

2021 ELECTRICAL

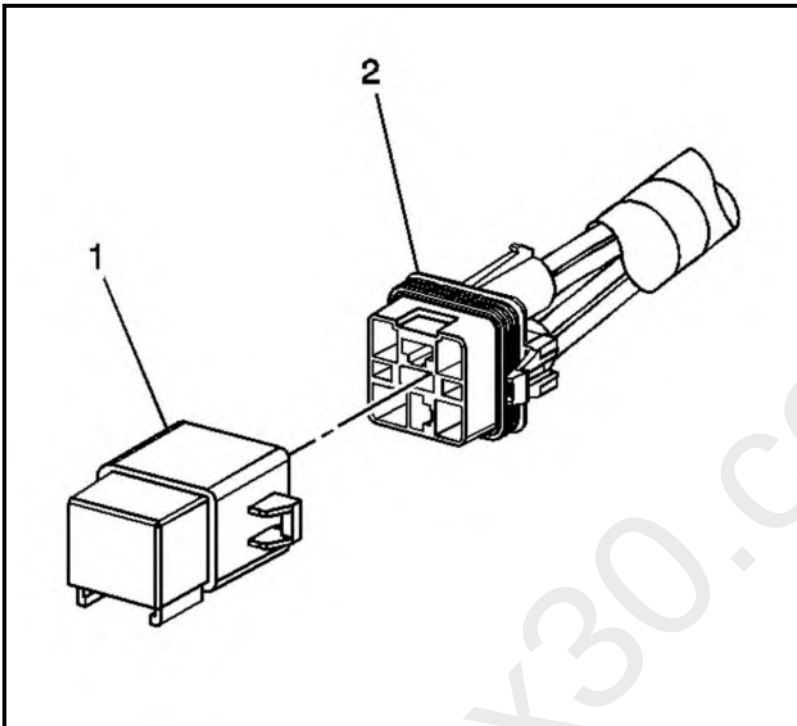
Wiring Systems and Power Management - Repair Instructions - Canyon, Colorado

REPAIR INSTRUCTIONS

ELECTRICAL RELAY REPLACEMENT (ATTACHED TO WIRE HARNESS)

Removal Procedure

1. Locate the relay. Refer to the [Master Electrical Component List](#) , or [Component Connector End Views - Index](#) to locate the relay in the vehicle.



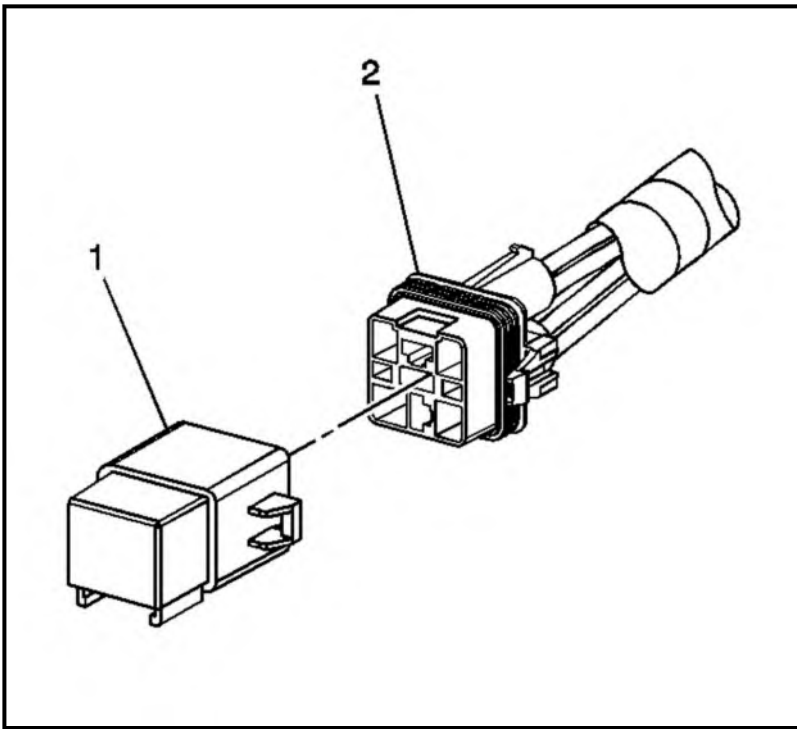
2. Remove any fasteners which hold the relay in place.
3. Remove any connector position assurance (CPA) devices or secondary locks.

NOTE: Use care when removing a relay in a wiring harness when the relay is secured by fasteners or tape.

4. Separate the relay (1) from the wire harness connector (2).

Installation Procedure

1. Connect the relay (1) to the wire harness connector (2).



2. Install any connector position assurance (CPA) devices or secondary locks.
3. Install the relay using any fasteners or tape that originally held the relay in place.

ELECTRICAL RELAY REPLACEMENT (WITHIN AN ELECTRICAL CENTER)

Special Tools

EL-43244 Relay Puller Pliers

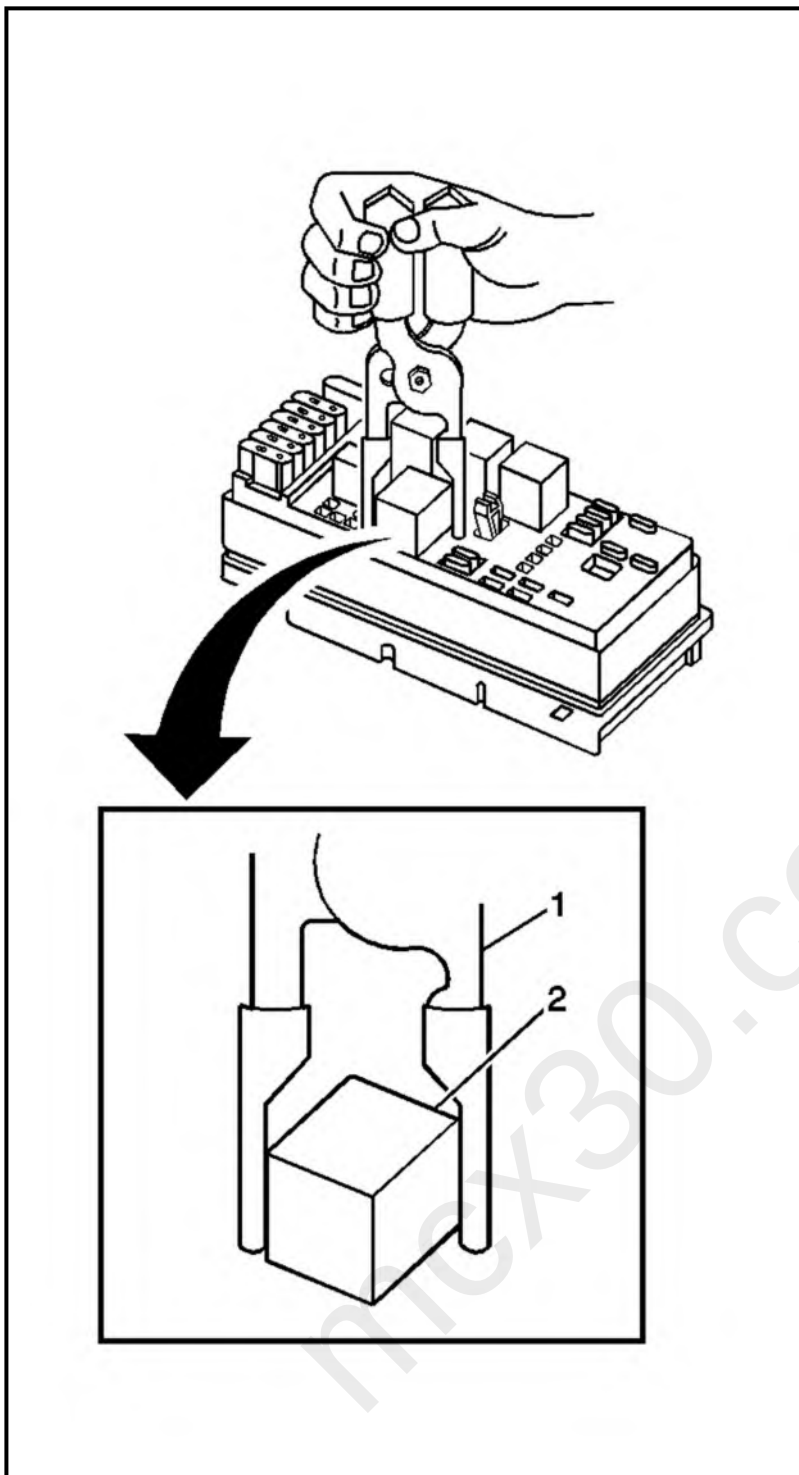
Removal Procedure

1. Remove the electrical center cover.

NOTE:

- **Always note the orientation of the relay.**
- **If equipped with a notch style relay; observe the location of the notch on the old relay to verify the new relay is installed with the notch in the same location.**
- **Ensure that the electrical center is secure, as not to put added stress on the wires or terminals.**

2. Locate the relay. Refer to [Electrical Center Identification Views](#) to locate the electrical center where the relay exists.
3. Using the EL-43244 (1) position the tool on opposing corners of the relay (2).

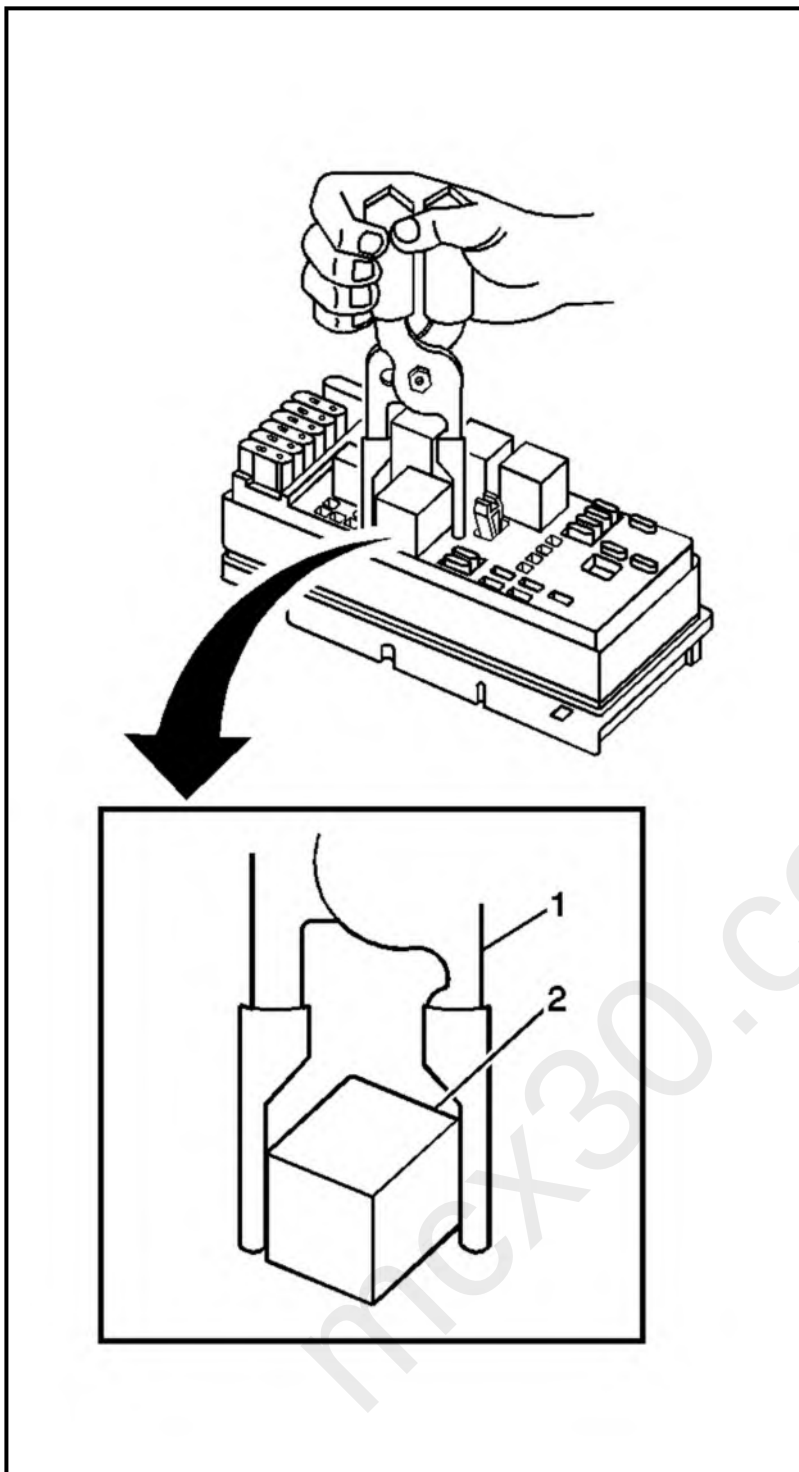


CAUTION: Use EL-43244 to pull the relay straight out from the electrical center terminals. The use of pliers or a flat bladed tool could damage the electrical center.

4. Remove the relay (2) from the electrical center.

Installation Procedure

1. Install the relay (2) in the same position as removed.

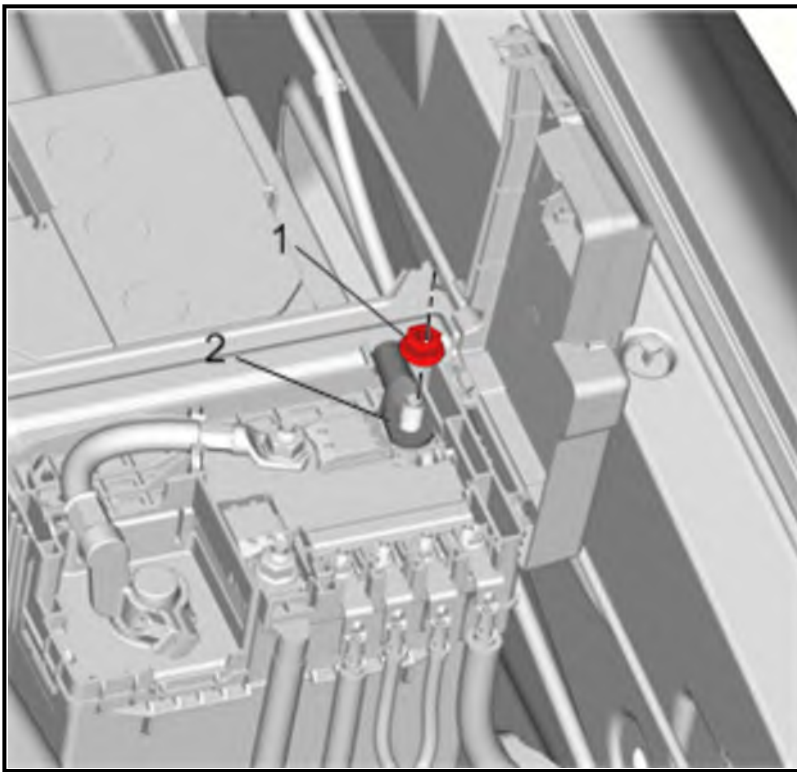


2. Install the electrical center cover.

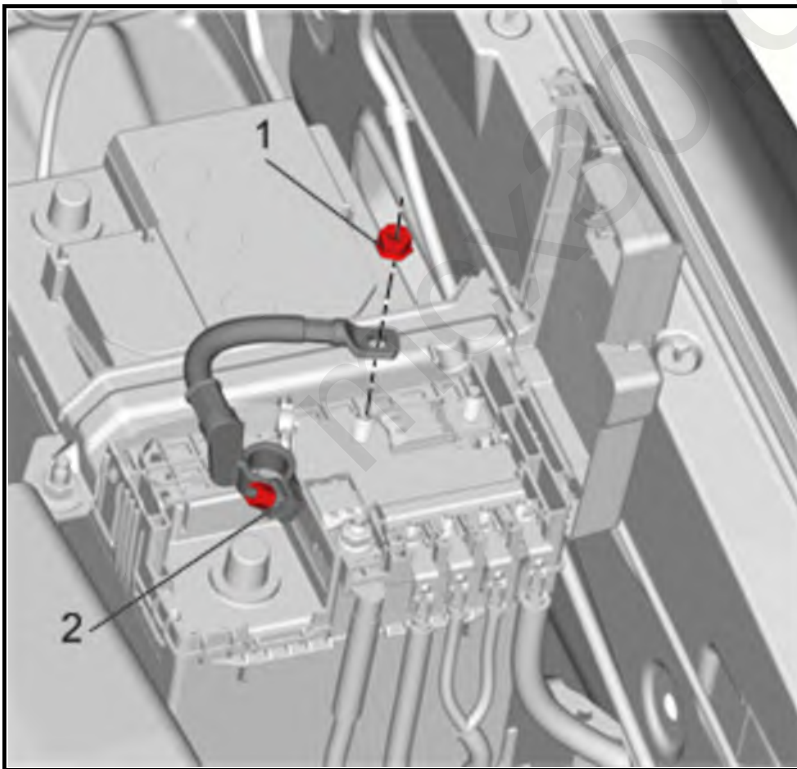
FUSE BLOCK REPLACEMENT

Removal Procedure

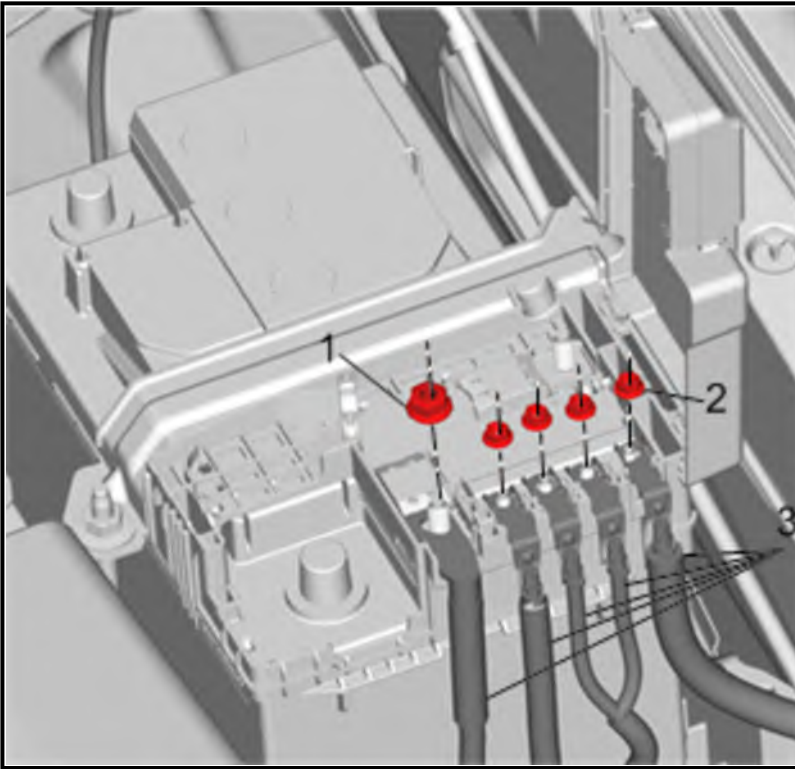
1. Disconnect the battery negative cable. Refer to [Battery Negative Cable Disconnection and Connection](#).
2. Open the fuse block cover.



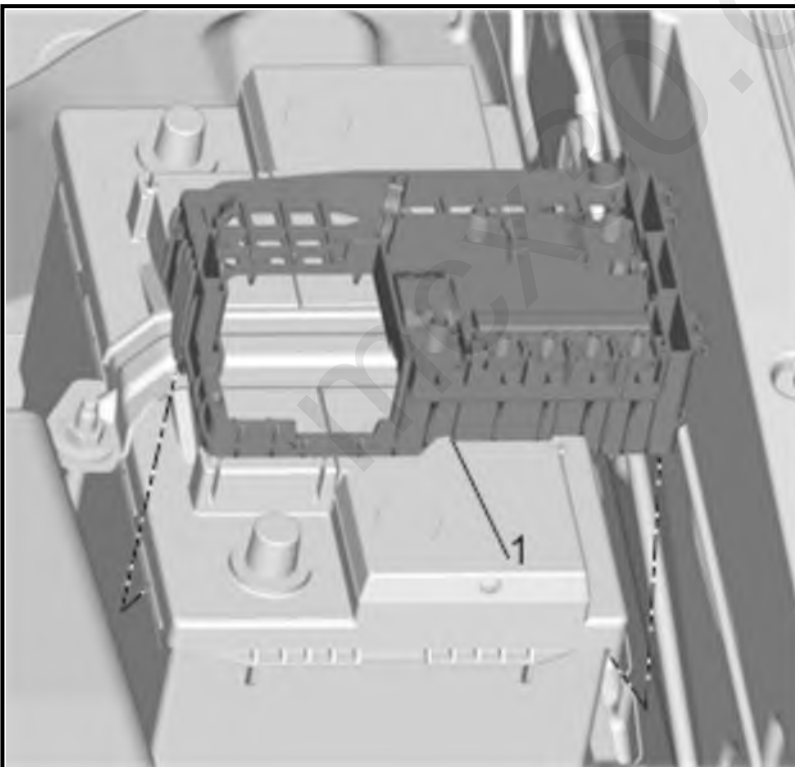
3. Remove the starter and generator cable nut (1).
4. Reposition the starter and generator cable (2).
5. Remove the positive battery cable nut (1).



6. Loosen the positive battery cable nut and remove cable (2).
7. Remove engine wiring harness junction block cable nut (1).

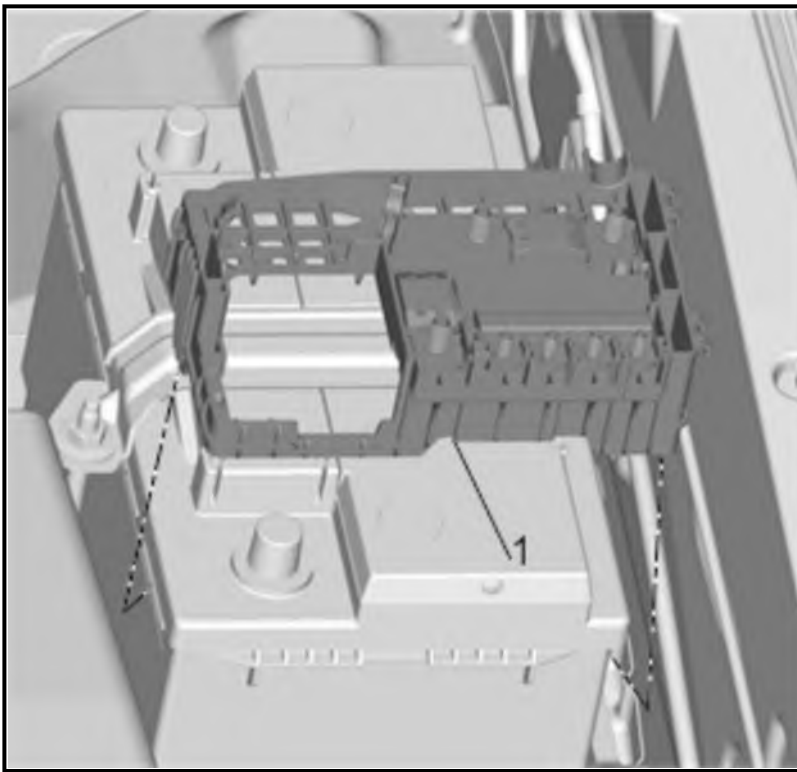


8. Remove the fuse block wiring harness terminal nuts (2).
9. Reposition the wiring harness terminals (3).
10. Unclip the fuse block tabs (1) and remove from the battery.730

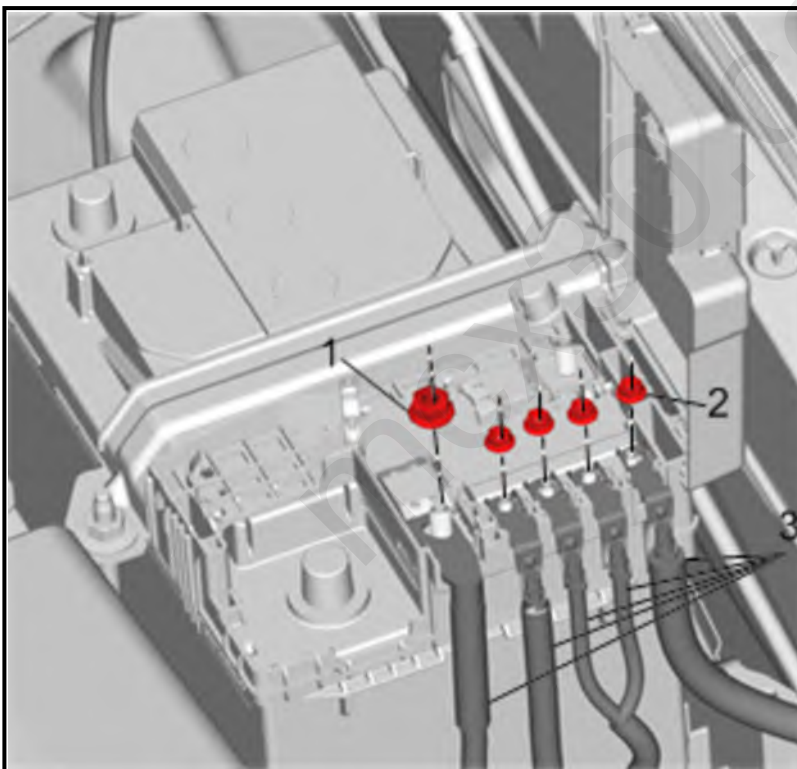


Installation Procedure

1. Position the junction block and tabs (1) to the battery.

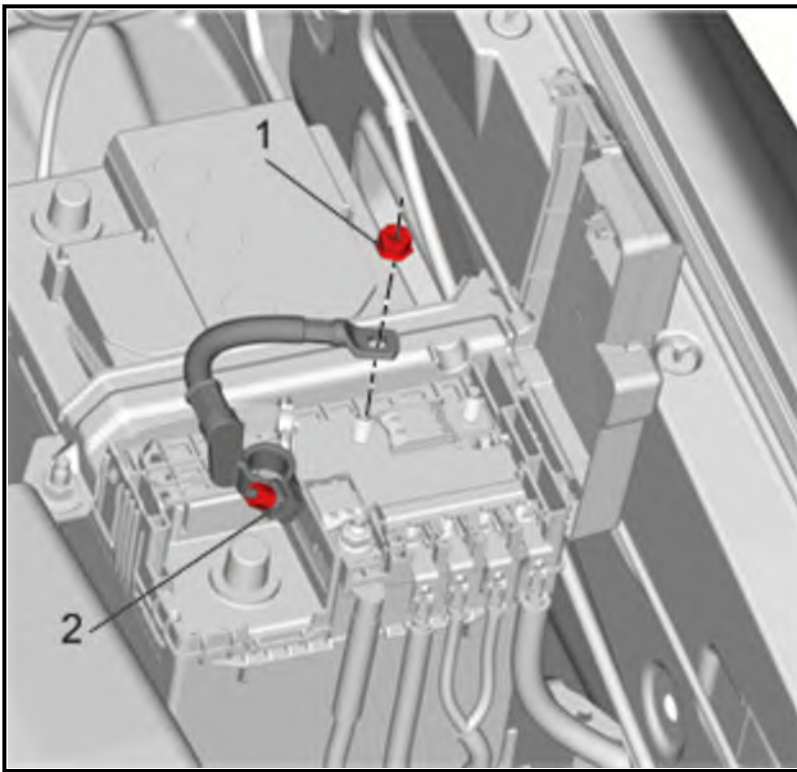


2. Position the fuse block wiring harness terminals to the fuse block (3).

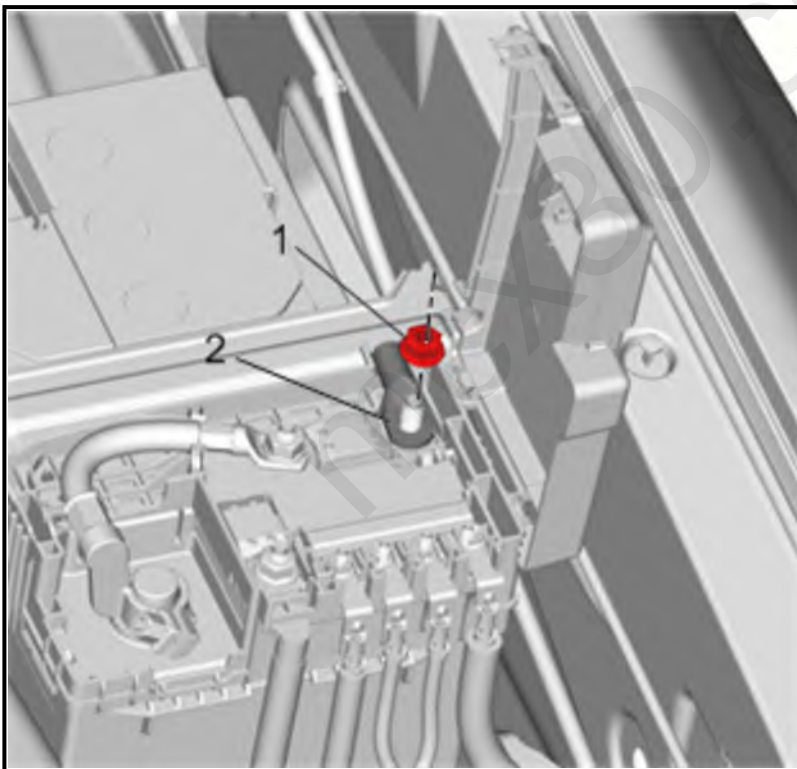


CAUTION: Refer to [Fastener Caution](#) .

3. Install the fuse block wiring harness terminal nuts (2) and tighten to 4.7 N.m (42 lb in).
4. Install the engine wiring harness junction block cable nut (1) and tighten to 10 N.m (89 lb in).
5. Install the positive battery cable (2).

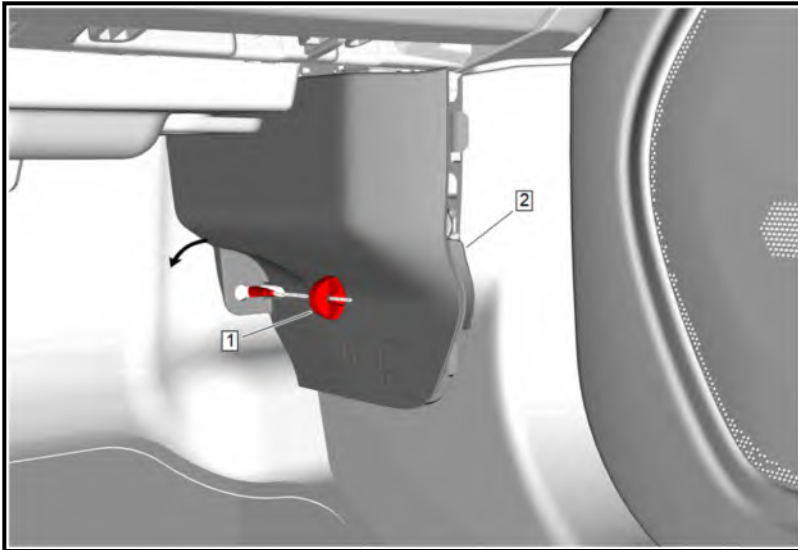


6. Install the positive battery cable nut (1) and tighten to 4.7 N.m (42 lb in).
7. Install the starter and generator cable (2).



8. Install the starter and generator cable nut (1) and tighten to 10 N.m (89 lb in).
9. Close the fuse block cover.
10. Connect the battery negative cable. Refer to [Battery Negative Cable Disconnection and Connection](#) .

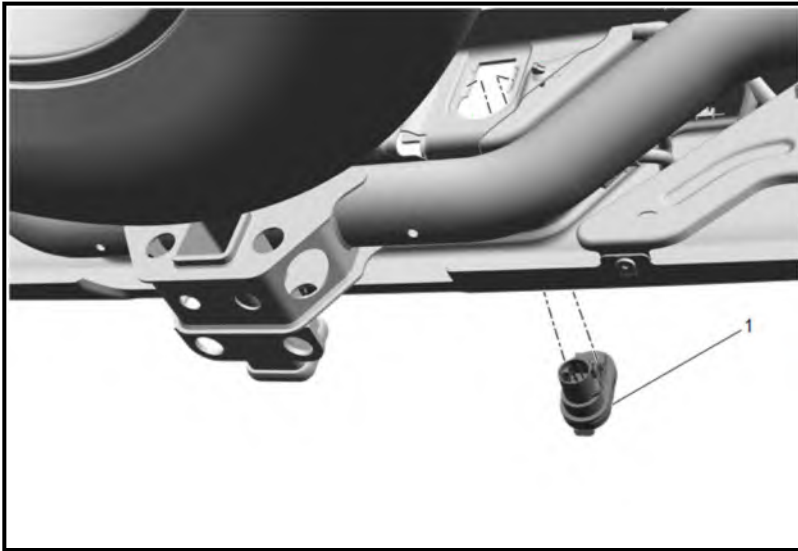
FRONT COMPARTMENT FUSE BLOCK COVER REPLACEMENT



NOTE: Callouts in the following chart represent components shown in graphic above.

Callout	Component Name
Preliminary Procedure Open the passenger side door to gain access to the front compartment fuse block cover on the right hand side lower hinge pillar.	
1	Front Compartment Fuse Block Cover Wing Nut CAUTION: Refer to Fastener Caution . Procedure Install and hand tighten
2	Front Compartment Fuse Block Cover Procedure Grasp the left hand side of the front compartment fuse block cover and pull slightly to release the tab and swing out to the right and remove.

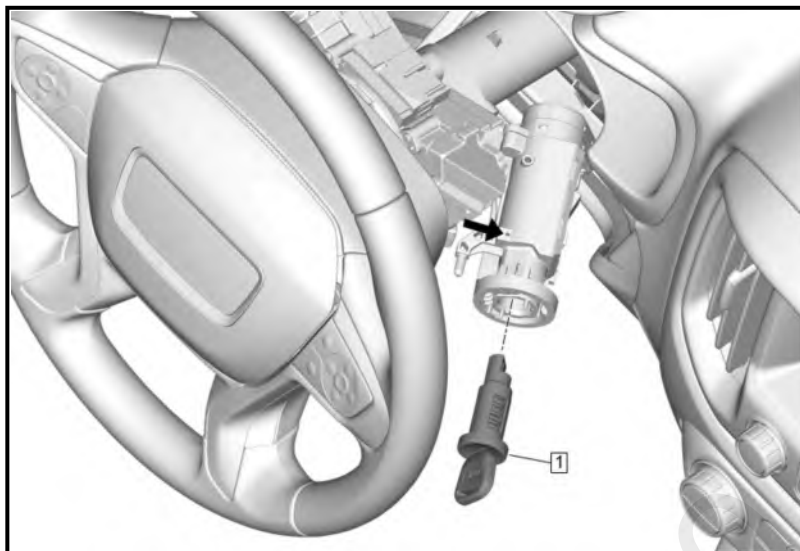
TOW VEHICLE ELECTRICAL RECEPTACLE REPLACEMENT



NOTE: Callouts in the following chart represent components shown in graphic above.

Callout	Component Name
1	Tow Vehicle Electrical Receptacle Procedure 1. Release the tow vehicle electrical receptacle connector lock at the top of the receptacle. 2. Release the two retainer tabs on each side. 3. Disconnect the electrical connector.

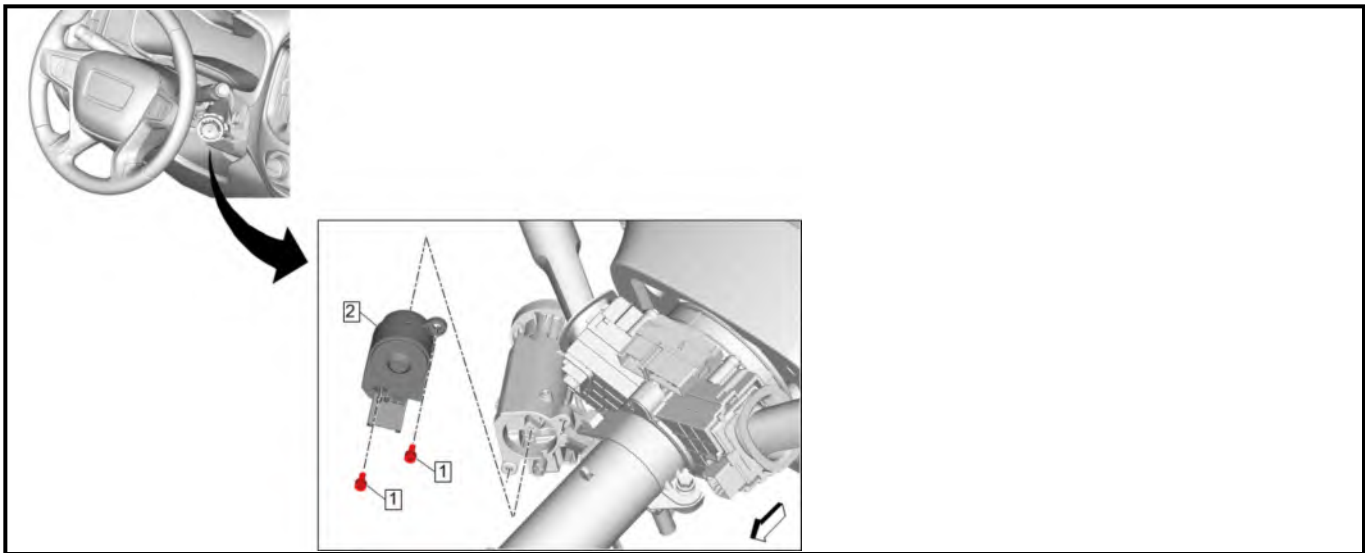
IGNITION LOCK CYLINDER REPLACEMENT



NOTE: Callouts in the following chart represent components shown in graphic above.

Callout	Component Name
Preliminary Procedures 1. Battery Negative Cable Disconnection and Connection 2. Steering Column Upper Trim Cover Replacement	
1	Ignition Lock Cylinder Procedure 1. Turn the ignition key to the RUN position. 2. Insert a pick-type tool into the proper hole on the ignition and start switch housing and press the lock tab on the ignition lock cylinder down while turning the cylinder to the START position. 3. Pull the ignition lock cylinder out of the ignition and start switch housing. 4. Code the NEW ignition lock cylinder. Lock Cylinder Coding - Ignition

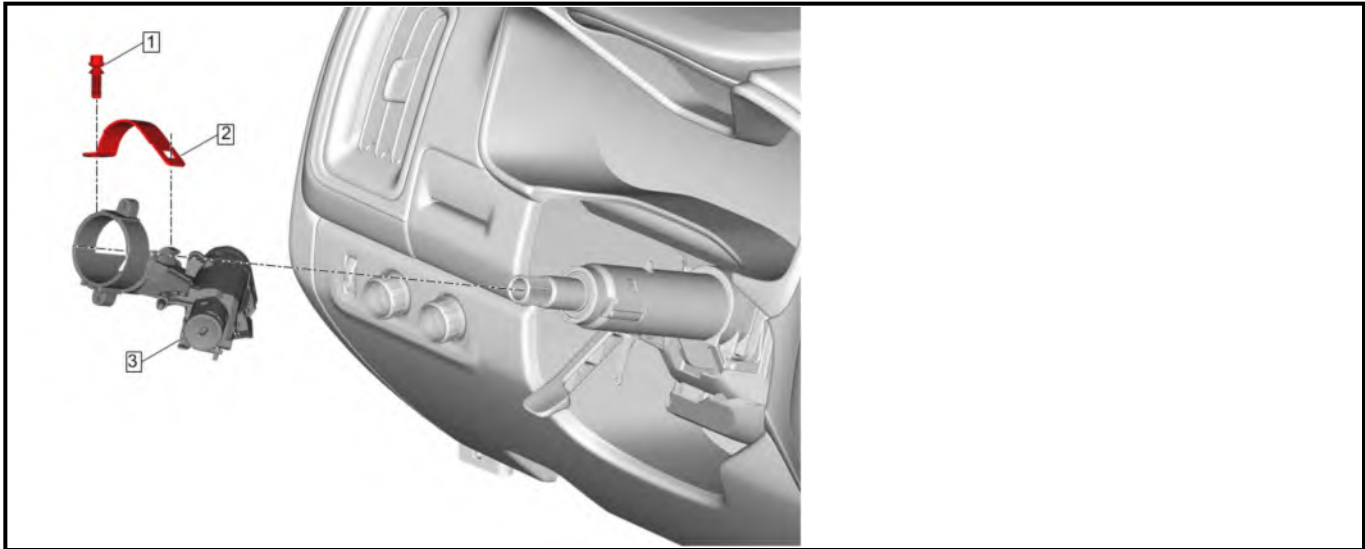
IGNITION AND START SWITCH REPLACEMENT



NOTE: Callouts in the following chart represent components shown in graphic above.

Callout	Component Name
Preliminary Procedures <u>Battery Negative Cable Disconnection and Connection</u> <u>Steering Column Lower Trim Cover Replacement</u>	
1	Ignition and Start Switch Bolt [2x] CAUTION: Refer to <u>Fastener Caution</u> . Tighten 2 N.m (18 lb in)
2	Ignition and Start Switch Procedure Disconnect the electrical connector.

IGNITION AND START SWITCH HOUSING REPLACEMENT



NOTE: Callouts in the following chart represent components shown in graphic above.

Callout	Component Name
Preliminary Procedure <u>Turn Signal Switch Bracket Replacement</u>	
1	Ignition and Start Switch Housing Bolt CAUTION: Refer to <u>Fastener</u> <u>Caution</u> . Procedure 1. Use a small hammer and chisel to remove the OLD ignition and start switch housing bolt. DISCARD the bolt. 2. Install the NEW ignition and start switch housing bolt and tighten until the bolt head breaks off.
2	Ignition and Start Switch Housing Strap
3	Ignition and Start Switch Housing Procedure 1. Disconnect the electrical connector. 2. Transfer components as necessary.