Front Fog Lamp Package Installation

 Table 1:
 Colorado Kit Contents

 Table 2:
 Canyon Kit Contents

Installation Instructions Part Number

23459681

Colorado Kit Contents

Qty	Description
2	Lamps
1	Left Fog Lamp Bezel
1	Right Fog Lamp Bezel
1	Right Lamp Molding
1	Left Lamp Molding
1	Chevy Head Lamp Switch
1	Wiring Kit – Harness & 8 Tie Straps
1	One Page Instruction Sheet

Canyon Kit Contents

Qty	Description
2	Lamps
1	Left Fog Lamp Bezel

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Qty	Description
1	Right Fog Lamp Bezel
1	GMC Head Lamp Switch
1	Wiring Kit – Harness & 8 Tie Straps
1	One Page Instruction Sheet

Preliminary Procedure

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

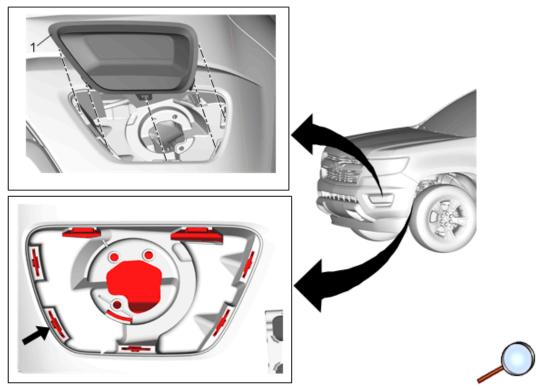
1. Raise and support the vehicle. Refer to Lifting and Jacking the Vehicle

2. Remove the front fascia. Refer to Front Bumper Fascia Replacement

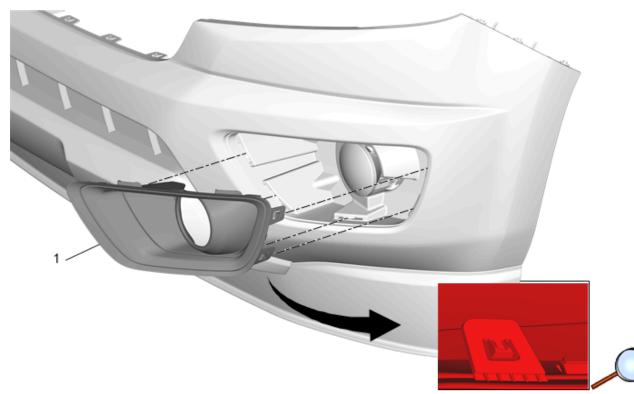
3. Place the front fascia on a soft surface to prevent scratching or damage.

4. Remove the fog lamp trim cover from the front fascia and install the fog lamps while the fascia is off the vehicle.

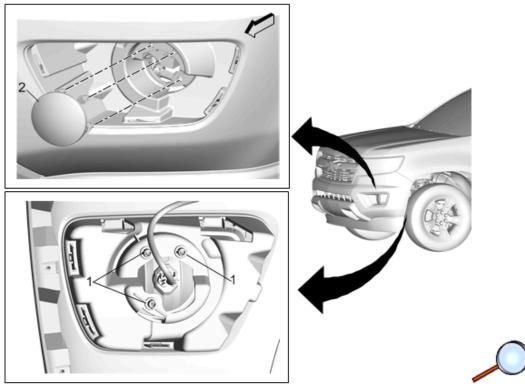
Procedure



1. Release all tabs holding the fog lamp opening cover (1) to the fascia from the rear side of the fascia, access to these tabs is available through the wheelhouse opening.

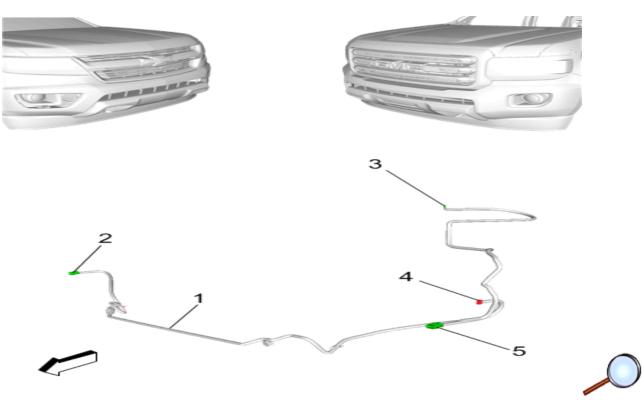


2. Position the fog lamp bezel (1) to the front bumper fascia and secure the locking tabs.

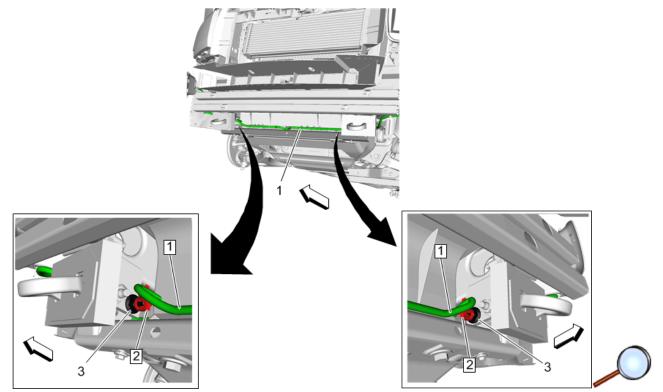


3. Position the fog lamp assembly (2) to the fog lamp bezel and secure locking tab retainers (1).

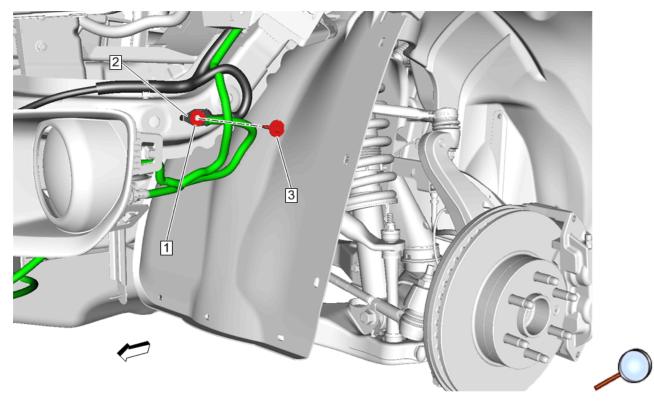
Wire Harness Installation



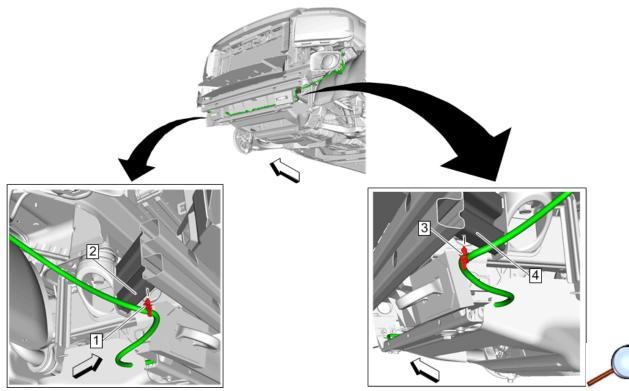
- 1. Lay the wiring harness on the ground in front of the vehicle and get an idea how it is to be installed in the vehicle.
 - 1.1. The lone wiring connector (2) goes to the right side fog lamp.
 - 1.2. The wiring connector (5) near some other take outs goes to the left fog lamp.
 - 1.3. The ground eyelet (4) attaches just forward to the left front tire.
 - 1.4. The lone single terminal (3) gets inserted into the UEC, (under hood electrical center).
 - 1.5. The loose piece of rigid scroll should be applied to the wire harness and will route across the front of the radiator.



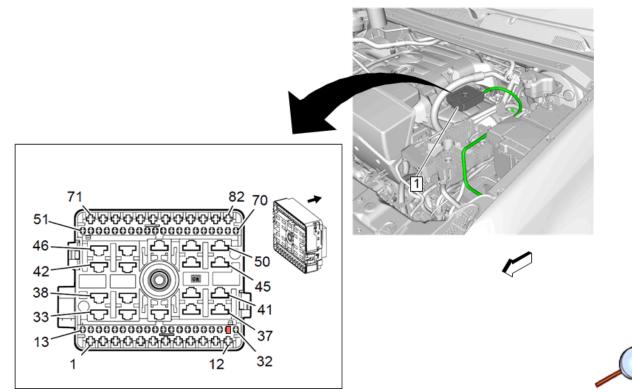
- 2. Route the wiring harness (1) across the base of the radiator and loosely tie strap to the cross vehicle beam.
- 3. Attach the two M10 stud clips (20 to the threaded ends of the frame bolts (3) that would also hold the tow hooks, if equipped.



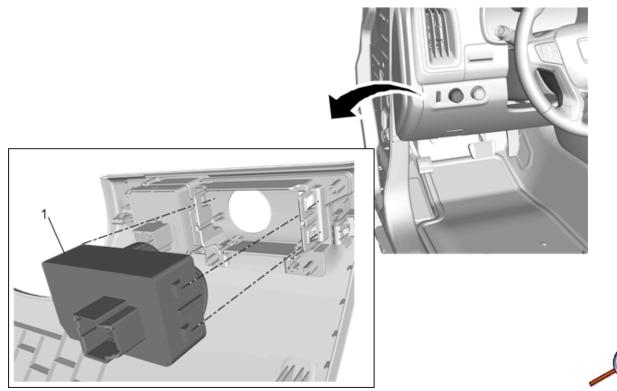
- **Caution:** Use the correct fastener in the correct location. Replacement fasteners must be the correct part number for that application. Fasteners requiring replacement or fasteners requiring the use of thread locking compound or sealant are identified in the service procedure. Do not use paints, 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.
- 4. Attach the ground eyelet (1) to the front left ground point (2) just forward of the left front tire.
- 5. Double stack the eyelet and torque the bolt (3) to 20 N.m (15 lb ft).



- 6. Clip the harness (3) on the left side into the hole on the bottom side of support (4) just outboard of tow hook.
- 7. Route the single terminal up and into the engine compartment heading towards the UEC.
- 8. Clip the harness (1) on the right side into the hole on the bottom side of support (2) just outboard of the tow hook.
- 9. Install the front fascia. Refer to Front Bumper Fascia Replacement.
- 10. Route the lone connector to the right fog lamp and connect to the right fog lamp.
- 11. Route the lone connector to the left fog lamp and connect to the left fog lamp.



- 12. Route the lone terminal up to the UEC (Underhood Electrical Center). Insert the bare terminal in cavity 31 of the 82-way connector of the UEC. Reassemble the UEC.
- 13. Go back and ensure the harness is routed away from any sharp surfaces and securely tie strap into position.



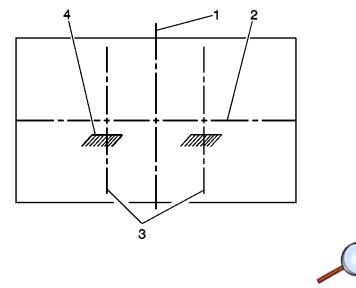
- 14. Using the appropriate tool gently press tabs to remove the factory installed headlamp switch (1) from the instrument panel knee bolster and replace with the accessory headlamp switch.
- 15. Swap the current headlamp switch with the new headlamp switch that contains the added fog lamp feature.
- 16. With the support of the Tech Line, download the new BCM calibration to support the new fog lamp feature.
 - **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). 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.
- 17. 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.
- 18. 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.
- 19. Once the fog lamps function, in park and low beam, including a cluster telltale, go back and secure the wiring harness forward of the UEC with the double headed tie straps and use the loose 5 tie straps to secure the wiring near the fog lamps and anywhere else it might be needed.
- 20. Reinstall the left front wheelhouse liner and left front wheel and tire. Properly torque the wheel nuts.
- 21. Reinstall any previously removed components.

22. Aim the fog lamps, refer to procedure below.

Preparation Procedure

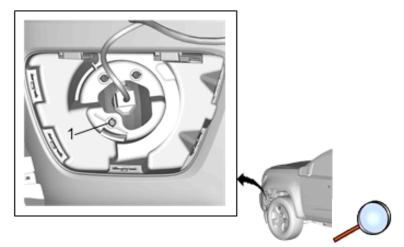
- **Note:** Horizontal aim is not adjustable on this vehicle. Vertical aim is done by an adjusting allen head screw located through the front wheelhouse liner. Prior to aiming the fog lamps, perform the following steps
- 1. Completely assemble all of the components on the vehicle.
- 2. Place the vehicle on a level surface.
- 3. Stop all unnecessary operations or work that could affect the ride height of the vehicle.
- 4. Close the doors and verify that the luggage compartment is empty.
- 5. Stabilize the suspension by rocking the vehicle sideways.
- 6. Ensure that the fuel level is full.
- 7. Ensure that the tires are inflated to the proper pressure.
- 8. Ensure that the driver or a similar weight , approximately 75 kg (165 lb), is in the vehicle driver seat.

Aiming Procedure



- 1. Park the vehicle 7.6 m (25 ft) away from the target screen.
- 2. Measure from the center of the fog lamp to the ground line. Using this measurement, mark the horizontal centerline (2) of the fog lamp on the target screen directly in front of the vehicle

3. Turn ON the fog lamps. The top of the fog lamp beam image (4) on the target screen should be 114 mm (4 in) below the center of the fog lamp lens height.



- 4. Adjust the fog lamp as required using the front fog lamp (1) adjusting screw at the rear lower portion of the projector lens. Pull back the front wheelhouse liner to access the adjusting screw.
- 5. Turn OFF the fog lamps.