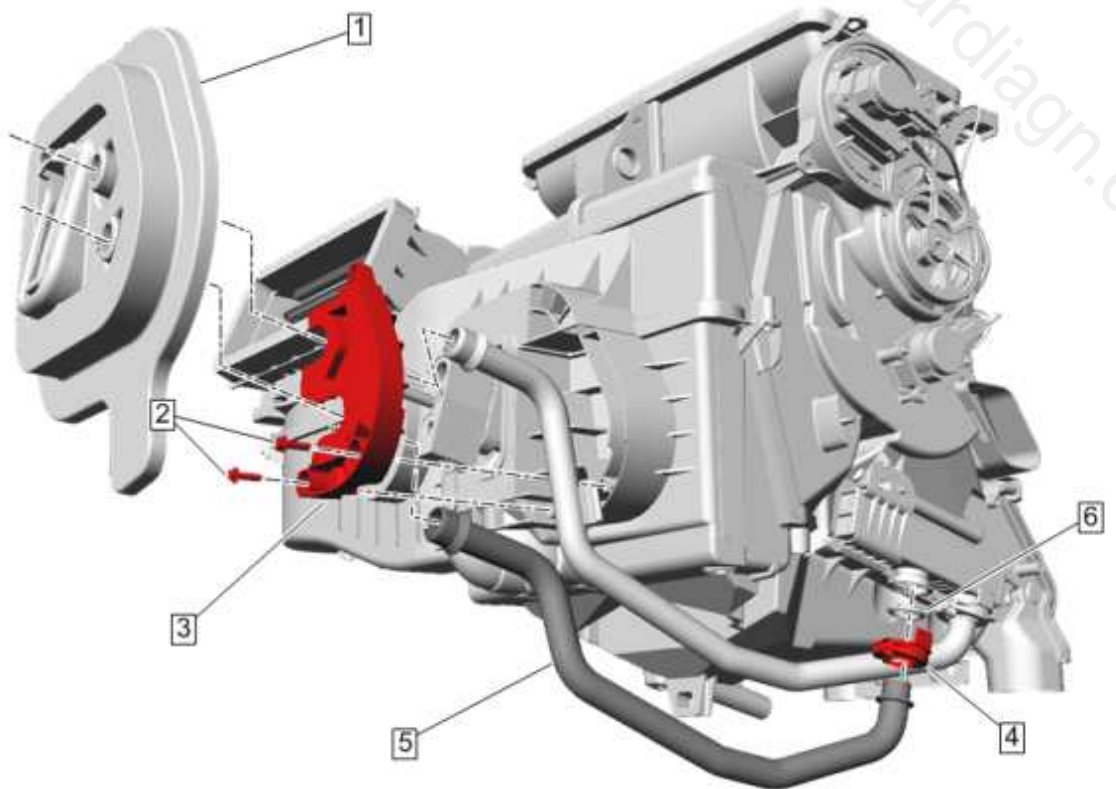


Fig. 703: Heater Core Outlet Tube
 Courtesy of GENERAL MOTORS COMPANY

6. Remove Heater Core Outlet Tube (5) - [Heater Core Outlet Tube Replacement](#)

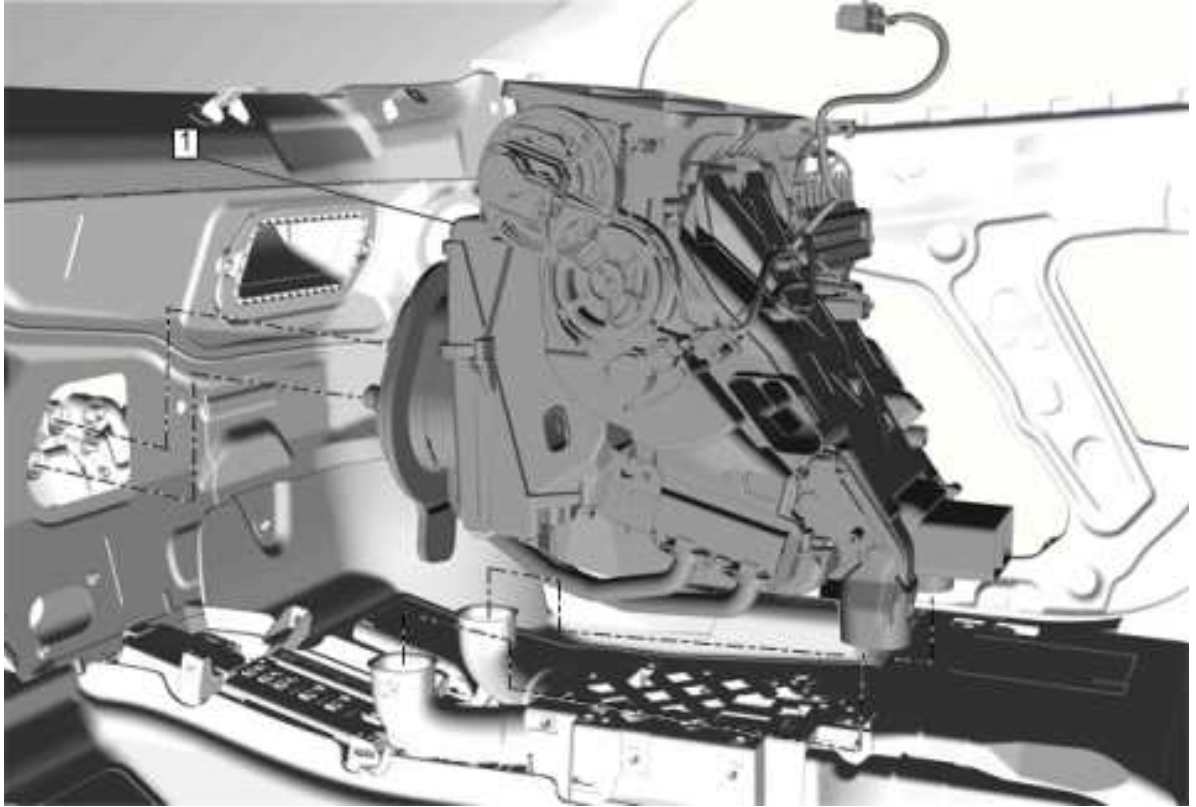


Fig. 704: Heater and Air Conditioning Evaporator and Blower Module
Courtesy of GENERAL MOTORS COMPANY

7. Install Heater and Air Conditioning Evaporator and Blower Module (1) - [Heater and Air Conditioning Evaporator and Blower Module Removal and Installation \(Equinox LYX\)](#)[Heater and Air Conditioning Evaporator and Blower Module Removal and Installation \(Equinox LTG\)](#)[Heater and Air Conditioning Evaporator and Blower Module Removal and Installation \(Equinox LH7\)](#)[Heater and Air Conditioning Evaporator and Blower Module Removal and Installation \(Terrain LH7\)](#)[Heater and Air Conditioning Evaporator and Blower Module Removal and Installation \(Terrain LTG\)](#)[Heater and Air Conditioning Evaporator and Blower Module Removal and Installation \(Terrain LYX With KL9\)](#)[Heater and Air Conditioning Evaporator and Blower Module Removal and Installation \(Terrain LYX\)](#)[Heater and Air Conditioning Evaporator and Blower Module Removal and Installation \(Equinox LYX With KL9\)](#).

AIR CONDITIONING EVAPORATOR UPPER CASE REPLACEMENT

Removal Procedure

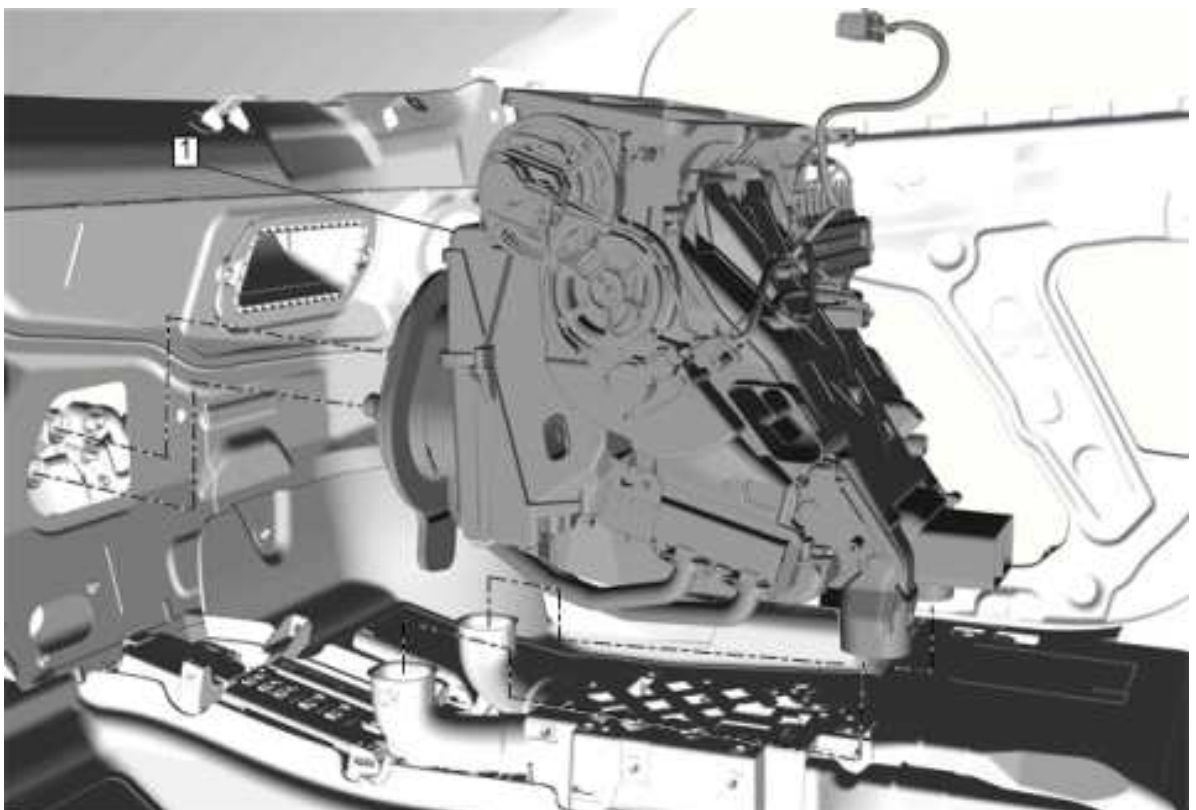


Fig. 705: Heater and Air Conditioning Evaporator and Blower Module
Courtesy of GENERAL MOTORS COMPANY

1. Remove Heater and Air Conditioning Evaporator and Blower Module (1) - [Heater and Air Conditioning Evaporator and Blower Module Removal and Installation \(Equinox LYX\)](#)[Heater and Air Conditioning Evaporator and Blower Module Removal and Installation \(Equinox LTG\)](#)[Heater and Air Conditioning Evaporator and Blower Module Removal and Installation \(Equinox LH7\)](#)[Heater and Air Conditioning Evaporator and Blower Module Removal and Installation \(Terrain LH7\)](#)[Heater and Air Conditioning Evaporator and Blower Module Removal and Installation \(Terrain LTG\)](#)[Heater and Air Conditioning Evaporator and Blower Module Removal and Installation \(Terrain LYX With KL9\)](#)[Heater and Air Conditioning Evaporator and Blower Module Removal and Installation \(Terrain LYX\)](#)[Heater and Air Conditioning Evaporator and Blower Module Removal and Installation \(Equinox LYX With KL9\)](#)

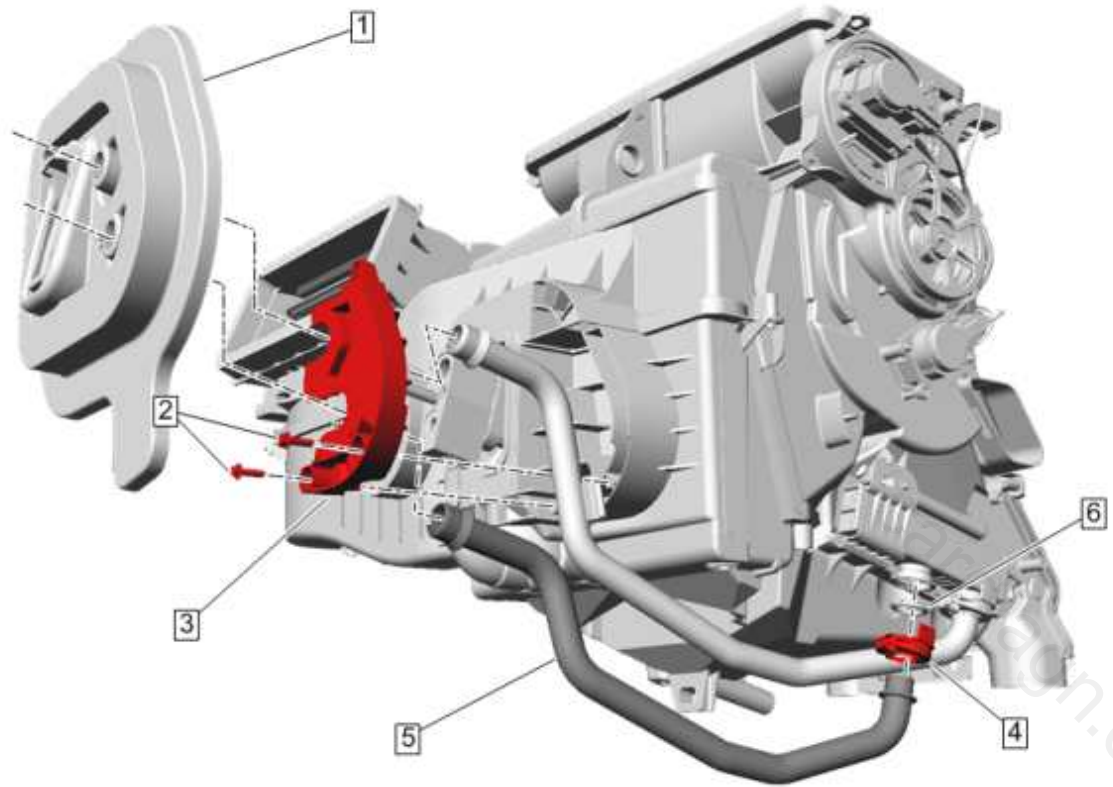


Fig. 706: Heater Core Outlet Tube
Courtesy of GENERAL MOTORS COMPANY

2. Remove Heater Core Outlet Tube (5) - [Heater Core Outlet Tube Replacement](#)

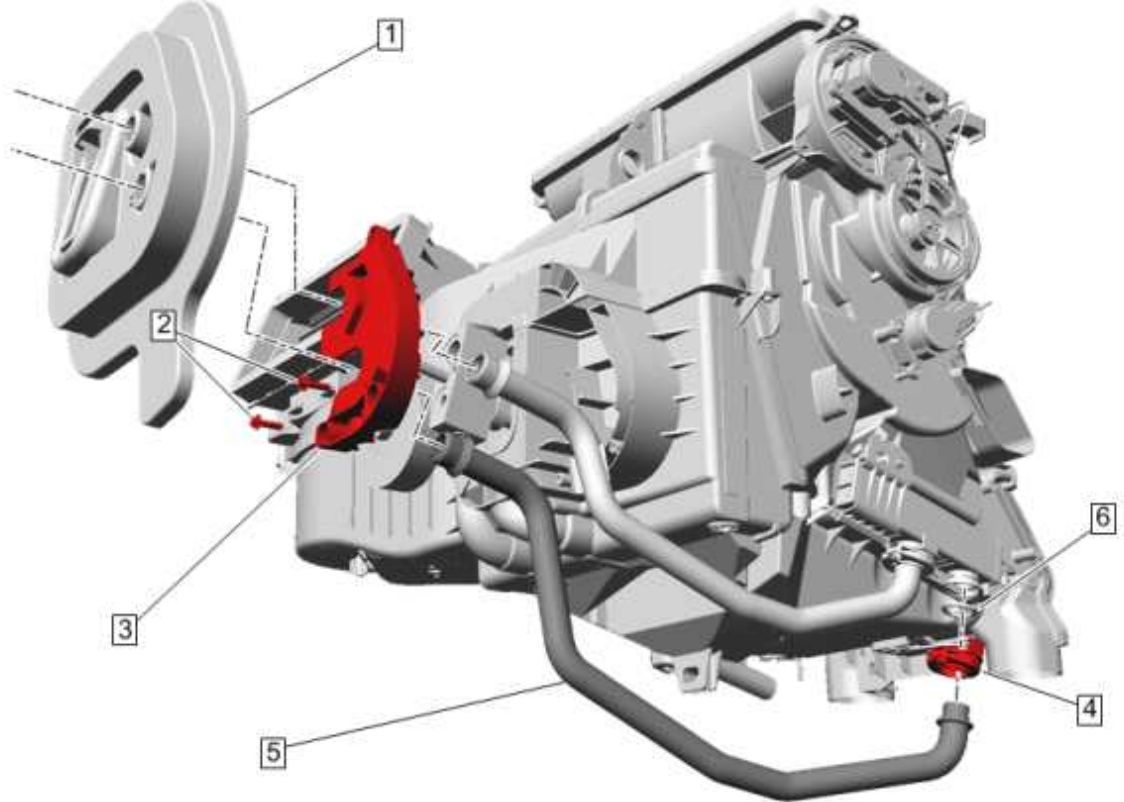


Fig. 707: Heater Core Inlet Tube
 Courtesy of GENERAL MOTORS COMPANY

3. Remove Heater Core Inlet Tube (5) - [Heater Core Inlet Tube Replacement](#)

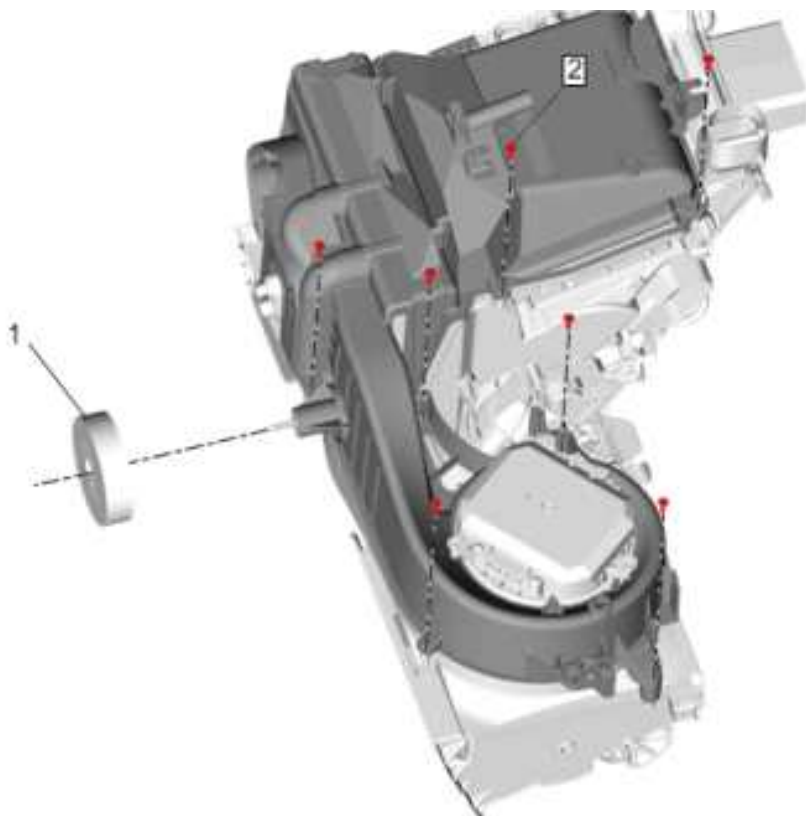


Fig. 708: Heater and Air Conditioning Evaporator and Blower Module Seal
 Courtesy of GENERAL MOTORS COMPANY

4. Remove Heater and Air Conditioning Evaporator and Blower Module Seal (1)
5. Remove Air Conditioning Evaporator Case Bolt (2)

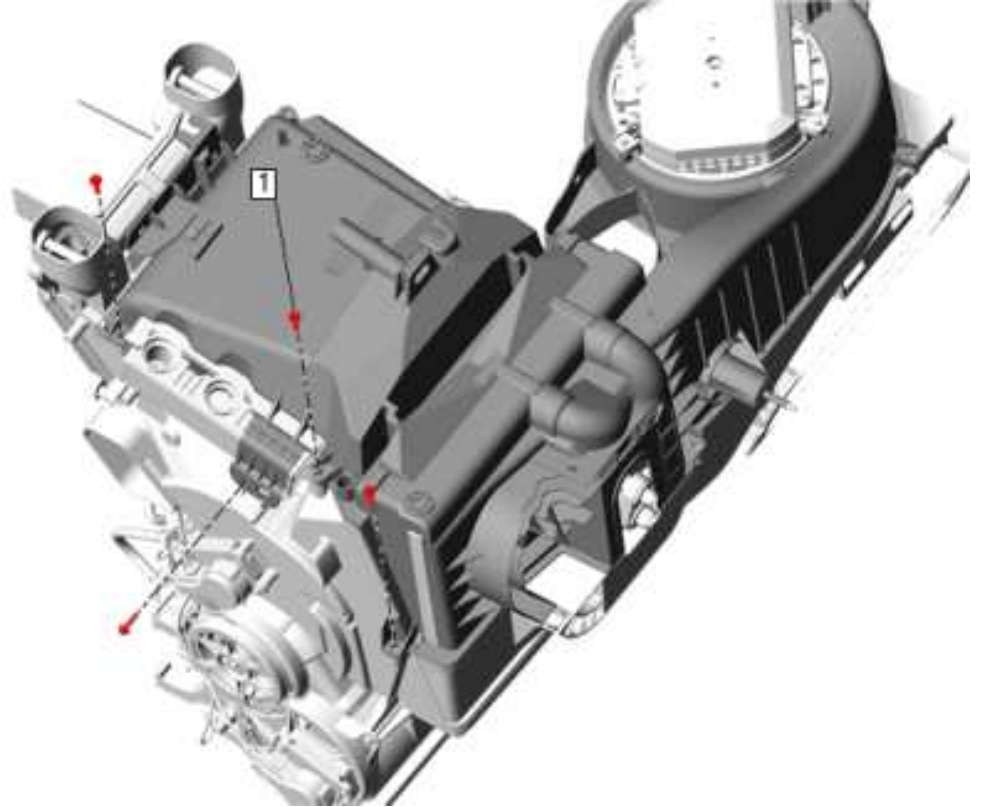


Fig. 709: Air Conditioning Evaporator Case Bolt
Courtesy of GENERAL MOTORS COMPANY

6. Remove Air Conditioning Evaporator Case Bolt (1)

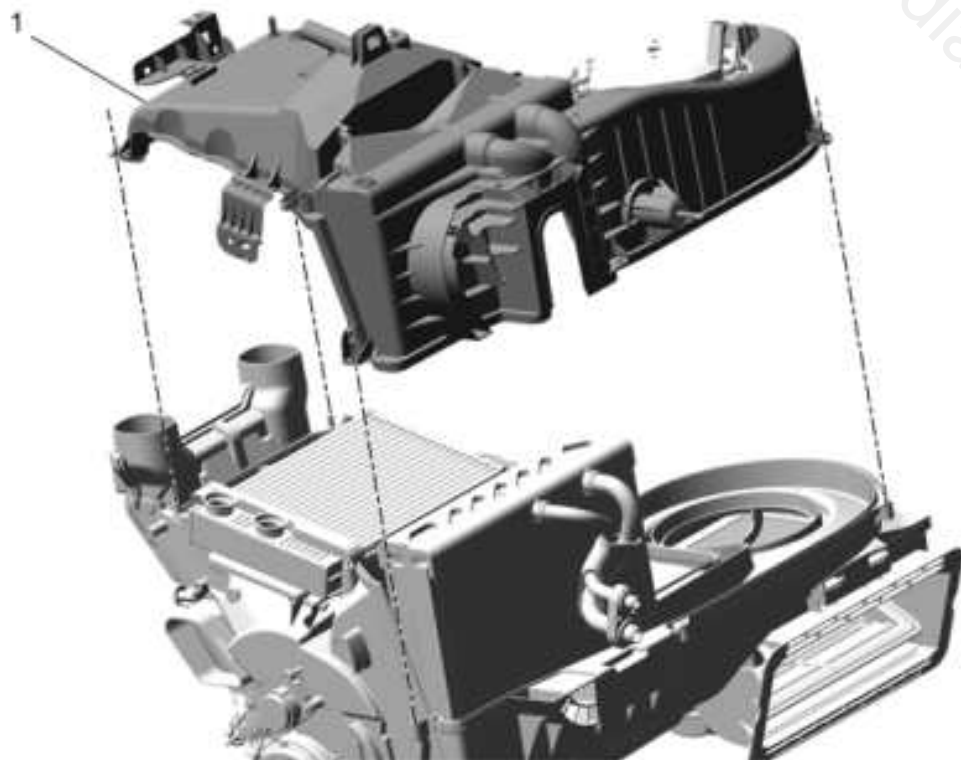


Fig. 710: Air Conditioning Evaporator Lower Case Assembly
Courtesy of GENERAL MOTORS COMPANY

7. Remove Air Conditioning Evaporator Lower Case Assembly (1)

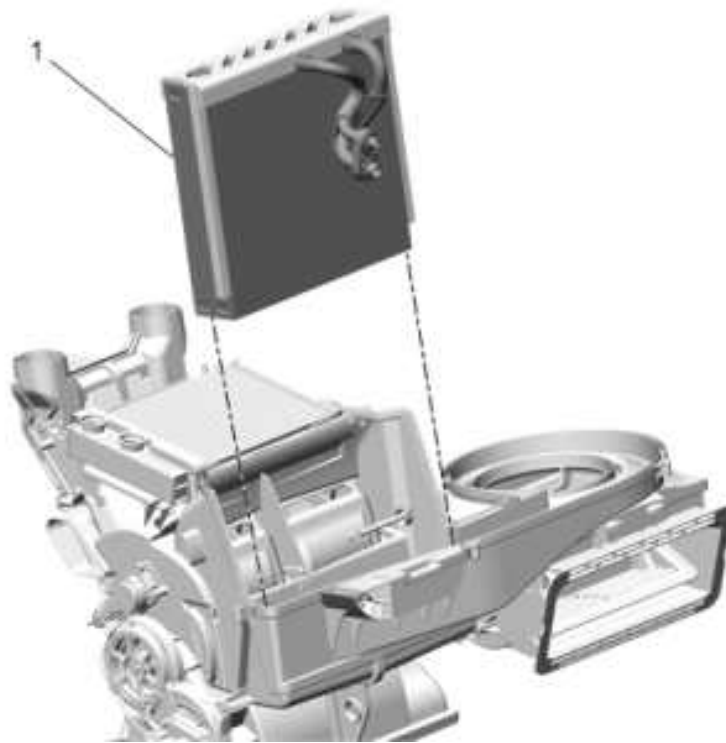


Fig. 711: Air Conditioning Evaporator
Courtesy of GENERAL MOTORS COMPANY

8. Remove Air Conditioning Evaporator (1)

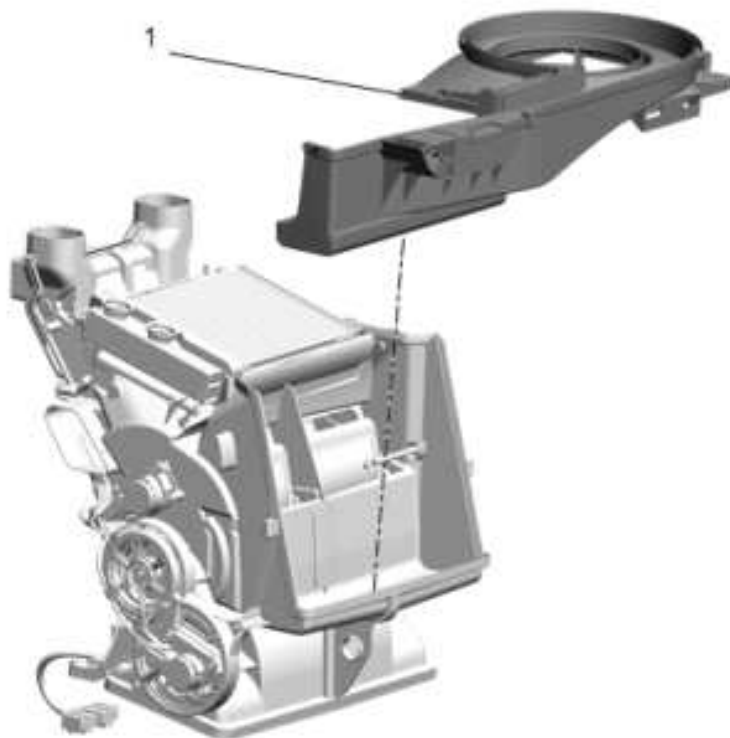


Fig. 712: Air Conditioning Evaporator Upper Case Assembly
Courtesy of GENERAL MOTORS COMPANY

9. Remove Air Conditioning Evaporator Upper Case Assembly (1)

10. Transfer components as necessary.

Installation Procedure



Fig. 713: Air Conditioning Evaporator Upper Case Assembly
Courtesy of GENERAL MOTORS COMPANY

1. Install Air Conditioning Evaporator Upper Case Assembly (1)

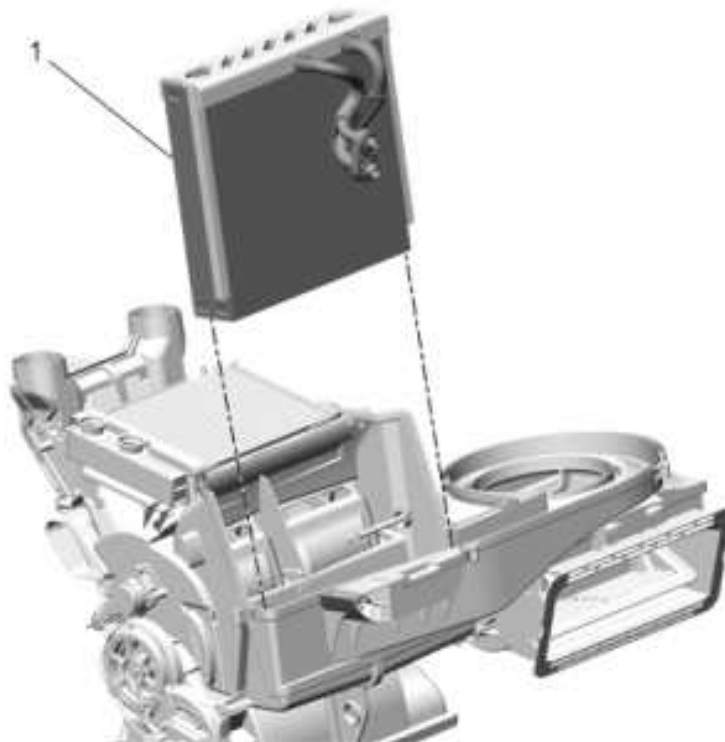


Fig. 714: Air Conditioning Evaporator
Courtesy of GENERAL MOTORS COMPANY

2. Install Air Conditioning Evaporator (1)

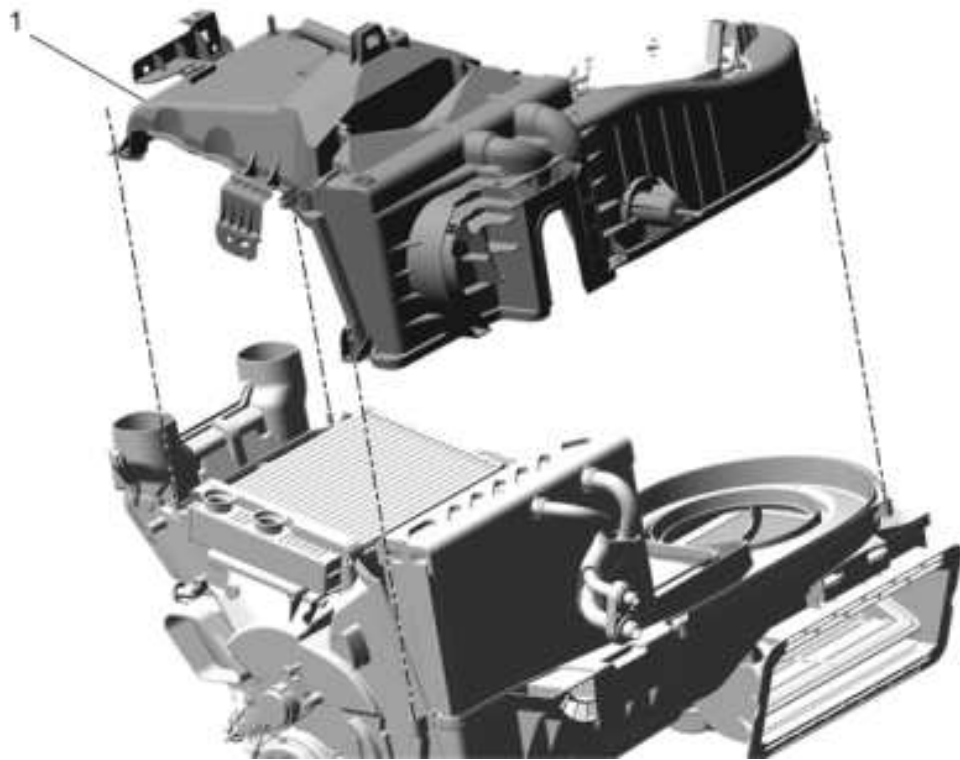


Fig. 715: Air Conditioning Evaporator Lower Case Assembly
 Courtesy of GENERAL MOTORS COMPANY

3. Install Air Conditioning Evaporator Lower Case Assembly (1)

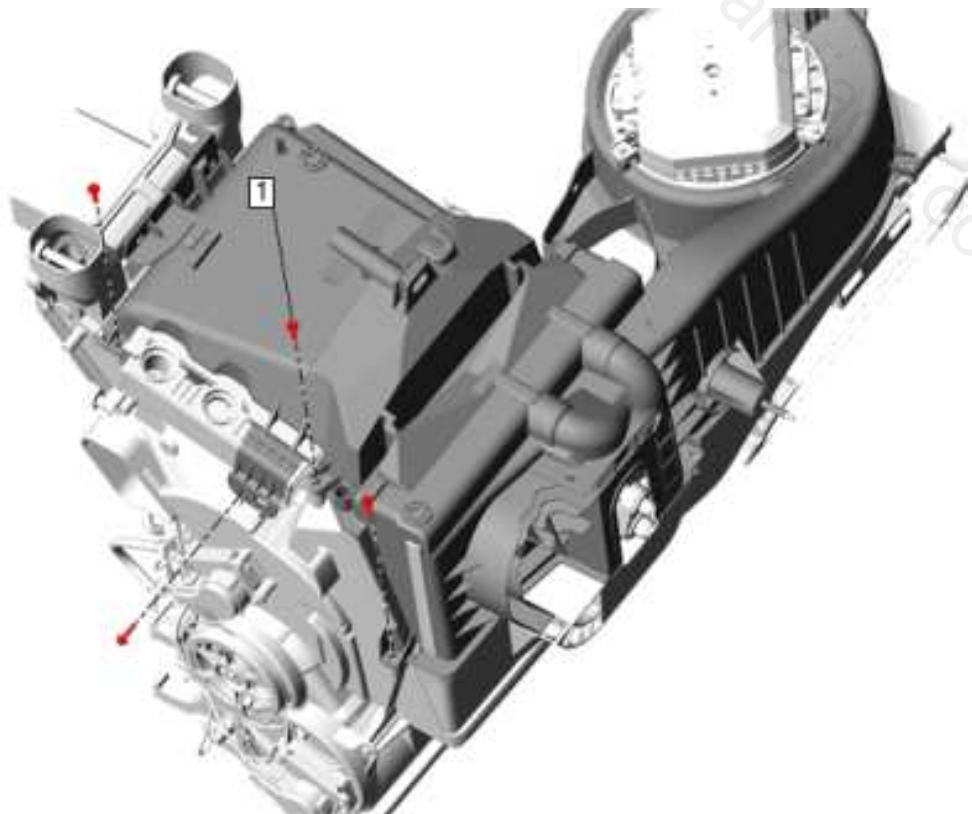


Fig. 716: Air Conditioning Evaporator Case Bolt
 Courtesy of GENERAL MOTORS COMPANY

CAUTION: Refer to **Fastener Caution** .

4. Install Air Conditioning Evaporator Case Bolt (1) [2x] 2.5 N.m (22 lb in)

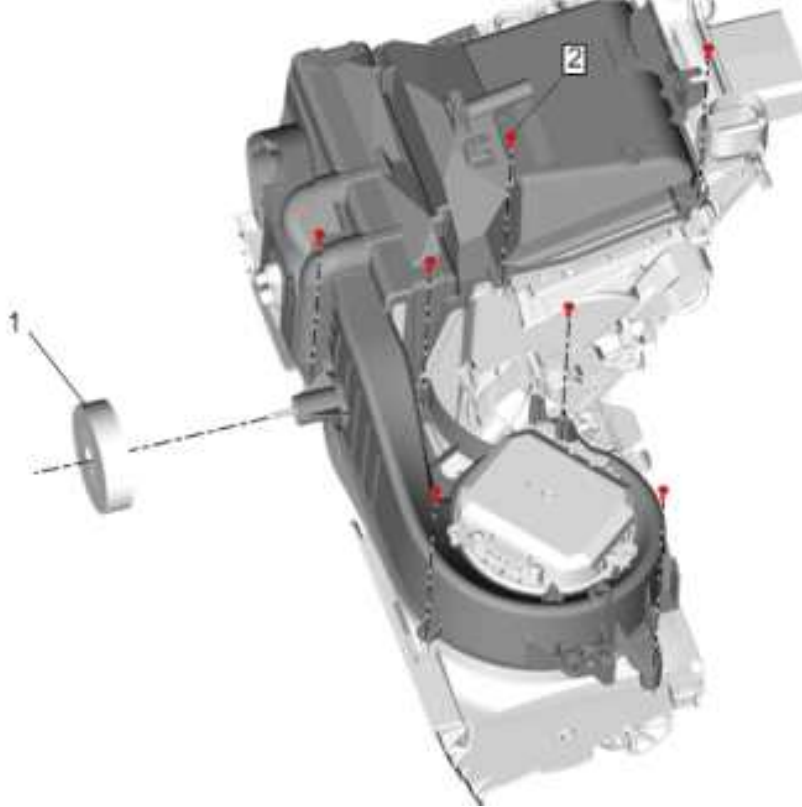


Fig. 717: Heater and Air Conditioning Evaporator and Blower Module Seal
Courtesy of GENERAL MOTORS COMPANY

5. Install Air Conditioning Evaporator Case Bolt (2) [7x] 2.5 N.m (22 lb in)
6. Install Heater and Air Conditioning Evaporator and Blower Module Seal (1)

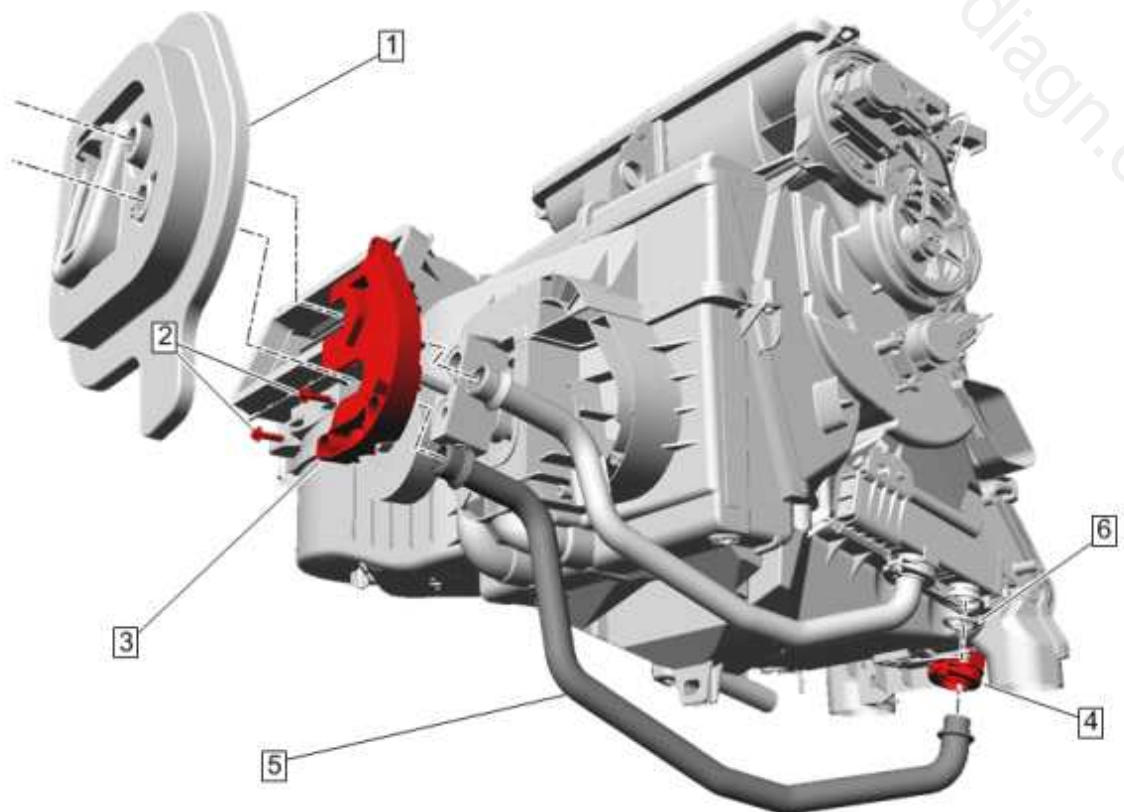


Fig. 718: Heater Core Inlet Tube
Courtesy of GENERAL MOTORS COMPANY

7. Remove Heater Core Inlet Tube (5) [Heater Core Inlet Tube Replacement](#)

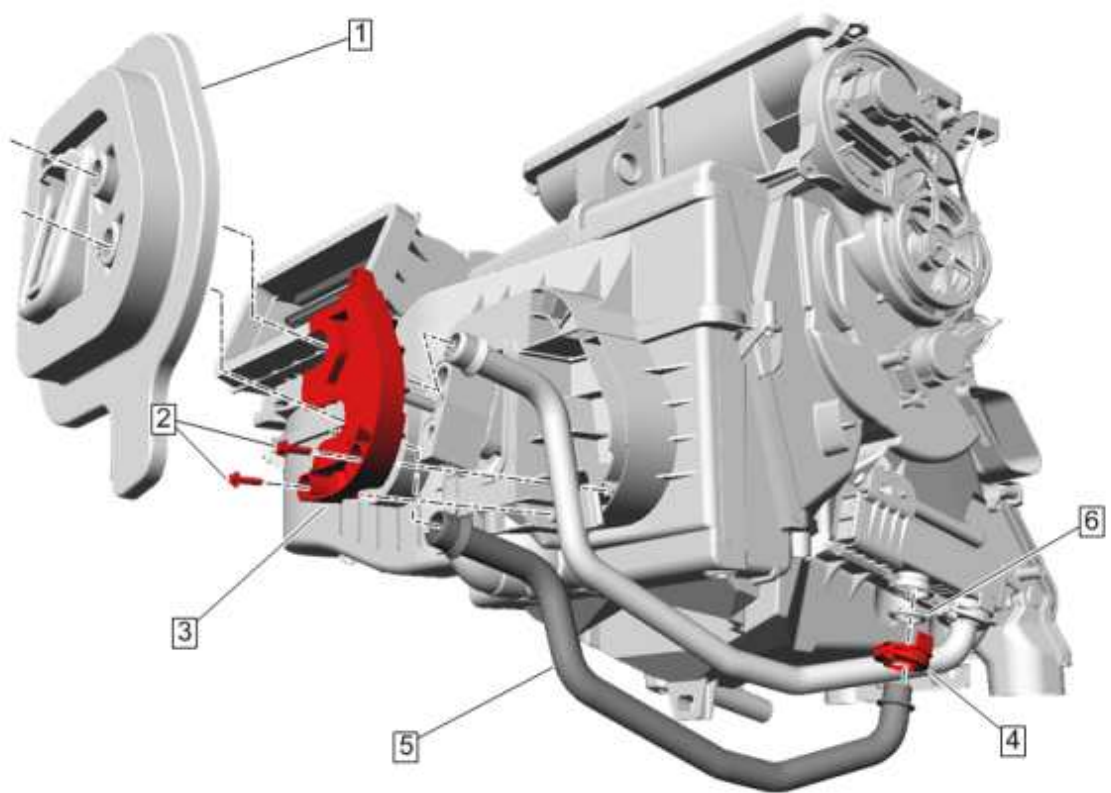


Fig. 719: Heater Core Outlet Tube
Courtesy of GENERAL MOTORS COMPANY

8. Remove Heater Core Outlet Tube (5) - [Heater Core Outlet Tube Replacement](#)

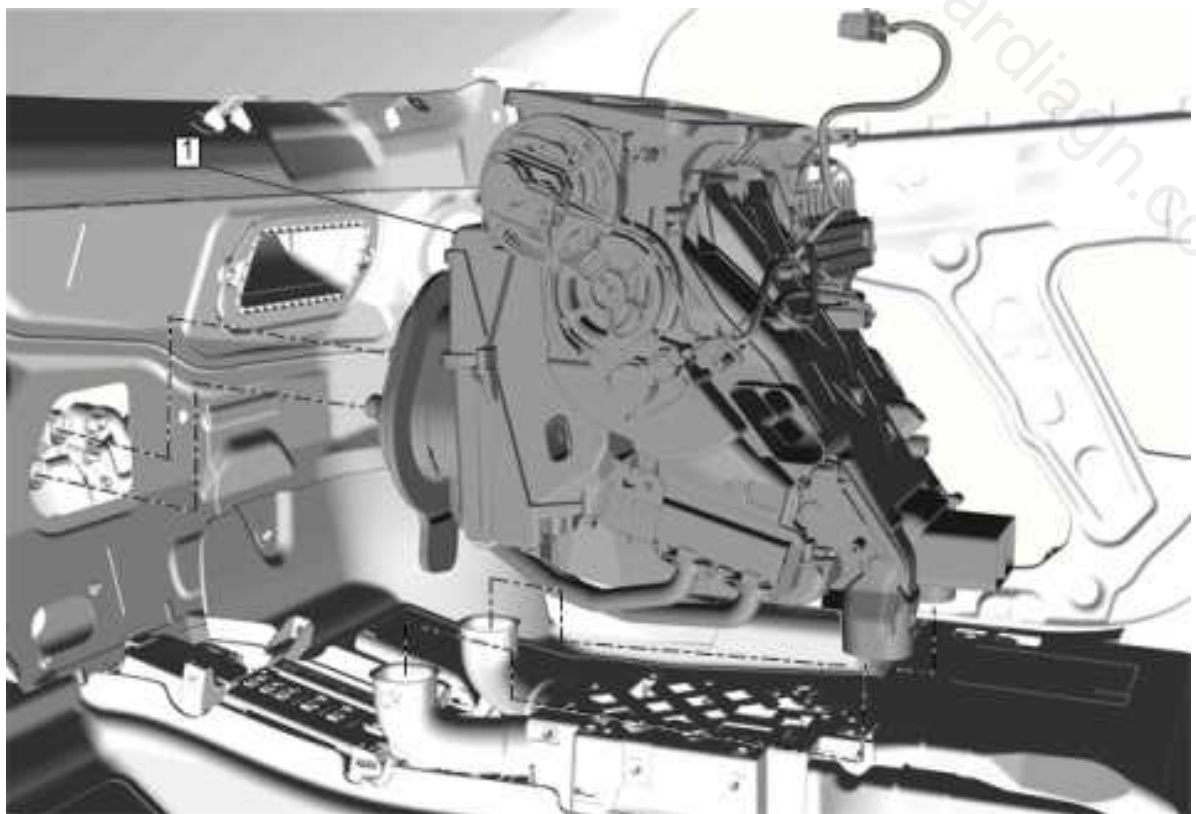


Fig. 720: Heater and Air Conditioning Evaporator and Blower Module
Courtesy of GENERAL MOTORS COMPANY

9. Install Heater and Air Conditioning Evaporator and Blower Module (1) - [Heater and Air Conditioning Evaporator and Blower Module Removal and Installation \(Equinox LYX\)](#)[Heater and Air Conditioning Evaporator and Blower Module Removal and Installation \(Equinox LTG\)](#)[Heater and Air Conditioning Evaporator and Blower Module Removal and Installation \(Equinox LH7\)](#)[Heater and Air Conditioning Evaporator and Blower Module Removal and Installation \(Terrain LH7\)](#)[Heater and Air Conditioning Evaporator and Blower Module Removal and Installation \(Terrain LTG\)](#)[Heater and Air Conditioning Evaporator and Blower Module Removal and Installation \(Terrain LYX With KL9\)](#)[Heater and Air](#)

AIR CONDITIONING EVAPORATOR REPLACEMENT (R-134A)

Removal Procedure

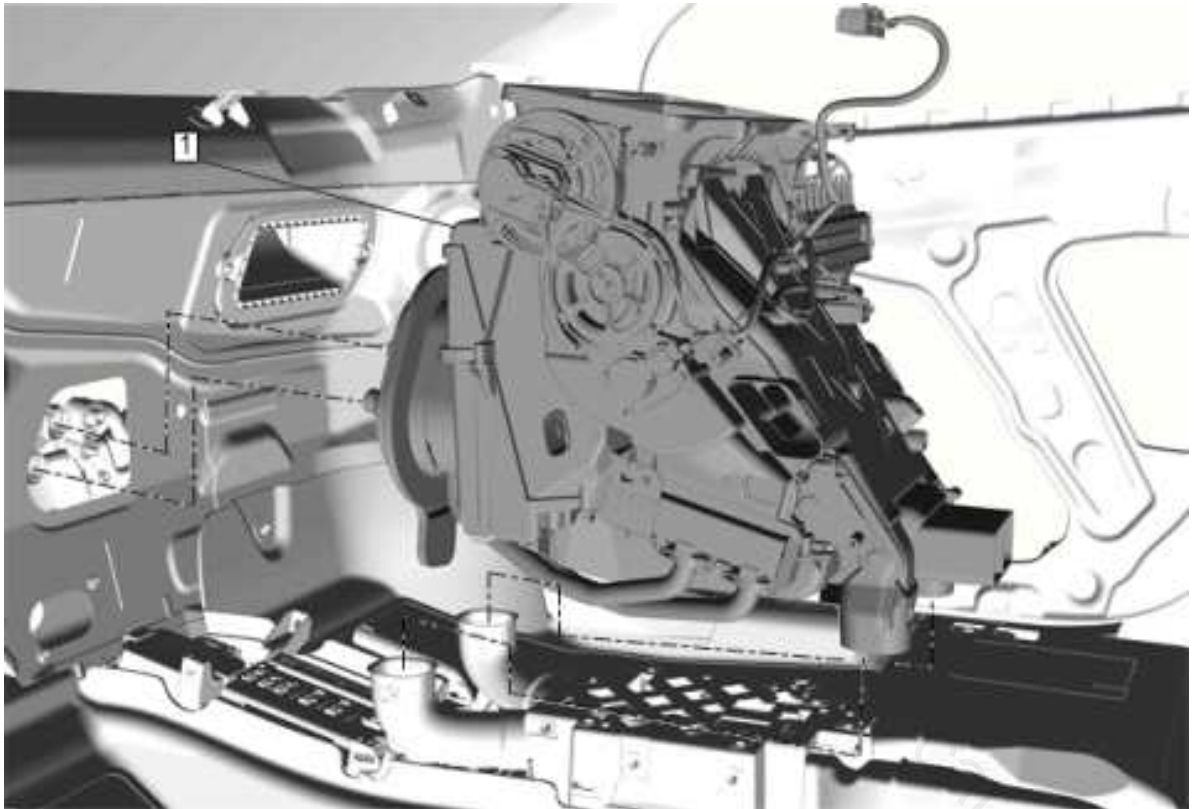


Fig. 721: Heater and Air Conditioning Evaporator and Blower Module
Courtesy of GENERAL MOTORS COMPANY

1. Remove Heater and Air Conditioning Evaporator and Blower Module (1) - Heater and Air Conditioning Evaporator and Blower Module Removal and Installation (Equinox LYX) Heater and Air Conditioning Evaporator and Blower Module Removal and Installation (Equinox LTG) Heater and Air Conditioning Evaporator and Blower Module Removal and Installation (Equinox LH7) Heater and Air Conditioning Evaporator and Blower Module Removal and Installation (Terrain LH7) Heater and Air Conditioning Evaporator and Blower Module Removal and Installation (Terrain LTG) Heater and Air Conditioning Evaporator and Blower Module Removal and Installation (Terrain LYX With KL9) Heater and Air Conditioning Evaporator and Blower Module Removal and Installation (Terrain LYX) Heater and Air Conditioning Evaporator and Blower Module Removal and Installation (Equinox LYX With KL9)

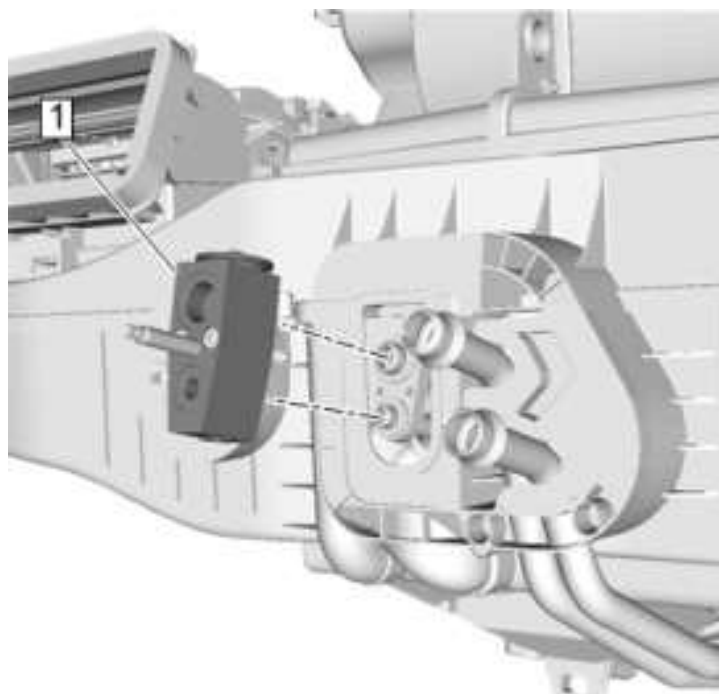


Fig. 722: Air Conditioning Evaporator Thermal Expansion Valve
Courtesy of GENERAL MOTORS COMPANY

2. Remove Air Conditioning Evaporator Thermal Expansion Valve (1) - [Air Conditioning Evaporator Thermal Expansion Valve Replacement](#)

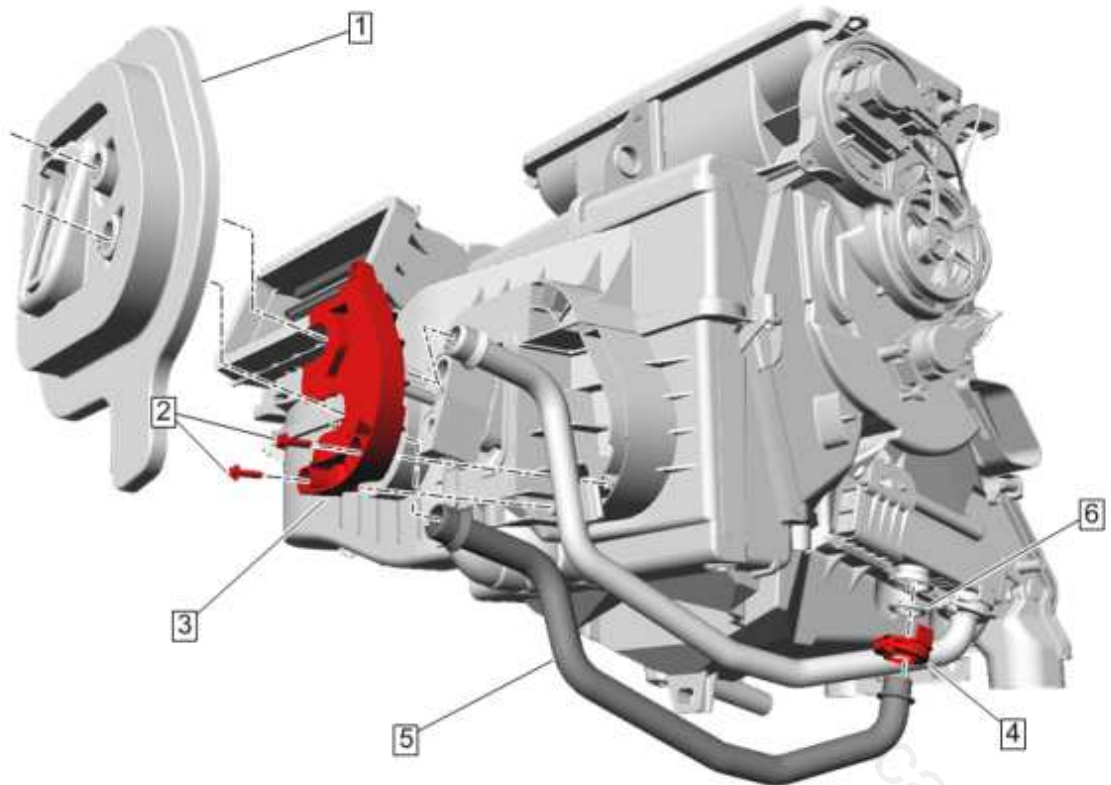


Fig. 723: Heater Core Outlet Tube
Courtesy of GENERAL MOTORS COMPANY

3. Remove Heater Core Outlet Tube (5) - [Heater Core Outlet Tube Replacement](#)

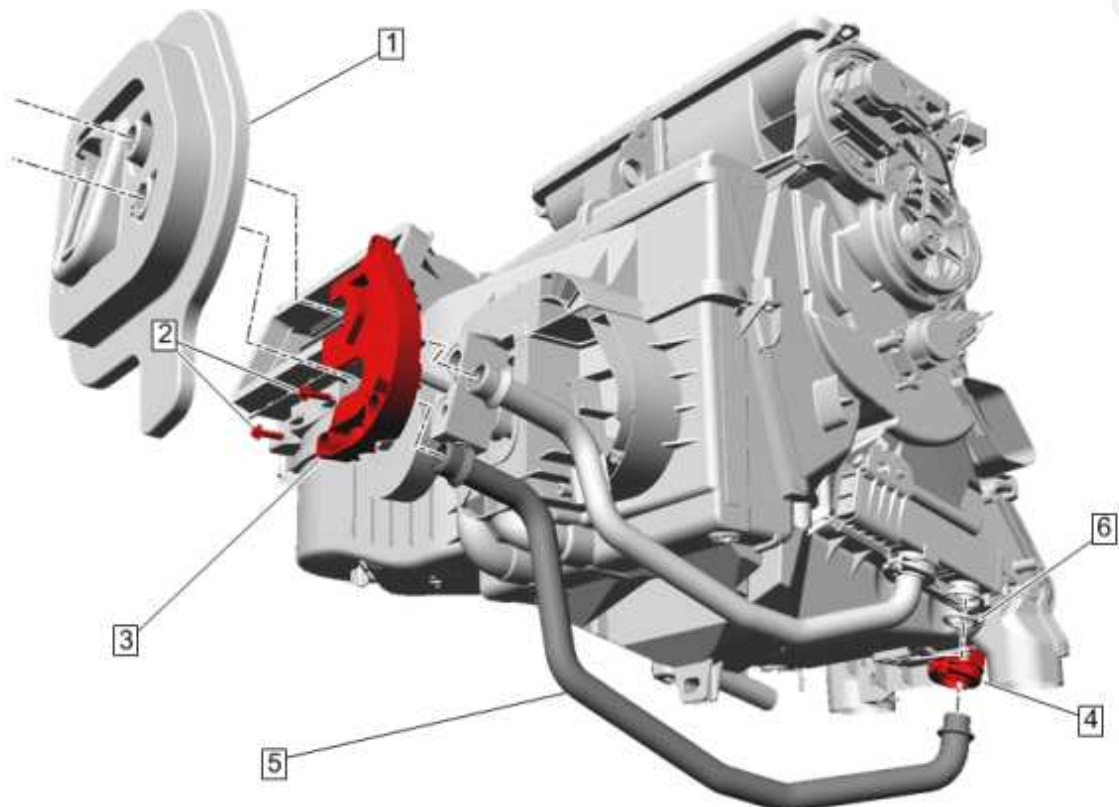


Fig. 724: Heater Core Inlet Tube
Courtesy of GENERAL MOTORS COMPANY

4. Remove Heater Core Inlet Tube (5) - [Heater Core Inlet Tube Replacement](#)

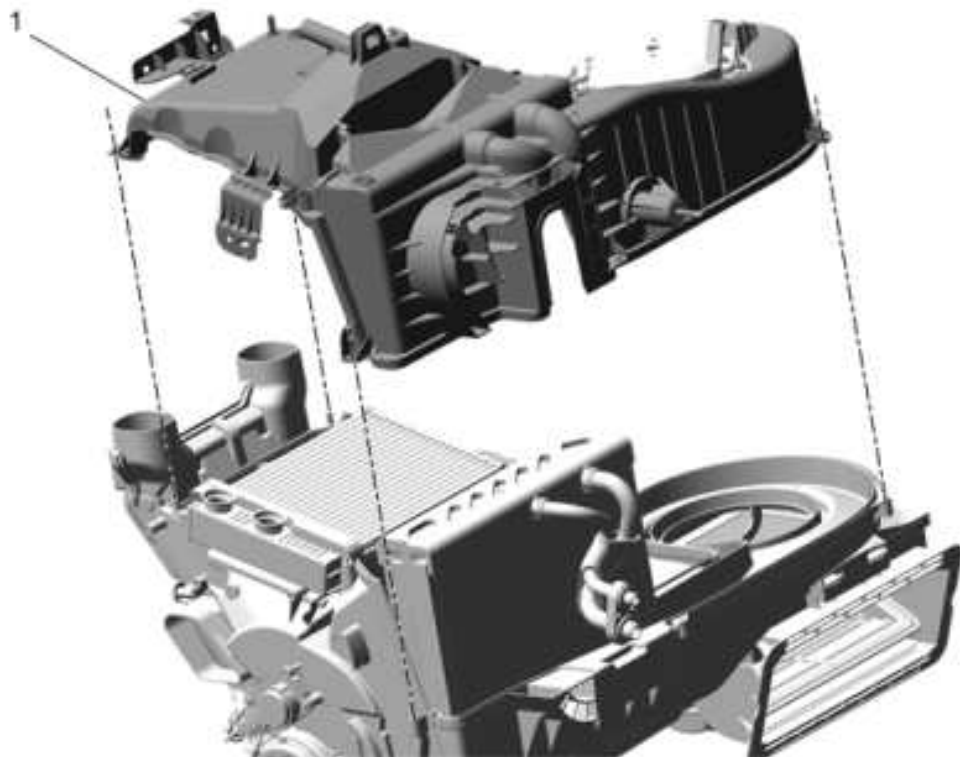


Fig. 725: Air Conditioning Evaporator Lower Case Assembly
Courtesy of GENERAL MOTORS COMPANY

5. Remove Air Conditioning Evaporator Lower Case Assembly (1) - **Air Conditioning Evaporator Lower Case Replacement**

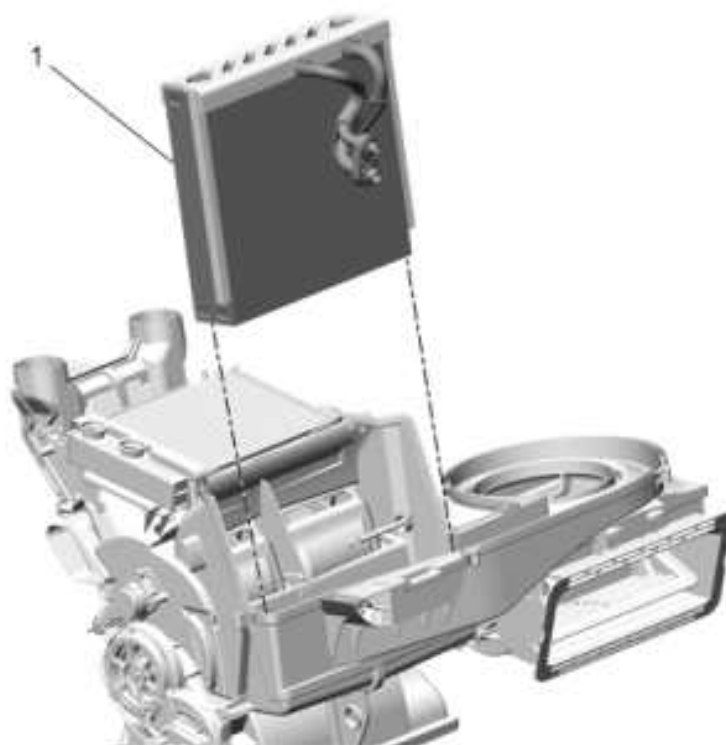


Fig. 726: Air Conditioning Evaporator
Courtesy of GENERAL MOTORS COMPANY

6. Remove Air Conditioning Evaporator (1)
7. Transfer components as necessary.

Installation Procedure

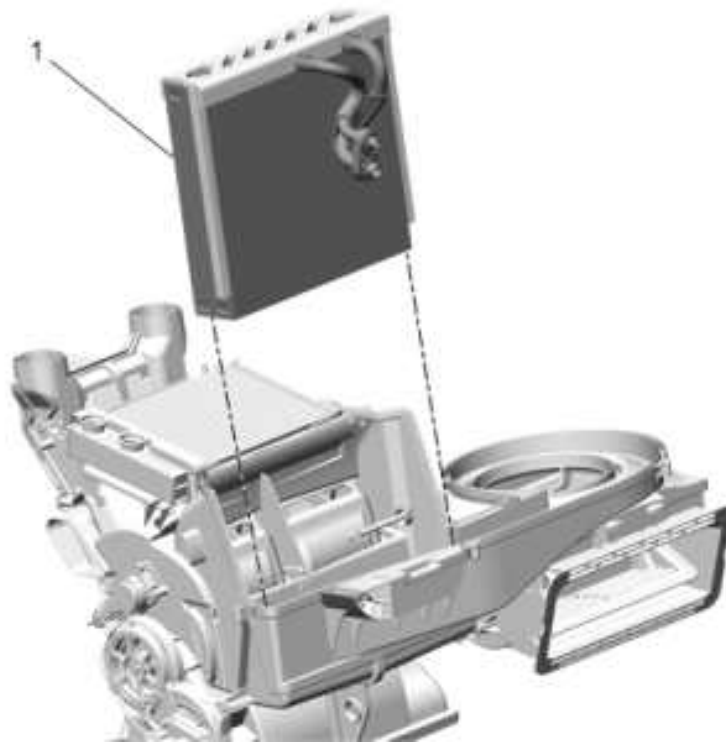


Fig. 727: Air Conditioning Evaporator
 Courtesy of GENERAL MOTORS COMPANY

1. Install Air Conditioning Evaporator (1)

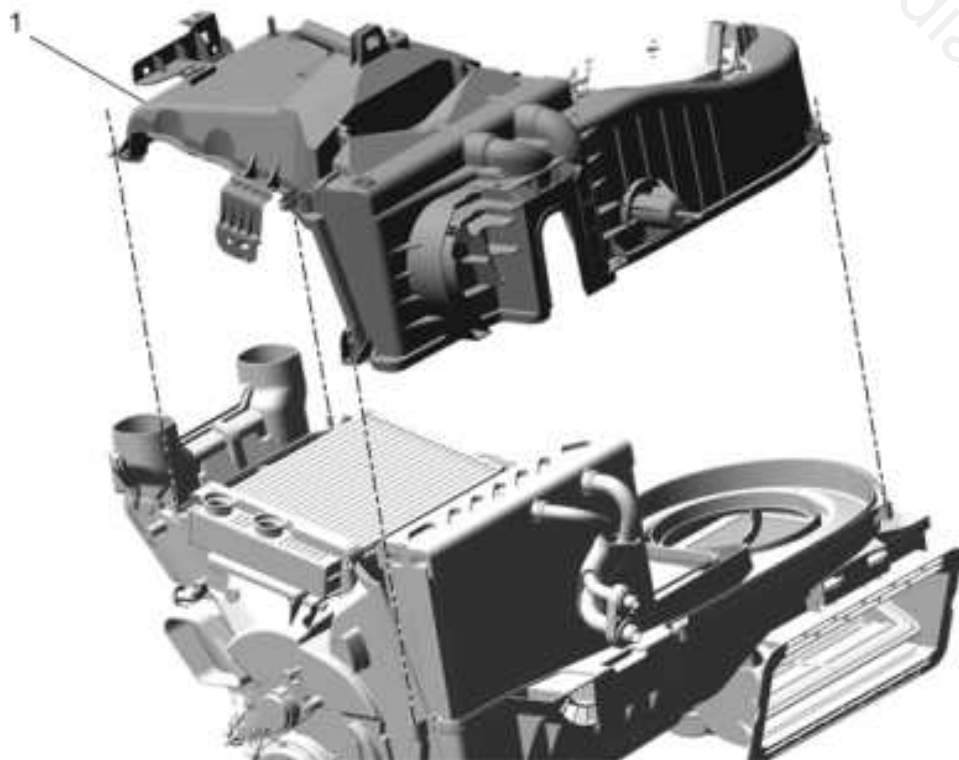


Fig. 728: Air Conditioning Evaporator Lower Case Assembly
 Courtesy of GENERAL MOTORS COMPANY

2. Install Air Conditioning Evaporator Lower Case Assembly (1) - **Air Conditioning Evaporator Lower Case Replacement**

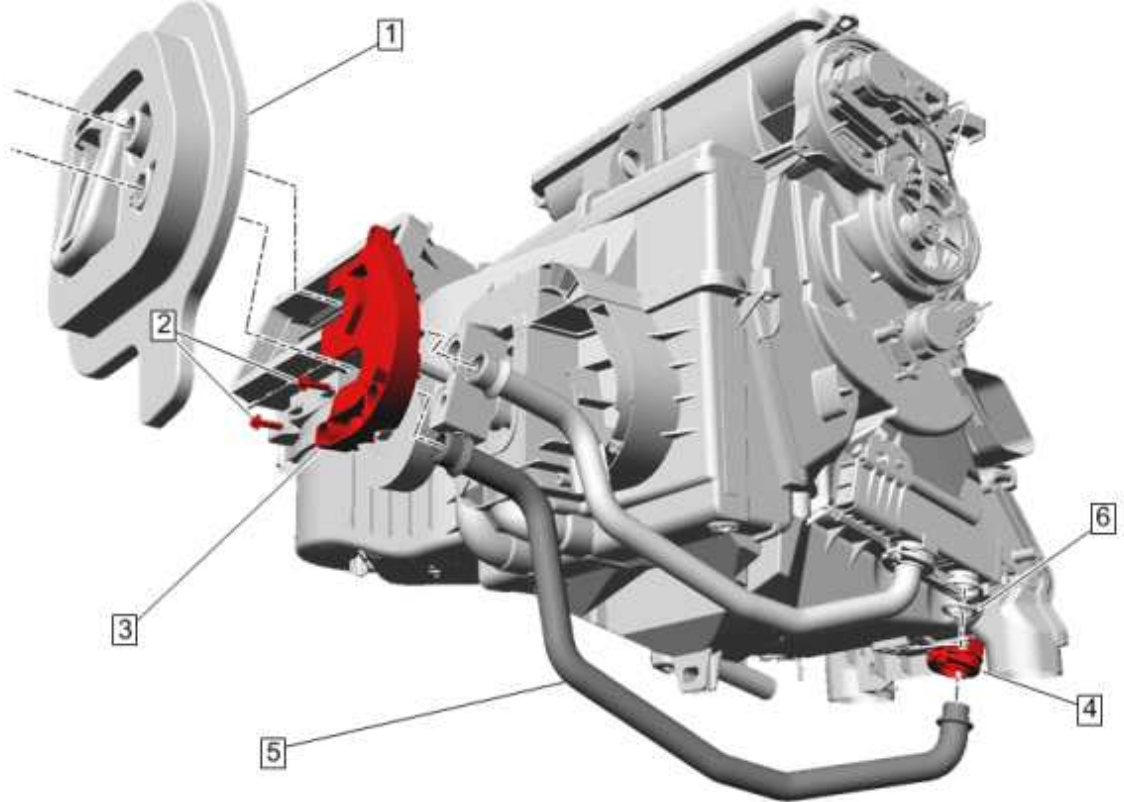


Fig. 729: Heater Core Inlet Tube
 Courtesy of GENERAL MOTORS COMPANY

3. Install Heater Core Inlet Tube (5) - [Heater Core Inlet Tube Replacement](#)

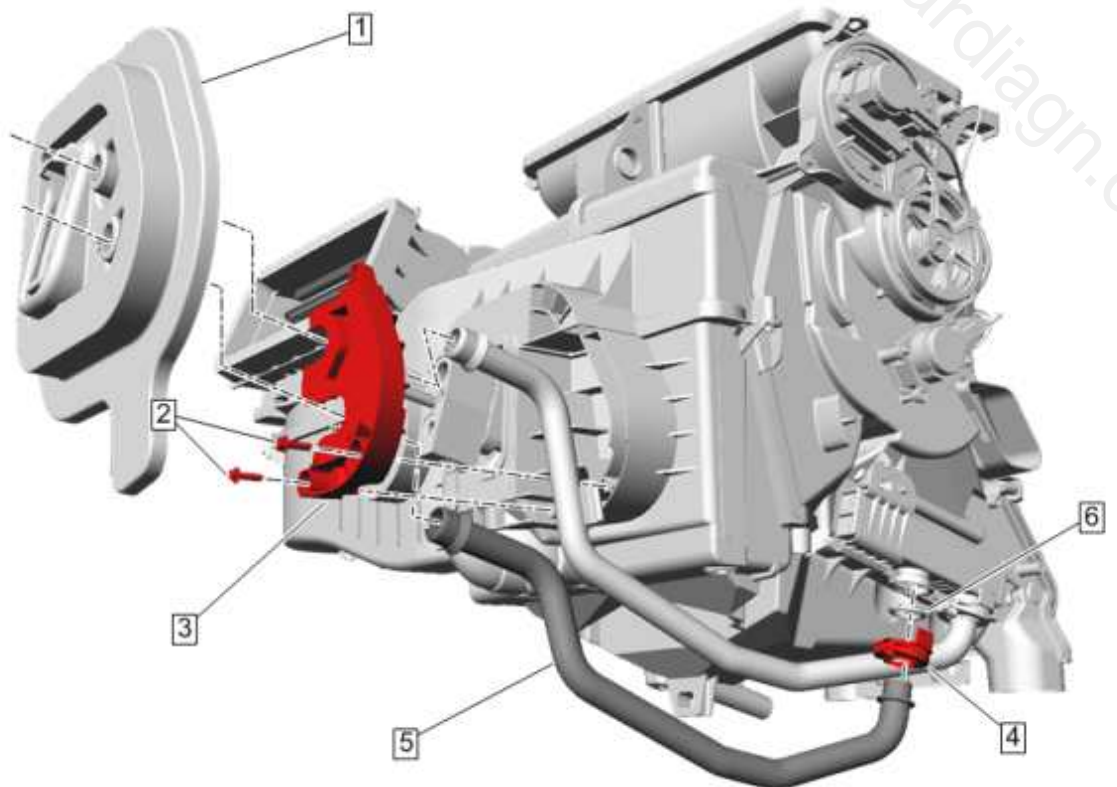


Fig. 730: Heater Core Outlet Tube
 Courtesy of GENERAL MOTORS COMPANY

4. Install Heater Core Outlet Tube (5) - [Heater Core Outlet Tube Replacement](#)

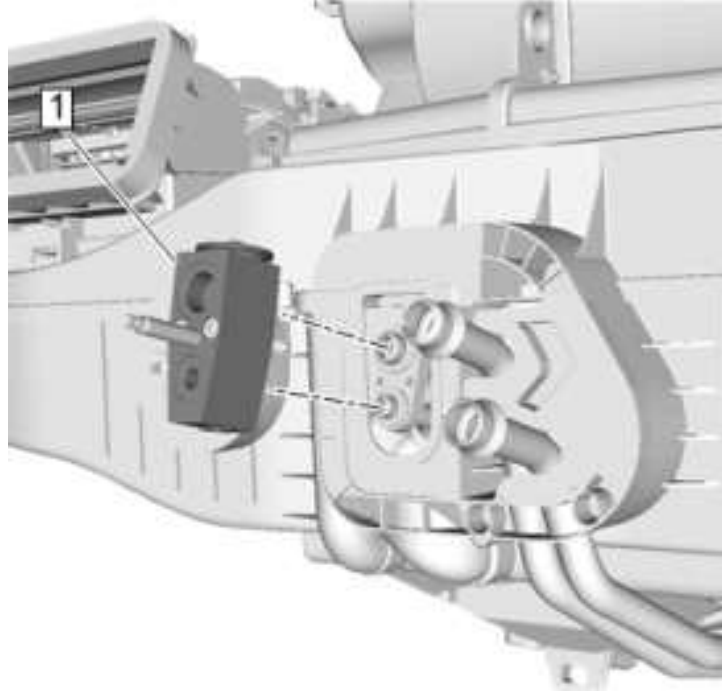


Fig. 731: Air Conditioning Evaporator Thermal Expansion Valve
 Courtesy of GENERAL MOTORS COMPANY

5. Install Air Conditioning Evaporator Thermal Expansion Valve (1) - [Air Conditioning Evaporator Thermal Expansion Valve Replacement](#)

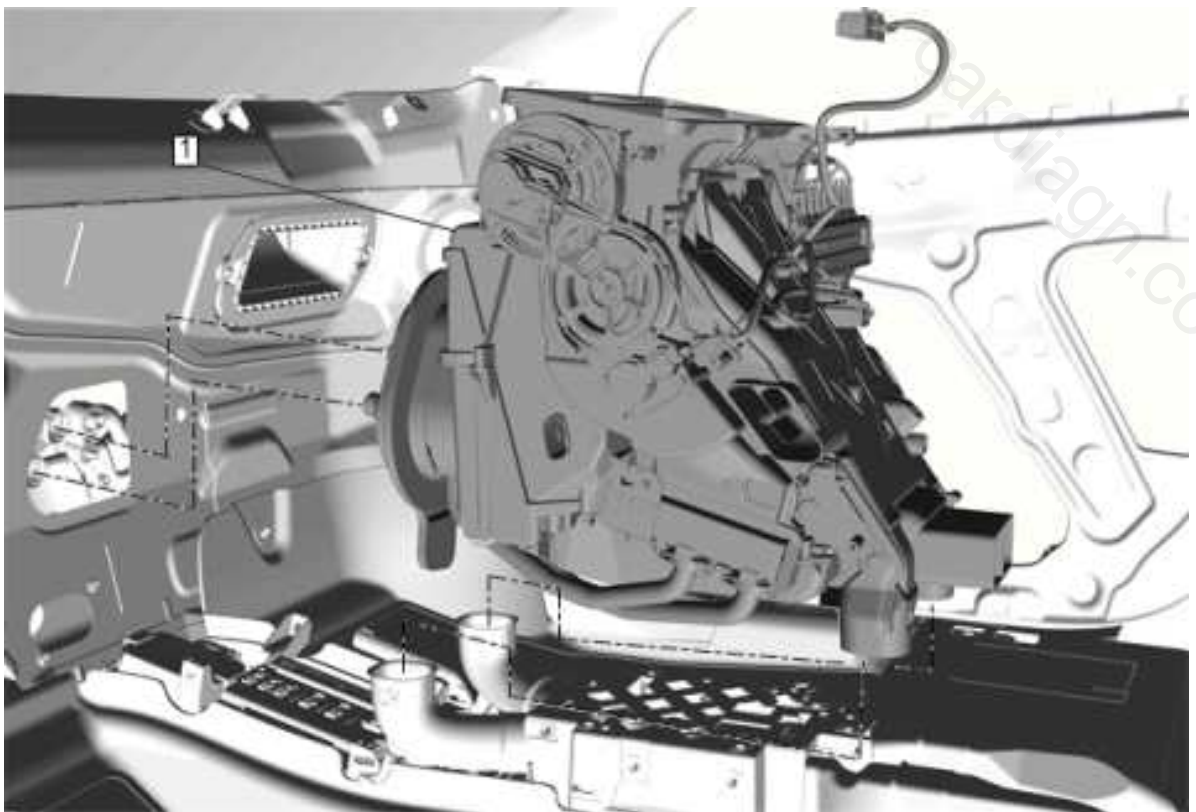


Fig. 732: Heater and Air Conditioning Evaporator and Blower Module
 Courtesy of GENERAL MOTORS COMPANY

6. Install Heater and Air Conditioning Evaporator and Blower Module (1) - [Heater and Air Conditioning Evaporator and Blower Module Removal and Installation \(Equinox LYX\)Heater and Air Conditioning Evaporator and Blower Module Removal and Installation \(Equinox LTG\)Heater and Air Conditioning Evaporator and Blower Module Removal and Installation \(Equinox LH7\)Heater and Air Conditioning Evaporator and Blower Module Removal and Installation \(Terrain LH7\)Heater and Air Conditioning Evaporator and Blower Module Removal and Installation \(Terrain LTG\)Heater and Air Conditioning Evaporator and Blower Module Removal and Installation \(Terrain LYX With KL9\)Heater and Air Conditioning Evaporator and Blower Module Removal and Installation \(Terrain LYX\)Heater and Air Conditioning Evaporator and Blower Module Removal and Installation \(Equinox LYX With KL9\)](#)

AIR CONDITIONING EVAPORATOR REPLACEMENT (R-1234YF)

WARNING: Refer to [R-1234yf Proper Service Procedures Warning](#) .

WARNING: Refer to [R-1234yf Refrigerant Evaporator Caution](#) .

WARNING: Evaporators in vehicles equipped with R-1234yf refrigerant systems must never be repaired or replaced with an evaporator removed from another or salvage vehicle. Use only new SAE J2842 certified and labeled evaporator(s) as replacement parts. Failure to follow this guideline could pose a health and/or safety risk to the vehicle occupant(s).

NOTE: Technicians repairing or servicing motor vehicle air conditioning (MVAC) systems must be trained and certified by an EPA approved organization. Certification is obtained by passing an EPA approved examination.
(<http://www.epa.gov/ozone/title6/609/technicians/609certs.html>)

Replacement Evaporator Label Requirements



Fig. 733: Replacement Evaporator Label

Courtesy of GENERAL MOTORS COMPANY

Replacement evaporators shall have a permanent marking (label, stamp, or etching) that indicates that this evaporator design meets SAE J2842 and shall include the wording below or optionally the symbols as shown:

Text Only- Label Wording- "Conforms to SAE J2842 (Evaporator Manufacturer's Name or Trademark) Replace only with new evaporator certified to meet SAE J2842.

Leak Free Joints Inside the Passenger Compartment

If a refrigerant joint/connection is made or disturbed inside the passenger cabin the following steps shall be followed by the technician to ensure the joint/connection is leak free.

1. Shall clean all dirt, grease and debris from and around connection joints before disassembly/assembly of refrigerant connections.
2. Shall be advised to carefully inspect the joint/connection seal surfaces for signs of deformation, contamination or damage after disassembly.
3. Shall be advised that Seals/O-rings shall never be reused, but replaced with all new parts.
4. Shall be advised to ensure proper alignment of male/female portions and seal so there is no misalignment and stress on the fitting connection.
5. Shall tighten the joint using the proper torque.
6. With full refrigerant charge installed and the vehicles HVAC blower motor set on its lowest speed, A/C switch off and air distribution set to floor. The technician shall insert a SAE J2913 compliant electronic leak detector set to high sensitivity (4 grams/year leak rate) into the center of a floor duct outlet, as far as possible. The technician shall monitor the electronic leak detector for 5 minutes or until the detector alarms.
 - If electronic leak detector alarms, recover the refrigerant and repair the leak.
 - If after 5 minutes there is no alarm, there is no indication of a leak in the passenger compartment and the repair can be completed.
7. If vehicle is equipped with an auxiliary evaporator, monitor the air downstream from the evaporator at the outlet duct closest to the auxiliary unit under the same conditions and set up as step 6.

Proper Disposal of the Replaced Evaporator

The replaced evaporator shall be disabled to ensure that it never be repaired or reused.

Disable the replaced evaporator by completing one of the following steps:

- Using tin snips sever a minimum of 3 of the evaporators tubes.
- Drill or Punch a minimum of two 25 mm (.25 inch) holes in each end tank.

Removal Procedure

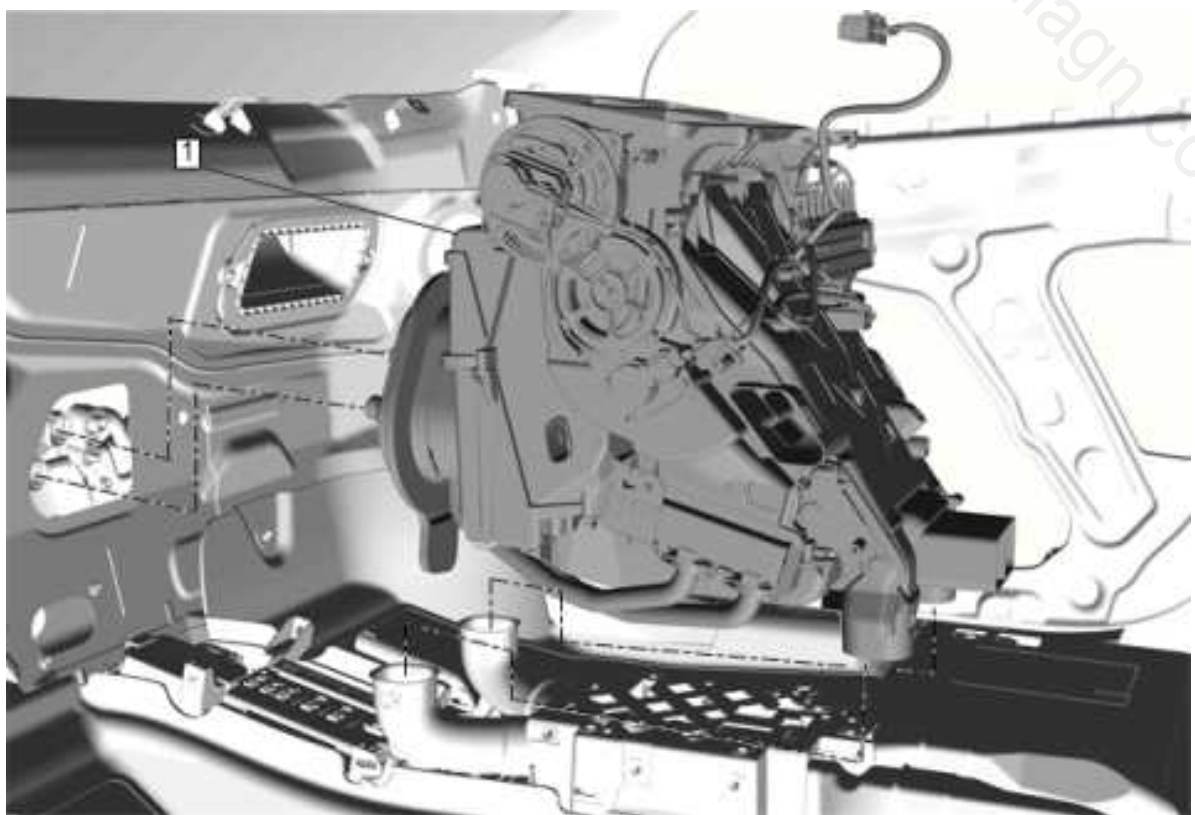


Fig. 734: Heater and Air Conditioning Evaporator and Blower Module
 Courtesy of GENERAL MOTORS COMPANY

1. Remove Heater and Air Conditioning Evaporator and Blower Module (1) - **Heater and Air Conditioning Evaporator and Blower Module Removal and Installation (Equinox LYX)****Heater and Air Conditioning Evaporator and Blower Module Removal and Installation (Equinox LTG)****Heater and Air Conditioning Evaporator and Blower Module Removal and Installation (Equinox LH7)****Heater and Air Conditioning Evaporator and Blower Module Removal and Installation (Terrain LH7)****Heater and Air Conditioning Evaporator and Blower Module Removal and Installation (Terrain LTG)****Heater and Air Conditioning**

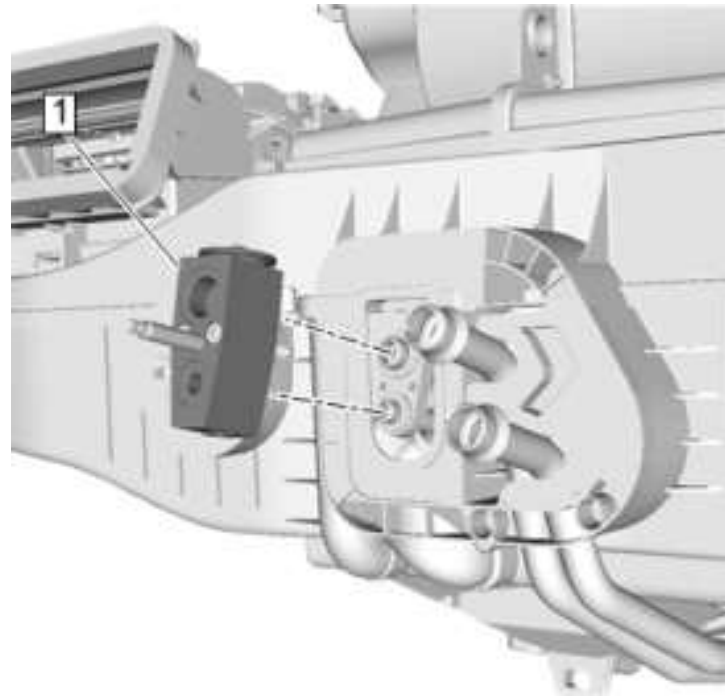


Fig. 735: Air Conditioning Evaporator Thermal Expansion Valve
Courtesy of GENERAL MOTORS COMPANY

2. Remove Air Conditioning Evaporator Thermal Expansion Valve (1) - [Air Conditioning Evaporator Thermal Expansion Valve Replacement](#)

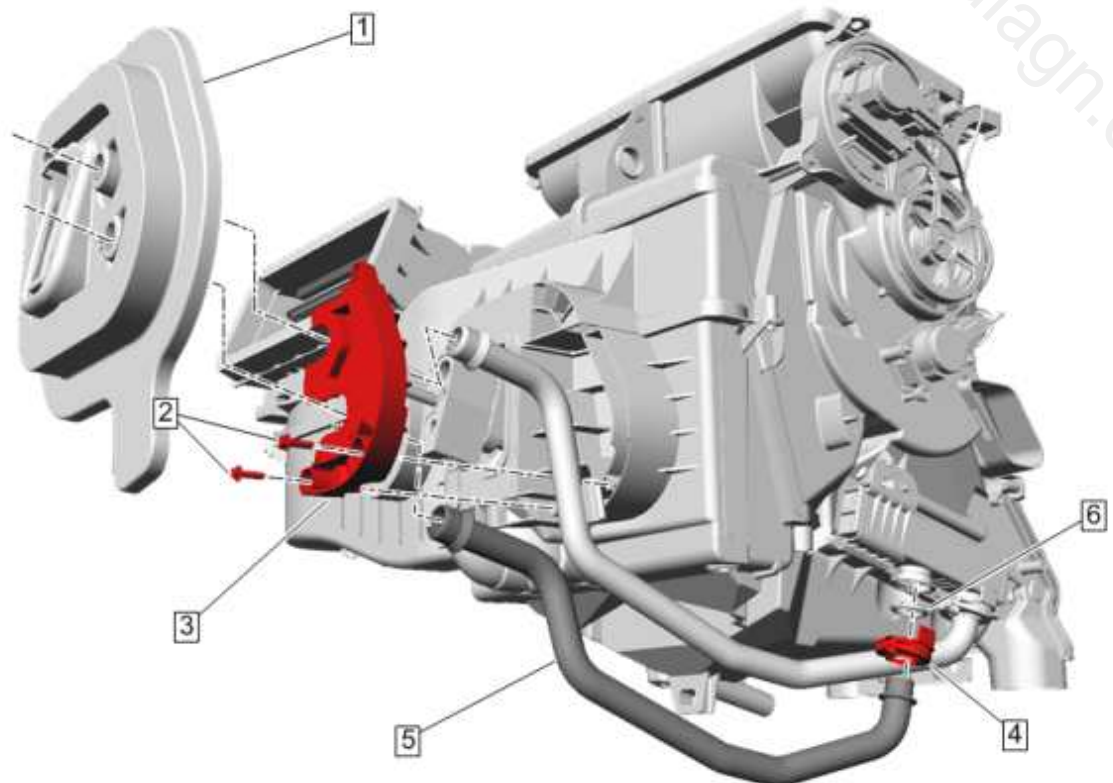


Fig. 736: Heater Core Outlet Tube
Courtesy of GENERAL MOTORS COMPANY

3. Remove Heater Core Outlet Tube (5) [Heater Core Outlet Tube Replacement](#)

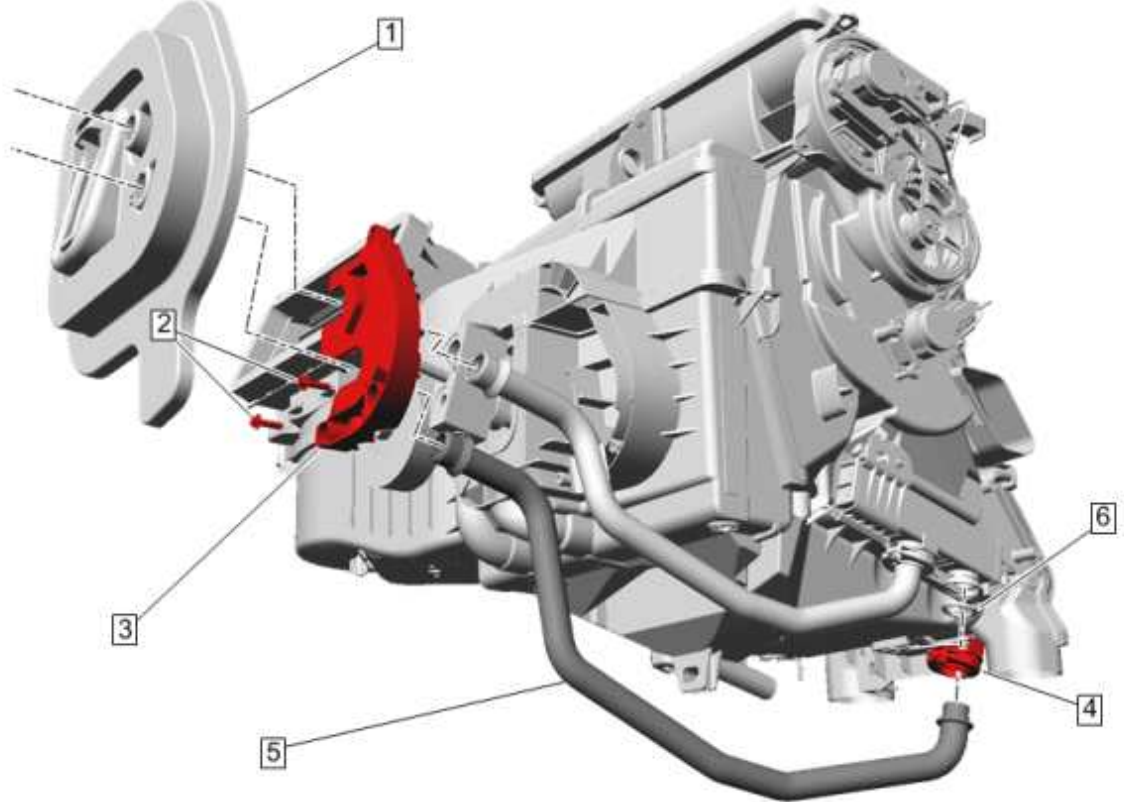


Fig. 737: Heater Core Inlet Tube
 Courtesy of GENERAL MOTORS COMPANY

4. Remove Heater Core Inlet Tube (5) - [Heater Core Inlet Tube Replacement](#)

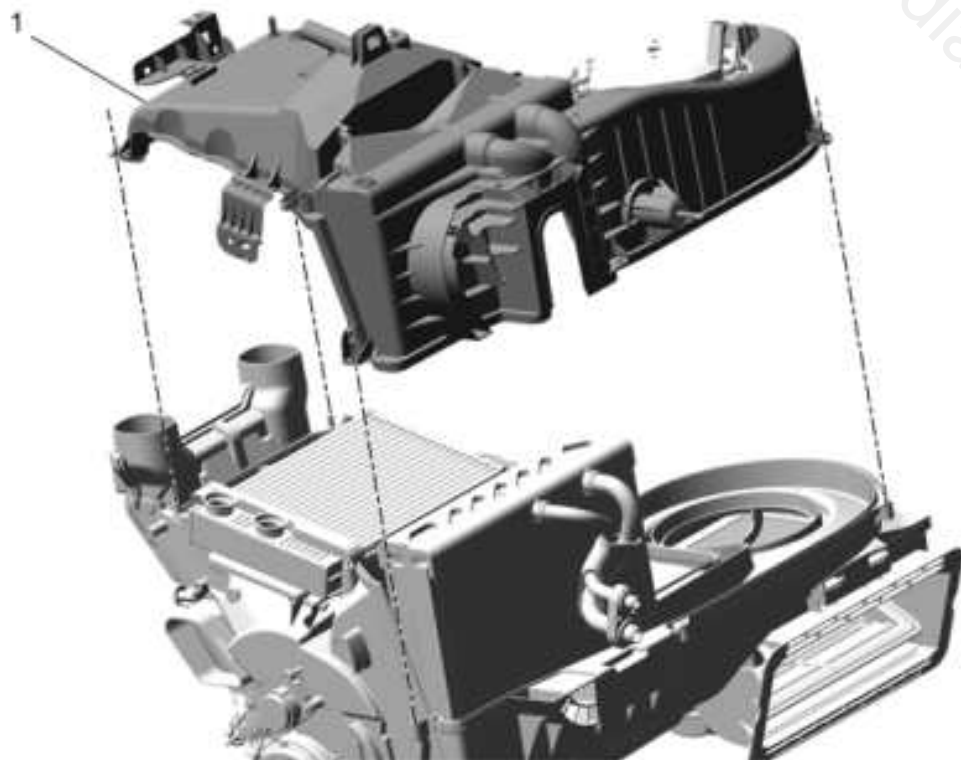


Fig. 738: Air Conditioning Evaporator Lower Case Assembly
 Courtesy of GENERAL MOTORS COMPANY

5. Remove Air Conditioning Evaporator Lower Case Assembly (1) - [Air Conditioning Evaporator Lower Case Replacement](#)

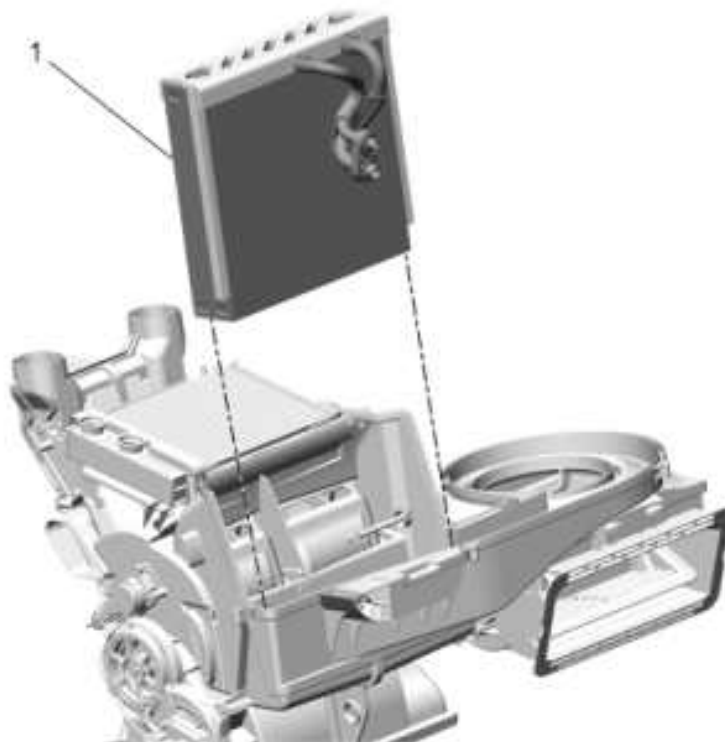


Fig. 739: Air Conditioning Evaporator
Courtesy of GENERAL MOTORS COMPANY

6. Remove Air Conditioning Evaporator (1)
7. Transfer components as necessary.

Installation Procedure

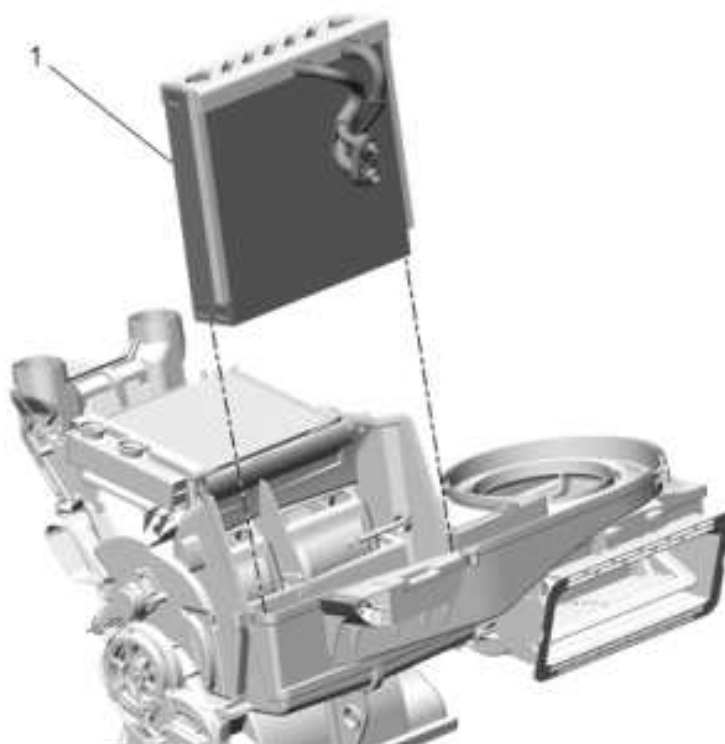


Fig. 740: Air Conditioning Evaporator
Courtesy of GENERAL MOTORS COMPANY

1. Install Air Conditioning Evaporator (1)

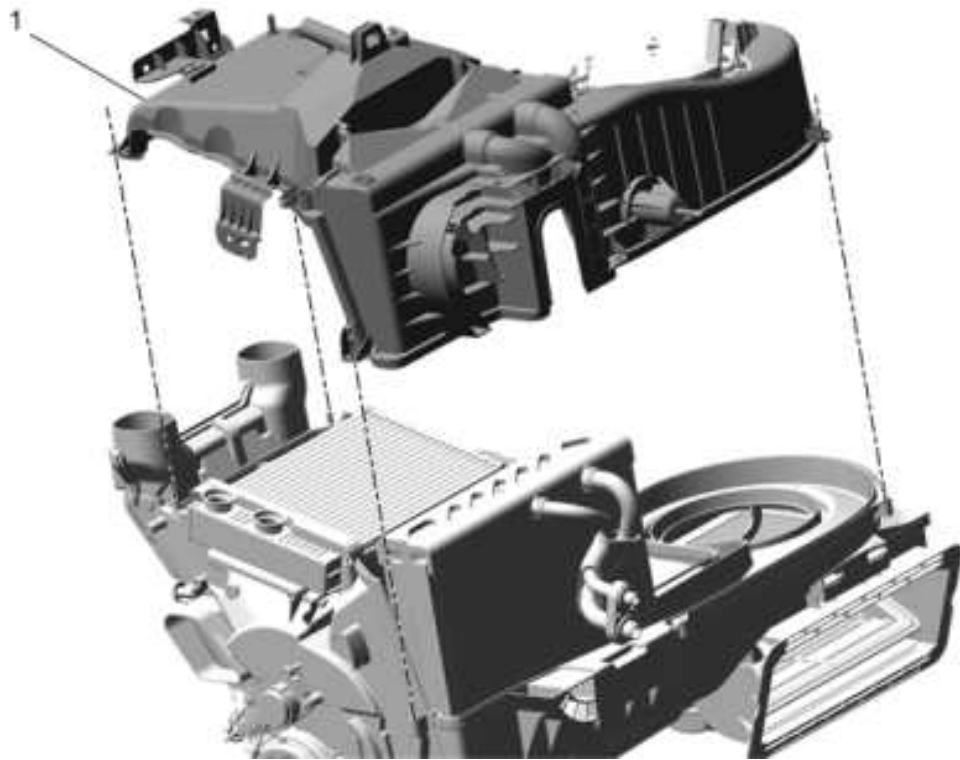


Fig. 741: Air Conditioning Evaporator Lower Case Assembly
 Courtesy of GENERAL MOTORS COMPANY

2. Install Air Conditioning Evaporator Lower Case Assembly (1) [Air Conditioning Evaporator Lower Case Replacement](#)

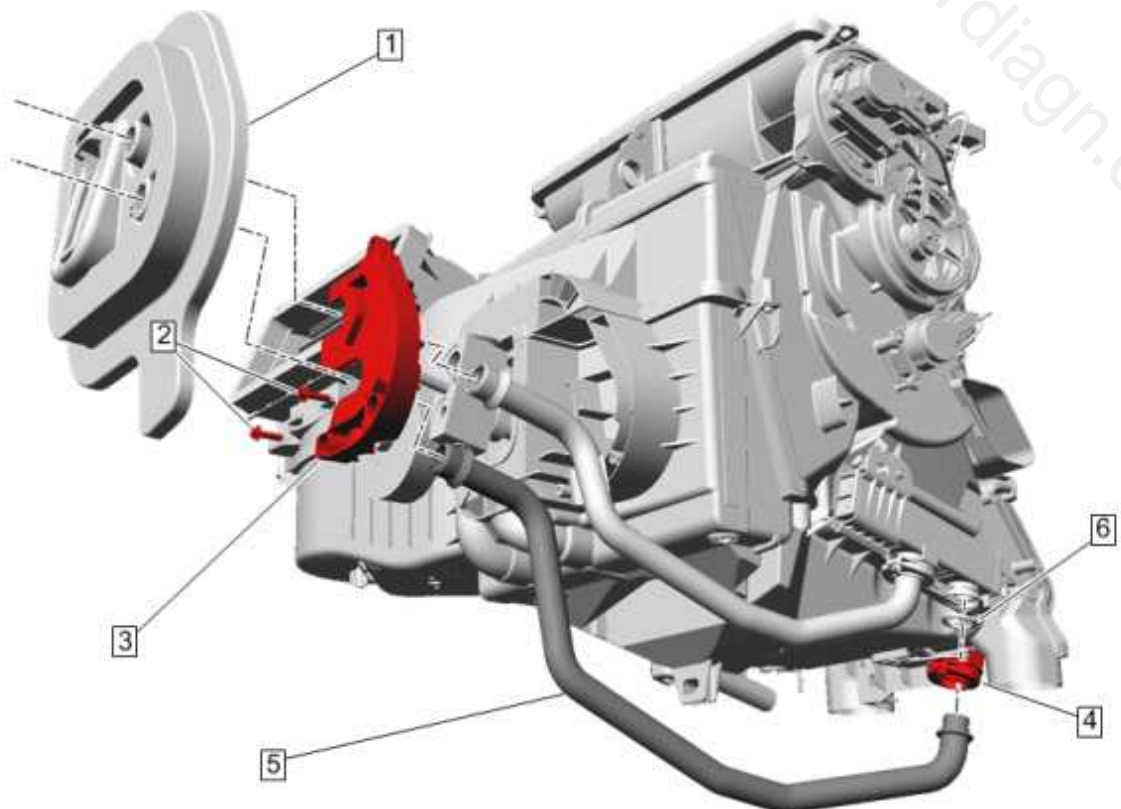


Fig. 742: Heater Core Inlet Tube
 Courtesy of GENERAL MOTORS COMPANY

3. Install Heater Core Inlet Tube (5) [Heater Core Inlet Tube Replacement](#)

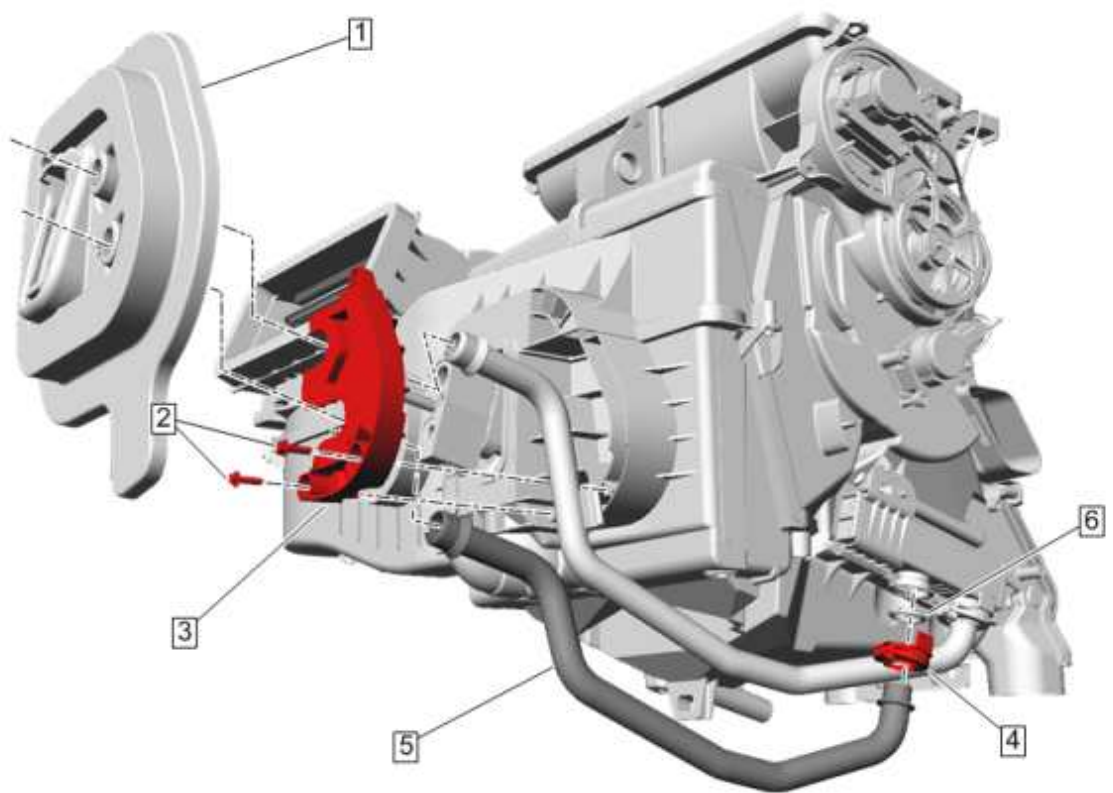


Fig. 743: Heater Core Outlet Tube
 Courtesy of GENERAL MOTORS COMPANY

4. Install Heater Core Outlet Tube (5) - [Heater Core Outlet Tube Replacement](#)

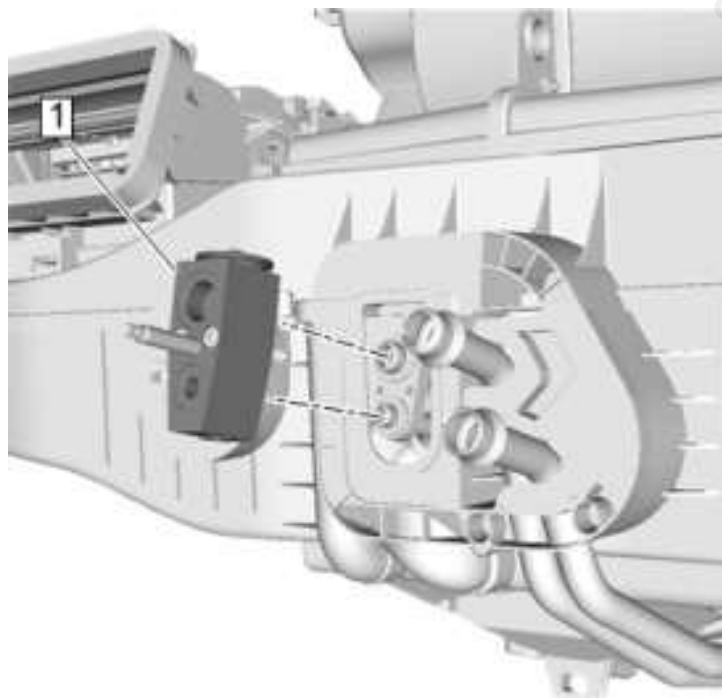


Fig. 744: Air Conditioning Evaporator Thermal Expansion Valve
 Courtesy of GENERAL MOTORS COMPANY

5. Install Air Conditioning Evaporator Thermal Expansion Valve (1) - [Air Conditioning Evaporator Thermal Expansion Valve Replacement](#)

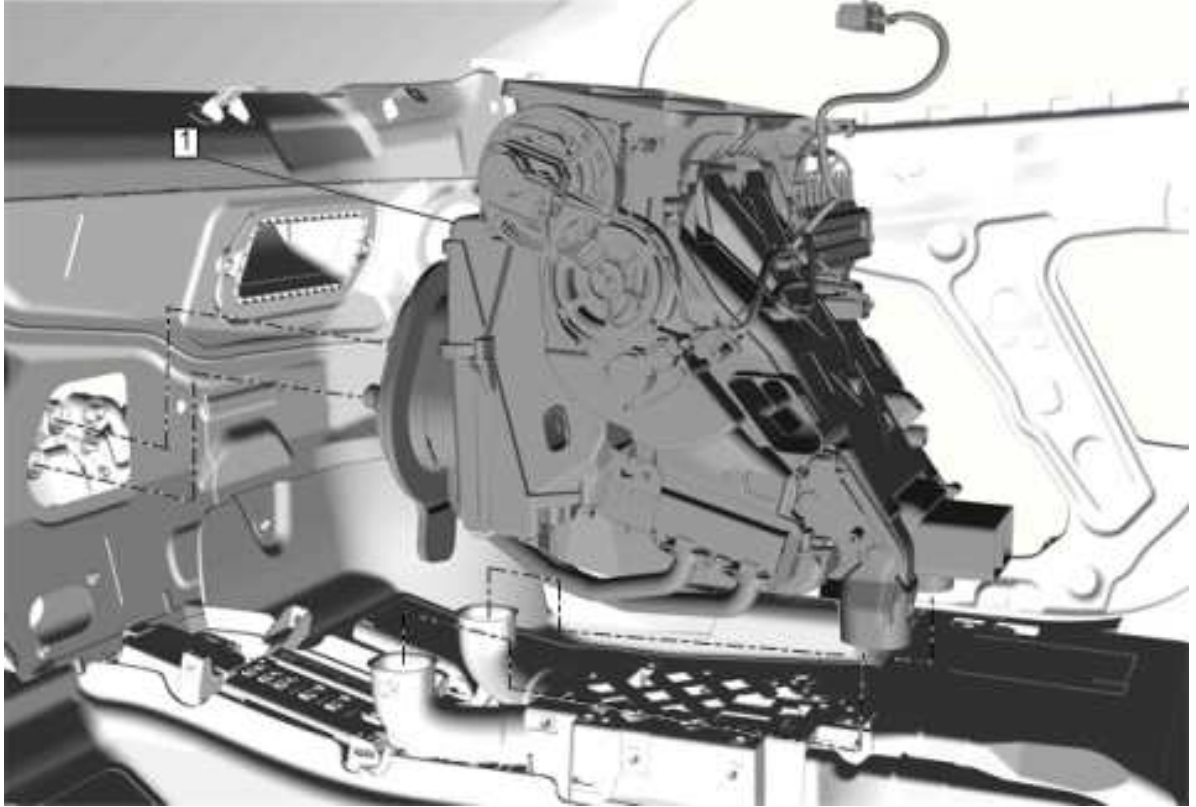


Fig. 745: Heater and Air Conditioning Evaporator and Blower Module
 Courtesy of GENERAL MOTORS COMPANY

6. Install Heater and Air Conditioning Evaporator and Blower Module (1) - [Heater and Air Conditioning Evaporator and Blower Module Removal and Installation \(Equinox LYX\)](#)[Heater and Air Conditioning Evaporator and Blower Module Removal and Installation \(Equinox LTG\)](#)[Heater and Air Conditioning Evaporator and Blower Module Removal and Installation \(Equinox LH7\)](#)[Heater and Air Conditioning Evaporator and Blower Module Removal and Installation \(Terrain LH7\)](#)[Heater and Air Conditioning Evaporator and Blower Module Removal and Installation \(Terrain LTG\)](#)[Heater and Air Conditioning Evaporator and Blower Module Removal and Installation \(Terrain LYX With KL9\)](#)[Heater and Air Conditioning Evaporator and Blower Module Removal and Installation \(Terrain LYX\)](#)[Heater and Air Conditioning Evaporator and Blower Module Removal and Installation \(Equinox LYX With KL9\)](#)

AIR CONDITIONING EVAPORATOR AND BLOWER MODULE DRAIN HOSE REPLACEMENT (EQUINOX)

Removal Procedure

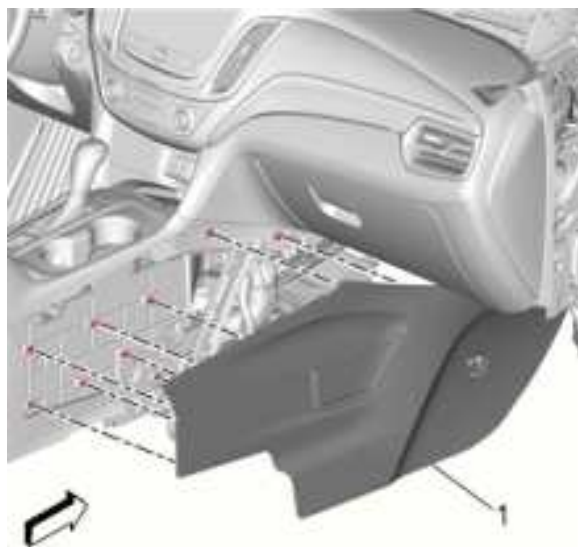


Fig. 746: Right Front Floor Console Extension Panel
 Courtesy of GENERAL MOTORS COMPANY

1. Remove Front Floor Console Extension Panel - Right (1) - [Front Floor Console Extension Panel Replacement - Right Side \(Equinox\)](#)

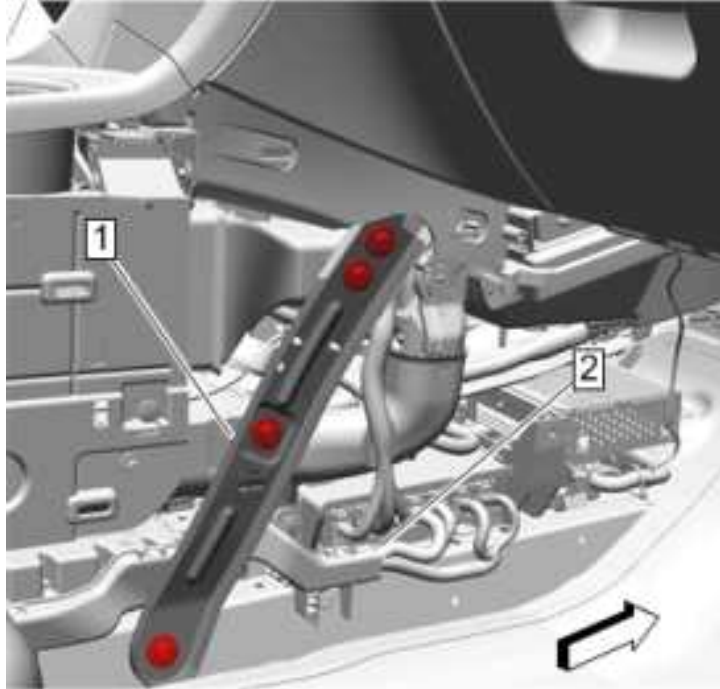


Fig. 747: Instrument Panel Center Lower Bracket-Right Side
 Courtesy of GENERAL MOTORS COMPANY

2. Remove Instrument Panel Center Lower Bracket-Right Side (1) - [**Instrument Panel Center Lower Bracket Replacement \(Equinox - Right Side\)**](#).
3. Unclip the wiring harness conduit (2) and position out of the way.

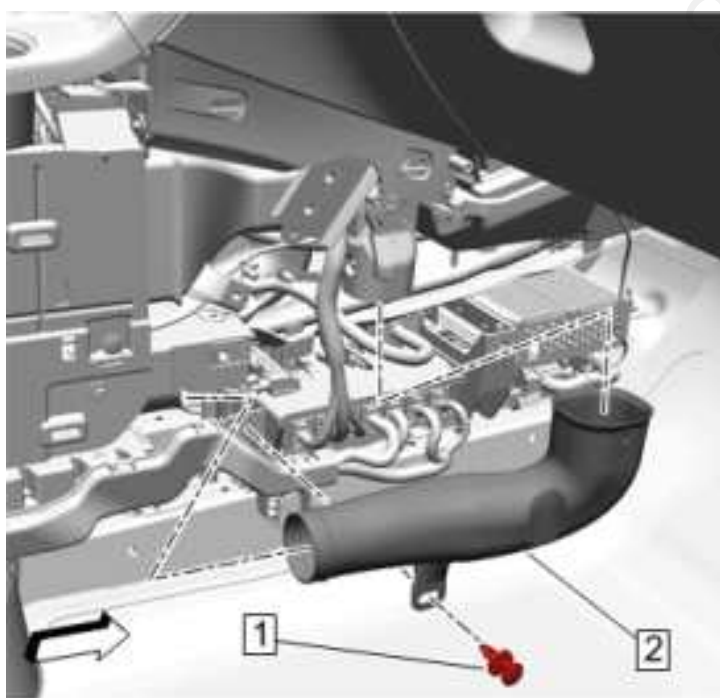


Fig. 748: Floor Rear Air Outlet Duct - Right Side
 Courtesy of GENERAL MOTORS COMPANY

4. Remove Floor Rear Air Outlet Duct - Right Side (2) - [**Floor Rear Air Outlet Duct Replacement - Right Side \(Equinox Front\)Floor Rear Air Outlet Duct Replacement - Right Side \(Eqionox Rear\)**](#).

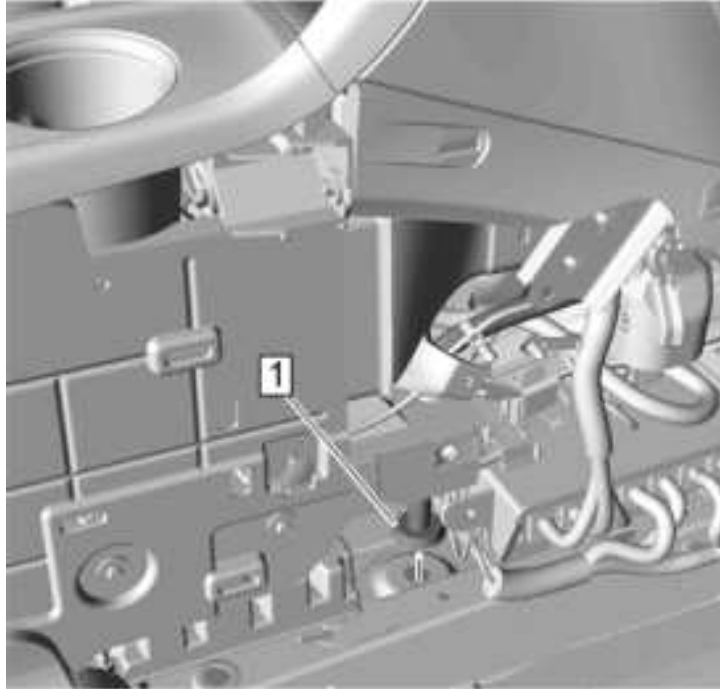


Fig. 749: Air Conditioning Evaporator and Blower Module Drain Hose
 Courtesy of GENERAL MOTORS COMPANY

5. Remove Air Conditioning Evaporator and Blower Module Drain Hose (1) @Front Floor Panel

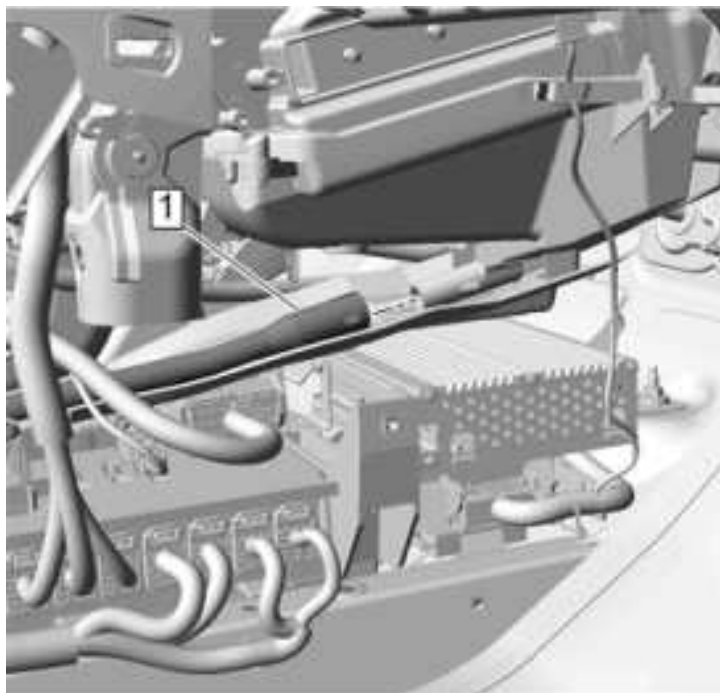


Fig. 750: Air Conditioning Evaporator and Blower Module Drain Hose
 Courtesy of GENERAL MOTORS COMPANY

CAUTION: Refer to [HVAC Module Drain Tube Caution](#) .

6. Prior to removing the air conditioning evaporator and blower module drain tube/hose, use clean and absorbent shop clothes/towels to cover the electrical components protecting the electrical components from water damage.
7. Remove Air Conditioning Evaporator and Blower Module Drain Hose (1) @Heater and Air Conditioning Evaporator and Blower Lower Case

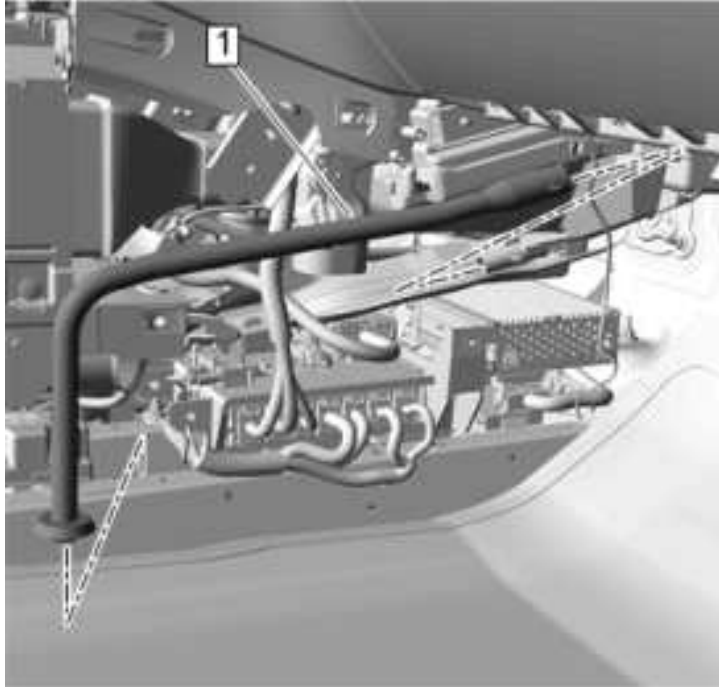


Fig. 751: Air Conditioning Evaporator and Blower Module Drain Hose
Courtesy of GENERAL MOTORS COMPANY

8. Remove Air Conditioning Evaporator and Blower Module Drain Hose (1)

Installation Procedure

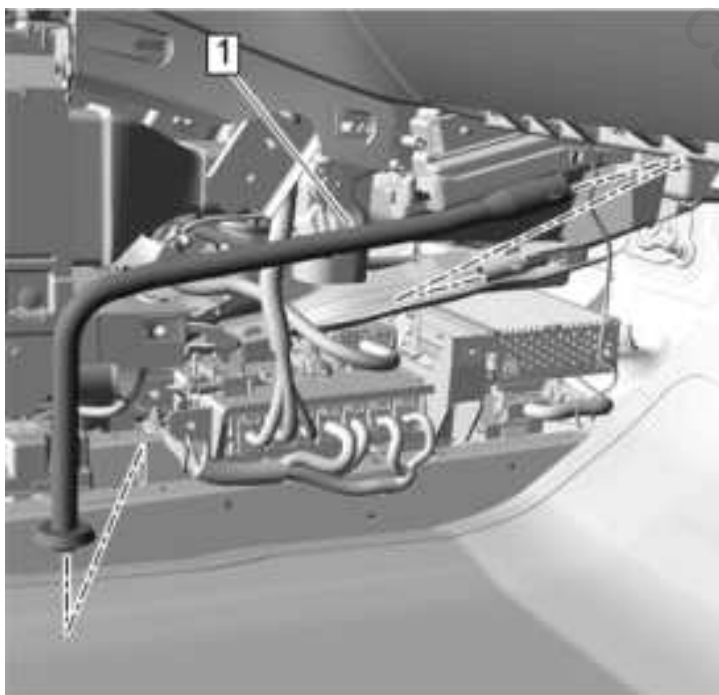


Fig. 752: Air Conditioning Evaporator and Blower Module Drain Hose
Courtesy of GENERAL MOTORS COMPANY

1. Install Air Conditioning Evaporator and Blower Module Drain Hose (1)

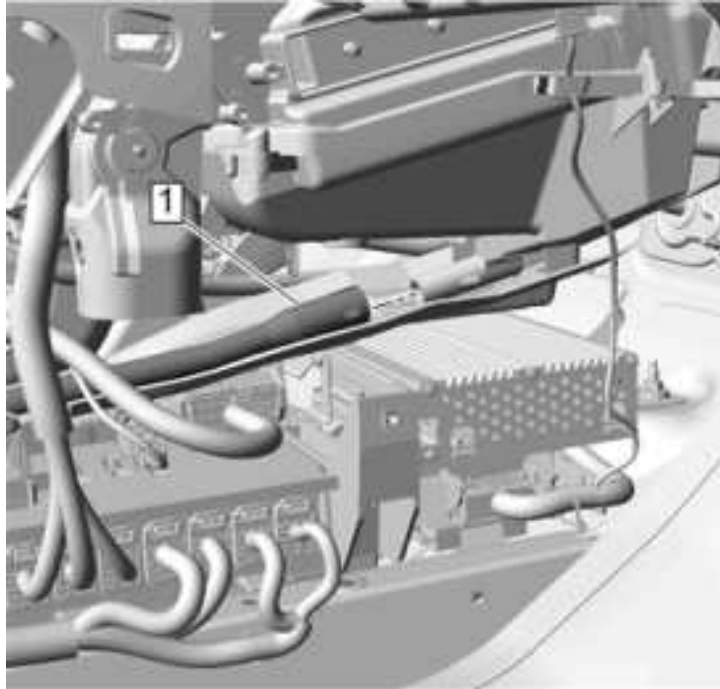


Fig. 753: Air Conditioning Evaporator and Blower Module Drain Hose
 Courtesy of GENERAL MOTORS COMPANY

CAUTION: Refer to [HVAC Module Drain Tube Caution](#) .

2. Install Air Conditioning Evaporator and Blower Module Drain Hose (1) @Heater and Air Conditioning Evaporator and Blower Lower Case

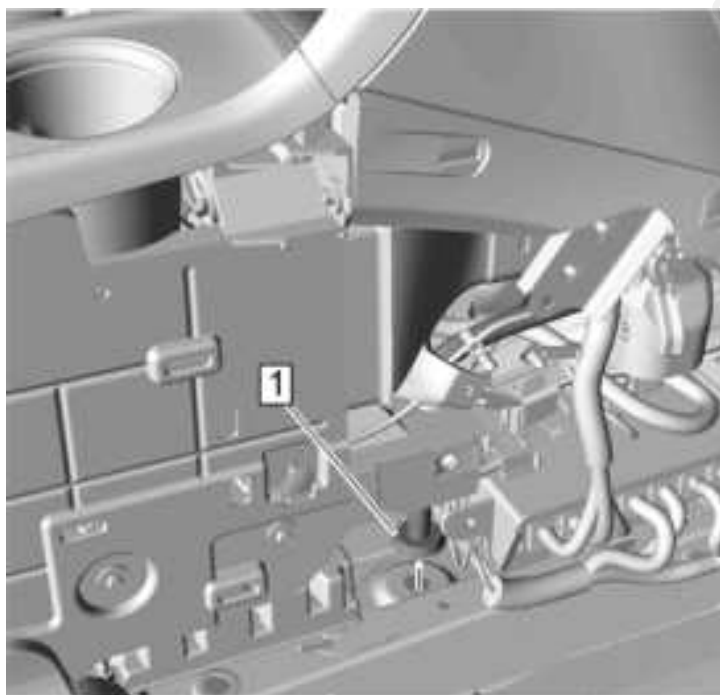


Fig. 754: Air Conditioning Evaporator and Blower Module Drain Hose
 Courtesy of GENERAL MOTORS COMPANY

3. Install Air Conditioning Evaporator and Blower Module Drain Hose (1) @Front Floor Panel
4. Remove the absorbent shop clothes/towels covering the electrical components.

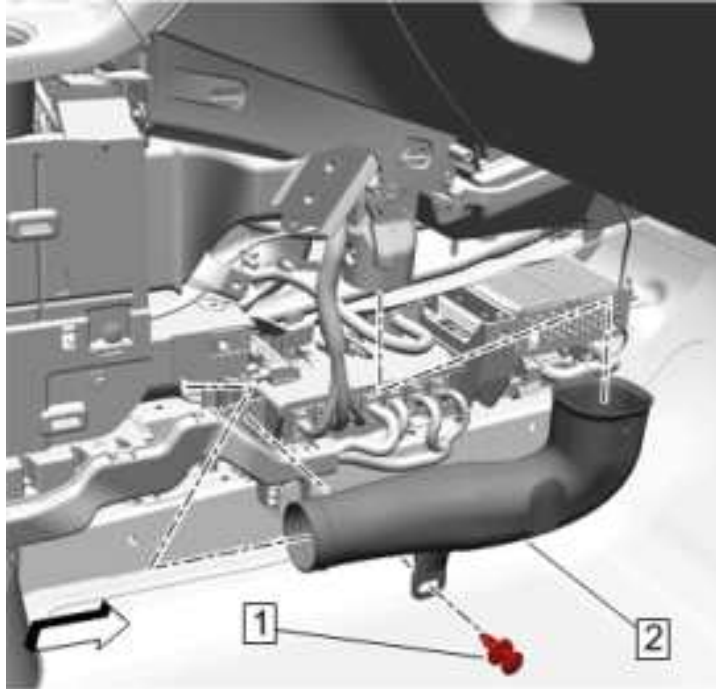


Fig. 755: Floor Rear Air Outlet Duct - Right Side
 Courtesy of GENERAL MOTORS COMPANY

5. Install Floor Rear Air Outlet Duct - Right Side (2) - [Floor Rear Air Outlet Duct Replacement - Right Side \(Equinox Front\)Floor Rear Air Outlet Duct Replacement - Right Side \(Eqionox Rear\)](#).

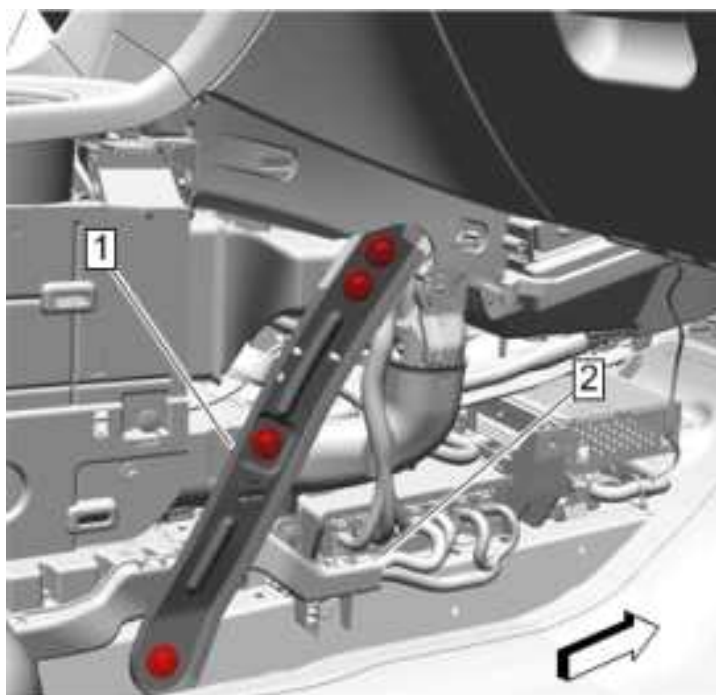


Fig. 756: Instrument Panel Center Lower Bracket-Right Side
 Courtesy of GENERAL MOTORS COMPANY

6. Position the wiring harness conduit (2) to its original position and secure.
7. Install Instrument Panel Center Lower Bracket-Right Side (1) - [Instrument Panel Center Lower Bracket Replacement \(Equinox - Right Side\)](#).

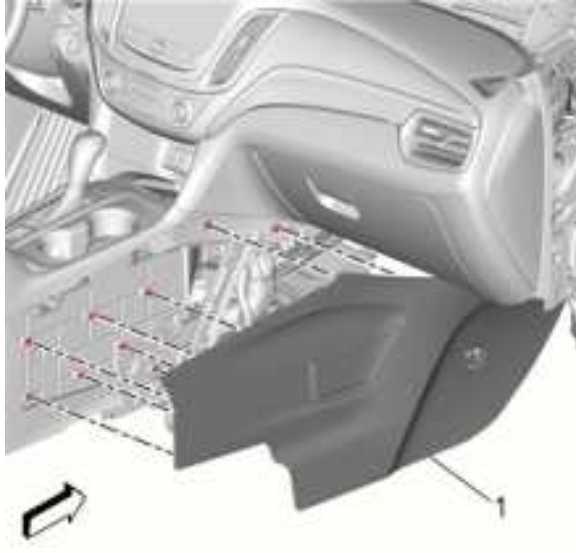


Fig. 757: Right Front Floor Console Extension Panel
 Courtesy of GENERAL MOTORS COMPANY

8. Install Front Floor Console Extension Panel - Right (1) - **Front Floor Console Extension Panel Replacement - Right Side (Equinox)**

AIR CONDITIONING EVAPORATOR AND BLOWER MODULE DRAIN HOSE REPLACEMENT (TERRAIN)

Removal Procedure

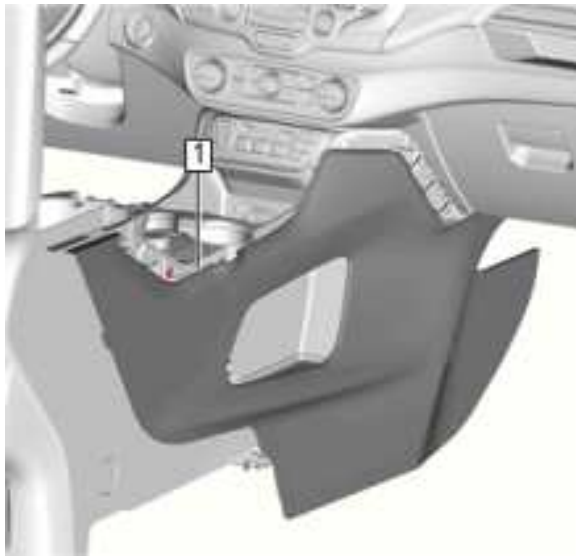


Fig. 758: Right Front Floor Console Extension Panel
 Courtesy of GENERAL MOTORS COMPANY

1. Remove Front Floor Console Extension Panel - Right (1) - **Front Floor Console Extension Panel Replacement - Right Side (Terrain)**

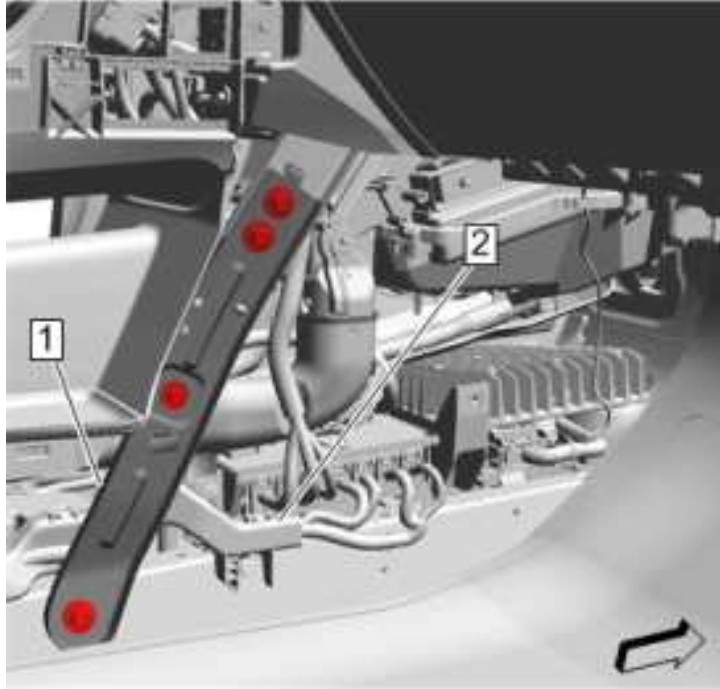


Fig. 759: Instrument Panel Center Lower Bracket
 Courtesy of GENERAL MOTORS COMPANY

2. Remove Instrument Panel Center Lower Bracket-Right Side (1) - [Instrument Panel Tie Bar Replacement \(Terrain\)](#)
3. Unclip the wiring harness conduit (2) and position out of the way.

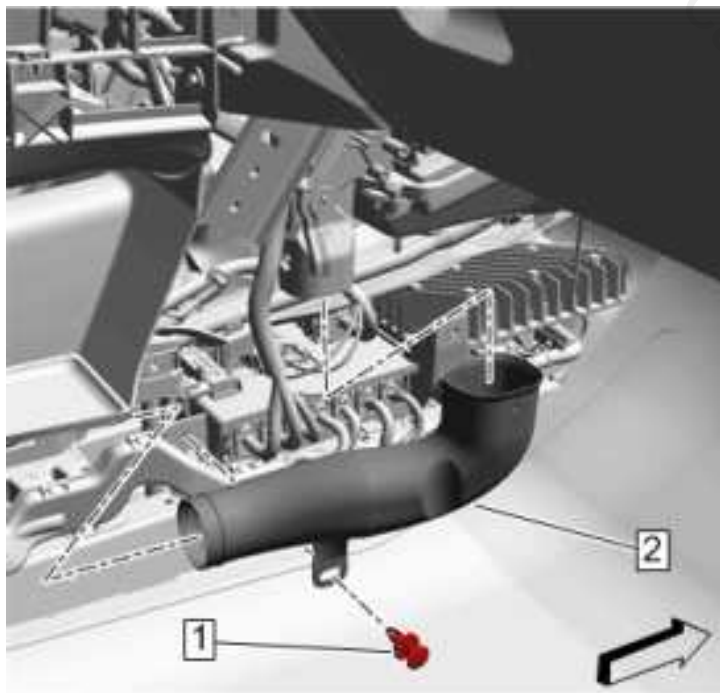


Fig. 760: Floor Rear Air Outlet Duct - Right Side
 Courtesy of GENERAL MOTORS COMPANY

4. Remove Floor Rear Air Outlet Duct - Right Side (2) - [Floor Rear Air Outlet Duct Replacement - Right Side \(Terrain Front\)](#)[Floor Rear Air Outlet Duct Replacement - Right Side \(Terrain Rear\)](#)

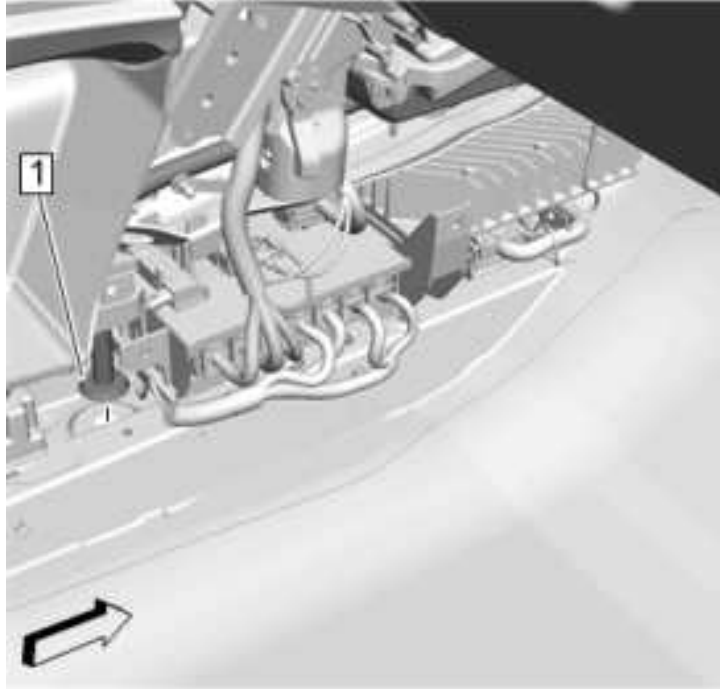


Fig. 761: Air Conditioning Evaporator and Blower Module Drain Hose
 Courtesy of GENERAL MOTORS COMPANY

5. Remove Air Conditioning Evaporator and Blower Module Drain Hose (1) @Front Floor Panel

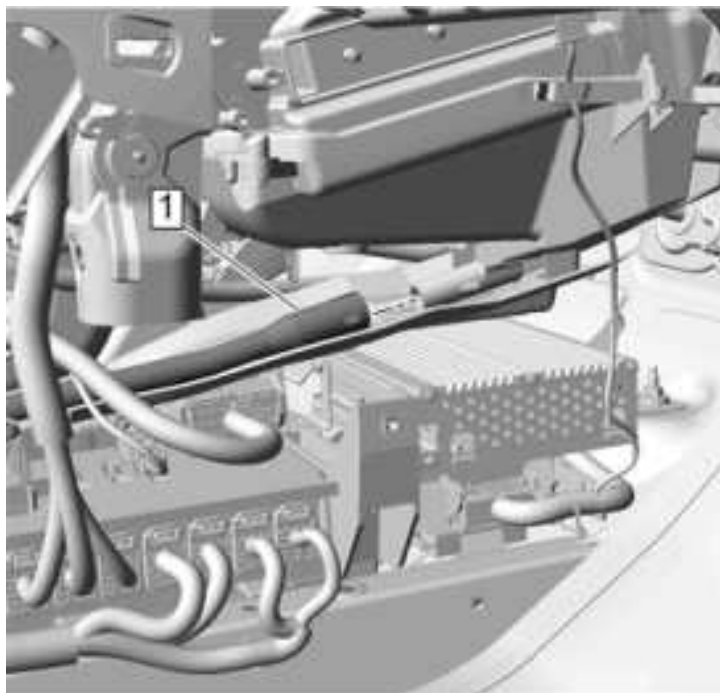


Fig. 762: Air Conditioning Evaporator and Blower Module Drain Hose
 Courtesy of GENERAL MOTORS COMPANY

CAUTION: Refer to [HVAC Module Drain Tube Caution](#) .

6. Prior to removing the air conditioning evaporator and blower module drain tube/hose, use clean and absorbent shop clothes/towels to cover the electrical components protecting the electrical components from water damage.
7. Remove Air Conditioning Evaporator and Blower Module Drain Hose (1) @Heater and Air Conditioning Evaporator and Blower Lower Case

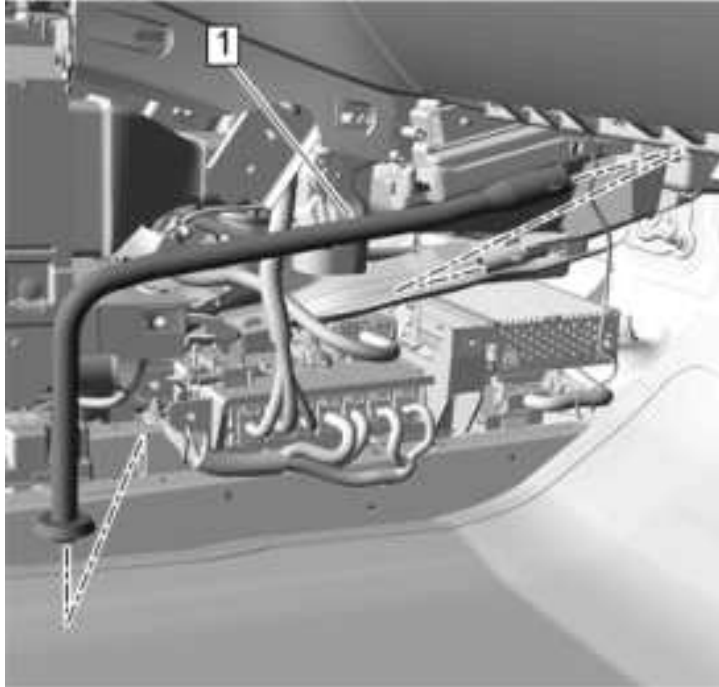


Fig. 763: Air Conditioning Evaporator and Blower Module Drain Hose
Courtesy of GENERAL MOTORS COMPANY

8. Remove Air Conditioning Evaporator and Blower Module Drain Hose (1)

Installation Procedure

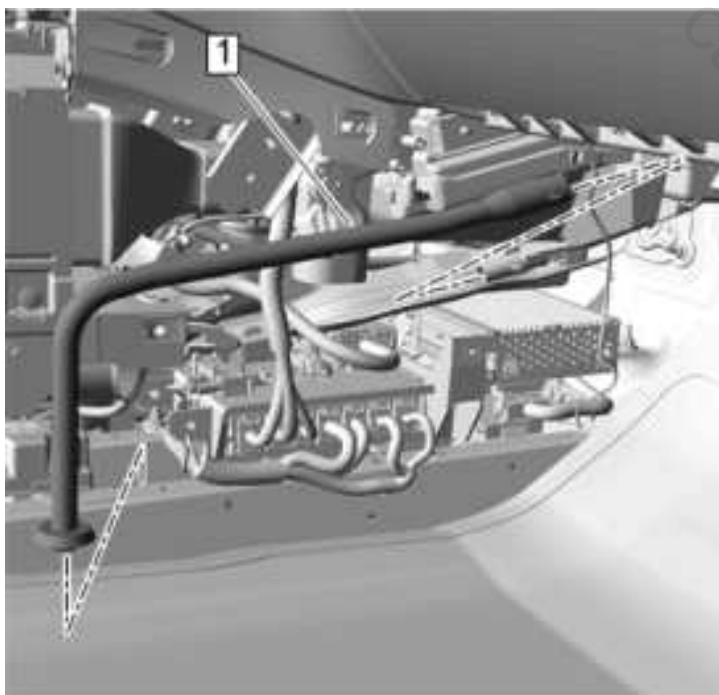


Fig. 764: Air Conditioning Evaporator and Blower Module Drain Hose
Courtesy of GENERAL MOTORS COMPANY

1. Install Air Conditioning Evaporator and Blower Module Drain Hose (1)

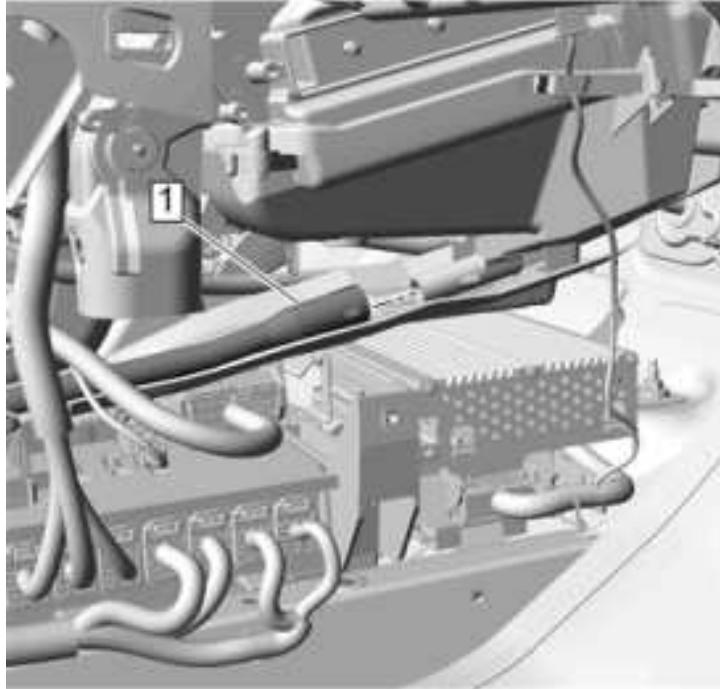


Fig. 765: Air Conditioning Evaporator and Blower Module Drain Hose
 Courtesy of GENERAL MOTORS COMPANY

CAUTION: Refer to [HVAC Module Drain Tube Caution](#) .

2. Install Air Conditioning Evaporator and Blower Module Drain Hose (1) @Heater and Air Conditioning Evaporator and Blower Lower Case

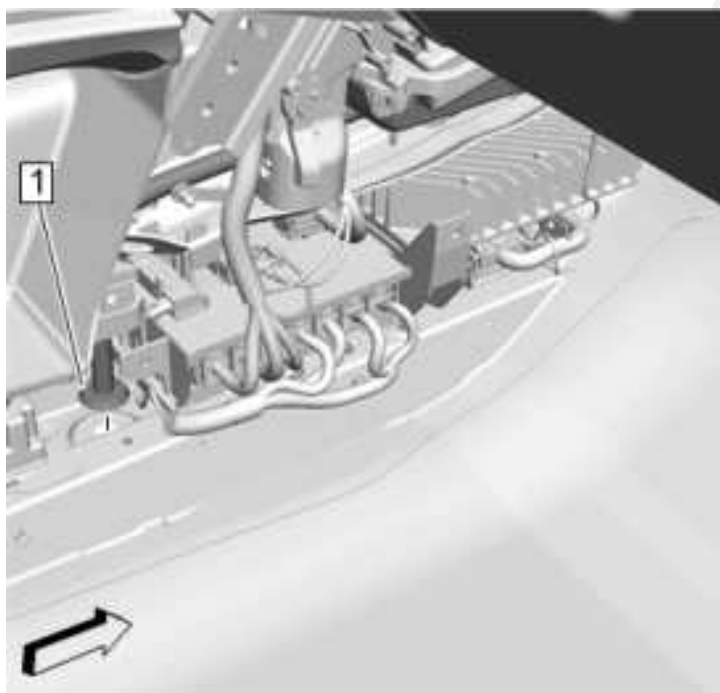


Fig. 766: Air Conditioning Evaporator and Blower Module Drain Hose
 Courtesy of GENERAL MOTORS COMPANY

3. Install Air Conditioning Evaporator and Blower Module Drain Hose (1) @Front Floor Panel
4. Remove the absorbent shop clothes/towels covering the electrical components.

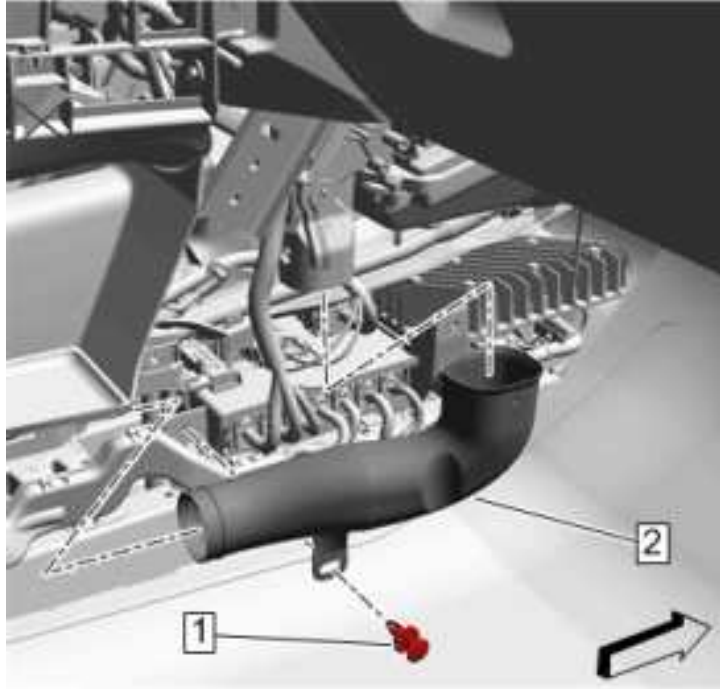


Fig. 767: Floor Rear Air Outlet Duct - Right Side
 Courtesy of GENERAL MOTORS COMPANY

5. Install Floor Rear Air Outlet Duct - Right Side (2) - [Floor Rear Air Outlet Duct Replacement - Right Side \(Terrain Front\)](#)[Floor Rear Air Outlet Duct Replacement - Right Side \(Terrain Rear\)](#).

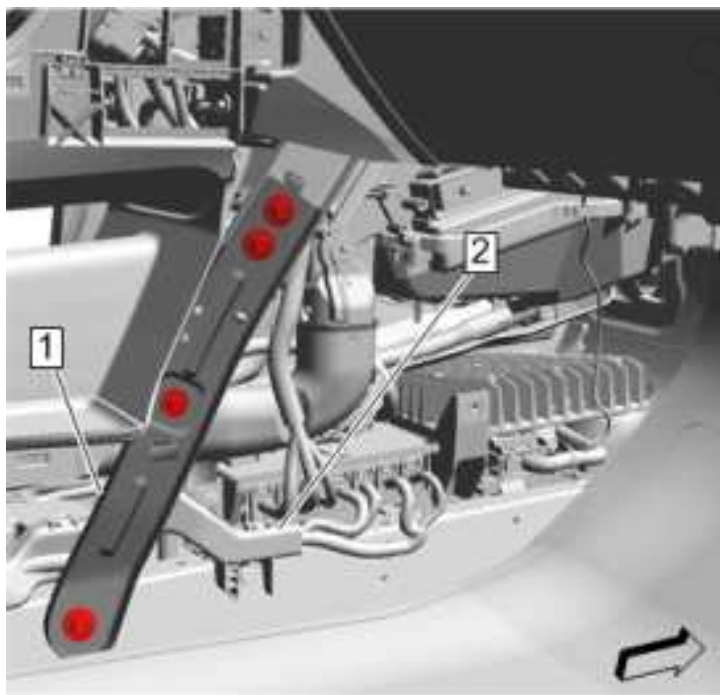


Fig. 768: Instrument Panel Center Lower Bracket
 Courtesy of GENERAL MOTORS COMPANY

6. Position the wiring harness conduit (2) to its original position and secure.
7. Install Instrument Panel Center Lower Bracket-Right Side (1) - [Instrument Panel Tie Bar Replacement \(Terrain\)](#).

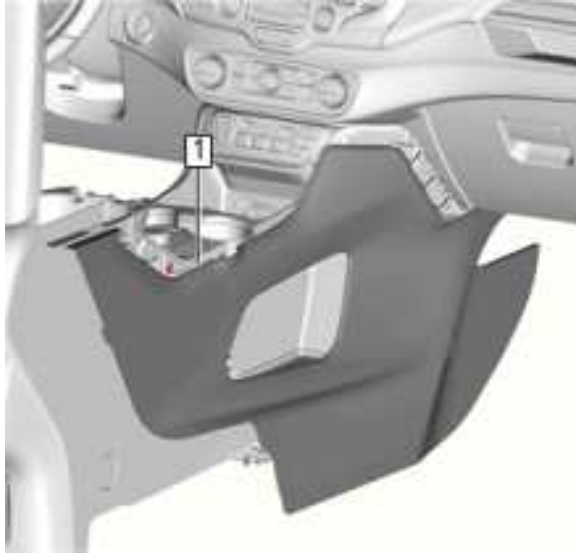


Fig. 769: Right Front Floor Console Extension Panel
 Courtesy of GENERAL MOTORS COMPANY

8. Install Front Floor Console Extension Panel - Right (1) - **Front Floor Console Extension Panel Replacement - Right Side (Terrain)**

HEATER INLET HOSE REPLACEMENT (LYX AWD WITHOUT KL9)

Removal Procedure

1. Drain the cooling system. **Cooling System Draining and Filling (GE 47716)**, **Cooling System Draining and Filling (Static)**

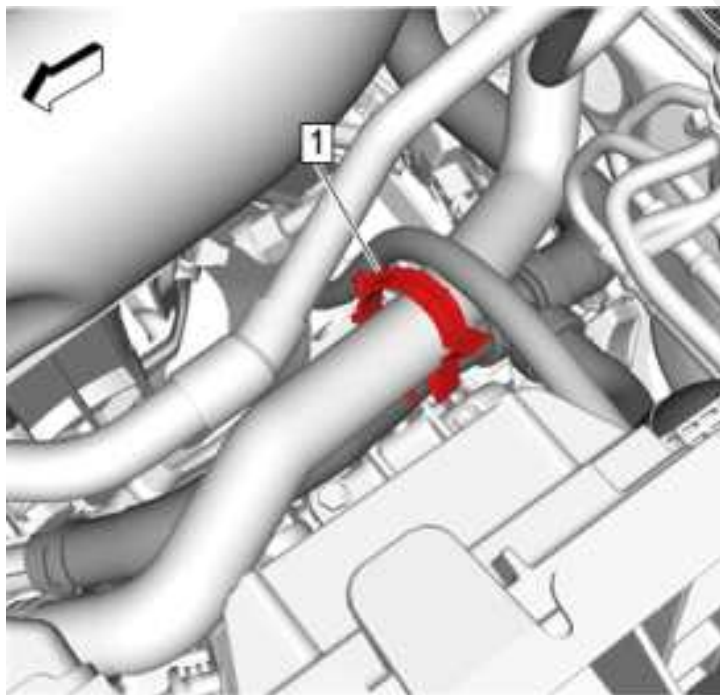


Fig. 770: Heater Outlet Hose Clip
 Courtesy of GENERAL MOTORS COMPANY

2. Remove Heater Outlet Hose Clip (1) @ Heater Inlet Hose

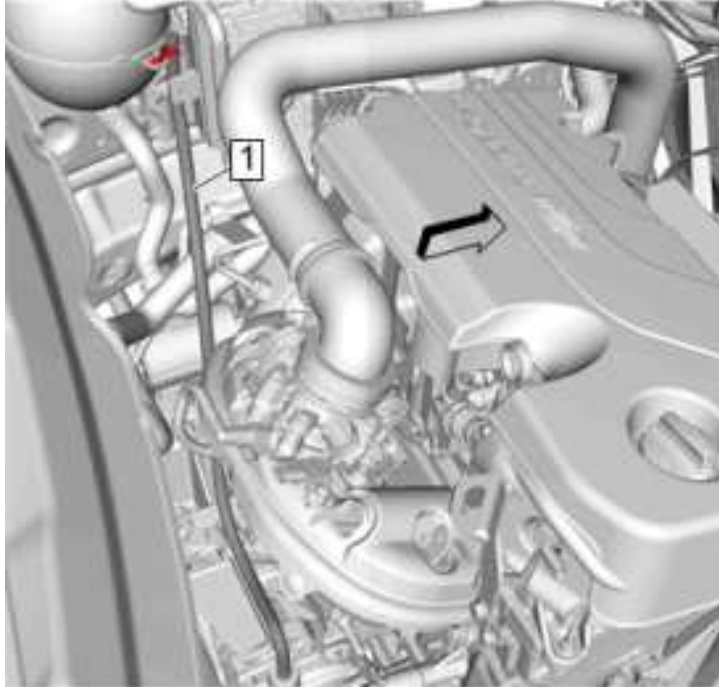


Fig. 771: Power Transfer Unit Vent Hose

Courtesy of GENERAL MOTORS COMPANY

3. Remove Power Transfer Unit Vent Hose (1) @Radiator Surge Tank - **Power Transfer Unit Vent Hose Replacement**

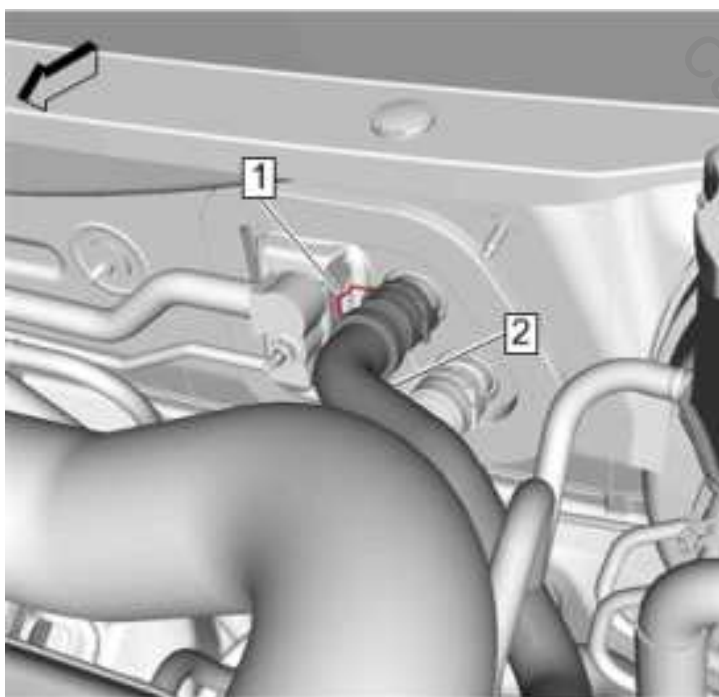


Fig. 772: Heater Inlet Hose

Courtesy of GENERAL MOTORS COMPANY

4. Disengage Heater Inlet Hose Retainer (1)
5. Remove Heater Inlet Hose (2) @Heater Core Inlet Tube

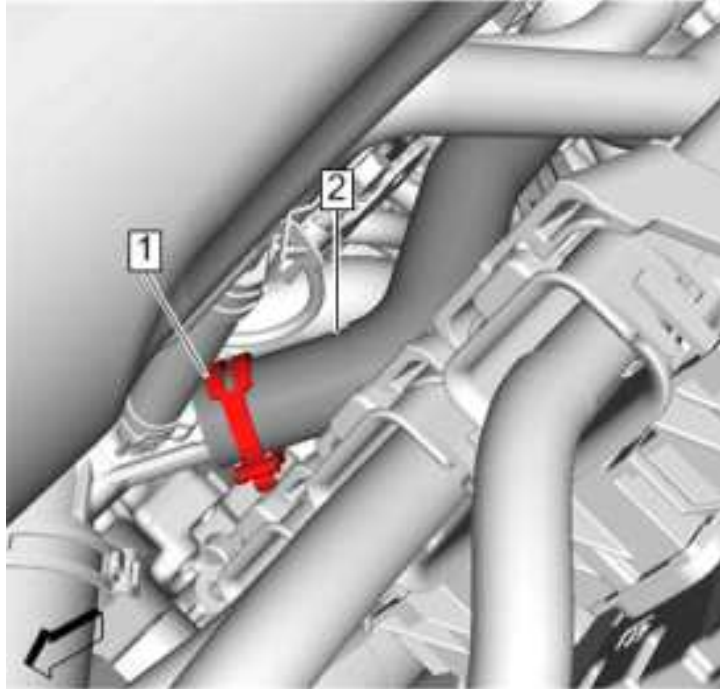


Fig. 773: Heater Inlet Hose Clamp

Courtesy of GENERAL MOTORS COMPANY

6. Disengage Heater Inlet Hose Clamp (1) - [Hose Clamp Replacement Guidelines - Spring Type](#)
7. Remove Heater Inlet Hose (2) @Water Outlet
8. Remove Heater Inlet Hose (2)

Installation Procedure

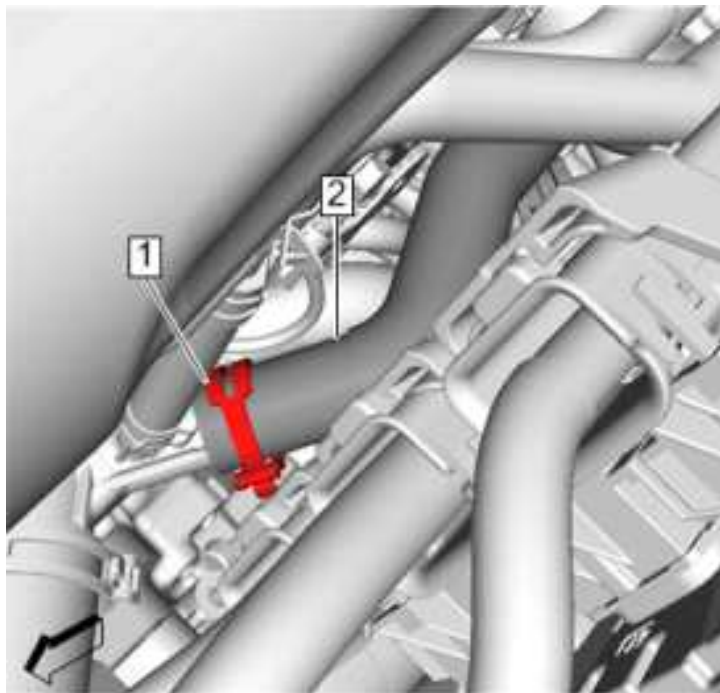


Fig. 774: Heater Inlet Hose Clamp

Courtesy of GENERAL MOTORS COMPANY

1. Install Heater Inlet Hose (2) @Water Outlet
2. Engage Heater Inlet Hose Clamp (2)[Hose Clamp Replacement Guidelines - Spring Type](#)

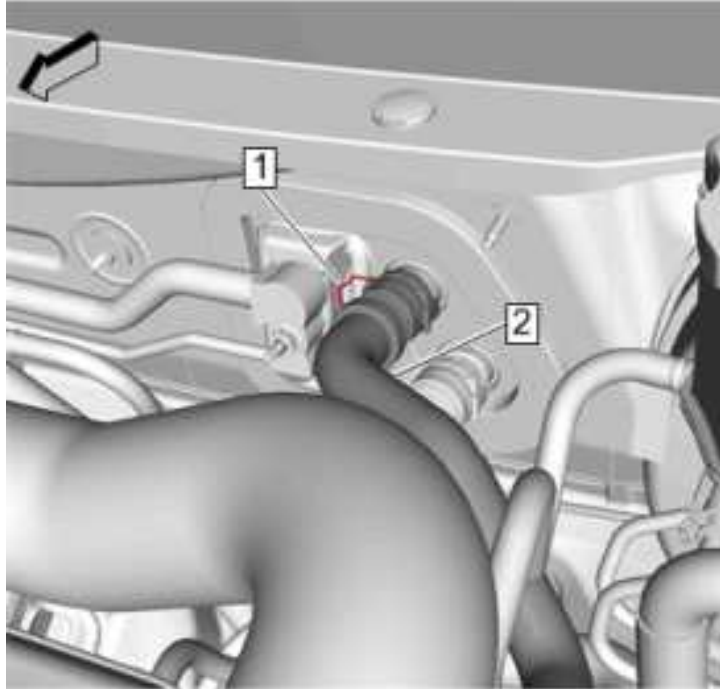


Fig. 775: Heater Inlet Hose

Courtesy of GENERAL MOTORS COMPANY

3. Install Heater Inlet Hose (2) @Heater Core Inlet Tube
4. Engage Heater Inlet Hose Retainer (1)

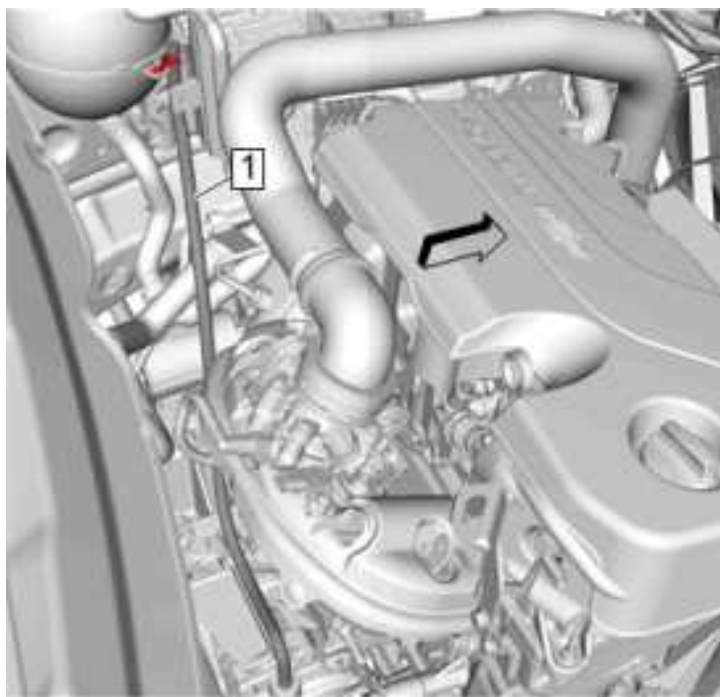


Fig. 776: Power Transfer Unit Vent Hose

Courtesy of GENERAL MOTORS COMPANY

5. Install Power Transfer Unit Vent Hose (1) @Radiator Surge Tank - **Power Transfer Unit Vent Hose Replacement**

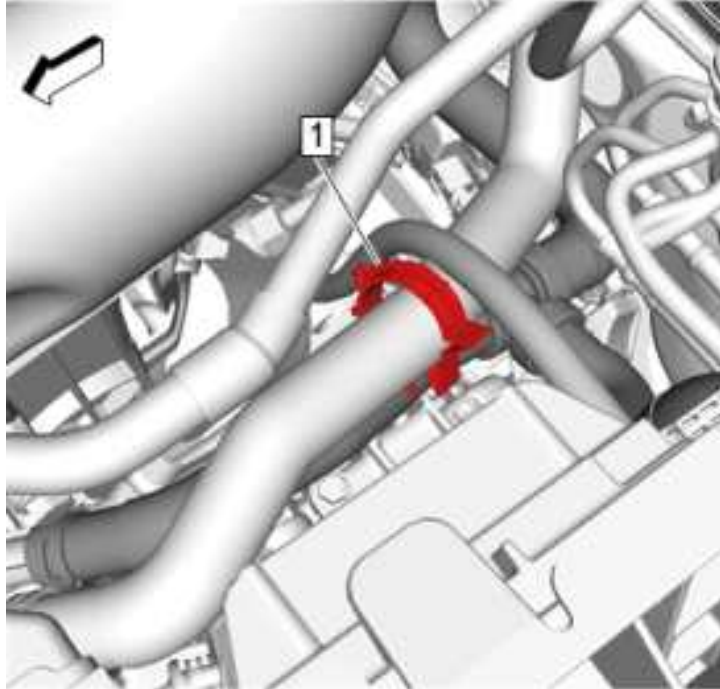


Fig. 777: Heater Outlet Hose Clip

Courtesy of GENERAL MOTORS COMPANY

6. Install Heater Outlet Hose Clip (1) @Heater Inlet Hose -
7. Fill the cooling system. [Cooling System Draining and Filling \(GE 47716\) Cooling System Draining and Filling \(Static\)](#)
8. Check the cooling system for leaks.

HEATER INLET HOSE REPLACEMENT (LYX WITH KL9)

Removal Procedure

1. Drain the cooling system. [Cooling System Draining and Filling \(GE 47716\) Cooling System Draining and Filling \(Static\)](#)

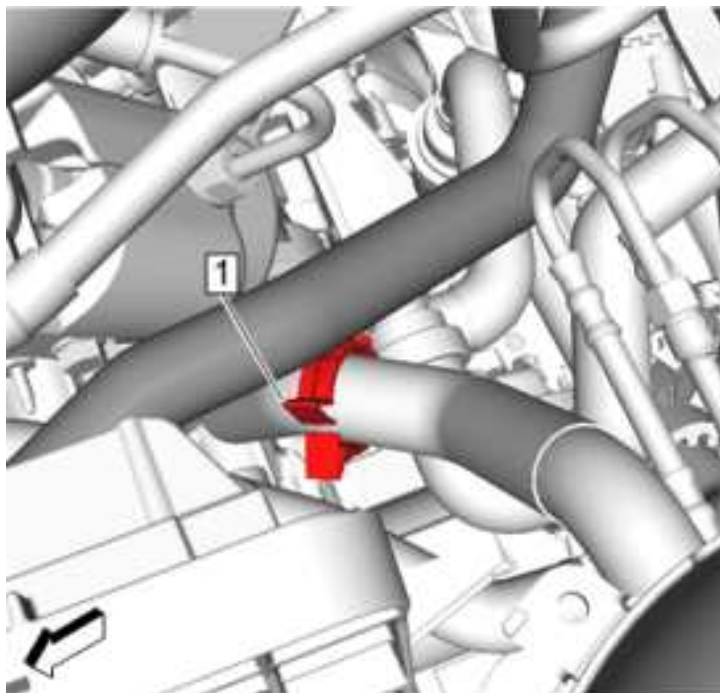


Fig. 778: Heater Inlet Hose Retainer

Courtesy of GENERAL MOTORS COMPANY

2. Remove Heater Inlet Hose Retainer (1) @Heater Water Auxiliary Pump Inlet Hose

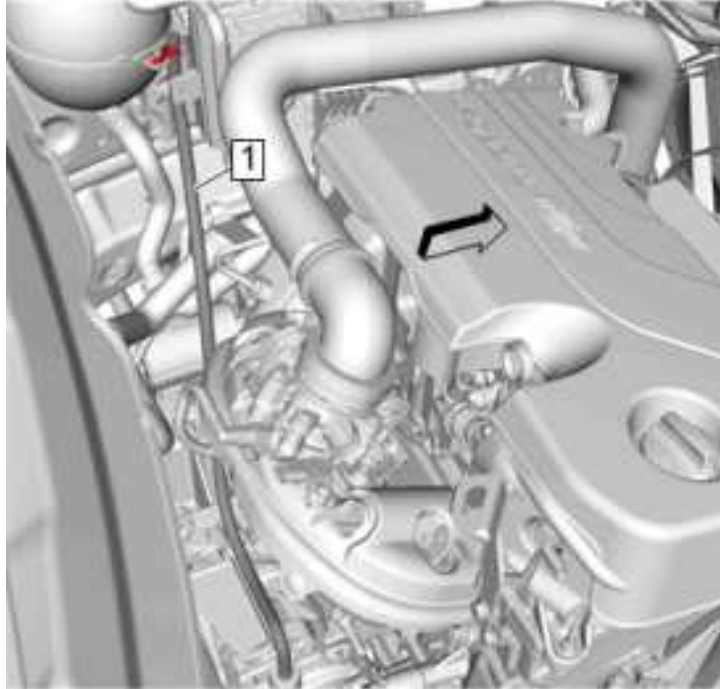


Fig. 779: Power Transfer Unit Vent Hose

Courtesy of GENERAL MOTORS COMPANY

3. Remove { If equipped } Power Transfer Unit Vent Hose (1) @Radiator Surge Tank - **Power Transfer Unit Vent Hose Replacement**

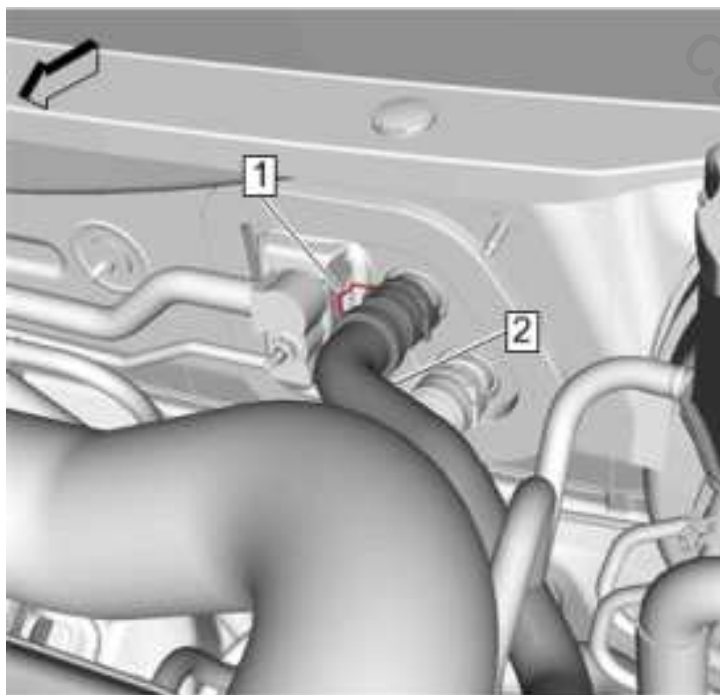


Fig. 780: Heater Inlet Hose

Courtesy of GENERAL MOTORS COMPANY

4. Disengage Heater Inlet Hose Retainer (1)
5. Remove Heater Inlet Hose (2) @Heater Core Inlet Tube

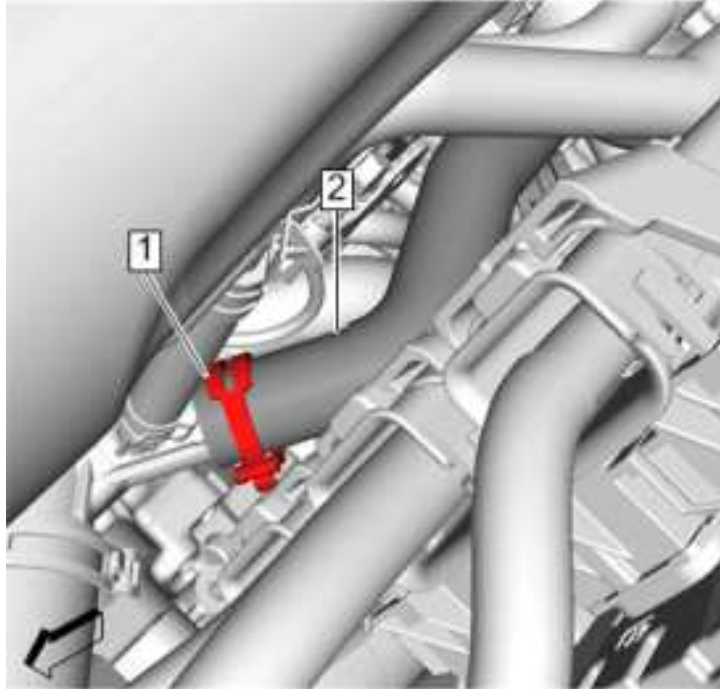


Fig. 781: Heater Inlet Hose Clamp

Courtesy of GENERAL MOTORS COMPANY

6. Disengage Heater Inlet Hose Clamp (1) - [Hose Clamp Replacement Guidelines - Spring Type](#)
7. Remove Heater Inlet Hose (2) @Water Outlet
8. Remove Heater Inlet Hose (2)

Installation Procedure

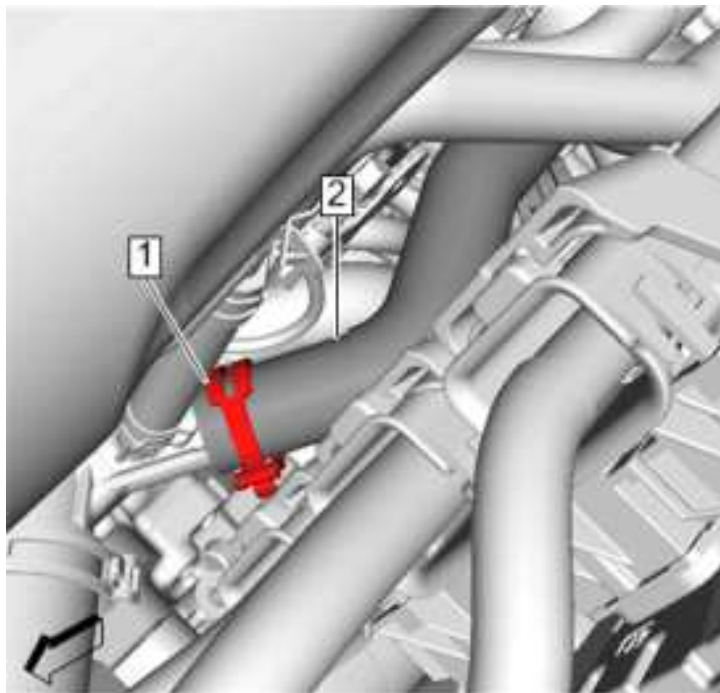


Fig. 782: Heater Inlet Hose Clamp

Courtesy of GENERAL MOTORS COMPANY

1. Install Heater Inlet Hose (2) @Water Outlet
2. Engage Heater Inlet Hose Clamp (1) - [Hose Clamp Replacement Guidelines - Spring Type](#)

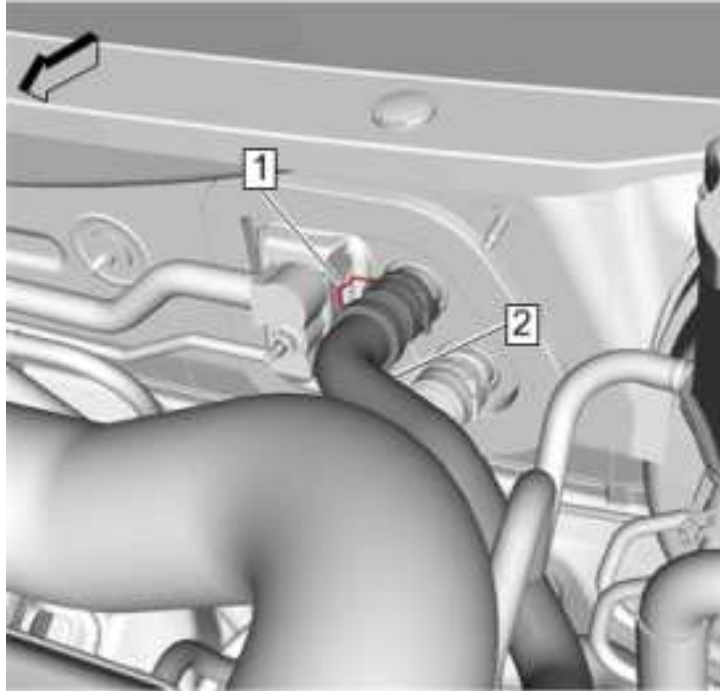


Fig. 783: Heater Inlet Hose

Courtesy of GENERAL MOTORS COMPANY

3. Install Heater Inlet Hose (2) @Heater Core Inlet Tube
4. Heater Inlet Hose Retainer (1)

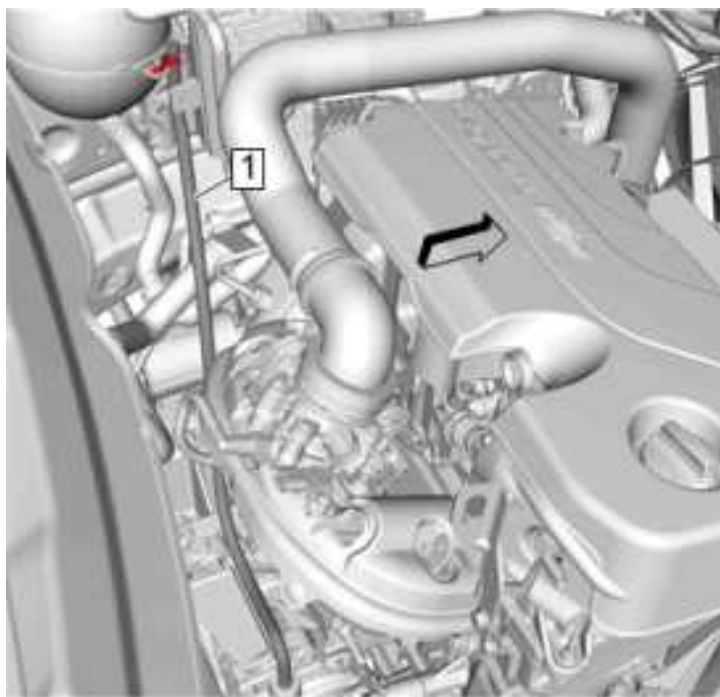


Fig. 784: Power Transfer Unit Vent Hose

Courtesy of GENERAL MOTORS COMPANY

5. Install { If equipped } Power Transfer Unit Vent Hose (1) @Radiator Surge Tank - **Power Transfer Unit Vent Hose Replacement**

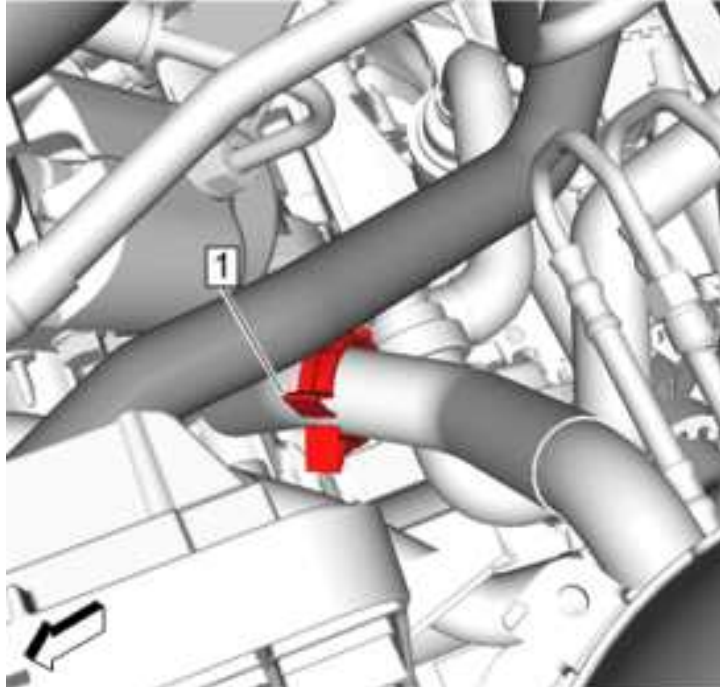


Fig. 785: Heater Inlet Hose Retainer
 Courtesy of GENERAL MOTORS COMPANY

6. Install Heater Inlet Hose Retainer (1) @Heater Water Auxiliary Pump Inlet Hose
7. Fill the cooling system. [Cooling System Draining and Filling \(GE 47716\). Cooling System Draining and Filling \(Static\)](#)
8. Check the cooling system for leaks.

HEATER INLET HOSE REPLACEMENT (LH7 TERRAIN)

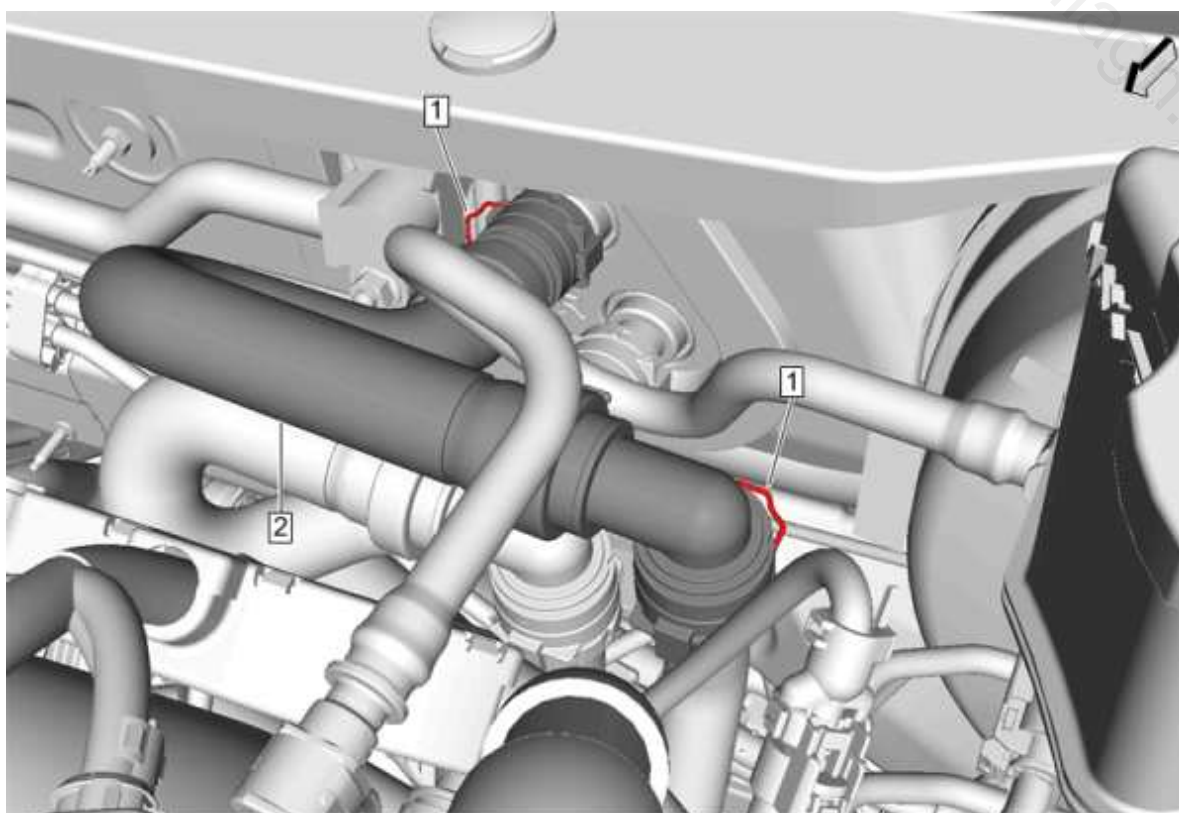


Fig. 786: Heater Inlet Hose
 Courtesy of GENERAL MOTORS COMPANY

Callout	Component Name

Callout	Component Name
Preliminary Procedures 1. Drain the cooling system. Cooling System Draining and Filling (GE 47716) Cooling System Draining and Filling (Static) 2. Intake Manifold Cover Replacement	
1	Heater Inlet Hose Retainer (Qty: 2)
2	Heater Inlet Hose Procedures 1. Fill the cooling system. Cooling System Draining and Filling (GE 47716) Cooling System Draining and Filling (Static) 2. Start the engine and check for coolant leaks.

HEATER INLET HOSE REPLACEMENT (LH7 EQUINOX)

Removal Procedure

1. Drain the cooling system. [Cooling System Draining and Filling \(GE 47716\)](#) [Cooling System Draining and Filling \(Static\)](#)
2. Remove Intake Manifold Cover - [Intake Manifold Cover Replacement](#)

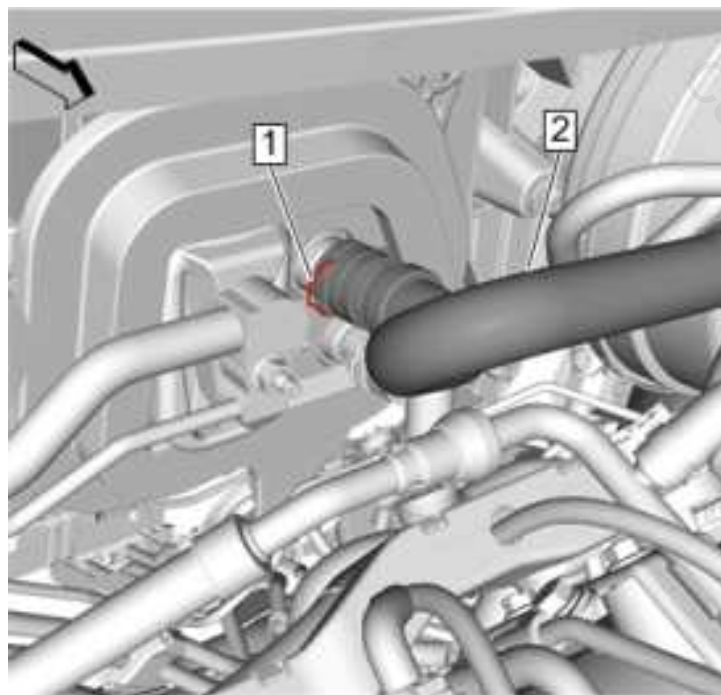


Fig. 787: Heater Inlet Hose And Retaining Clip
Courtesy of GENERAL MOTORS COMPANY

3. Disengage Heater Inlet Hose Retainer (1)
4. Remove Heater Inlet Hose (2) @Heater Core Inlet Tube

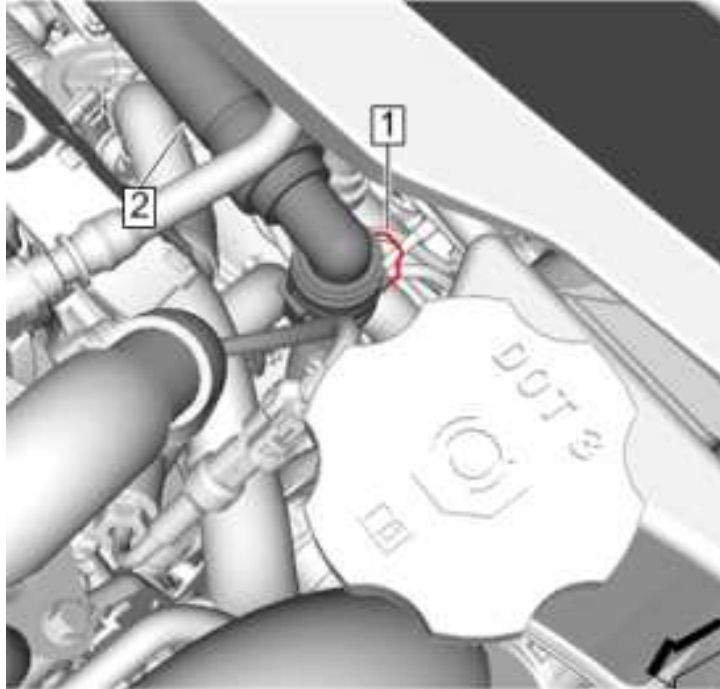


Fig. 788: Heater Inlet Hose Retainer

Courtesy of GENERAL MOTORS COMPANY

5. Disengage Heater Inlet Hose Retainer (1)
6. Remove Heater Inlet Hose (2) @Heater Inlet and Outlet Pipe Bracket
7. Remove Heater Inlet Hose (2)

Installation Procedure

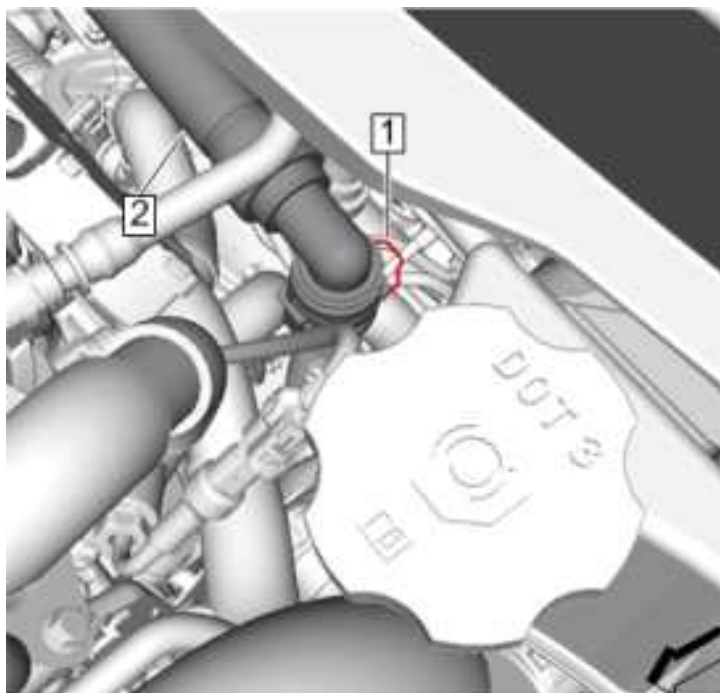


Fig. 789: Heater Inlet Hose Retainer

Courtesy of GENERAL MOTORS COMPANY

1. Install Heater Inlet Hose (2) @Heater Inlet and Outlet Pipe Bracket
2. Engage Heater Inlet Hose Retainer (1)

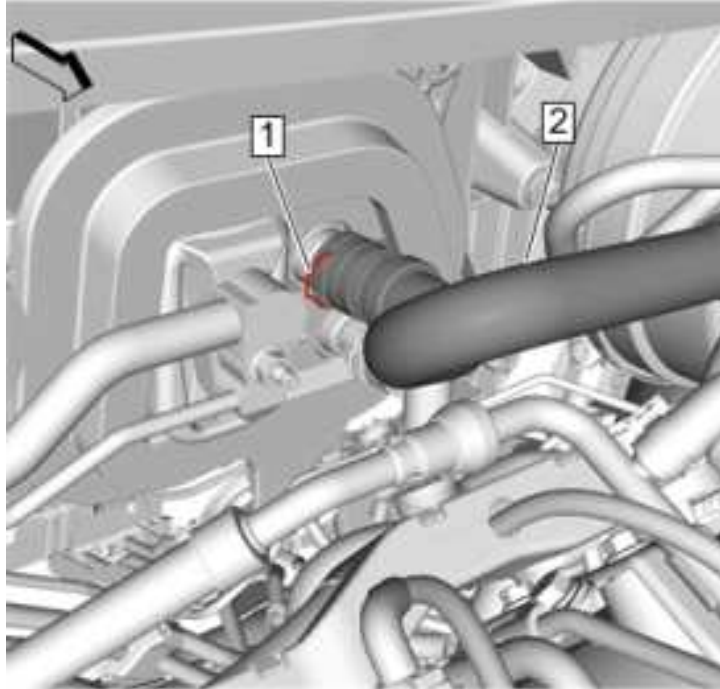


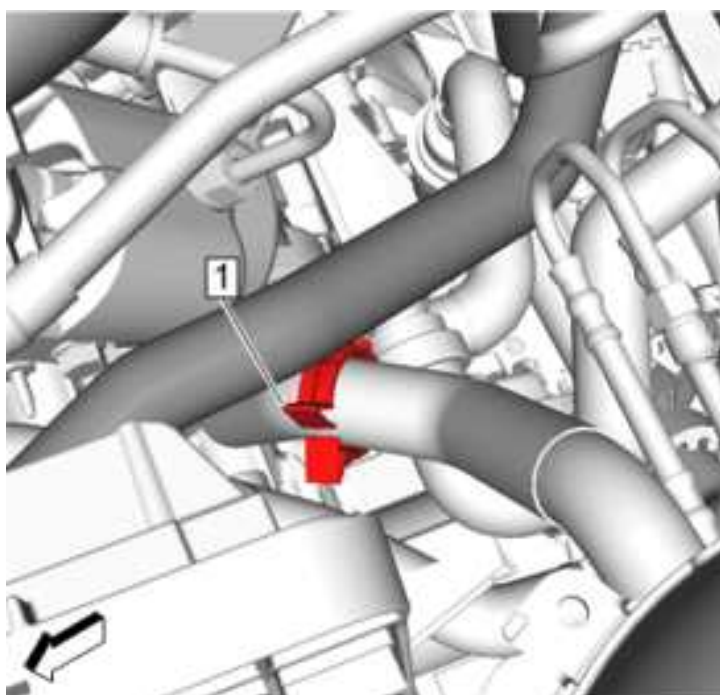
Fig. 790: Heater Inlet Hose And Retaining Clip
 Courtesy of GENERAL MOTORS COMPANY

3. Install Heater Inlet Hose (2) @Heater Core Inlet Tube
4. Engage Heater Inlet Hose Retainer (1)
5. Install Intake Manifold Cover [Intake Manifold Cover Replacement](#)
6. Fill the cooling system. [Cooling System Draining and Filling \(GE 47716\)](#) [Cooling System Draining and Filling \(Static\)](#)
7. Check the cooling system for leaks.

HEATER INLET HOSE REPLACEMENT (LTG WITH KL9)

Removal Procedure

1. Drain the cooling system. [Cooling System Draining and Filling \(GE 47716\)](#) [Cooling System Draining and Filling \(Static\)](#)
2. Remove { If equipped } Power Transfer Unit Vent Hose@Radiator Surge Tank - [Power Transfer Unit Vent Hose Replacement](#)
3. Reposition the wiring harness.



4. Remove Heater Inlet Hose Retainer (1) @Auxiliary Heater Outlet Hose

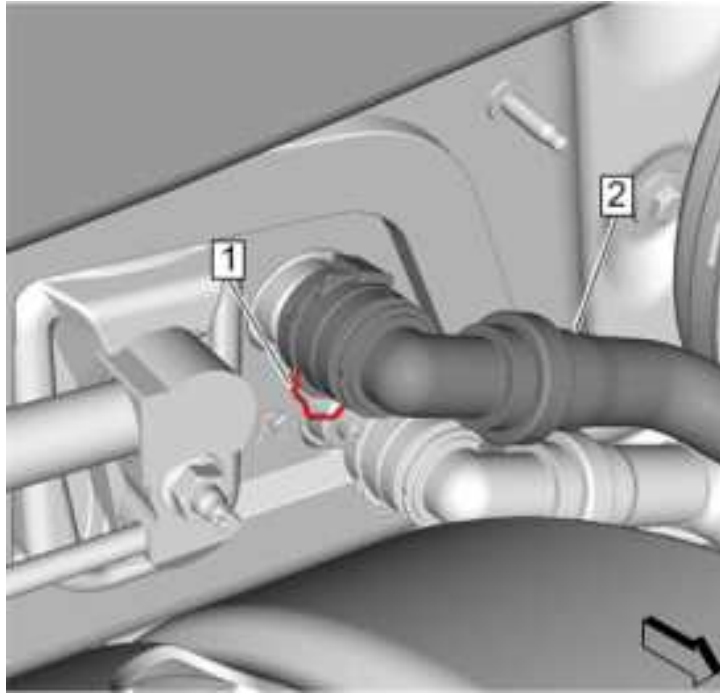


Fig. 792: Heater Inlet Hose Retainer
Courtesy of GENERAL MOTORS COMPANY

5. Disengage Heater Inlet Hose Retainer (1)
6. Remove Heater Inlet Hose (2) @Heater Core Inlet Tube

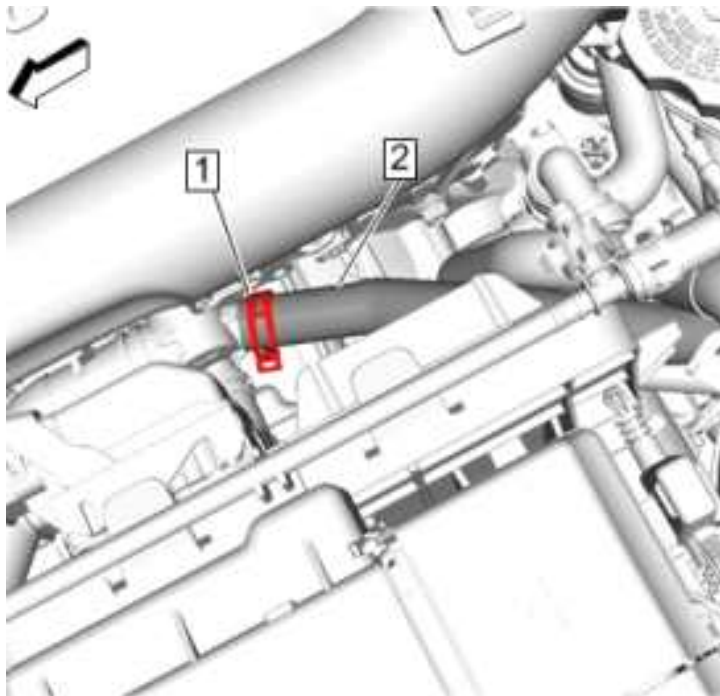


Fig. 793: Heater Inlet Hose Clamp
Courtesy of GENERAL MOTORS COMPANY

7. Disengage Heater Inlet Hose Clamp (1) - [Hose Clamp Replacement Guidelines - Spring Type](#)
8. Remove Heater Inlet Hose (2) @Water Outlet
9. Remove Heater Inlet Hose (2)

Installation Procedure

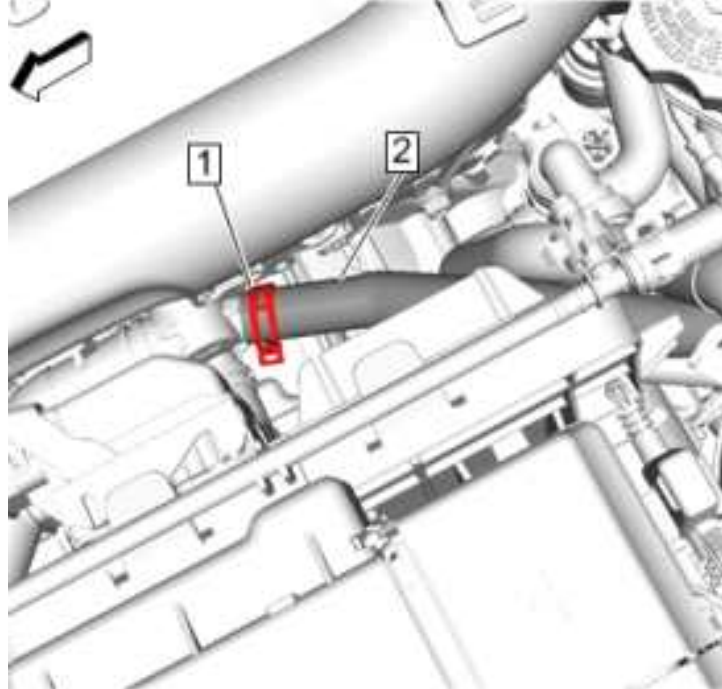


Fig. 794: Heater Inlet Hose Clamp

Courtesy of GENERAL MOTORS COMPANY

1. Install Heater Inlet Hose (2) @Water Outlet
2. Engage Heater Inlet Hose Clamp (1) - [Hose Clamp Replacement Guidelines - Spring Type](#)

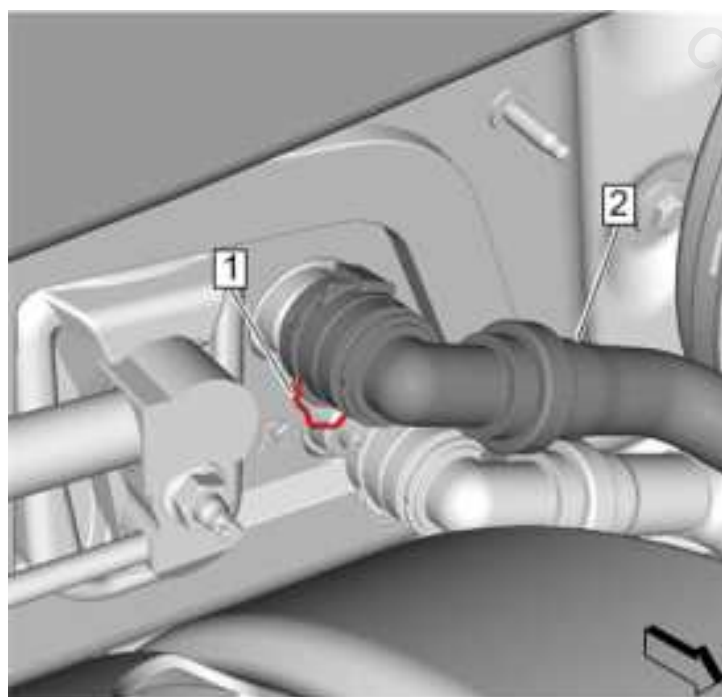


Fig. 795: Heater Inlet Hose Retainer

Courtesy of GENERAL MOTORS COMPANY

3. Install Heater Inlet Hose (2) @Heater Core Inlet Tube
4. Engage Heater Inlet Hose Retainer (1)

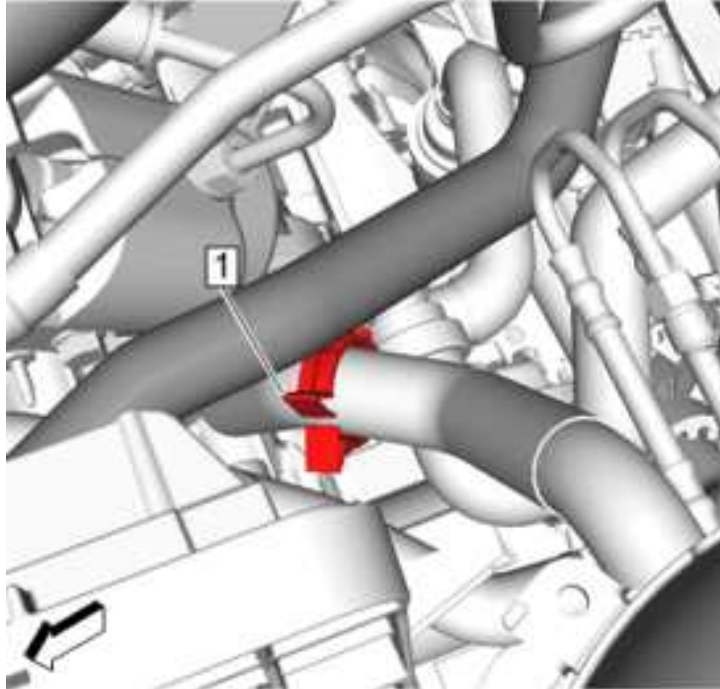


Fig. 796: Heater Inlet Hose Retainer

Courtesy of GENERAL MOTORS COMPANY

5. Install Heater Inlet Hose Retainer (1) @Auxiliary Heater Outlet Hose
6. Reposition the wiring harness.
7. Install { If equipped } Power Transfer Unit Vent Hose@Radiator Surge Tank [Power Transfer Unit Vent Hose Replacement](#)
8. Fill the cooling system. [Cooling System Draining and Filling.\(GE 47716\)](#) [Cooling System Draining and Filling.\(Static\)](#)
9. Check the cooling system for leaks.

HEATER INLET HOSE BRACKET REPLACEMENT (LYX)

Removal Procedure

1. Drain the cooling system. [Cooling System Draining and Filling.\(GE 47716\)](#) [Cooling System Draining and Filling.\(Static\)](#)

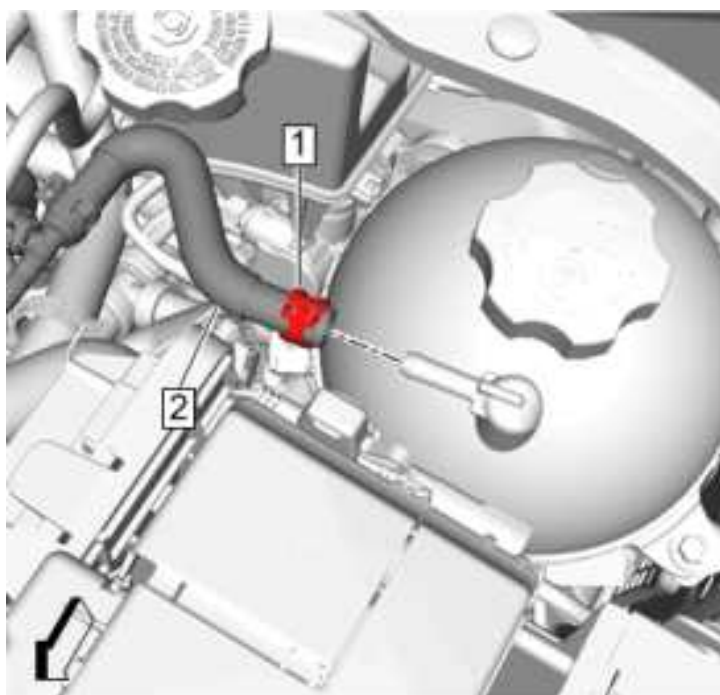


Fig. 797: Engine Coolant Air Bleed Hose

Courtesy of GENERAL MOTORS COMPANY

2. Remove Engine Coolant Air Bleed Hose (2) @Radiator Surge Tank and position aside - [Engine Coolant Air Bleed Hose Replacement \(Turbocharger Coolant Return pipe to Water Outlet, LYX\)](#) [Engine Coolant Air Bleed Hose Replacement \(Radiator Surge Tank to Turbocharger Coolant Return Pipe to Radiator, LYX\)](#)

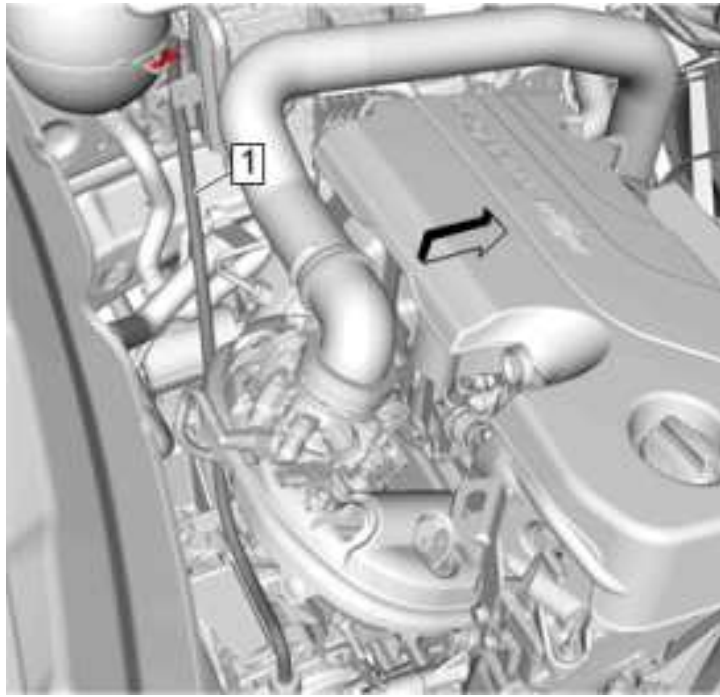


Fig. 798: Power Transfer Unit Vent Hose
Courtesy of GENERAL MOTORS COMPANY

3. Remove { If equipped } Power Transfer Unit Vent Hose (1) @Radiator Surge Tank and position aside - [Power Transfer Unit Vent Hose Replacement](#)

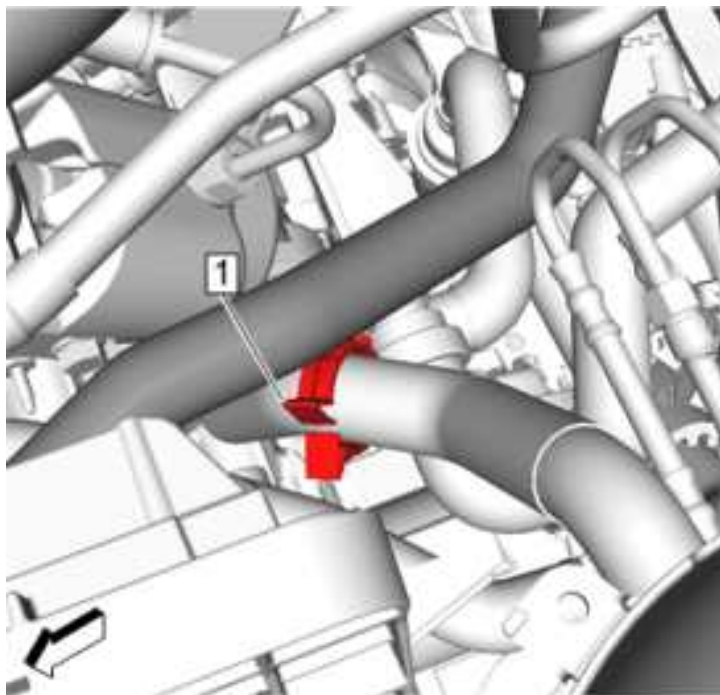


Fig. 799: Heater Inlet Hose Retainer
Courtesy of GENERAL MOTORS COMPANY

4. Remove Heater Inlet Hose Retainer (1) @Heater Water Auxiliary Pump Inlet Hose - [Heater Inlet Hose Replacement \(LYX AWD without KL9\)](#) [Heater Inlet Hose Replacement \(LYX with KL9\)](#)
5. Reposition the wiring harness.

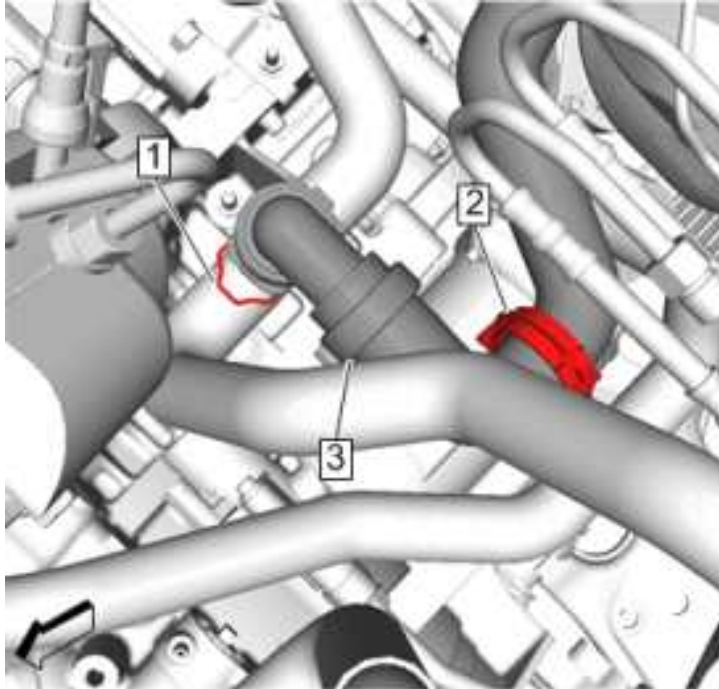


Fig. 800: Heater Water Auxiliary Pump Hose

Courtesy of GENERAL MOTORS COMPANY

6. Remove Heater Water Auxiliary Pump Hose (3) and position aside - [Heater Water Auxiliary Pump Hose Replacement \(LYX with KL9\)](#)

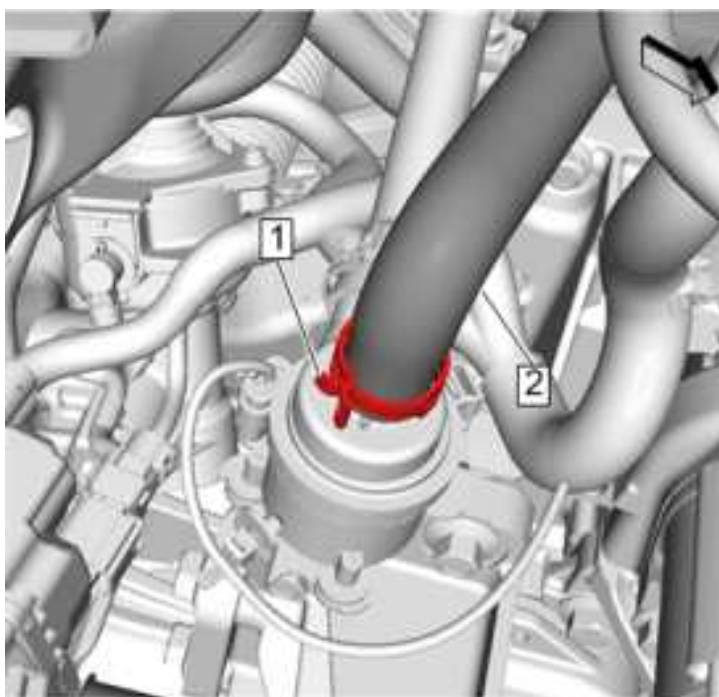


Fig. 801: Heater Water Auxiliary Pump Inlet Hose

Courtesy of GENERAL MOTORS COMPANY

7. Remove Heater Water Auxiliary Pump Inlet Hose (2) - [Heater Water Auxiliary Pump Inlet Hose Replacement \(LYX with KL9\)](#)

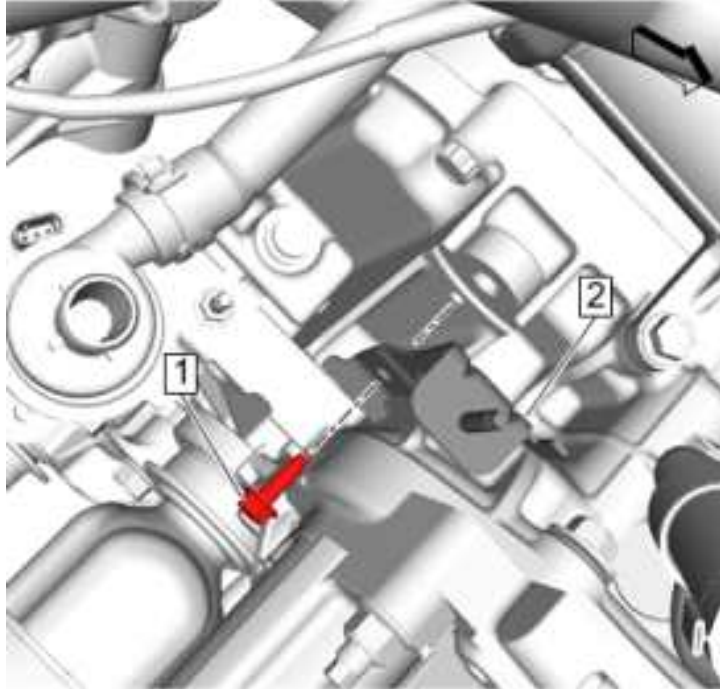


Fig. 802: Heater Inlet Hose Bracket

Courtesy of GENERAL MOTORS COMPANY

8. Remove Heater Inlet Hose Bracket Bolt (1)
9. Remove Heater Inlet Hose Bracket (2)

Installation Procedure

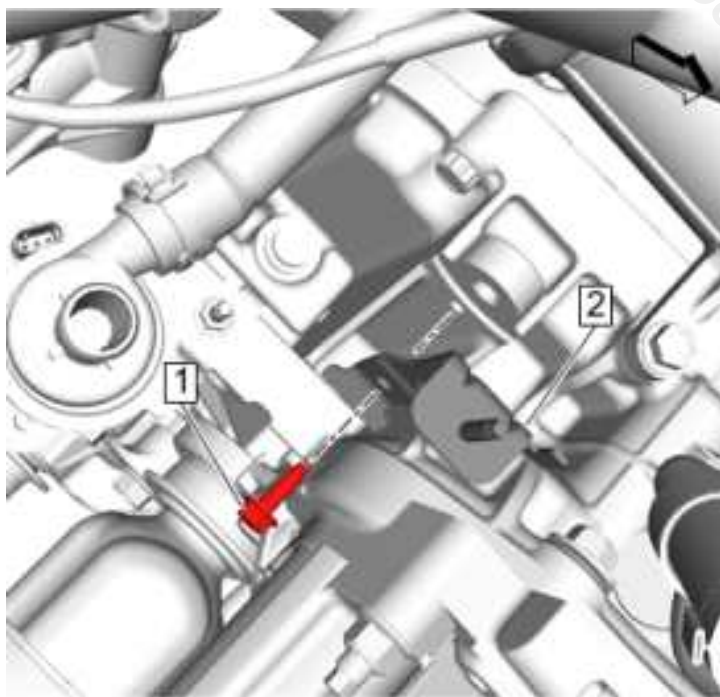


Fig. 803: Heater Inlet Hose Bracket

Courtesy of GENERAL MOTORS COMPANY

1. Install Heater Inlet Hose Bracket (2)

CAUTION: Refer to Fastener Caution .

2. Install Heater Inlet Hose Bracket Bolt (1) and tighten 9 N.m (80 lb in)

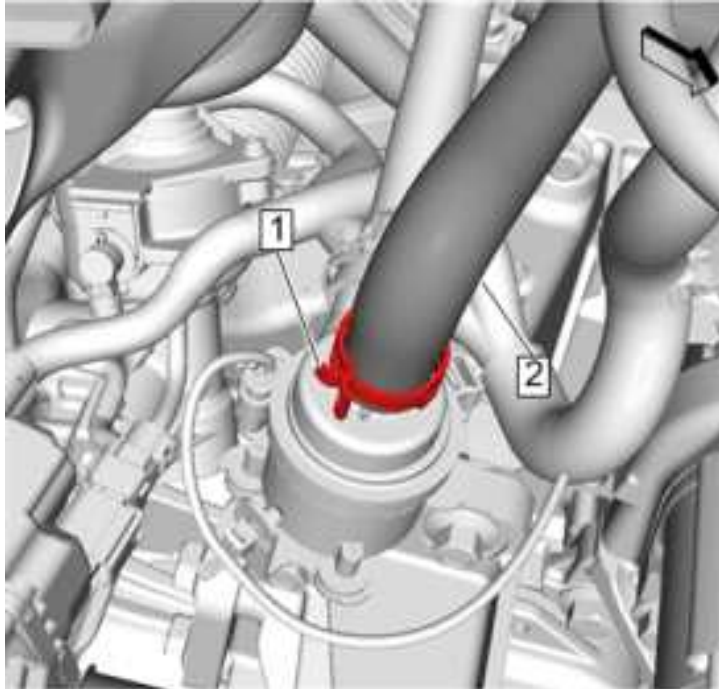


Fig. 804: Heater Water Auxiliary Pump Inlet Hose
 Courtesy of GENERAL MOTORS COMPANY

3. Install Heater Water Auxiliary Pump Inlet Hose (2) - [Heater Water Auxiliary Pump Inlet Hose Replacement \(LYX with KL9\)](#)

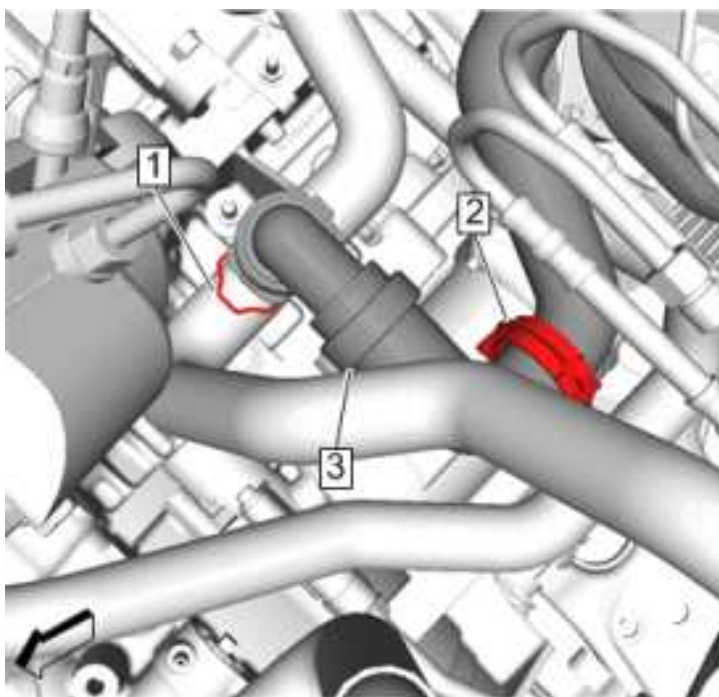


Fig. 805: Heater Water Auxiliary Pump Hose
 Courtesy of GENERAL MOTORS COMPANY

4. Install Heater Water Auxiliary Pump Hose (3) - [Heater Water Auxiliary Pump Hose Replacement \(LYX with KL9\)](#)
5. Position the wiring harness.

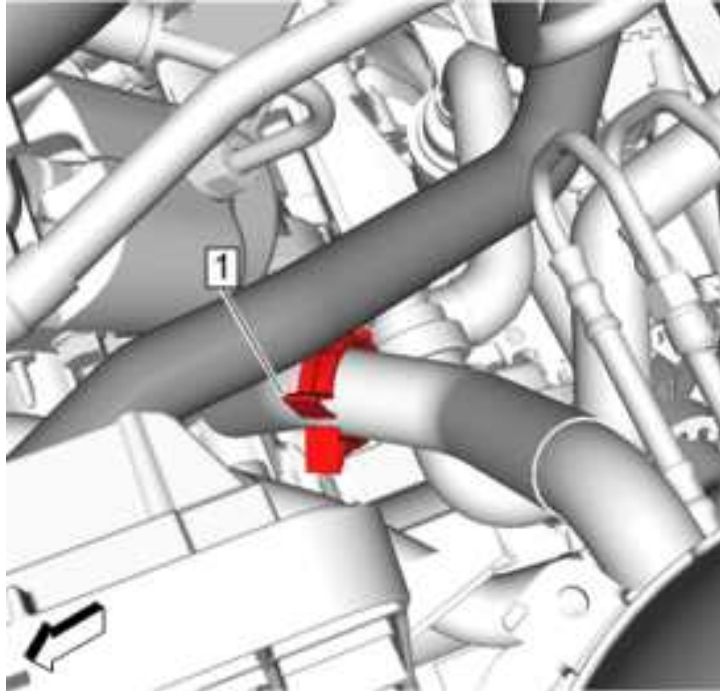


Fig. 806: Heater Inlet Hose Retainer

Courtesy of GENERAL MOTORS COMPANY

6. Install Heater Inlet Hose Retainer (1) @Heater Water Auxiliary Pump Inlet Hose - [Heater Inlet Hose Replacement \(LYX AWD without KL9\)](#)[Heater Inlet Hose Replacement \(LYX with KL9\)](#)

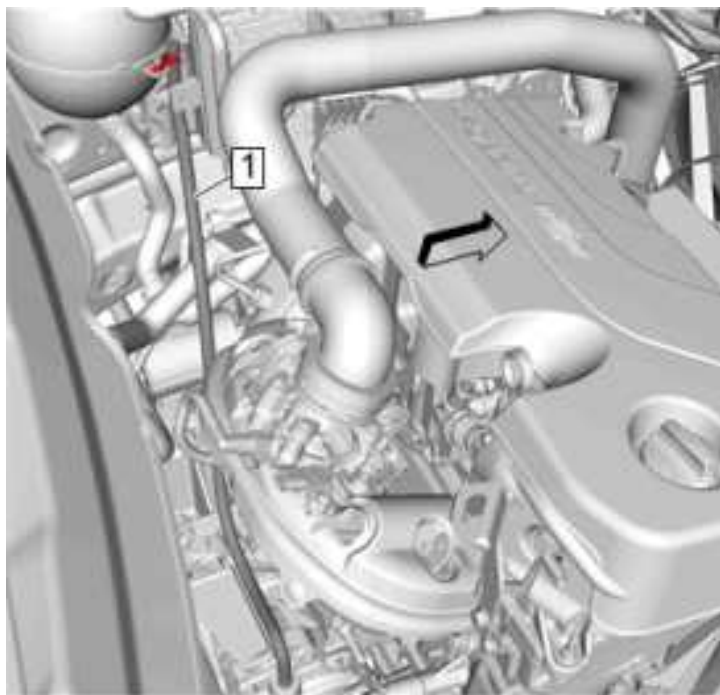


Fig. 807: Power Transfer Unit Vent Hose

Courtesy of GENERAL MOTORS COMPANY

7. Install { If equipped } Power Transfer Unit Vent Hose (1) @Radiator Surge Tank - [Power Transfer Unit Vent Hose Replacement](#)

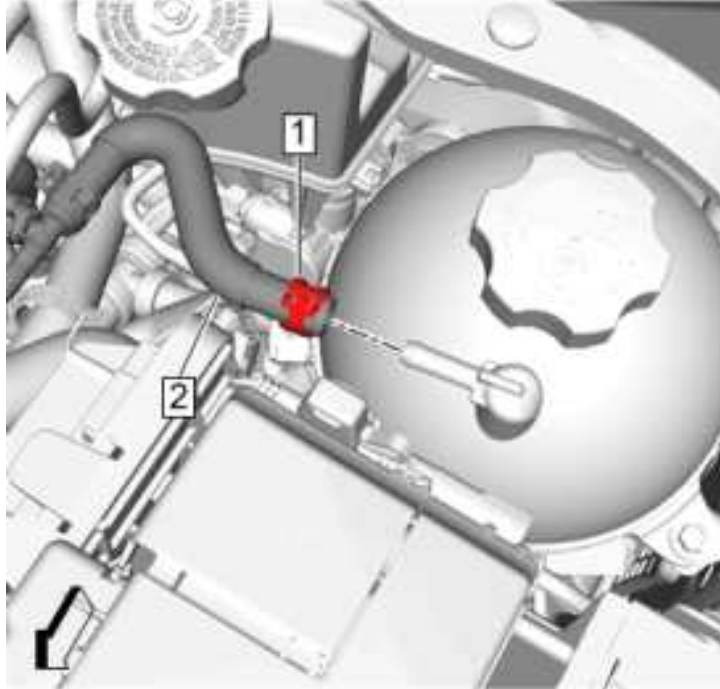


Fig. 808: Engine Coolant Air Bleed Hose

Courtesy of GENERAL MOTORS COMPANY

8. Install Engine Coolant Air Bleed Hose (2) @Radiator Surge Tank - [Engine Coolant Air Bleed Hose Replacement \(Turbocharger Coolant Return pipe to Water Outlet, LYX\)](#) [Engine Coolant Air Bleed Hose Replacement \(Radiator Surge Tank to Turbocharger Coolant Return Pipe to Radiator, LYX\)](#)
9. Fill the cooling system. [Cooling System Draining and Filling \(GE 47716\)](#) [Cooling System Draining and Filling \(Static\)](#)
10. Check the cooling system for leaks.

HEATER INLET HOSE BRACKET REPLACEMENT (LTG WITH KL9)

Removal Procedure

1. Drain the cooling system. [Cooling System Draining and Filling \(GE 47716\)](#) [Cooling System Draining and Filling \(Static\)](#)
2. Reposition Engine Coolant Air Bleed Hose - [Engine Coolant Air Bleed Hose Replacement \(Radiator Surge Tank to Radiator to Engine Coolant Air Bleed Pipe LTG\)](#)
3. Reposition Power Transfer Unit Vent Hose - [Power Transfer Unit Vent Hose Replacement](#)
4. Reposition the wiring harness.

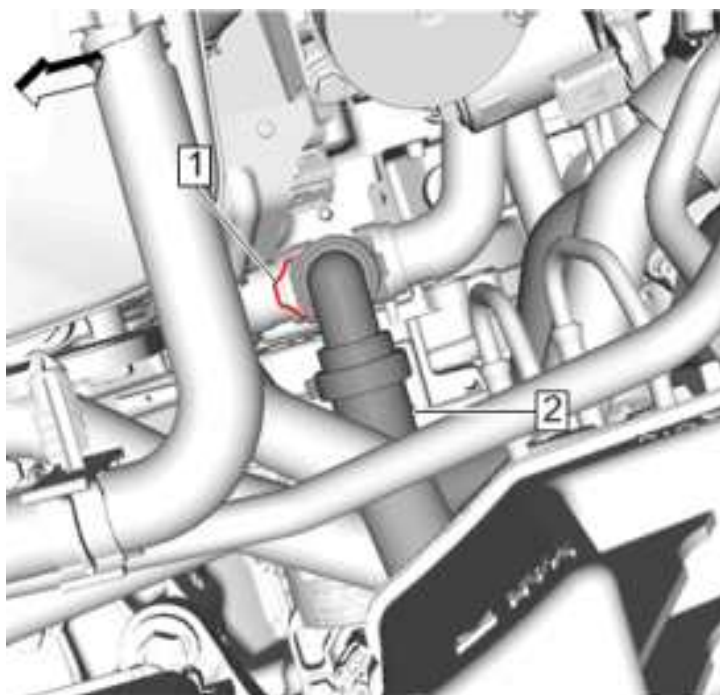


Fig. 809: Heater Water Auxiliary Pump Hose
Courtesy of GENERAL MOTORS COMPANY

5. Remove Heater Water Auxiliary Pump Hose (2) @Heater Water Auxiliary Pump Inlet Hose and position aside - **Heater Water Auxiliary Pump Hose Replacement (LTG with KL9)**.
6. Remove Heater Water Auxiliary Pump Inlet Hose - **Heater Water Auxiliary Pump Inlet Hose Replacement (LTG with KL9)**.

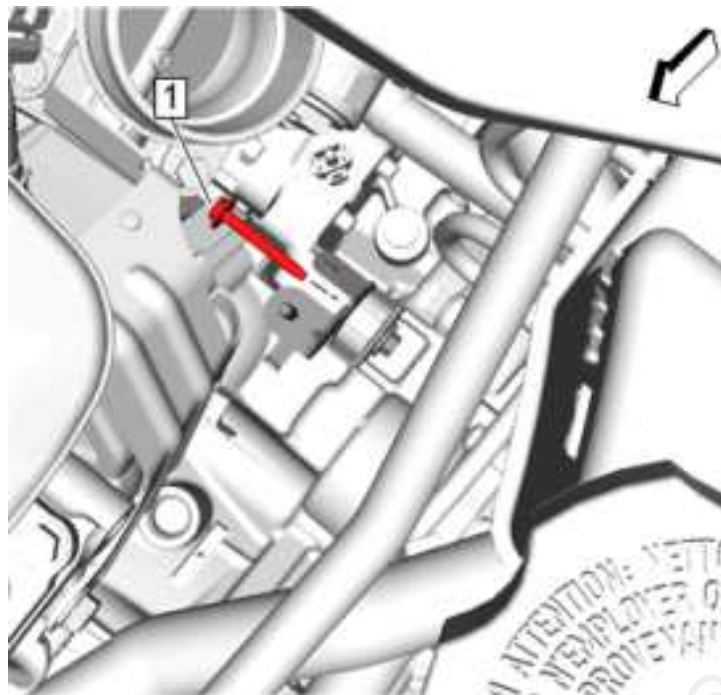


Fig. 810: Heater Inlet Hose Bracket Bolt
Courtesy of GENERAL MOTORS COMPANY

7. Remove Heater Inlet Hose Bracket Bolt (1)

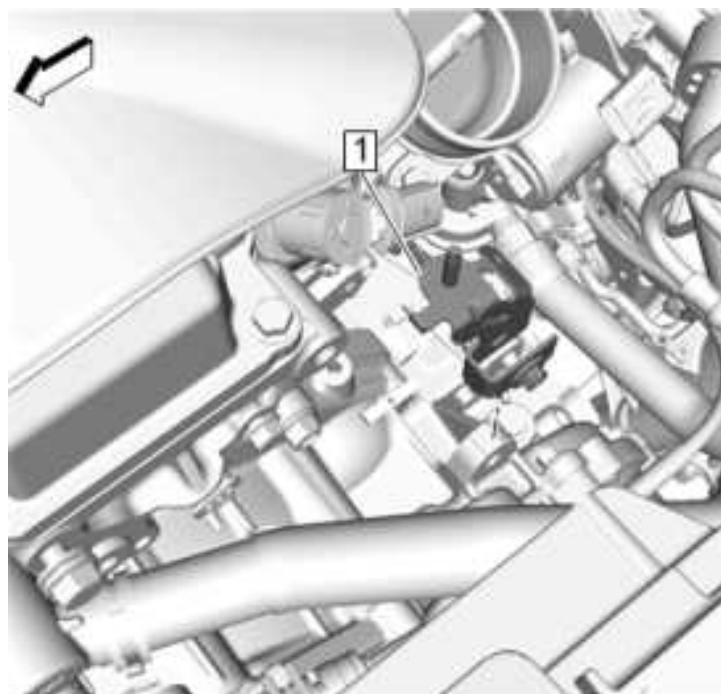


Fig. 811: Heater Inlet Hose Bracket
Courtesy of GENERAL MOTORS COMPANY

8. Remove Heater Inlet Hose Bracket (1)

Installation Procedure

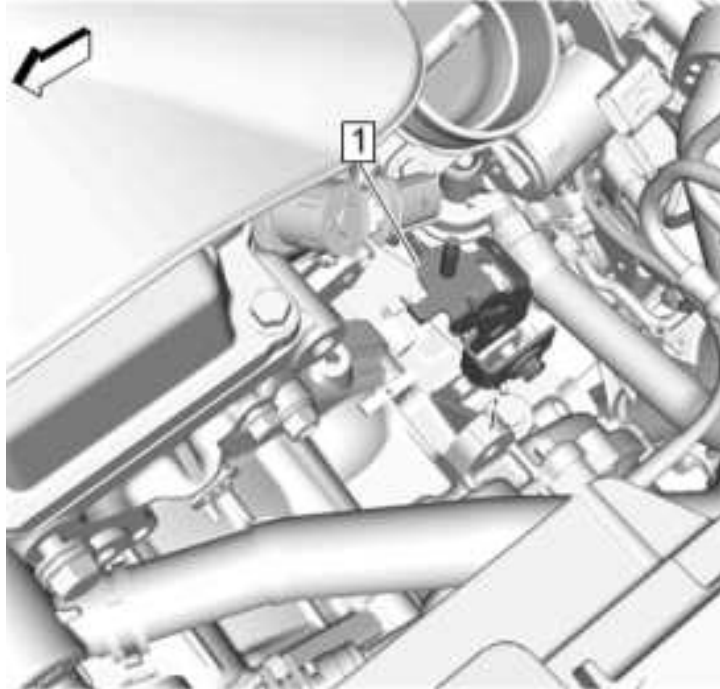


Fig. 812: Heater Inlet Hose Bracket

Courtesy of GENERAL MOTORS COMPANY

1. Install Heater Inlet Hose Bracket (1)

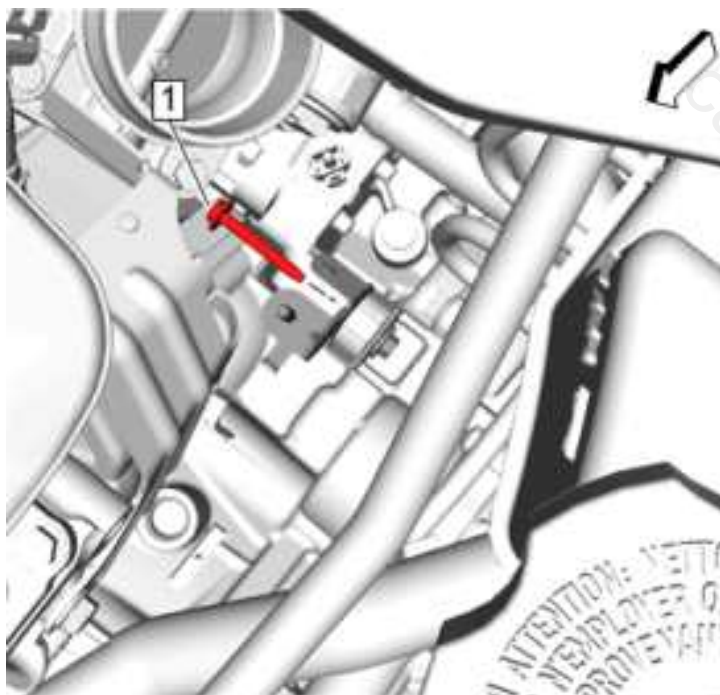


Fig. 813: Heater Inlet Hose Bracket Bolt

Courtesy of GENERAL MOTORS COMPANY

CAUTION: Refer to [Fastener Caution](#) .

2. Install Heater Inlet Hose Bracket Bolt (1) and tighten 9 N.m (80 lb in)
3. Install Heater Water Auxiliary Pump Inlet Hose - [Heater Water Auxiliary Pump Inlet Hose Replacement \(LTG with KL9\)](#)

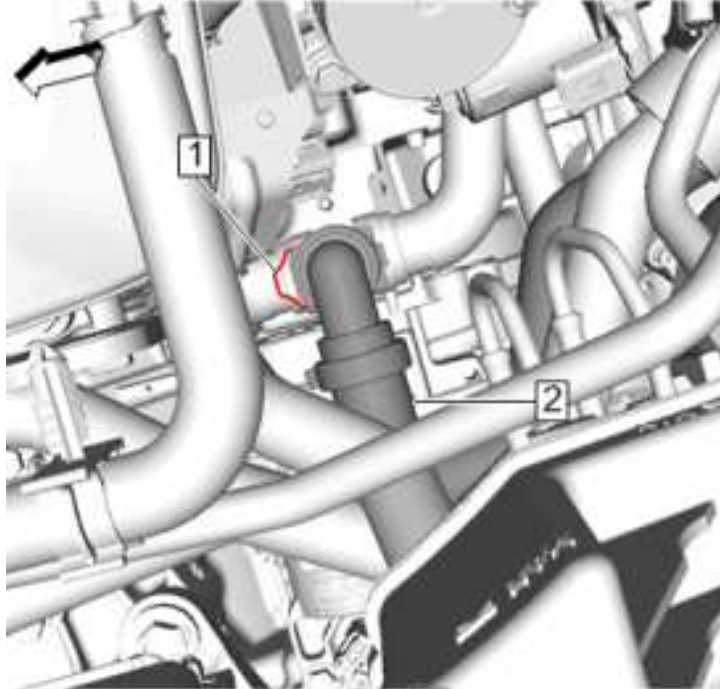


Fig. 814: Heater Water Auxiliary Pump Hose

Courtesy of GENERAL MOTORS COMPANY

4. Install Heater Water Auxiliary Pump Hose (1) @Heater Water Auxiliary Pump Inlet Hose - [Heater Water Auxiliary Pump Hose Replacement \(LTG with KL9\)](#).
5. Position the wiring harness.
6. Install Power Transfer Unit Vent Hose - [Power Transfer Unit Vent Hose Replacement](#)
7. Install Engine Coolant Air Bleed Hose - [Engine Coolant Air Bleed Hose Replacement \(Radiator Surge Tank to Radiator to Engine Coolant Air Bleed Pipe LTG\)](#).
8. Fill the cooling system. [Cooling System Draining and Filling \(GE 47716\)](#). [Cooling System Draining and Filling \(Static\)](#).
9. Check the cooling system for leaks.

AUXILIARY HEATER INLET HOSE REPLACEMENT (LH7 TERRAIN)

Removal Procedure

1. Drain the cooling system. [Cooling System Draining and Filling \(GE 47716\)](#). [Cooling System Draining and Filling \(Static\)](#).

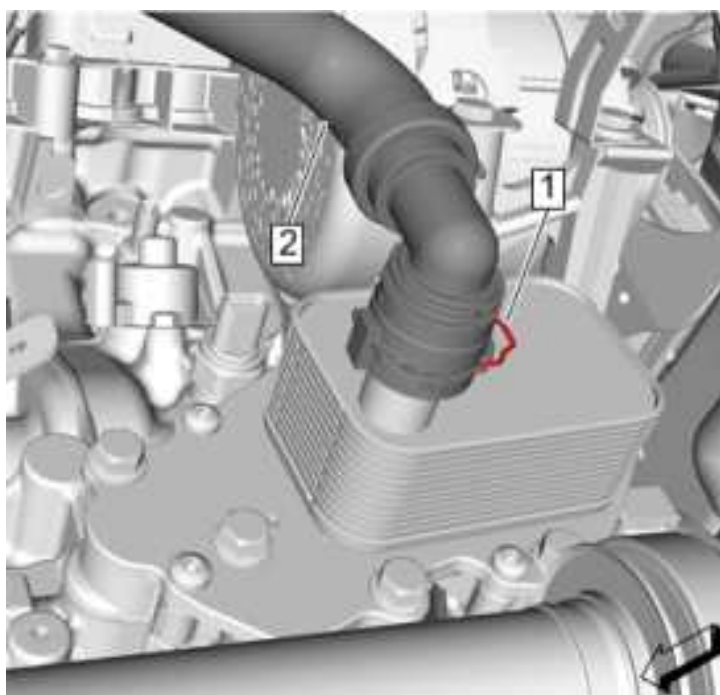


Fig. 815: Auxiliary Heater Outlet Hose And Retainer
Courtesy of GENERAL MOTORS COMPANY

2. Disengage Auxiliary Heater Inlet Hose Retainer (1)
3. Remove Auxiliary Heater Inlet Hose (2) @Engine Oil Cooler

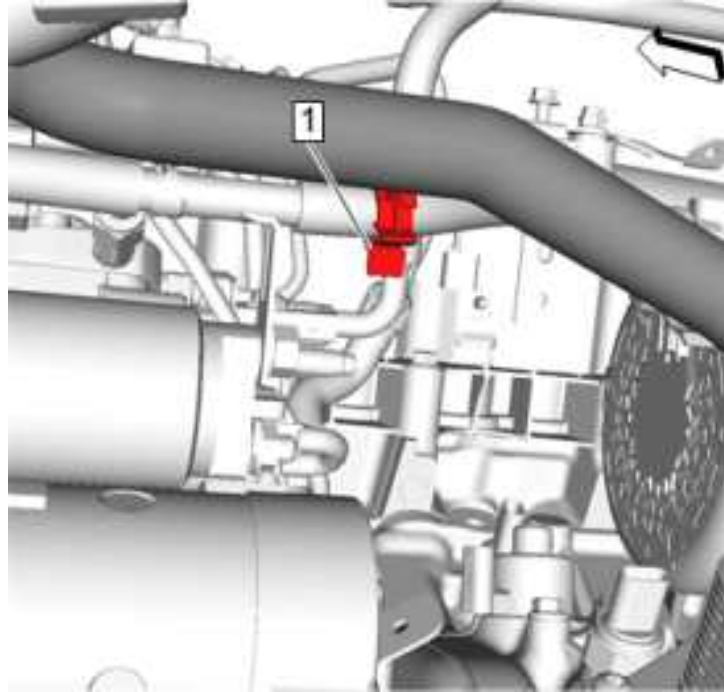


Fig. 816: Heater Outlet Hose Clip
Courtesy of GENERAL MOTORS COMPANY

4. Remove Engine Coolant Air Bleed Pipe Clip (1) @Starter Solenoid Cable
5. Lower the vehicle.
6. Remove Intake Manifold Cover - [Intake Manifold Cover Replacement](#)

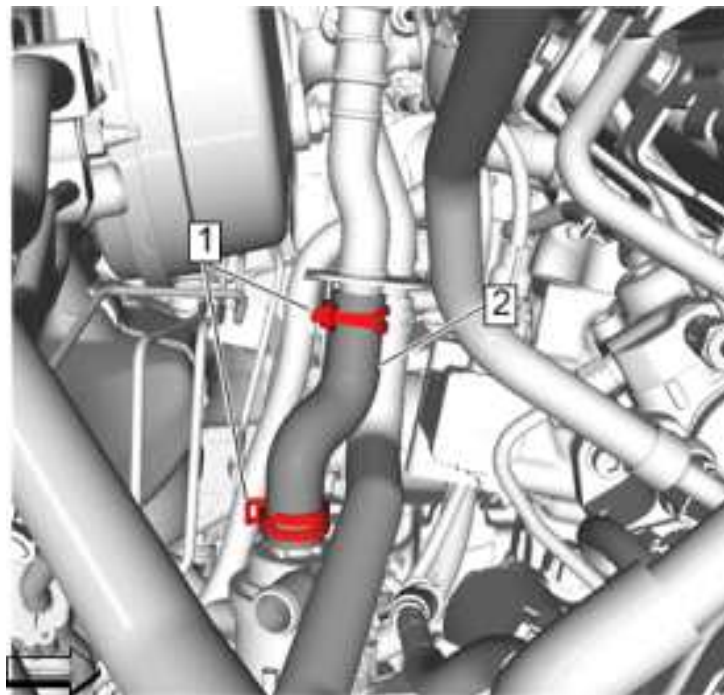


Fig. 817: Heater Water Auxiliary Pump Inlet Hose
Courtesy of GENERAL MOTORS COMPANY

7. Remove Heater Water Auxiliary Pump Inlet Hose (2) - [Heater Water Auxiliary Pump Inlet Hose Replacement \(LH7 Terrain\)](#)

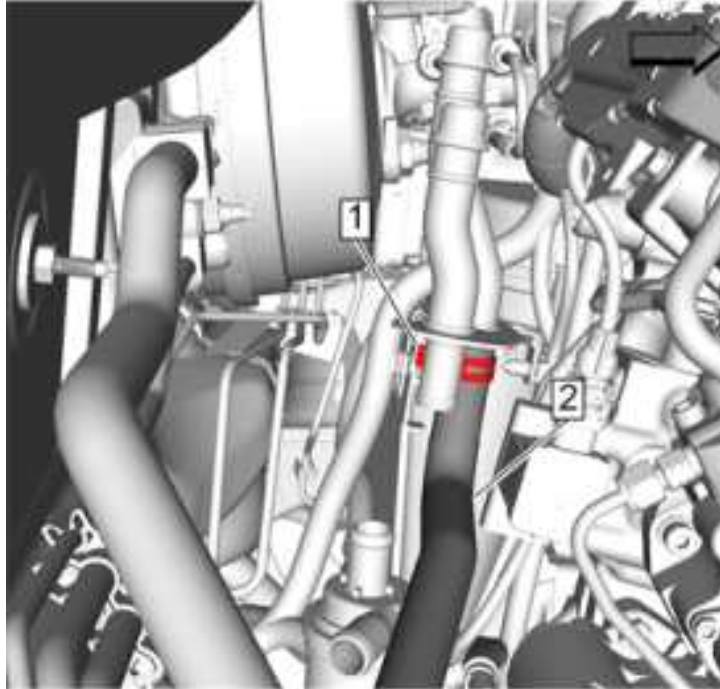


Fig. 818: Auxiliary Heater Inlet Hose Clamp

Courtesy of GENERAL MOTORS COMPANY

8. Disengage Auxiliary Heater Inlet Hose Clamp (1) - [Hose Clamp Replacement Guidelines - Spring Type](#)
9. Remove Auxiliary Heater Inlet Hose (2) @Heater Inlet and Outlet Pipe Bracket
10. Remove Auxiliary Heater Inlet Hose (2)

Installation Procedure

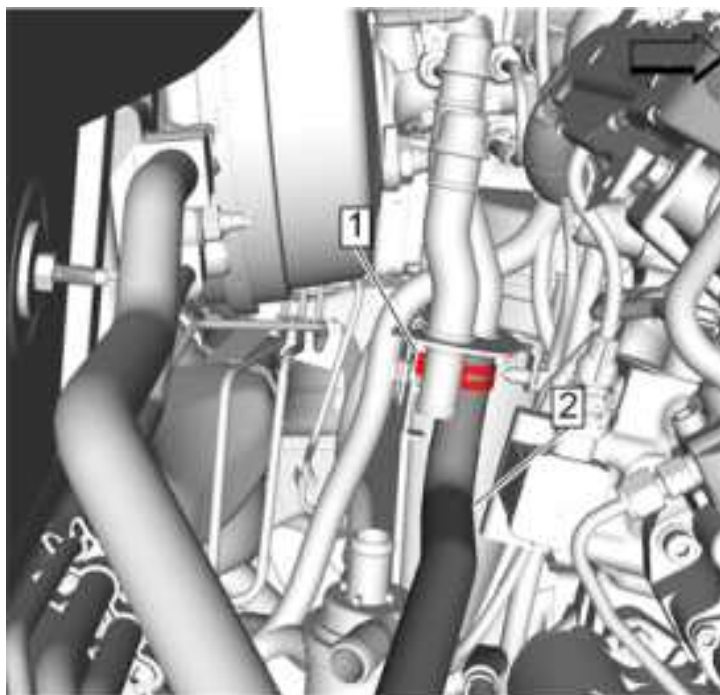


Fig. 819: Auxiliary Heater Inlet Hose Clamp

Courtesy of GENERAL MOTORS COMPANY

1. Install Auxiliary Heater Inlet Hose (2) @Heater Inlet and Outlet Pipe Bracket
2. Engage Auxiliary Heater Inlet Hose Clamp (1) - [Hose Clamp Replacement Guidelines - Spring Type](#)

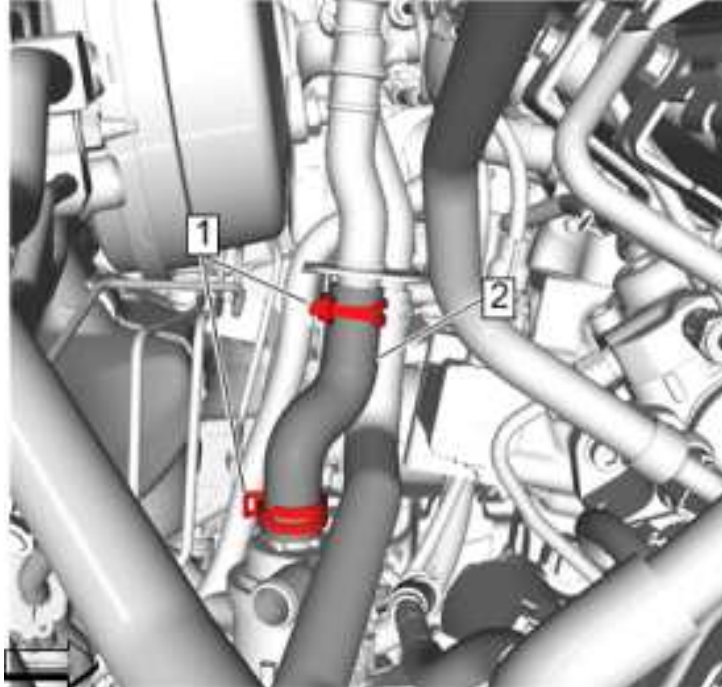


Fig. 820: Heater Water Auxiliary Pump Inlet Hose

Courtesy of GENERAL MOTORS COMPANY

3. Install Heater Water Auxiliary Pump Inlet Hose (2) - [Heater Water Auxiliary Pump Inlet Hose Replacement \(LH7 Terrain\)](#)
4. Install Intake Manifold Cover - [Intake Manifold Cover Replacement](#)
5. Raise and support the vehicle. [Lifting and Jacking the Vehicle](#)

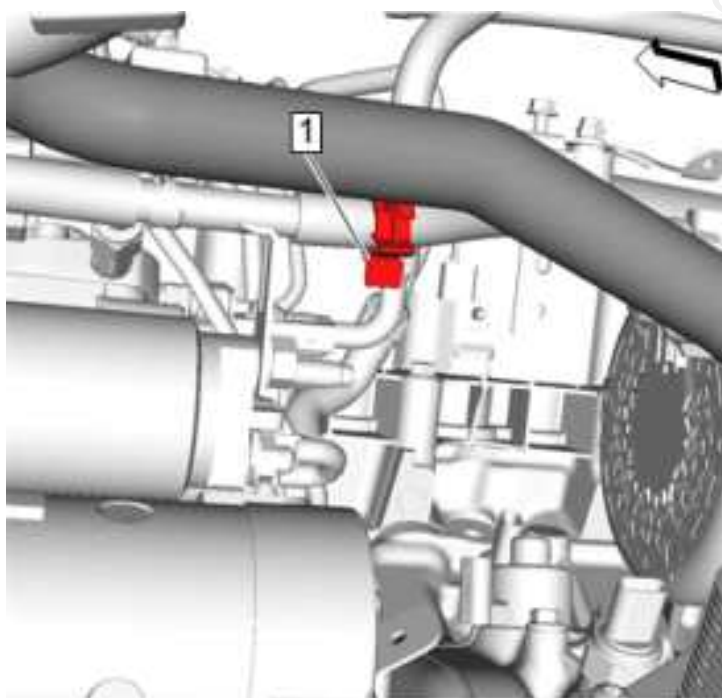


Fig. 821: Heater Outlet Hose Clip

Courtesy of GENERAL MOTORS COMPANY

6. Install Engine Coolant Air Bleed Pipe Clip (1) @Starter Solenoid Cable

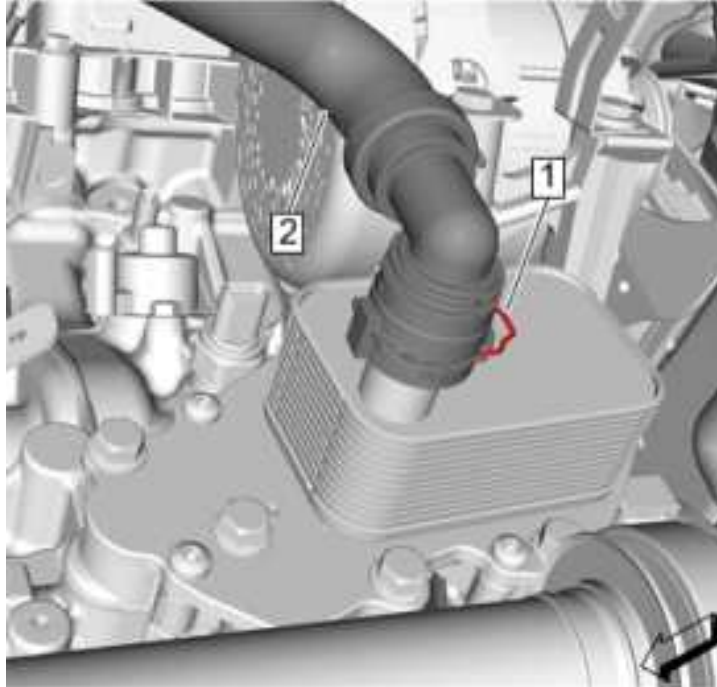


Fig. 822: Auxiliary Heater Outlet Hose And Retainer
Courtesy of GENERAL MOTORS COMPANY

7. Install Auxiliary Heater Inlet Hose (2) @Engine Oil Cooler
8. Engage Auxiliary Heater Inlet Hose Retainer (1)
9. Fill the cooling system. [Cooling System Draining and Filling \(GE 47716\) Cooling System Draining and Filling \(Static\)](#)
10. Check the cooling system for leaks.

AUXILIARY HEATER OUTLET HOSE REPLACEMENT (LYX WITH KL9)

Removal Procedure

1. Drain the cooling system. [Cooling System Draining and Filling \(GE 47716\) Cooling System Draining and Filling \(Static\)](#)

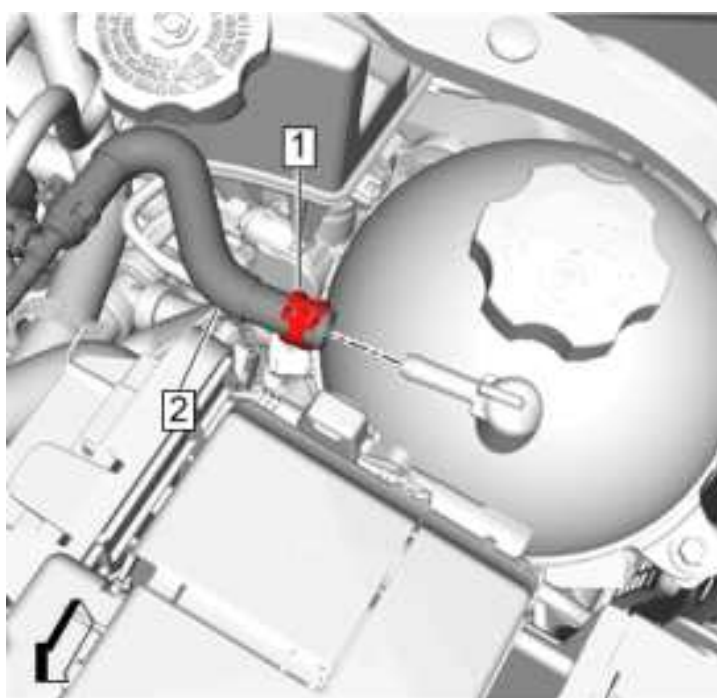


Fig. 823: Engine Coolant Air Bleed Hose
Courtesy of GENERAL MOTORS COMPANY

2. Remove Engine Coolant Air Bleed Hose (2) @Radiator Surge Tank - [Engine Coolant Air Bleed Hose Replacement \(Turbocharger Coolant Return pipe to Water Outlet, LYX\) Engine Coolant Air Bleed Hose Replacement \(Radiator Surge Tank to Turbocharger Coolant Return Pipe to Radiator, LYX\)](#)

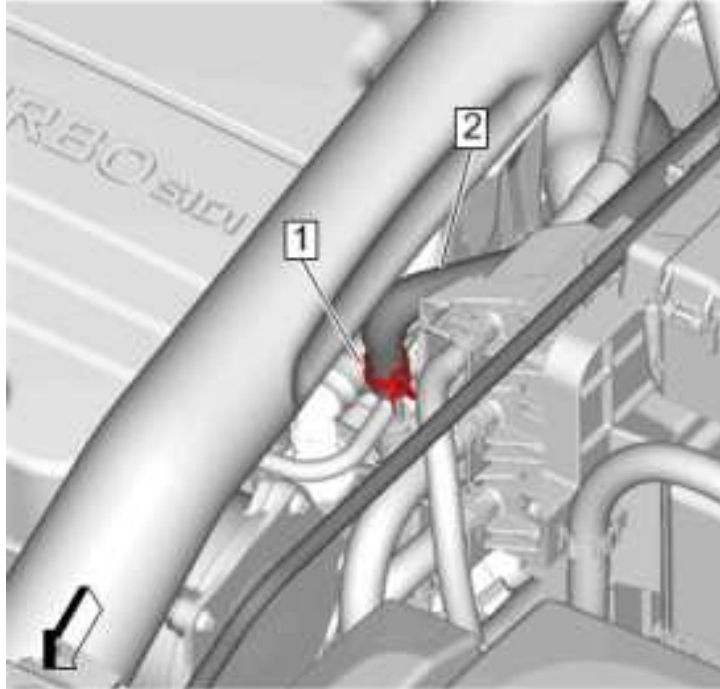


Fig. 824: Engine Coolant Air Bleed Hose Clamp
 Courtesy of GENERAL MOTORS COMPANY

3. Remove Engine Coolant Air Bleed Hose (2) @Turbocharger Coolant Return Pipe - [Engine Coolant Air Bleed Hose Replacement \(Turbocharger Coolant Return pipe to Water Outlet, LYX\)](#) [Engine Coolant Air Bleed Hose Replacement \(Radiator Surge Tank to Turbocharger Coolant Return Pipe to Radiator, LYX\)](#)

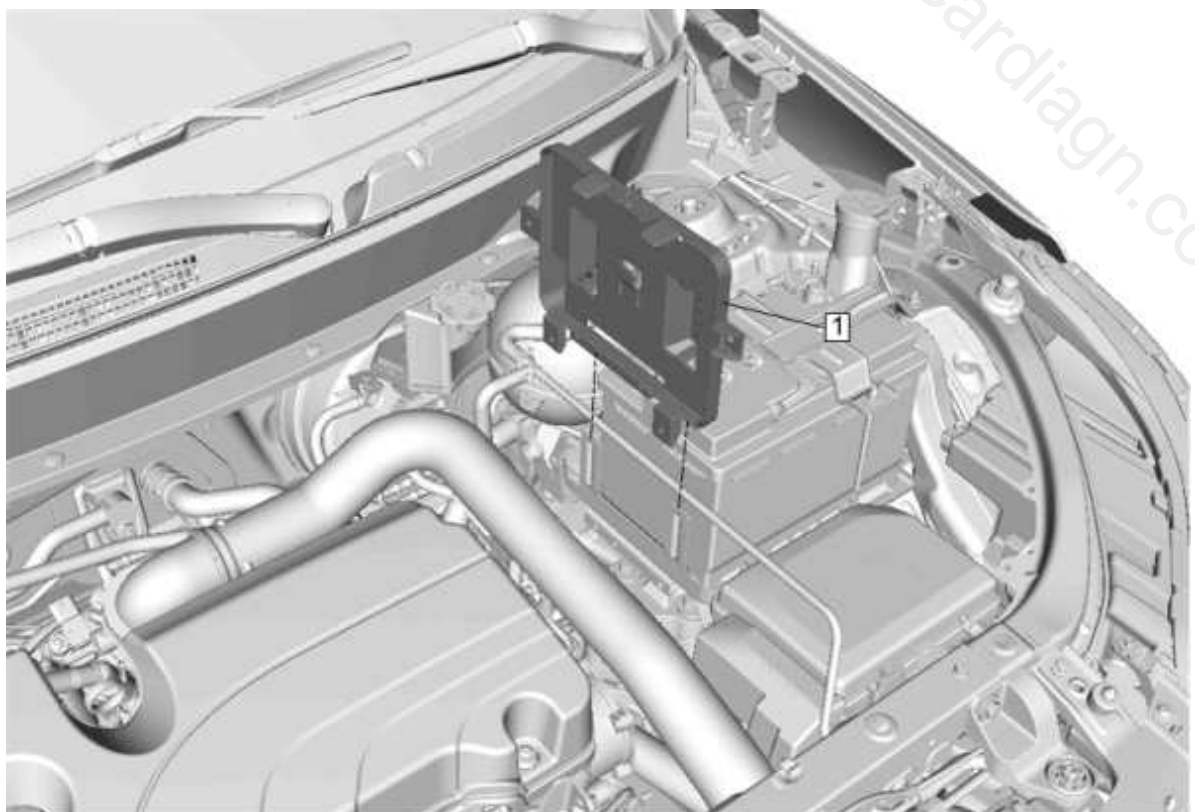


Fig. 825: Engine Control Module Bracket
 Courtesy of GENERAL MOTORS COMPANY

4. Remove Engine Control Module Bracket (1) - [Engine Control Module Bracket Replacement](#)

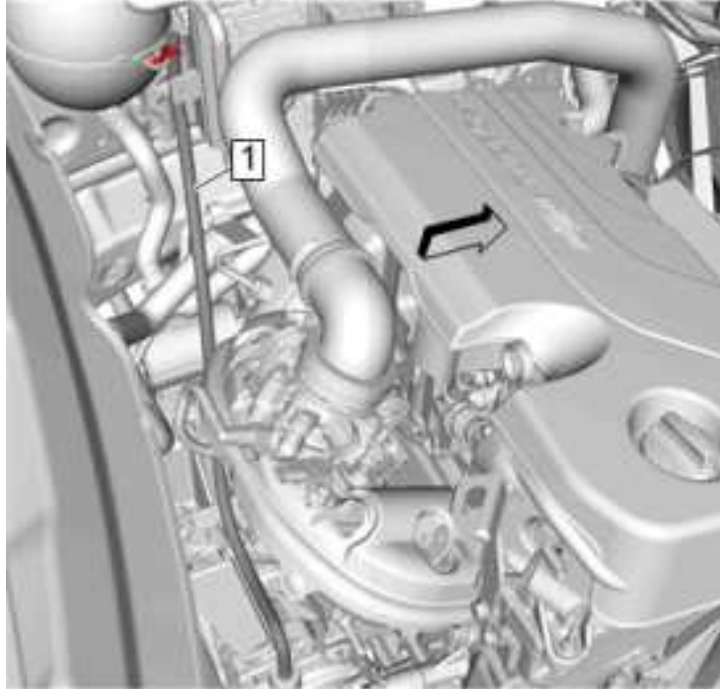


Fig. 826: Power Transfer Unit Vent Hose
 Courtesy of GENERAL MOTORS COMPANY

5. Remove { If equipped } Power Transfer Unit Vent Hose (1) @Radiator Surge Tank - **Power Transfer Unit Vent Hose Replacement**
6. Reposition Wiring Harnesses

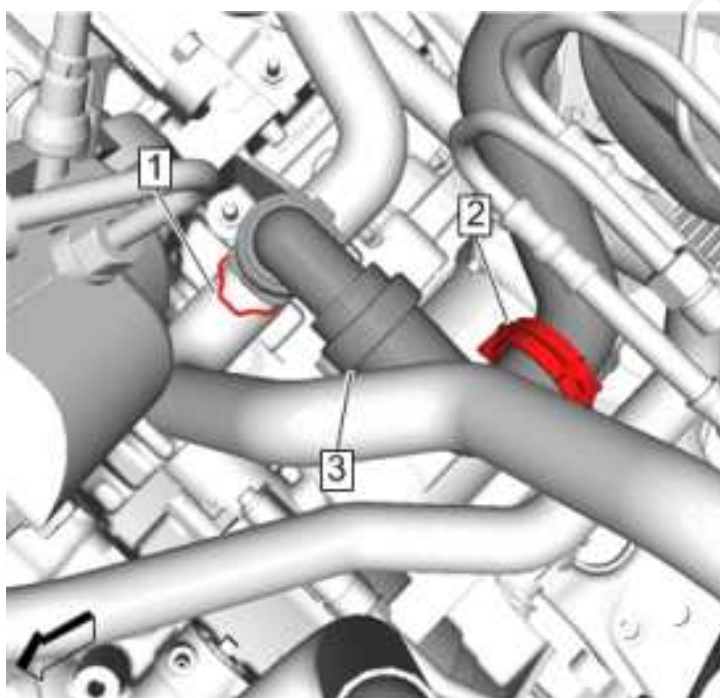


Fig. 827: Heater Water Auxiliary Pump Hose
 Courtesy of GENERAL MOTORS COMPANY

7. Remove Auxiliary Heater Outlet Hose Retainer (2) @Heater Water Auxiliary Pump Hose

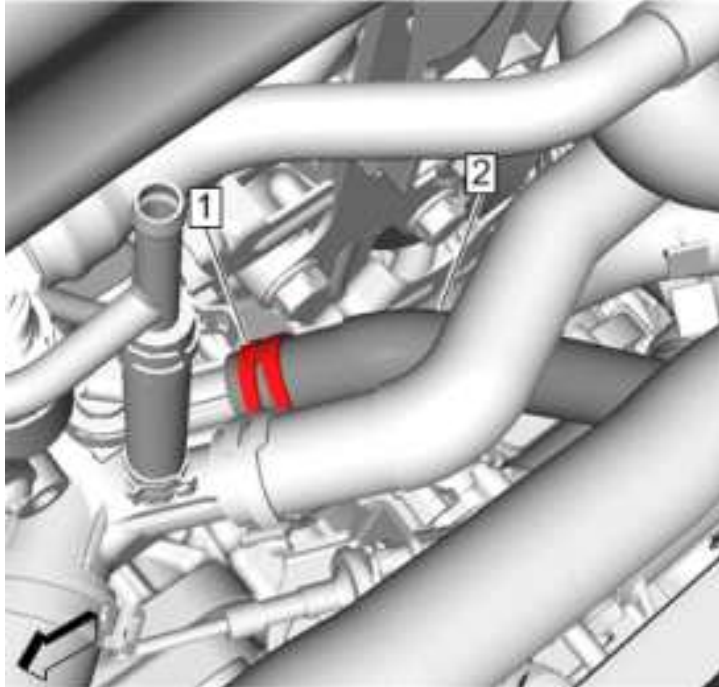


Fig. 828: Auxiliary Heater Outlet Hose And Clamp
 Courtesy of GENERAL MOTORS COMPANY

8. Disengage Auxiliary Heater Outlet Hose Clamp (1) - [Hose Clamp Replacement Guidelines - Spring Type](#)
9. Remove Auxiliary Heater Outlet Hose (2) @Water Outlet

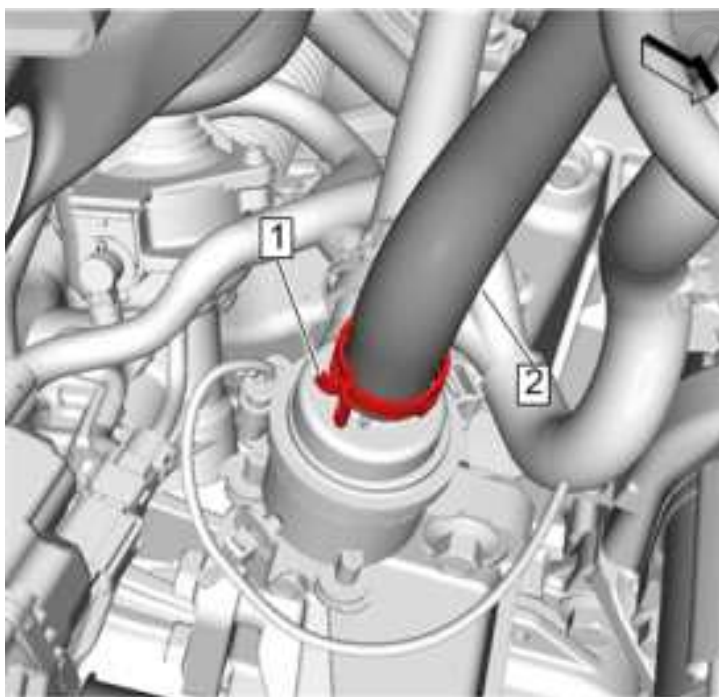


Fig. 829: Heater Water Auxiliary Pump Inlet Hose
 Courtesy of GENERAL MOTORS COMPANY

10. Remove Heater Water Auxiliary Pump Inlet Hose (2) @Auxiliary Water Pump - [Heater Water Auxiliary Pump Inlet Hose Replacement \(LYX with KL9\)](#)

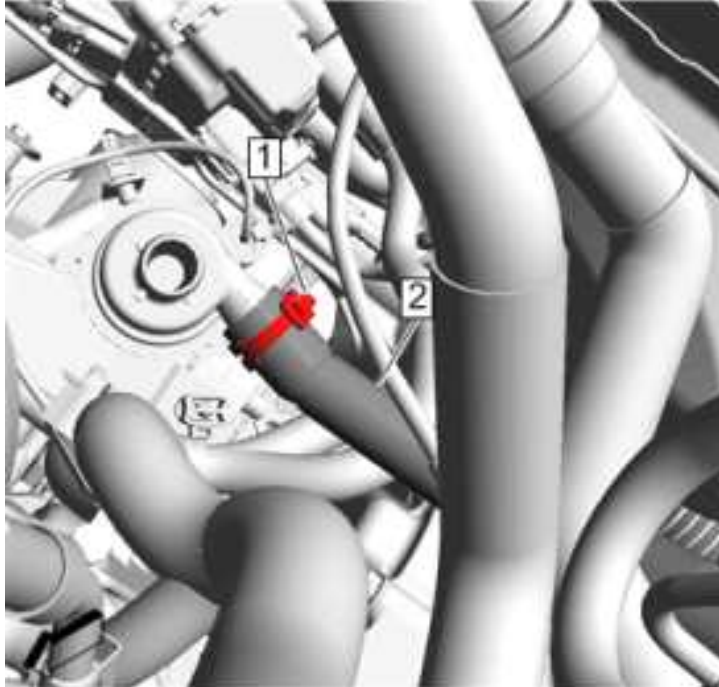


Fig. 830: Auxiliary Heater Outlet Hose

Courtesy of GENERAL MOTORS COMPANY

11. Disengage Auxiliary Heater Outlet Hose Clamp (1) [Hose Clamp Replacement Guidelines - Spring Type](#)
12. Remove Auxiliary Heater Outlet Hose (2) @Auxiliary Water Pump
13. Remove Auxiliary Heater Outlet Hose (2)

Installation Procedure

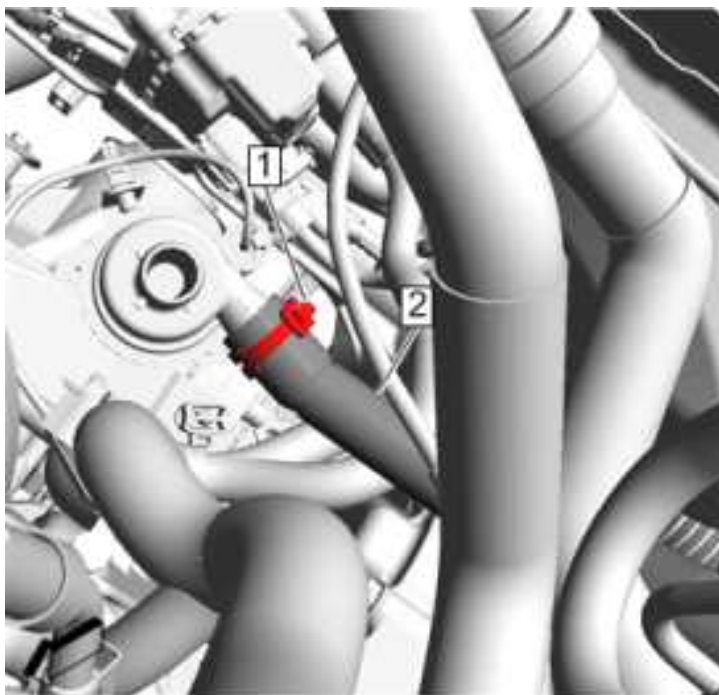


Fig. 831: Auxiliary Heater Outlet Hose

Courtesy of GENERAL MOTORS COMPANY

1. Install Auxiliary Heater Outlet Hose (2) @Auxiliary Water Pump
2. Engage Auxiliary Heater Outlet Hose Clamp (1) - [Hose Clamp Replacement Guidelines - Spring Type](#)

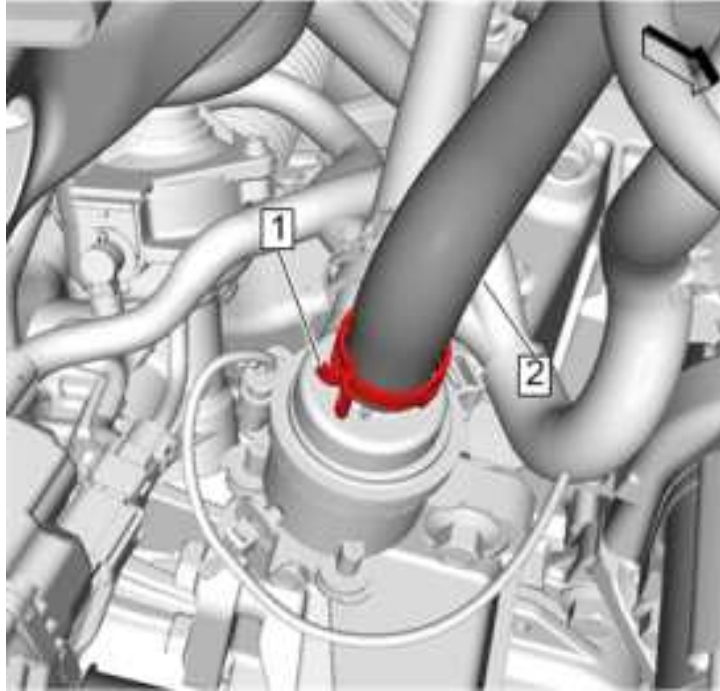


Fig. 832: Heater Water Auxiliary Pump Inlet Hose
 Courtesy of GENERAL MOTORS COMPANY

3. Install Heater Water Auxiliary Pump Inlet Hose (2) @Auxiliary Water Pump - [Heater Water Auxiliary Pump Inlet Hose Replacement \(LYX with KL9\)](#).

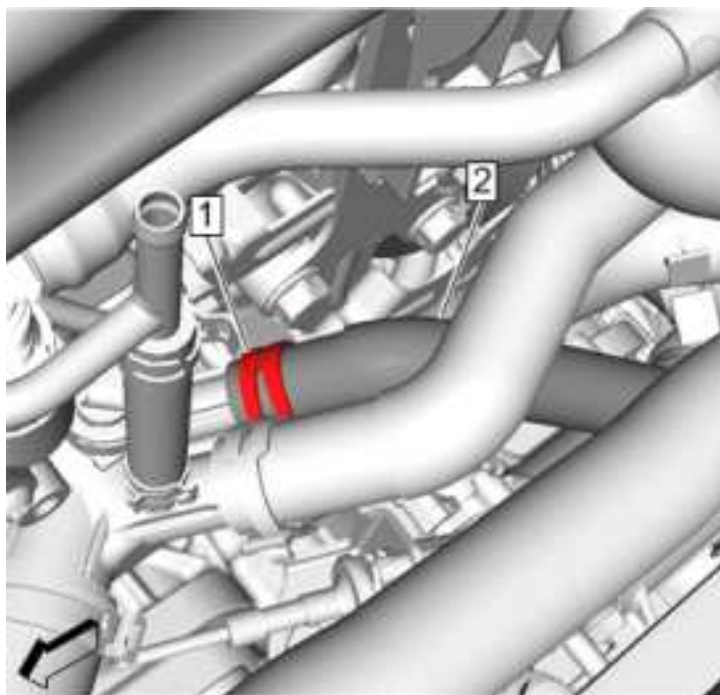


Fig. 833: Auxiliary Heater Outlet Hose And Clamp
 Courtesy of GENERAL MOTORS COMPANY

4. Install Auxiliary Heater Outlet Hose (2) @Water Outlet
5. Engage Auxiliary Heater Outlet Hose Clamp (1) - [Hose Clamp Replacement Guidelines - Spring Type](#)

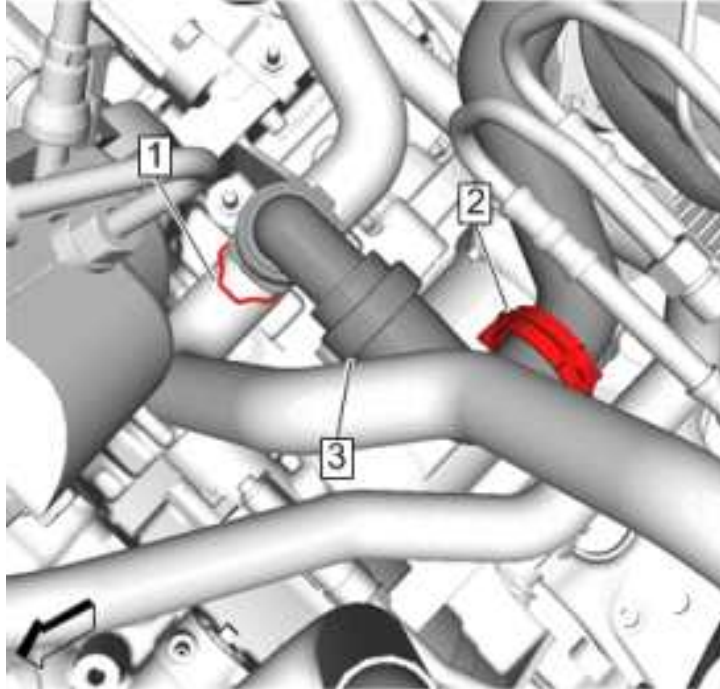


Fig. 834: Heater Water Auxiliary Pump Hose
 Courtesy of GENERAL MOTORS COMPANY

6. Install Auxiliary Heater Outlet Hose Retainer (2) @Heater Water Auxiliary Pump Hose
7. Reposition Wiring Harnesses

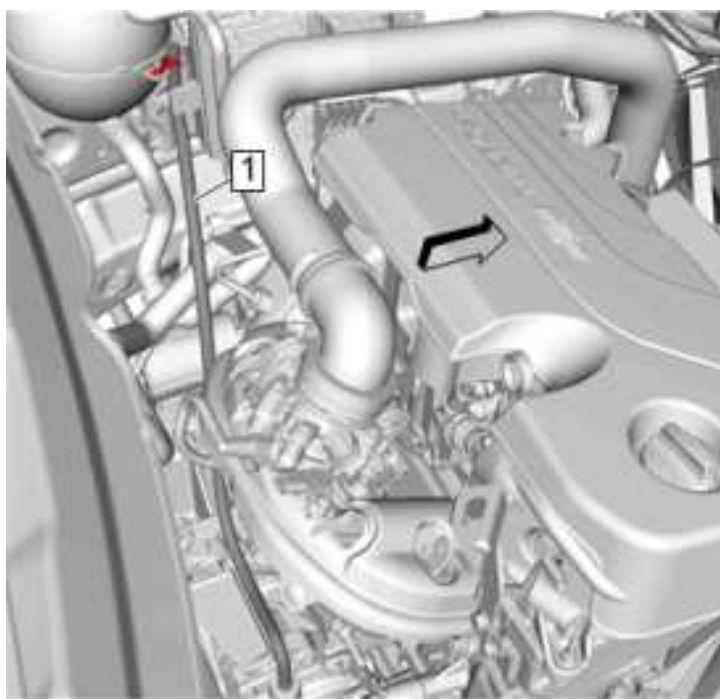


Fig. 835: Power Transfer Unit Vent Hose
 Courtesy of GENERAL MOTORS COMPANY

8. Install { If equipped } Power Transfer Unit Vent Hose (1) @Radiator Surge Tank - **Power Transfer Unit Vent Hose Replacement**

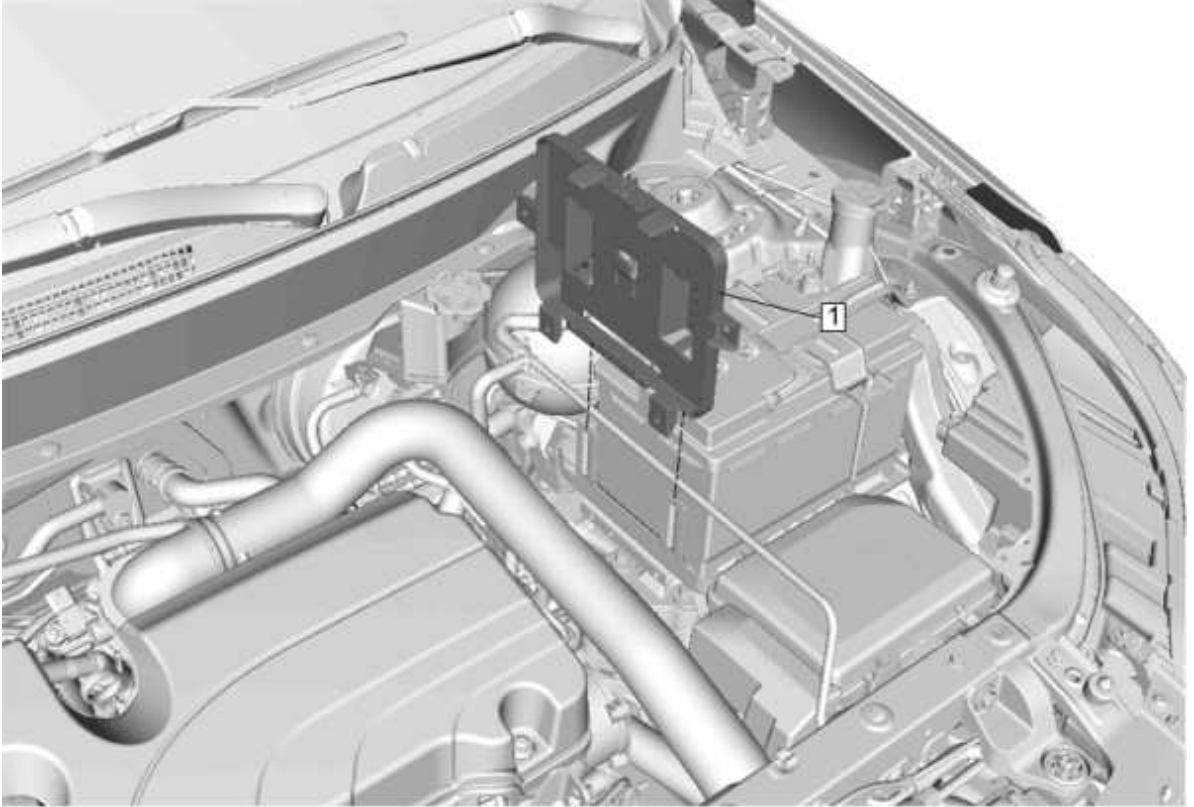


Fig. 836: Engine Control Module Bracket
 Courtesy of GENERAL MOTORS COMPANY

9. Install Engine Control Module Bracket (1) - **Engine Control Module Bracket Replacement**

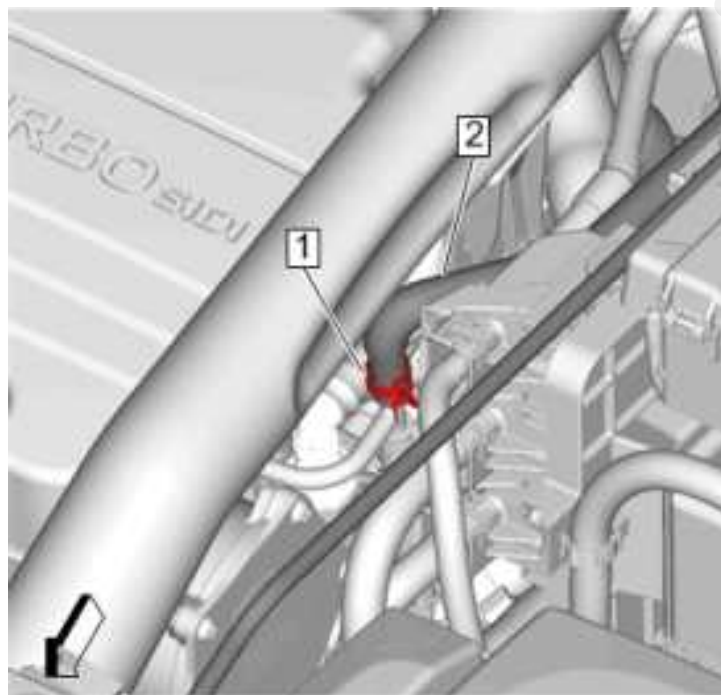


Fig. 837: Engine Coolant Air Bleed Hose Clamp
 Courtesy of GENERAL MOTORS COMPANY

10. Install Engine Coolant Air Bleed Hose (2) @Turbocharger Coolant Return Pipe - **Engine Coolant Air Bleed Hose Replacement (Turbocharger Coolant Return pipe to Water Outlet, LYX)** **Engine Coolant Air Bleed Hose Replacement (Radiator Surge Tank to Turbocharger Coolant Return Pipe to Radiator, LYX)**

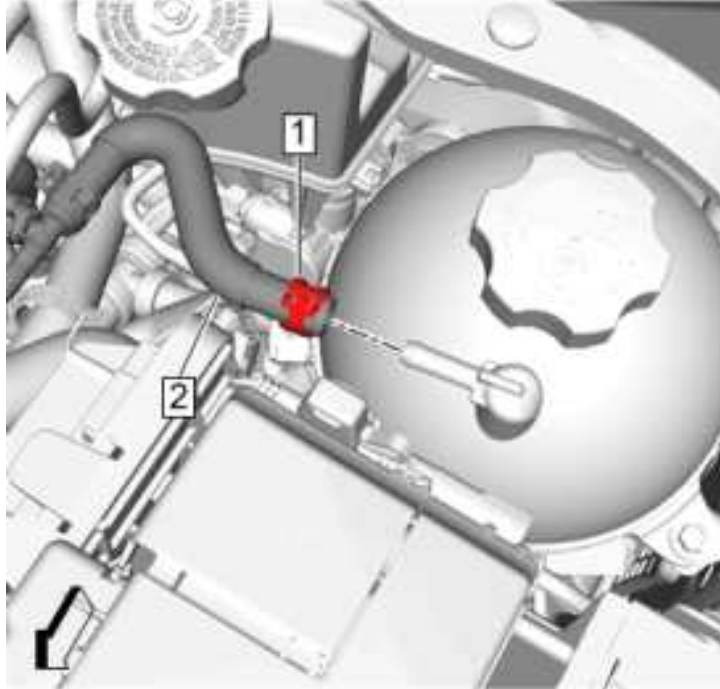


Fig. 838: Engine Coolant Air Bleed Hose

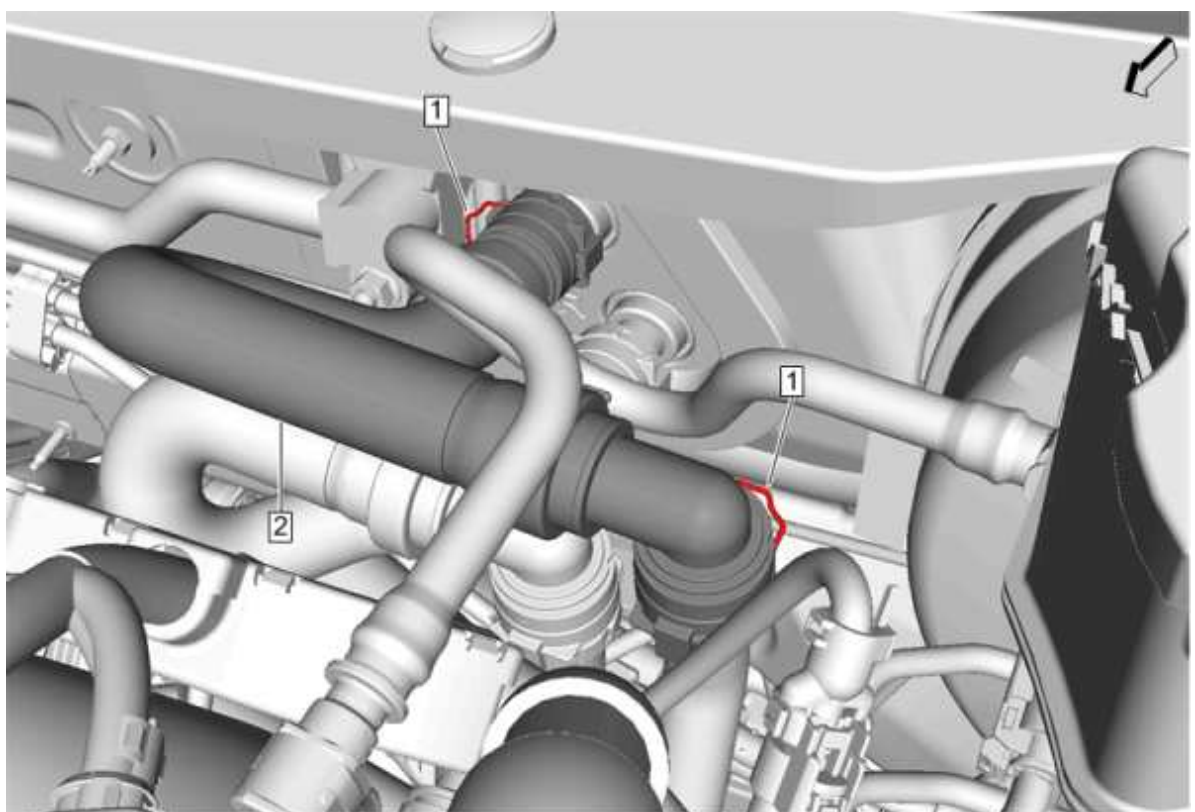
Courtesy of GENERAL MOTORS COMPANY

11. Install Engine Coolant Air Bleed Hose (2) @Radiator Surge Tank - [Engine Coolant Air Bleed Hose Replacement \(Turbocharger Coolant Return pipe to Water Outlet, LYX\)](#) [Engine Coolant Air Bleed Hose Replacement \(Radiator Surge Tank to Turbocharger Coolant Return Pipe to Radiator, LYX\)](#)
12. Fill the cooling system. [Cooling System Draining and Filling \(GE 47716\)](#) [Cooling System Draining and Filling \(Static\)](#)
13. Check the cooling system for leaks.

AUXILIARY HEATER OUTLET HOSE REPLACEMENT (LH7 TERRAIN)

Removal Procedure

1. Drain the cooling system. [Cooling System Draining and Filling \(GE 47716\)](#) [Cooling System Draining and Filling \(Static\)](#)
2. Remove Intake Manifold Cover - [Intake Manifold Cover Replacement](#)



3. Remove Heater Inlet Hose (2) - **Heater Inlet Hose Replacement (LH7 Terrain)**

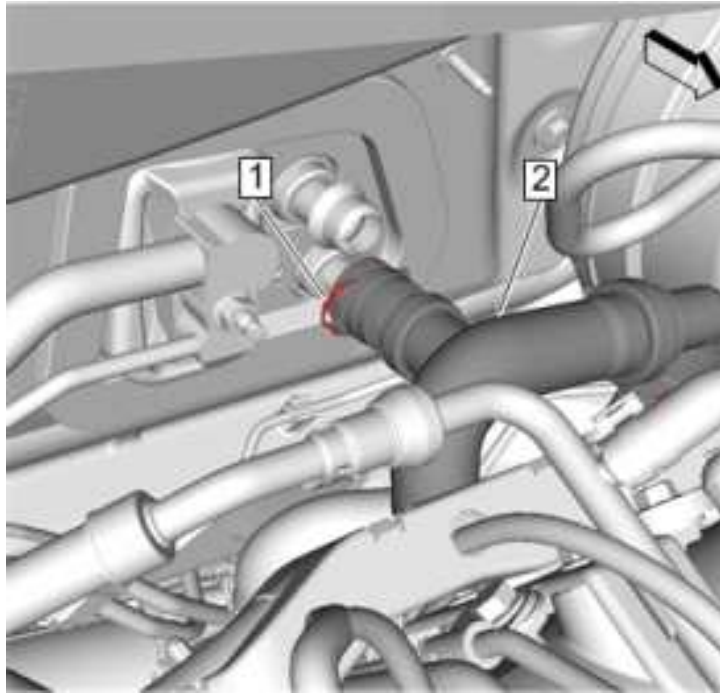


Fig. 840: Auxiliary Heater Outlet Hose And Retainer
Courtesy of GENERAL MOTORS COMPANY

4. Disengage Auxiliary Heater Outlet Hose Retainer (1)
5. Remove Auxiliary Heater Outlet Hose (2) @Heater Core Inlet Tube

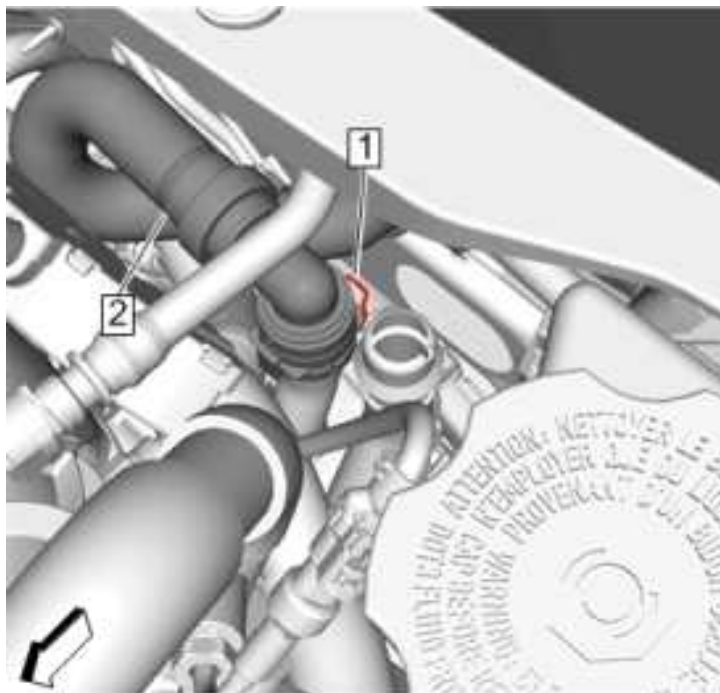


Fig. 841: Auxiliary Heater Outlet Hose
Courtesy of GENERAL MOTORS COMPANY

6. Disengage Auxiliary Heater Outlet Hose Retainer (1)
7. Remove Auxiliary Heater Outlet Hose (2) @Heater Inlet and Outlet Pipe Bracket
8. Remove Auxiliary Heater Outlet Hose (2)

Installation Procedure

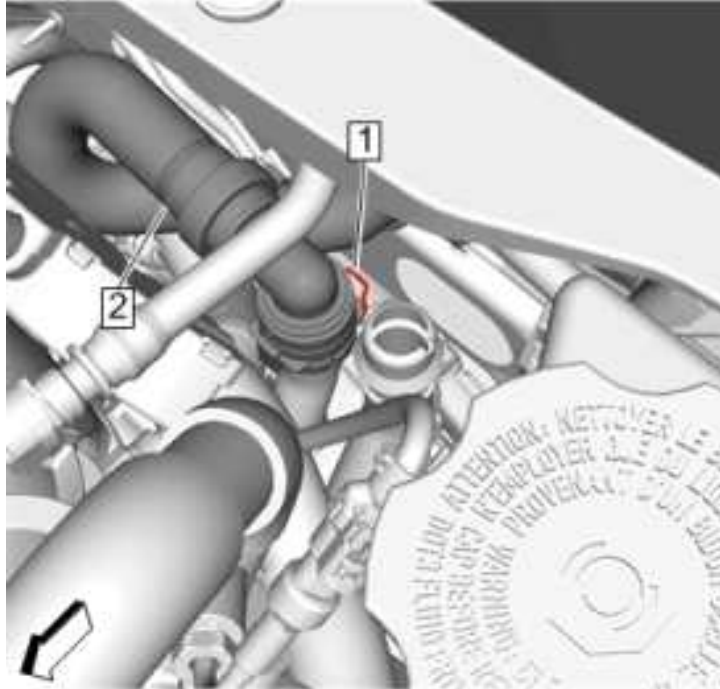


Fig. 842: Auxiliary Heater Outlet Hose

Courtesy of GENERAL MOTORS COMPANY

1. Install Auxiliary Heater Outlet Hose (2) @Heater Inlet and Outlet Pipe Bracket
2. Engage Auxiliary Heater Outlet Hose Retainer (1)

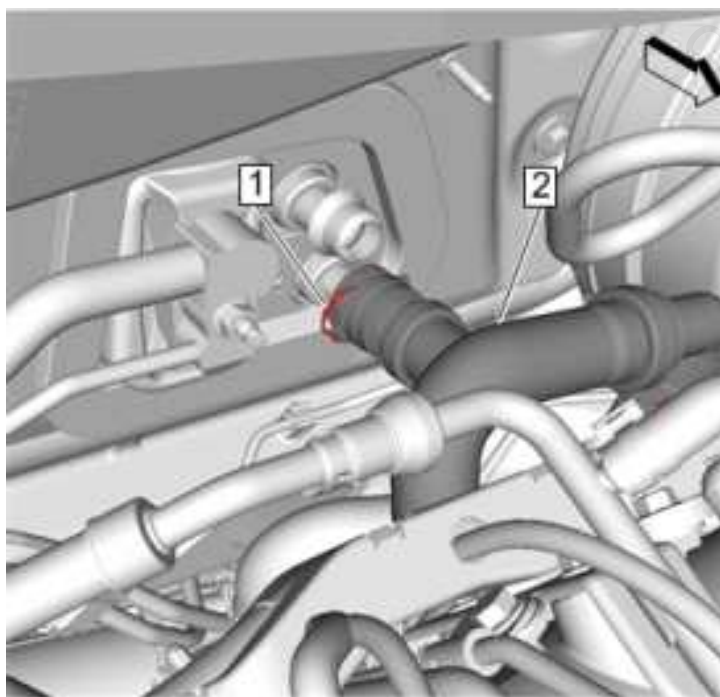


Fig. 843: Auxiliary Heater Outlet Hose And Retainer

Courtesy of GENERAL MOTORS COMPANY

3. Install Auxiliary Heater Outlet Hose (2) @Heater Core Inlet Tube
4. Engage Auxiliary Heater Outlet Hose Retainer (1)

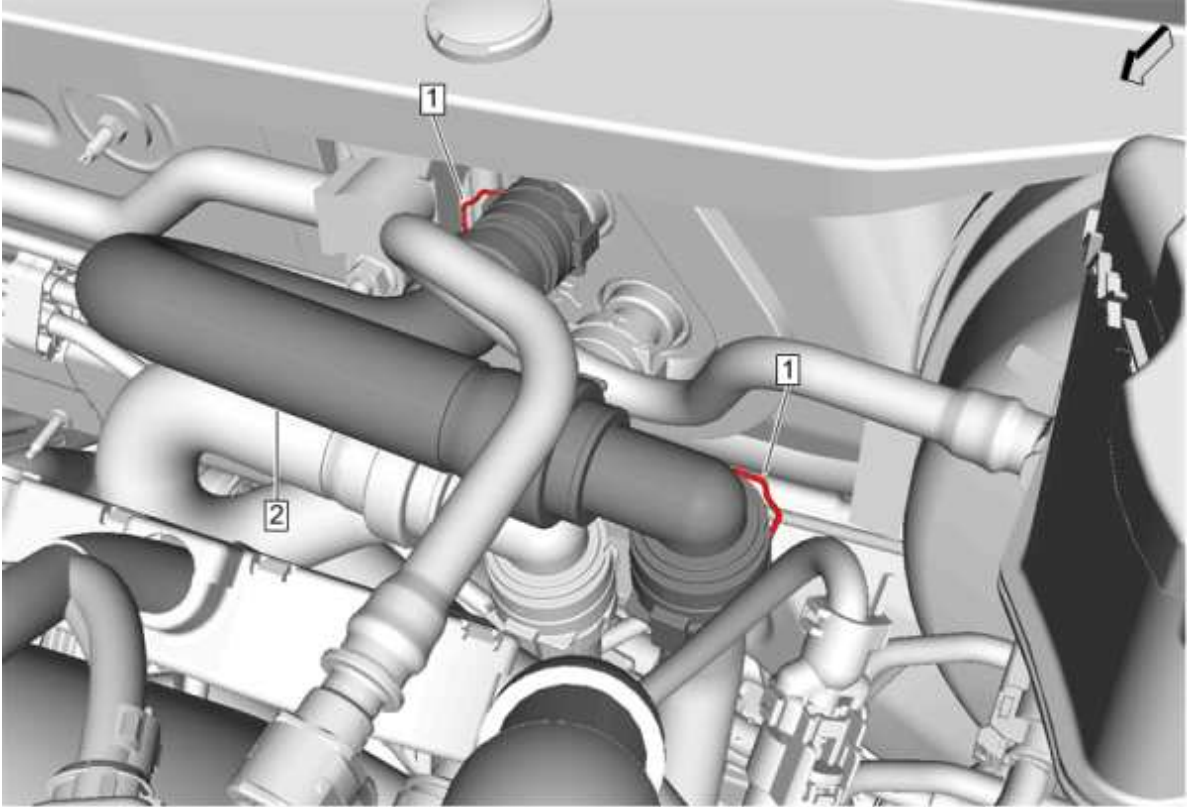


Fig. 844: Heater Inlet Hose

Courtesy of GENERAL MOTORS COMPANY

5. Install Heater Inlet Hose (2) - [Heater Inlet Hose Replacement \(LH7 Terrain\)](#).
6. Install Intake Manifold Cover - [Intake Manifold Cover Replacement](#)
7. Fill the cooling system. [Cooling System Draining and Filling \(GE 47716\)](#). [Cooling System Draining and Filling \(Static\)](#).
8. Check the cooling system for leaks.

AUXILIARY HEATER OUTLET HOSE REPLACEMENT (LH7 EQUINOX)

Removal Procedure

1. Drain the cooling system. [Cooling System Draining and Filling \(GE 47716\)](#). [Cooling System Draining and Filling \(Static\)](#).

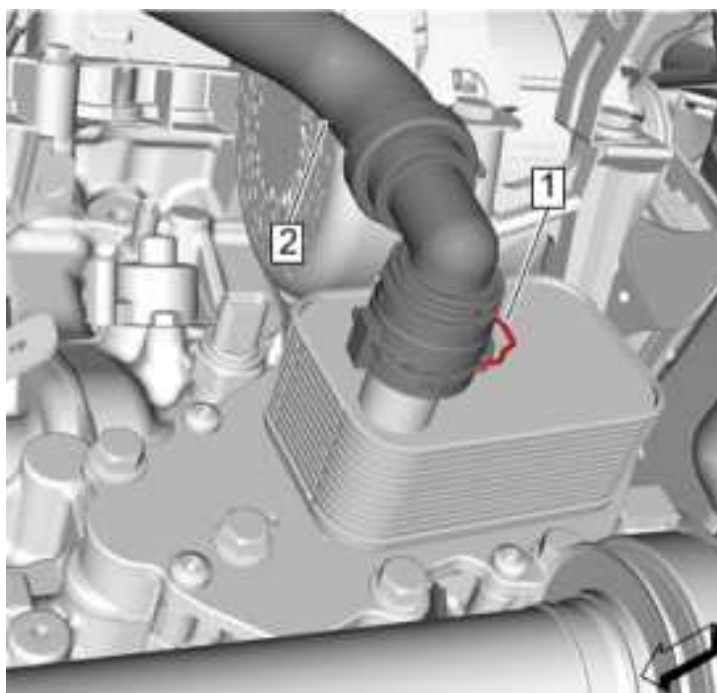


Fig. 845: Auxiliary Heater Outlet Hose And Retainer

Courtesy of GENERAL MOTORS COMPANY

2. Disengage Auxiliary Heater Outlet Hose Retainer (1)
3. Remove Auxiliary Heater Outlet Hose (2) @Engine Oil Cooler

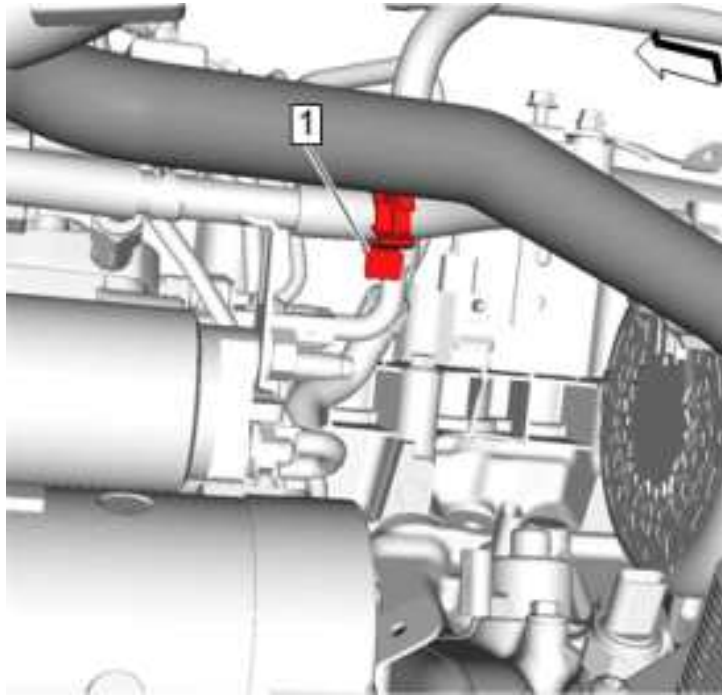


Fig. 846: Heater Outlet Hose Clip
Courtesy of GENERAL MOTORS COMPANY

4. Remove Heater Outlet Hose Clip (1) @Starter Solenoid Cable
5. Lower the vehicle.
6. Remove Intake Manifold Cover - [Intake Manifold Cover Replacement](#)

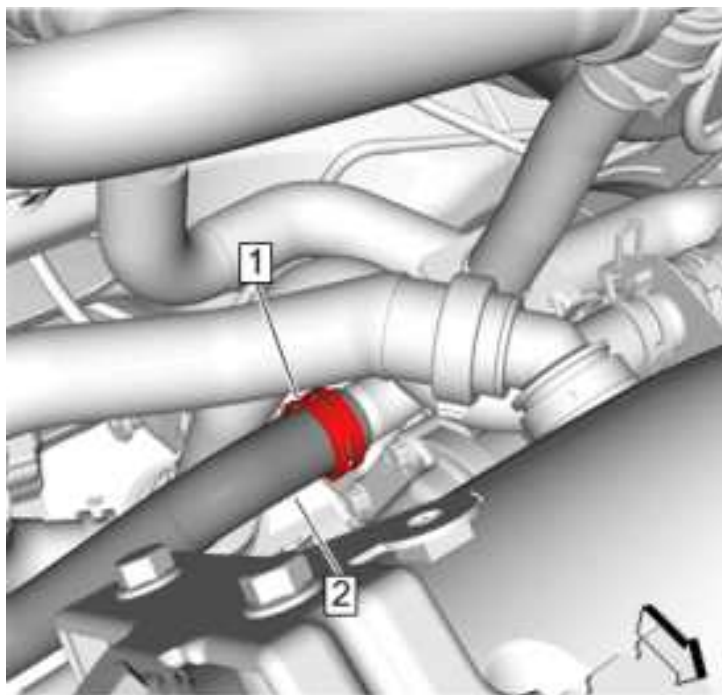


Fig. 847: Auxiliary Heater Outlet Hose
Courtesy of GENERAL MOTORS COMPANY

7. Disengage Auxiliary Heater Outlet Hose Clamp (1) - [Hose Clamp Replacement Guidelines - Spring Type](#)
8. Remove Auxiliary Heater Outlet Hose (2) @Heater Inlet and Outlet Pipe Bracket
9. Remove Auxiliary Heater Outlet Hose (2)

Installation Procedure

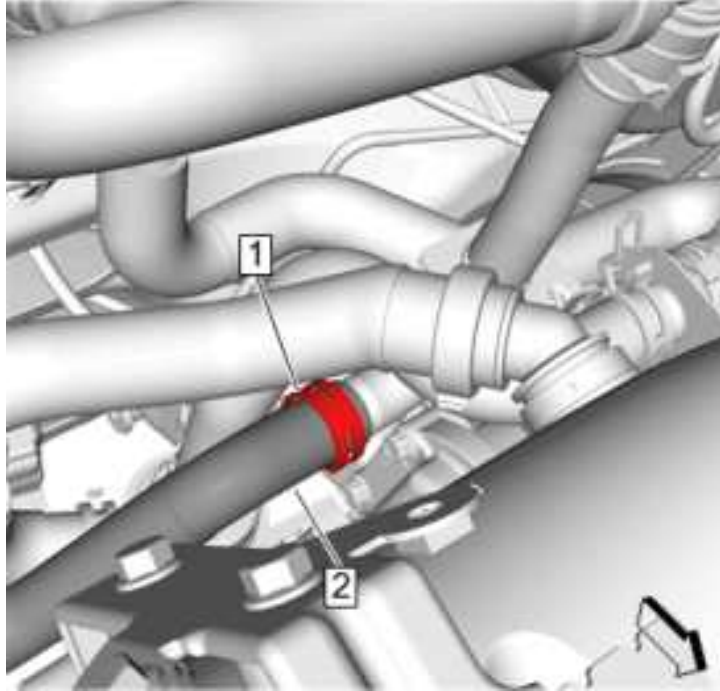


Fig. 848: Auxiliary Heater Outlet Hose

Courtesy of GENERAL MOTORS COMPANY

1. Install Auxiliary Heater Outlet Hose (2) @Heater Inlet and Outlet Pipe Bracket
2. Engage Auxiliary Heater Outlet Hose Clamp (1) - [Hose Clamp Replacement Guidelines - Spring Type](#)
3. Install Intake Manifold Cover - [Intake Manifold Cover Replacement](#)
4. Raise and support the vehicle. [Lifting and Jacking the Vehicle](#)

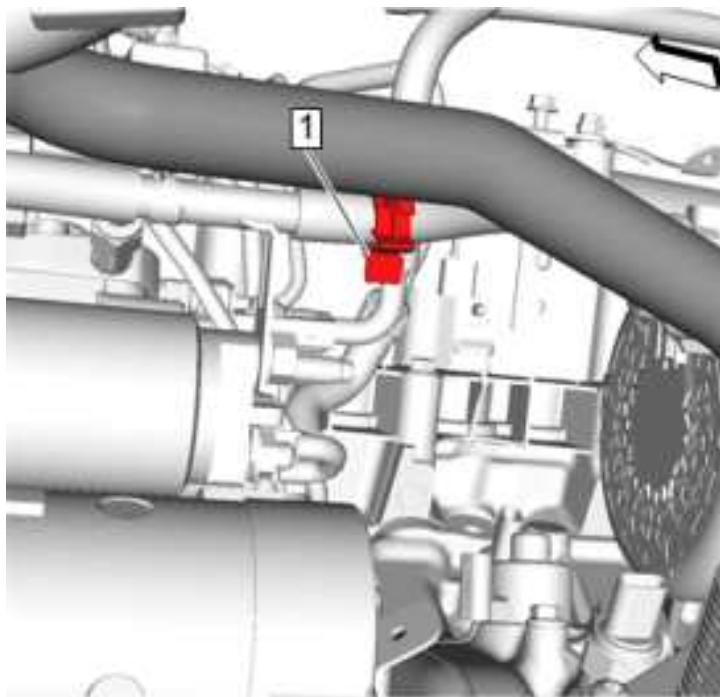


Fig. 849: Heater Outlet Hose Clip

Courtesy of GENERAL MOTORS COMPANY

5. Install Heater Outlet Hose Clip (1) @Starter Solenoid Cable

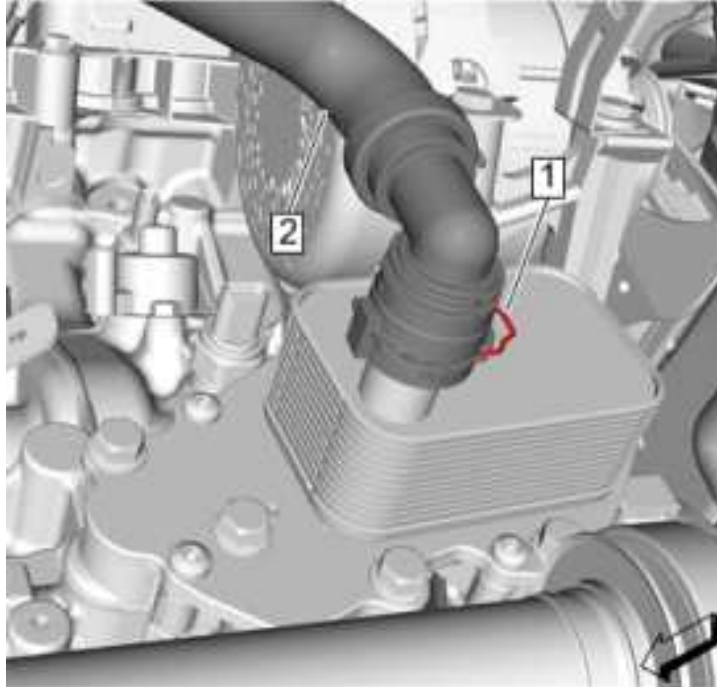


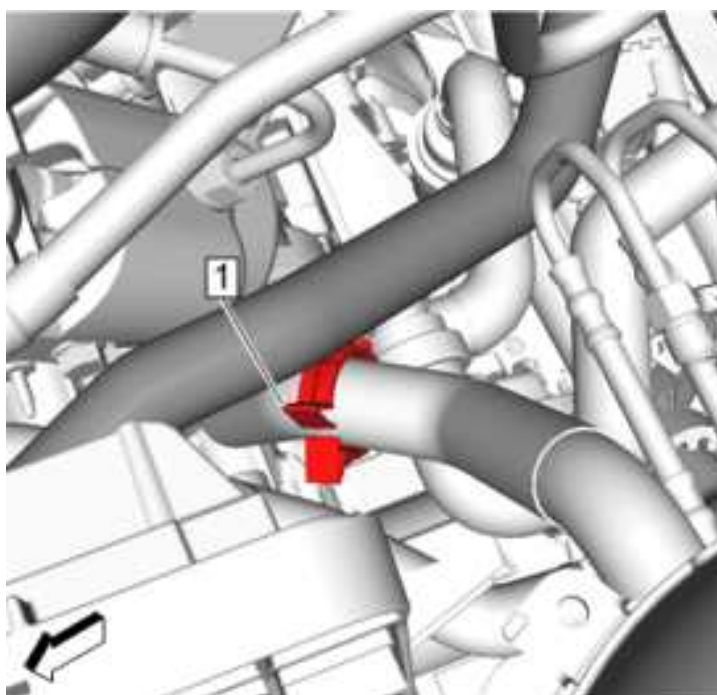
Fig. 850: Auxiliary Heater Outlet Hose And Retainer
 Courtesy of GENERAL MOTORS COMPANY

6. Install Auxiliary Heater Outlet Hose (2) @Engine Oil Cooler
7. Engage Auxiliary Heater Outlet Hose Retainer (1)
8. Fill the cooling system. [Cooling System Draining and Filling \(GE 47716\) Cooling System Draining and Filling \(Static\)](#)
9. Check the cooling system for leaks.

AUXILIARY HEATER OUTLET HOSE REPLACEMENT (LTG WITH KL9)

Removal Procedure

1. Drain the cooling system. [Cooling System Draining and Filling \(GE 47716\) Cooling System Draining and Filling \(Static\)](#)
2. Reposition Engine Coolant Air Bleed Hose - [Engine Coolant Air Bleed Hose Replacement \(Radiator Surge Tank to Radiator to Engine Coolant Air Bleed Pipe LTG\)](#)
3. Remove Engine Control Module - [Engine Control Module Replacement](#)
4. Remove Power Transfer Unit Vent Hose@Radiator Surge Tank -[Power Transfer Unit Vent Hose Replacement](#)
5. Reposition Wiring Harnesses



6. Remove Heater Inlet Hose Retainer (1) @Auxiliary Heater Outlet Hose

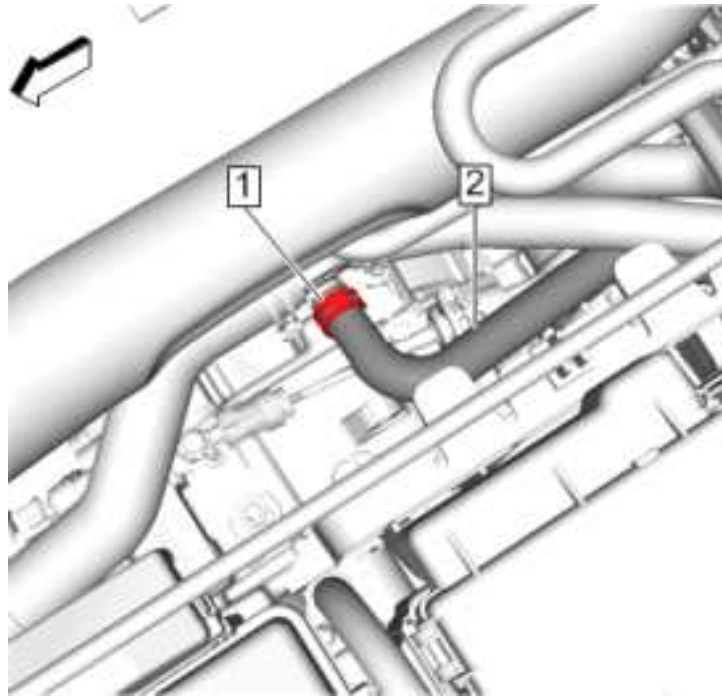


Fig. 852: Auxiliary Heater Outlet Hose And Clamp
Courtesy of GENERAL MOTORS COMPANY

7. Disengage Auxiliary Heater Outlet Hose Clamp (1) - [Hose Clamp Replacement Guidelines - Spring Type](#)
8. Remove Auxiliary Heater Outlet Hose (2) @Water Outlet
9. Remove Heater Water Auxiliary Pump Inlet Hose - [Heater Water Auxiliary Pump Inlet Hose Replacement \(LTG with KL9\)](#)

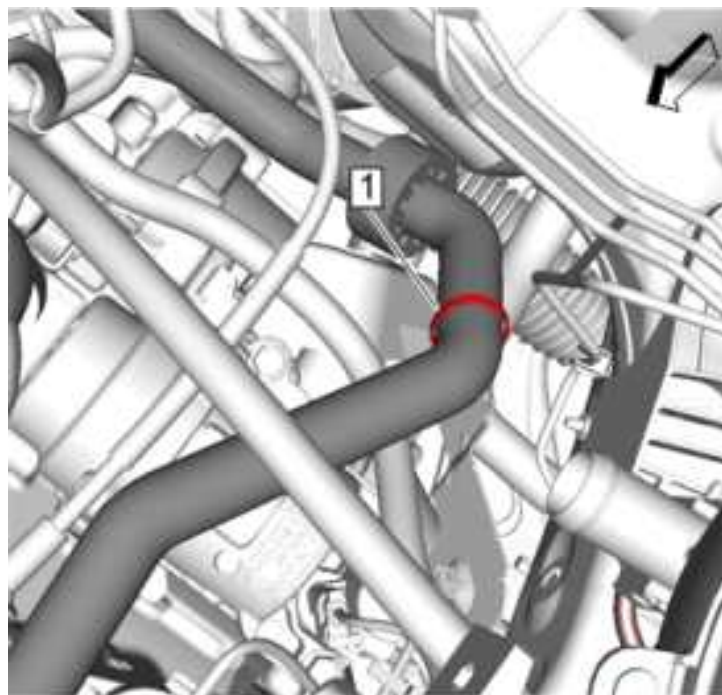


Fig. 853: Auxiliary Heater Outlet Hose Retainer
Courtesy of GENERAL MOTORS COMPANY

10. Remove Auxiliary Heater Outlet Hose Retainer (1) @Automatic Transmission Wiring Harness Bracket

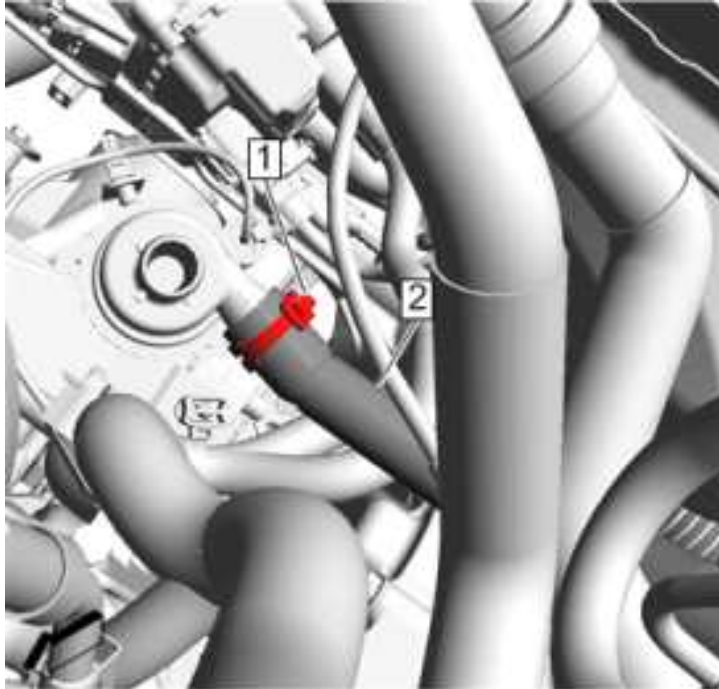


Fig. 854: Auxiliary Heater Outlet Hose

Courtesy of GENERAL MOTORS COMPANY

11. Disengage Auxiliary Heater Outlet Hose Clamp (1) - [Hose Clamp Replacement Guidelines - Spring Type](#)
12. Remove Auxiliary Heater Outlet Hose (2) @Auxiliary Water Pump
13. Remove Auxiliary Heater Outlet Hose (2)

Installation Procedure

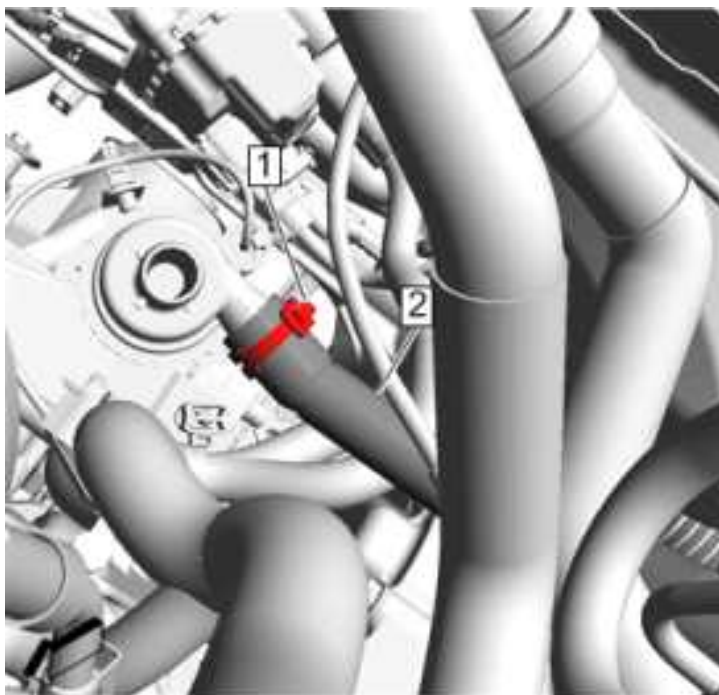


Fig. 855: Auxiliary Heater Outlet Hose

Courtesy of GENERAL MOTORS COMPANY

1. Install Auxiliary Heater Outlet Hose (2) @Auxiliary Water Pump
2. Engage Auxiliary Heater Outlet Hose Clamp (1) - [Hose Clamp Replacement Guidelines - Spring Type](#)

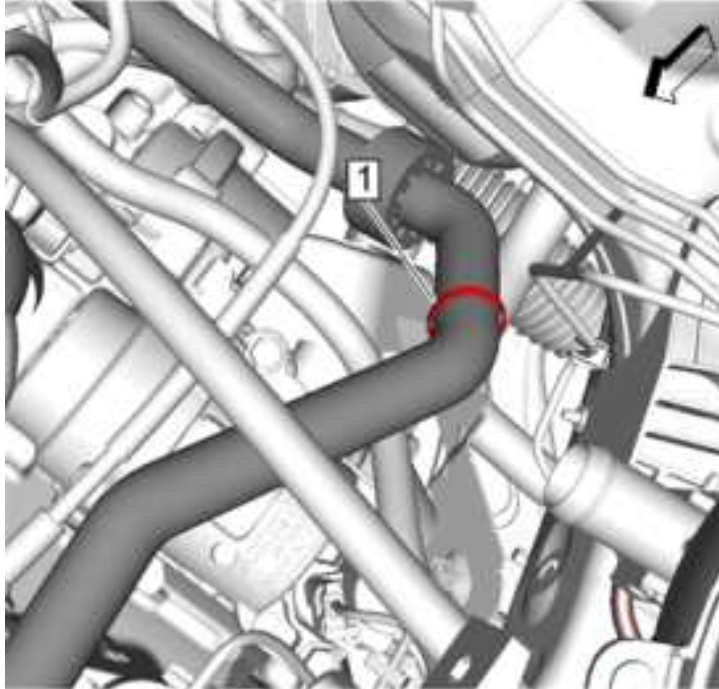


Fig. 856: Auxiliary Heater Outlet Hose Retainer
 Courtesy of GENERAL MOTORS COMPANY

3. Install Auxiliary Heater Outlet Hose Retainer (1) @Automatic Transmission Wiring Harness Bracket
4. Install Heater Water Auxiliary Pump Inlet Hose - [Heater Water Auxiliary Pump Inlet Hose Replacement \(LTG with KL9\)](#)

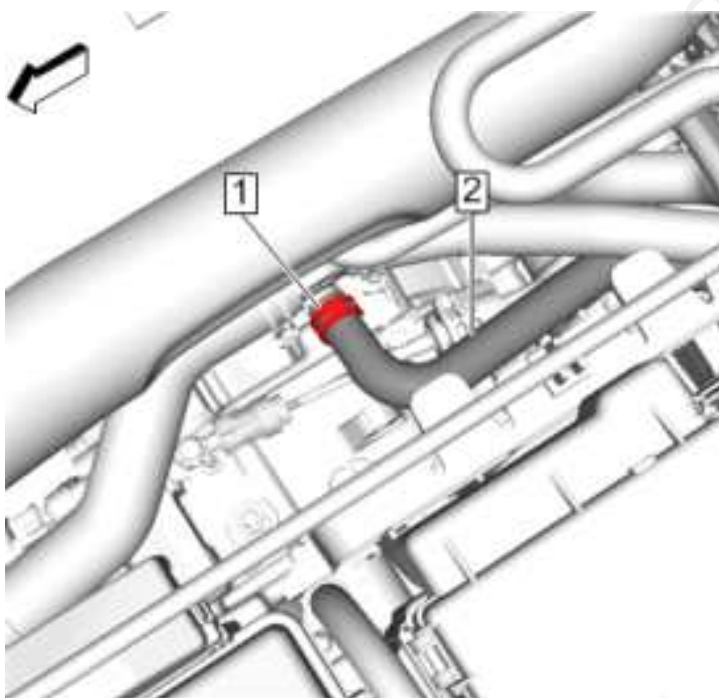


Fig. 857: Auxiliary Heater Outlet Hose And Clamp
 Courtesy of GENERAL MOTORS COMPANY

5. Install Auxiliary Heater Outlet Hose (2) @Water Outlet
6. Engage Auxiliary Heater Outlet Hose Clamp (1) - [Hose Clamp Replacement Guidelines - Spring Type](#)

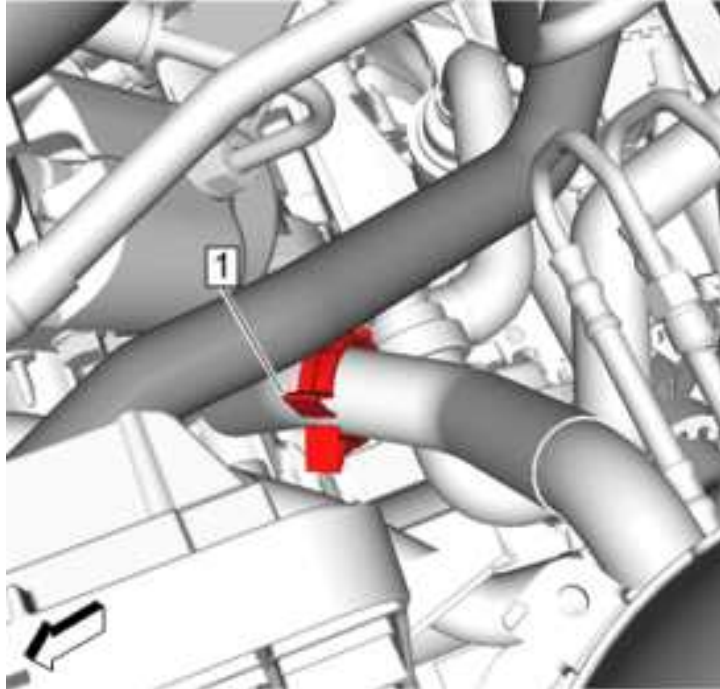


Fig. 858: Heater Inlet Hose Retainer

Courtesy of GENERAL MOTORS COMPANY

7. Install Heater Inlet Hose Retainer (1) @Auxiliary Heater Outlet Hose
8. Reposition Wiring Harnesses
9. Install Power Transfer Unit Vent Hose@Radiator Surge Tank - [Power Transfer Unit Vent Hose Replacement](#)
10. Install Engine Control Module - [Engine Control Module Replacement](#)
11. Reposition Engine Coolant Air Bleed Hose - [Engine Coolant Air Bleed Hose Replacement \(Radiator Surge Tank to Radiator to Engine Coolant Air Bleed Pipe LTG\)](#)
12. Fill the cooling system. [Cooling System Draining and Filling \(GE 47716\) Cooling System Draining and Filling \(Static\)](#)
13. Check the cooling system for leaks.

HEATER INLET AND OUTLET PIPE BRACKET REPLACEMENT (LH7 EQUINOX)

Removal Procedure

1. Drain the cooling system. [Cooling System Draining and Filling \(GE 47716\) Cooling System Draining and Filling \(Static\)](#)
2. Remove Intake Manifold Cover - [Intake Manifold Cover Replacement](#)

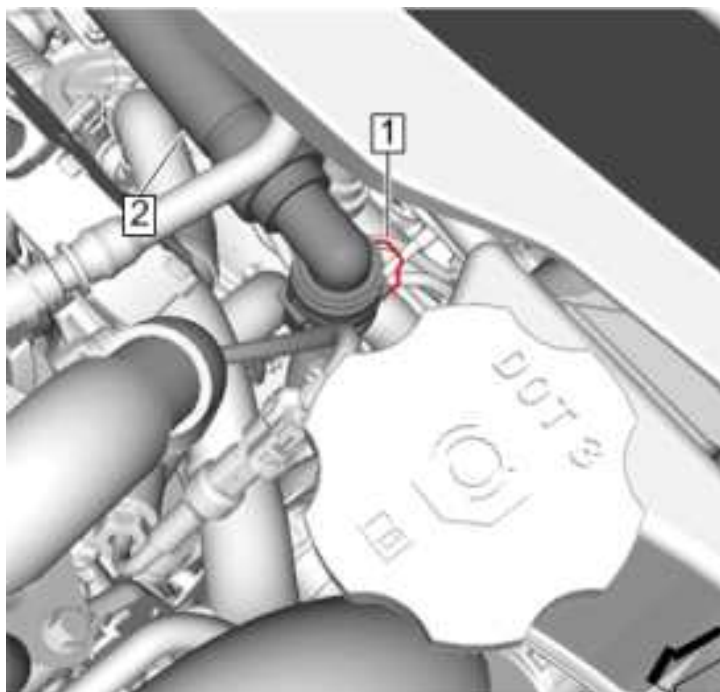


Fig. 859: Heater Inlet Hose Retainer
Courtesy of GENERAL MOTORS COMPANY

3. Remove Heater Inlet Hose (2) @Heater Inlet and Outlet Pipe Bracket - [Heater Inlet Hose Replacement \(LH7 Equinox\)](#)

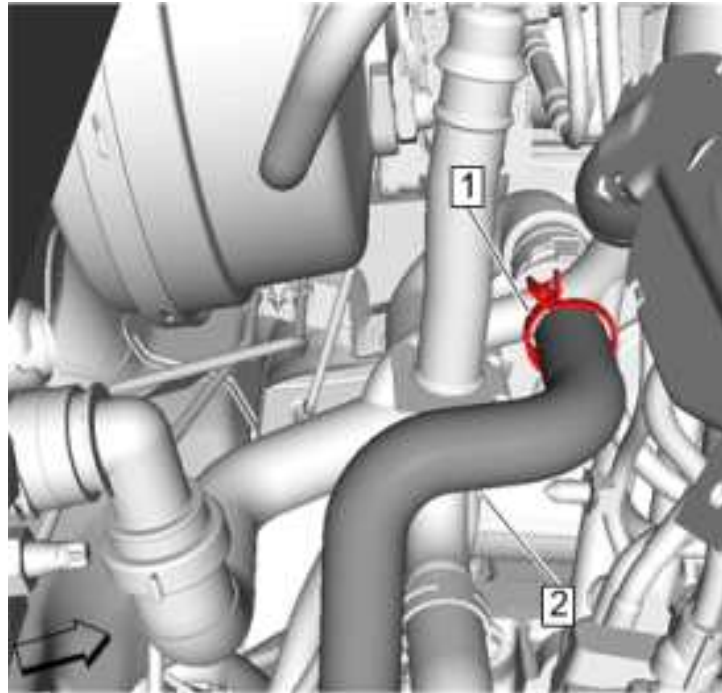


Fig. 860: Heater Water Auxiliary Pump Inlet Hose
Courtesy of GENERAL MOTORS COMPANY

4. Remove Heater Water Auxiliary Pump Inlet Hose (2) @Heater Inlet and Outlet Pipe Bracket - [Heater Water Auxiliary Pump Inlet Hose Replacement \(LH7 Equinox\)](#)

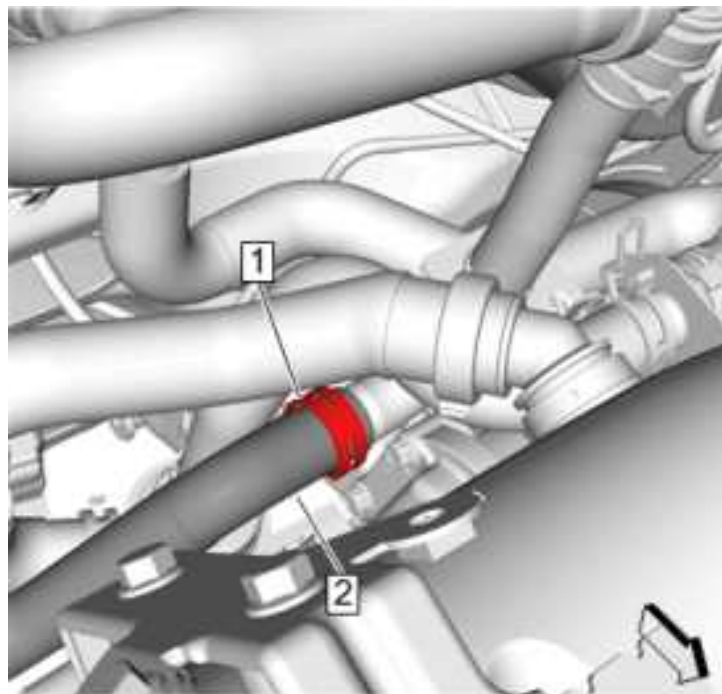


Fig. 861: Auxiliary Heater Outlet Hose
Courtesy of GENERAL MOTORS COMPANY

5. Remove Auxiliary Heater Outlet Hose (2) @Heater Inlet and Outlet Pipe Bracket - [Auxiliary Heater Outlet Hose Replacement \(LH7 Equinox\)](#)

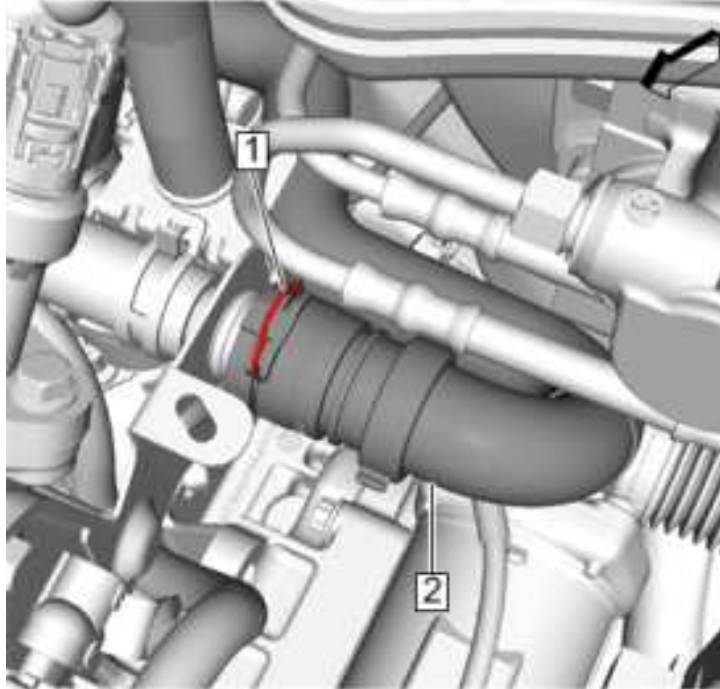


Fig. 862: Heater Outlet Hose

Courtesy of GENERAL MOTORS COMPANY

6. Remove Heater Outlet Hose (2) @Heater Inlet and Outlet Pipe Bracket - [Heater Outlet Hose Replacement \(LYX without KL9\)Heater Outlet Hose Replacement \(LH7\)](#)
7. Disconnect and reposition harness as necessary.

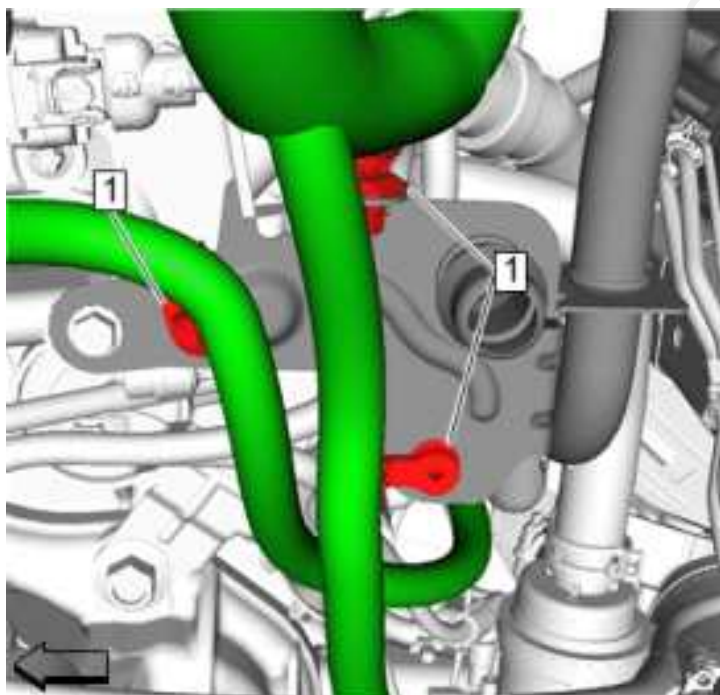


Fig. 863: Wiring Harness Retainer

Courtesy of GENERAL MOTORS COMPANY

8. Remove Wiring Harness Retainer (1) @Heater Inlet and Outlet Pipe Bracket - [3x]

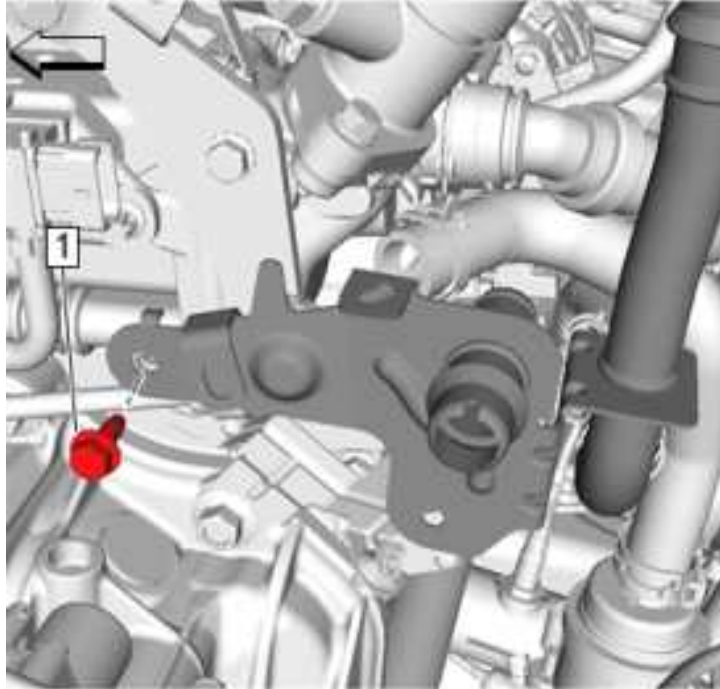


Fig. 864: Heater Inlet Pipe Bracket Bolt
Courtesy of GENERAL MOTORS COMPANY

9. Remove Heater Inlet Pipe Bracket Bolt (1)

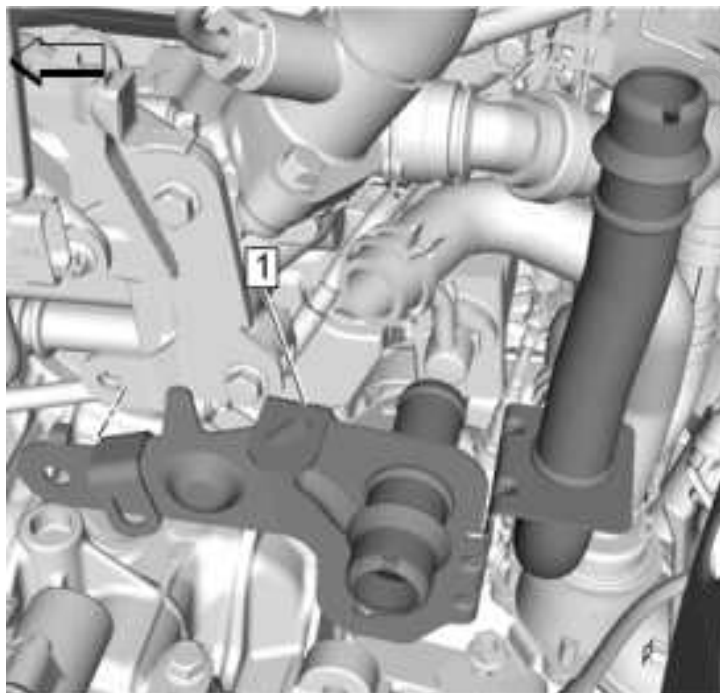


Fig. 865: Heater Inlet and Outlet Pipe Bracket
Courtesy of GENERAL MOTORS COMPANY

10. Remove Heater Inlet and Outlet Pipe Bracket (1)

Installation Procedure

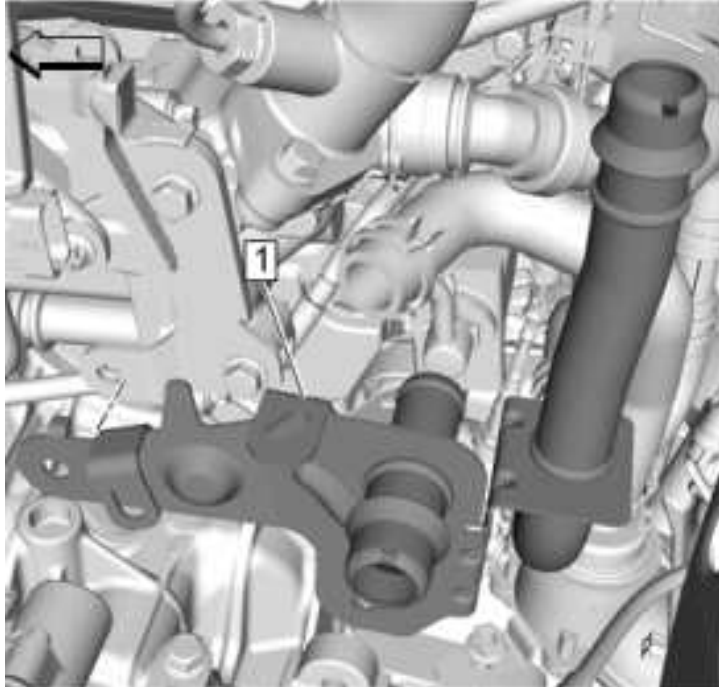


Fig. 866: Heater Inlet and Outlet Pipe Bracket
 Courtesy of GENERAL MOTORS COMPANY

1. Install Heater Inlet and Outlet Pipe Bracket (1)

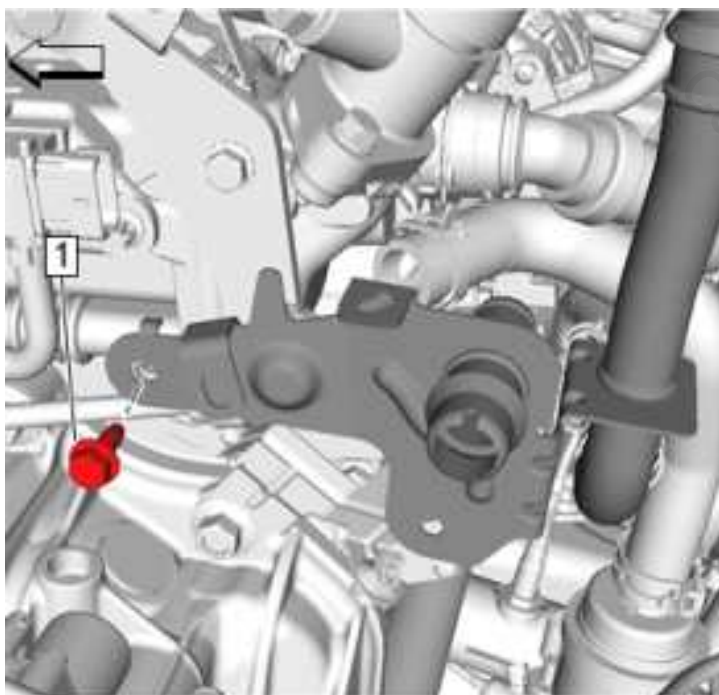


Fig. 867: Heater Inlet Pipe Bracket Bolt
 Courtesy of GENERAL MOTORS COMPANY

CAUTION: Refer to **Fastener Caution** .

2. Install Heater Inlet Pipe Bracket Bolt (1) and tighten 9 N.m (80 lb in)

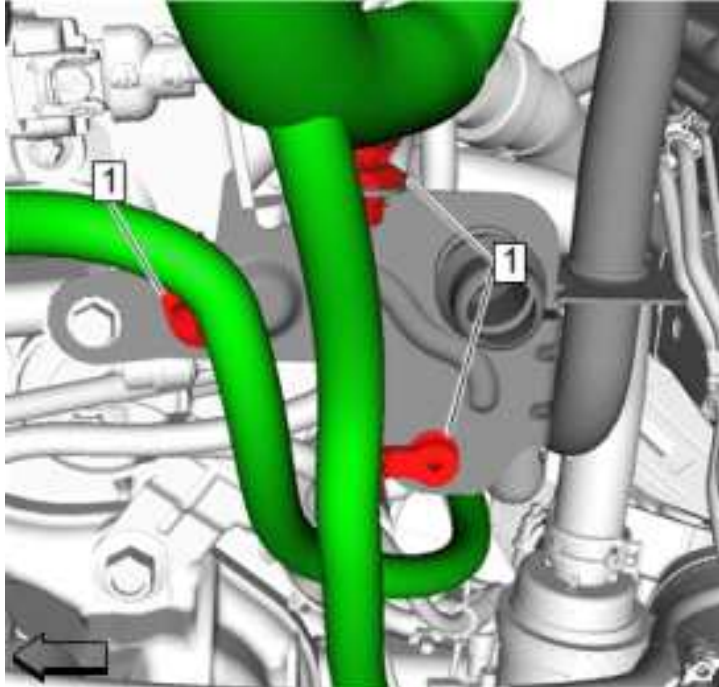


Fig. 868: Wiring Harness Retainer

Courtesy of GENERAL MOTORS COMPANY

3. Install Wiring Harness Retainer (1) @Heater Inlet and Outlet Pipe Bracket [3x]
4. Wiring Harnesses - Connect as necessary

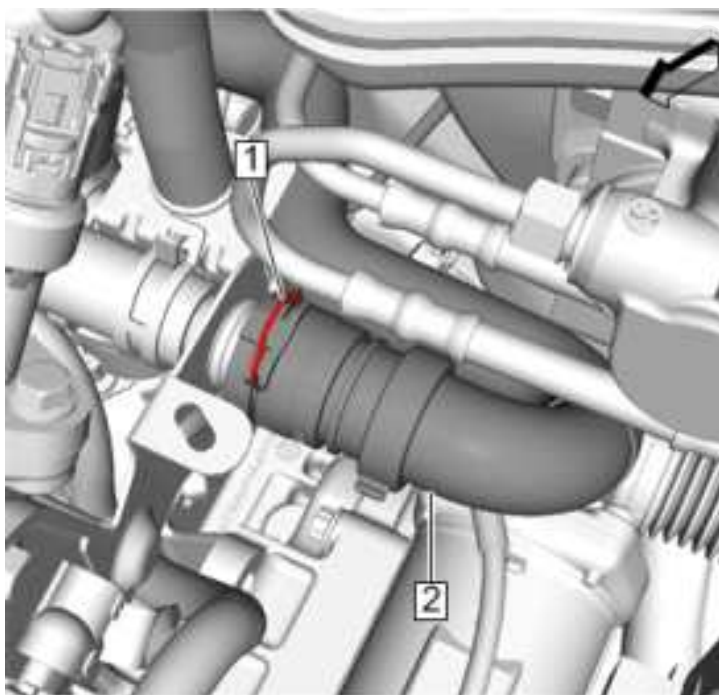


Fig. 869: Heater Outlet Hose

Courtesy of GENERAL MOTORS COMPANY

5. Install Heater Outlet Hose (2) @Heater Inlet and Outlet Pipe Bracket - **Heater Outlet Hose Replacement (LH7)**

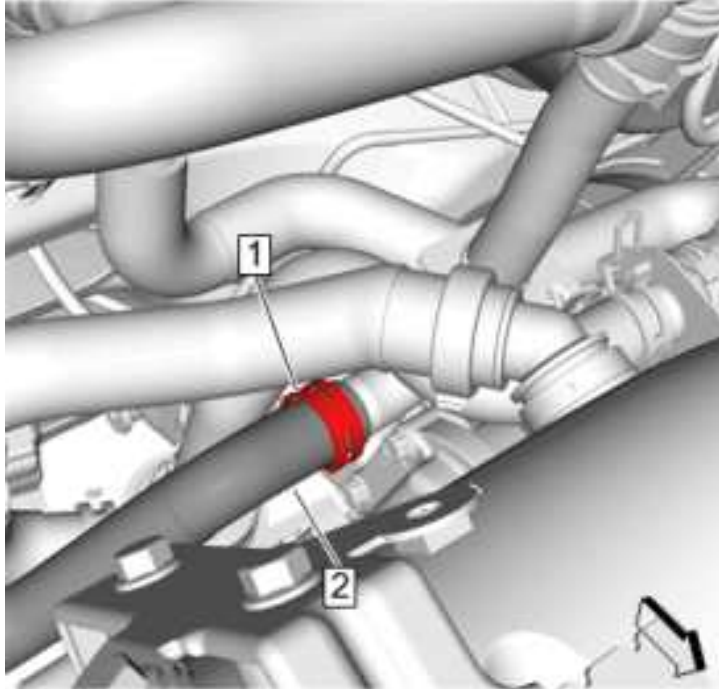


Fig. 870: Auxiliary Heater Outlet Hose

Courtesy of GENERAL MOTORS COMPANY

6. Install Auxiliary Heater Outlet Hose (2) @Heater Inlet and Outlet Pipe Bracket - [Auxiliary Heater Outlet Hose Replacement \(LH7 Equinox\)](#)

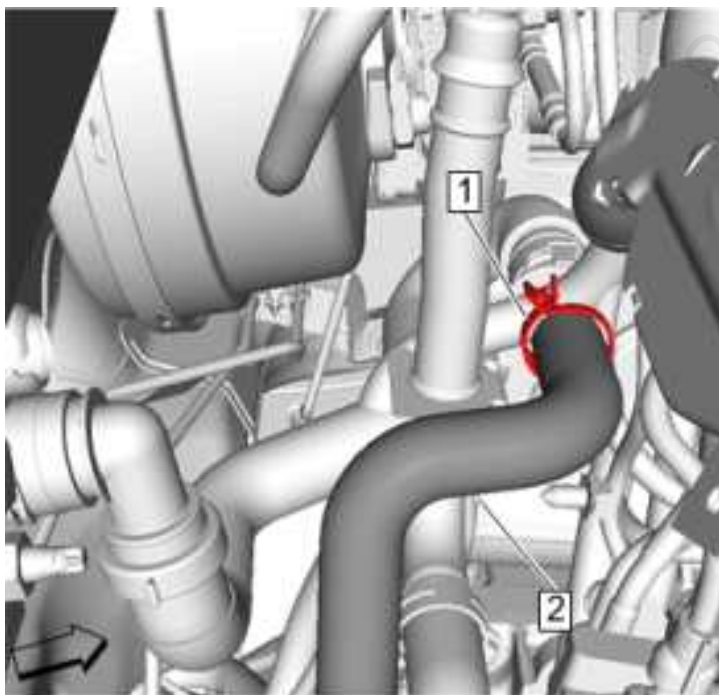


Fig. 871: Heater Water Auxiliary Pump Inlet Hose

Courtesy of GENERAL MOTORS COMPANY

7. Install Heater Water Auxiliary Pump Inlet Hose (2) @Heater Inlet and Outlet Pipe Bracket - [Heater Water Auxiliary Pump Inlet Hose Replacement \(LH7 Equinox\)](#)

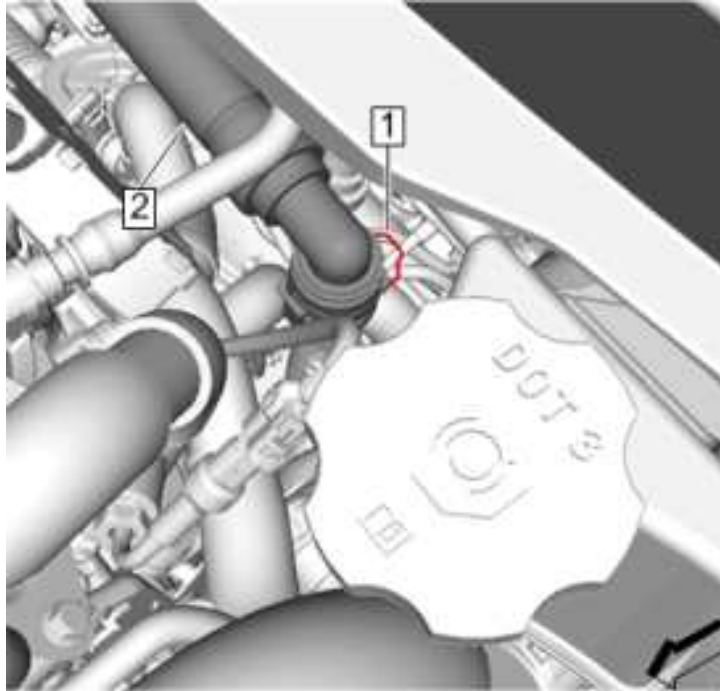


Fig. 872: Heater Inlet Hose Retainer

Courtesy of GENERAL MOTORS COMPANY

8. Install Heater Inlet Hose (2) @ Heater Inlet and Outlet Pipe Bracket - [Heater Inlet Hose Replacement \(LH7 Equinox\)](#)
9. Install Intake Manifold Cover - [Intake Manifold Cover Replacement](#)
10. Fill the cooling system. [Cooling System Draining and Filling \(GE 47716\)](#). [Cooling System Draining and Filling \(Static\)](#)
11. Check the cooling system for leaks.

HEATER INLET AND OUTLET PIPE BRACKET REPLACEMENT (LH7 TERRAIN)

Removal Procedure

1. Drain the cooling system. [Cooling System Draining and Filling \(GE 47716\)](#). [Cooling System Draining and Filling \(Static\)](#)
2. Lower the vehicle.
3. Remove Intake Manifold Cover - [Intake Manifold Cover Replacement](#)

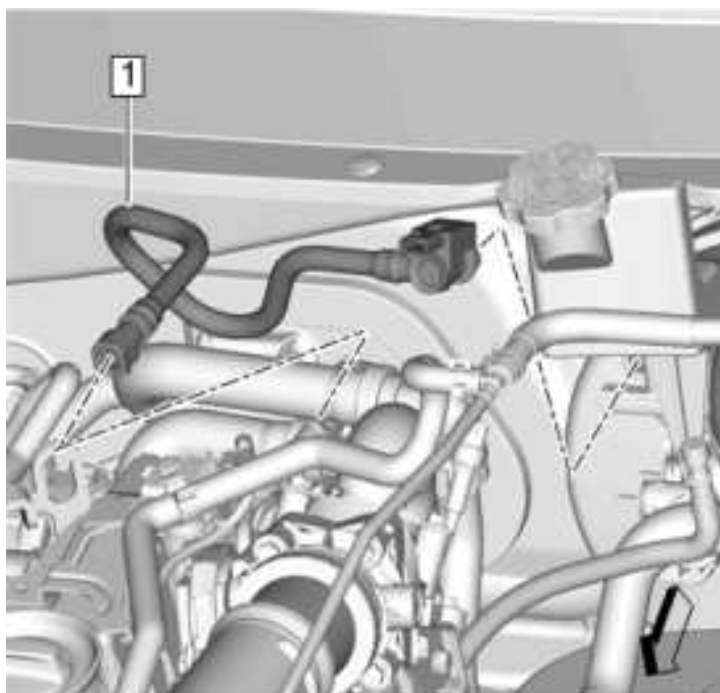


Fig. 873: Power Brake Booster Vacuum Pipe

Courtesy of GENERAL MOTORS COMPANY

4. Remove Power Brake Booster Vacuum Pipe (1) - [Power Brake Booster Vacuum Pipe Replacement \(LH7\)](#)

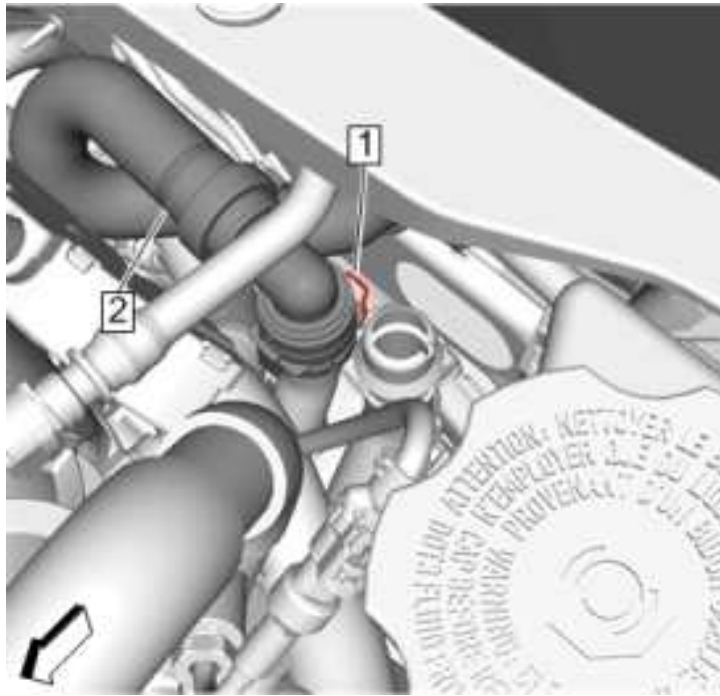


Fig. 874: Auxiliary Heater Outlet Hose

Courtesy of GENERAL MOTORS COMPANY

5. Remove Auxiliary Heater Outlet Hose (2) - [Auxiliary Heater Outlet Hose Replacement \(LH7 Terrain\)](#)
6. Remove Heater Water Auxiliary Pump Hose - [Heater Water Auxiliary Pump Hose Replacement \(LH7 Terrain\)](#)

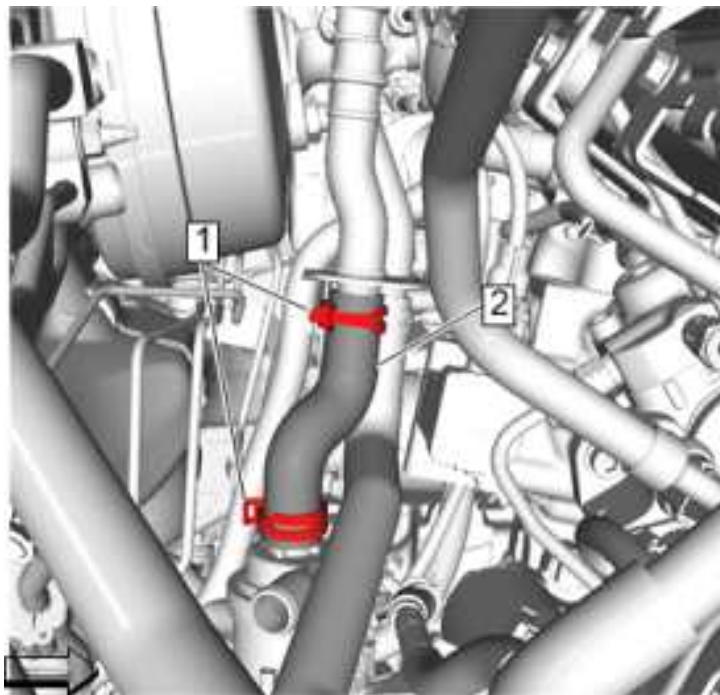


Fig. 875: Heater Water Auxiliary Pump Inlet Hose

Courtesy of GENERAL MOTORS COMPANY

7. Remove Heater Water Auxiliary Pump Inlet Hose (2) - [Heater Water Auxiliary Pump Inlet Hose Replacement \(LH7 Terrain\)](#)
8. Remove Auxiliary Heater Inlet Hose@Heater Inlet and Outlet Pipe - [Auxiliary Heater Inlet Hose Replacement \(LH7 Terrain\)](#)

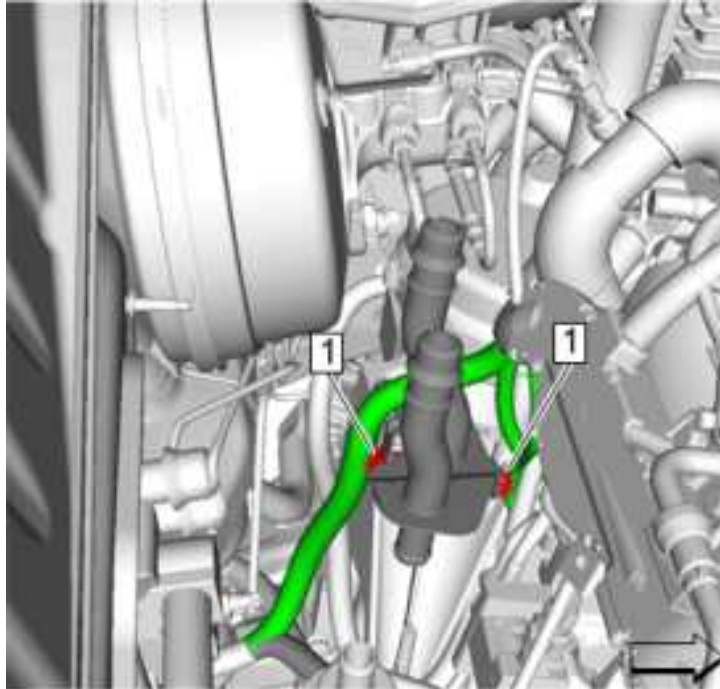


Fig. 876: Engine Wiring Harness Retainer
Courtesy of GENERAL MOTORS COMPANY

9. Remove Engine Wiring Harness Retainer (1) @Heater Inlet and Outlet Pipe Bracket [2x]
10. Reposition the wiring harness.

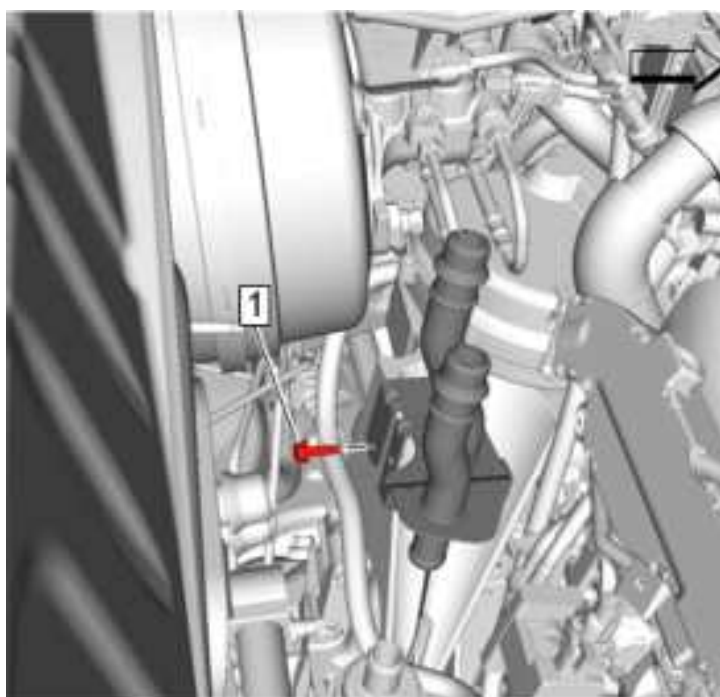


Fig. 877: Heater Inlet and Outlet Pipe Bracket Bolt
Courtesy of GENERAL MOTORS COMPANY

11. Remove Heater Inlet and Outlet Pipe Bracket Bolt (1)

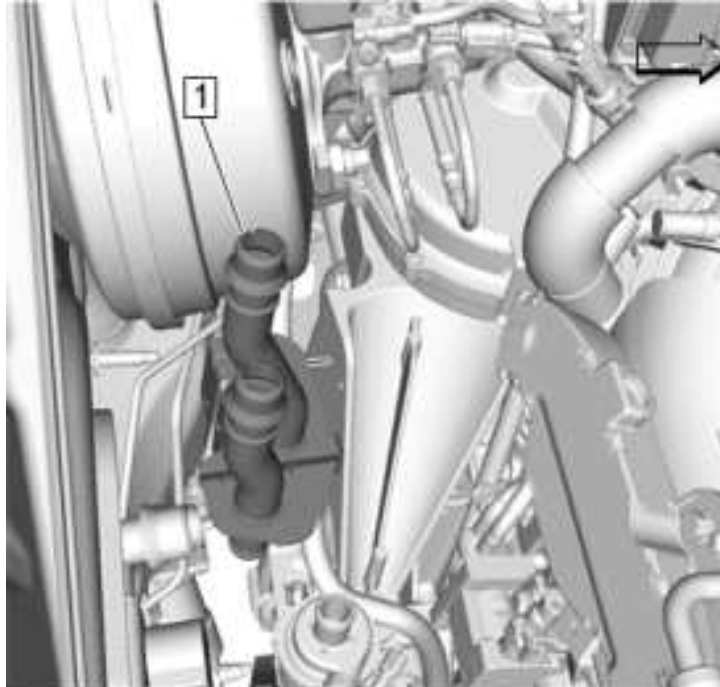


Fig. 878: Heater Inlet and Outlet Pipe Bracket
Courtesy of GENERAL MOTORS COMPANY

12. Remove Heater Inlet and Outlet Pipe Bracket (1)

Installation Procedure

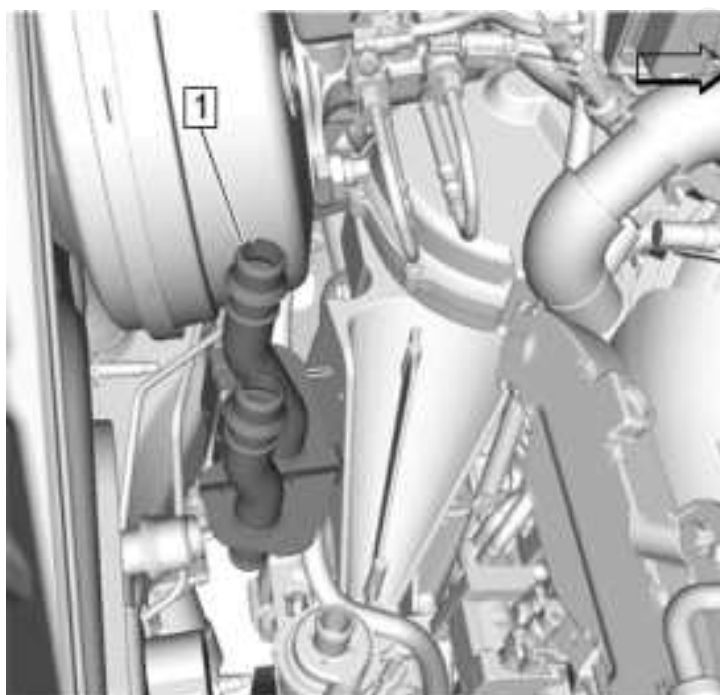


Fig. 879: Heater Inlet and Outlet Pipe Bracket
Courtesy of GENERAL MOTORS COMPANY

1. Install Heater Inlet and Outlet Pipe Bracket (1)

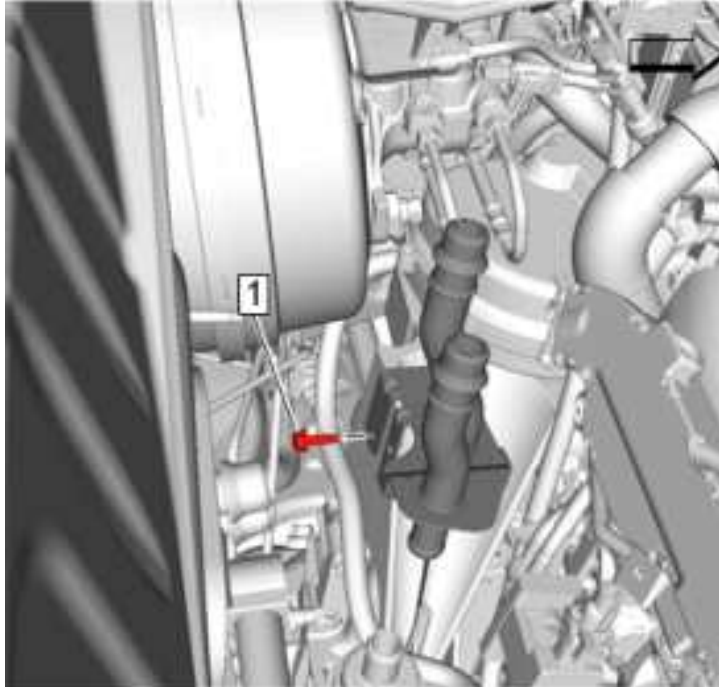


Fig. 880: Heater Inlet and Outlet Pipe Bracket Bolt
 Courtesy of GENERAL MOTORS COMPANY

CAUTION: Refer to **Fastener Caution** .

2. Install Heater Inlet and Outlet Pipe Bracket Bolt (1) and tighten 9 N.m (80 lb in)
3. Reposition the wiring harness.

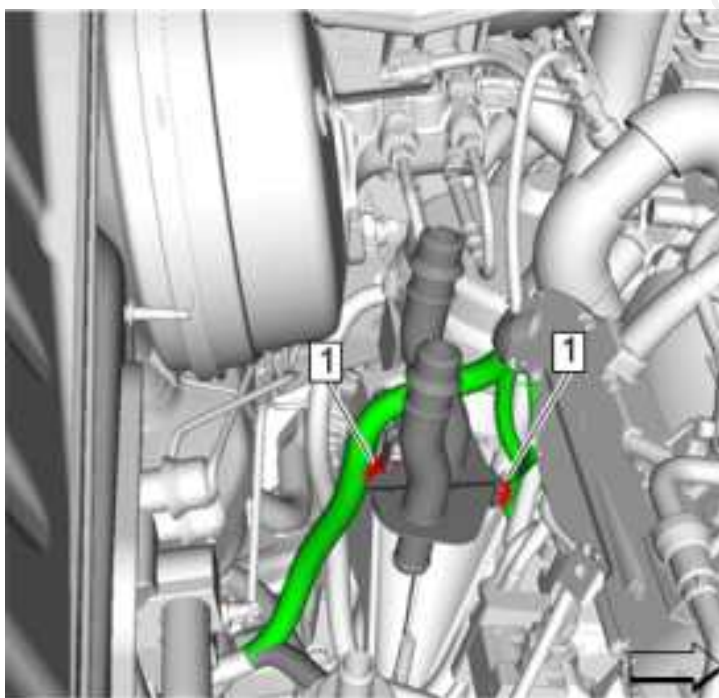


Fig. 881: Engine Wiring Harness Retainer
 Courtesy of GENERAL MOTORS COMPANY

4. Install Engine Wiring Harness Retainer (1) @Heater Inlet and Outlet Pipe Bracket [2x]
5. Install Auxiliary Heater Inlet Hose@Heater Inlet and Outlet Pipe - **Auxiliary Heater Inlet Hose Replacement (LH7 Terrain)**.

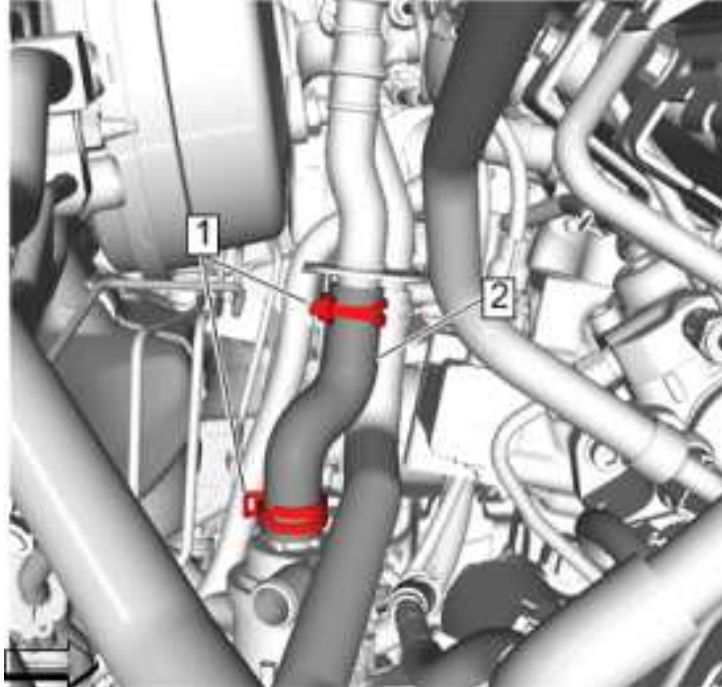


Fig. 882: Heater Water Auxiliary Pump Inlet Hose
 Courtesy of GENERAL MOTORS COMPANY

6. Install Heater Water Auxiliary Pump Inlet Hose (2) - [Heater Water Auxiliary Pump Inlet Hose Replacement \(LH7 Terrain\)](#)
7. Install Heater Water Auxiliary Pump Hose - [Heater Water Auxiliary Pump Hose Replacement \(LH7 Terrain\)](#)

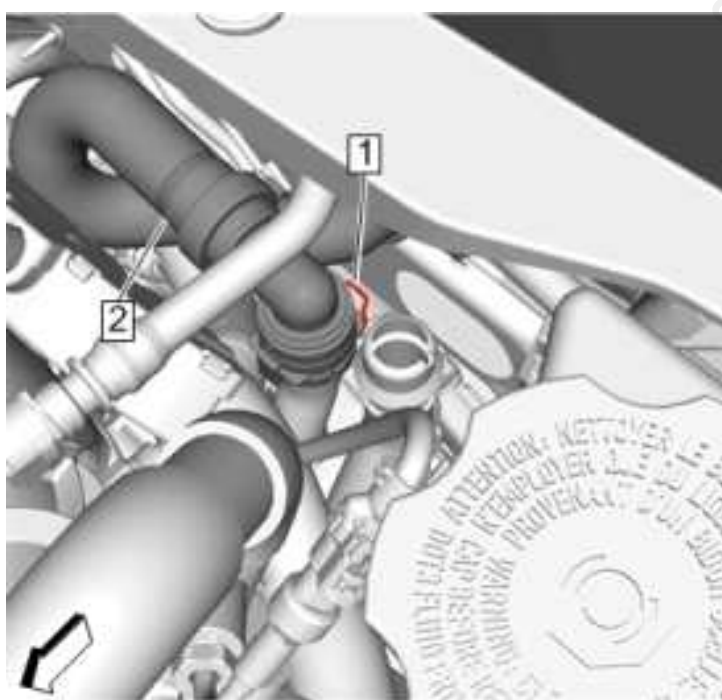


Fig. 883: Auxiliary Heater Outlet Hose
 Courtesy of GENERAL MOTORS COMPANY

8. Install Auxiliary Heater Outlet Hose (2) - [Auxiliary Heater Outlet Hose Replacement \(LH7 Terrain\)](#)

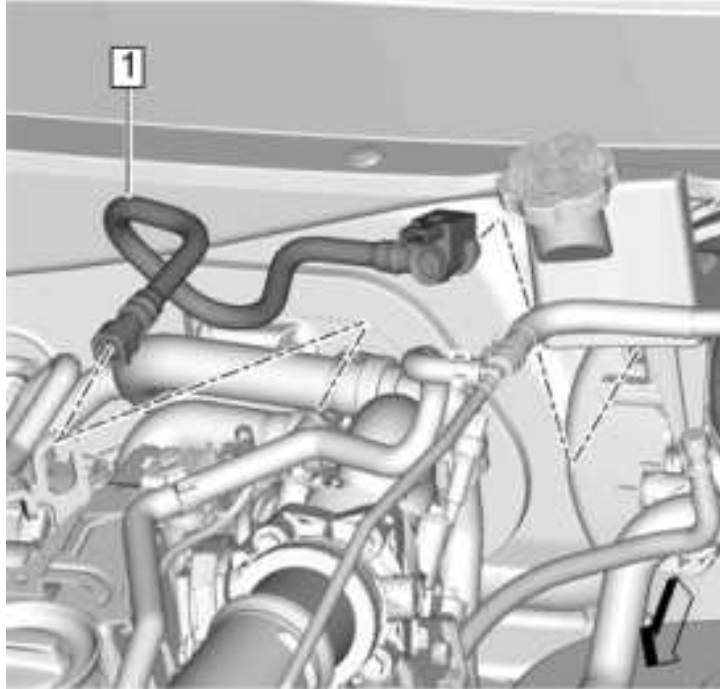


Fig. 884: Power Brake Booster Vacuum Pipe

Courtesy of GENERAL MOTORS COMPANY

9. Install Power Brake Booster Vacuum Pipe (1) - [Power Brake Booster Vacuum Pipe Replacement \(LH7\)](#)
10. Install Intake Manifold Cover - [Intake Manifold Cover Replacement](#)
11. Fill the cooling system to the proper level. [Cooling System Draining and Filling \(GE 47716\)](#) [Cooling System Draining and Filling \(Static\)](#)
12. Check the cooling system for leaks.

HEATER OUTLET HOSE REPLACEMENT (LYX WITHOUT KL9)

Removal Procedure

1. Drain the cooling system. [Cooling System Draining and Filling \(GE 47716\)](#) [Cooling System Draining and Filling \(Static\)](#)

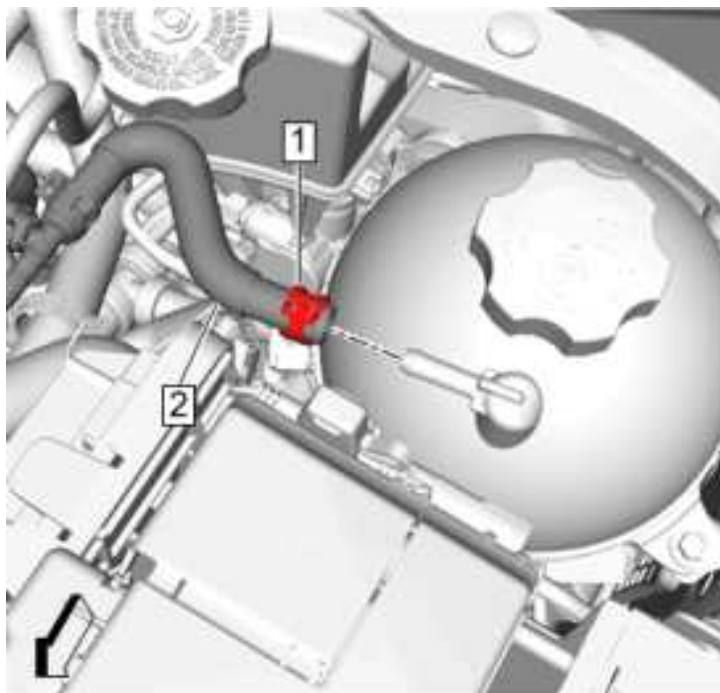


Fig. 885: Engine Coolant Air Bleed Hose

Courtesy of GENERAL MOTORS COMPANY

2. Remove Engine Coolant Air Bleed Hose (2) @Radiator Surge Tank and position aside - [Engine Coolant Air Bleed Hose Replacement \(Turbocharger Coolant Return pipe to Water Outlet, LYX\)](#) [Engine Coolant](#)

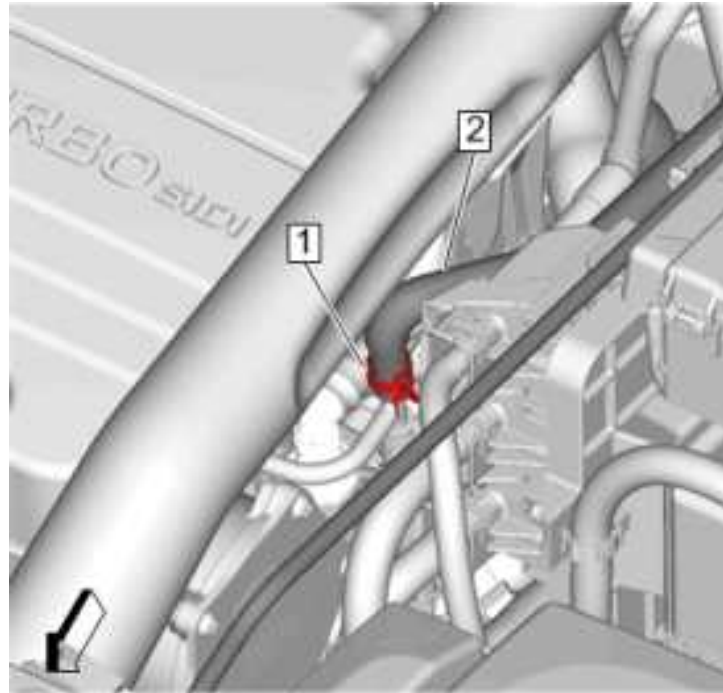


Fig. 886: Engine Coolant Air Bleed Hose Clamp

Courtesy of GENERAL MOTORS COMPANY

3. Remove Engine Coolant Air Bleed Hose (2) @Turbocharger Coolant Return Pipe and position aside - **Engine Coolant Air Bleed Hose Replacement (Turbocharger Coolant Return pipe to Water Outlet, LYX)**
Engine Coolant Air Bleed Hose Replacement (Radiator Surge Tank to Turbocharger Coolant Return Pipe to Radiator, LYX)

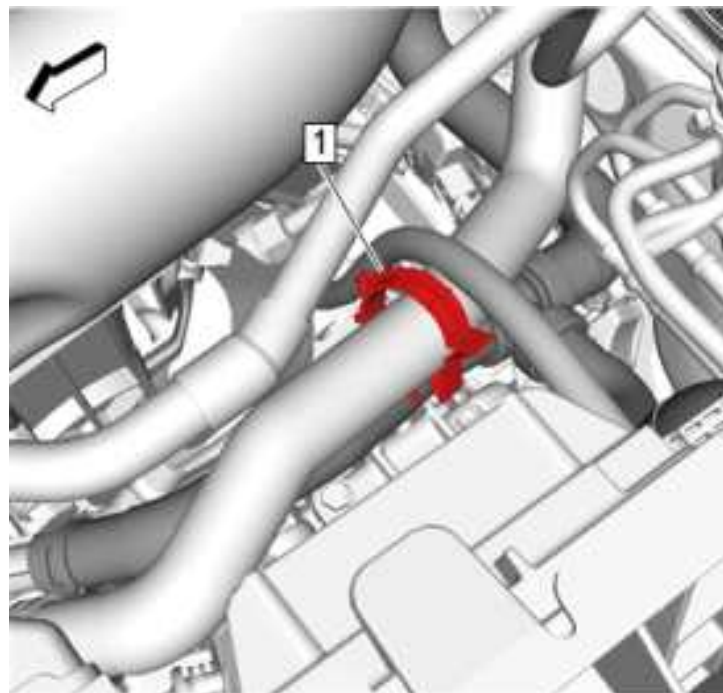


Fig. 887: Heater Outlet Hose Clip

Courtesy of GENERAL MOTORS COMPANY

4. Remove Heater Outlet Hose Clip (1) @Heater Inlet Hose

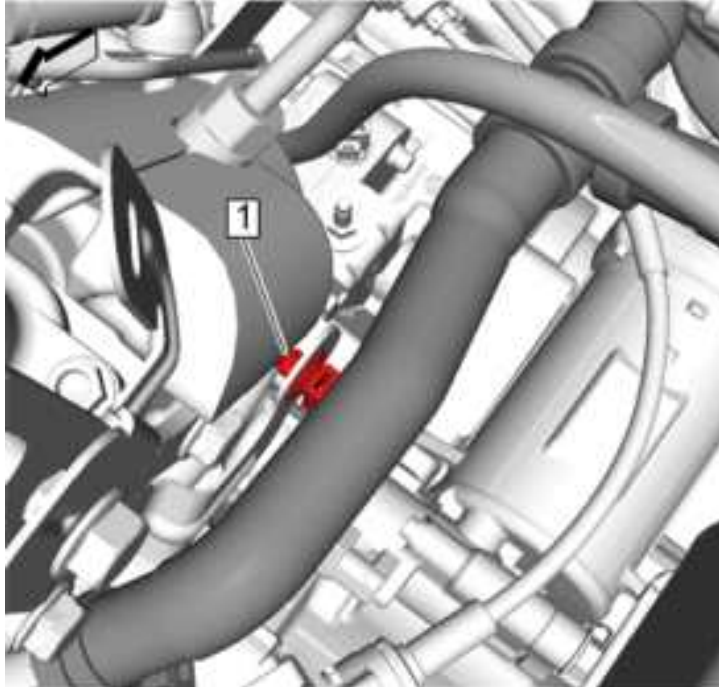


Fig. 888: Heater Outlet Hose Clip

Courtesy of GENERAL MOTORS COMPANY

5. Remove Heater Outlet Hose Clip (1) @Engine Wiring Harness Bracket

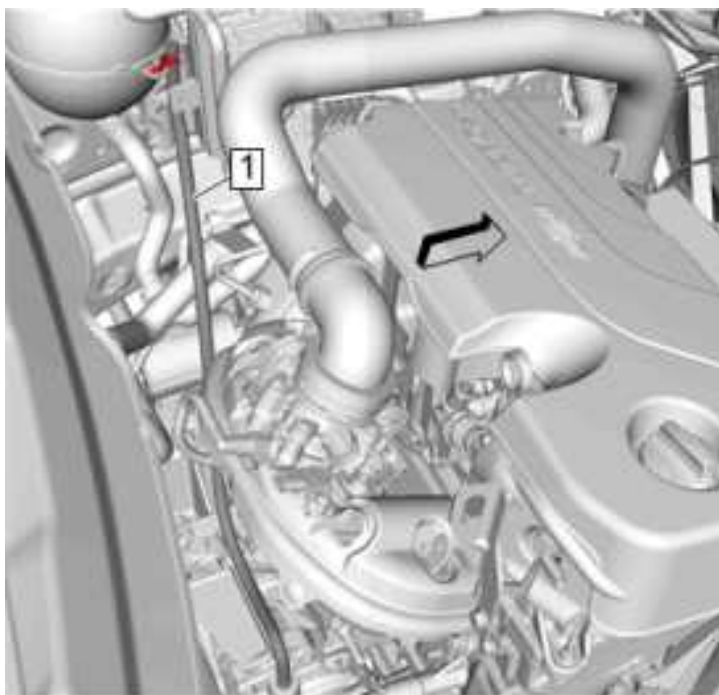


Fig. 889: Power Transfer Unit Vent Hose

Courtesy of GENERAL MOTORS COMPANY

6. Remove { If equipped } Power Transfer Unit Vent Hose (1) @Radiator Surge Tank - **Power Transfer Unit Vent Hose Replacement**

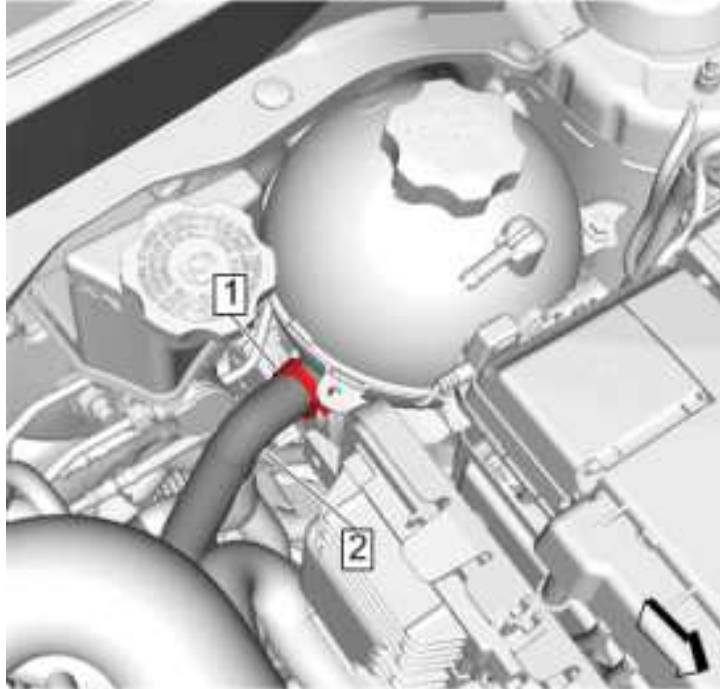


Fig. 890: Heater Outlet Hose

Courtesy of GENERAL MOTORS COMPANY

7. Disengage Heater Outlet Hose Clamp (1) - [Hose Clamp Replacement Guidelines - Spring Type](#)
8. Remove Heater Outlet Hose (2) @Radiator Surge Tank

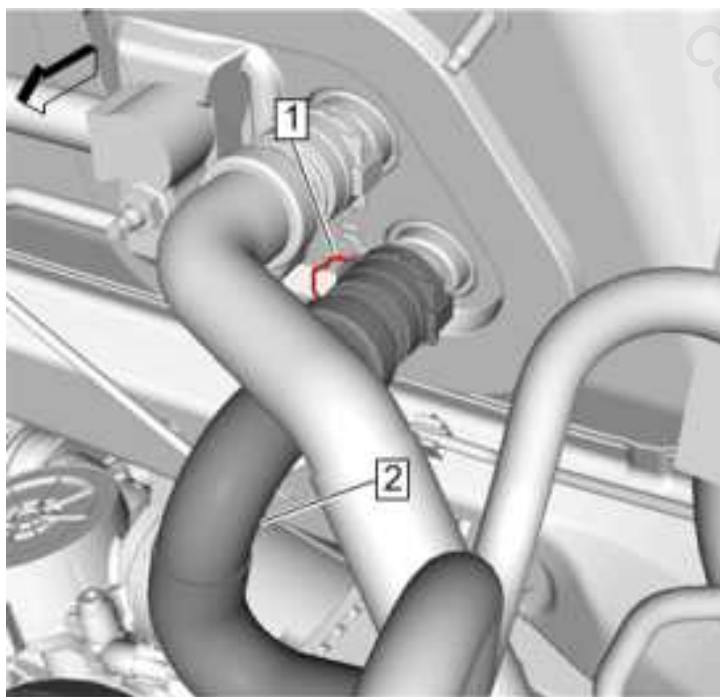


Fig. 891: Heater Outlet Hose Retainer

Courtesy of GENERAL MOTORS COMPANY

9. Disengage Heater Outlet Hose Retainer (1)
10. Remove Heater Outlet Hose (2) @Heater Core Outlet Tube

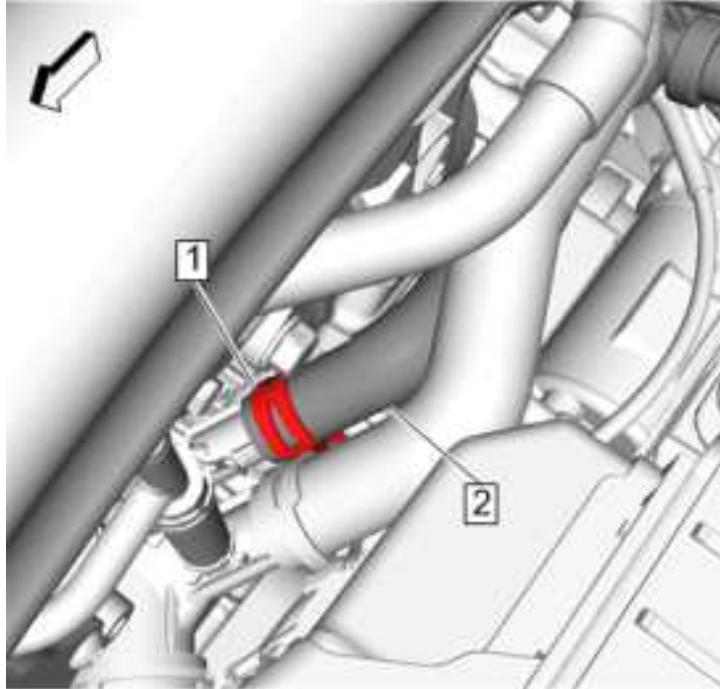


Fig. 892: Heater Outlet Hose And Clamp

Courtesy of GENERAL MOTORS COMPANY

11. Heater Outlet Hose Clamp (1) - [Hose Clamp Replacement Guidelines - Spring Type](#)
12. Remove Heater Outlet Hose (2) @Water Outlet
13. Remove Heater Outlet Hose (2)

Installation Procedure

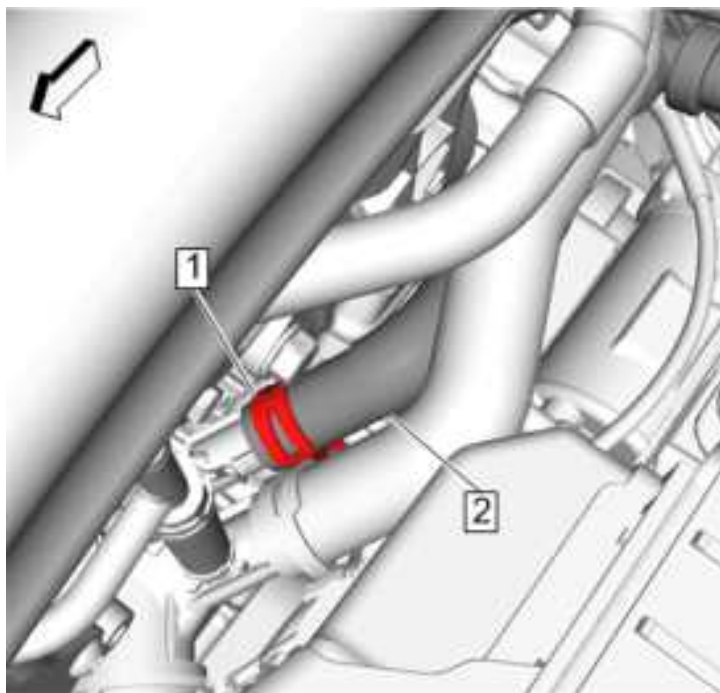


Fig. 893: Heater Outlet Hose And Clamp

Courtesy of GENERAL MOTORS COMPANY

1. Install Heater Outlet Hose (2) @Water Outlet
2. Engage Heater Outlet Hose Clamp (1) - [Hose Clamp Replacement Guidelines - Spring Type](#)

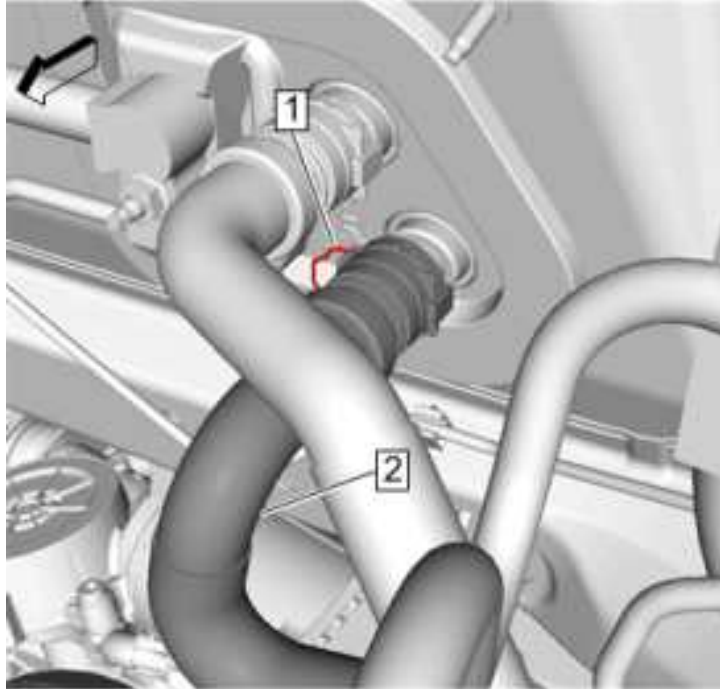


Fig. 894: Heater Outlet Hose Retainer

Courtesy of GENERAL MOTORS COMPANY

3. Install Heater Outlet Hose (2) @Heater Core Outlet Tube
4. Engage Heater Outlet Hose Retainer (1)

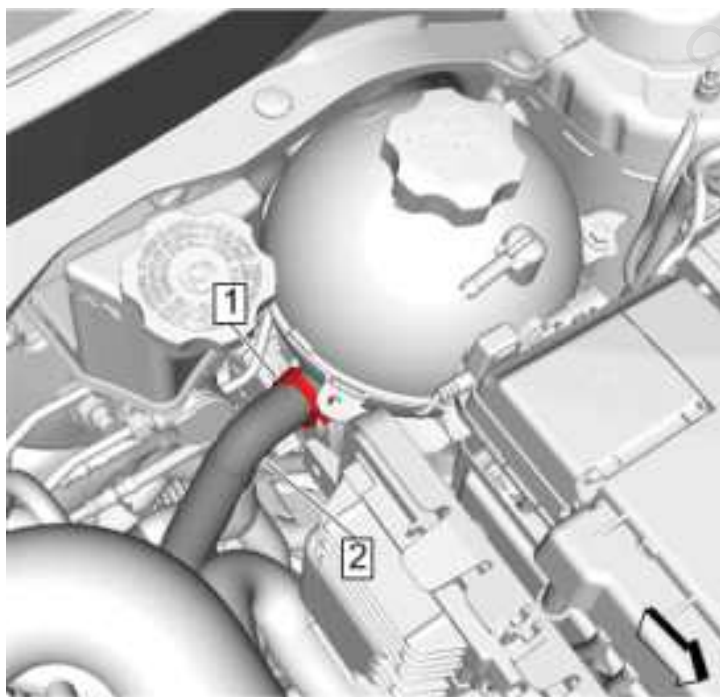


Fig. 895: Heater Outlet Hose

Courtesy of GENERAL MOTORS COMPANY

5. Install Heater Outlet Hose (2) @Radiator Surge Tank
6. Engage Heater Outlet Hose Clamp (1) - [Hose Clamp Replacement Guidelines - Spring Type](#)

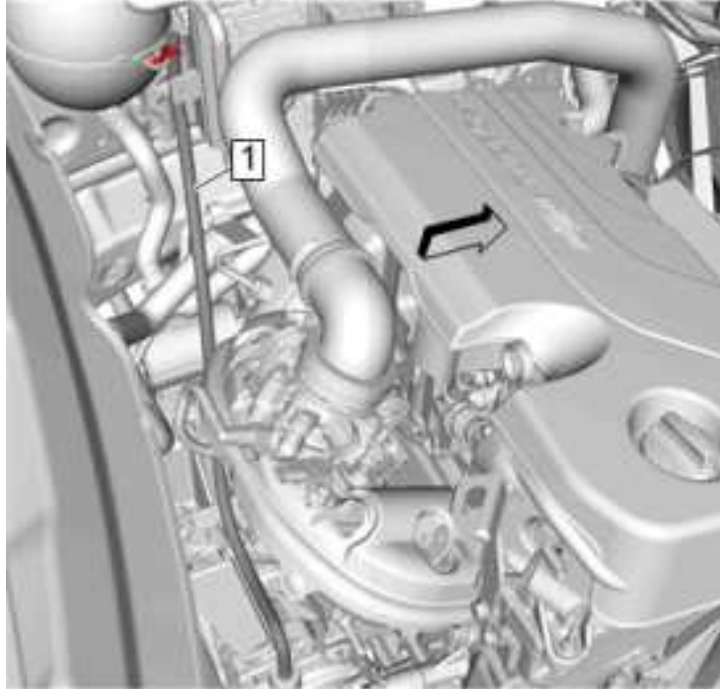


Fig. 896: Power Transfer Unit Vent Hose
 Courtesy of GENERAL MOTORS COMPANY

7. Install { If equipped } Power Transfer Unit Vent Hose (1) @Radiator Surge Tank - **Power Transfer Unit Vent Hose Replacement**

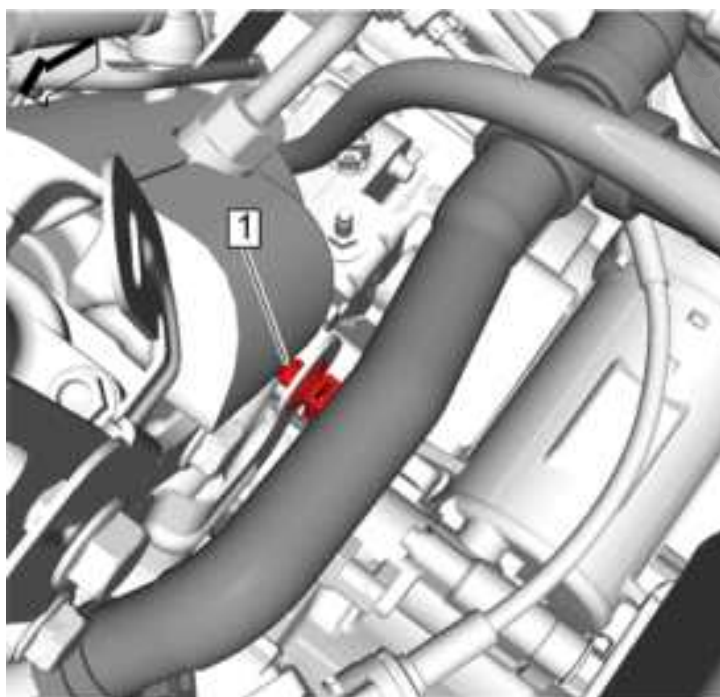


Fig. 897: Heater Outlet Hose Clip
 Courtesy of GENERAL MOTORS COMPANY

8. Install Heater Outlet Hose Clip (1) @Engine Wiring Harness Bracket

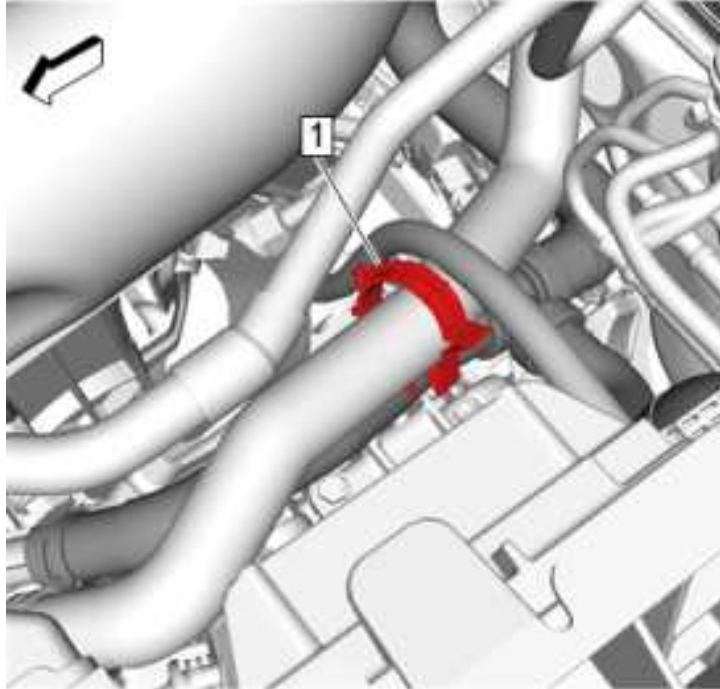


Fig. 898: Heater Outlet Hose Clip

Courtesy of GENERAL MOTORS COMPANY

9. Install Heater Outlet Hose Clip (1) @Heater Inlet Hose

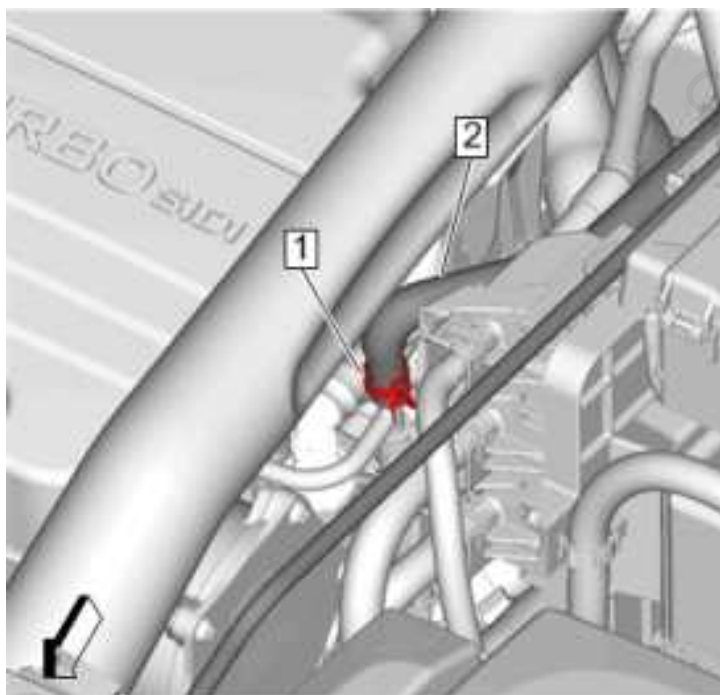


Fig. 899: Engine Coolant Air Bleed Hose Clamp

Courtesy of GENERAL MOTORS COMPANY

10. Install Engine Coolant Air Bleed Hose (2) @Turbocharger Coolant Return Pipe - **Engine Coolant Air Bleed Hose Replacement (Turbocharger Coolant Return pipe to Water Outlet, LYX)** **Engine Coolant Air Bleed Hose Replacement (Radiator Surge Tank to Turbocharger Coolant Return Pipe to Radiator, LYX)**

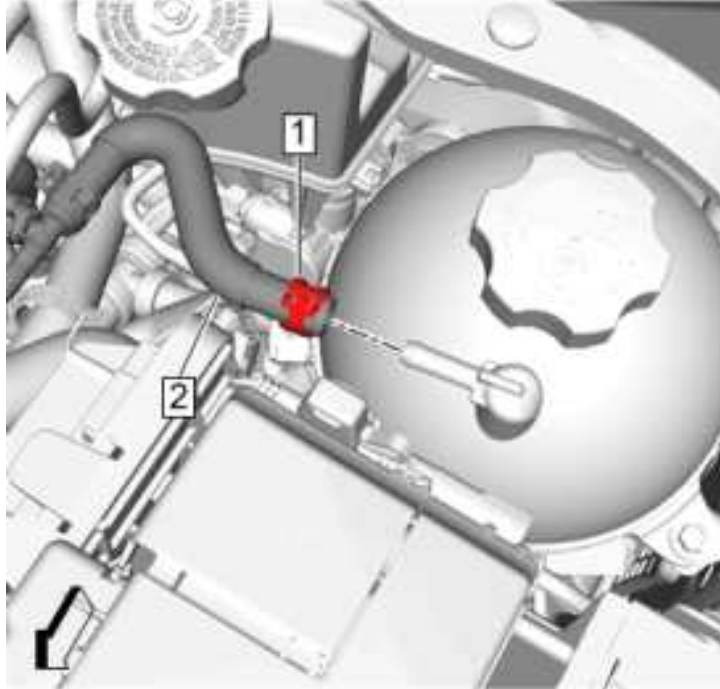


Fig. 900: Engine Coolant Air Bleed Hose

Courtesy of GENERAL MOTORS COMPANY

11. Install Engine Coolant Air Bleed Hose (2) @Radiator Surge Tank - [Engine Coolant Air Bleed Hose Replacement \(Turbocharger Coolant Return pipe to Water Outlet, LYX\)](#) [Engine Coolant Air Bleed Hose Replacement \(Radiator Surge Tank to Turbocharger Coolant Return Pipe to Radiator, LYX\)](#)
12. Fill the cooling system. [Cooling System Draining and Filling \(GE 47716\)](#) [Cooling System Draining and Filling \(Static\)](#)
13. Check the cooling system for leaks.

HEATER OUTLET HOSE REPLACEMENT (LH7)

Removal Procedure

1. Drain the cooling system. [Cooling System Draining and Filling \(GE 47716\)](#) [Cooling System Draining and Filling \(Static\)](#)
2. Remove Intake Manifold Cover - [Intake Manifold Cover Replacement](#)
3. Remove Heater Inlet Hose - [Heater Inlet Hose Replacement \(LH7 Terrain\)](#) [Heater Inlet Hose Replacement \(LH7 Equinox\)](#)
4. Reposition the wiring harness.

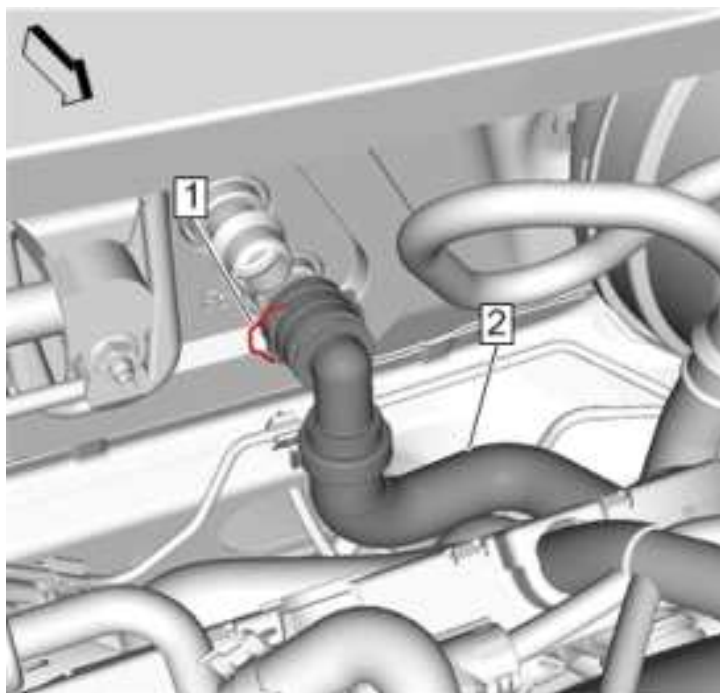


Fig. 901: Heater Outlet Hose And Retaining Clip
Courtesy of GENERAL MOTORS COMPANY

5. Disengage Heater Outlet Hose Retainer (1)
6. Remove Heater Outlet Hose (2) @Heater Core Outlet Tube

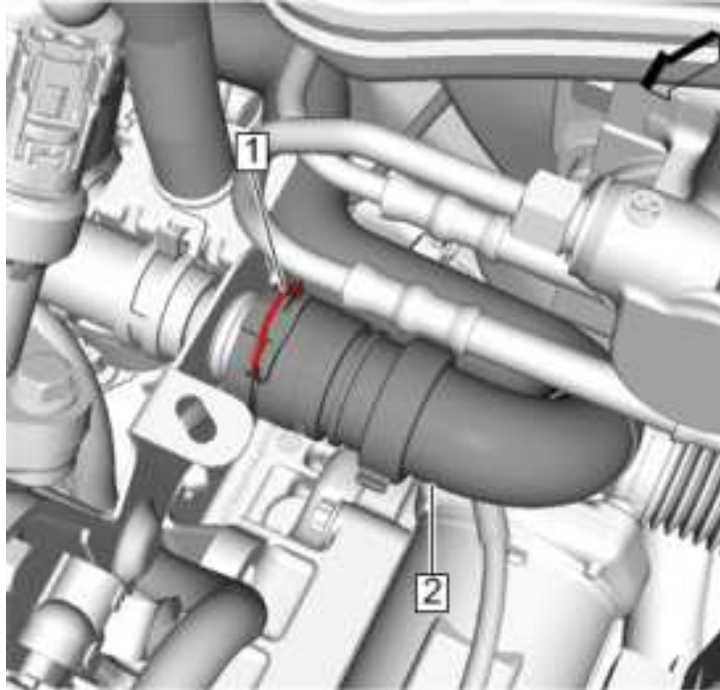


Fig. 902: Heater Outlet Hose
Courtesy of GENERAL MOTORS COMPANY

7. Disengage Heater Outlet Hose Retainer (1)
8. Remove Heater Outlet Hose (2) @Heater Inlet and Outlet Pipe Bracket
9. Remove Heater Outlet Hose (2)

Installation Procedure

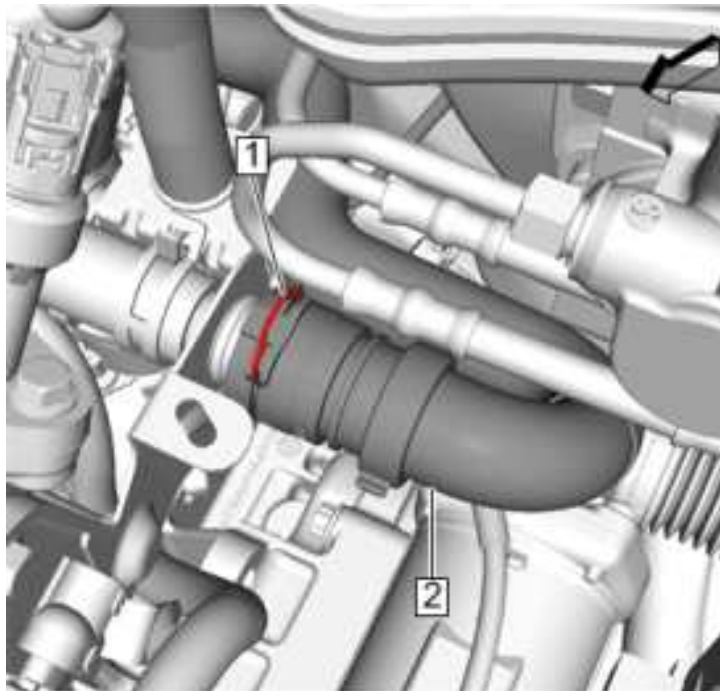


Fig. 903: Heater Outlet Hose
Courtesy of GENERAL MOTORS COMPANY

1. Install Heater Outlet Hose (2) @Heater Inlet and Outlet Pipe Bracket
2. Engage Heater Outlet Hose Retainer (1)

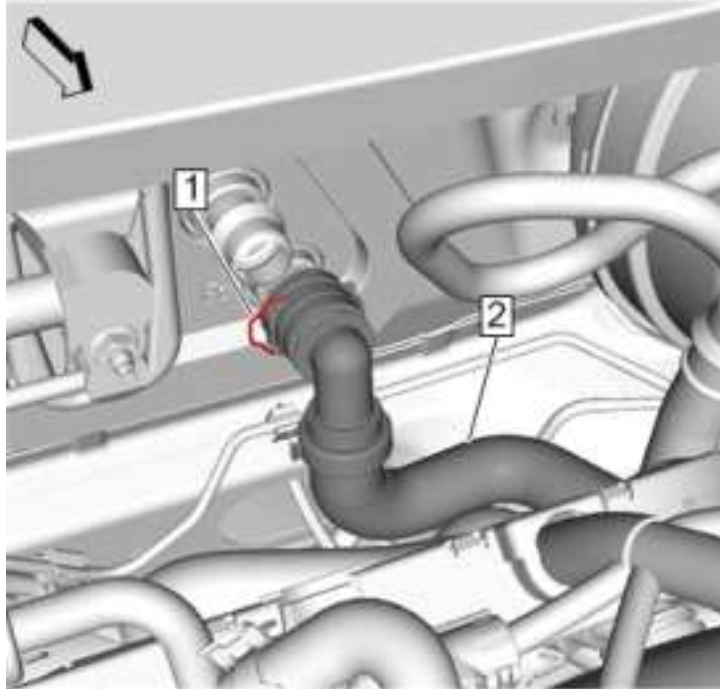
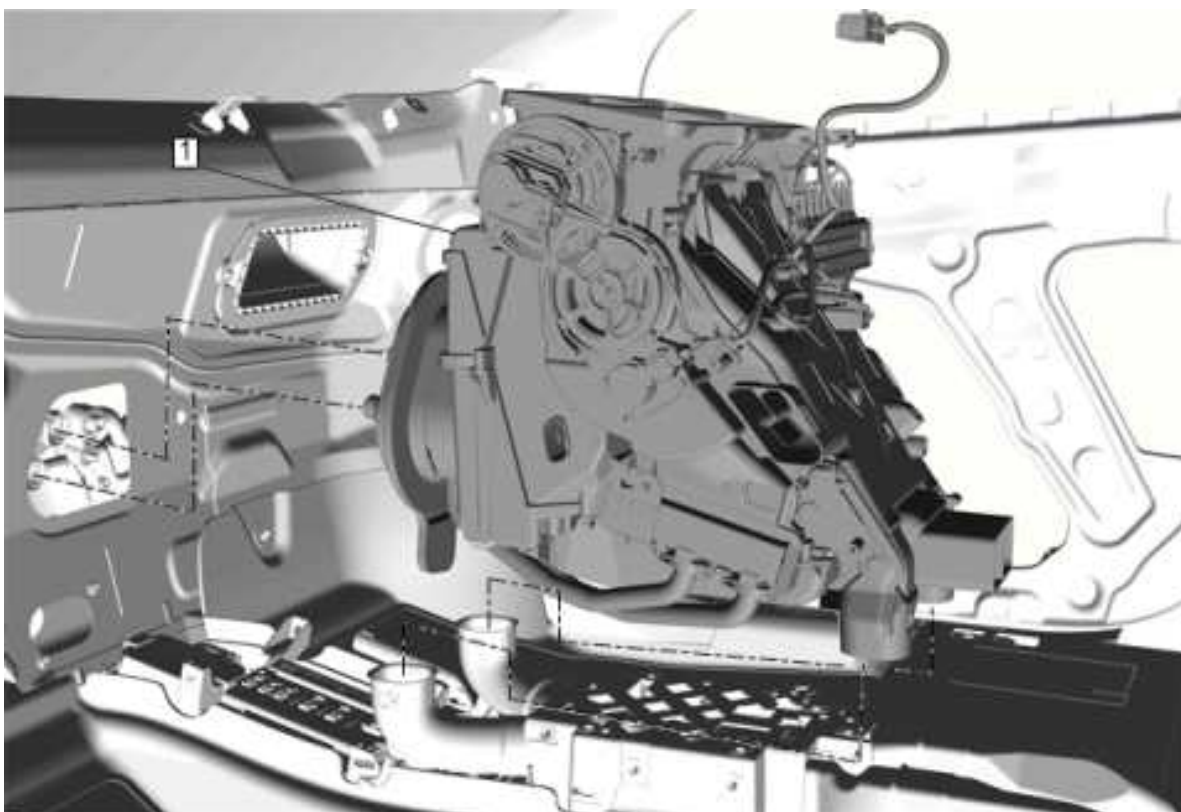


Fig. 904: Heater Outlet Hose And Retaining Clip
 Courtesy of GENERAL MOTORS COMPANY

3. Install Heater Outlet Hose (2) @Heater Core Outlet Tube
4. Engage Heater Outlet Hose Retainer (1)
5. Reposition the wiring harness.
6. Install Heater Inlet Hose - [Heater Inlet Hose Replacement \(LH7 Terrain\)](#)[Heater Inlet Hose Replacement \(LH7 Equinox\)](#)
7. Install Intake Manifold Cover - [Intake Manifold Cover Replacement](#)
8. Fill the cooling system. [Cooling System Draining and Filling \(GE 47716\)](#) [Cooling System Draining and Filling \(Static\)](#)
9. Check the cooling system for leaks.

HEATER CORE OUTLET TUBE REPLACEMENT

Removal Procedure



1. Remove Heater and Air Conditioning Evaporator and Blower Module (1) - **Heater and Air Conditioning Evaporator and Blower Module Removal and Installation (Equinox LYX)****Heater and Air Conditioning Evaporator and Blower Module Removal and Installation (Equinox LTG)****Heater and Air Conditioning Evaporator and Blower Module Removal and Installation (Equinox LH7)****Heater and Air Conditioning Evaporator and Blower Module Removal and Installation (Terrain LH7)****Heater and Air Conditioning Evaporator and Blower Module Removal and Installation (Terrain LTG)****Heater and Air Conditioning Evaporator and Blower Module Removal and Installation (Terrain LYX With KL9)****Heater and Air Conditioning Evaporator and Blower Module Removal and Installation (Terrain LYX)****Heater and Air Conditioning Evaporator and Blower Module Removal and Installation (Equinox LYX With KL9)**

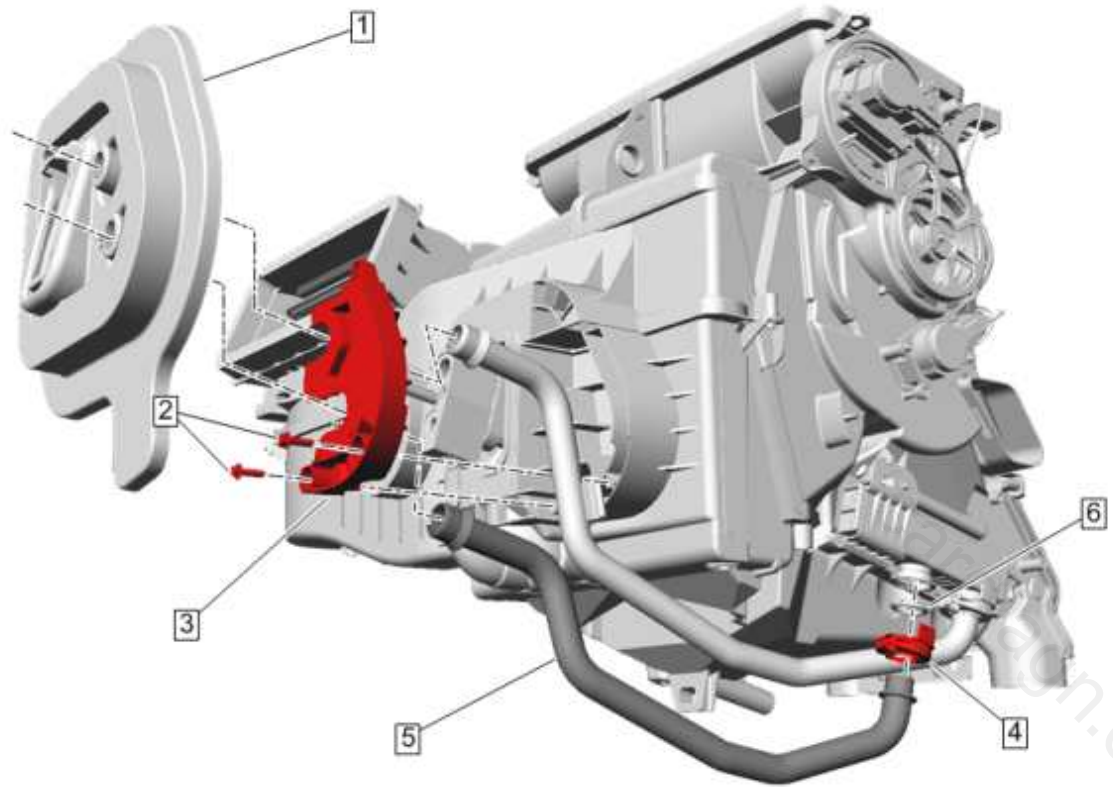


Fig. 906: Heater Core Outlet Tube
Courtesy of GENERAL MOTORS COMPANY

2. Remove Heater And Air Conditioning Evaporator Tube Seal (1)
3. Remove Heater Core Tube Bracket Bolt (2)
4. Remove Heater Core Tube Bracket (3)
5. Remove Heater Core Outlet Tube Clamp (4) and DISCARD
6. Remove Heater Core Outlet Tube (5)
7. Remove Heater Core Outlet Tube O-Ring Seal (6) and DISCARD the O-ring seal.

Installation Procedure

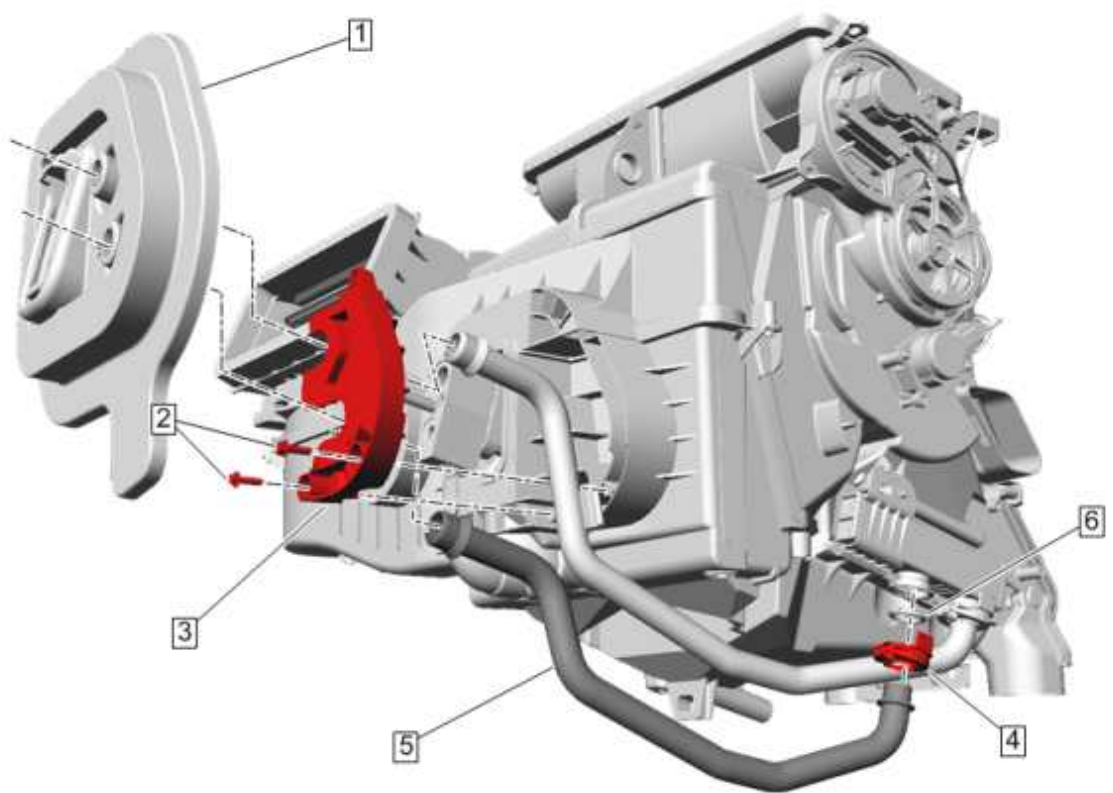


Fig. 907: Heater Core Outlet Tube
Courtesy of GENERAL MOTORS COMPANY

1. Install Heater Core Outlet Tube O-Ring Seal (6)
2. Install Heater Core Outlet Tube (5)
3. Install a NEW Heater Core Outlet Tube Clamp (4)
4. Install Heater Core Tube Bracket (3)

CAUTION: Refer to **Fastener Caution** .

5. Install Heater Core Tube Bracket Bolt (2) 2.5 N.m (22 lb in)
6. Install Heater And Air Conditioning Evaporator Tube Seal (1)

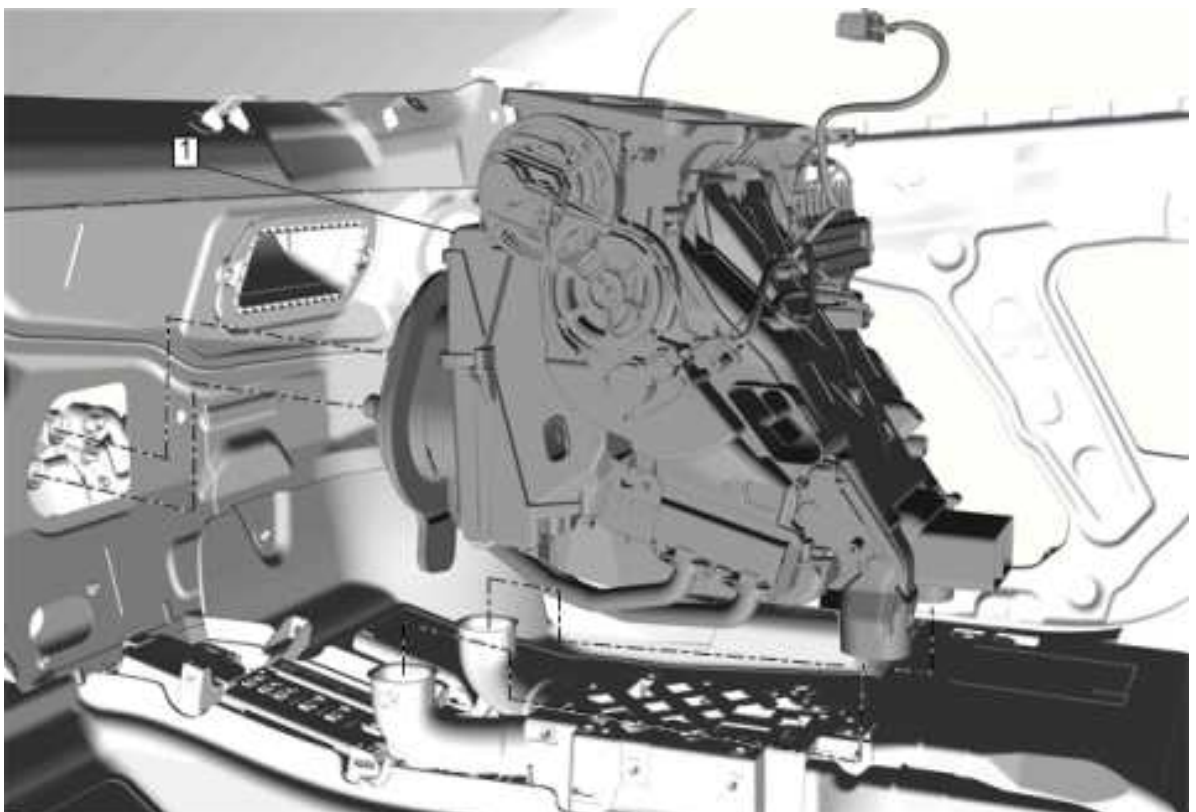


Fig. 908: Heater and Air Conditioning Evaporator and Blower Module
Courtesy of GENERAL MOTORS COMPANY

7. Install Heater and Air Conditioning Evaporator and Blower Module (1) - [Heater and Air Conditioning Evaporator and Blower Module Removal and Installation \(Equinox LYX\)](#)[Heater and Air Conditioning Evaporator and Blower Module Removal and Installation \(Equinox LTG\)](#)[Heater and Air Conditioning Evaporator and Blower Module Removal and Installation \(Equinox LH7\)](#)[Heater and Air Conditioning Evaporator and Blower Module Removal and Installation \(Terrain LH7\)](#)[Heater and Air Conditioning Evaporator and Blower Module Removal and Installation \(Terrain LTG\)](#)[Heater and Air Conditioning Evaporator and Blower Module Removal and Installation \(Terrain LYX With KL9\)](#)[Heater and Air Conditioning Evaporator and Blower Module Removal and Installation \(Terrain LYX\)](#)[Heater and Air Conditioning Evaporator and Blower Module Removal and Installation \(Equinox LYX With KL9\)](#)
8. Clear the DTCs from the heater and air conditioning remote control module.
9. Fill the cooling system to the proper level.
10. Inspect for coolant leaks.
11. Inspect for refrigerant leaks.

HEATER CORE INLET TUBE REPLACEMENT

Removal Procedure

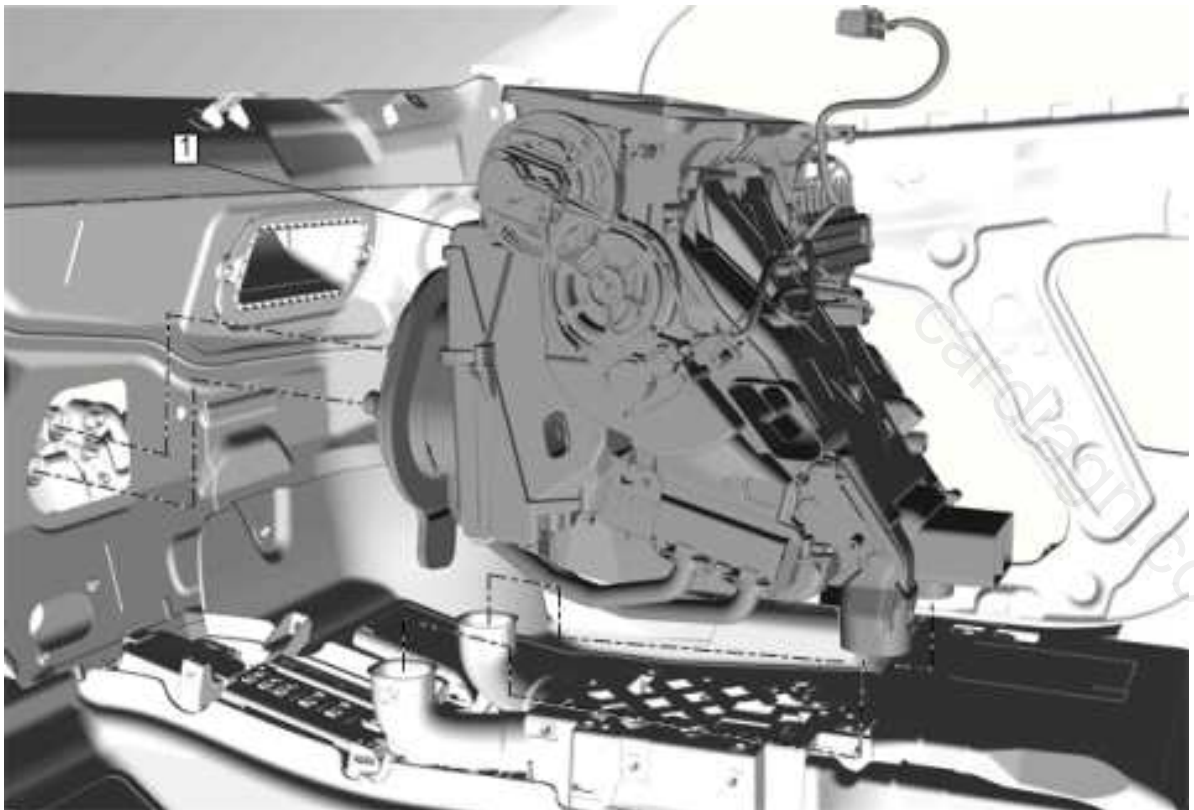


Fig. 909: Heater and Air Conditioning Evaporator and Blower Module
Courtesy of GENERAL MOTORS COMPANY

1. Remove Heater and Air Conditioning Evaporator and Blower Module (1) - [Heater and Air Conditioning Evaporator and Blower Module Removal and Installation \(Equinox LYX\)](#)[Heater and Air Conditioning Evaporator and Blower Module Removal and Installation \(Equinox LTG\)](#)[Heater and Air Conditioning Evaporator and Blower Module Removal and Installation \(Equinox LH7\)](#)[Heater and Air Conditioning Evaporator and Blower Module Removal and Installation \(Terrain LH7\)](#)[Heater and Air Conditioning Evaporator and Blower Module Removal and Installation \(Terrain LTG\)](#)[Heater and Air Conditioning Evaporator and Blower Module Removal and Installation \(Terrain LYX With KL9\)](#)[Heater and Air Conditioning Evaporator and Blower Module Removal and Installation \(Terrain LYX\)](#)[Heater and Air Conditioning Evaporator and Blower Module Removal and Installation \(Equinox LYX With KL9\)](#)

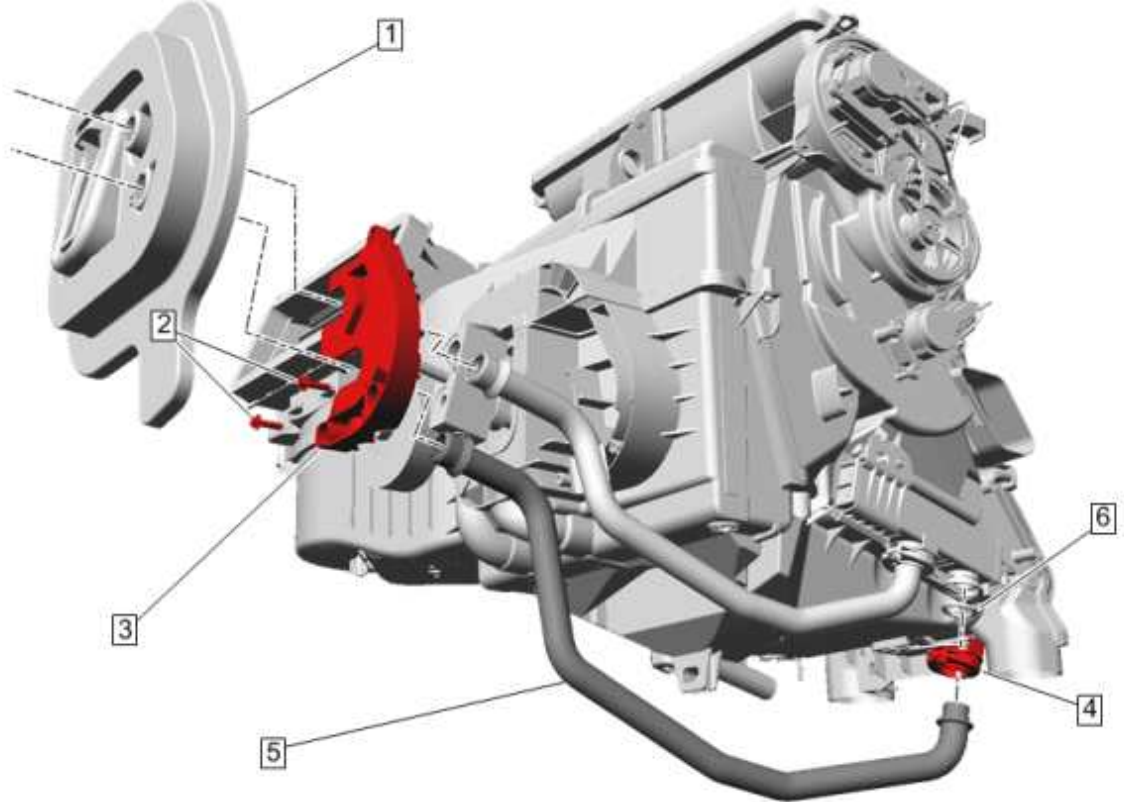


Fig. 910: Heater Core Inlet Tube
 Courtesy of GENERAL MOTORS COMPANY

2. Remove Heater And Air Conditioning Evaporator Tube Seal (1)
3. Remove Heater Core Tube Bracket Bolt (2)
4. Remove Heater Core Tube Bracket (3)
5. Remove Heater Core Inlet Tube Clamp (4) and DISCARD
6. Remove Heater Core Inlet Tube (5)
7. Remove Heater Core Inlet Tube O-Ring Seal (6) and DISCARD the O-ring seal.

Installation Procedure

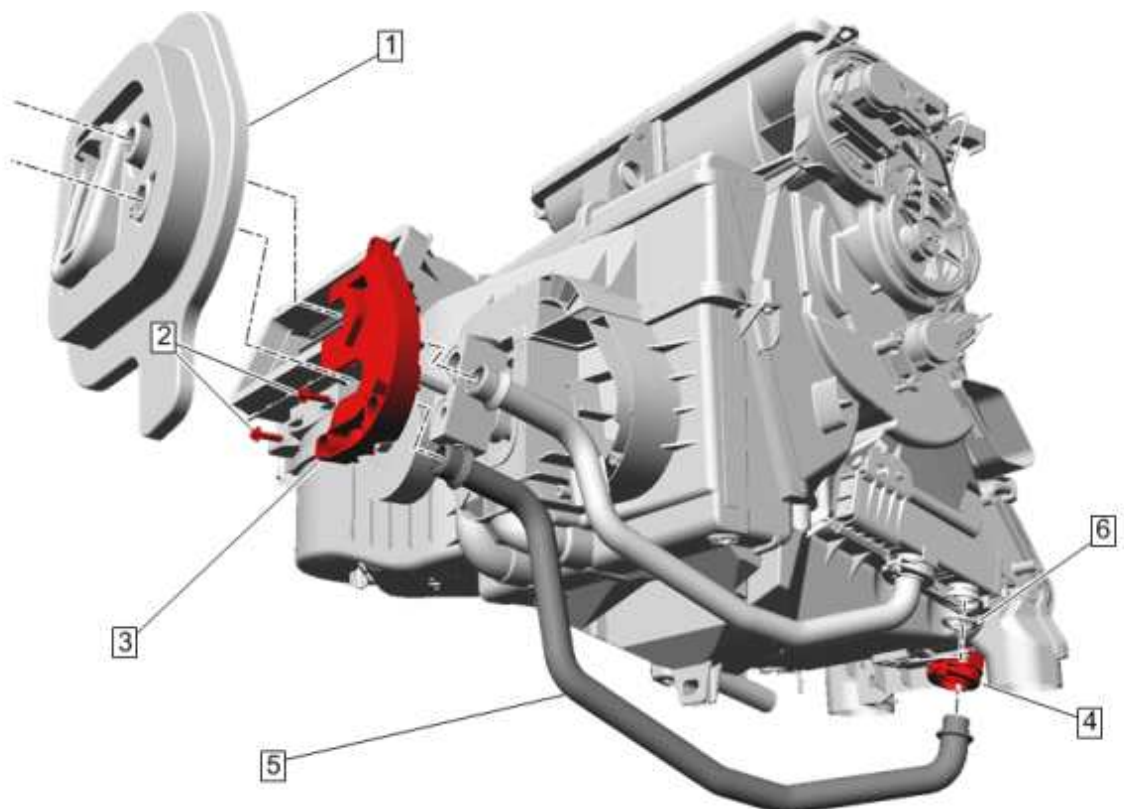


Fig. 911: Heater Core Inlet Tube
 Courtesy of GENERAL MOTORS COMPANY

1. Install Heater Core Inlet Tube O-Ring Seal (6)
2. Install Heater Core Inlet Tube (5)
3. Install a NEW Heater Core Inlet Tube Clamp (4)
4. Install Heater Core Tube Bracket (3)

CAUTION: Refer to [Fastener Caution](#) .

5. Install Heater Core Tube Bracket Bolt (2) [2x] 2.5 N.m (22 lb in)
6. Install Heater And Air Conditioning Evaporator Tube Seal (1)

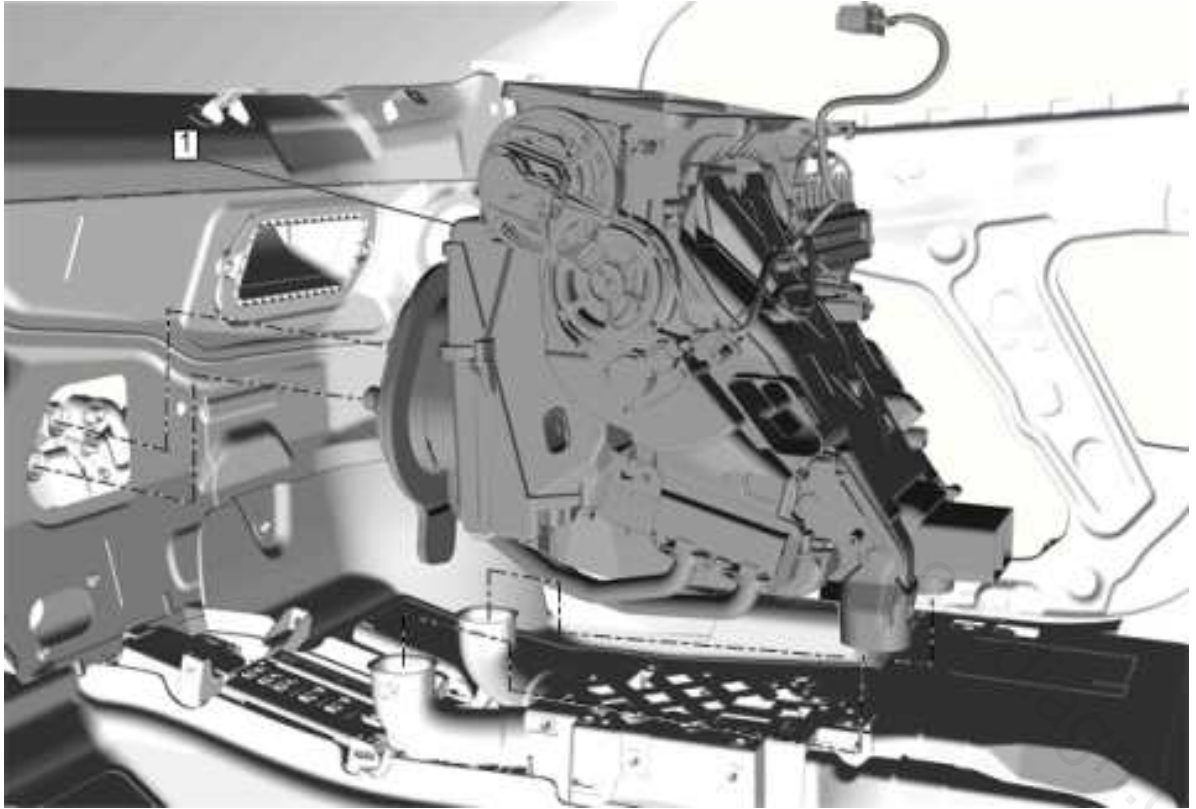


Fig. 912: Heater and Air Conditioning Evaporator and Blower Module
Courtesy of GENERAL MOTORS COMPANY

7. Install Heater and Air Conditioning Evaporator and Blower Module (1) - [Heater and Air Conditioning Evaporator and Blower Module Removal and Installation \(Equinox LYX\)](#)[Heater and Air Conditioning Evaporator and Blower Module Removal and Installation \(Equinox LTG\)](#)[Heater and Air Conditioning Evaporator and Blower Module Removal and Installation \(Equinox LH7\)](#)[Heater and Air Conditioning Evaporator and Blower Module Removal and Installation \(Terrain LH7\)](#)[Heater and Air Conditioning Evaporator and Blower Module Removal and Installation \(Terrain LTG\)](#)[Heater and Air Conditioning Evaporator and Blower Module Removal and Installation \(Terrain LYX With KL9\)](#)[Heater and Air Conditioning Evaporator and Blower Module Removal and Installation \(Terrain LYX\)](#)[Heater and Air Conditioning Evaporator and Blower Module Removal and Installation \(Equinox LYX With KL9\)](#)
8. Clear the DTCs from the heater and air conditioning remote control module.
9. Fill the cooling system to the proper level.
10. Inspect for coolant leaks.
11. Inspect for refrigerant leaks.

PASSENGER COMPARTMENT AIR FILTER REPLACEMENT

Removal Procedure

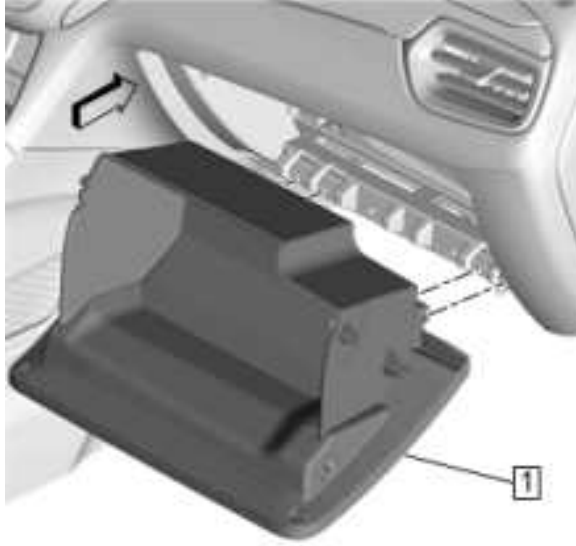


Fig. 913: Instrument Panel Compartment Door
 Courtesy of GENERAL MOTORS COMPANY

1. Remove Instrument Panel Compartment Door (1) - **Instrument Panel Compartment Door Replacement (Equinox)** **Instrument Panel Compartment Door Replacement (Terrain)**

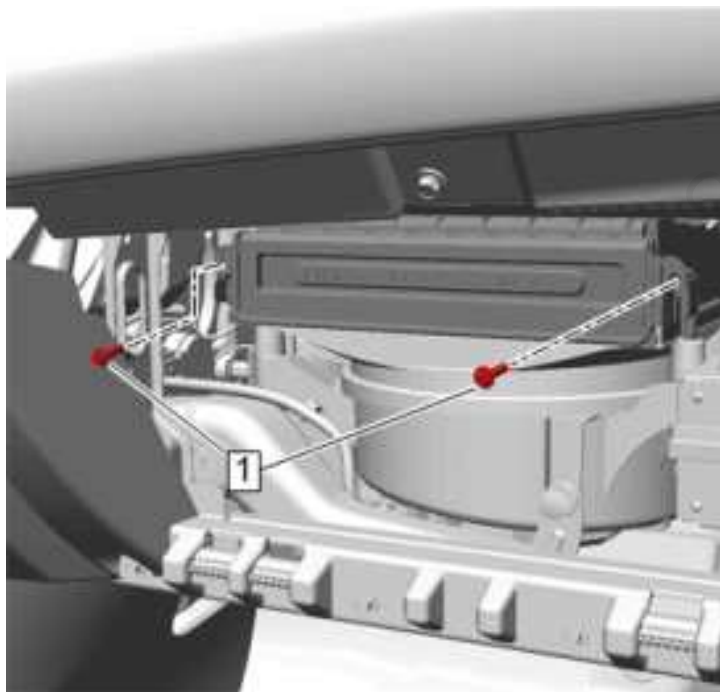


Fig. 914: Passenger Compartment Air Filter Housing Cover Screw
 Courtesy of GENERAL MOTORS COMPANY

2. Remove { If equipped } Passenger Compartment Air Filter Housing Cover Screw (1) [2x]

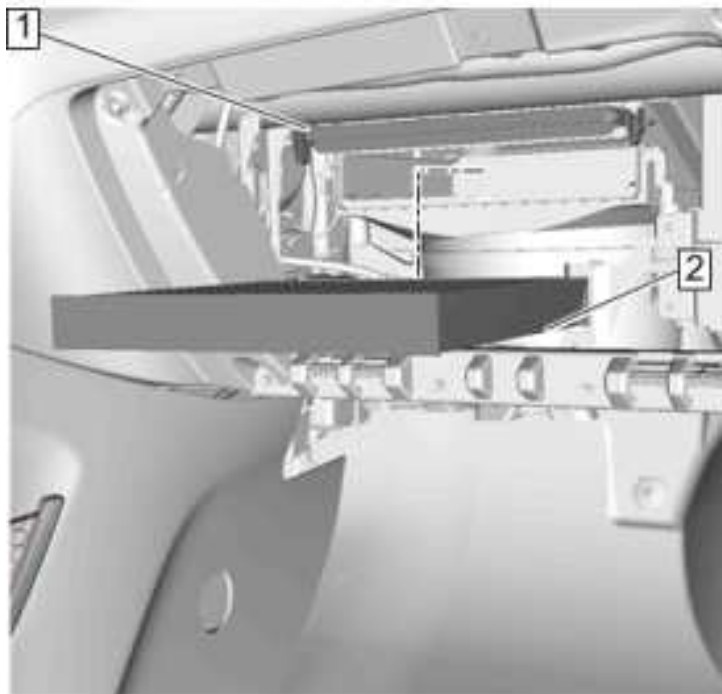


Fig. 915: Passenger Compartment Air Filter Door
Courtesy of GENERAL MOTORS COMPANY

3. Open Passenger Compartment Air Filter Door (1)
4. Remove Passenger Compartment Air Filter (2)

Installation Procedure

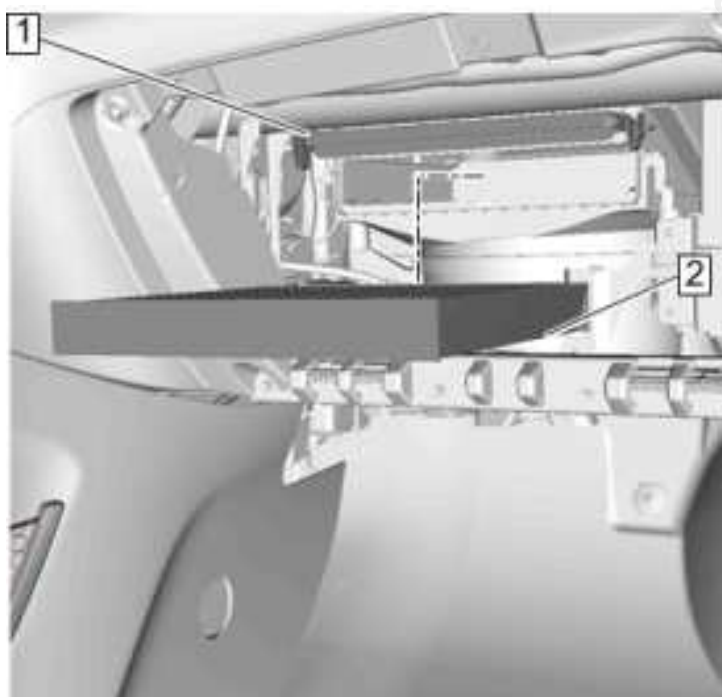


Fig. 916: Passenger Compartment Air Filter Door
Courtesy of GENERAL MOTORS COMPANY

1. Install Passenger Compartment Air Filter (2)
2. Close Passenger Compartment Air Filter Door (1)

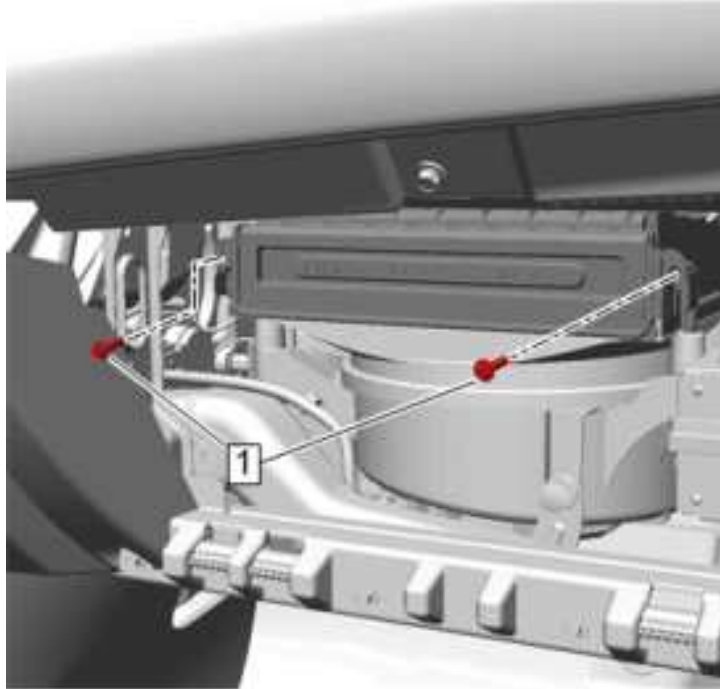


Fig. 917: Passenger Compartment Air Filter Housing Cover Screw
Courtesy of GENERAL MOTORS COMPANY

CAUTION: Refer to **Fastener Caution** .

3. Install { If equipped } Passenger Compartment Air Filter Housing Cover Screw (1) and tighten [2x] 1.5 N.m (13 lb in)

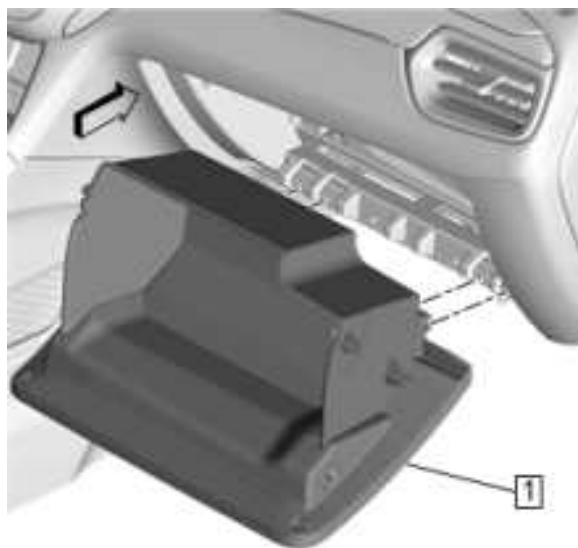


Fig. 918: Instrument Panel Compartment Door
Courtesy of GENERAL MOTORS COMPANY

4. Install Instrument Panel Compartment Door (1) - **Instrument Panel Compartment Door Replacement (Equinox)** **Instrument Panel Compartment Door Replacement (Terrain)**

AIR INLET DUCT REPLACEMENT

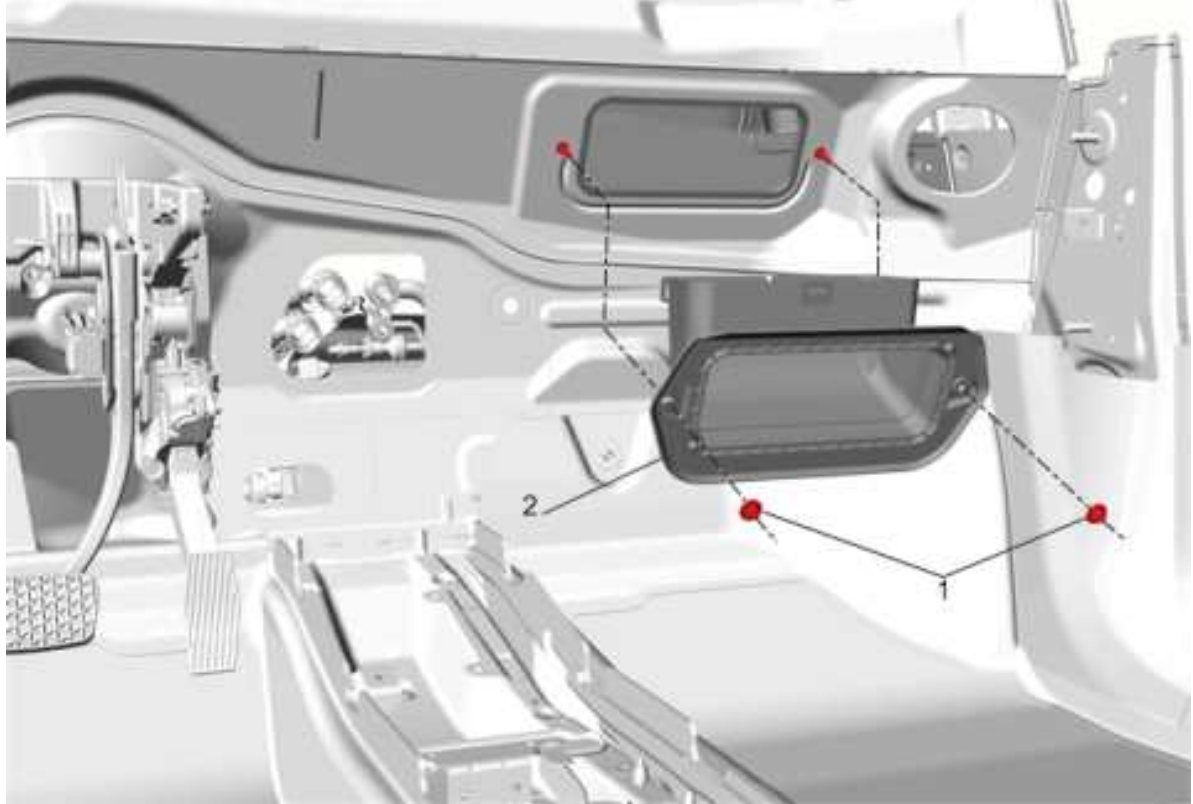


Fig. 919: Air Inlet Duct

Courtesy of GENERAL MOTORS COMPANY

Call out	Component Name
Preliminary Procedures <u>Heater and Air Conditioning Evaporator and Blower Module Removal and Installation (Equinox LYX) Heater and Air Conditioning Evaporator and Blower Module Removal and Installation (Equinox LTG) Heater and Air Conditioning Evaporator and Blower Module Removal and Installation (Equinox LH7) Heater and Air Conditioning Evaporator and Blower Module Removal and Installation (Terrain LH7) Heater and Air Conditioning Evaporator and Blower Module Removal and Installation (Terrain LTG) Heater and Air Conditioning Evaporator and Blower Module Removal and Installation (Terrain LYX With KL9) Heater and Air Conditioning Evaporator and Blower Module Removal and Installation (Terrain LYX) Heater and Air Conditioning Evaporator and Blower Module Removal and Installation (Equinox LYX With KL9)</u> <u>Air Inlet Grille Panel Water Deflector Replacement</u>	
1	Air Inlet Duct Nut CAUTION: Refer to <u>Fastener Caution</u> . Tighten 5.0 N.m (44 lb in)
2	Air Inlet Duct

AIR INLET HOUSING REPLACEMENT

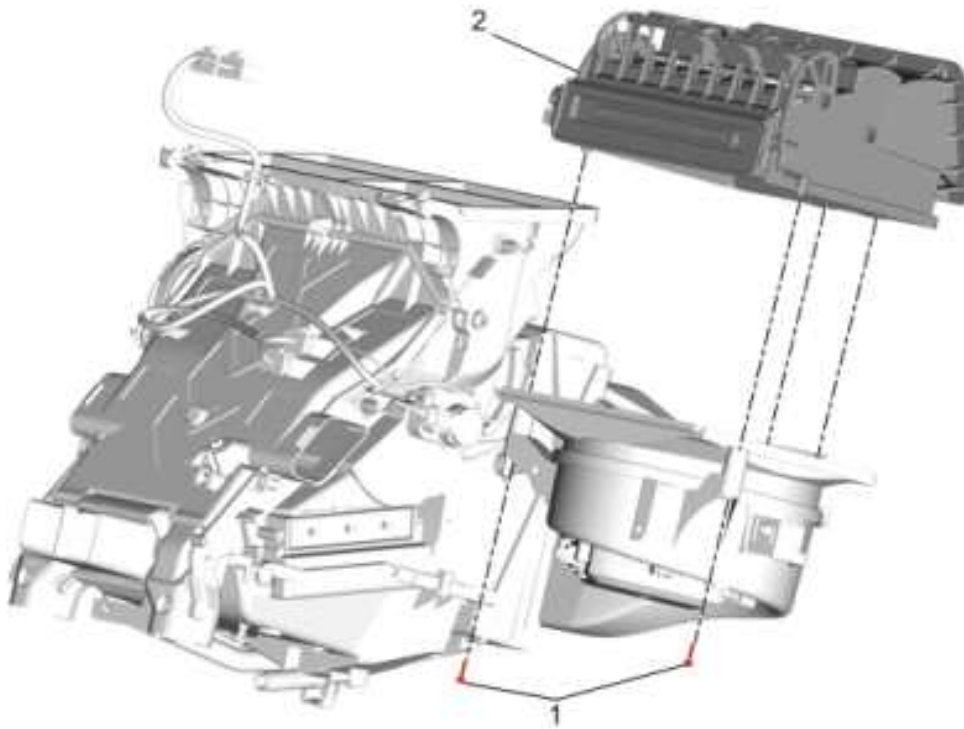


Fig. 920: Air Inlet Housing

Courtesy of GENERAL MOTORS COMPANY

Call out	Component Name
Preliminary Procedure <u>Heater and Air Conditioning Evaporator and Blower Module Removal and Installation (Equinox LYX)</u> <u>Heater and Air Conditioning Evaporator and Blower Module Removal and Installation (Equinox LTG)</u> <u>Heater and Air Conditioning Evaporator and Blower Module Removal and Installation (Equinox LH7)</u> <u>Heater and Air Conditioning Evaporator and Blower Module Removal and Installation (Terrain LH7)</u> <u>Heater and Air Conditioning Evaporator and Blower Module Removal and Installation (Terrain LTG)</u> <u>Heater and Air Conditioning Evaporator and Blower Module Removal and Installation (Terrain LYX With KL9)</u> <u>Heater and Air Conditioning Evaporator and Blower Module Removal and Installation (Terrain LYX)</u> <u>Heater and Air Conditioning Evaporator and Blower Module Removal and Installation (Equinox LYX With KL9)</u>	
1	Air Inlet Housing Bolt [2x] CAUTION: Refer to <u>Fastener Caution</u> . Tighten 2.5 N.m (22 lb in)
2	Air Inlet Housing Procedures 1. Disconnect the electrical connector. 2. Tilt the air inlet housing forward to disengage from the air conditioning evaporator upper case. 3. Transfer components as necessary.

BLOWER MOTOR REPLACEMENT

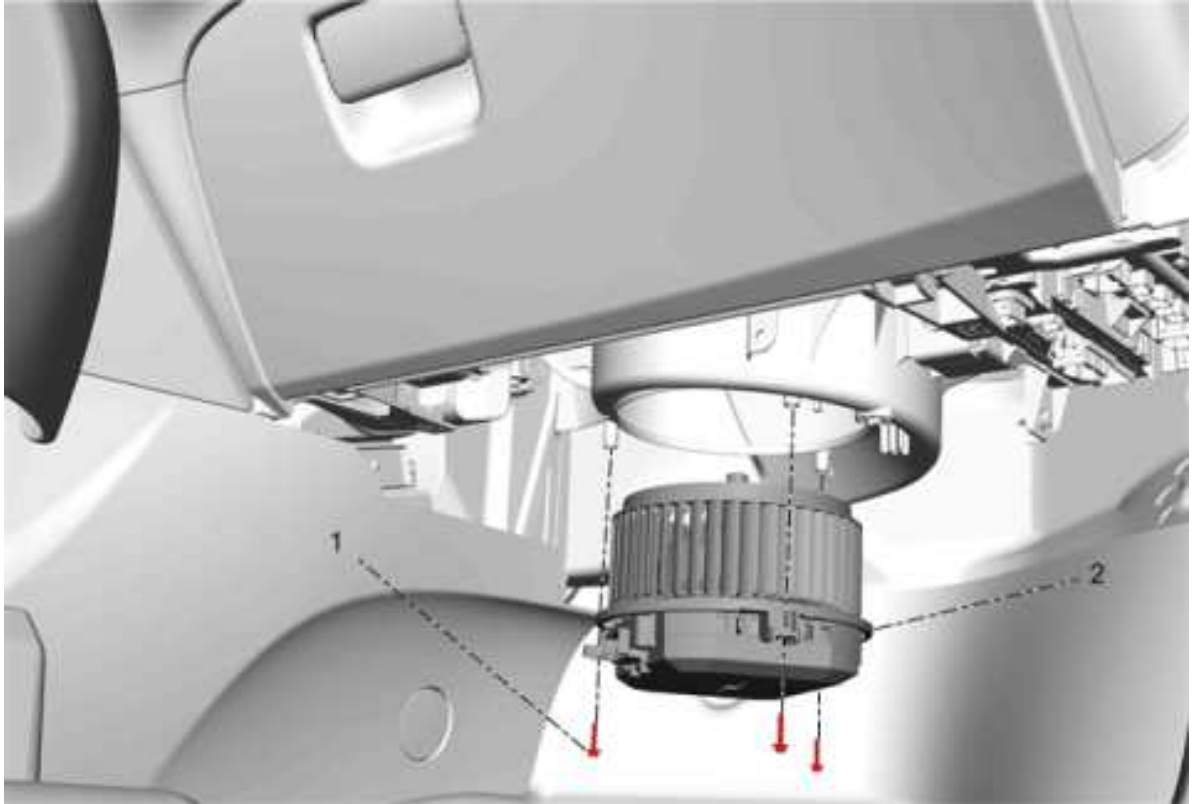


Fig. 921: Blower Motor

Courtesy of GENERAL MOTORS COMPANY

Call out	Component Name
Preliminary Procedure <u>Floor Front Air Outlet Duct Replacement - Right Side (Inner)</u> <u>Floor Front Air Outlet Duct Replacement - Right Side (Outer)</u>	
1	Blower Motor Bolt[3x] CAUTION: Refer to <u>Fastener Caution</u> . Tighten 1.2 N.m (11 lb in)
2	Blower Motor Assembly Procedure Disconnect the electrical connector.

SIDE WINDOW DEFOGGER OUTLET GRILLE REPLACEMENT (TERRAIN)

Removal Procedure



Fig. 922: Radio Front Center Speaker
 Courtesy of GENERAL MOTORS COMPANY

1. Remove Radio Front Center Speaker (2) - [Radio Front Center Speaker Replacement \(Terrain\)](#)

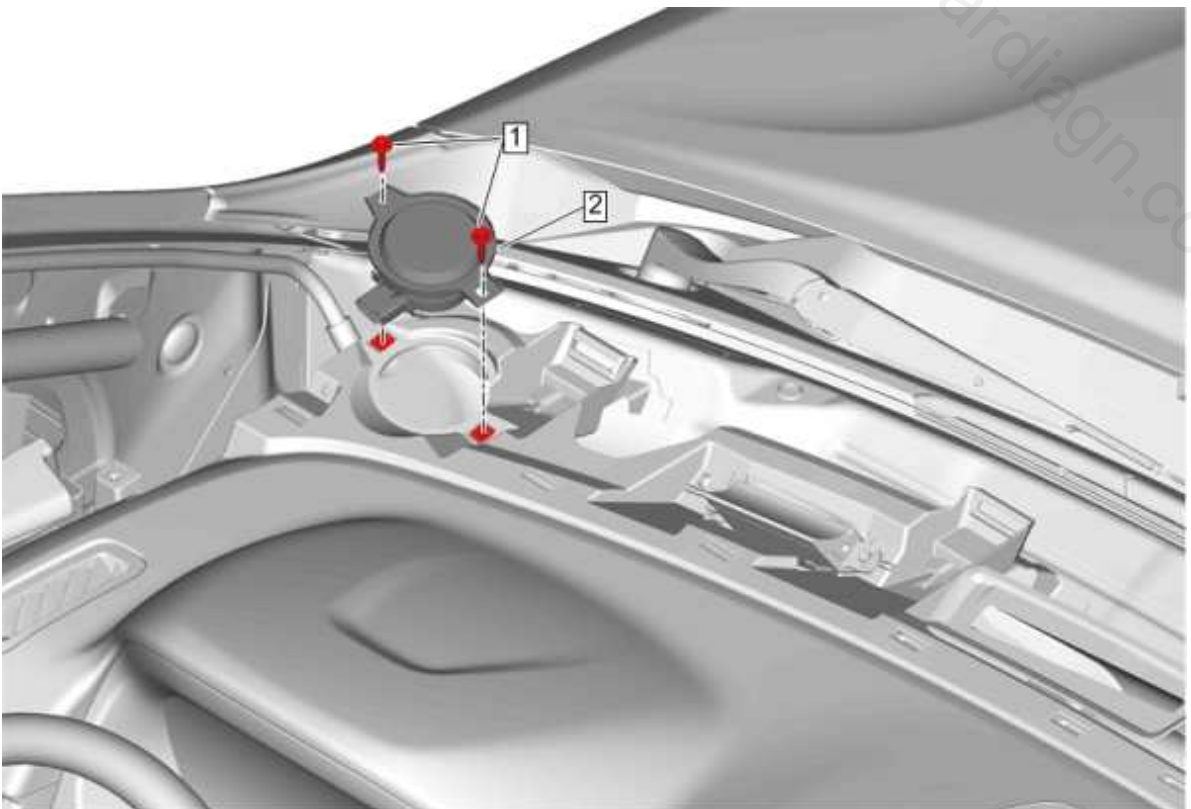


Fig. 923: Radio Front Speaker
 Courtesy of GENERAL MOTORS COMPANY

2. Remove the left and right radio front speaker (2). [Radio Front Speaker Replacement \(Terrain\)](#)

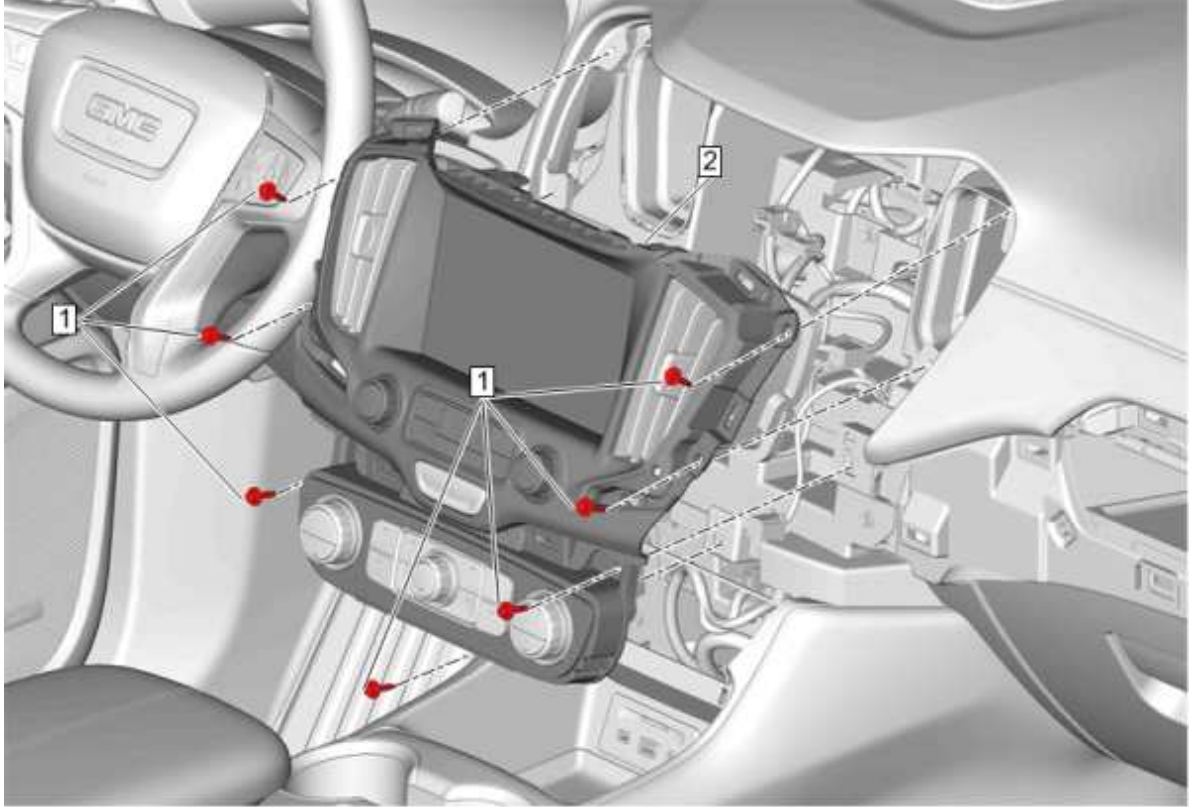


Fig. 924: Radio Control Assembly And Screws
Courtesy of GENERAL MOTORS COMPANY

3. Remove Radio Control Assembly (2) - **Radio Control Assembly Replacement (Terrain)**



Fig. 925: Left Side Instrument Panel Trim Pad
Courtesy of GENERAL MOTORS COMPANY

4. Remove Instrument Panel Trim Pad - Left Side (1) - **Instrument Panel Trim Pad Replacement - Left Side (Terrain)**

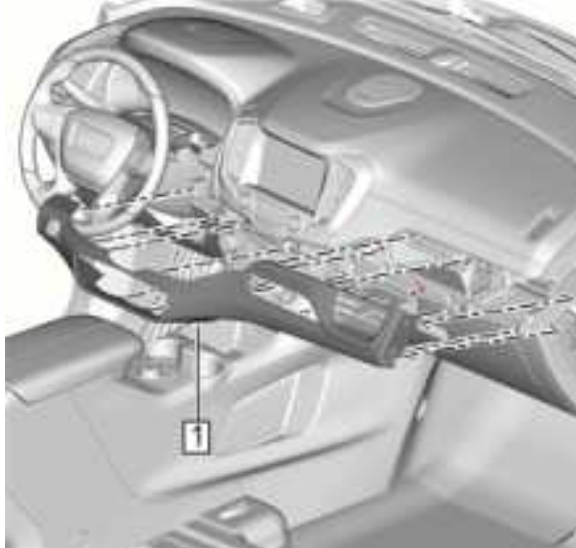


Fig. 926: Right Side Instrument Panel Trim Pad
Courtesy of GENERAL MOTORS COMPANY

5. Remove Instrument Panel Trim Pad - Right Side (1) - **Instrument Panel Trim Pad Replacement - Right Side (Terrain)**



Fig. 927: Instrument Panel Cluster Trim Plate
Courtesy of GENERAL MOTORS COMPANY

6. Remove Instrument Panel Cluster Trim Plate (1) - **Instrument Panel Cluster Trim Plate Replacement (Terrain)**

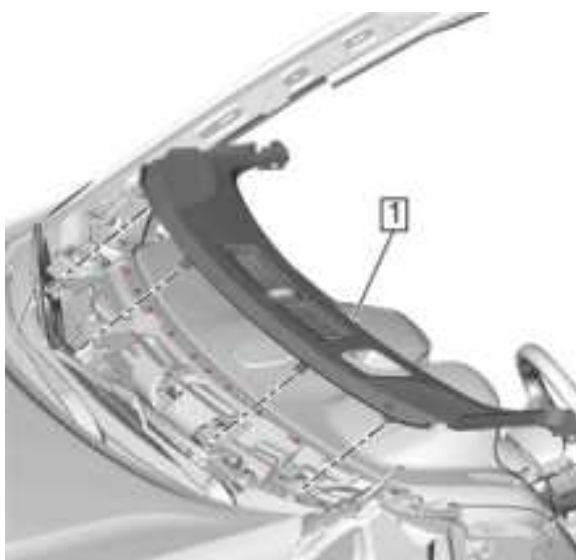


Fig. 928: Instrument Panel Extension
Courtesy of GENERAL MOTORS COMPANY

7. Remove Instrument Panel Extension (1) - [Instrument Panel Extension Replacement \(Terrain\)](#)

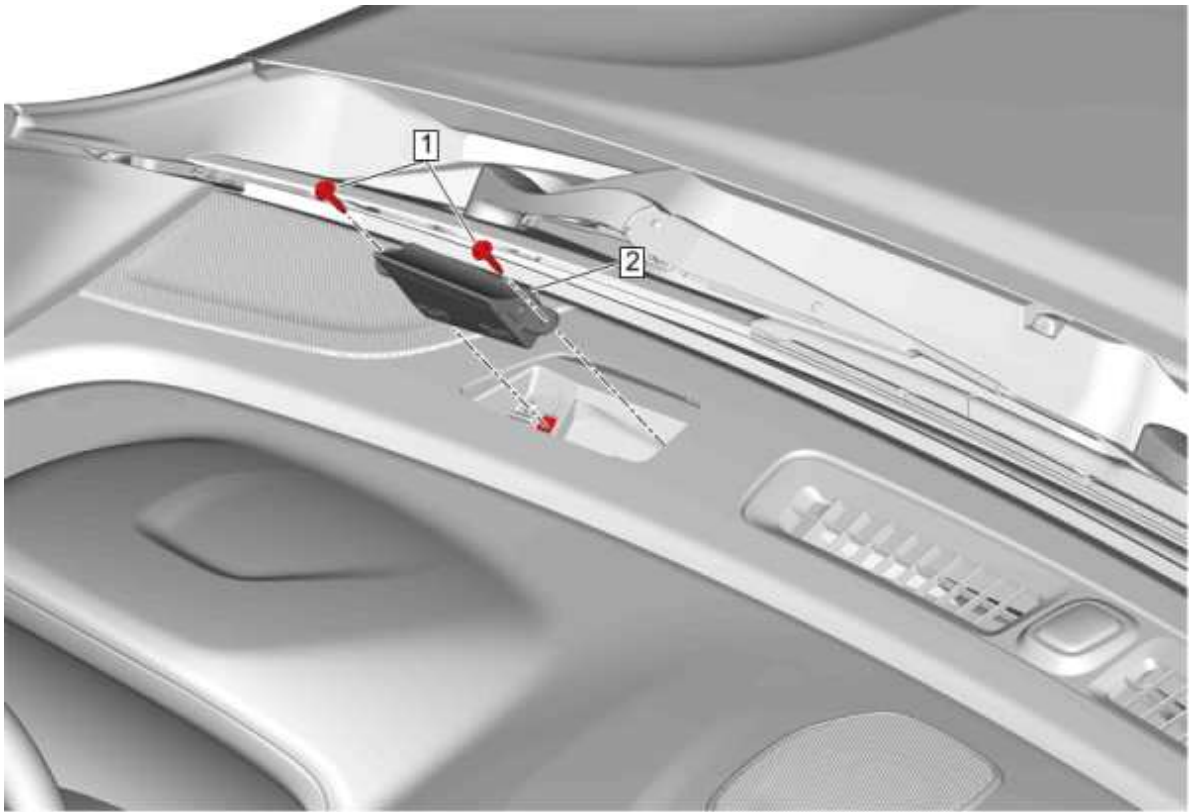


Fig. 929: Forward Collision Alert Display And Screws
Courtesy of GENERAL MOTORS COMPANY

8. Remove Forward Collision Alert Display (2) - [Forward Collision Alert Display Replacement \(Terrain\)](#)

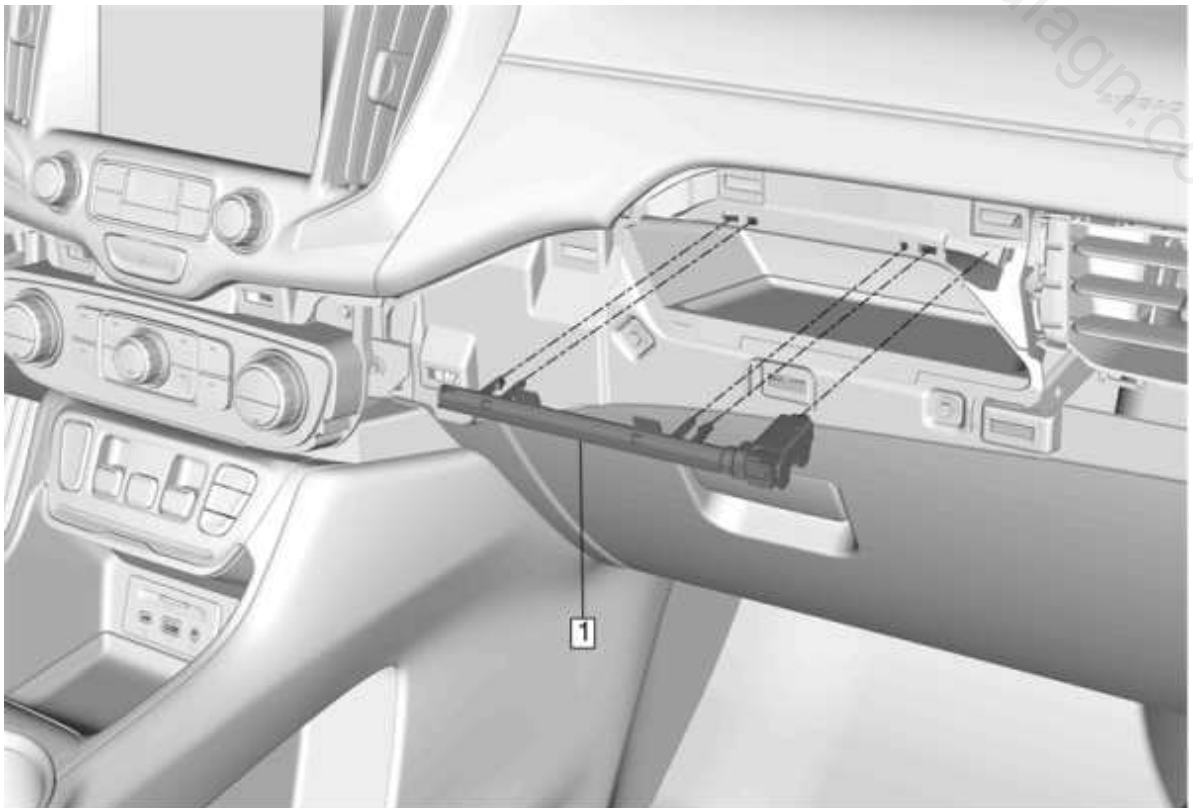


Fig. 930: Instrument Panel Light Conductor Lamp
Courtesy of GENERAL MOTORS COMPANY

9. Remove Instrument Panel Light Conductor Lamp (1) - [Instrument Panel Light Conductor Lamp Replacement \(GMC\)](#)

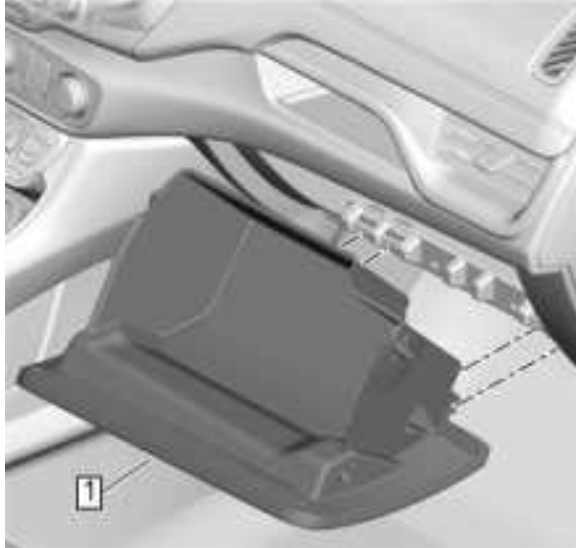


Fig. 931: Instrument Panel Compartment Door
 Courtesy of GENERAL MOTORS COMPANY

10. Remove Instrument Panel Compartment Door (1) - [Instrument Panel Compartment Door Replacement \(Terrain\)](#)

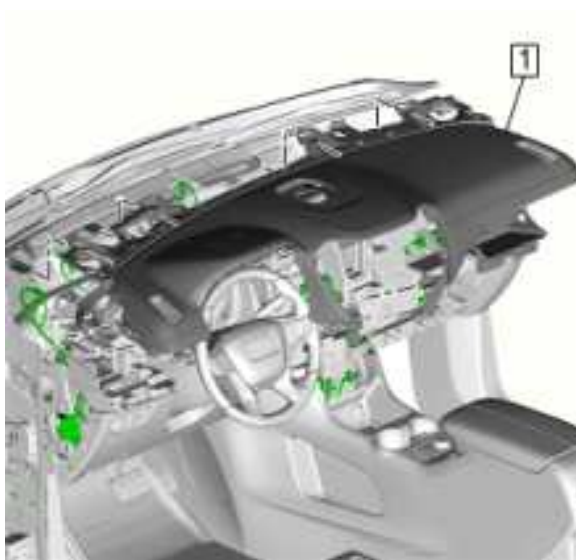


Fig. 932: Instrument Panel Upper Trim Panel
 Courtesy of GENERAL MOTORS COMPANY

11. Remove Instrument Panel Upper Trim Panel (1) - [Instrument Panel Upper Trim Panel Replacement \(Terrain\)](#)



Fig. 933: Window Defogger Outlet Grille
 Courtesy of GENERAL MOTORS COMPANY

12. Release the tabs from underneath the upper trim panel and push the left side window defogger outlet grille (1) through the opening.



Fig. 934: Window Defogger Outlet Grille
Courtesy of GENERAL MOTORS COMPANY

13. Release the tabs from underneath the upper trim panel and push the right side window defogger outlet grille (1) through the opening.

Installation Procedure



Fig. 935: Window Defogger Outlet Grille
Courtesy of GENERAL MOTORS COMPANY

1. Install Side Window Defogger Outlet Grille - Right Side (1)



Fig. 936: Window Defogger Outlet Grille
Courtesy of GENERAL MOTORS COMPANY

2. Install Side Window Defogger Outlet Grille - Left Side (1)

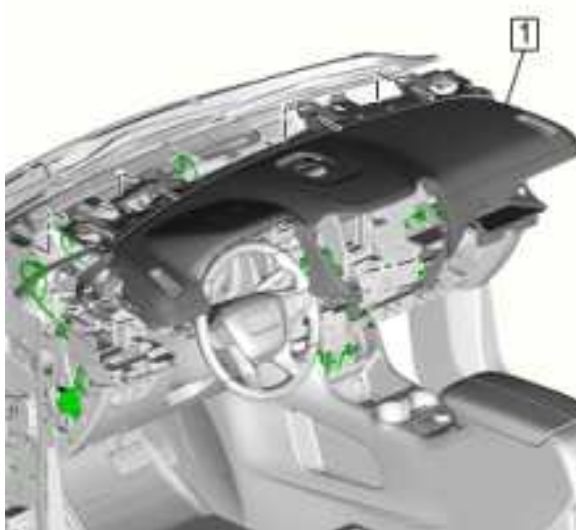


Fig. 937: Instrument Panel Upper Trim Panel
Courtesy of GENERAL MOTORS COMPANY

3. Install Instrument Panel Upper Trim Panel (1) - **Instrument Panel Upper Trim Panel Replacement (Terrain)**

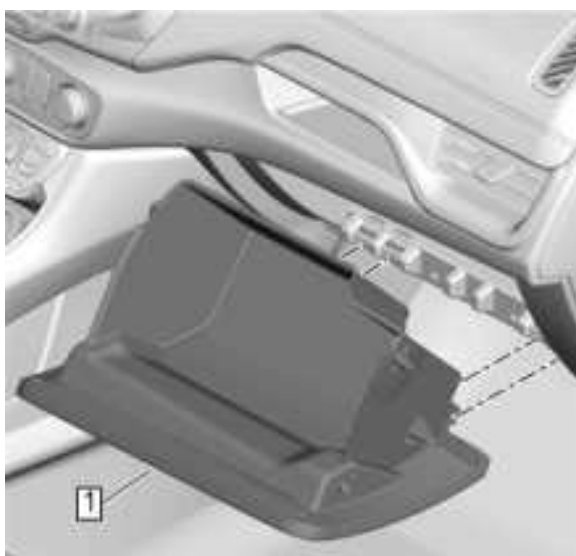


Fig. 938: Instrument Panel Compartment Door
Courtesy of GENERAL MOTORS COMPANY

4. Install Instrument Panel Compartment Door (1) - [Instrument Panel Compartment Door Replacement \(Terrain\)](#)

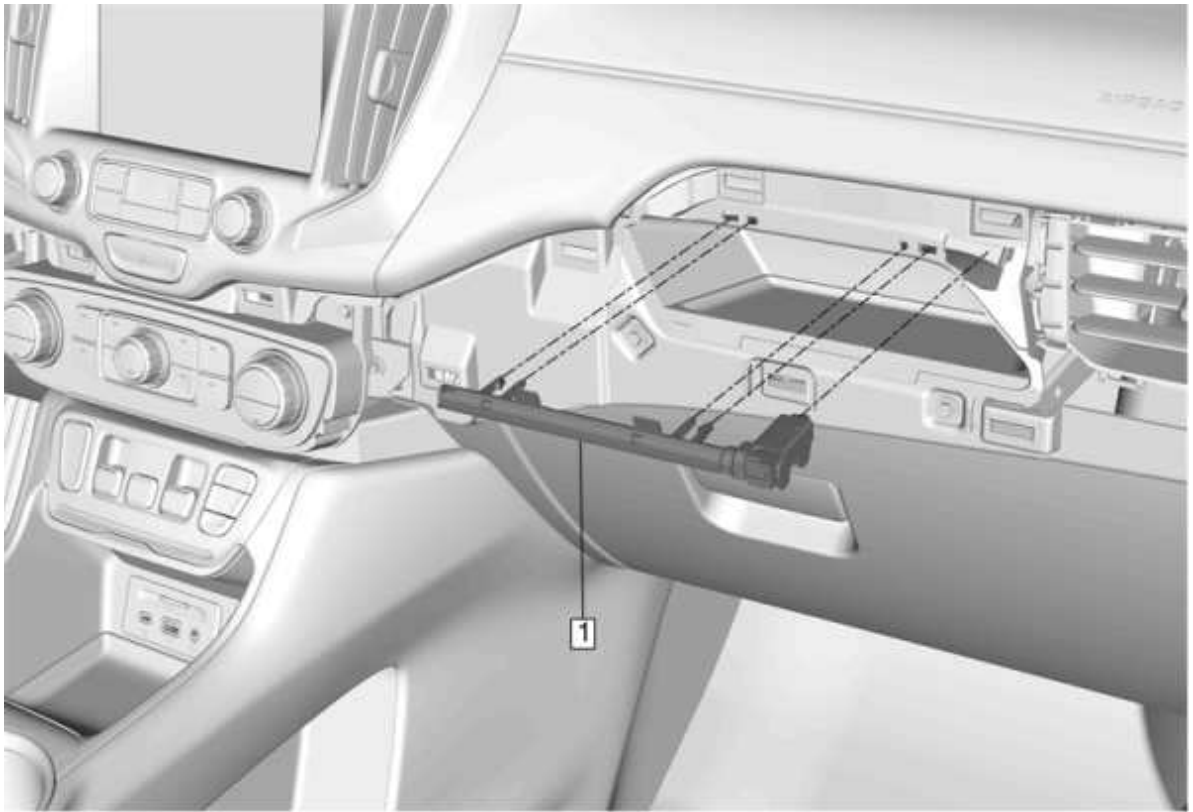


Fig. 939: Instrument Panel Light Conductor Lamp
Courtesy of GENERAL MOTORS COMPANY

5. Install Instrument Panel Light Conductor Lamp (1) - [Instrument Panel Light Conductor Lamp Replacement \(GMC\)](#)

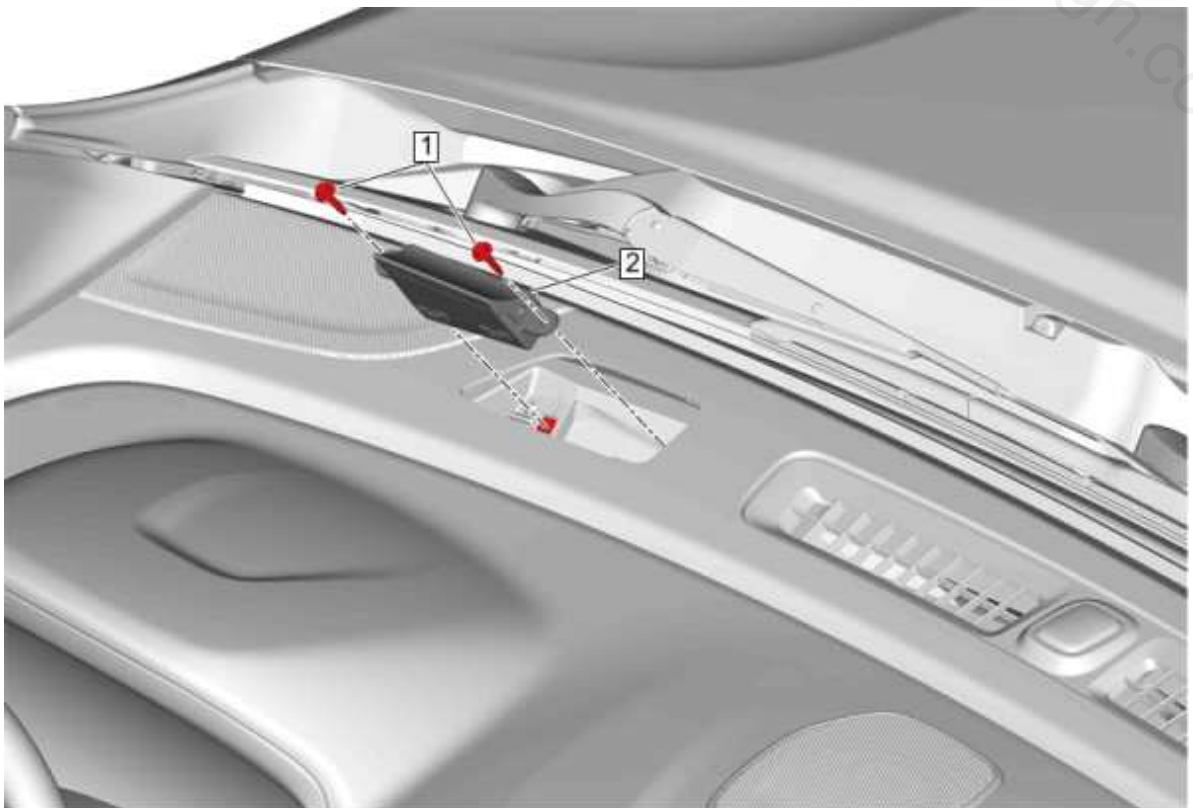


Fig. 940: Forward Collision Alert Display And Screws
Courtesy of GENERAL MOTORS COMPANY

6. Install Forward Collision Alert Display (1) - [Forward Collision Alert Display Replacement \(Terrain\)](#)



Fig. 941: Instrument Panel Extension
Courtesy of GENERAL MOTORS COMPANY

7. Install Instrument Panel Extension (1) - **Instrument Panel Extension Replacement (Terrain)**



Fig. 942: Instrument Panel Cluster Trim Plate
Courtesy of GENERAL MOTORS COMPANY

8. Install Instrument Panel Cluster Trim Plate (1) - **Instrument Panel Cluster Trim Plate Replacement (Terrain)**

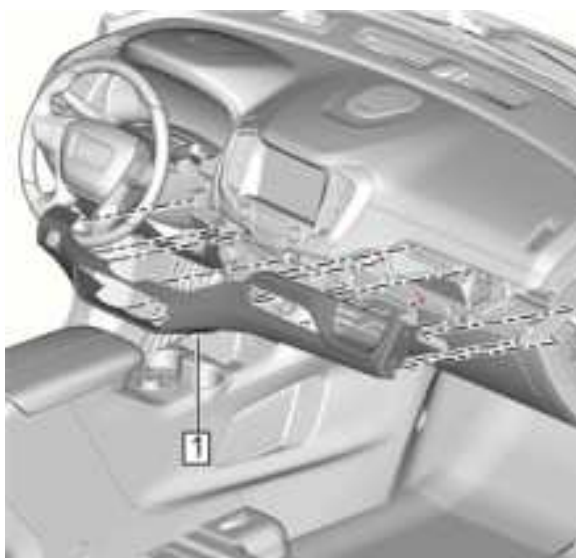


Fig. 943: Right Side Instrument Panel Trim Pad
Courtesy of GENERAL MOTORS COMPANY

9. Install Instrument Panel Trim Pad - Right Side (1) - [Instrument Panel Trim Pad Replacement - Right Side \(Terrain\)](#)



Fig. 944: Left Side Instrument Panel Trim Pad
Courtesy of GENERAL MOTORS COMPANY

10. Install Instrument Panel Trim Pad - Left Side (1) - [Instrument Panel Trim Pad Replacement - Left Side \(Terrain\)](#)

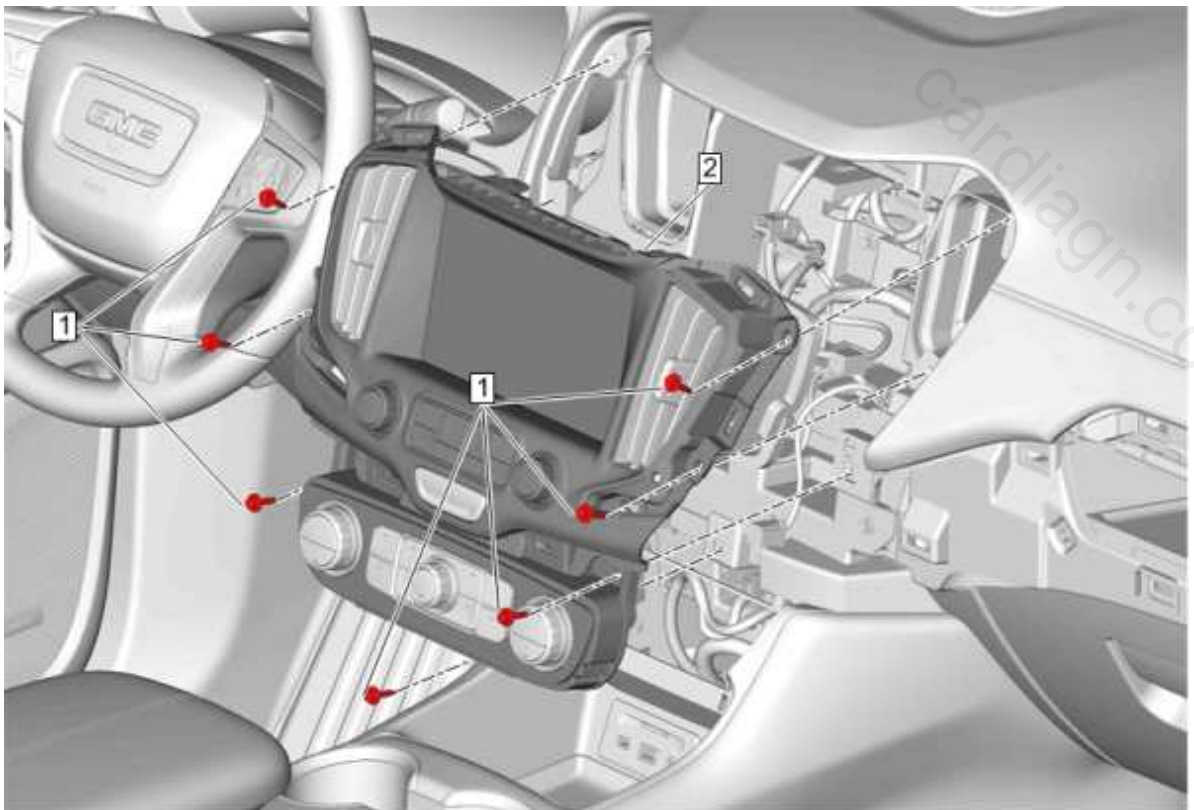


Fig. 945: Radio Control Assembly And Screws
Courtesy of GENERAL MOTORS COMPANY

11. Install Radio Control Assembly (2) - [Radio Control Assembly Replacement \(Terrain\)](#)

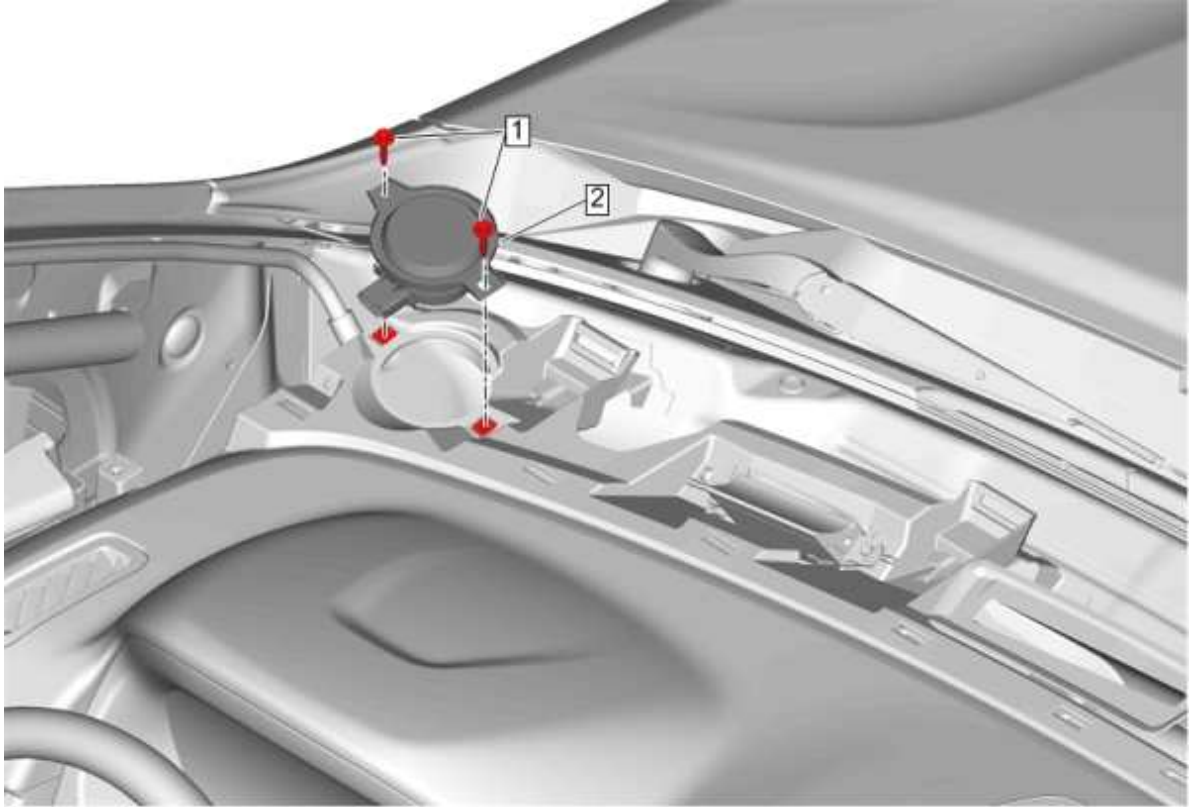


Fig. 946: Radio Front Speaker

Courtesy of GENERAL MOTORS COMPANY

12. Install the left and right radio front speaker (2). [Radio Front Speaker Replacement \(Terrain\)](#)



Fig. 947: Radio Front Center Speaker

Courtesy of GENERAL MOTORS COMPANY

13. Install Radio Front Center Speaker (2) - [Radio Front Center Speaker Replacement \(Terrain\)](#)

AIR DISTRIBUTOR CASE REPLACEMENT

Removal Procedure

1. Remove - [Heater and Air Conditioning Evaporator and Blower Module Removal and Installation \(Equinox LYX\)](#) Heater and Air Conditioning Evaporator and Blower Module Removal and Installation

(Equinox LTG)Heater and Air Conditioning Evaporator and Blower Module Removal and Installation
(Equinox LH7)Heater and Air Conditioning Evaporator and Blower Module Removal and Installation
(Terrain LH7)Heater and Air Conditioning Evaporator and Blower Module Removal and Installation
(Terrain LTG)Heater and Air Conditioning Evaporator and Blower Module Removal and Installation
(Terrain LYX With KL9)Heater and Air Conditioning Evaporator and Blower Module Removal and Installation
(Terrain LYX)Heater and Air Conditioning Evaporator and Blower Module Removal and Installation
(Equinox LYX With KL9)

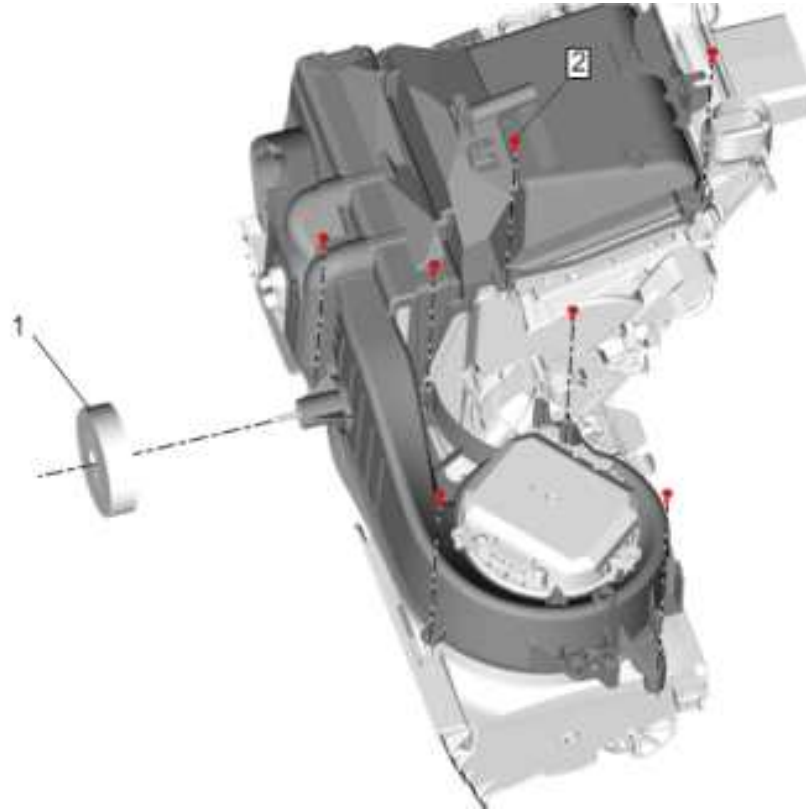


Fig. 948: Heater and Air Conditioning Evaporator and Blower Module Seal
Courtesy of GENERAL MOTORS COMPANY

2. Remove Heater and Air Conditioning Evaporator and Blower Module Seal (1)
3. Remove Air Conditioning Evaporator Case Bolt (2)

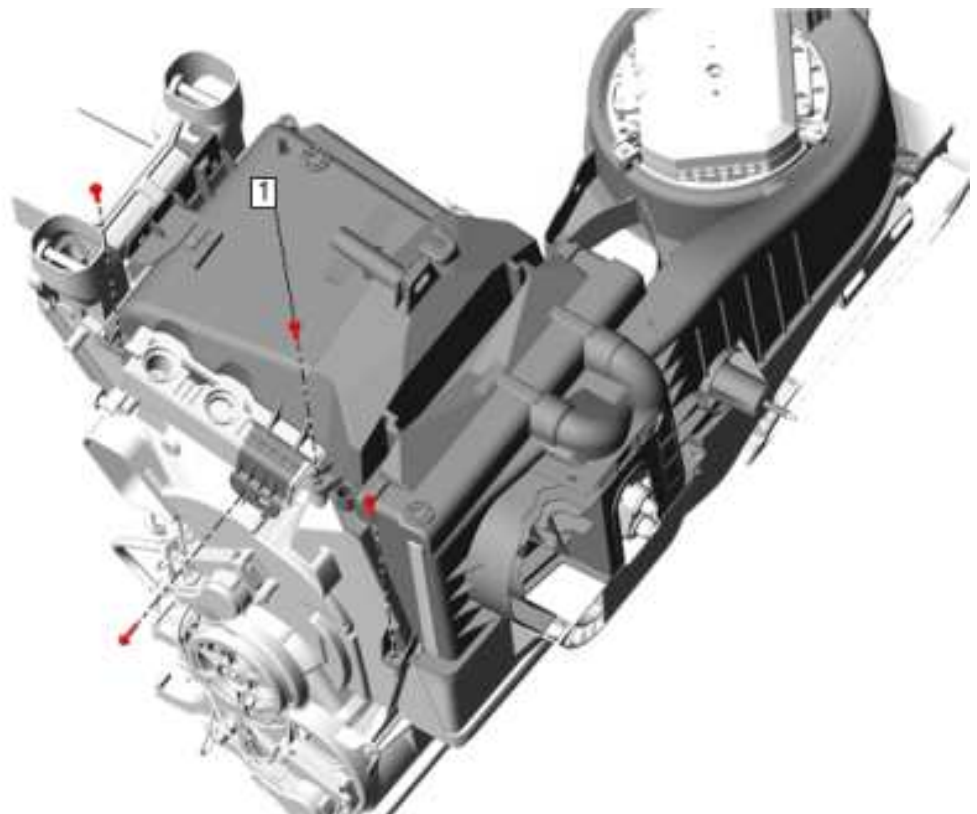


Fig. 949: Air Conditioning Evaporator Case Bolt
Courtesy of GENERAL MOTORS COMPANY

4. Remove Air Conditioning Evaporator Case Bolt (1) [4]

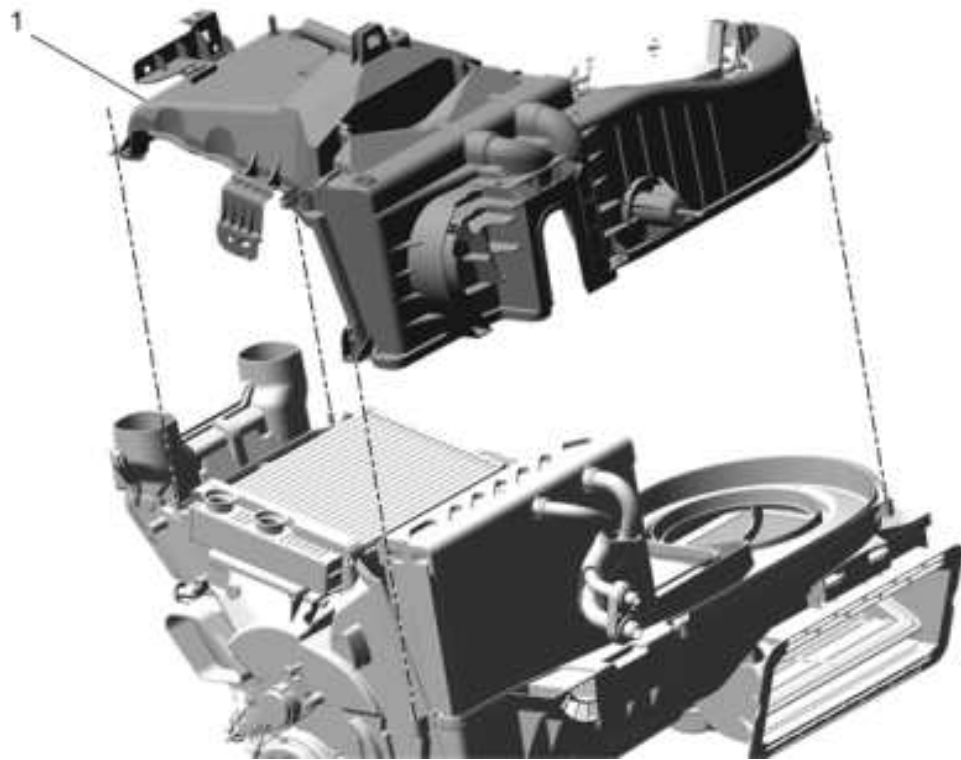


Fig. 950: Air Conditioning Evaporator Lower Case Assembly
Courtesy of GENERAL MOTORS COMPANY

5. Remove Air Conditioning Evaporator Lower Case Assembly (1)

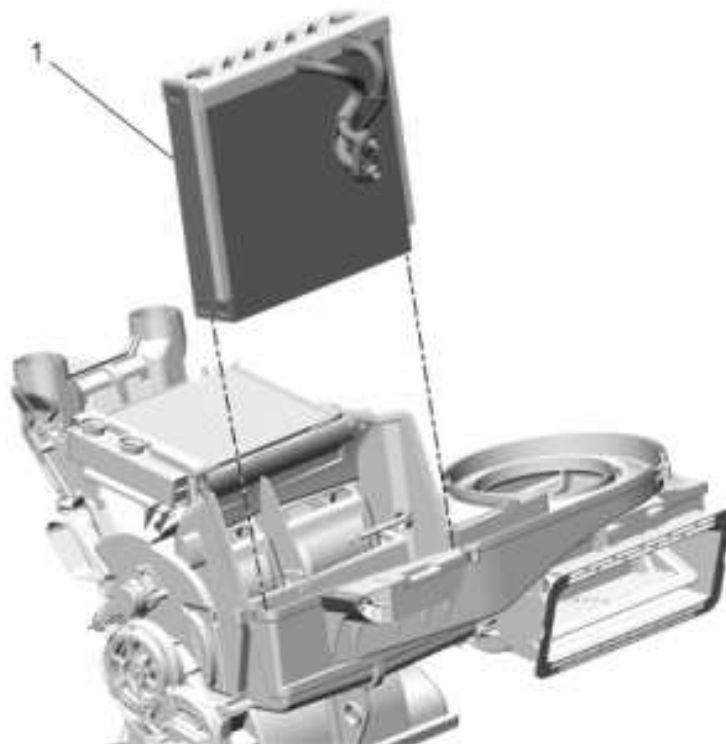


Fig. 951: Air Conditioning Evaporator
Courtesy of GENERAL MOTORS COMPANY

6. Remove Air Conditioning Evaporator (1)



Fig. 952: Air Conditioning Evaporator Upper Case Assembly
Courtesy of GENERAL MOTORS COMPANY

7. Remove Air Conditioning Evaporator Upper Case Assembly (1)

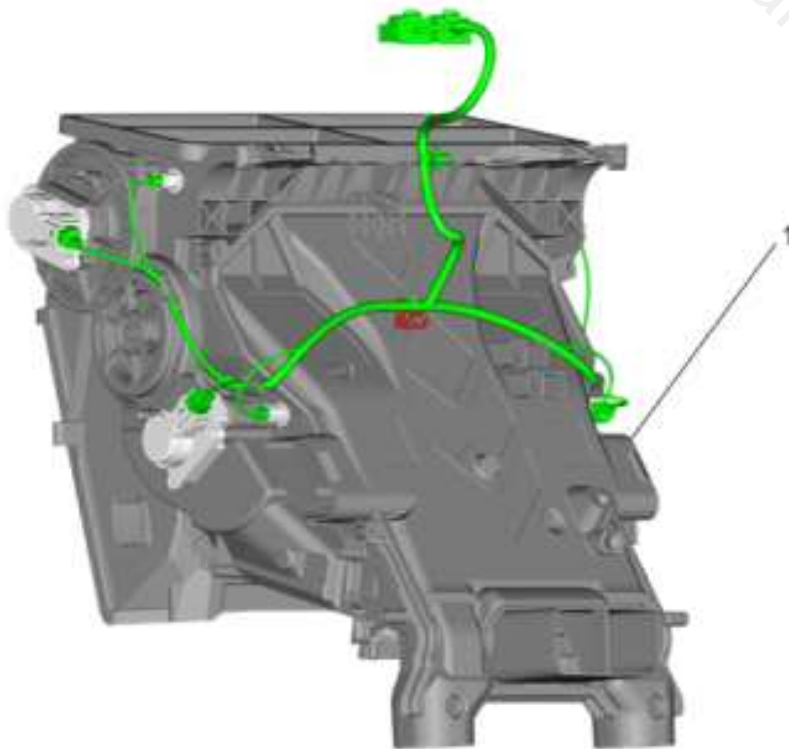


Fig. 953: Air Distributor Case
Courtesy of GENERAL MOTORS COMPANY

8. Transfer all components as necessary from the air distributor case (1).

Installation Procedure



Fig. 954: Air Conditioning Evaporator Upper Case Assembly
Courtesy of GENERAL MOTORS COMPANY

1. Air Conditioning Evaporator Upper Case Assembly (1)

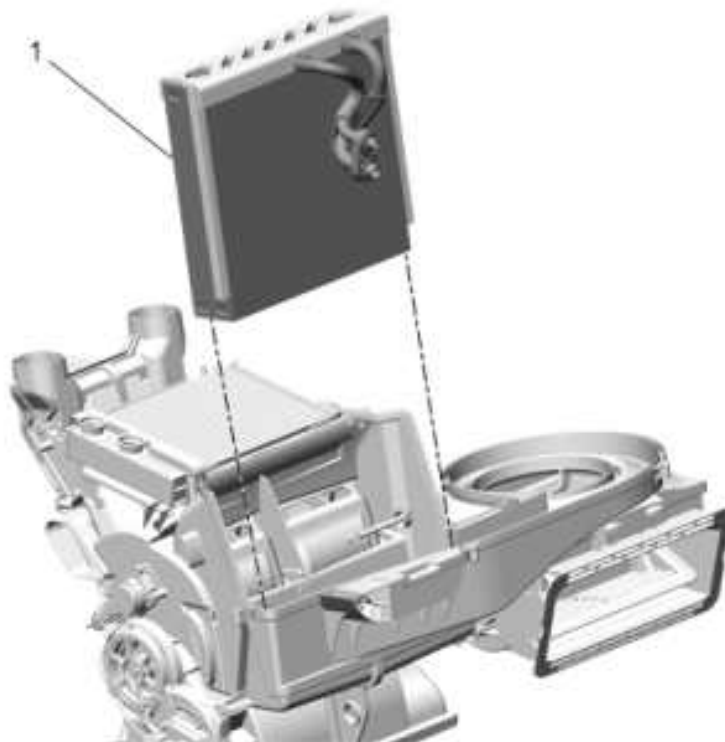


Fig. 955: Air Conditioning Evaporator
Courtesy of GENERAL MOTORS COMPANY

2. Air Conditioning Evaporator (1)

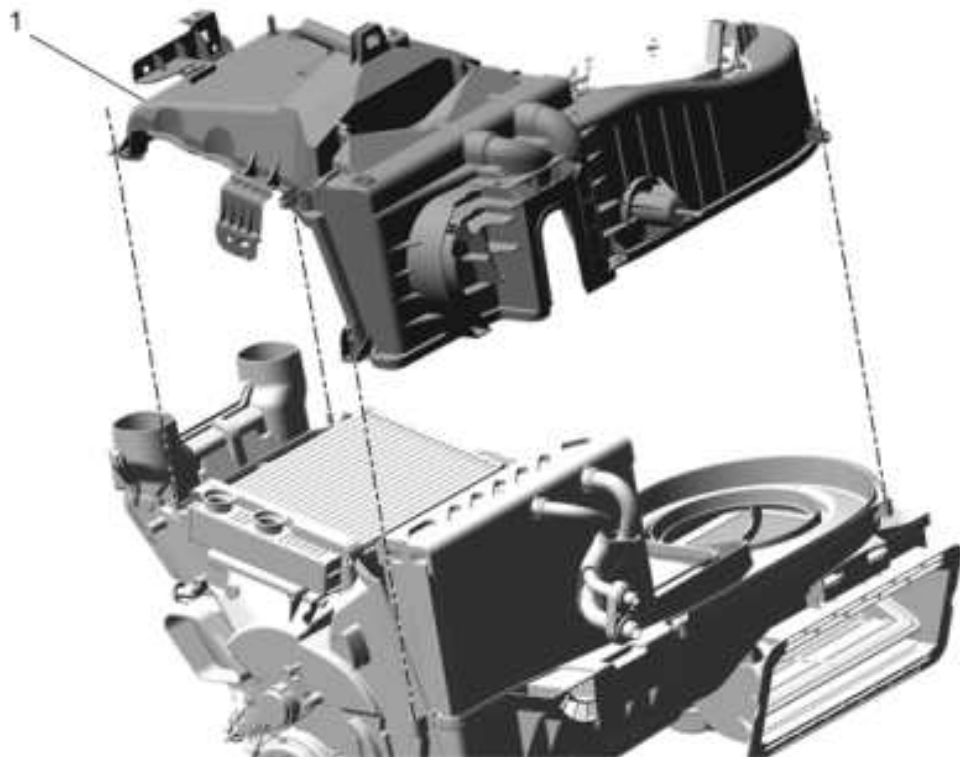


Fig. 956: Air Conditioning Evaporator Lower Case Assembly
Courtesy of GENERAL MOTORS COMPANY

3. Air Conditioning Evaporator Lower Case Assembly (1)

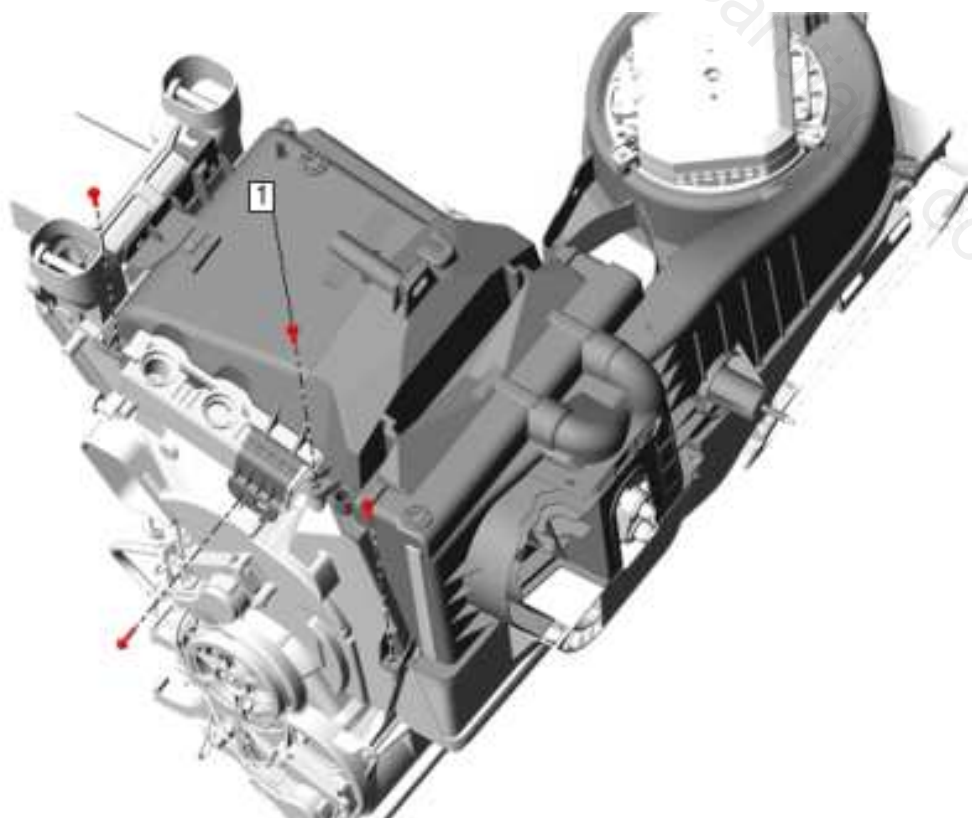


Fig. 957: Air Conditioning Evaporator Case Bolt
Courtesy of GENERAL MOTORS COMPANY

CAUTION: Refer to **Fastener Caution** .

4. Install Air Conditioning Evaporator Case Bolt (1) [4x] 2.5 N.m (22 lb in)

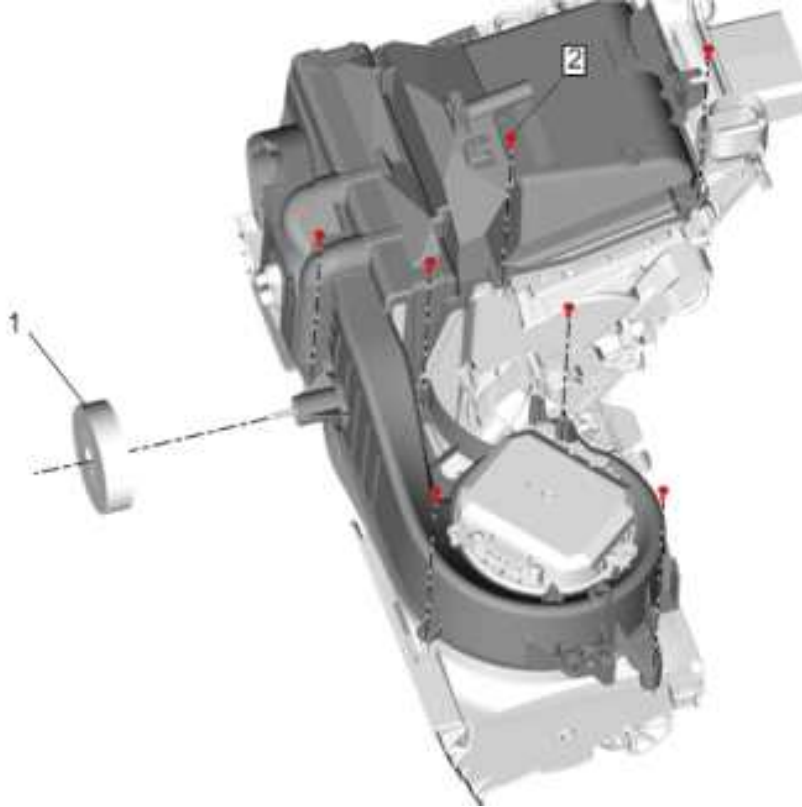


Fig. 958: Heater and Air Conditioning Evaporator and Blower Module Seal
Courtesy of GENERAL MOTORS COMPANY

5. Install Air Conditioning Evaporator Case Bolt (2) [7] 2.5 N.m (22 lb in)
6. Install Heater and Air Conditioning Evaporator and Blower Module Seal (1)
7. Install **Heater and Air Conditioning Evaporator and Blower Module Removal and Installation (Equinox LYX) Heater and Air Conditioning Evaporator and Blower Module Removal and Installation (Equinox LTG) Heater and Air Conditioning Evaporator and Blower Module Removal and Installation (Equinox LH7) Heater and Air Conditioning Evaporator and Blower Module Removal and Installation (Terrain LH7) Heater and Air Conditioning Evaporator and Blower Module Removal and Installation (Terrain LTG) Heater and Air Conditioning Evaporator and Blower Module Removal and Installation (Terrain LYX With KL9) Heater and Air Conditioning Evaporator and Blower Module Removal and Installation (Terrain LYX) Heater and Air Conditioning Evaporator and Blower Module Removal and Installation (Equinox LYX With KL9)**

INSTRUMENT PANEL OUTER AIR OUTLET REPLACEMENT - LEFT SIDE (EQUINOX)

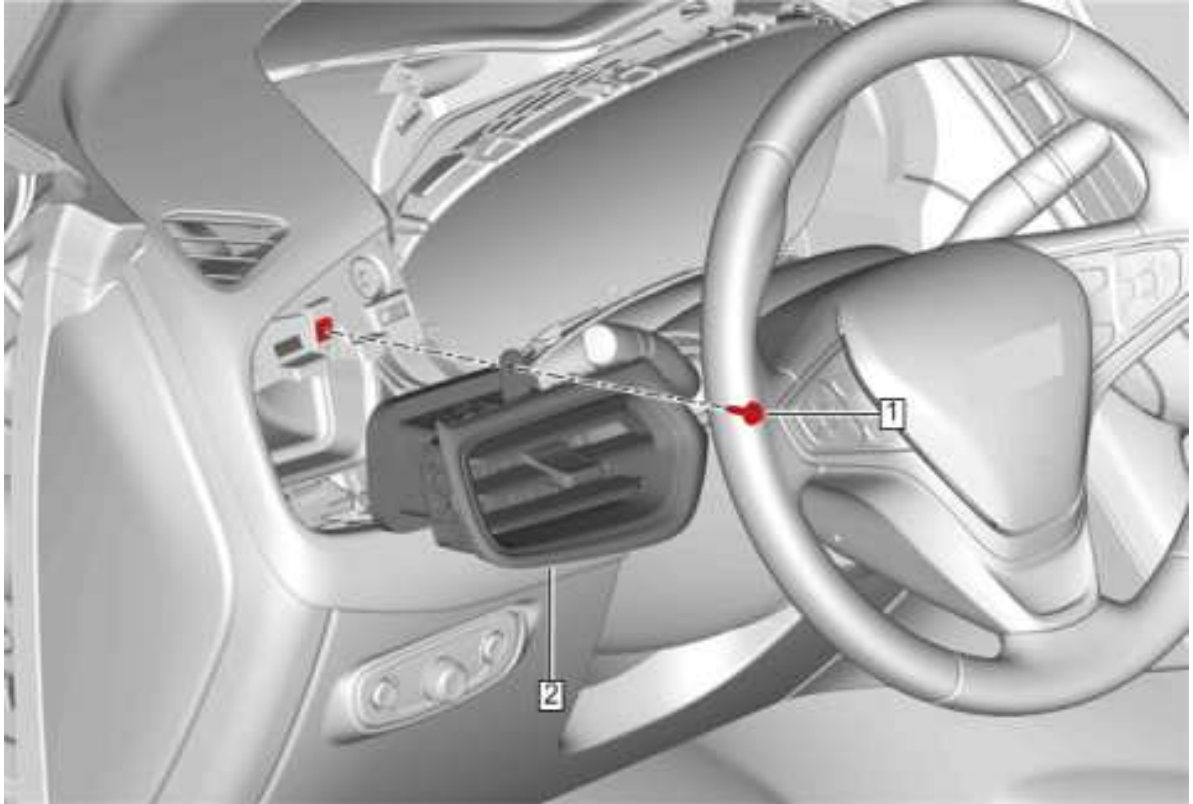


Fig. 959: Left Side Instrument Panel Outer Air Outlet And Screw
Courtesy of GENERAL MOTORS COMPANY

Callout	Component Name
Preliminary Procedure <u>Instrument Panel Trim Pad Replacement - Left Side (Equinox)</u> <u>Instrument Panel Cluster Trim Plate Replacement (Equinox)</u>	
1	Instrument Panel Outer Air Outlet Bolt CAUTION: Refer to <u>Fastener Caution</u> . Tighten 2.5 N.m (22 lb in)
2	Instrument Panel Outer Air Outlet - Left Side Procedure Use a flat bladed plastic trim tool.

INSTRUMENT PANEL OUTER AIR OUTLET REPLACEMENT - LEFT SIDE (TERRAIN)

Removal Procedure

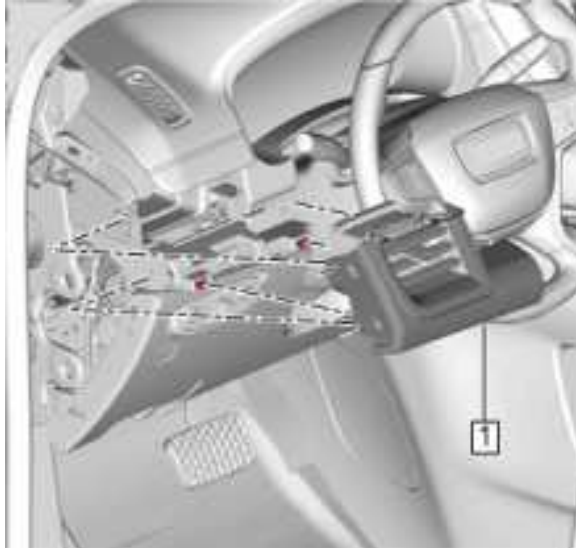


Fig. 960: Left Side Instrument Panel Trim Pad
Courtesy of GENERAL MOTORS COMPANY

1. Remove Instrument Panel Trim Pad - Left Side (1) - **Instrument Panel Trim Pad Replacement - Left Side (Terrain)**

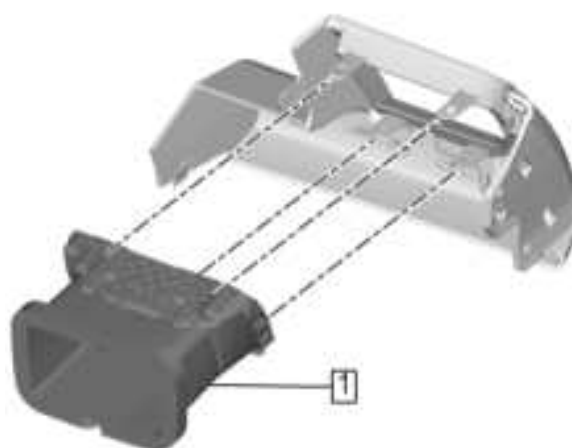


Fig. 961: Instrument Panel Outer Air Outlet - Left Side
Courtesy of GENERAL MOTORS COMPANY

2. Release the plastic retaining tabs.
3. Remove Instrument Panel Outer Air Outlet - Left Side (1)

Installation Procedure

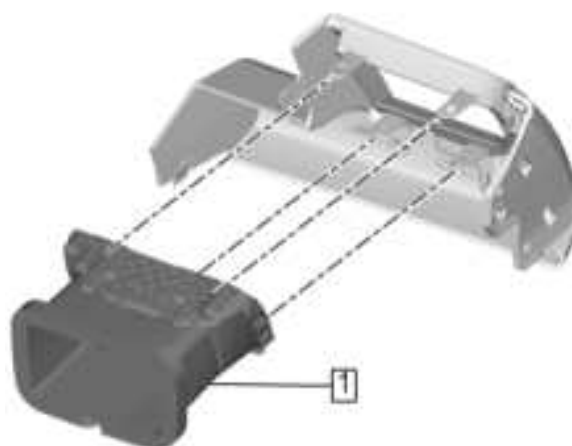


Fig. 962: Instrument Panel Outer Air Outlet - Left Side
Courtesy of GENERAL MOTORS COMPANY

1. Install Instrument Panel Outer Air Outlet - Left Side (1)



Fig. 963: Left Side Instrument Panel Trim Pad
Courtesy of GENERAL MOTORS COMPANY

2. Install Instrument Panel Trim Pad - Left Side (1) - [Instrument Panel Trim Pad Replacement - Left Side \(Terrain\)](#)

INSTRUMENT PANEL CENTER AIR OUTLET REPLACEMENT - LEFT SIDE (EQUINOX)

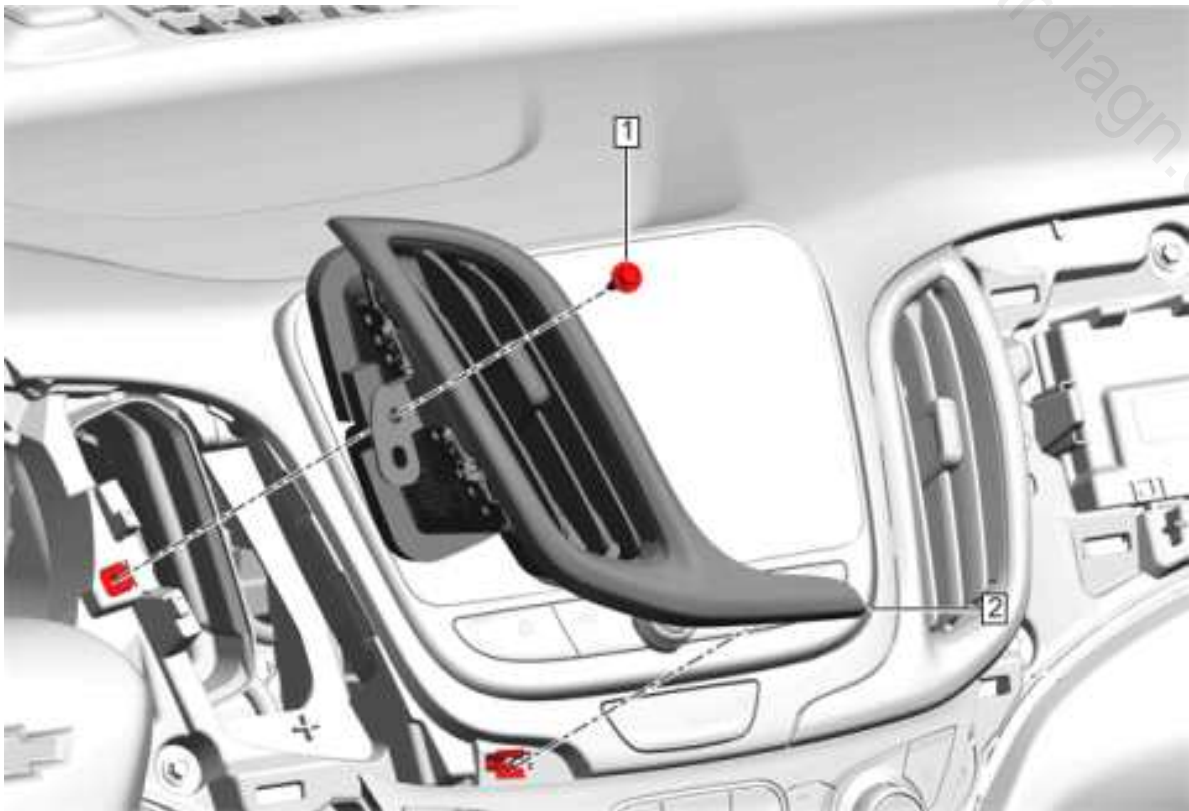


Fig. 964: Left Side Instrument Panel Center Air Outlet And Screw
Courtesy of GENERAL MOTORS COMPANY

Callout	Component Name
Preliminary Procedure	
<u>Instrument Panel Trim Pad Replacement - Right Side (Equinox)</u>	

Callout	Component Name
1	Instrument Panel Center Air Outlet Bolt CAUTION: Refer to Fastener Caution . Tighten 2.5 N.m (22 lb in)
2	Instrument Panel Center Air Outlet - Left Side Procedure Use a flat bladed plastic trim tool.

INSTRUMENT PANEL CENTER AIR OUTLET REPLACEMENT - LEFT SIDE (TERRAIN)

Removal Procedure

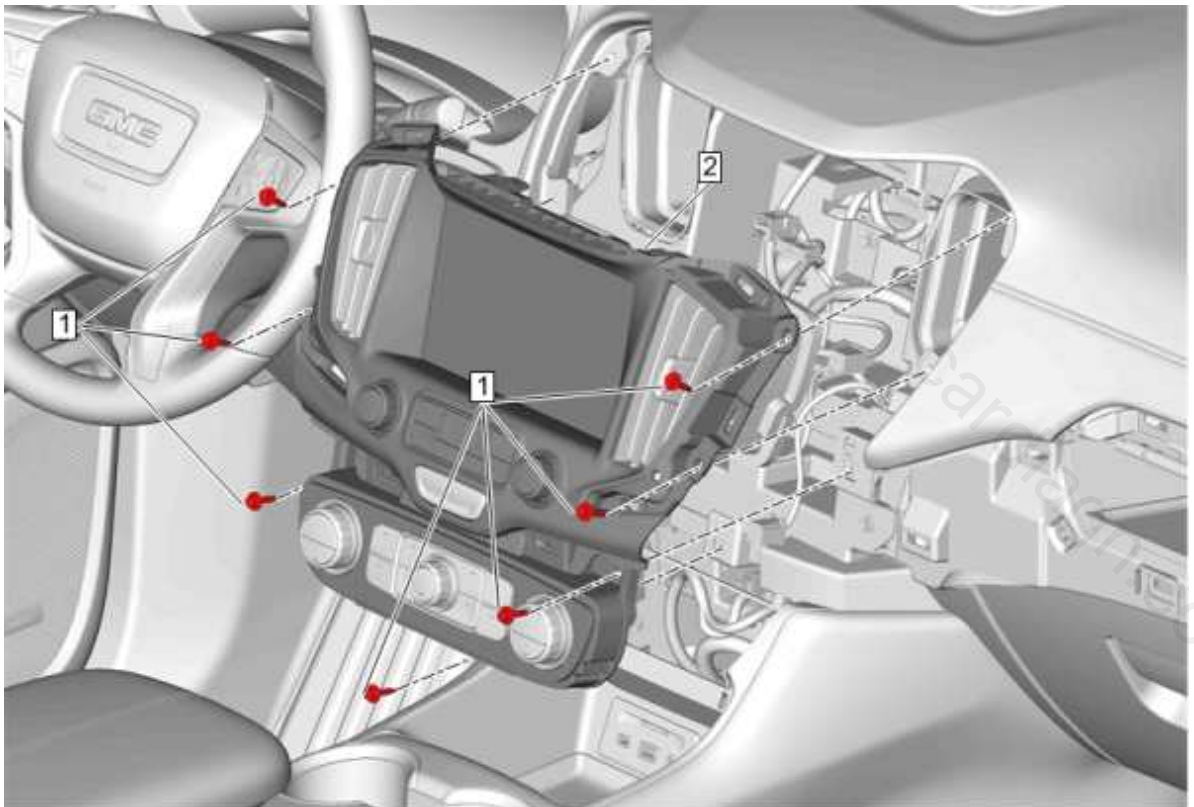


Fig. 965: Radio Control Assembly And Screws
Courtesy of GENERAL MOTORS COMPANY

1. Remove Radio Control Assembly (2) - [Radio Control Assembly Replacement \(Terrain\)](#)

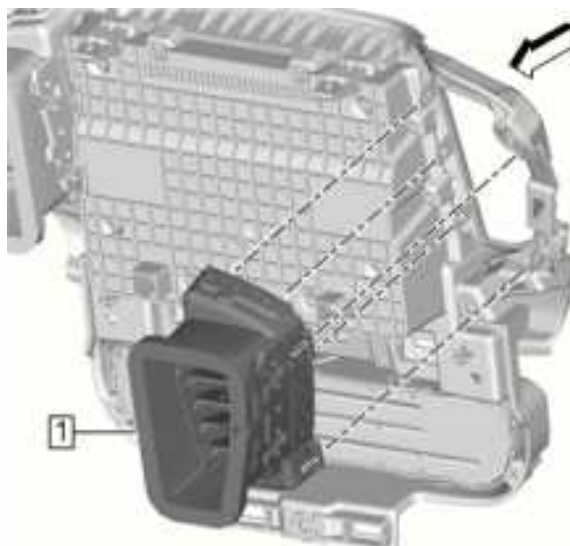


Fig. 966: Instrument Panel Center Air Outlet - Left Side
Courtesy of GENERAL MOTORS COMPANY

2. Release the plastic retaining tabs.
3. Remove Instrument Panel Center Air Outlet - Left Side (1)

Installation Procedure

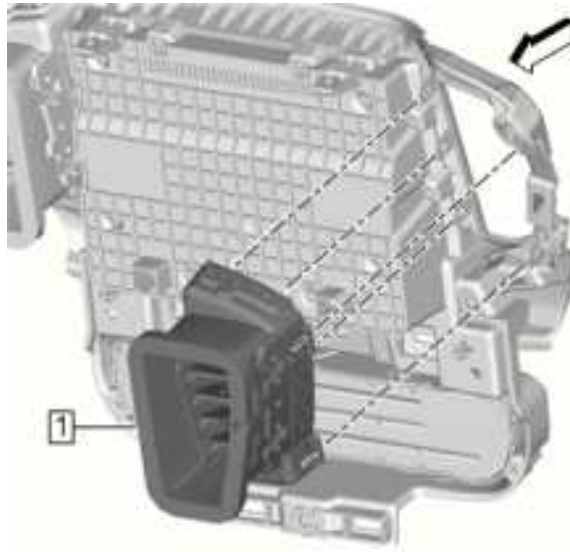


Fig. 967: Instrument Panel Center Air Outlet - Left Side
Courtesy of GENERAL MOTORS COMPANY

1. Install Instrument Panel Center Air Outlet - Left Side (1)

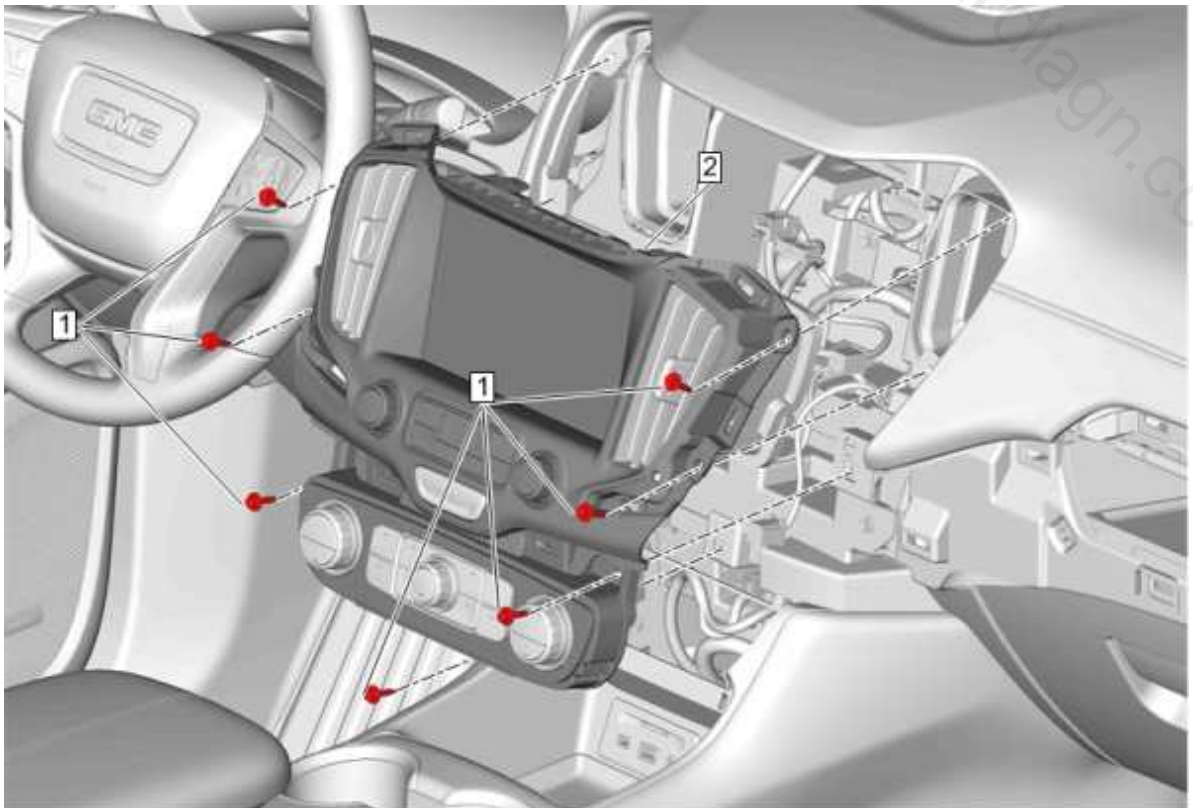


Fig. 968: Radio Control Assembly And Screws
Courtesy of GENERAL MOTORS COMPANY

2. Install Radio Control Assembly (2) - **Radio Control Assembly Replacement (Terrain)**

INSTRUMENT PANEL CENTER AIR OUTLET REPLACEMENT - RIGHT SIDE (EQUINOX)



Fig. 969: Right Side Instrument Panel Center Air Outlet And Screw
 Courtesy of GENERAL MOTORS COMPANY

Callout	Component Name
Preliminary Procedure <u>Instrument Panel Trim Pad Replacement - Right Side (Equinox)</u>	
1	Instrument Panel Center Air Outlet Bolt CAUTION: Refer to <u>Fastener Caution</u> . Tighten 2.5 N.m (22 lb in)
2	Instrument Panel Center Air Outlet - Right Side Procedure Use a flat bladed plastic trim tool.

INSTRUMENT PANEL CENTER AIR OUTLET REPLACEMENT - RIGHT SIDE (TERRAIN)

Removal Procedure

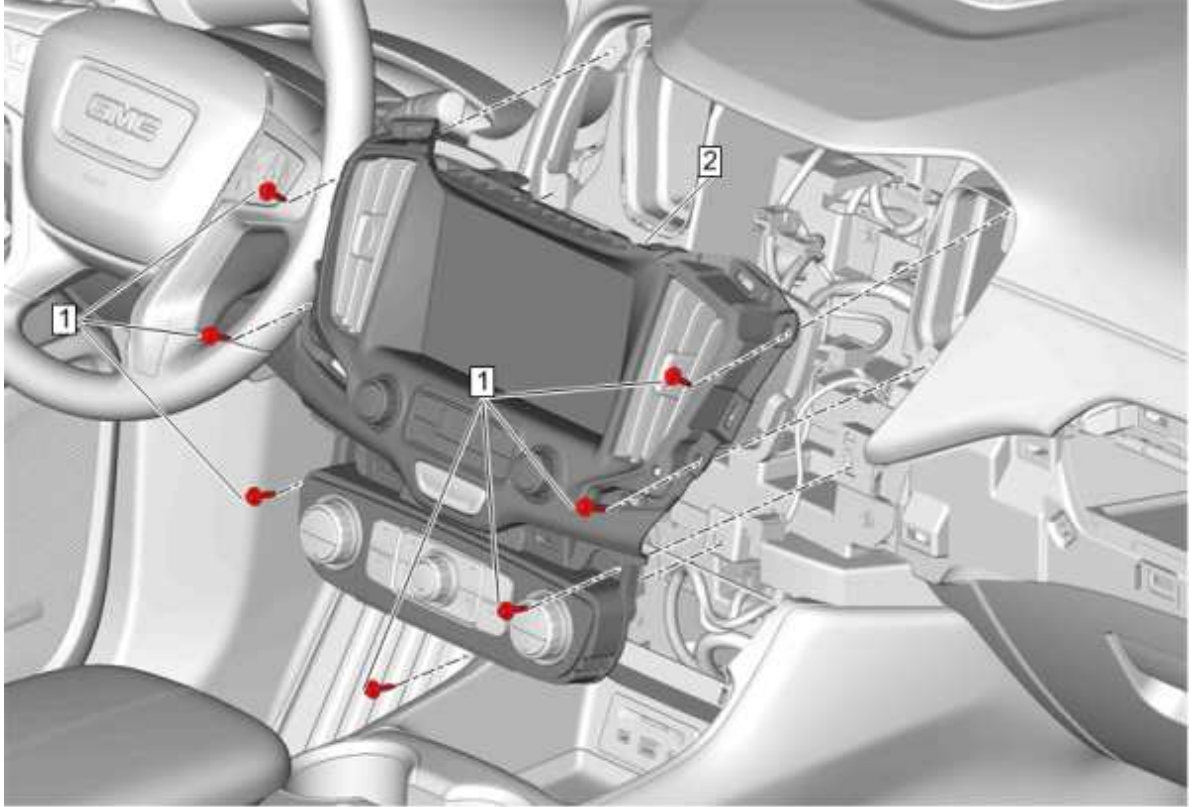


Fig. 970: Radio Control Assembly And Screws
Courtesy of GENERAL MOTORS COMPANY

1. Remove Radio Control Assembly (2) - **Radio Control Assembly Replacement (Terrain)**

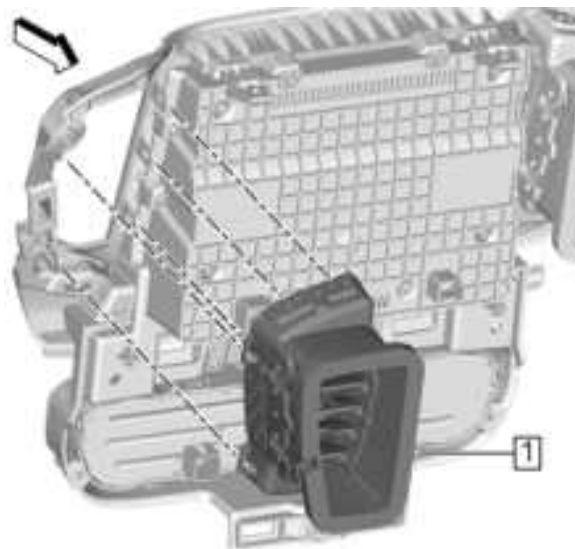


Fig. 971: Instrument Panel Center Air Outlet - Right Side
Courtesy of GENERAL MOTORS COMPANY

2. Release the plastic retaining tabs.
3. Remove Instrument Panel Center Air Outlet - Right Side (1)

Installation Procedure

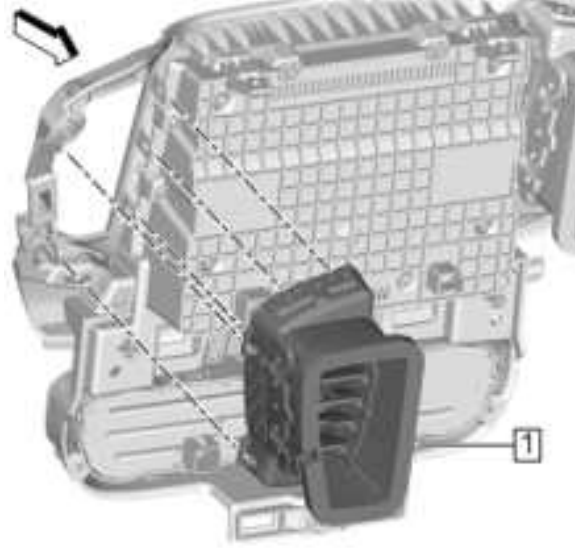


Fig. 972: Instrument Panel Center Air Outlet - Right Side
Courtesy of GENERAL MOTORS COMPANY

1. Install Instrument Panel Center Air Outlet - Right Side (1)

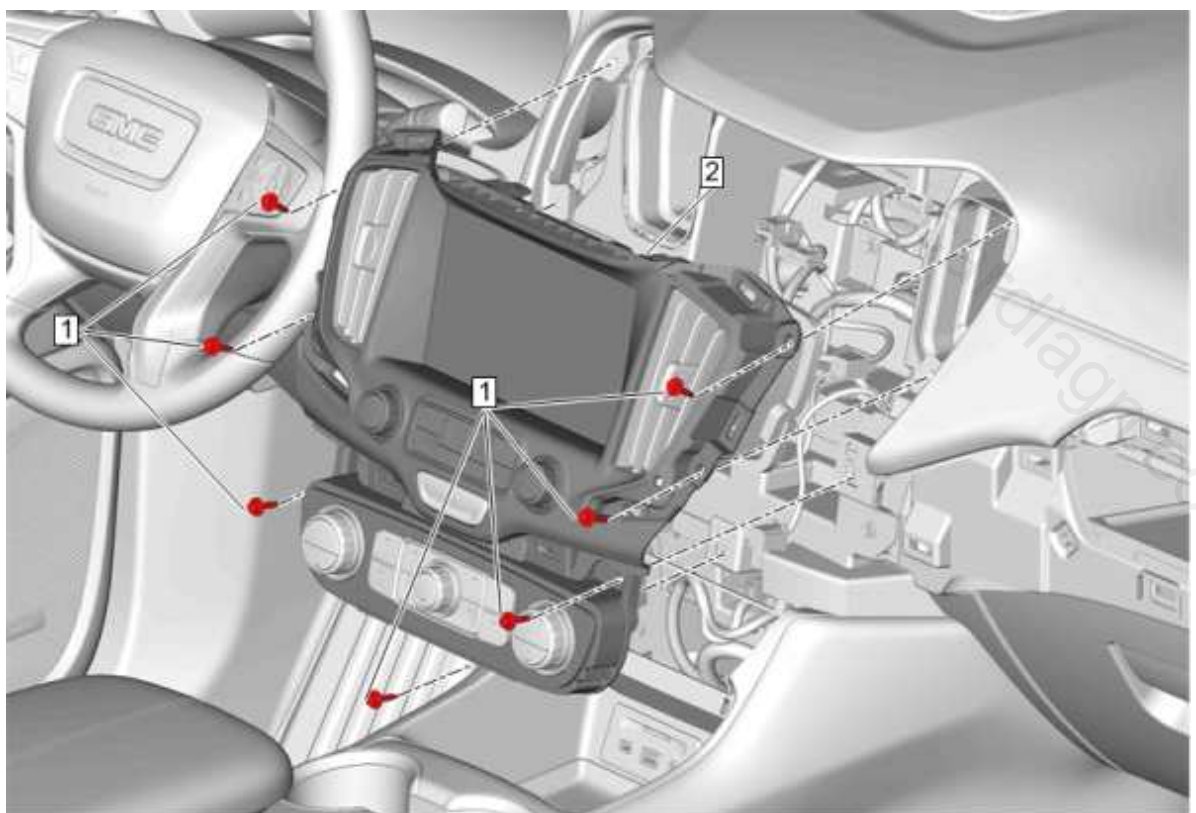


Fig. 973: Radio Control Assembly And Screws
Courtesy of GENERAL MOTORS COMPANY

2. Install Radio Control Assembly (2) - **Radio Control Assembly Replacement (Terrain)**

INSTRUMENT PANEL OUTER AIR OUTLET REPLACEMENT - RIGHT SIDE (EQUINOX)



Fig. 974: Right Side Instrument Panel Outer Air Outlet And Screw
 Courtesy of GENERAL MOTORS COMPANY

Callout	Component Name
Preliminary Procedure <u>Instrument Panel Trim Pad Replacement - Right Side (Equinox)</u>	
1	Instrument Panel Outer Air Outlet Bolt CAUTION: Refer to <u>Fastener Caution</u> . Tighten 2.5 N.m (22 lb in)
2	Instrument Panel Outer Air Outlet - Right Side Procedure Use a flat bladed plastic trim tool.

INSTRUMENT PANEL OUTER AIR OUTLET REPLACEMENT - RIGHT SIDE (TERRAIN)

Removal Procedure

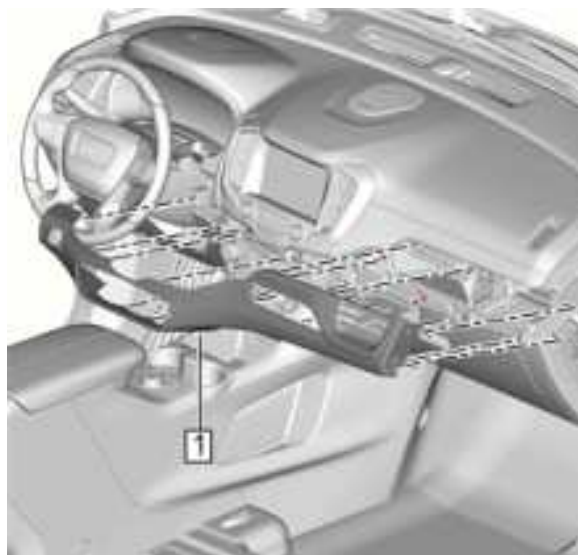


Fig. 975: Right Side Instrument Panel Trim Pad
Courtesy of GENERAL MOTORS COMPANY

1. Remove Instrument Panel Trim Pad - Right Side (1) - **Instrument Panel Trim Pad Replacement - Right Side (Terrain)**

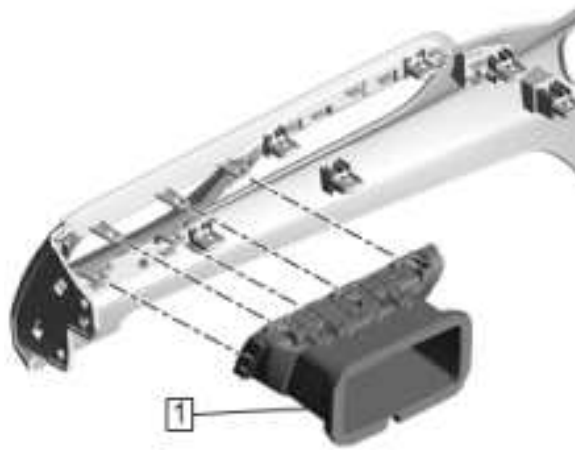


Fig. 976: Instrument Panel Outer Air Outlet - Right Side
Courtesy of GENERAL MOTORS COMPANY

2. Release the plastic retaining tabs.
3. Remove Instrument Panel Outer Air Outlet - Right Side (1)

Installation Procedure

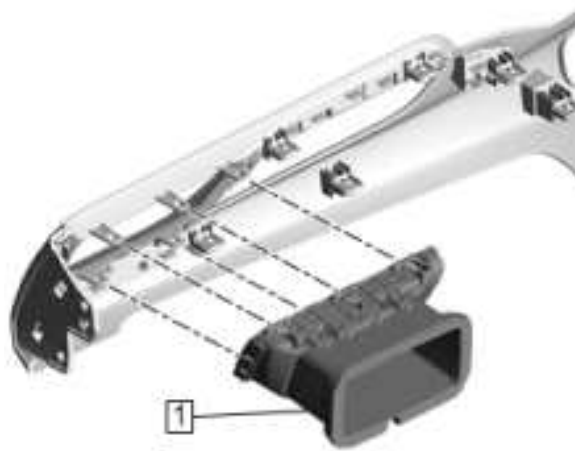


Fig. 977: Instrument Panel Outer Air Outlet - Right Side
Courtesy of GENERAL MOTORS COMPANY

1. Install Instrument Panel Outer Air Outlet - Right Side (1)

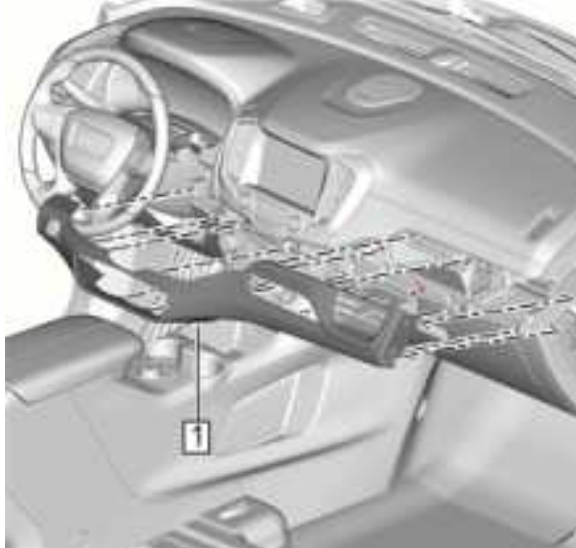


Fig. 978: Right Side Instrument Panel Trim Pad
Courtesy of GENERAL MOTORS COMPANY

2. Install Instrument Panel Trim Pad - Right Side (1) - [Instrument Panel Trim Pad Replacement - Right Side \(Terrain\)](#)

INSTRUMENT PANEL COMPARTMENT AIR DUCT REPLACEMENT (EQUINOX)

Removal Procedure



Fig. 979: Instrument Panel Knee Bolster
Courtesy of GENERAL MOTORS COMPANY

1. Remove Instrument Panel Knee Bolster (1) - [Instrument Panel Knee Bolster Replacement \(Equinox\)](#)

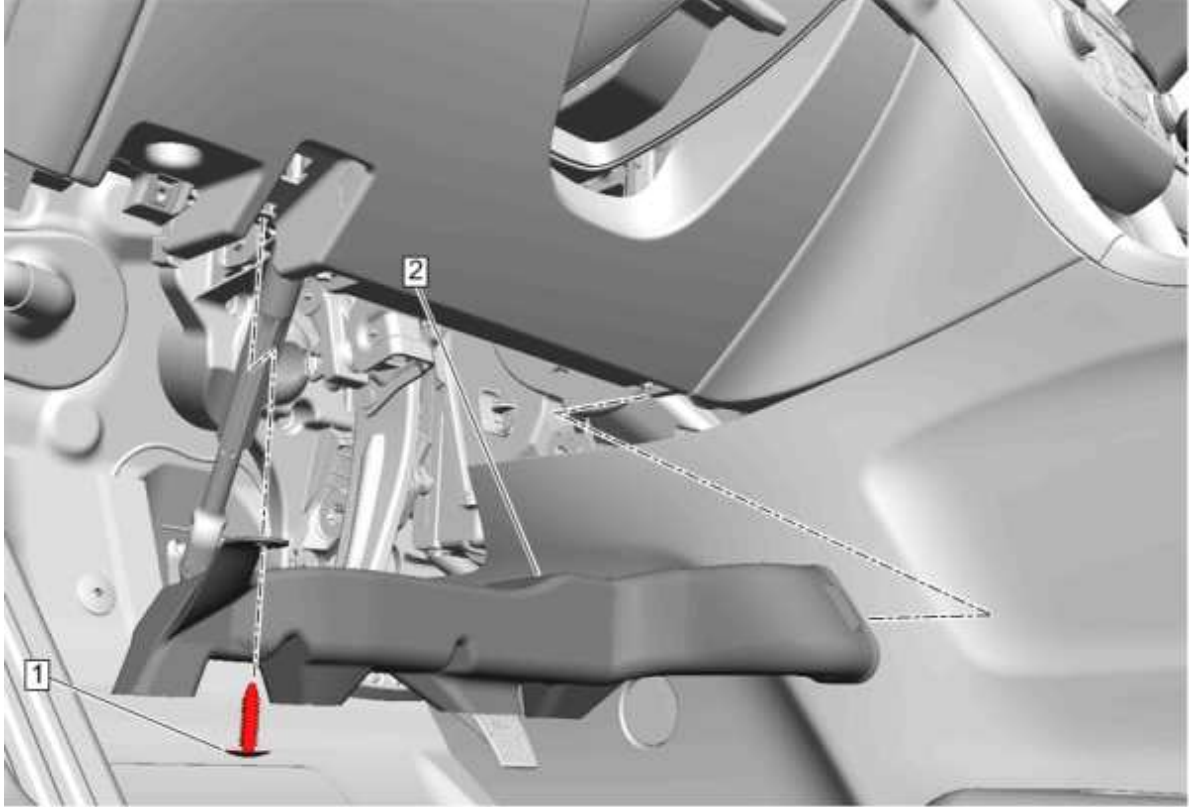


Fig. 980: Floor Front Air Outlet Duct
Courtesy of GENERAL MOTORS COMPANY

2. Remove Floor Front Air Outlet Duct - Left Side (2) - **Floor Front Air Outlet Duct Replacement - Left Side**



Fig. 981: Left Front Floor Console Extension Panel
Courtesy of GENERAL MOTORS COMPANY

3. Remove Front Floor Console Extension Panel (1) - **Front Floor Console Extension Panel Replacement - Left Side (Equinox)**

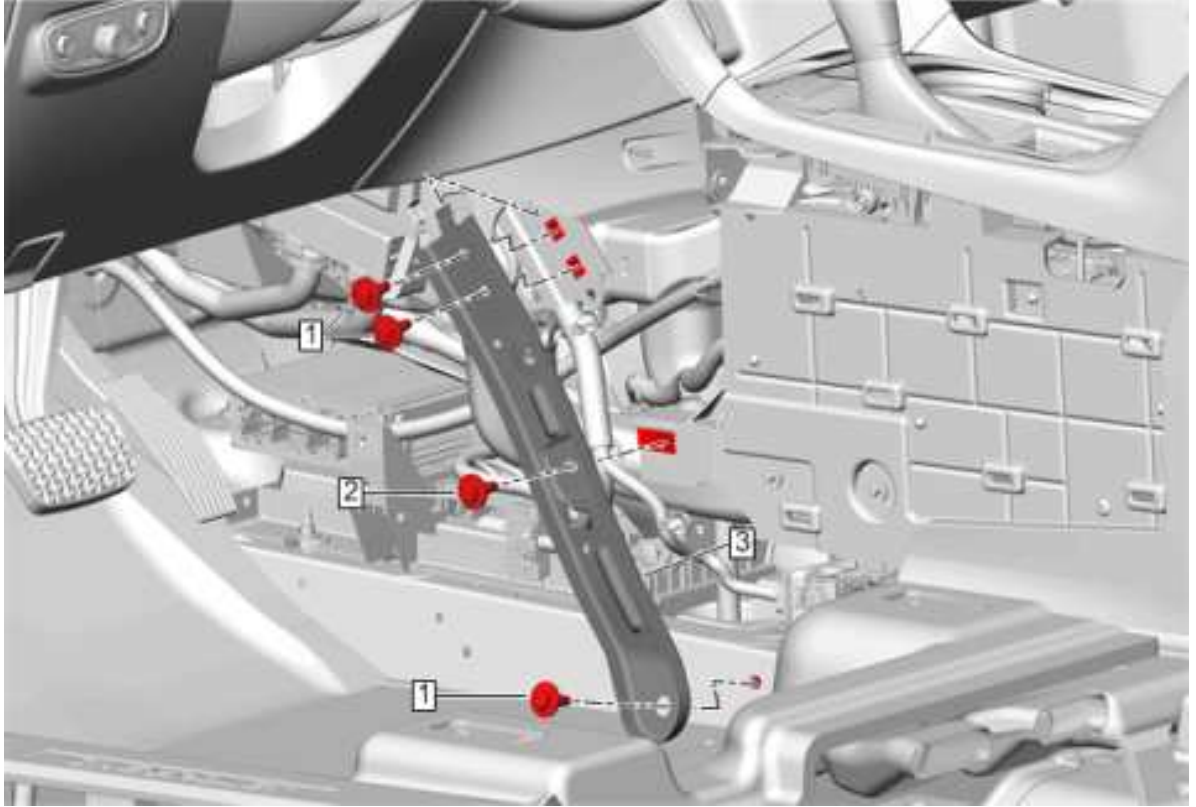


Fig. 982: Left Instrument Panel Center Lower Bracket
 Courtesy of GENERAL MOTORS COMPANY

4. Remove Instrument Panel Center Lower Bracket (3) - **Instrument Panel Center Lower Bracket Replacement (Equinox - Left Side) Instrument Panel Center Lower Bracket Replacement (Equinox - Right Side)**

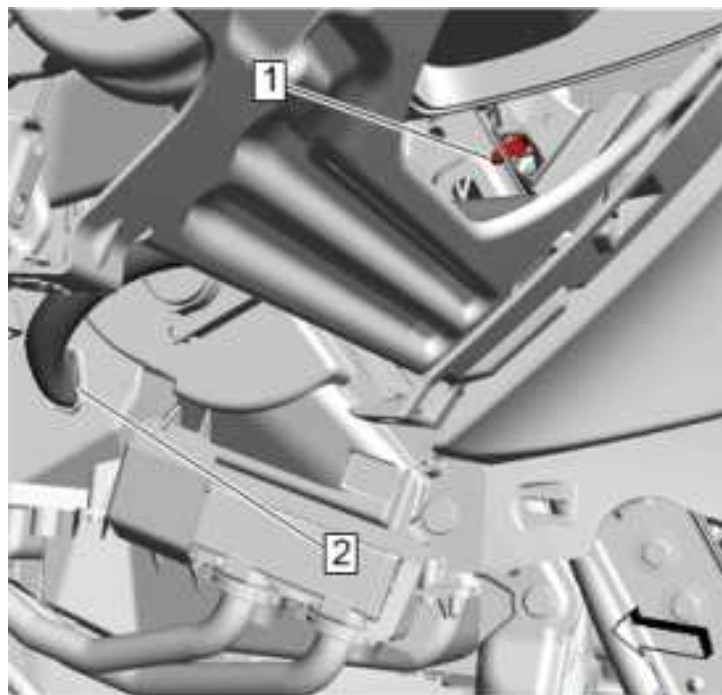


Fig. 983: Instrument Panel Compartment Air Duct And Retainer
 Courtesy of GENERAL MOTORS COMPANY

5. Remove Retainer (1)
6. Remove Instrument Panel Compartment Air Duct (2) @Heater and Air Conditioning Evaporator and Blower Module

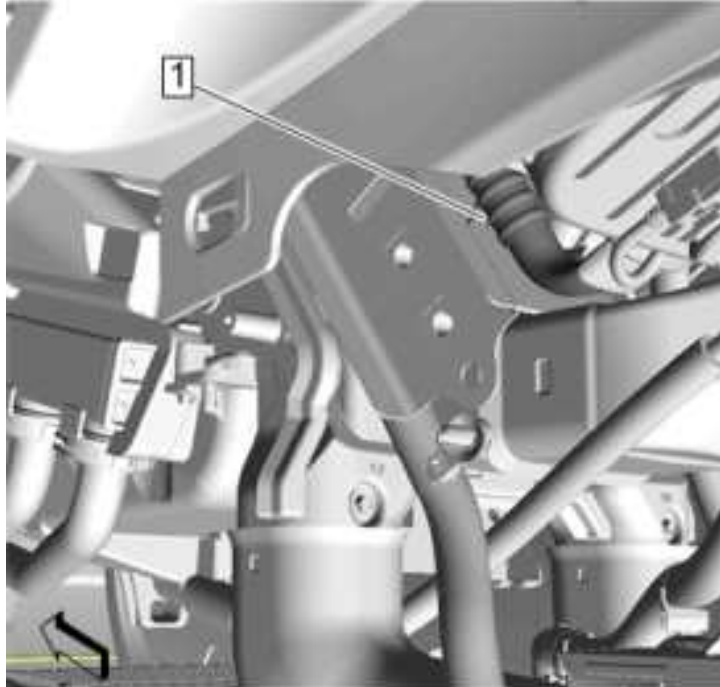


Fig. 984: Instrument Panel Compartment Air Duct
Courtesy of GENERAL MOTORS COMPANY

7. Remove Instrument Panel Compartment Air Duct (1) @Instrument Panel Stowage Tray

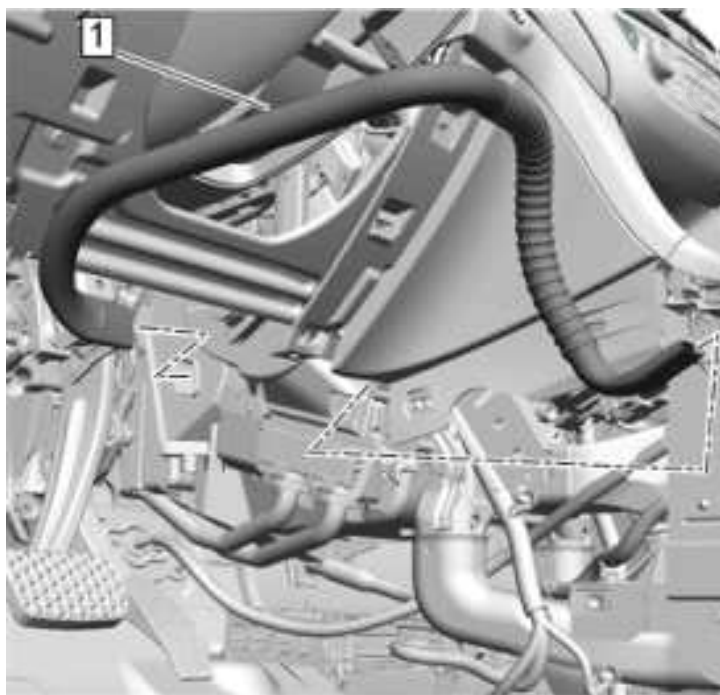


Fig. 985: Instrument Panel Compartment Air Duct
Courtesy of GENERAL MOTORS COMPANY

8. Remove Instrument Panel Compartment Air Duct (1)

Installation Procedure

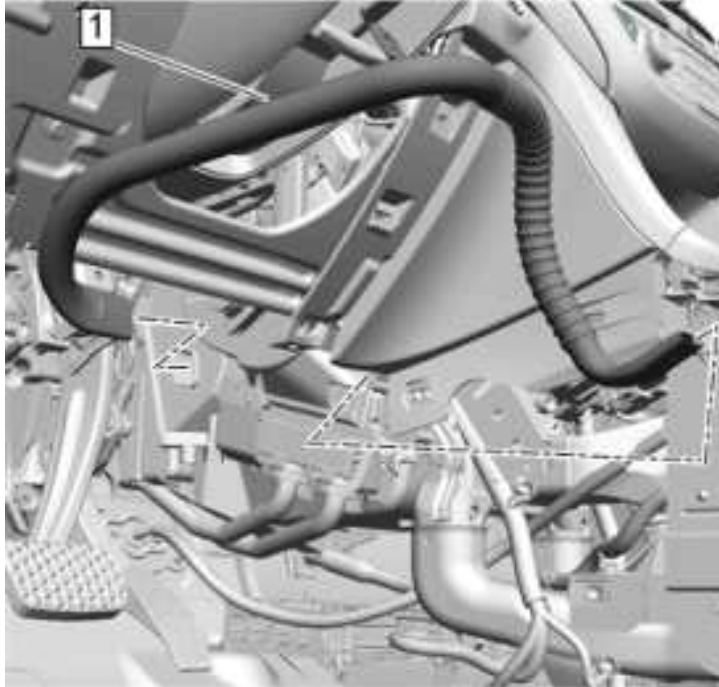


Fig. 986: Instrument Panel Compartment Air Duct
Courtesy of GENERAL MOTORS COMPANY

1. Install Instrument Panel Compartment Air Duct (1)

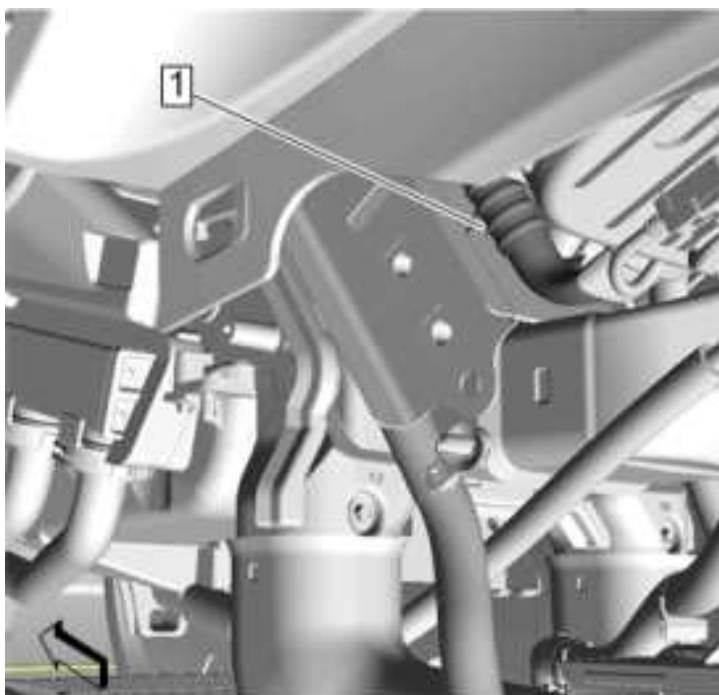


Fig. 987: Instrument Panel Compartment Air Duct
Courtesy of GENERAL MOTORS COMPANY

2. Install Instrument Panel Compartment Air Duct (1) @Instrument Panel Stowage Tray

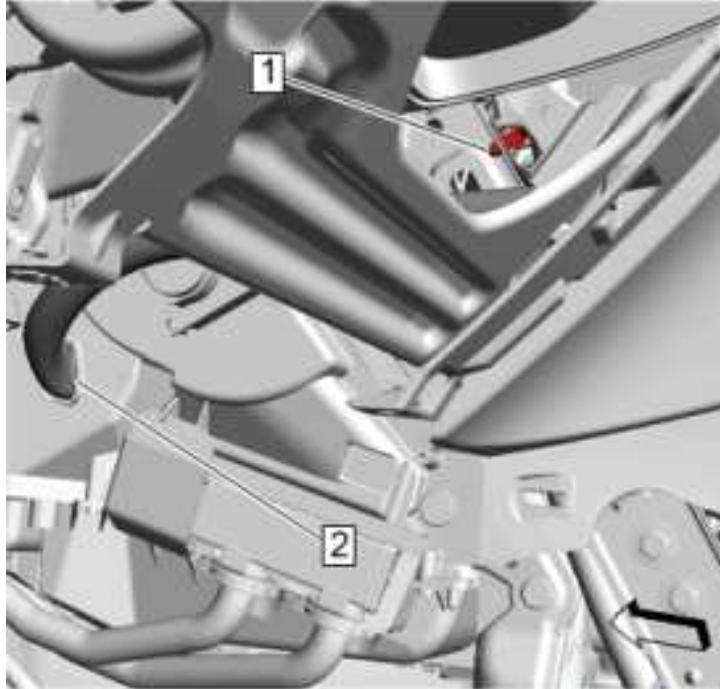


Fig. 988: Instrument Panel Compartment Air Duct And Retainer
 Courtesy of GENERAL MOTORS COMPANY

3. Install Instrument Panel Compartment Air Duct (2) @Heater and Air Conditioning Evaporator and Blower Module
4. Install Retainer (1)

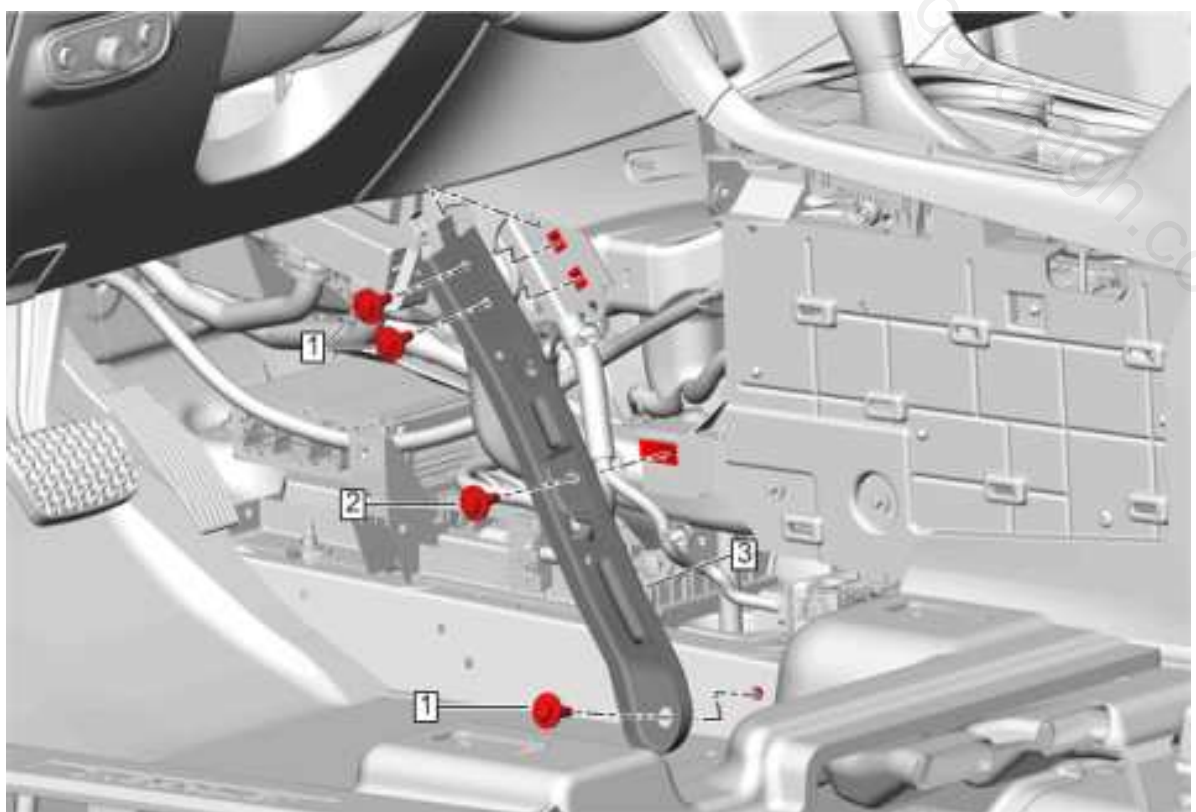


Fig. 989: Left Instrument Panel Center Lower Bracket
 Courtesy of GENERAL MOTORS COMPANY

5. Install Instrument Panel Center Lower Bracket (3) - **Instrument Panel Center Lower Bracket Replacement (Equinox - Left Side)** **Instrument Panel Center Lower Bracket Replacement (Equinox - Right Side)**



Fig. 990: Left Front Floor Console Extension Panel

Courtesy of GENERAL MOTORS COMPANY

6. Install Front Floor Console Extension Panel (1) - [**Front Floor Console Extension Panel Replacement - Left Side \(Equinox\)**](#)

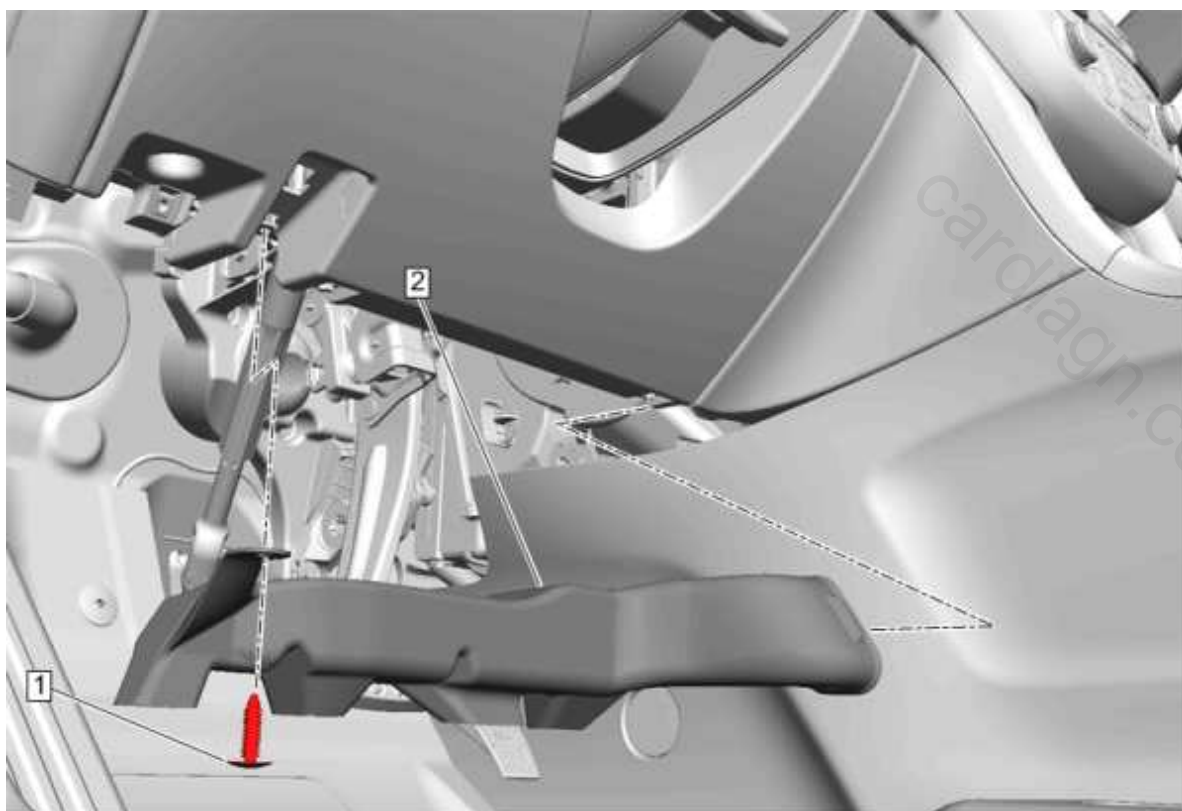


Fig. 991: Floor Front Air Outlet Duct

Courtesy of GENERAL MOTORS COMPANY

7. Install Floor Front Air Outlet Duct - Left Side (2) - [**Floor Front Air Outlet Duct Replacement - Left Side**](#)



Fig. 992: Instrument Panel Knee Bolster
Courtesy of GENERAL MOTORS COMPANY

8. Install Instrument Panel Knee Bolster (1) - **Instrument Panel Knee Bolster Replacement (Equinox)**

INSTRUMENT PANEL COMPARTMENT AIR DUCT REPLACEMENT (TERRAIN)

Removal Procedure

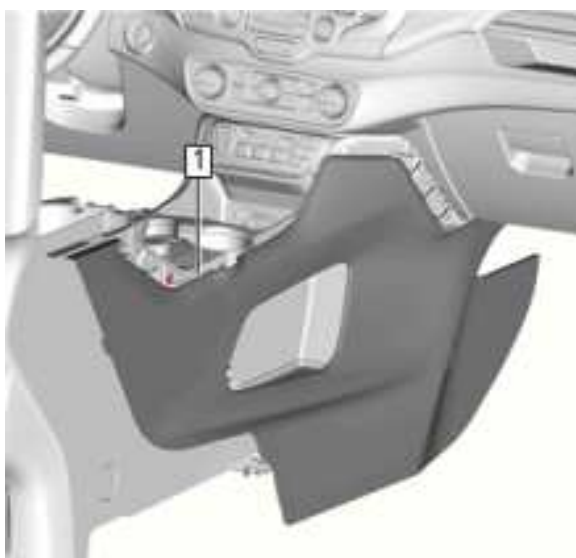


Fig. 993: Right Front Floor Console Extension Panel
Courtesy of GENERAL MOTORS COMPANY

1. Remove Front Floor Console Extension Panel - Right (1) - **Front Floor Console Extension Panel Replacement - Right Side (Terrain)**

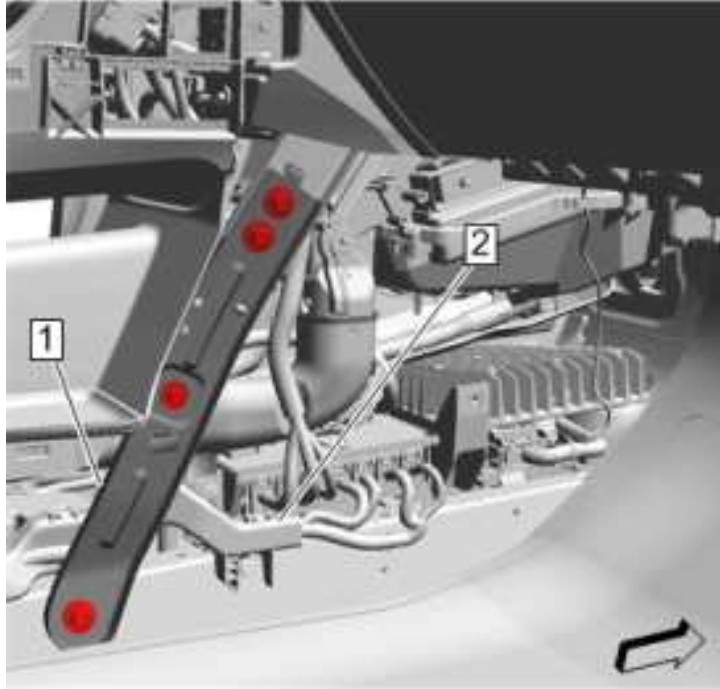


Fig. 994: Instrument Panel Center Lower Bracket
 Courtesy of GENERAL MOTORS COMPANY

2. Remove Instrument Panel Center Lower Bracket-Right Side (1) - **Instrument Panel Center Lower Bracket Replacement (Terrain - Left Side)** **Instrument Panel Center Lower Bracket Replacement (Terrain - Right Side)**
3. Unclip the wiring harness conduit (2) and position out of the way.

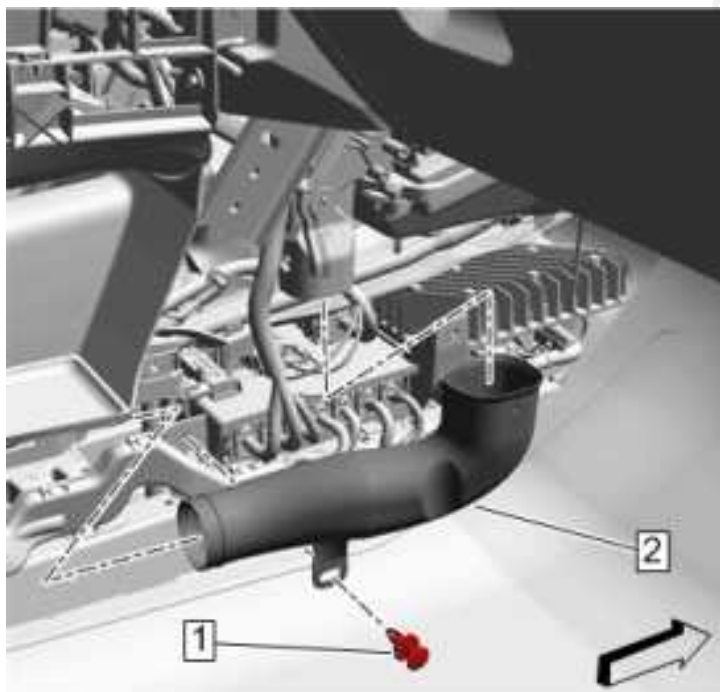


Fig. 995: Floor Rear Air Outlet Duct - Right Side
 Courtesy of GENERAL MOTORS COMPANY

4. Remove Push Pin (1)
5. Remove Floor Rear Air Outlet Duct - Right Side (2)

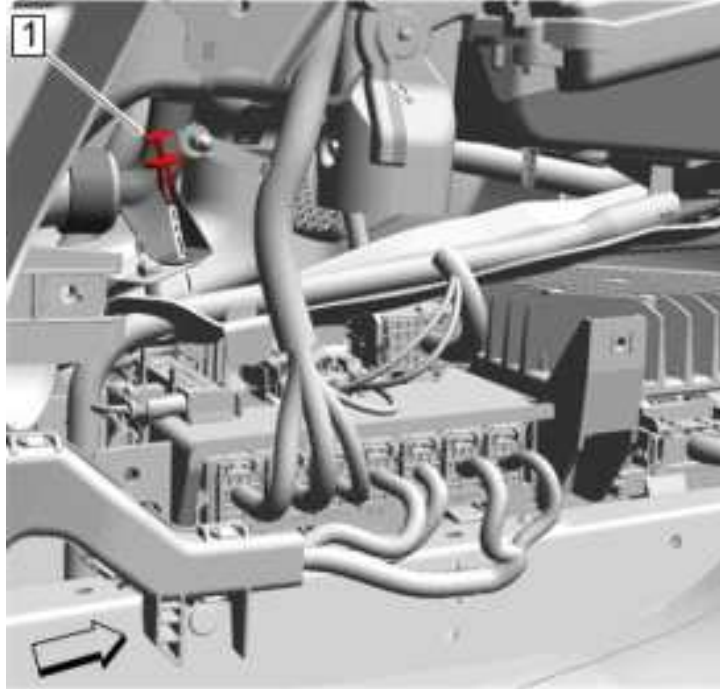


Fig. 996: Push Pin

Courtesy of GENERAL MOTORS COMPANY

6. Unclip the wiring harness and position out of the way.
7. Remove Push Pin (1)

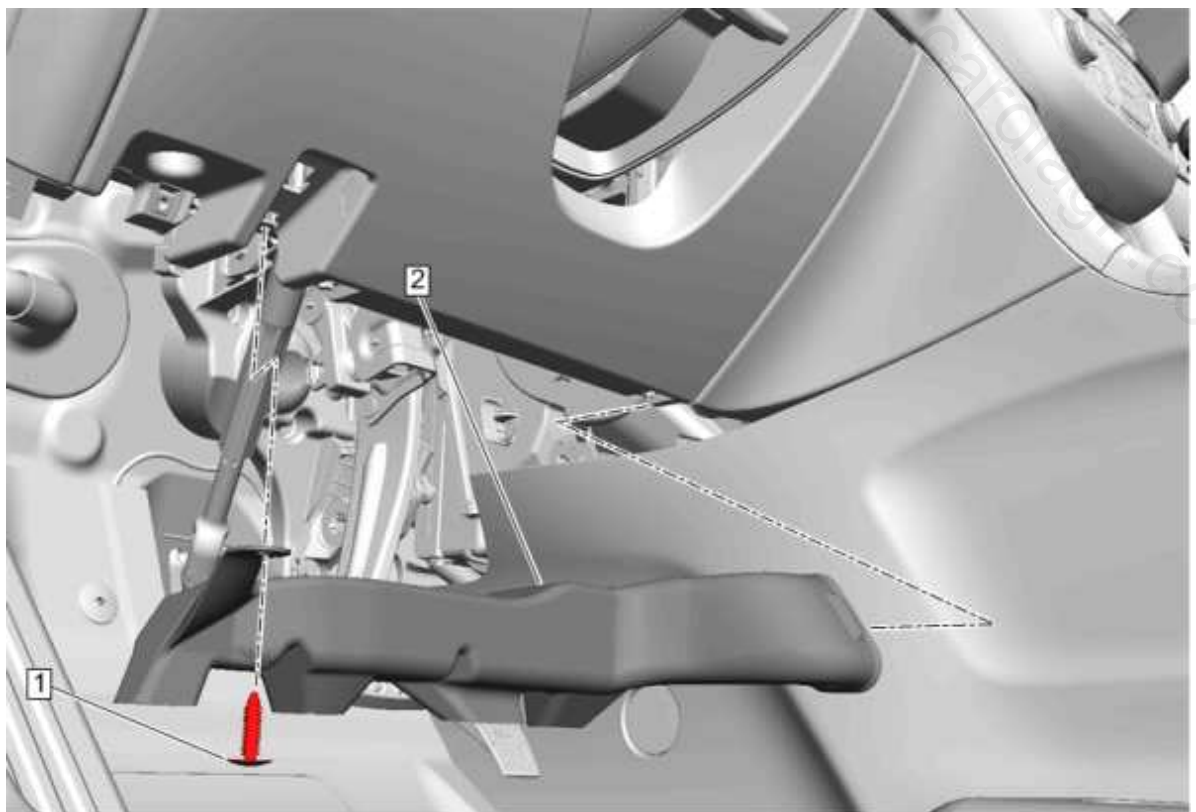


Fig. 997: Floor Front Air Outlet Duct

Courtesy of GENERAL MOTORS COMPANY

8. Remove Floor Front Air Outlet Duct - Left Side (2) - [Floor Front Air Outlet Duct Replacement - Left Side](#)



Fig. 998: Instrument Panel Knee Bolster
Courtesy of GENERAL MOTORS COMPANY

9. Remove Instrument Panel Knee Bolster (1) - [Instrument Panel Knee Bolster Replacement \(Terrain\)](#).



Fig. 999: Left Front Floor Console Extension Panel
Courtesy of GENERAL MOTORS COMPANY

10. Remove Front Floor Console Extension Panel (1) - [Front Floor Console Extension Panel Replacement - Left Side \(Terrain\)](#).

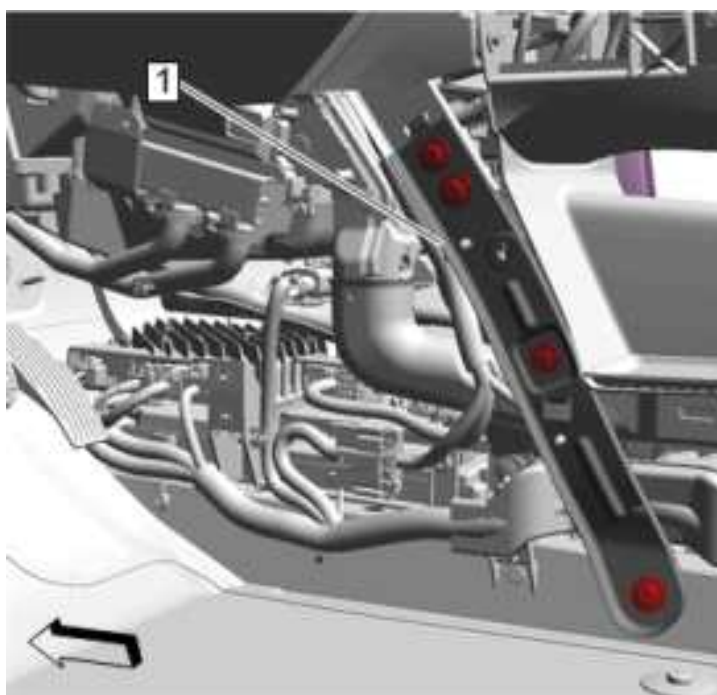


Fig. 1000: Instrument Panel Center Lower Bracket-Left Side
Courtesy of GENERAL MOTORS COMPANY

11. Remove Instrument Panel Center Lower Bracket-Left Side (3) - **Instrument Panel Center Lower Bracket Replacement (Terrain - Left Side)** **Instrument Panel Center Lower Bracket Replacement (Terrain - Right Side)**

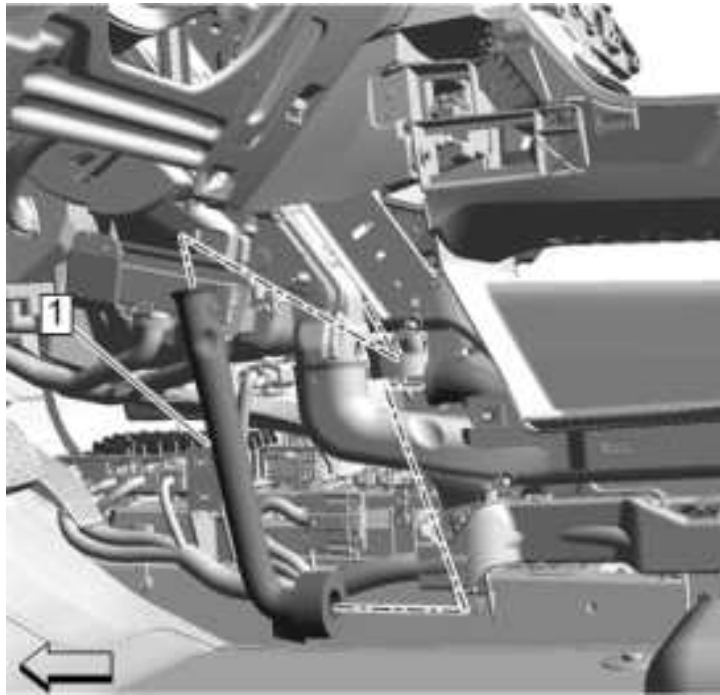


Fig. 1001: Instrument Panel Compartment Air Duct
Courtesy of GENERAL MOTORS COMPANY

NOTE: Some of the instrument panel wiring harness has been removed for clarity for the service procedure.

12. Remove Instrument Panel Compartment Air Duct (1)

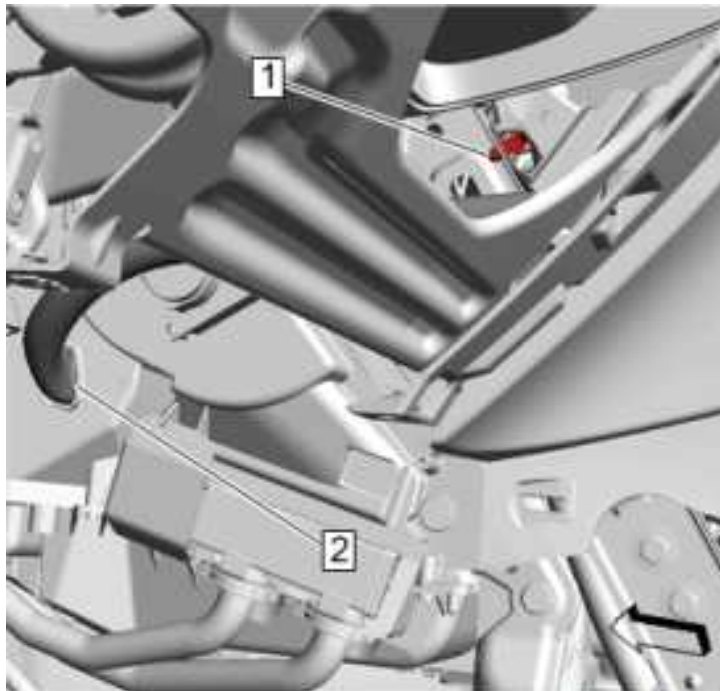


Fig. 1002: Instrument Panel Compartment Air Duct And Retainer
Courtesy of GENERAL MOTORS COMPANY

13. Remove Retainer (1)
14. Remove Instrument Panel Compartment Air Duct (2) @ Heater and Air Conditioning Evaporator and Blower Module

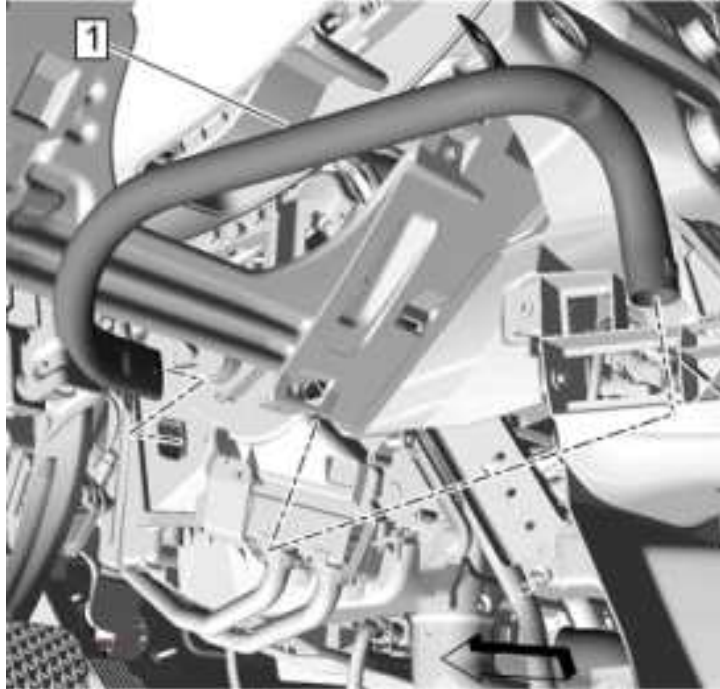


Fig. 1003: Instrument Panel Compartment Air Duct
Courtesy of GENERAL MOTORS COMPANY

15. Remove Instrument Panel Compartment Air Duct (1)

Installation Procedure

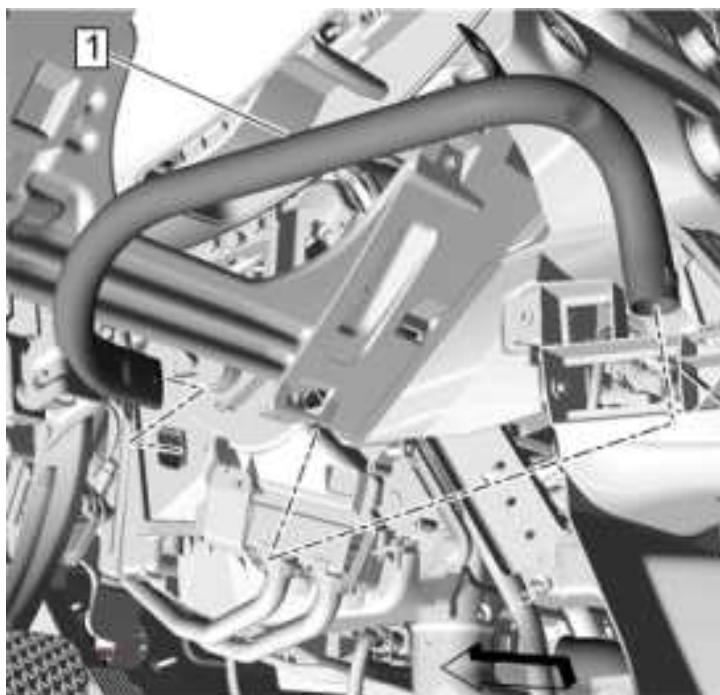


Fig. 1004: Instrument Panel Compartment Air Duct
Courtesy of GENERAL MOTORS COMPANY

1. Install Instrument Panel Compartment Air Duct (1)

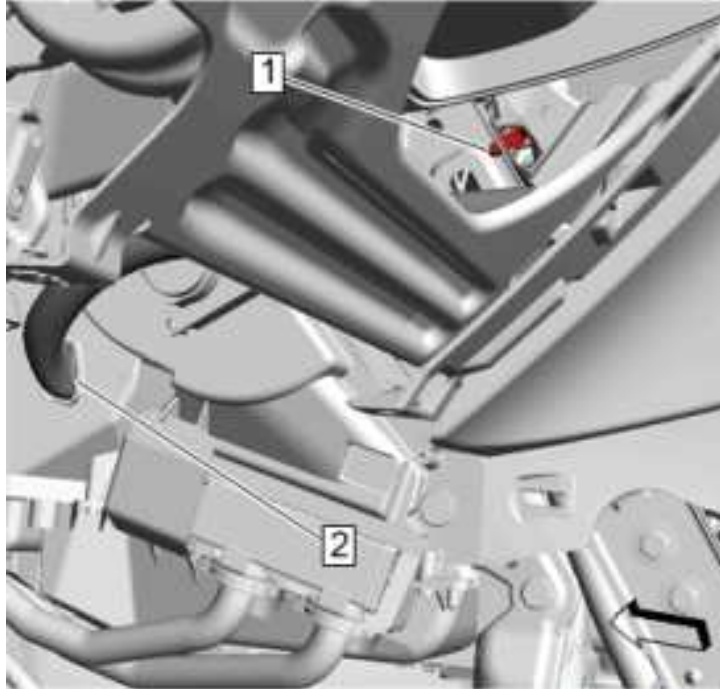


Fig. 1005: Instrument Panel Compartment Air Duct And Retainer
 Courtesy of GENERAL MOTORS COMPANY

2. Install Instrument Panel Compartment Air Duct (2) @Heater and Air Conditioning Evaporator and Blower Module
3. Install Retainer (1)

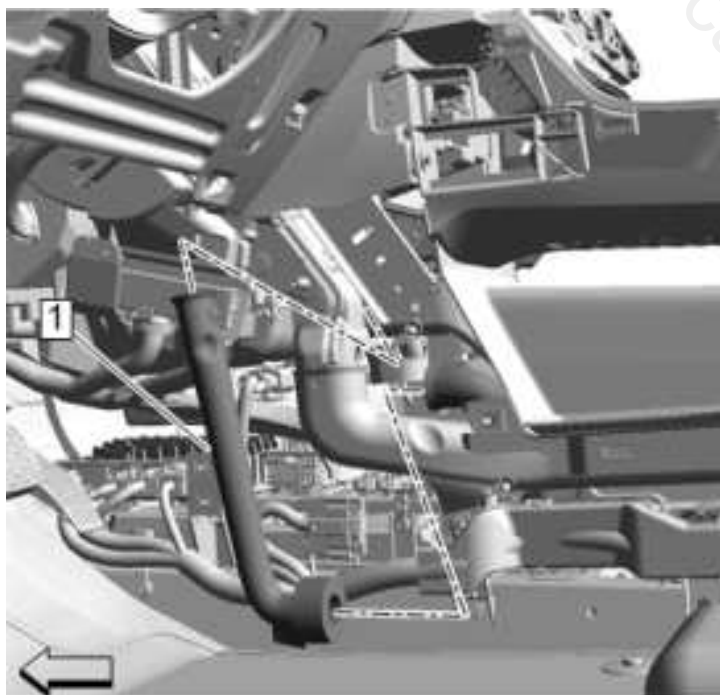


Fig. 1006: Instrument Panel Compartment Air Duct
 Courtesy of GENERAL MOTORS COMPANY

4. Install Instrument Panel Compartment Air Duct (1)
5. Verify that both instrument panel compartment air ducts are mated to each other.

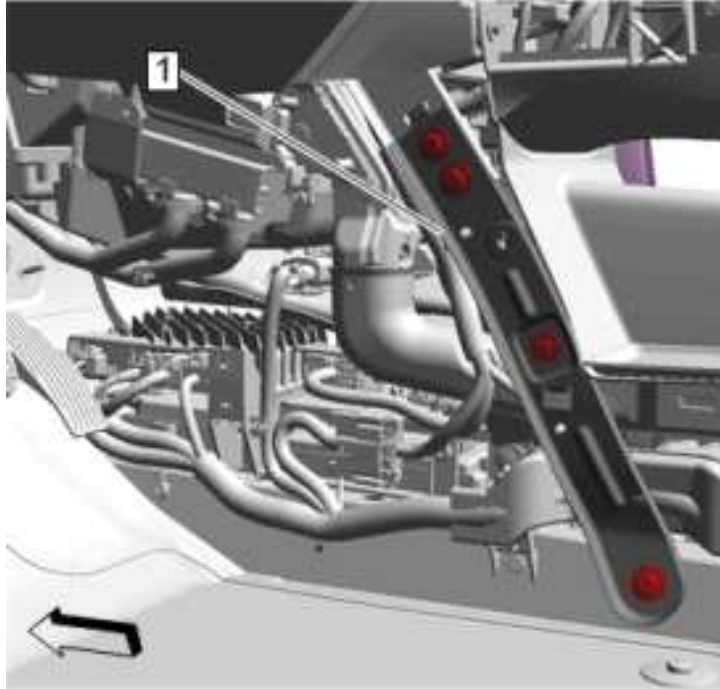


Fig. 1007: Instrument Panel Center Lower Bracket-Left Side
 Courtesy of GENERAL MOTORS COMPANY

6. Install Instrument Panel Center Lower Bracket-Left Side (3) - **Instrument Panel Center Lower Bracket Replacement (Terrain - Left Side)** **Instrument Panel Center Lower Bracket Replacement (Terrain - Right Side)**



Fig. 1008: Left Front Floor Console Extension Panel
 Courtesy of GENERAL MOTORS COMPANY

7. Install Front Floor Console Extension Panel (1) - **Front Floor Console Extension Panel Replacement - Left Side (Terrain)**



Fig. 1009: Instrument Panel Knee Bolster
Courtesy of GENERAL MOTORS COMPANY

8. Install Instrument Panel Knee Bolster (1) - [**Instrument Panel Knee Bolster Replacement \(Terrain\)**](#)

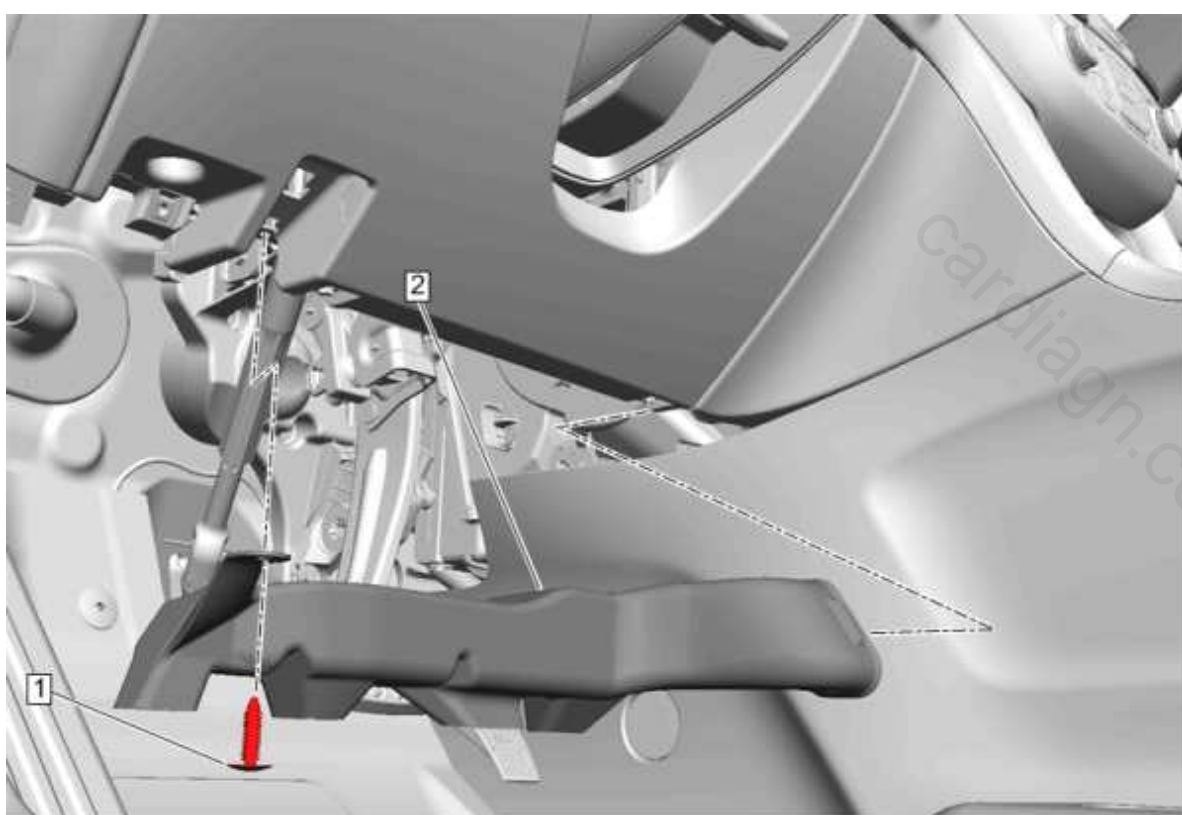


Fig. 1010: Floor Front Air Outlet Duct
Courtesy of GENERAL MOTORS COMPANY

9. Install Floor Front Air Outlet Duct - Left Side (2) - [**Floor Front Air Outlet Duct Replacement - Left Side**](#)

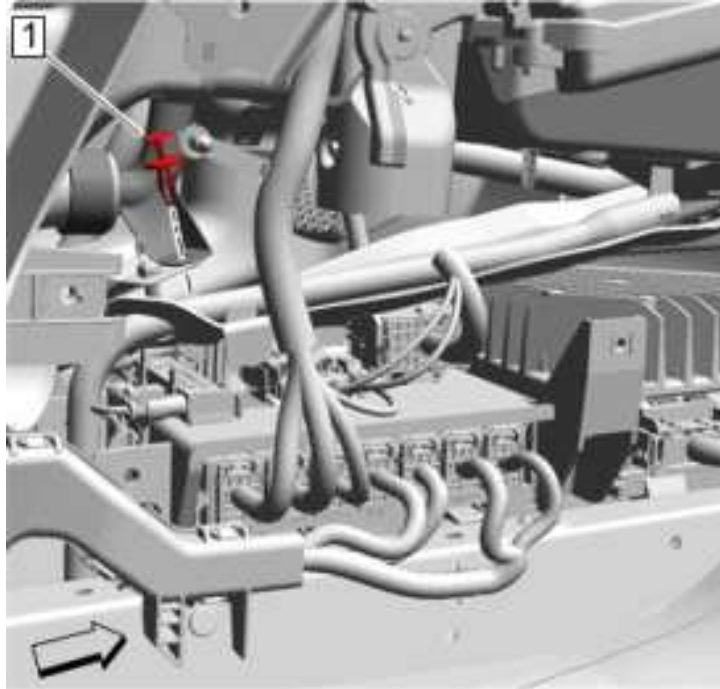


Fig. 1011: Push Pin

Courtesy of GENERAL MOTORS COMPANY

10. Install Push Pin (1)
11. Position the wiring harness back to its original position and secure.

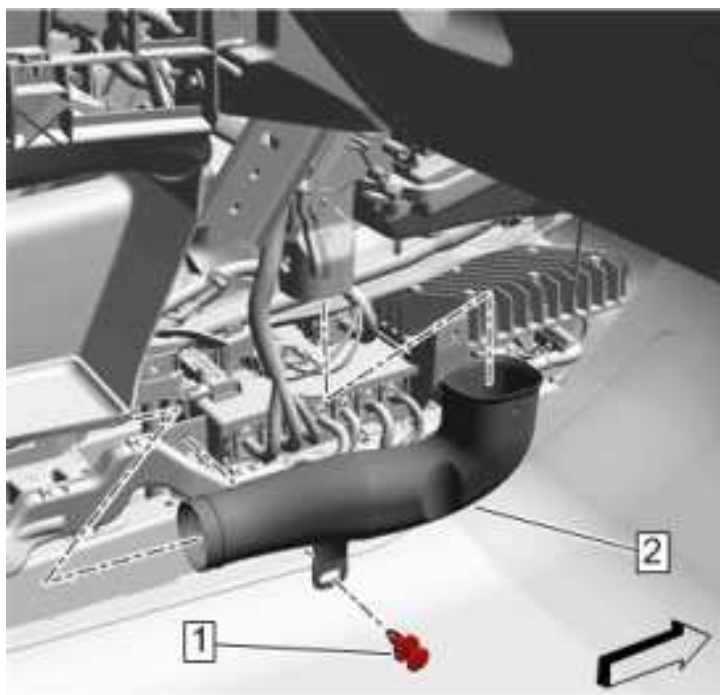


Fig. 1012: Floor Rear Air Outlet Duct - Right Side

Courtesy of GENERAL MOTORS COMPANY

12. Install Floor Rear Air Outlet Duct - Right Side (2)
13. Install Push Pin (1)

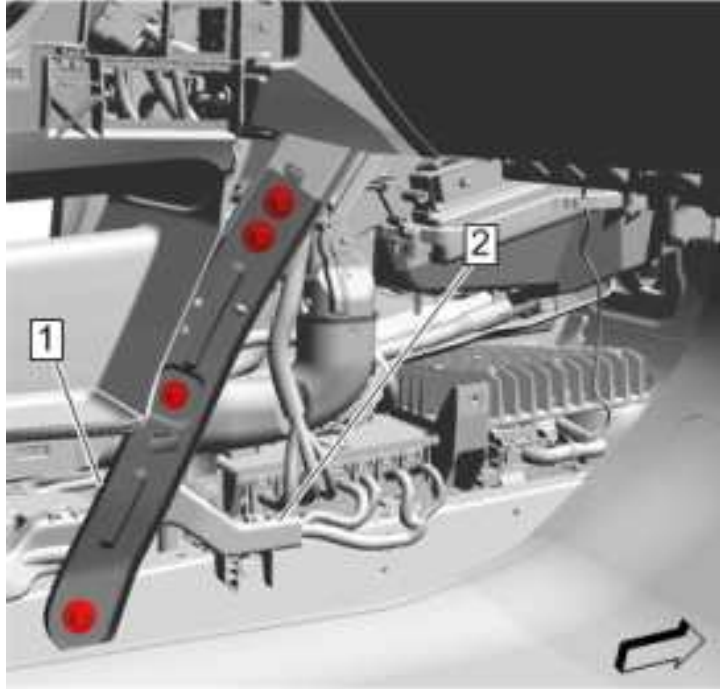


Fig. 1013: Instrument Panel Center Lower Bracket
 Courtesy of GENERAL MOTORS COMPANY

14. Position the wiring harness conduit (2) to its original position and secure.
15. Install Instrument Panel Center Lower Bracket-Right Side (1) - **Instrument Panel Center Lower Bracket Replacement (Terrain - Left Side)** **Instrument Panel Center Lower Bracket Replacement (Terrain - Right Side)**

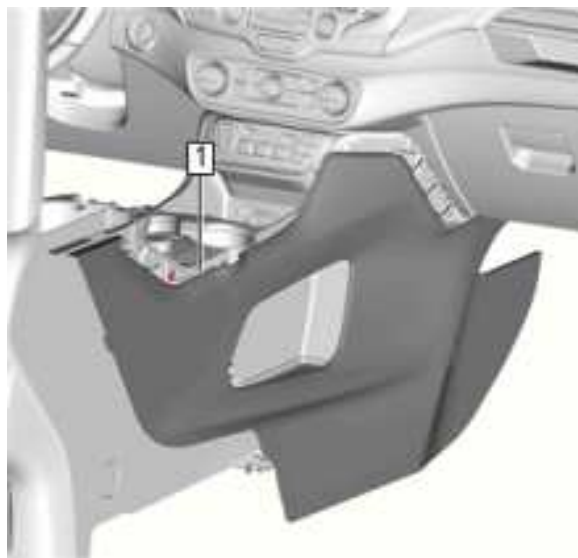


Fig. 1014: Right Front Floor Console Extension Panel
 Courtesy of GENERAL MOTORS COMPANY

16. Install Front Floor Console Extension Panel - Right (1) - **Front Floor Console Extension Panel Replacement - Right Side (Terrain)**

FLOOR FRONT AIR OUTLET DUCT REPLACEMENT - RIGHT SIDE (INNER)

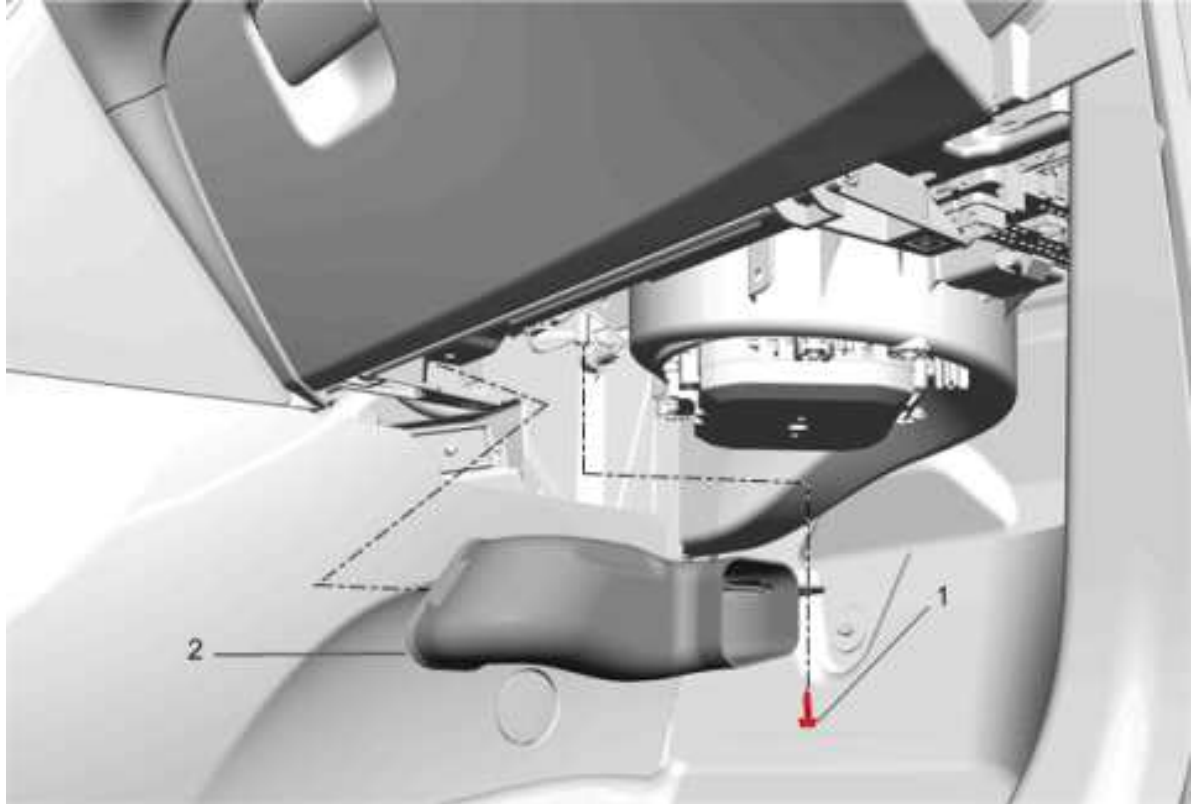


Fig. 1015: Floor Front Air Outlet Duct Replacement - Right Side (Inner)
Courtesy of GENERAL MOTORS COMPANY

Callout	Component Name
Preliminary Procedures <u>Floor Front Air Outlet Duct Replacement - Right Side (Inner)</u> <u>Front Floor Console Extension Panel Replacement - Right Side (Equinox)</u> <u>Front Floor Console Extension Panel Replacement - Right Side (Terrain)</u>	
1	Floor Front Air Outlet Duct Bolt CAUTION: Refer to <u>Fastener Caution</u> . Tighten 2.5 N.m (22 lb in)
2	Floor Front Air Outlet Duct - Right Side - Inner Procedure Maneuver the inner floor front air outlet duct from under the instrument panel assembly.

FLOOR FRONT AIR OUTLET DUCT REPLACEMENT - RIGHT SIDE (OUTER)

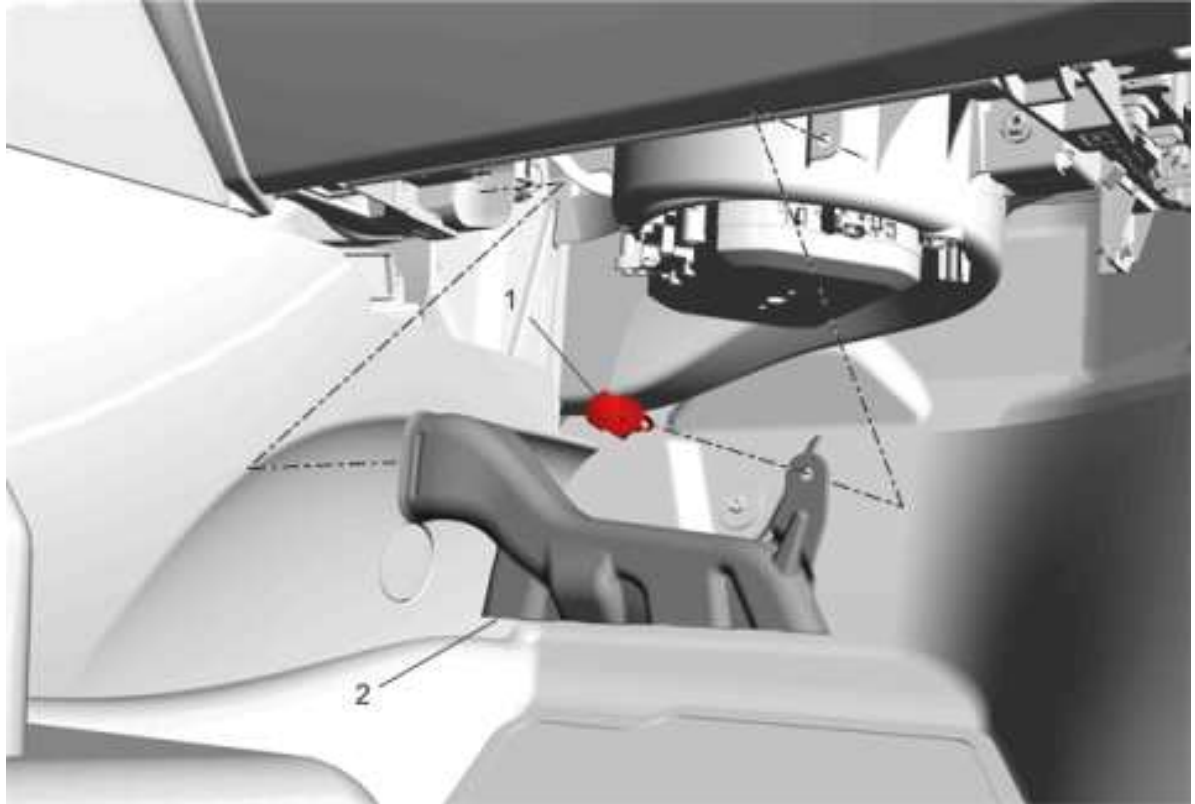


Fig. 1016: Floor Front Air Outlet Duct - Right Side (Outer)
 Courtesy of GENERAL MOTORS COMPANY

Callout	Component Name
1	Floor Front Air Outlet Duct Fastener
2	Floor Front Air Outlet Duct - Right Side - Outer

FLOOR FRONT AIR OUTLET DUCT REPLACEMENT - LEFT SIDE

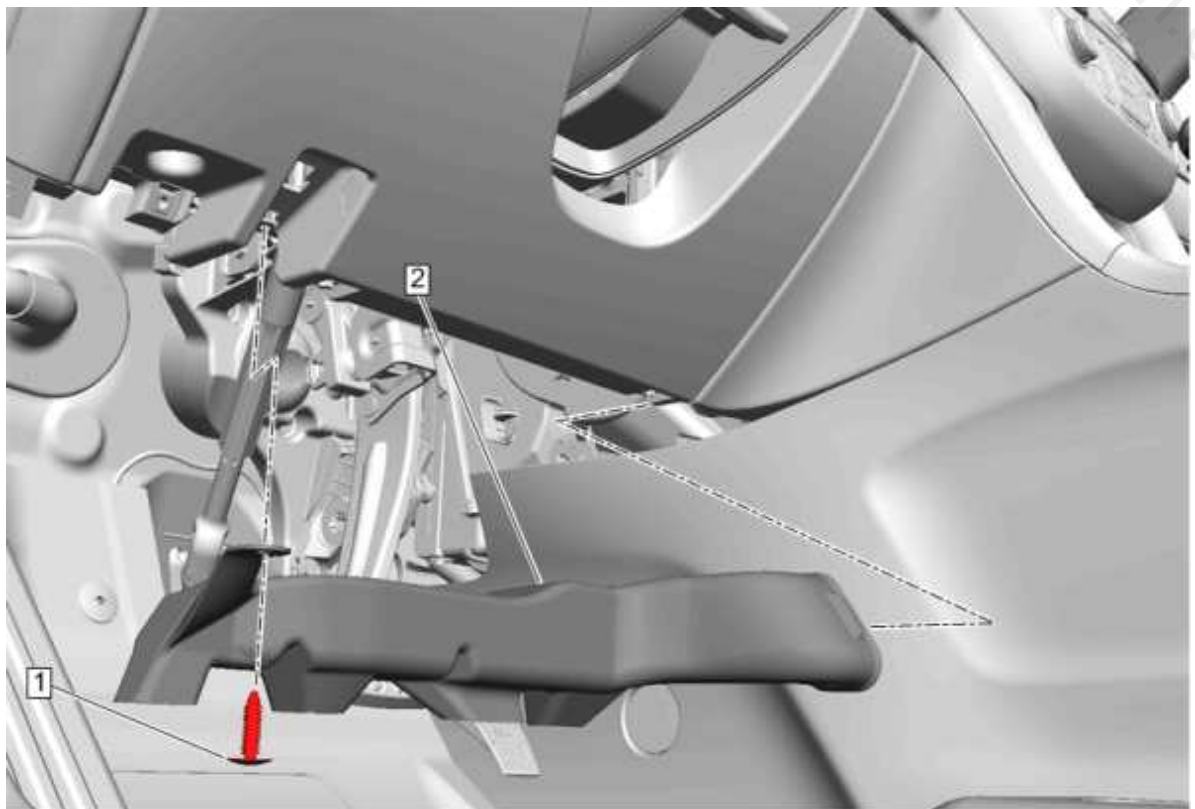


Fig. 1017: Floor Front Air Outlet Duct
 Courtesy of GENERAL MOTORS COMPANY

Callout	Component Name
1	Push Pin
2	Floor Front Air Outlet Duct - Left Side

Removal Procedure

1. Remove Drivers Seat and Passengers Seat - [Driver or Passenger Seat Removal and Installation](#)

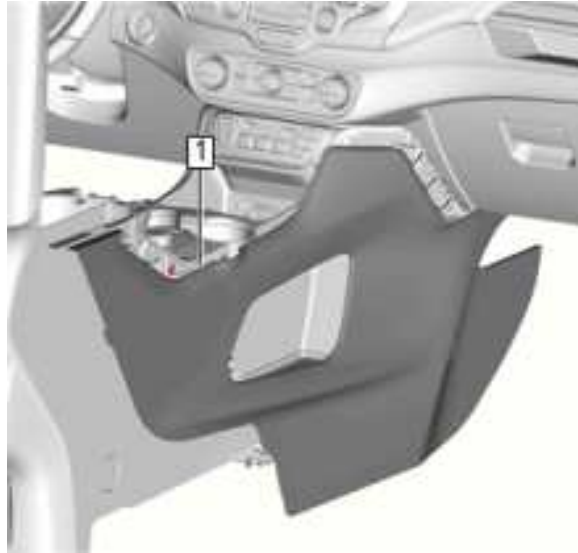


Fig. 1018: Right Front Floor Console Extension Panel
Courtesy of GENERAL MOTORS COMPANY

2. Remove Front Floor Console Extension Panel - Right (1) - [Front Floor Console Extension Panel Replacement - Right Side \(Terrain\)](#)



Fig. 1019: Left Front Floor Console Extension Panel
Courtesy of GENERAL MOTORS COMPANY

3. Remove Front Floor Console Extension Panel - Left (1) - [Front Floor Console Extension Panel Replacement - Left Side \(Terrain\)](#)

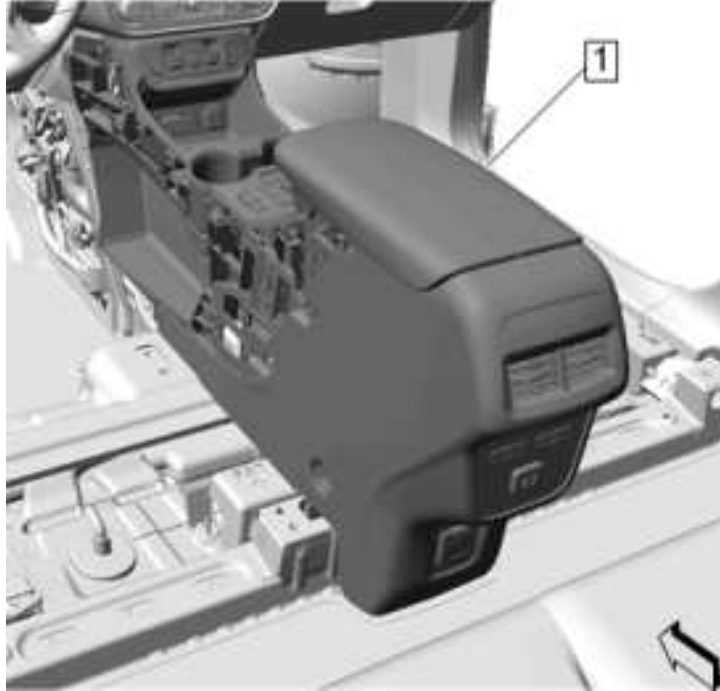


Fig. 1020: Front Floor Console

Courtesy of GENERAL MOTORS COMPANY

4. Remove Front Floor Console (1) - [Front Floor Console Replacement \(Terrain\)](#)
5. Disconnect the electrical connectors.

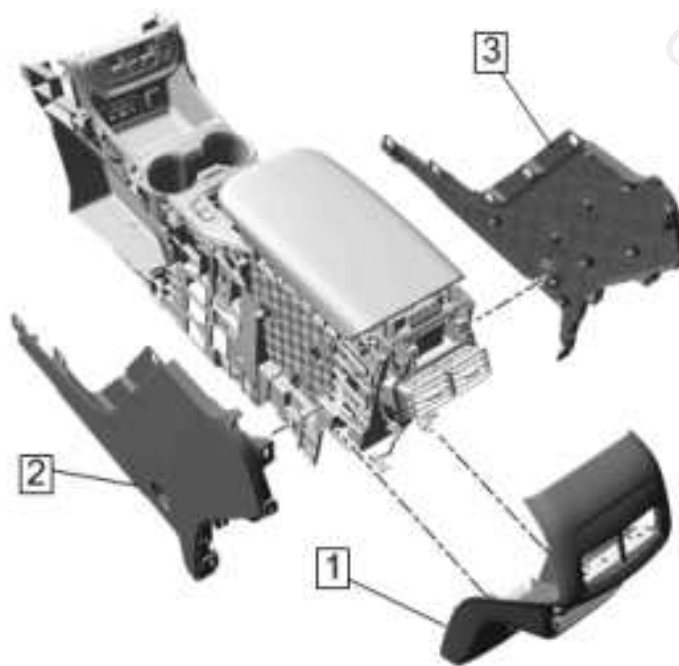


Fig. 1021: Front Floor Console Rear Trim Panel- Left

Courtesy of GENERAL MOTORS COMPANY

6. Remove Front Floor Console Rear Trim Panel (1) - [Front Floor Console Rear Trim Panel Replacement \(Terrain\)](#)
7. Disconnect and reposition harness as necessary.
8. Remove Front Floor Console Rear Trim Panel- Left (2)

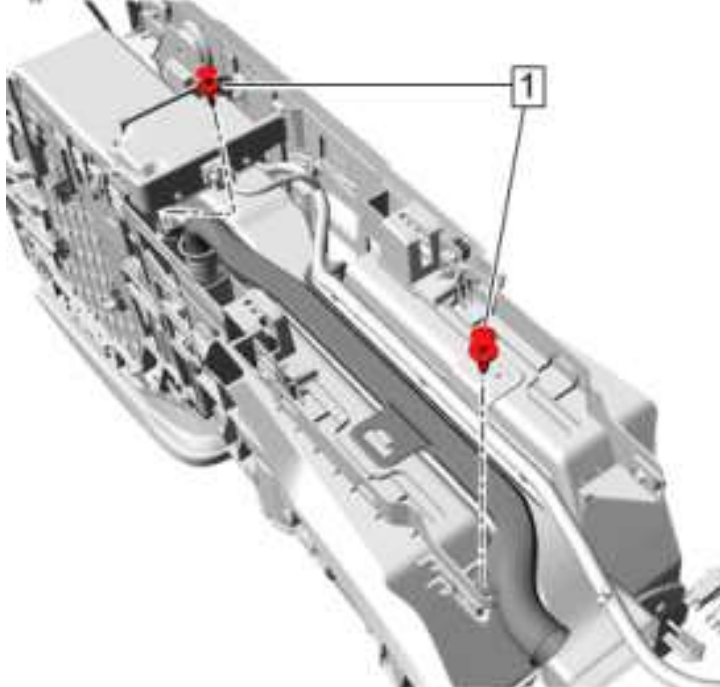


Fig. 1022: Push Pin

Courtesy of GENERAL MOTORS COMPANY

9. Remove Push Pin (1)

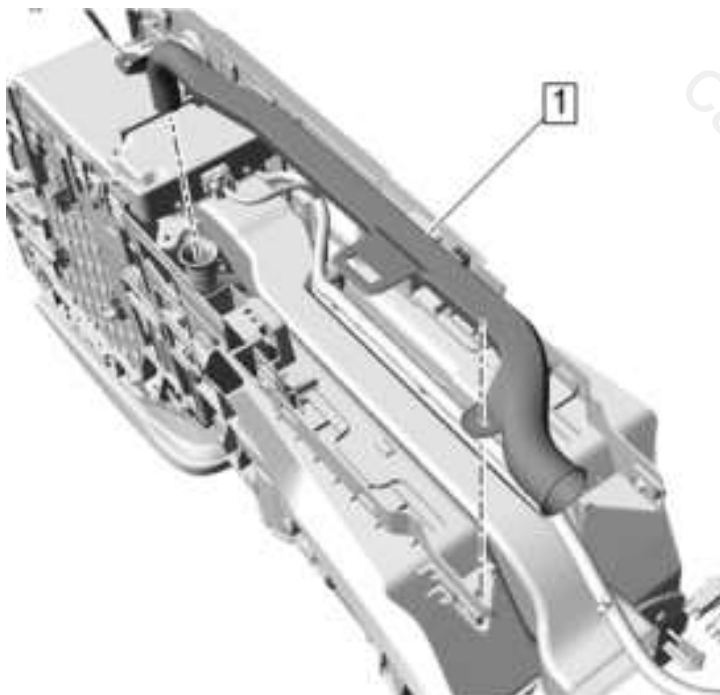


Fig. 1023: Front Floor Console Auxiliary Cooling Duct

Courtesy of GENERAL MOTORS COMPANY

10. Remove Front Floor Console Auxiliary Cooling Duct (1)

Installation Procedure

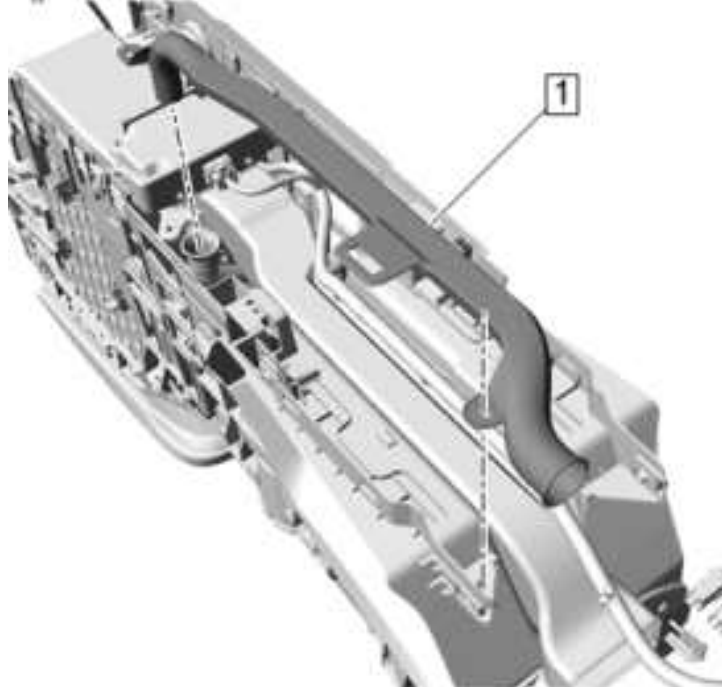


Fig. 1024: Front Floor Console Auxiliary Cooling Duct
Courtesy of GENERAL MOTORS COMPANY

1. Install Front Floor Console Auxiliary Cooling Duct (1)

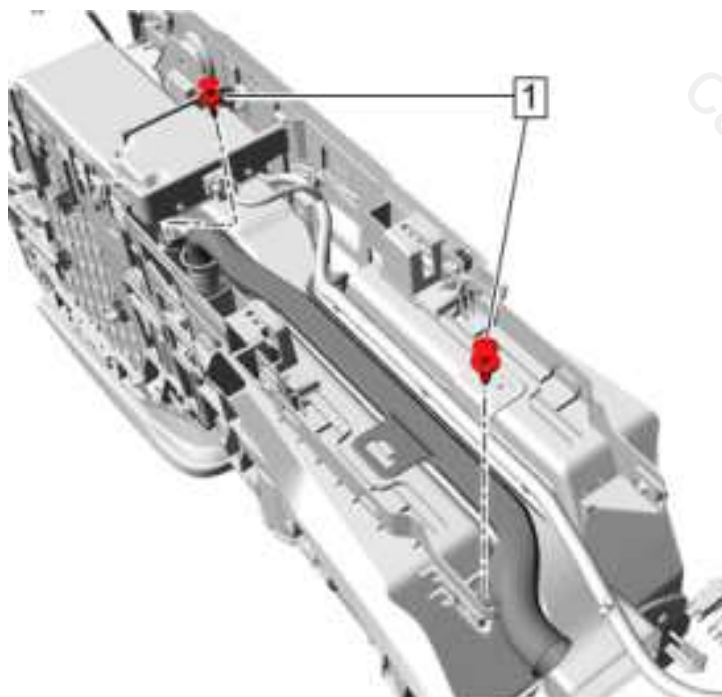


Fig. 1025: Push Pin
Courtesy of GENERAL MOTORS COMPANY

2. Install Push Pin (1)

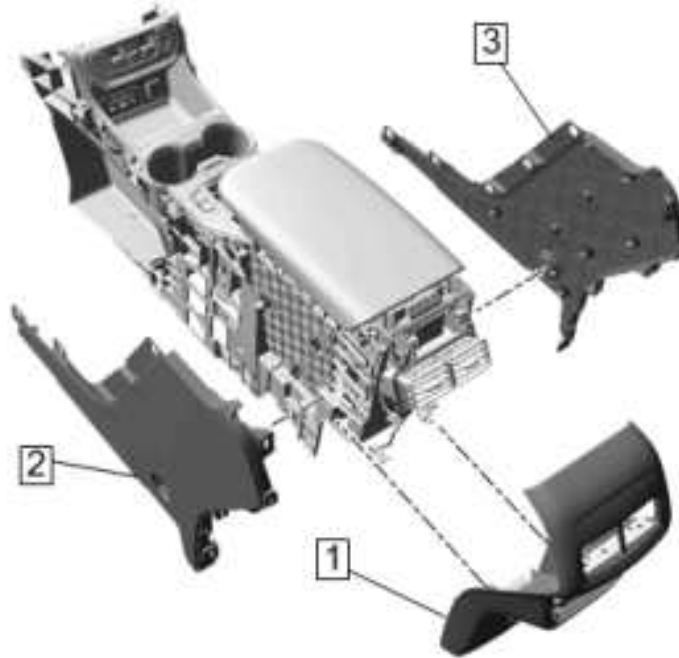


Fig. 1026: Front Floor Console Rear Trim Panel- Left
Courtesy of GENERAL MOTORS COMPANY

3. Install Front Floor Console Rear Trim Panel- Left (2)
4. Connect the electrical connectors.
5. Install Front Floor Console Rear Trim Panel (1) - [Front Floor Console Rear Trim Panel Replacement \(Terrain\)](#)

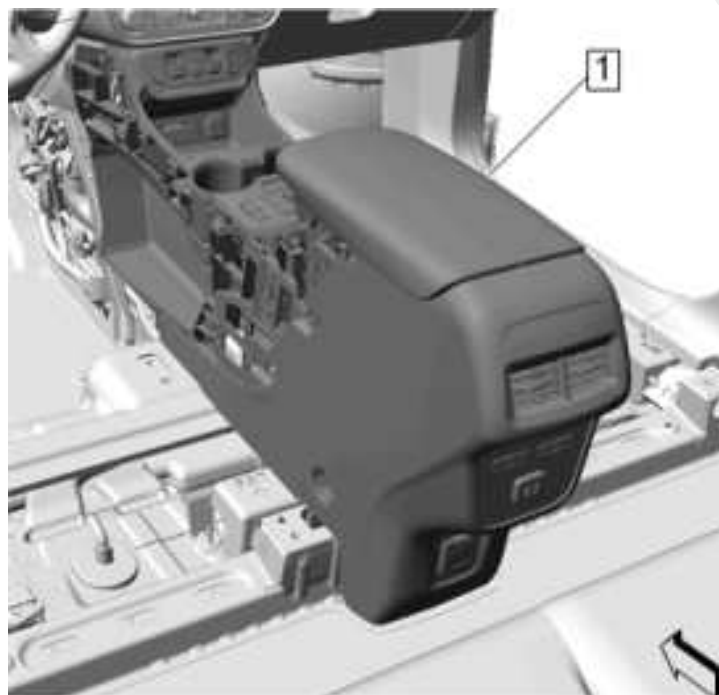


Fig. 1027: Front Floor Console
Courtesy of GENERAL MOTORS COMPANY

6. Connect the electrical connectors.
7. Install Front Floor Console (1) - [Front Floor Console Replacement \(Terrain\)](#)



Fig. 1028: Left Front Floor Console Extension Panel
Courtesy of GENERAL MOTORS COMPANY

8. Install Front Floor Console Extension Panel - Left (1) - **Front Floor Console Extension Panel Replacement - Left Side (Terrain)**

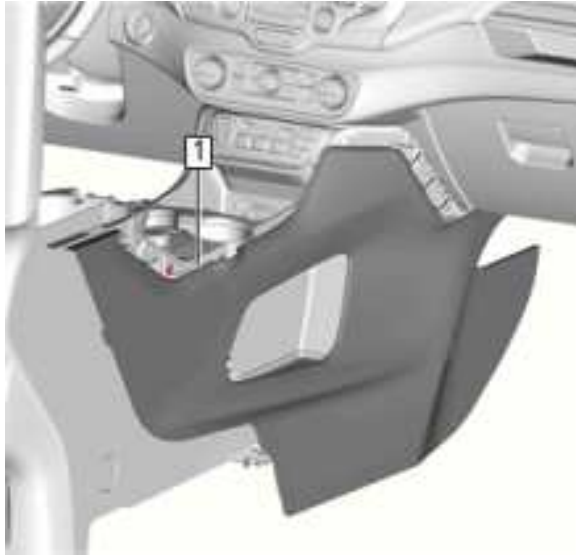


Fig. 1029: Right Front Floor Console Extension Panel
Courtesy of GENERAL MOTORS COMPANY

9. Install Front Floor Console Extension Panel - Right (1) - **Front Floor Console Extension Panel Replacement - Right Side (Terrain)**
10. Install Drivers Seat and Passengers Seat - **Driver or Passenger Seat Removal and Installation**

FRONT FLOOR CONSOLE REAR AIR DUCT REPLACEMENT (EQUINOX FRONT)

Removal Procedure

1. Remove Drivers Seat and Passengers Seat - **Driver or Passenger Seat Removal and Installation**

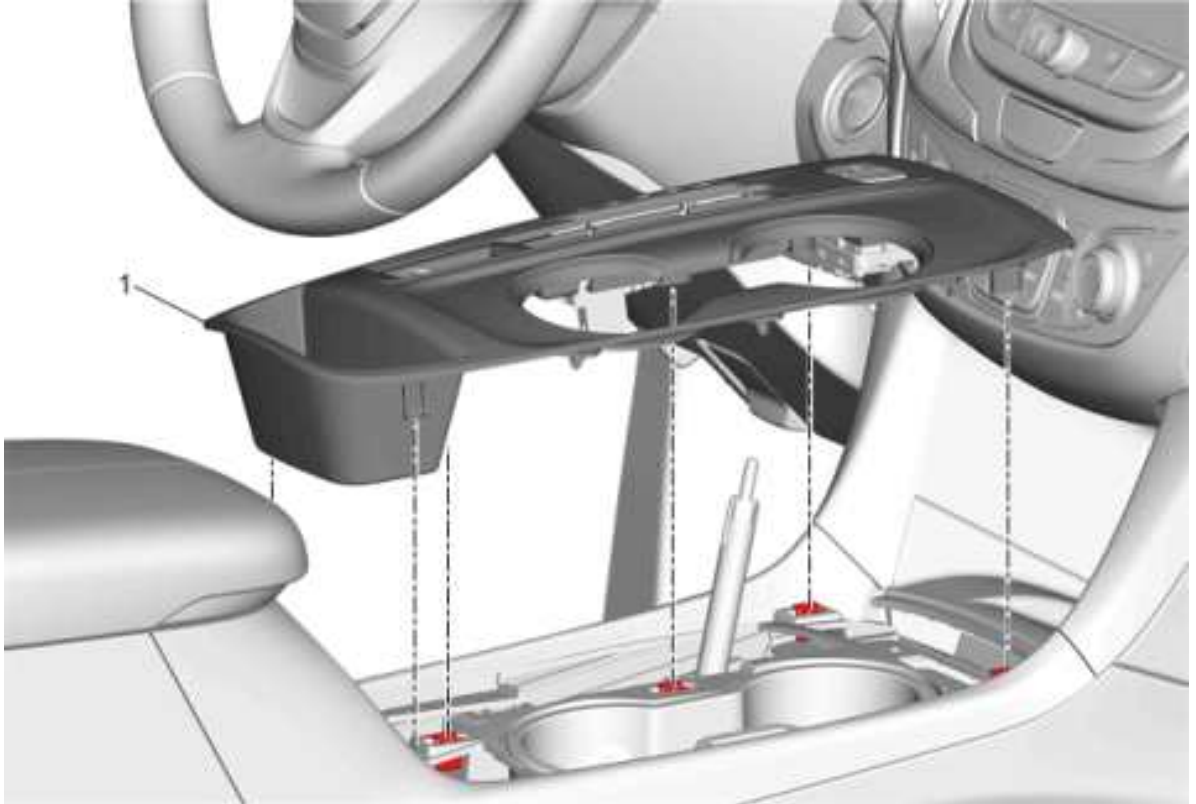


Fig. 1030: Front Floor Console Trim Plate (Equinox)
Courtesy of GENERAL MOTORS COMPANY

2. Remove Front Floor Console Trim Plate (1) - **Front Floor Console Trim Plate Replacement (Equinox)**

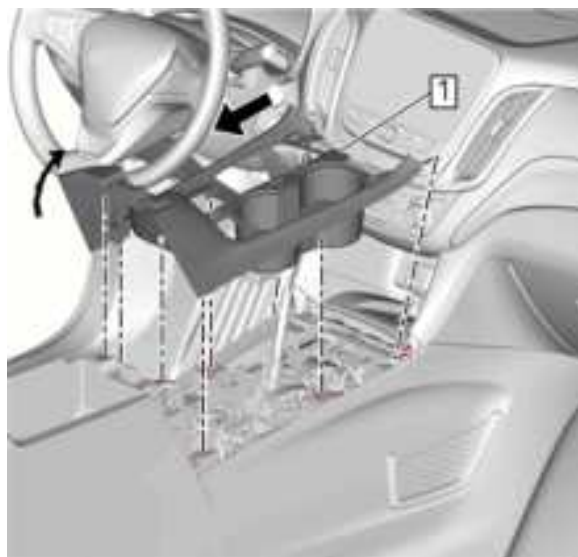


Fig. 1031: Front Floor Console Applique
Courtesy of GENERAL MOTORS COMPANY

3. Remove Front Floor Console Applique (1) - **Front Floor Console Applique Replacement (Equinox)**

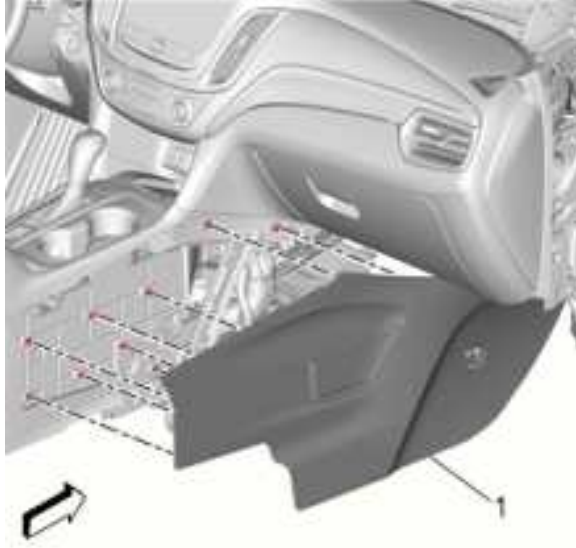


Fig. 1032: Right Front Floor Console Extension Panel
 Courtesy of GENERAL MOTORS COMPANY

4. Remove Front Floor Console Extension Panel - Right (1) - **Front Floor Console Extension Panel Replacement - Right Side (Equinox)**



Fig. 1033: Left Front Floor Console Extension Panel
 Courtesy of GENERAL MOTORS COMPANY

5. Remove Front Floor Console Extension Panel - Left (1) - **Front Floor Console Extension Panel Replacement - Left Side (Equinox)**

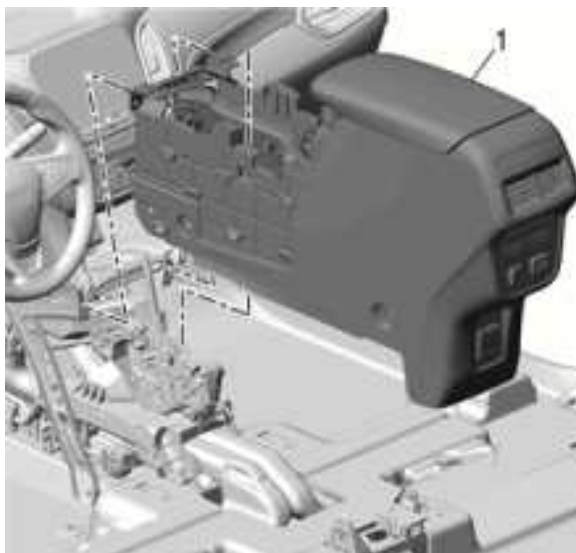


Fig. 1034: Front Floor Console
 Courtesy of GENERAL MOTORS COMPANY

6. Remove Front Floor Console (1) - [Front Floor Console Replacement \(Equinox\)](#)

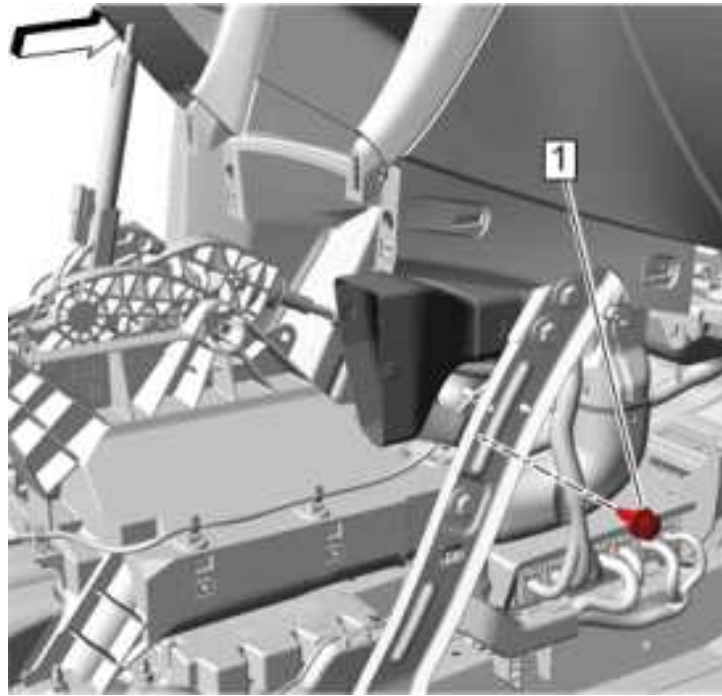


Fig. 1035: Push Pin

Courtesy of GENERAL MOTORS COMPANY

7. Remove Push Pin (1)

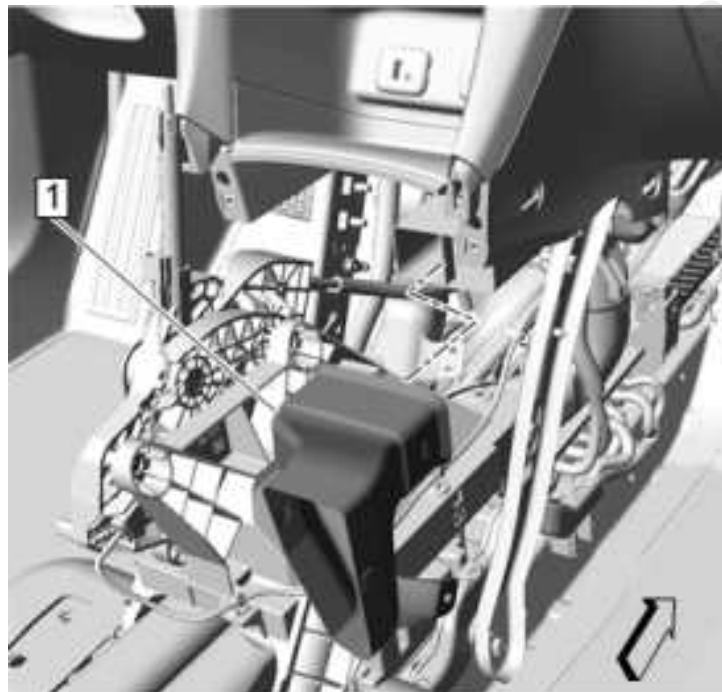


Fig. 1036: Front Floor Console Rear Air Duct

Courtesy of GENERAL MOTORS COMPANY

8. Remove Front Floor Console Rear Air Duct (1)

Installation Procedure

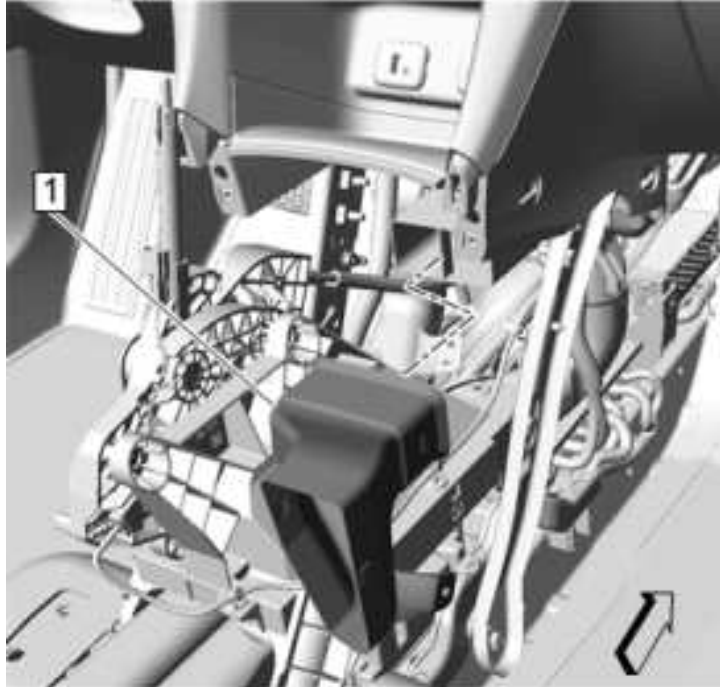


Fig. 1037: Front Floor Console Rear Air Duct
Courtesy of GENERAL MOTORS COMPANY

1. Install Front Floor Console Rear Air Duct (1)

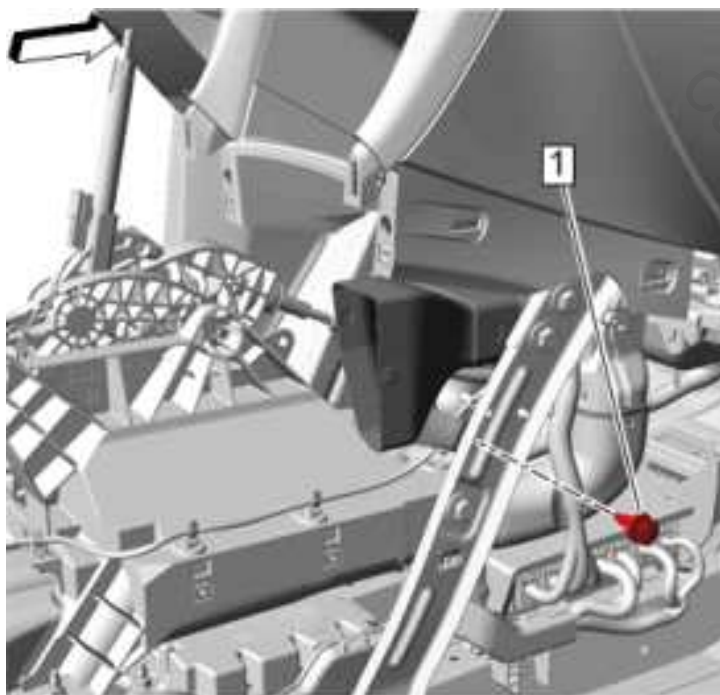


Fig. 1038: Push Pin
Courtesy of GENERAL MOTORS COMPANY

2. Install Push Pin (1)

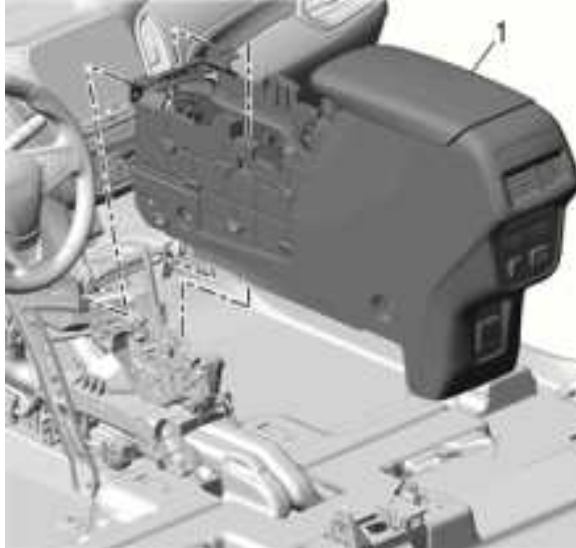


Fig. 1039: Front Floor Console

Courtesy of GENERAL MOTORS COMPANY

3. Install Front Floor Console (1) [Front Floor Console Replacement \(Equinox\)](#)



Fig. 1040: Left Front Floor Console Extension Panel

Courtesy of GENERAL MOTORS COMPANY

4. Install Front Floor Console Extension Panel - Left (1) - [Front Floor Console Extension Panel Replacement - Left Side \(Equinox\)](#)

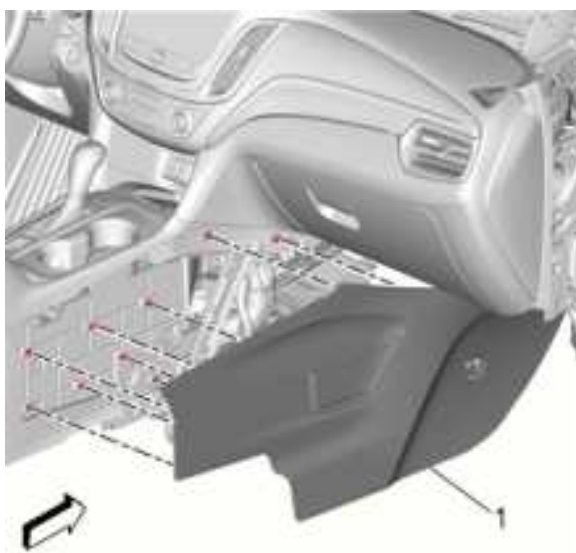


Fig. 1041: Right Front Floor Console Extension Panel

Courtesy of GENERAL MOTORS COMPANY

5. Install Front Floor Console Extension Panel - Right (1) - [Front Floor Console Extension Panel Replacement - Right Side \(Equinox\)](#).

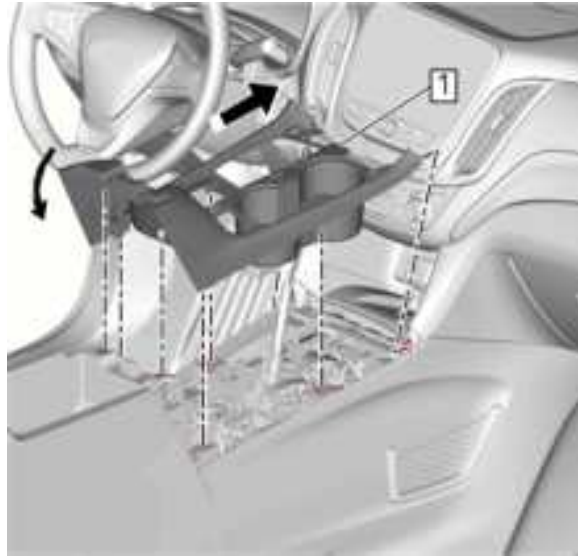


Fig. 1042: Front Floor Console Applique
Courtesy of GENERAL MOTORS COMPANY

6. Install Front Floor Console Applique (1) - [Front Floor Console Applique Replacement \(Equinox\)](#).

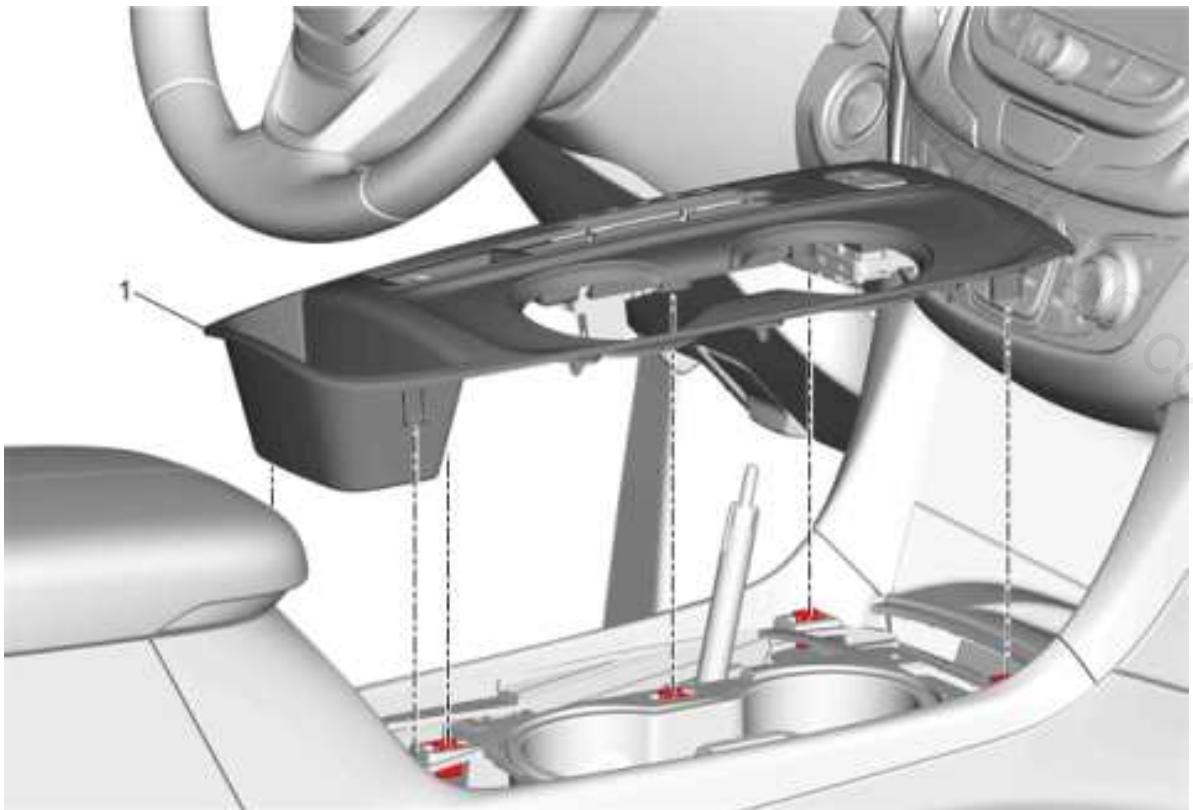


Fig. 1043: Front Floor Console Trim Plate (Equinox)
Courtesy of GENERAL MOTORS COMPANY

7. Install Front Floor Console Trim Plate (1) - [Front Floor Console Trim Plate Replacement \(Equinox\)](#)
8. Install Drivers Seat and Passengers Seat - [Driver or Passenger Seat Removal and Installation](#)

FRONT FLOOR CONSOLE REAR AIR DUCT REPLACEMENT (EQUINOX REAR)

Removal Procedure

1. Remove Drivers Seat and Passengers Seat - [Driver or Passenger Seat Removal and Installation](#)

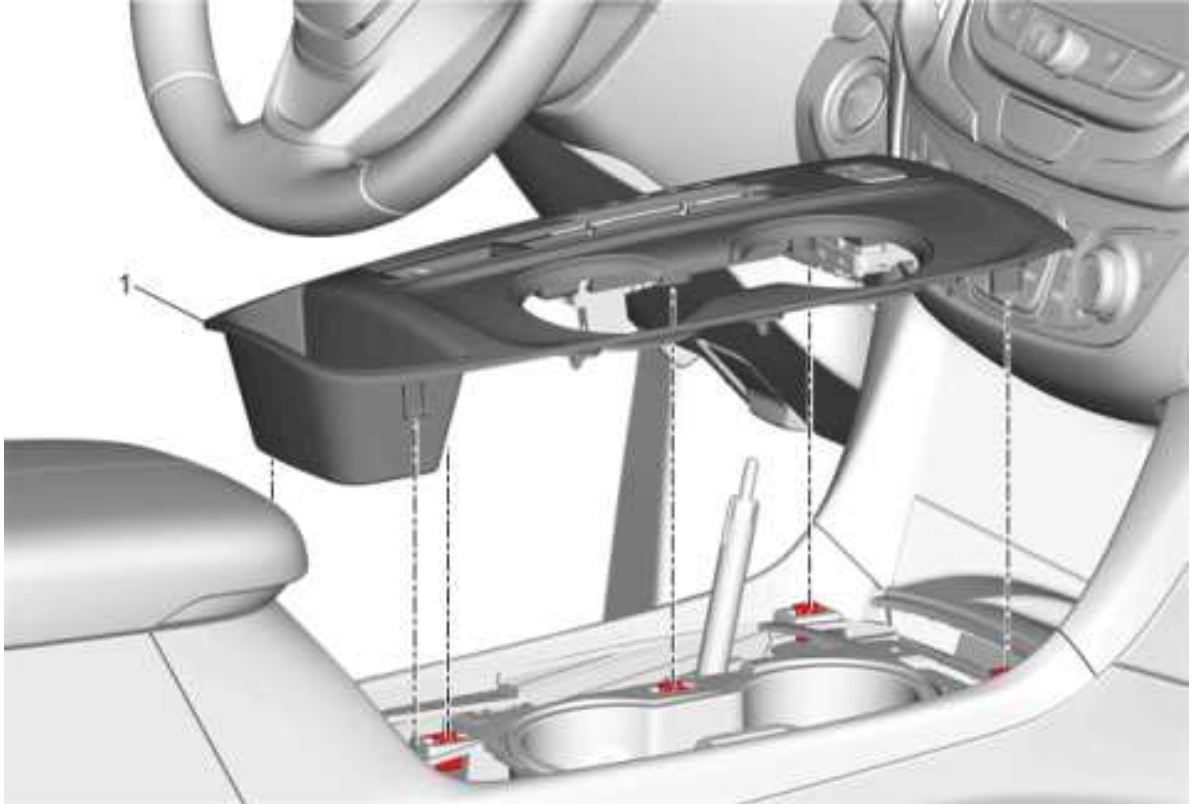


Fig. 1044: Front Floor Console Trim Plate (Equinox)
Courtesy of GENERAL MOTORS COMPANY

2. Remove Front Floor Console Trim Plate (1) - **Front Floor Console Trim Plate Replacement (Equinox)**

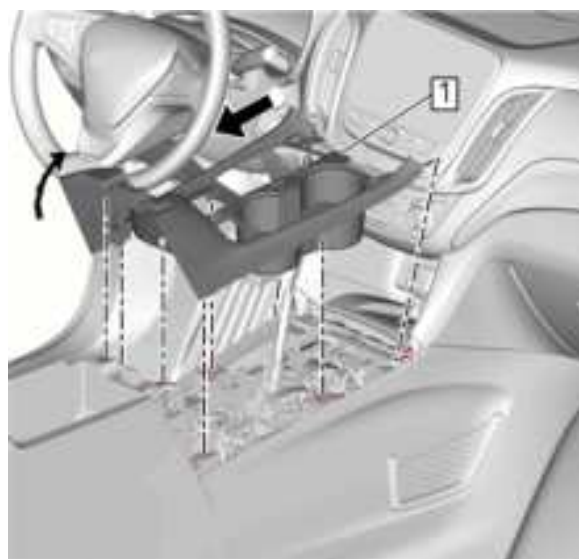


Fig. 1045: Front Floor Console Applique
Courtesy of GENERAL MOTORS COMPANY

3. Remove Front Floor Console Applique (1) - **Front Floor Console Applique Replacement (Equinox)**

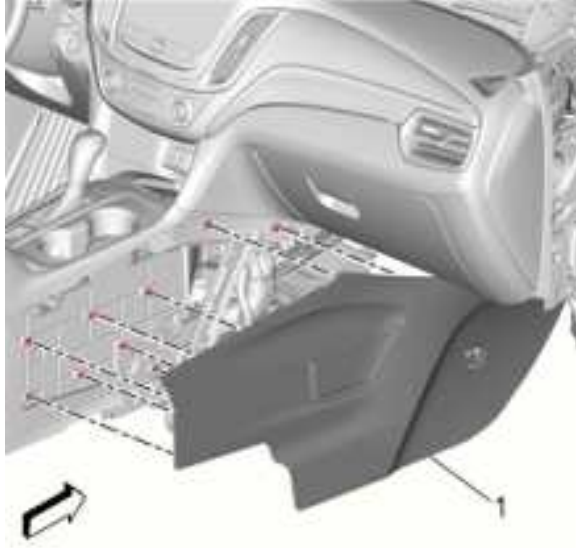


Fig. 1046: Right Front Floor Console Extension Panel
 Courtesy of GENERAL MOTORS COMPANY

4. Remove Front Floor Console Extension Panel - Right (1) - **Front Floor Console Extension Panel Replacement - Right Side (Equinox)**



Fig. 1047: Left Front Floor Console Extension Panel
 Courtesy of GENERAL MOTORS COMPANY

5. Remove Front Floor Console Extension Panel - Left (1) - **Front Floor Console Extension Panel Replacement - Left Side (Equinox)**

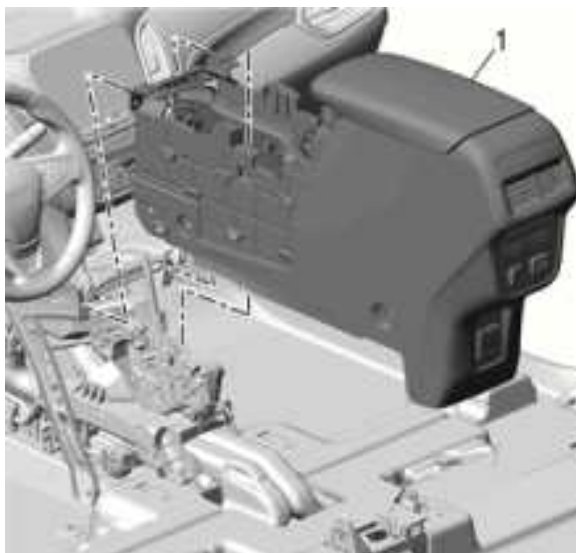


Fig. 1048: Front Floor Console
 Courtesy of GENERAL MOTORS COMPANY

6. Remove Front Floor Console (1) - [Front Floor Console Replacement \(Equinox\)](#)
7. Disconnect the electrical connectors.

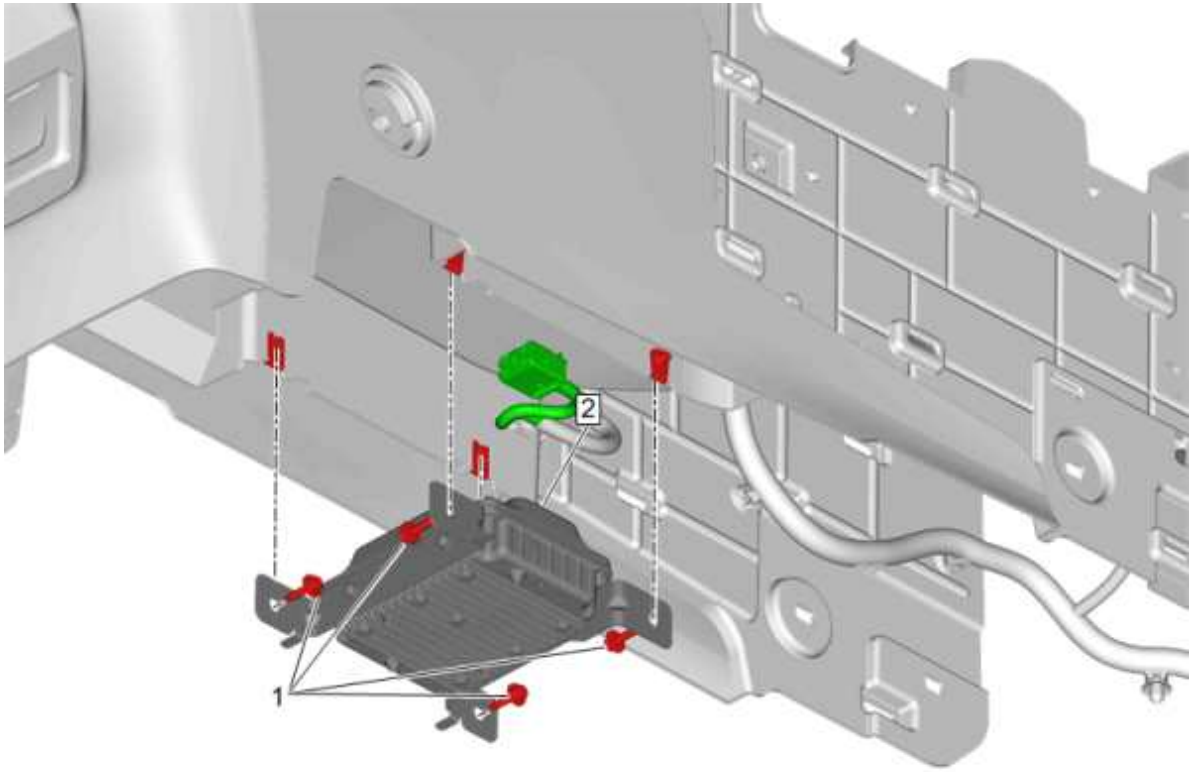


Fig. 1049: Accessory AC and DC Power Control Module And Bolt
Courtesy of GENERAL MOTORS COMPANY

8. Remove Accessory AC and DC Power Control Module - [Accessory AC and DC Power Control Module Replacement \(Equinox\)](#)



Fig. 1050: Front Floor Console Armrest
Courtesy of GENERAL MOTORS COMPANY

9. Remove Front Floor Console Armrest (1) - [Front Floor Console Armrest Replacement \(Equinox\)](#)

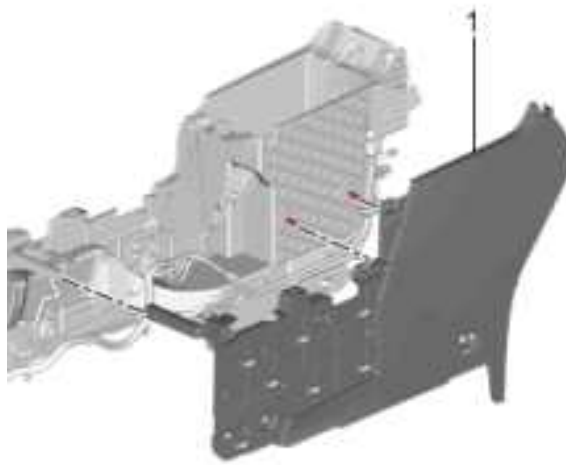


Fig. 1051: Left Side Front Floor Lower Console
Courtesy of GENERAL MOTORS COMPANY

10. Remove Front Floor Lower Console - Left Side (1) - [**Front Floor Lower Console Replacement \(Equinox\)**](#)
11. Disconnect and reposition harness as necessary.

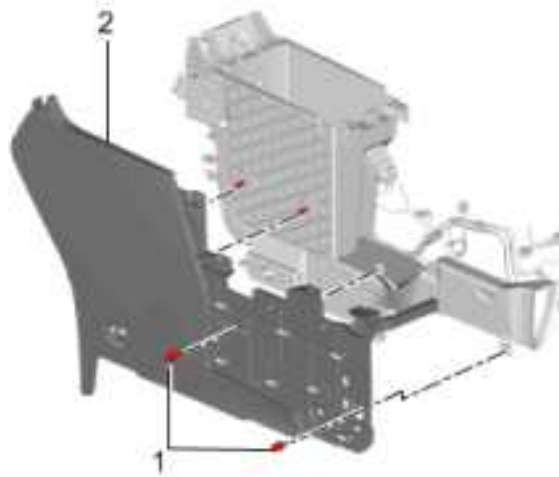


Fig. 1052: Front Floor Console Rear Air Duct Retainers And Right Side Front Floor Lower Console
Courtesy of GENERAL MOTORS COMPANY

12. Remove Front Floor Console Rear Air Duct Retainer (1)
13. Remove Front Floor Lower Console - Right Side (2)
14. Disconnect and reposition harness as necessary.

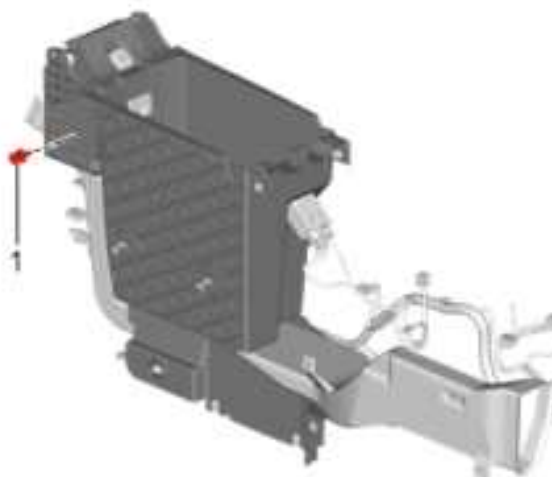


Fig. 1053: Front Floor Console Rear Air Duct Retainer
Courtesy of GENERAL MOTORS COMPANY

15. Remove Front Floor Console Rear Air Duct Retainer (1)
16. Note the location and routing of the wiring harness to ensure proper reinstallation.

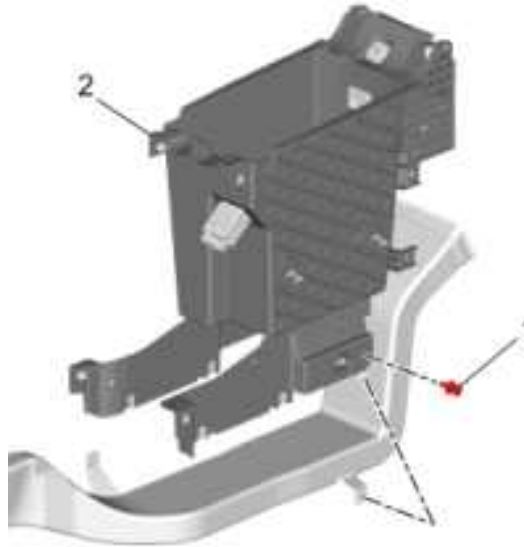


Fig. 1054: Front Floor Console Rear Air Duct Retainer And Front Floor Console Compartment
Courtesy of GENERAL MOTORS COMPANY

17. Remove Front Floor Console Rear Air Duct Retainer (1)

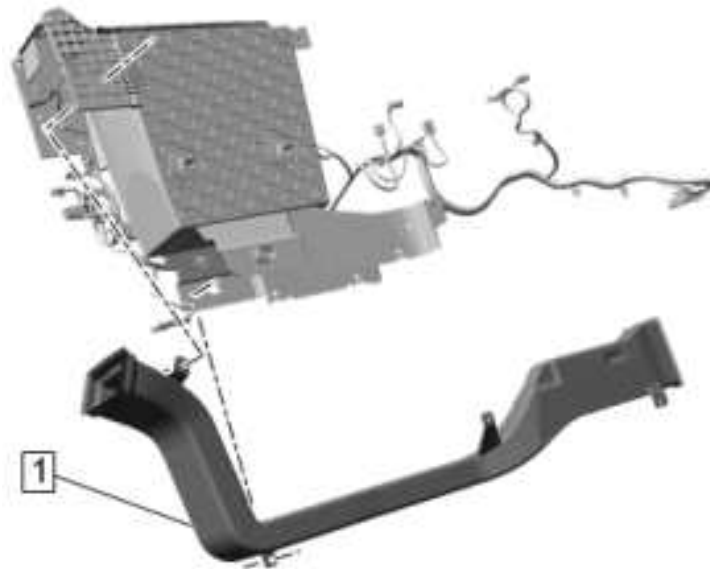


Fig. 1055: Front Floor Console Rear Air Duct
Courtesy of GENERAL MOTORS COMPANY

18. Remove Front Floor Console Rear Air Duct (1) @Front Floor Console Compartment

Installation Procedure

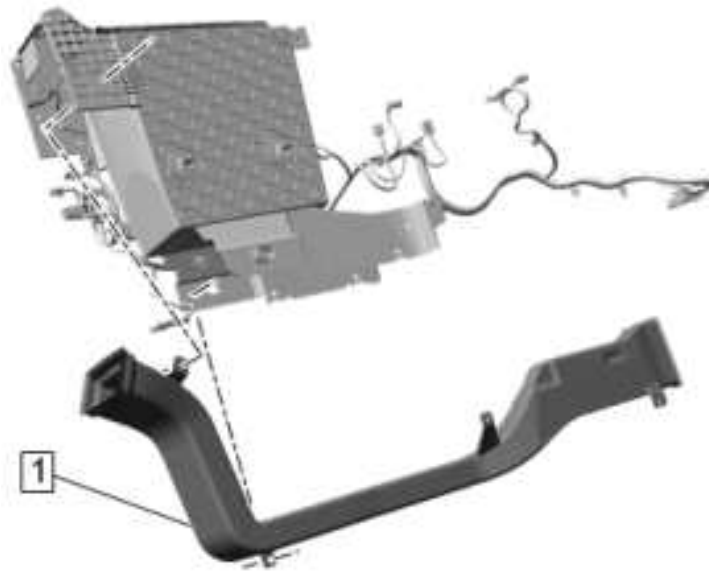


Fig. 1056: Front Floor Console Rear Air Duct
Courtesy of GENERAL MOTORS COMPANY

1. Install Front Floor Console Rear Air Duct (1) @Front Floor Console Compartment

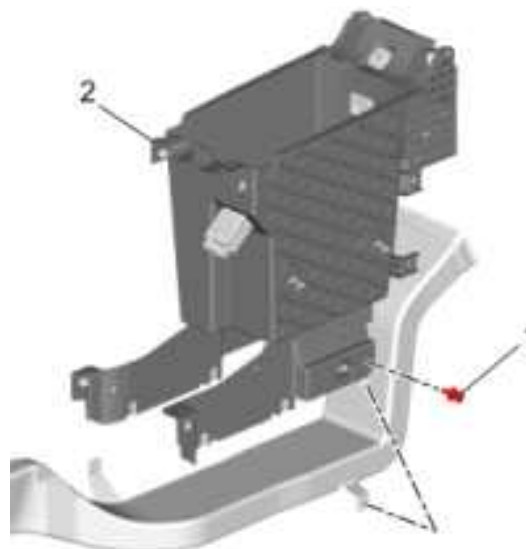


Fig. 1057: Front Floor Console Rear Air Duct Retainer And Front Floor Console Compartment
Courtesy of GENERAL MOTORS COMPANY

2. Install Front Floor Console Rear Air Duct Retainer (1)

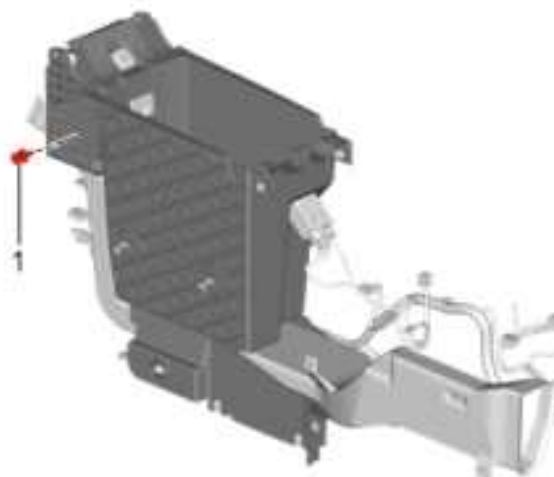


Fig. 1058: Front Floor Console Rear Air Duct Retainer
Courtesy of GENERAL MOTORS COMPANY

3. Route the wiring harness to it's proper position.
4. Install Front Floor Console Rear Air Duct Retainer (1)

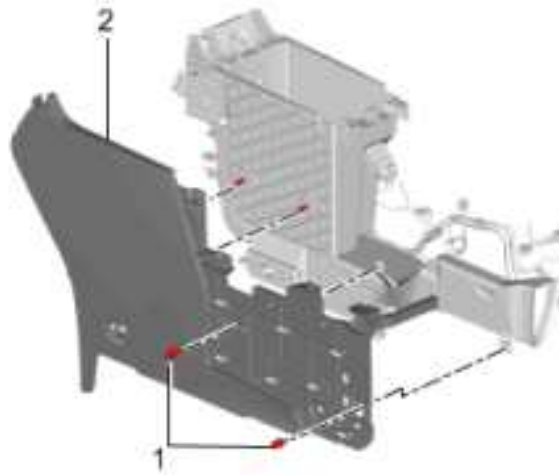


Fig. 1059: Front Floor Console Rear Air Duct Retainers And Right Side Front Floor Lower Console
Courtesy of GENERAL MOTORS COMPANY

5. Position the wiring harness to it's proper position and reconnect.
6. Install Front Floor Lower Console - Right Side (2)
7. Install Front Floor Console Rear Air Duct Retainer (1) [2x]

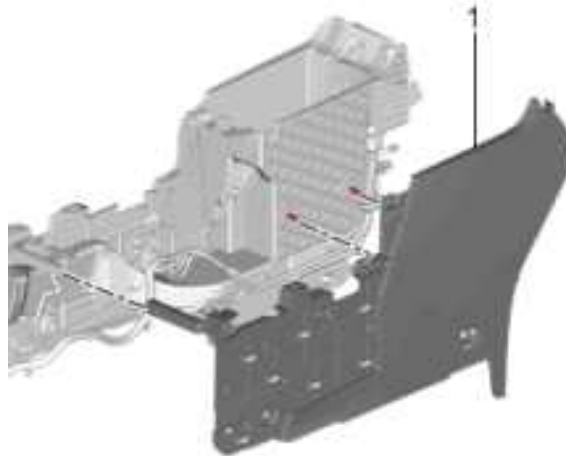


Fig. 1060: Left Side Front Floor Lower Console
Courtesy of GENERAL MOTORS COMPANY

8. Install Front Floor Lower Console - Left Side (1) - **Front Floor Lower Console Replacement (Equinox)**
9. Position the wiring harness to it's proper position and reconnect.

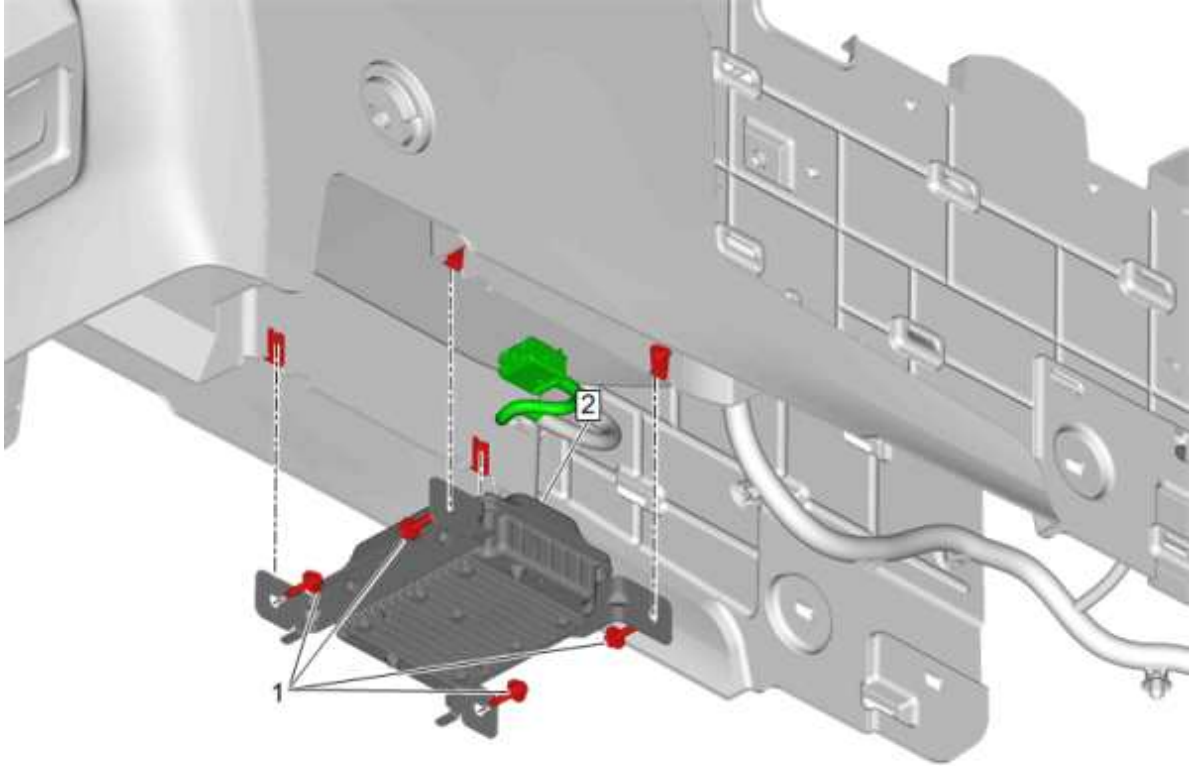


Fig. 1061: Accessory AC and DC Power Control Module And Bolt
Courtesy of GENERAL MOTORS COMPANY

10. Install Accessory AC and DC Power Control Module - [Accessory AC and DC Power Control Module Replacement \(Equinox\)](#)



Fig. 1062: Front Floor Console Armrest
Courtesy of GENERAL MOTORS COMPANY

11. Install Front Floor Console Armrest (1) - [Front Floor Console Armrest Replacement \(Equinox\)](#)

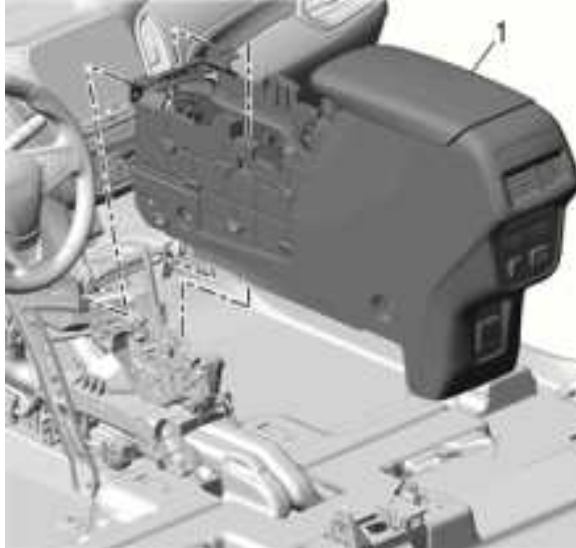


Fig. 1063: Front Floor Console

Courtesy of GENERAL MOTORS COMPANY

12. Connect the electrical connectors.
13. Install Front Floor Console (1) - [Front Floor Console Replacement \(Equinox\)](#)



Fig. 1064: Left Front Floor Console Extension Panel

Courtesy of GENERAL MOTORS COMPANY

14. Install Front Floor Console Extension Panel - Left (1) - [Front Floor Console Extension Panel Replacement - Left Side \(Equinox\)](#)

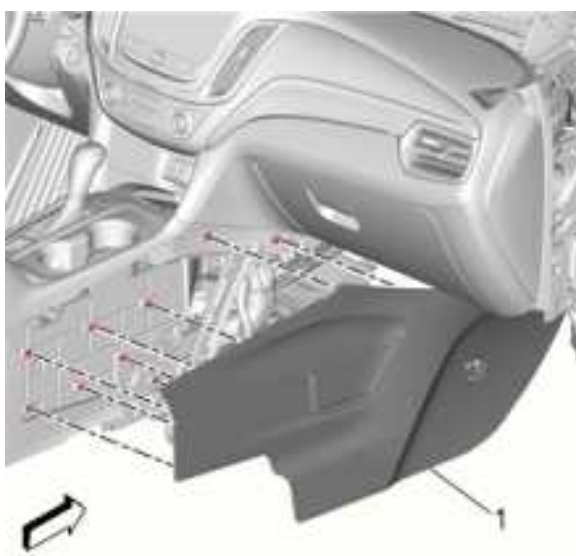


Fig. 1065: Right Front Floor Console Extension Panel

Courtesy of GENERAL MOTORS COMPANY

15. Install Front Floor Console Extension Panel - Right (1) - [Front Floor Console Extension Panel Replacement - Right Side \(Equinox\)](#).

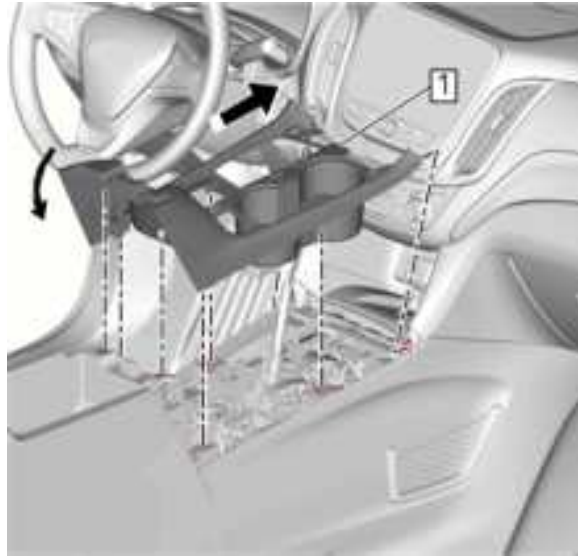


Fig. 1066: Front Floor Console Applique
Courtesy of GENERAL MOTORS COMPANY

16. Install Front Floor Console Applique (1) - [Front Floor Console Applique Replacement \(Equinox\)](#).

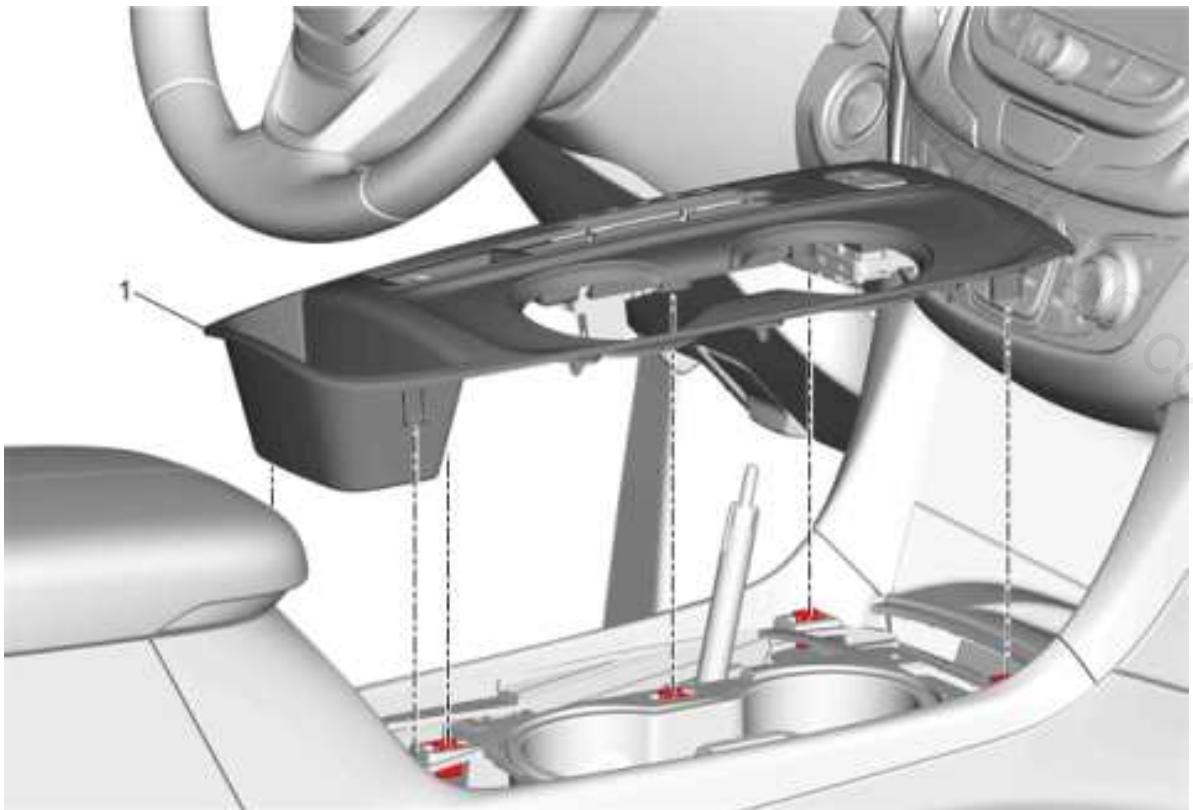


Fig. 1067: Front Floor Console Trim Plate (Equinox)
Courtesy of GENERAL MOTORS COMPANY

17. Install Front Floor Console Trim Plate (1) - [Front Floor Console Trim Plate Replacement \(Equinox\)](#)
18. Install Drivers Seat and Passengers Seat - [Driver or Passenger Seat Removal and Installation](#)

FRONT FLOOR CONSOLE REAR AIR DUCT REPLACEMENT (TERRAIN)

Removal Procedure

1. Remove Drivers Seat and Passengers Seat - [Driver or Passenger Seat Removal and Installation](#)

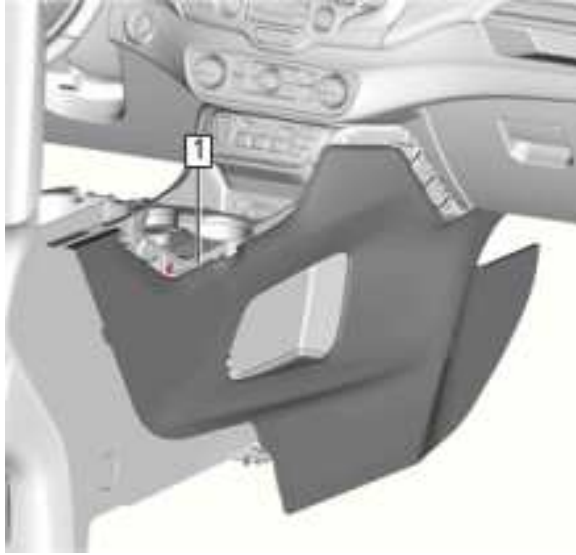


Fig. 1068: Right Front Floor Console Extension Panel
Courtesy of GENERAL MOTORS COMPANY

2. Remove Front Floor Console Extension Panel - Right (1)- **Front Floor Console Extension Panel Replacement - Right Side (Terrain)**



Fig. 1069: Left Front Floor Console Extension Panel
Courtesy of GENERAL MOTORS COMPANY

3. Remove Front Floor Console Extension Panel - Left (1) - **Front Floor Console Extension Panel Replacement - Left Side (Terrain)**

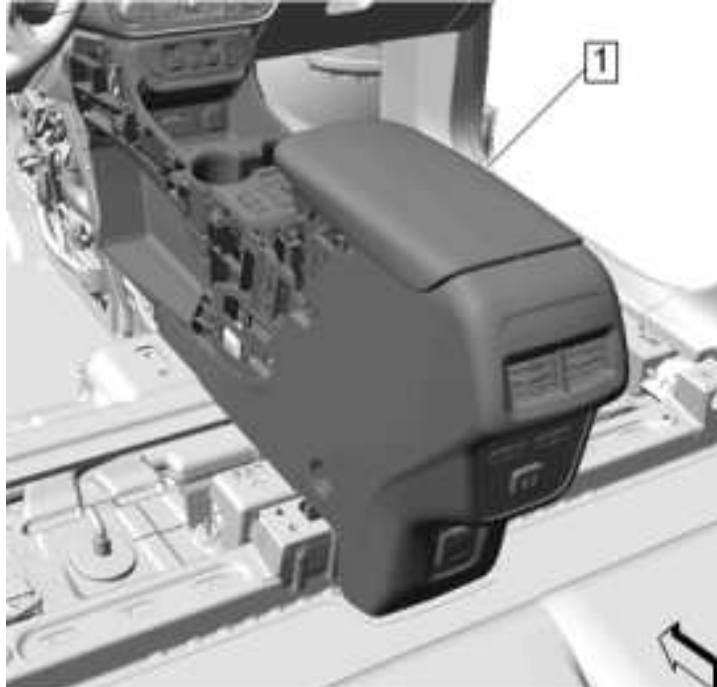


Fig. 1070: Front Floor Console

Courtesy of GENERAL MOTORS COMPANY

4. Remove Front Floor Console (1) - [Front Floor Console Replacement \(Terrain\)](#)
5. Disconnect the electrical connectors.

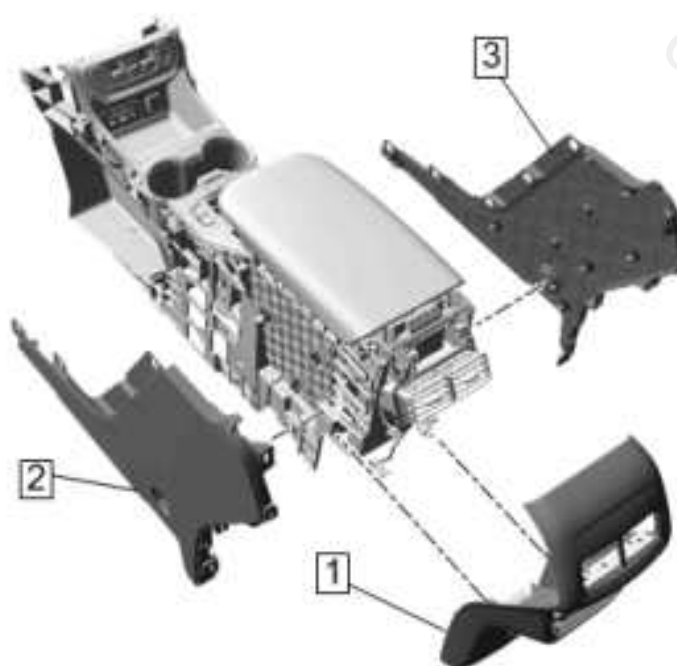


Fig. 1071: Front Floor Console Rear Trim Panel- Left

Courtesy of GENERAL MOTORS COMPANY

6. Remove Front Floor Console Rear Trim Panel (1) - [Front Floor Console Rear Trim Panel Replacement \(Equinox\)](#) [Front Floor Console Rear Trim Panel Replacement \(Terrain\)](#)
7. Disconnect and reposition harness as necessary.
8. Remove Front Floor Console Rear Trim Panel-Left Side (2)
9. Remove Front Floor Console Rear Trim Panel-Right Side (3)

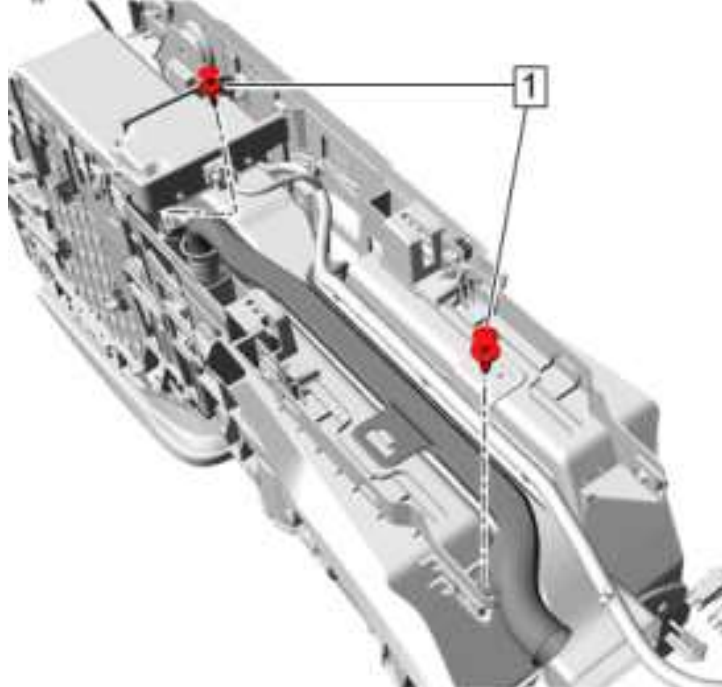


Fig. 1072: Push Pin

Courtesy of GENERAL MOTORS COMPANY

10. Remove { If equipped } Push Pin (1)

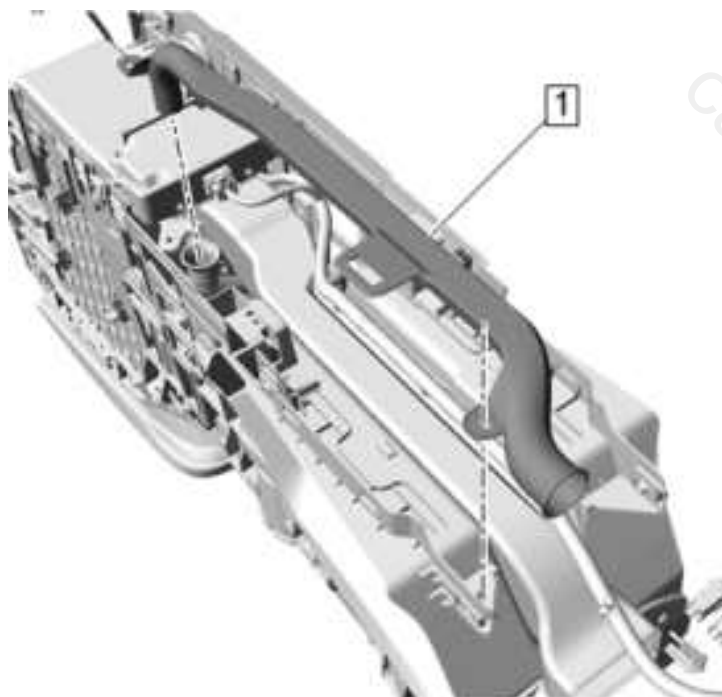


Fig. 1073: Front Floor Console Auxiliary Cooling Duct

Courtesy of GENERAL MOTORS COMPANY

11. Remove { If equipped } Front Floor Console Auxiliary Cooling Duct (1)

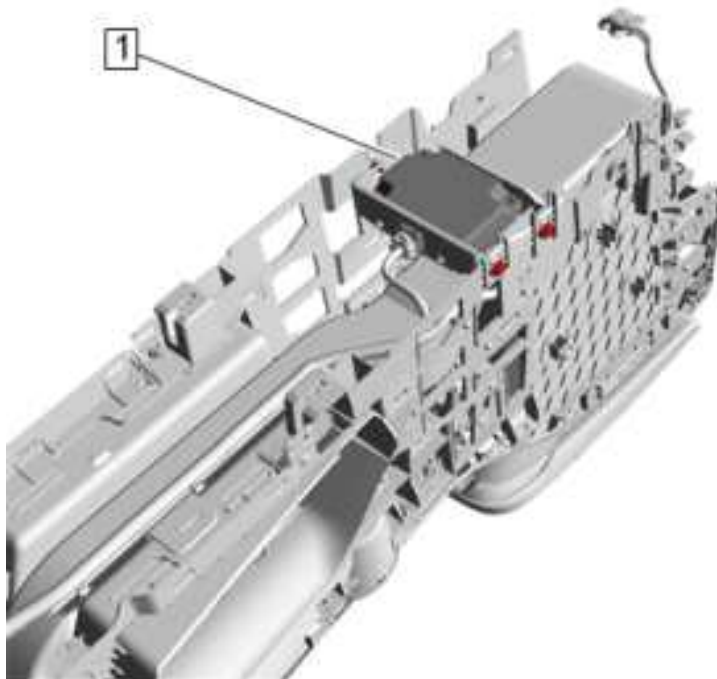


Fig. 1074: Accessory AC And DC Power Control Module
Courtesy of GENERAL MOTORS COMPANY

12. Remove Accessory AC and DC Power Control Module (1) - [Accessory AC and DC Power Control Module Replacement \(Terrain\)](#).

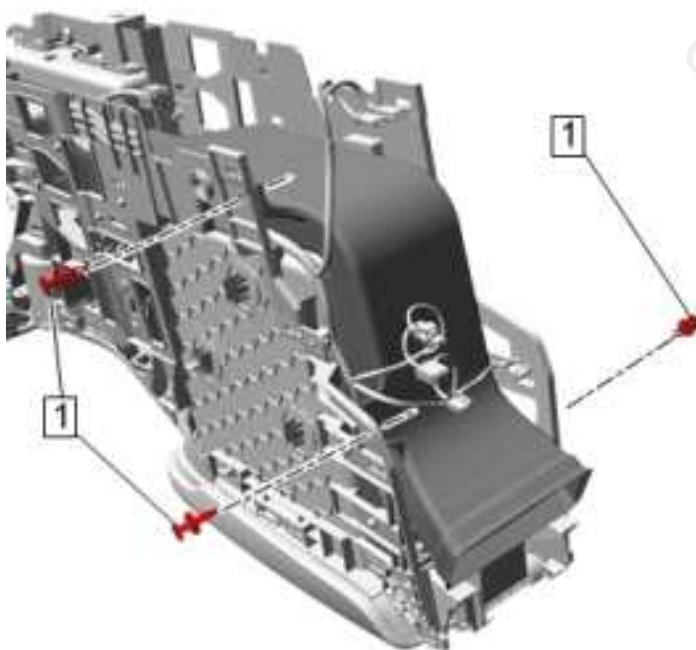


Fig. 1075: Push Pin
Courtesy of GENERAL MOTORS COMPANY

13. Remove Push Pin (1)

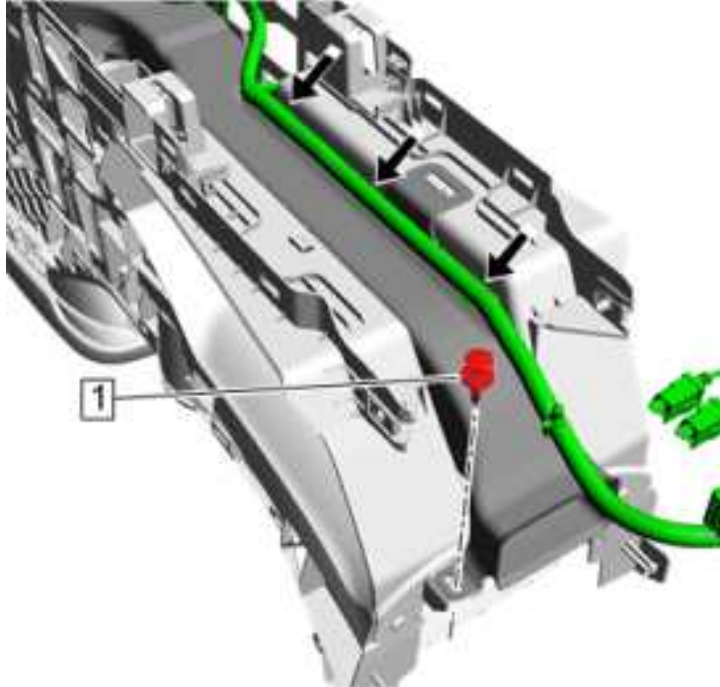


Fig. 1076: Push Pin

Courtesy of GENERAL MOTORS COMPANY

14. Remove Push Pin (1)
15. Un-clip the front floor console harness from the front floor console rear air duct indicated by the arrows.

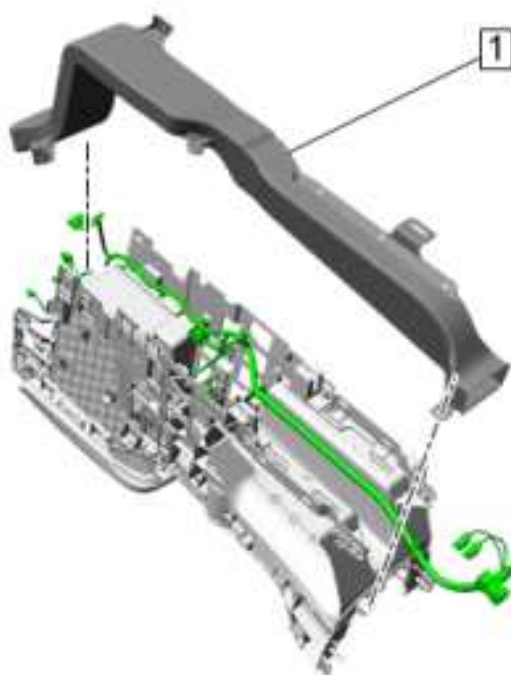


Fig. 1077: Front Floor Console Rear Air Duct

Courtesy of GENERAL MOTORS COMPANY

16. Remove Front Floor Console Rear Air Duct (1) @Front Floor Console Retainer

Installation Procedure

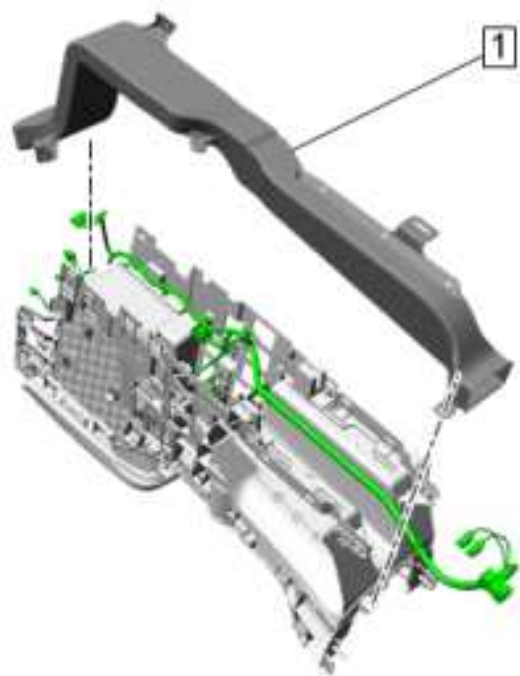


Fig. 1078: Front Floor Console Rear Air Duct
Courtesy of GENERAL MOTORS COMPANY

1. Install Front Floor Console Rear Air Duct (1) @Front Floor Console Retainer

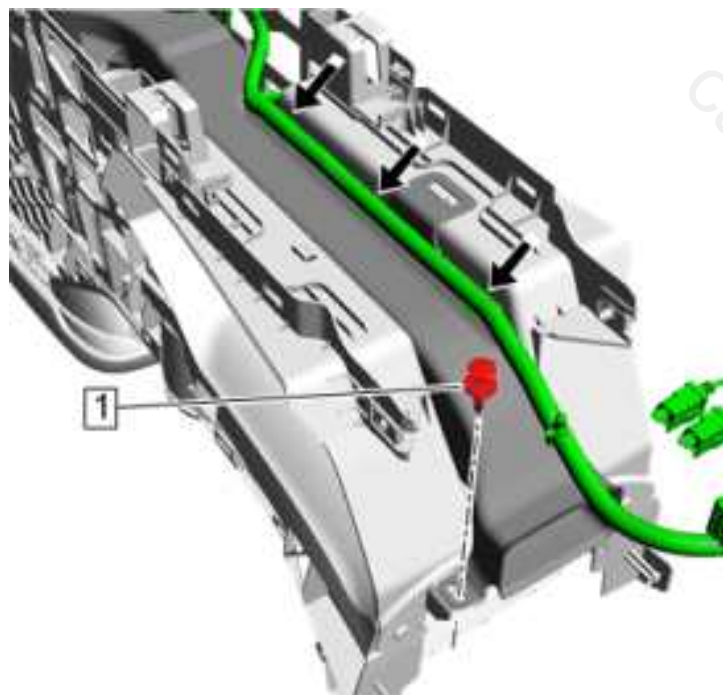


Fig. 1079: Push Pin
Courtesy of GENERAL MOTORS COMPANY

2. Install Push Pin (1)
3. Clip the front floor console harness to the front floor console rear air duct indicated by the arrows.

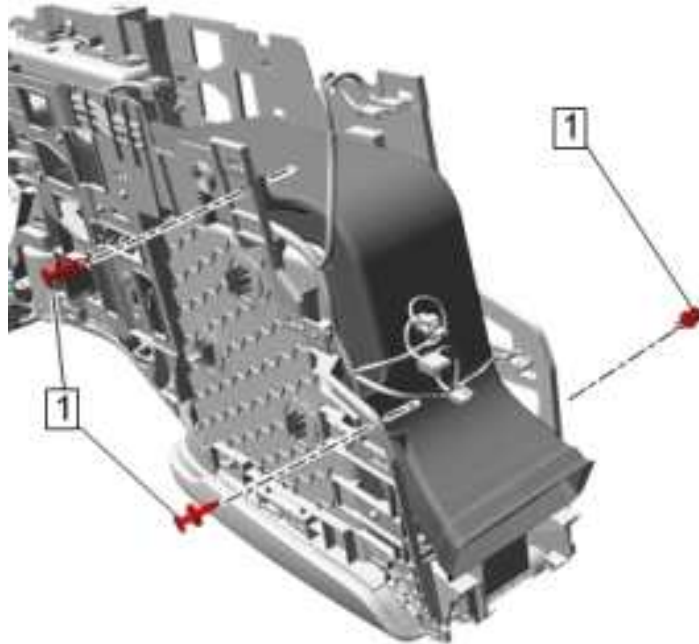


Fig. 1080: Push Pin

Courtesy of GENERAL MOTORS COMPANY

4. Install Push Pin (1)

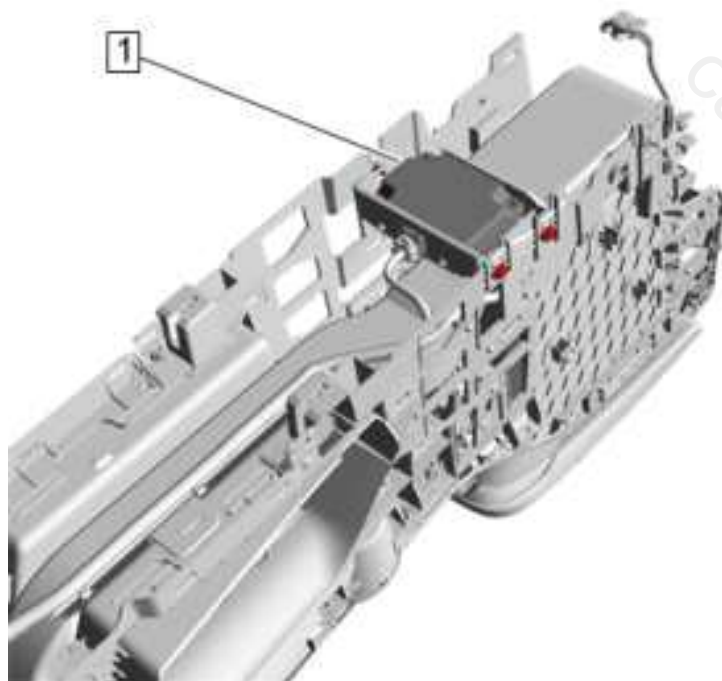


Fig. 1081: Accessory AC And DC Power Control Module

Courtesy of GENERAL MOTORS COMPANY

5. Install Accessory AC and DC Power Control Module (1) - [Accessory AC and DC Power Control Module Replacement \(Terrain\)](#)

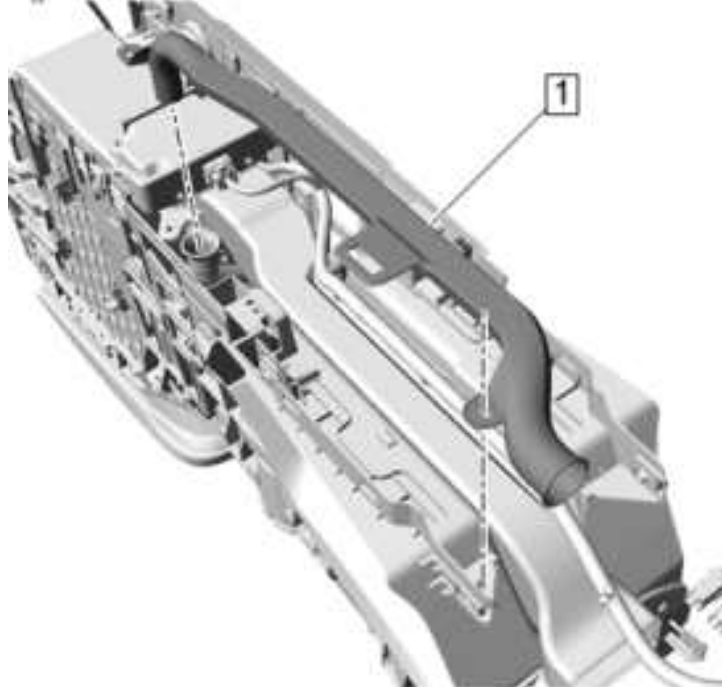


Fig. 1082: Front Floor Console Auxiliary Cooling Duct
Courtesy of GENERAL MOTORS COMPANY

6. Install { If equipped } Front Floor Console Auxiliary Cooling Duct (1)

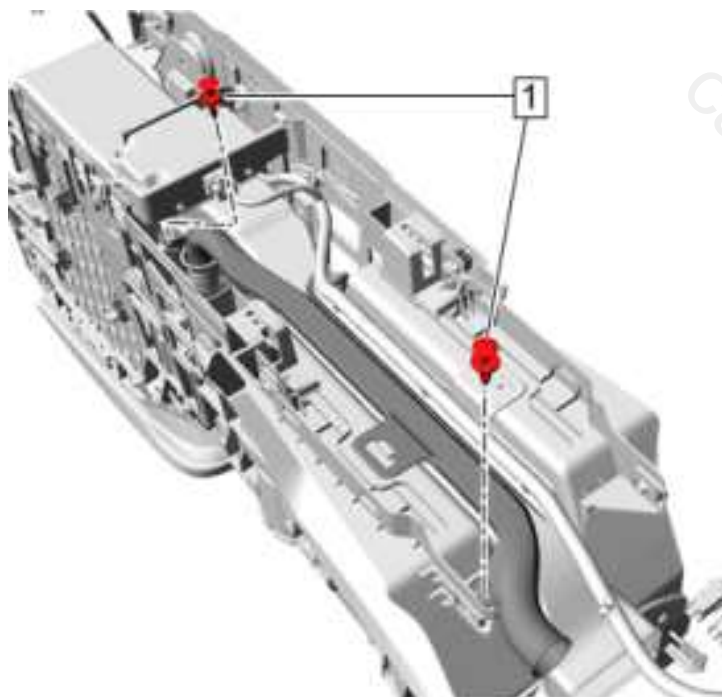


Fig. 1083: Push Pin
Courtesy of GENERAL MOTORS COMPANY

7. Install { If equipped } Push Pin (1) [2x]

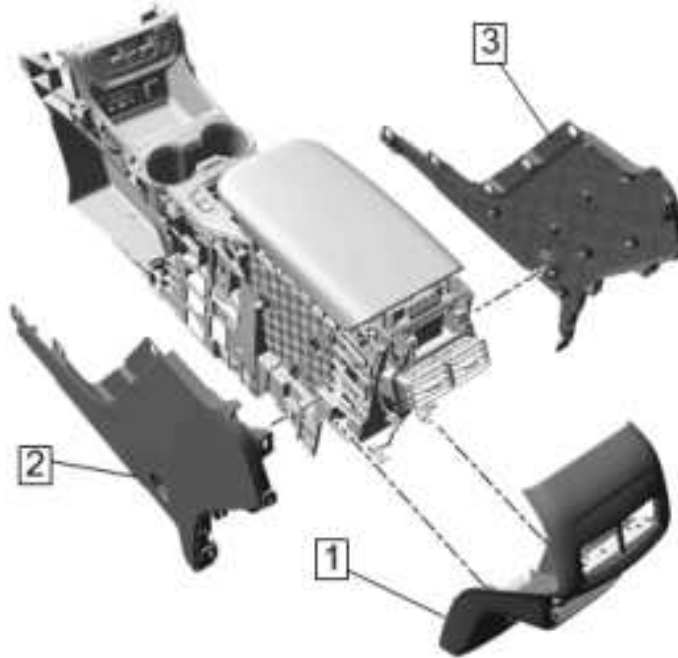


Fig. 1084: Front Floor Console Rear Trim Panel- Left
Courtesy of GENERAL MOTORS COMPANY

8. Install Front Floor Console Rear Trim Panel-Right Side (3)
9. Install Front Floor Console Rear Trim Panel-Left Side (2)
10. Connect the electrical connectors.
11. Install Front Floor Console Rear Trim Panel (1) - [Front Floor Console Rear Trim Panel Replacement \(Terrain\)](#)

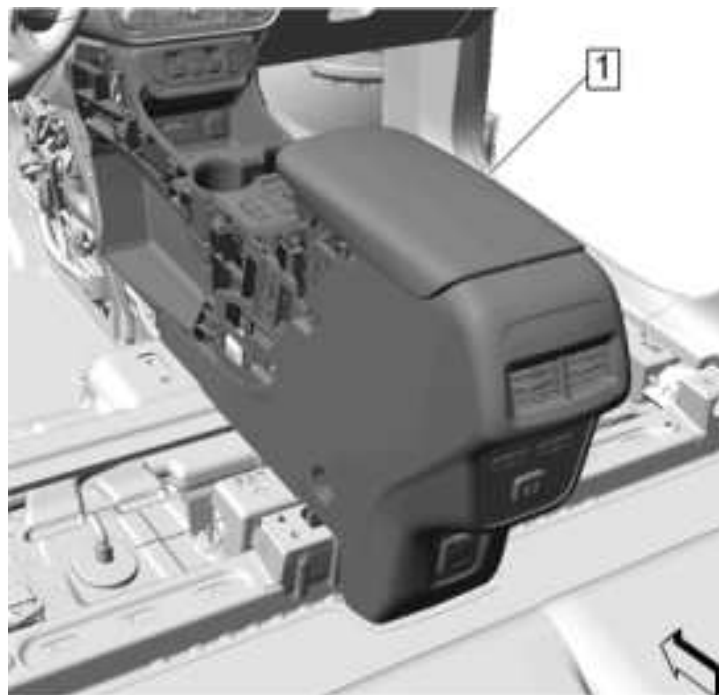


Fig. 1085: Front Floor Console
Courtesy of GENERAL MOTORS COMPANY

12. Connect the electrical connectors.
13. Install Front Floor Console (1) - [Front Floor Console Replacement \(Terrain\)](#)



Fig. 1086: Left Front Floor Console Extension Panel

Courtesy of GENERAL MOTORS COMPANY

14. Install Front Floor Console Extension Panel - Left (1) - **Front Floor Console Extension Panel Replacement - Left Side (Terrain)**

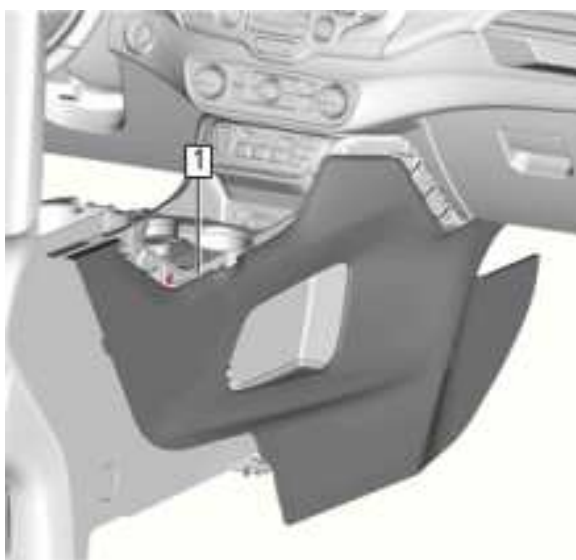


Fig. 1087: Right Front Floor Console Extension Panel

Courtesy of GENERAL MOTORS COMPANY

15. Install Front Floor Console Extension Panel - Right (1) - **Front Floor Console Extension Panel Replacement - Right Side (Terrain)**
16. Install Drivers Seat and Passengers Seat - **Driver or Passenger Seat Removal and Installation**

FRONT FLOOR CONSOLE REAR AIR OUTLET REPLACEMENT

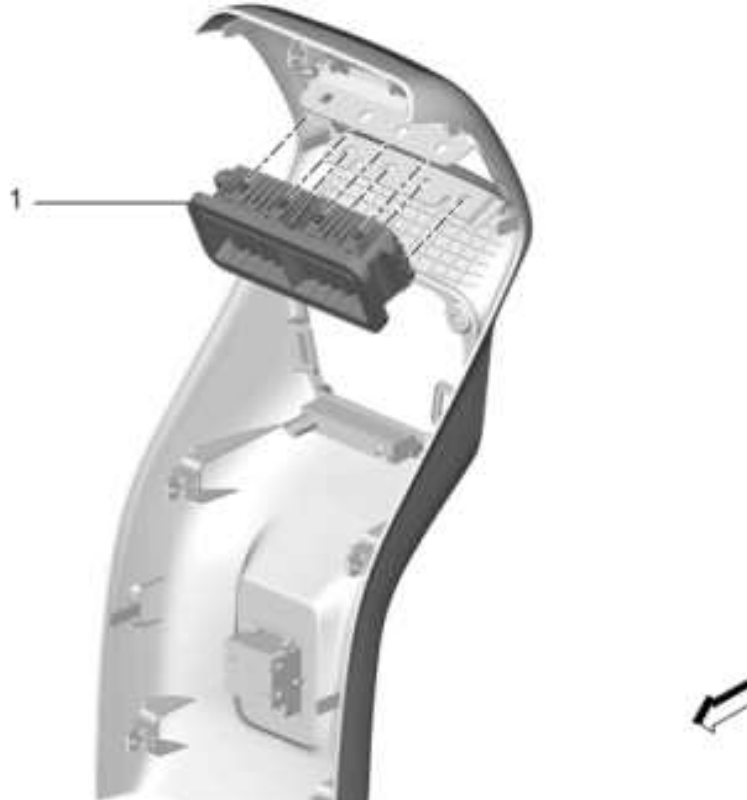


Fig. 1088: Front Floor Console Rear Air Outlet
 Courtesy of GENERAL MOTORS COMPANY

Callout	Component Name
Preliminary Procedure Front Floor Console Rear Trim Panel Replacement (Equinox) Front Floor Console Rear Trim Panel Replacement (Terrain)	
1	Front Floor Console Rear Air Outlet Procedure Release the plastic retaining tabs.

INSTRUMENT PANEL CENTER AIR OUTLET DUCT REPLACEMENT (EQIONOX)

Removal Procedure

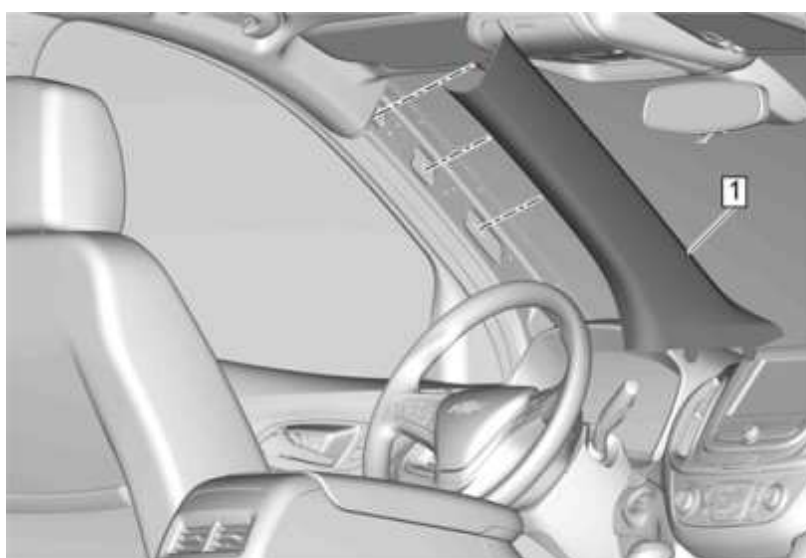


Fig. 1089: Windshield Garnish Molding Replacement (Equinox)
Courtesy of GENERAL MOTORS COMPANY

1. Remove the left and right side windshield garnish molding (1). [Windshield Garnish Molding Replacement \(Equinox\)](#)



Fig. 1090: Left And Right Instrument Panel Outer Trim Cover
Courtesy of GENERAL MOTORS COMPANY

2. Remove the left and right instrument panel outer trim cover (1). [Instrument Panel Outer Trim Cover Replacement \(Equinox\)](#)

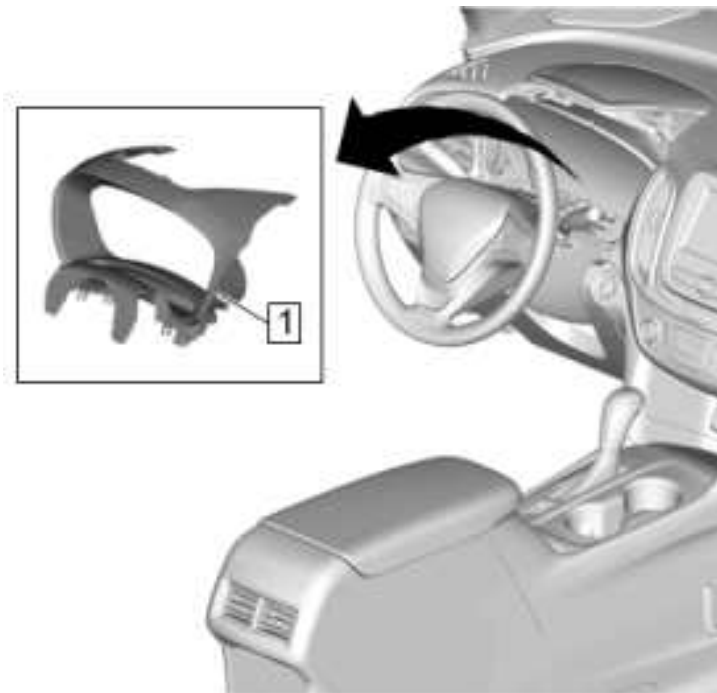


Fig. 1091: Instrument Panel Cluster Trim Plate
Courtesy of GENERAL MOTORS COMPANY

3. Remove Instrument Panel Cluster Trim Plate (1) - [Instrument Panel Cluster Trim Plate Replacement \(Equinox\)](#)

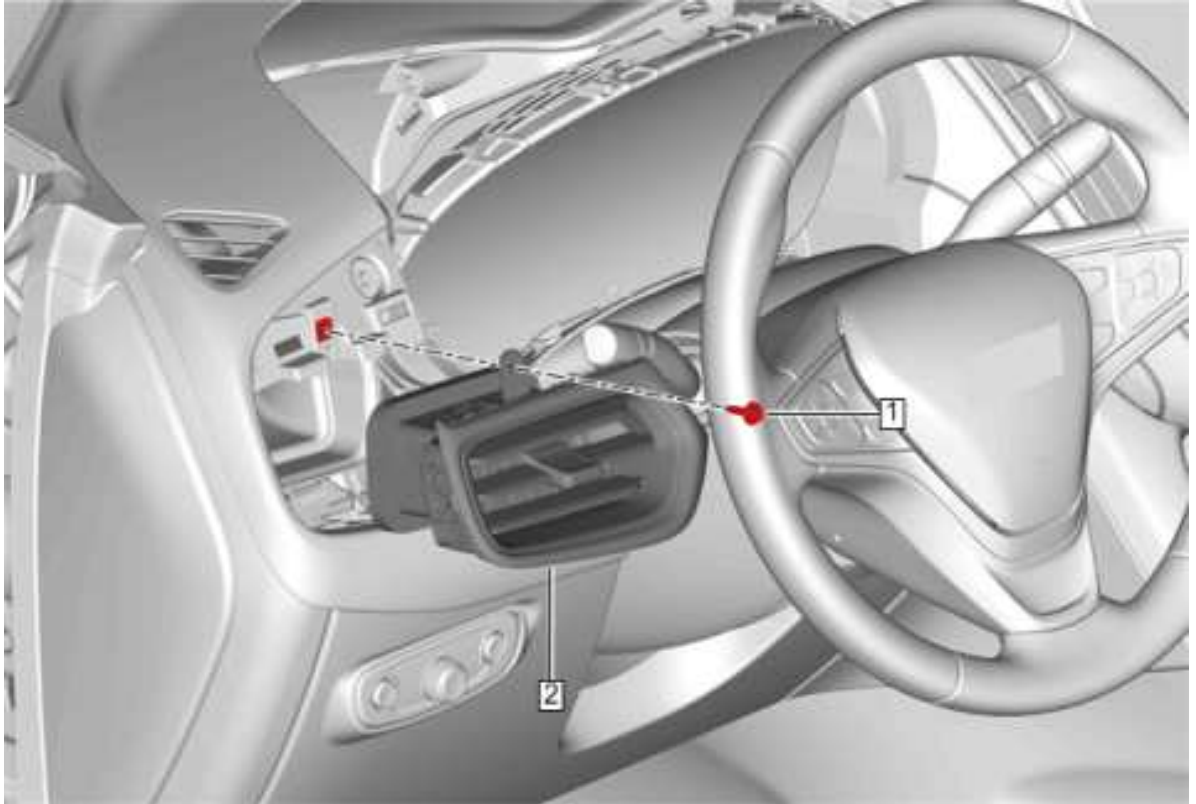


Fig. 1092: Left Side Instrument Panel Outer Air Outlet And Screw
Courtesy of GENERAL MOTORS COMPANY

4. Remove Instrument Panel Outer Air Outlet - Left Side (2) - **Instrument Panel Outer Air Outlet Replacement - Left Side (Equinox)**

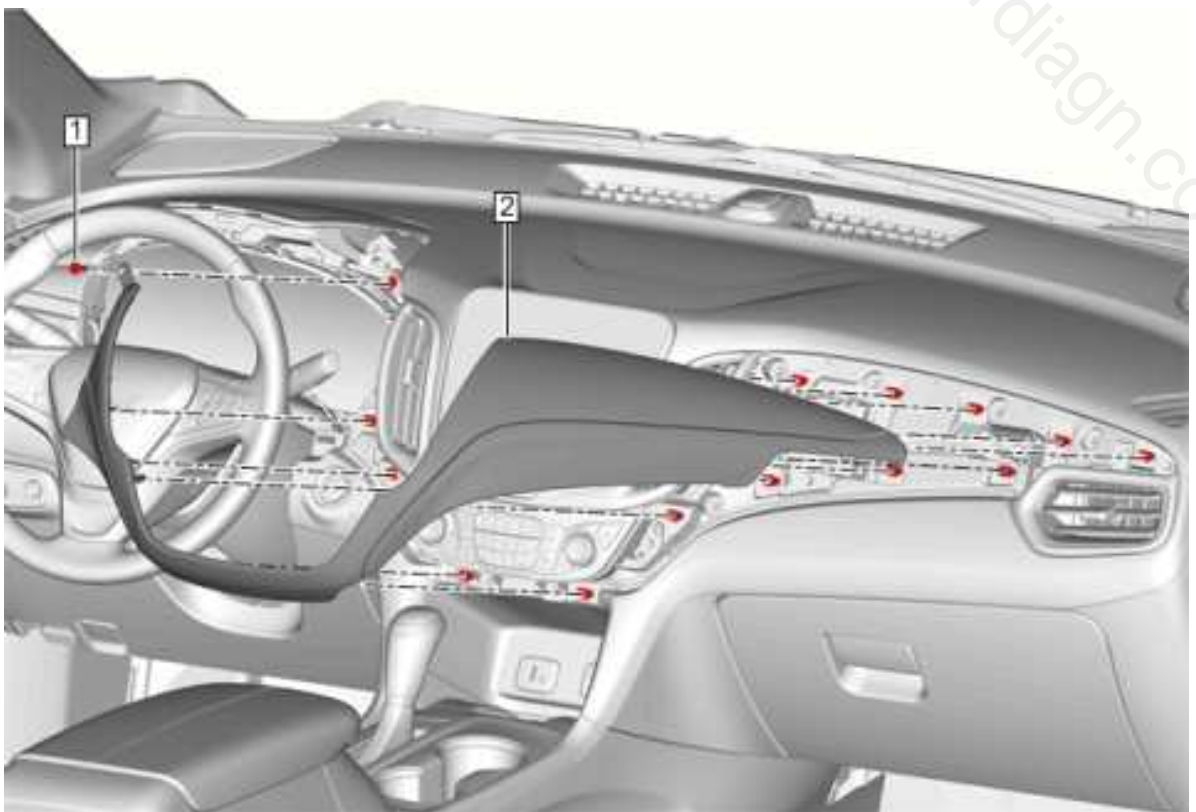


Fig. 1093: Right Side Instrument Panel Trim Pad
Courtesy of GENERAL MOTORS COMPANY

5. Remove Instrument Panel Trim Pad - Right Side (2) - **Instrument Panel Trim Pad Replacement - Right Side (Equinox)**

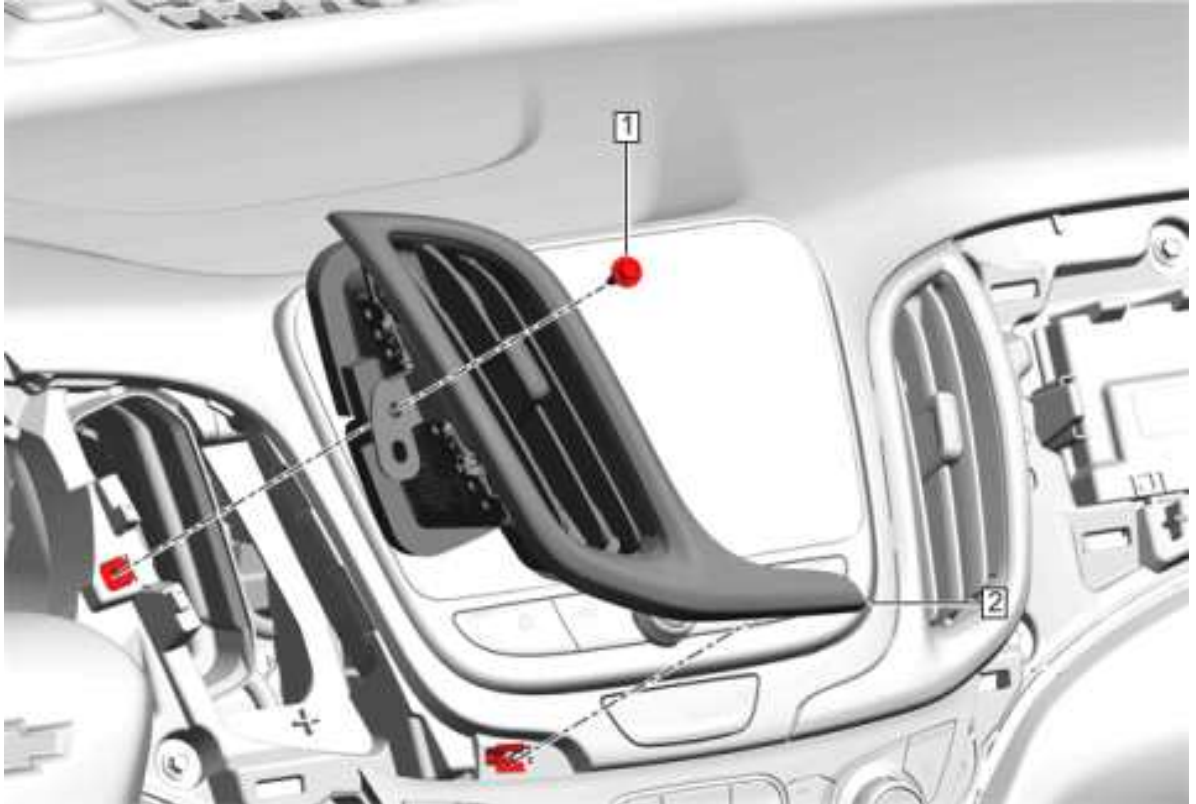


Fig. 1094: Left Side Instrument Panel Center Air Outlet And Screw
 Courtesy of GENERAL MOTORS COMPANY

6. Remove Instrument Panel Center Air Outlet - Left Side (2) - **Instrument Panel Center Air Outlet Replacement - Left Side (Equinox)**



Fig. 1095: Right Side Instrument Panel Center Air Outlet And Screw
 Courtesy of GENERAL MOTORS COMPANY

7. Remove Instrument Panel Center Air Outlet - Right Side (2) - **Instrument Panel Center Air Outlet Replacement - Right Side (Equinox)**

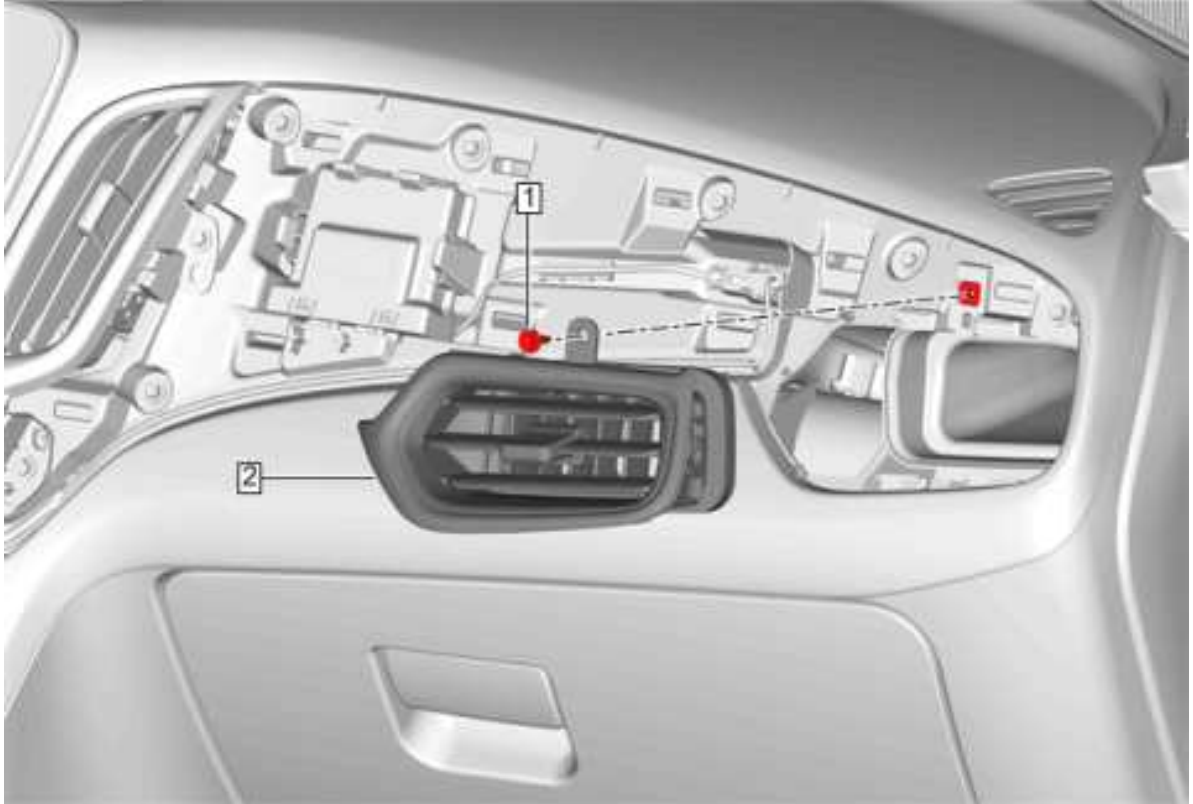


Fig. 1096: Right Side Instrument Panel Outer Air Outlet And Screw
 Courtesy of GENERAL MOTORS COMPANY

8. Remove Instrument Panel Outer Air Outlet - Right Side (2) - **Instrument Panel Outer Air Outlet Replacement - Right Side (Equinox)**

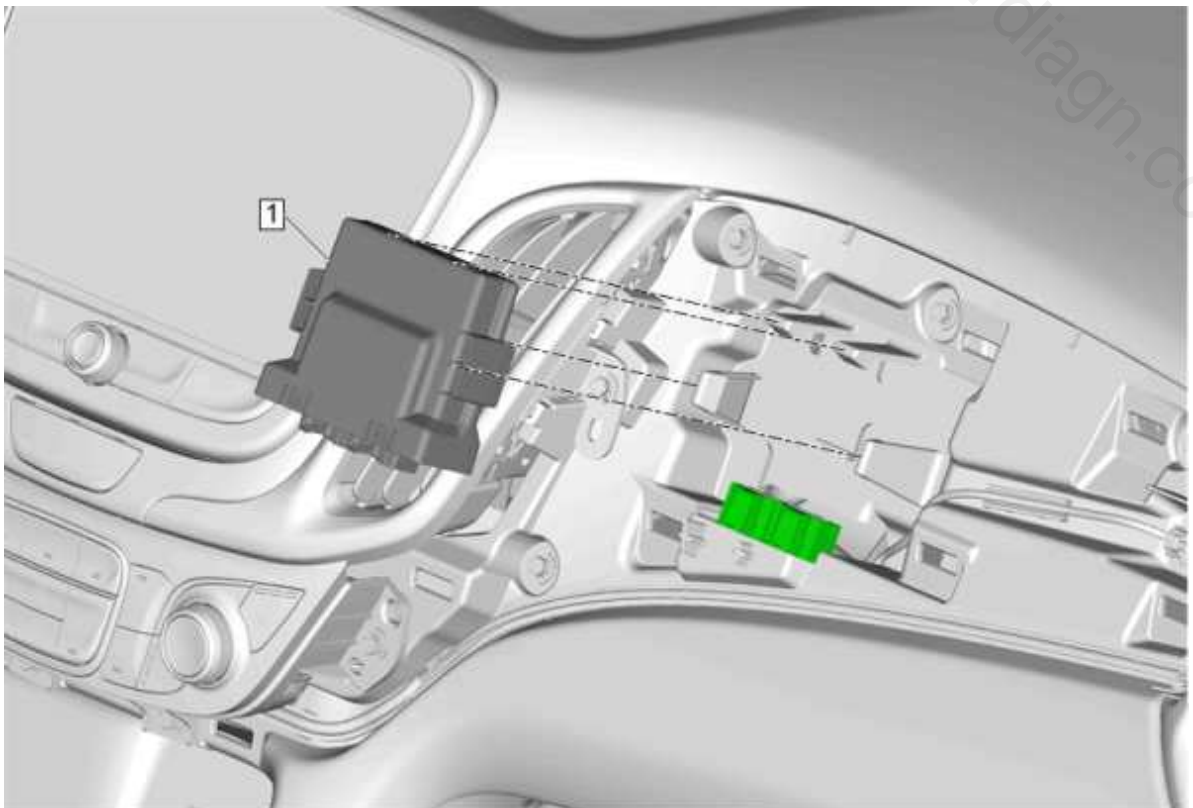


Fig. 1097: Serial Data Gateway Module
 Courtesy of GENERAL MOTORS COMPANY

9. Remove Serial Data Gateway Module (1) - **Serial Data Gateway Module Replacement (Equinox)**

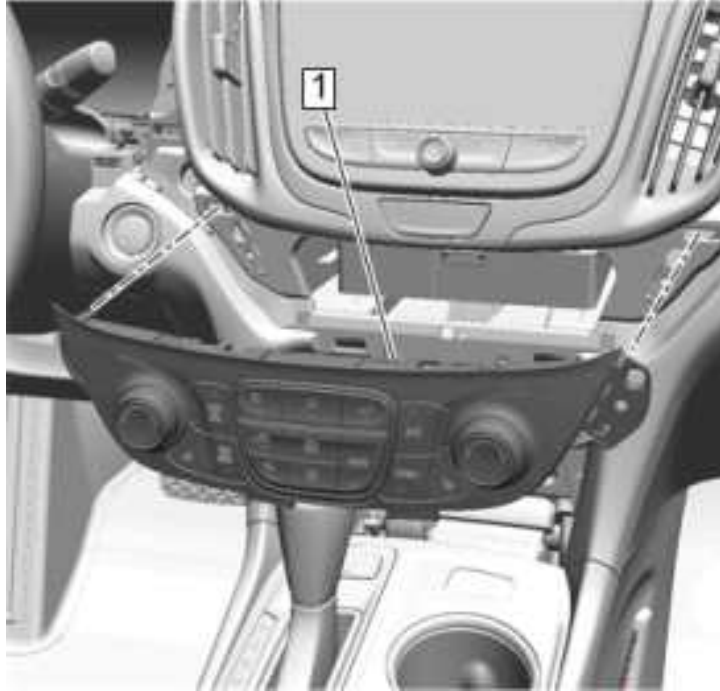


Fig. 1098: Heater and Air Conditioning User Interface Control
 Courtesy of GENERAL MOTORS COMPANY

10. Remove Heater and Air Conditioning User Interface Control (1) - [Heater and Air Conditioning User Interface Control Replacement \(Equinox\)](#)



Fig. 1099: Radio Control Assembly
 Courtesy of GENERAL MOTORS COMPANY

11. Remove Rear Radio Control Assembly (1) - [Radio Control Assembly Replacement \(Equinox\)](#)
12. Hazard Warning Switch - Disconnect the electrical connector.

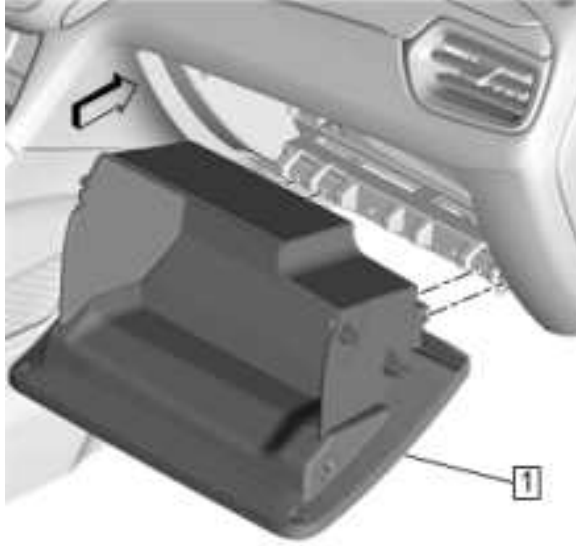


Fig. 1100: Instrument Panel Compartment Door
 Courtesy of GENERAL MOTORS COMPANY

13. Remove Instrument Panel Compartment Door (1) - **Instrument Panel Compartment Door Replacement (Equinox)**

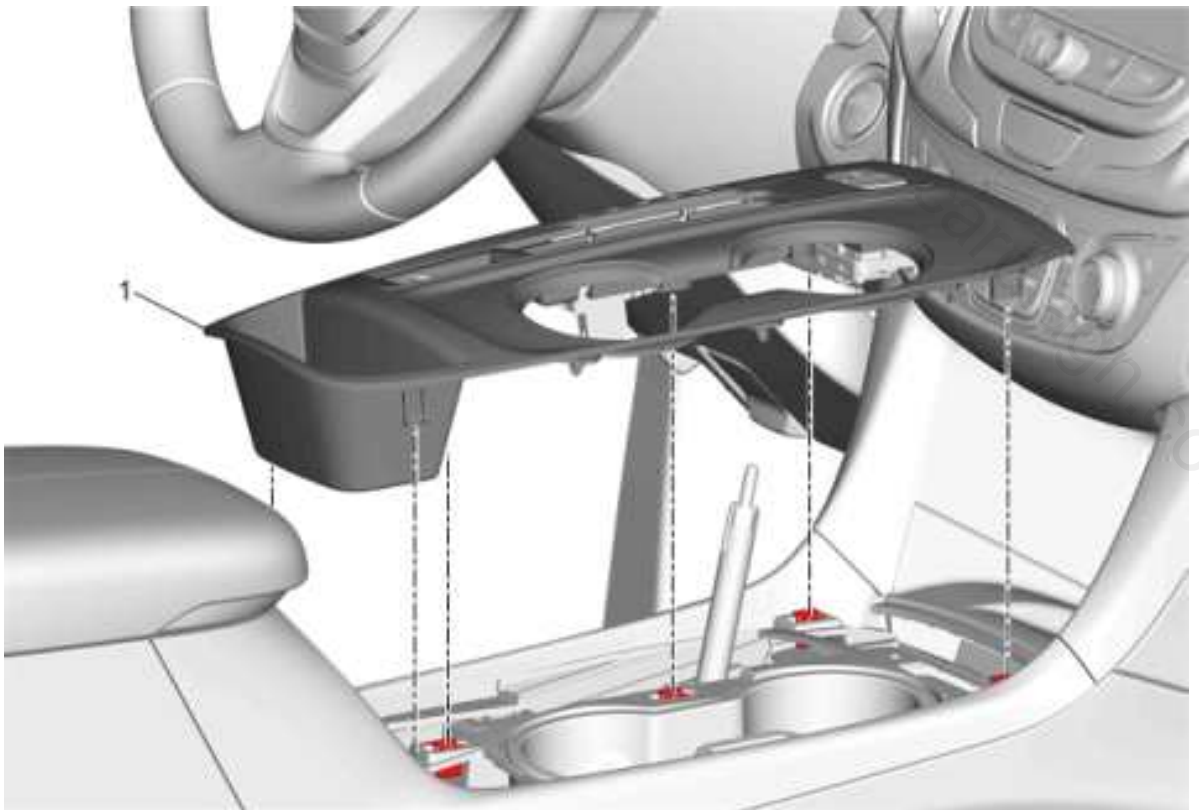


Fig. 1101: Front Floor Console Trim Plate (Equinox)
 Courtesy of GENERAL MOTORS COMPANY

14. Remove Front Floor Console Trim Plate (1) - **Front Floor Console Trim Plate Replacement (Equinox)**

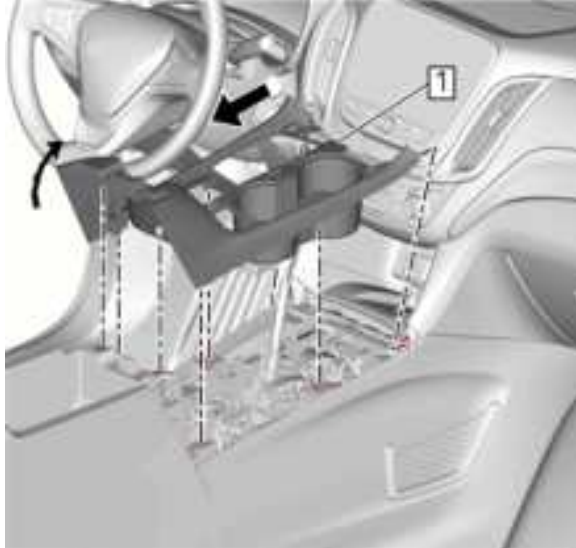


Fig. 1102: Front Floor Console Applique
 Courtesy of GENERAL MOTORS COMPANY

15. Remove Front Floor Console Applique (1) - **Front Floor Console Applique Replacement (Equinox)**

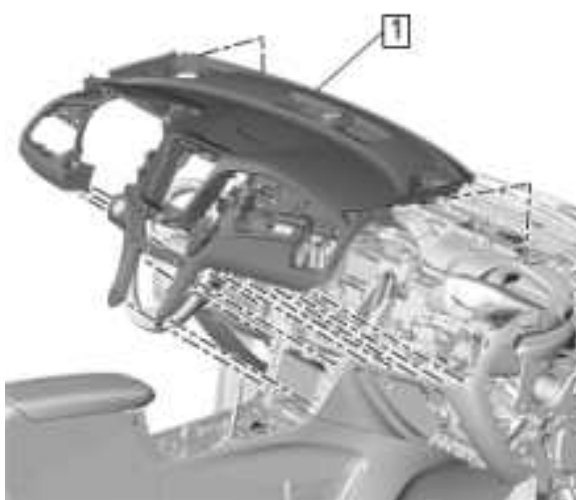


Fig. 1103: Instrument Panel Upper Trim Panel
 Courtesy of GENERAL MOTORS COMPANY

16. Remove Instrument Panel Upper Trim Panel (1) - **Instrument Panel Upper Trim Panel Replacement (Equinox)**

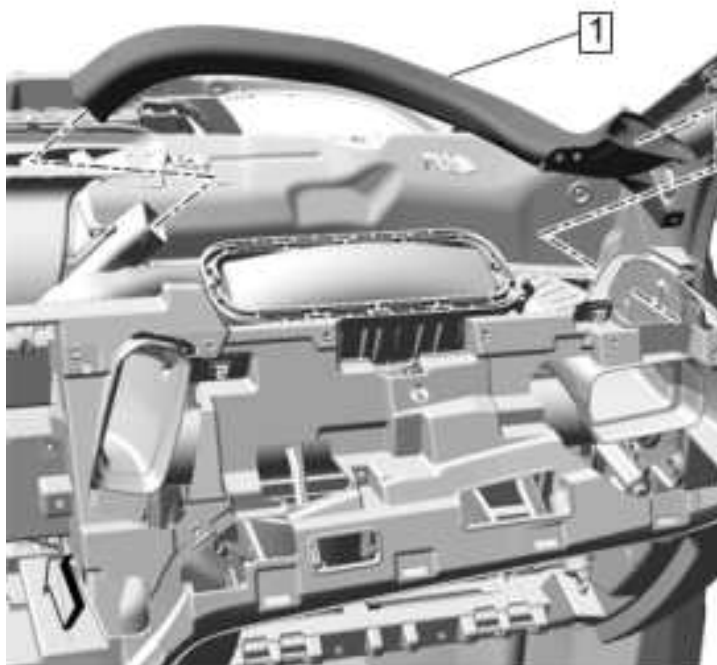


Fig. 1104: Right Side Window Defogger Outlet Duct
Courtesy of GENERAL MOTORS COMPANY

17. Remove Side Window Defogger Outlet Duct - Right Side (1) - [Side Window Defogger Outlet Duct Replacement - Right Side \(Equinox\)](#)



Fig. 1105: Left Side Window Defogger Outlet Duct
Courtesy of GENERAL MOTORS COMPANY

18. Remove Side Window Defogger Outlet Duct - Left Side (1) - [Side Window Defogger Outlet Duct Replacement - Left Side \(Equinox\)](#)

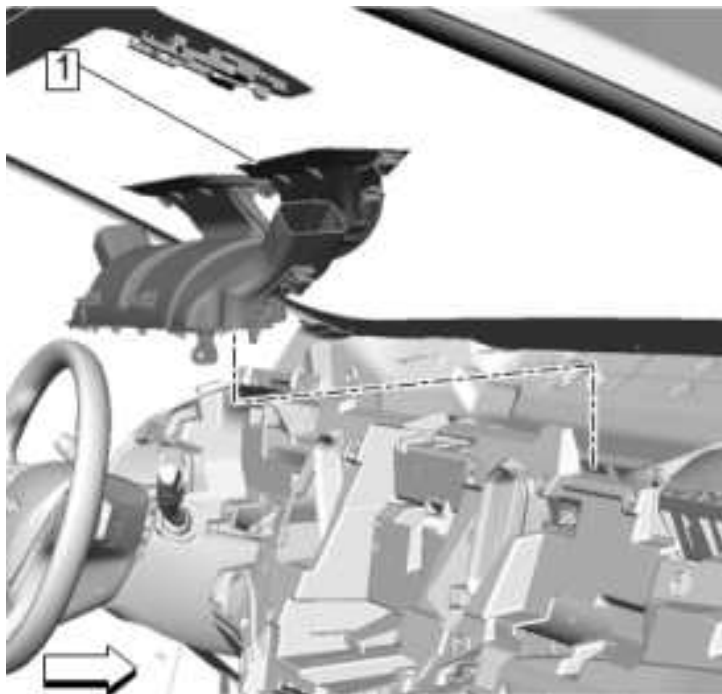


Fig. 1106: Windshield Defroster Outlet Duct
Courtesy of GENERAL MOTORS COMPANY

19. Remove Windshield Defroster Outlet Duct (1) - [Windshield Defroster Outlet Duct Replacement \(Equinox\)](#)

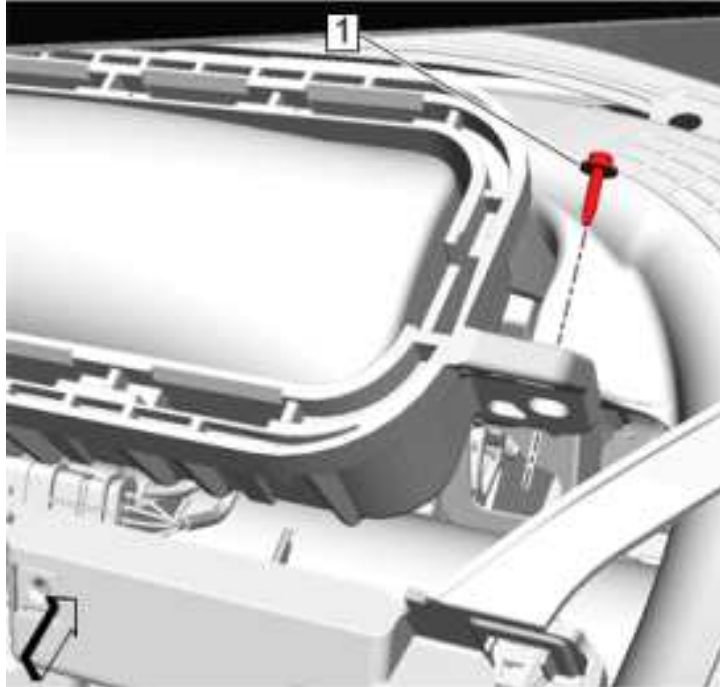


Fig. 1107: Instrument Panel Center Air Outlet Duct Bolt
Courtesy of GENERAL MOTORS COMPANY

- 20. Remove Instrument Panel Center Air Outlet Duct Bolt (1)
- 21. Disconnect and reposition harness as necessary.

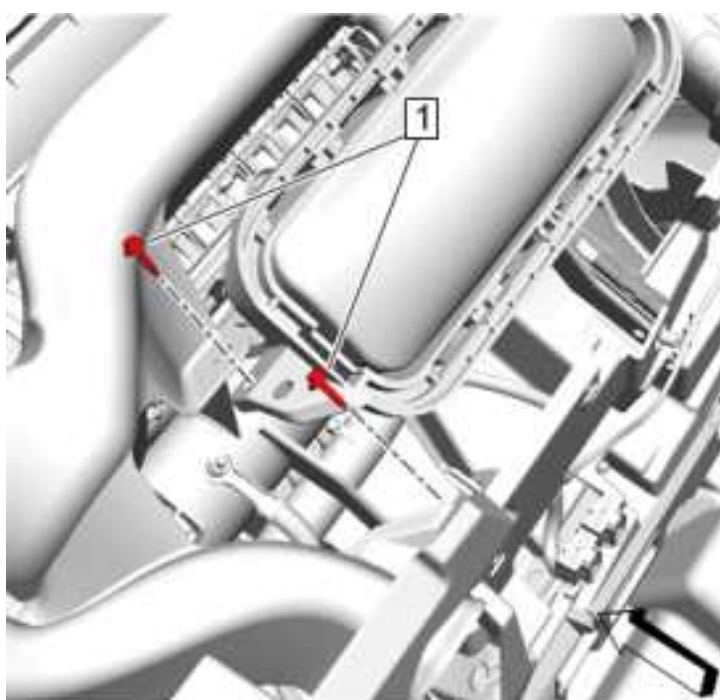


Fig. 1108: Instrument Panel Center Air Outlet Duct Bolt
Courtesy of GENERAL MOTORS COMPANY

- 22. Remove Instrument Panel Center Air Outlet Duct Bolt (1)

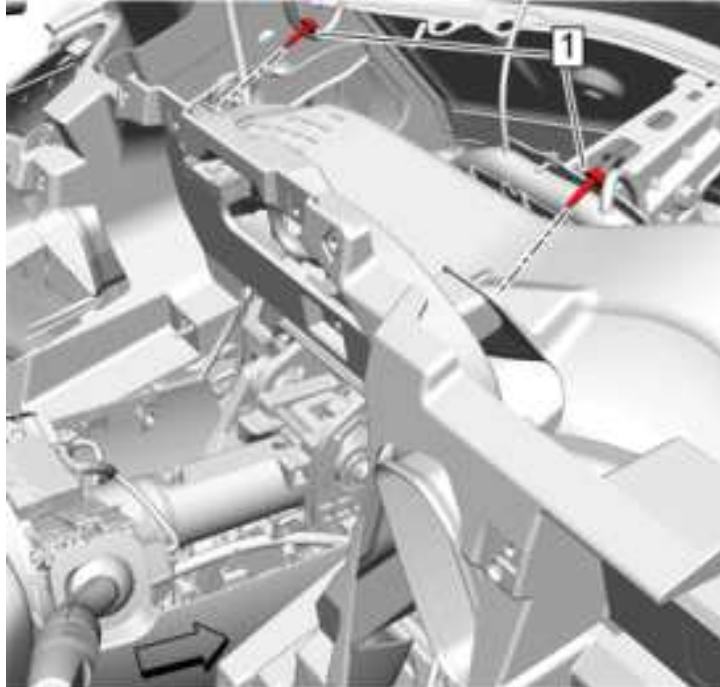


Fig. 1109: Instrument Panel Center Air Outlet Duct Bolt
Courtesy of GENERAL MOTORS COMPANY

23. Remove Instrument Panel Center Air Outlet Duct Bolt (1)

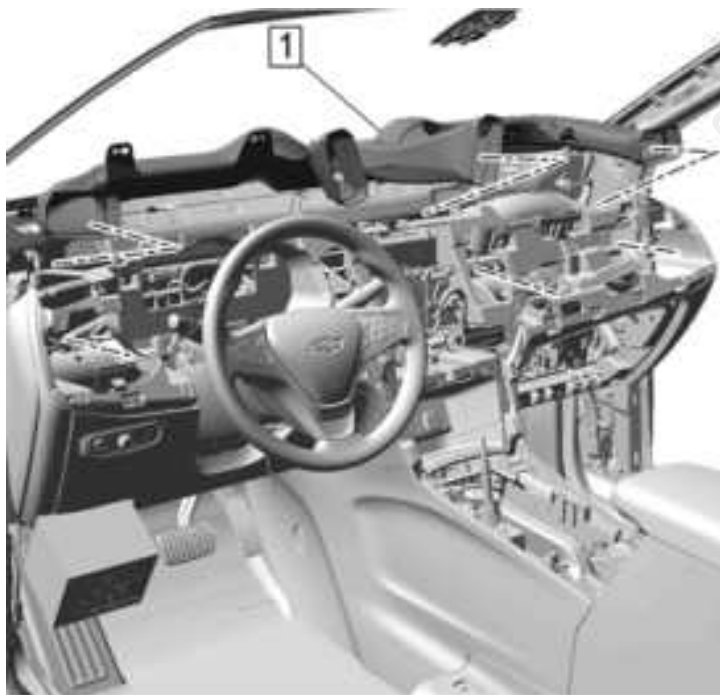


Fig. 1110: Instrument Panel Center Air Outlet Duct
Courtesy of GENERAL MOTORS COMPANY

24. Instrument Panel Center Air Outlet Duct (1)

Installation Procedure

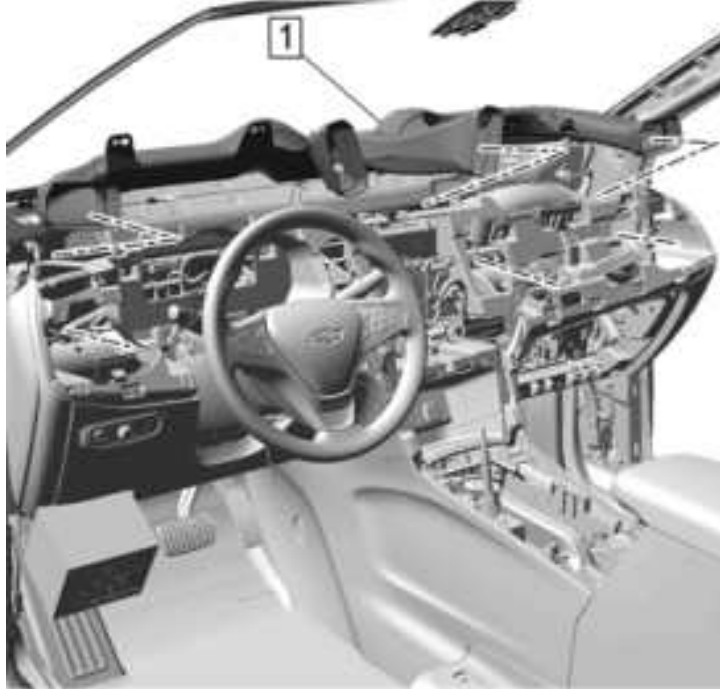


Fig. 1111: Instrument Panel Center Air Outlet Duct
 Courtesy of GENERAL MOTORS COMPANY

1. Install Instrument Panel Center Air Outlet Duct (1)

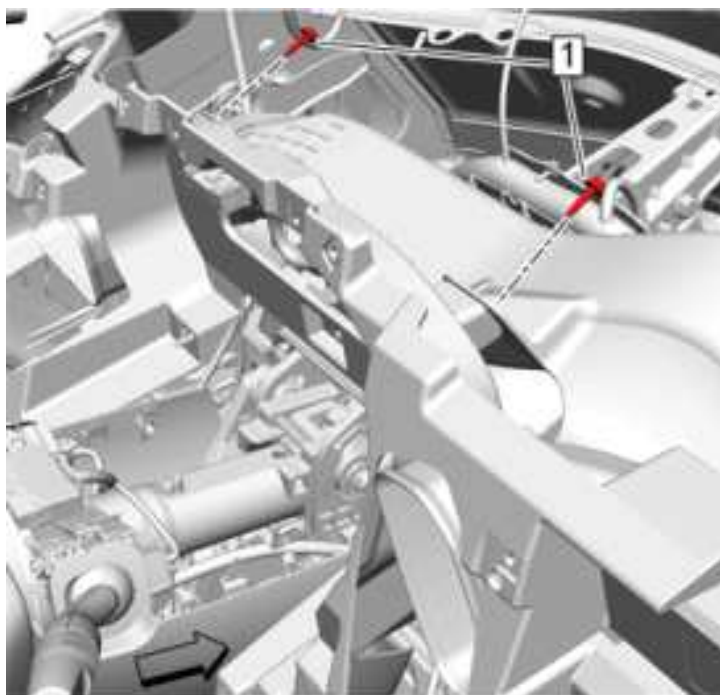


Fig. 1112: Instrument Panel Center Air Outlet Duct Bolt
 Courtesy of GENERAL MOTORS COMPANY

CAUTION: Refer to **Fastener Caution** .

2. Install Instrument Panel Center Air Outlet Duct Bolt (1) and tighten [2x] 2.5 N.m (22 lb in)

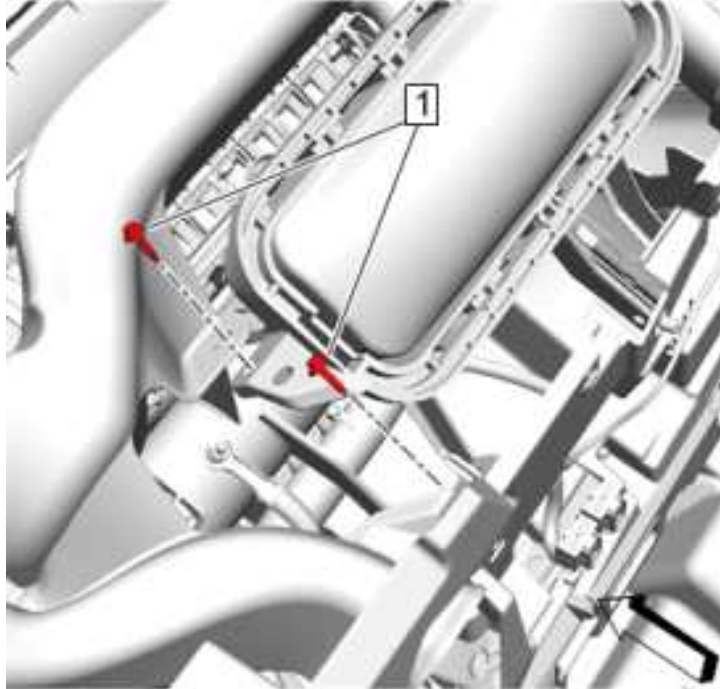


Fig. 1113: Instrument Panel Center Air Outlet Duct Bolt
Courtesy of GENERAL MOTORS COMPANY

3. Install Instrument Panel Center Air Outlet Duct Bolt (1) and tighten [2x] 2.5 N.m (22 lb in)
4. Reconnect the wiring harness.

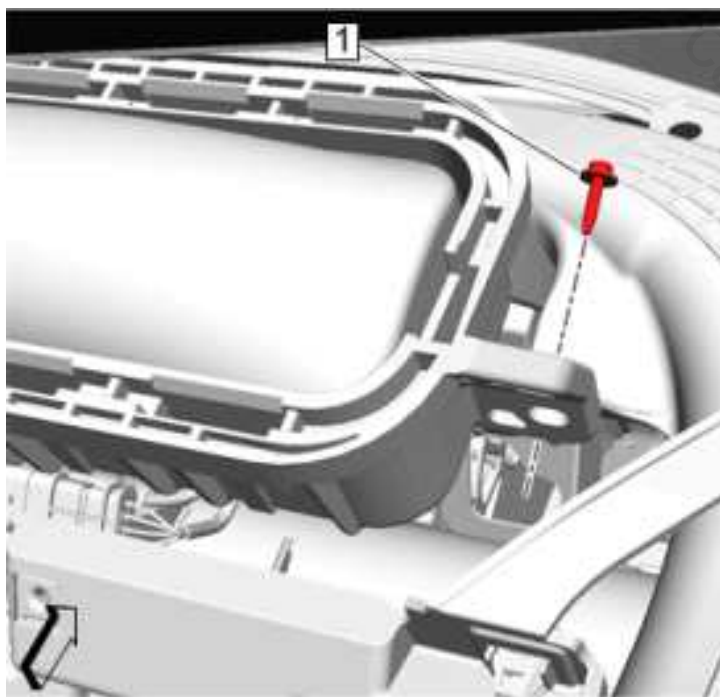


Fig. 1114: Instrument Panel Center Air Outlet Duct Bolt
Courtesy of GENERAL MOTORS COMPANY

5. Install Instrument Panel Center Air Outlet Duct Bolt (1) and tighten 2.5 N.m (22 lb in)

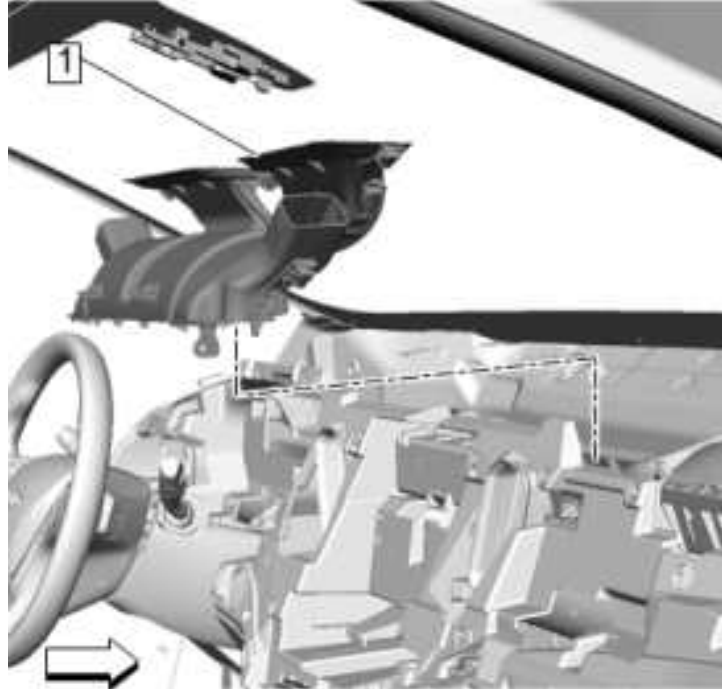


Fig. 1115: Windshield Defroster Outlet Duct
 Courtesy of GENERAL MOTORS COMPANY

6. Install Windshield Defroster Outlet Duct (1) - [Windshield Defroster Outlet Duct Replacement \(Equinox\)](#)



Fig. 1116: Left Side Window Defogger Outlet Duct
 Courtesy of GENERAL MOTORS COMPANY

7. Install Side Window Defogger Outlet Duct - Left Side (1) - [Side Window Defogger Outlet Duct Replacement - Left Side \(Equinox\)](#)

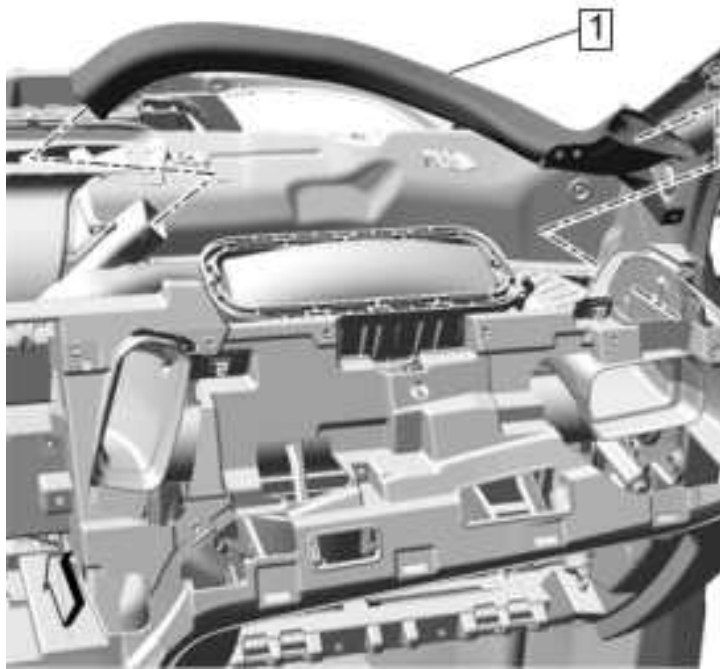


Fig. 1117: Right Side Window Defogger Outlet Duct
 Courtesy of GENERAL MOTORS COMPANY

8. Install Side Window Defogger Outlet Duct - Right Side (1) - [Side Window Defogger Outlet Duct Replacement - Right Side \(Equinox\)](#)

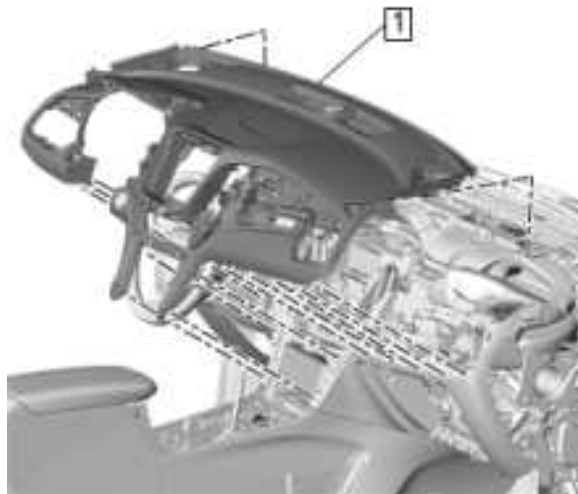


Fig. 1118: Instrument Panel Upper Trim Panel
 Courtesy of GENERAL MOTORS COMPANY

9. Install Instrument Panel Upper Trim Panel (1) - [Instrument Panel Upper Trim Panel Replacement \(Equinox\)](#)

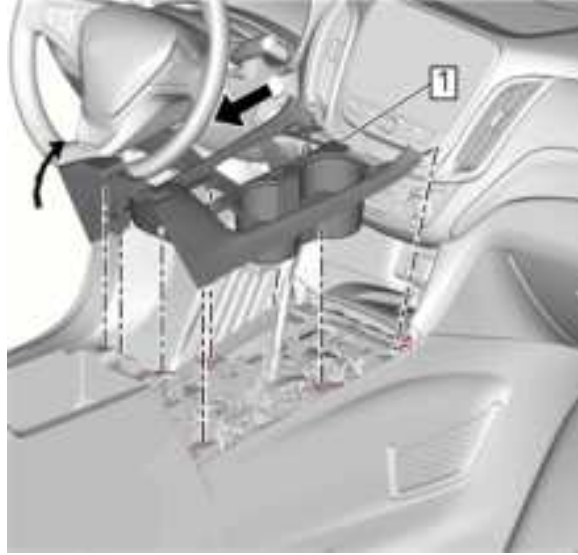


Fig. 1119: Front Floor Console Applique
Courtesy of GENERAL MOTORS COMPANY

10. Install Front Floor Console Applique (1) - [Front Floor Console Applique Replacement \(Equinox\)](#)

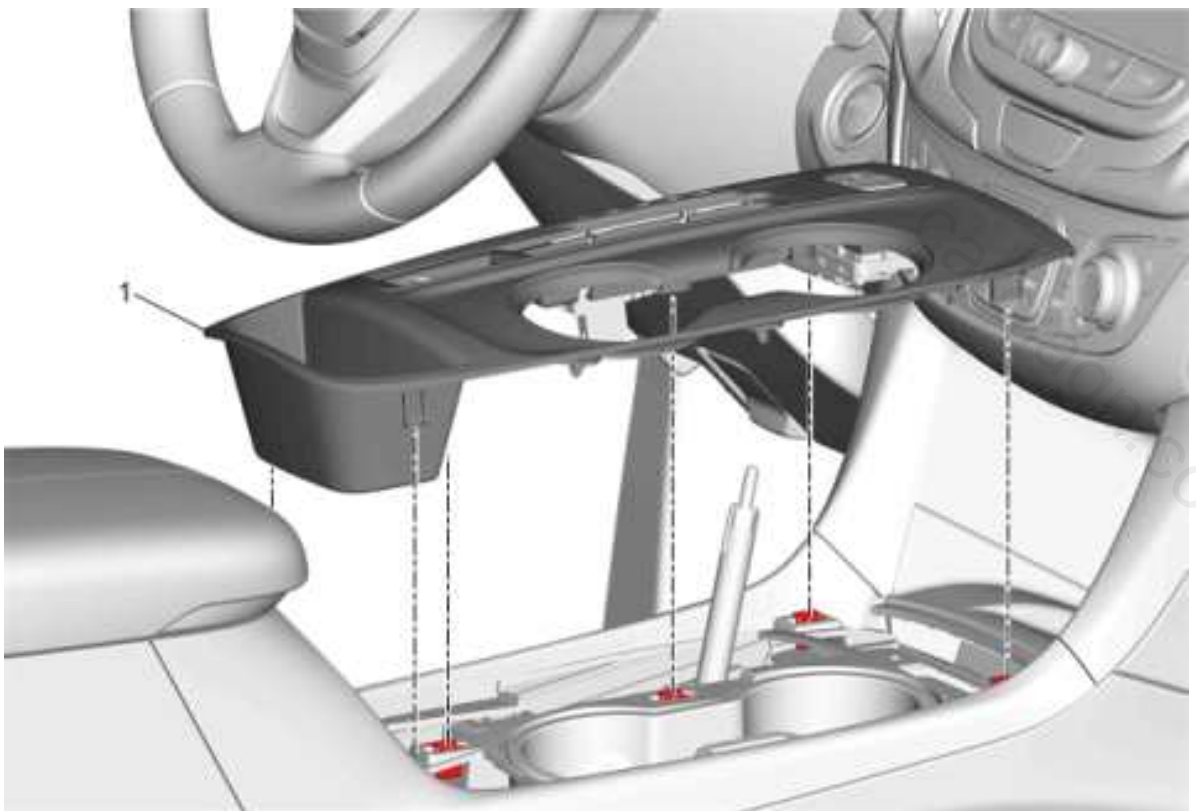


Fig. 1120: Front Floor Console Trim Plate (Equinox)
Courtesy of GENERAL MOTORS COMPANY

11. Install Front Floor Console Trim Plate (1) - [Front Floor Console Trim Plate Replacement \(Equinox\)](#)

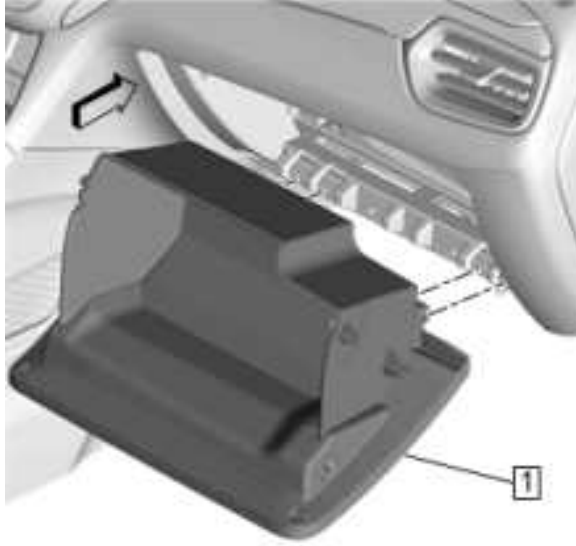


Fig. 1121: Instrument Panel Compartment Door
Courtesy of GENERAL MOTORS COMPANY

12. Install Instrument Panel Compartment Door (1) - [Instrument Panel Compartment Door Replacement \(Equinox\)](#)
13. Hazard Warning Switch - Connect the electrical connector.



Fig. 1122: Radio Control Assembly
Courtesy of GENERAL MOTORS COMPANY

14. Install Rear Radio Control Assembly (1) - [Radio Control Assembly Replacement \(Equinox\)](#)

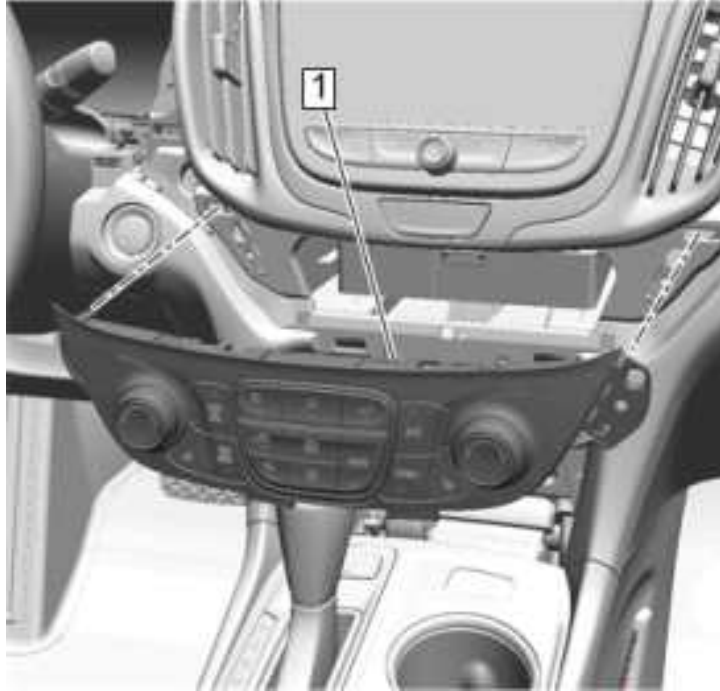


Fig. 1123: Heater and Air Conditioning User Interface Control
 Courtesy of GENERAL MOTORS COMPANY

15. Install Heater and Air Conditioning User Interface Control (1) - [Heater and Air Conditioning User Interface Control Replacement \(Equinox\)](#)

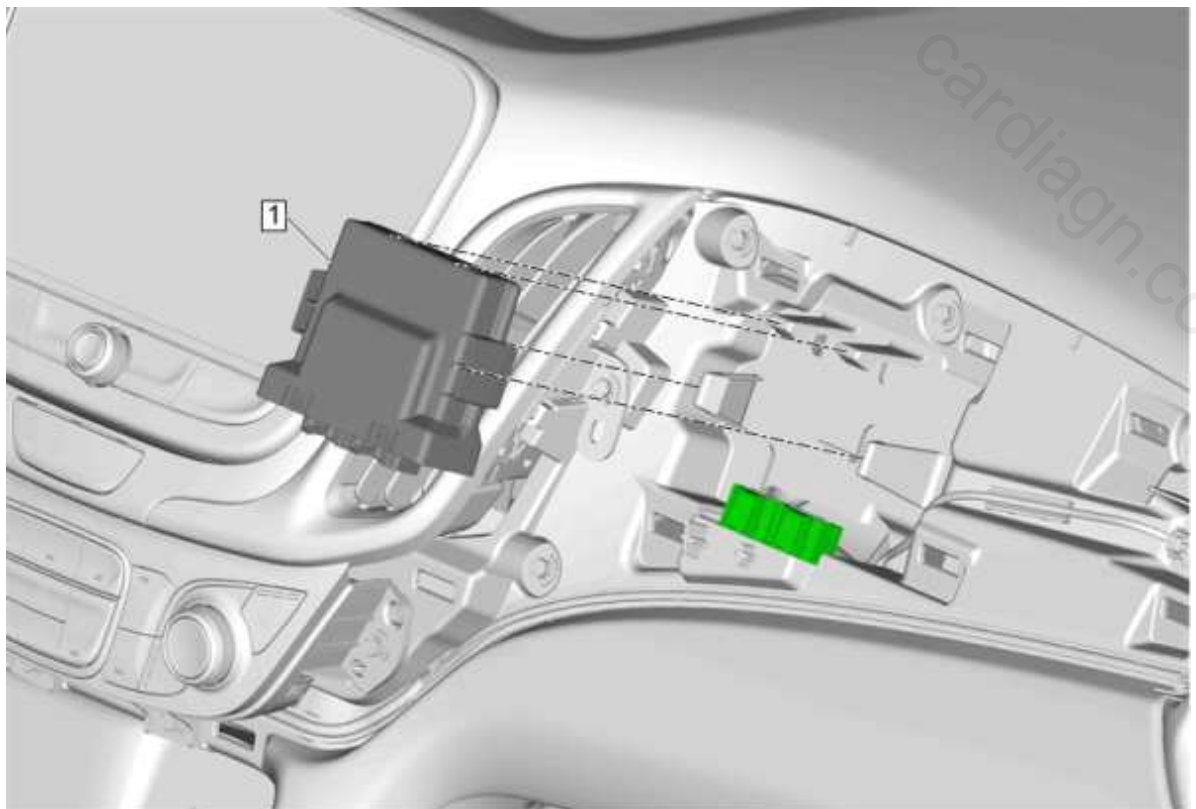


Fig. 1124: Serial Data Gateway Module
 Courtesy of GENERAL MOTORS COMPANY

16. Install Serial Data Gateway Module (1) - [Serial Data Gateway Module Replacement \(Equinox\)](#)



Fig. 1125: Right Side Instrument Panel Outer Air Outlet And Screw
 Courtesy of GENERAL MOTORS COMPANY

17. Install Instrument Panel Outer Air Outlet - Right Side (2) - **Instrument Panel Outer Air Outlet Replacement - Right Side (Equinox)**



Fig. 1126: Right Side Instrument Panel Center Air Outlet And Screw
 Courtesy of GENERAL MOTORS COMPANY

18. Install Instrument Panel Center Air Outlet - Right Side (2) - **Instrument Panel Center Air Outlet Replacement - Right Side (Equinox)**

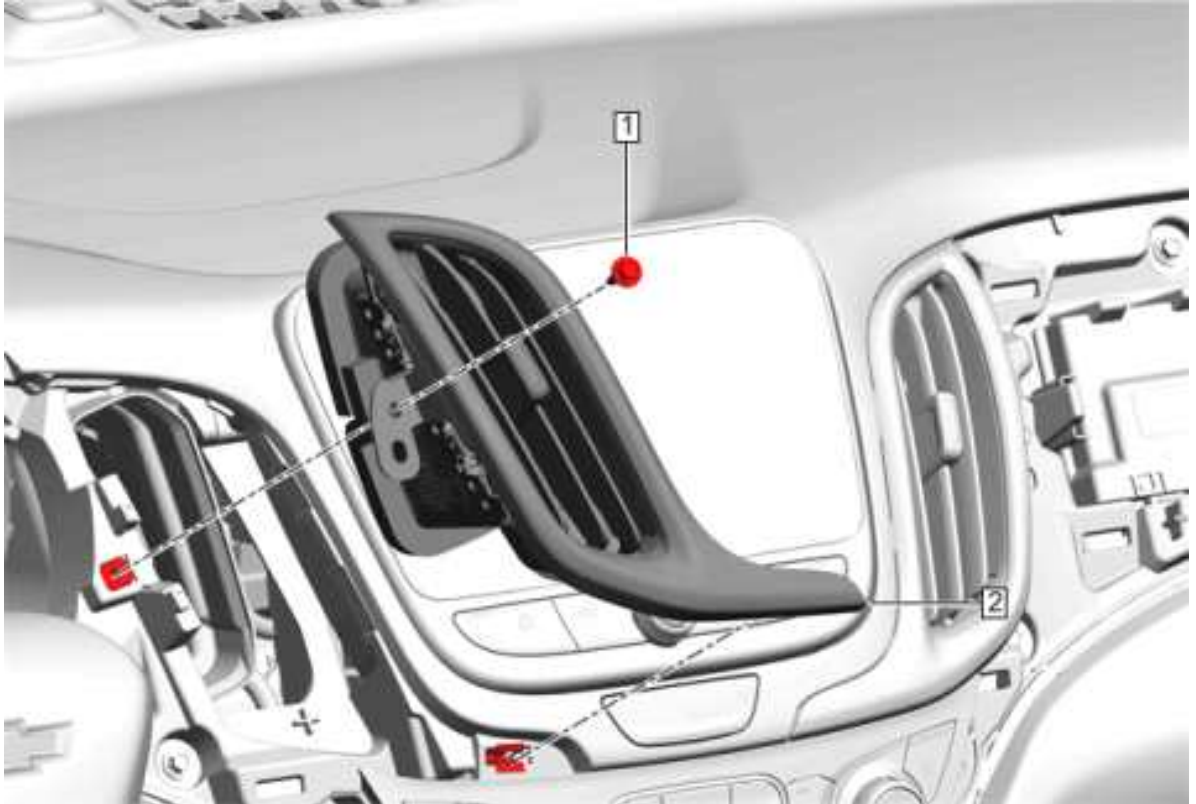


Fig. 1127: Left Side Instrument Panel Center Air Outlet And Screw
 Courtesy of GENERAL MOTORS COMPANY

19. Install Instrument Panel Center Air Outlet - Left Side (2) - **Instrument Panel Center Air Outlet Replacement - Left Side (Equinox)**

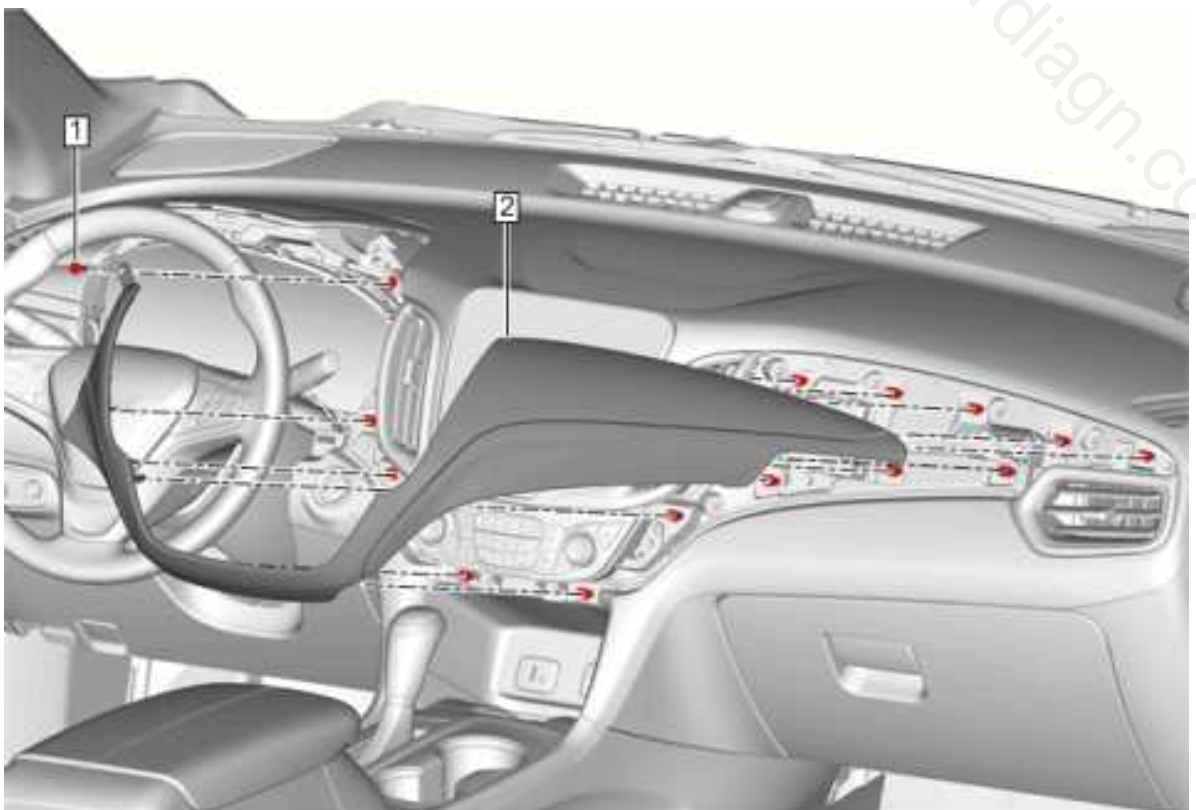


Fig. 1128: Right Side Instrument Panel Trim Pad
 Courtesy of GENERAL MOTORS COMPANY

20. Install Instrument Panel Trim Pad - Right Side (2) - **Instrument Panel Trim Pad Replacement - Right Side (Equinox)**

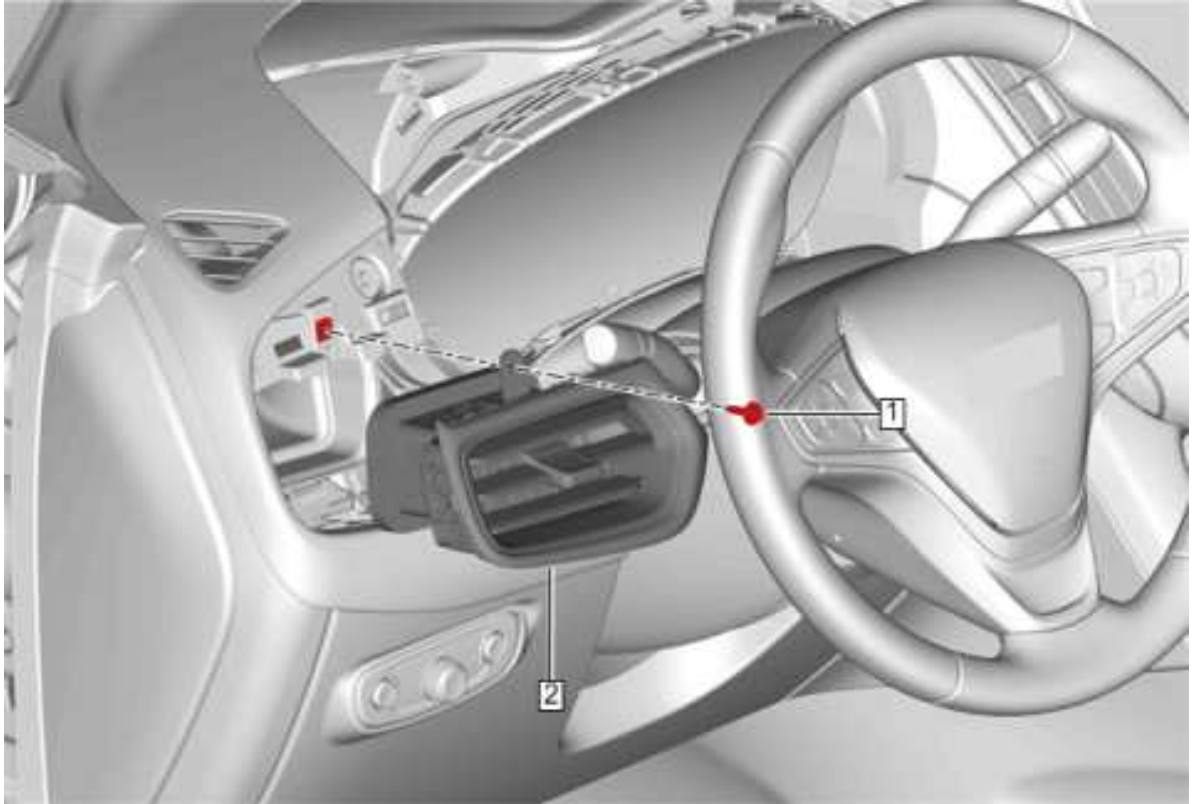


Fig. 1129: Left Side Instrument Panel Outer Air Outlet And Screw
 Courtesy of GENERAL MOTORS COMPANY

21. Install Instrument Panel Outer Air Outlet - Left Side (2) - [Instrument Panel Outer Air Outlet Replacement - Left Side \(Equinox\)](#)

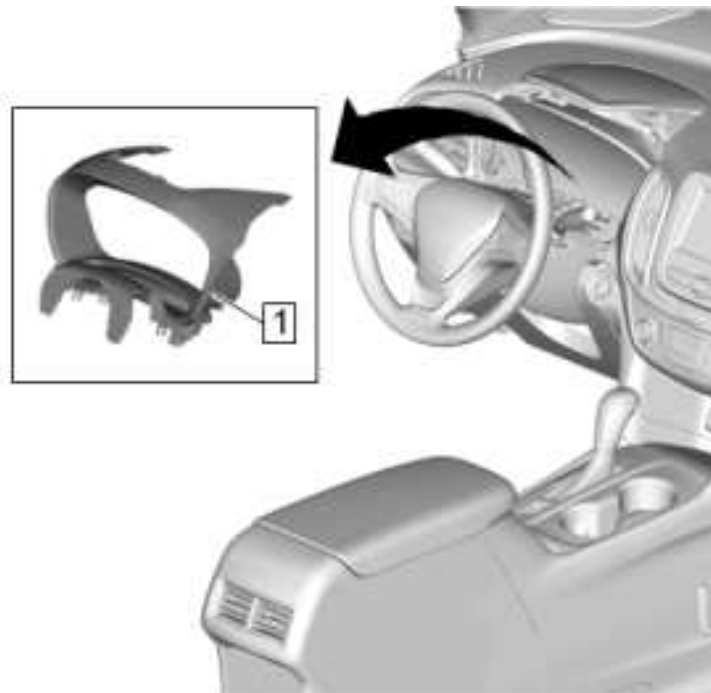


Fig. 1130: Instrument Panel Cluster Trim Plate
 Courtesy of GENERAL MOTORS COMPANY

22. Install Instrument Panel Cluster Trim Plate (1) - [Instrument Panel Cluster Trim Plate Replacement \(Equinox\)](#)



Fig. 1131: Left And Right Instrument Panel Outer Trim Cover
Courtesy of GENERAL MOTORS COMPANY

23. Install the left and right instrument panel outer trim cover (1). [Instrument Panel Outer Trim Cover Replacement \(Equinox\)](#)

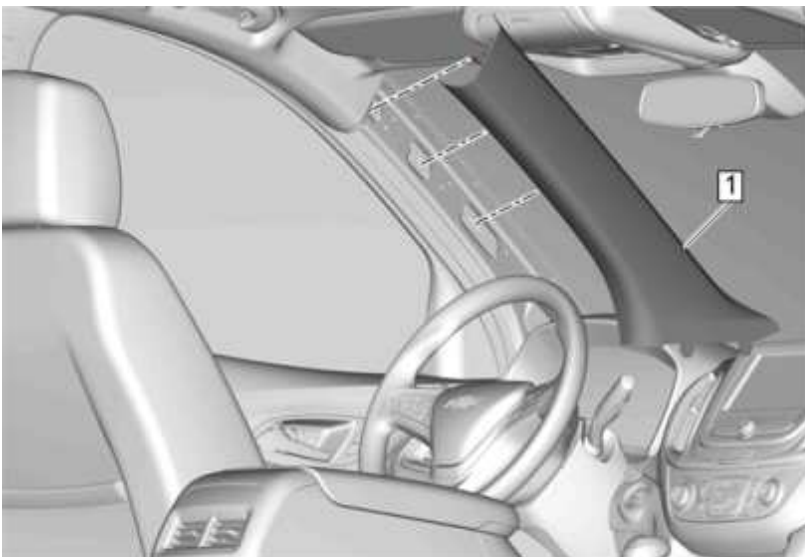


Fig. 1132: Windshield Garnish Molding Replacement (Equinox)
Courtesy of GENERAL MOTORS COMPANY

24. Install the left and right side windshield garnish molding (1). [Windshield Garnish Molding Replacement \(Equinox\)](#)

INSTRUMENT PANEL CENTER AIR OUTLET DUCT REPLACEMENT (TERRAIN)

Removal Procedure

1. Remove the left and right side windshield garnish molding. [Windshield Garnish Molding Replacement \(Terrain\)](#)

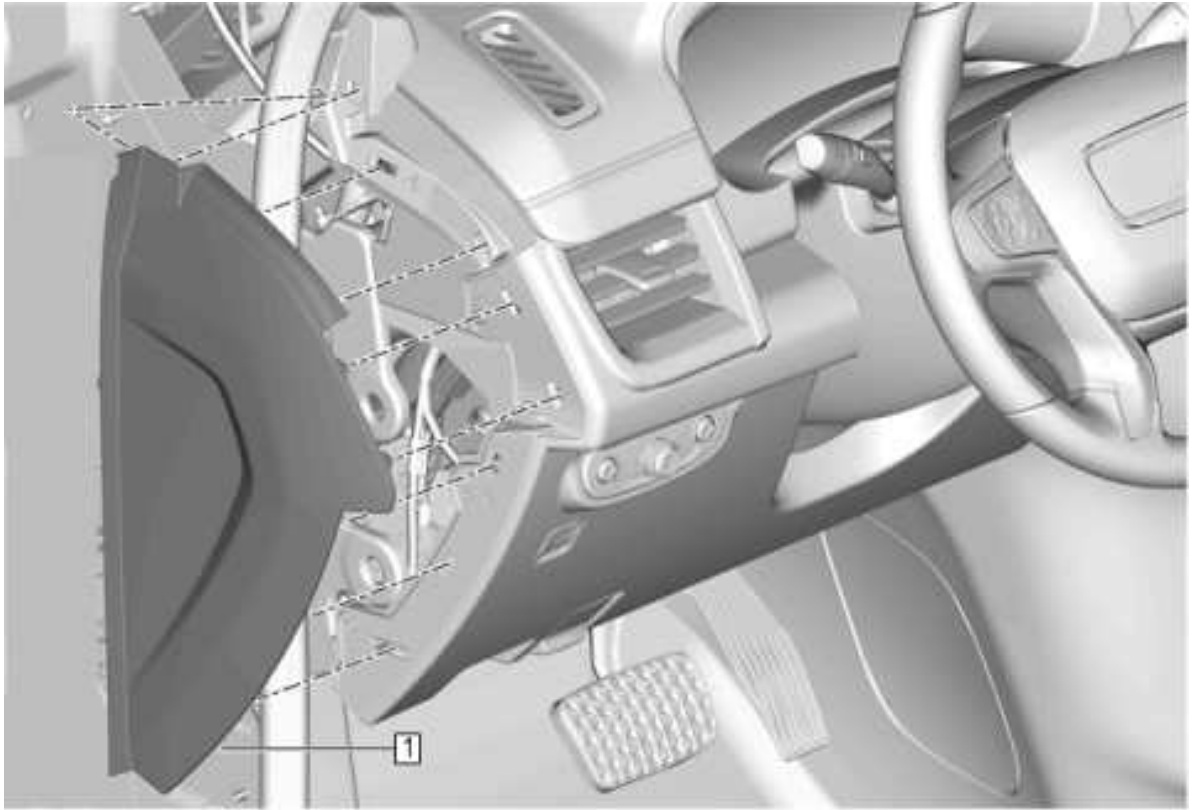


Fig. 1133: Instrument Panel Outer Trim Cover (Terrain)

Courtesy of GENERAL MOTORS COMPANY

2. Remove the left and right instrument panel outer trim cover (1). [Instrument Panel Outer Trim Cover Replacement \(Terrain\)](#)



Fig. 1134: Instrument Panel Cluster Trim Plate

Courtesy of GENERAL MOTORS COMPANY

3. Remove Instrument Panel Cluster Trim Plate (1) - [Instrument Panel Cluster Trim Plate Replacement \(Terrain\)](#)

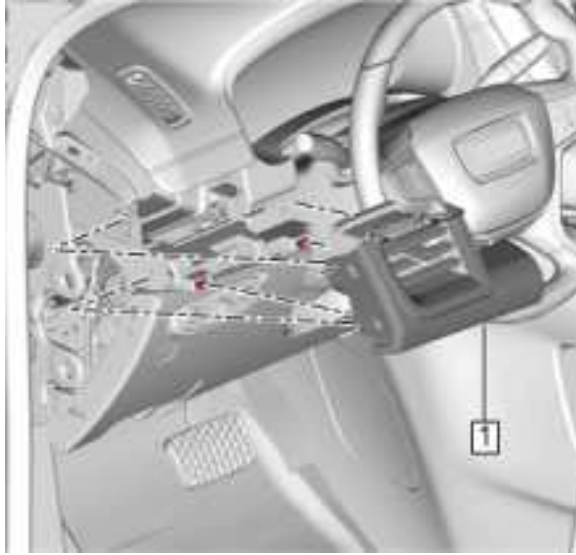


Fig. 1135: Left Side Instrument Panel Trim Pad
Courtesy of GENERAL MOTORS COMPANY

4. Remove Instrument Panel Trim Pad - Left Side (1) - [Instrument Panel Trim Pad Replacement - Left Side \(Terrain\)](#)

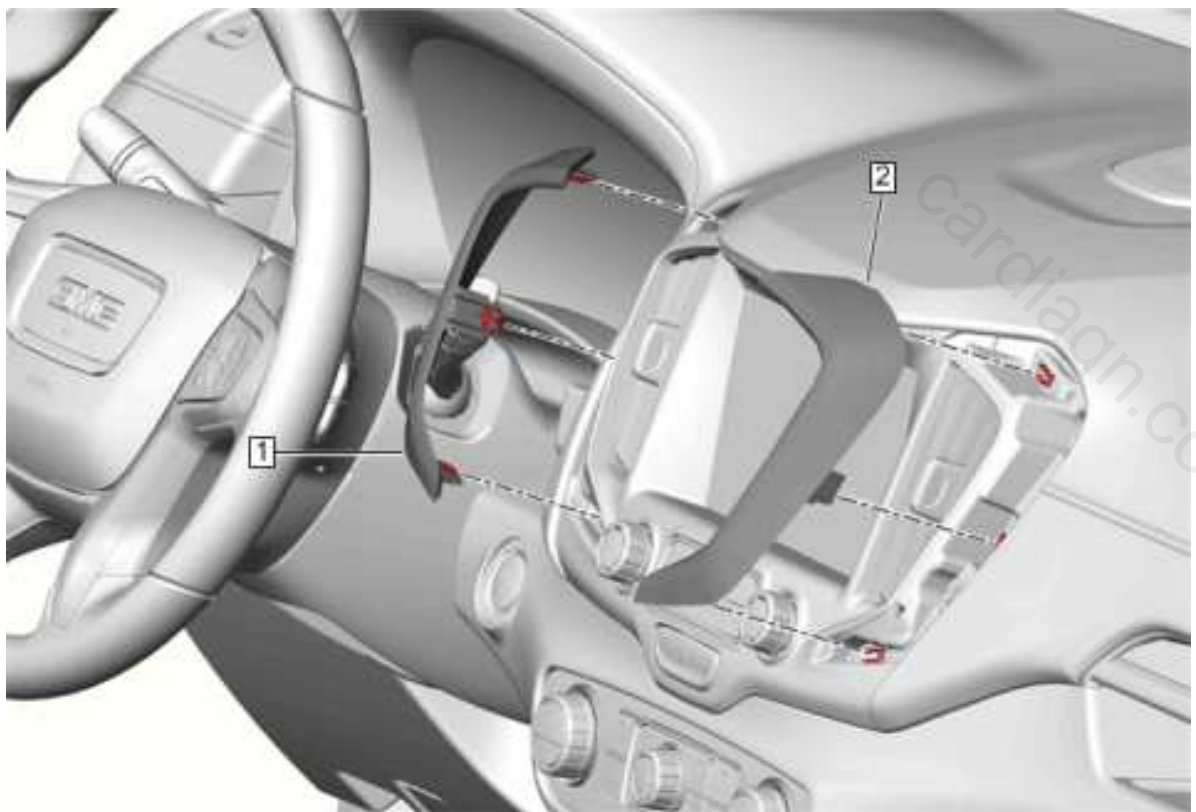


Fig. 1136: Instrument Panel Center Trim Plate Appliques
Courtesy of GENERAL MOTORS COMPANY

5. Remove Instrument Panel Center Trim Plate Applique - Left Side (1) - [Instrument Panel Center Trim Plate Applique Replacement \(Terrain\)](#)
6. Remove Instrument Panel Center Trim Plate Applique - Right Side (2) - [Instrument Panel Center Trim Plate Applique Replacement \(Terrain\)](#)



Fig. 1137: Front Floor Console Transmission Shift Opening Bezel
Courtesy of GENERAL MOTORS COMPANY

7. Remove Front Floor Console Transmission Shift Opening Bezel (1) - **Front Floor Console Transmission Shift Opening Bezel Replacement (Terrain)**.

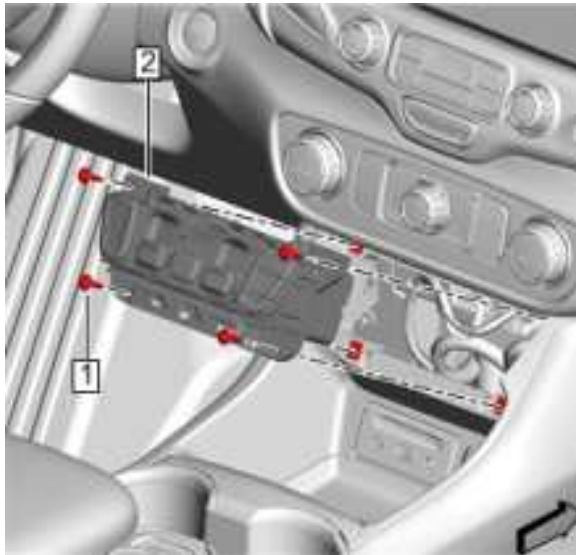


Fig. 1138: Automatic Transmission Control Bolts And Electronic Transmission Shift Control Pushbutton
Courtesy of GENERAL MOTORS COMPANY

8. Remove Electronic Transmission Shift Control Pushbutton (2) - **Electronic Transmission Shift Control Pushbutton Replacement**

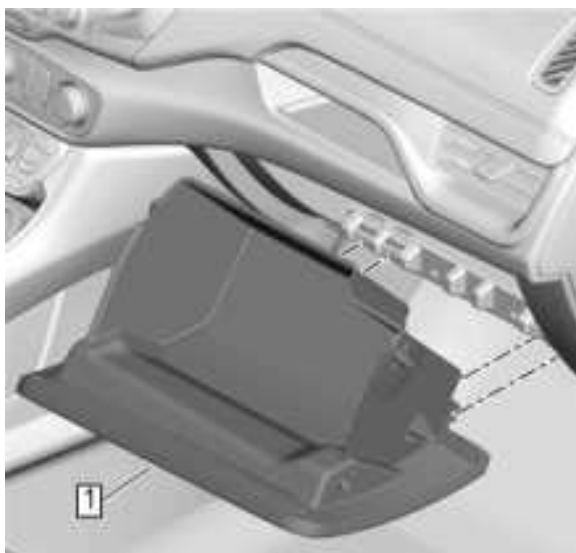


Fig. 1139: Instrument Panel Compartment Door
Courtesy of GENERAL MOTORS COMPANY

9. Remove Instrument Panel Compartment Door (1) - [Instrument Panel Compartment Door Replacement \(Terrain\)](#)

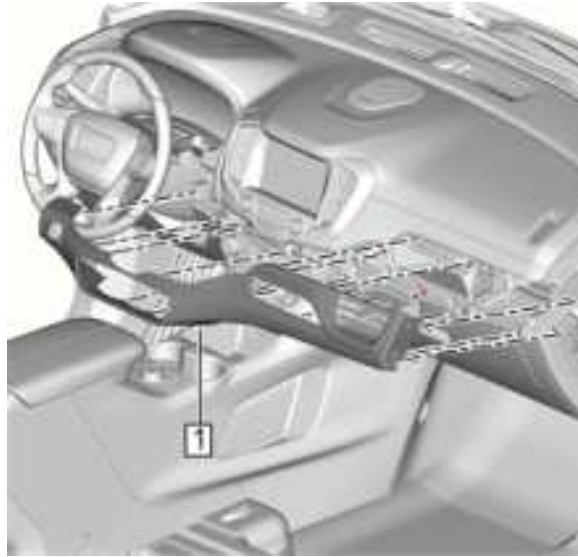


Fig. 1140: Right Side Instrument Panel Trim Pad
Courtesy of GENERAL MOTORS COMPANY

10. Remove Instrument Panel Trim Pad - Right Side (1) - [Instrument Panel Trim Pad Replacement - Right Side \(Terrain\)](#)

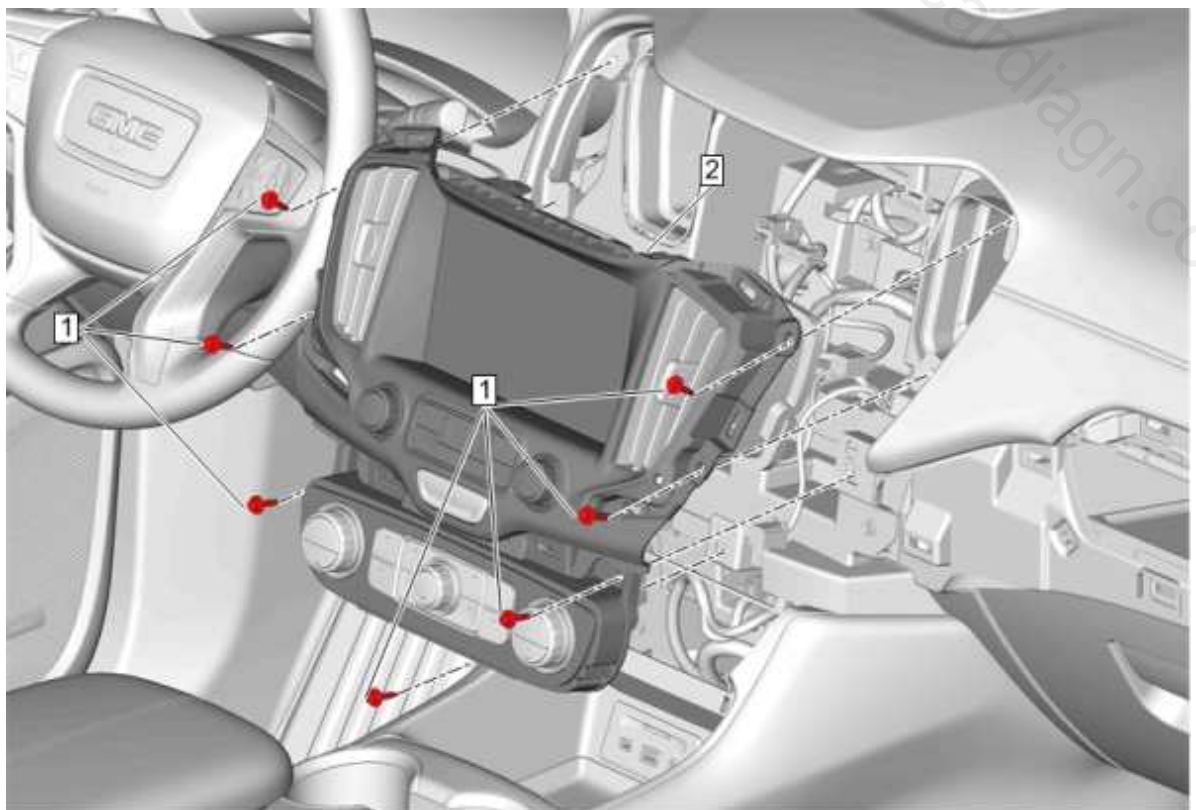


Fig. 1141: Radio Control Assembly And Screws
Courtesy of GENERAL MOTORS COMPANY

11. Remove Radio Control Assembly (2) - [Radio Control Assembly Replacement \(Terrain\)](#)
12. Disconnect all electrical connectors.



Fig. 1142: Radio Front Center Speaker
Courtesy of GENERAL MOTORS COMPANY

13. Remove Radio Front Center Speaker (2) [Radio Front Center Speaker Replacement \(Terrain\)](#)

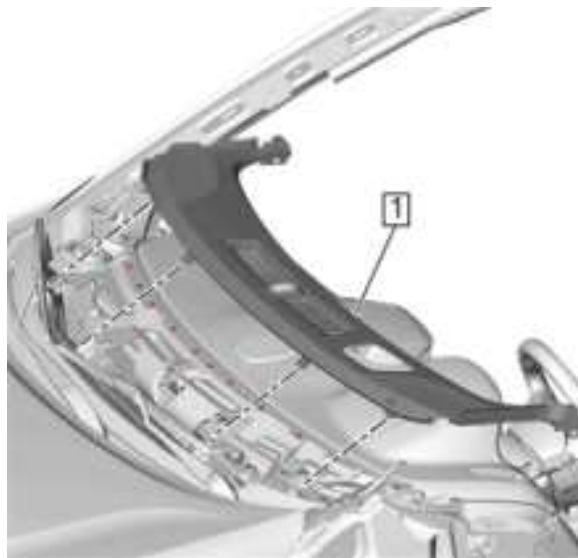


Fig. 1143: Instrument Panel Extension
Courtesy of GENERAL MOTORS COMPANY

14. Remove Instrument Panel Extension (1) - [Instrument Panel Extension Replacement \(Terrain\)](#)

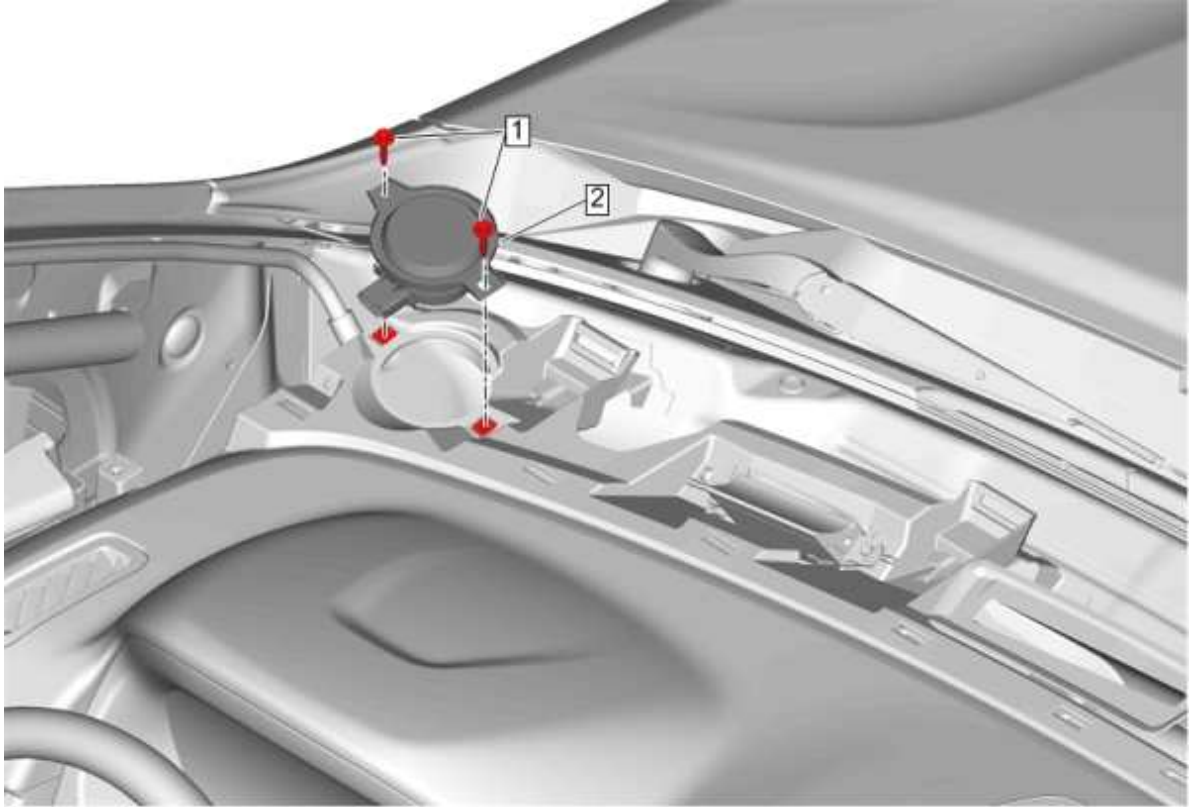


Fig. 1144: Radio Front Speaker

Courtesy of GENERAL MOTORS COMPANY

15. Remove the left and right side radio front speakers.(2)[Radio Front Speaker Replacement \(Terrain\)](#)

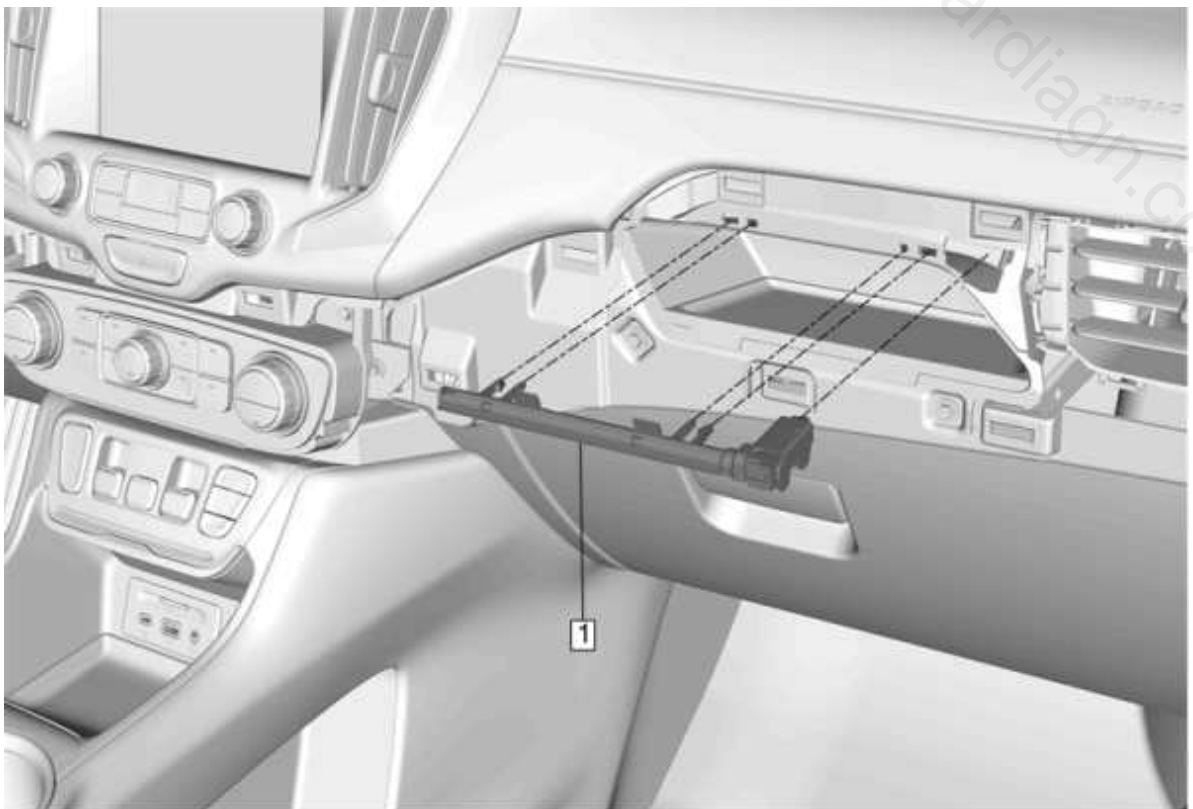


Fig. 1145: Instrument Panel Light Conductor Lamp

Courtesy of GENERAL MOTORS COMPANY

16. Remove Instrument Panel Light Conductor Lamp (1) - [Instrument Panel Light Conductor Lamp Replacement \(GMC\)](#)

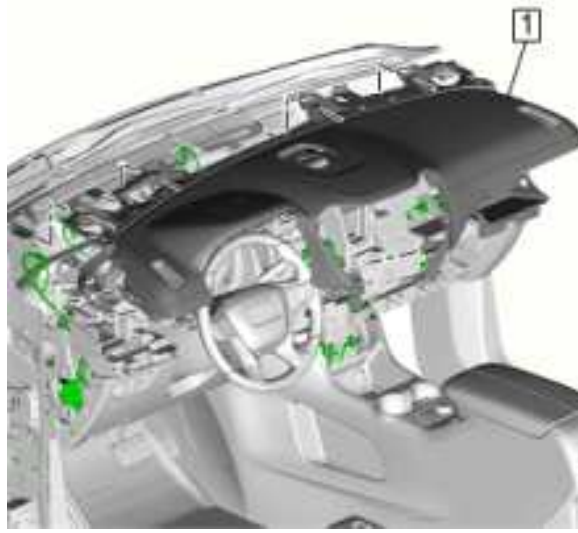


Fig. 1146: Instrument Panel Upper Trim Panel
Courtesy of GENERAL MOTORS COMPANY

17. Remove Instrument Panel Upper Trim Panel (1) - **Instrument Panel Upper Trim Panel Replacement (Terrain)**

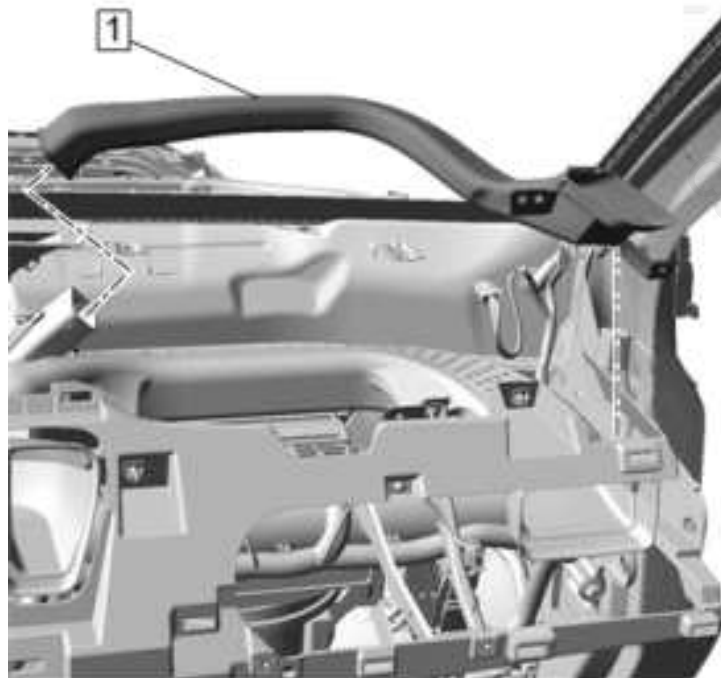


Fig. 1147: Right Side Window Defogger Outlet Duct
Courtesy of GENERAL MOTORS COMPANY

18. Remove Side Window Defogger Outlet Duct - Right Side (1) - **Side Window Defogger Outlet Duct Replacement - Right Side (Terrain)**

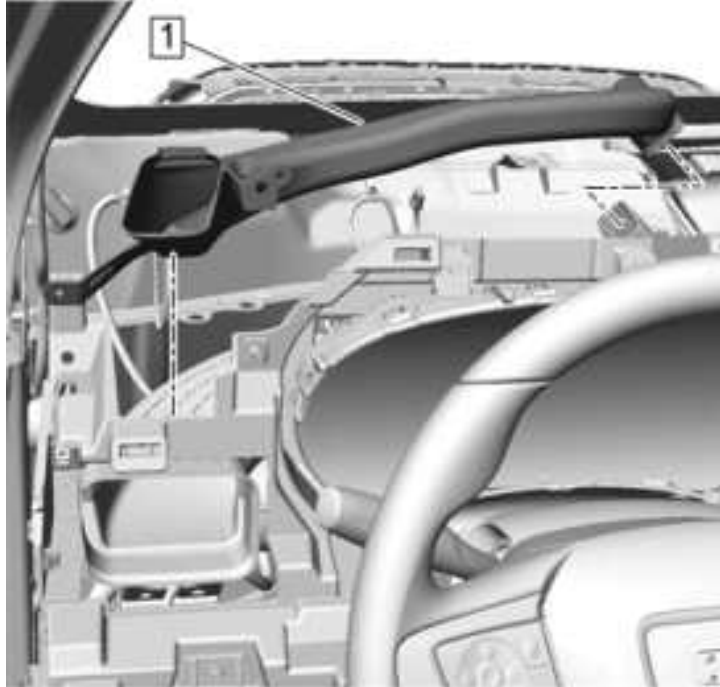


Fig. 1148: Left Side Window Defogger Outlet Duct
 Courtesy of GENERAL MOTORS COMPANY

19. Remove Side Window Defogger Outlet Duct - Left Side (1) - [Side Window Defogger Outlet Duct Replacement - Left Side \(Terrain\)](#)

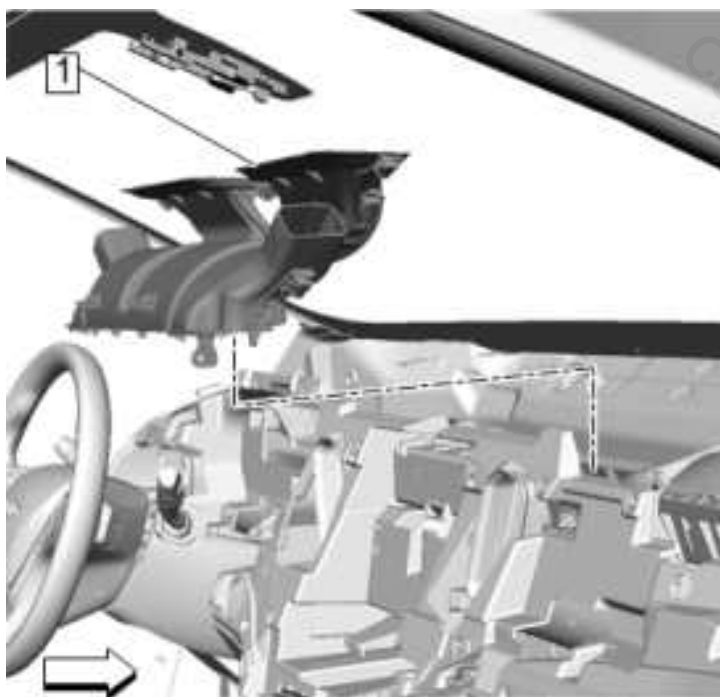


Fig. 1149: Windshield Defroster Outlet Duct
 Courtesy of GENERAL MOTORS COMPANY

20. Remove Windshield Defroster Outlet Duct (1) - [Windshield Defroster Outlet Duct Replacement \(Terrain\)](#)
21. Disconnect and reposition harness as necessary.

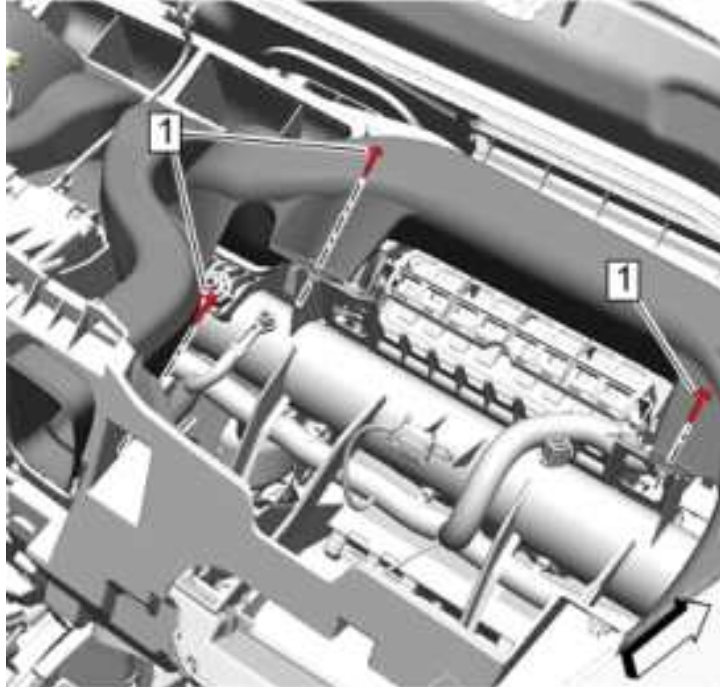


Fig. 1150: Instrument Panel Center Air Outlet Duct Bolt
Courtesy of GENERAL MOTORS COMPANY

22. Remove Instrument Panel Center Air Outlet Duct Bolt (1)

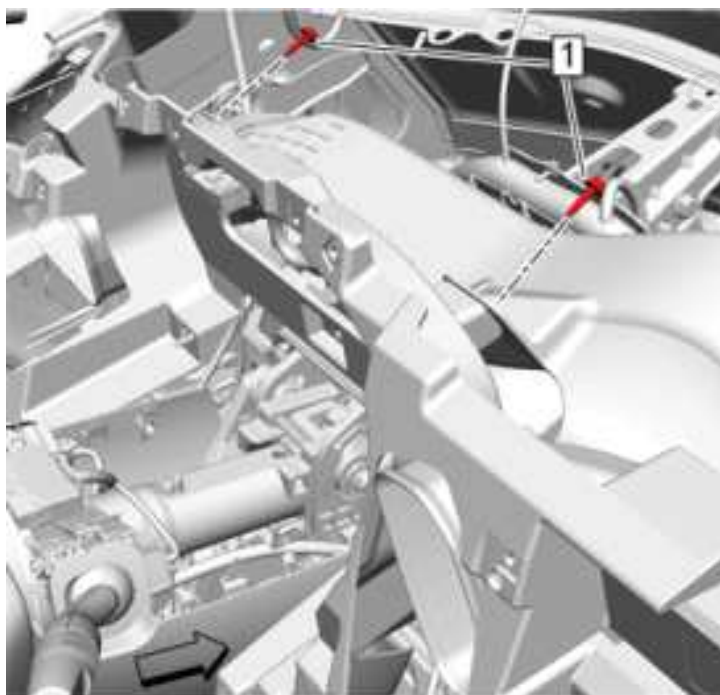


Fig. 1151: Instrument Panel Center Air Outlet Duct Bolt
Courtesy of GENERAL MOTORS COMPANY

23. Remove Instrument Panel Center Air Outlet Duct Bolt (1)

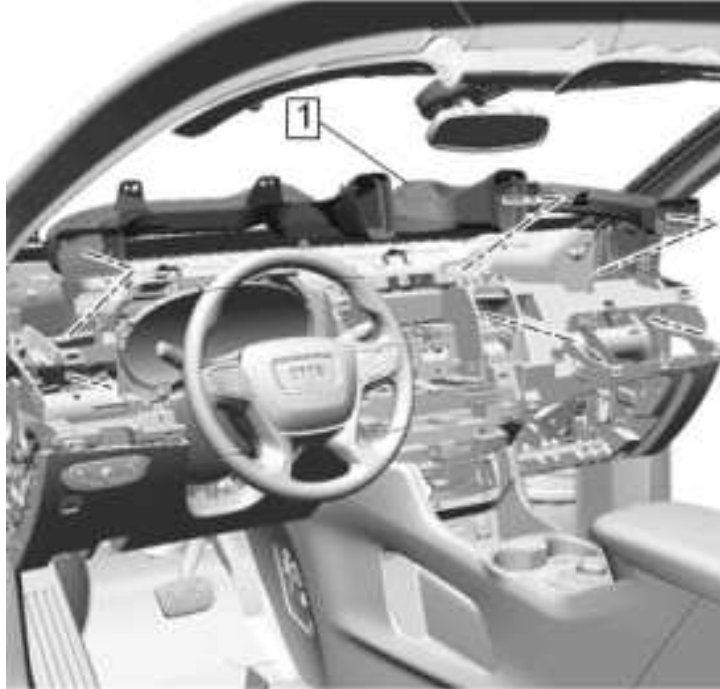


Fig. 1152: Instrument Panel Center Air Outlet Duct
Courtesy of GENERAL MOTORS COMPANY

24. Remove Instrument Panel Center Air Outlet Duct (1)

Installation Procedure

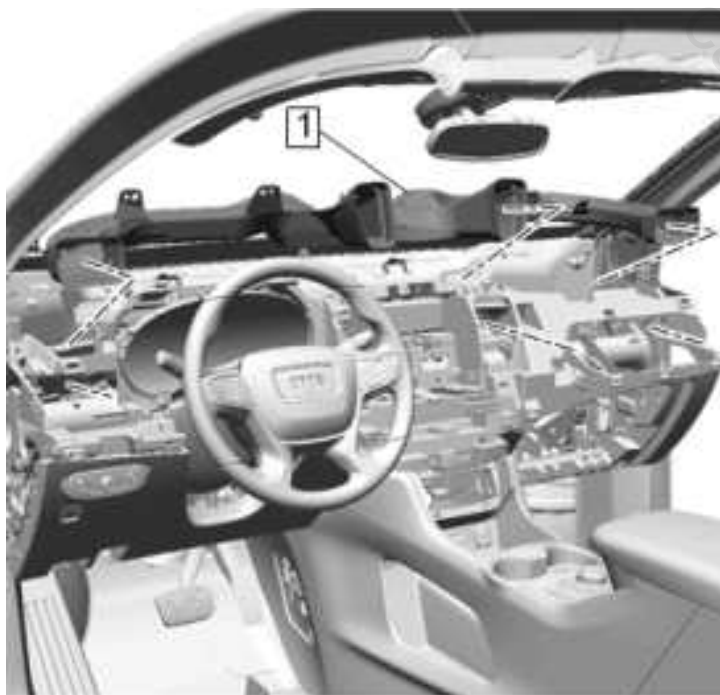


Fig. 1153: Instrument Panel Center Air Outlet Duct
Courtesy of GENERAL MOTORS COMPANY

1. Install Instrument Panel Center Air Outlet Duct (1)

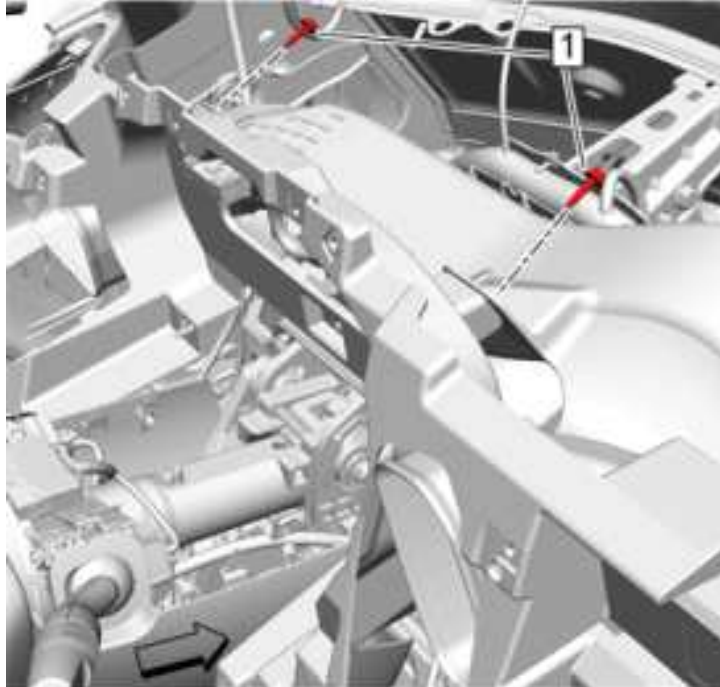


Fig. 1154: Instrument Panel Center Air Outlet Duct Bolt
 Courtesy of GENERAL MOTORS COMPANY

2. Install Instrument Panel Center Air Outlet Duct Bolt (1) and tighten [2x] 2.5 N.m (22 lb in)

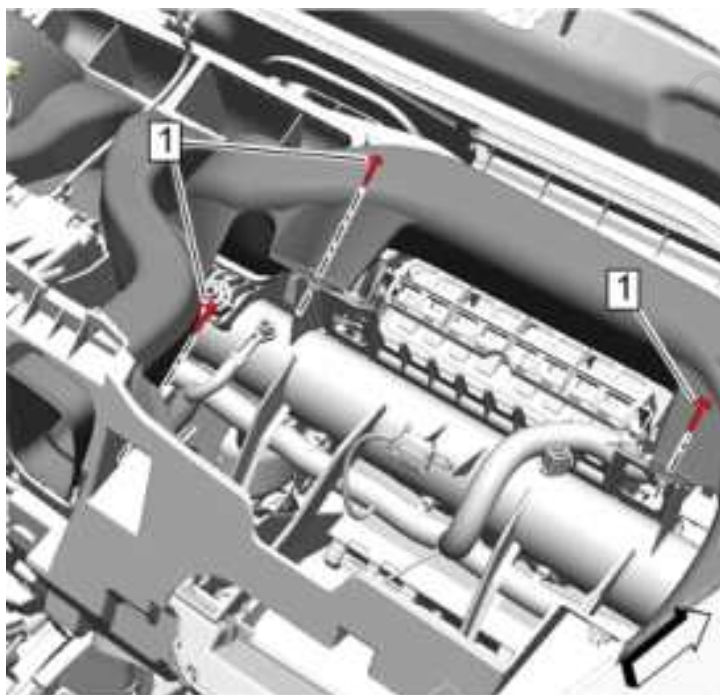


Fig. 1155: Instrument Panel Center Air Outlet Duct Bolt
 Courtesy of GENERAL MOTORS COMPANY

3. Install Instrument Panel Center Air Outlet Duct Bolt (1) and tighten [3x] 2.5 N.m (22 lb in)

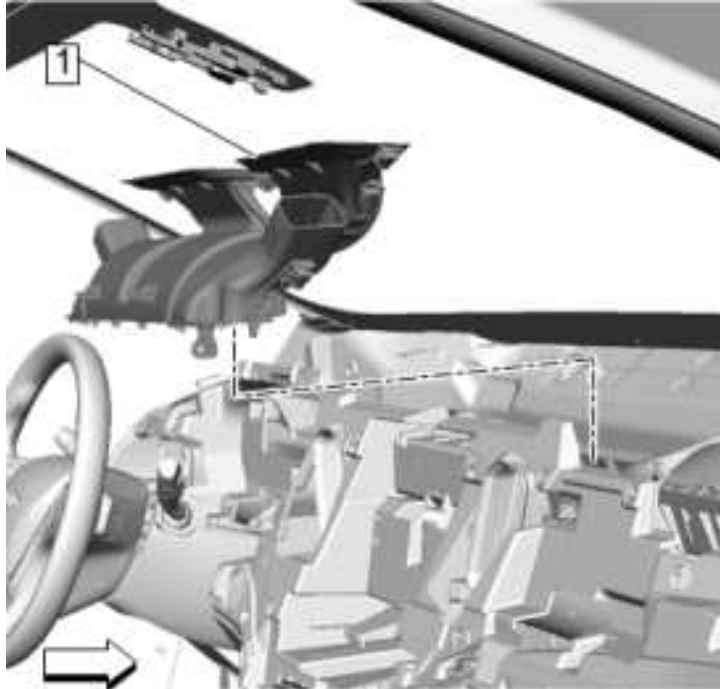


Fig. 1156: Windshield Defroster Outlet Duct

Courtesy of GENERAL MOTORS COMPANY

4. Attach the wiring harness and connect the electrical connectors as necessary.
5. Install Windshield Defroster Outlet Duct (1) - [Windshield Defroster Outlet Duct Replacement \(Terrain\)](#)

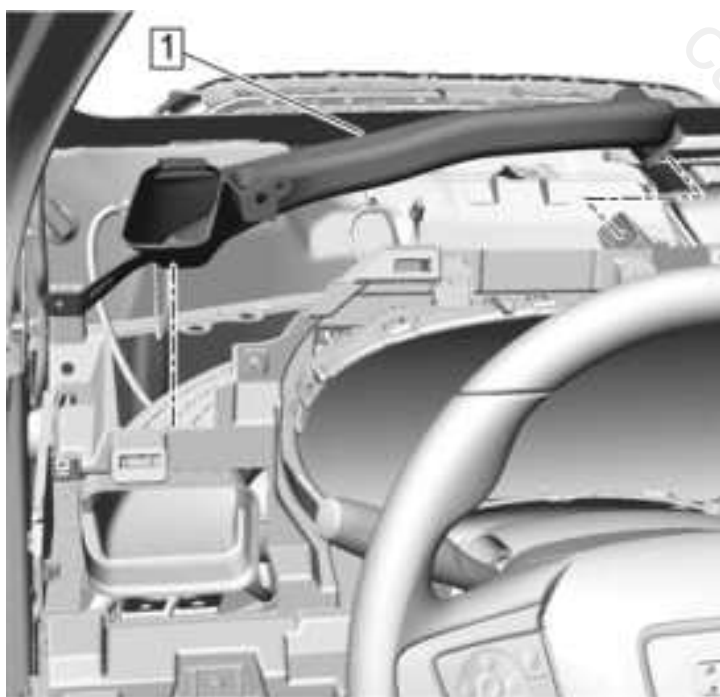


Fig. 1157: Left Side Window Defogger Outlet Duct

Courtesy of GENERAL MOTORS COMPANY

6. Install Side Window Defogger Outlet Duct - Left Side (1) - [Side Window Defogger Outlet Duct Replacement - Left Side \(Terrain\)](#)

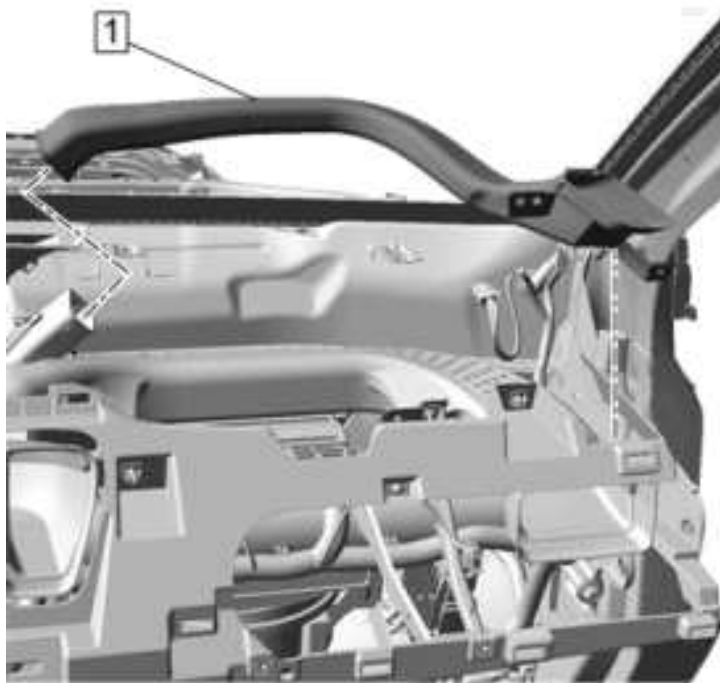


Fig. 1158: Right Side Window Defogger Outlet Duct
 Courtesy of GENERAL MOTORS COMPANY

7. Install Side Window Defogger Outlet Duct - Right Side (1) - **Side Window Defogger Outlet Duct Replacement - Right Side (Terrain)**

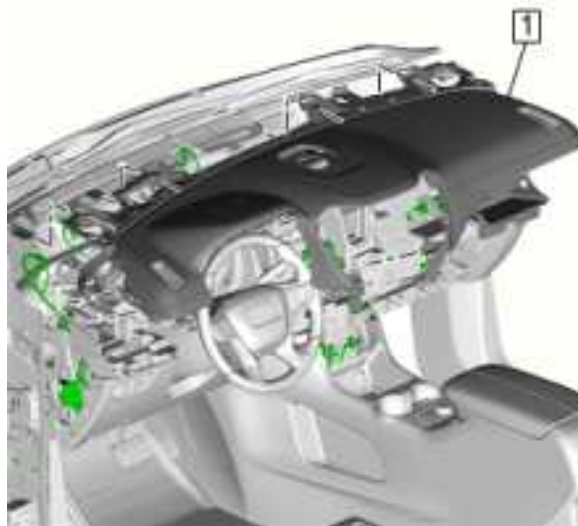


Fig. 1159: Instrument Panel Upper Trim Panel
 Courtesy of GENERAL MOTORS COMPANY

8. Install Instrument Panel Upper Trim Panel (1) - **Instrument Panel Upper Trim Panel Replacement (Terrain)**

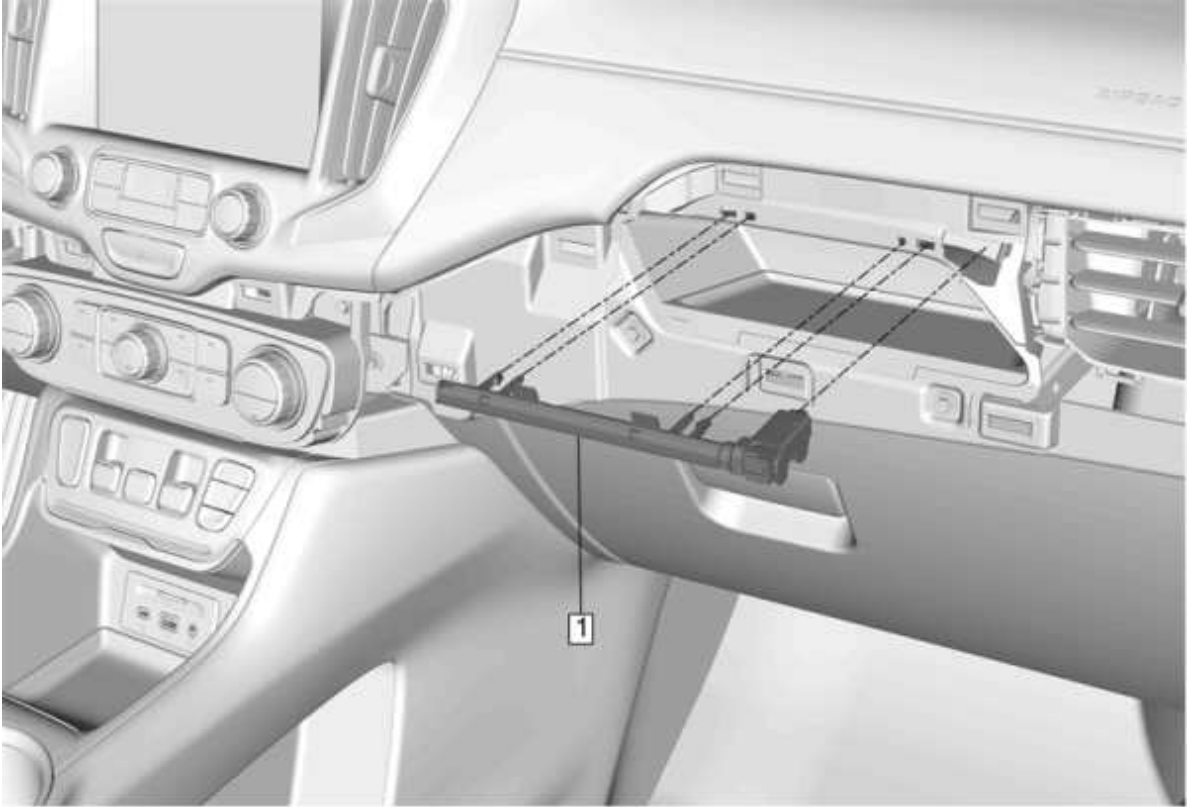


Fig. 1160: Instrument Panel Light Conductor Lamp
Courtesy of GENERAL MOTORS COMPANY

9. Install Instrument Panel Light Conductor Lamp (1) - **Instrument Panel Light Conductor Lamp Replacement (GMC)**

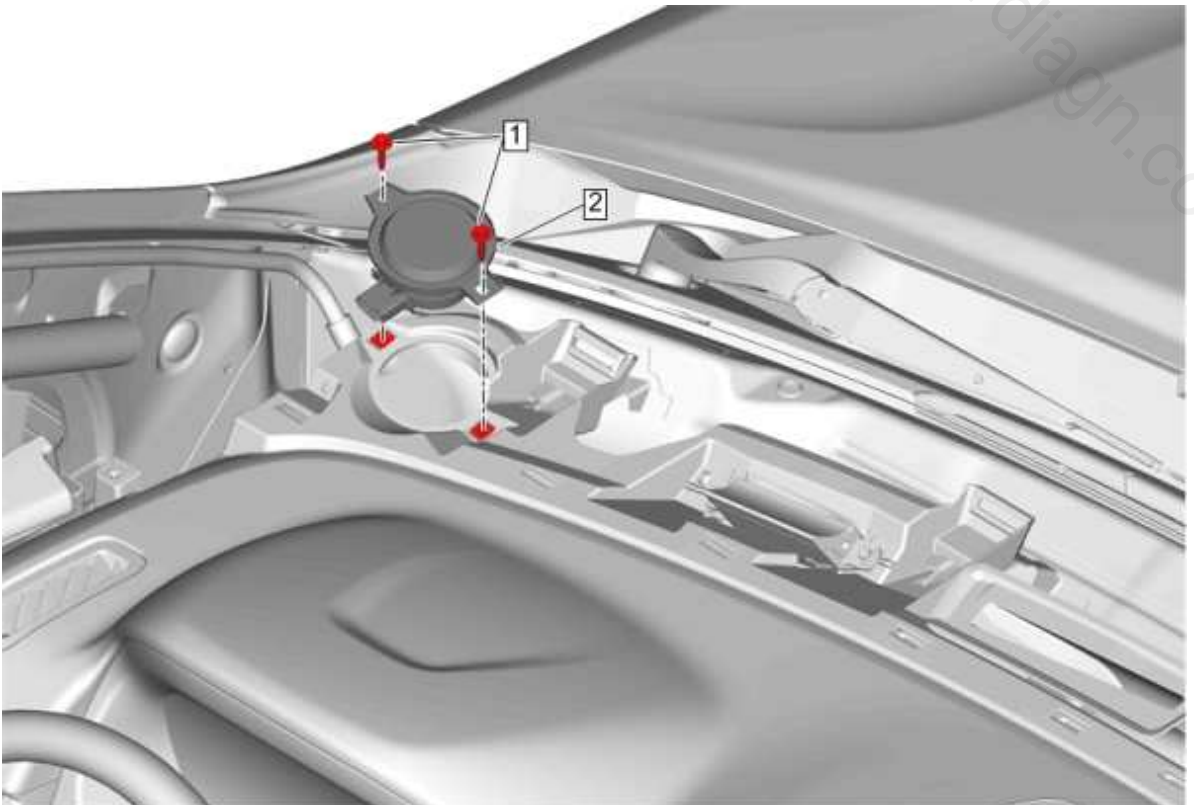


Fig. 1161: Radio Front Speaker
Courtesy of GENERAL MOTORS COMPANY

10. Install the left and right side radio front speakers.(2)**Radio Front Speaker Replacement (Terrain)**



Fig. 1162: Instrument Panel Extension
Courtesy of GENERAL MOTORS COMPANY

11. Install Instrument Panel Extension (1) [Instrument Panel Extension Replacement \(Terrain\)](#)



Fig. 1163: Radio Front Center Speaker
Courtesy of GENERAL MOTORS COMPANY

12. Install Radio Front Center Speaker (2) [Radio Front Center Speaker Replacement \(Terrain\)](#)

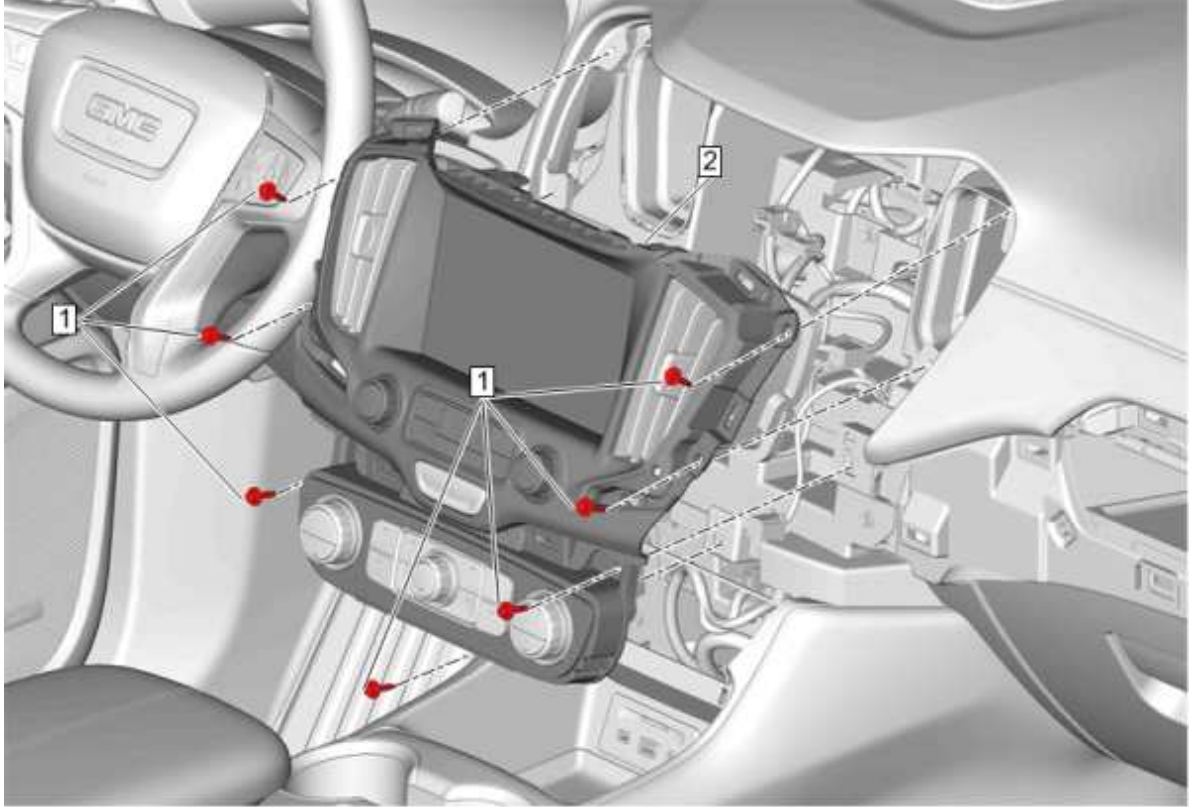


Fig. 1164: Radio Control Assembly And Screws
Courtesy of GENERAL MOTORS COMPANY

13. Connect the electrical connectors.
14. Install Radio Control Assembly (2) - [Radio Control Assembly Replacement \(Terrain\)](#)

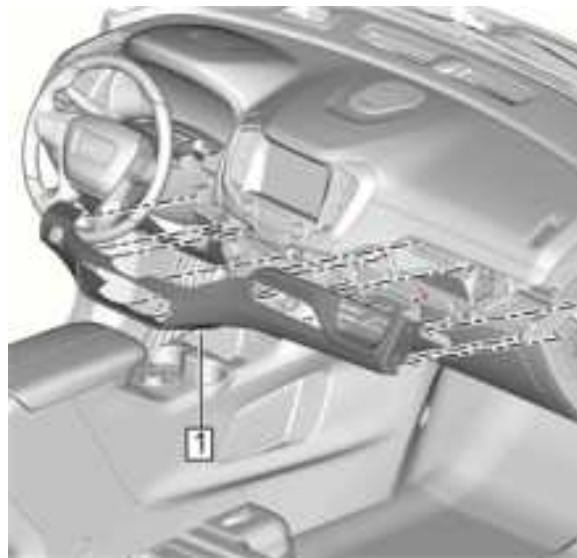


Fig. 1165: Right Side Instrument Panel Trim Pad
Courtesy of GENERAL MOTORS COMPANY

15. Install Instrument Panel Trim Pad - Right Side (1)- [Instrument Panel Trim Pad Replacement - Right Side \(Terrain\)](#)

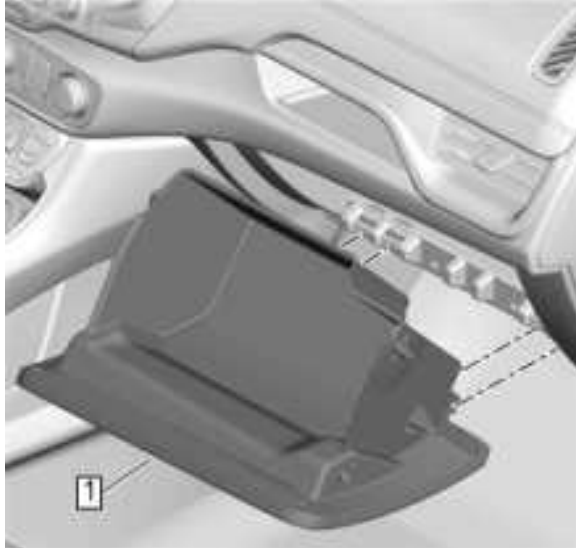


Fig. 1166: Instrument Panel Compartment Door
 Courtesy of GENERAL MOTORS COMPANY

16. Install Instrument Panel Compartment Door (1) - **Instrument Panel Compartment Door Replacement (Terrain)**

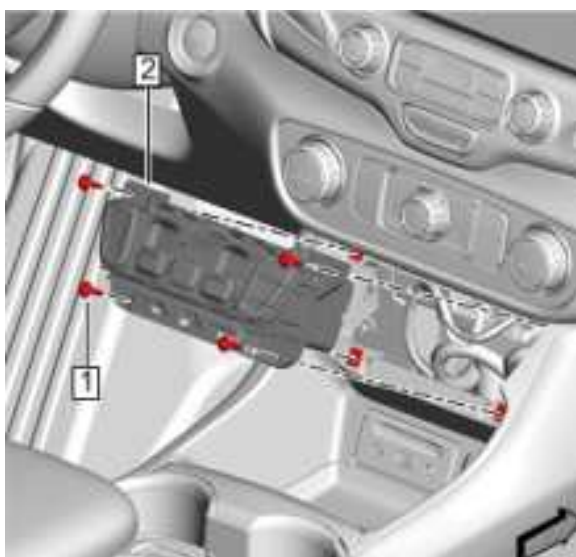


Fig. 1167: Automatic Transmission Control Bolts And Electronic Transmission Shift Control Pushbutton
 Courtesy of GENERAL MOTORS COMPANY

17. Install Electronic Transmission Shift Control Pushbutton (2) - **Electronic Transmission Shift Control Pushbutton Replacement**



Fig. 1168: Front Floor Console Transmission Shift Opening Bezel
Courtesy of GENERAL MOTORS COMPANY

18. Install Front Floor Console Transmission Shift Opening Bezel (1) - **Front Floor Console Transmission Shift Opening Bezel Replacement (Terrain)**

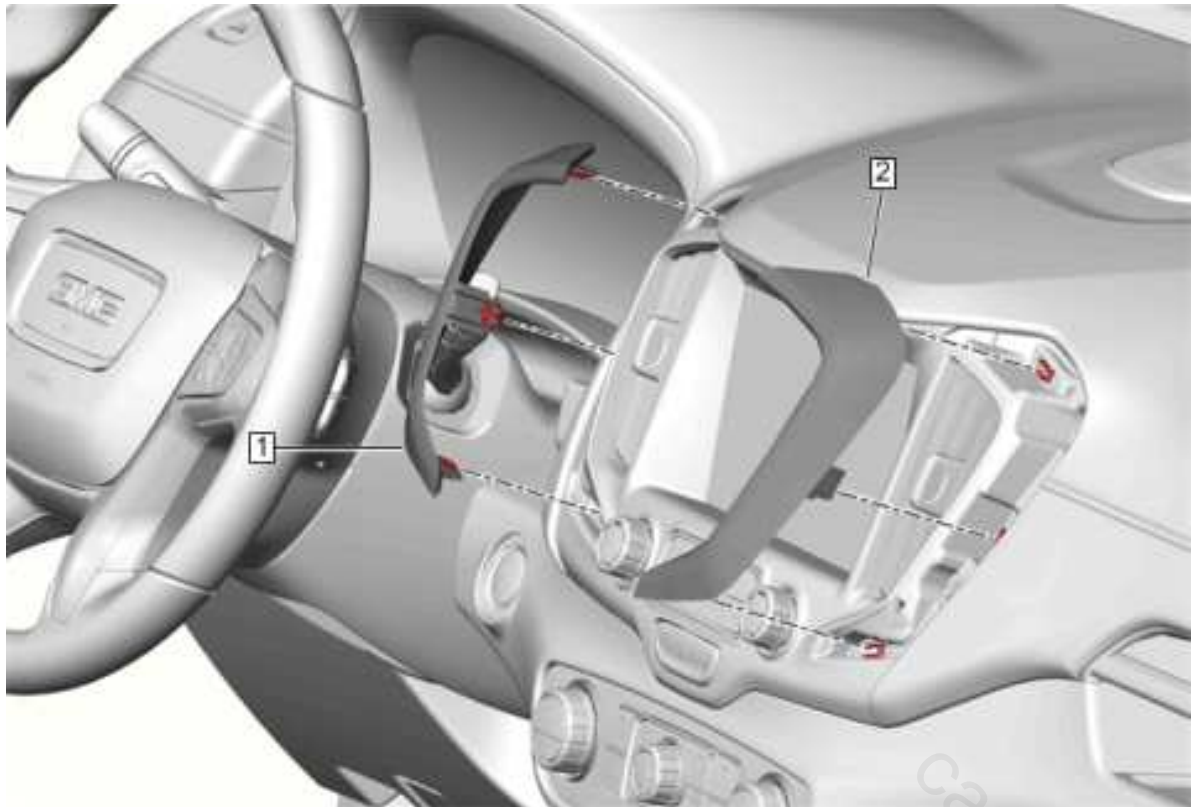


Fig. 1169: Instrument Panel Center Trim Plate Appliques
Courtesy of GENERAL MOTORS COMPANY

19. Install Instrument Panel Center Trim Plate Applique - Left Side (1) - **Instrument Panel Center Trim Plate Applique Replacement (Terrain)**
20. Install Instrument Panel Center Trim Plate Applique - Right Side (2) - **Instrument Panel Center Trim Plate Applique Replacement (Terrain)**



Fig. 1170: Left Side Instrument Panel Trim Pad
Courtesy of GENERAL MOTORS COMPANY

21. Install Instrument Panel Trim Pad - Left Side (1) - **Instrument Panel Trim Pad Replacement - Left Side (Terrain)**



Fig. 1171: Instrument Panel Cluster Trim Plate
Courtesy of GENERAL MOTORS COMPANY

22. Install Instrument Panel Cluster Trim Plate (1) **Instrument Panel Cluster Trim Plate Replacement (Terrain)**

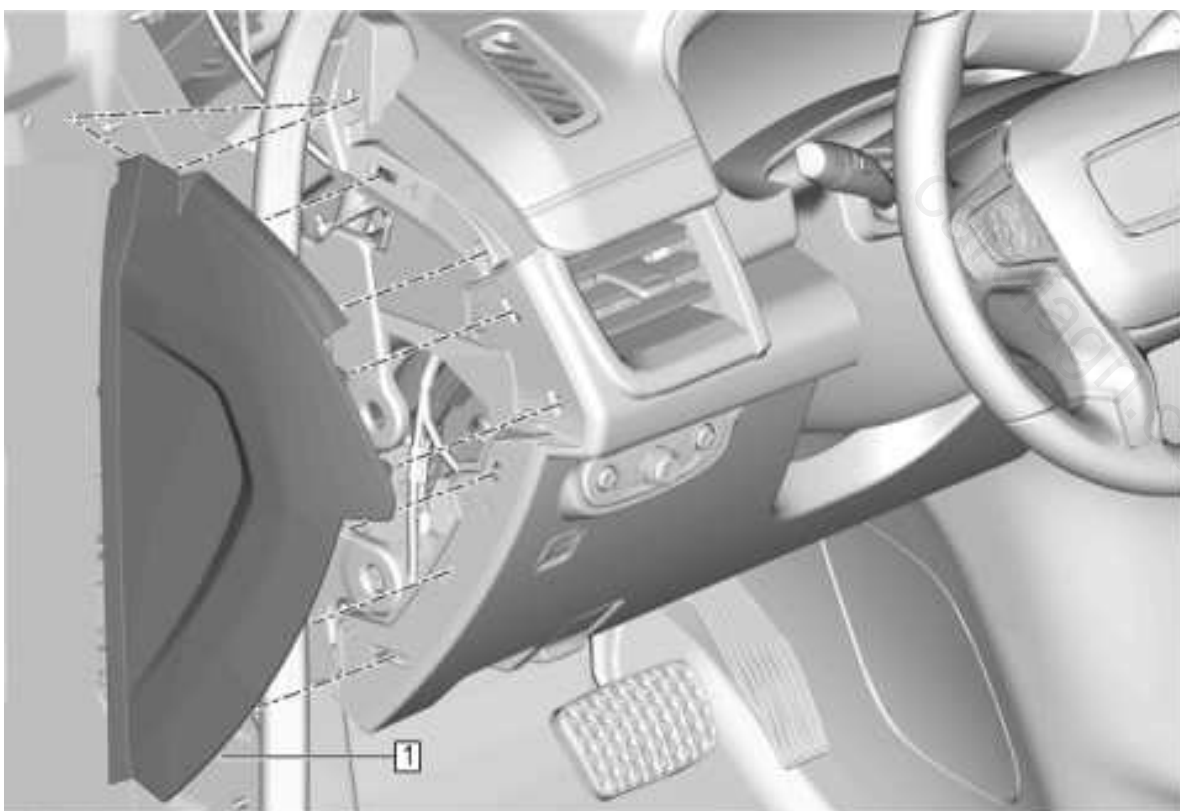


Fig. 1172: Instrument Panel Outer Trim Cover (Terrain)
Courtesy of GENERAL MOTORS COMPANY

23. Install the left and right instrument panel outer trim cover (1). **Instrument Panel Outer Trim Cover Replacement (Terrain)**
24. Install the left and right side windshield garnish molding. **Windshield Garnish Molding Replacement (Terrain)**

WINDSHIELD DEFROSTER OUTLET DUCT REPLACEMENT (EQUINOX)

Removal Procedure

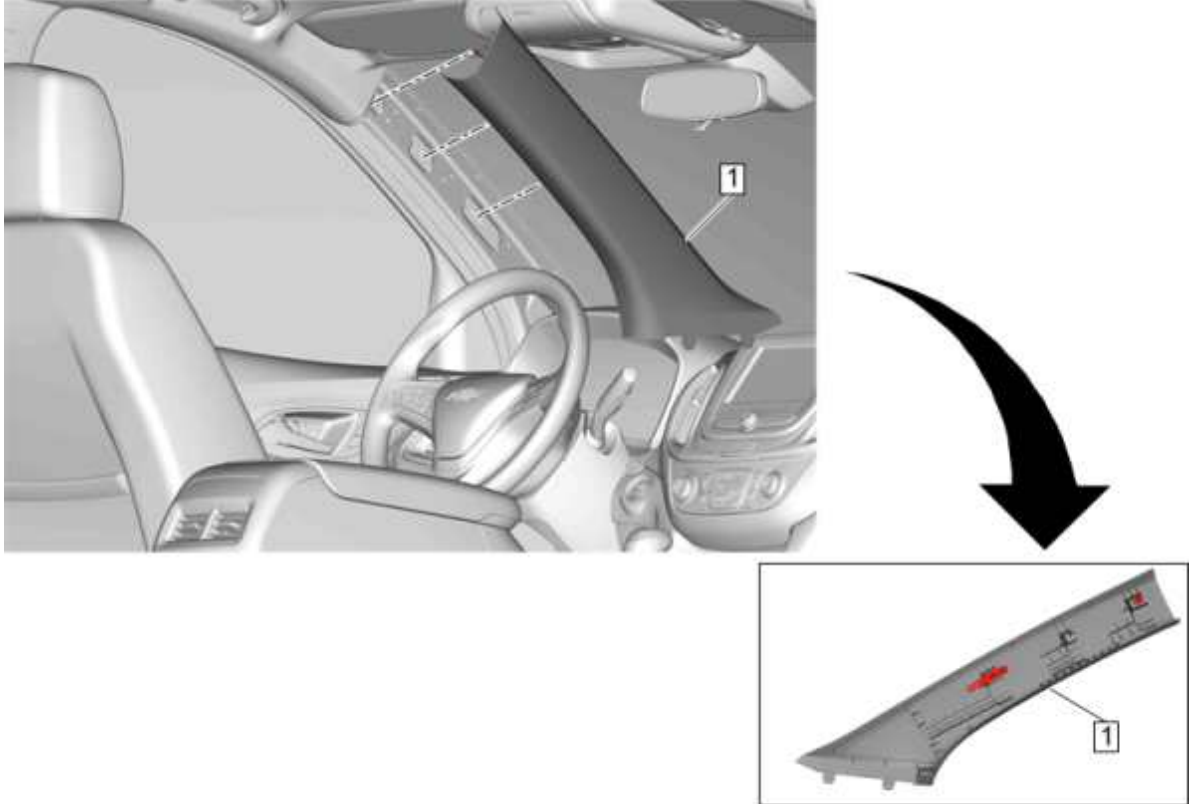


Fig. 1173: Windshield Garnish Molding Replacement (Equinox)
 Courtesy of GENERAL MOTORS COMPANY

1. Remove the left and right side windshield garnish molding (1). [Windshield Garnish Molding Replacement \(Equinox\)](#)



Fig. 1174: Left And Right Instrument Panel Outer Trim Cover
 Courtesy of GENERAL MOTORS COMPANY

2. Remove the left and right instrument panel outer trim cover (1). [Instrument Panel Outer Trim Cover Replacement \(Equinox\)](#)

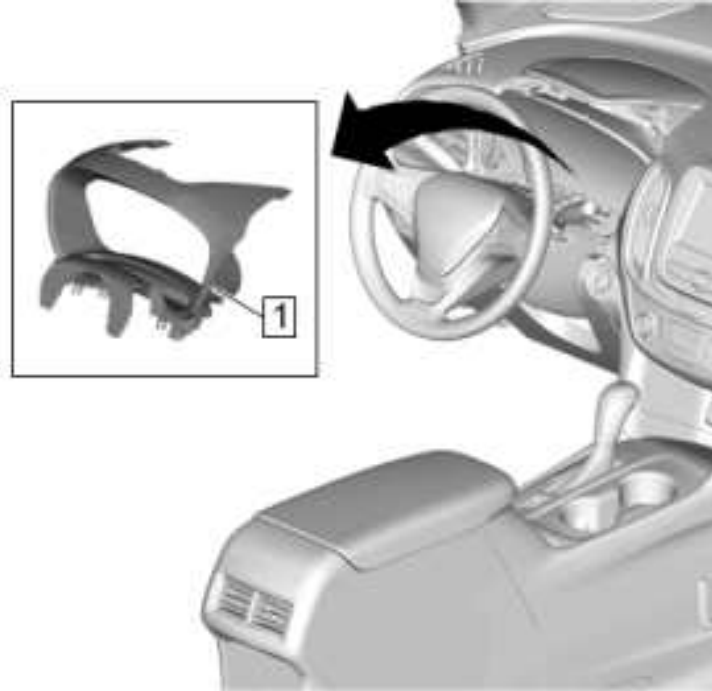


Fig. 1175: Instrument Panel Cluster Trim Plate
 Courtesy of GENERAL MOTORS COMPANY

3. Remove Instrument Panel Cluster Trim Plate (1) - **Instrument Panel Cluster Trim Plate Replacement (Equinox)**

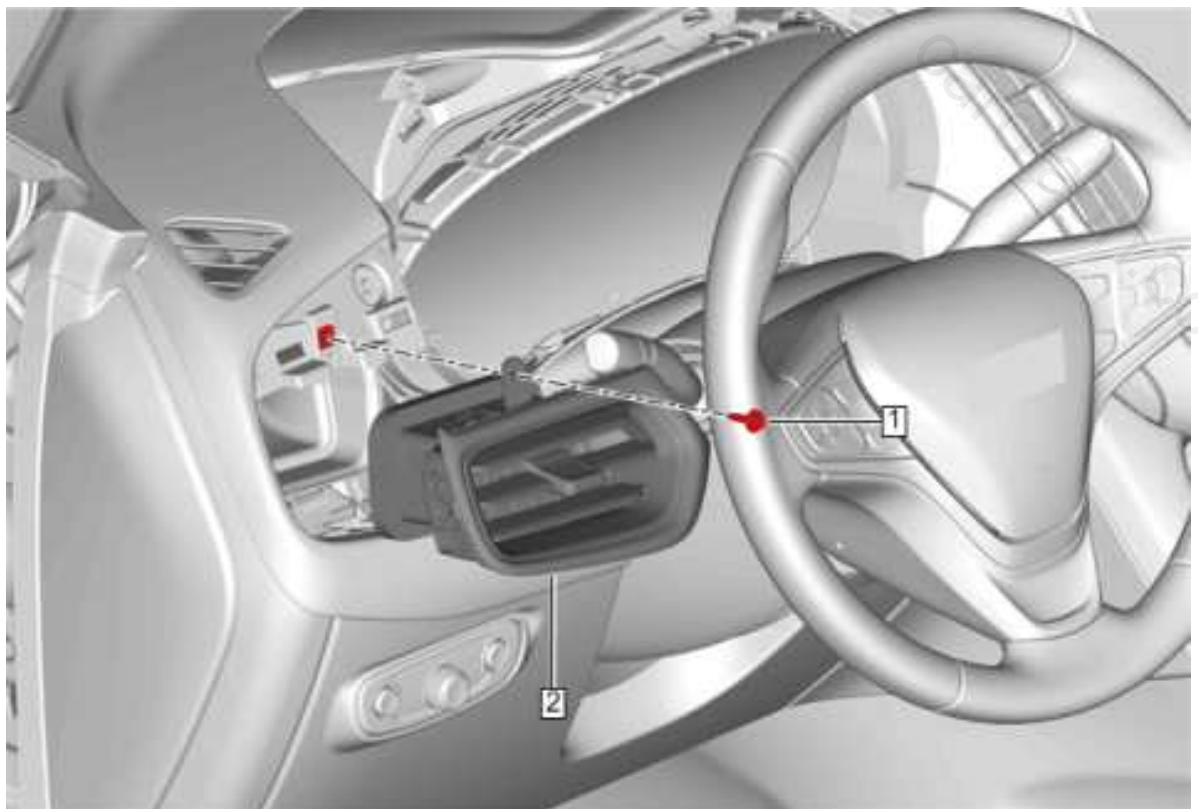


Fig. 1176: Left Side Instrument Panel Outer Air Outlet And Screw
 Courtesy of GENERAL MOTORS COMPANY

4. Remove Instrument Panel Outer Air Outlet - Left Side (2) - **Instrument Panel Outer Air Outlet Replacement - Left Side (Equinox)**

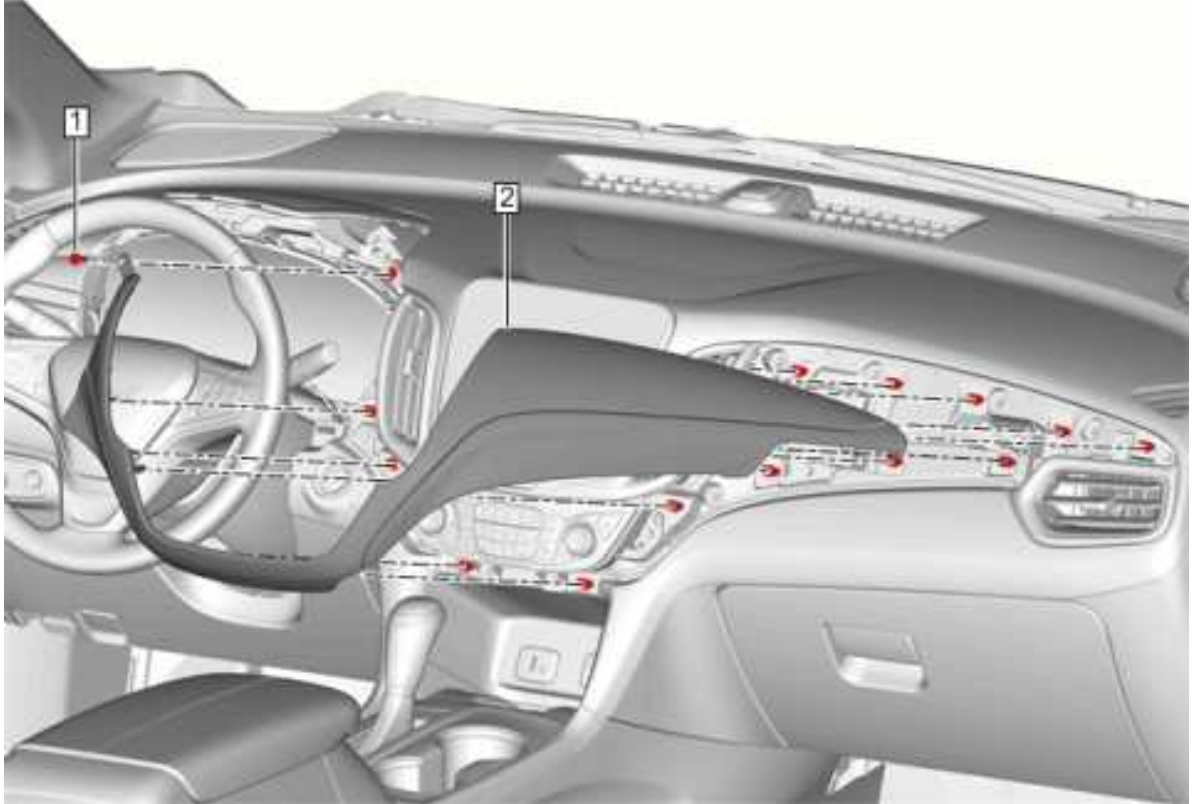


Fig. 1177: Right Side Instrument Panel Trim Pad
 Courtesy of GENERAL MOTORS COMPANY

5. Remove Instrument Panel Trim Pad - Right Side (2) - **Instrument Panel Trim Pad Replacement - Right Side (Equinox)**

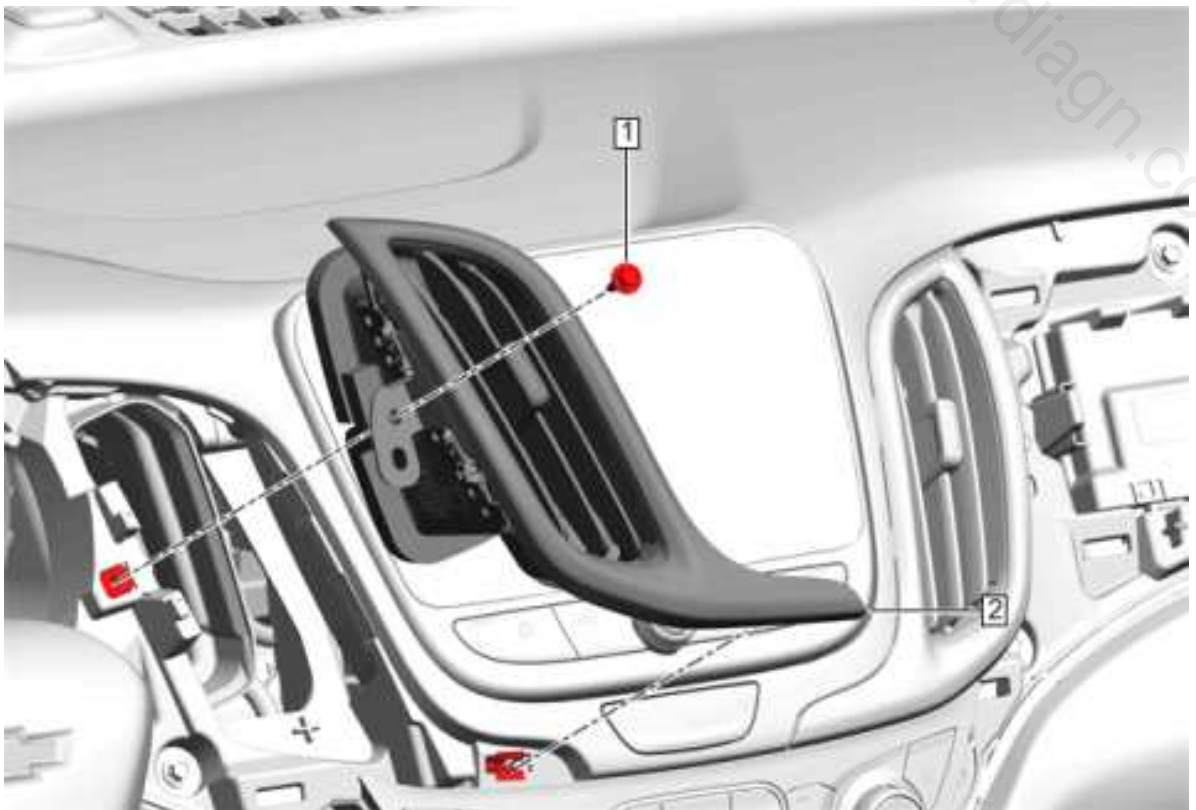


Fig. 1178: Left Side Instrument Panel Center Air Outlet And Screw
 Courtesy of GENERAL MOTORS COMPANY

6. Remove Instrument Panel Center Air Outlet - Left Side (2) - **Instrument Panel Center Air Outlet Replacement - Left Side (Equinox)**



Fig. 1179: Right Side Instrument Panel Center Air Outlet And Screw
 Courtesy of GENERAL MOTORS COMPANY

7. Remove Instrument Panel Center Air Outlet - Right Side (2) - **Instrument Panel Center Air Outlet Replacement - Right Side (Equinox)**

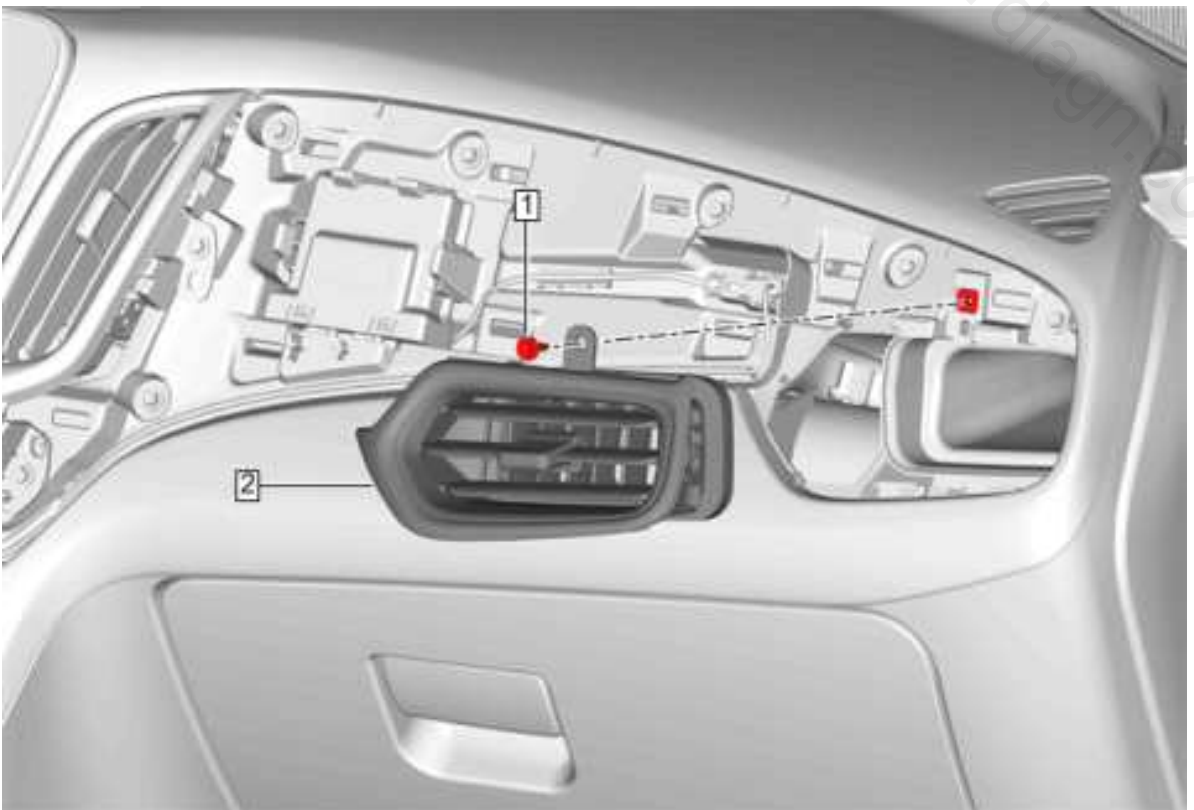


Fig. 1180: Right Side Instrument Panel Outer Air Outlet And Screw
 Courtesy of GENERAL MOTORS COMPANY

8. Remove Instrument Panel Outer Air Outlet - Right Side (2) - **Instrument Panel Outer Air Outlet Replacement - Right Side (Equinox)**

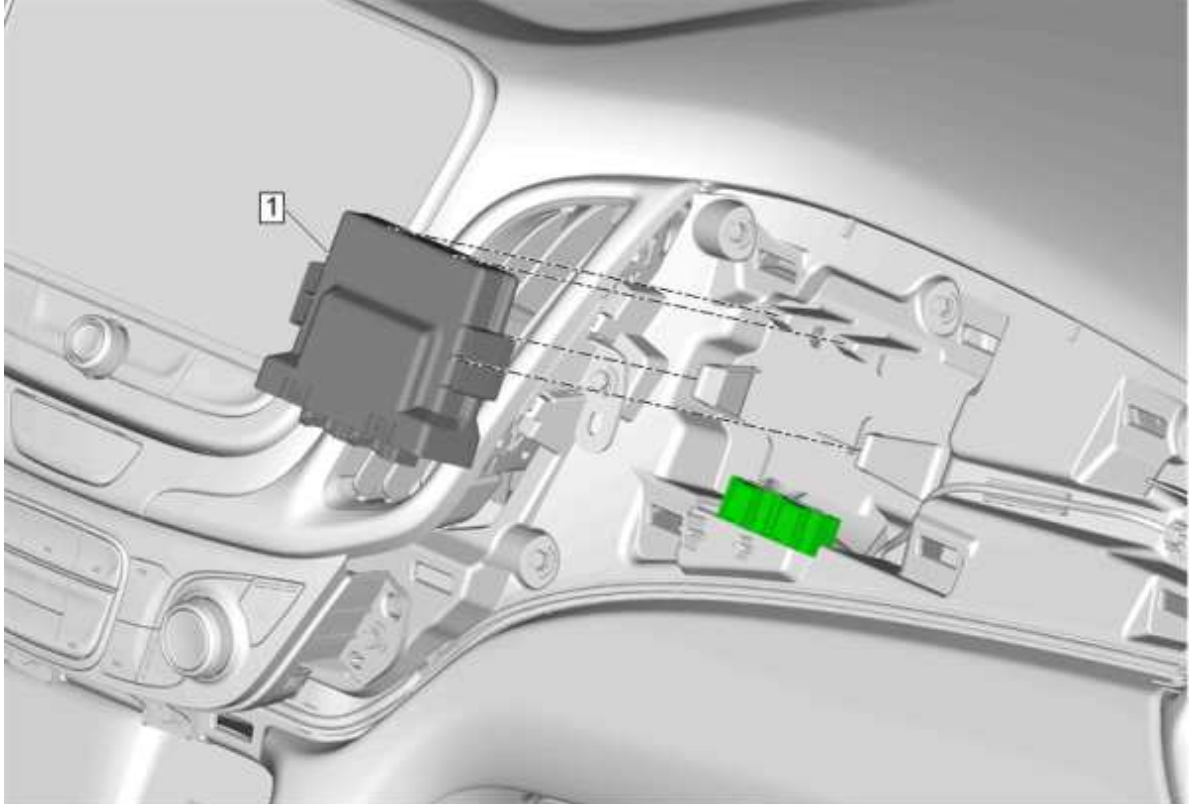


Fig. 1181: Serial Data Gateway Module
 Courtesy of GENERAL MOTORS COMPANY

9. Remove Serial Data Gateway Module (1) - [Serial Data Gateway Module Replacement \(Equinox\)](#)

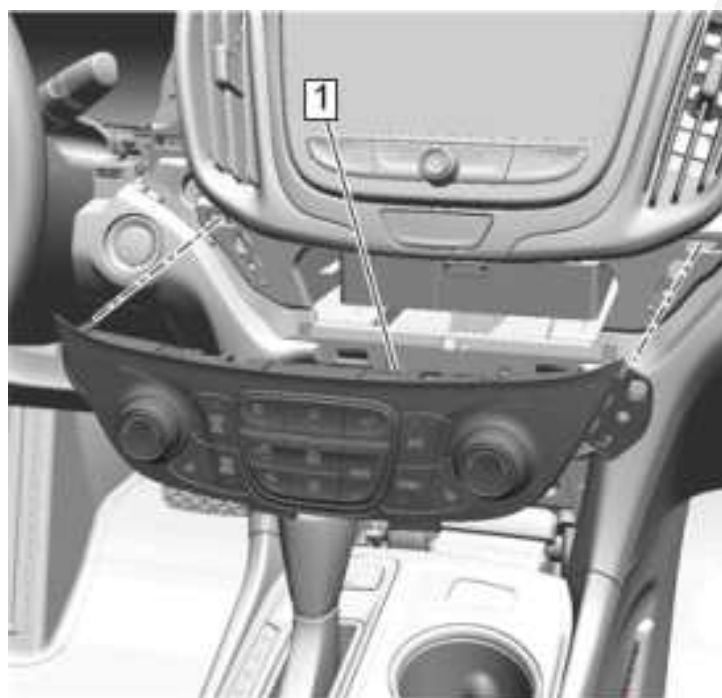


Fig. 1182: Heater and Air Conditioning User Interface Control
 Courtesy of GENERAL MOTORS COMPANY

10. Remove Heater and Air Conditioning User Interface Control (1) - [Heater and Air Conditioning User Interface Control Replacement \(Equinox\)](#)



Fig. 1183: Radio Control Assembly

Courtesy of GENERAL MOTORS COMPANY

11. Remove Rear Radio Control Assembly (1) - [Radio Control Assembly Replacement \(Equinox\)](#)
12. Hazard Warning Switch - Disconnect the electrical connector.

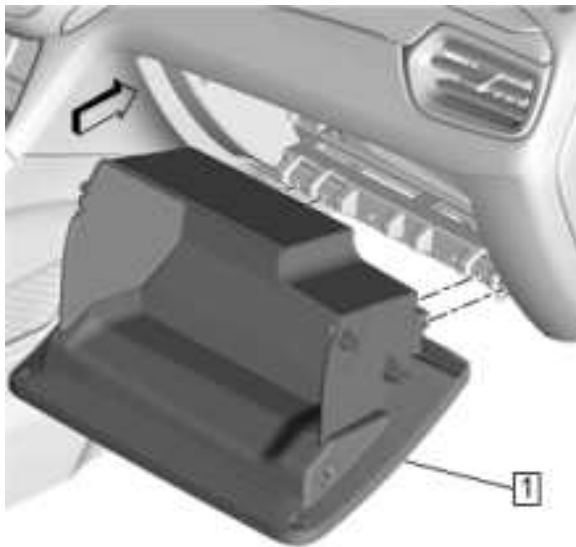


Fig. 1184: Instrument Panel Compartment Door

Courtesy of GENERAL MOTORS COMPANY

13. Remove Instrument Panel Compartment Door (1) - [Instrument Panel Compartment Door Replacement \(Equinox\)](#)

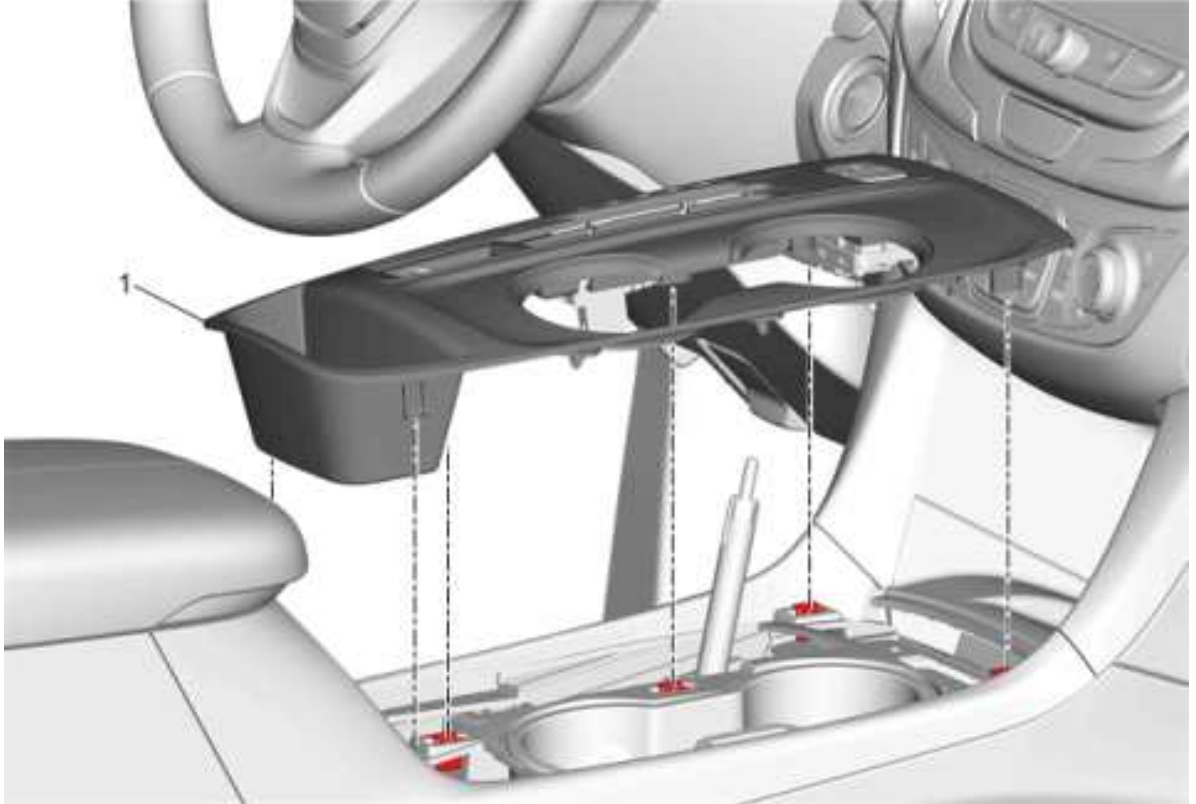


Fig. 1185: Front Floor Console Trim Plate (Equinox)

Courtesy of GENERAL MOTORS COMPANY

14. Remove Front Floor Console Trim Plate (1) - **Front Floor Console Trim Plate Replacement (Equinox)**

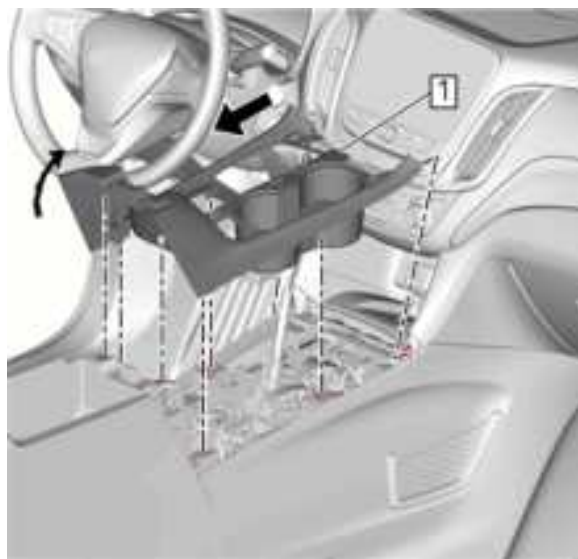


Fig. 1186: Front Floor Console Applique

Courtesy of GENERAL MOTORS COMPANY

15. Remove Front Floor Console Applique (1) - **Front Floor Console Applique Replacement (Equinox)**

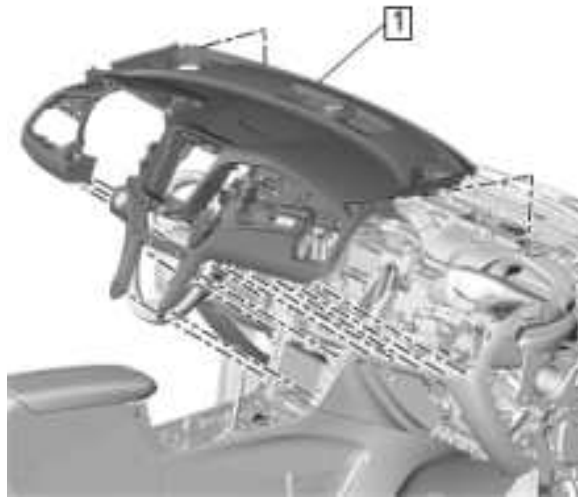


Fig. 1187: Instrument Panel Upper Trim Panel
Courtesy of GENERAL MOTORS COMPANY

16. Remove Instrument Panel Upper Trim Panel (1) - **Instrument Panel Upper Trim Panel Replacement (Equinox)**

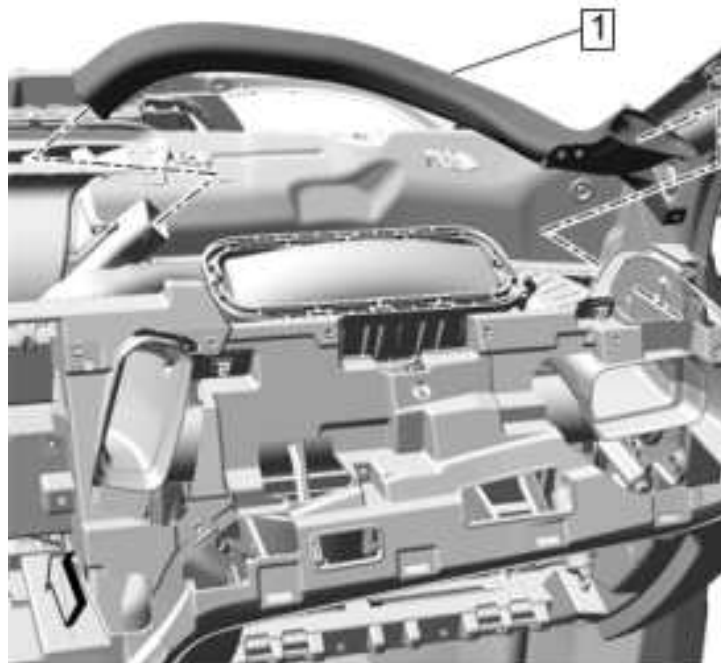


Fig. 1188: Right Side Window Defogger Outlet Duct
Courtesy of GENERAL MOTORS COMPANY

17. Remove Side Window Defogger Outlet Duct - Right Side (1) - **Side Window Defogger Outlet Duct Replacement - Right Side (Equinox)**



Fig. 1189: Left Side Window Defogger Outlet Duct
 Courtesy of GENERAL MOTORS COMPANY

18. Remove Side Window Defogger Outlet Duct - Left Side (1) - **Side Window Defogger Outlet Duct Replacement - Left Side (Equinox)**

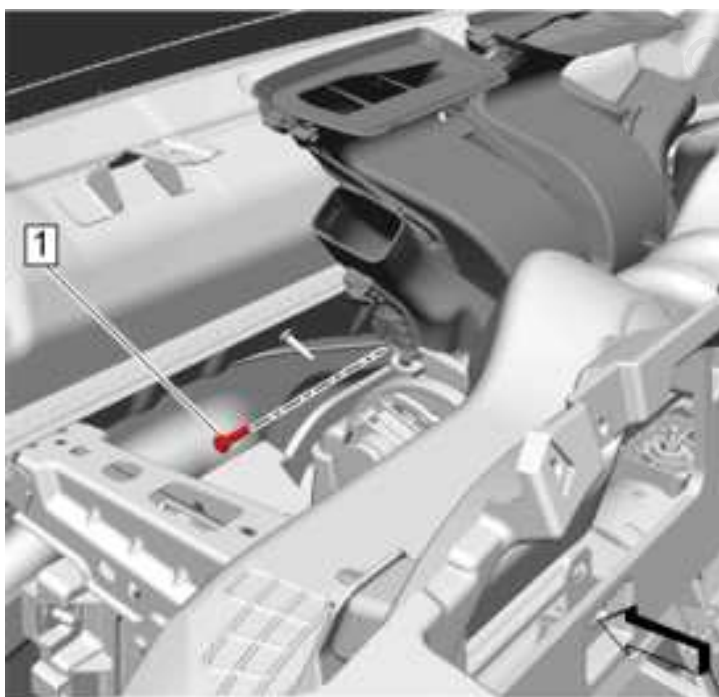


Fig. 1190: Windshield Defroster Outlet Duct Bolt
 Courtesy of GENERAL MOTORS COMPANY

19. Remove Windshield Defroster Outlet Duct Bolt (1)
20. Remove Wiring Harness Retainer@Windshield Defroster Outlet Duct [2x]

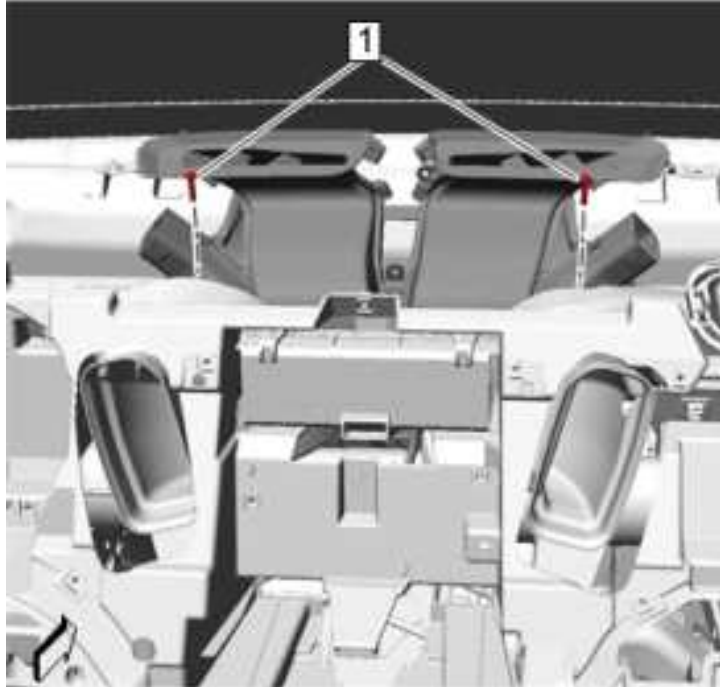


Fig. 1191: Windshield Defroster Outlet Duct Bolt
Courtesy of GENERAL MOTORS COMPANY

21. Remove Windshield Defroster Outlet Duct Bolt (1)

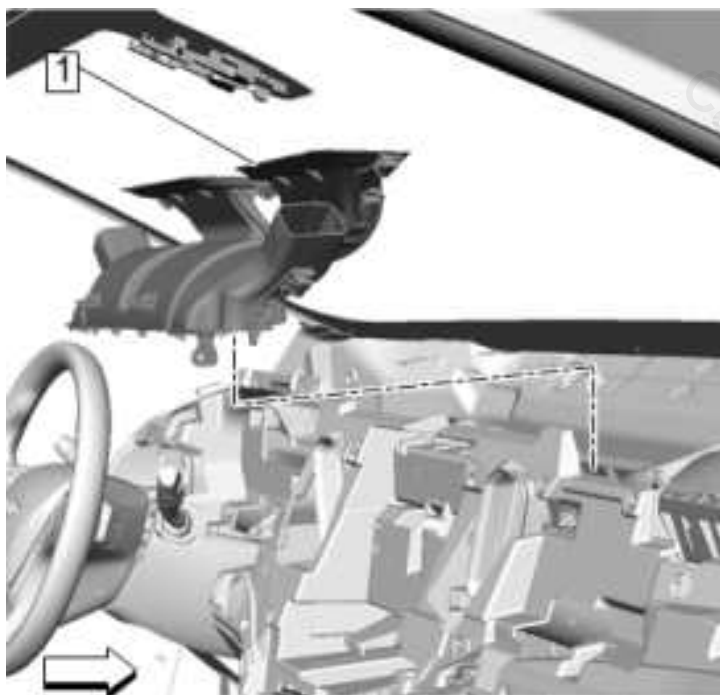


Fig. 1192: Windshield Defroster Outlet Duct
Courtesy of GENERAL MOTORS COMPANY

22. Remove Windshield Defroster Outlet Duct (1)

Installation Procedure

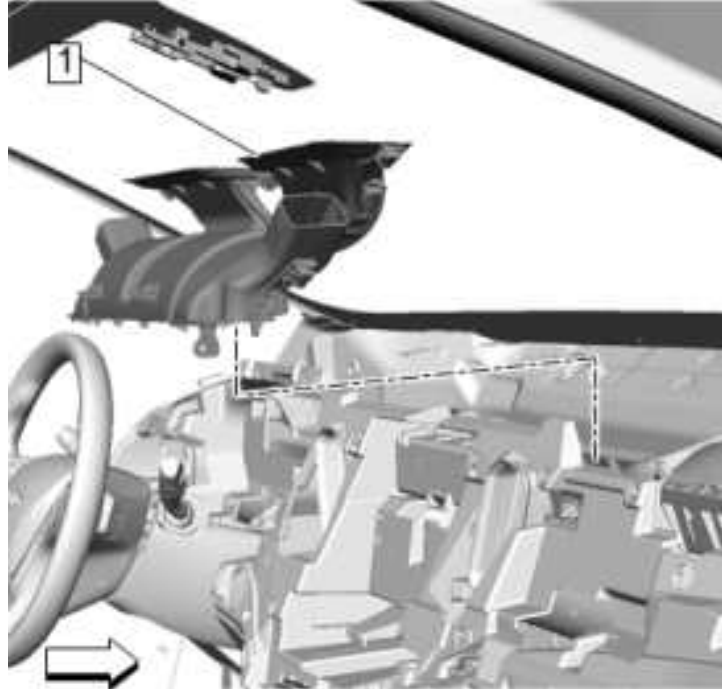


Fig. 1193: Windshield Defroster Outlet Duct
 Courtesy of GENERAL MOTORS COMPANY

1. Install Windshield Defroster Outlet Duct (1)

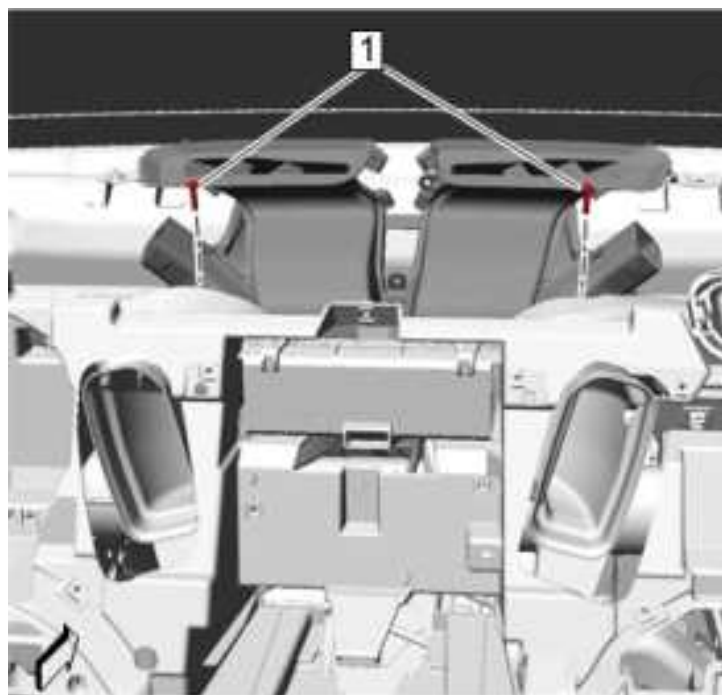


Fig. 1194: Windshield Defroster Outlet Duct Bolt
 Courtesy of GENERAL MOTORS COMPANY

CAUTION: Refer to **Fastener Caution** .

2. Install Windshield Defroster Outlet Duct Bolt (1) and tighten [2x] 1.5 N.m (13 lb in)

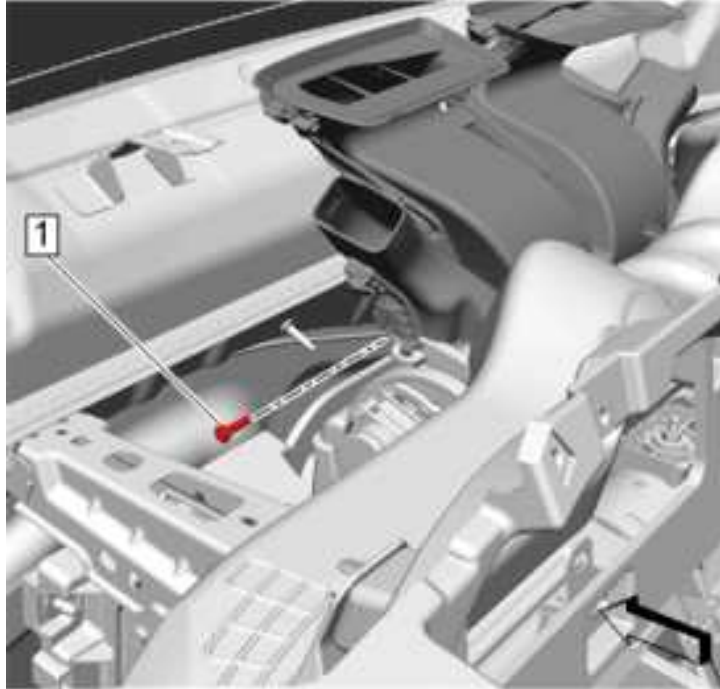


Fig. 1195: Windshield Defroster Outlet Duct Bolt
 Courtesy of GENERAL MOTORS COMPANY

3. Install Windshield Defroster Outlet Duct Bolt (1) and tighten 1.5 N.m (13 lb in)
4. Install Wiring Harness Retainer@Windshield Defroster Outlet Duct - [2x]



Fig. 1196: Left Side Window Defogger Outlet Duct
 Courtesy of GENERAL MOTORS COMPANY

5. Install Side Window Defogger Outlet Duct - Left Side (1) - **Side Window Defogger Outlet Duct Replacement - Left Side (Equinox)**

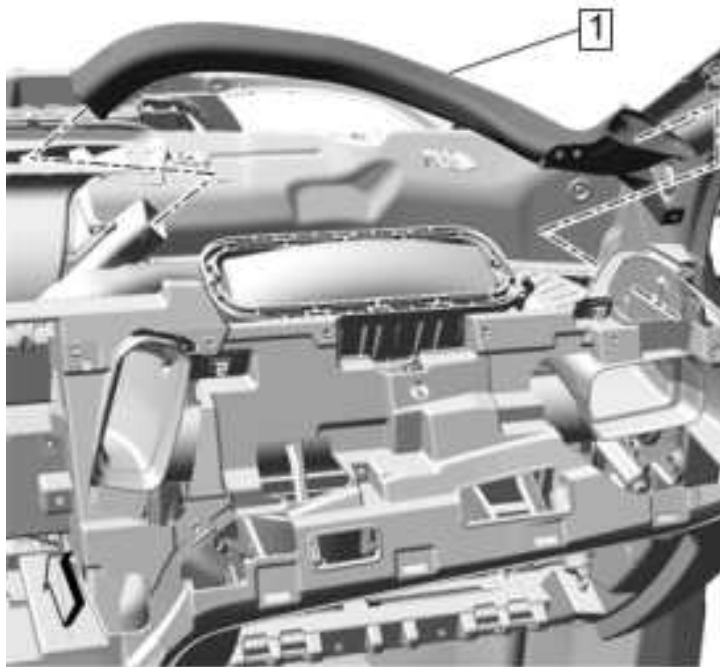


Fig. 1197: Right Side Window Defogger Outlet Duct
 Courtesy of GENERAL MOTORS COMPANY

6. Install Side Window Defogger Outlet Duct - Right Side (1) - **Side Window Defogger Outlet Duct Replacement - Right Side (Equinox)**

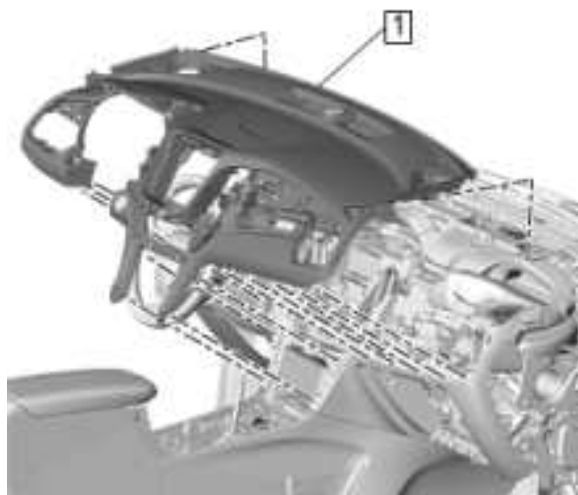


Fig. 1198: Instrument Panel Upper Trim Panel
 Courtesy of GENERAL MOTORS COMPANY

7. Install Instrument Panel Upper Trim Panel (1) - **Instrument Panel Upper Trim Panel Replacement (Equinox)**

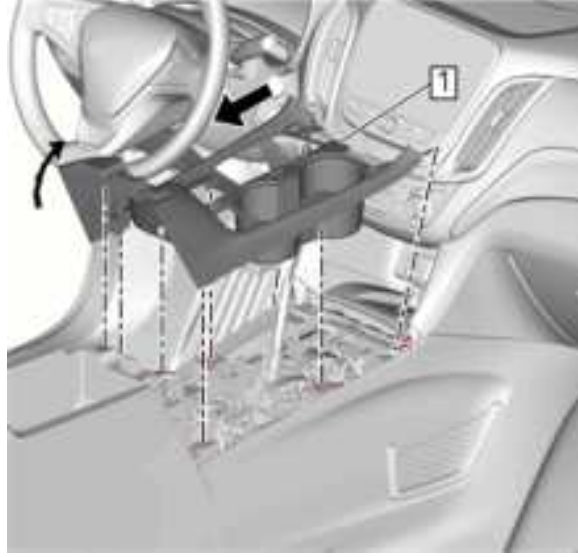


Fig. 1199: Front Floor Console Applique
Courtesy of GENERAL MOTORS COMPANY

8. Install Front Floor Console Applique (1) - [Front Floor Console Applique Replacement \(Equinox\)](#)

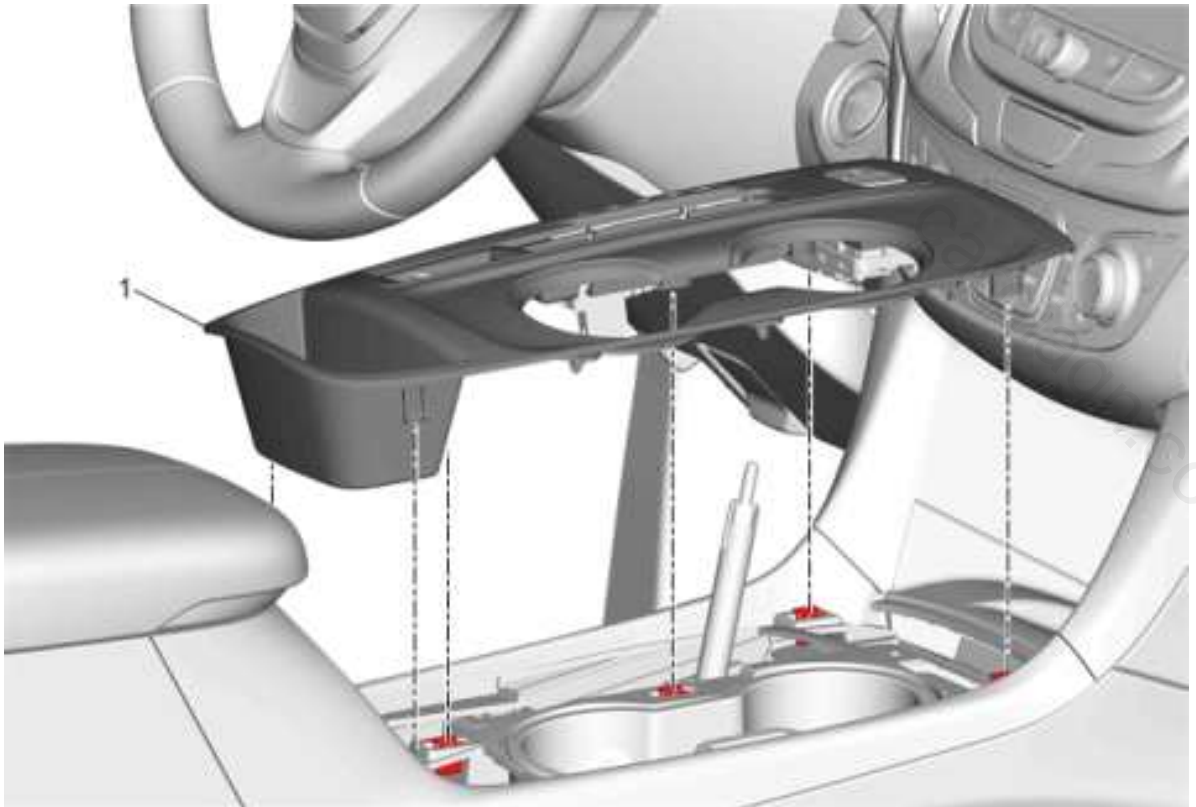


Fig. 1200: Front Floor Console Trim Plate (Equinox)
Courtesy of GENERAL MOTORS COMPANY

9. Install Front Floor Console Trim Plate (1) - [Front Floor Console Trim Plate Replacement \(Equinox\)](#)

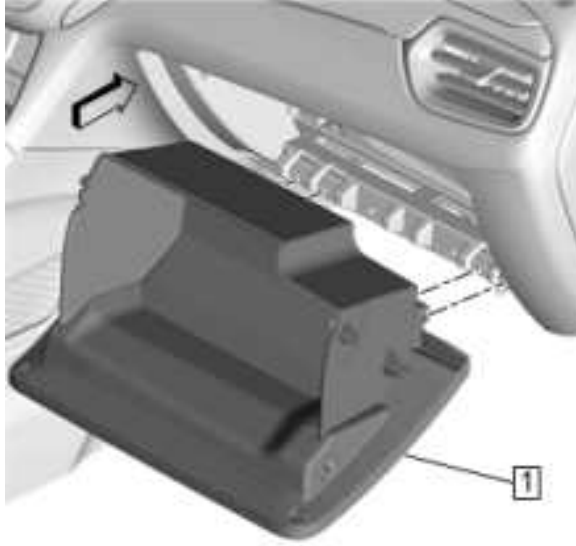


Fig. 1201: Instrument Panel Compartment Door
Courtesy of GENERAL MOTORS COMPANY

10. Install Instrument Panel Compartment Door (1) - [Instrument Panel Compartment Door Replacement \(Equinox\)](#)
11. Hazard Warning Switch - Connect the electrical connector.



Fig. 1202: Radio Control Assembly
Courtesy of GENERAL MOTORS COMPANY

12. Install Rear Radio Control Assembly (1) - [Radio Control Assembly Replacement \(Equinox\)](#)

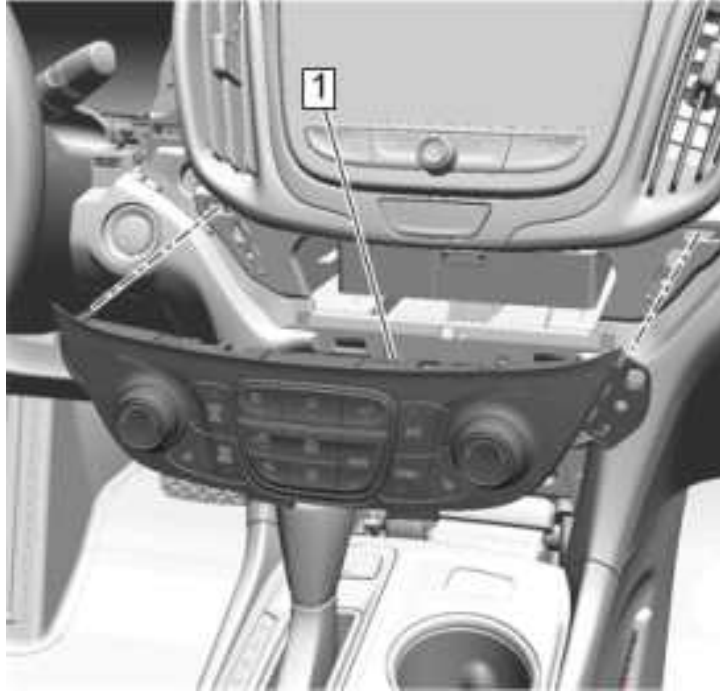


Fig. 1203: Heater and Air Conditioning User Interface Control
 Courtesy of GENERAL MOTORS COMPANY

13. Install Heater and Air Conditioning User Interface Control (1) - [Heater and Air Conditioning User Interface Control Replacement \(Equinox\)](#)

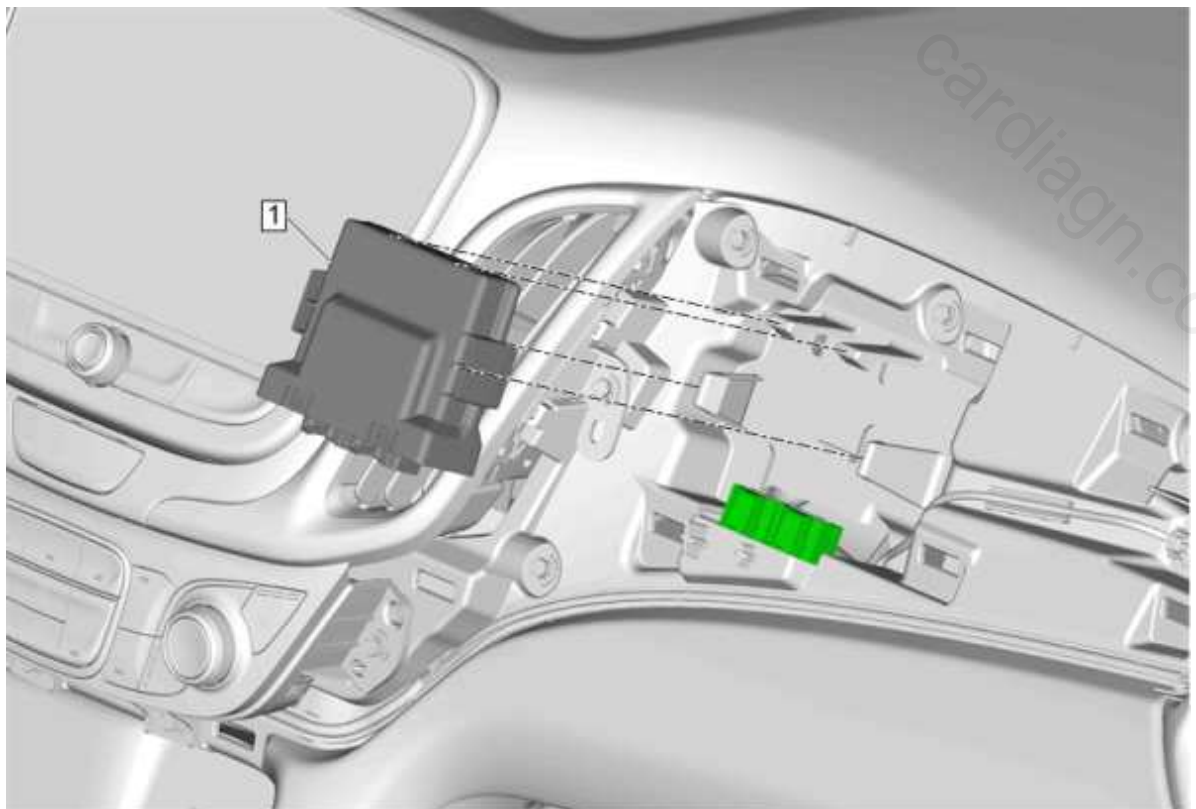


Fig. 1204: Serial Data Gateway Module
 Courtesy of GENERAL MOTORS COMPANY

14. Install Serial Data Gateway Module (1) - [Serial Data Gateway Module Replacement \(Equinox\)](#)

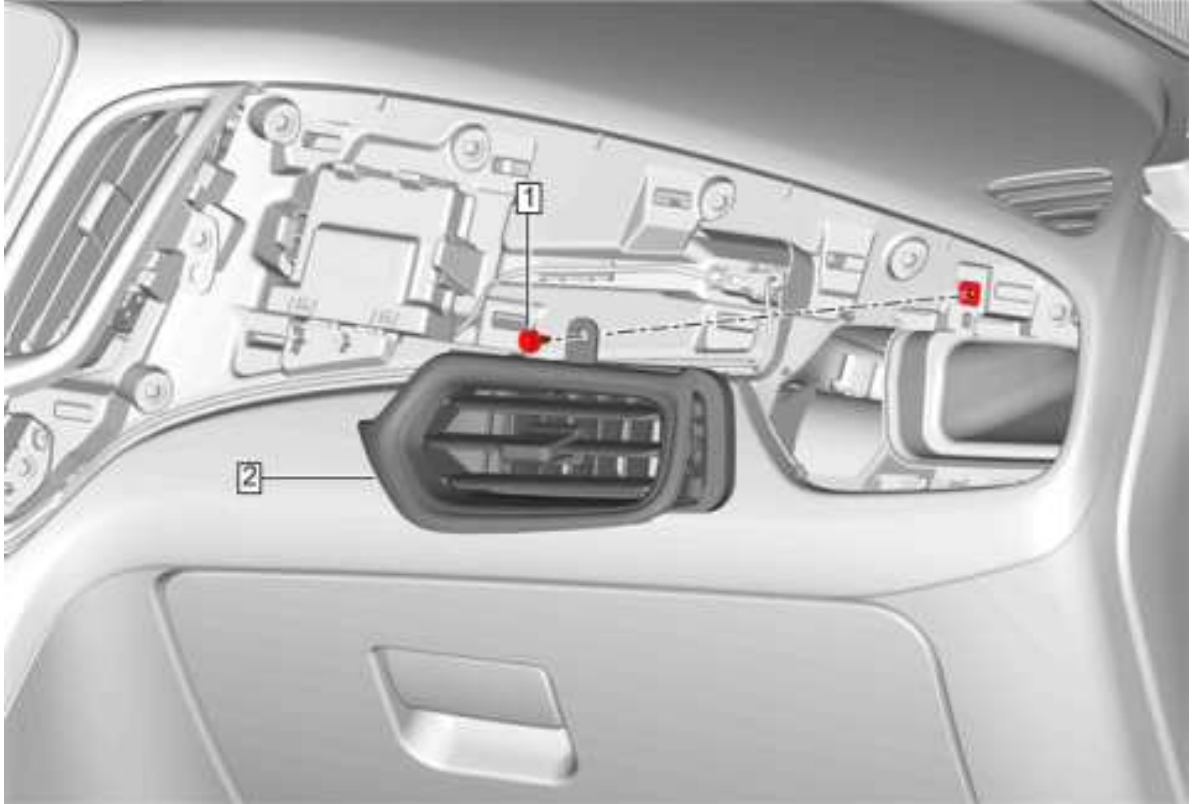


Fig. 1205: Right Side Instrument Panel Outer Air Outlet And Screw
 Courtesy of GENERAL MOTORS COMPANY

15. Install Instrument Panel Outer Air Outlet - Right Side (2) - **Instrument Panel Outer Air Outlet Replacement - Right Side (Equinox)**



Fig. 1206: Right Side Instrument Panel Center Air Outlet And Screw
 Courtesy of GENERAL MOTORS COMPANY

16. Install Instrument Panel Center Air Outlet - Right Side (2) - **Instrument Panel Center Air Outlet Replacement - Right Side (Equinox)**

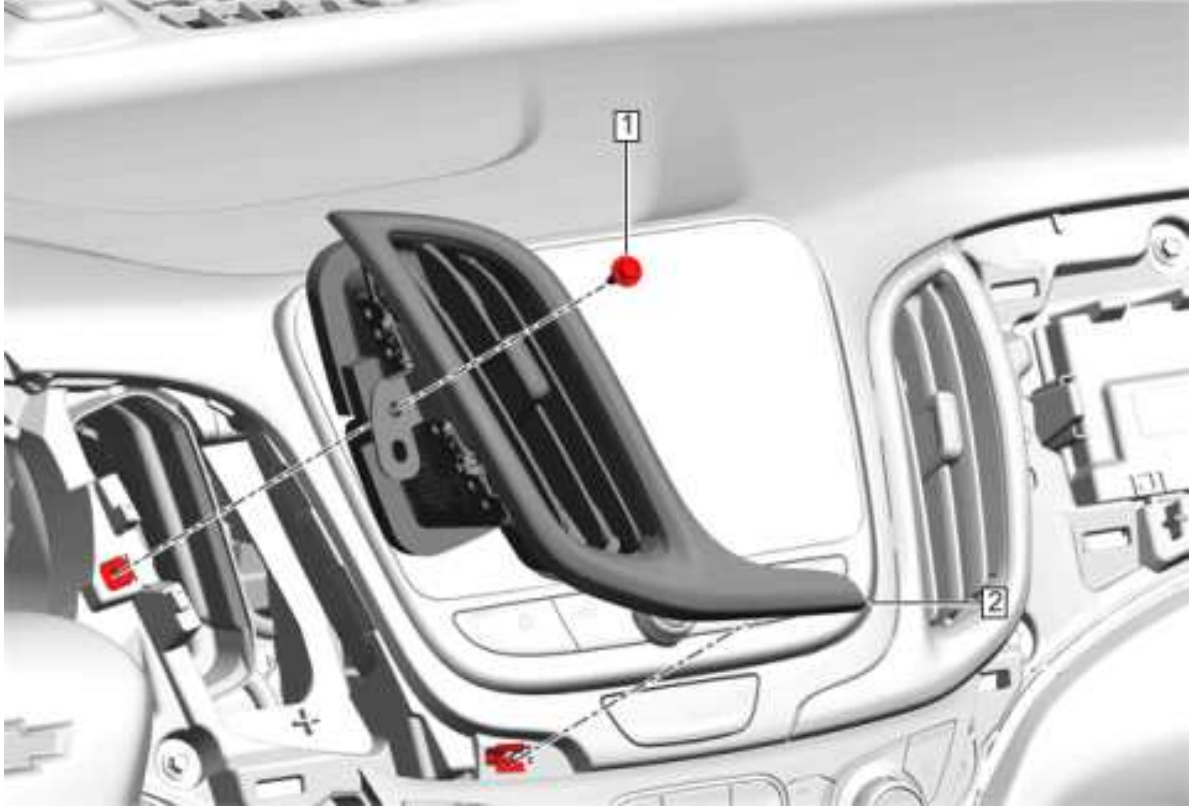


Fig. 1207: Left Side Instrument Panel Center Air Outlet And Screw
 Courtesy of GENERAL MOTORS COMPANY

17. Install Instrument Panel Center Air Outlet - Left Side (2) - **Instrument Panel Center Air Outlet Replacement - Left Side (Equinox)**

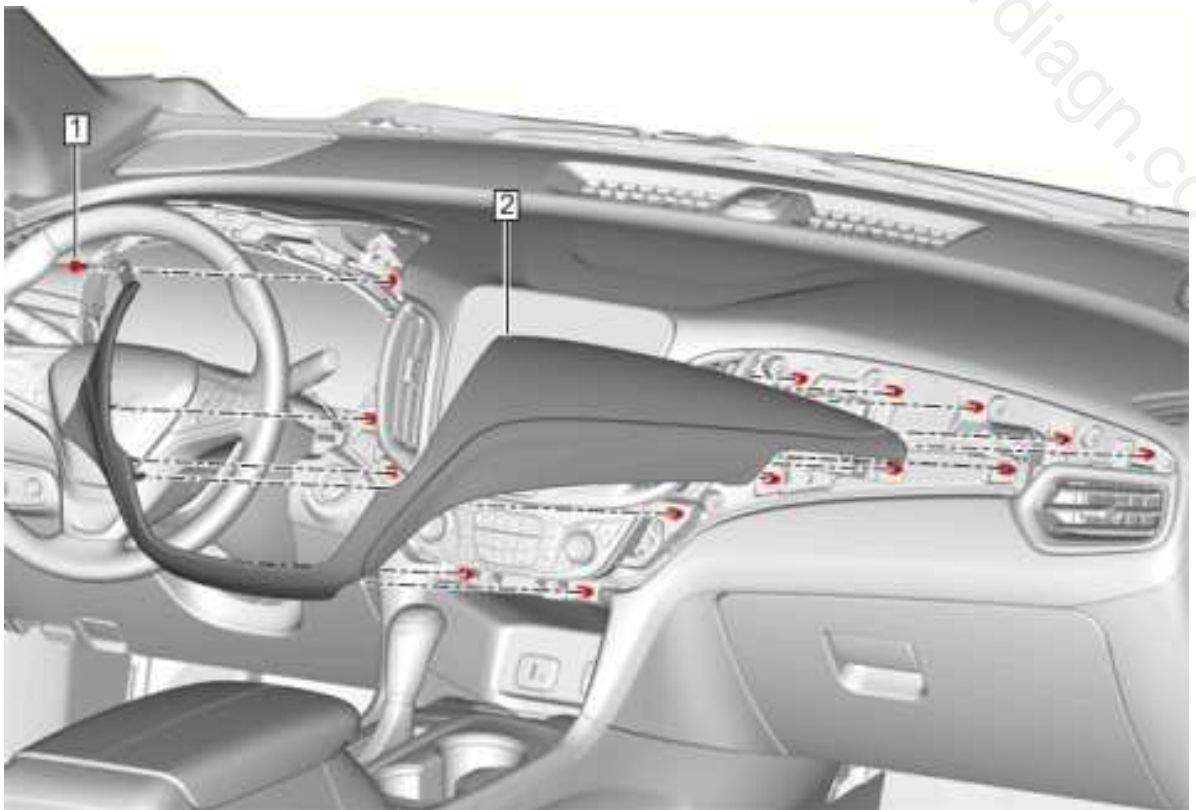


Fig. 1208: Right Side Instrument Panel Trim Pad
 Courtesy of GENERAL MOTORS COMPANY

18. Install Instrument Panel Trim Pad - Right Side (2) - **Instrument Panel Trim Pad Replacement - Right Side (Equinox)**

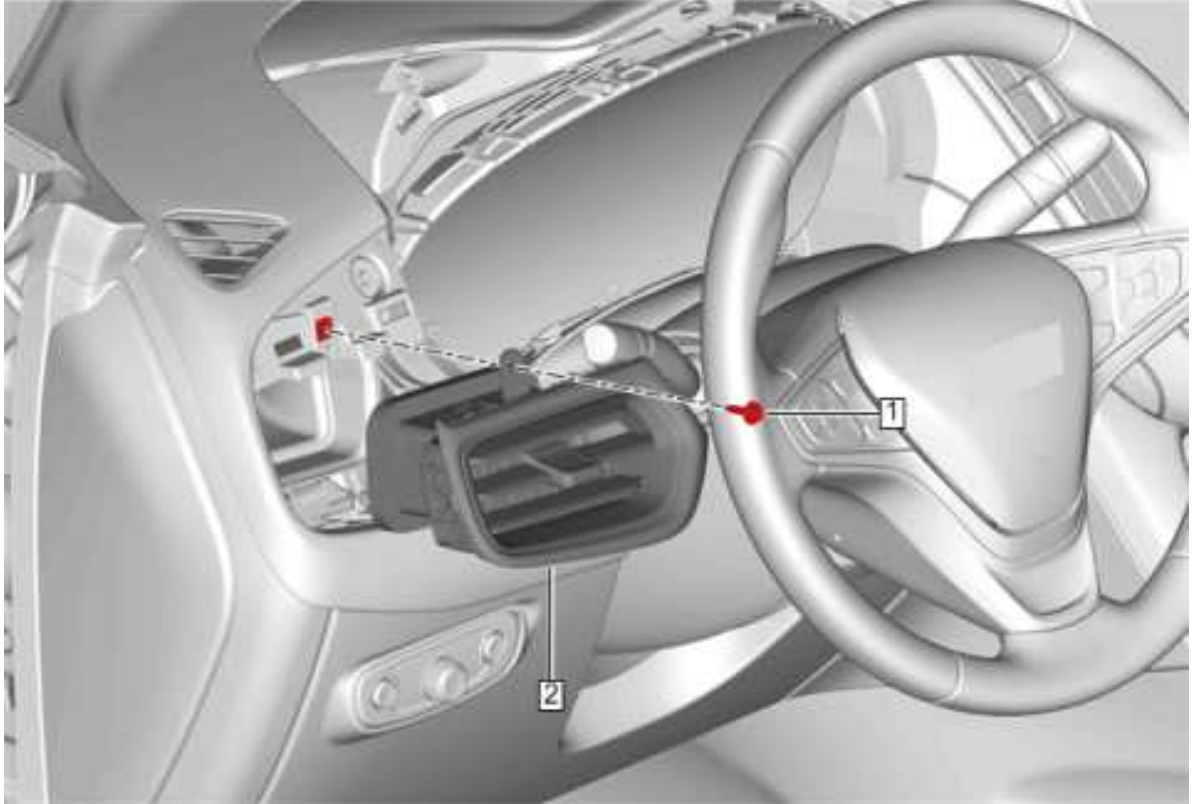


Fig. 1209: Left Side Instrument Panel Outer Air Outlet And Screw
 Courtesy of GENERAL MOTORS COMPANY

19. Install Instrument Panel Outer Air Outlet - Left Side (2) - [Instrument Panel Outer Air Outlet Replacement - Left Side \(Equinox\)](#)

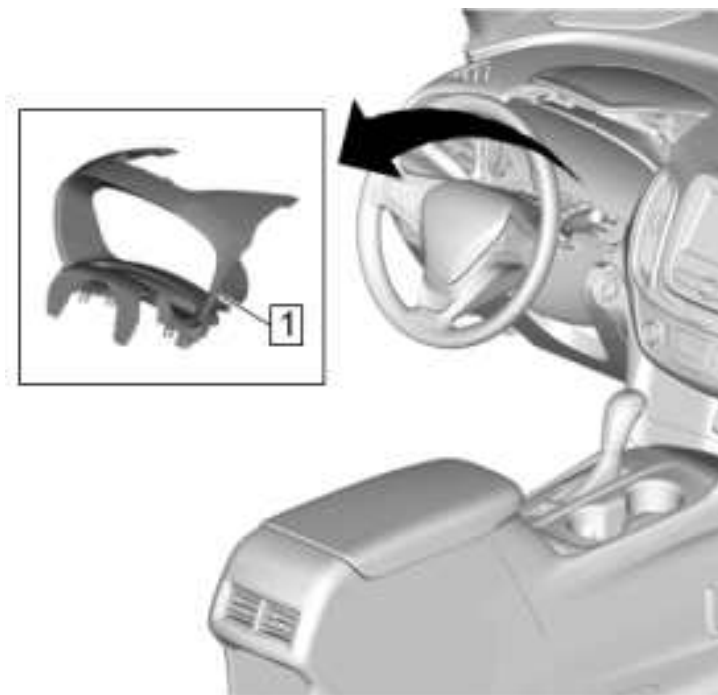


Fig. 1210: Instrument Panel Cluster Trim Plate
 Courtesy of GENERAL MOTORS COMPANY

20. Install Instrument Panel Cluster Trim Plate (1) - [Instrument Panel Cluster Trim Plate Replacement \(Equinox\)](#)



Fig. 1211: Left And Right Instrument Panel Outer Trim Cover
Courtesy of GENERAL MOTORS COMPANY

21. Install the left and right instrument panel outer trim cover (1). [Instrument Panel Outer Trim Cover Replacement \(Equinox\)](#)

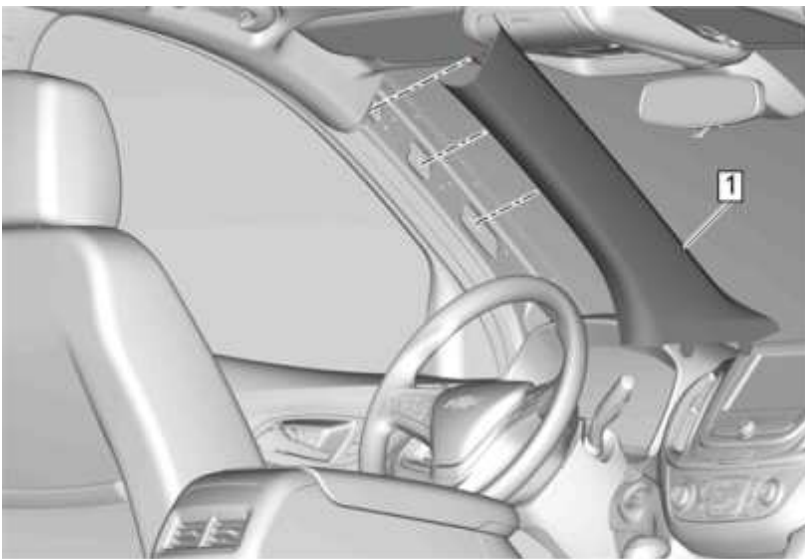


Fig. 1212: Windshield Garnish Molding Replacement (Equinox)
Courtesy of GENERAL MOTORS COMPANY

22. Install the left and right side windshield garnish molding (1). [Windshield Garnish Molding Replacement \(Equinox\)](#)

WINDSHIELD DEFROSTER OUTLET DUCT REPLACEMENT (TERRAIN)

Removal Procedure

1. Remove the left and right side windshield garnish molding. [Windshield Garnish Molding Replacement \(Terrain\)](#)

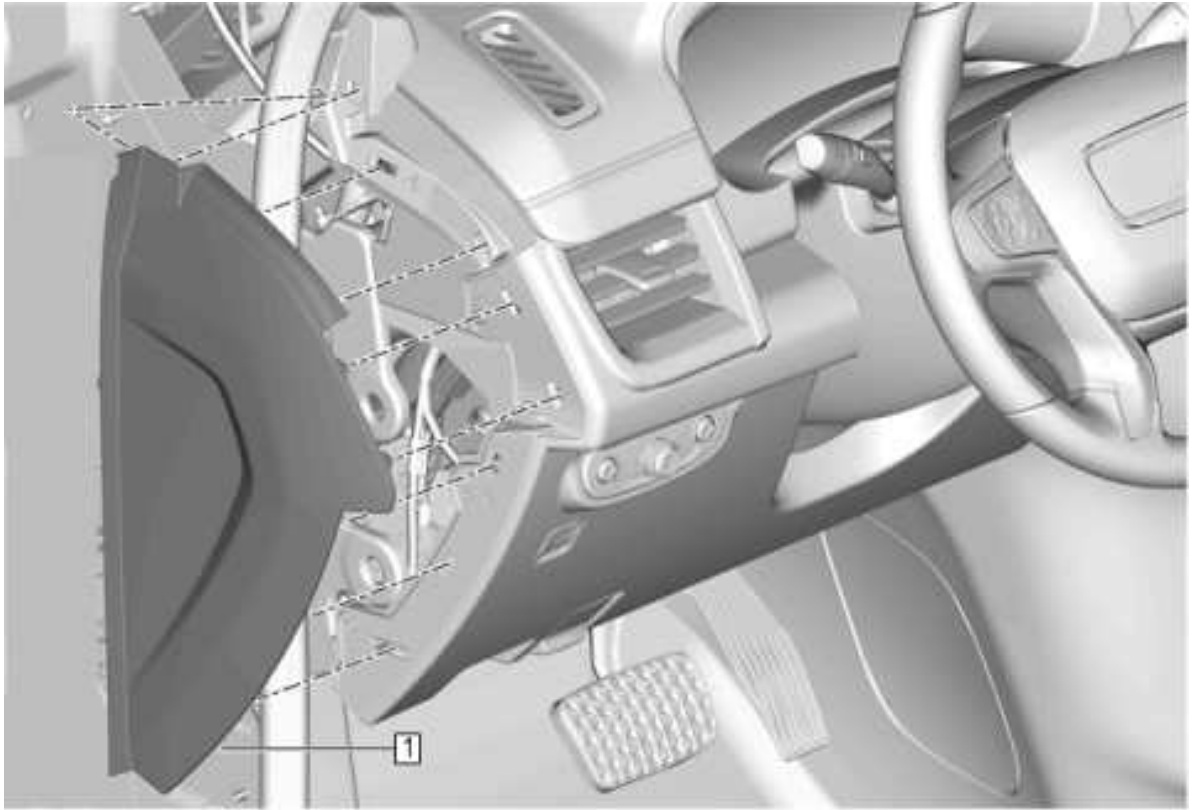


Fig. 1213: Instrument Panel Outer Trim Cover (Terrain)
Courtesy of GENERAL MOTORS COMPANY

2. Remove the left and right instrument panel outer trim cover (1). [Instrument Panel Outer Trim Cover Replacement \(Terrain\)](#)



Fig. 1214: Instrument Panel Cluster Trim Plate
Courtesy of GENERAL MOTORS COMPANY

3. Remove Instrument Panel Cluster Trim Plate (1) - [Instrument Panel Cluster Trim Plate Replacement \(Terrain\)](#)

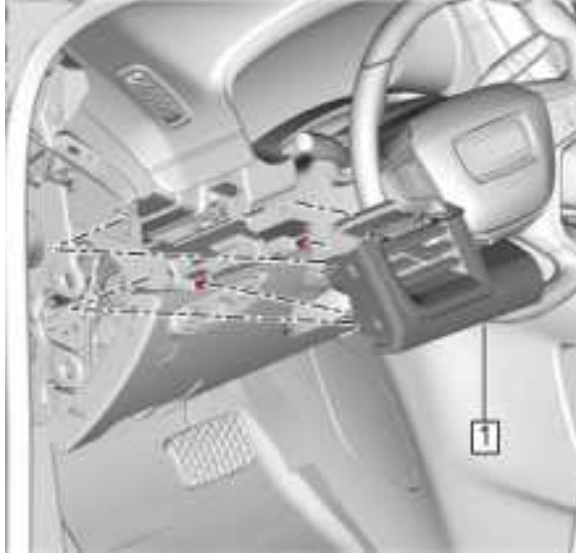


Fig. 1215: Left Side Instrument Panel Trim Pad
Courtesy of GENERAL MOTORS COMPANY

4. Remove Instrument Panel Trim Pad - Left Side (1) - **Instrument Panel Trim Pad Replacement - Left Side (Terrain)**

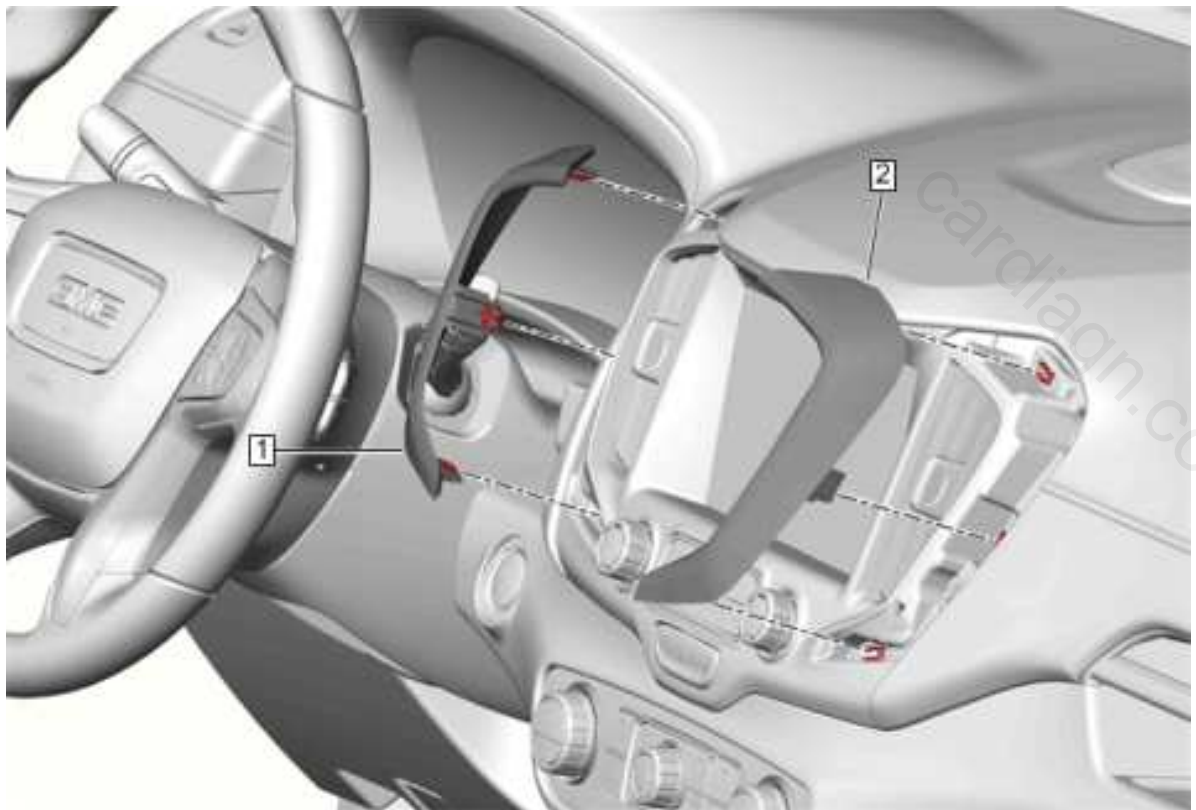


Fig. 1216: Instrument Panel Center Trim Plate Appliques
Courtesy of GENERAL MOTORS COMPANY

5. Remove Instrument Panel Center Trim Plate Applique - Left Side (1) - **Instrument Panel Center Trim Plate Applique Replacement (Terrain)**
6. Remove Instrument Panel Center Trim Plate Applique - Right Side (2) - **Instrument Panel Center Trim Plate Applique Replacement (Terrain)**



Fig. 1217: Front Floor Console Transmission Shift Opening Bezel
Courtesy of GENERAL MOTORS COMPANY

7. Remove Front Floor Console Transmission Shift Opening Bezel (1) - **Front Floor Console Transmission Shift Opening Bezel Replacement (Terrain)**

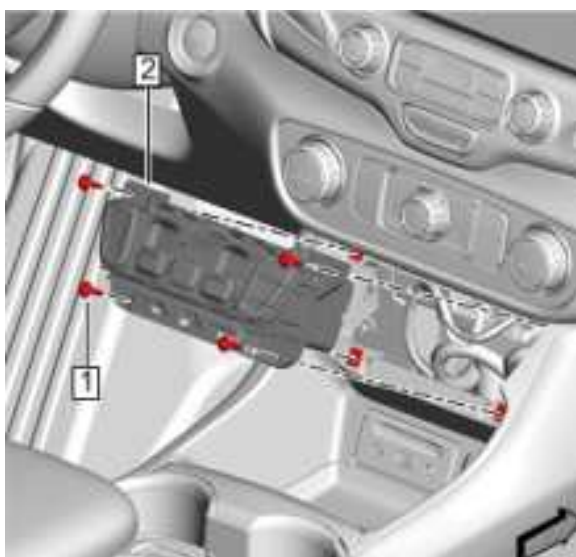


Fig. 1218: Automatic Transmission Control Bolts And Electronic Transmission Shift Control Pushbutton
Courtesy of GENERAL MOTORS COMPANY

8. Remove Electronic Transmission Shift Control Pushbutton (2) - **Electronic Transmission Shift Control Pushbutton Replacement**

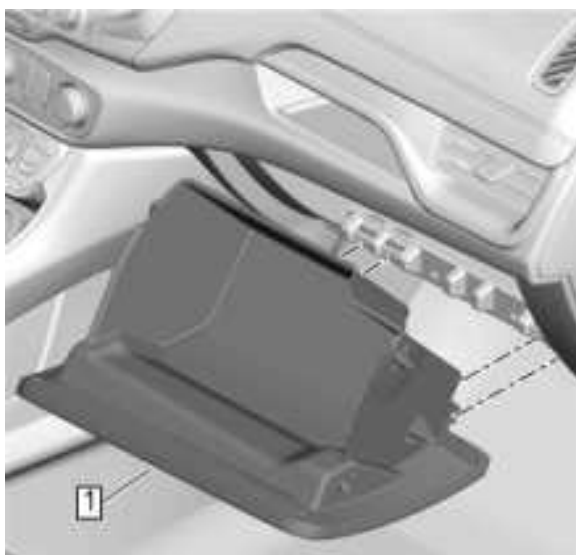


Fig. 1219: Instrument Panel Compartment Door
Courtesy of GENERAL MOTORS COMPANY

9. Remove Instrument Panel Compartment Door (1) - [Instrument Panel Compartment Door Replacement \(Terrain\)](#)

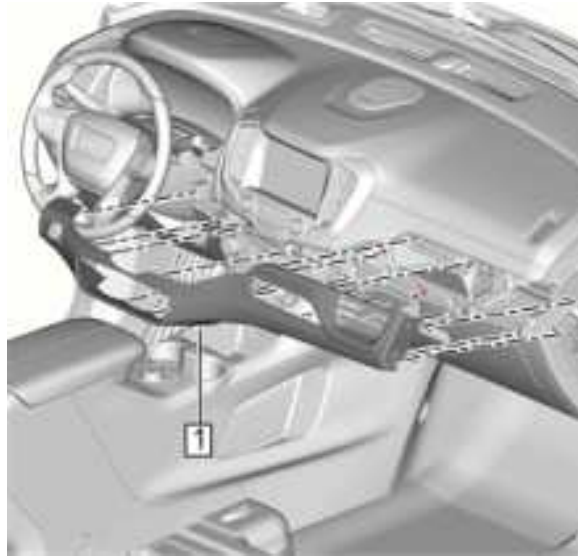


Fig. 1220: Right Side Instrument Panel Trim Pad
Courtesy of GENERAL MOTORS COMPANY

10. Remove Instrument Panel Trim Pad - Right Side (1) - [Instrument Panel Trim Pad Replacement - Right Side \(Terrain\)](#)

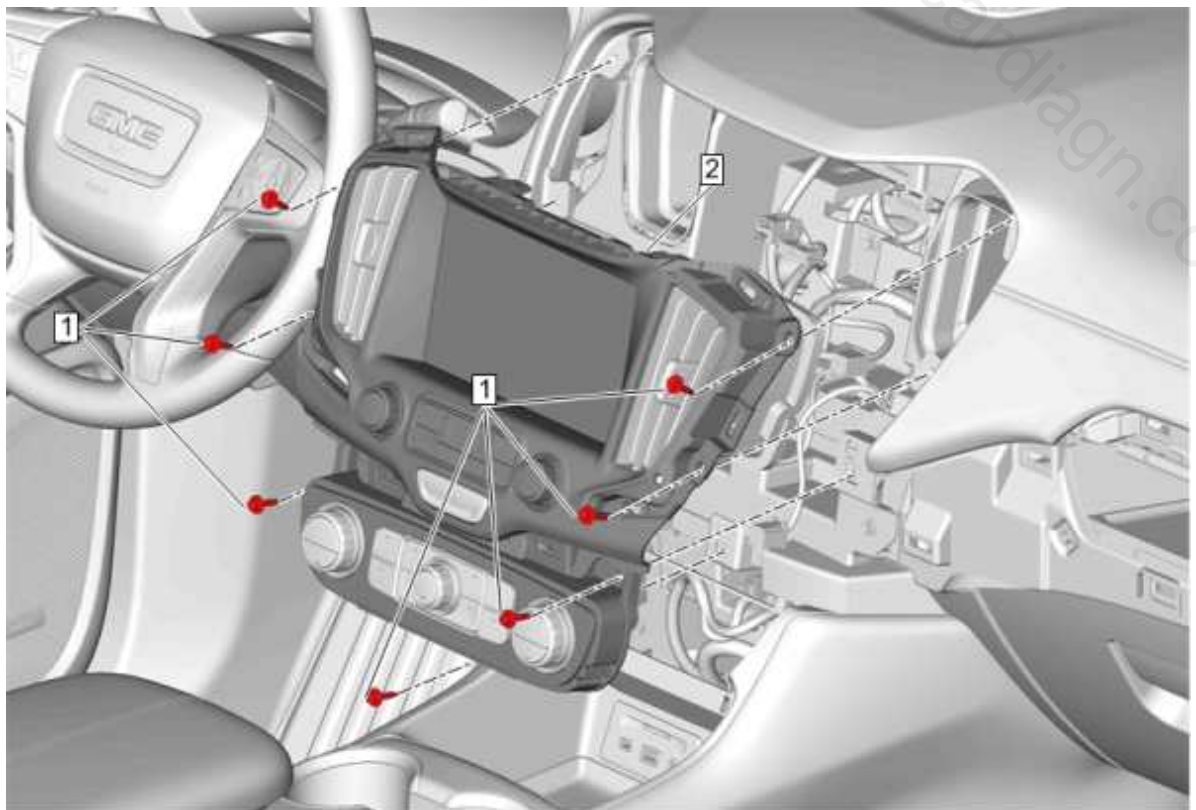


Fig. 1221: Radio Control Assembly And Screws
Courtesy of GENERAL MOTORS COMPANY

11. Remove Radio Control Assembly (2) - [Radio Control Assembly Replacement \(Terrain\)](#)
12. Disconnect all electrical connectors.



Fig. 1222: Radio Front Center Speaker
Courtesy of GENERAL MOTORS COMPANY

13. Remove Radio Front Center Speaker (2) **Radio Front Center Speaker Replacement (Terrain)**

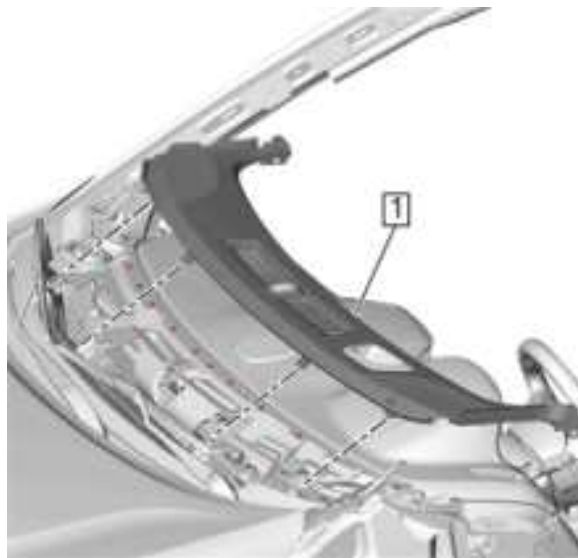


Fig. 1223: Instrument Panel Extension
Courtesy of GENERAL MOTORS COMPANY

14. Remove Instrument Panel Extension (1) - **Instrument Panel Extension Replacement (Terrain)**

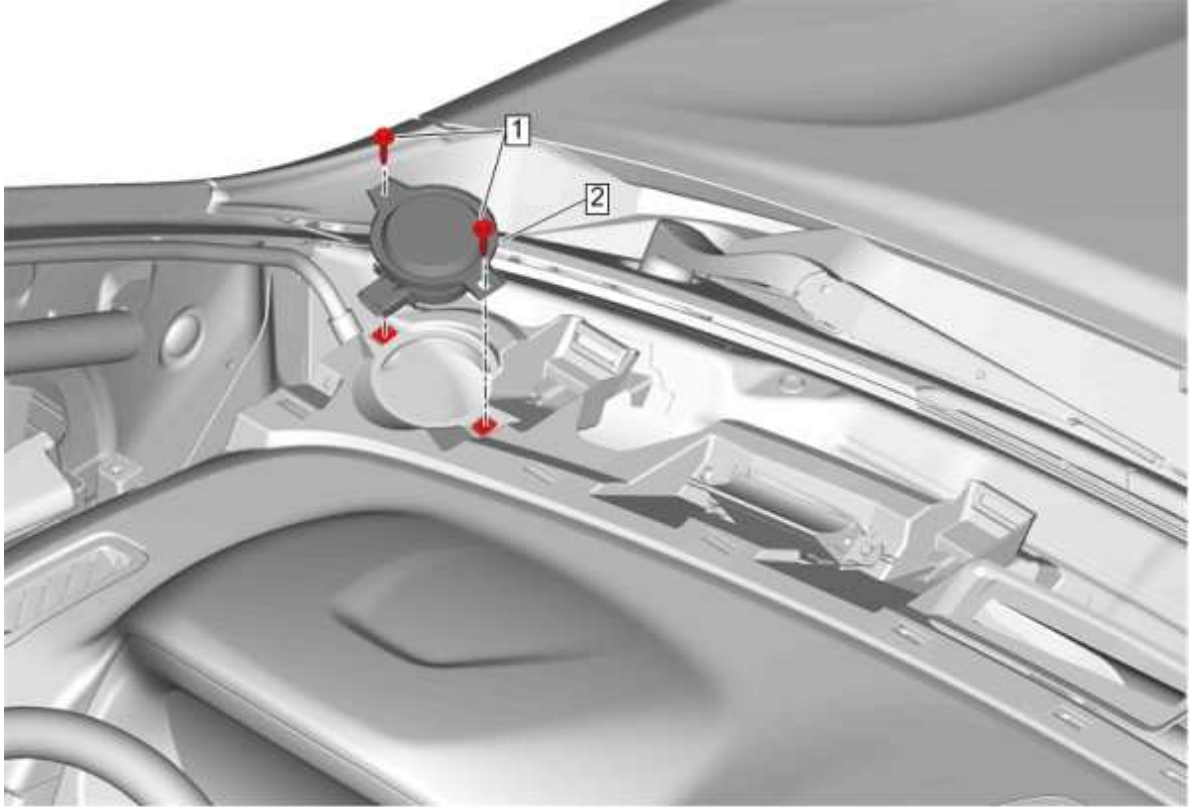


Fig. 1224: Radio Front Speaker

Courtesy of GENERAL MOTORS COMPANY

15. Remove the left and right side radio front speakers.(2)[Radio Front Speaker Replacement \(Terrain\)](#)

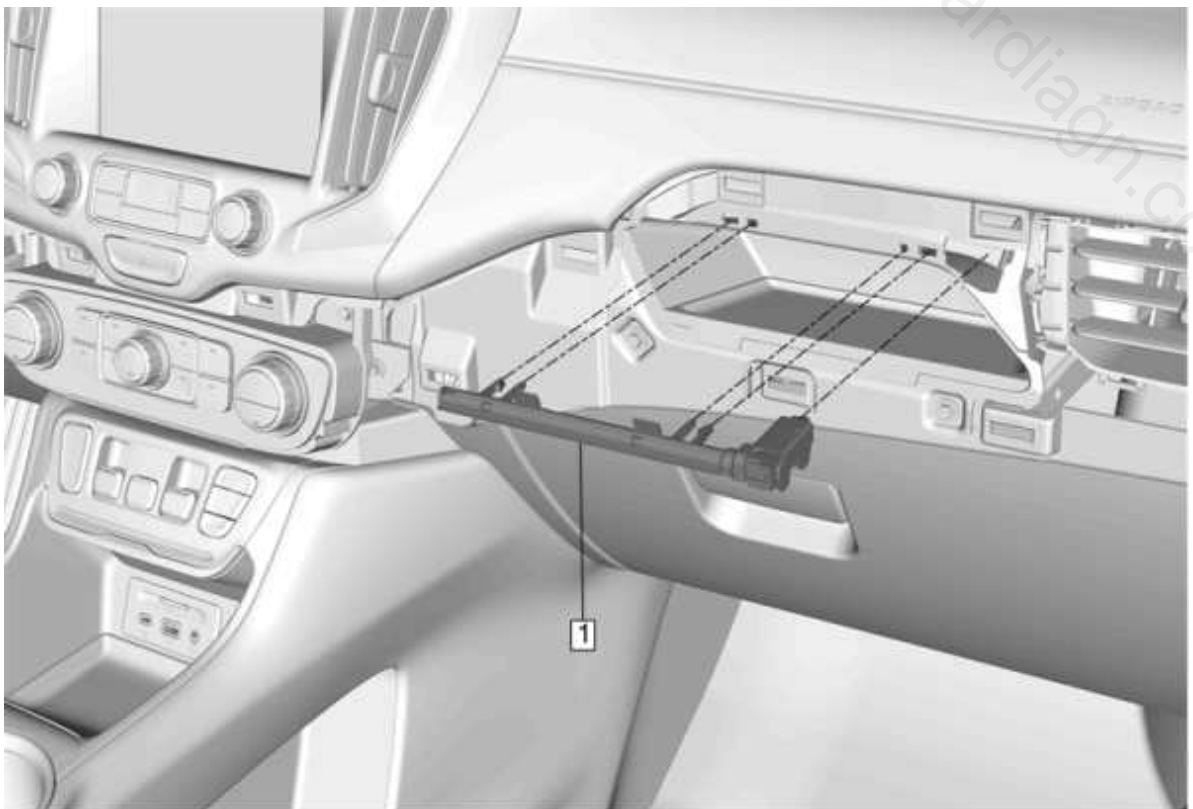


Fig. 1225: Instrument Panel Light Conductor Lamp

Courtesy of GENERAL MOTORS COMPANY

16. Remove Instrument Panel Light Conductor Lamp (1) - [Instrument Panel Light Conductor Lamp Replacement \(GMC\)](#)

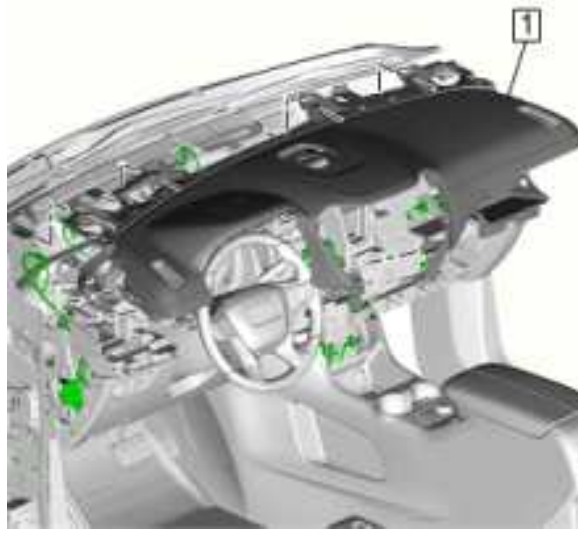


Fig. 1226: Instrument Panel Upper Trim Panel
 Courtesy of GENERAL MOTORS COMPANY

17. Remove Instrument Panel Upper Trim Panel (1) - **Instrument Panel Upper Trim Panel Replacement (Terrain)**

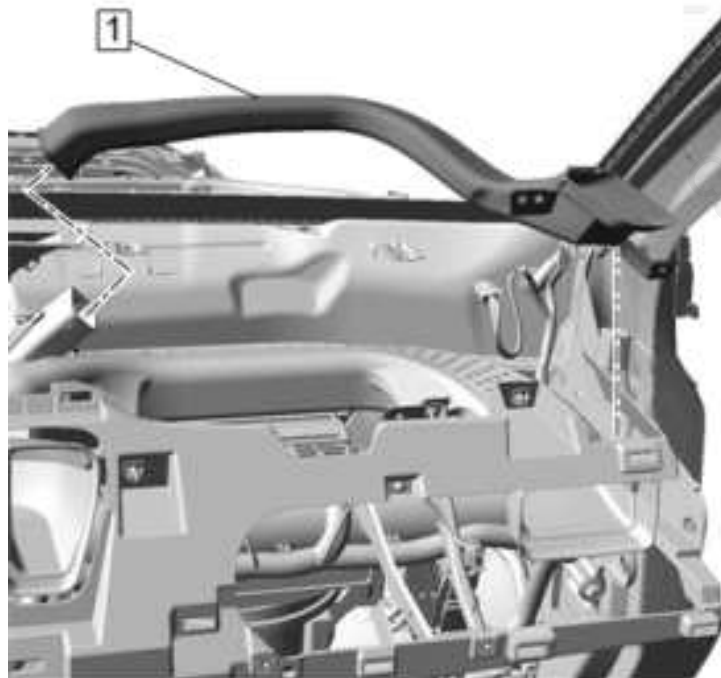


Fig. 1227: Right Side Window Defogger Outlet Duct
 Courtesy of GENERAL MOTORS COMPANY

18. Remove Side Window Defogger Outlet Duct - Right Side (1) - **Side Window Defogger Outlet Duct Replacement - Right Side (Terrain)**

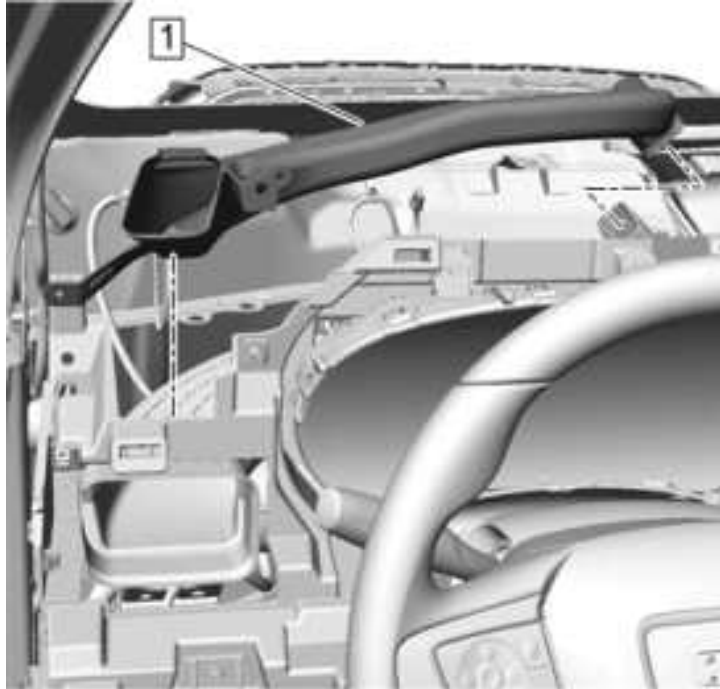


Fig. 1228: Left Side Window Defogger Outlet Duct
 Courtesy of GENERAL MOTORS COMPANY

19. Remove Side Window Defogger Outlet Duct - Left Side (1) - **Side Window Defogger Outlet Duct Replacement - Left Side (Terrain)**

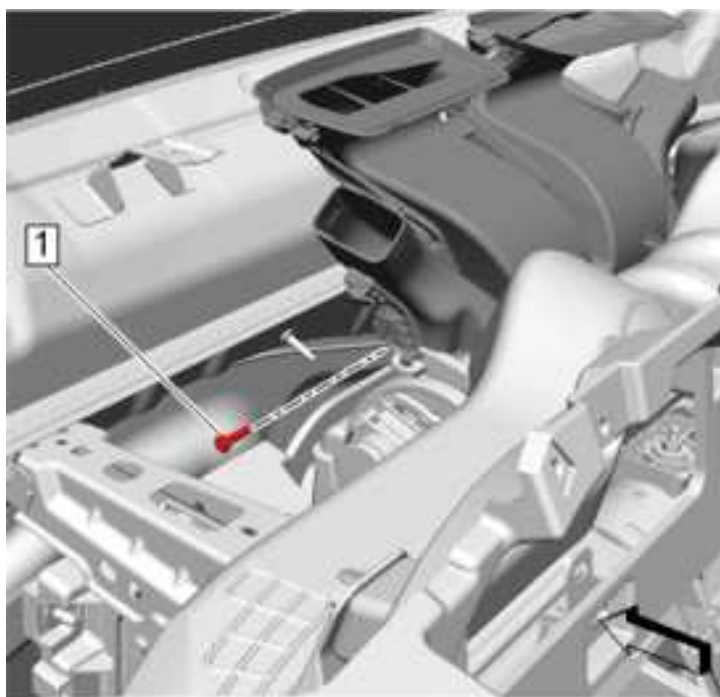


Fig. 1229: Windshield Defroster Outlet Duct Bolt
 Courtesy of GENERAL MOTORS COMPANY

20. Remove Windshield Defroster Outlet Duct Bolt (1)

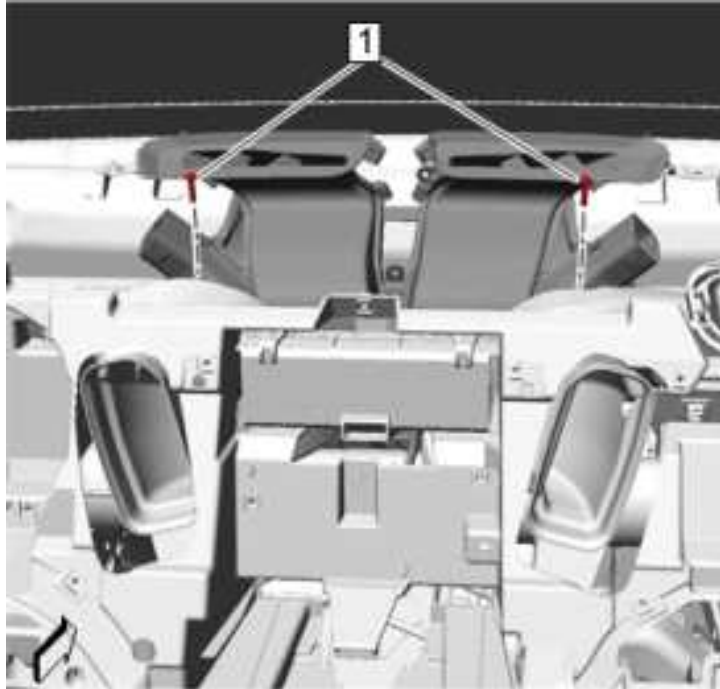


Fig. 1230: Windshield Defroster Outlet Duct Bolt
Courtesy of GENERAL MOTORS COMPANY

21. Remove Windshield Defroster Outlet Duct Bolt (1)

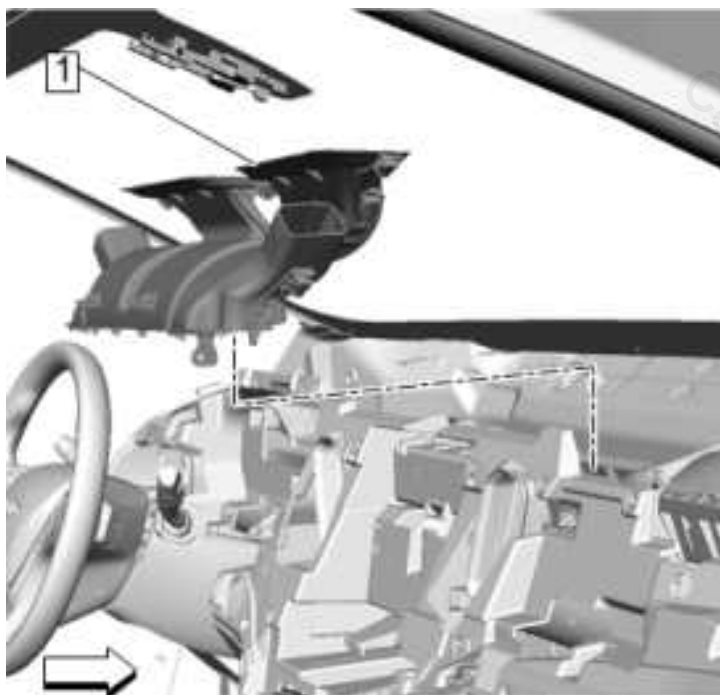


Fig. 1231: Windshield Defroster Outlet Duct
Courtesy of GENERAL MOTORS COMPANY

22. Windshield Defroster Outlet Duct (1)
23. Disconnect and reposition harness as necessary.

Installation Procedure

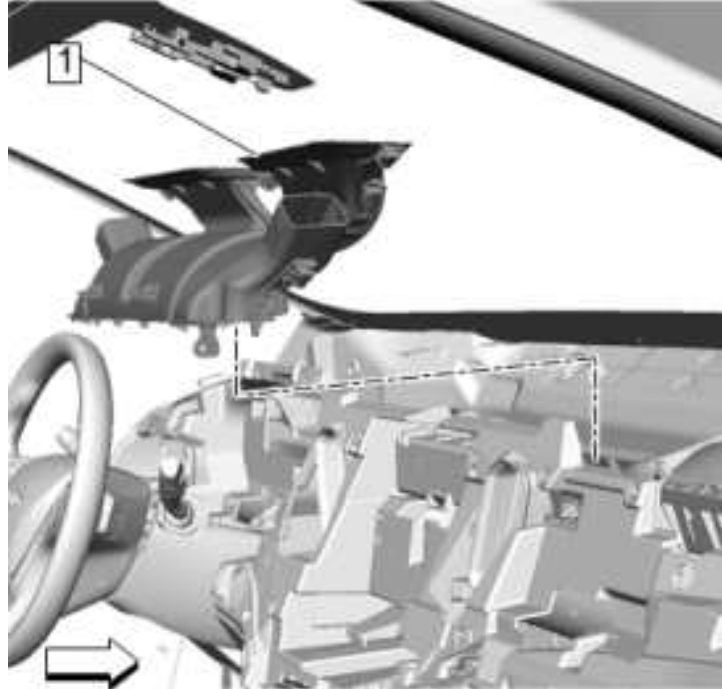


Fig. 1232: Windshield Defroster Outlet Duct
 Courtesy of GENERAL MOTORS COMPANY

1. Attach the wiring harness and connect the electrical connectors as necessary.
2. Install Windshield Defroster Outlet Duct (1)

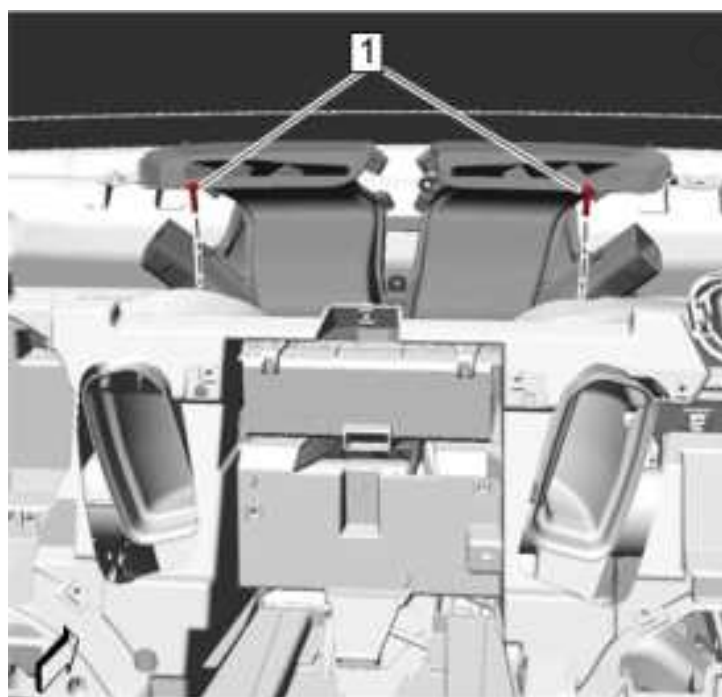


Fig. 1233: Windshield Defroster Outlet Duct Bolt
 Courtesy of GENERAL MOTORS COMPANY

CAUTION: Refer to [Fastener Caution](#) .

3. Install Windshield Defroster Outlet Duct Bolt (1) and tighten [2x].5 N.m (13 lb in)

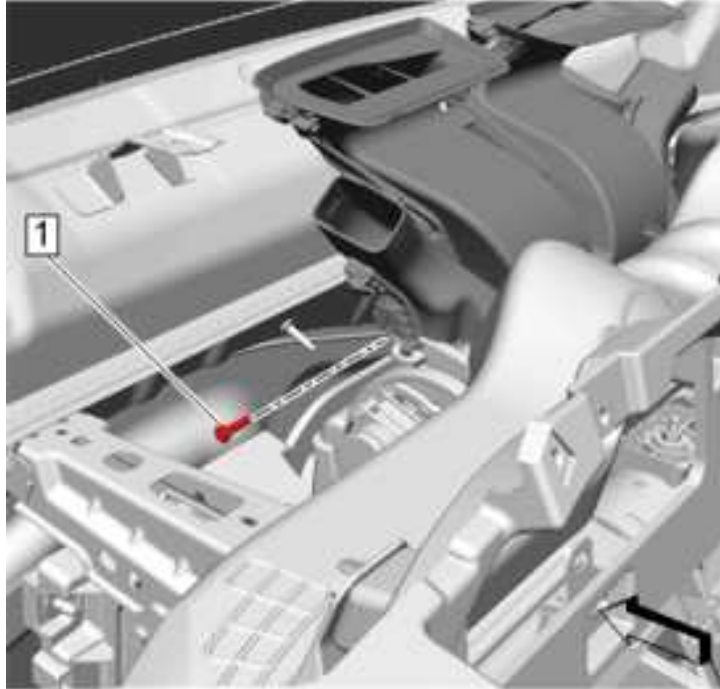


Fig. 1234: Windshield Defroster Outlet Duct Bolt
Courtesy of GENERAL MOTORS COMPANY

4. Install Windshield Defroster Outlet Duct Bolt (1) and tighten 1.5 N.m (13 lb in)

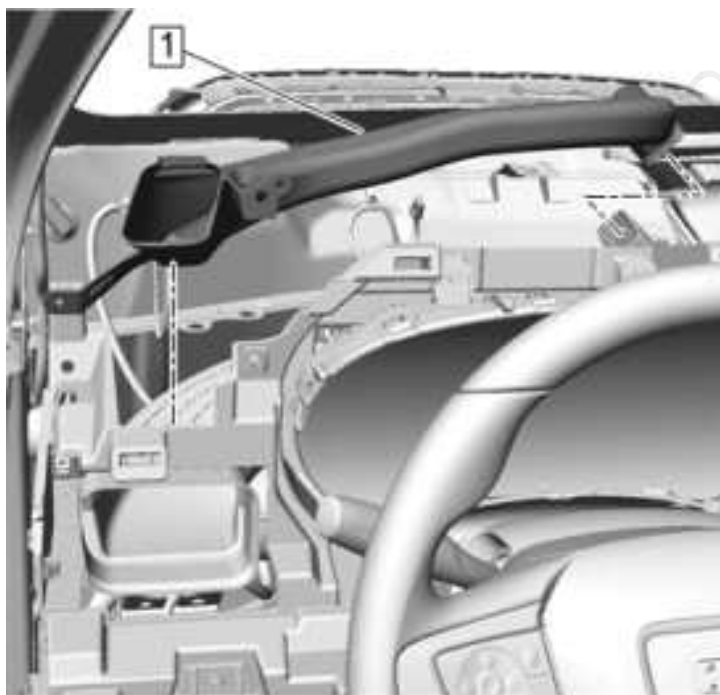


Fig. 1235: Left Side Window Defogger Outlet Duct
Courtesy of GENERAL MOTORS COMPANY

5. Install Side Window Defogger Outlet Duct - Left Side (1) - **Side Window Defogger Outlet Duct Replacement - Left Side (Terrain)**

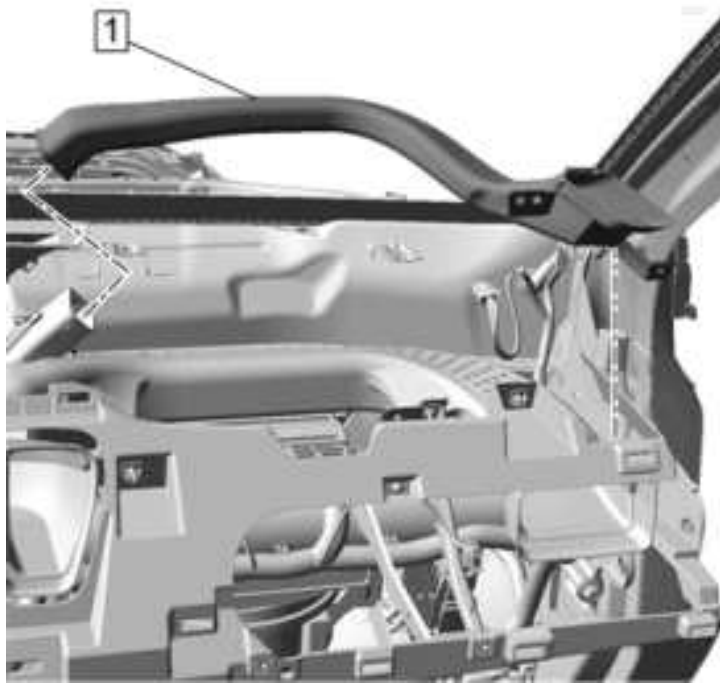


Fig. 1236: Right Side Window Defogger Outlet Duct
 Courtesy of GENERAL MOTORS COMPANY

6. Install Side Window Defogger Outlet Duct - Right Side (1) - **Side Window Defogger Outlet Duct Replacement - Right Side (Terrain)**

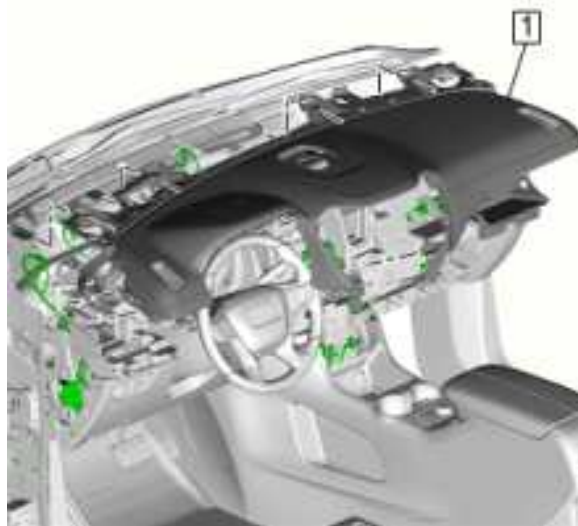


Fig. 1237: Instrument Panel Upper Trim Panel
 Courtesy of GENERAL MOTORS COMPANY

7. Install Instrument Panel Upper Trim Panel (1) - **Instrument Panel Upper Trim Panel Replacement (Terrain)**

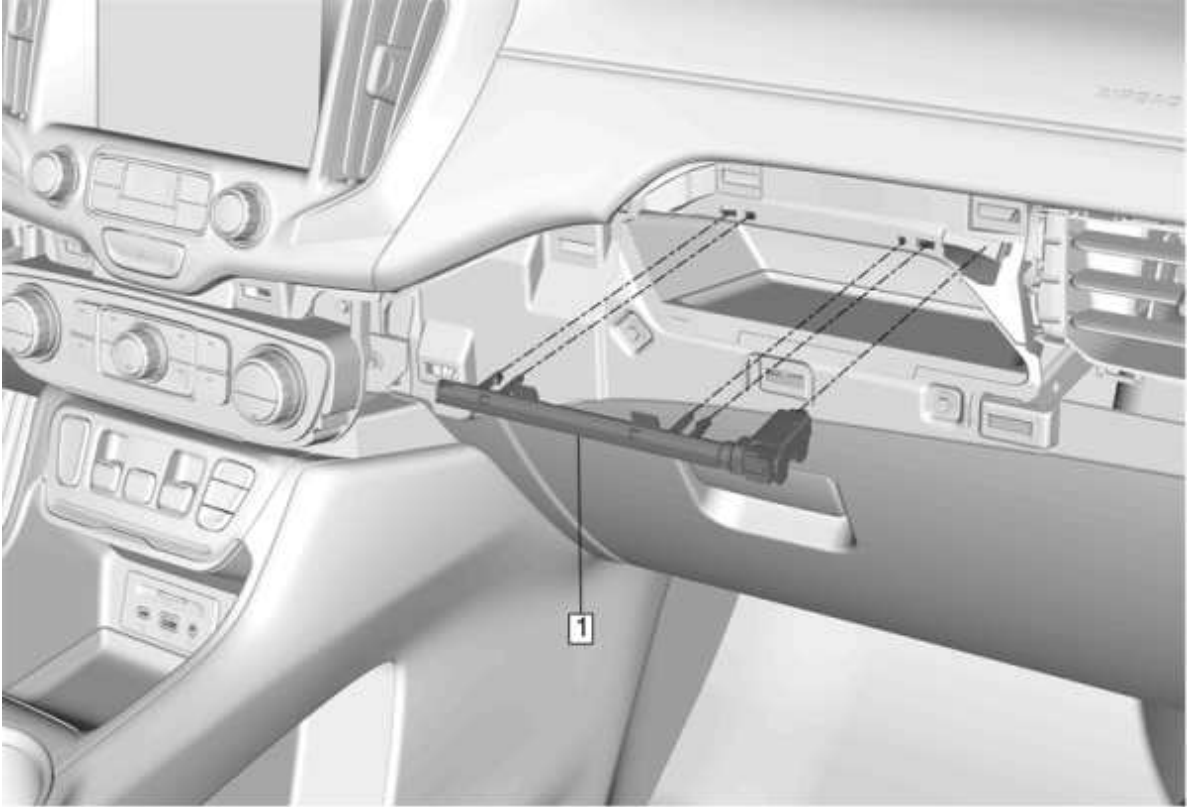


Fig. 1238: Instrument Panel Light Conductor Lamp
Courtesy of GENERAL MOTORS COMPANY

8. Install Instrument Panel Light Conductor Lamp (1) - **Instrument Panel Light Conductor Lamp Replacement (GMC)**

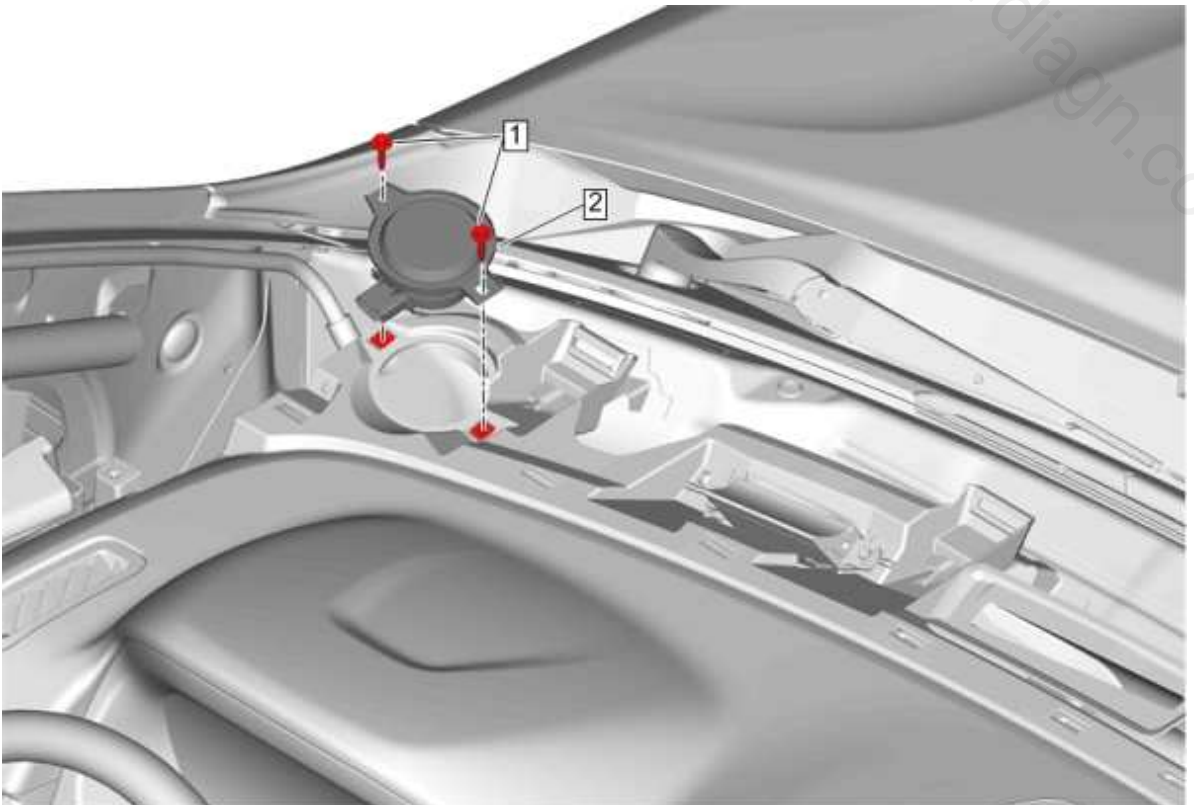


Fig. 1239: Radio Front Speaker
Courtesy of GENERAL MOTORS COMPANY

9. Install the left and right side radio front speakers. (2)**Radio Front Speaker Replacement (Terrain)**



Fig. 1240: Instrument Panel Extension
Courtesy of GENERAL MOTORS COMPANY

10. Install Instrument Panel Extension (1) - [Instrument Panel Extension Replacement \(Terrain\)](#)



Fig. 1241: Radio Front Center Speaker
Courtesy of GENERAL MOTORS COMPANY

11. Install Radio Front Center Speaker (2) [Radio Front Center Speaker Replacement \(Terrain\)](#)

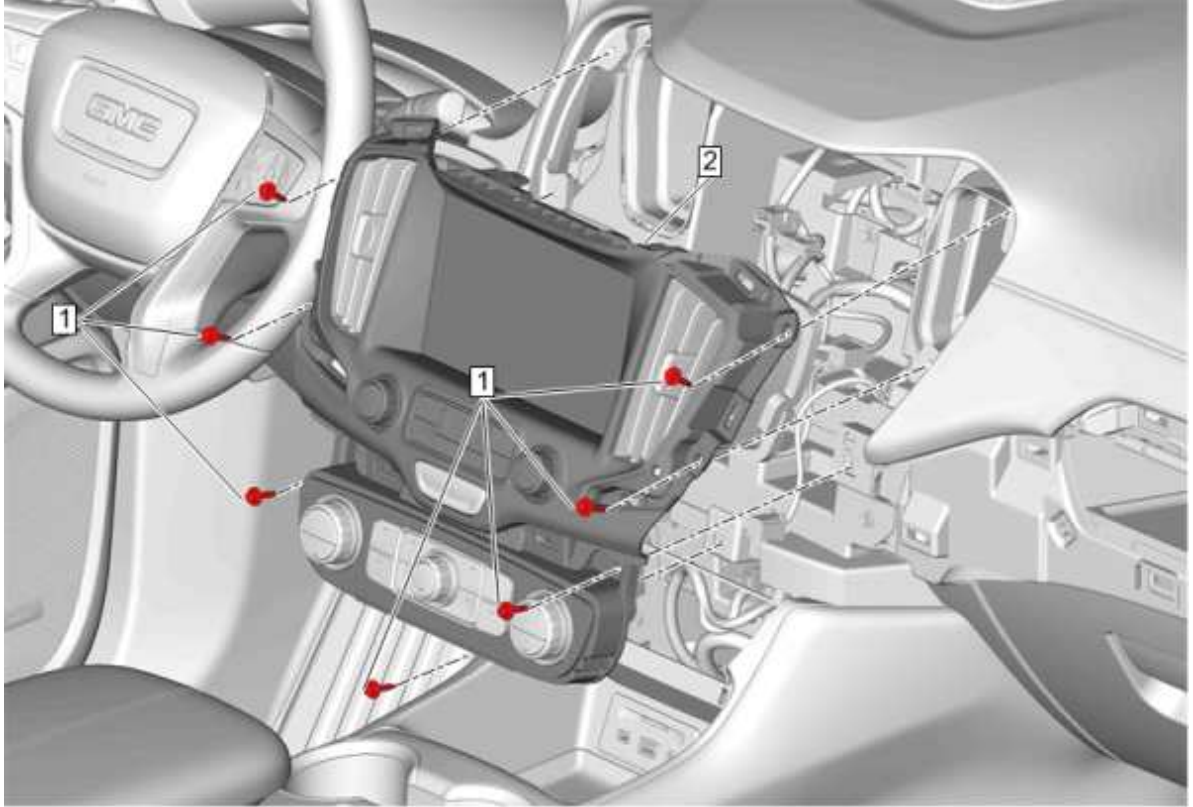


Fig. 1242: Radio Control Assembly And Screws
Courtesy of GENERAL MOTORS COMPANY

12. Connect the electrical connectors.
13. Install Radio Control Assembly (2) - [Radio Control Assembly Replacement \(Terrain\)](#)

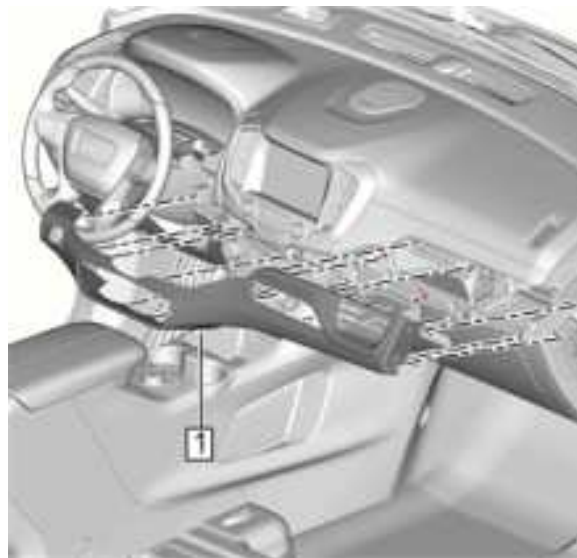


Fig. 1243: Right Side Instrument Panel Trim Pad
Courtesy of GENERAL MOTORS COMPANY

14. Install Instrument Panel Trim Pad - Right Side (1) - [Instrument Panel Trim Pad Replacement - Right Side \(Terrain\)](#)

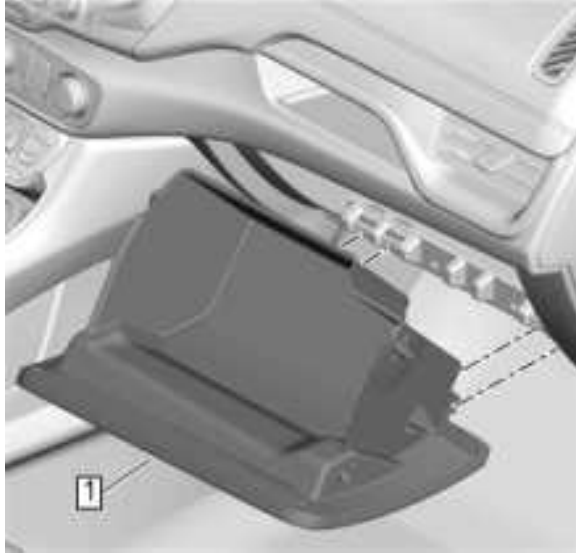


Fig. 1244: Instrument Panel Compartment Door
Courtesy of GENERAL MOTORS COMPANY

15. Install Instrument Panel Compartment Door (1) - **Instrument Panel Compartment Door Replacement (Terrain)**

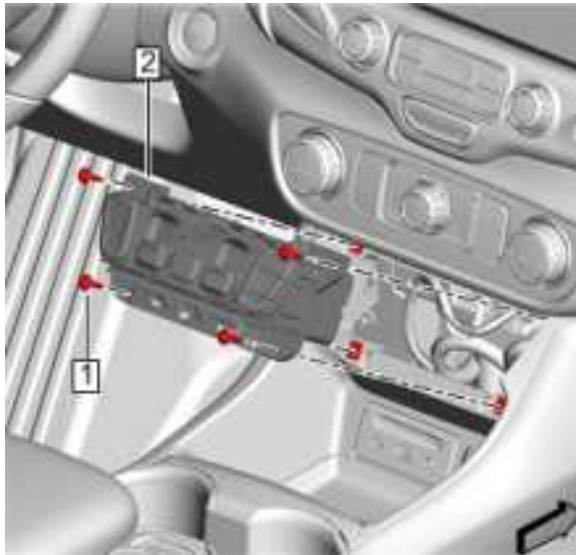


Fig. 1245: Automatic Transmission Control Bolts And Electronic Transmission Shift Control Pushbutton
Courtesy of GENERAL MOTORS COMPANY

16. Install Electronic Transmission Shift Control Pushbutton (2) - **Electronic Transmission Shift Control Pushbutton Replacement**



Fig. 1246: Front Floor Console Transmission Shift Opening Bezel
Courtesy of GENERAL MOTORS COMPANY

17. Install Front Floor Console Transmission Shift Opening Bezel (1) - **Front Floor Console Transmission Shift Opening Bezel Replacement (Terrain)**

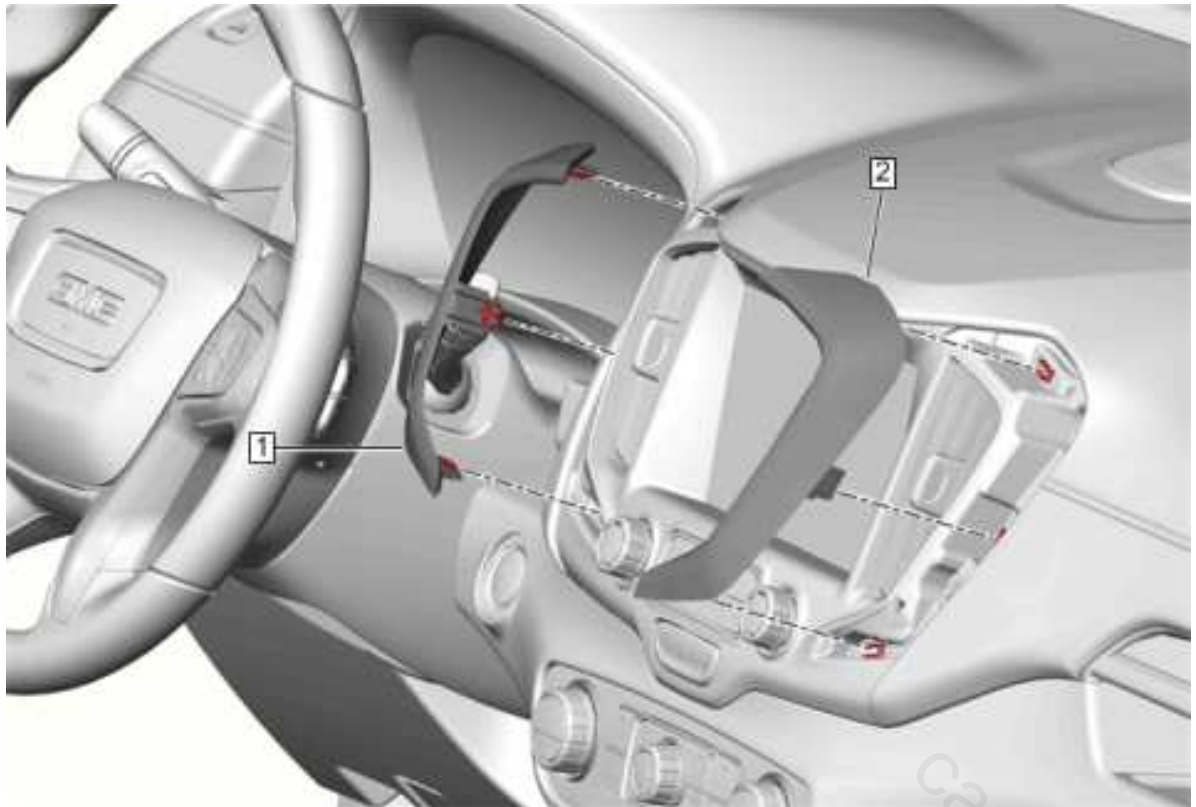


Fig. 1247: Instrument Panel Center Trim Plate Appliques
Courtesy of GENERAL MOTORS COMPANY

18. Install Instrument Panel Center Trim Plate Applique - Left Side (1) - **Instrument Panel Center Trim Plate Applique Replacement (Terrain)**
19. Install Instrument Panel Center Trim Plate Applique - Right Side (2) - **Instrument Panel Center Trim Plate Applique Replacement (Terrain)**



Fig. 1248: Left Side Instrument Panel Trim Pad
Courtesy of GENERAL MOTORS COMPANY

20. Install Instrument Panel Trim Pad - Left Side (1) - **Instrument Panel Trim Pad Replacement - Left Side (Terrain)**



Fig. 1249: Instrument Panel Cluster Trim Plate
Courtesy of GENERAL MOTORS COMPANY

21. Install Instrument Panel Cluster Trim Plate (1) - **Instrument Panel Cluster Trim Plate Replacement (Terrain)**

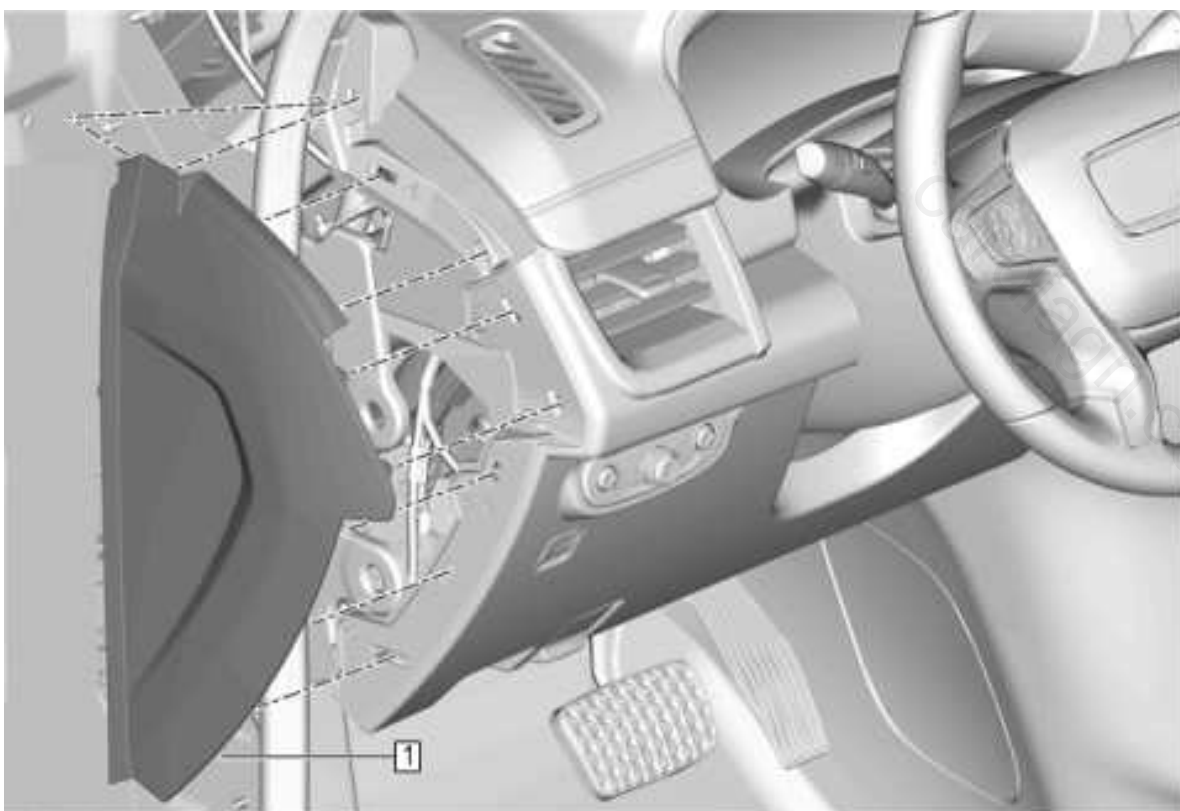


Fig. 1250: Instrument Panel Outer Trim Cover (Terrain)
Courtesy of GENERAL MOTORS COMPANY

22. Install the left and right instrument panel outer trim cover (1). **Instrument Panel Outer Trim Cover Replacement (Terrain)**
23. Install the left and right side windshield garnish molding. **Windshield Garnish Molding Replacement (Terrain)**

SIDE WINDOW DEFOGGER OUTLET DUCT REPLACEMENT - LEFT SIDE (EQUINOX)

Removal Procedure

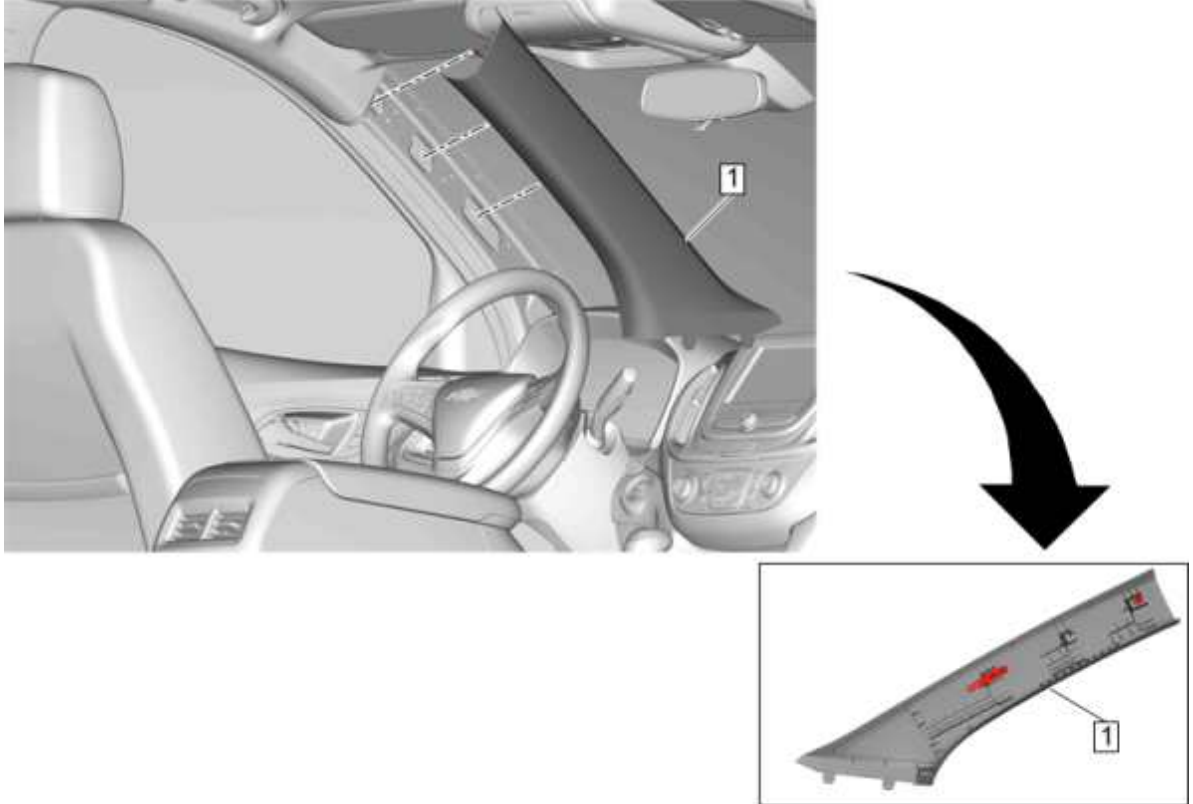


Fig. 1251: Windshield Garnish Molding Replacement (Equinox)
 Courtesy of GENERAL MOTORS COMPANY

1. Remove the left and right side windshield garnish molding (1). [Windshield Garnish Molding Replacement \(Equinox\)](#)



Fig. 1252: Left And Right Instrument Panel Outer Trim Cover
 Courtesy of GENERAL MOTORS COMPANY

2. Remove the left and right instrument panel outer trim cover (1). [Instrument Panel Outer Trim Cover Replacement \(Equinox\)](#)

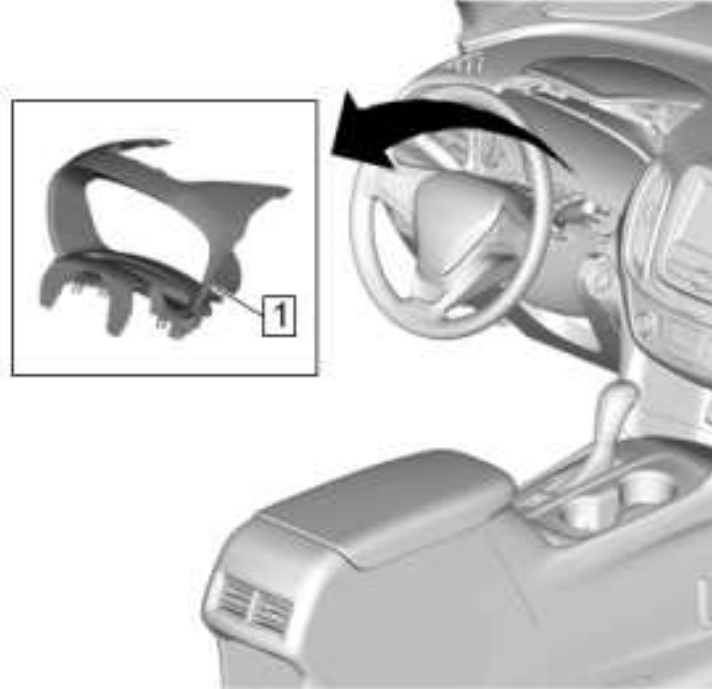


Fig. 1253: Instrument Panel Cluster Trim Plate
 Courtesy of GENERAL MOTORS COMPANY

3. Remove Instrument Panel Cluster Trim Plate (1) - **Instrument Panel Cluster Trim Plate Replacement (Equinox)**

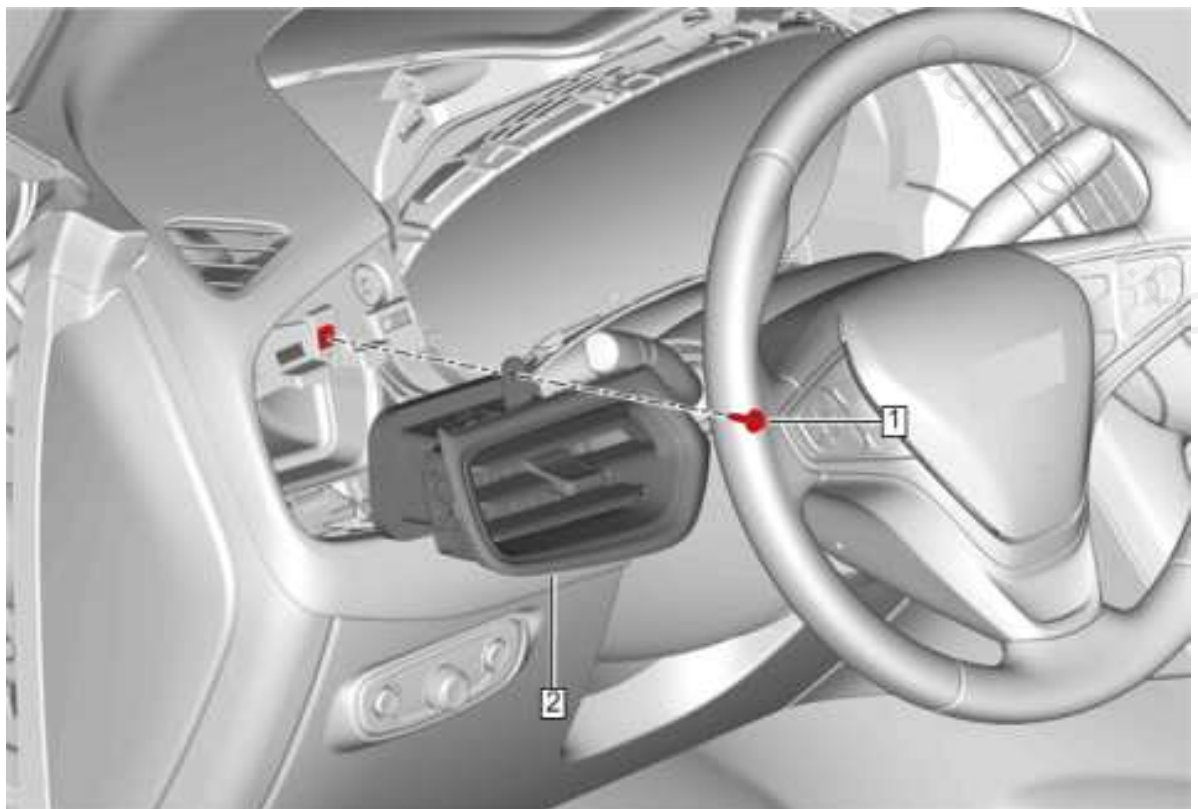


Fig. 1254: Left Side Instrument Panel Outer Air Outlet And Screw
 Courtesy of GENERAL MOTORS COMPANY

4. Remove Instrument Panel Outer Air Outlet - Left Side (2) - **Instrument Panel Outer Air Outlet Replacement - Left Side (Equinox)**

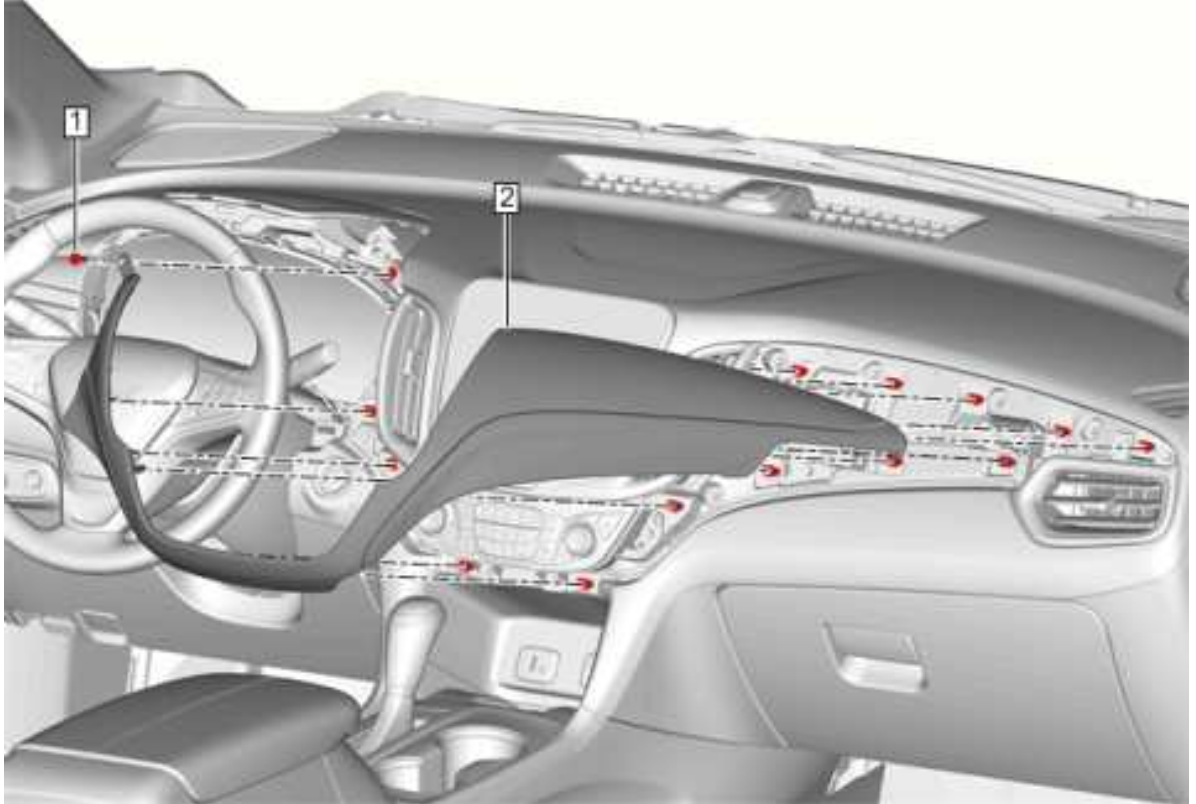


Fig. 1255: Right Side Instrument Panel Trim Pad
 Courtesy of GENERAL MOTORS COMPANY

5. Remove Instrument Panel Trim Pad - Right Side (2) - **Instrument Panel Trim Pad Replacement - Right Side (Equinox)**

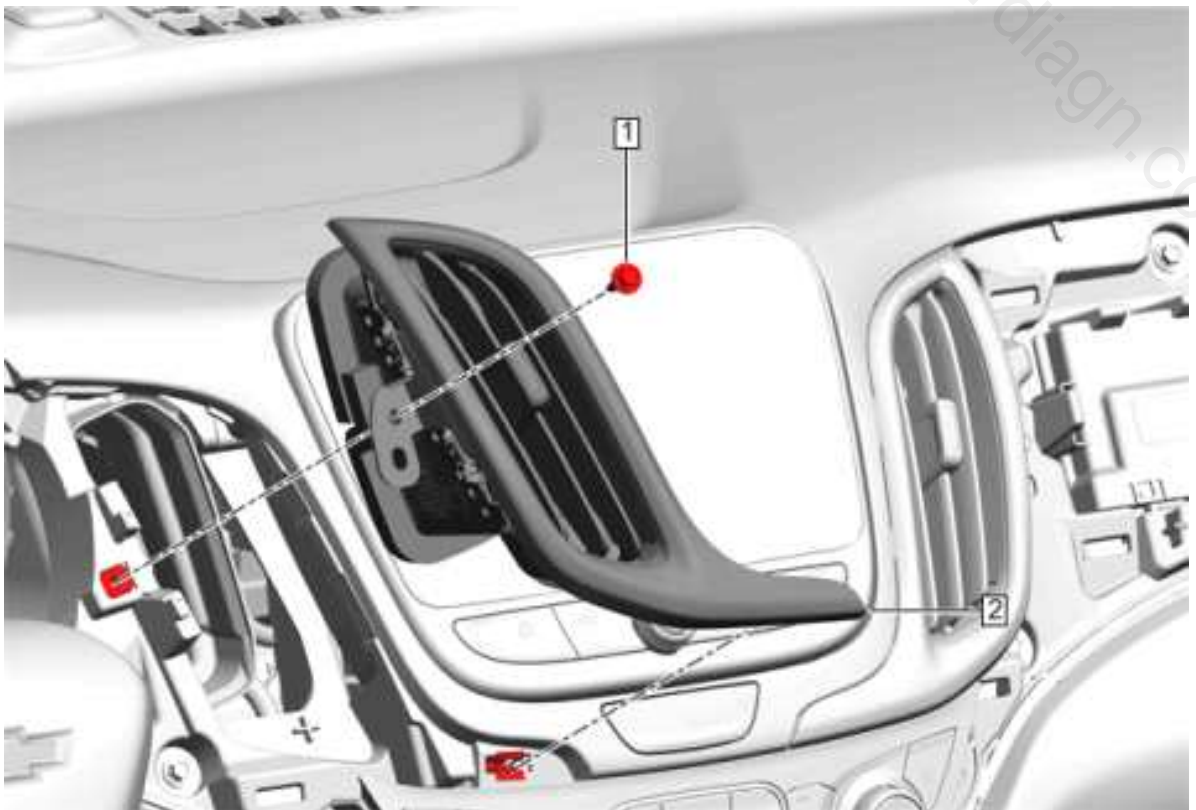


Fig. 1256: Left Side Instrument Panel Center Air Outlet And Screw
 Courtesy of GENERAL MOTORS COMPANY

6. Remove Instrument Panel Center Air Outlet - Left Side (2) - **Instrument Panel Center Air Outlet Replacement - Left Side (Equinox)**



Fig. 1257: Right Side Instrument Panel Center Air Outlet And Screw
 Courtesy of GENERAL MOTORS COMPANY

7. Remove Instrument Panel Center Air Outlet - Right Side (2) - **Instrument Panel Center Air Outlet Replacement - Right Side (Equinox)**



Fig. 1258: Right Side Instrument Panel Outer Air Outlet And Screw
 Courtesy of GENERAL MOTORS COMPANY

8. Remove Instrument Panel Outer Air Outlet - Right Side (2) - **Instrument Panel Outer Air Outlet Replacement - Right Side (Equinox)**

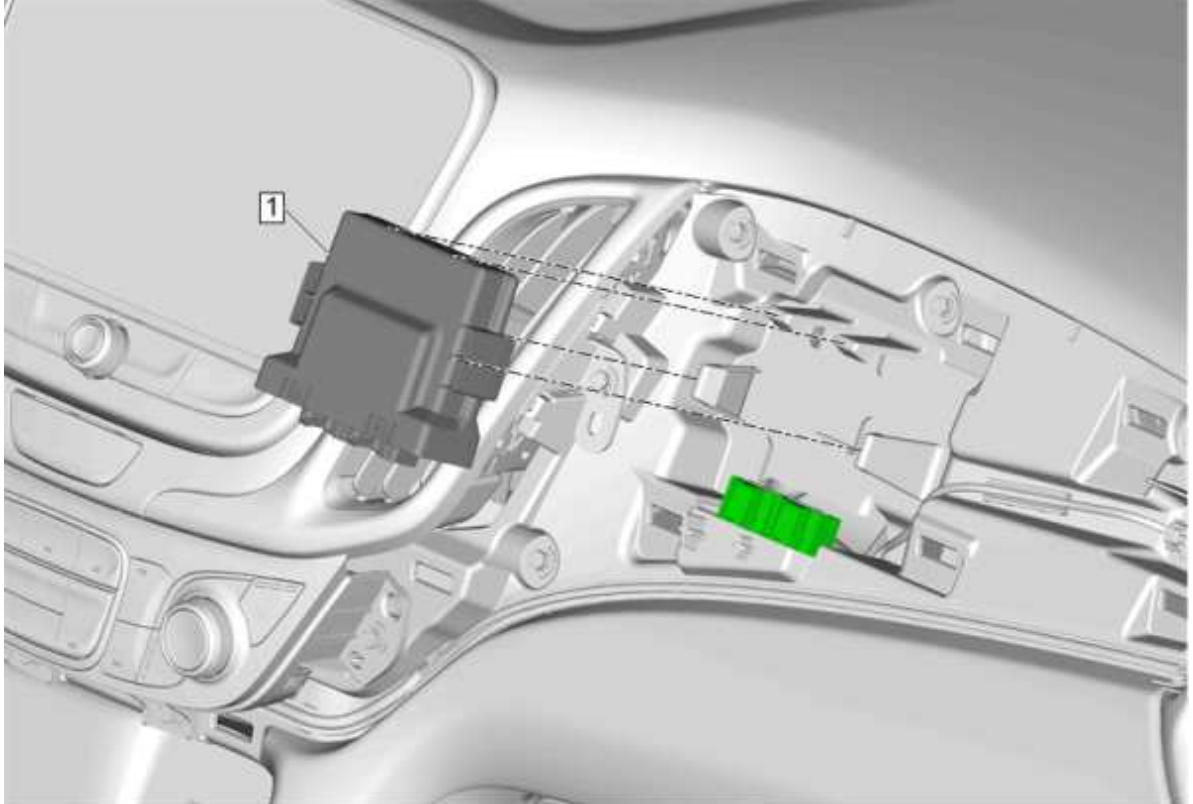


Fig. 1259: Serial Data Gateway Module
 Courtesy of GENERAL MOTORS COMPANY

9. Remove Serial Data Gateway Module (1) - [Serial Data Gateway Module Replacement \(Equinox\)](#)

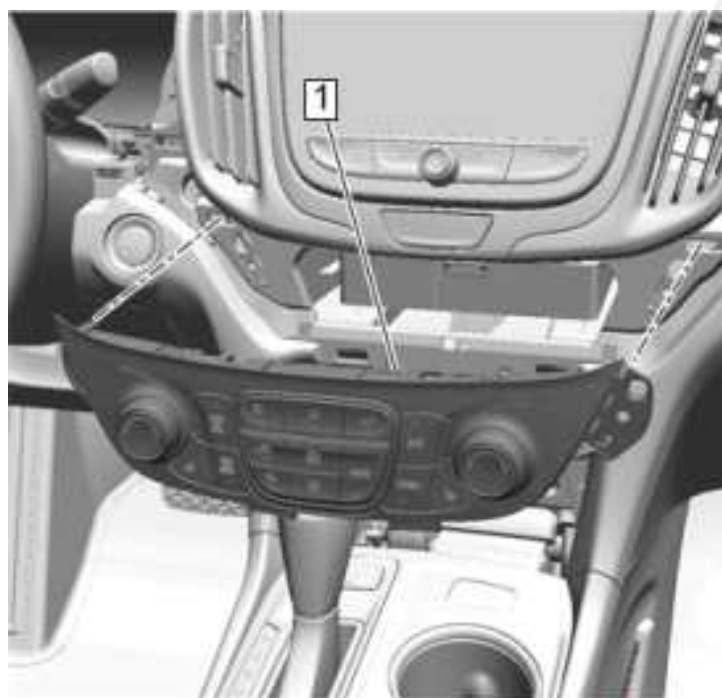


Fig. 1260: Heater and Air Conditioning User Interface Control
 Courtesy of GENERAL MOTORS COMPANY

10. Remove Heater and Air Conditioning User Interface Control (1) - [Heater and Air Conditioning User Interface Control Replacement \(Equinox\)](#)



Fig. 1261: Radio Control Assembly

Courtesy of GENERAL MOTORS COMPANY

11. Remove Rear Radio Control Assembly (1) - [Radio Control Assembly Replacement \(Equinox\)](#)
12. Hazard Warning Switch - Disconnect the electrical connector.

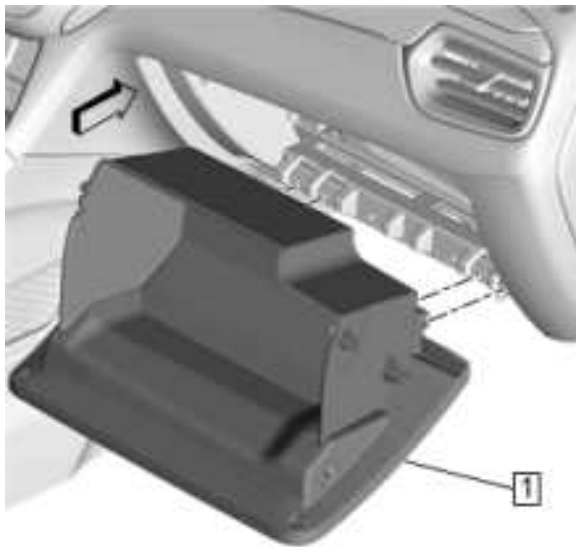


Fig. 1262: Instrument Panel Compartment Door

Courtesy of GENERAL MOTORS COMPANY

13. Remove Instrument Panel Compartment Door (1) [Instrument Panel Compartment Door Replacement \(Equinox\)](#)

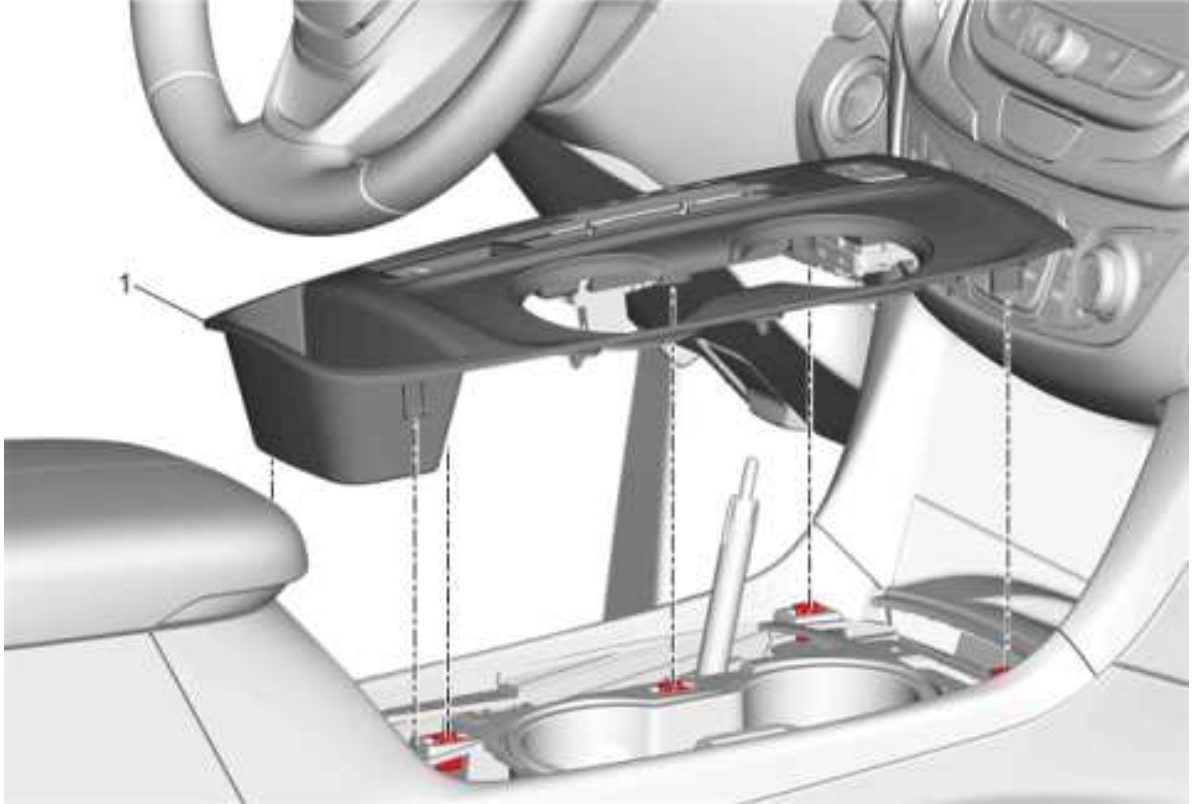


Fig. 1263: Front Floor Console Trim Plate (Equinox)
Courtesy of GENERAL MOTORS COMPANY

14. Remove Front Floor Console Trim Plate (1) - **Front Floor Console Trim Plate Replacement (Equinox)**

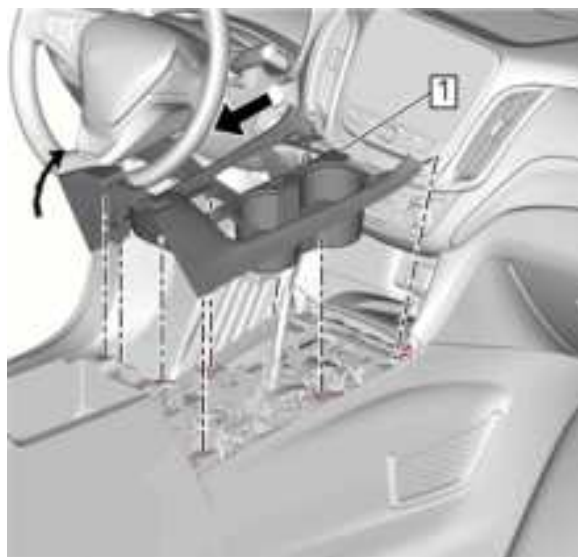


Fig. 1264: Front Floor Console Applique
Courtesy of GENERAL MOTORS COMPANY

15. Remove Front Floor Console Applique (1) - **Front Floor Console Applique Replacement (Equinox)**

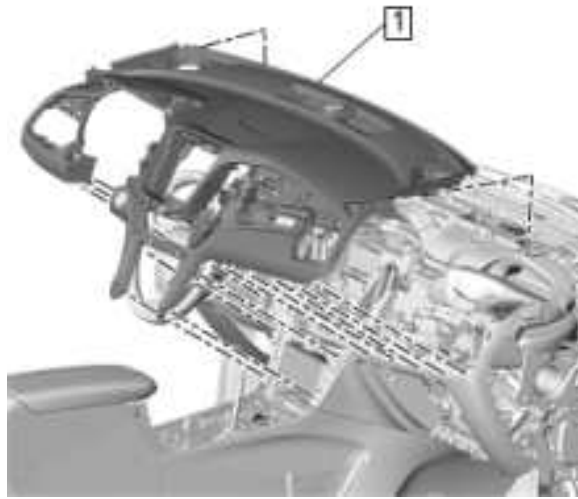


Fig. 1265: Instrument Panel Upper Trim Panel
Courtesy of GENERAL MOTORS COMPANY

16. Remove Instrument Panel Upper Trim Panel (1) - **Instrument Panel Upper Trim Panel Replacement (Equinox)**

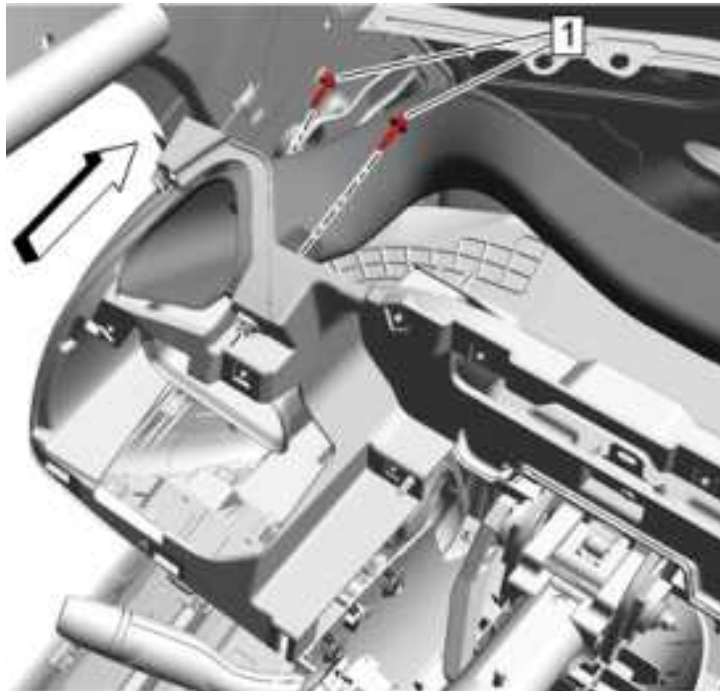


Fig. 1266: Side Window Defogger Outlet Duct Bolt
Courtesy of GENERAL MOTORS COMPANY

17. Remove Side Window Defogger Outlet Duct Bolt (1)



Fig. 1267: Left Side Window Defogger Outlet Duct
Courtesy of GENERAL MOTORS COMPANY

18. Remove Side Window Defogger Outlet Duct - Left Side (1)

Installation Procedure



Fig. 1268: Left Side Window Defogger Outlet Duct
Courtesy of GENERAL MOTORS COMPANY

1. Install Side Window Defogger Outlet Duct - Left Side (1)

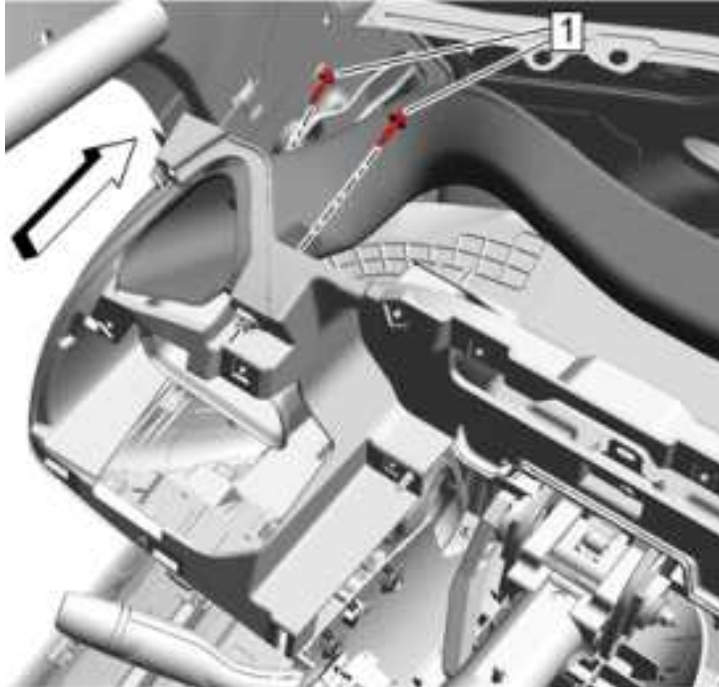


Fig. 1269: Side Window Defogger Outlet Duct Bolt
 Courtesy of GENERAL MOTORS COMPANY

CAUTION: Refer to [Fastener Caution](#) .

2. Install Side Window Defogger Outlet Duct Bolt (1) and tighten [2x] 5 N.m (22 lb in)

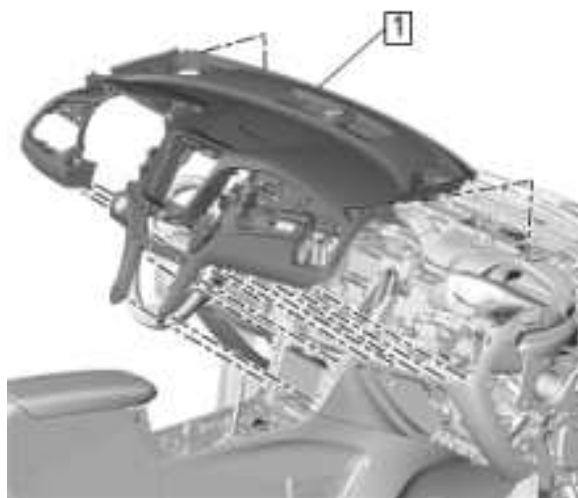


Fig. 1270: Instrument Panel Upper Trim Panel
 Courtesy of GENERAL MOTORS COMPANY

3. Install Instrument Panel Upper Trim Panel (1) - [Instrument Panel Upper Trim Panel Replacement \(Equinox\)](#)

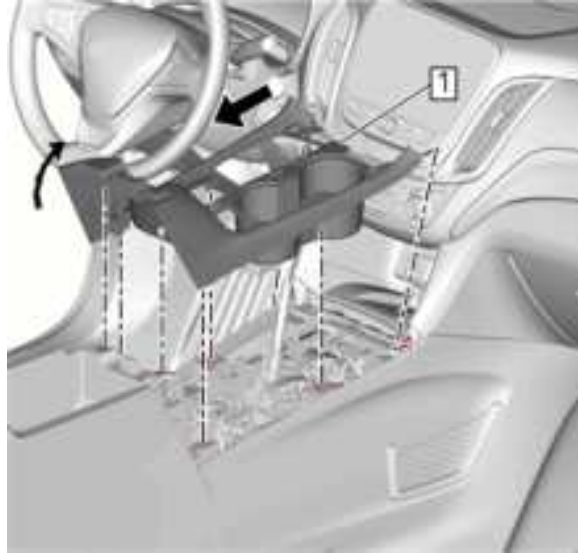


Fig. 1271: Front Floor Console Applique
Courtesy of GENERAL MOTORS COMPANY

4. Install Front Floor Console Applique (1) - [Front Floor Console Applique Replacement \(Equinox\)](#)

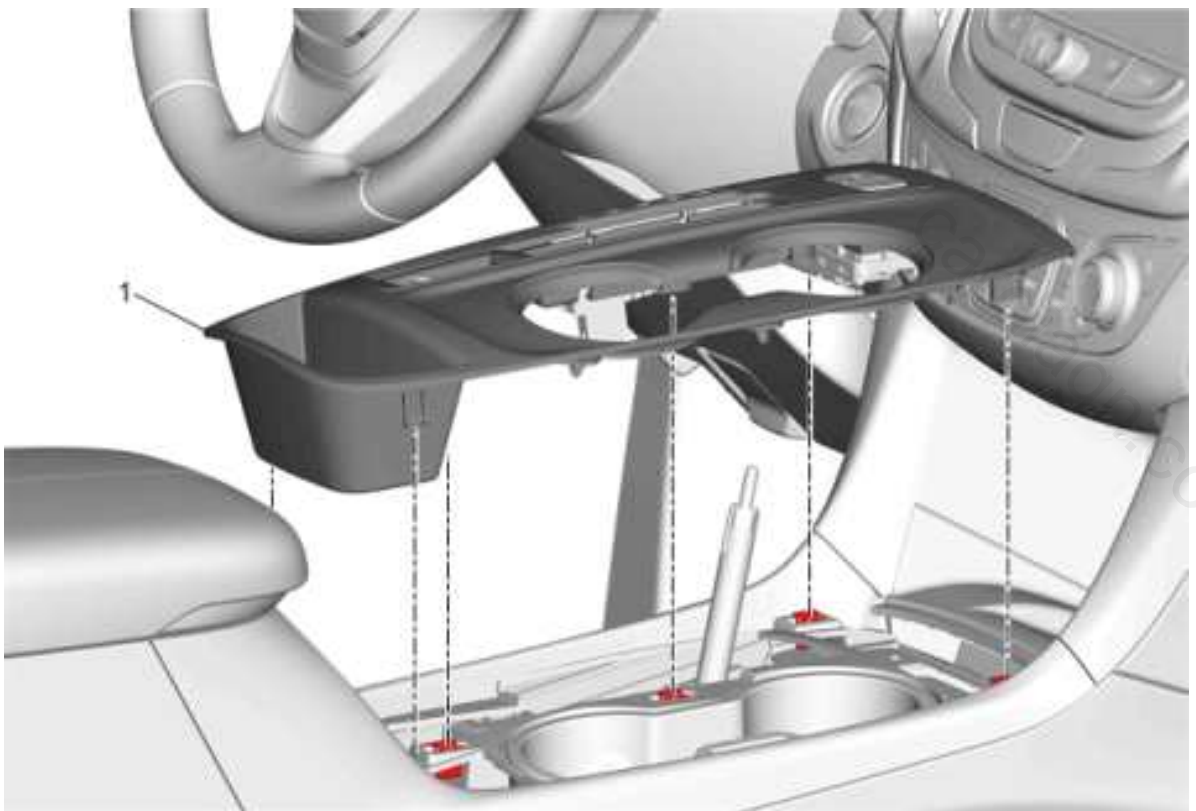


Fig. 1272: Front Floor Console Trim Plate (Equinox)
Courtesy of GENERAL MOTORS COMPANY

5. Install Front Floor Console Trim Plate (1) - [Front Floor Console Trim Plate Replacement \(Equinox\)](#)

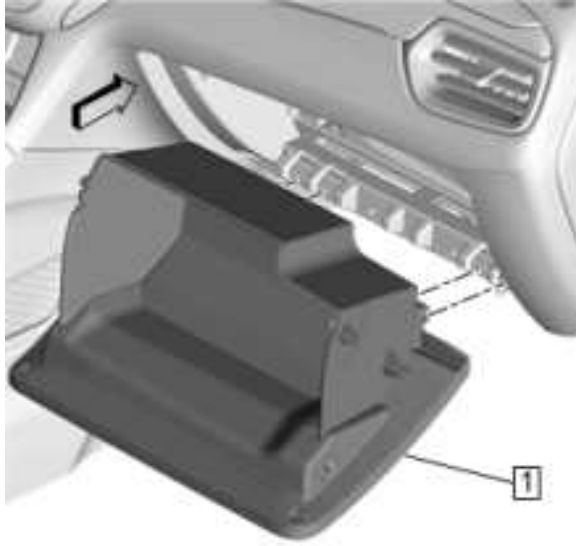


Fig. 1273: Instrument Panel Compartment Door
Courtesy of GENERAL MOTORS COMPANY

6. Install Instrument Panel Compartment Door (1) - **Instrument Panel Compartment Door Replacement (Equinox)**
7. Hazard Warning Switch - Connect the electrical connector.



Fig. 1274: Radio Control Assembly
Courtesy of GENERAL MOTORS COMPANY

8. Install Rear Radio Control Assembly (1) - **Radio Control Assembly Replacement (Equinox)**



Fig. 1275: Heater and Air Conditioning User Interface Control
 Courtesy of GENERAL MOTORS COMPANY

9. Install Heater and Air Conditioning User Interface Control (1) - [Heater and Air Conditioning User Interface Control Replacement \(Equinox\)](#)

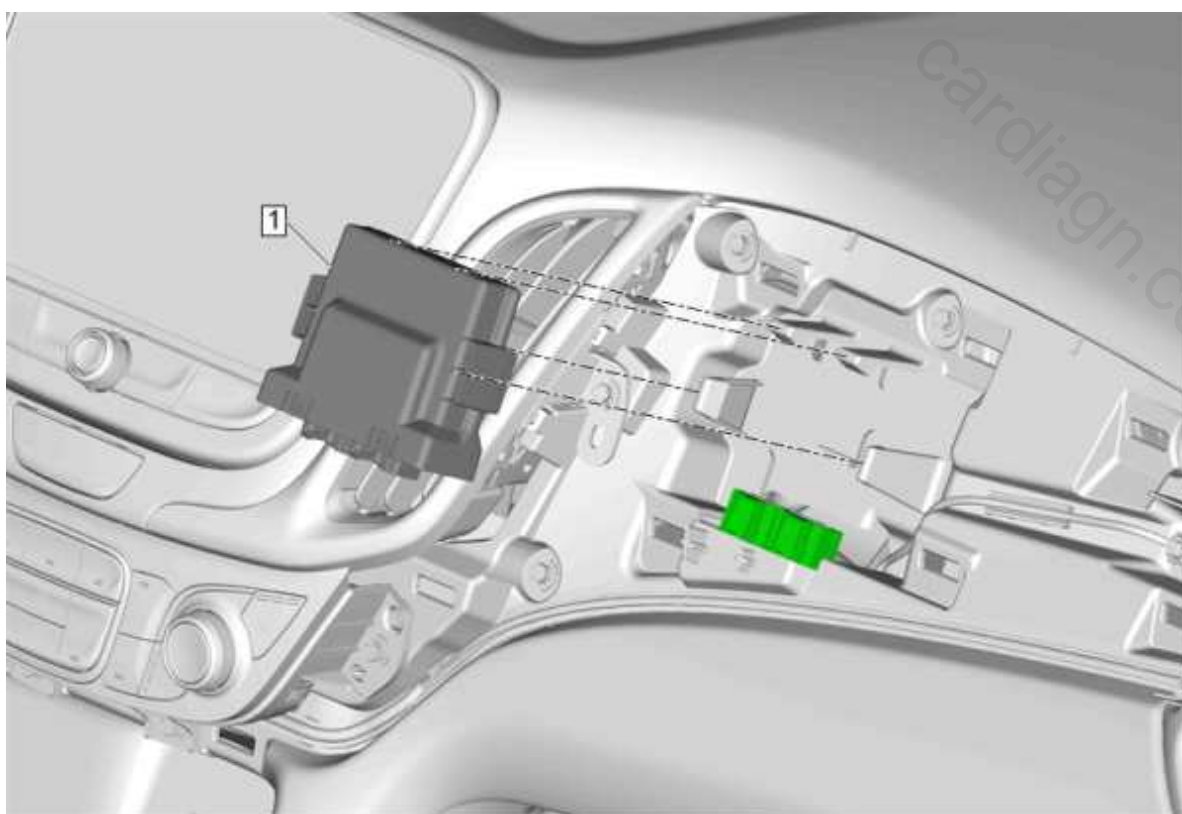


Fig. 1276: Serial Data Gateway Module
 Courtesy of GENERAL MOTORS COMPANY

10. Install Serial Data Gateway Module (1) - [Serial Data Gateway Module Replacement \(Equinox\)](#)

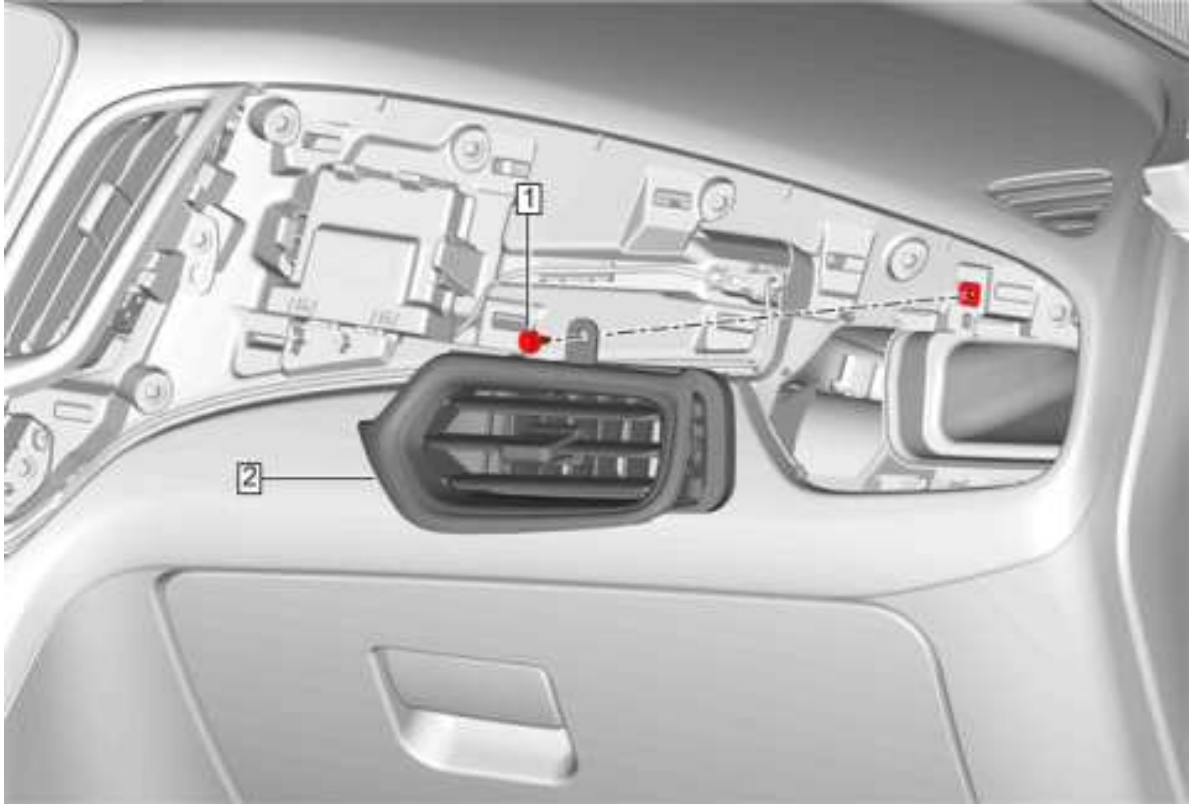


Fig. 1277: Right Side Instrument Panel Outer Air Outlet And Screw
 Courtesy of GENERAL MOTORS COMPANY

11. Install Instrument Panel Outer Air Outlet - Right Side (2) - **Instrument Panel Outer Air Outlet Replacement - Right Side (Equinox)**



Fig. 1278: Right Side Instrument Panel Center Air Outlet And Screw
 Courtesy of GENERAL MOTORS COMPANY

12. Install Instrument Panel Center Air Outlet - Right Side (2) - **Instrument Panel Center Air Outlet Replacement - Right Side (Equinox)**

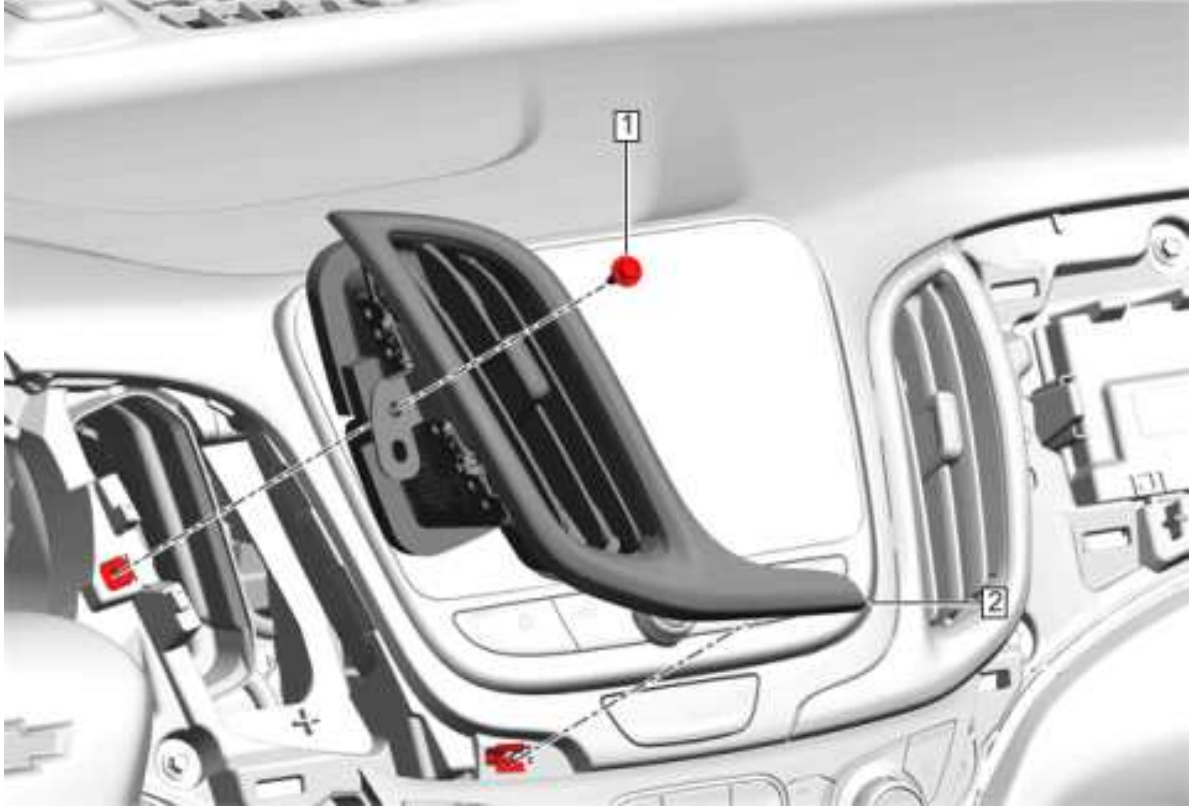


Fig. 1279: Left Side Instrument Panel Center Air Outlet And Screw
 Courtesy of GENERAL MOTORS COMPANY

13. Install Instrument Panel Center Air Outlet - Left Side (2) - **Instrument Panel Center Air Outlet Replacement - Left Side (Equinox)**

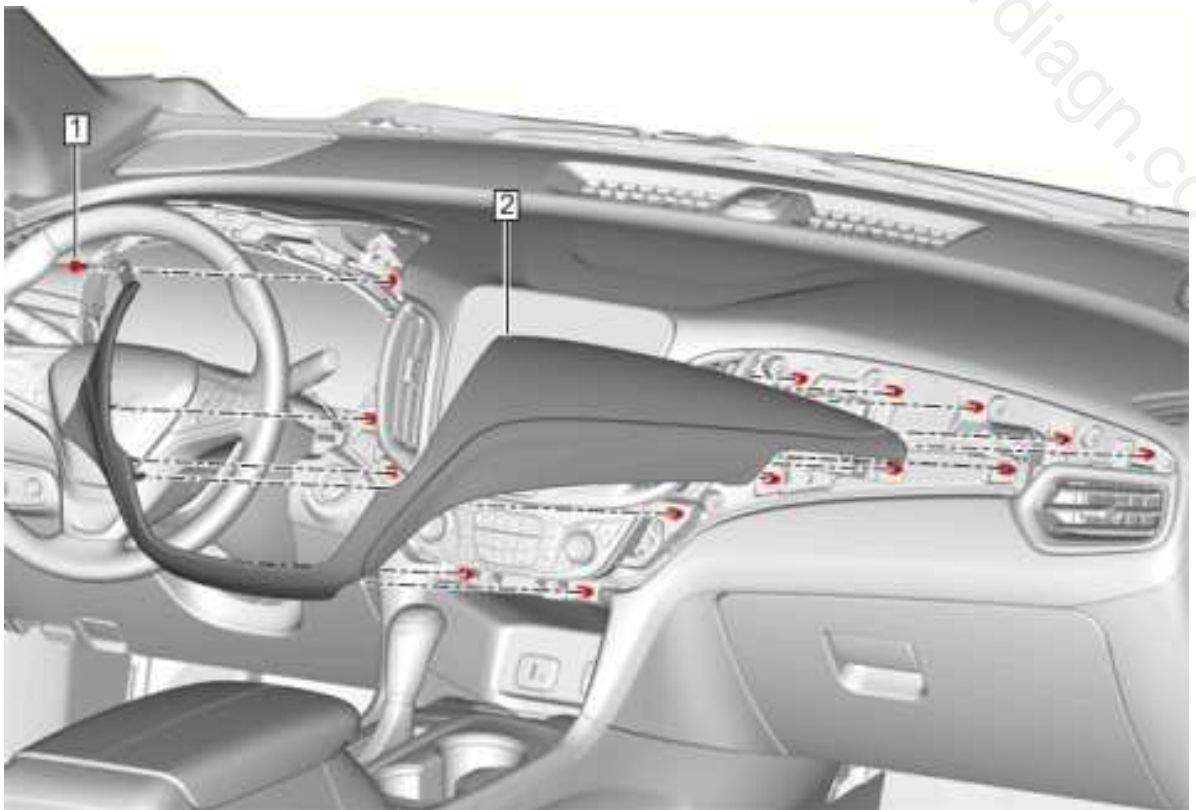


Fig. 1280: Right Side Instrument Panel Trim Pad
 Courtesy of GENERAL MOTORS COMPANY

14. Install Instrument Panel Trim Pad - Right Side (2) - **Instrument Panel Trim Pad Replacement - Right Side (Equinox)**

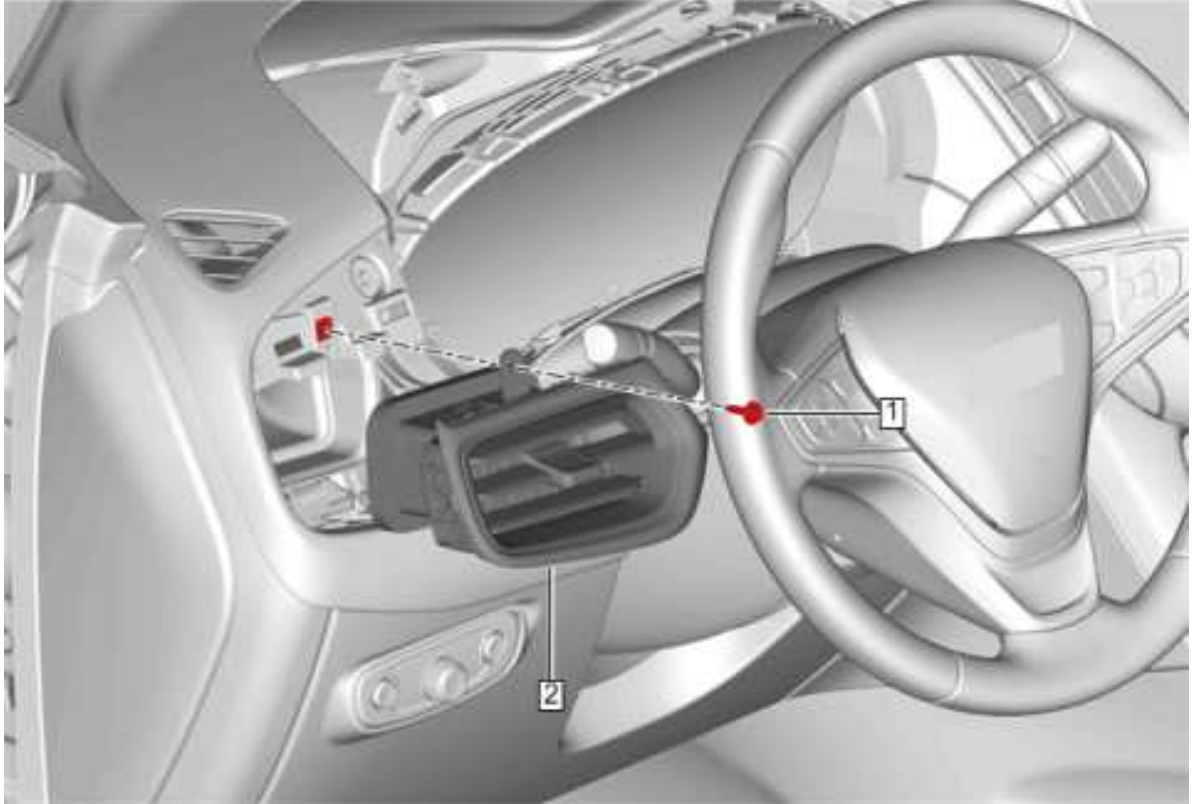


Fig. 1281: Left Side Instrument Panel Outer Air Outlet And Screw

Courtesy of GENERAL MOTORS COMPANY

15. Install Instrument Panel Outer Air Outlet - Left Side (2) - [Instrument Panel Outer Air Outlet Replacement - Left Side \(Equinox\)](#)

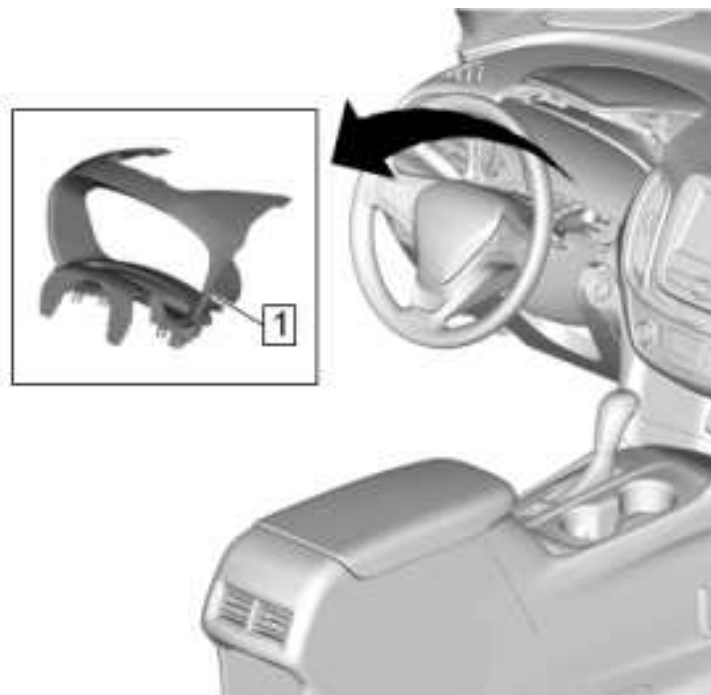


Fig. 1282: Instrument Panel Cluster Trim Plate

Courtesy of GENERAL MOTORS COMPANY

16. Install Instrument Panel Cluster Trim Plate (1) - [Instrument Panel Cluster Trim Plate Replacement \(Equinox\)](#)



Fig. 1283: Left And Right Instrument Panel Outer Trim Cover
Courtesy of GENERAL MOTORS COMPANY

17. Install the left and right instrument panel outer trim cover (1). **Instrument Panel Outer Trim Cover Replacement (Equinox)**

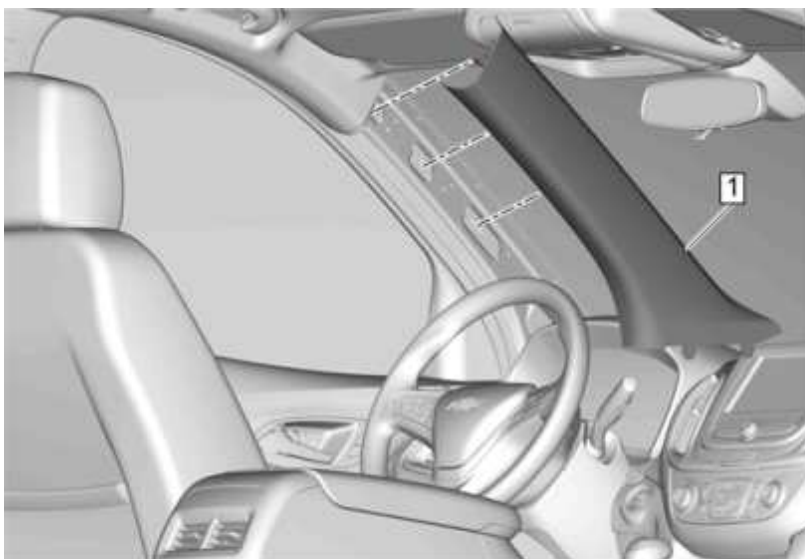


Fig. 1284: Windshield Garnish Molding Replacement (Equinox)
Courtesy of GENERAL MOTORS COMPANY

18. Install the left and right side windshield garnish molding (1). **Windshield Garnish Molding Replacement (Equinox)**

SIDE WINDOW DEFOGGER OUTLET DUCT REPLACEMENT - LEFT SIDE (TERRAIN)

Removal Procedure

1. Remove the left and right side windshield garnish molding. [Windshield Garnish Molding Replacement \(Terrain\)](#)

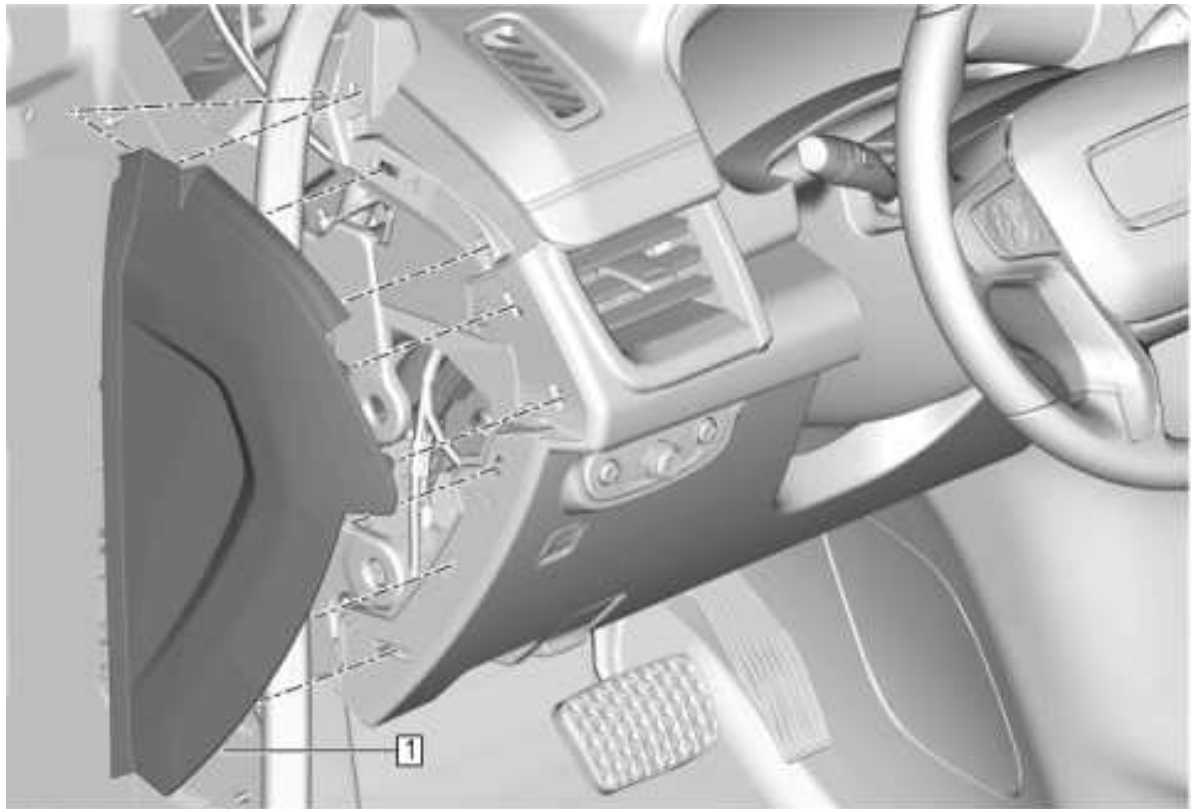


Fig. 1285: Instrument Panel Outer Trim Cover (Terrain)

Courtesy of GENERAL MOTORS COMPANY

2. Remove the left and right instrument panel outer trim cover (1). [Instrument Panel Outer Trim Cover Replacement \(Terrain\)](#)



Fig. 1286: Instrument Panel Cluster Trim Plate

Courtesy of GENERAL MOTORS COMPANY

3. Remove Instrument Panel Cluster Trim Plate (1) - [Instrument Panel Cluster Trim Plate Replacement \(Terrain\)](#)



Fig. 1287: Left Side Instrument Panel Trim Pad
Courtesy of GENERAL MOTORS COMPANY

4. Remove Instrument Panel Trim Pad - Left Side (1) - **Instrument Panel Trim Pad Replacement - Left Side (Terrain)**

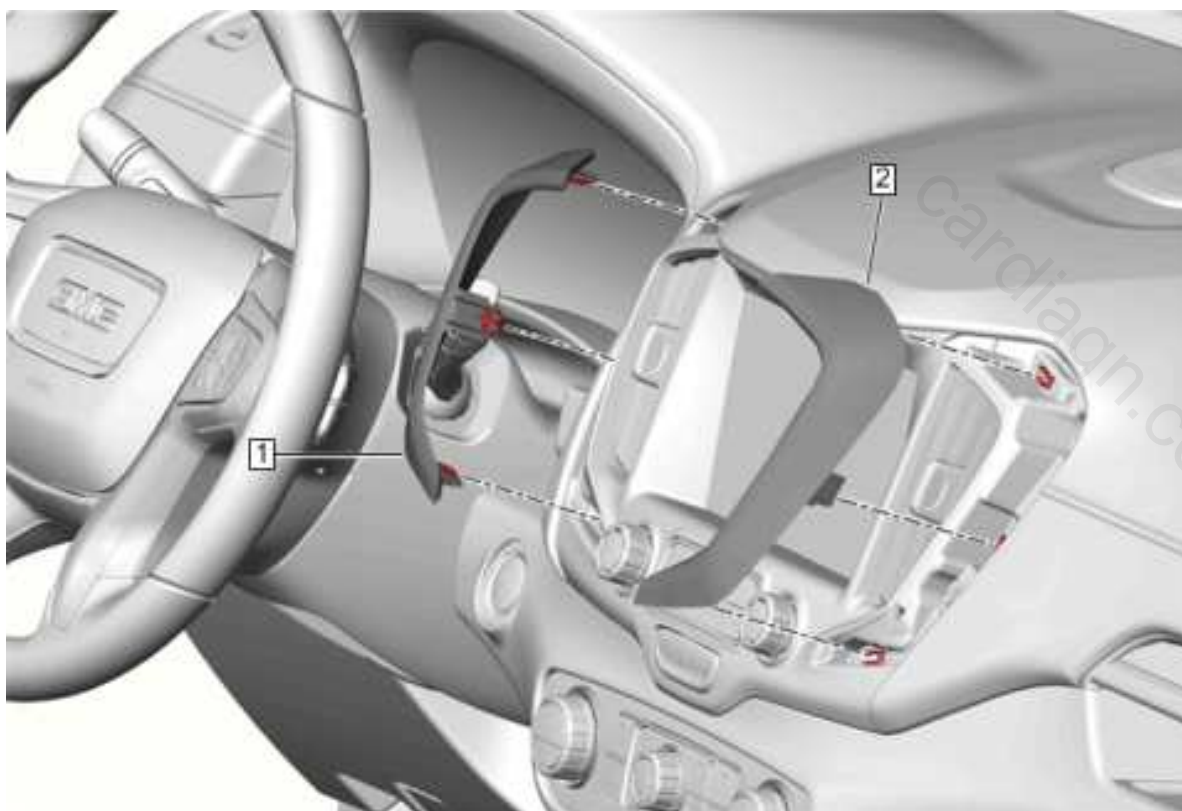


Fig. 1288: Instrument Panel Center Trim Plate Appliques
Courtesy of GENERAL MOTORS COMPANY

5. Remove Instrument Panel Center Trim Plate Applique - Left Side (1) - **Instrument Panel Center Trim Plate Applique Replacement (Terrain)**
6. Remove Instrument Panel Center Trim Plate Applique - Right Side (2) - **Instrument Panel Center Trim Plate Applique Replacement (Terrain)**



Fig. 1289: Front Floor Console Transmission Shift Opening Bezel
 Courtesy of GENERAL MOTORS COMPANY

7. Remove Front Floor Console Transmission Shift Opening Bezel (1) - **Front Floor Console Transmission Shift Opening Bezel Replacement (Terrain)**

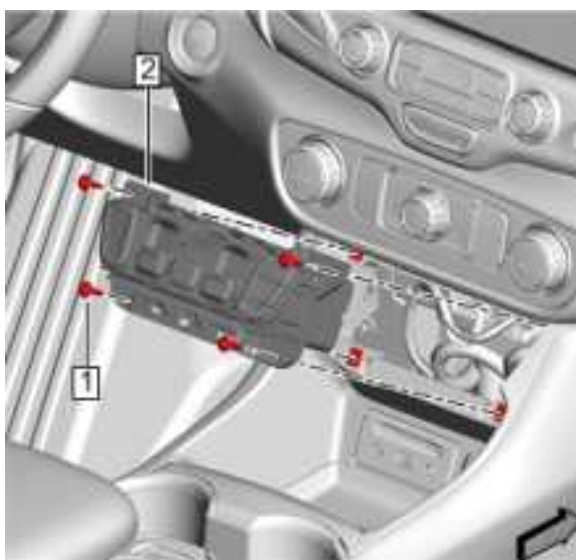


Fig. 1290: Automatic Transmission Control Bolts And Electronic Transmission Shift Control Pushbutton
 Courtesy of GENERAL MOTORS COMPANY

8. Remove Electronic Transmission Shift Control Pushbutton (1) - **Electronic Transmission Shift Control Pushbutton Replacement**

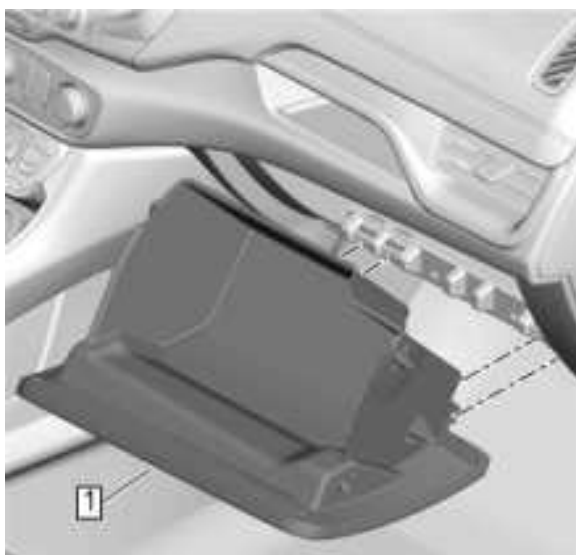


Fig. 1291: Instrument Panel Compartment Door
Courtesy of GENERAL MOTORS COMPANY

9. Remove Instrument Panel Compartment Door (1) - [Instrument Panel Compartment Door Replacement \(Terrain\)](#)

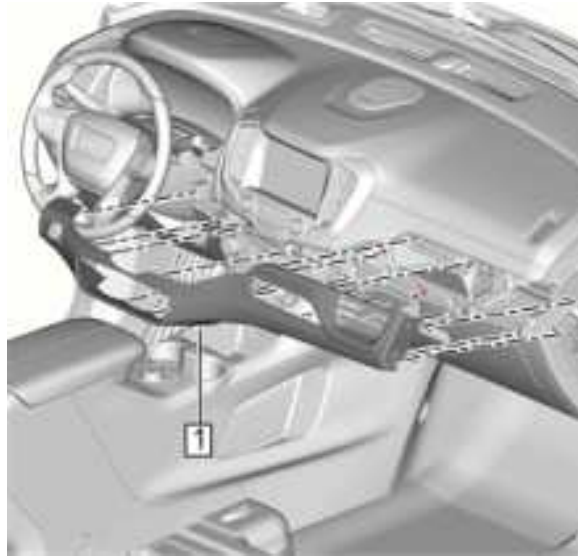


Fig. 1292: Right Side Instrument Panel Trim Pad
Courtesy of GENERAL MOTORS COMPANY

10. Remove Instrument Panel Trim Pad - Right Side (1) - [Instrument Panel Trim Pad Replacement - Right Side \(Terrain\)](#)

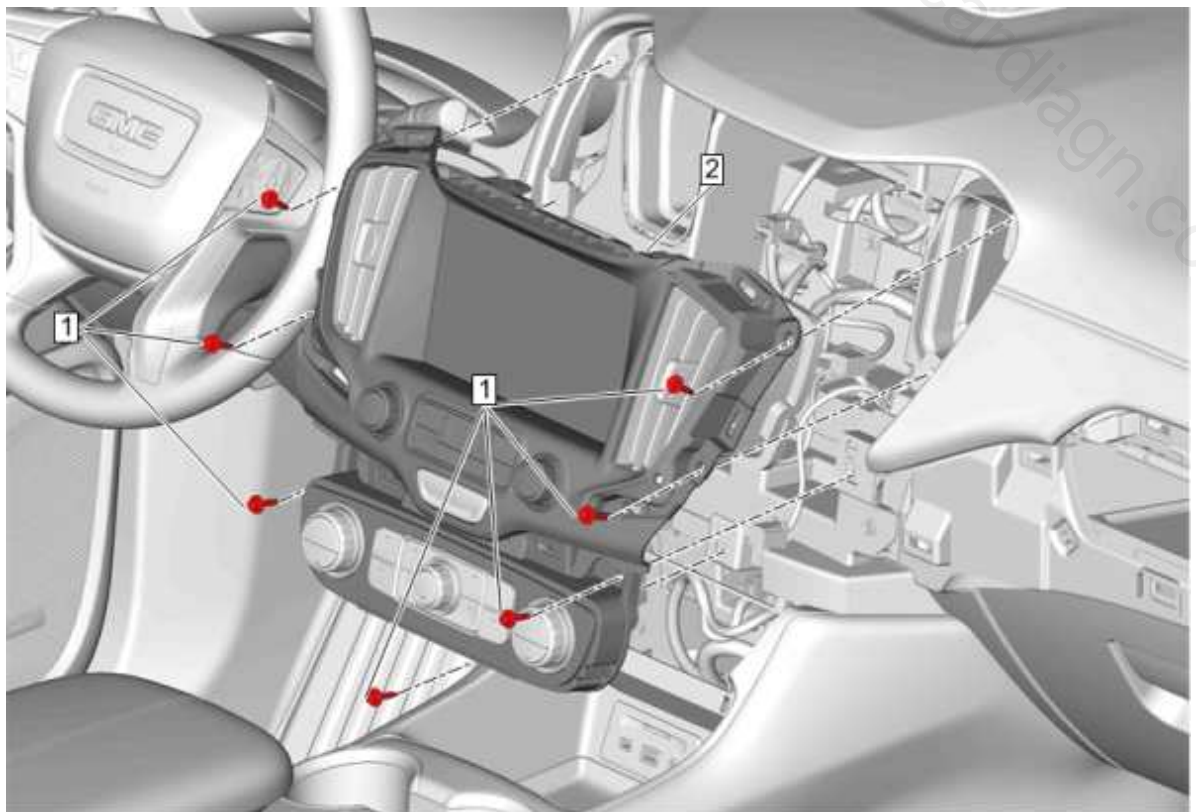


Fig. 1293: Radio Control Assembly And Screws
Courtesy of GENERAL MOTORS COMPANY

11. Remove Radio Control Assembly (2) - [Radio Control Assembly Replacement \(Terrain\)](#)
12. Disconnect all electrical connectors.



Fig. 1294: Radio Front Center Speaker
Courtesy of GENERAL MOTORS COMPANY

13. Remove Radio Front Center Speaker (2) [Radio Front Center Speaker Replacement \(Terrain\)](#)

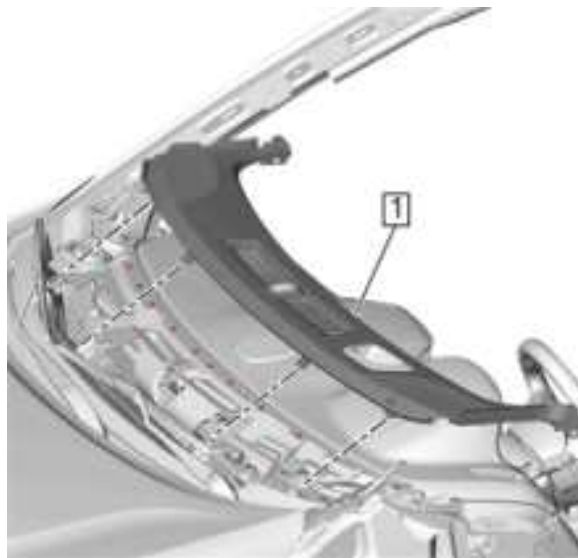


Fig. 1295: Instrument Panel Extension
Courtesy of GENERAL MOTORS COMPANY

14. Remove Instrument Panel Extension (1) - [Instrument Panel Extension Replacement \(Terrain\)](#)

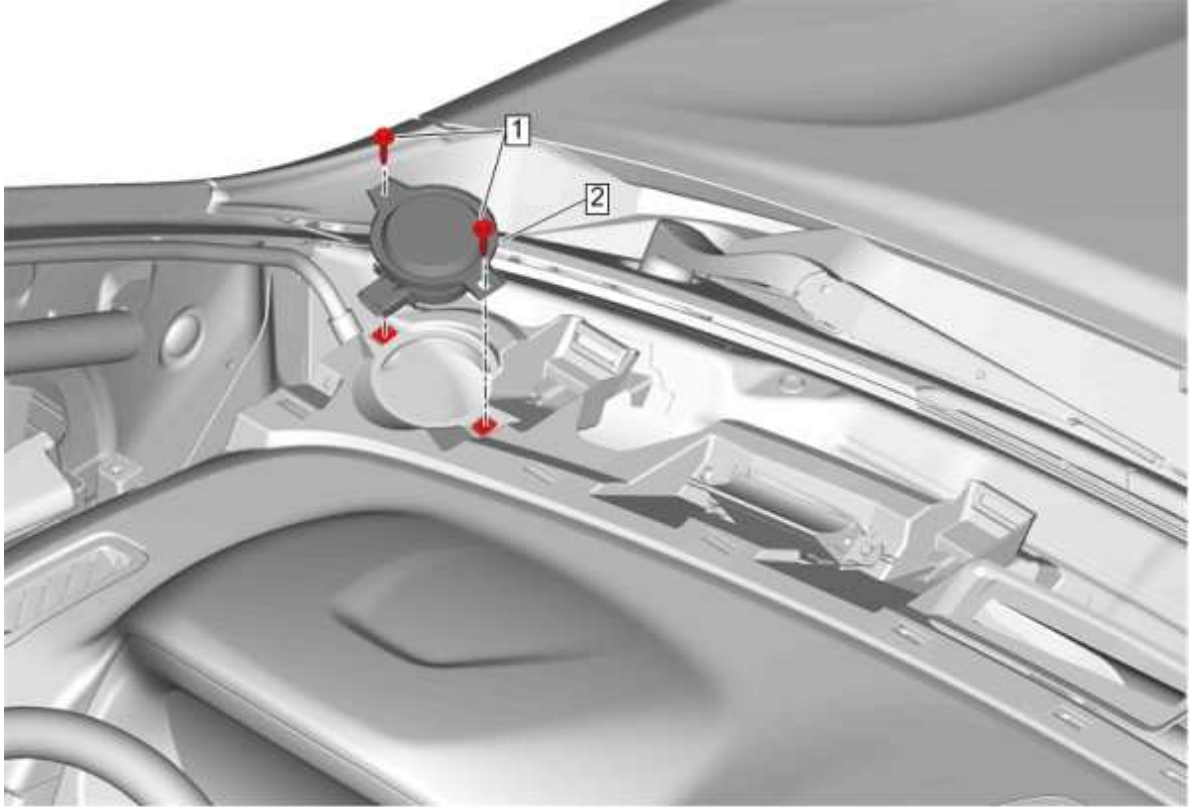


Fig. 1296: Radio Front Speaker

Courtesy of GENERAL MOTORS COMPANY

15. Remove the left and right side radio front speakers.(2) **Radio Front Speaker Replacement (Terrain)**

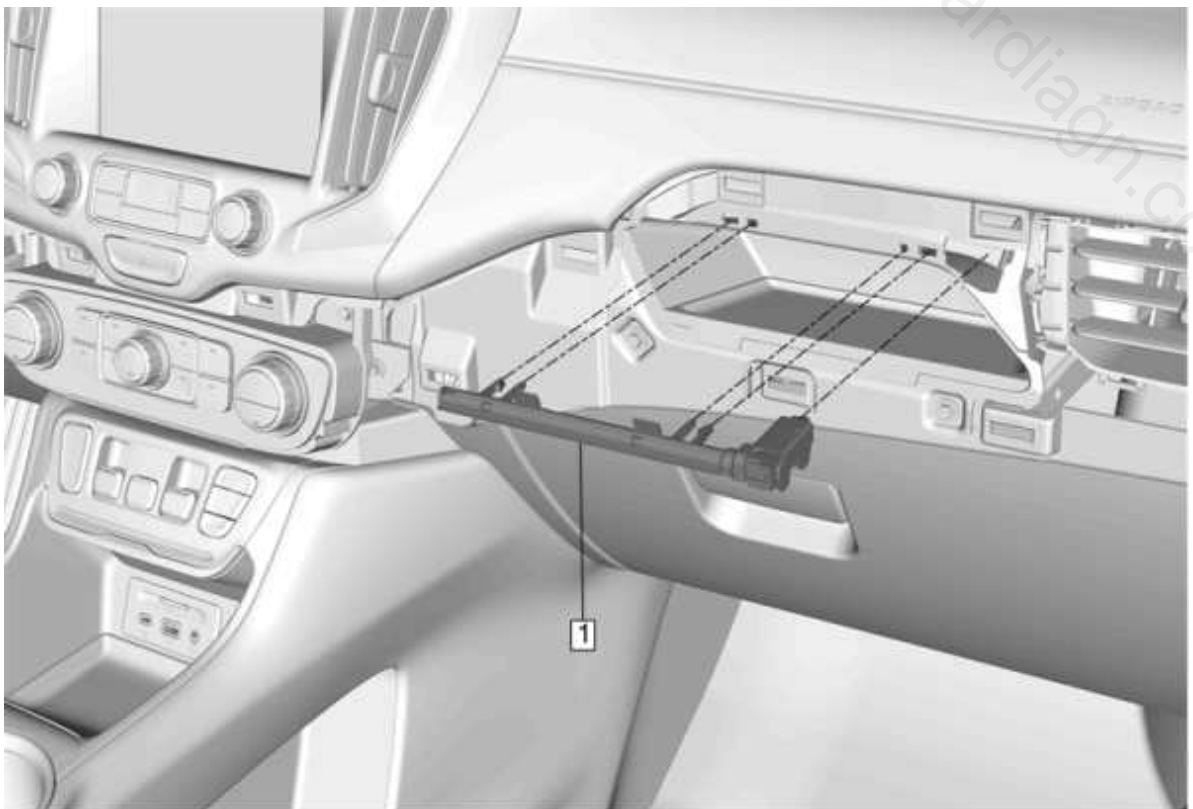


Fig. 1297: Instrument Panel Light Conductor Lamp

Courtesy of GENERAL MOTORS COMPANY

16. Remove Instrument Panel Light Conductor Lamp (1) - **Instrument Panel Light Conductor Lamp Replacement (GMC)**

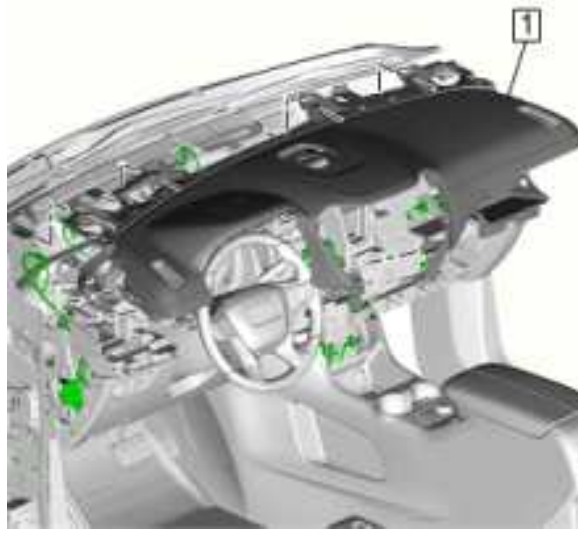


Fig. 1298: Instrument Panel Upper Trim Panel
Courtesy of GENERAL MOTORS COMPANY

17. Remove Instrument Panel Upper Trim Panel (1) - **Instrument Panel Upper Trim Panel Replacement (Terrain)**

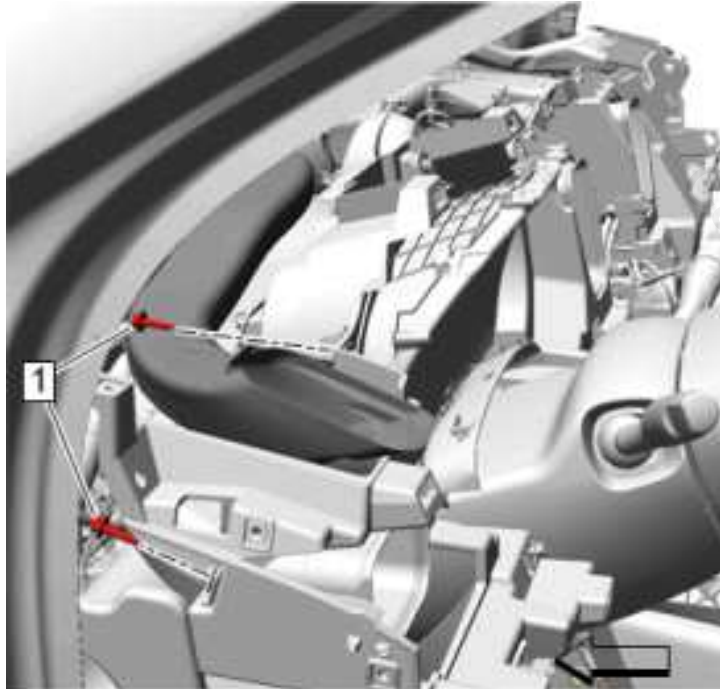


Fig. 1299: Side Window Defogger Outlet Duct Bolt
Courtesy of GENERAL MOTORS COMPANY

18. Remove Side Window Defogger Outlet Duct Bolt (1) [2x]

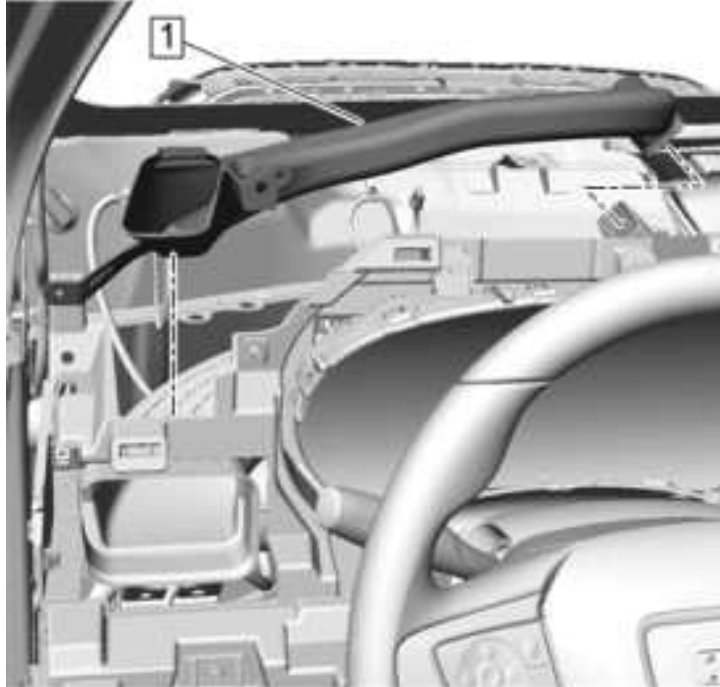


Fig. 1300: Left Side Window Defogger Outlet Duct
Courtesy of GENERAL MOTORS COMPANY

19. Remove Side Window Defogger Outlet Duct - Left Side (1)

Installation Procedure

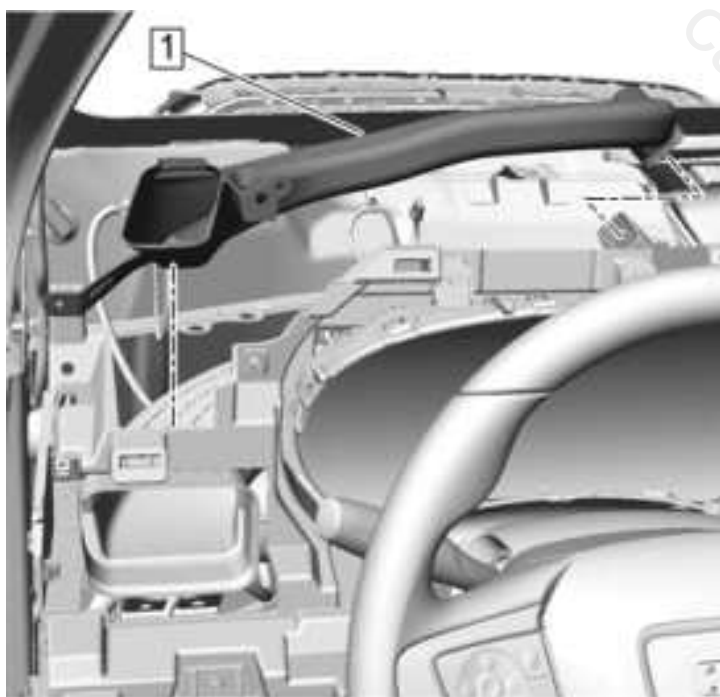


Fig. 1301: Left Side Window Defogger Outlet Duct
Courtesy of GENERAL MOTORS COMPANY

1. Install Side Window Defogger Outlet Duct - Left Side (1)

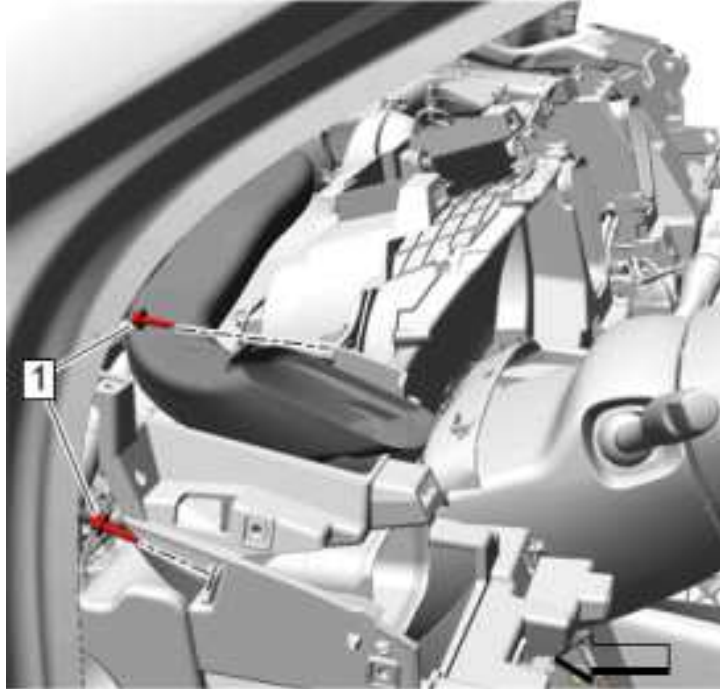


Fig. 1302: Side Window Defogger Outlet Duct Bolt
 Courtesy of GENERAL MOTORS COMPANY

CAUTION: Refer to [Fastener Caution](#) .

2. Install Side Window Defogger Outlet Duct Bolt (1) and tighten [2x] 2.5 N.m (22 lb in)

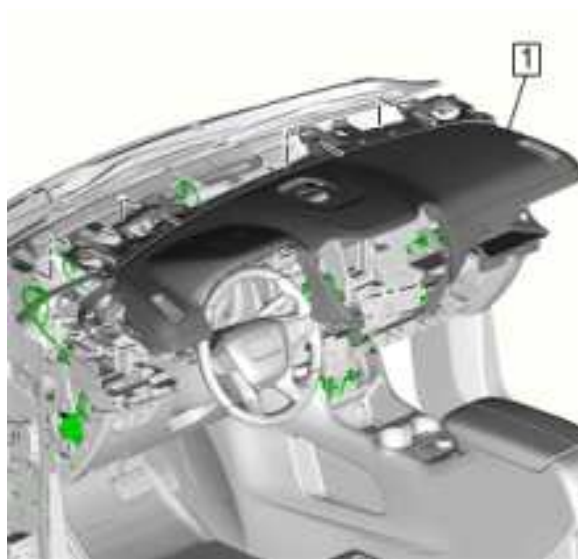


Fig. 1303: Instrument Panel Upper Trim Panel
 Courtesy of GENERAL MOTORS COMPANY

3. Install Instrument Panel Upper Trim Panel (1) [Instrument Panel Upper Trim Panel Replacement \(Terrain\)](#)

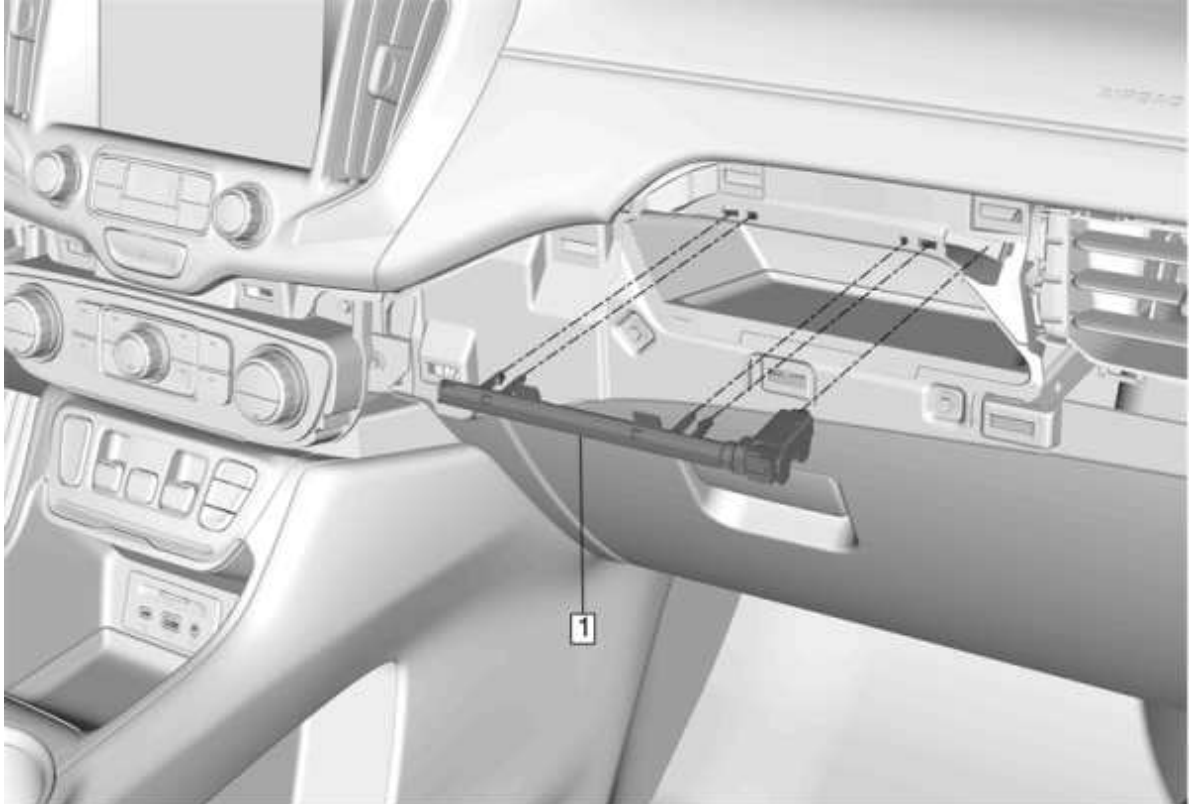


Fig. 1304: Instrument Panel Light Conductor Lamp
 Courtesy of GENERAL MOTORS COMPANY

4. Install Instrument Panel Light Conductor Lamp (1) - **Instrument Panel Light Conductor Lamp Replacement (GMC)**

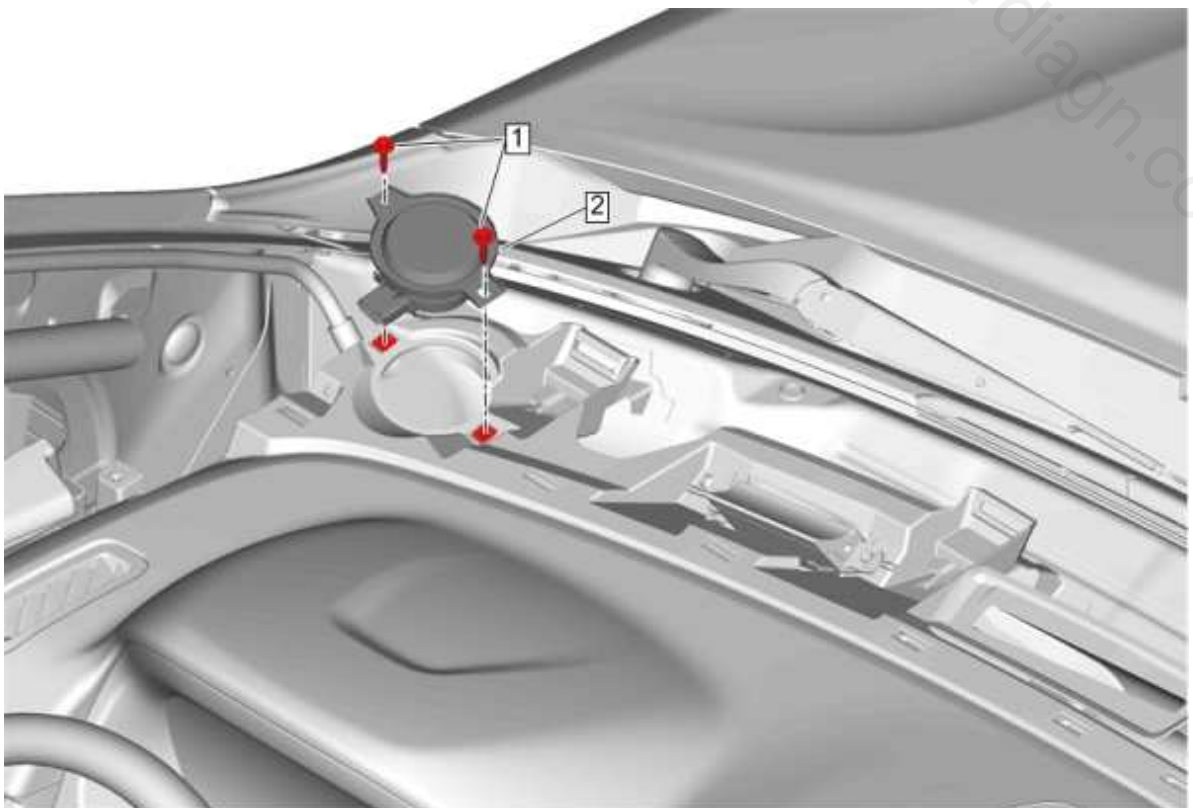


Fig. 1305: Radio Front Speaker
 Courtesy of GENERAL MOTORS COMPANY

5. Install the left and right side radio front speakers. (2)**Radio Front Speaker Replacement (Terrain)**



Fig. 1306: Instrument Panel Extension
Courtesy of GENERAL MOTORS COMPANY

6. Install Instrument Panel Extension (1) - [Instrument Panel Extension Replacement \(Terrain\)](#)



Fig. 1307: Radio Front Center Speaker
Courtesy of GENERAL MOTORS COMPANY

7. Install Radio Front Center Speaker (2) [Radio Front Center Speaker Replacement \(Terrain\)](#)

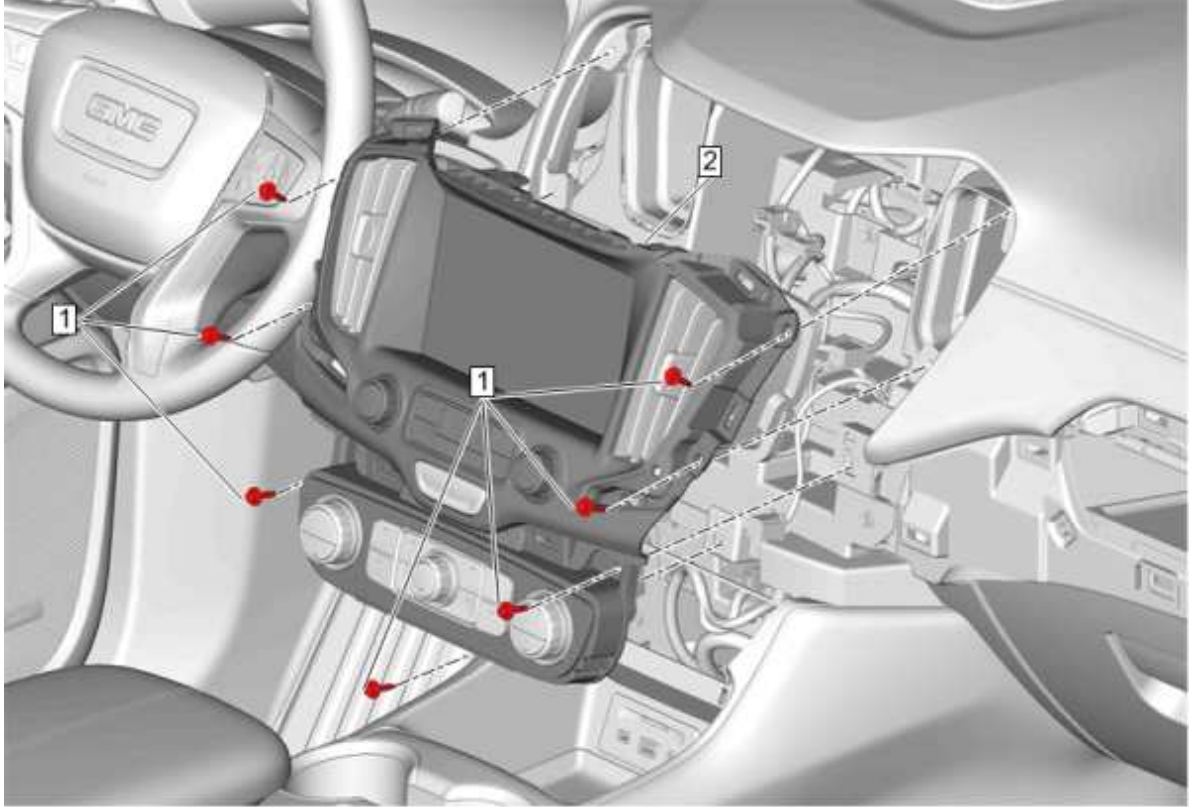


Fig. 1308: Radio Control Assembly And Screws
Courtesy of GENERAL MOTORS COMPANY

8. Connect the electrical connectors.
9. Install Radio Control Assembly (2) - [Radio Control Assembly Replacement \(Terrain\)](#)

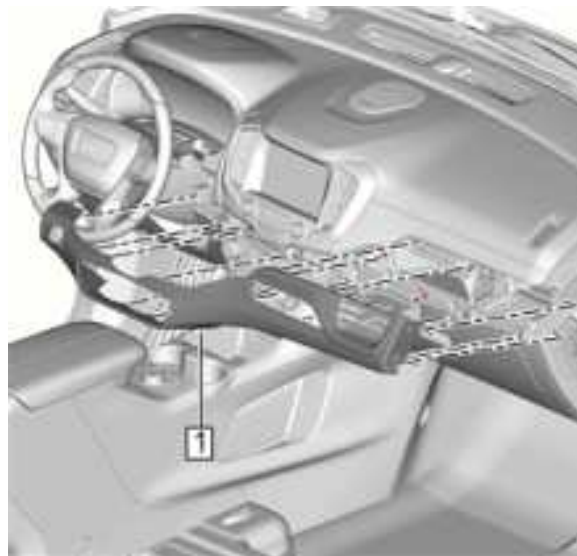


Fig. 1309: Right Side Instrument Panel Trim Pad
Courtesy of GENERAL MOTORS COMPANY

10. Install Instrument Panel Trim Pad - Right Side (1) - [Instrument Panel Trim Pad Replacement - Right Side \(Terrain\)](#)

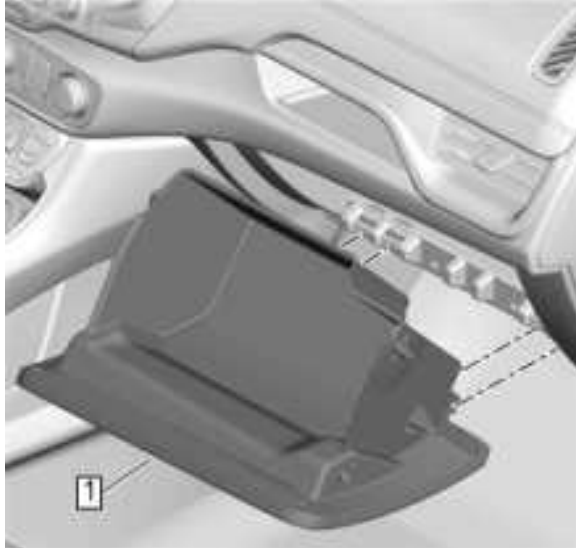


Fig. 1310: Instrument Panel Compartment Door
Courtesy of GENERAL MOTORS COMPANY

11. Install Instrument Panel Compartment Door (1) - **Instrument Panel Compartment Door Replacement (Terrain)**

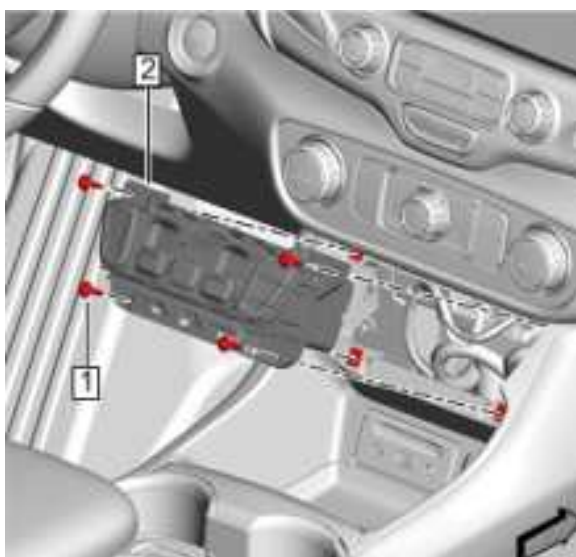


Fig. 1311: Automatic Transmission Control Bolts And Electronic Transmission Shift Control Pushbutton
Courtesy of GENERAL MOTORS COMPANY

12. Install Electronic Transmission Shift Control Pushbutton (2) - **Electronic Transmission Shift Control Pushbutton Replacement**



Fig. 1312: Front Floor Console Transmission Shift Opening Bezel
Courtesy of GENERAL MOTORS COMPANY

13. Install Front Floor Console Transmission Shift Opening Bezel (1) - **Front Floor Console Transmission Shift Opening Bezel Replacement (Terrain)**

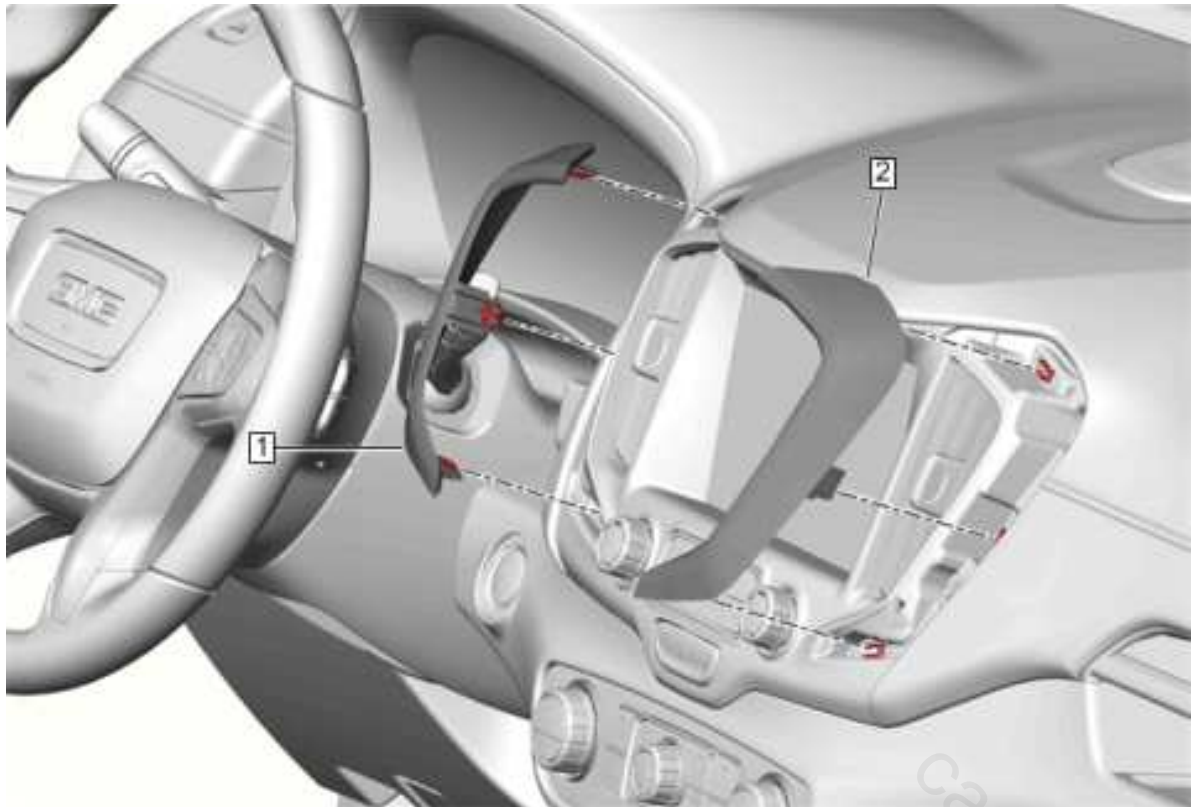


Fig. 1313: Instrument Panel Center Trim Plate Appliques
Courtesy of GENERAL MOTORS COMPANY

14. Install Instrument Panel Center Trim Plate Applique - Left Side (1) - **Instrument Panel Center Trim Plate Applique Replacement (Terrain)**
15. Install Instrument Panel Center Trim Plate Applique - Right Side (2) - **Instrument Panel Center Trim Plate Applique Replacement (Terrain)**



Fig. 1314: Left Side Instrument Panel Trim Pad
Courtesy of GENERAL MOTORS COMPANY

16. Install Instrument Panel Trim Pad - Left Side (1) - **Instrument Panel Trim Pad Replacement - Left Side (Terrain)**



Fig. 1315: Instrument Panel Cluster Trim Plate
Courtesy of GENERAL MOTORS COMPANY

17. Install Instrument Panel Cluster Trim Plate (1) - **Instrument Panel Cluster Trim Plate Replacement (Terrain)**

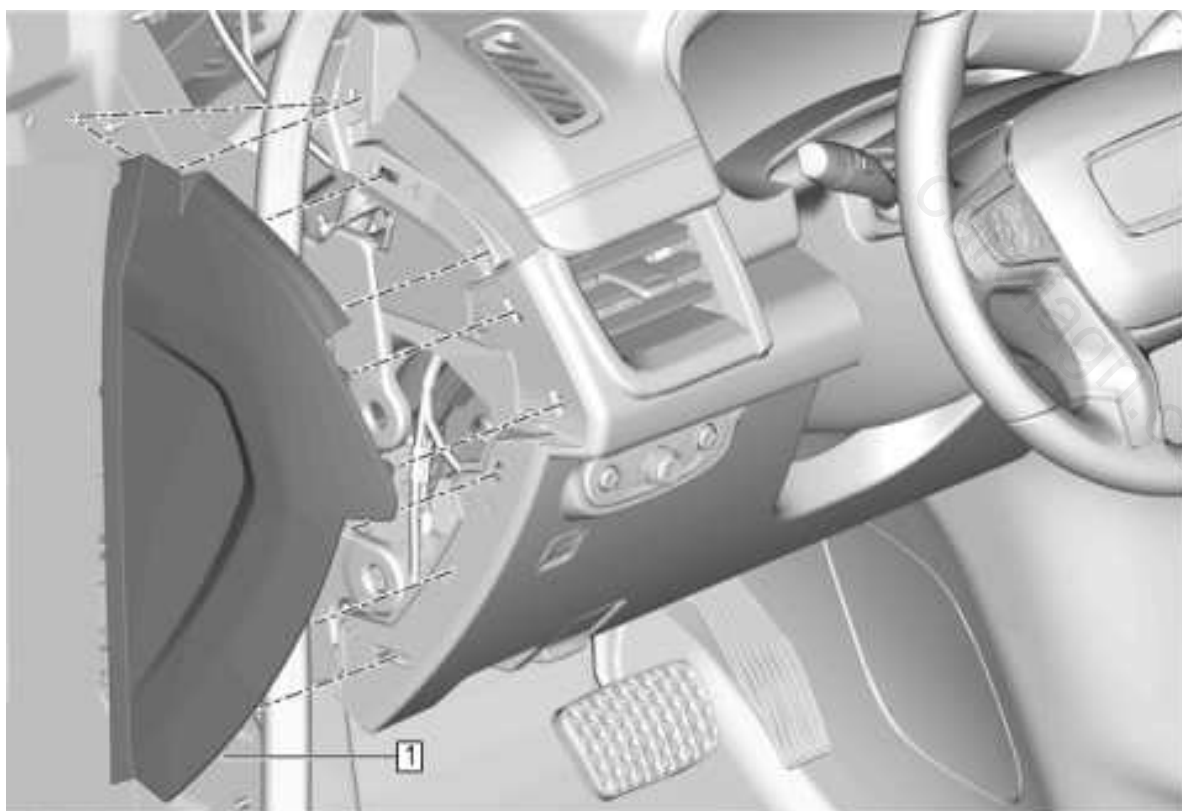


Fig. 1316: Instrument Panel Outer Trim Cover (Terrain)
Courtesy of GENERAL MOTORS COMPANY

18. Install the left and right instrument panel outer trim cover (1). **Instrument Panel Outer Trim Cover Replacement (Terrain)**
19. Install the left and right side windshield garnish molding. **Windshield Garnish Molding Replacement (Terrain)**

SIDE WINDOW DEFOGGER OUTLET DUCT REPLACEMENT - RIGHT SIDE (EQUINOX)

Removal Procedure

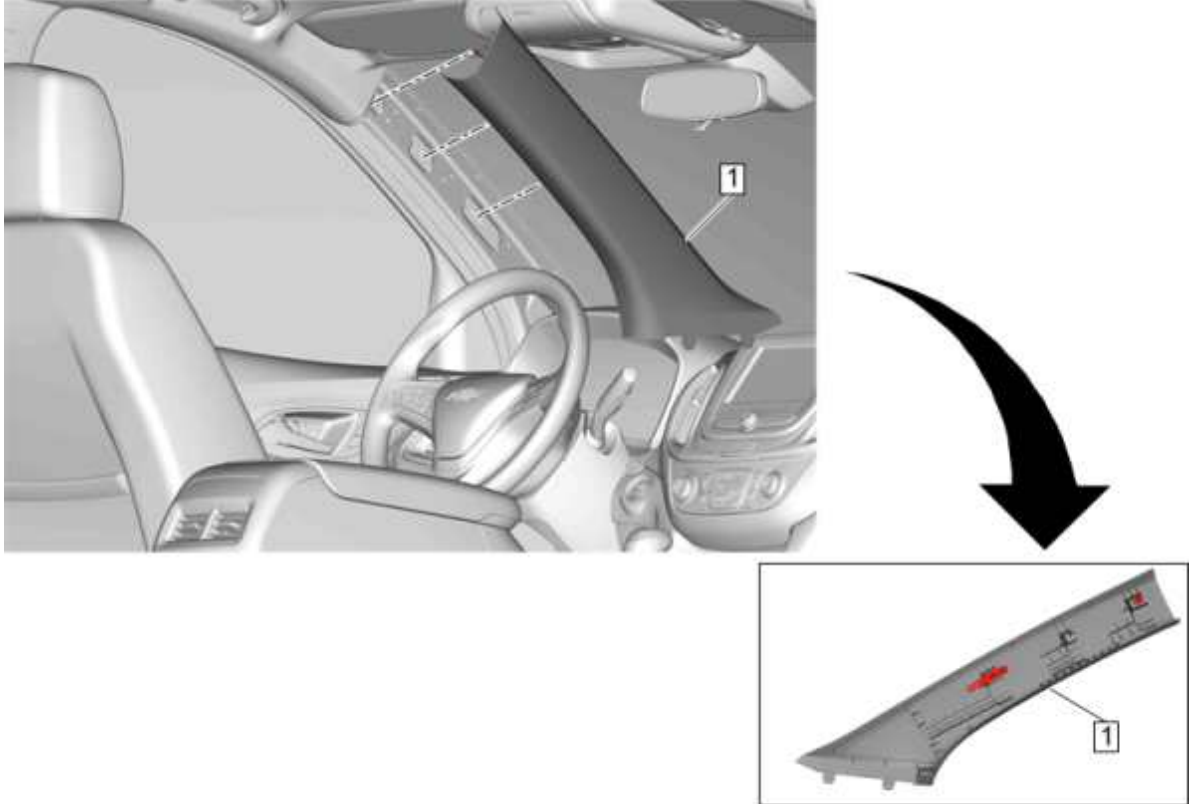


Fig. 1317: Windshield Garnish Molding Replacement (Equinox)
 Courtesy of GENERAL MOTORS COMPANY

1. Remove the left and right side windshield garnish molding(1). [Windshield Garnish Molding Replacement \(Equinox\)](#)



Fig. 1318: Left And Right Instrument Panel Outer Trim Cover
 Courtesy of GENERAL MOTORS COMPANY

2. Remove the left and right instrument panel outer trim cover (1). [Instrument Panel Outer Trim Cover Replacement \(Equinox\)](#)

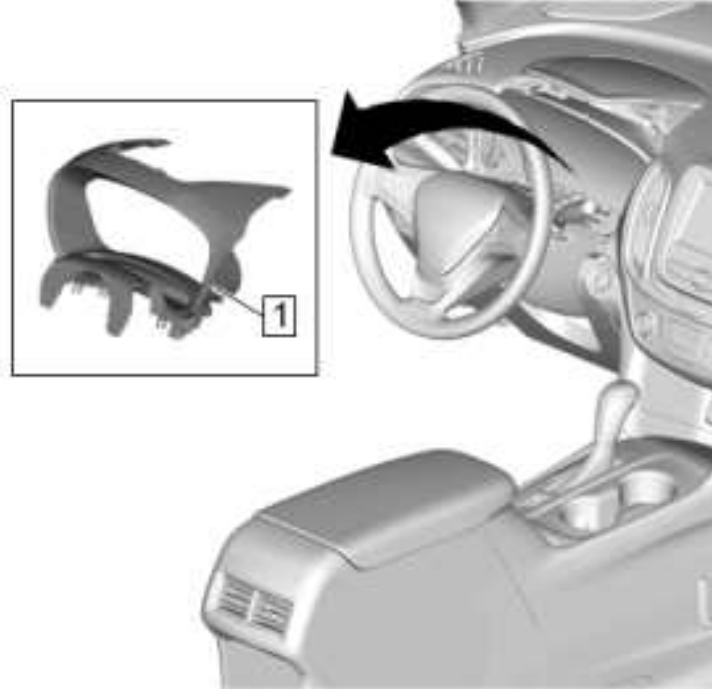


Fig. 1319: Instrument Panel Cluster Trim Plate
 Courtesy of GENERAL MOTORS COMPANY

3. Remove Instrument Panel Cluster Trim Plate (1) - **Instrument Panel Cluster Trim Plate Replacement (Equinox)**

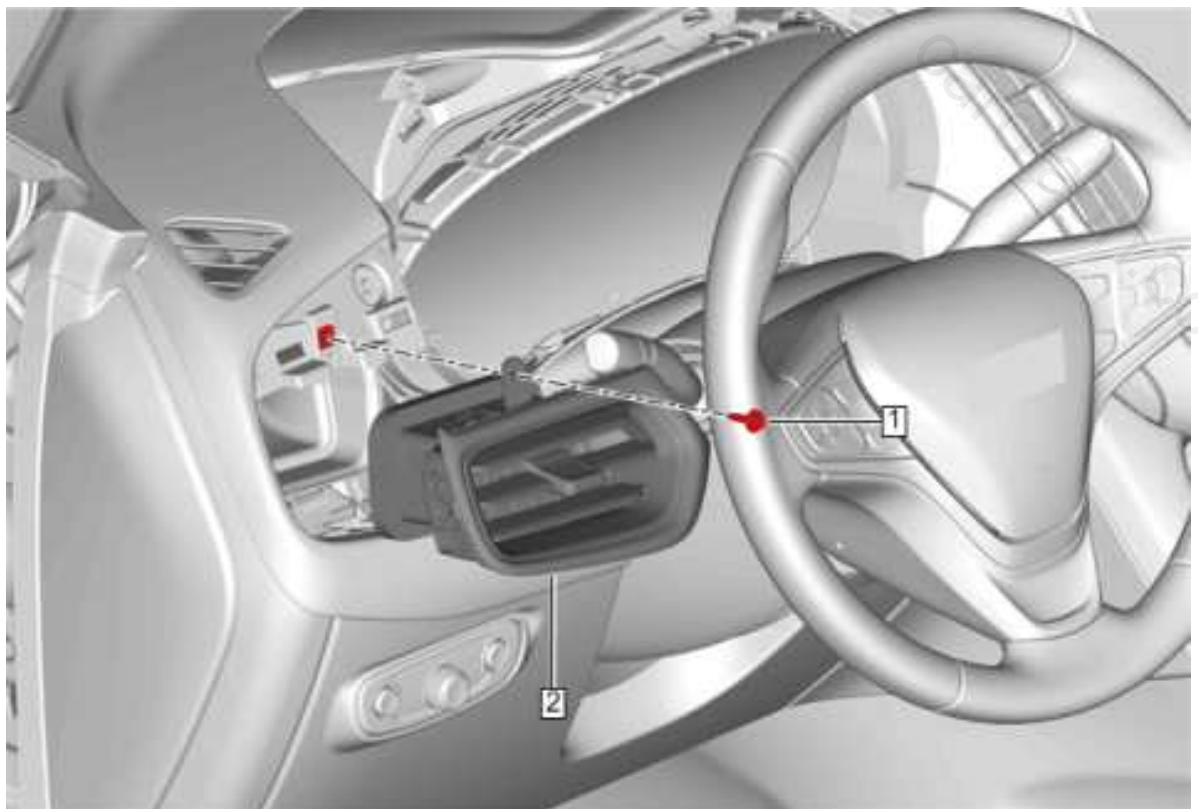


Fig. 1320: Left Side Instrument Panel Outer Air Outlet And Screw
 Courtesy of GENERAL MOTORS COMPANY

4. Remove Instrument Panel Outer Air Outlet - Left Side (2) - **Instrument Panel Outer Air Outlet Replacement - Left Side (Equinox)**

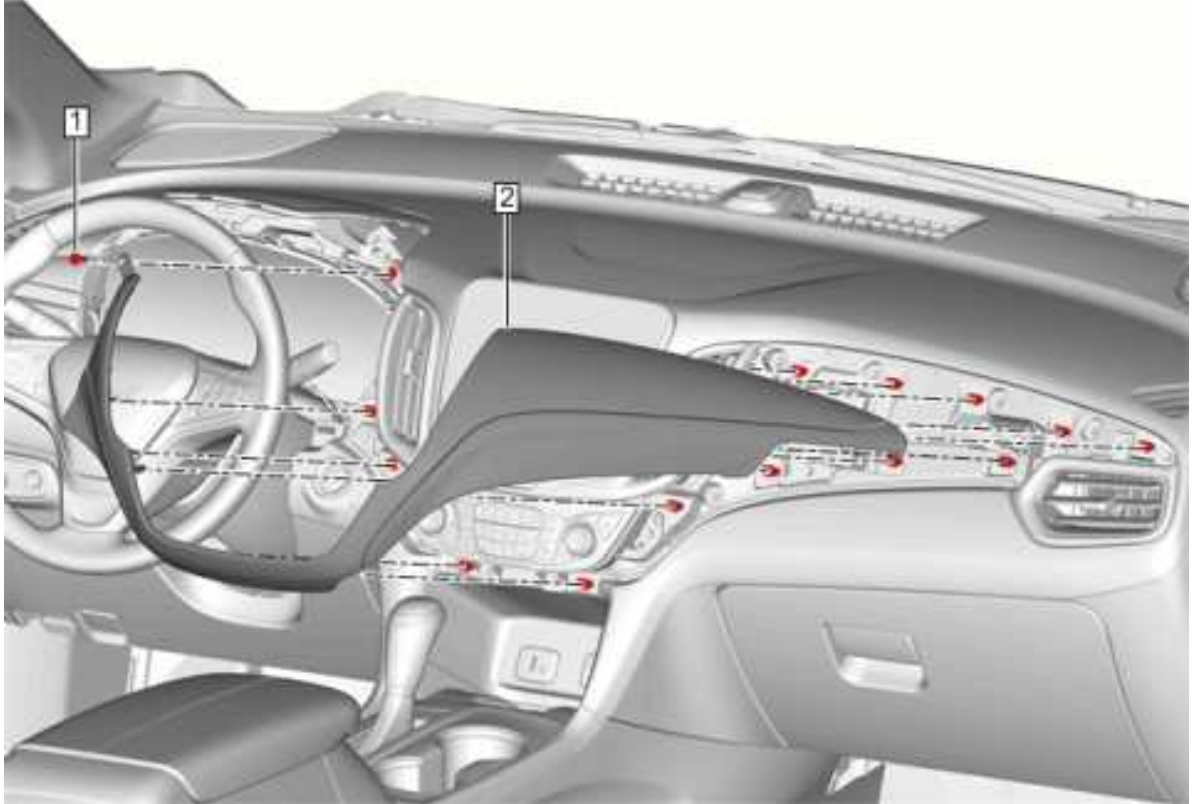


Fig. 1321: Right Side Instrument Panel Trim Pad
 Courtesy of GENERAL MOTORS COMPANY

5. Remove Instrument Panel Trim Pad - Right Side (2) - **Instrument Panel Trim Pad Replacement - Right Side (Equinox)**

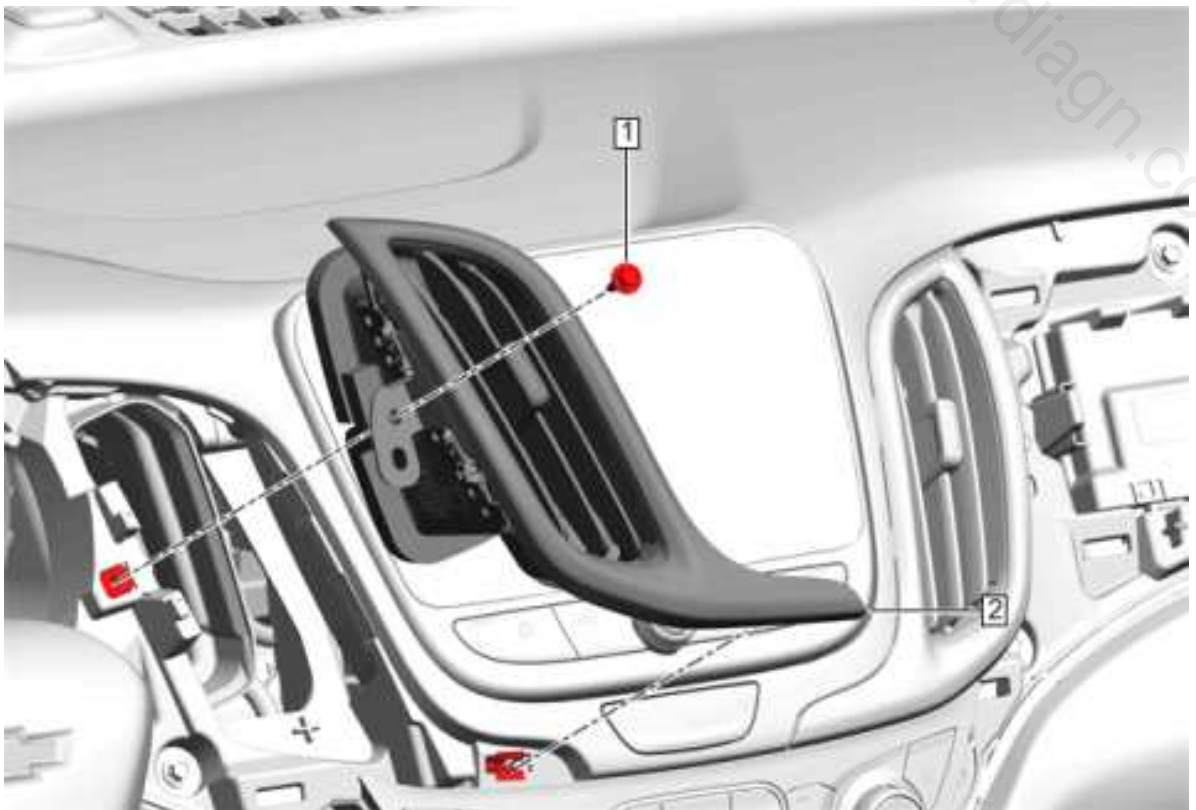


Fig. 1322: Left Side Instrument Panel Center Air Outlet And Screw
 Courtesy of GENERAL MOTORS COMPANY

6. Remove Instrument Panel Center Air Outlet - Left Side (2) - **Instrument Panel Center Air Outlet Replacement - Left Side (Equinox)**



Fig. 1323: Right Side Instrument Panel Center Air Outlet And Screw
 Courtesy of GENERAL MOTORS COMPANY

7. Remove Instrument Panel Center Air Outlet - Right Side (2) - **Instrument Panel Center Air Outlet Replacement - Right Side (Equinox)**

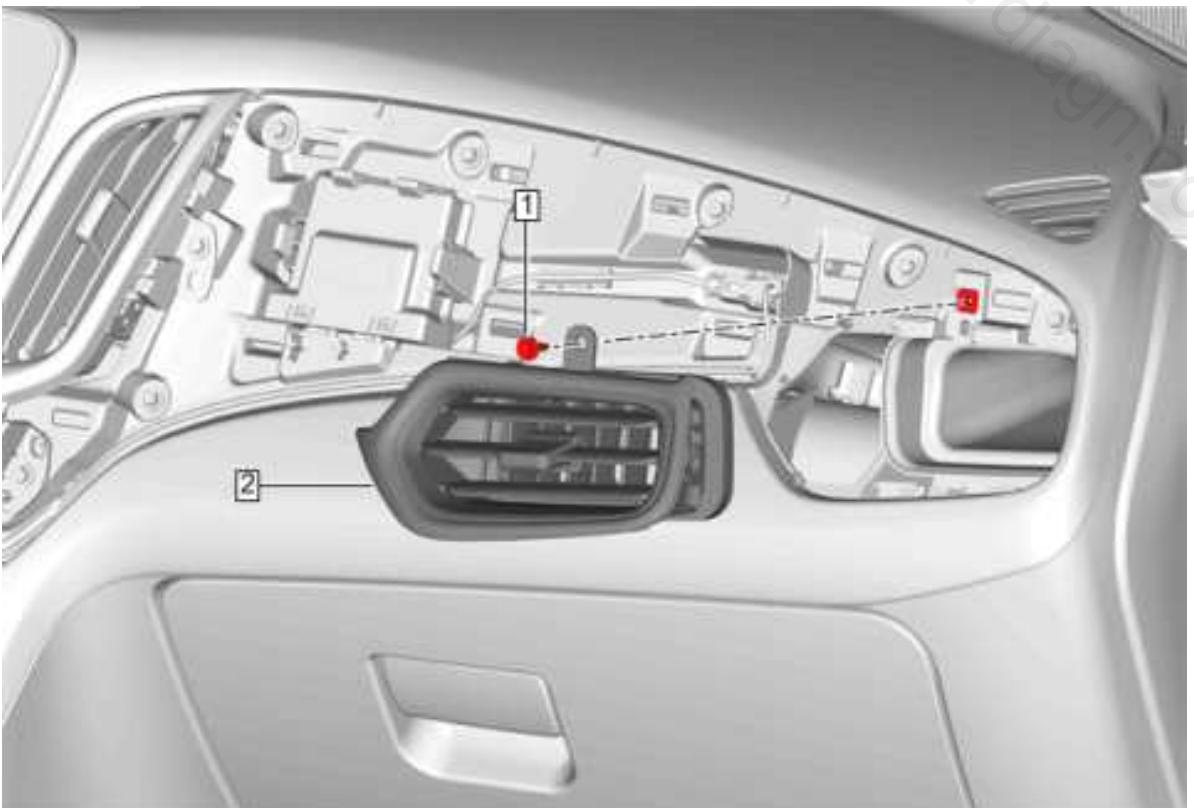


Fig. 1324: Right Side Instrument Panel Outer Air Outlet And Screw
 Courtesy of GENERAL MOTORS COMPANY

8. Remove Instrument Panel Outer Air Outlet - Right Side (2) - **Instrument Panel Outer Air Outlet Replacement - Right Side (Equinox)**

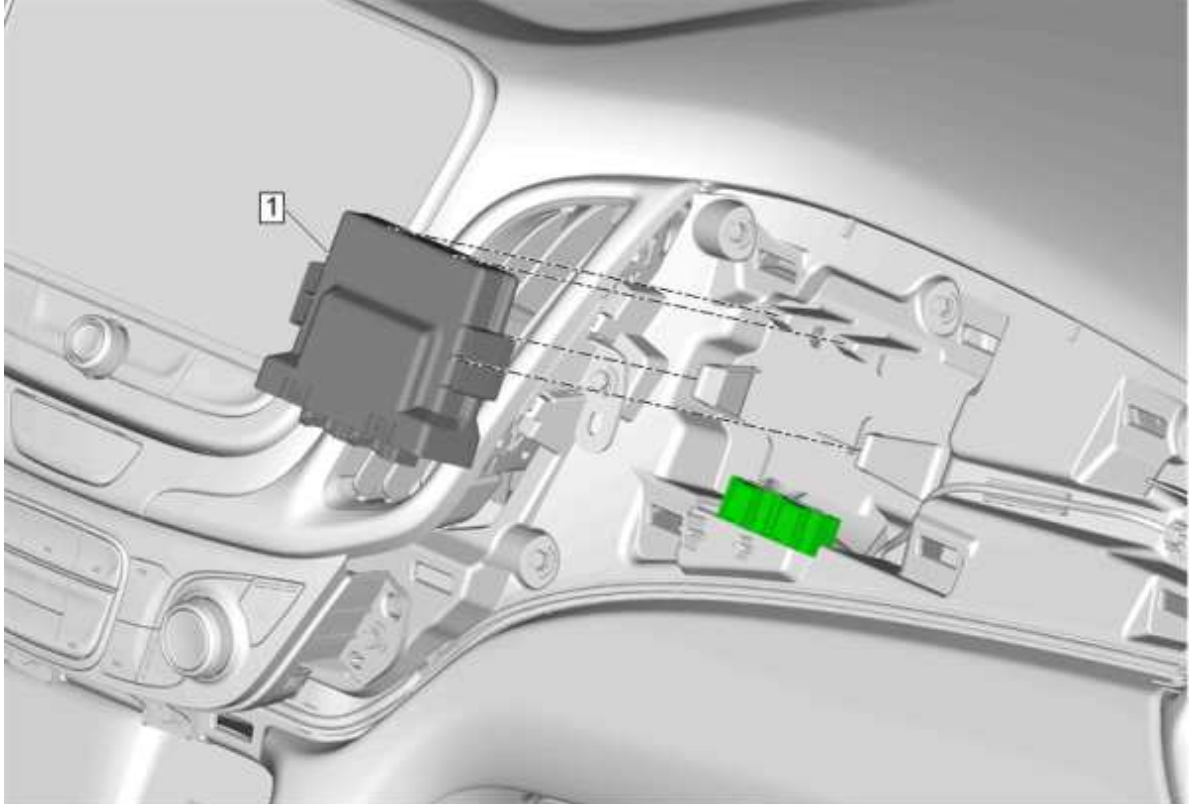


Fig. 1325: Serial Data Gateway Module
 Courtesy of GENERAL MOTORS COMPANY

9. Remove Serial Data Gateway Module (1) - [Serial Data Gateway Module Replacement \(Equinox\)](#)

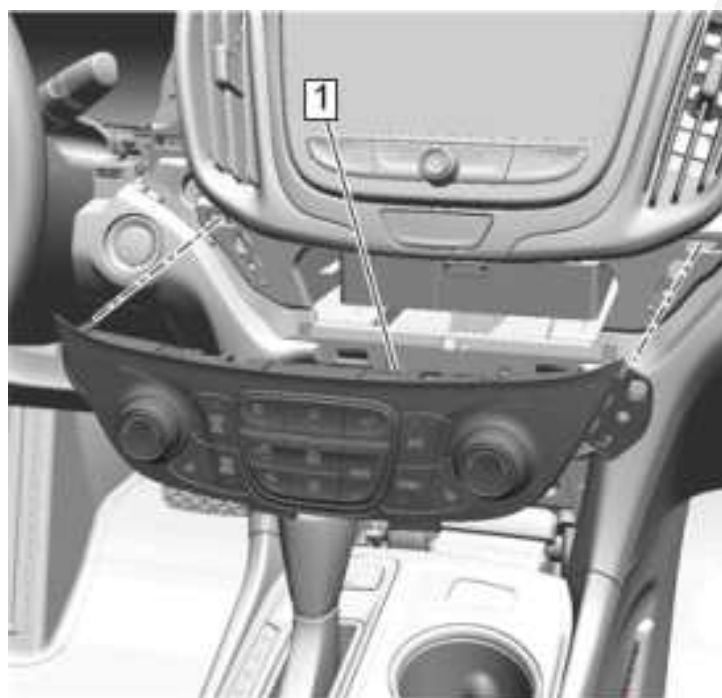


Fig. 1326: Heater and Air Conditioning User Interface Control
 Courtesy of GENERAL MOTORS COMPANY

10. Remove Heater and Air Conditioning User Interface Control (1) - [Heater and Air Conditioning User Interface Control Replacement \(Equinox\)](#)



Fig. 1327: Radio Control Assembly

Courtesy of GENERAL MOTORS COMPANY

11. Remove Rear Radio Control Assembly (1) - [Radio Control Assembly Replacement \(Equinox\)](#)
12. Hazard Warning Switch - Disconnect the electrical connector.

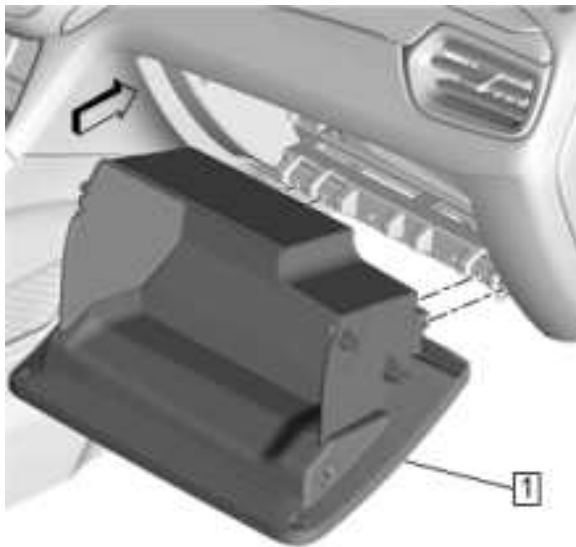


Fig. 1328: Instrument Panel Compartment Door

Courtesy of GENERAL MOTORS COMPANY

13. Remove Instrument Panel Compartment Door (1) - [Instrument Panel Compartment Door Replacement \(Equinox\)](#)

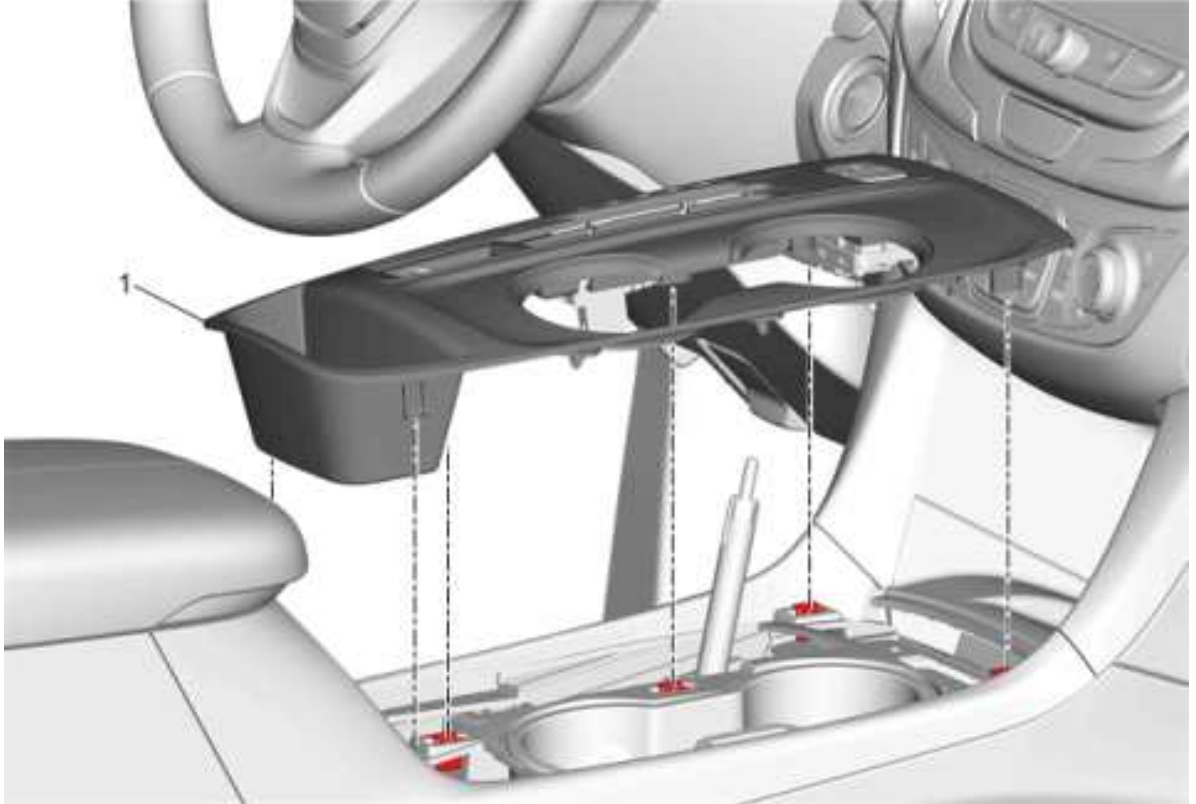


Fig. 1329: Front Floor Console Trim Plate (Equinox)
Courtesy of GENERAL MOTORS COMPANY

14. Remove Front Floor Console Trim Plate (1) - **Front Floor Console Trim Plate Replacement (Equinox)**

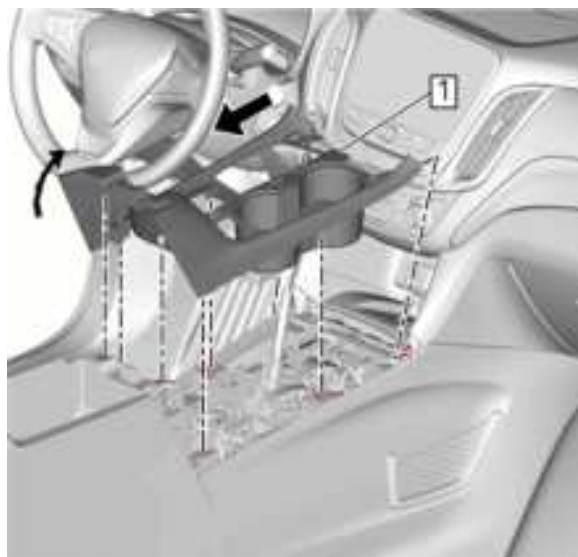


Fig. 1330: Front Floor Console Applique
Courtesy of GENERAL MOTORS COMPANY

15. Remove Front Floor Console Applique (1) - **Front Floor Console Applique Replacement (Equinox)**

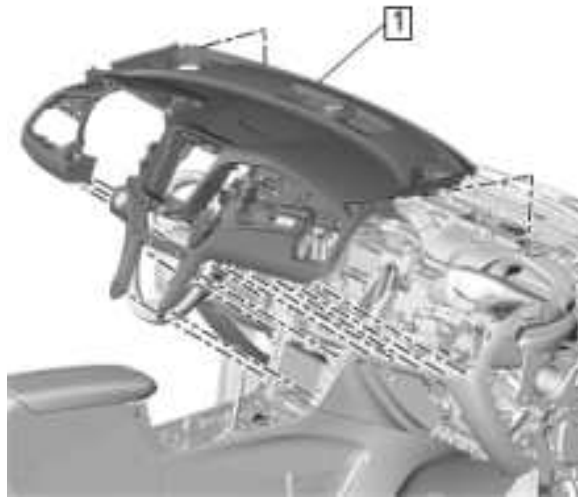


Fig. 1331: Instrument Panel Upper Trim Panel
Courtesy of GENERAL MOTORS COMPANY

16. Remove Instrument Panel Upper Trim Panel (1) - **Instrument Panel Upper Trim Panel Replacement (Equinox)**

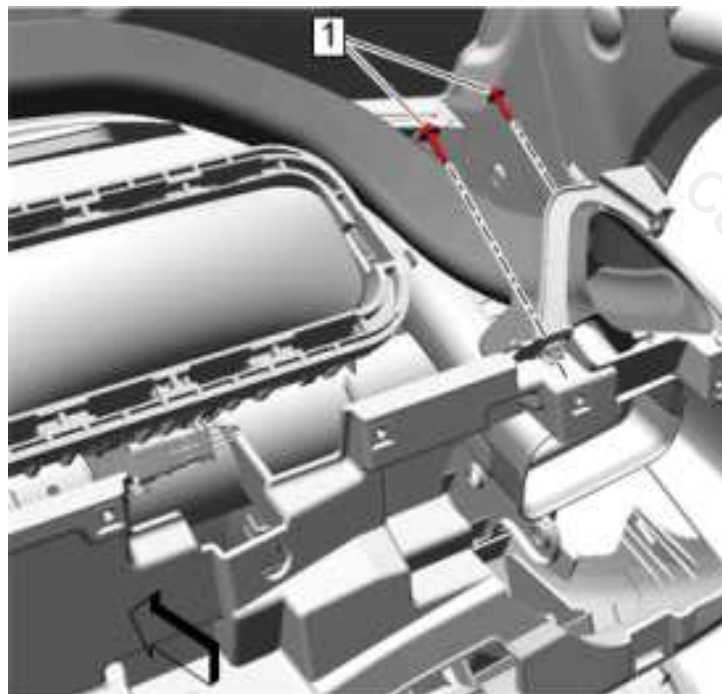


Fig. 1332: Side Window Defogger Outlet Duct Bolt
Courtesy of GENERAL MOTORS COMPANY

17. Remove Side Window Defogger Outlet Duct Bolt (1)

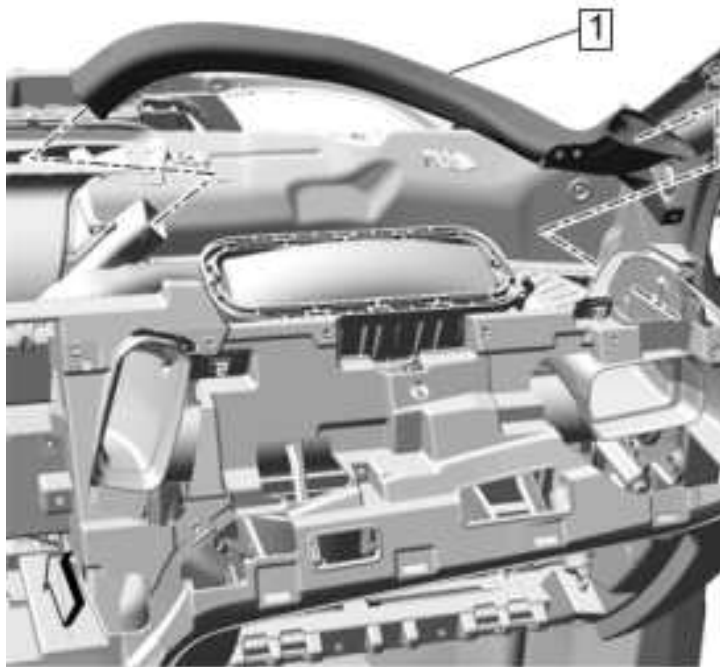


Fig. 1333: Right Side Window Defogger Outlet Duct
Courtesy of GENERAL MOTORS COMPANY

18. Remove Side Window Defogger Outlet Duct - Right Side (1)

Installation Procedure

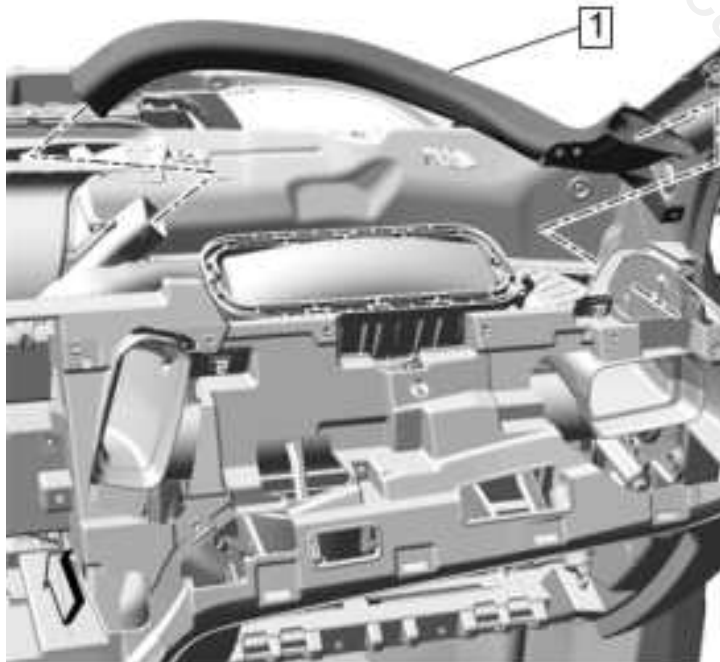


Fig. 1334: Right Side Window Defogger Outlet Duct
Courtesy of GENERAL MOTORS COMPANY

1. Install Side Window Defogger Outlet Duct - Right Side (1)

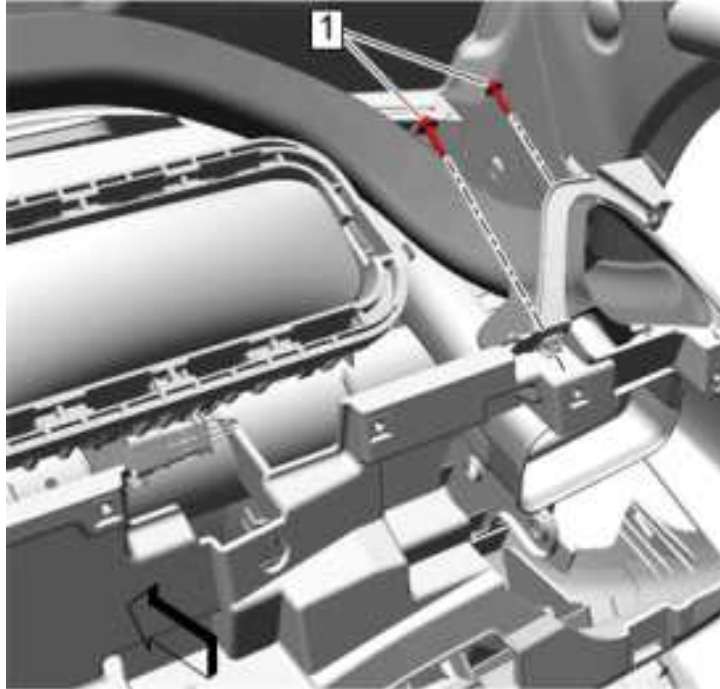


Fig. 1335: Side Window Defogger Outlet Duct Bolt
 Courtesy of GENERAL MOTORS COMPANY

CAUTION: Refer to [Fastener Caution](#) .

2. Install Side Window Defogger Outlet Duct Bolt (1) and tighten [2x] 2.5 N.m (22 lb in)

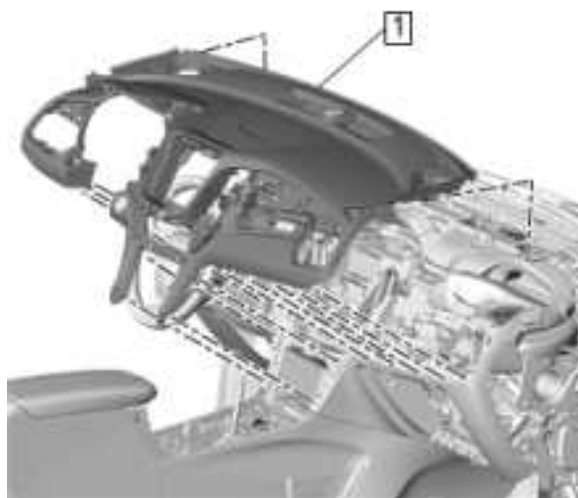


Fig. 1336: Instrument Panel Upper Trim Panel
 Courtesy of GENERAL MOTORS COMPANY

3. Install Instrument Panel Upper Trim Panel (1) - [Instrument Panel Upper Trim Panel Replacement \(Equinox\)](#).

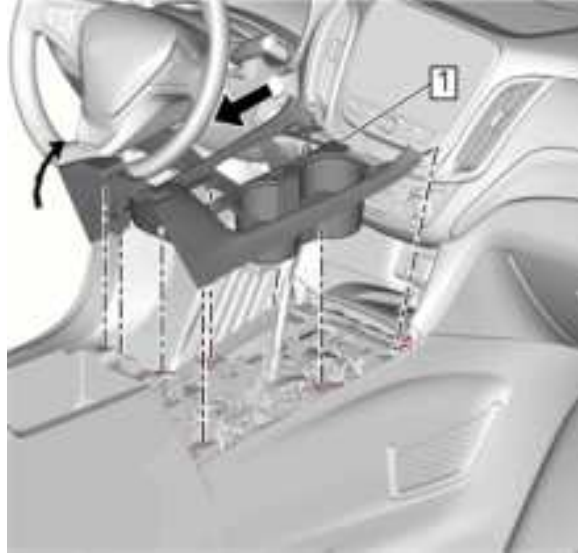


Fig. 1337: Front Floor Console Applique
Courtesy of GENERAL MOTORS COMPANY

4. Install Front Floor Console Applique (1) - [Front Floor Console Applique Replacement \(Equinox\)](#)

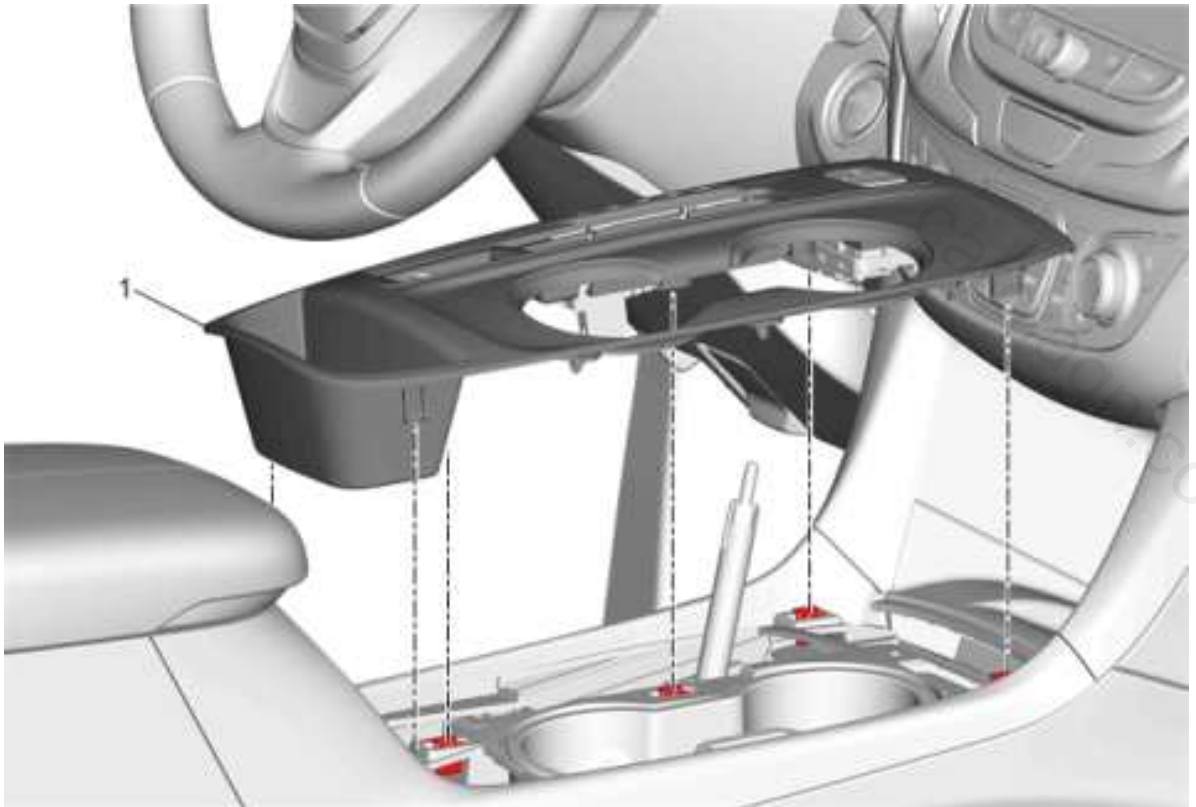


Fig. 1338: Front Floor Console Trim Plate (Equinox)
Courtesy of GENERAL MOTORS COMPANY

5. Install Front Floor Console Trim Plate (1) - [Front Floor Console Trim Plate Replacement \(Equinox\)](#)

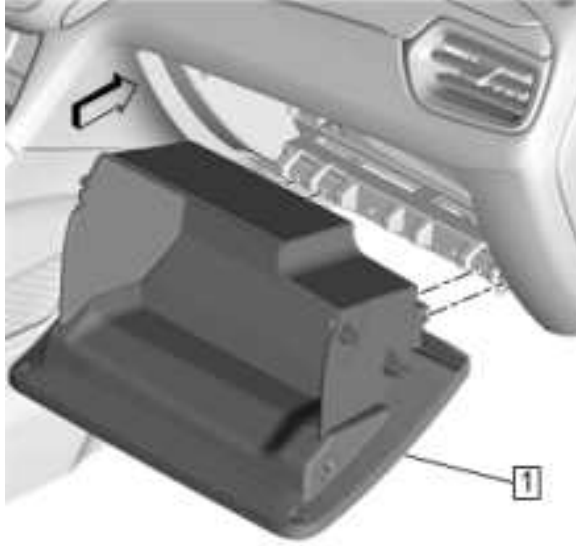


Fig. 1339: Instrument Panel Compartment Door
Courtesy of GENERAL MOTORS COMPANY

6. Install Instrument Panel Compartment Door (1) - [Instrument Panel Compartment Door Replacement \(Equinox\)](#)
7. Hazard Warning Switch - Connect the electrical connector.



Fig. 1340: Radio Control Assembly
Courtesy of GENERAL MOTORS COMPANY

8. Install Rear Radio Control Assembly (1) - [Radio Control Assembly Replacement \(Equinox\)](#)

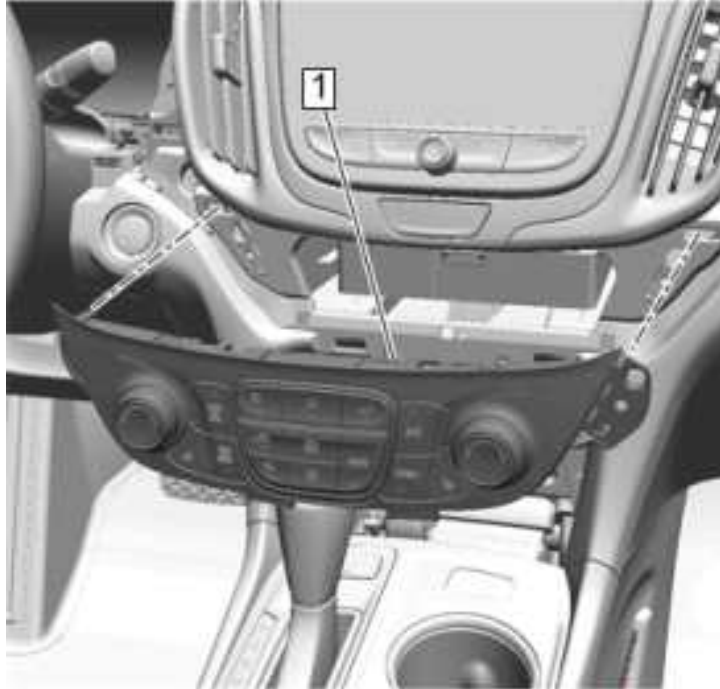


Fig. 1341: Heater and Air Conditioning User Interface Control
 Courtesy of GENERAL MOTORS COMPANY

9. Install Heater and Air Conditioning User Interface Control (1) - [Heater and Air Conditioning User Interface Control Replacement \(Equinox\)](#)

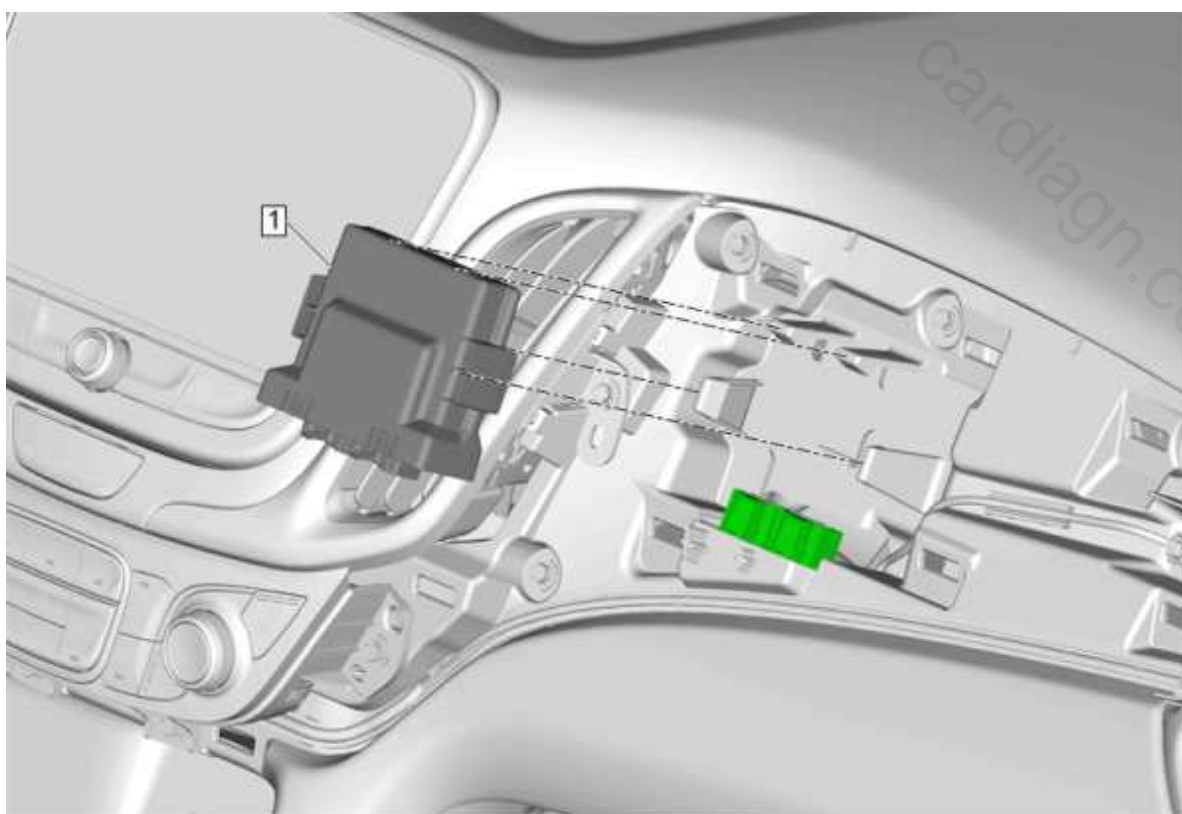


Fig. 1342: Serial Data Gateway Module
 Courtesy of GENERAL MOTORS COMPANY

10. Install Serial Data Gateway Module (1) - [Serial Data Gateway Module Replacement \(Equinox\)](#)



Fig. 1343: Right Side Instrument Panel Outer Air Outlet And Screw
 Courtesy of GENERAL MOTORS COMPANY

11. Install Instrument Panel Outer Air Outlet - Right Side (2) - **Instrument Panel Outer Air Outlet Replacement - Right Side (Equinox)**



Fig. 1344: Right Side Instrument Panel Center Air Outlet And Screw
 Courtesy of GENERAL MOTORS COMPANY

12. Install Instrument Panel Center Air Outlet - Right Side (2) - **Instrument Panel Center Air Outlet Replacement - Right Side (Equinox)**

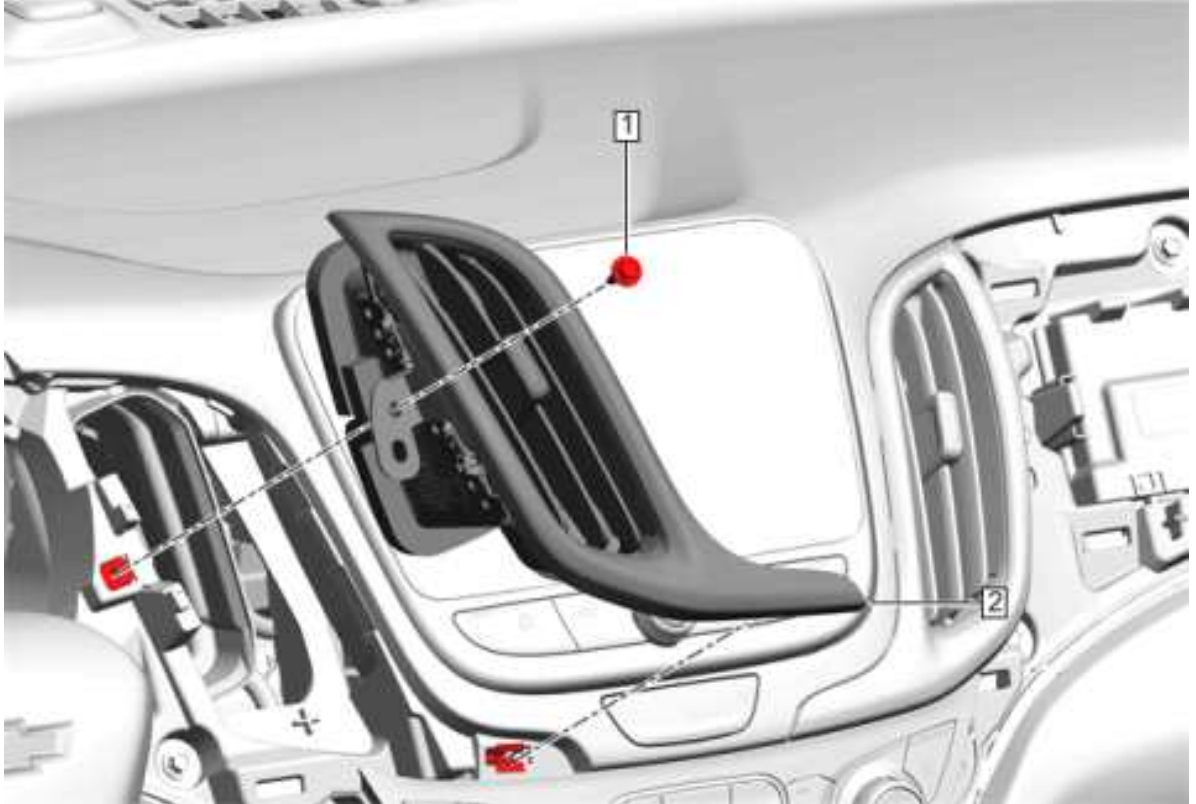


Fig. 1345: Left Side Instrument Panel Center Air Outlet And Screw
 Courtesy of GENERAL MOTORS COMPANY

13. Install Instrument Panel Center Air Outlet - Left Side (2) - **Instrument Panel Center Air Outlet Replacement - Left Side (Equinox)**

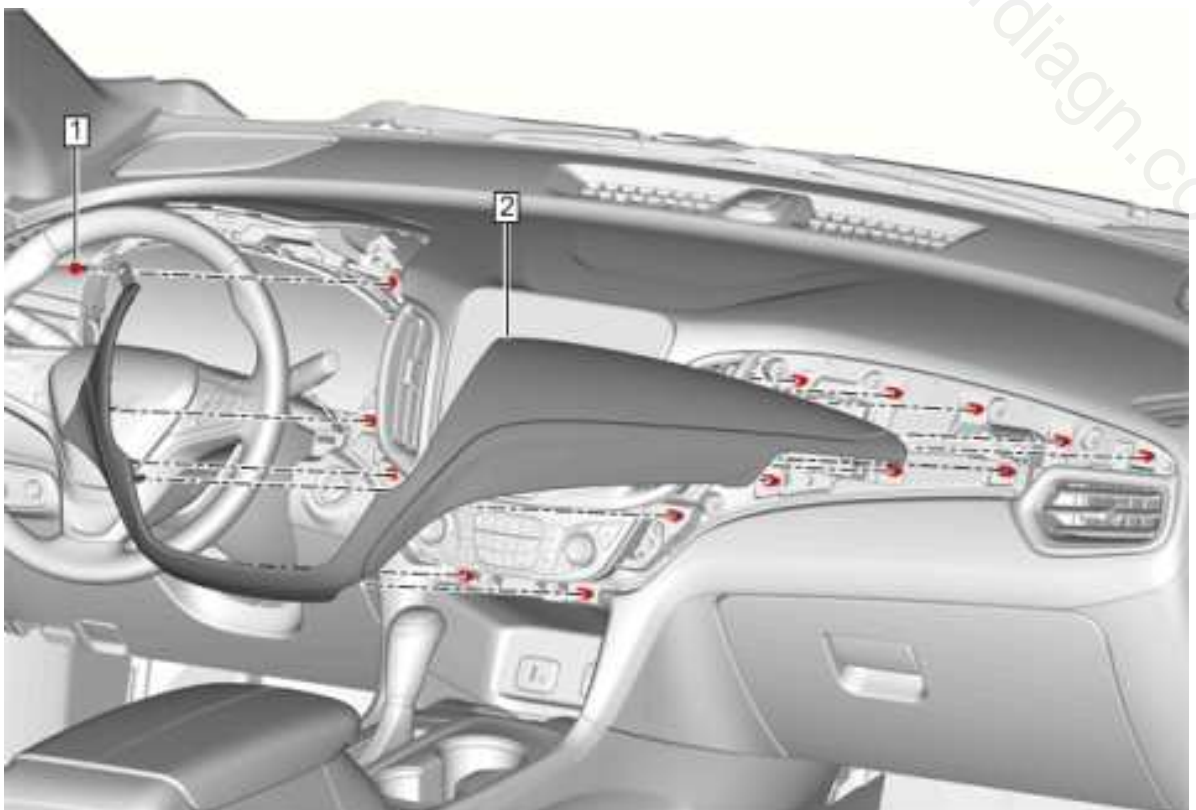


Fig. 1346: Right Side Instrument Panel Trim Pad
 Courtesy of GENERAL MOTORS COMPANY

14. Install Instrument Panel Trim Pad - Right Side (2) - **Instrument Panel Trim Pad Replacement - Right Side (Equinox)**

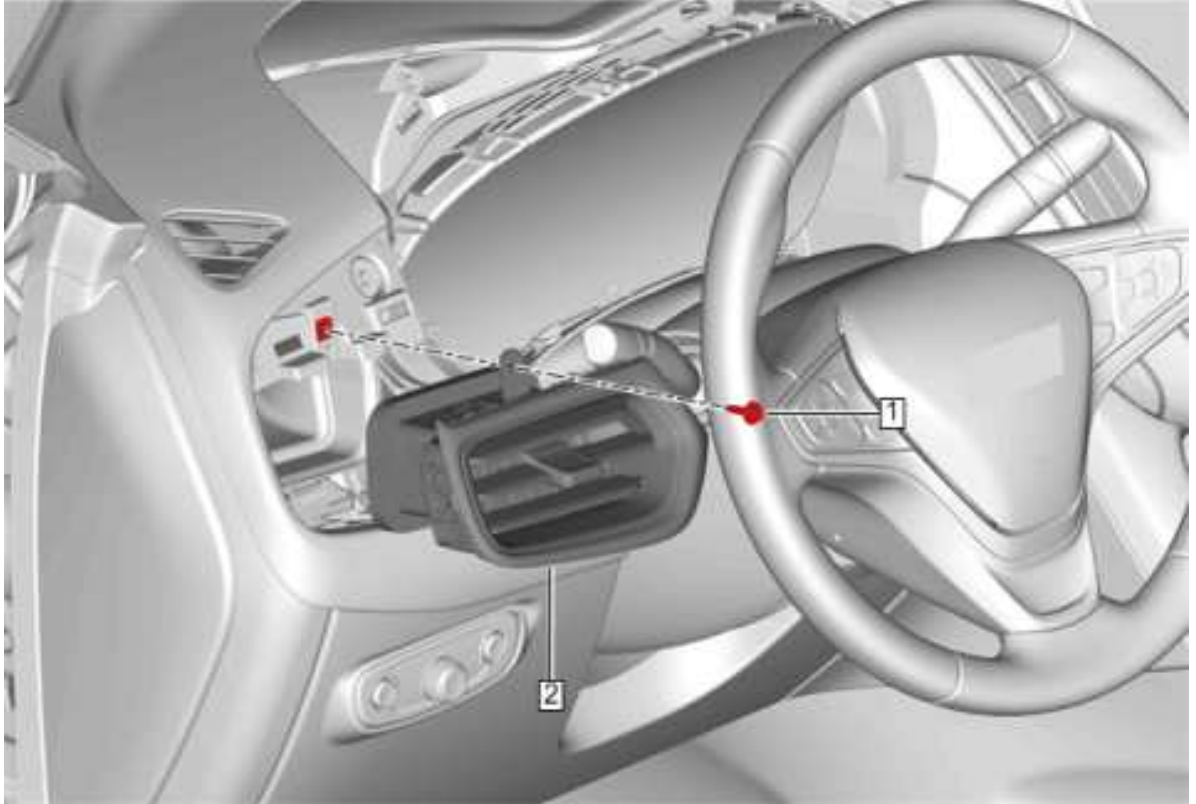


Fig. 1347: Left Side Instrument Panel Outer Air Outlet And Screw
 Courtesy of GENERAL MOTORS COMPANY

15. Install Instrument Panel Outer Air Outlet - Left Side (2) - [Instrument Panel Outer Air Outlet Replacement - Left Side \(Equinox\)](#)

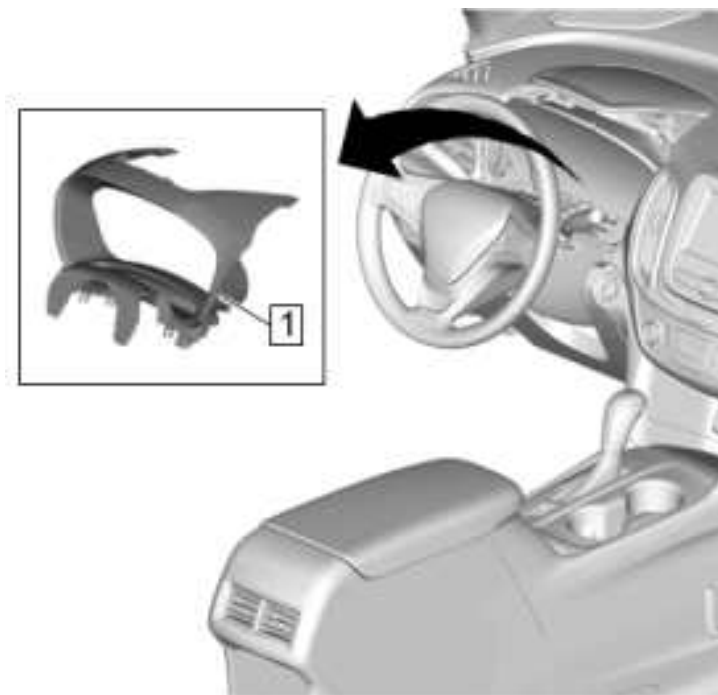


Fig. 1348: Instrument Panel Cluster Trim Plate
 Courtesy of GENERAL MOTORS COMPANY

16. Install Instrument Panel Cluster Trim Plate (1) - [Instrument Panel Cluster Trim Plate Replacement \(Equinox\)](#)



Fig. 1349: Left And Right Instrument Panel Outer Trim Cover
Courtesy of GENERAL MOTORS COMPANY

17. Install the left and right instrument panel outer trim cover (1). **Instrument Panel Outer Trim Cover Replacement (Equinox)**

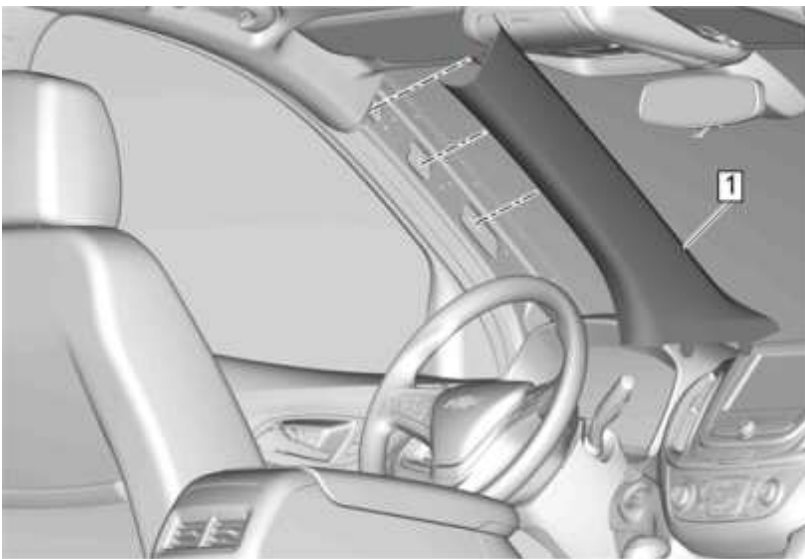


Fig. 1350: Windshield Garnish Molding Replacement (Equinox)
Courtesy of GENERAL MOTORS COMPANY

18. Install the left and right side windshield garnish molding (1). **Windshield Garnish Molding Replacement (Equinox)**

SIDE WINDOW DEFOGGER OUTLET DUCT REPLACEMENT - RIGHT SIDE (TERRAIN)

Removal Procedure

1. Remove the left and right side windshield garnish molding. [Windshield Garnish Molding Replacement \(Terrain\)](#)

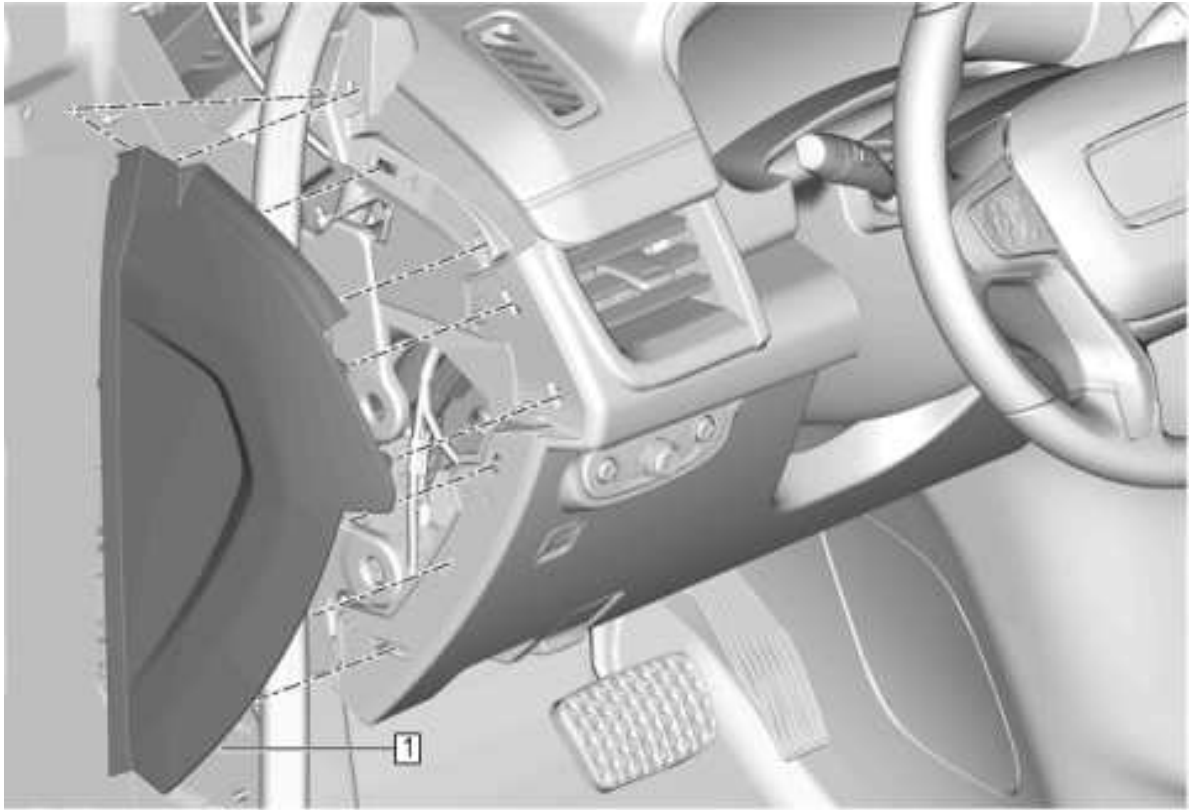


Fig. 1351: Instrument Panel Outer Trim Cover (Terrain)

Courtesy of GENERAL MOTORS COMPANY

2. Remove the left and right instrument panel outer trim cover (1). [Instrument Panel Outer Trim Cover Replacement \(Terrain\)](#)



Fig. 1352: Instrument Panel Cluster Trim Plate

Courtesy of GENERAL MOTORS COMPANY

3. Remove Instrument Panel Cluster Trim Plate (1) - [Instrument Panel Cluster Trim Plate Replacement \(Terrain\)](#)

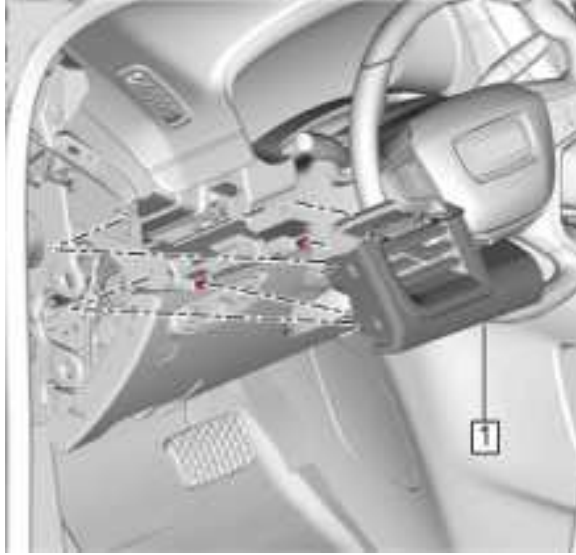


Fig. 1353: Left Side Instrument Panel Trim Pad
Courtesy of GENERAL MOTORS COMPANY

4. Remove Instrument Panel Trim Pad - Left Side (1) - **Instrument Panel Trim Pad Replacement - Left Side (Terrain)**

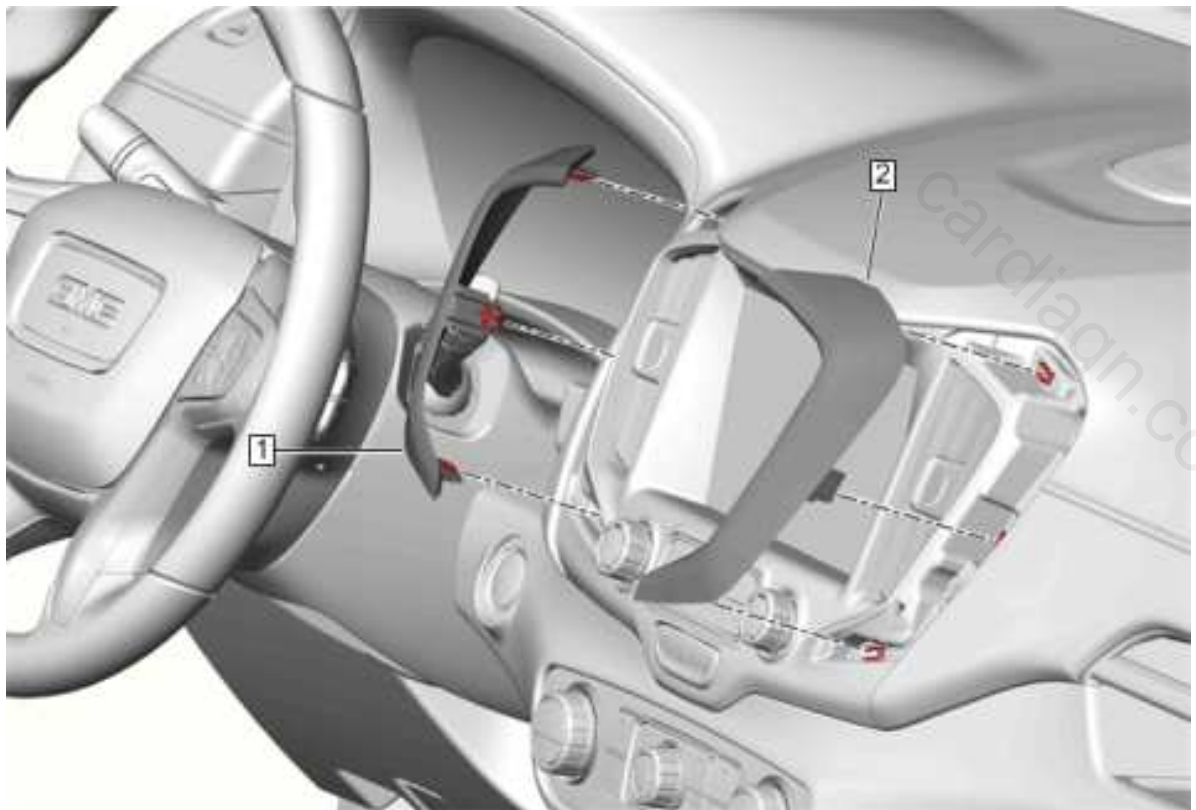


Fig. 1354: Instrument Panel Center Trim Plate Appliques
Courtesy of GENERAL MOTORS COMPANY

5. Remove Instrument Panel Center Trim Plate Applique - Left Side (1) - **Instrument Panel Center Trim Plate Applique Replacement (Terrain)**
6. Remove Instrument Panel Center Trim Plate Applique - Right Side (2) - **Instrument Panel Center Trim Plate Applique Replacement (Terrain)**



Fig. 1355: Front Floor Console Transmission Shift Opening Bezel
Courtesy of GENERAL MOTORS COMPANY

7. Remove Front Floor Console Transmission Shift Opening Bezel (1) - **Front Floor Console Transmission Shift Opening Bezel Replacement (Terrain)**.

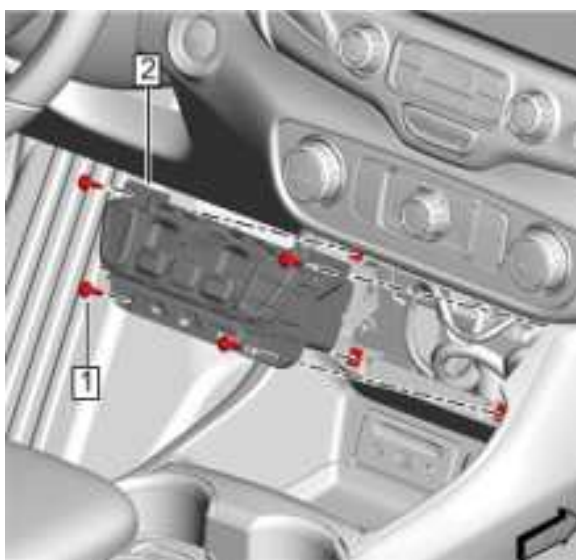


Fig. 1356: Automatic Transmission Control Bolts And Electronic Transmission Shift Control Pushbutton
Courtesy of GENERAL MOTORS COMPANY

8. Remove Electronic Transmission Shift Control Pushbutton (2) - **Electronic Transmission Shift Control Pushbutton Replacement**

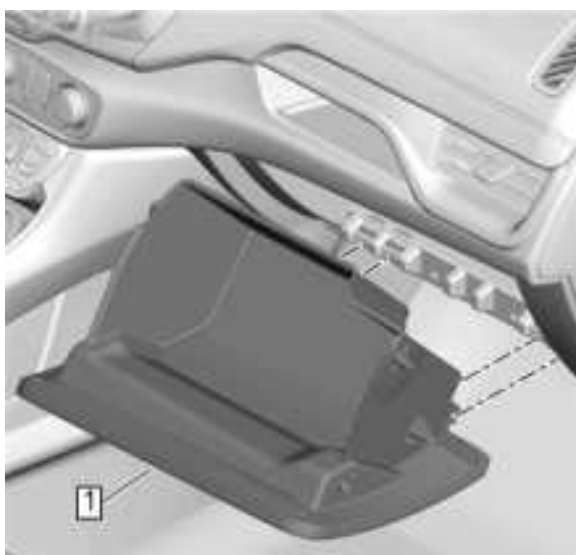


Fig. 1357: Instrument Panel Compartment Door
Courtesy of GENERAL MOTORS COMPANY

9. Remove Instrument Panel Compartment Door (1) - [Instrument Panel Compartment Door Replacement \(Terrain\)](#)

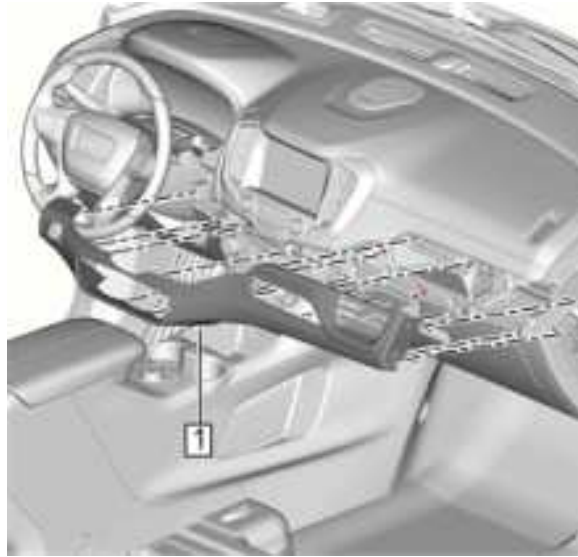


Fig. 1358: Right Side Instrument Panel Trim Pad
Courtesy of GENERAL MOTORS COMPANY

10. Remove Instrument Panel Trim Pad - Right Side (1) - [Instrument Panel Trim Pad Replacement - Right Side \(Terrain\)](#)

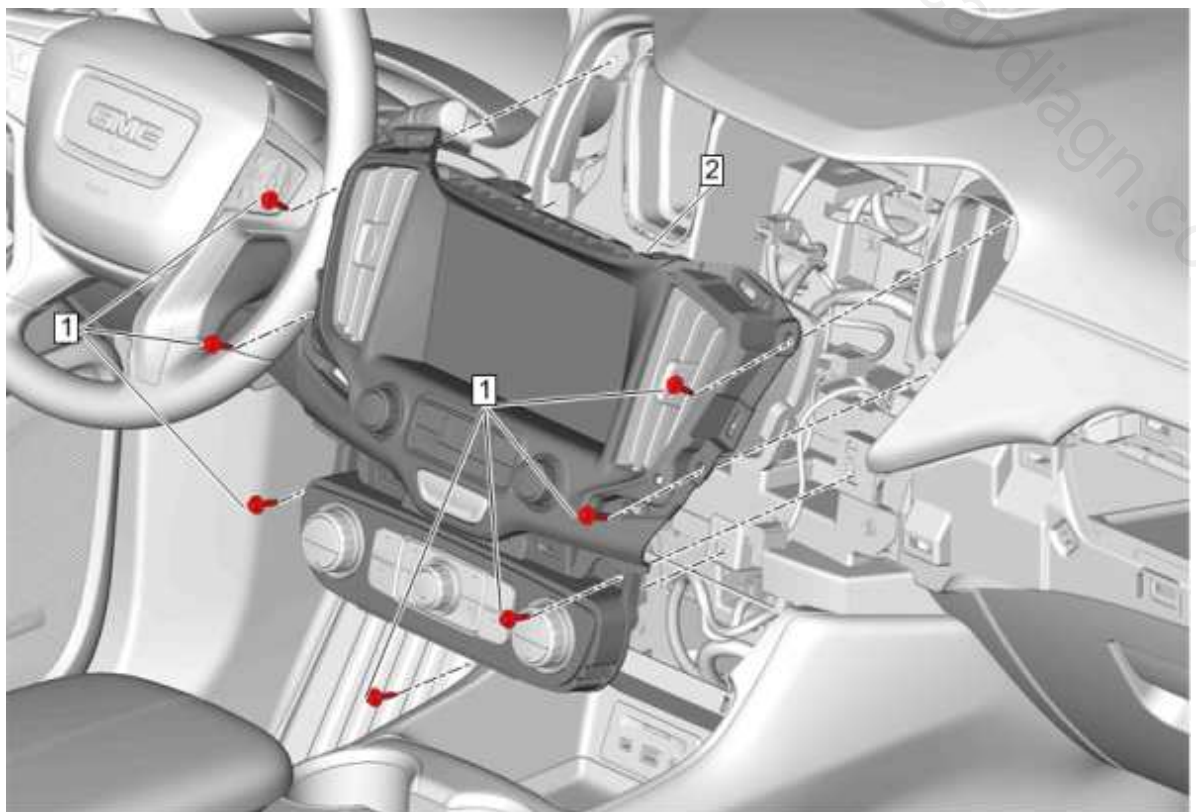


Fig. 1359: Radio Control Assembly And Screws
Courtesy of GENERAL MOTORS COMPANY

11. Remove Radio Control Assembly (2) - [Radio Control Assembly Replacement \(Terrain\)](#)
12. Disconnect all electrical connectors.



Fig. 1360: Radio Front Center Speaker
Courtesy of GENERAL MOTORS COMPANY

13. Remove Radio Front Center Speaker (2) [Radio Front Center Speaker Replacement \(Terrain\)](#)

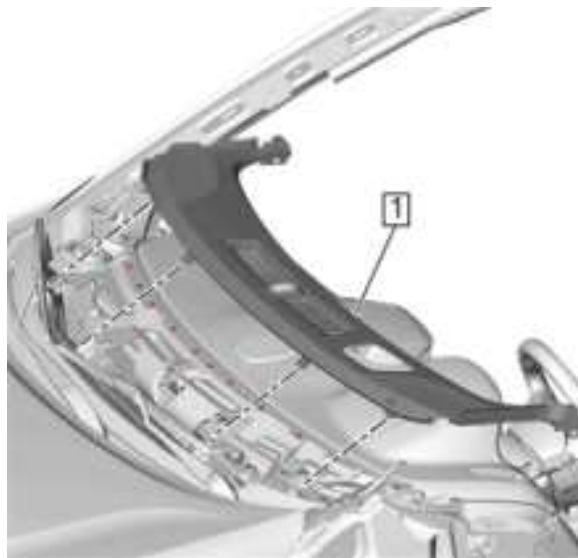


Fig. 1361: Instrument Panel Extension
Courtesy of GENERAL MOTORS COMPANY

14. Remove Instrument Panel Extension (1) - [Instrument Panel Extension Replacement \(Terrain\)](#)

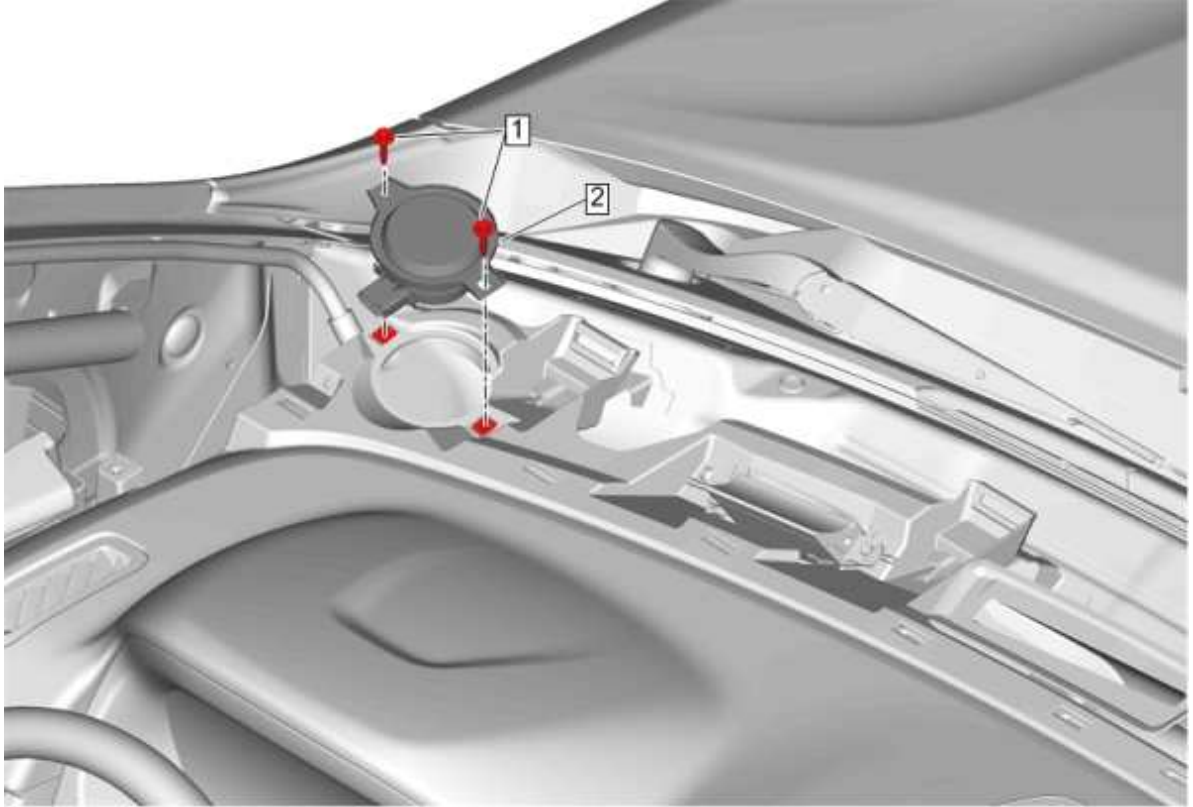


Fig. 1362: Radio Front Speaker

Courtesy of GENERAL MOTORS COMPANY

15. Remove the left and right side radio front speakers.(2) **Radio Front Speaker Replacement (Terrain)**

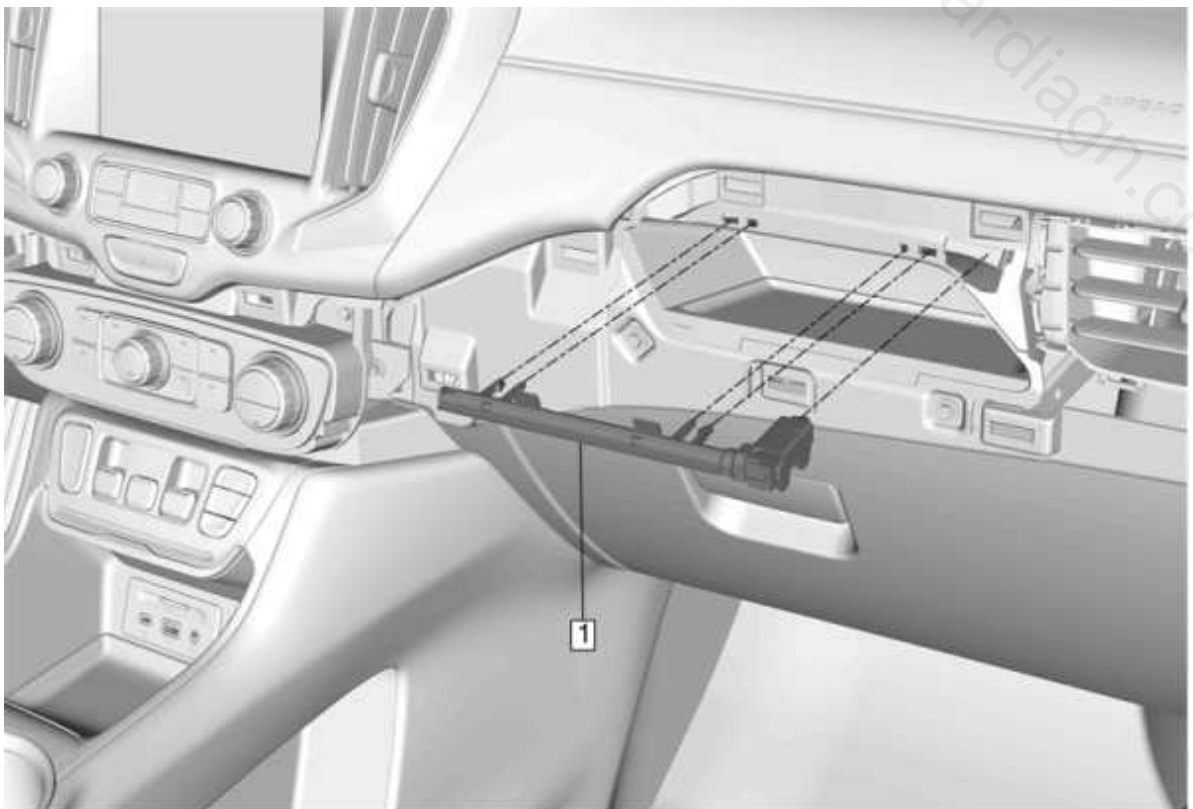


Fig. 1363: Instrument Panel Light Conductor Lamp

Courtesy of GENERAL MOTORS COMPANY

16. Remove Instrument Panel Light Conductor Lamp (1) - **Instrument Panel Light Conductor Lamp Replacement (GMC)**

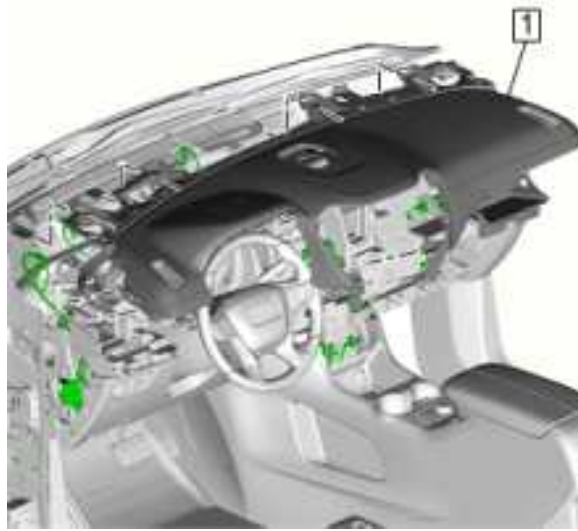


Fig. 1364: Instrument Panel Upper Trim Panel
Courtesy of GENERAL MOTORS COMPANY

17. Remove Instrument Panel Upper Trim Panel (1) - **Instrument Panel Upper Trim Panel Replacement (Terrain)**

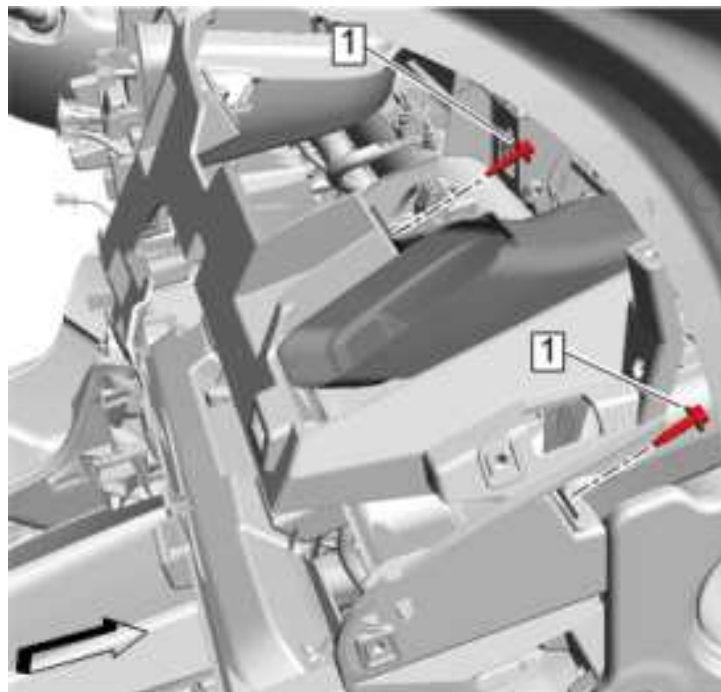


Fig. 1365: Side Window Defogger Outlet Duct Bolt
Courtesy of GENERAL MOTORS COMPANY

18. Remove Side Window Defogger Outlet Duct Bolt (1)

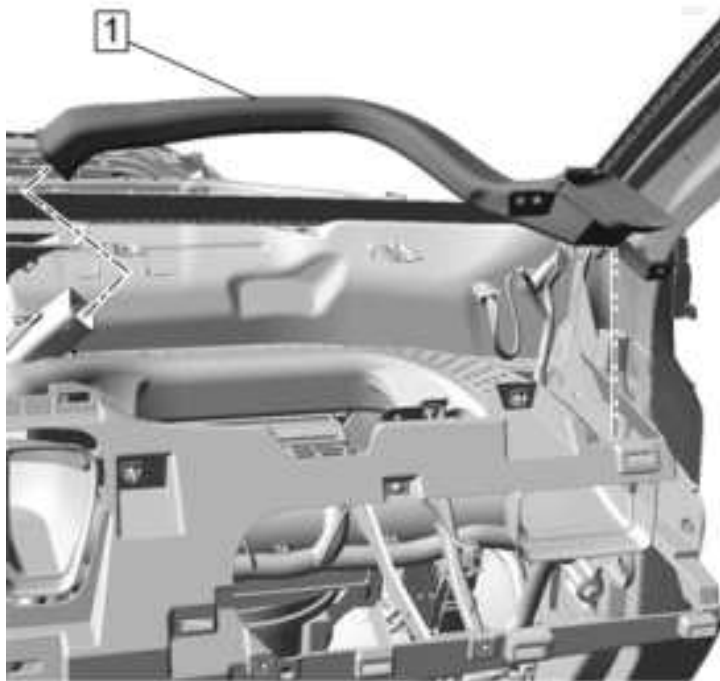


Fig. 1366: Right Side Window Defogger Outlet Duct
Courtesy of GENERAL MOTORS COMPANY

19. Remove Side Window Defogger Outlet Duct - Right Side (1)

Installation Procedure

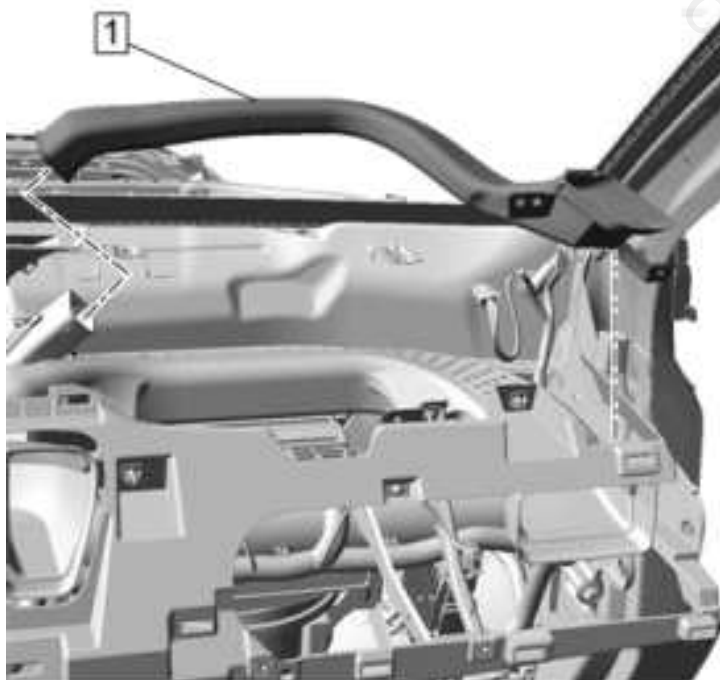


Fig. 1367: Right Side Window Defogger Outlet Duct
Courtesy of GENERAL MOTORS COMPANY

1. Install Side Window Defogger Outlet Duct - Right Side (1)

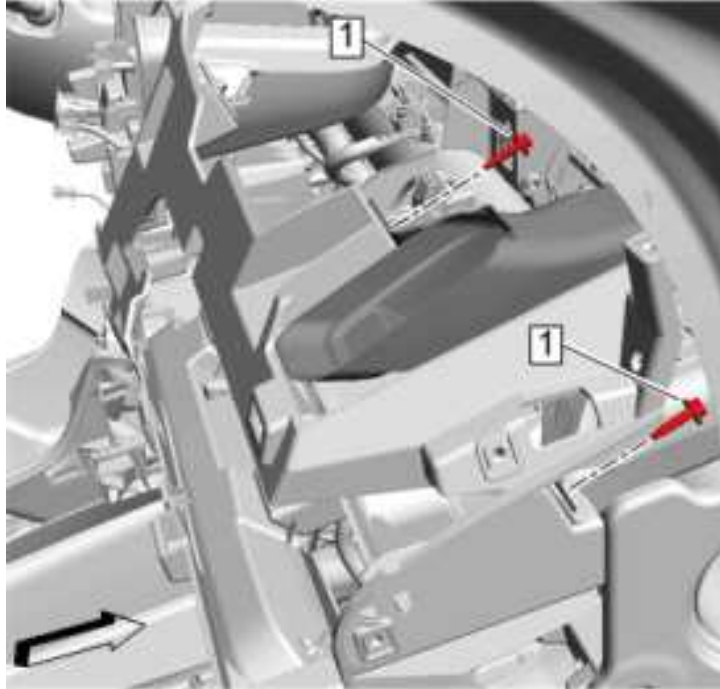


Fig. 1368: Side Window Defogger Outlet Duct Bolt
 Courtesy of GENERAL MOTORS COMPANY

CAUTION: Refer to [Fastener Caution](#) .

2. Install Side Window Defogger Outlet Duct Bolt (1) and tighten [2x] 2.5 N.m (22 lb in)

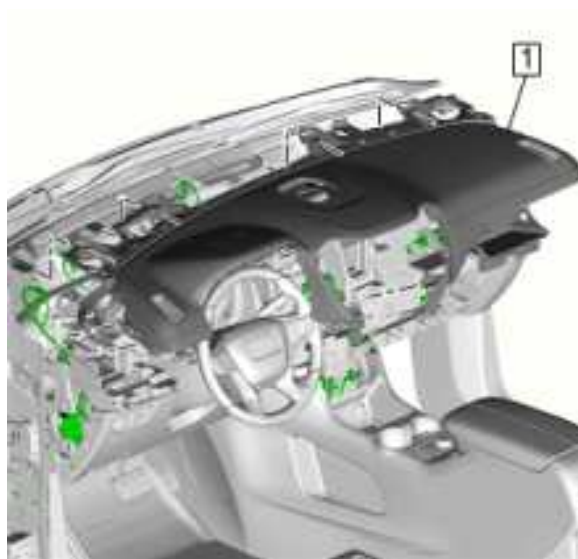


Fig. 1369: Instrument Panel Upper Trim Panel
 Courtesy of GENERAL MOTORS COMPANY

3. Install Instrument Panel Upper Trim Panel (1) - [Instrument Panel Upper Trim Panel Replacement \(Terrain\)](#)

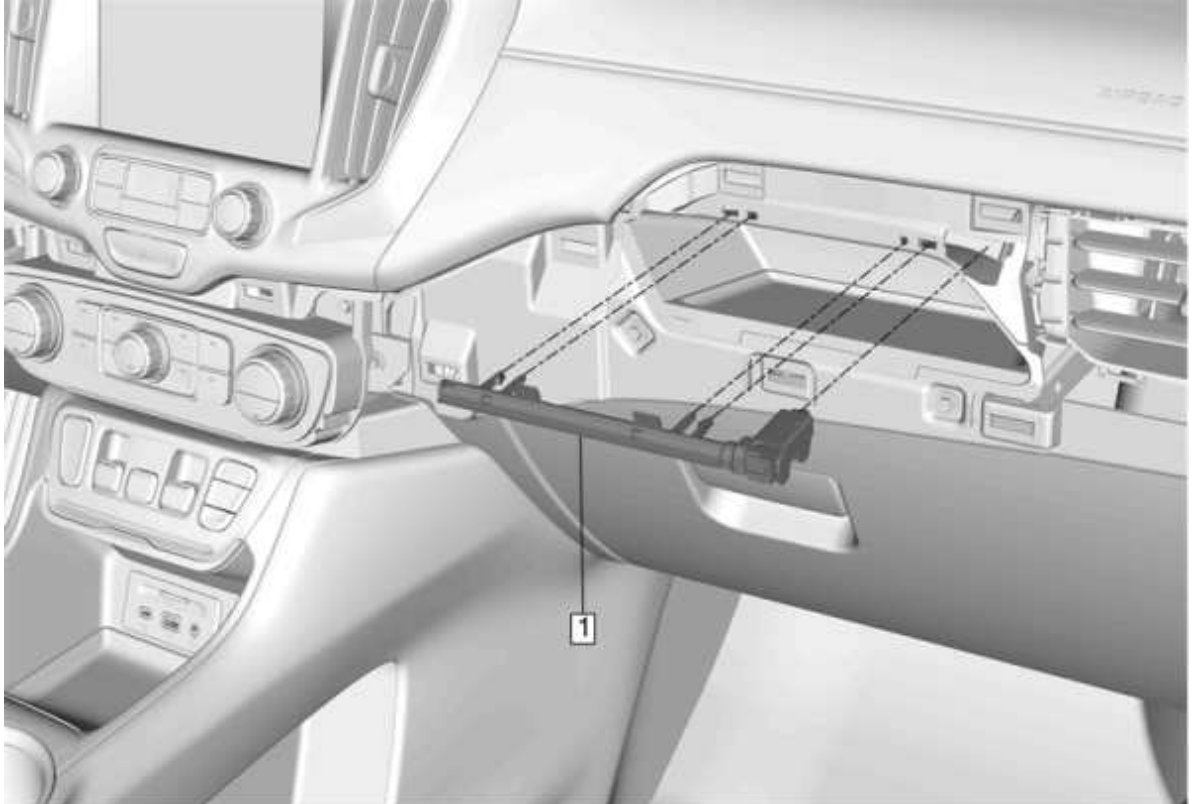


Fig. 1370: Instrument Panel Light Conductor Lamp
 Courtesy of GENERAL MOTORS COMPANY

4. Install Instrument Panel Light Conductor Lamp (1) - **Instrument Panel Light Conductor Lamp Replacement (GMC)**

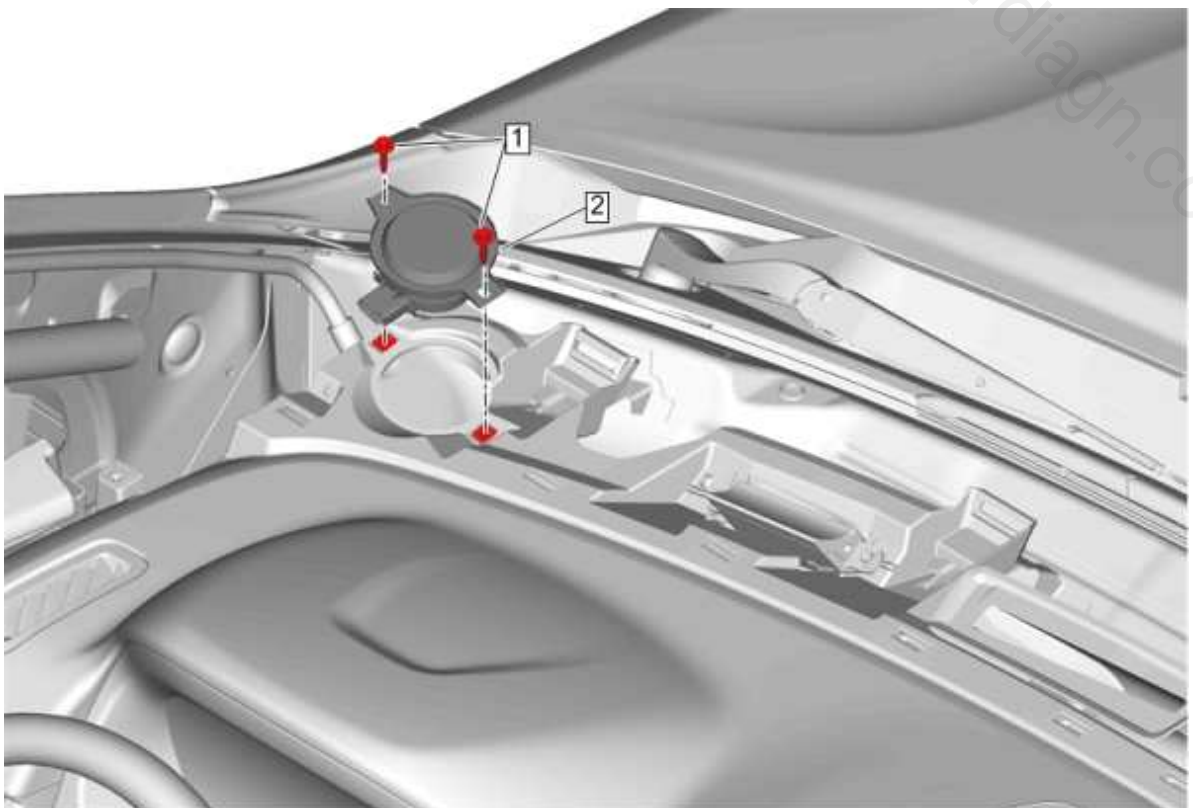


Fig. 1371: Radio Front Speaker
 Courtesy of GENERAL MOTORS COMPANY

5. Install the left and right side radio front speakers.(2)**Radio Front Speaker Replacement (Terrain)**



Fig. 1372: Instrument Panel Extension
Courtesy of GENERAL MOTORS COMPANY

6. Install Instrument Panel Extension (1) **Instrument Panel Extension Replacement (Terrain)**



Fig. 1373: Radio Front Center Speaker
Courtesy of GENERAL MOTORS COMPANY

7. Install Radio Front Center Speaker (2) **Radio Front Center Speaker Replacement (Terrain)**

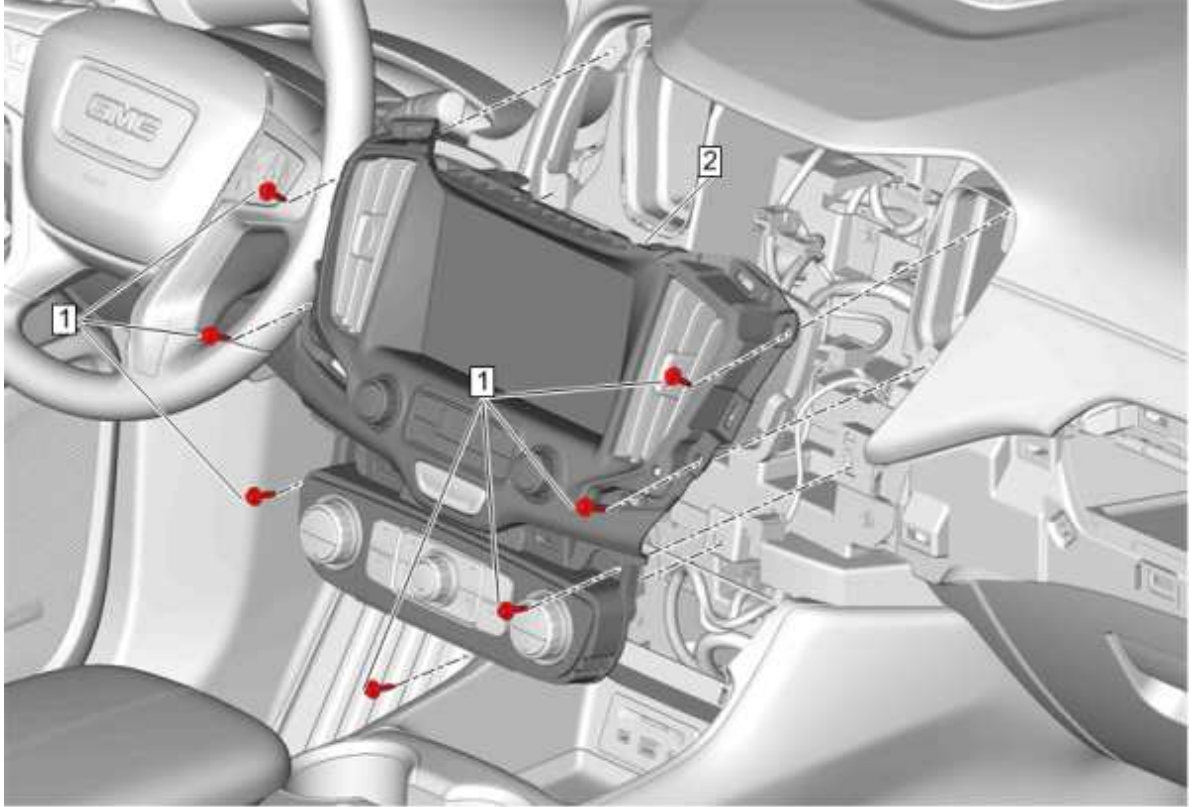


Fig. 1374: Radio Control Assembly And Screws
Courtesy of GENERAL MOTORS COMPANY

8. Connect the electrical connectors.
9. Install Radio Control Assembly (2) - [Radio Control Assembly Replacement \(Terrain\)](#)

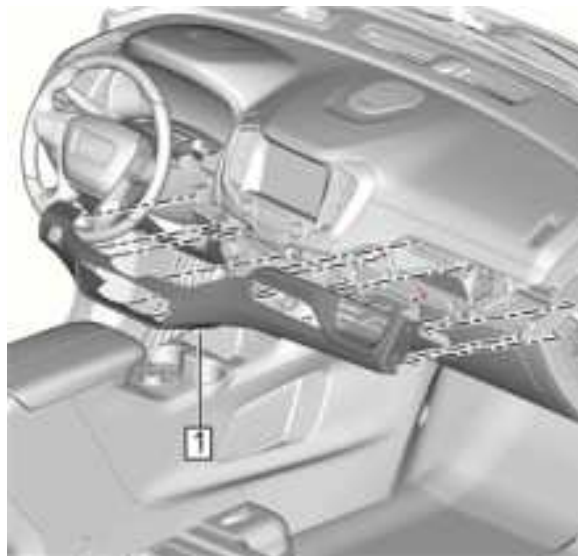


Fig. 1375: Right Side Instrument Panel Trim Pad
Courtesy of GENERAL MOTORS COMPANY

10. Install Instrument Panel Trim Pad - Right Side (1) - [Instrument Panel Trim Pad Replacement - Right Side \(Terrain\)](#)

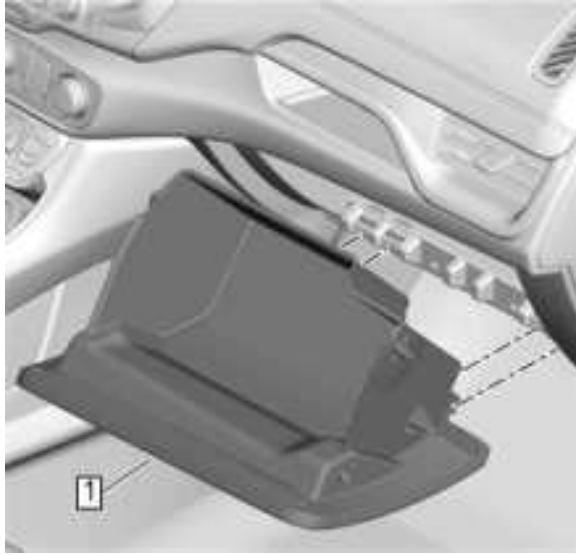


Fig. 1376: Instrument Panel Compartment Door
Courtesy of GENERAL MOTORS COMPANY

11. Install Instrument Panel Compartment Door (1) **Instrument Panel Compartment Door Replacement (Terrain)**

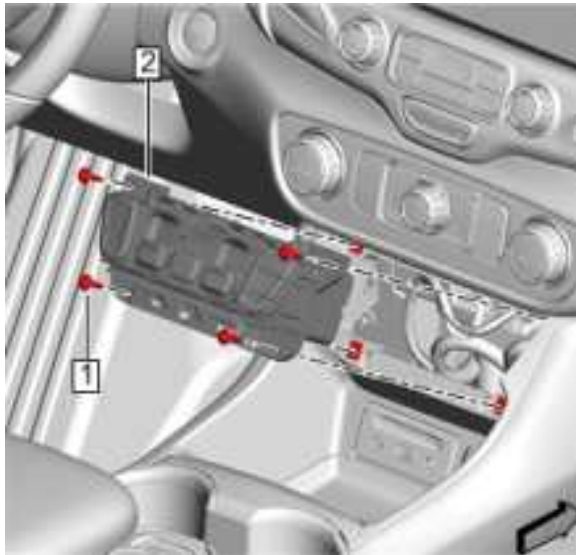


Fig. 1377: Automatic Transmission Control Bolts And Electronic Transmission Shift Control Pushbutton
Courtesy of GENERAL MOTORS COMPANY

12. Install Electronic Transmission Shift Control Pushbutton (2) - **Electronic Transmission Shift Control Pushbutton Replacement**



Fig. 1378: Front Floor Console Transmission Shift Opening Bezel
Courtesy of GENERAL MOTORS COMPANY

13. Install Front Floor Console Transmission Shift Opening Bezel (1) - **Front Floor Console Transmission Shift Opening Bezel Replacement (Terrain)**

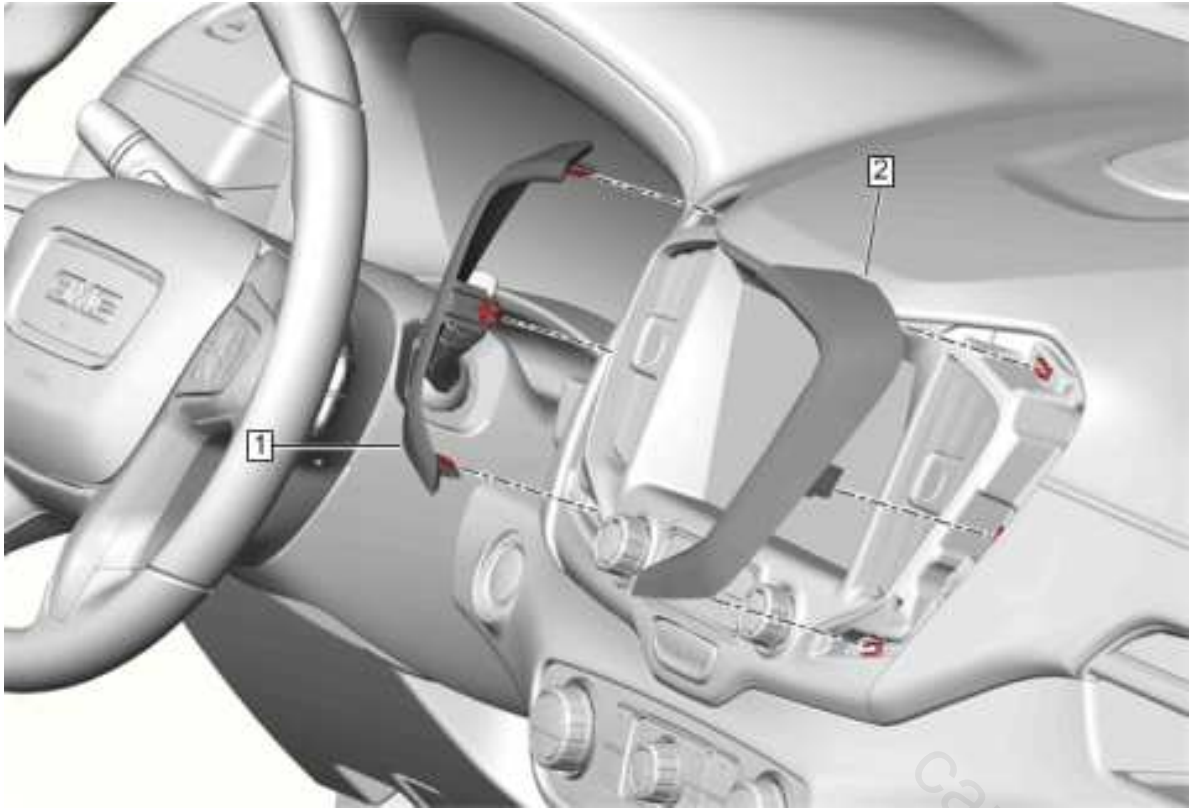


Fig. 1379: Instrument Panel Center Trim Plate Appliques
Courtesy of GENERAL MOTORS COMPANY

14. Install Instrument Panel Center Trim Plate Applique - Left Side (1) - **Instrument Panel Center Trim Plate Applique Replacement (Terrain)**
15. Install Instrument Panel Center Trim Plate Applique - Right Side (2) - **Instrument Panel Center Trim Plate Applique Replacement (Terrain)**



Fig. 1380: Left Side Instrument Panel Trim Pad
Courtesy of GENERAL MOTORS COMPANY

16. Install Instrument Panel Trim Pad - Left Side (1) - **Instrument Panel Trim Pad Replacement - Left Side (Terrain)**



Fig. 1381: Instrument Panel Cluster Trim Plate
Courtesy of GENERAL MOTORS COMPANY

17. Install Instrument Panel Cluster Trim Plate (1) - **Instrument Panel Cluster Trim Plate Replacement (Terrain)**

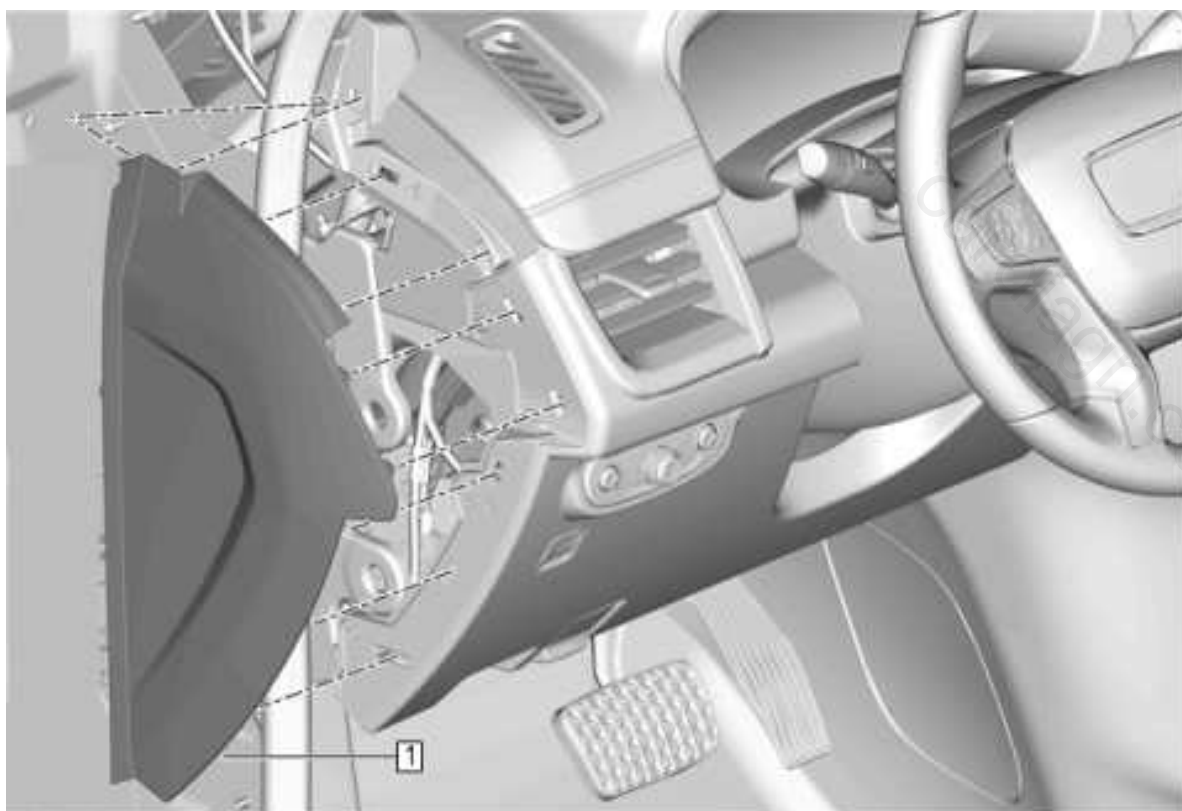


Fig. 1382: Instrument Panel Outer Trim Cover (Terrain)
Courtesy of GENERAL MOTORS COMPANY

18. Install the left and right instrument panel outer trim cover (1). **Instrument Panel Outer Trim Cover Replacement (Terrain)**
19. Install the left and right side windshield garnish molding. **Windshield Garnish Molding Replacement (Terrain)**

FLOOR REAR AIR OUTLET DUCT REPLACEMENT - LEFT SIDE (EQUINOX)

Removal Procedure

1. Remove Drivers Seat and Passengers Seat - **Driver or Passenger Seat Removal and Installation**

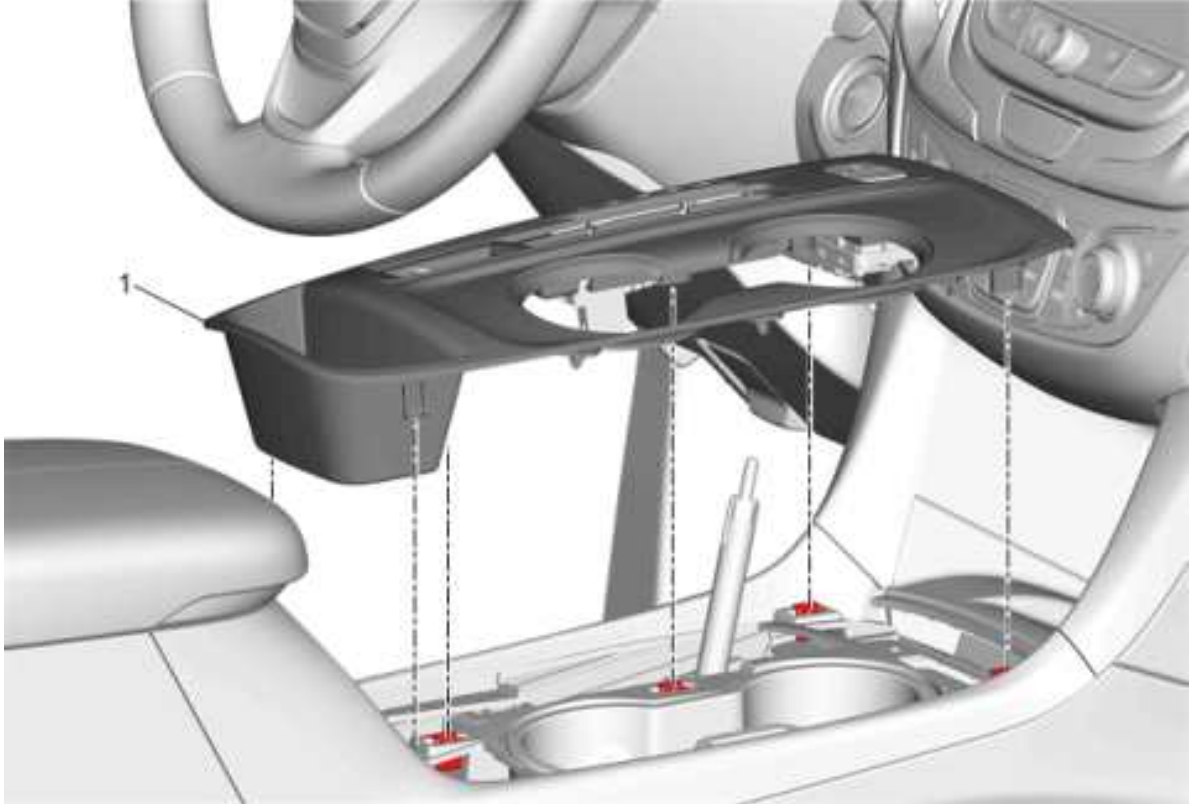


Fig. 1383: Front Floor Console Trim Plate (Equinox)
Courtesy of GENERAL MOTORS COMPANY

2. Remove Front Floor Console Trim Plate (1) - [Front Floor Console Trim Plate Replacement \(Equinox\)](#)

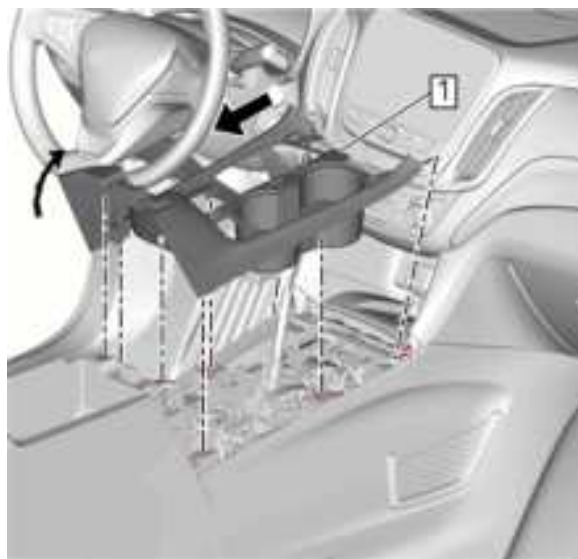


Fig. 1384: Front Floor Console Applique
Courtesy of GENERAL MOTORS COMPANY

3. Remove Front Floor Console Applique (1) - [Front Floor Console Applique Replacement \(Equinox\)](#)

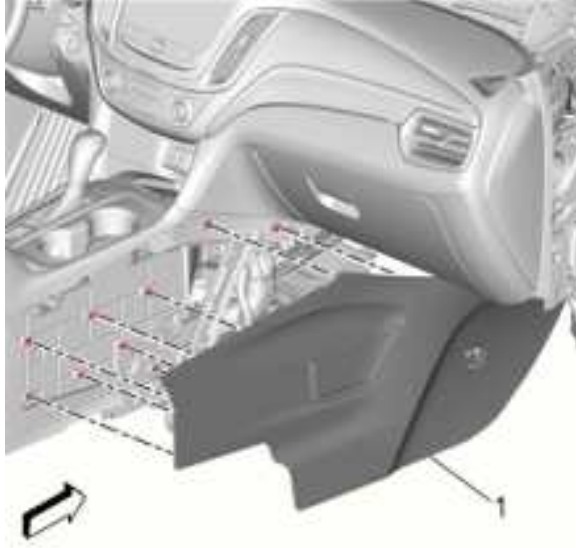


Fig. 1385: Right Front Floor Console Extension Panel
 Courtesy of GENERAL MOTORS COMPANY

4. Remove Front Floor Console Extension Panel - Right (1) - **Front Floor Console Extension Panel Replacement - Right Side (Equinox)**



Fig. 1386: Left Front Floor Console Extension Panel
 Courtesy of GENERAL MOTORS COMPANY

5. Remove Front Floor Console Extension Panel - Left (1) - **Front Floor Console Extension Panel Replacement - Left Side (Equinox)**

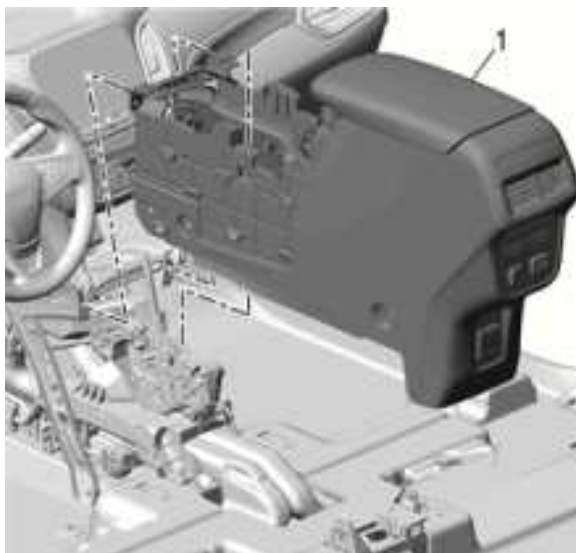


Fig. 1387: Front Floor Console
 Courtesy of GENERAL MOTORS COMPANY

6. Remove Front Floor Console (1) - [Front Floor Console Replacement \(Equinox\)](#)
7. Disconnect the electrical connectors.

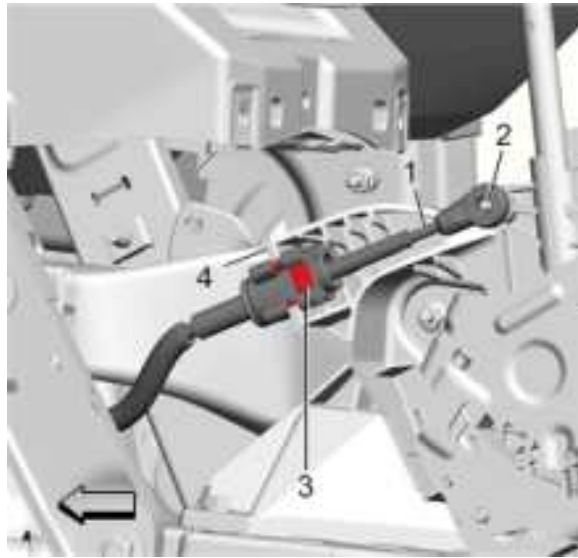


Fig. 1388: Range Selector Lever Cable Components
Courtesy of GENERAL MOTORS COMPANY

8. Remove Range Selector Lever Cable (1) @Automatic Transmission Control - [Range Selector Lever Cable Replacement](#)



Fig. 1389: Automatic Transmission Control And Automatic Transmission Control Bracket Assembly
Courtesy of GENERAL MOTORS COMPANY

9. Remove the automatic transmission control and automatic transmission control bracket as assembly.(3)
[Transmission Control Bracket Replacement](#)

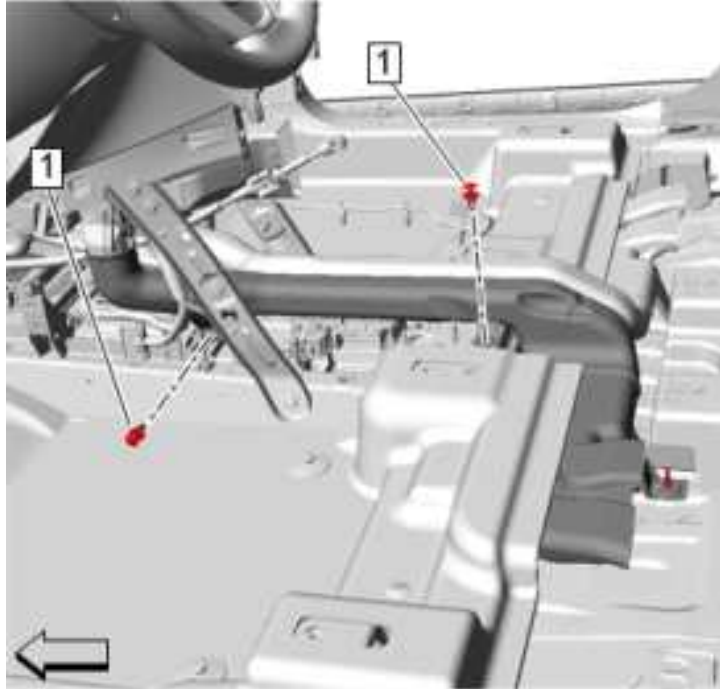


Fig. 1390: Push Pin

Courtesy of GENERAL MOTORS COMPANY

10. Remove Push Pin (1) [2x]
11. Pull back the rear carpet to access the floor rear air outlet duct.
12. Pull back the drive side front carpet to access the floor rear air outlet duct.

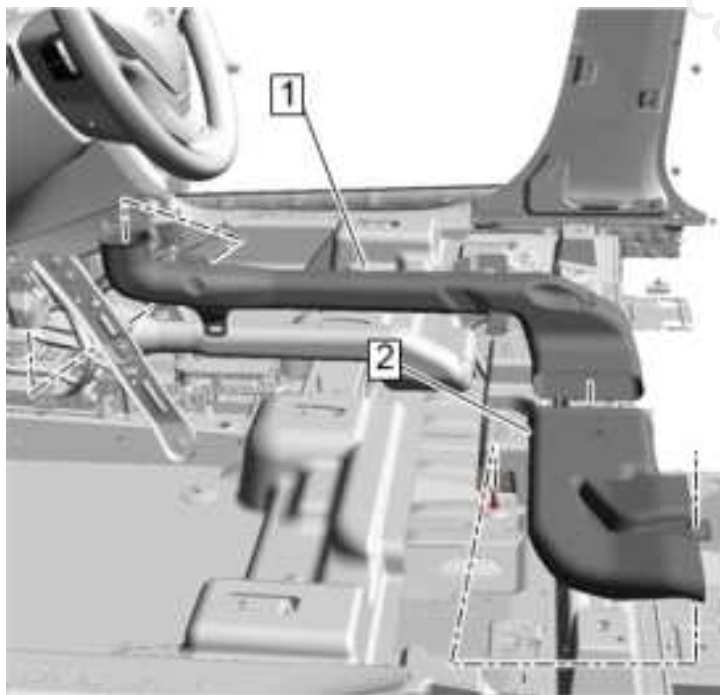


Fig. 1391: Floor Rear Air Outlet Duct

Courtesy of GENERAL MOTORS COMPANY

13. Remove Floor Rear Air Outlet Duct (1)
14. Remove Floor Rear Air Outlet Duct- Front (1) @Floor Rear Air Outlet Duct- Rear (2)

Installation Procedure

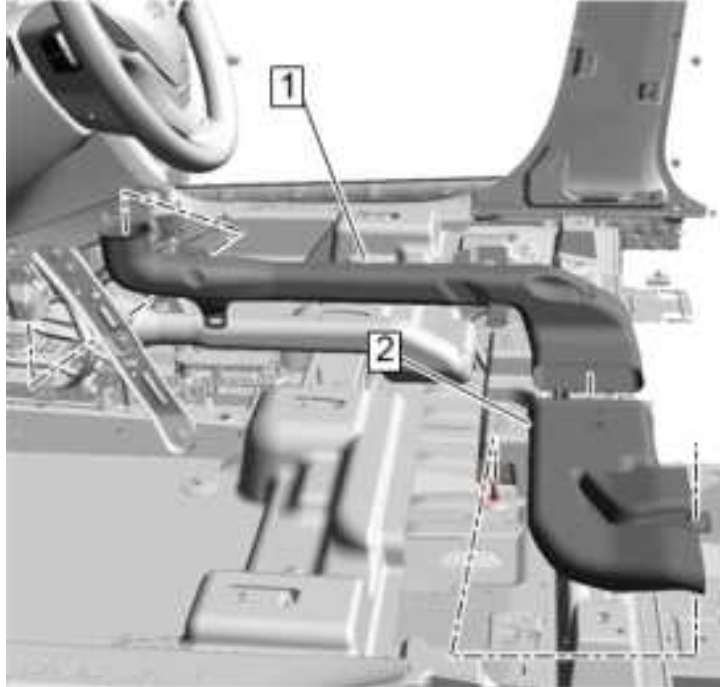


Fig. 1392: Floor Rear Air Outlet Duct

Courtesy of GENERAL MOTORS COMPANY

1. Install Floor Rear Air Outlet Duct- Front (1) @Floor Rear Air Outlet Duct- Rear (2)
2. Install Floor Rear Air Outlet Duct (1)
3. Reset the drive side front carpet to its original position.
4. Reset the rear carpet to its original position.

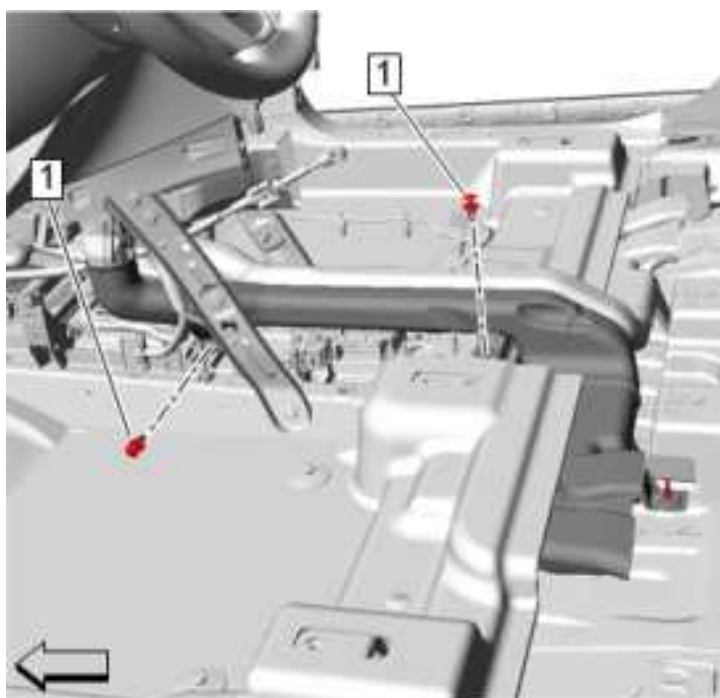


Fig. 1393: Push Pin

Courtesy of GENERAL MOTORS COMPANY

5. Install Push Pin (1) [2x]



Fig. 1394: Automatic Transmission Control And Automatic Transmission Control Bracket Assembly
 Courtesy of GENERAL MOTORS COMPANY

6. Install the automatic transmission control and automatic transmission control bracket assembly. (3)
Transmission Control Bracket Replacement

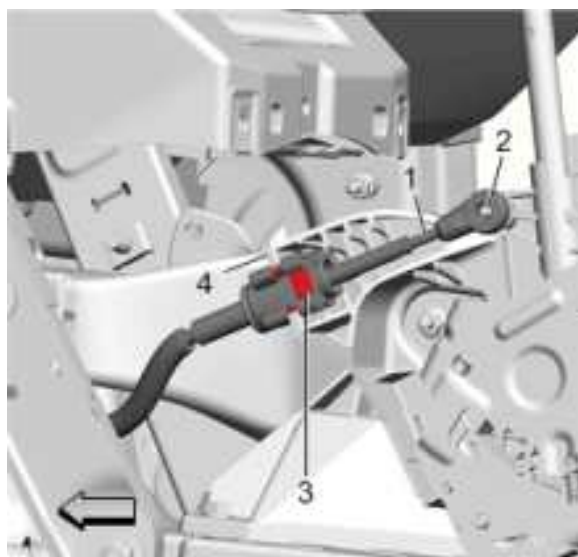


Fig. 1395: Range Selector Lever Cable Components
 Courtesy of GENERAL MOTORS COMPANY

7. Install Range Selector Lever Cable (1) @Automatic Transmission Control - Range Selector Lever Cable Replacement

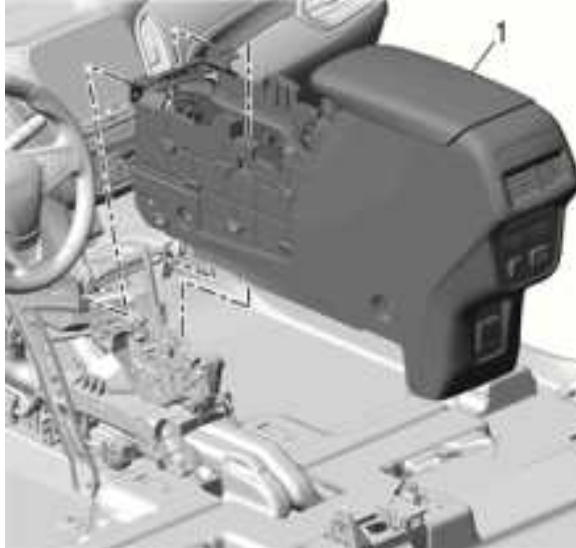


Fig. 1396: Front Floor Console

Courtesy of GENERAL MOTORS COMPANY

8. Connect the electrical connectors.
9. Install Front Floor Console (1) - [Front Floor Console Replacement \(Equinox\)](#)



Fig. 1397: Left Front Floor Console Extension Panel

Courtesy of GENERAL MOTORS COMPANY

10. Install Front Floor Console Extension Panel - Left (1) - [Front Floor Console Extension Panel Replacement - Left Side \(Equinox\)](#)

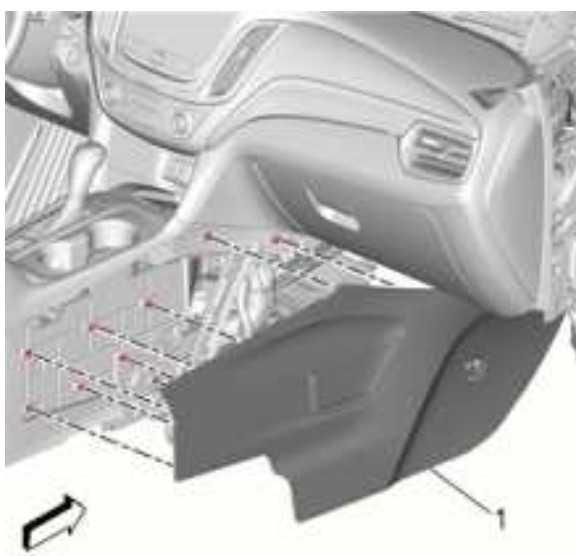


Fig. 1398: Right Front Floor Console Extension Panel

Courtesy of GENERAL MOTORS COMPANY

11. Install Front Floor Console Extension Panel - Right (1) - [Front Floor Console Extension Panel Replacement - Right Side \(Equinox\)](#).

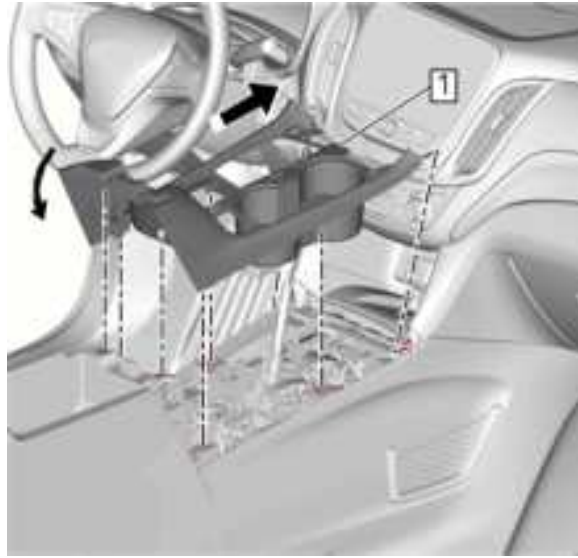


Fig. 1399: Front Floor Console Applique
Courtesy of GENERAL MOTORS COMPANY

12. Install Front Floor Console Applique (1) - [Front Floor Console Applique Replacement \(Equinox\)](#).

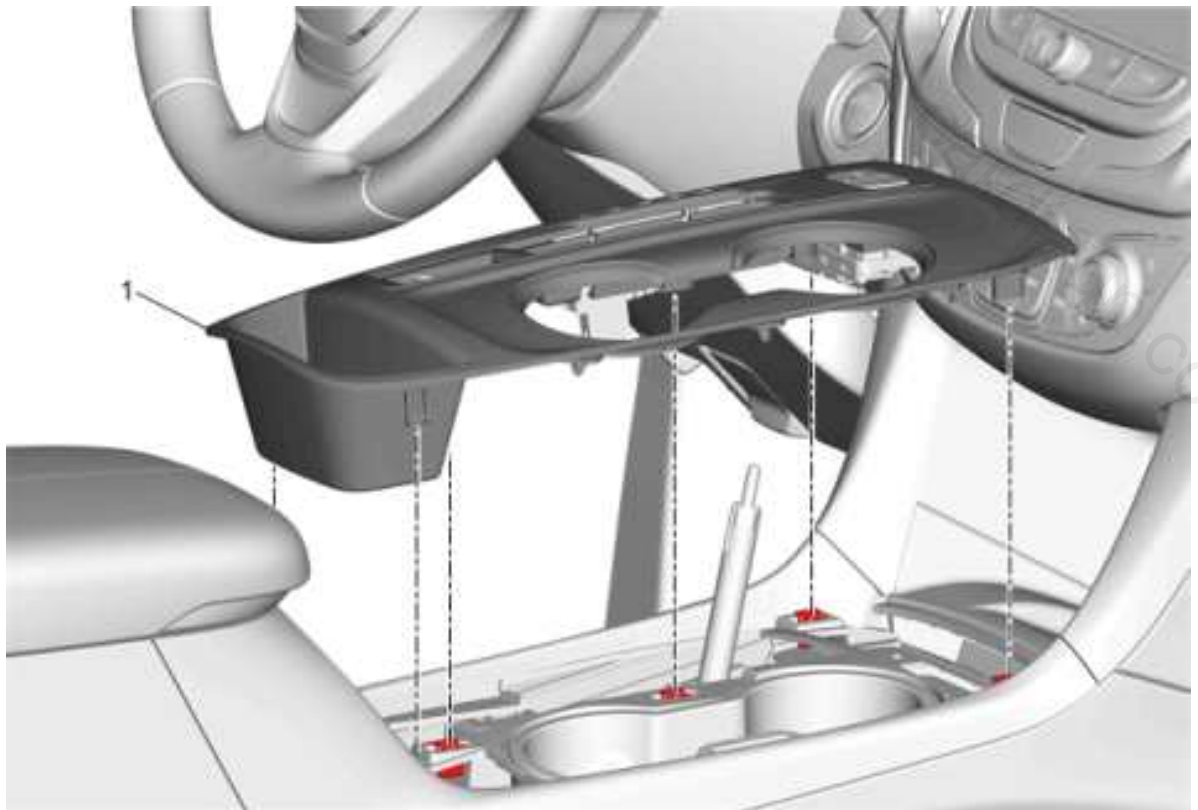


Fig. 1400: Front Floor Console Trim Plate (Equinox)
Courtesy of GENERAL MOTORS COMPANY

13. Install Front Floor Console Trim Plate (1) - [Front Floor Console Trim Plate Replacement \(Equinox\)](#)
14. Install Drivers Seat and Passengers Seat - [Driver or Passenger Seat Removal and Installation](#)

FLOOR REAR AIR OUTLET DUCT REPLACEMENT - LEFT SIDE (TERRAIN)

Removal Procedure

1. Remove Drivers Seat and Passengers Seat - [Driver or Passenger Seat Removal and Installation](#)

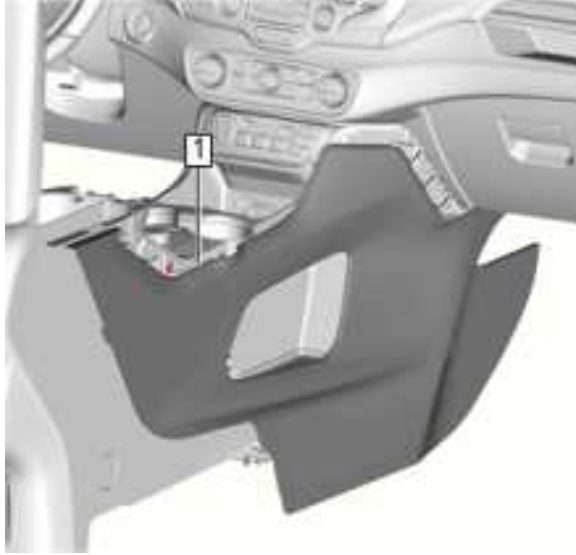


Fig. 1401: Right Front Floor Console Extension Panel
Courtesy of GENERAL MOTORS COMPANY

2. Remove Front Floor Console Extension Panel - Right (1) - **Front Floor Console Extension Panel Replacement - Right Side (Terrain)**



Fig. 1402: Left Front Floor Console Extension Panel
Courtesy of GENERAL MOTORS COMPANY

3. Remove Front Floor Console Extension Panel - Left (1) - **Front Floor Console Extension Panel Replacement - Left Side (Terrain)**

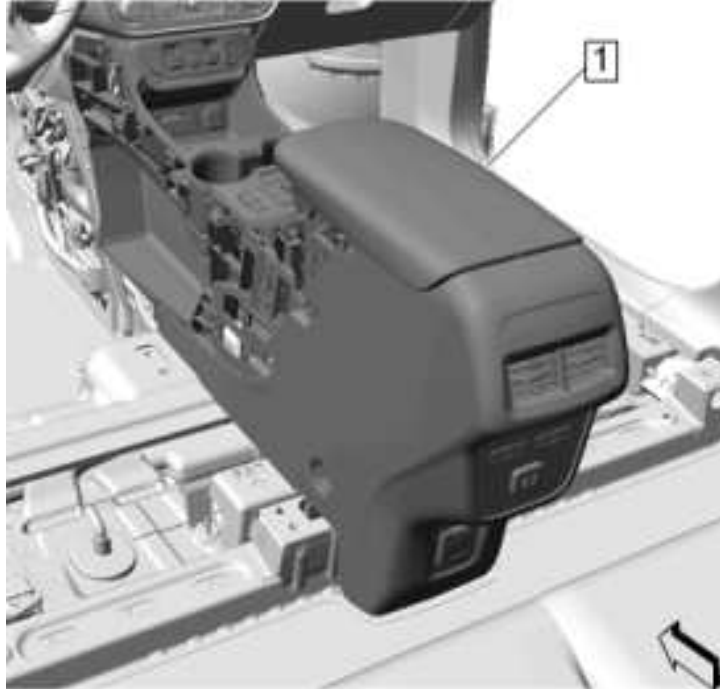


Fig. 1403: Front Floor Console

Courtesy of GENERAL MOTORS COMPANY

4. Remove Front Floor Console (1) - **Front Floor Console Replacement (Terrain)**
5. Disconnect the electrical connectors.

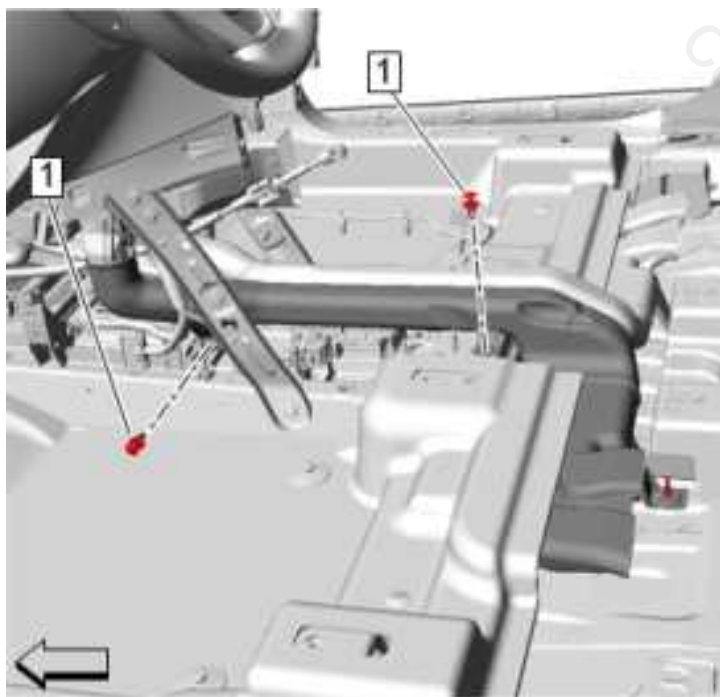


Fig. 1404: Push Pin

Courtesy of GENERAL MOTORS COMPANY

6. Remove Push Pin (1) [2x]
7. Pull back the rear carpet to access the floor rear air outlet duct.
8. Pull back the drive side front carpet to access the floor rear air outlet duct.

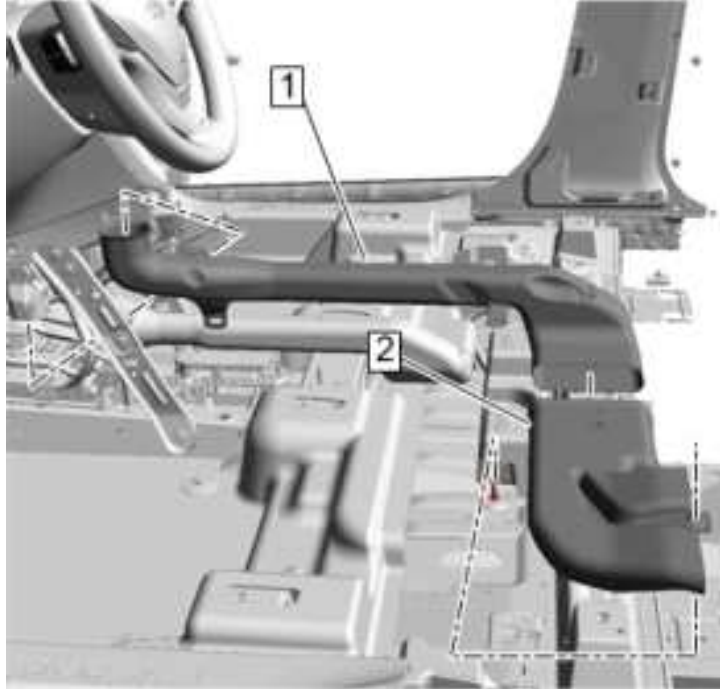


Fig. 1405: Floor Rear Air Outlet Duct

Courtesy of GENERAL MOTORS COMPANY

9. Remove Floor Rear Air Outlet Duct (1)
10. Remove Floor Rear Air Outlet Duct- Front (1) @Floor Rear Air Outlet Duct- Rear (2)

Installation Procedure

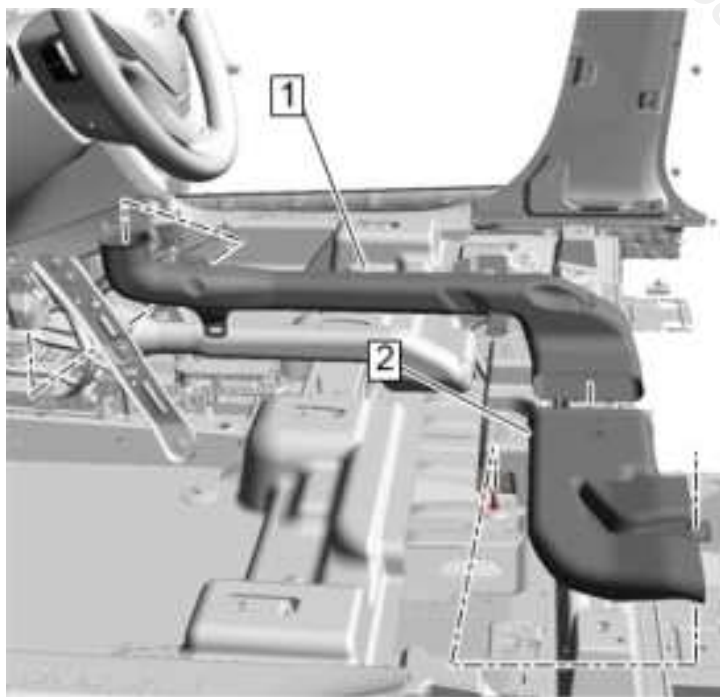


Fig. 1406: Floor Rear Air Outlet Duct

Courtesy of GENERAL MOTORS COMPANY

1. Install Floor Rear Air Outlet Duct- Front (1) @Floor Rear Air Outlet Duct- Rear (2)
2. Floor Rear Air Outlet Duct (1)
3. Reset the drive side front carpet to its original position.
4. Reset the rear carpet to its original position.

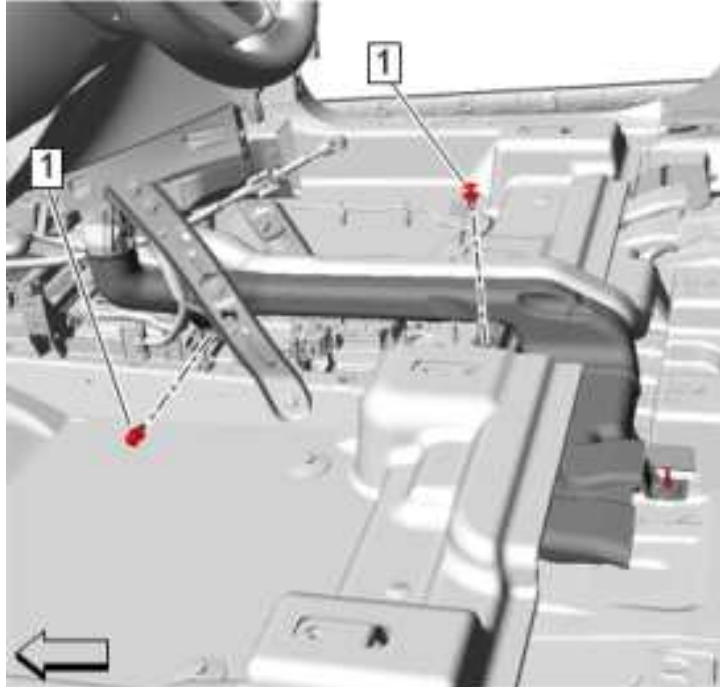


Fig. 1407: Push Pin

Courtesy of GENERAL MOTORS COMPANY

5. Push Pin (1) [2x]

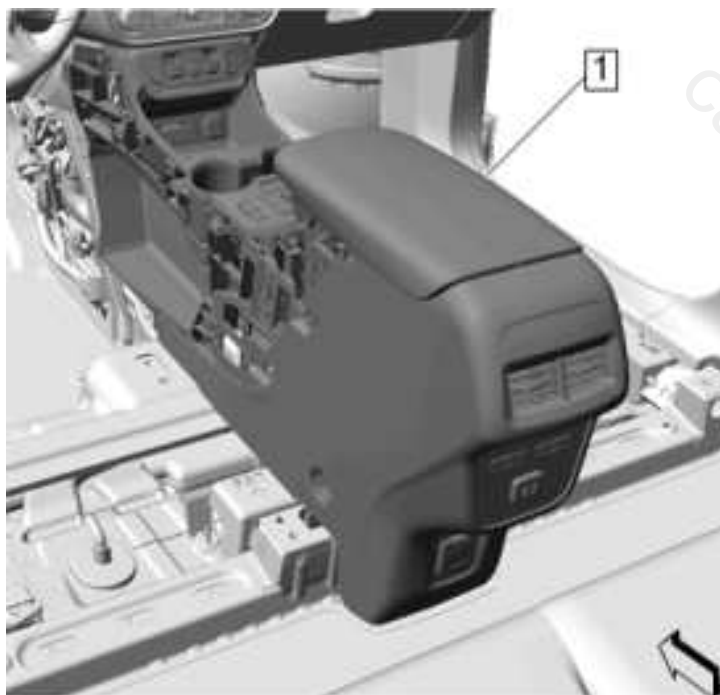


Fig. 1408: Front Floor Console

Courtesy of GENERAL MOTORS COMPANY

6. Connect the electrical connectors.
7. Install Front Floor Console (1) [Front Floor Console Replacement \(Terrain\)](#).



Fig. 1409: Left Front Floor Console Extension Panel

Courtesy of GENERAL MOTORS COMPANY

8. Install Front Floor Console Extension Panel - Left (1) - **Front Floor Console Extension Panel Replacement - Left Side (Terrain)**

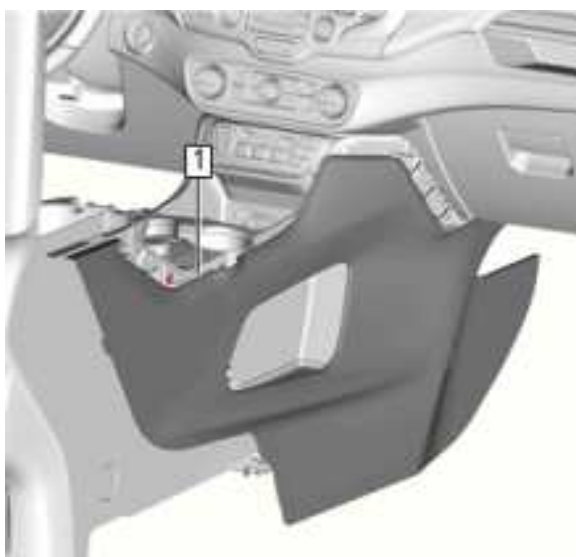


Fig. 1410: Right Front Floor Console Extension Panel

Courtesy of GENERAL MOTORS COMPANY

9. Install Front Floor Console Extension Panel - Right (1) - **Front Floor Console Extension Panel Replacement - Right Side (Terrain)**
10. Install Drivers Seat and Passengers Seat - **Driver or Passenger Seat Removal and Installation**

FLOOR REAR AIR OUTLET DUCT REPLACEMENT - RIGHT SIDE (EQUINOX FRONT)

Removal Procedure

1. Remove Front Floor Console Extension Panel - Right - **Front Floor Console Extension Panel Replacement - Right Side (Equinox)**

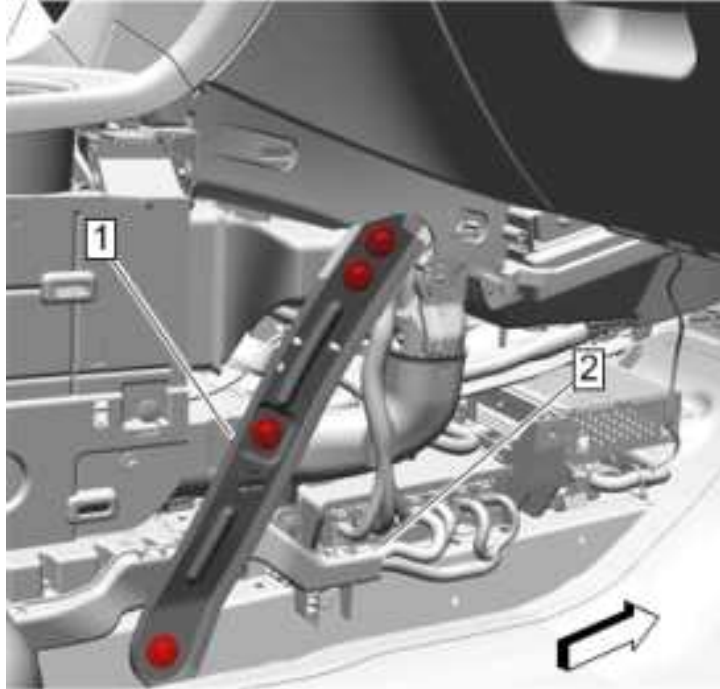


Fig. 1411: Instrument Panel Center Lower Bracket-Right Side
 Courtesy of GENERAL MOTORS COMPANY

2. Remove Instrument Panel Center Lower Bracket-Right Side (1) - [Instrument Panel Center Lower Bracket Replacement \(Equinox - Right Side\)](#).
3. Unclip the wiring harness conduit (2) and position out of the way.

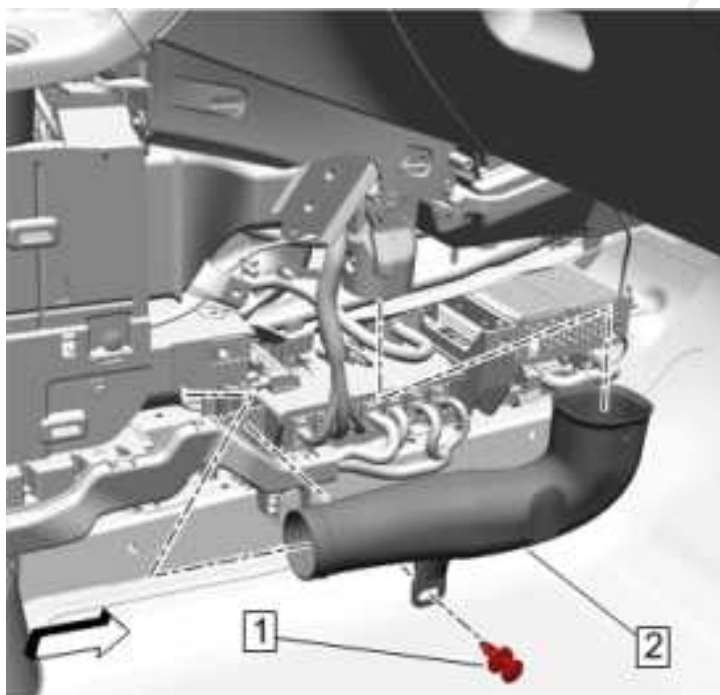


Fig. 1412: Floor Rear Air Outlet Duct - Right Side
 Courtesy of GENERAL MOTORS COMPANY

4. Remove Push Pin (1)
5. Remove Floor Rear Air Outlet Duct - Right Side (2)

Installation Procedure

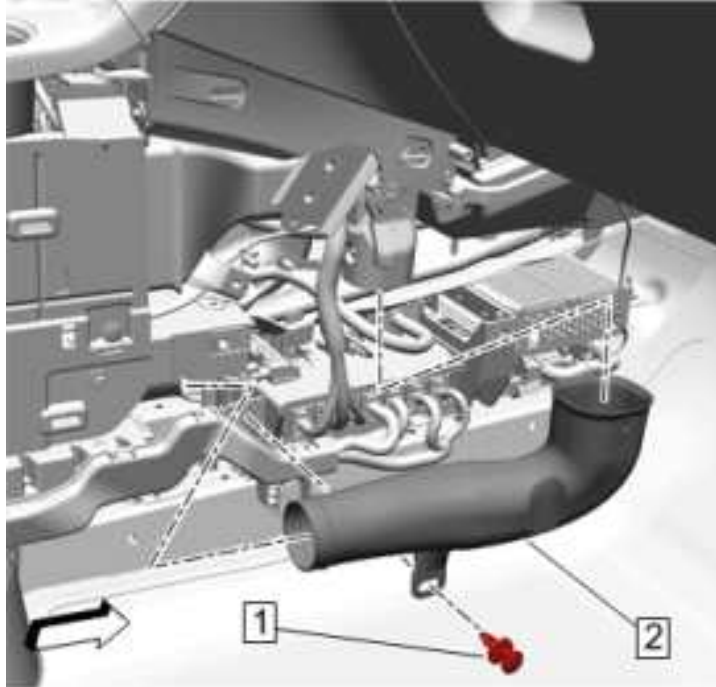


Fig. 1413: Floor Rear Air Outlet Duct - Right Side
 Courtesy of GENERAL MOTORS COMPANY

1. Install Floor Rear Air Outlet Duct - Right Side (2)
2. Push Pin (1)

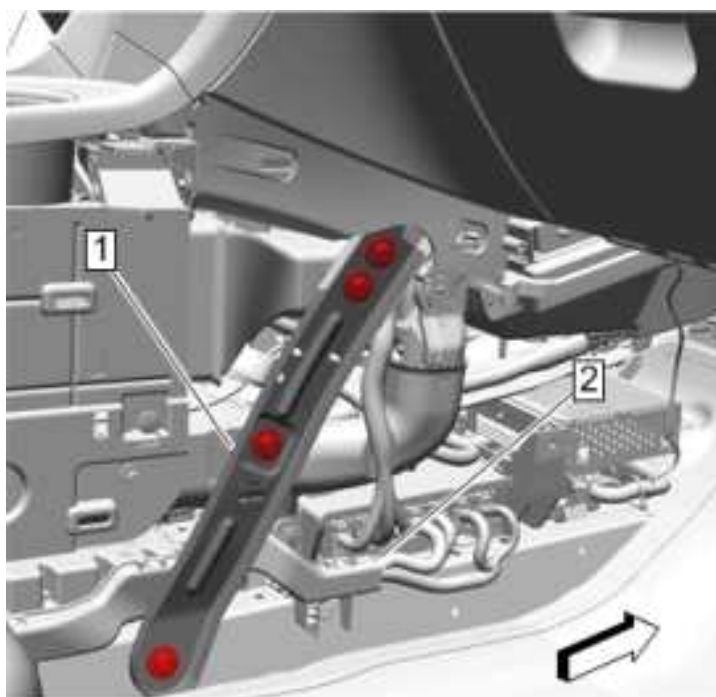


Fig. 1414: Instrument Panel Center Lower Bracket-Right Side
 Courtesy of GENERAL MOTORS COMPANY

3. Position the wiring harness conduit (2) to its original position and secure.
4. Install Instrument Panel Center Lower Bracket-Right Side (1) - [Instrument Panel Center Lower Bracket Replacement \(Equinox - Right Side\)](#).
5. Install Front Floor Console Extension Panel - Right - [Front Floor Console Extension Panel Replacement - Right Side \(Equinox\)](#).

FLOOR REAR AIR OUTLET DUCT REPLACEMENT - RIGHT SIDE (EQIONOX REAR)

Removal Procedure

1. Remove Drivers Seat and Passengers Seat - [Driver or Passenger Seat Removal and Installation](#)

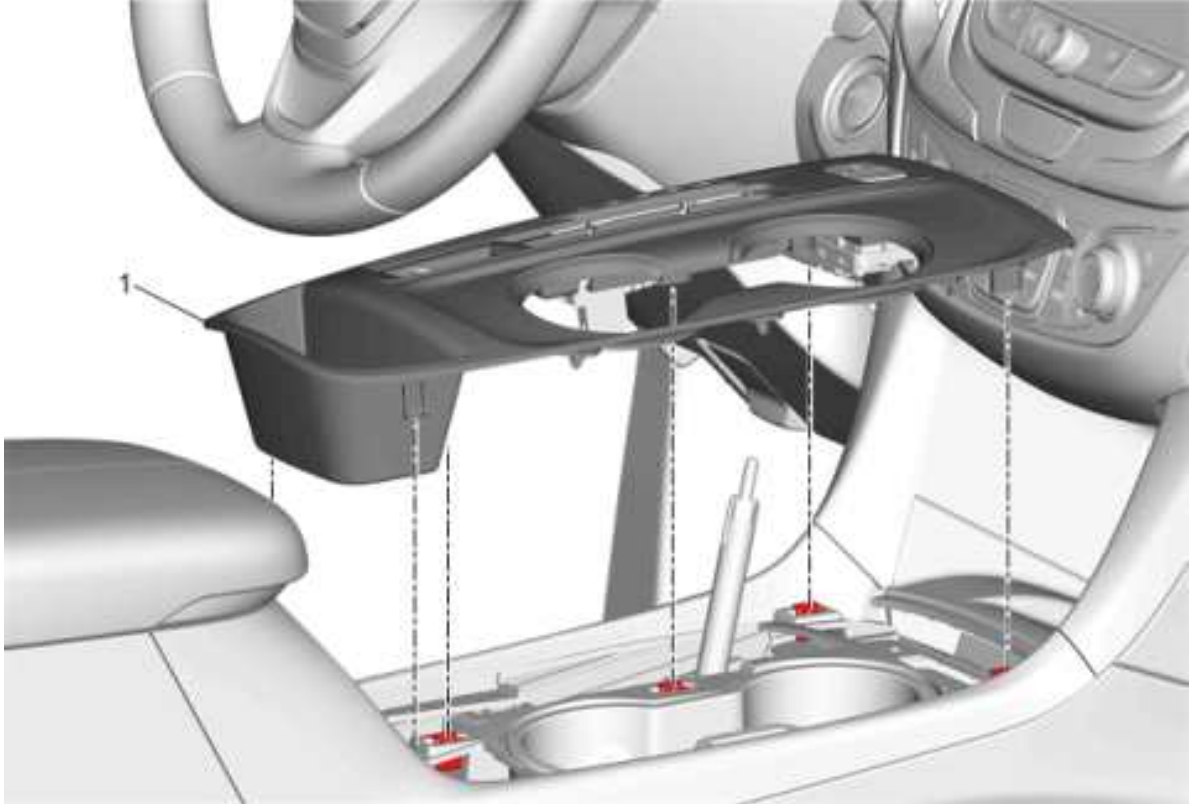


Fig. 1415: Front Floor Console Trim Plate (Equinox)

Courtesy of GENERAL MOTORS COMPANY

2. Remove Front Floor Console Trim Plate (1) - **Front Floor Console Trim Plate Replacement (Equinox)**

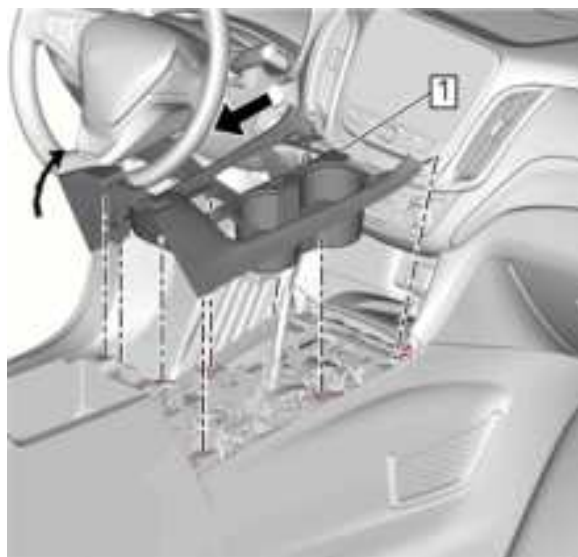


Fig. 1416: Front Floor Console Applique

Courtesy of GENERAL MOTORS COMPANY

3. Remove Front Floor Console Applique (1) - **Front Floor Console Applique Replacement (Equinox)**

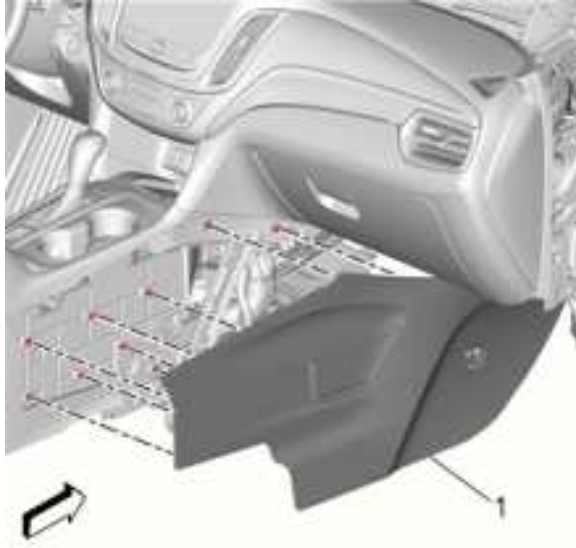


Fig. 1417: Right Front Floor Console Extension Panel
 Courtesy of GENERAL MOTORS COMPANY

4. Remove Front Floor Console Extension Panel - Right (1) - **Front Floor Console Extension Panel Replacement - Right Side (Equinox)**



Fig. 1418: Left Front Floor Console Extension Panel
 Courtesy of GENERAL MOTORS COMPANY

5. Remove Front Floor Console Extension Panel - Left (1) - **Front Floor Console Extension Panel Replacement - Left Side (Equinox)**

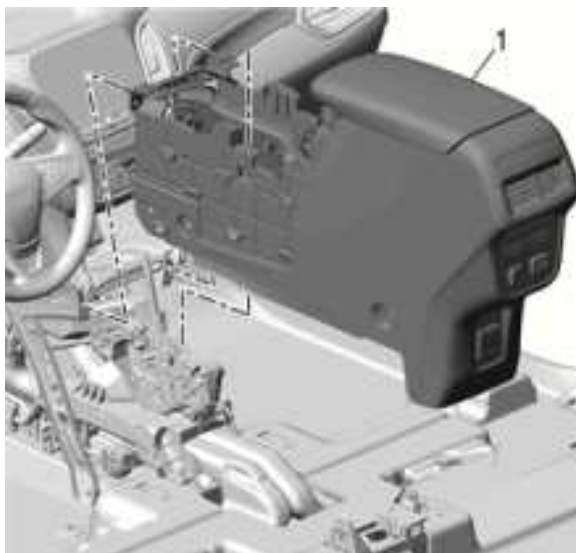


Fig. 1419: Front Floor Console
 Courtesy of GENERAL MOTORS COMPANY

6. Remove Front Floor Console (1) - [Front Floor Console Replacement \(Equinox\)](#)
7. Disconnect the electrical connectors.

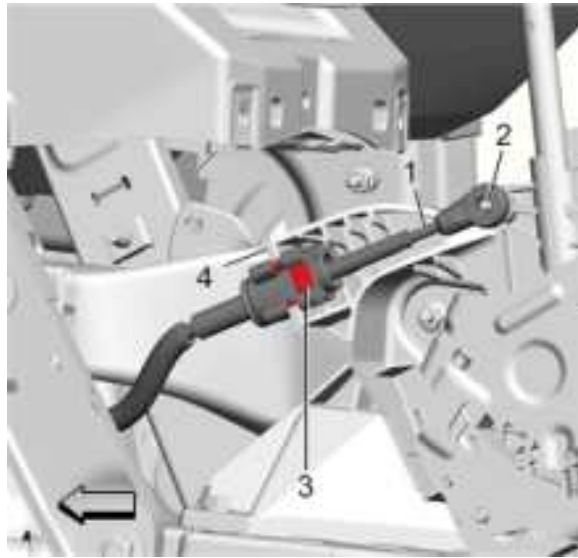


Fig. 1420: Range Selector Lever Cable Components
Courtesy of GENERAL MOTORS COMPANY

8. Remove Range Selector Lever Cable (1) @Automatic Transmission Control - [Range Selector Lever Cable Replacement](#)



Fig. 1421: Automatic Transmission Control And Automatic Transmission Control Bracket Assembly
Courtesy of GENERAL MOTORS COMPANY

9. Remove the automatic transmission control and automatic transmission control bracket as assembly.
(3)[Transmission Control Bracket Replacement](#)

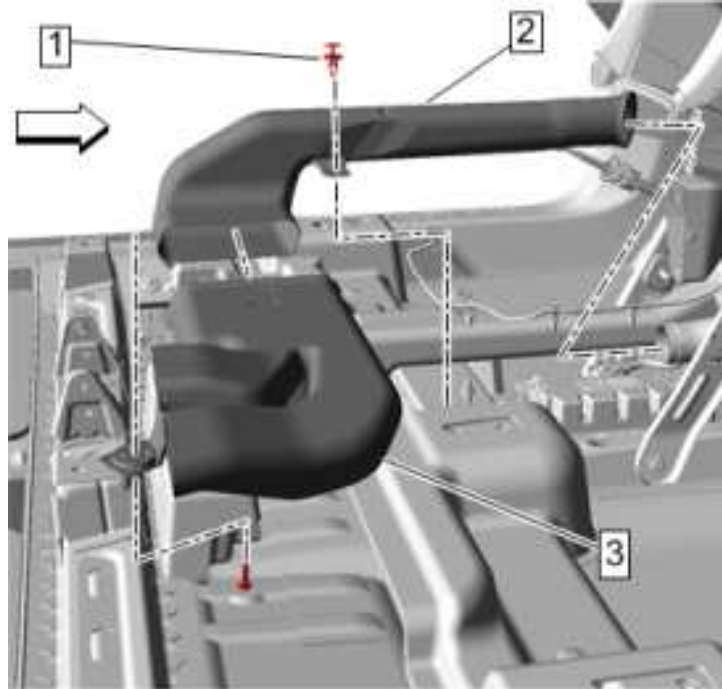


Fig. 1422: Push Pin And Floor Rear Air Outlet Duct
Courtesy of GENERAL MOTORS COMPANY

10. Remove Push Pin (1)
11. Pull back the rear carpet to access the floor rear air outlet duct.
12. Pull back the passengers side front carpet to access the floor rear air outlet duct.
13. Remove Floor Rear Air Outlet Duct (2)
14. Remove Floor Rear Air Outlet Duct- Center (2) @Floor Rear Air Outlet Duct- Rear (3)

Installation Procedure

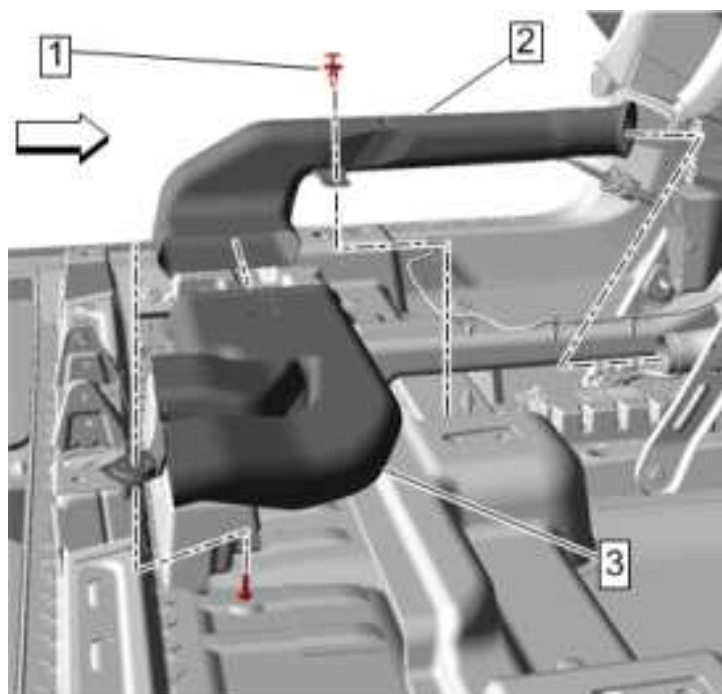


Fig. 1423: Push Pin And Floor Rear Air Outlet Duct
Courtesy of GENERAL MOTORS COMPANY

1. Install Floor Rear Air Outlet Duct- Center (2) @Floor Rear Air Outlet Duct- Rear (3)
2. Install Floor Rear Air Outlet Duct (2)
3. Reset the passengers side front carpet to its original position.
4. Reset the rear carpet to its original position.
5. Install Push Pin (1)



Fig. 1424: Automatic Transmission Control And Automatic Transmission Control Bracket Assembly
 Courtesy of GENERAL MOTORS COMPANY

6. Install the automatic transmission control and automatic transmission control bracket assembly.

(3) **Transmission Control Bracket Replacement**

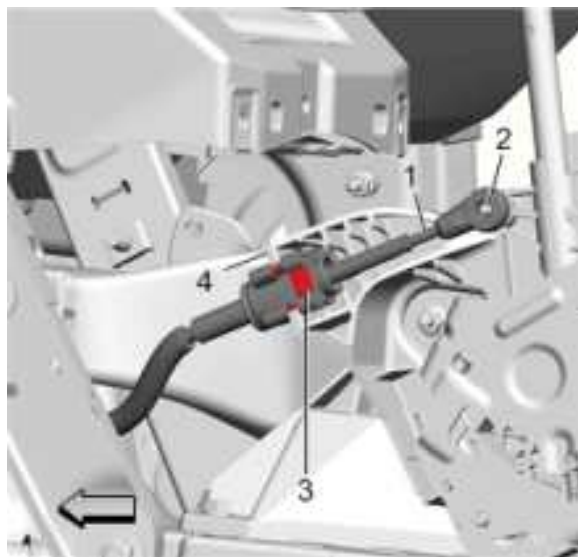


Fig. 1425: Range Selector Lever Cable Components
 Courtesy of GENERAL MOTORS COMPANY

7. Install Range Selector Lever Cable (1) @Automatic Transmission Control - **Range Selector Lever Cable Replacement**

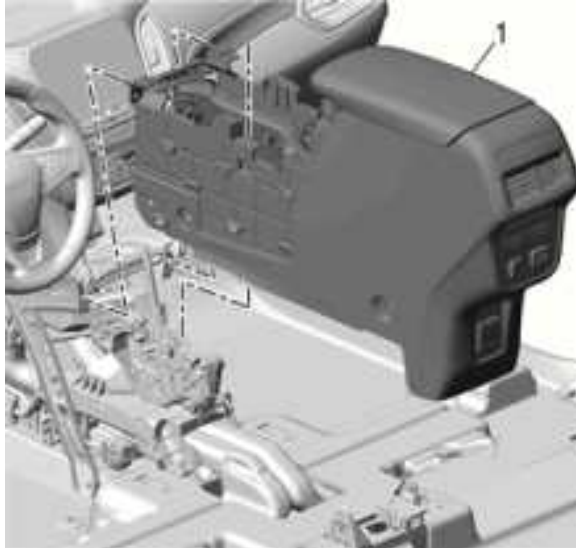


Fig. 1426: Front Floor Console

Courtesy of GENERAL MOTORS COMPANY

8. Connect the electrical connectors.
9. Install Front Floor Console (1) - **Front Floor Console Replacement (Equinox)**



Fig. 1427: Left Front Floor Console Extension Panel

Courtesy of GENERAL MOTORS COMPANY

10. Install Front Floor Console Extension Panel - Left (1) **Front Floor Console Extension Panel Replacement - Left Side (Equinox)**

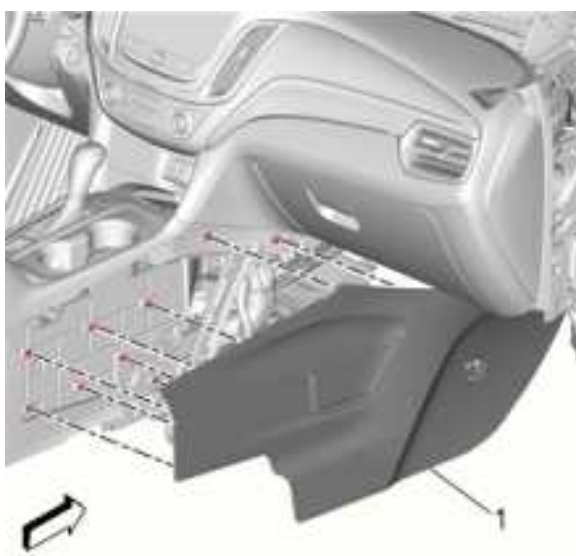


Fig. 1428: Right Front Floor Console Extension Panel

Courtesy of GENERAL MOTORS COMPANY

11. Install Front Floor Console Extension Panel - Right (1) - [Front Floor Console Extension Panel Replacement - Right Side \(Equinox\)](#).

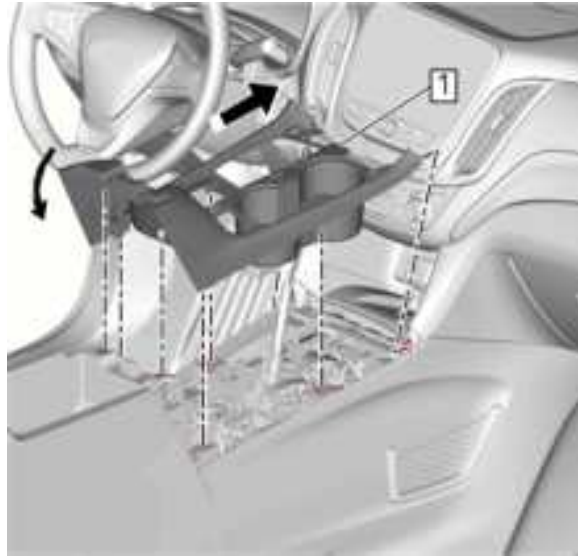


Fig. 1429: Front Floor Console Applique
Courtesy of GENERAL MOTORS COMPANY

12. Install Front Floor Console Applique (1) - [Front Floor Console Applique Replacement \(Equinox\)](#).

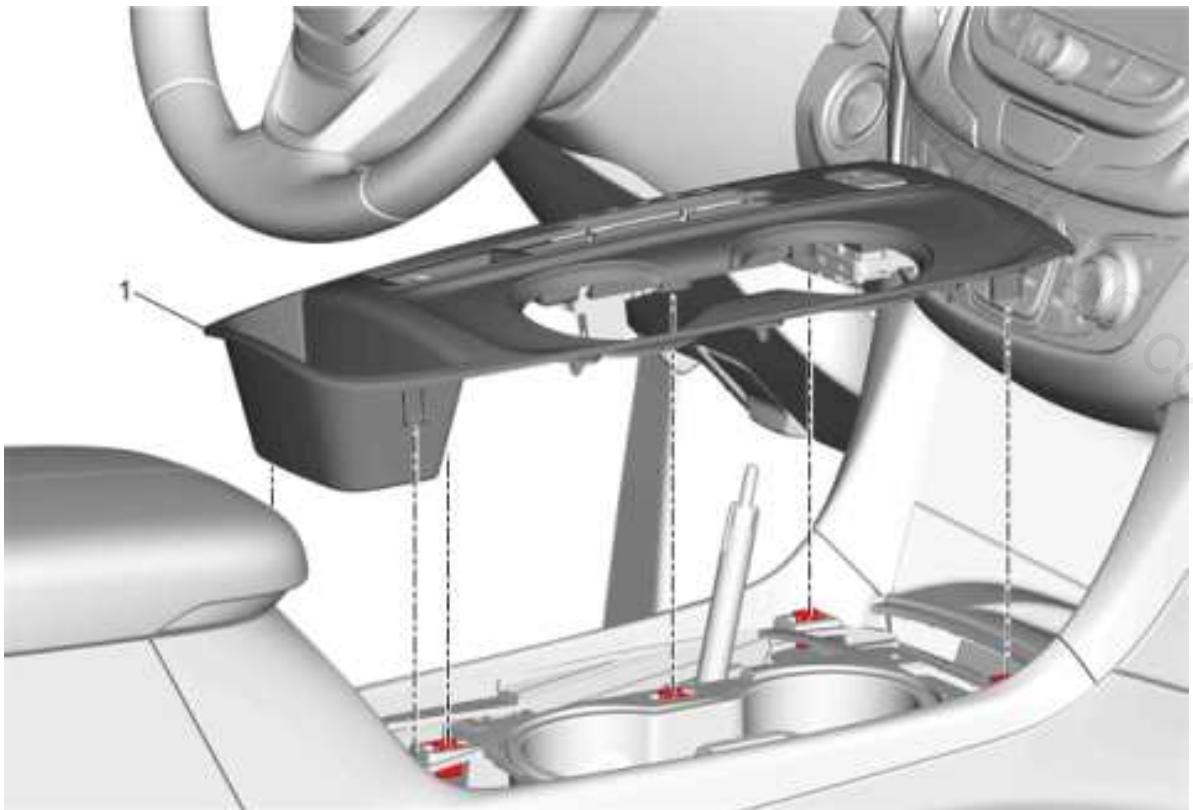


Fig. 1430: Front Floor Console Trim Plate (Equinox)
Courtesy of GENERAL MOTORS COMPANY

13. Install Front Floor Console Trim Plate (1) - [Front Floor Console Trim Plate Replacement \(Equinox\)](#)
14. Install Drivers Seat and Passengers Seat - [Driver or Passenger Seat Removal and Installation](#)

FLOOR REAR AIR OUTLET DUCT REPLACEMENT - RIGHT SIDE (TERRAIN FRONT)

Removal Procedure

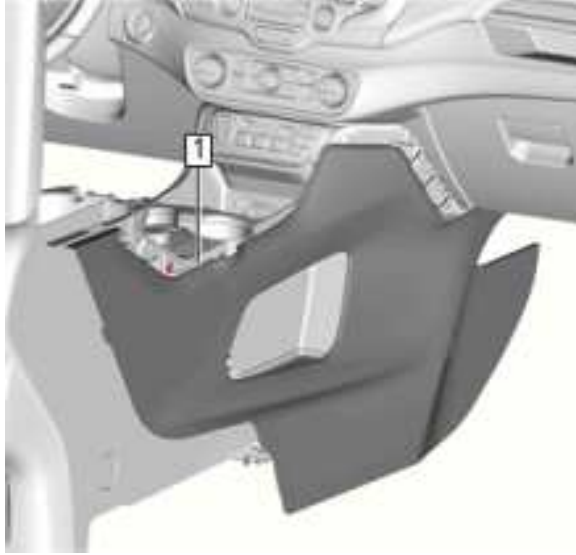


Fig. 1431: Right Front Floor Console Extension Panel

Courtesy of GENERAL MOTORS COMPANY

1. Remove Front Floor Console Extension Panel - Right (1) - **Front Floor Console Extension Panel Replacement - Right Side (Terrain)**

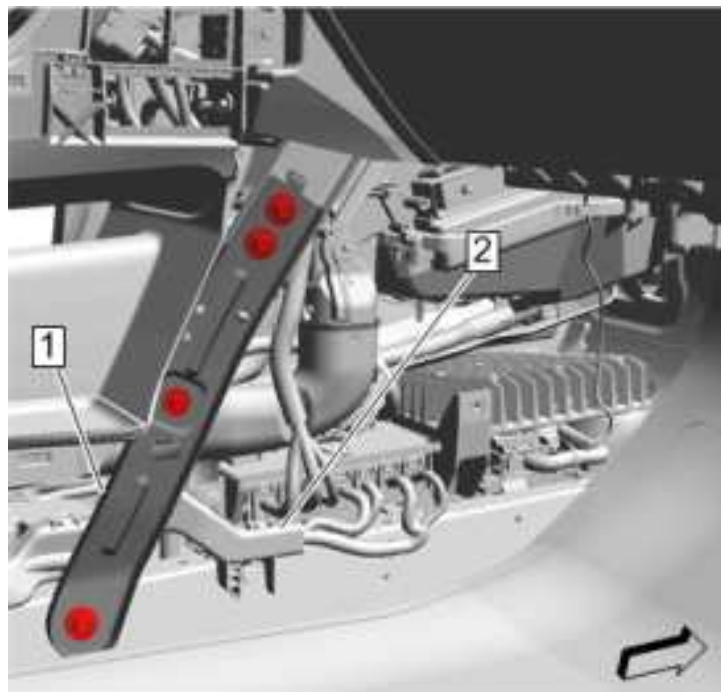


Fig. 1432: Instrument Panel Center Lower Bracket

Courtesy of GENERAL MOTORS COMPANY

2. Remove Instrument Panel Center Lower Bracket-Right Side (1) - **Instrument Panel Center Lower Bracket Replacement (Terrain - Right Side)**
3. Unclip the wiring harness conduit (2) and position out of the way.

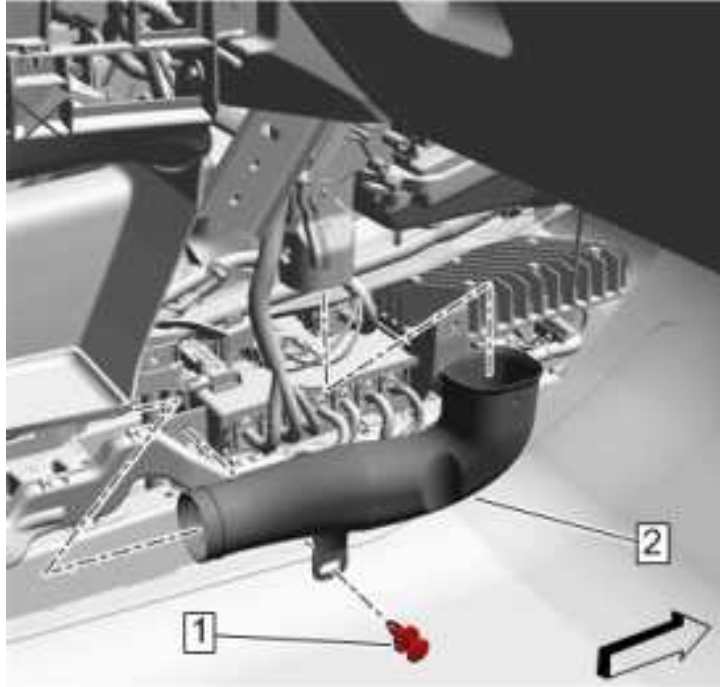


Fig. 1433: Floor Rear Air Outlet Duct - Right Side
Courtesy of GENERAL MOTORS COMPANY

4. Remove Push Pin (1)
5. Remove Floor Rear Air Outlet Duct - Right Side (2)

Installation Procedure

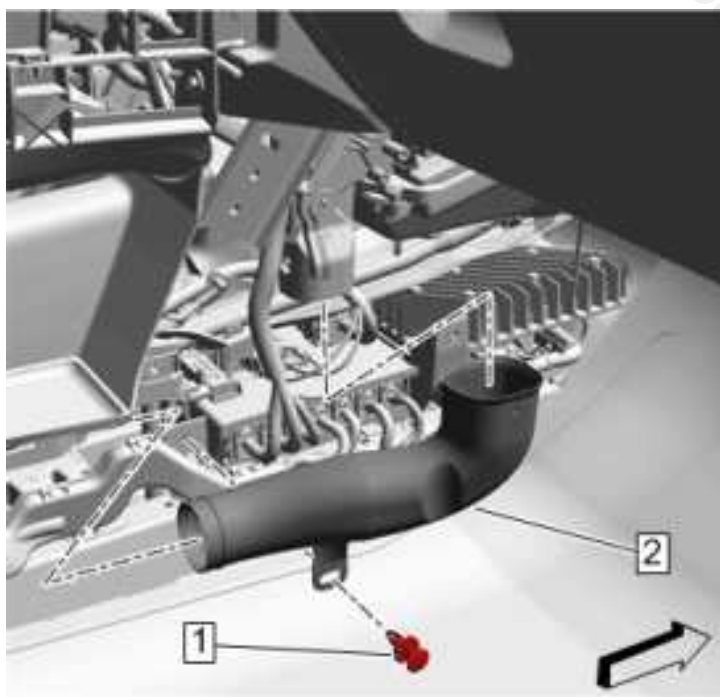


Fig. 1434: Floor Rear Air Outlet Duct - Right Side
Courtesy of GENERAL MOTORS COMPANY

1. Floor Rear Air Outlet Duct - Right Side (2)
2. Push Pin (1)

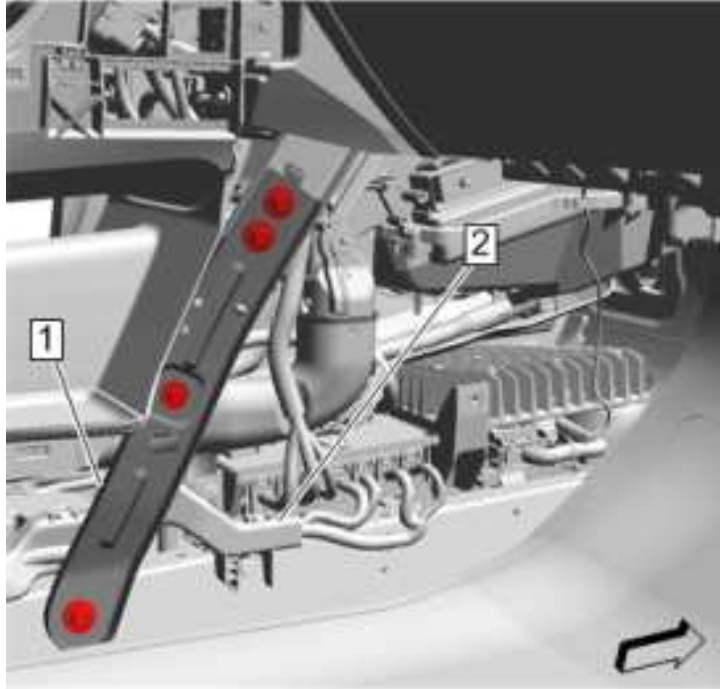


Fig. 1435: Instrument Panel Center Lower Bracket
 Courtesy of GENERAL MOTORS COMPANY

3. Position the wiring harness conduit (2) to its original position and secure.
4. Instrument Panel Center Lower Bracket-Right Side (1) - **Instrument Panel Center Lower Bracket Replacement (Terrain - Right Side)**

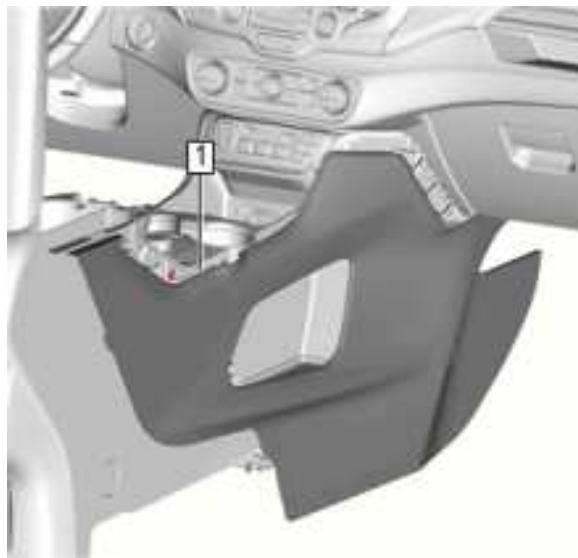


Fig. 1436: Right Front Floor Console Extension Panel
 Courtesy of GENERAL MOTORS COMPANY

5. Front Floor Console Extension Panel - Right (1) - **Front Floor Console Extension Panel Replacement - Right Side (Terrain)**

FLOOR REAR AIR OUTLET DUCT REPLACEMENT - RIGHT SIDE (TERRAIN REAR)

Removal Procedure

1. Remove Drivers Seat and Passengers Seat - **Driver or Passenger Seat Removal and Installation**

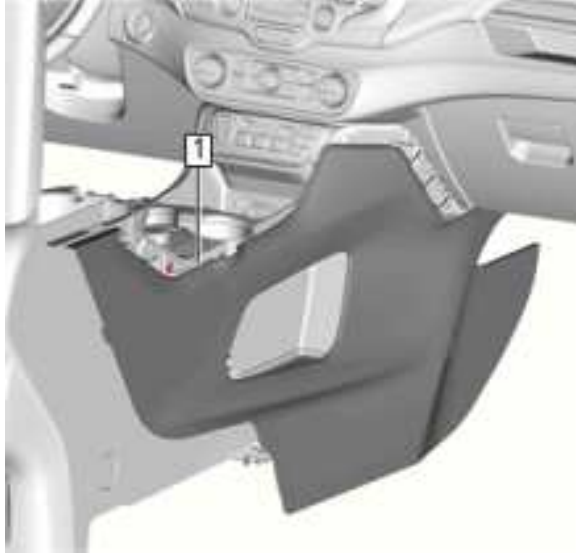


Fig. 1437: Right Front Floor Console Extension Panel
Courtesy of GENERAL MOTORS COMPANY

2. Remove Front Floor Console Extension Panel - Right (1) - **Front Floor Console Extension Panel Replacement - Right Side (Terrain)**



Fig. 1438: Left Front Floor Console Extension Panel
Courtesy of GENERAL MOTORS COMPANY

3. Remove Front Floor Console Extension Panel - Left (1) - **Front Floor Console Extension Panel Replacement - Left Side (Terrain)**

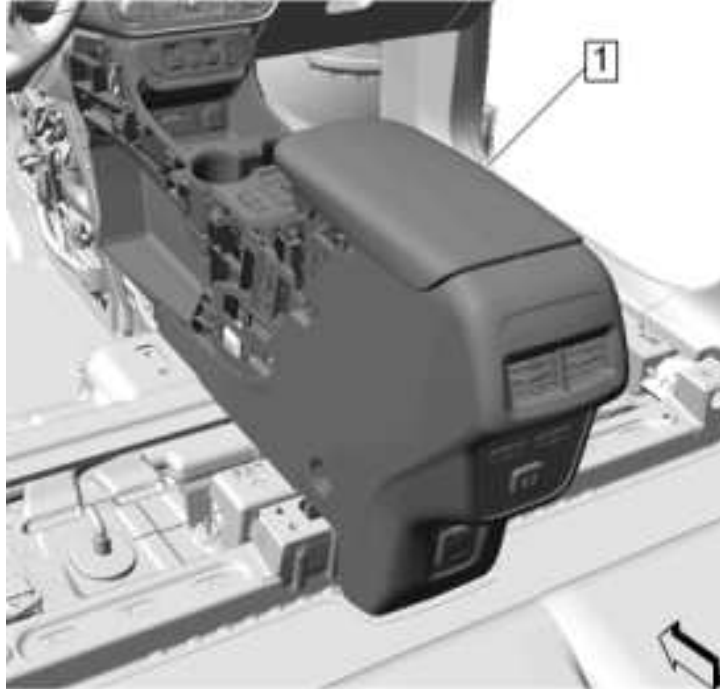


Fig. 1439: Front Floor Console

Courtesy of GENERAL MOTORS COMPANY

4. Remove Front Floor Console (1) - **Front Floor Console Replacement (Terrain)**
5. Disconnect the electrical connectors.

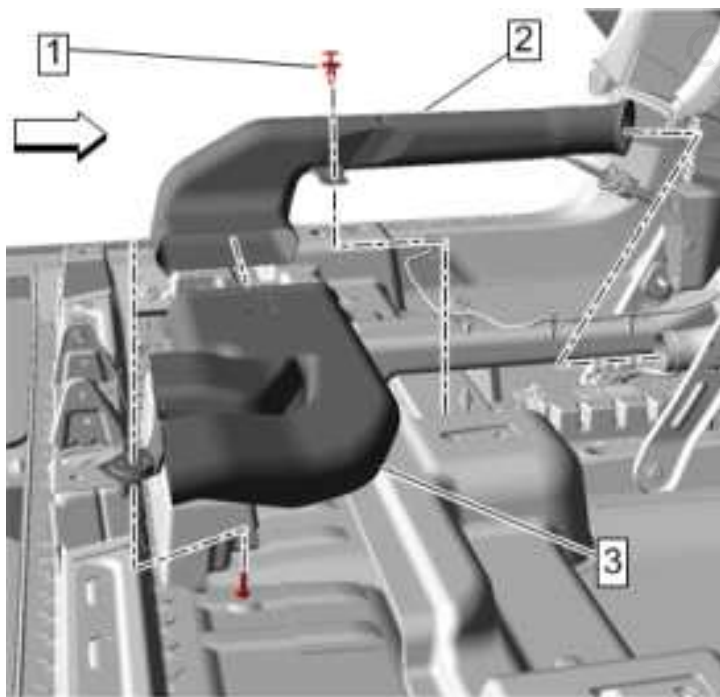


Fig. 1440: Push Pin And Floor Rear Air Outlet Duct

Courtesy of GENERAL MOTORS COMPANY

6. Remove Push Pin (1)
7. Pull back the rear carpet to access the floor rear air outlet duct.
8. Pull back the passengers side front carpet to access the floor rear air outlet duct.
9. Remove Floor Rear Air Outlet Duct (2)
10. Remove Floor Rear Air Outlet Duct- Center (2) @Floor Rear Air Outlet Duct- Rear (3)

Installation Procedure

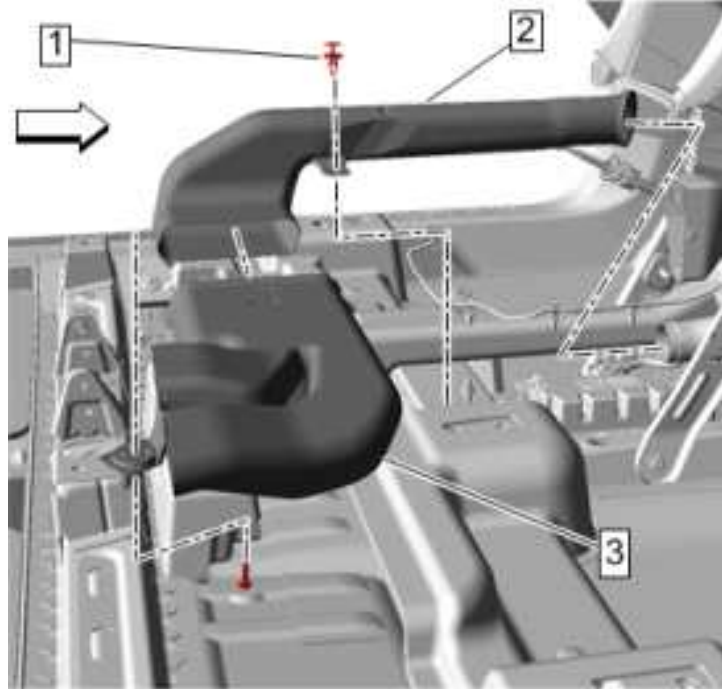


Fig. 1441: Push Pin And Floor Rear Air Outlet Duct
Courtesy of GENERAL MOTORS COMPANY

1. Floor Rear Air Outlet Duct- Center (2) @Floor Rear Air Outlet Duct- Rear (3)
2. Floor Rear Air Outlet Duct (2)
3. Reset the passengers side front carpet to its original position.
4. Reset the rear carpet to its original position.
5. Push Pin (1)

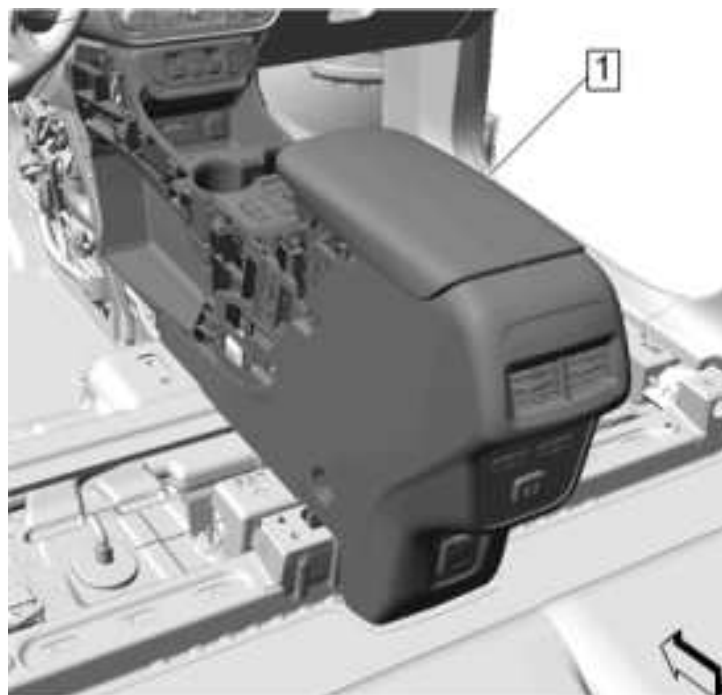


Fig. 1442: Front Floor Console
Courtesy of GENERAL MOTORS COMPANY

6. Connect the electrical connectors.
7. Front Floor Console (1) - **Front Floor Console Replacement (Terrain)**



Fig. 1443: Left Front Floor Console Extension Panel

Courtesy of GENERAL MOTORS COMPANY

8. Front Floor Console Extension Panel - Left (1) - [Front Floor Console Extension Panel Replacement - Left Side \(Terrain\)](#)

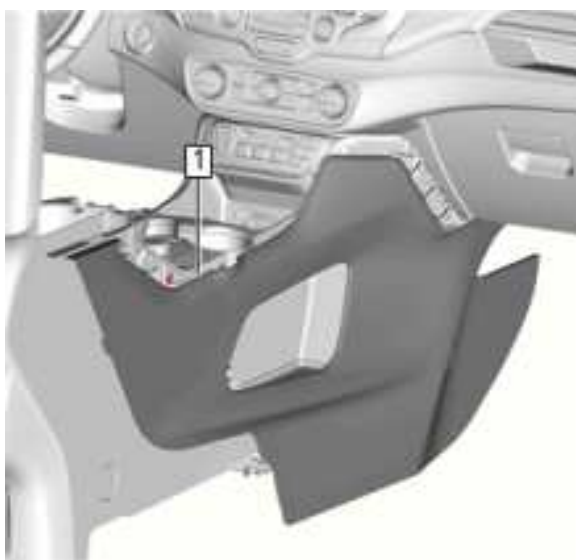


Fig. 1444: Right Front Floor Console Extension Panel

Courtesy of GENERAL MOTORS COMPANY

9. Front Floor Console Extension Panel - Right (1) - [Front Floor Console Extension Panel Replacement - Right Side \(Terrain\)](#)
10. Drivers Seat and Passengers Seat - [Driver or Passenger Seat Removal and Installation](#)

HEATER CORE REPLACEMENT

Removal Procedure

1. Drain the cooling system. [Cooling System Draining and Filling \(GE 47716\)](#) [Cooling System Draining and Filling \(Static\)](#)
2. [Front Floor Console Extension Panel Replacement - Left Side \(Equinox\)](#) [Front Floor Console Extension Panel Replacement - Left Side \(Terrain\)](#)

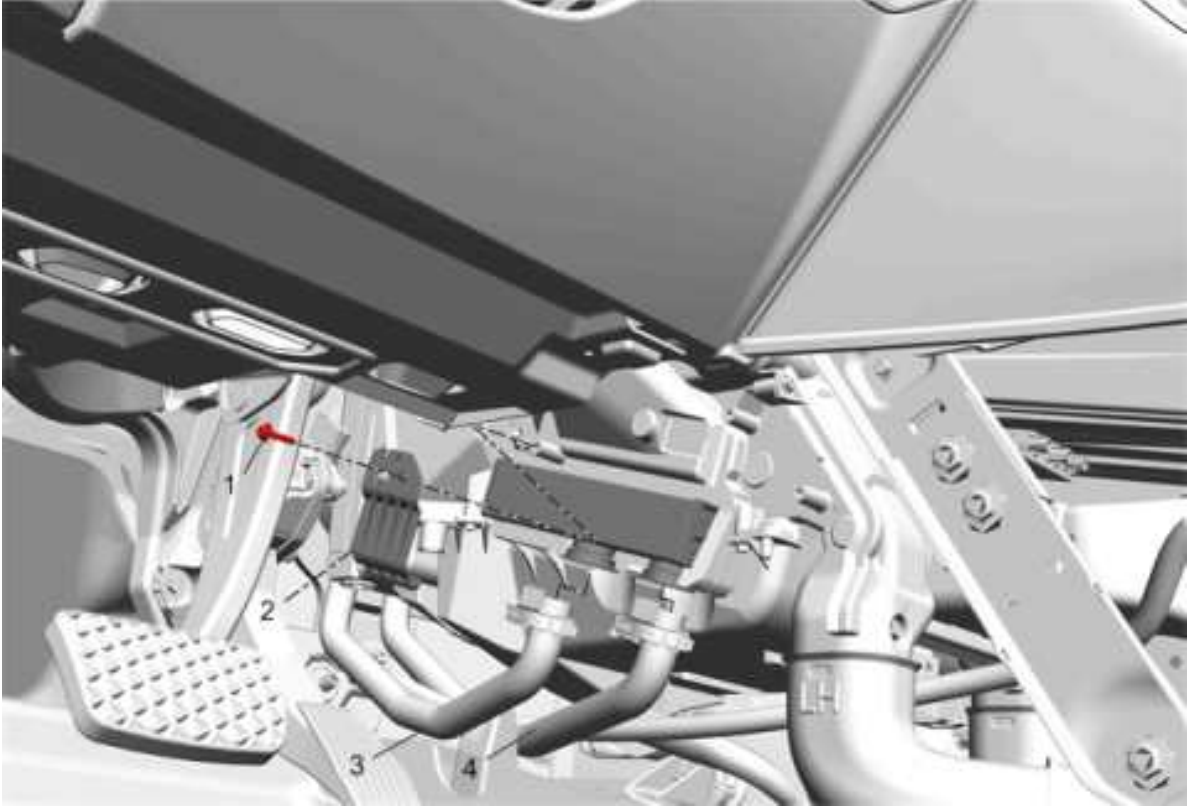


Fig. 1445: Heater Core Outlet Tube, Inlet Tube And Bracket
 Courtesy of GENERAL MOTORS COMPANY

CAUTION: Refer to [HVAC Module Drain Tube Caution](#) .

3. Prior to removing the heater core, use clean and absorbent shop clothes/towels to cover the electrical components protecting the electrical components from water damage.
4. Remove Heater Core Outlet Tube (3) @Heater Core - [Heater Core Outlet Tube Replacement](#)
5. Remove Heater Core Inlet Tube (4) @Heater Core - [Heater Core Inlet Tube Replacement](#)
6. Remove Heater Core Bracket Bolt (1)
7. Remove Heater Core Bracket (2)

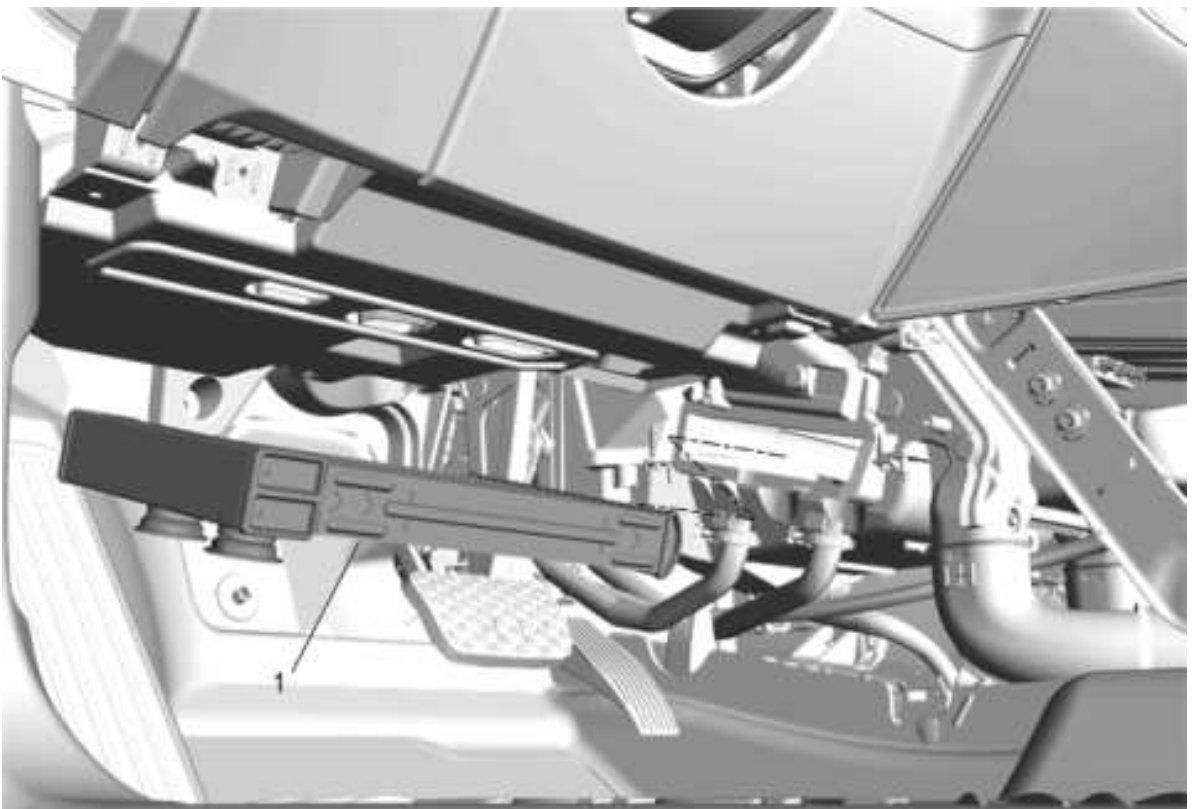


Fig. 1446: Heater Core
 Courtesy of GENERAL MOTORS COMPANY

8. Remove Heater Core (1)

Installation Procedure

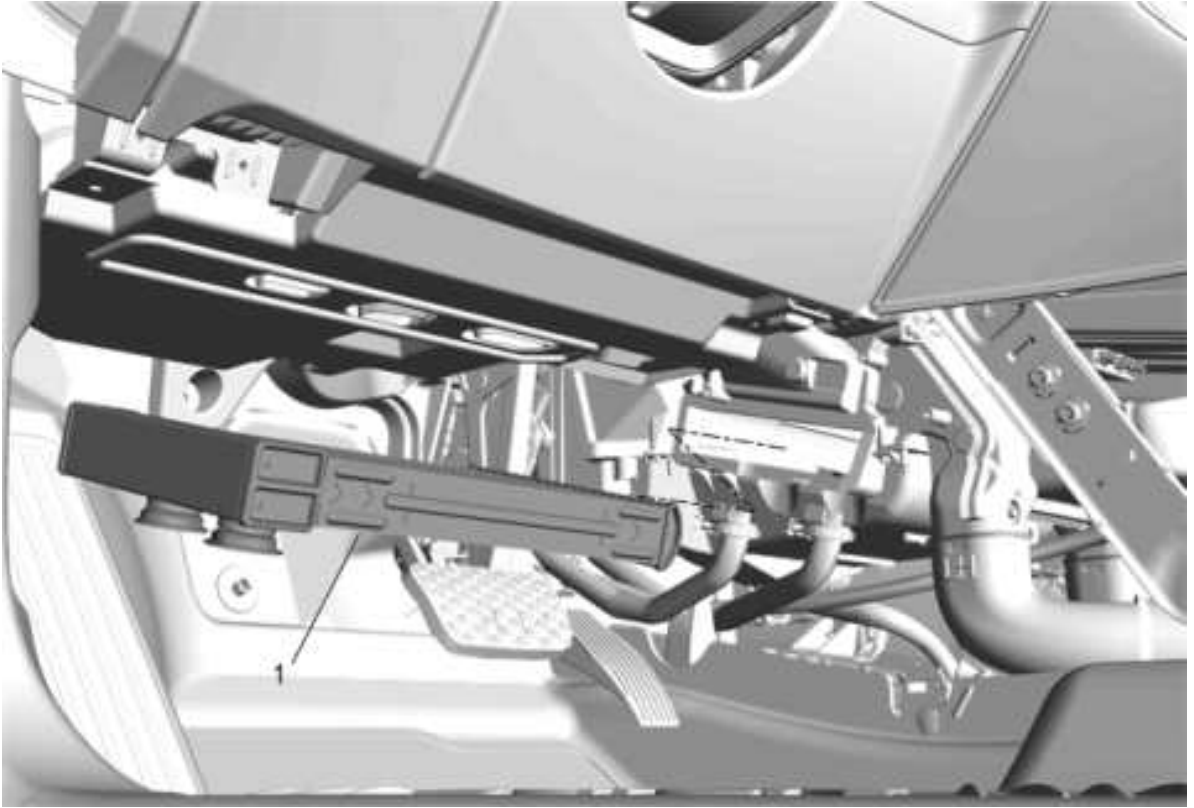


Fig. 1447: Heater Core
Courtesy of GENERAL MOTORS COMPANY

1. Install Heater Core (1)

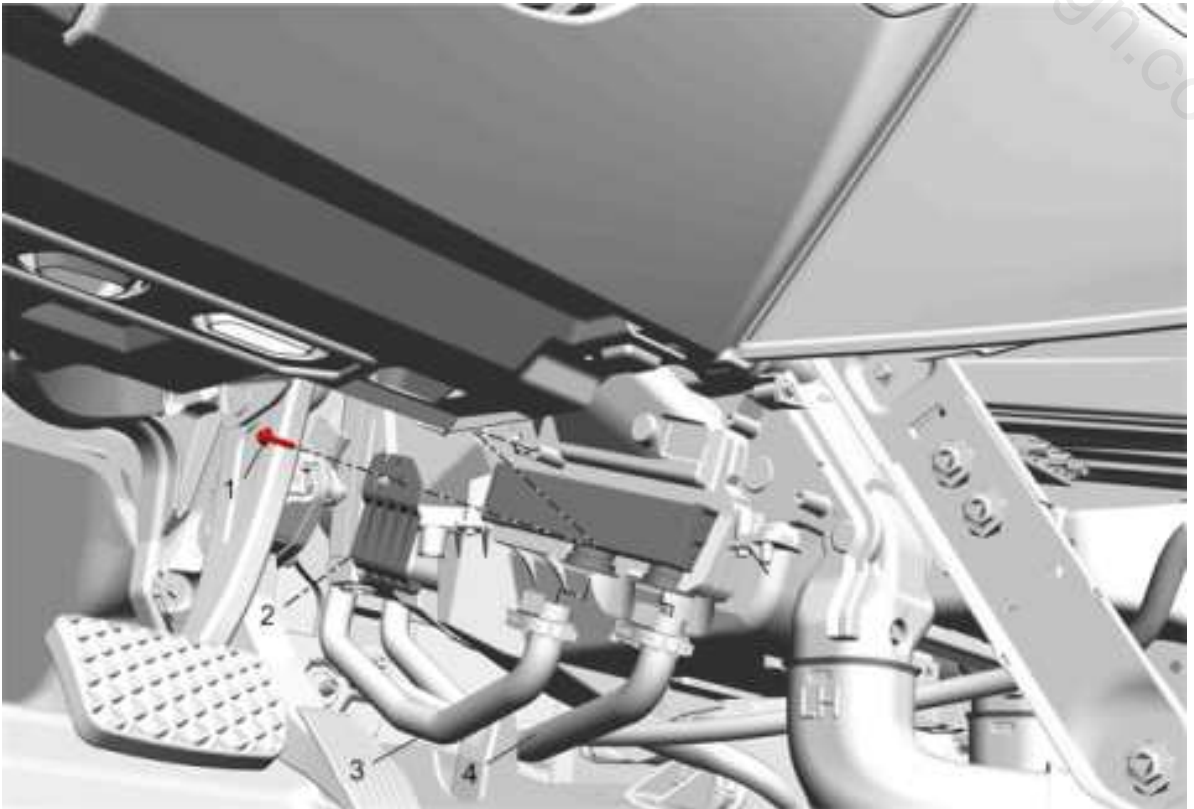


Fig. 1448: Heater Core Outlet Tube, Inlet Tube And Bracket
Courtesy of GENERAL MOTORS COMPANY

CAUTION: Refer to **Fastener Caution** .

2. Install Heater Core Bracket (2)
3. Install Heater Core Bracket Bolt (1) and tighten 2.5 N.m (22 lb in)

NOTE: The heater core tube clamps are not reusable, install New heater core tube clamps.

4. Install Heater Core Inlet Tube (4) @Heater Core - [Heater Core Inlet Tube Replacement](#)
5. Install Heater Core Outlet Tube (3) @Heater Core - [Heater Core Outlet Tube Replacement](#)
6. Fill the cooling system. [Cooling System Draining and Filling \(GE 47716\)](#) [Cooling System Draining and Filling \(Static\)](#)

CAUTION: Refer to [HVAC Module Drain Tube Caution](#) .

7. Inspect for coolant leaks.
8. [Front Floor Console Extension Panel Replacement - Left Side \(Equinox\)](#) [Front Floor Console Extension Panel Replacement - Left Side \(Terrain\)](#)

AUXILIARY HEATER CORE REPLACEMENT (C32)

Removal Procedure

1. Disconnect the battery negative cable. [Battery Negative Cable Disconnection and Connection \(KL9\)](#)

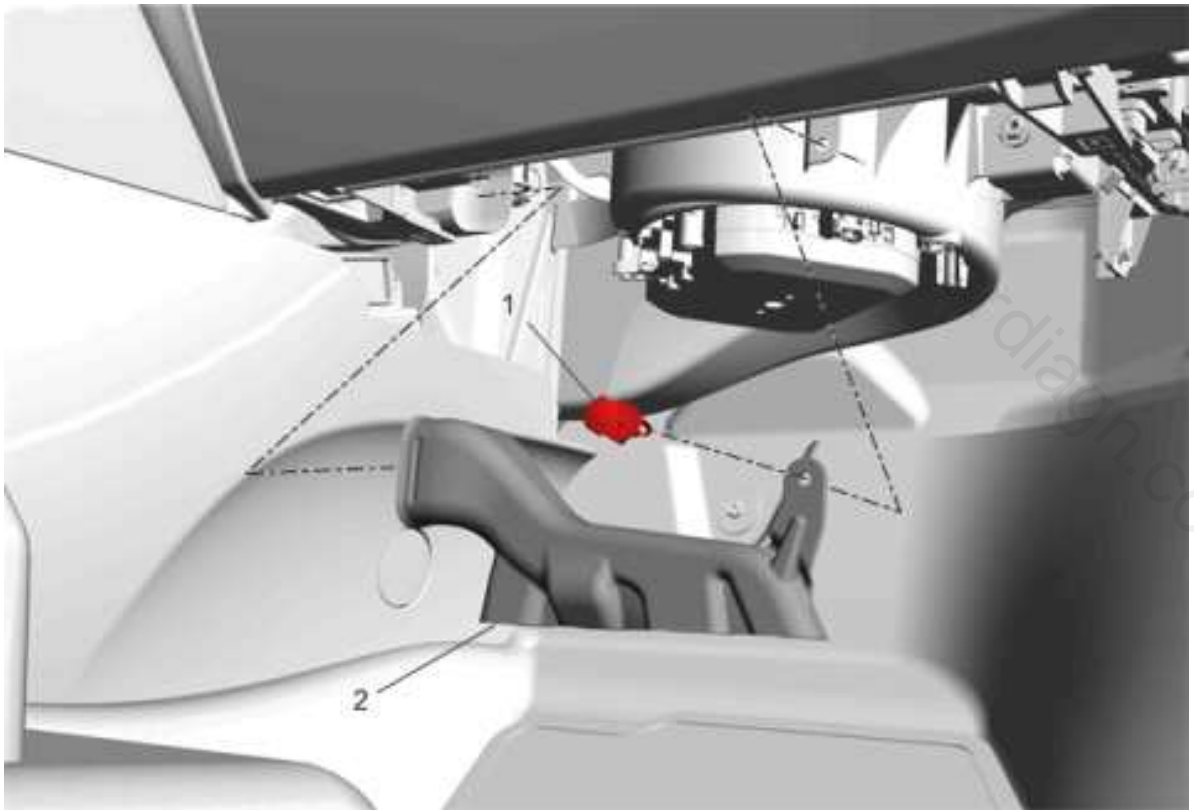


Fig. 1449: Floor Front Air Outlet Duct - Right Side (Outer)

Courtesy of GENERAL MOTORS COMPANY

2. Remove Floor Front Air Outlet Duct - Right Side (2) - [Floor Front Air Outlet Duct Replacement - Right Side \(Inner\)](#) [Floor Front Air Outlet Duct Replacement - Right Side \(Outer\)](#)

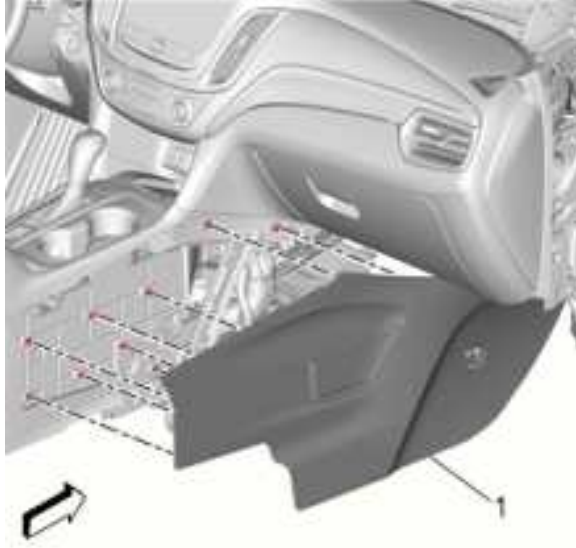


Fig. 1450: Right Front Floor Console Extension Panel
Courtesy of GENERAL MOTORS COMPANY

3. Remove Front Floor Console Extension Panel - Right (1) - **Front Floor Console Extension Panel Replacement - Right Side (Equinox) Front Floor Console Extension Panel Replacement - Right Side (Terrain)**

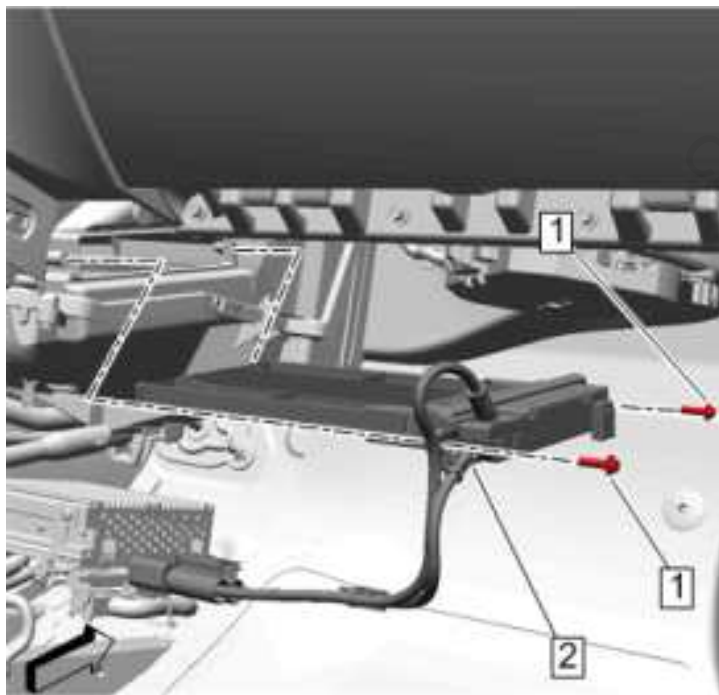


Fig. 1451: Auxiliary Heater Core And Screw
Courtesy of GENERAL MOTORS COMPANY

4. Remove Auxiliary Heater Core Screw (1)
5. Remove Auxiliary Heater Core (2)
6. Disconnect the electrical connectors.

Installation Procedure

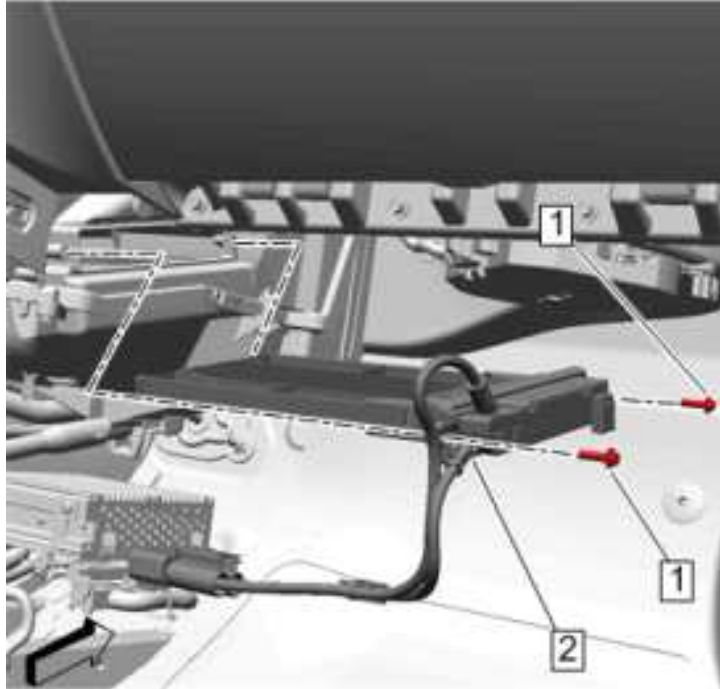


Fig. 1452: Auxiliary Heater Core And Screw
 Courtesy of GENERAL MOTORS COMPANY

1. Install Auxiliary Heater Core (2)

CAUTION: Refer to **Fastener Caution** .

2. Install Auxiliary Heater Core Screw (1) and tighten [2x] 2.5 N.m (22 lb in)
3. Connect the electrical connectors.

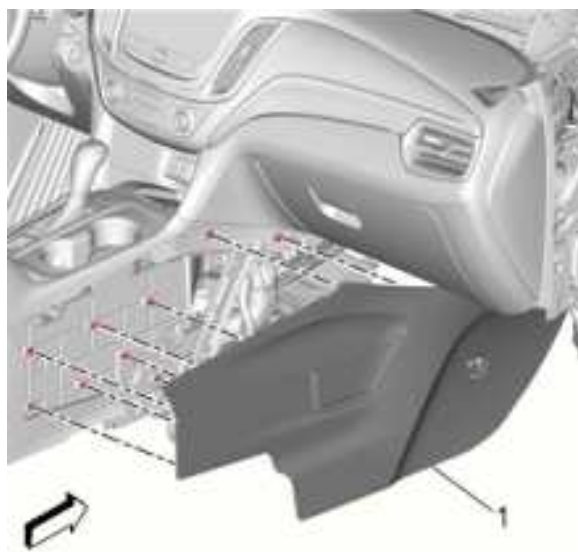


Fig. 1453: Right Front Floor Console Extension Panel
 Courtesy of GENERAL MOTORS COMPANY

4. Install Front Floor Console Extension Panel - Right (1) - **Front Floor Console Extension Panel Replacement - Right Side (Equinox) Front Floor Console Extension Panel Replacement - Right Side (Terrain)**

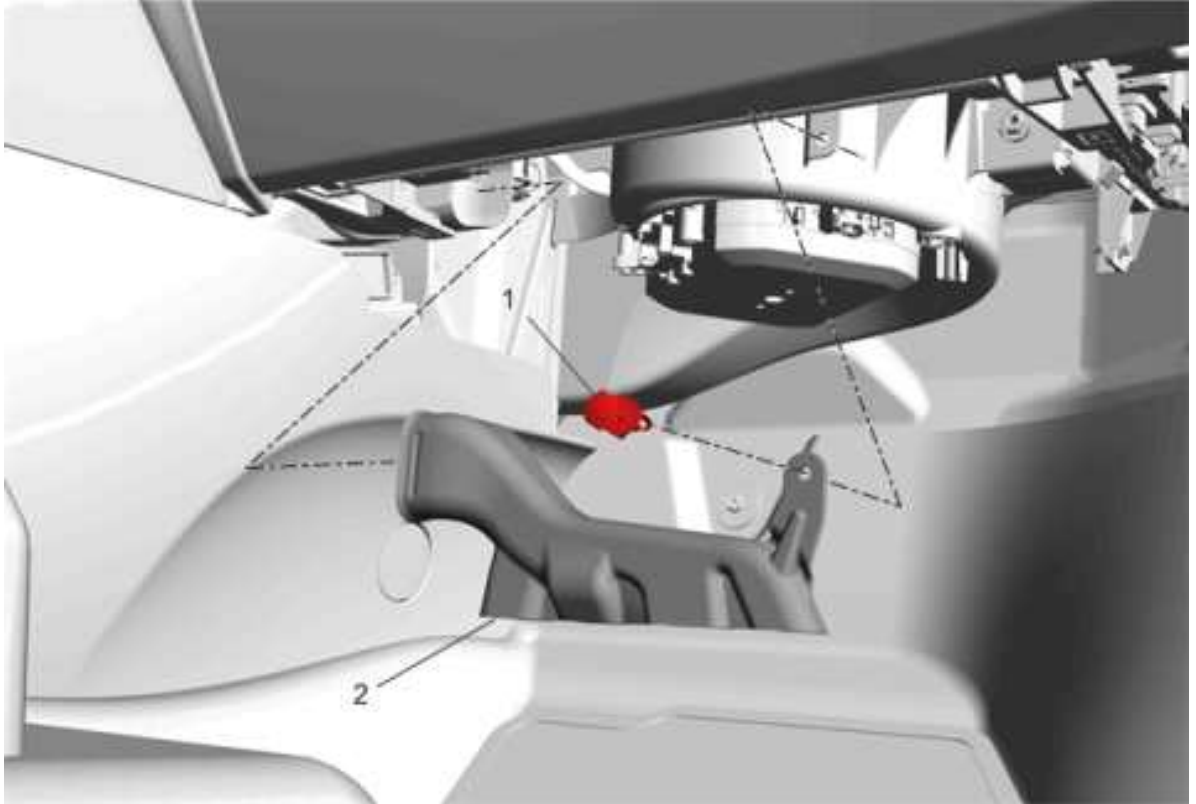


Fig. 1454: Floor Front Air Outlet Duct - Right Side (Outer)

Courtesy of GENERAL MOTORS COMPANY

5. Install Floor Front Air Outlet Duct - Right Side (2) - [Floor Front Air Outlet Duct Replacement - Right Side \(Inner\)](#)[Floor Front Air Outlet Duct Replacement - Right Side \(Outer\)](#)
6. Connect the battery negative cable. [Battery Negative Cable Disconnection and Connection \(KL9\)](#)

AIR CONDITIONING EVAPORATOR CONNECTOR HOSE/TUBE AND COMPRESSOR HOSE REPLACEMENT (LYX)

Removal Procedure

1. Recover the refrigerant. [Refrigerant Recovery and Recharging \(R-134a\)](#)[Refrigerant Recovery and Recharging \(R-1234yf\)](#)

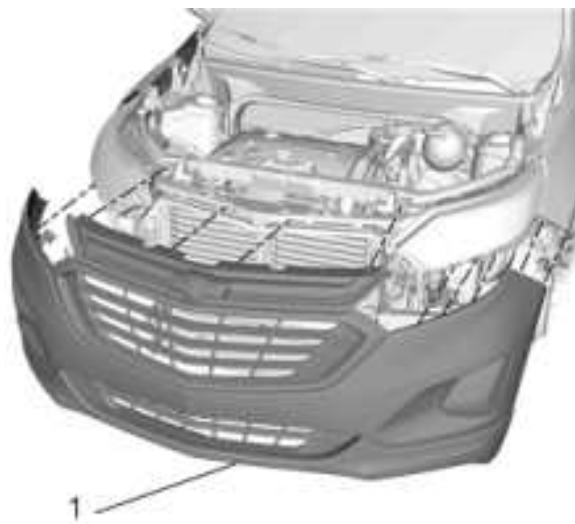


Fig. 1455: Fascia

Courtesy of GENERAL MOTORS COMPANY

2. Remove Front Bumper Fascia (1) - [Front Bumper Fascia Replacement \(Equinox\)](#) [Front Bumper Fascia Replacement \(Terrain\)](#)
3. Remove Headlamp-Right Side (2) - [Headlamp Replacement \(Chevrolet\)](#) [Headlamp Replacement \(GMC\)](#)

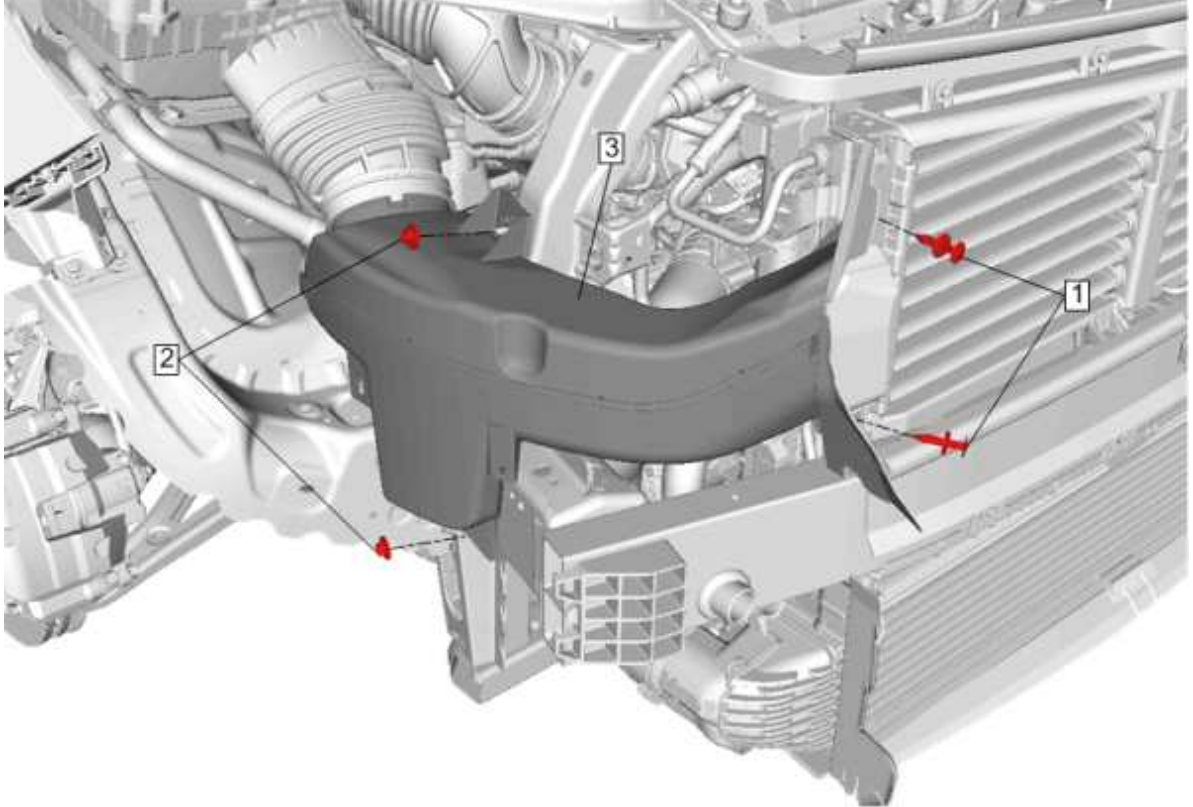


Fig. 1456: Intake Air Baffle

Courtesy of GENERAL MOTORS COMPANY

4. Remove Intake Air Baffle (3) - [Intake Air Baffle Replacement](#)

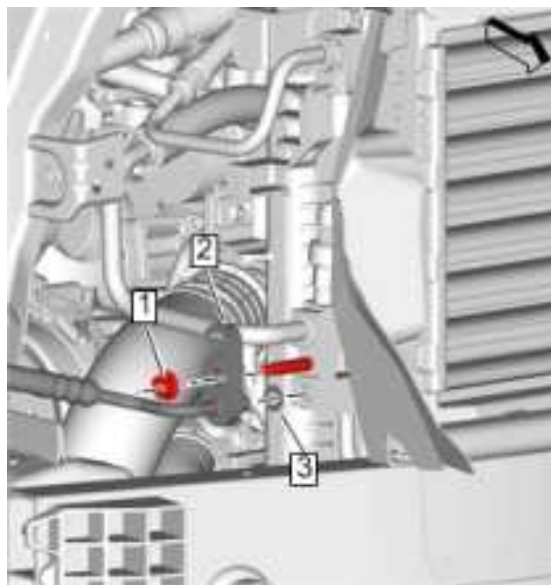


Fig. 1457: Air Conditioning Refrigerant Heat Exchanger And Nut

Courtesy of GENERAL MOTORS COMPANY

5. Remove Air Conditioning Refrigerant Heat Exchanger (2) @Air Conditioning Condenser - [Air Conditioning Refrigerant Heat Exchanger Replacement \(LYX\)](#)

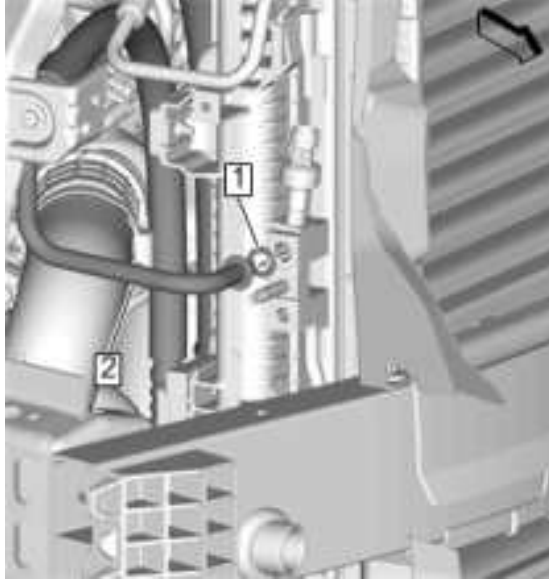


Fig. 1458: Air Conditioning Evaporator Connector Hose/Tube and Compressor Hose
Courtesy of GENERAL MOTORS COMPANY

6. Remove Air Conditioning Evaporator Connector Hose/Tube and Compressor Hose (2) @Air Conditioning Condenser
7. Remove and DISCARD the sealing washer. (1) [Air Conditioning System Seal Replacement](#)

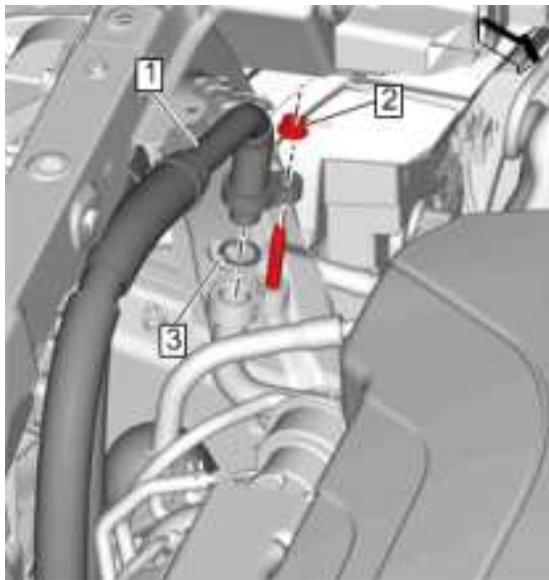


Fig. 1459: Air Conditioning Evaporator Connector Hose/Tube and Compressor Hose
Courtesy of GENERAL MOTORS COMPANY

8. Remove Air Conditioning Evaporator Connector Hose/Tube and Compressor Hose Nut (2) @Air Conditioning Refrigerant Heat Exchanger
9. Remove Air Conditioning Evaporator Connector Hose/Tube and Compressor Hose (1) @Air Conditioning Refrigerant Heat Exchanger
10. Remove and DISCARD the sealing washer.(3)[Air Conditioning System Seal Replacement](#)

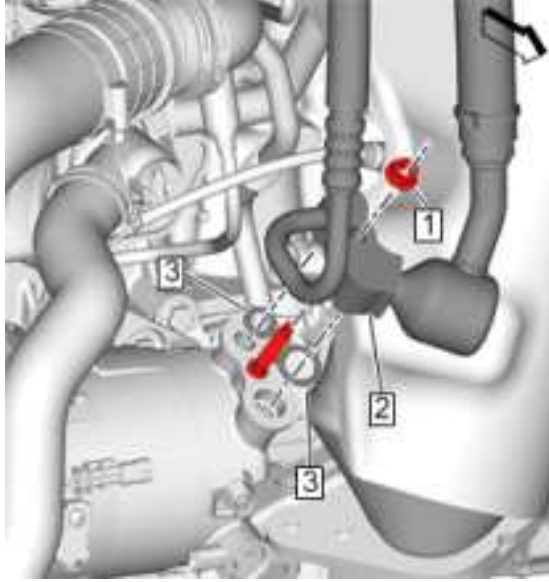


Fig. 1460: Air Conditioning Evaporator Connector Hose/Tube and Compressor Hose
Courtesy of GENERAL MOTORS COMPANY

11. Remove Remove Air Conditioning Evaporator Connector Hose/Tube and Compressor Hose Nut (1) @Air Conditioning Compressor
12. Remove Air Conditioning Evaporator Connector Hose/Tube and Compressor Hose (2) @Air Conditioning Compressor
13. Remove and DISCARD the sealing washer.(3) [2x][Air Conditioning System Seal Replacement](#)
14. Remove the air conditioning evaporator connector hose/tube and compressor hose from the vehicle.

Installation Procedure

1. Install the air conditioning evaporator connector hose/tube and compressor hose to the vehicle.

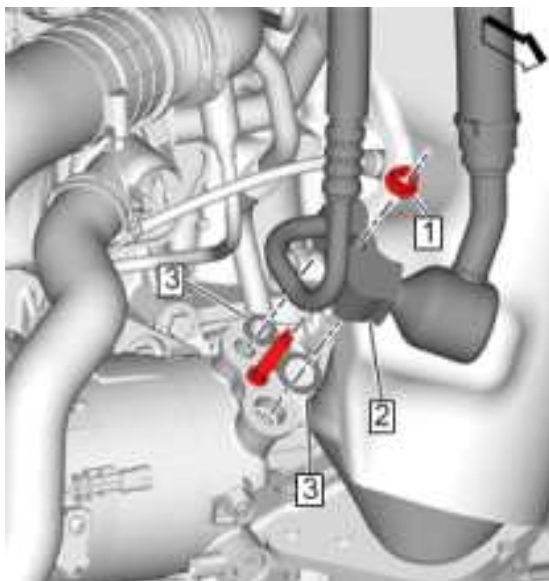


Fig. 1461: Air Conditioning Evaporator Connector Hose/Tube and Compressor Hose
Courtesy of GENERAL MOTORS COMPANY

2. Install a NEW sealing washer. (3) [2x][Air Conditioning System Seal Replacement](#)
3. Install Air Conditioning Evaporator Connector Hose/Tube and Compressor Hose (2) @Air Conditioning Compressor

CAUTION: Refer to [Fastener Caution](#) .

4. Install Air Conditioning Evaporator Connector Hose/Tube and Compressor Hose Nut (1) @Air Conditioning Compressor and tighten 22 N.m (16 lb ft)

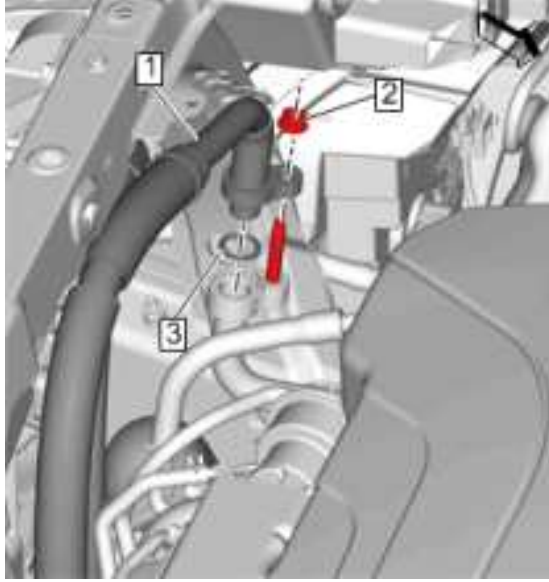


Fig. 1462: Air Conditioning Evaporator Connector Hose/Tube and Compressor Hose
 Courtesy of GENERAL MOTORS COMPANY

5. Install a NEW sealing washer. (3) [2x] [Air Conditioning System Seal Replacement](#)
6. Install Air Conditioning Evaporator Connector Hose/Tube and Compressor Hose (2) @Air Conditioning Refrigerant Heat Exchanger

CAUTION: Refer to [Fastener Caution](#) .

7. Install Air Conditioning Evaporator Connector Hose/Tube and Compressor Hose Nut (2) @Air Conditioning Refrigerant Heat Exchanger and tighten 22 N.m (16 lb ft)

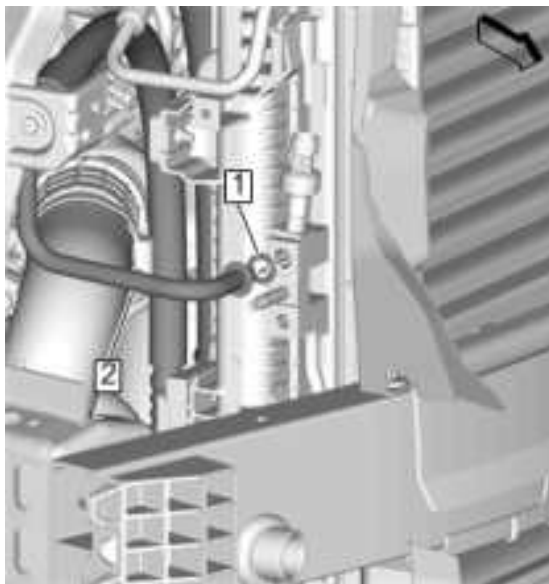


Fig. 1463: Air Conditioning Evaporator Connector Hose/Tube and Compressor Hose
 Courtesy of GENERAL MOTORS COMPANY

8. Install a NEW sealing washer. (1) [Air Conditioning System Seal Replacement](#)
9. Install Air Conditioning Evaporator Connector Hose/Tube and Compressor Hose (2) @Air Conditioning Condenser

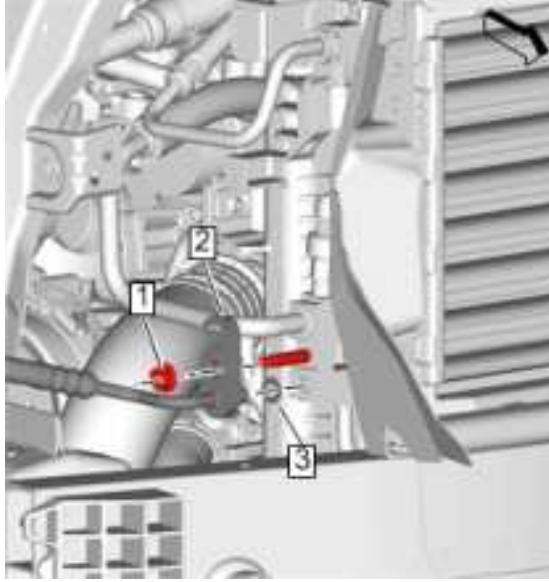


Fig. 1464: Air Conditioning Refrigerant Heat Exchanger And Nut
 Courtesy of GENERAL MOTORS COMPANY

10. Install Air Conditioning Refrigerant Heat Exchanger (2) @Air Conditioning Condenser - [Air Conditioning Refrigerant Heat Exchanger Replacement \(LYX\)](#)

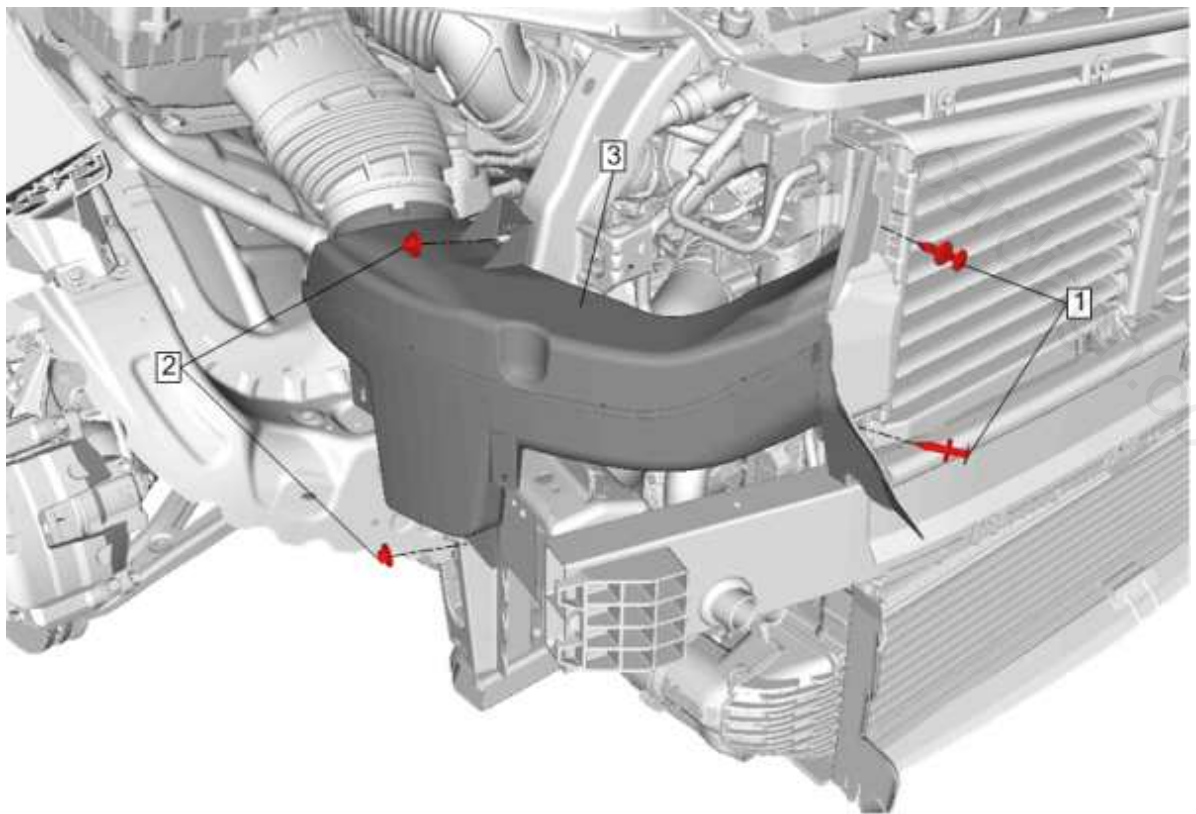


Fig. 1465: Intake Air Baffle
 Courtesy of GENERAL MOTORS COMPANY

11. Install Intake Air Baffle (3) - [Intake Air Baffle Replacement](#)
12. Install Headlamp-Right Side (2)- [Headlamp Replacement \(Chevrolet\)](#) [Headlamp Replacement \(GMC\)](#)

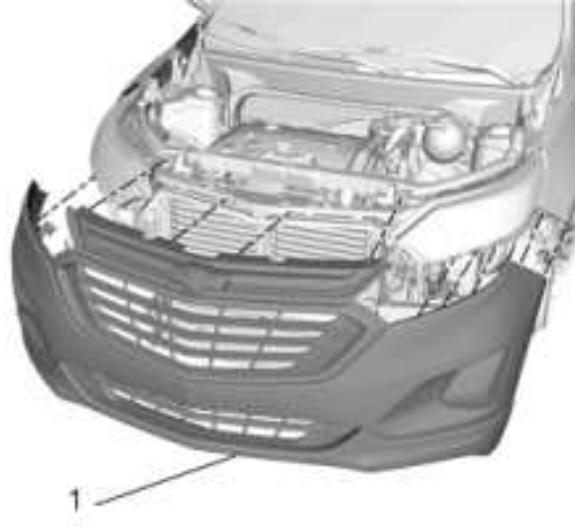


Fig. 1466: Fascia

Courtesy of GENERAL MOTORS COMPANY

13. Install Front Bumper Fascia (1) - [Front Bumper Fascia Replacement \(Equinox\)](#) [Front Bumper Fascia Replacement \(Terrain\)](#)
14. Recharge the refrigerant. [Refrigerant Recovery and Recharging \(R-134a\)](#) [Refrigerant Recovery and Recharging \(R-1234yf\)](#)

AIR CONDITIONING EVAPORATOR CONNECTOR HOSE/TUBE AND COMPRESSOR HOSE REPLACEMENT (LTG)

Removal Procedure

1. Recover the refrigerant. [Refrigerant Recovery and Recharging \(R-134a\)](#) [Refrigerant Recovery and Recharging \(R-1234yf\)](#)

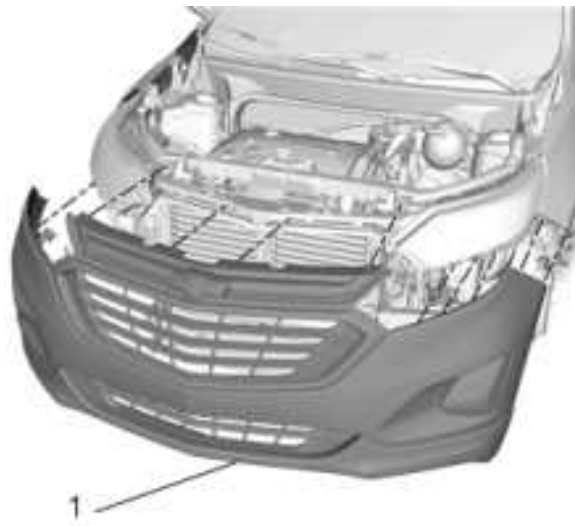


Fig. 1467: Fascia

Courtesy of GENERAL MOTORS COMPANY

2. Remove Front Bumper Fascia (1) - [Front Bumper Fascia Replacement \(Equinox\)](#) [Front Bumper Fascia Replacement \(Terrain\)](#)
3. Remove Headlamp-Right Side (2) - [Headlamp Replacement \(Chevrolet\)](#) [Headlamp Replacement \(GMC\)](#)

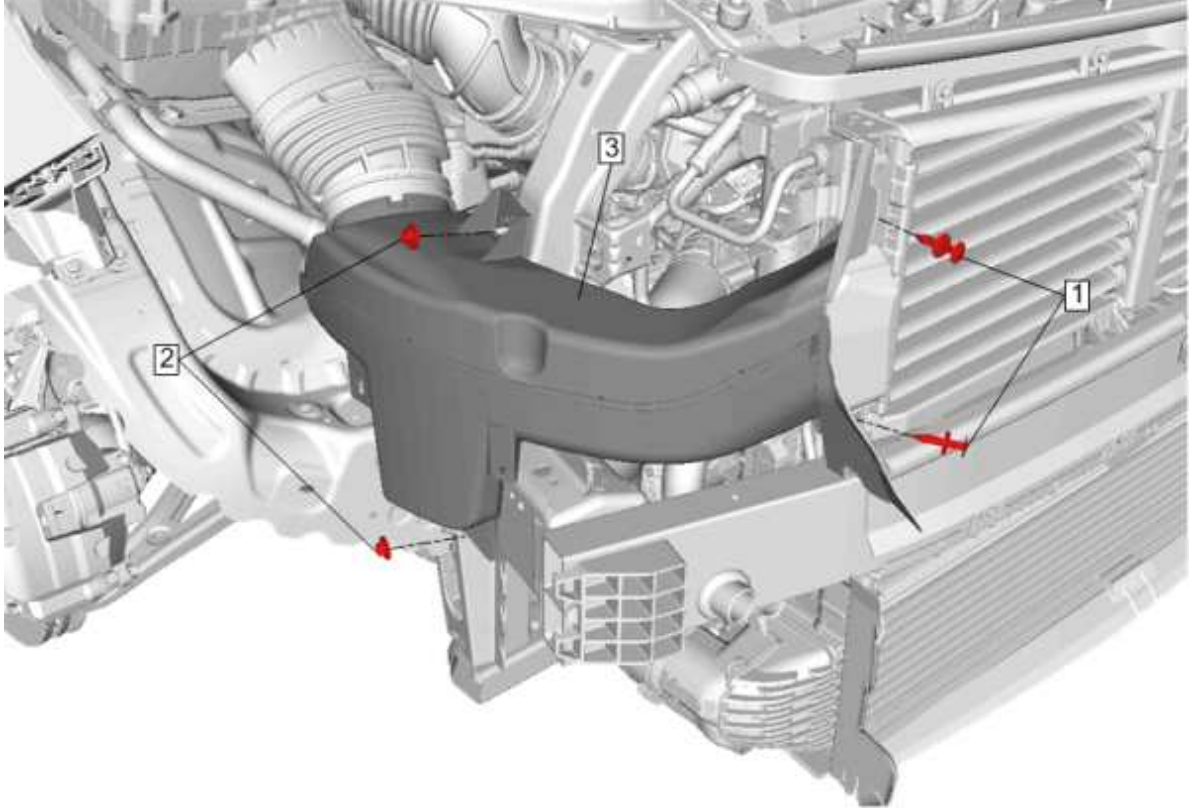


Fig. 1468: Intake Air Baffle

Courtesy of GENERAL MOTORS COMPANY

4. Remove Intake Air Baffle (3) - [Intake Air Baffle Replacement](#)

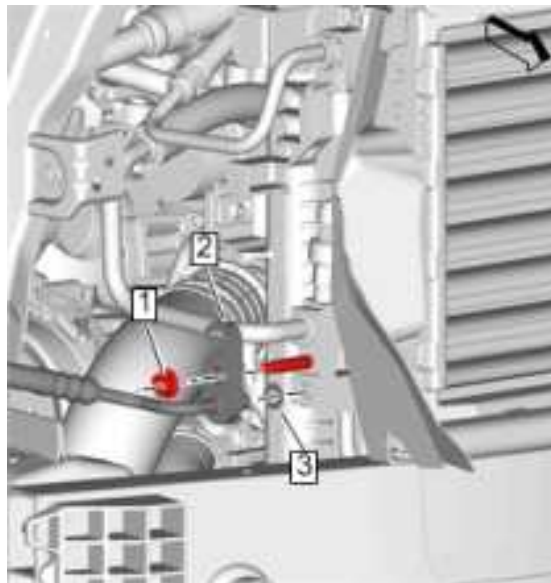


Fig. 1469: Air Conditioning Refrigerant Heat Exchanger And Nut

Courtesy of GENERAL MOTORS COMPANY

5. Remove Air Conditioning Refrigerant Heat Exchanger (2) @Air Conditioning Condenser - [Air Conditioning Refrigerant Heat Exchanger Replacement \(LTG\)](#)

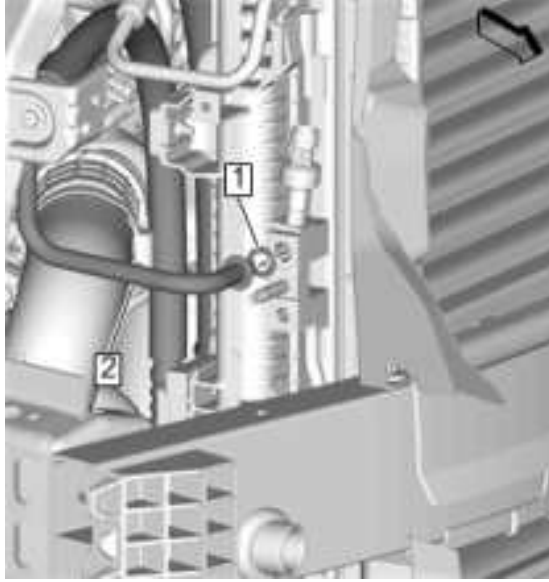


Fig. 1470: Air Conditioning Evaporator Connector Hose/Tube and Compressor Hose
Courtesy of GENERAL MOTORS COMPANY

6. Remove Air Conditioning Evaporator Connector Hose/Tube and Compressor Hose (2) @Air Conditioning Condenser
7. Remove and DISCARD the sealing washer.(1) [Air Conditioning System Seal Replacement](#)

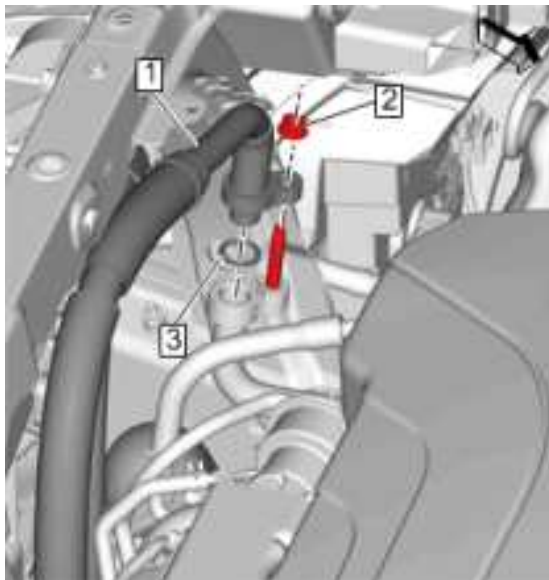


Fig. 1471: Air Conditioning Evaporator Connector Hose/Tube and Compressor Hose
Courtesy of GENERAL MOTORS COMPANY

8. Remove Air Conditioning Evaporator Connector Hose/Tube and Compressor Hose Nut (2) @Air Conditioning Refrigerant Heat Exchanger
9. Remove Air Conditioning Evaporator Connector Hose/Tube and Compressor Hose (1) @Air Conditioning Refrigerant Heat Exchanger
10. Remove and DISCARD the sealing washer. (3) [Air Conditioning System Seal Replacement](#)

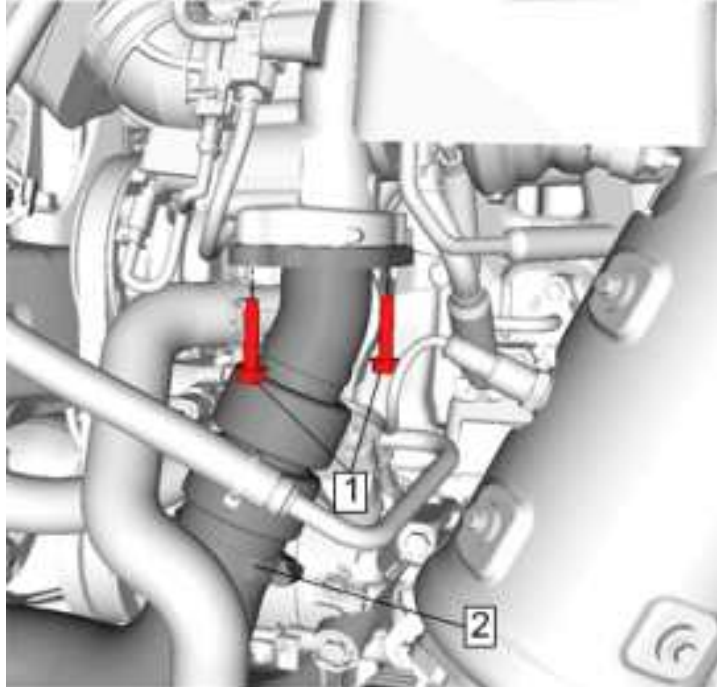


Fig. 1472: Charge Air Cooler Inlet Air Tube
 Courtesy of GENERAL MOTORS COMPANY

11. Remove Charge Air Cooler Inlet Air Tube (2) @Turbocharger - **Charge Air Cooler Inlet Air Tube Replacement**

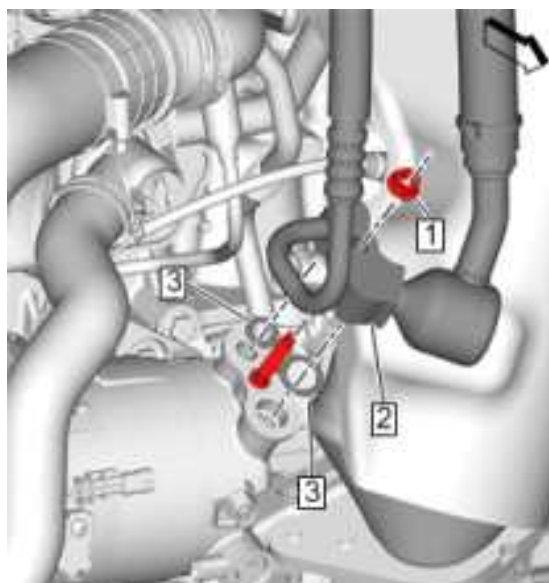


Fig. 1473: Air Conditioning Evaporator Connector Hose/Tube and Compressor Hose
 Courtesy of GENERAL MOTORS COMPANY

12. Remove Air Conditioning Evaporator Connector Hose/Tube and Compressor Hose Nut (1) @Air Conditioning Compressor
13. Remove Air Conditioning Evaporator Connector Hose/Tube and Compressor Hose (2) @Air Conditioning Compressor
14. Remove and DISCARD the sealing washer.(3) [2x]**Air Conditioning System Seal Replacement**
15. Remove the air conditioning evaporator connector hose/tube and compressor hose from the vehicle.

Installation Procedure

1. Install the air conditioning evaporator connector hose/tube and compressor hose to the vehicle.

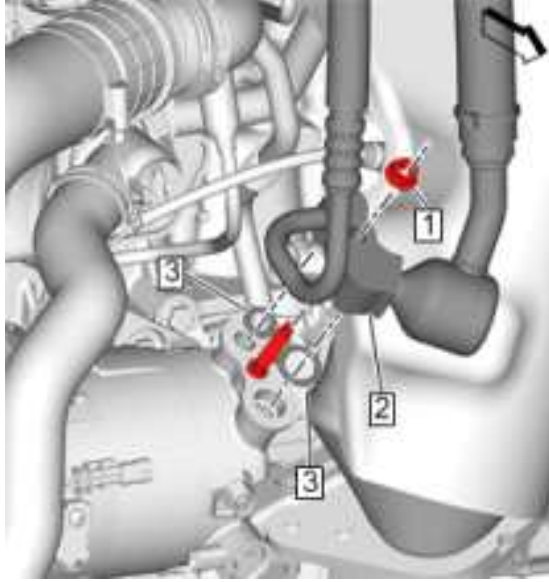


Fig. 1474: Air Conditioning Evaporator Connector Hose/Tube and Compressor Hose
Courtesy of GENERAL MOTORS COMPANY

2. Install a NEW sealing washer. (3) [2x] [Air Conditioning System Seal Replacement](#)
3. Install Air Conditioning Evaporator Connector Hose/Tube and Compressor Hose (2) @Air Conditioning Compressor

CAUTION: Refer to [Fastener Caution](#) .

4. Install Air Conditioning Evaporator Connector Hose/Tube and Compressor Hose Nut (1) @Air Conditioning Compressor and tighten 22 N.m (16 lb ft)

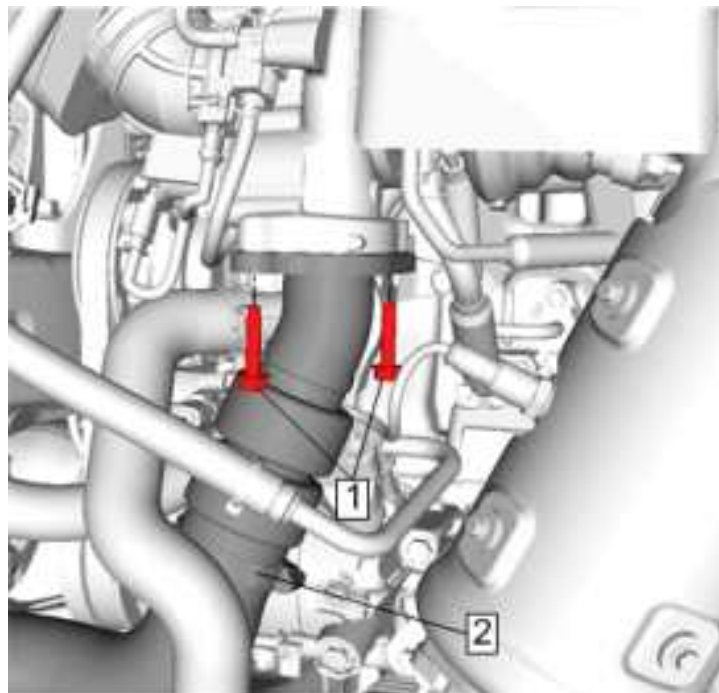


Fig. 1475: Charge Air Cooler Inlet Air Tube
Courtesy of GENERAL MOTORS COMPANY

5. Install Charge Air Cooler Inlet Air Tube (2) @Turbocharger - [Charge Air Cooler Inlet Air Tube Replacement](#)

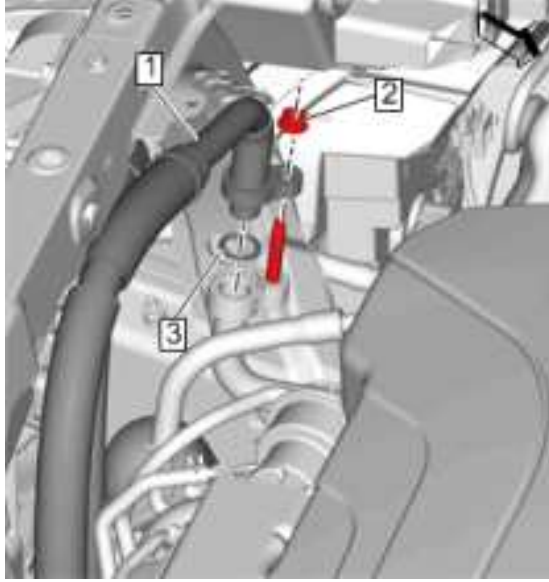


Fig. 1476: Air Conditioning Evaporator Connector Hose/Tube and Compressor Hose
 Courtesy of GENERAL MOTORS COMPANY

6. Install a NEW sealing washer. (3) [2] [Air Conditioning System Seal Replacement](#)
7. Install Air Conditioning Evaporator Connector Hose/Tube and Compressor Hose (1) @Air Conditioning Refrigerant Heat Exchanger

CAUTION: Refer to [Fastener Caution](#) .

8. Install Air Conditioning Evaporator Connector Hose/Tube and Compressor Hose Nut (2) @Air Conditioning Refrigerant Heat Exchanger and tighten 22 N.m (16 lb ft)

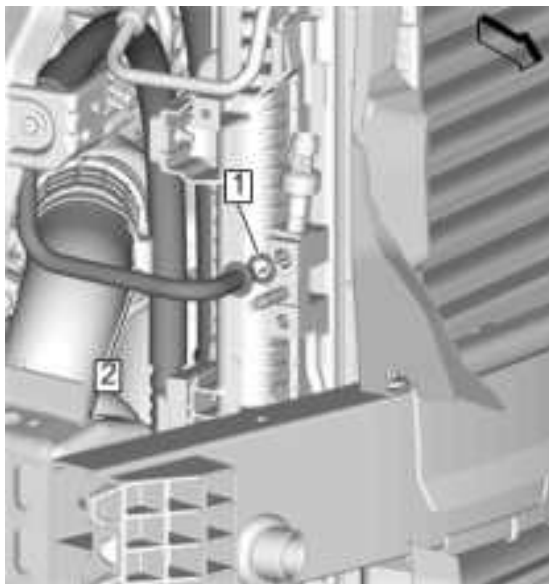


Fig. 1477: Air Conditioning Evaporator Connector Hose/Tube and Compressor Hose
 Courtesy of GENERAL MOTORS COMPANY

9. Install a NEW sealing washer. (1) [Air Conditioning System Seal Replacement](#)
10. Install Air Conditioning Evaporator Connector Hose/Tube and Compressor Hose (2) @Air Conditioning Condenser

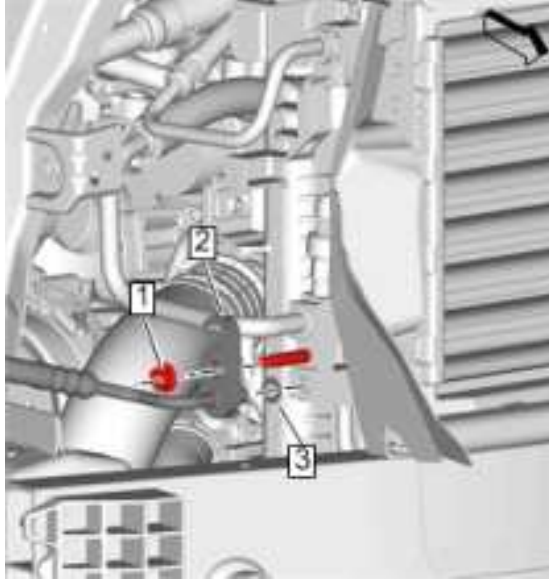


Fig. 1478: Air Conditioning Refrigerant Heat Exchanger And Nut
 Courtesy of GENERAL MOTORS COMPANY

11. Install Air Conditioning Refrigerant Heat Exchanger (2) @Air Conditioning Condenser - [Air Conditioning Refrigerant Heat Exchanger Replacement \(LTG\)](#)

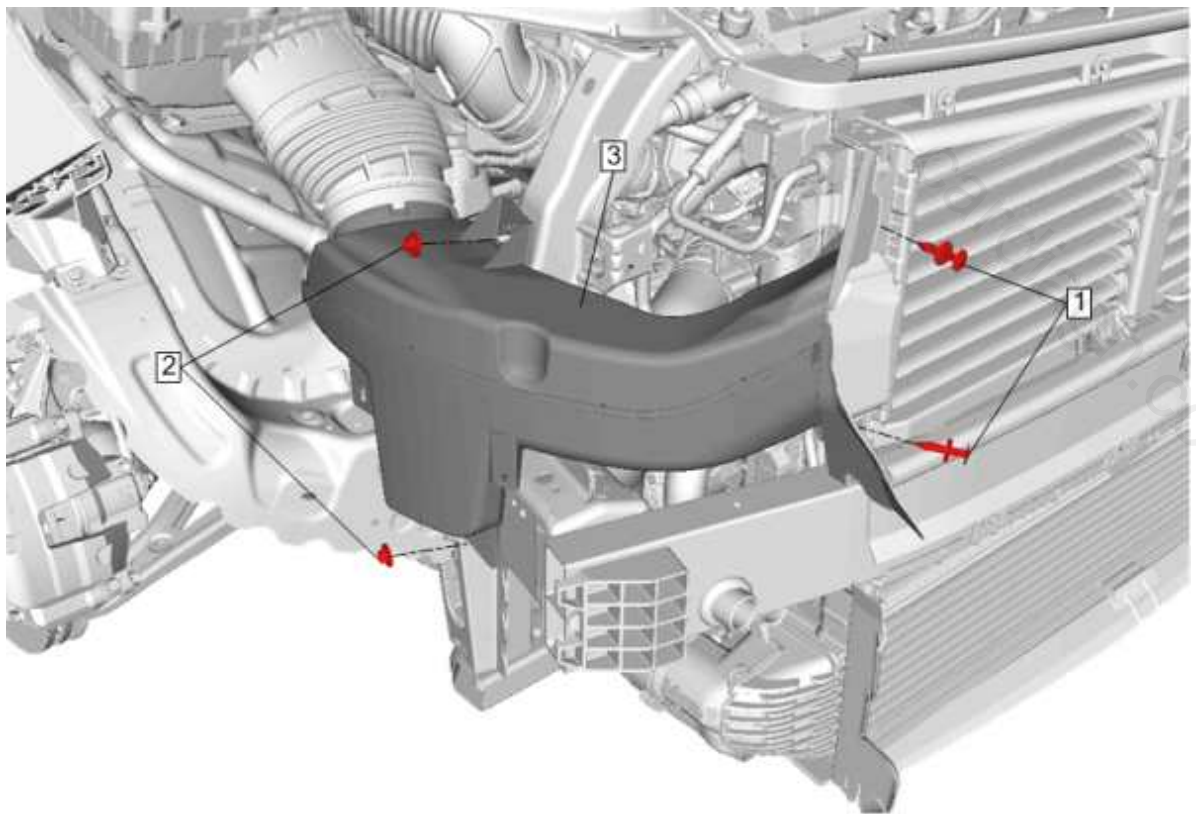


Fig. 1479: Intake Air Baffle
 Courtesy of GENERAL MOTORS COMPANY

12. Install Intake Air Baffle (3) - [Intake Air Baffle Replacement](#)
13. Install Headlamp-Right Side (2) - [Headlamp Replacement \(Chevrolet\)](#) [Headlamp Replacement \(GMC\)](#)

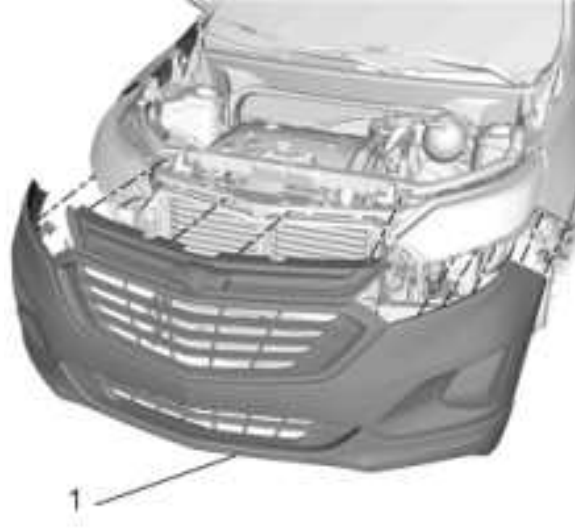


Fig. 1480: Fascia

Courtesy of GENERAL MOTORS COMPANY

14. Install Front Bumper Fascia (1) - [Front Bumper Fascia Replacement \(Equinox\)](#) [Front Bumper Fascia Replacement \(Terrain\)](#)
15. Recharge the refrigerant. [Refrigerant Recovery and Recharging \(R-134a\)](#) [Refrigerant Recovery and Recharging \(R-1234yf\)](#)

AIR CONDITIONING EVAPORATOR CONNECTOR HOSE/TUBE AND COMPRESSOR HOSE REPLACEMENT (LH7)

Removal Procedure

1. Recover the refrigerant. [Refrigerant Recovery and Recharging \(R-134a\)](#) [Refrigerant Recovery and Recharging \(R-1234yf\)](#)

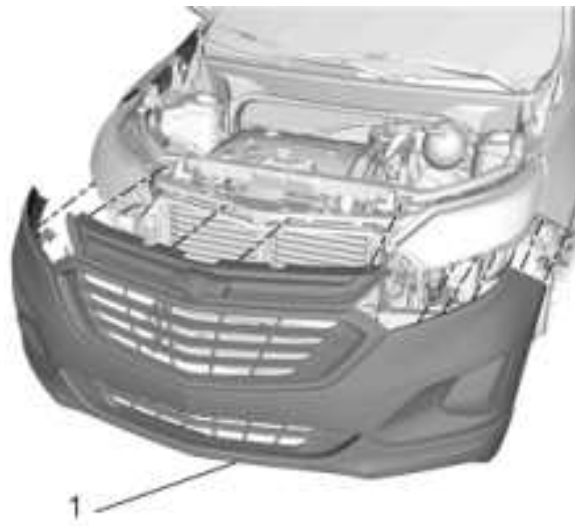


Fig. 1481: Fascia

Courtesy of GENERAL MOTORS COMPANY

2. Remove Front Bumper Fascia (1) - [Front Bumper Fascia Replacement \(Equinox\)](#) [Front Bumper Fascia Replacement \(Terrain\)](#)
3. Remove Headlamp-Right Side (2) - [Headlamp Replacement \(Chevrolet\)](#) [Headlamp Replacement \(GMC\)](#)

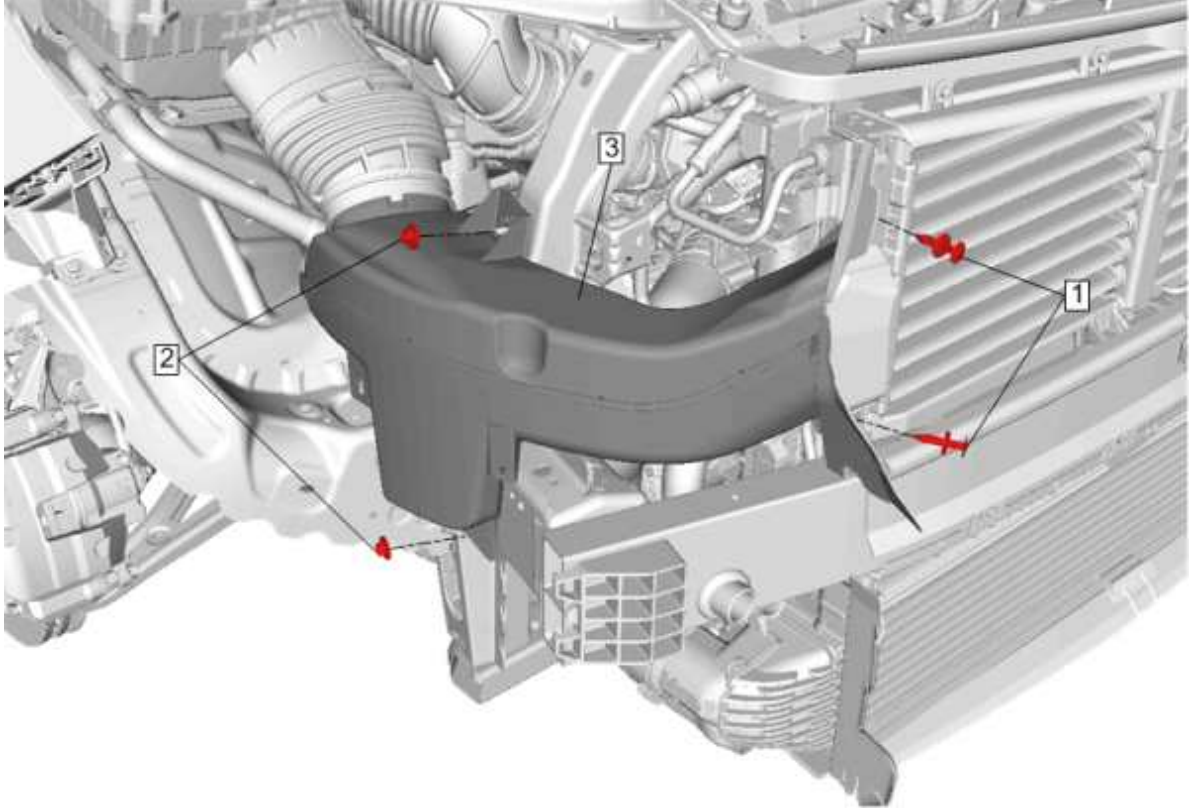


Fig. 1482: Intake Air Baffle

Courtesy of GENERAL MOTORS COMPANY

4. Remove Intake Air Baffle (3) - [Intake Air Baffle Replacement](#)

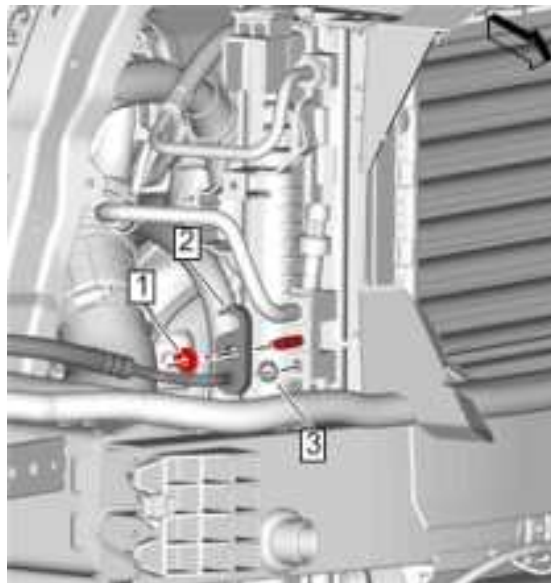


Fig. 1483: Air Conditioning Refrigerant Heat Exchanger And Nut

Courtesy of GENERAL MOTORS COMPANY

5. Remove Air Conditioning Refrigerant Heat Exchanger (2) @Air Conditioning Condenser - [Air Conditioning Refrigerant Heat Exchanger Replacement \(LH7\)](#)

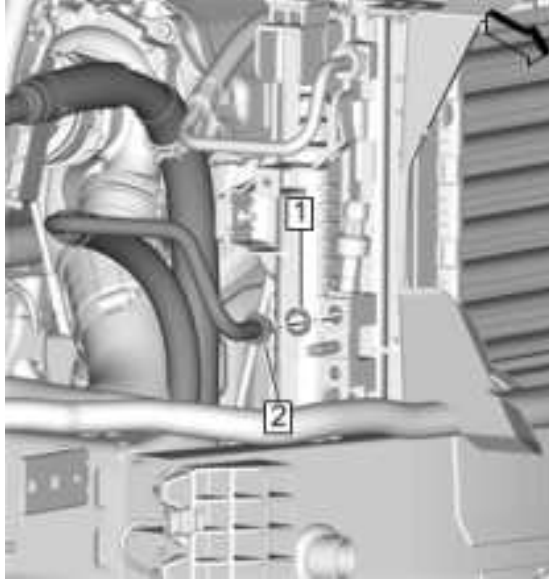


Fig. 1484: Air Conditioning Evaporator Connector Hose/Tube and Compressor Hose
Courtesy of GENERAL MOTORS COMPANY

6. Remove Air Conditioning Evaporator Connector Hose/Tube and Compressor Hose (2) @Air Conditioning Condenser
7. Remove and DISCARD the sealing washer.(1) [Air Conditioning System Seal Replacement](#)

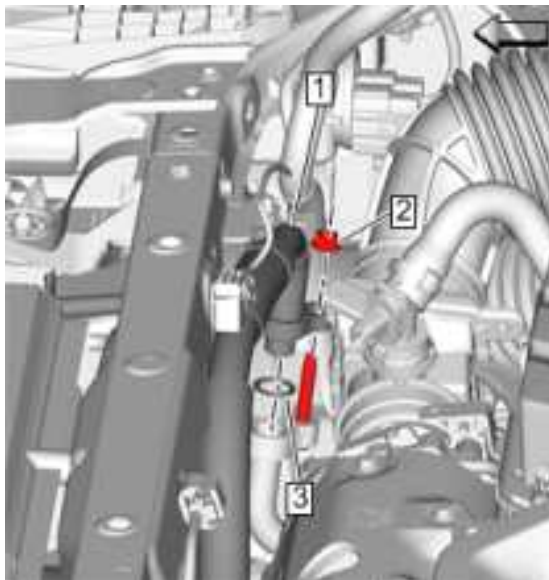


Fig. 1485: Air Conditioning Evaporator Connector Hose/Tube and Compressor Hose
Courtesy of GENERAL MOTORS COMPANY

8. Remove Air Conditioning Evaporator Connector Hose/Tube and Compressor Hose Nut (2) @Air Conditioning Refrigerant Heat Exchanger
9. Remove Air Conditioning Evaporator Connector Hose/Tube and Compressor Hose (1) @Air Conditioning Refrigerant Heat Exchanger
10. Remove and DISCARD the sealing washer.(3) [Air Conditioning System Seal Replacement](#)
11. Disconnect the electrical connector at the turbocharger wastegate actuator.

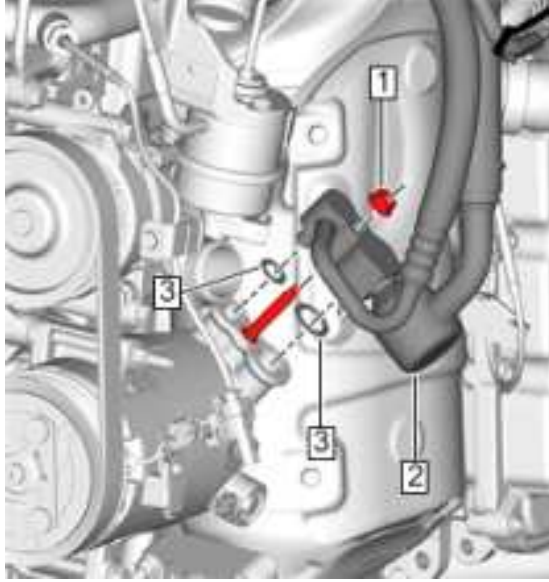


Fig. 1486: A/C Evaporator Connector Hose/Tube And Compressor Hose, Seals And Retaining Nut
Courtesy of GENERAL MOTORS COMPANY

12. Remove Air Conditioning Evaporator Connector Hose/Tube and Compressor Hose Nut (1) @Air Conditioning Compressor
13. Remove Air Conditioning Evaporator Connector Hose/Tube and Compressor Hose (2) @Air Conditioning Compressor
14. Remove and DISCARD the sealing washer. (3) [2x] **Air Conditioning System Seal Replacement**
15. Remove the air conditioning evaporator connector hose/tube and compressor hose (2) from the vehicle.

Installation Procedure

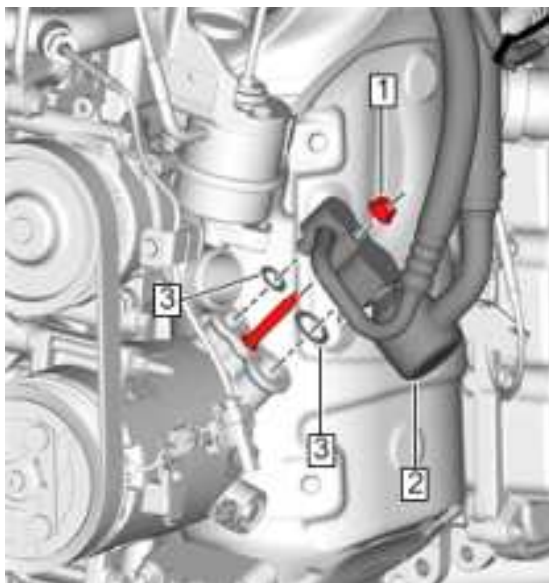


Fig. 1487: A/C Evaporator Connector Hose/Tube And Compressor Hose, Seals And Retaining Nut
Courtesy of GENERAL MOTORS COMPANY

1. Install a NEW sealing washer. (3) [2x] **Air Conditioning System Seal Replacement**
2. Install the air conditioning evaporator connector hose/tube and compressor hose (2) to the vehicle.
3. Install Air Conditioning Evaporator Connector Hose/Tube and Compressor Hose (2) @Air Conditioning Compressor

CAUTION: Refer to **Fastener Caution** .

4. Install Air Conditioning Evaporator Connector Hose/Tube and Compressor Hose Nut (1) @Air Conditioning Compressor and tighten 22 N.m (16 lb ft)
5. Connect the electrical connector at the turbocharger wastegate actuator.

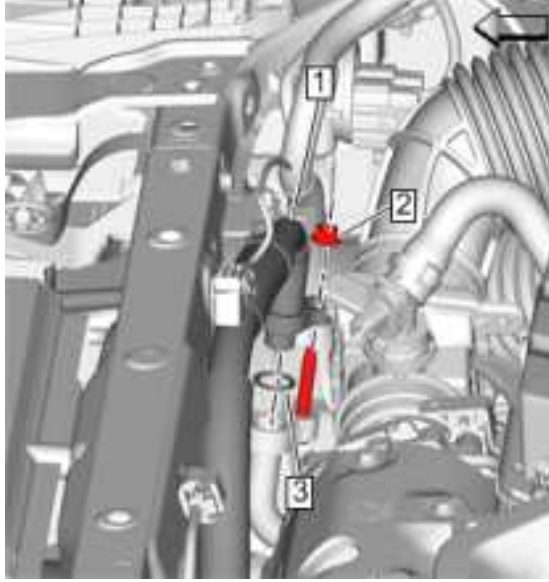


Fig. 1488: Air Conditioning Evaporator Connector Hose/Tube and Compressor Hose
 Courtesy of GENERAL MOTORS COMPANY

6. Install a NEW sealing washer. (3) [2x] [Air Conditioning System Seal Replacement](#)
7. Install Air Conditioning Evaporator Connector Hose/Tube and Compressor Hose (1) @Air Conditioning Refrigerant Heat Exchanger

CAUTION: Refer to [Fastener Caution](#) .

8. Install Air Conditioning Evaporator Connector Hose/Tube and Compressor Hose Nut (2) @Air Conditioning Refrigerant Heat Exchanger and tighten 22 N.m (16 lb ft)

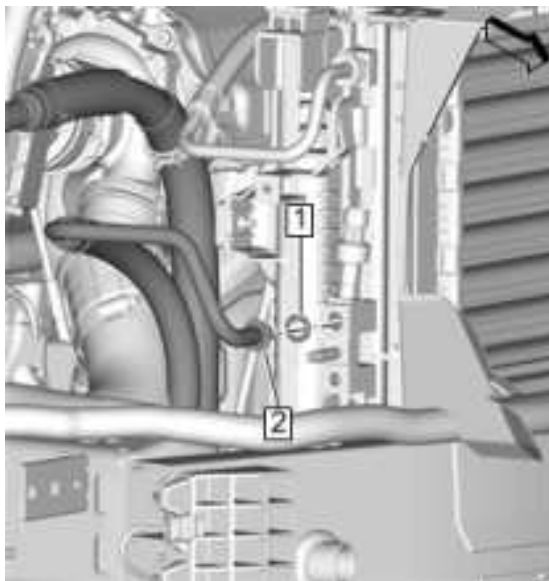


Fig. 1489: Air Conditioning Evaporator Connector Hose/Tube and Compressor Hose
 Courtesy of GENERAL MOTORS COMPANY

9. Install a NEW sealing washer. (1) [Air Conditioning System Seal Replacement](#)
10. Install Air Conditioning Evaporator Connector Hose/Tube and Compressor Hose (2) @Air Conditioning Condenser

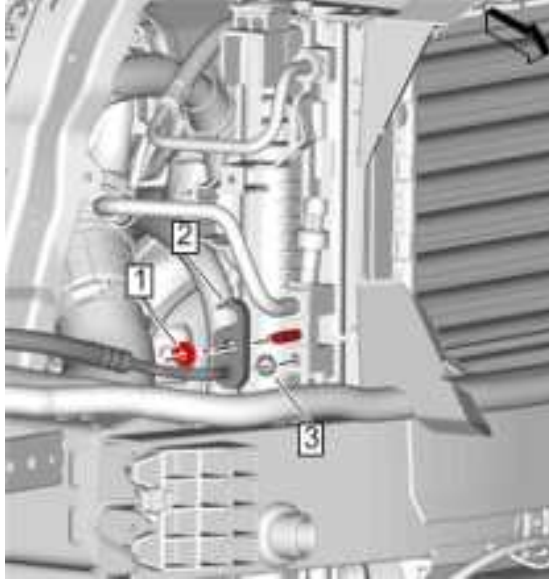


Fig. 1490: Air Conditioning Refrigerant Heat Exchanger And Nut
 Courtesy of GENERAL MOTORS COMPANY

11. Install Air Conditioning Refrigerant Heat Exchanger (2) @Air Conditioning Condenser - [Air Conditioning Refrigerant Heat Exchanger Replacement \(LH7\)](#)

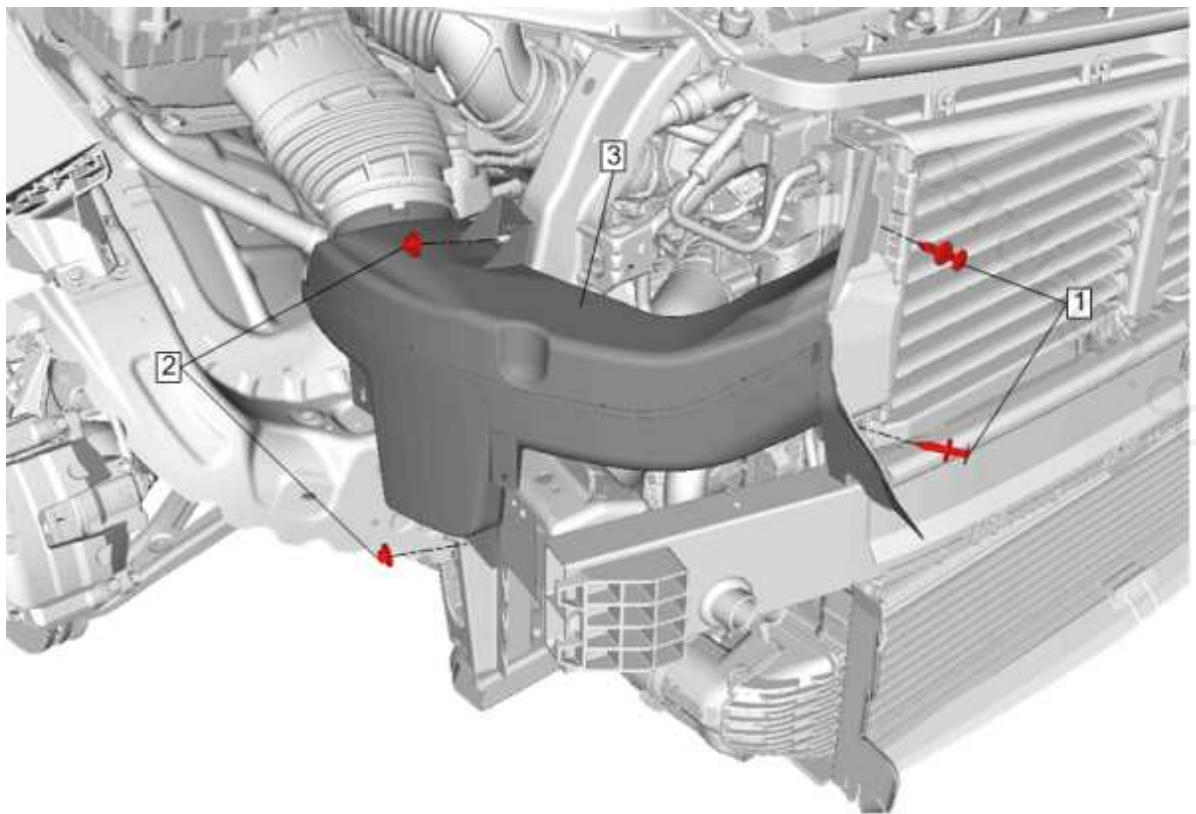


Fig. 1491: Intake Air Baffle
 Courtesy of GENERAL MOTORS COMPANY

12. Install Intake Air Baffle (3) - [Intake Air Baffle Replacement](#)
13. Install Headlamp-Right Side (2) - [Headlamp Replacement \(Chevrolet\)](#) [Headlamp Replacement \(GMC\)](#)

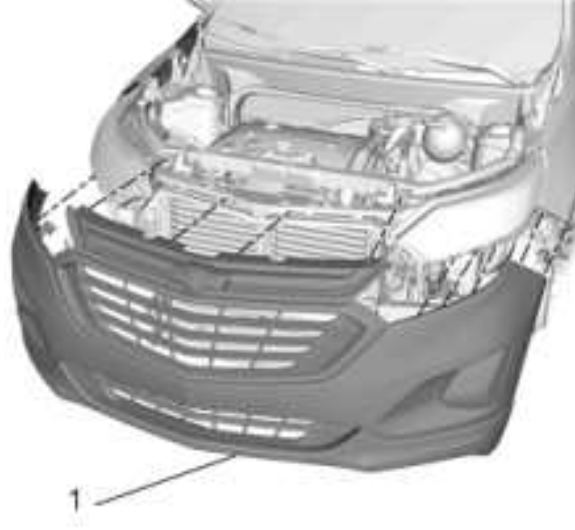


Fig. 1492: Fascia

Courtesy of GENERAL MOTORS COMPANY

14. Install Front Bumper Fascia (1) - [Front Bumper Fascia Replacement \(Equinox\)](#) [Front Bumper Fascia Replacement \(Terrain\)](#)
15. Recharge the refrigerant. [Refrigerant Recovery and Recharging \(R-134a\)](#) [Refrigerant Recovery and Recharging \(R-1234yf\)](#)

HEATER WATER AUXILIARY PUMP HOSE REPLACEMENT (LYX WITH KL9)

Removal Procedure

1. Drain the cooling system. [Cooling System Draining and Filling \(GE 47716\)](#) [Cooling System Draining and Filling \(Static\)](#)

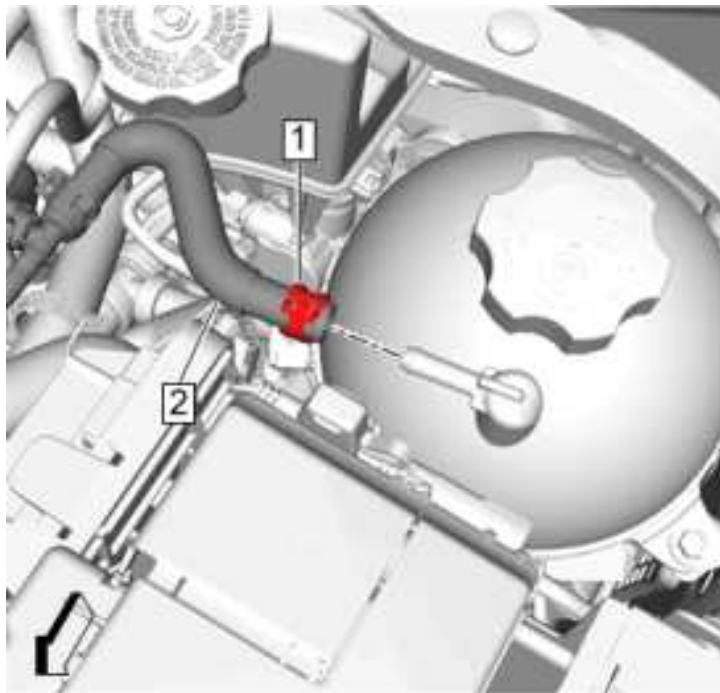


Fig. 1493: Engine Coolant Air Bleed Hose

Courtesy of GENERAL MOTORS COMPANY

2. Remove Engine Coolant Air Bleed Hose (2) @Radiator Surge Tank - [Engine Coolant Air Bleed Hose Replacement \(Turbocharger Coolant Return pipe to Water Outlet, LYX\)](#) [Engine Coolant Air Bleed Hose Replacement \(Radiator Surge Tank to Turbocharger Coolant Return Pipe to Radiator, LYX\)](#)

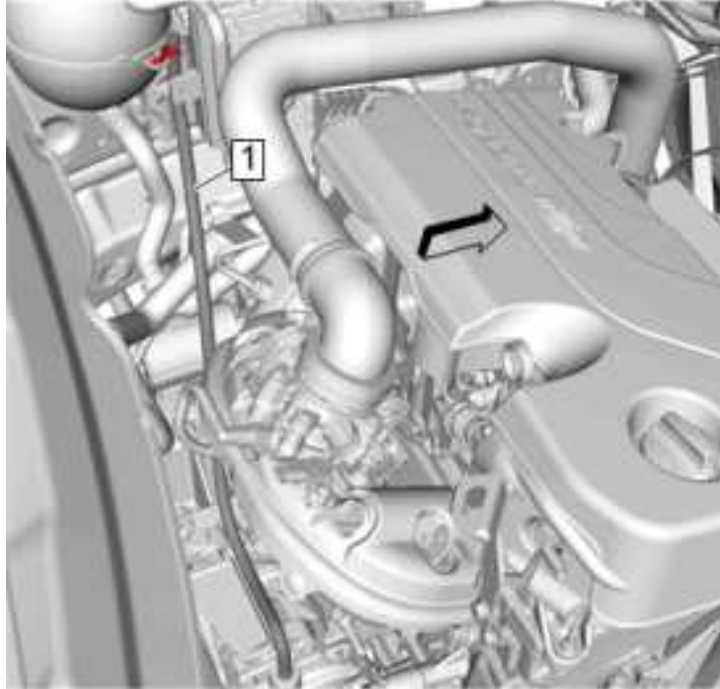


Fig. 1494: Power Transfer Unit Vent Hose
 Courtesy of GENERAL MOTORS COMPANY

3. Remove Power Transfer Unit Vent Hose (1) @Radiator Surge Tank - **Power Transfer Unit Vent Hose Replacement**

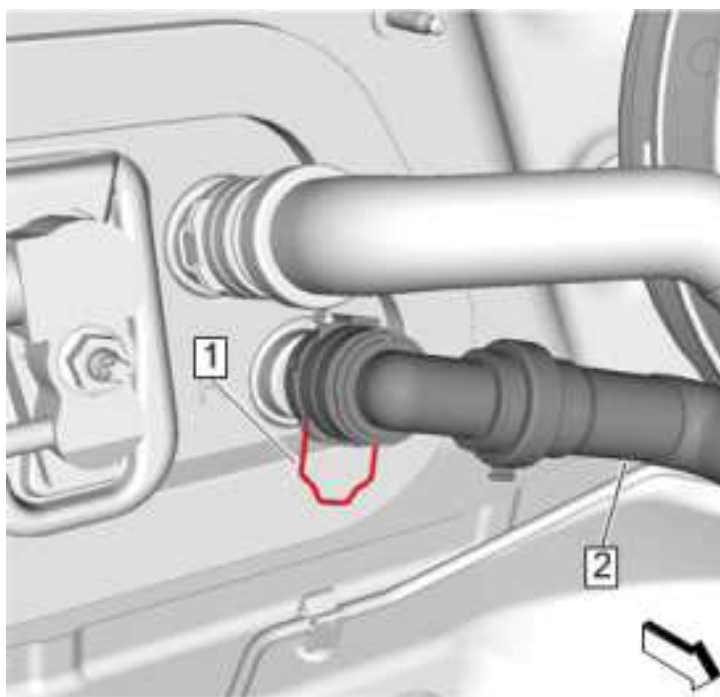


Fig. 1495: Heater Outlet Hose
 Courtesy of GENERAL MOTORS COMPANY

4. Disengage Heater Water Auxiliary Pump Hose Retainer (1)
5. Remove Heater Water Auxiliary Pump Hose (2) @Heater Core Outlet Tube

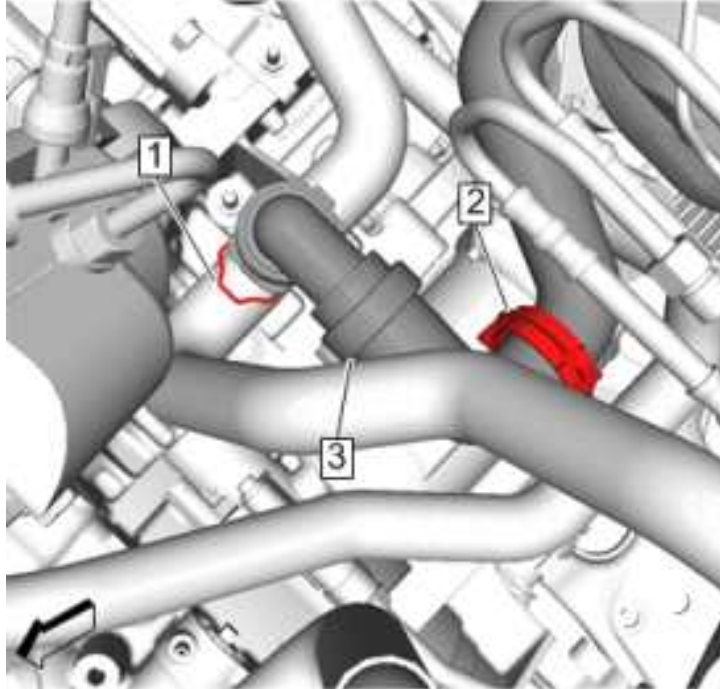


Fig. 1496: Heater Water Auxiliary Pump Hose
Courtesy of GENERAL MOTORS COMPANY

6. Disengage Heater Water Auxiliary Pump Hose Retainer (1)
7. Remove Auxiliary Heater Outlet Hose Retainer (2) @Heater Water Auxiliary Pump Hose
8. Remove Heater Water Auxiliary Pump Hose (3) @Heater Water Auxiliary Pump Inlet Hose
9. Remove Heater Water Auxiliary Pump Hose (3)

Installation Procedure

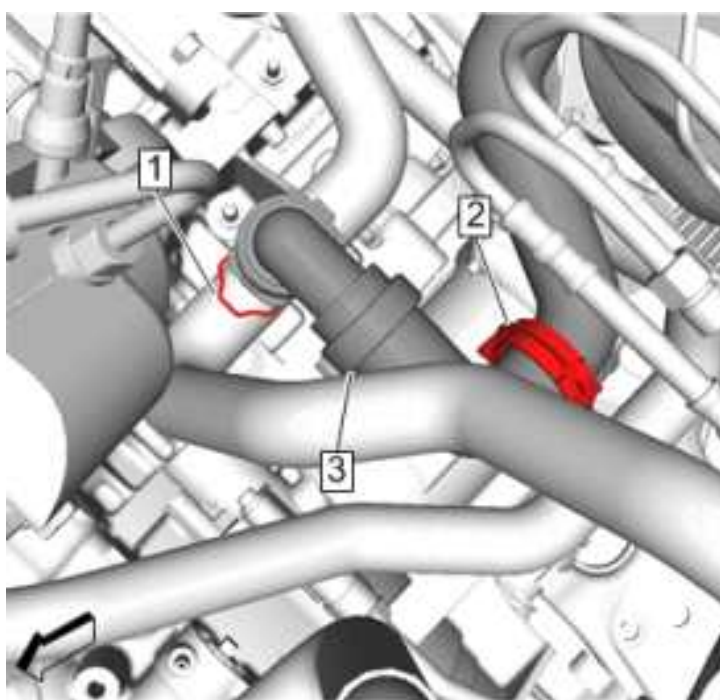


Fig. 1497: Heater Water Auxiliary Pump Hose
Courtesy of GENERAL MOTORS COMPANY

1. Install Heater Water Auxiliary Pump Hose (3) @Heater Water Auxiliary Pump Inlet Hose
2. Engage Heater Water Auxiliary Pump Hose Retainer (1)
3. Install Auxiliary Heater Outlet Hose Retainer (2) @Heater Water Auxiliary Pump Hose

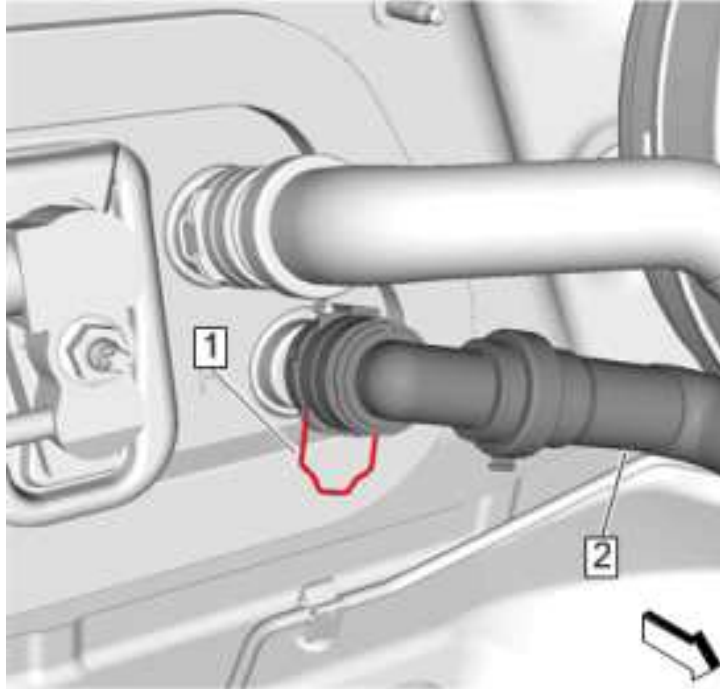


Fig. 1498: Heater Outlet Hose

Courtesy of GENERAL MOTORS COMPANY

4. Remove Heater Water Auxiliary Pump Hose (2) @Heater Core Outlet Tube
5. Disengage Heater Water Auxiliary Pump Hose Retainer (1)

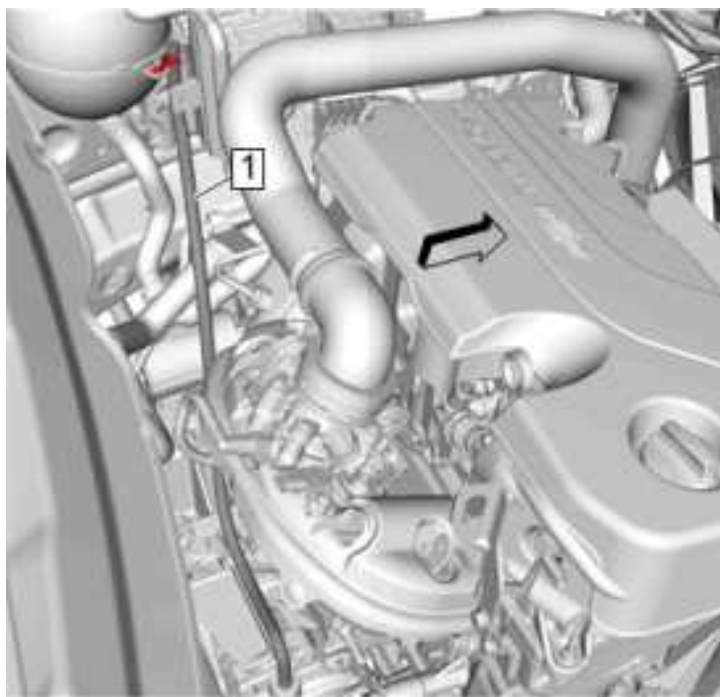


Fig. 1499: Power Transfer Unit Vent Hose

Courtesy of GENERAL MOTORS COMPANY

6. Install Power Transfer Unit Vent Hose (1) @Radiator Surge Tank - **Power Transfer Unit Vent Hose Replacement**

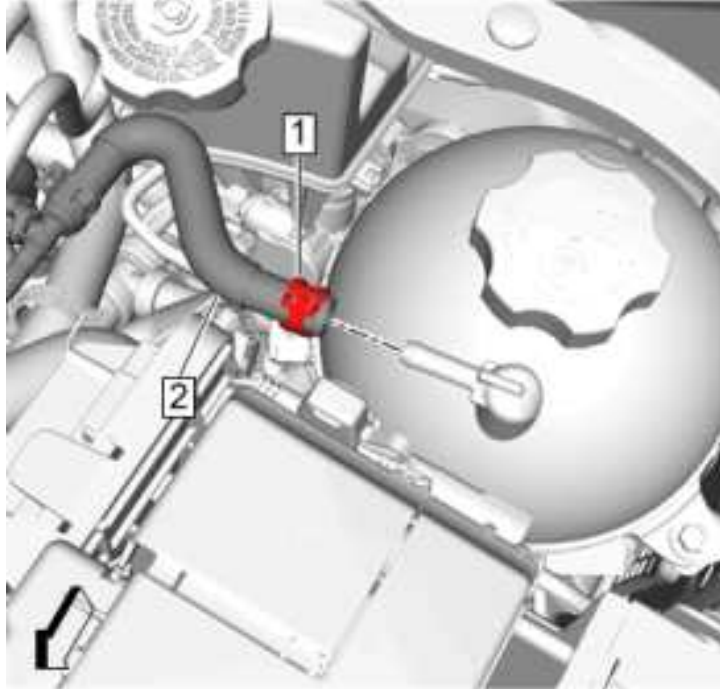


Fig. 1500: Engine Coolant Air Bleed Hose
Courtesy of GENERAL MOTORS COMPANY

7. Install Engine Coolant Air Bleed Hose (2) @Radiator Surge Tank - [Engine Coolant Air Bleed Hose Replacement \(Turbocharger Coolant Return pipe to Water Outlet, LYX\)](#) [Engine Coolant Air Bleed Hose Replacement \(Radiator Surge Tank to Turbocharger Coolant Return Pipe to Radiator, LYX\)](#)
8. Fill the cooling system. [Cooling System Draining and Filling \(GE 47716\)](#) [Cooling System Draining and Filling \(Static\)](#)
9. Check the cooling system for leaks.

HEATER WATER AUXILIARY PUMP HOSE REPLACEMENT (LH7 EQUINOX)

Removal Procedure

1. Drain the cooling system. [Cooling System Draining and Filling \(GE 47716\)](#) [Cooling System Draining and Filling \(Static\)](#)
2. Lower the vehicle.
3. Remove Intake Manifold Cover - [Intake Manifold Cover Replacement](#)

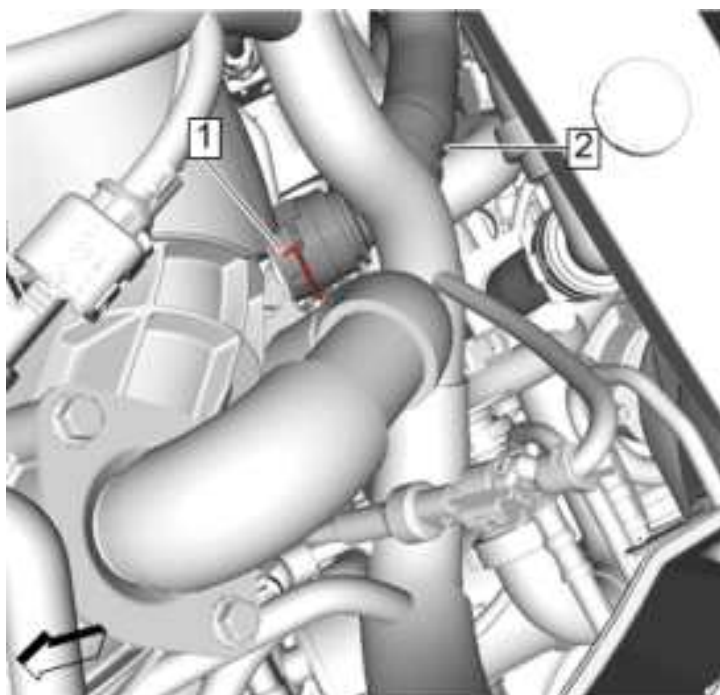


Fig. 1501: Heater Water Auxiliary Pump Hose Retainer
Courtesy of GENERAL MOTORS COMPANY

4. Disengage Heater Water Auxiliary Pump Hose Retainer (1)
5. Remove Heater Water Auxiliary Pump Hose (2) @Exhaust Gas Recirculation Cooler Housing

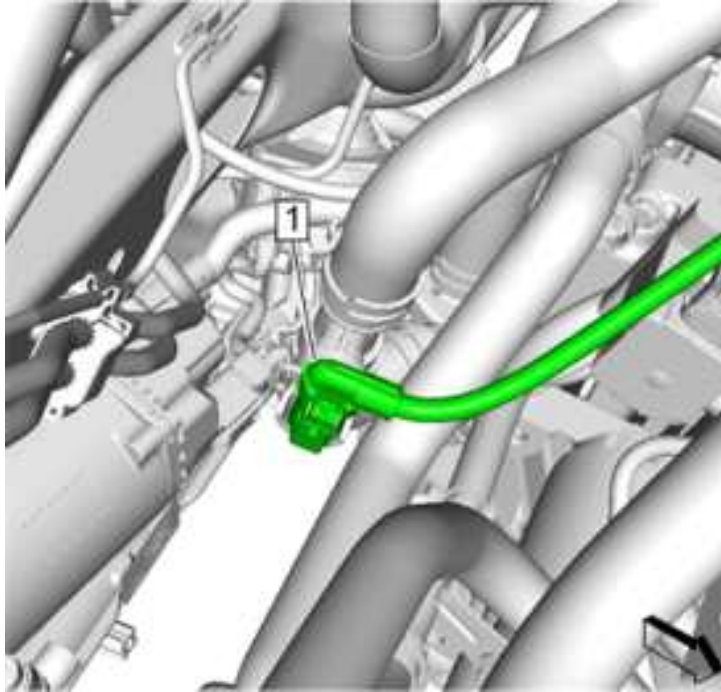


Fig. 1502: Engine Coolant Temperature Sensor Electrical Connector
Courtesy of GENERAL MOTORS COMPANY

6. Disconnect Engine Coolant Temperature Sensor Electrical Connector (1) @Engine Coolant Temperature Sensor

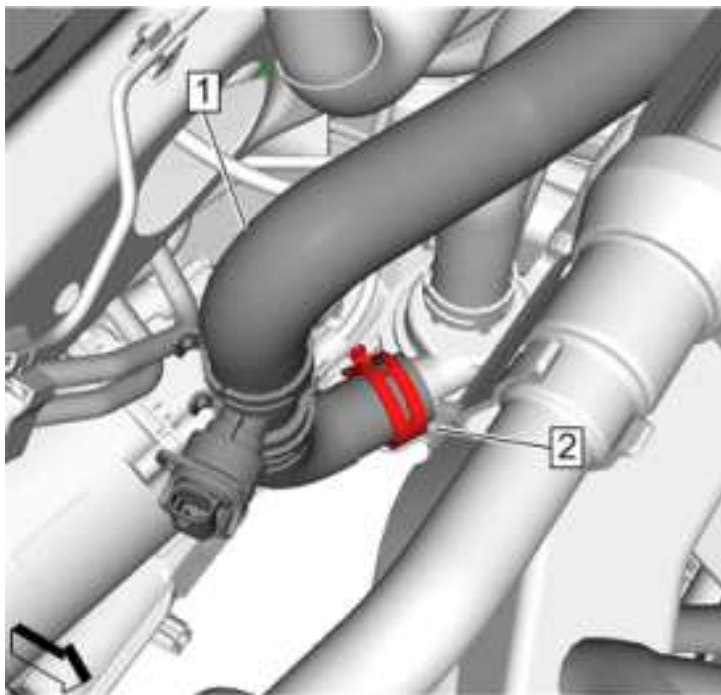


Fig. 1503: Heater Water Auxiliary Pump Hose Clamp
Courtesy of GENERAL MOTORS COMPANY

7. Disengage Heater Water Auxiliary Pump Hose Camp (2) - [Hose Clamp Replacement Guidelines - Spring Type](#)
8. Remove Heater Water Auxiliary Pump Hose (1) @Auxiliary Water Pump
9. Remove Heater Water Auxiliary Pump Hose (1)

Installation Procedure

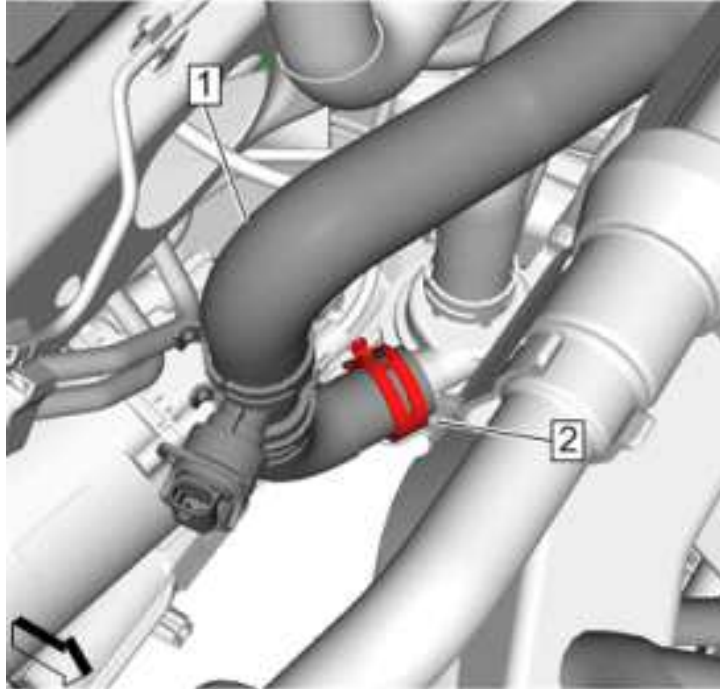


Fig. 1504: Heater Water Auxiliary Pump Hose Clamp
 Courtesy of GENERAL MOTORS COMPANY

1. Install Heater Water Auxiliary Pump Hose (1) @Auxiliary Water Pump
2. Engage Heater Water Auxiliary Pump Hose Clamp (2) - [Hose Clamp Replacement Guidelines - Spring Type](#)

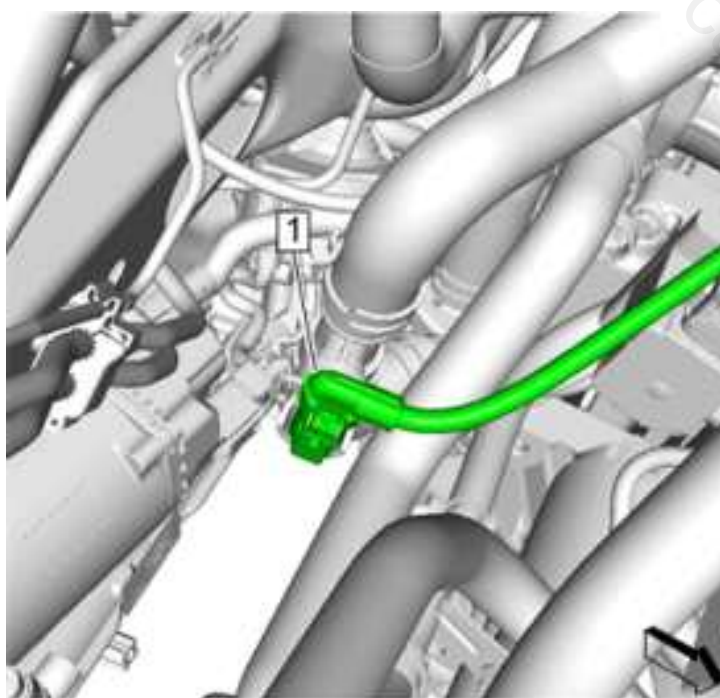


Fig. 1505: Engine Coolant Temperature Sensor Electrical Connector
 Courtesy of GENERAL MOTORS COMPANY

3. Connect Engine Coolant Temperature Sensor Electrical Connector (1) @Engine Coolant Temperature Sensor

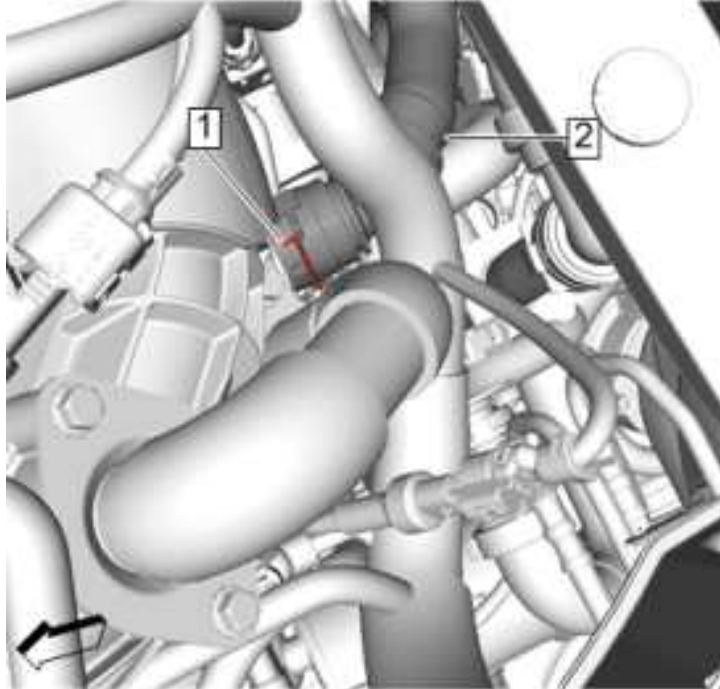


Fig. 1506: Heater Water Auxiliary Pump Hose Retainer
 Courtesy of GENERAL MOTORS COMPANY

4. Install Heater Water Auxiliary Pump Hose (2) @Exhaust Gas Recirculation Cooler Housing
5. Engage Heater Water Auxiliary Pump Hose Retainer (1)
6. Install Intake Manifold Cover - [Intake Manifold Cover Replacement](#)
7. Fill the cooling system. [Cooling System Draining and Filling \(GE 47716\)](#) [Cooling System Draining and Filling \(Static\)](#)
8. Check the cooling system for leaks.

HEATER WATER AUXILIARY PUMP HOSE REPLACEMENT (LTG WITH KL9)

Removal Procedure

1. Drain the cooling system. [Cooling System Draining and Filling \(GE 47716\)](#) [Cooling System Draining and Filling \(Static\)](#)

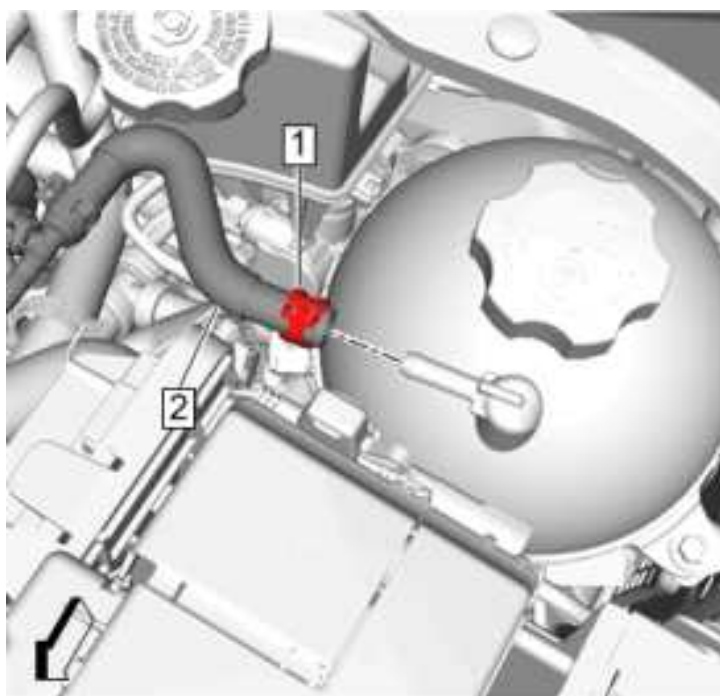


Fig. 1507: Engine Coolant Air Bleed Hose
 Courtesy of GENERAL MOTORS COMPANY

2. Remove Engine Coolant Air Bleed Hose (2) @Radiator Surge Tank - [Engine Coolant Air Bleed Hose Replacement \(Radiator Surge Tank to Radiator to Engine Coolant Air Bleed Pipe LTG\)](#)

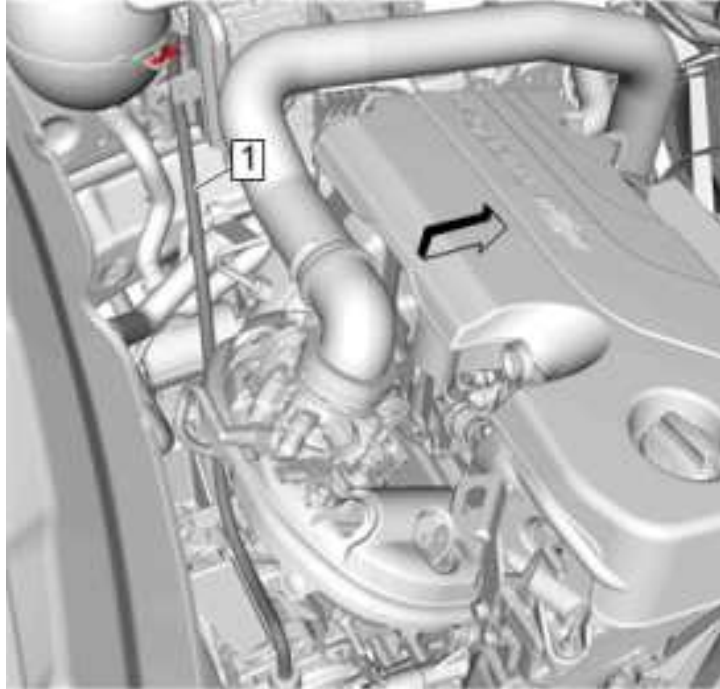


Fig. 1508: Power Transfer Unit Vent Hose
 Courtesy of GENERAL MOTORS COMPANY

3. Remove Power Transfer Unit Vent Hose (1) @Radiator Surge Tank - **Power Transfer Unit Vent Hose Replacement**

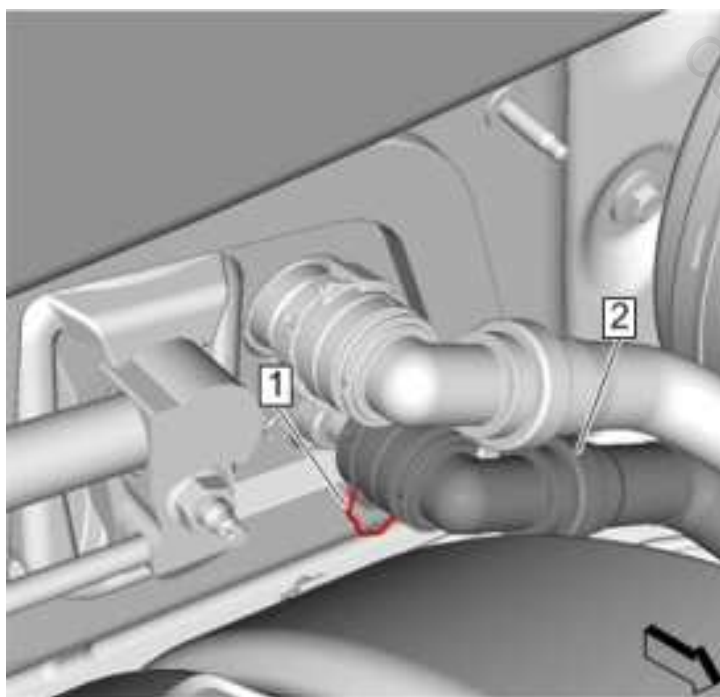


Fig. 1509: Heater Water Auxiliary Pump Hose Retainer
 Courtesy of GENERAL MOTORS COMPANY

4. Disengage Heater Water Auxiliary Pump Hose Retainer (1)
5. Remove Heater Water Auxiliary Pump Hose (2) @Heater Core Outlet Tube

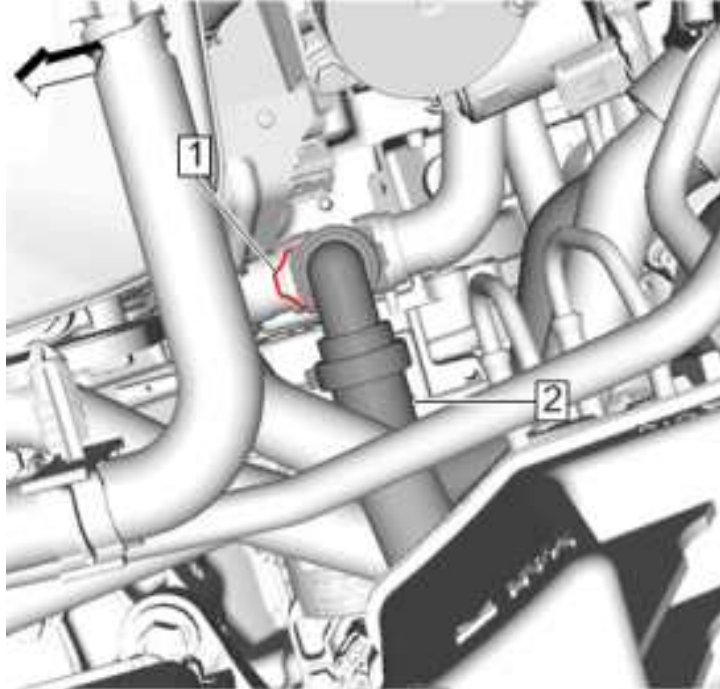


Fig. 1510: Heater Water Auxiliary Pump Hose

Courtesy of GENERAL MOTORS COMPANY

6. Disengage Heater Water Auxiliary Pump Hose Retainer (1)
7. Remove Heater Water Auxiliary Pump Hose (2) @Heater Water Auxiliary Pump Inlet Hose
8. Remove Heater Water Auxiliary Pump Hose (2)

Installation Procedure

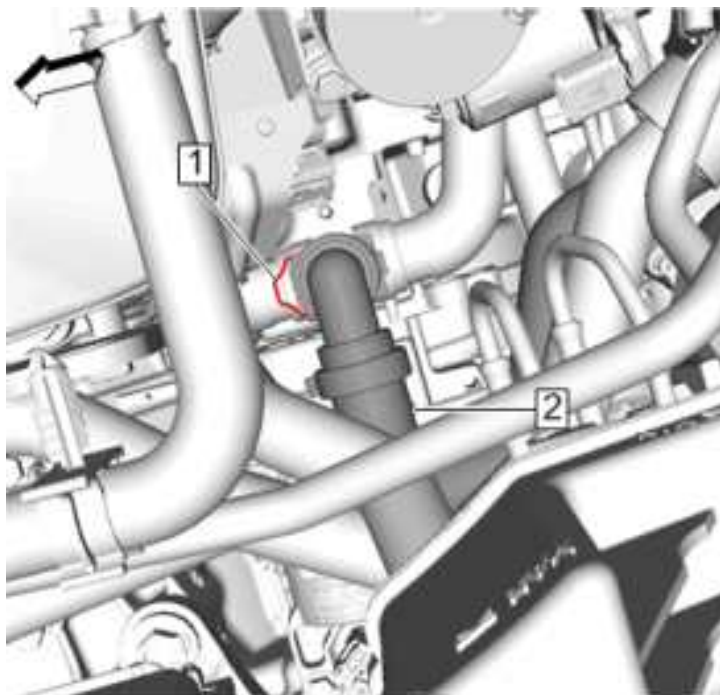


Fig. 1511: Heater Water Auxiliary Pump Hose

Courtesy of GENERAL MOTORS COMPANY

1. Install Heater Water Auxiliary Pump Hose (2) @Heater Water Auxiliary Pump Inlet Hose
2. Engage Heater Water Auxiliary Pump Hose Retainer (1)

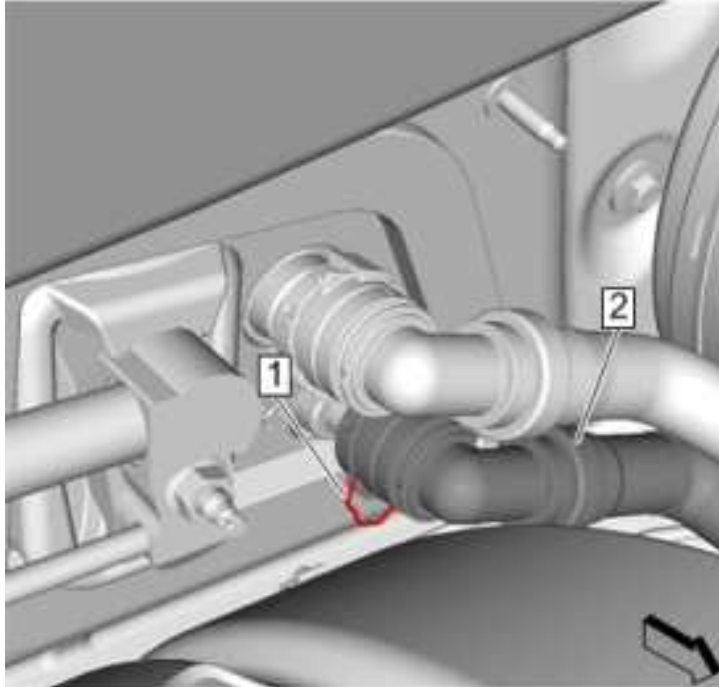


Fig. 1512: Heater Water Auxiliary Pump Hose Retainer
 Courtesy of GENERAL MOTORS COMPANY

3. Install Heater Water Auxiliary Pump Hose (2) @Heater Core Outlet Tube
4. Engage Heater Water Auxiliary Pump Hose Retainer (1)

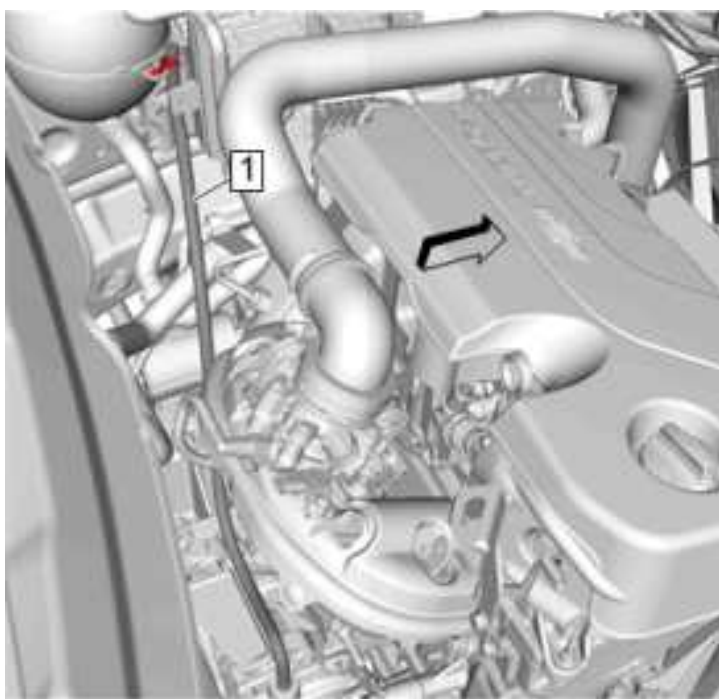


Fig. 1513: Power Transfer Unit Vent Hose
 Courtesy of GENERAL MOTORS COMPANY

5. Install Power Transfer Unit Vent Hose (1) @Radiator Surge Tank - **Power Transfer Unit Vent Hose Replacement**

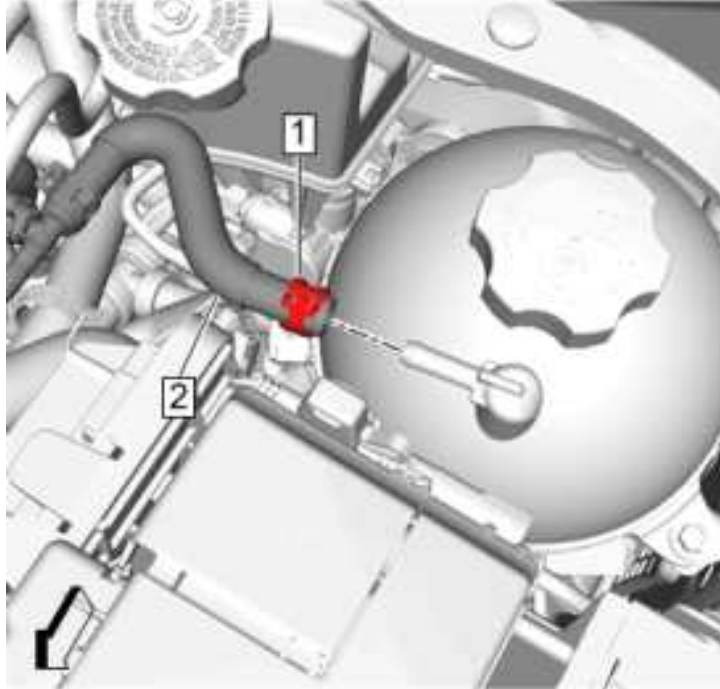


Fig. 1514: Engine Coolant Air Bleed Hose

Courtesy of GENERAL MOTORS COMPANY

6. Install Engine Coolant Air Bleed Hose (2) @Radiator Surge Tank - [Engine Coolant Air Bleed Hose Replacement \(Radiator Surge Tank to Radiator to Engine Coolant Air Bleed Pipe LTG\)](#).
7. Fill the cooling system. [Cooling System Draining and Filling \(GE 47716\)](#). [Cooling System Draining and Filling \(Static\)](#).
8. Check the cooling system for leaks.

HEATER WATER AUXILIARY PUMP HOSE REPLACEMENT (LH7 TERRAIN)

Removal Procedure

1. Drain the cooling system. [Cooling System Draining and Filling \(GE 47716\)](#). [Cooling System Draining and Filling \(Static\)](#).
2. Lower the vehicle.
3. Remove Intake Manifold Cover - [Intake Manifold Cover Replacement](#)

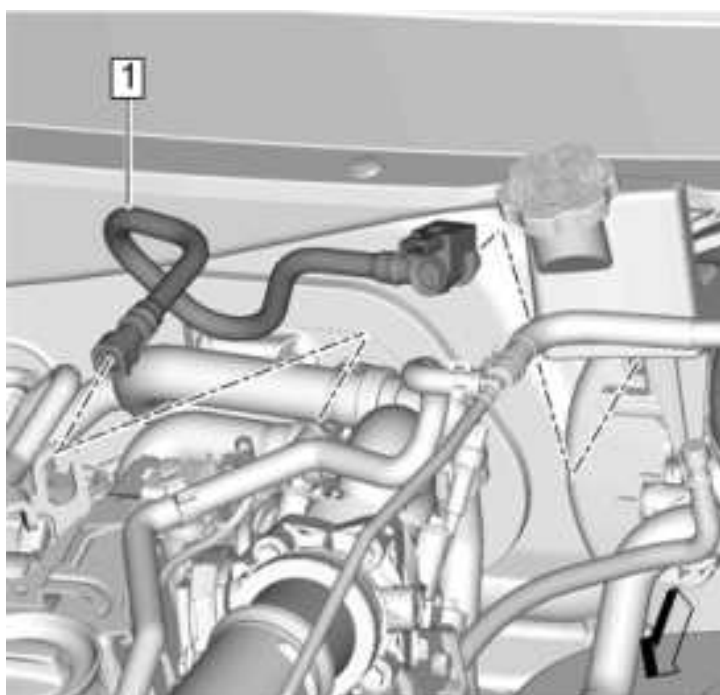


Fig. 1515: Power Brake Booster Vacuum Pipe

Courtesy of GENERAL MOTORS COMPANY

4. Remove Power Brake Booster Vacuum Pipe (1) @Power Brake Booster Vacuum Pipe Fitting **Power Brake Booster Vacuum Pipe Replacement (LH7)**

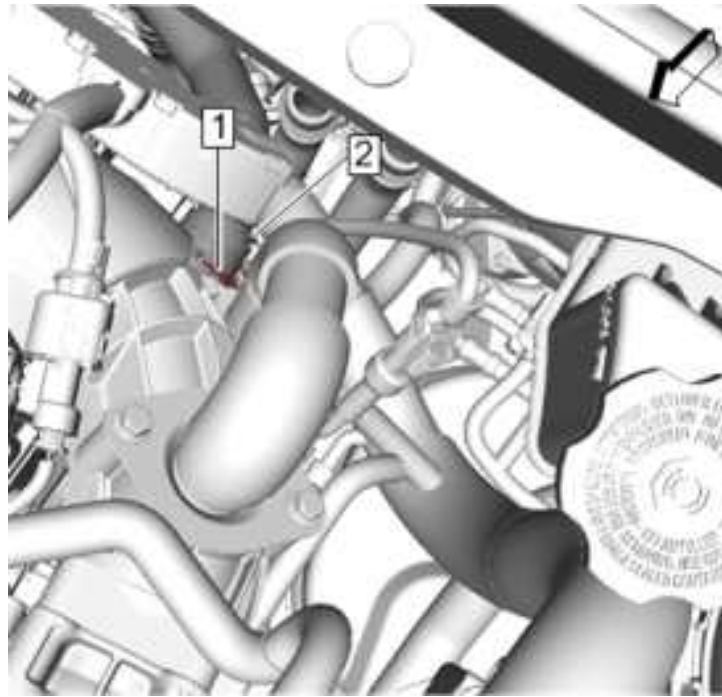


Fig. 1516: Heater Water Auxiliary Pump Hose And Retainer

Courtesy of GENERAL MOTORS COMPANY

5. Disengage Heater Water Auxiliary Pump Hose Retainer (1)
6. Remove Heater Water Auxiliary Pump Hose (2) @Exhaust Gas Recirculation Cooler Housing

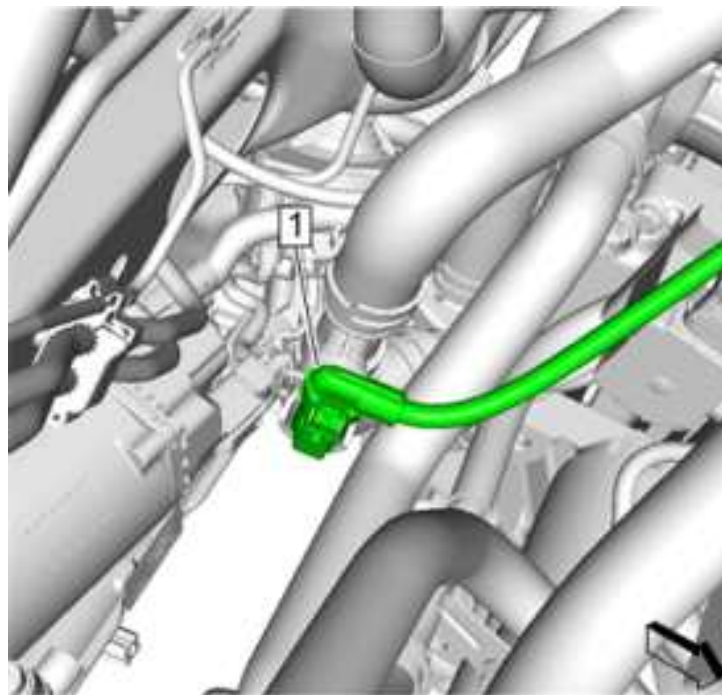


Fig. 1517: Engine Coolant Temperature Sensor Electrical Connector

Courtesy of GENERAL MOTORS COMPANY

7. Disconnect Engine Coolant Temperature Sensor Electrical Connector (1) @Engine Coolant Temperature Sensor

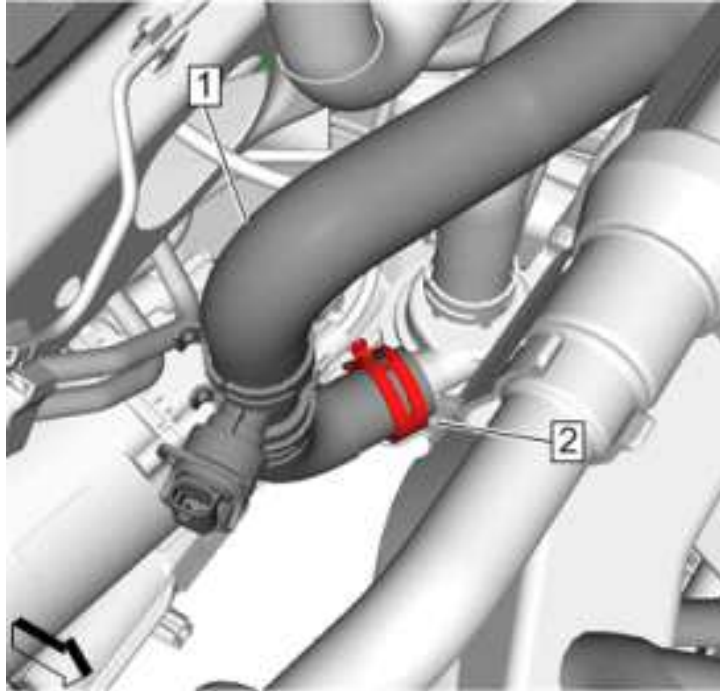


Fig. 1518: Heater Water Auxiliary Pump Hose Clamp
Courtesy of GENERAL MOTORS COMPANY

8. Disengage Heater Water Auxiliary Pump Hose Clamp (2) - [Hose Clamp Replacement Guidelines - Spring Type](#)
9. Remove Heater Water Auxiliary Pump Hose (1) @Auxiliary Water Pump
10. Remove Heater Water Auxiliary Pump Hose (1)

Installation Procedure

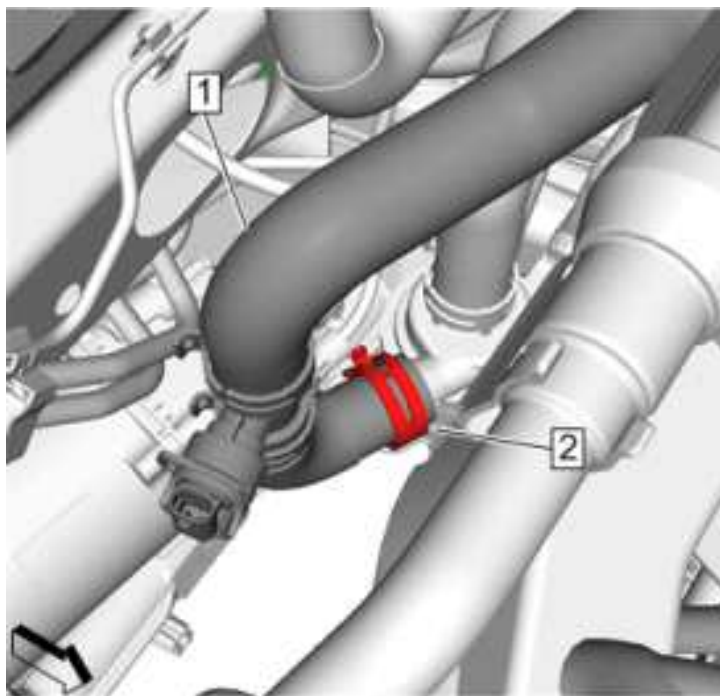


Fig. 1519: Heater Water Auxiliary Pump Hose Clamp
Courtesy of GENERAL MOTORS COMPANY

1. Install Heater Water Auxiliary Pump Hose (1) @Auxiliary Water Pump
2. Engage Heater Water Auxiliary Pump Hose Clamp (2) - [Hose Clamp Replacement Guidelines - Spring Type](#)

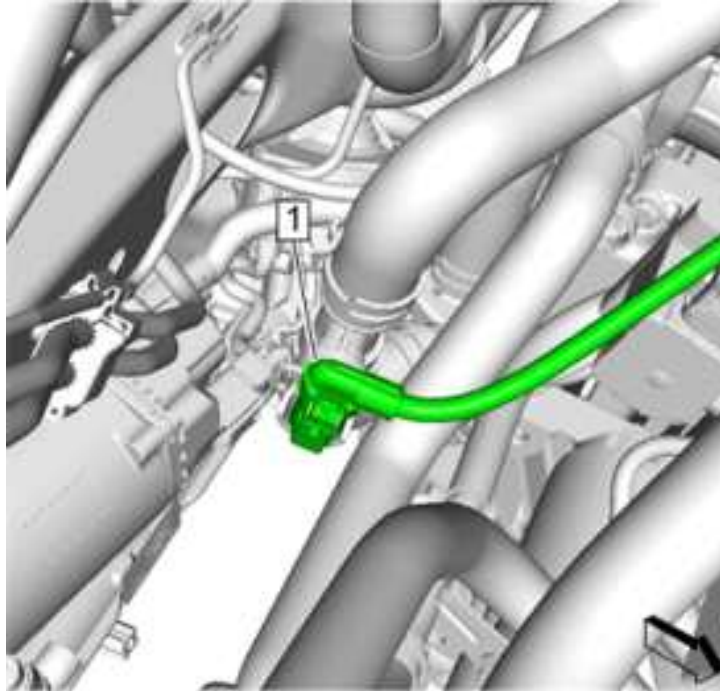


Fig. 1520: Engine Coolant Temperature Sensor Electrical Connector
 Courtesy of GENERAL MOTORS COMPANY

3. Connect Engine Coolant Temperature Sensor Electrical Connector (1) @Engine Coolant Temperature Sensor

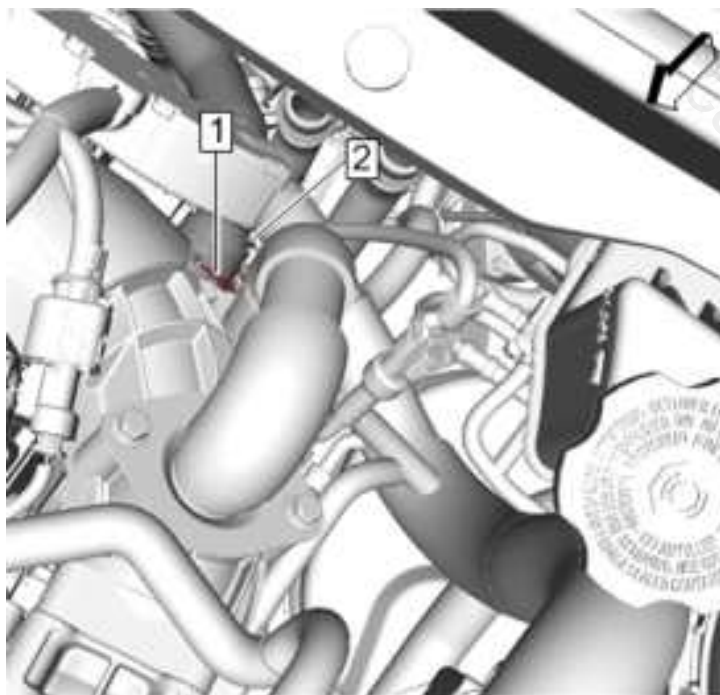


Fig. 1521: Heater Water Auxiliary Pump Hose And Retainer
 Courtesy of GENERAL MOTORS COMPANY

4. Install Heater Water Auxiliary Pump Hose (2) @Exhaust Gas Recirculation Cooler Housing
5. Engage Heater Water Auxiliary Pump Hose Retainer (1)

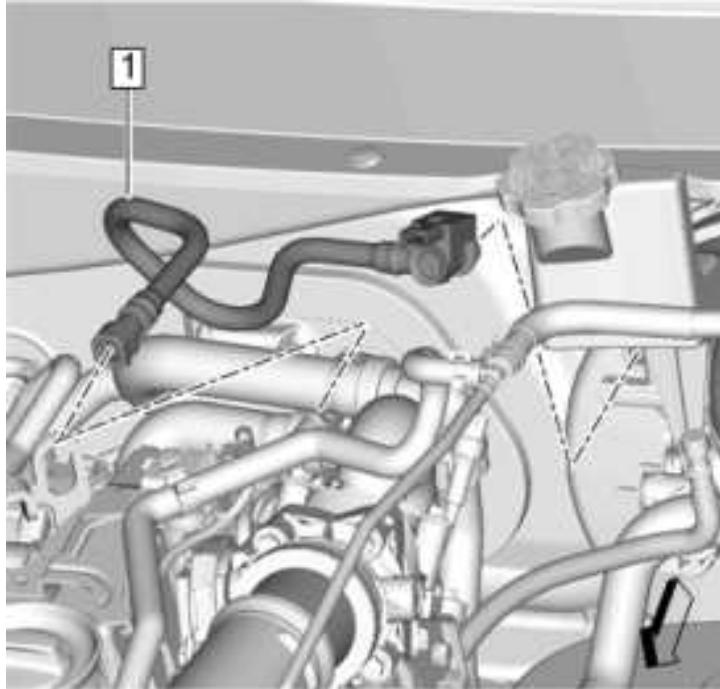


Fig. 1522: Power Brake Booster Vacuum Pipe
Courtesy of GENERAL MOTORS COMPANY

6. Install Power Brake Booster Vacuum Pipe (1) @Power Brake Booster Vacuum Pipe Fitting - [Power Brake Booster Vacuum Pipe Replacement \(LH7\)](#)
7. Install Intake Manifold Cover - [Intake Manifold Cover Replacement](#)
8. Fill the cooling system. [Cooling System Draining and Filling \(GE 47716\)](#). [Cooling System Draining and Filling \(Static\)](#)
9. Check the cooling system for leaks.

HEATER WATER AUXILIARY PUMP INLET HOSE REPLACEMENT (LYX WITH KL9)

Removal Procedure

1. Drain the cooling system. [Cooling System Draining and Filling \(GE 47716\)](#). [Cooling System Draining and Filling \(Static\)](#)

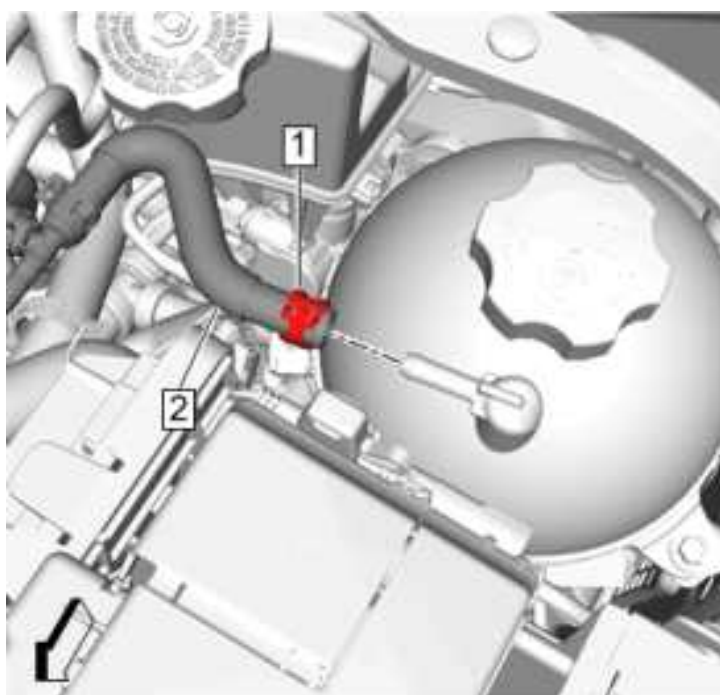


Fig. 1523: Engine Coolant Air Bleed Hose
Courtesy of GENERAL MOTORS COMPANY

2. Remove Engine Coolant Air Bleed Hose (2) @Radiator Surge Tank and position aside - [Engine Coolant Air Bleed Hose Replacement \(Turbocharger Coolant Return pipe to Water Outlet, LYX\)](#). [Engine Coolant](#)

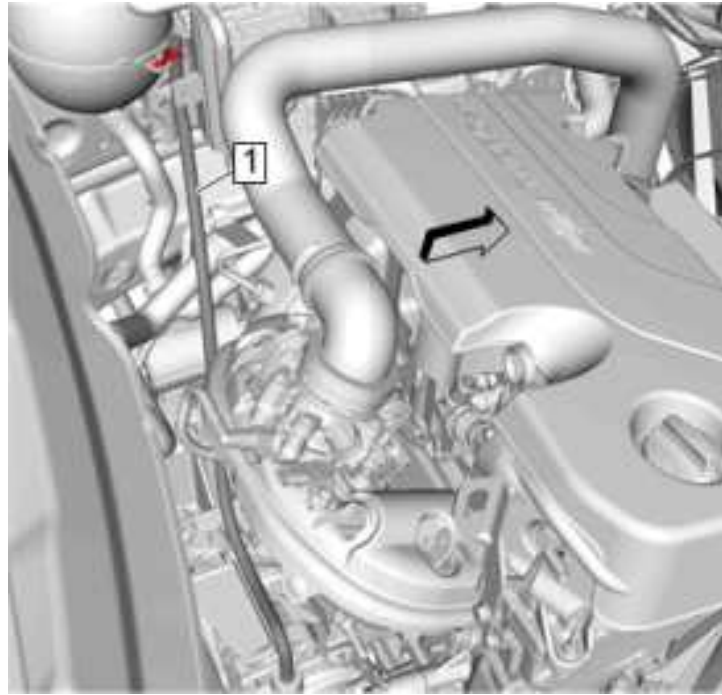


Fig. 1524: Power Transfer Unit Vent Hose
Courtesy of GENERAL MOTORS COMPANY

3. Remove Power Transfer Unit Vent Hose (1) @Radiator Surge Tank and position aside - **Power Transfer Unit Vent Hose Replacement**

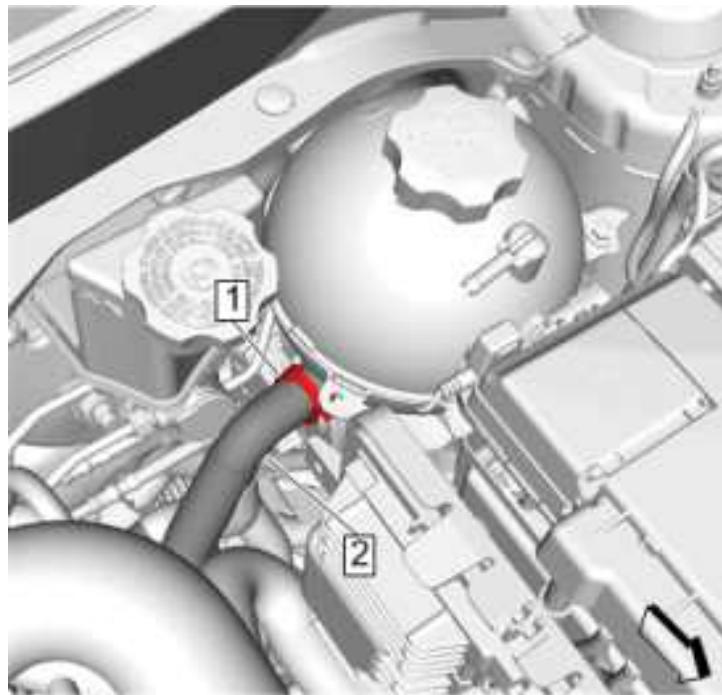


Fig. 1525: Heater Outlet Hose
Courtesy of GENERAL MOTORS COMPANY

4. Disengage Heater Water Auxiliary Pump Inlet Hose Clamp (1) - **Hose Clamp Replacement Guidelines - Spring Type**
5. Remove Heater Water Auxiliary Pump Inlet Hose (2) @Radiator Surge Tank

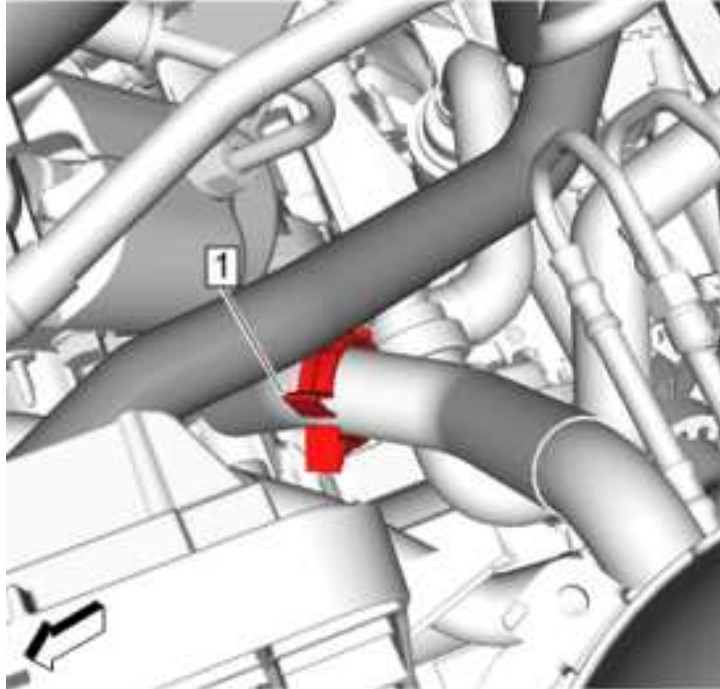


Fig. 1526: Heater Inlet Hose Retainer

Courtesy of GENERAL MOTORS COMPANY

6. Remove Heater Inlet Hose Retainer (1) @Heater Water Auxiliary Pump Inlet Hose - [Heater Inlet Hose Replacement \(LYX with KL9\)](#)
7. Reposition the wiring harness.

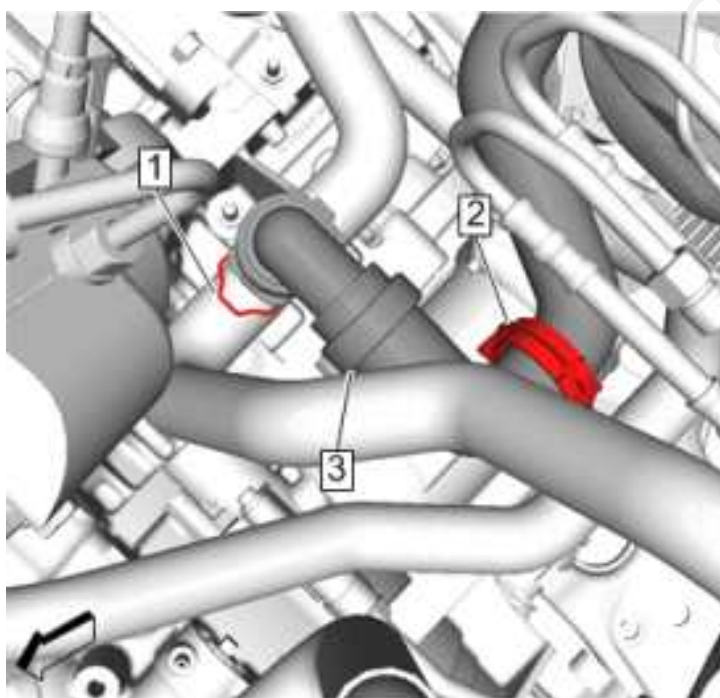


Fig. 1527: Heater Water Auxiliary Pump Hose

Courtesy of GENERAL MOTORS COMPANY

8. Remove Heater Water Auxiliary Pump Hose (3) @Heater Water Auxiliary Pump Inlet Hose and position aside - [Heater Water Auxiliary Pump Hose Replacement \(LYX with KL9\)](#)

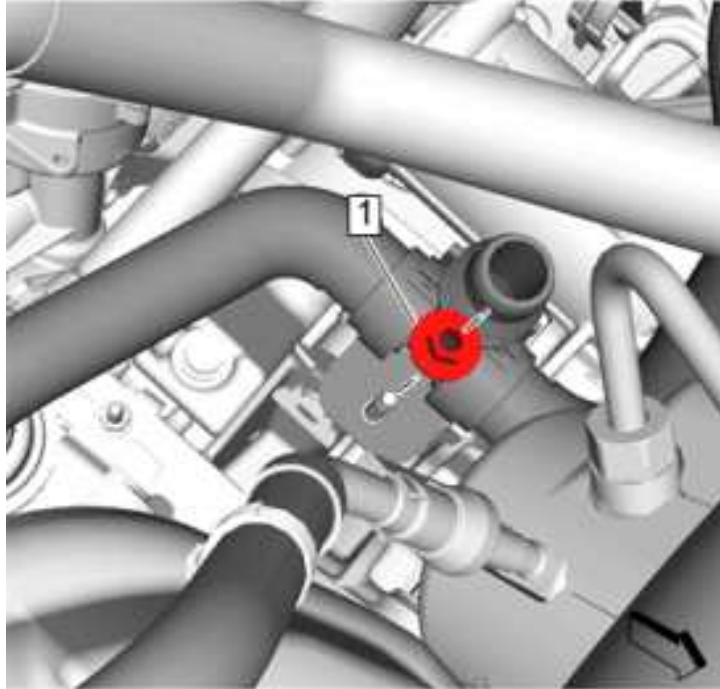


Fig. 1528: Heater Water Auxiliary Pump Inlet Hose Nut
 Courtesy of GENERAL MOTORS COMPANY

9. Remove Heater Water Auxiliary Pump Inlet Hose Nut (1)

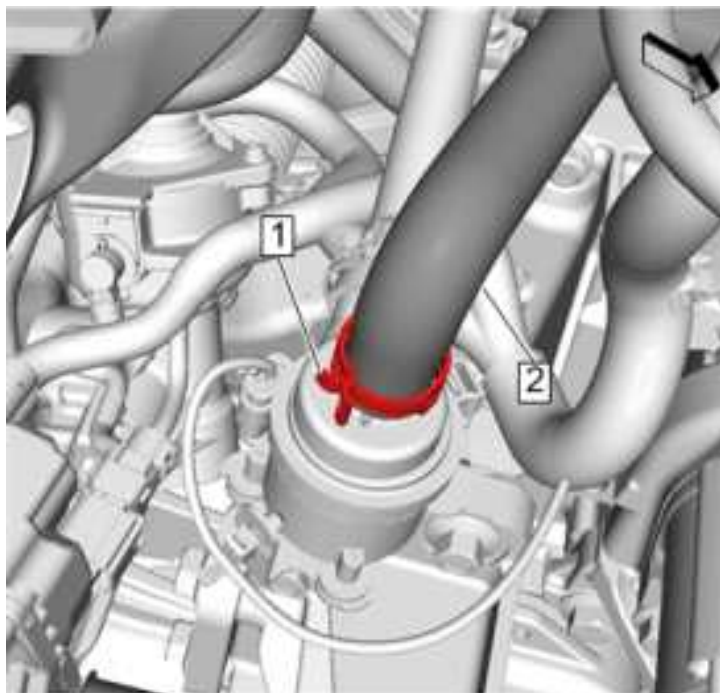


Fig. 1529: Heater Water Auxiliary Pump Inlet Hose
 Courtesy of GENERAL MOTORS COMPANY

10. Disengage Heater Water Auxiliary Pump Inlet Hose Clamp (1) - [Hose Clamp Replacement Guidelines - Spring Type](#)
11. Remove Heater Water Auxiliary Pump Inlet Hose (2) @Auxiliary Water Pump
12. Remove Heater Water Auxiliary Pump Inlet Hose (2)

Installation Procedure

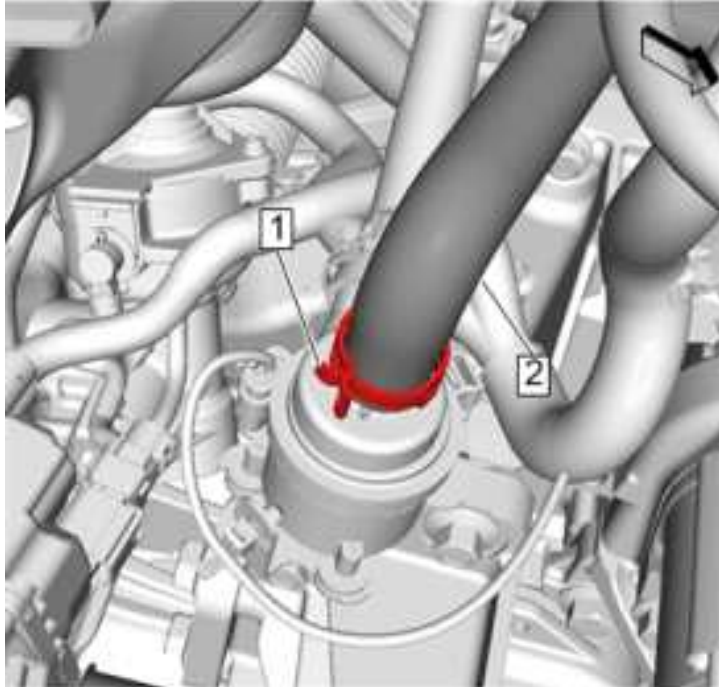


Fig. 1530: Heater Water Auxiliary Pump Inlet Hose
 Courtesy of GENERAL MOTORS COMPANY

1. Install Heater Water Auxiliary Pump Inlet Hose (2) @Auxiliary Water Pump
2. Engage Heater Water Auxiliary Pump Inlet Hose Clamp (1) - [Hose Clamp Replacement Guidelines - Spring Type](#)

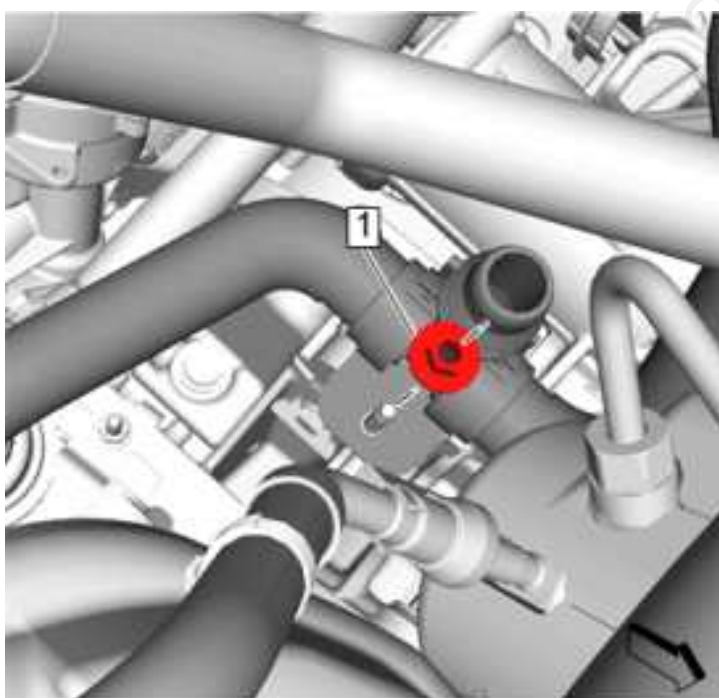


Fig. 1531: Heater Water Auxiliary Pump Inlet Hose Nut
 Courtesy of GENERAL MOTORS COMPANY

CAUTION: Refer to [Fastener Caution](#) .

3. Install Heater Water Auxiliary Pump Inlet Hose Nut (1) and tighten 9 N.m (80 lb in)

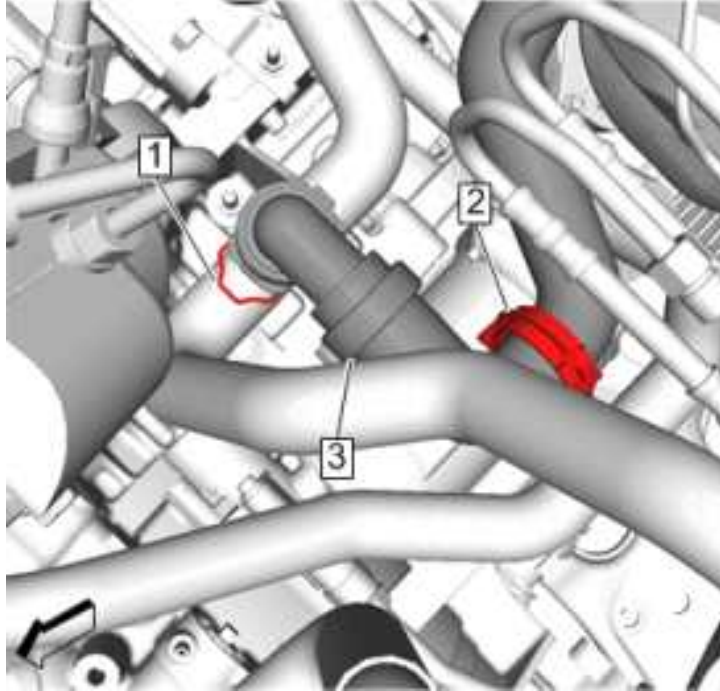


Fig. 1532: Heater Water Auxiliary Pump Hose
 Courtesy of GENERAL MOTORS COMPANY

4. Install Heater Water Auxiliary Pump Hose (3) @Heater Water Auxiliary Pump Inlet Hose - [Heater Water Auxiliary Pump Hose Replacement \(LYX with KL9\)](#).
5. Reposition the wiring harness.

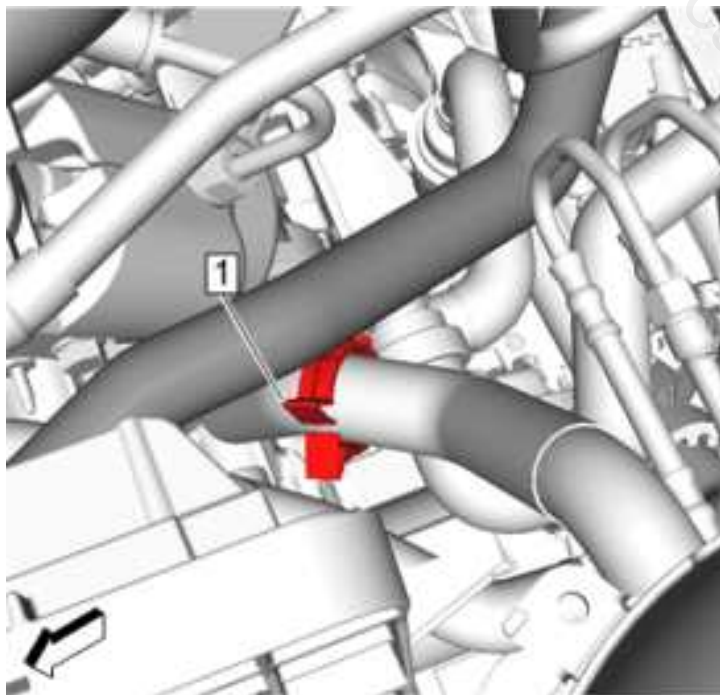


Fig. 1533: Heater Inlet Hose Retainer
 Courtesy of GENERAL MOTORS COMPANY

6. Install Heater Inlet Hose Retainer (1) @Heater Water Auxiliary Pump Inlet Hose - [Heater Inlet Hose Replacement \(LYX with KL9\)](#).

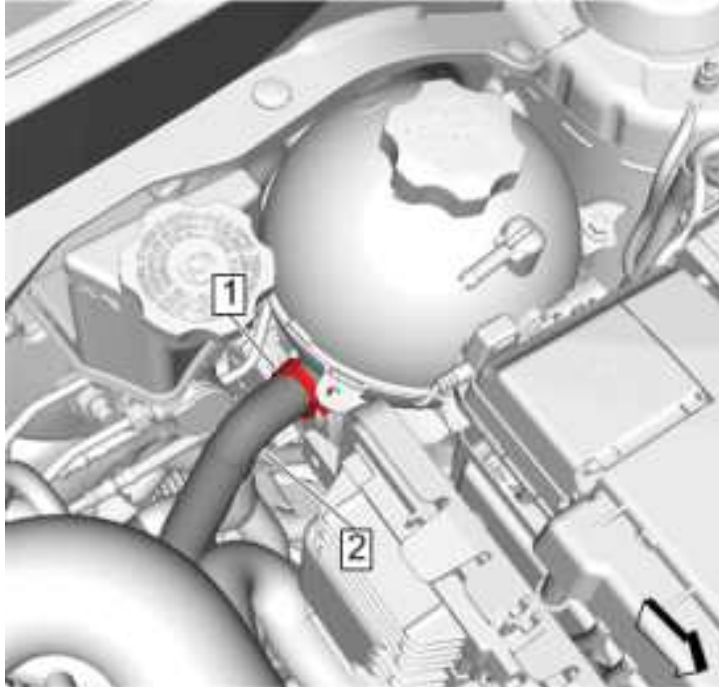


Fig. 1534: Heater Outlet Hose

Courtesy of GENERAL MOTORS COMPANY

7. Install Heater Water Auxiliary Pump Inlet Hose (2) @Radiator Surge Tank
8. Engage Heater Water Auxiliary Pump Inlet Hose Clamp (1) - [Hose Clamp Replacement Guidelines - Spring Type](#)

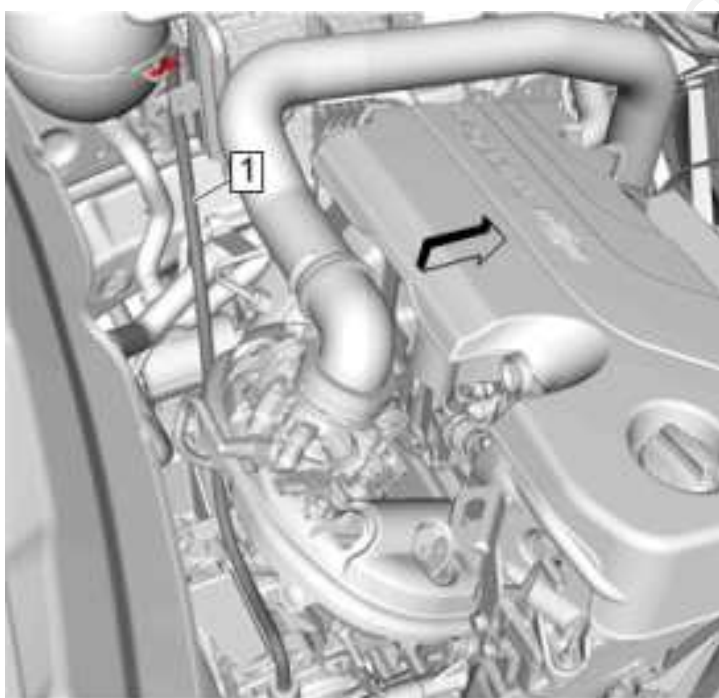


Fig. 1535: Power Transfer Unit Vent Hose

Courtesy of GENERAL MOTORS COMPANY

9. Install Power Transfer Unit Vent Hose (1) @Radiator Surge Tank - [Power Transfer Unit Vent Hose Replacement](#)

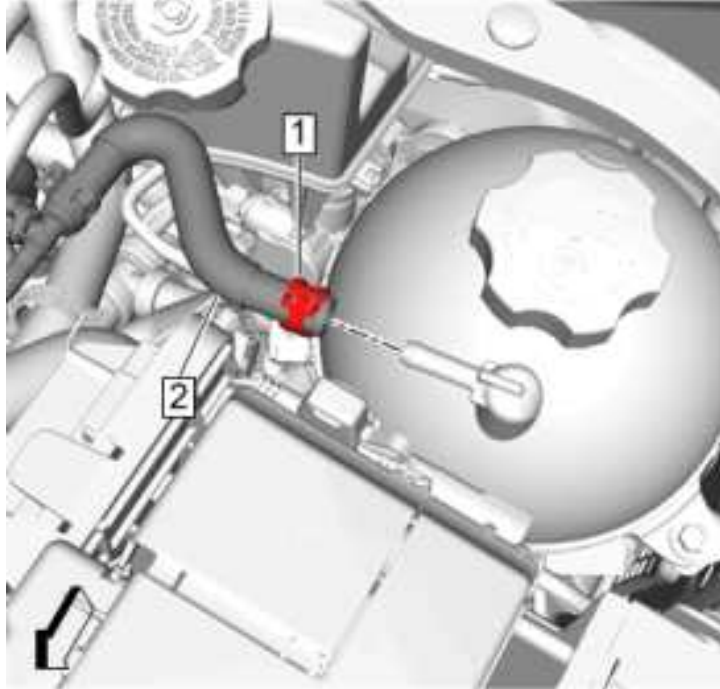


Fig. 1536: Engine Coolant Air Bleed Hose
Courtesy of GENERAL MOTORS COMPANY

10. Install Engine Coolant Air Bleed Hose (2) @Radiator Surge Tank - [Engine Coolant Air Bleed Hose Replacement \(Turbocharger Coolant Return pipe to Water Outlet, LYX\)](#) [Engine Coolant Air Bleed Hose Replacement \(Radiator Surge Tank to Turbocharger Coolant Return Pipe to Radiator, LYX\)](#)
11. Fill the cooling system. [Cooling System Draining and Filling \(GE 47716\)](#) [Cooling System Draining and Filling \(Static\)](#)
12. Check the cooling system for leaks.

HEATER WATER AUXILIARY PUMP INLET HOSE REPLACEMENT (LH7 EQUINOX)

Removal Procedure

1. Drain the cooling system. [Cooling System Draining and Filling \(GE 47716\)](#) [Cooling System Draining and Filling \(Static\)](#)
2. Remove Intake Manifold Cover - [Intake Manifold Cover Replacement](#)
3. Remove Heater Inlet Hose - [Heater Inlet Hose Replacement \(LH7 Equinox\)](#)
4. Remove Heater Water Auxiliary Pump Hose - [Heater Water Auxiliary Pump Hose Replacement \(LH7 Equinox\)](#)

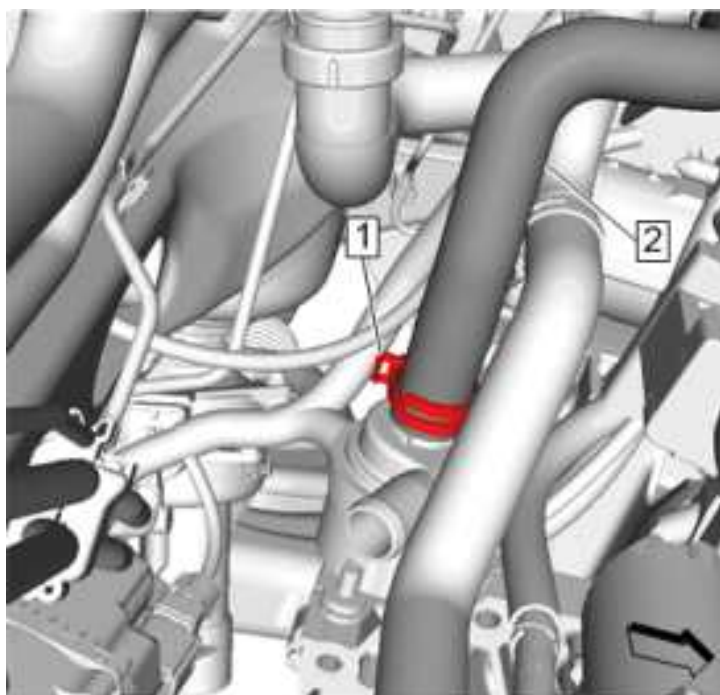


Fig. 1537: Heater Water Auxiliary Pump Inlet Hose Clamp
Courtesy of GENERAL MOTORS COMPANY

5. Disengage Heater Water Auxiliary Pump Inlet Hose Clamp (1) - [Hose Clamp Replacement Guidelines - Spring Type](#)
6. Remove Heater Water Auxiliary Pump Inlet Hose (2) @Auxiliary Water Pump

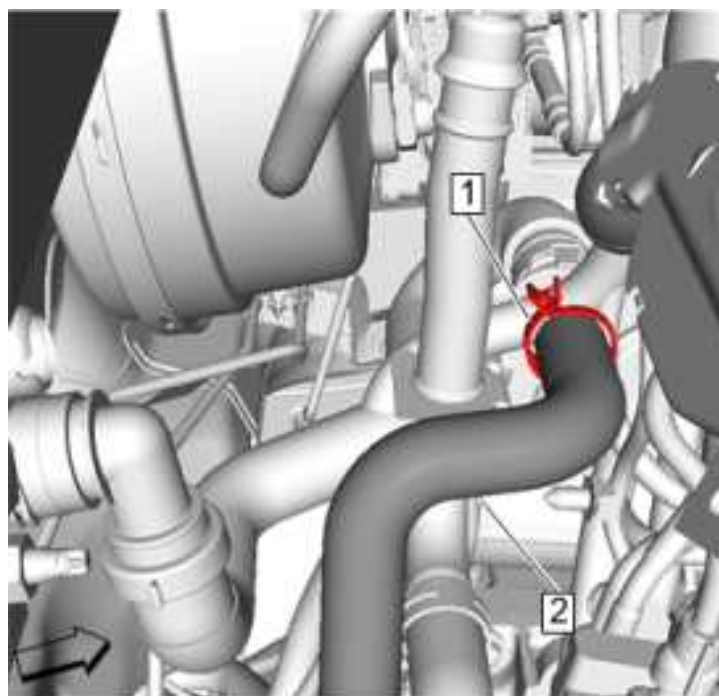


Fig. 1538: Heater Water Auxiliary Pump Inlet Hose
Courtesy of GENERAL MOTORS COMPANY

7. Disengage Heater Water Auxiliary Pump Inlet Hose Clamp (1) - [Hose Clamp Replacement Guidelines - Spring Type](#)
8. Remove Heater Water Auxiliary Pump Inlet Hose (2) @Heater Inlet and Outlet Pipe Bracket
9. Remove Heater Water Auxiliary Pump Inlet Hose (2)

Installation Procedure

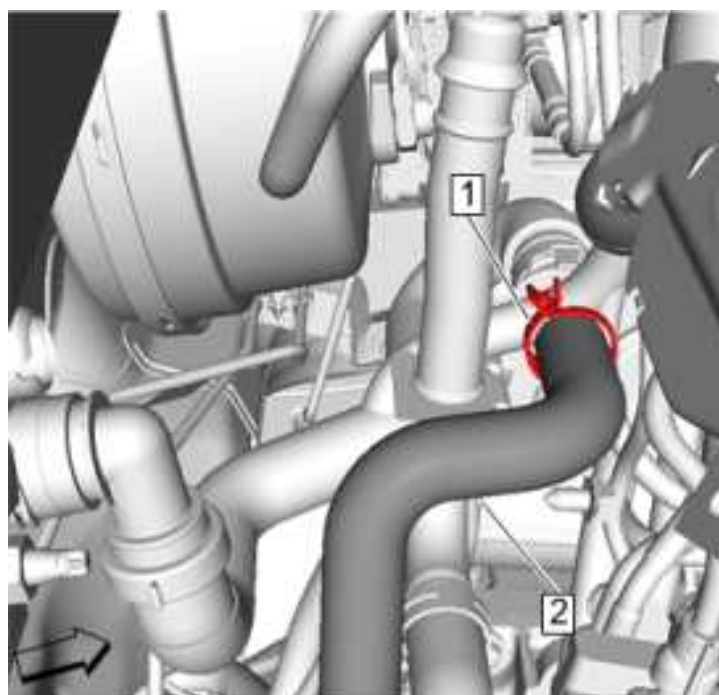


Fig. 1539: Heater Water Auxiliary Pump Inlet Hose
Courtesy of GENERAL MOTORS COMPANY

1. Install Heater Water Auxiliary Pump Inlet Hose (2) @Heater Inlet and Outlet Pipe Bracket

- Engage Heater Water Auxiliary Pump Inlet Hose Clamp (1) - [Hose Clamp Replacement Guidelines - Spring Type](#)

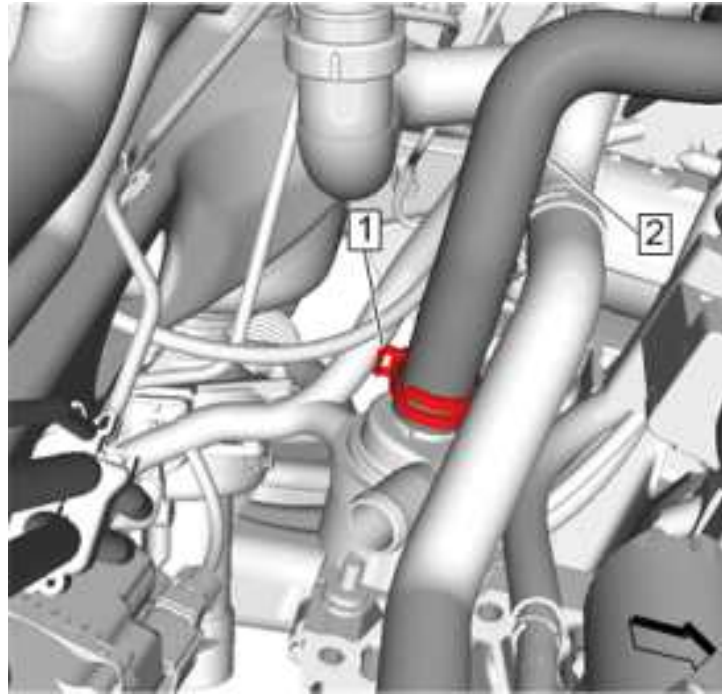


Fig. 1540: Heater Water Auxiliary Pump Inlet Hose Clamp

Courtesy of GENERAL MOTORS COMPANY

- Install Heater Water Auxiliary Pump Inlet Hose (2) @Auxiliary Water Pump
- Engage Heater Water Auxiliary Pump Inlet Hose Clamp (1)[Hose Clamp Replacement Guidelines - Spring Type](#)
- Install Heater Water Auxiliary Pump Hose - [Heater Water Auxiliary Pump Hose Replacement \(LH7 Equinox\)](#)
- Install Heater Inlet Hose - [Heater Inlet Hose Replacement \(LH7 Equinox\)](#)
- Install Intake Manifold Cover -[Intake Manifold Cover Replacement](#)
- Fill the cooling system. [Cooling System Draining and Filling \(GE 47716\)](#). [Cooling System Draining and Filling \(Static\)](#)
- Check the cooling system for leaks.

HEATER WATER AUXILIARY PUMP INLET HOSE REPLACEMENT (LTG WITH KL9)

Removal Procedure

- Drain the cooling system. [Cooling System Draining and Filling \(GE 47716\)](#). [Cooling System Draining and Filling \(Static\)](#)

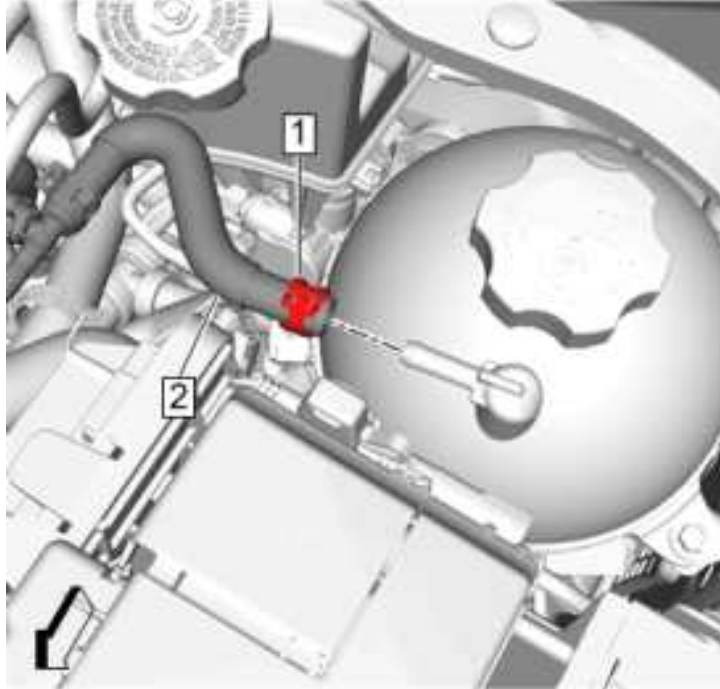


Fig. 1541: Engine Coolant Air Bleed Hose

Courtesy of GENERAL MOTORS COMPANY

2. Remove Engine Coolant Air Bleed Hose (2) @Radiator Surge Tank and position aside - [Engine Coolant Air Bleed Hose Replacement \(Radiator Surge Tank to Radiator to Engine Coolant Air Bleed Pipe LTG\)](#).

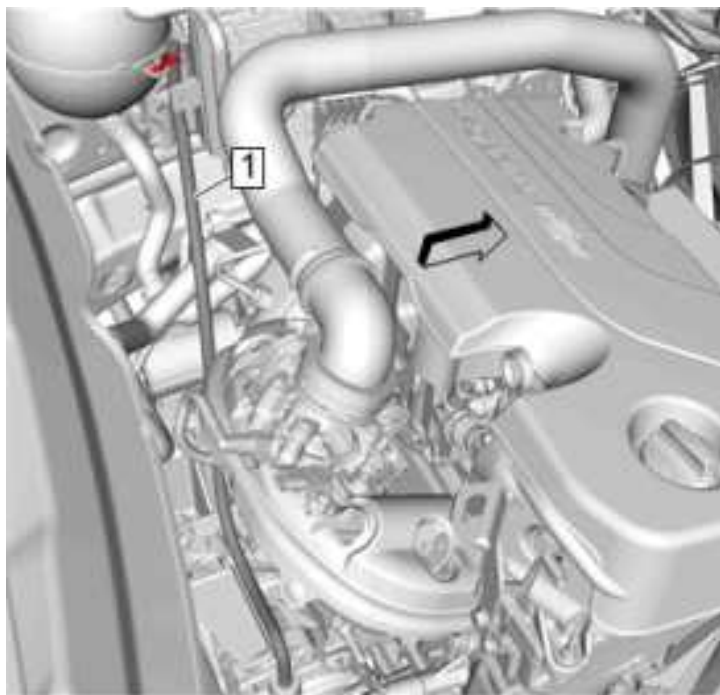


Fig. 1542: Power Transfer Unit Vent Hose

Courtesy of GENERAL MOTORS COMPANY

3. Remove Power Transfer Unit Vent Hose (1) @Radiator Surge Tank and position aside - [Power Transfer Unit Vent Hose Replacement](#)

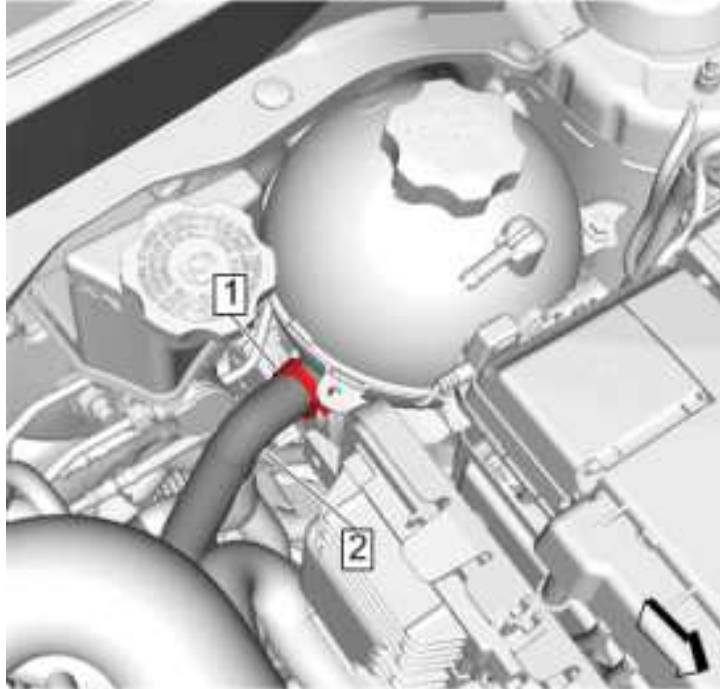


Fig. 1543: Heater Outlet Hose

Courtesy of GENERAL MOTORS COMPANY

4. Disengage Heater Water Auxiliary Pump Inlet Hose Clamp (1) - [Hose Clamp Replacement Guidelines - Spring Type](#)
5. Remove Heater Water Auxiliary Pump Inlet Hose (2) @Radiator Surge Tank
6. Reposition the wiring harness.

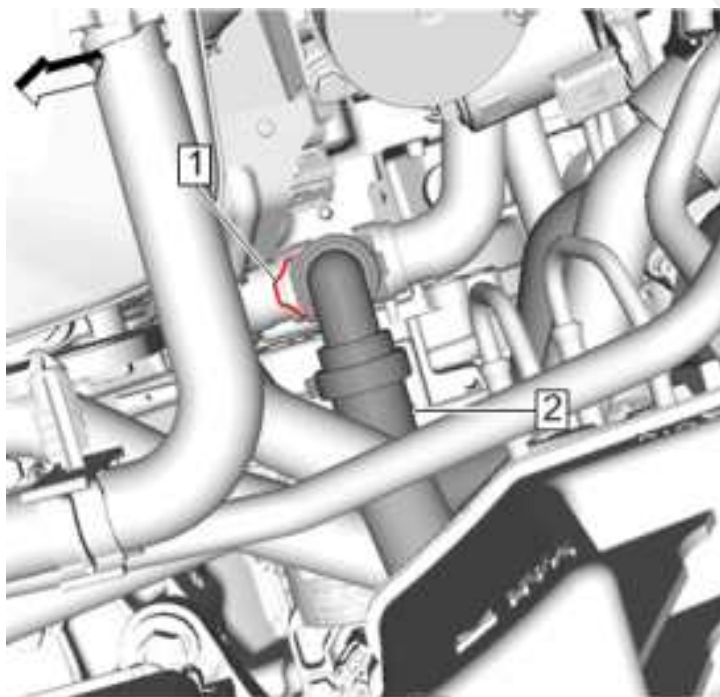


Fig. 1544: Heater Water Auxiliary Pump Hose

Courtesy of GENERAL MOTORS COMPANY

7. Remove Heater Water Auxiliary Pump Hose (2) @Heater Water Auxiliary Pump Inlet Hose and position aside - [Heater Water Auxiliary Pump Hose Replacement \(LTG with KL9\)](#)

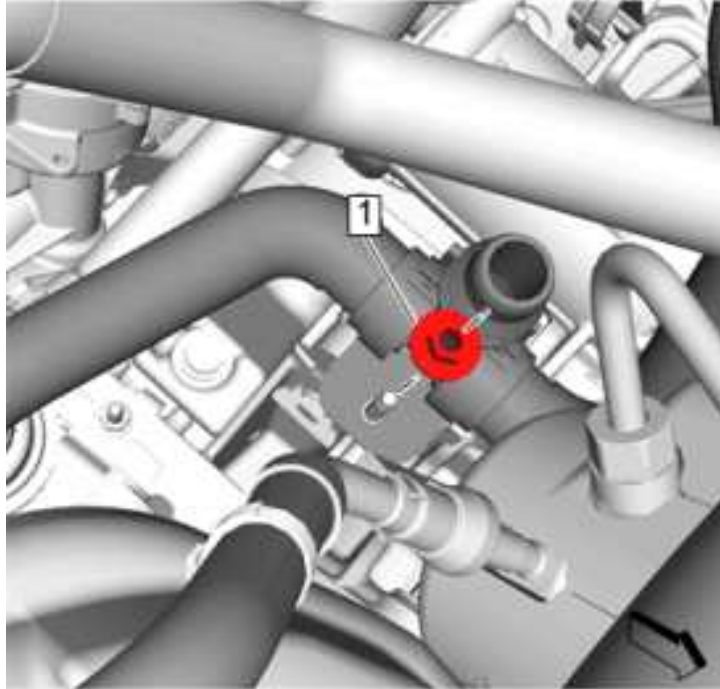


Fig. 1545: Heater Water Auxiliary Pump Inlet Hose Nut
 Courtesy of GENERAL MOTORS COMPANY

8. Remove Heater Water Auxiliary Pump Inlet Hose Nut (1)

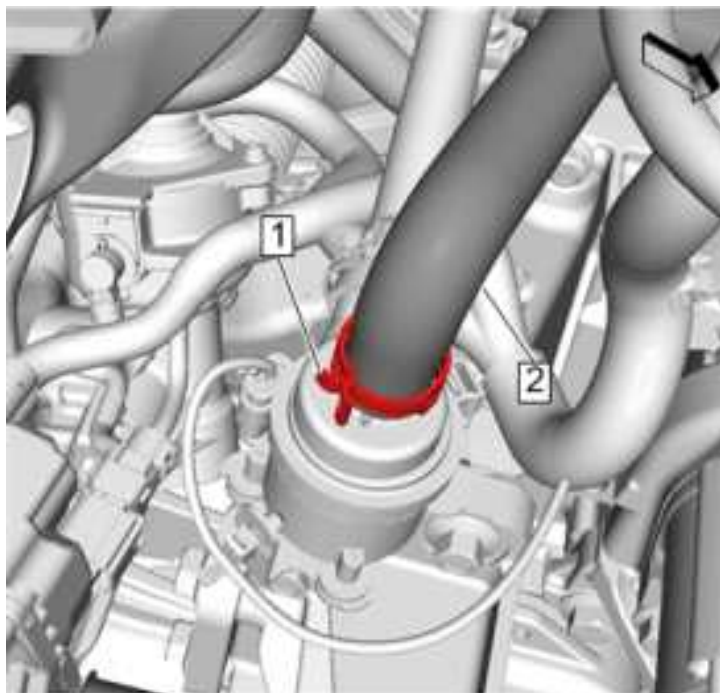


Fig. 1546: Heater Water Auxiliary Pump Inlet Hose
 Courtesy of GENERAL MOTORS COMPANY

9. Heater Water Auxiliary Pump Inlet Hose Clamp (1) - [Hose Clamp Replacement Guidelines - Spring Type](#)
10. Remove Heater Water Auxiliary Pump Inlet Hose (2) @Auxiliary Water Pump
11. Remove Heater Water Auxiliary Pump Inlet Hose (2)

Installation Procedure

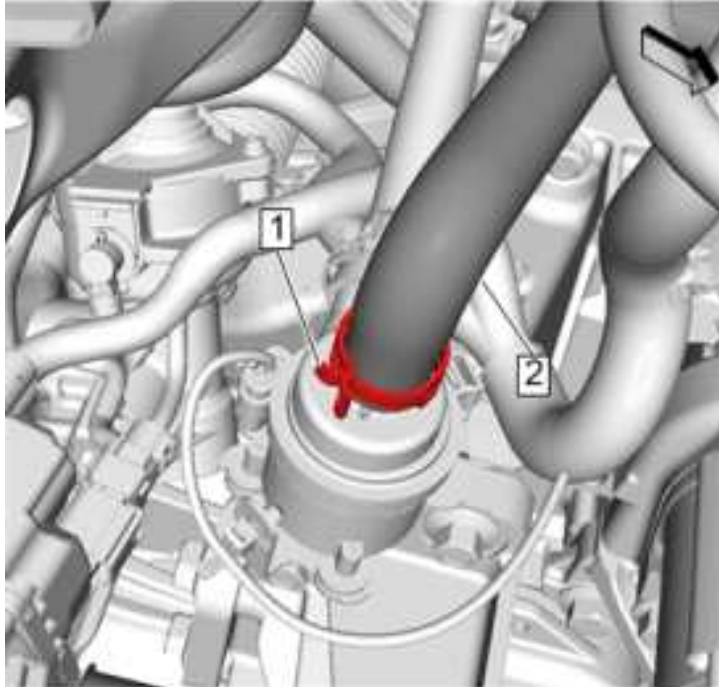


Fig. 1547: Heater Water Auxiliary Pump Inlet Hose
 Courtesy of GENERAL MOTORS COMPANY

1. Install Heater Water Auxiliary Pump Inlet Hose (2) @Auxiliary Water Pump
2. Engage Heater Water Auxiliary Pump Inlet Hose Clamp (1) - [Hose Clamp Replacement Guidelines - Spring Type](#)

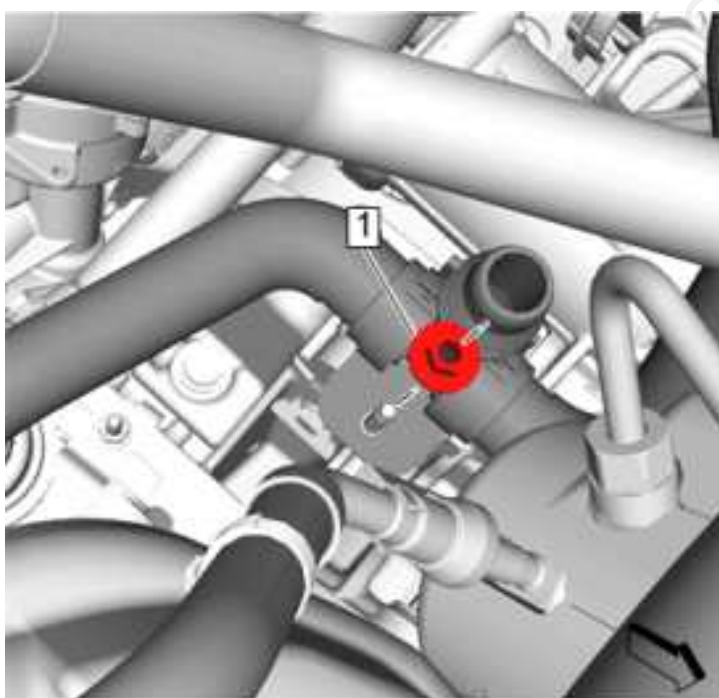


Fig. 1548: Heater Water Auxiliary Pump Inlet Hose Nut
 Courtesy of GENERAL MOTORS COMPANY

CAUTION: Refer to [Fastener Caution](#) .

3. Install Heater Water Auxiliary Pump Inlet Hose Nut (1) and tighten 9 N.m (80 lb in)

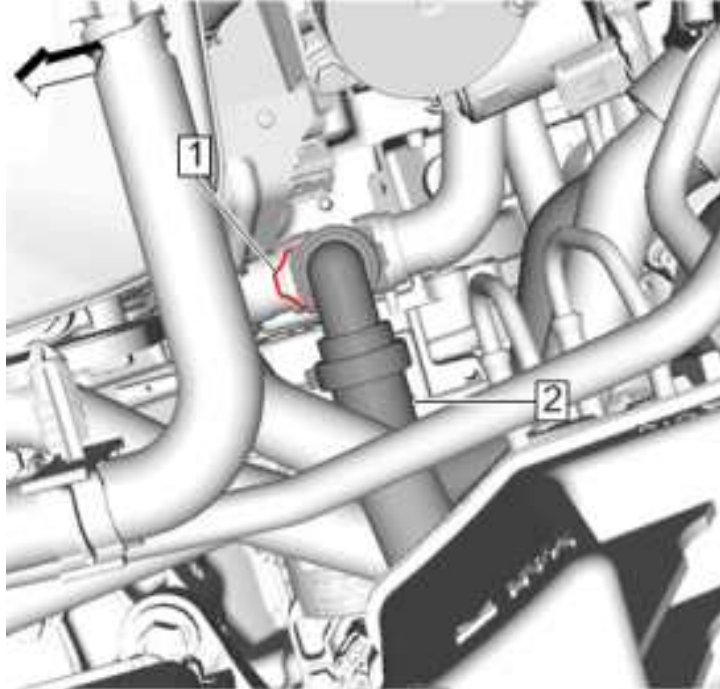


Fig. 1549: Heater Water Auxiliary Pump Hose

Courtesy of GENERAL MOTORS COMPANY

4. Install Heater Water Auxiliary Pump Hose (2) @Heater Water Auxiliary Pump Inlet Hose - [Heater Water Auxiliary Pump Hose Replacement \(LTG with KL9\)](#).
5. Reposition the wiring harness.

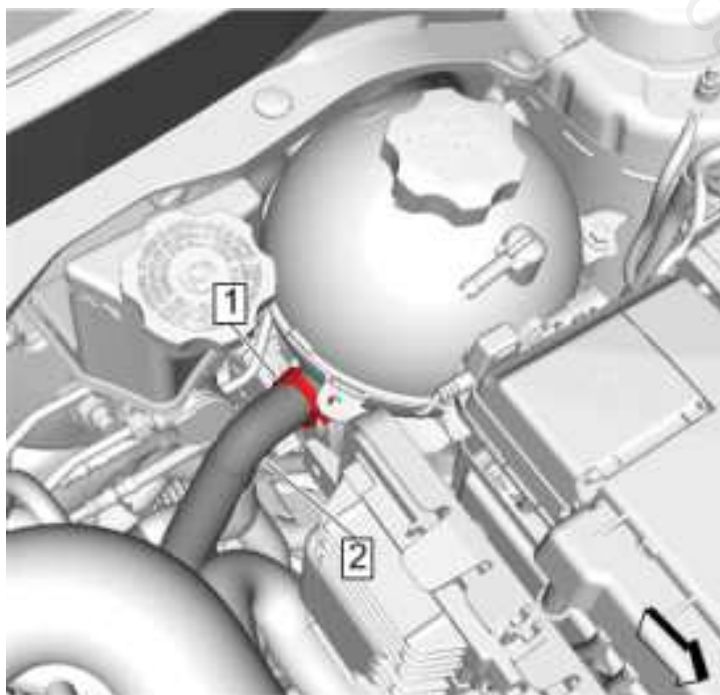


Fig. 1550: Heater Outlet Hose

Courtesy of GENERAL MOTORS COMPANY

6. Install Heater Water Auxiliary Pump Inlet Hose (2) @Radiator Surge Tank
7. Engage Heater Water Auxiliary Pump Inlet Hose Clamp (1) - [Hose Clamp Replacement Guidelines - Spring Type](#)

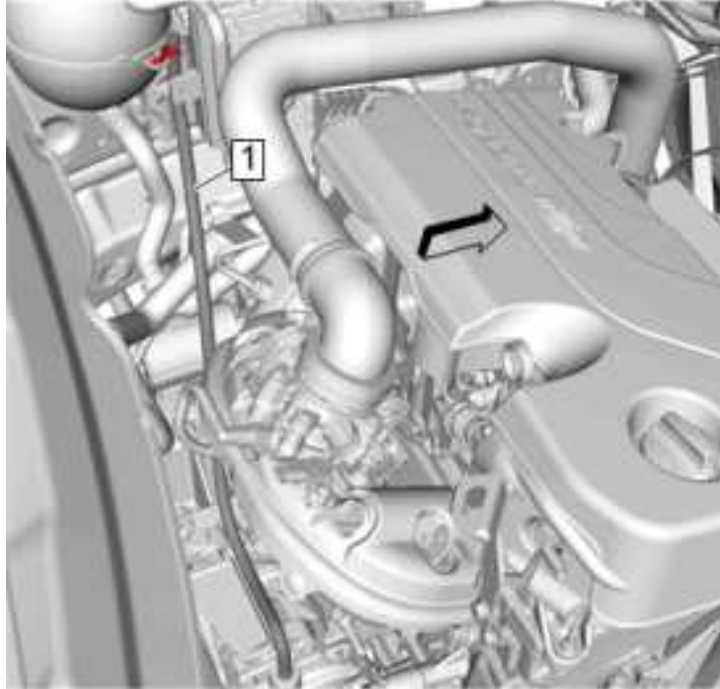


Fig. 1551: Power Transfer Unit Vent Hose
 Courtesy of GENERAL MOTORS COMPANY

8. Install Power Transfer Unit Vent Hose (1) @Radiator Surge Tank - [Power Transfer Unit Vent Hose Replacement](#)

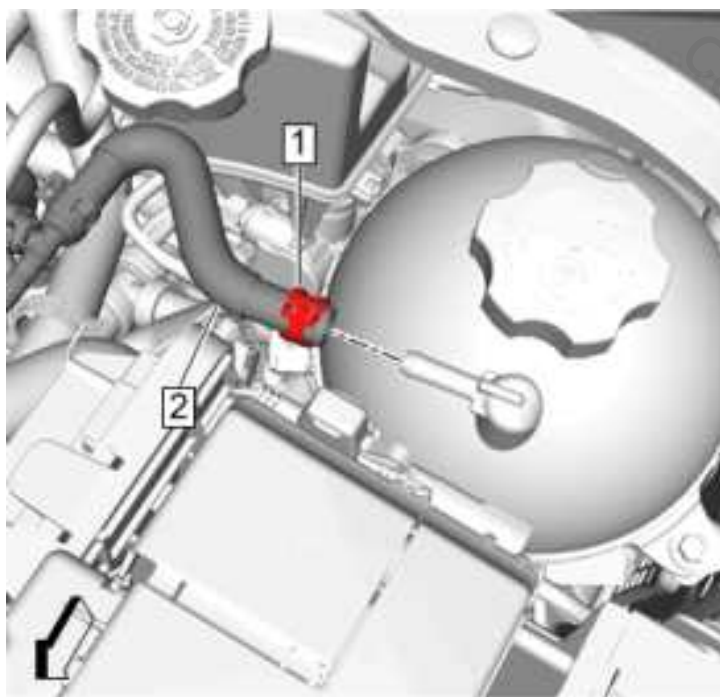


Fig. 1552: Engine Coolant Air Bleed Hose
 Courtesy of GENERAL MOTORS COMPANY

9. Install Engine Coolant Air Bleed Hose (2) @Radiator Surge Tank - [Engine Coolant Air Bleed Hose Replacement \(Radiator Surge Tank to Radiator to Engine Coolant Air Bleed Pipe LTG\)](#).
10. Fill the cooling system. [Cooling System Draining and Filling \(GE 47716\)](#). [Cooling System Draining and Filling \(Static\)](#).
11. Check the cooling system for leaks.

HEATER WATER AUXILIARY PUMP INLET HOSE REPLACEMENT (LH7 TERRAIN)

Removal Procedure

1. Drain the cooling system. [Cooling System Draining and Filling \(GE 47716\)](#). [Cooling System Draining and Filling \(Static\)](#).
2. Remove Intake Manifold Cover - [Intake Manifold Cover Replacement](#)

3. Remove Auxiliary Heater Outlet Hose - [Auxiliary Heater Outlet Hose Replacement \(LH7 Terrain\)](#)
4. Remove Heater Water Auxiliary Pump Hose - [Heater Water Auxiliary Pump Hose Replacement \(LH7 Terrain\)](#)

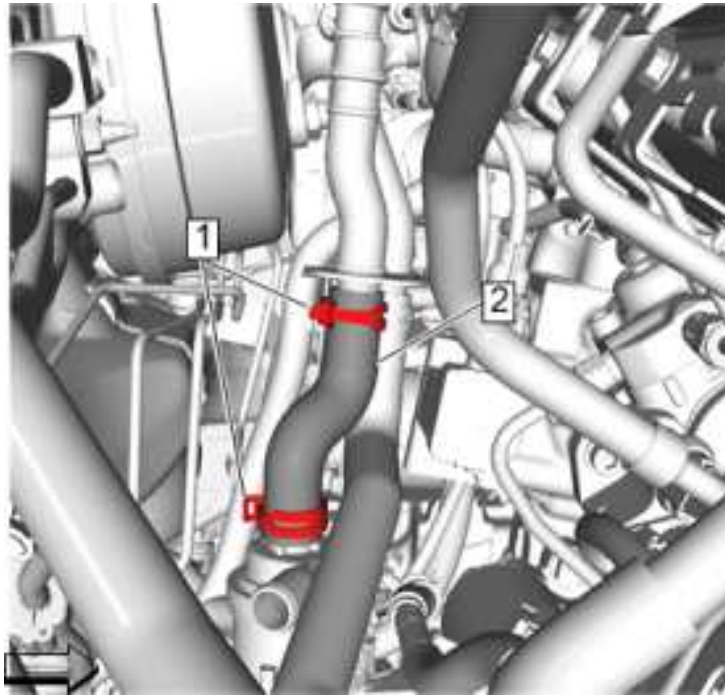


Fig. 1553: Heater Water Auxiliary Pump Inlet Hose
Courtesy of GENERAL MOTORS COMPANY

5. Disengage Heater Water Auxiliary Pump Inlet Hose Clamp (1) - [Hose Clamp Replacement Guidelines - Spring Type](#)
6. Remove Heater Water Auxiliary Pump Inlet Hose (2)

Installation Procedure

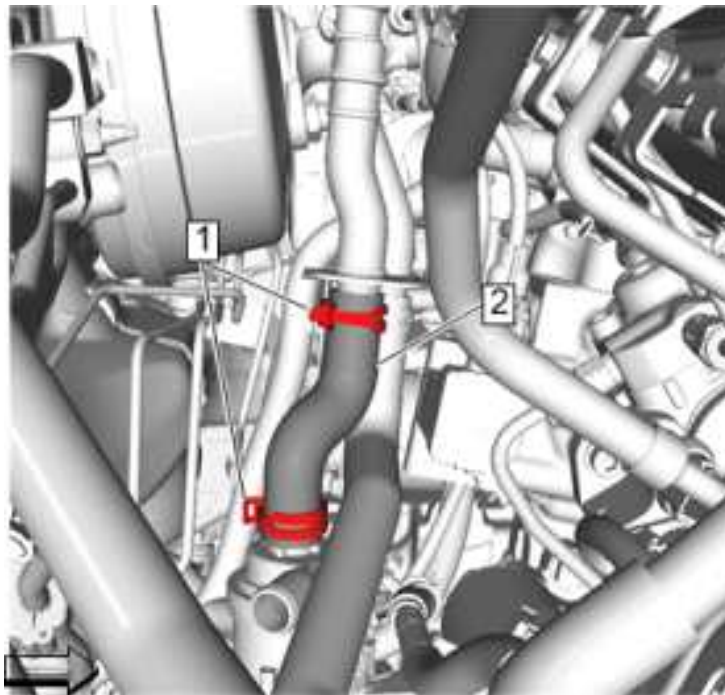


Fig. 1554: Heater Water Auxiliary Pump Inlet Hose
Courtesy of GENERAL MOTORS COMPANY

1. Install Heater Water Auxiliary Pump Inlet Hose (2)
2. Engage Heater Water Auxiliary Pump Inlet Hose Clamp (1) - [Hose Clamp Replacement Guidelines - Spring Type](#)
3. Install Heater Water Auxiliary Pump Hose - [Heater Water Auxiliary Pump Hose Replacement \(LH7 Terrain\)](#)

4. Install Auxiliary Heater Outlet Hose - [Auxiliary Heater Outlet Hose Replacement \(LH7 Terrain\)](#).
5. Install Intake Manifold Cover - [Intake Manifold Cover Replacement](#)
6. Fill the cooling system. [Cooling System Draining and Filling \(GE 47716\)](#). [Cooling System Draining and Filling \(Static\)](#).
7. Check the cooling system for leaks.

DESCRIPTION AND OPERATION

HEATING AND AIR CONDITIONING SYSTEM DESCRIPTION AND OPERATION

The air temperature and the air delivery description and operation are divided into 8 areas:

- HVAC Control Components
- Air Speed
- Air Delivery
- Heating and A/C Operation
- Recirculation Operation
- Automatic Operation
- Engine Coolant
- A/C Cycle

HVAC Control Components

Radio/HVAC Control

The Radio/HVAC control contains all switches, which are required to control the functions of HVAC and serve as interface between the operator and the HVAC control module. The selected values are passed to the HVAC control module via LIN-Bus.

HVAC Control Module

The HVAC control module is a GMLAN device that interfaces between the operator and the HVAC system to maintain and control desired air temperature and air distribution settings. The battery positive voltage circuit provides power that the HVAC control module uses for keep alive memory. If the battery positive voltage circuit loses power, all HVAC DTCs and settings will be erased from keep alive memory. The body control module (BCM), which is the vehicle mode master, provides a device ON-Signal. The HVAC control module provides blower, air delivery mode and air temperature settings.

The HVAC control module supports the following features:

Feature	Availability
Afterblow	Available if reprogrammed by the technician
Purge	Yes
Personalization	Yes
Actuator Calibration	Yes

Actuators

Doors in the HVAC case assembly are used to control air flow. The HVAC control module operates the doors through the use of actuators, with one actuator being used for each door. The system has the following air control doors and associated actuators: mode, temperature, and recirculation.

Each actuator used in the system is a 5-wire bi-directional electric motor that incorporate a feedback potentiometer. The five circuits are, low reference, 5 V reference, actuator position signal, and two control circuits. The control circuits use either a ground or 12 V value to coordinate the actuator movement. In order to move the actuator, the HVAC control module grounds one of the control circuits while providing the other with 12 V. The HVAC control module reverses the polarity of the control circuits to move the actuator in the opposite direction.

When the actuator shaft rotates, the potentiometer's sliding contact changes the door position signal between 0 - 5 V. The HVAC control module converts the voltage signal to counts. The total range of the counts is 0 - 1024, with

an operating range between 20 - 1000. The actual operating range of an actuator is determined during calibration. During calibration, the actuator is moved through its full range of travel and the module stores the minimum and maximum value. Based on the desired system operation, the module sets a commanded, or targeted, value for the actuators. The control circuits are operated to move the door to the required position, and the changing position signal is sent to the module. Once the actual position signal and the commanded value are the same, the module ceases operating the control circuits and the actuator (and door) remain in the desired position.

Blower Motor

The blower motor control module is an interface between the HVAC control module and the blower motor. The blower motor speed control from the HVAC control module, battery positive and ground circuits enable the blower motor control module to operate. The HVAC control module provides a pulse width modulation (PWM) signal to the blower motor control module in order to command the blower motor speed. The blower motor control module transfers the PWM signal into a corresponding blower motor voltage.

Duct Temperature Sensors

The air temperature sensors are 2-wire negative temperature co-efficient thermistors. The sensors operate within a temperature range of -40 to $+85^{\circ}\text{C}$ (-40 to $+185^{\circ}\text{F}$). The sensors are installed in the air distribution ducts and measure the temperature of the air that streams from the ducts. The HVAC control module uses these values to calculate the mixed air flap position.

Evaporator Temperature Sensor

The evaporator temperature sensor is a 2-wire negative temperature co-efficient thermistor. The sensor operates within a temperature range of -40 to $+85^{\circ}\text{C}$ (-40 to $+185^{\circ}\text{F}$). The sensor is installed at the evaporator and measures its temperature. If the temperature drops under 3°C (38°F), the compressor will be switched off in order to prevent a frozen evaporator.

A/C Refrigerant Pressure Sensor

The A/C refrigerant pressure sensor is a 3-wire piezoelectric pressure transducer. A 5 V reference voltage, low reference, and signal circuits enable the sensor to operate. The A/C pressure signal can be between 0.2 - 4.8 V. When the A/C refrigerant pressure is low, the signal value is near 0 V. When the A/C refrigerant pressure is high, the signal value is near 5 V. The engine control module (ECM) converts the voltage signal to a pressure value. When pressure is too high or too low, the ECM will not allow the A/C compressor clutch to engage.

A/C Compressor

The A/C compressor uses a conventional belt driven magnetic clutch to engage and mechanically turn the compressor. When the A/C switch is pressed, the HVAC control module sends an A/C request message to the ECM via serial data. If specific criteria is met, the ECM then grounds the A/C compressor clutch relay control circuit, which will switch the A/C compressor clutch relay. With the relay contacts closed, battery voltage is supplied to the permanently grounded A/C compressor clutch. The A/C compressor clutch will then be activated.

This A/C system utilizes a variable displacement solenoid valve to alter the amount of displacement created by the turning of the compressor. The HVAC control module provides both battery voltage and a pulse width modulated ground to the variable displacement solenoid valve. When the A/C switch is pressed, the HVAC control module grounds the variable displacement solenoid using a (PWM) signal in order to determine the amount of compressor displacement. The performance of the A/C compressor is regulated based on cooling load.

Ambient Light/Sunload Sensor

The ambient light/sunload sensor includes the sunload sensor and passenger compartment temperature sensor.

- Sun heat intensity
- Passenger compartment temperature

The solar sensor is connected to ground and to a 5 V stabilized voltage supply through the HVAC control module. As the sunload increases, the sensor signal voltage also increases and vice versa. The signal varies between 1.4 - 4.5 V and is provided to the HVAC control module.

The passenger compartment temperature sensor is a negative temperature co-efficient thermistor. A signal and low reference circuit enables the sensor to operate. As the air temperature increases, the sensor resistance decreases. The

sensor signal varies between 0 - 5 V.

Bright or high intensity light causes the vehicle's interior temperature to increase. The HVAC system compensates for the increased temperature by diverting additional cool air into the vehicle.

Windshield Temperature and Inside Moisture Sensor

The windshield temperature and inside moisture sensor includes the relative humidity sensor, windshield temperature sensor and humidity sensing element temperature sensor all in one assembly.

This sensor assembly provides information about:

- Relative humidity level at the windshield inside the vehicle
- Temperature of the windshield inside the vehicle
- Temperature of the humidity sensor element

The relative humidity sensor measures the relative humidity of the compartment side of the windshield. It also detects the temperature of the windshield surface on the compartment side. Both values are used as control inputs for the HVAC control module application to calculate the fog risk on windshield compartment side and ability to reduce fuel consumption by decreasing A/C compressor usage to a minimum without causing any fog. The sensor will also enable partial recirculation mode in order to improve heat-up performance of the passenger compartment under cold ambient temperature conditions without the risk of mist build-up on the windshield. The humidity sensor element temperature sensor supplies the temperature of the humidity sensor element. It is only needed if the thermal contact between the humidity sensing element and the inside windshield surface is not sufficient.

Air Speed

The blower control switch is part of the Radio/HVAC control. The selected value of the blower switch position is sent to the HVAC control module via LIN-Bus.

The blower motor control module is an interface between the HVAC control module and the blower motor. The blower motor speed control from the HVAC control module, battery positive and ground circuits enable the blower motor control module to operate. The HVAC control module provides a pulse width modulation (PWM) signal to the blower motor control module in order to command the blower motor speed. The blower motor control module transfers the PWM signal into a corresponding blower motor voltage.

Afterblow

Afterblow is a feature that dries the evaporator core by operating the blower motor after the engine is turned OFF. This reduces the amount of microbial growth that can create undesirable odors. The vehicle does not come equipped with the afterblow feature turned ON. If the afterblow feature is required due to an odor concern, it must be enabled using the scan tool Afterblow configuration function.

After the HVAC control module has been programmed for afterblow, the following conditions must be met for afterblow to operate:

- The engine has been turned OFF for at least 30 minutes.
- The ambient air temperature is at least 21°C (70°F).
- The A/C compressor operated for more than 2 minutes before shut down.
- The system voltage is at least 12 volts.

Once the above conditions have been met, the blower motor will perform the following sequence up to 5 times. This could last up to an hour:

1. The blower motor will be OFF for 7 - 11 minutes.
2. The blower motor will RUN for 25 - 30 seconds.

Air Delivery

The HVAC control module controls the distribution of air by the use of recirculation and mode door actuator. The modes that may be selected are:

- Defrost

- Defog
- Panel
- Floor

The desired air distribution mode can be selected with the air distribution switches at the HVAC control. The HVAC control delivers the values to the HVAC control module via LIN-Bus. The HVAC control module controls the mode door actuator so that it drives the door to the calculated position. Depending on the position of the door, air is distributed through various ducts leading to the outlets in the dash. Turning the mode door to the defrost position, the HVAC control module will move the recirculation actuator to outside air, reducing window fogging. When defrost is selected, the blower motor will be activated, regardless of the coolant temperature. The HVAC control module enables a high volume of air delivered to the front defrost vents. A/C is available in all modes.

Recirculation Operation

The recirculation switch is integrated into the HVAC control. The selected recirculation switch position is sent to the HVAC control module via LIN-Bus. The HVAC control module controls the air intake using the recirculation actuator. In recirculation mode the recirculation door opens in order to circulate the air within the vehicle. In fresh air mode the recirculation door is closed in order to route outside air into the vehicle.

Heating and A/C Operation

The purpose of the heating and A/C system is to provide heated and cooled air to the interior of the vehicle. The A/C system will also remove humidity from the interior and reduce windshield fogging. Regardless of the temperature setting, the following can affect the rate that the HVAC system can achieve the desired temperature:

- Recirculation actuator setting
- Difference between inside and desired temperature
- Blower motor speed setting
- Mode setting

Pressing the A/C switch or AUTO switch enables the HVAC control module to request A/C compressor engagement and turn ON the A/C switch LED respectively the AUTO switch LED if the AUTO switch is pressed. The setting of the A/C Mode can be adjusted to be set to On, Off, or kept to the Last Setting when the vehicle was last shut off. This setting is made in the Configuration Settings Menu and will determine what mode the A/C will be in when the vehicle is started. The HVAC control module sends a message to the engine control module (ECM) for A/C compressor engagement. The ECM will provide a ground for the A/C compressor relay enabling it to close its internal contacts to send battery voltage to the A/C compressor clutch coil. The A/C compressor diode will prevent a voltage peak, resulting from the collapse of the magnetic field of the coil, from entering the vehicle electrical system when the compressor is disengaged.

The following conditions must be met in order to activate the A/C compressor:

- Battery voltage is between 9 - 18 V.
- Engine coolant temperature is less than 124°C (255°F).
- Engine speed is greater than 600 RPM.
- Engine speed is less than 5 500 RPM.
- A/C high side pressure is between 269 - 2 929 kPa (39 - 425 PSI).
- Throttle position is less than 100%.
- Evaporator temperature is greater than 3°C (38°F).
- ECM does not detect immoderate torque load.
- ECM does not detect insufficient idle quality.
- The ambient temperature is above 1°C (34°F).

The sensor information is used by the ECM to determine the following:

- The A/C high side pressure
- An A/C system load on the engine
- An immoderate A/C high side pressure
- The heat load at the A/C condenser

The air streams into the passenger compartment through the heater core and the evaporator core. The air temperature actuator drives the mixed air flap to induce the airflow. If the interior temperature should be increased, the mixed air flap is put into the position in which more air streams through the heater core. If the interior temperature should be decreased, the mixed air flap is put into the position in which more air streams through the evaporator core.

Recirculation Operation - without Heated Seats

The recirculation switch and the fresh air switch are part of the Radio/HVAC control. The selected switch position is sent to the HVAC control module via LIN-Bus. The HVAC control module controls the air intake through the recirculation actuator. The recirculation switch closes the recirculation flap in order to circulate the air within the vehicle. Through selection of the fresh air switch, the recirculation flap is opened again in order to route outside air into the vehicle.

Recirculation is only available if the defrost mode is not active. When the defrost mode is active, the recirculation actuator opens the recirculation flap and outside air is circulated to the windshield to reduce fogging.

Recirculation Operation - with Heated Seats

The recirculation switch is part of the Radio/HVAC control. The selected recirculation switch position is sent to the HVAC control module via LIN-Bus. The HVAC control module controls the air intake through the recirculation actuator. The recirculation switch closes the recirculation flap in order to circulate the air within the vehicle. Through renewed selection of the recirculation switch, the recirculation flap is opened again in order to route outside air into the vehicle.

Recirculation is only available if the defrost mode is not active. When the defrost mode is active, the recirculation actuator opens the recirculation flap and outside air is circulated to the windshield to reduce fogging.

Automatic Operation

In automatic operation, the HVAC control module maintains the comfort level inside of the vehicle by controlling the A/C compressor clutch, the blower motor, the air temperature actuators, mode actuator and recirculation actuator. Personalized settings for auto fan speed, air conditioning mode, and remote start auto heat seats are available in the Configuration Settings Menu.

To put the HVAC system in automatic mode, the following is required:

1. The auto switch must be activated.
2. The air temperature switch must be in any other position than full hot or full cold position.

Once the desired temperature is reached, the blower motor, mode, recirculation and temperature actuators automatically adjust to maintain the temperature selected. The HVAC control module performs the following functions to maintain the desired air temperature:

- Monitors the following sensors:
 - Ambient air temperature sensor
 - Lower left air temperature sensor
 - Upper left air temperature sensor
 - Ambient light/sunload sensor
- Regulate blower motor speed
- Position the air temperature actuator
- Position the mode actuator
- Position the recirculation actuator
- Request A/C operation

When the warmest position is selected in automatic operation the blower speed will increase gradually until the vehicle reaches normal operating temperature. When normal operating temperature is reached the blower stays on high speed and the air temperature actuators stays in the full heat position.

When the coldest position is selected in automatic operation the blower stays on high and the air temperature actuators stay in full cold position. The mode actuator remains in the panel position and the recirculation actuator will remain in the recirculation position.

Under cold ambient temperatures, the automatic HVAC system provides heat in the most efficient manner. The operator can select an extreme temperature setting but the system will not warm the vehicle any faster. Under warm ambient temperatures, the automatic HVAC system also provides air conditioning in the most efficient manner. Selecting an extreme cool temperature will not cool the vehicle any faster.

NOTE: **The "High" blower setting cannot raise the blower setting past 12, and the "Low" blower preference cannot drop the blower setting below 1, but the blower setting in Auto can be in-between blower settings.**

Personalized Auto Fan Speed settings of "High", "Low", and "Normal" can be selected. The factory setting is "Normal", and will control the fan speed automatically from 1 to 12 according to the vehicle air temperature sensors and preprogrammed logic. A "High" personal fan setting can increase the fan speed up to 1 blower setting. A "Low" personal fan setting can decrease the fan speed 1 blower setting across a range of vehicle conditions.

Engine Coolant

Engine coolant is the essential element of the heating system. The thermostat controls the normal engine operating coolant temperature. The thermostat also creates a restriction for the cooling system that promotes a positive coolant flow and helps prevent cavitation.

Coolant enters the heater core through the inlet heater hose, in a pressurized state. The heater core is located inside the HVAC control module. The ambient air drawn through the HVAC control module absorbs the heat of the coolant flowing through the heater core. Heated air is distributed to the passenger compartment, through the HVAC control module, for passenger comfort. Opening or closing the air temperature flap controls the amount of heat delivered to the passenger compartment. The coolant exits the heater core through the return heater hose and recirculates back to the engine cooling system.

A/C Cycle

Refrigerant is the key element in an air conditioning system. R-134a and R-1234yf are very low temperature gases that can transfer the undesirable heat and moisture from the passenger compartment to the outside air.

The compressor builds pressure on the vapor refrigerant. Compressing the refrigerant also adds heat to the refrigerant. The refrigerant is discharged from the compressor, through the discharge hose, and forced to flow to the condenser and then through the balance of the A/C system. The A/C system is mechanically protected with the use of a high pressure relief valve. If the A/C refrigerant pressure sensor fails or if the refrigerant system becomes restricted and refrigerant pressure continued to rise, the high pressure relief will pop open and release refrigerant from the system.

Compressed refrigerant enters the condenser in a high temperature, high pressure vapor state. As the refrigerant flows through the condenser, the heat of the refrigerant is transferred to the ambient air passing through the condenser. Cooling the refrigerant causes the refrigerant to condense and change from a vapor to a liquid state.

The condenser is located in front of the radiator for maximum heat transfer. The condenser is made of aluminum tubing and aluminum cooling fins, which allows rapid heat transfer for the refrigerant. The semi-cooled liquid refrigerant exits the condenser and flows to the Receiver/Dehydrator (R/D).

The R/D contains desiccant that absorbs moisture that may be in the refrigerant system. The R/D also acts as a storage vessel to ensure that a steady flow of liquid reaches the thermal expansion valve. The refrigerant exits the R/D and flows through the liquid line to the thermal expansion valve.

The thermal expansion valve is located at the front of dash and attaches to the evaporator inlet and outlet pipes. The thermal expansion valve is the dividing point for the high and the low pressure sides of the A/C system. As the refrigerant passes through the thermal expansion valve, the pressure on the refrigerant is lowered. The thermal expansion valve also meters the amount of liquid refrigerant that can flow into the evaporator.

Refrigerant exiting the thermal expansion valve flows into the evaporator core in a low pressure, liquid state. Ambient air is drawn through the HVAC control module and passes through the evaporator core. Warm and moist air will cause the liquid refrigerant boil inside of the evaporator core. The boiling refrigerant absorbs heat from the ambient air and draws moisture onto the evaporator. The refrigerant exits the evaporator through the suction line and back to the A/C compressor, in a vapor state, and completing the A/C cycle of heat removal. At the A/C compressor, the refrigerant is compressed again and the cycle of heat removal is repeated.

The conditioned air is distributed through the HVAC control module for passenger comfort. The heat and moisture removed from the passenger compartment will also change form, or condense, and is discharged from the HVAC control module as water.

SPECIAL TOOLS AND EQUIPMENT

SPECIAL TOOLS

Illustration	Tool Number / Description
	BO-38185 J-38185 Hose Clamp Pliers

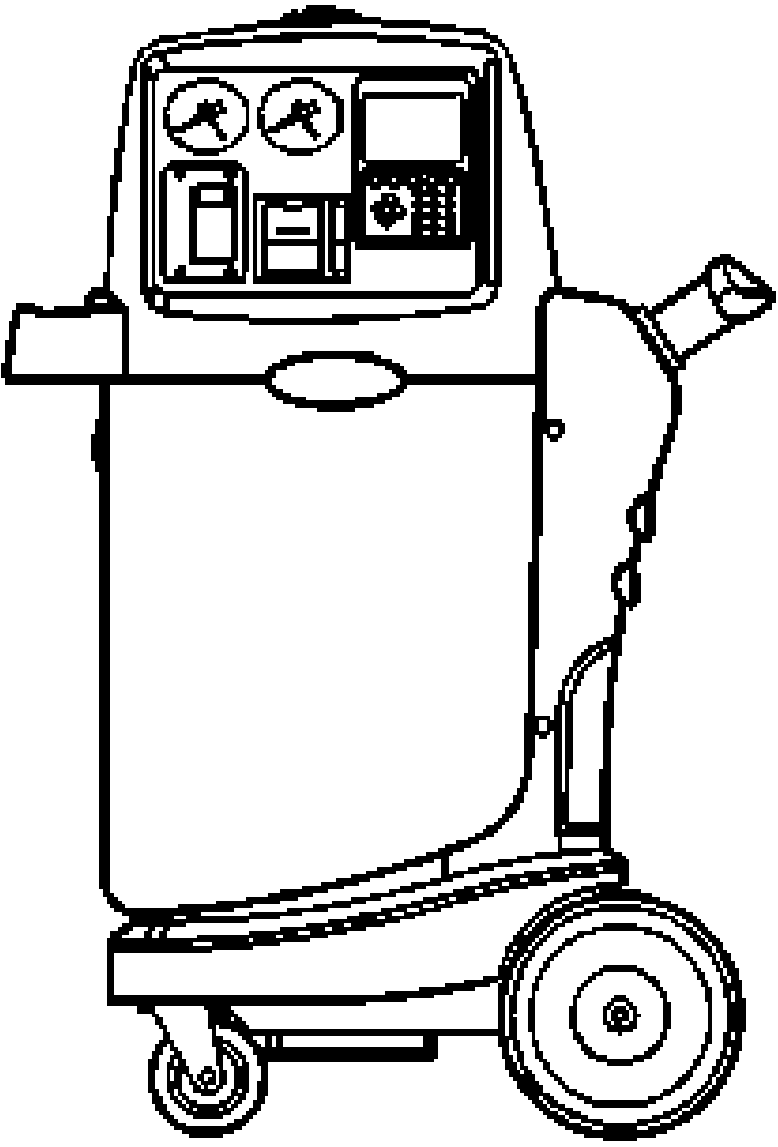
Illustration	Tool Number / Description
 A line drawing of a medical air conditioning service center. The unit is rectangular with a control panel on top featuring two analog gauges, a digital display, and several buttons. It has a handle on the left side and a hose connection on the right. The unit is mounted on a base with two large wheels and a smaller front wheel.	GE-8800 J-43600 ACR 2000 Air Conditioning Service Center

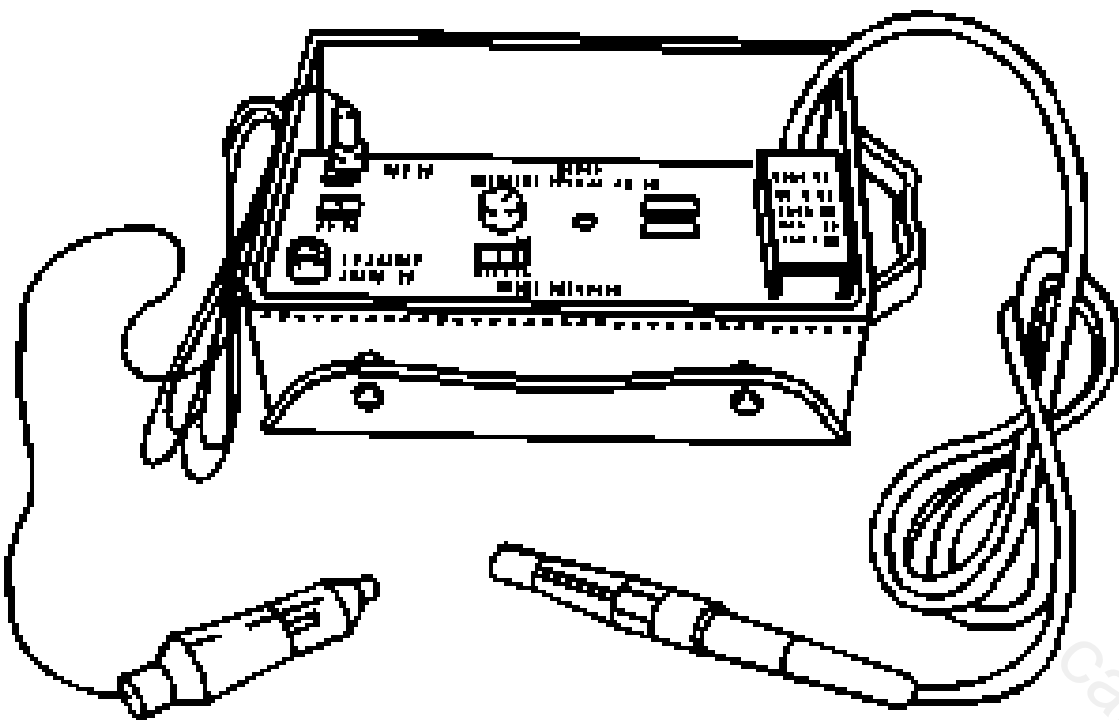
Illustration	Tool Number / Description
	GE-39400-A J-39400-A Halogen Leak Detector
	GE-41447 J-41447 R-134a A/C Tracer Dye - Box of 24

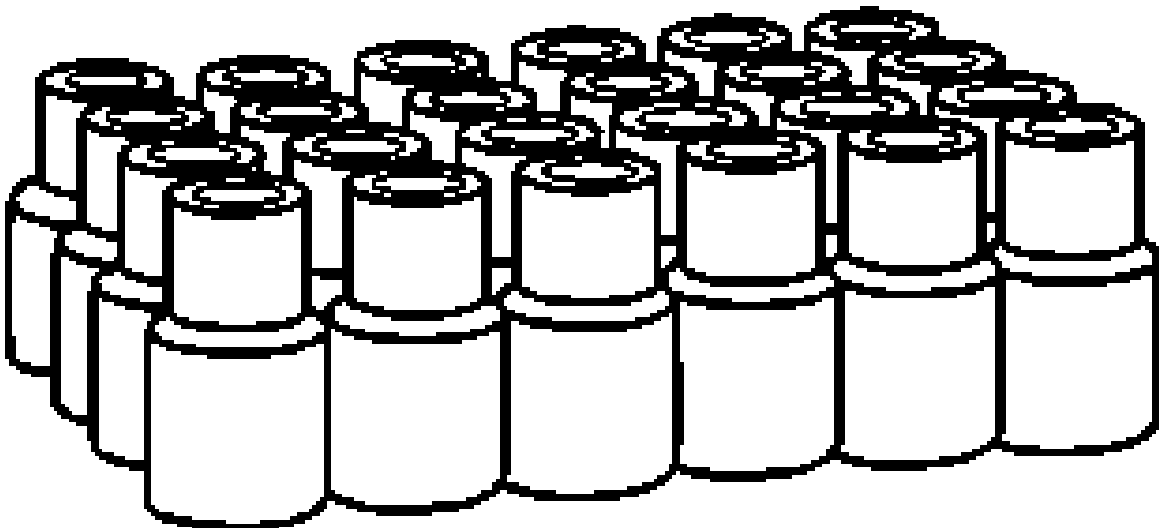
Illustration	Tool Number / Description
	

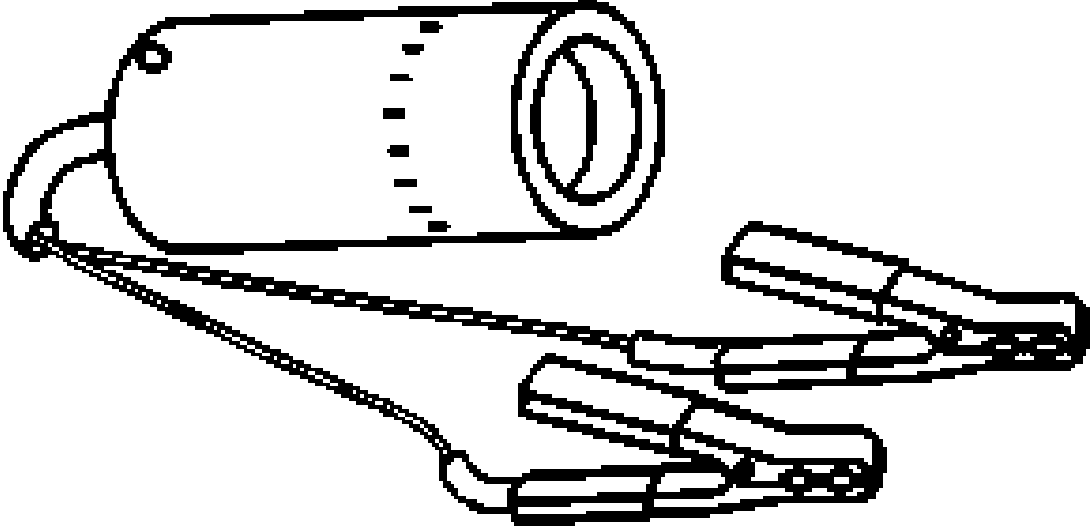
Illustration	Tool Number / Description
 The illustration shows a cylindrical device, likely a leak detection lamp, with a coiled cable extending from one end. The cable terminates in two alligator clips, one of which is shown attached to a test lead. The device has a lens or opening on the opposite end of the cable. A faint watermark 'cardiagn.com' is visible in the lower right area of the illustration.	GE-42220 J-42220 Universal 12V Leak Detection Lamp

Illustration	Tool Number / Description
	GE-43872 J-43872 Fluorescent Dye Cleaner

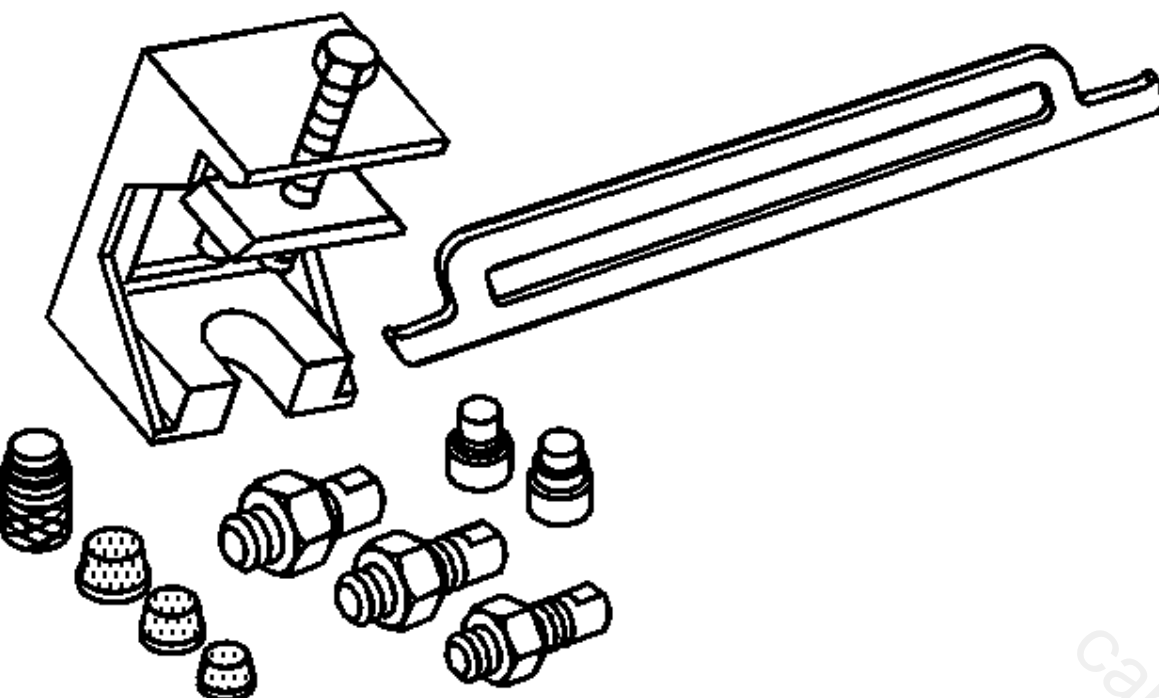
Illustration	Tool Number / Description
	GE-44551 J-44551 Suction Screen Installation/Removal Kit

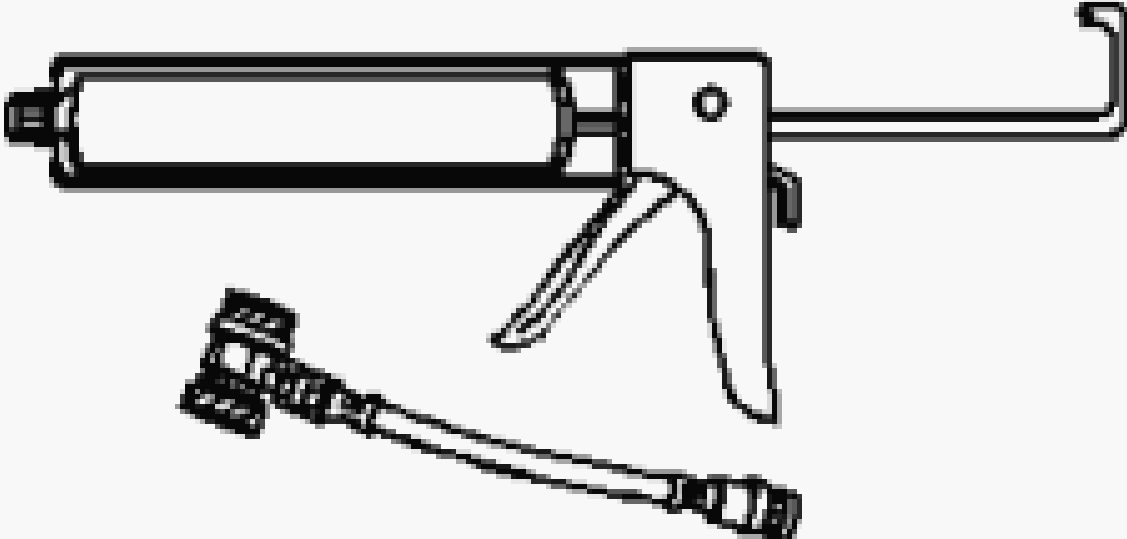
Illustration	Tool Number / Description
	GE-45037 J-45037 A/C Oil Injector

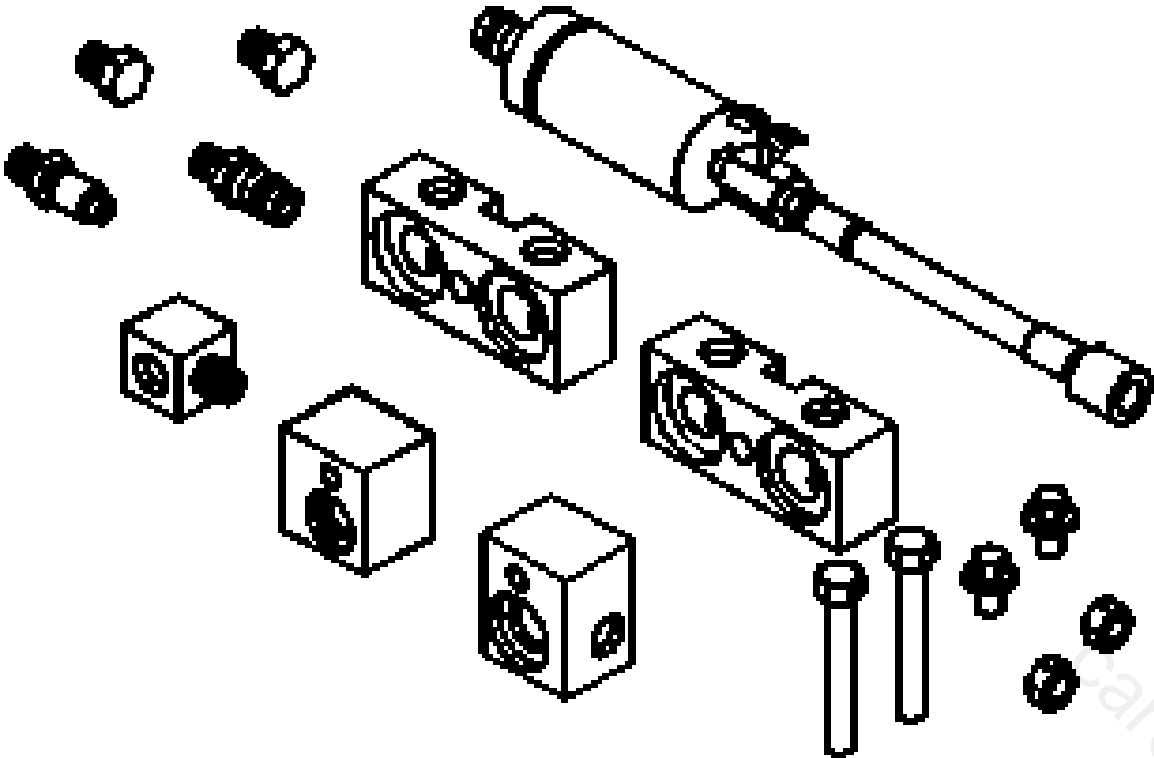
Illustration	Tool Number / Description
	GE-45268 J-45268 A/C Flushing Adapter Kit

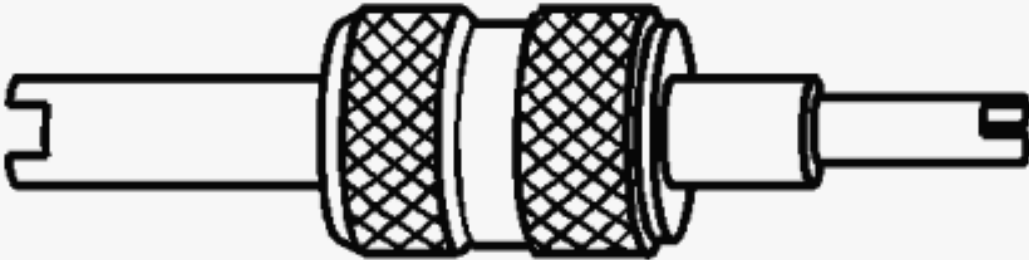
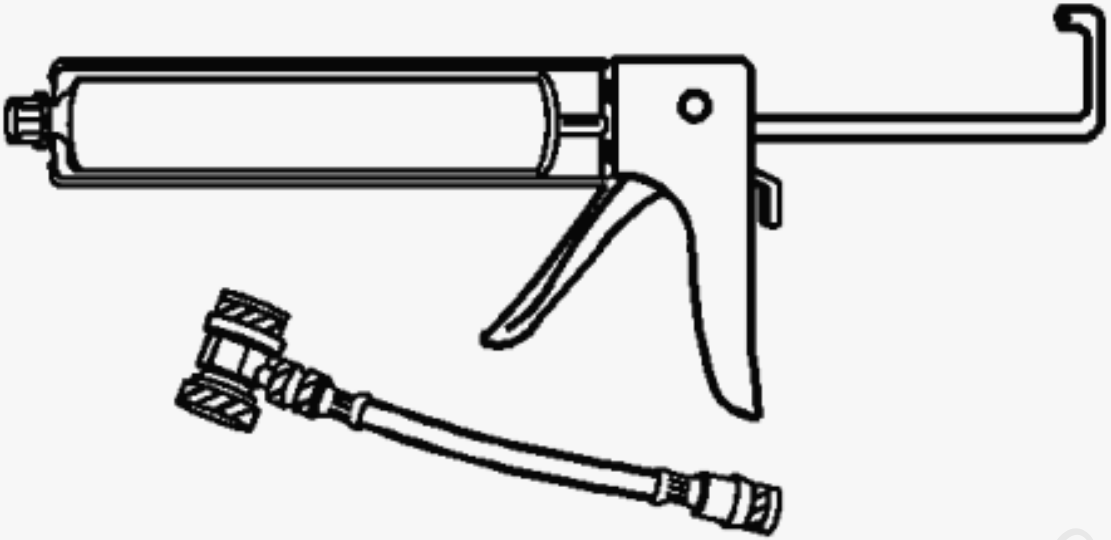
Illustration	Tool Number / Description
	GE-46246 J-46246 Valve Core Tool

Illustration	Tool Number / Description
	GE-46297 J-46297 A/C Dye Injector Kit

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Illustration	Tool Number / Description
	GE-46297-12 J-46297-12 Replacement Dye Cartridges

Illustration	Tool Number / Description
	GE-48800 CoolTech A/C Recharge Machine cardiagn.com

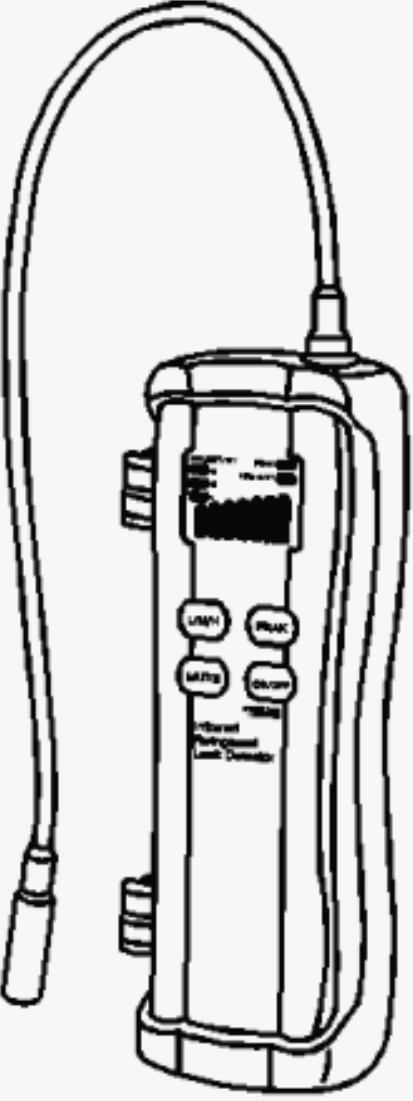
Illustration	Tool Number / Description
	GE-50078 Electronic Leak Detector

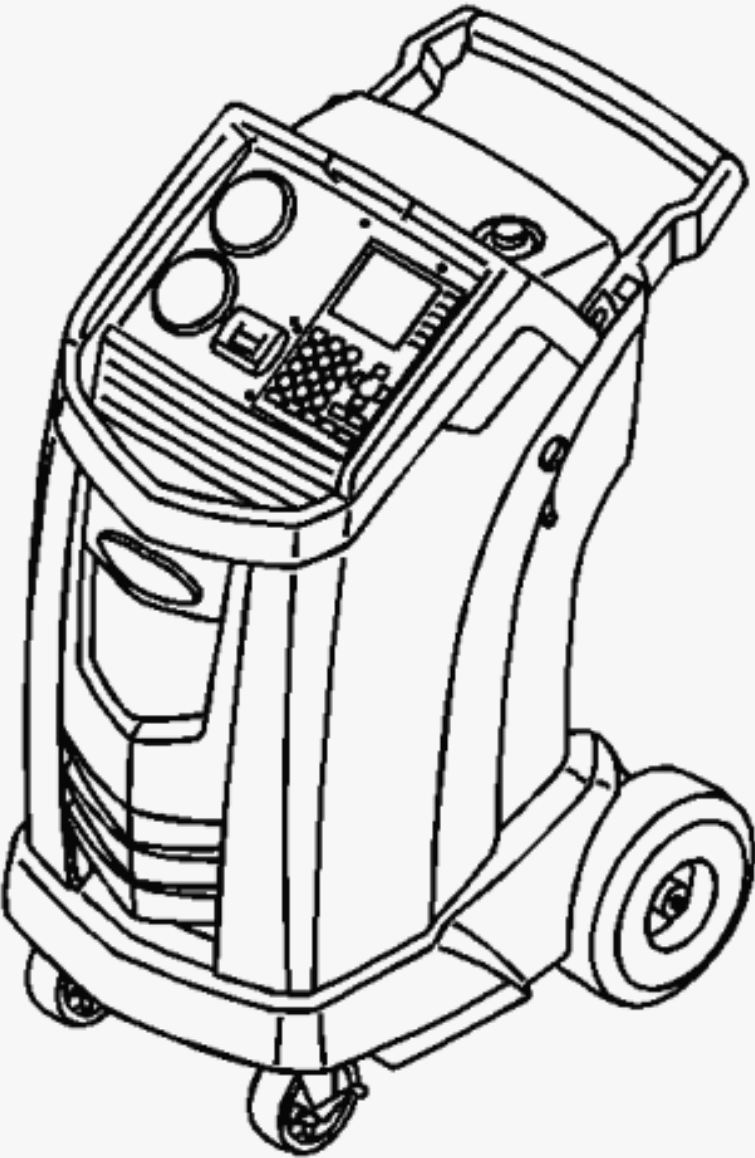
Illustration	Tool Number / Description
 A line drawing of a refrigerant recovery/recharge cart. The device is a vertical, rectangular unit mounted on a four-wheeled cart. The top section features a control panel with a digital display, several buttons, and two large circular ports. Below the control panel is a large, rectangular, ribbed area, likely a filter or a collection tank. The unit is designed for portability, with a handle on top and a sturdy frame.	GE-50300-A R-1234yf A/C Refrigerant Recovery/Recharge Cart

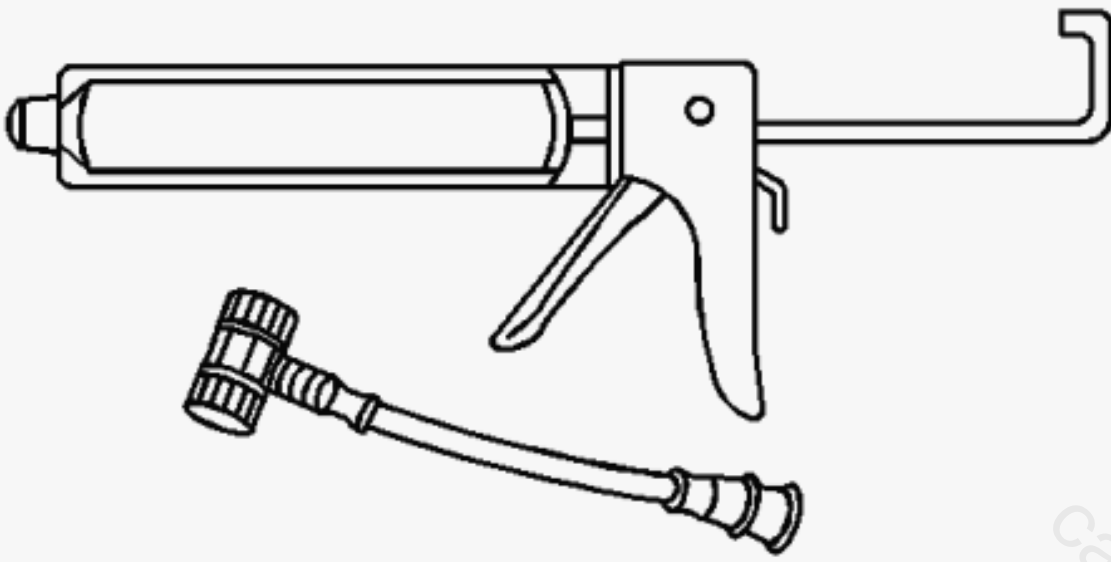
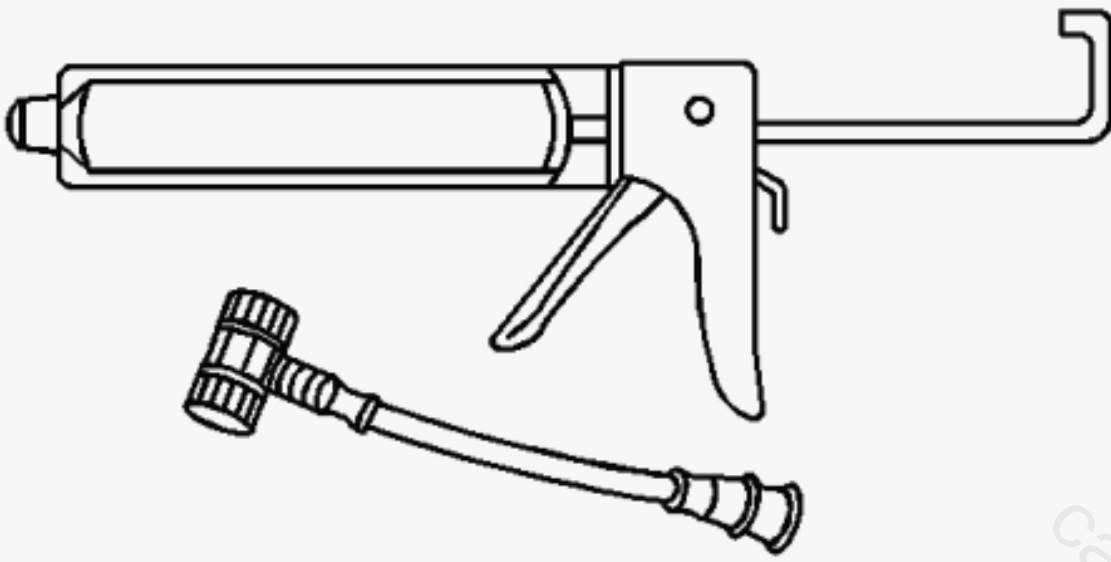
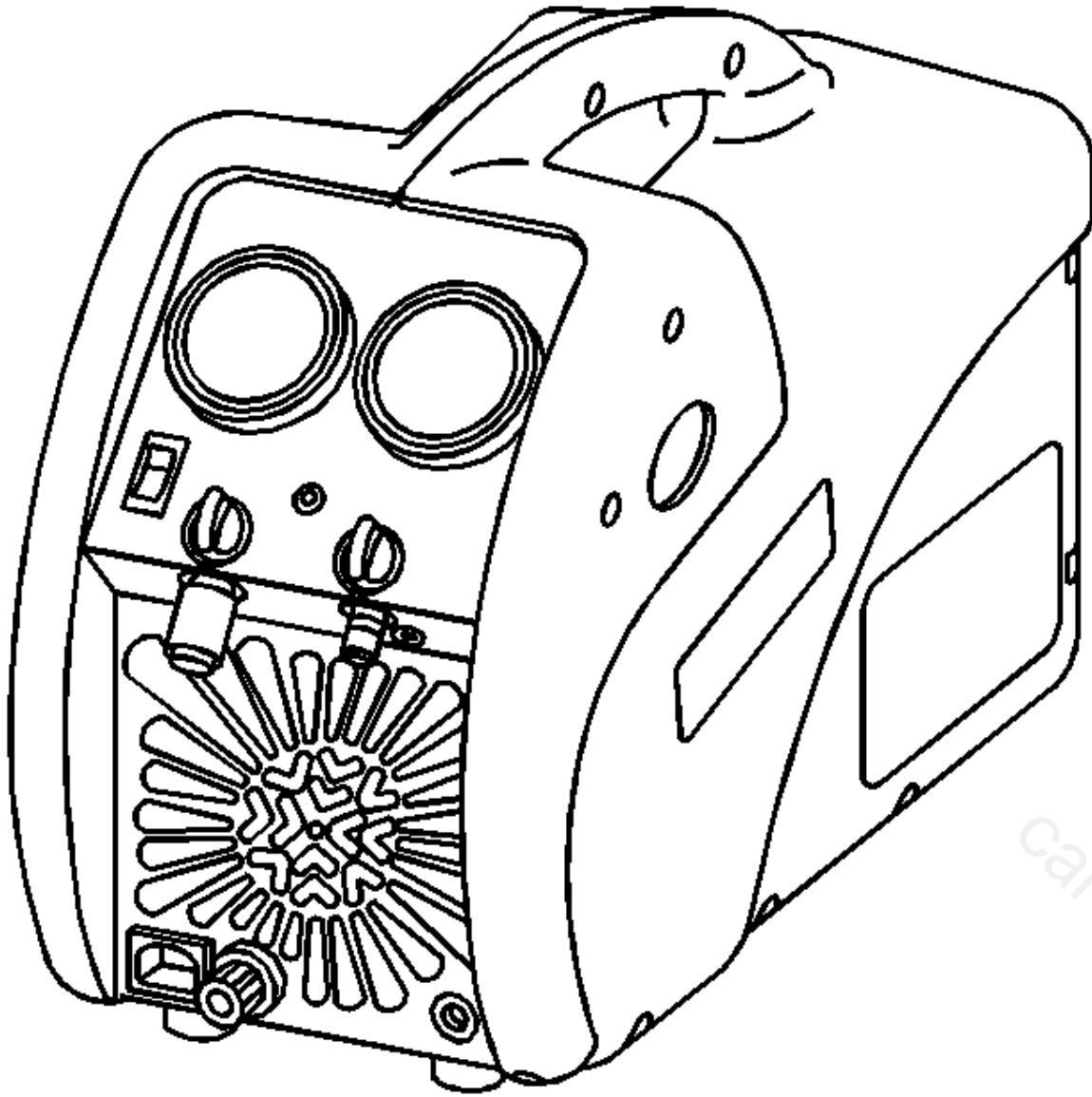
Illustration	Tool Number / Description
	GE-50744 R-1234yf PAG Oil Injector Hose

Illustration	Tool Number / Description
 A line drawing of a manual oil injector tool. The tool consists of a cylindrical body with a trigger on the side and a hook at the end. A hose is attached to the bottom of the tool, featuring a flared end and a connector. The drawing is oriented horizontally.	GE-50745 R-1234yf POG Oil Injector Hose

Illustration

Tool Number / Description



GE-50957
Machine R-1234yf
Contaminated
Refrigerant

7000086I
Scan Tool
Used for diagnosis
of vehicle electrical
system.

Illustration	Tool Number / Description
