**Document ID: 4183707** 

# Front Fog Lamp Package Installation

# **Installation Instructions Part Number**

84140226

### **Kit Contents**

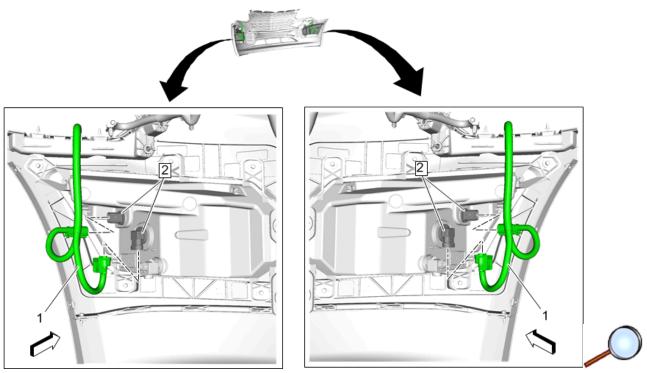
Qty	Description
1	Left Fog Lamp Assembly
1	Right Fog Lamp Assembly
1	Steering Column Switch
6	Tie Straps
1	Fog Lamp Harness
1	1317 Harness (Wire)
1	Instruction Sheet

# **Preliminary Procedure**

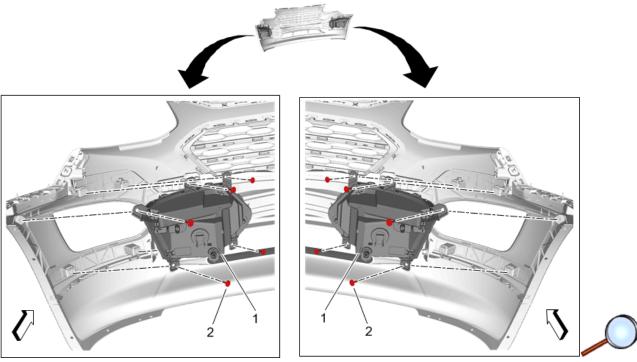
**Note:** Please review the entire procedure before trying to perform it.

- 1. Raise and support the vehicle. Refer to <u>Lifting and Jacking the Vehicle</u>.
- 2. Remove the front fascia. Refer to Front Bumper Fascia Replacement.

# **Lamp Replacement**



1. Disconnect the harness (1) from both lower lamp assemblies (2).



2. Remove and retain the bolts (2) securing the left and right front lamp assemblies (1) and remove both assemblies from the front fascia.

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

3. Using the previously retained bolts (2), install the new fog lamp assemblies (1) to the front fascia.

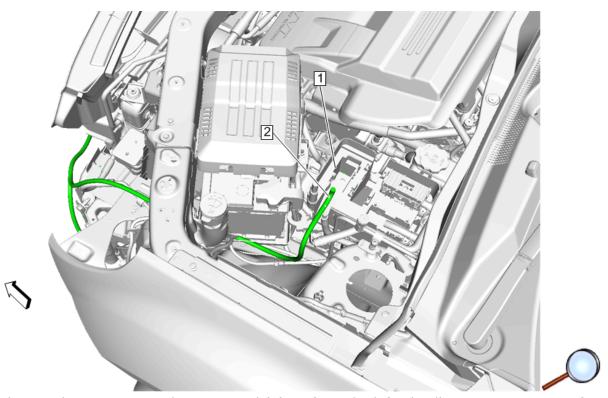
**Note:** Left and right fog lamp assemblies are not interchangeable.

# Tighten

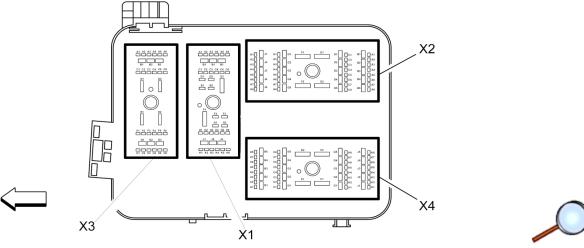
Tighten the bolts to 2.5 N.m (22 lb in).

### **Harness Install**

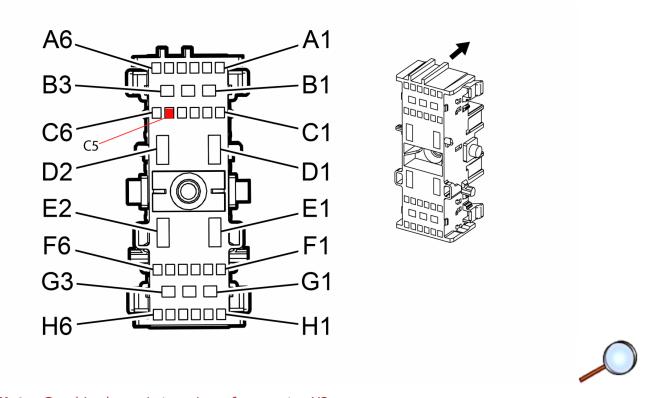
- 1. Disconnect negative battery cable. Refer to <u>Battery Negative Cable Disconnection and Connection</u>.
- 2. Remove the underhood electrical center (UEC), to access the designated connector below it. Refer to <u>Accessory Wiring Junction</u> Block Replacement.



3. Route the wire harness jumper lone terminal (2) up from the left wheelhouse area, starting forward of the washer bottle filler neck. Follow the routing of the front lighting harness to the UEC (1).

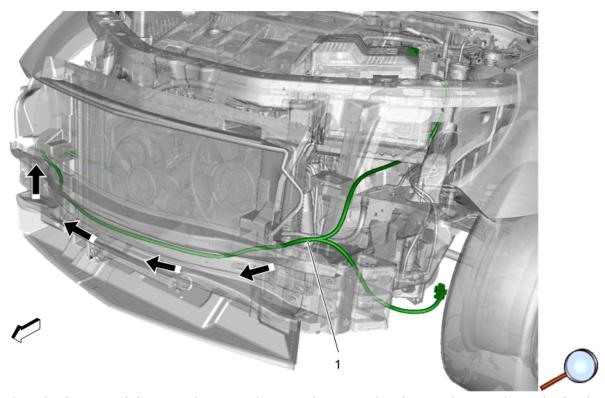


4. Locate the 43-way connector X3, the smaller black connector, with a red CPA towards the front of the UEC.

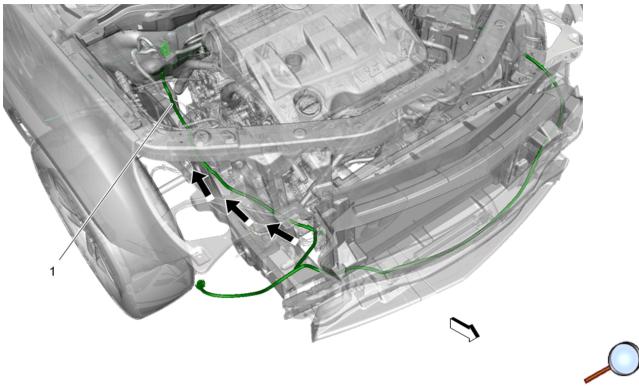


# **Note:** Graphic shown is top view of connector X3.

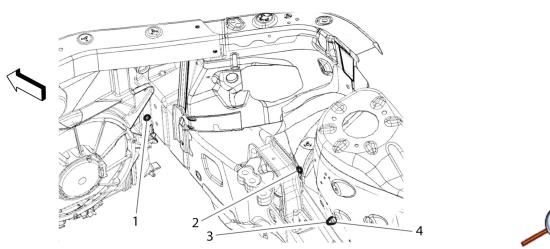
- 5. Disengage the red CPA and remove the connector from the base assembly.
- 6. Remove the red TPA from the connector housing. Insert the bare terminal (from the fog lamp harness) into cavity C5 of connector X3. Reinstall and lock the red TPA.



- 7. Ensure that the harness (1) routes between bumper beam and radiator, then to the right fog lamp area, following the main forward lighting harness.
- 8. Remove the air cleaner assembly. Refer to <u>Air Cleaner Assembly Replacement</u> or <u>Air Cleaner Assembly Replacement</u>.



9. Route the ground circuit (1) up along the right side of the radiator, outboard of the radiator hose, outboard of the right engine mount, to the ground stud on the inboard side of the right shock tower.

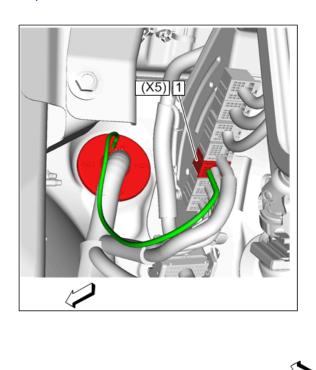


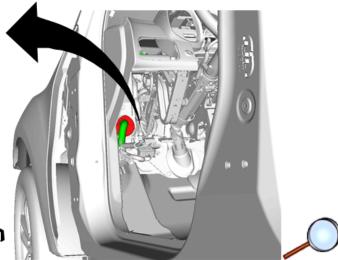
10. Secure the wiring with the attached fir tree clips to the right side of the radiator (1), and to the shock tower (2), just outboard of the right engine mount.

- 11. Remove the ground nut (4) from the inboard side of the right shock tower.
- 12. Attach the fog lamp ground eyelet, on top of the existing ground circuit (3), align crimp tangs to minimize overlap, install the fastener and torque to 10 N.m.
- 13. Reinstall the air cleaner assembly. Refer to <u>Air Cleaner Assembly Replacement</u> or <u>Air Cleaner Assembly Replacement</u>.
- 14. Use the included tie straps every 150 mm to 200 mm starting from rear of connector, secure the wiring near each fog lamp and across the base of the radiator. Secure the wiring so that snow and ice accumulation will not pull the wires down. Cut off excess tie strap tails.
- 15. Connect the left fog lamp.
- 16. Connect the right fog lamp.
- 17. Reinstall front fascia to vehicle and connect electrical connections. Refer to Front Bumper Fascia Replacement.

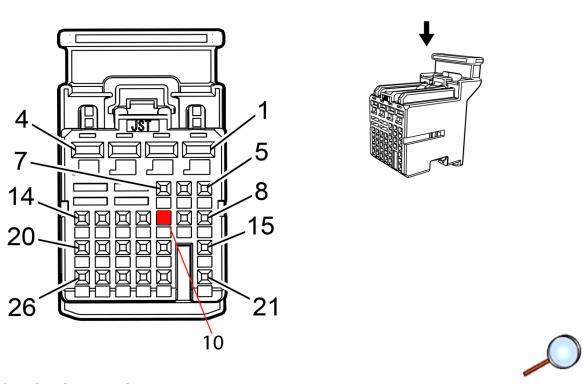
### Inspect to see if Circuit 1317 is present at BCM

- 1. Remove the BCM and BCM mounting bracket. Refer to <u>Body Control Module Replacement</u>.
- 2. Remove the instrument panel insulator panel to gain access to body harness. Refer to <u>Instrument Panel Insulator Panel</u> Replacement Left Side.





3. **Locate BCM and Connections:** Locate BROWN BCM connector X5 (Item #2). Remove connector and inspect to see if Cavity 10 is populated.



4. Inspect for circuit at Cavity #10:

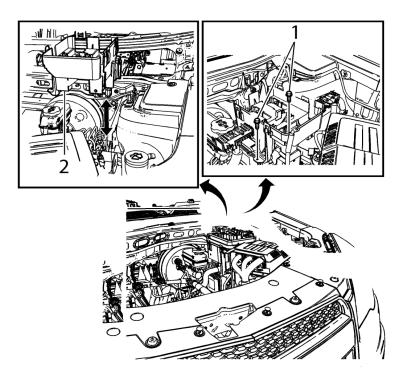
If cavity 10 is populated (Circuit # 1317 Dark GREEN/WHITE Stripe), **DO NOT install Kit harness for circuit 1317, it can be discarded.** A small population of vehicles MAY HAVE this circuit already present. If it is present:

- 4.1. Reconnect Connector X5 to BCM.
- 4.2. Reinstall the BCM and BCM mounting bracket. Refer to <u>Body Control Module Replacement</u>.
- 4.3. Re-secure I/P panels. Refer to <u>Instrument Panel Insulator Panel Replacement Left Side</u>.
- 4.4. Reinstall the UEC. Refer to Accessory Wiring Junction Block Replacement.
- 5. Proceed to "Stalk Switch Install", disregarding the installation of Circuit 1317.
- 6. If no circuit is present, proceed to installation instructions below for "Circuit 1317 Harness Install".

#### **Circuit 1317 Harness Install**

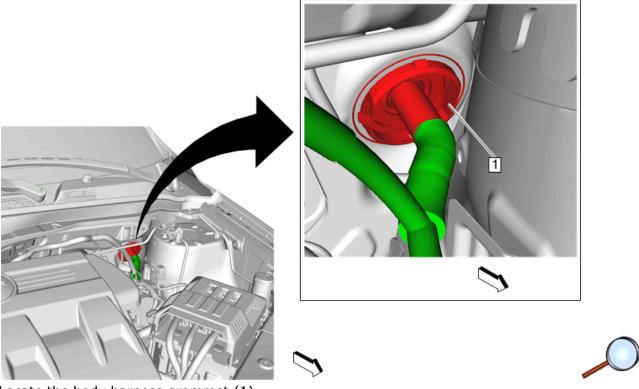
1. Remove the BCM and BCM mounting bracket. Refer to <u>Body Control Module Replacement</u>.

2. Remove the instrument panel insulator panel to gain access to body harness. Refer to <u>Instrument Panel Insulator Panel Replacement - Left Side</u>.

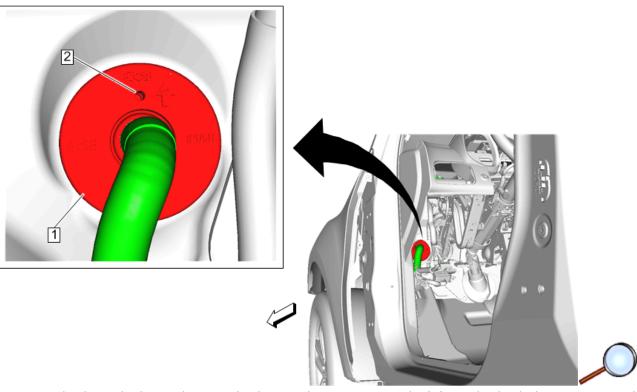




3. Remove the bolts (1) and the base of the UEC (2) to gain access to the body harness grommet.

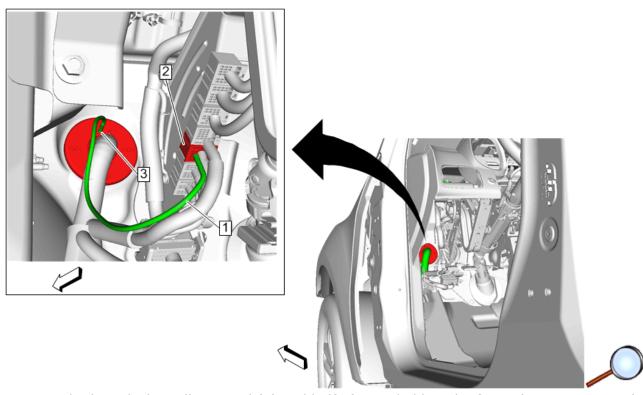


- 4. Locate the body harness grommet (1).
- 5. Locate the wire provided in kit. Identify end of wire with smaller terminal.



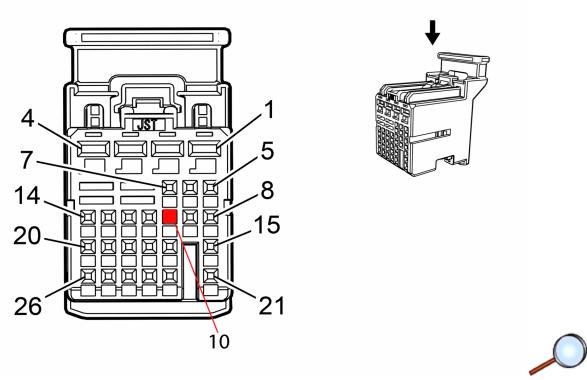
- 6. From inside the vehicle on driver side, locate the service nipple (2) on the body harness pass through grommet (1) and pierce a small hole in center of the nipple (2).
- 7. Insert a pull wire through the service nipple from inside the vehicle, attach the end of the wire with the smaller of the two terminals.

Document ID: 4183707

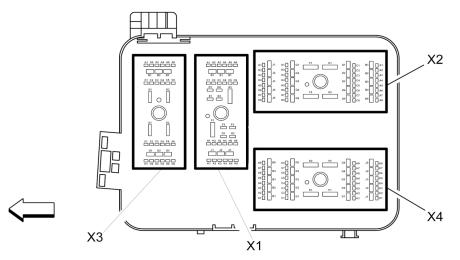


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- 8. From inside the vehicle, pull terminal (1) and half of provided length of wire (approx 400 mm) to follow along the main body harness to reach BCM Connector X5 (2), (the brown connector).
- 9. From inside of the vehicle, apply a small amount of RTV type sealant, (GM P/N 12378521 or equivalent), (with a narrow applicator tip), into the recess of the service nipple (3), ensuring that the sealant is applied around the wire inside the nipple. Apply a small piece of tape to prevent the RTV from oozing out of the nipple.

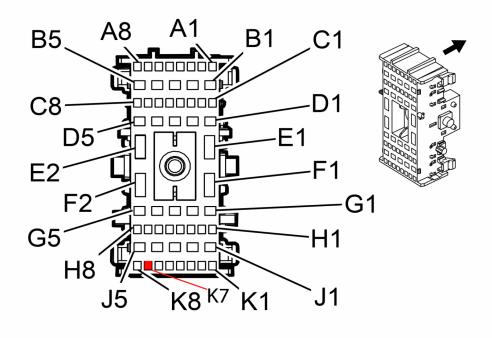


- 10. Disengage the TPA from the brown BCM connector.
- 11. Insert the terminal into Cavity 10 and re-insert the TPA and lock.
- 12. Reinstall the BCM and BCM mounting bracket. Refer to **Body Control Module Replacement**.
- 13. Insert and secure the connector X5 back into BCM.
- 14. Apply three tie straps, (as needed), to secure the service wire to the body harness every 150 mm to 200 mm from BCM..
- 15. From the engine side of the pass-through, route the wire along the main harness to reach UEC.





16. Locate he 56-way connector, X4, (the large grey connector) and remove from base.



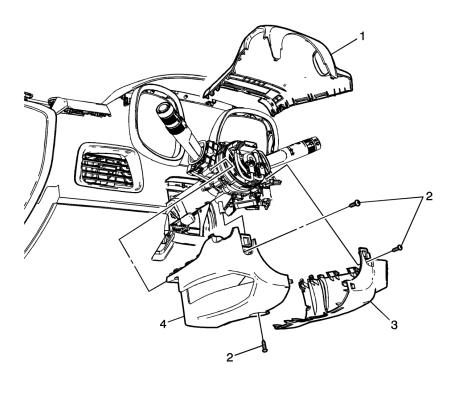


# **Note:** Graphic shown is top view of connector X4.

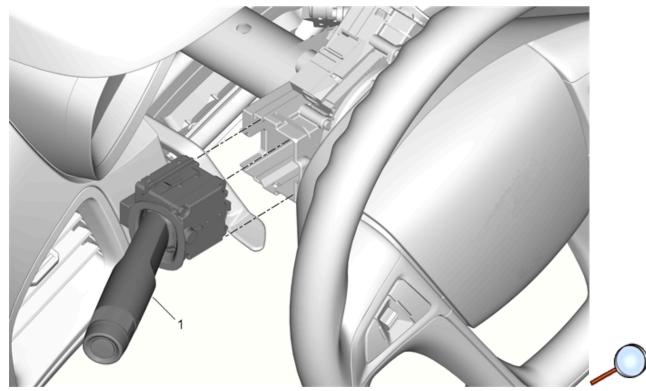
- 17. Remove the rear connector shell TPA from the connector housing.
- 18. Insert the larger terminal (from the service harness) into cavity K7 of the connector.

- 19. Reinstall the TPA rear shell and back.
- 20. Position the connector back into the base of the UEC.
- 21. Apply three tie straps, (as needed), to maintain routing along main harness bundle every 150 mm to 200 mm.
- 22. Reinstall the UEC. Refer to Accessory Wiring Junction Block Replacement.

## **Stalk Switch Install**







- 2. Remove the factory installed turn signal multifunction switch. Refer to Turn Signal Multifunction Switch Replacement.
- 3. Install the new turn signal multifunction switch with fog lamp control. Refer to <u>Turn Signal Multifunction Switch Replacement</u>.
- 4. Reinstall the steering column shroud. Refer to Steering Column Shroud Replacement.
- 5. Connect negative battery cable. Refer to Battery Negative Cable Disconnection and Connection.

**Note:** The installation of this accessory fog lamp kit requires programming and configuring of the vehicle. This is done with a Service Programming System (SPS-TIS2Web). The installer needs to call TCSC to obtain a VCI number. United States 1-888-337-1010 Canada (English) 1-800-828-6860 Canada (French) 1-800-503-3222. The Techline Customer Support Center will provide programming instructions and changes to the vehicles calibration settings. You must provide the vehicle identification number (VIN) of the vehicle to be programmed and the authorization code when calling TCSC.

- 6. Using the Scan Tool with a MDI, and (SPS-TIS2Web), update the body control module (BCM) calibration file and the instrument panel cluster (IPC) to activate the front fog lamps and the front fog lamp telltales
- 7. Test the function of the front fog lamps and the front fog lamp telltale. Fog lamps work with park lamps and low beams and not with high beams. (See checklist below).
- 8. Reinstall any previously removed components.
- 9. Aim the fog lamps. Refer to Fog Lamp Aiming.

# **Appendix**

# **Suggested Test Process**

- Fog Lamps will not turn on when Park or Head Lamps are off.
- Able to turn on Fog Lamps with Park Lamps on.
- Able to turn on Fog Lamps with Head Lamps on.
- Do Fog Lamps turn off with High Beams on?
- Do Fog Lamps turn off with Accessory Time Out?
- Not able to turn on Fog Lamps with High Beams on.