THM 4L60-E

TRANSMISSION AND ENGINE OVERHEATS
1994-1996 CHEVROLET CAPRICE

COMPLAINT: Some models of 1994-1996 Chevrolet Caprice may exhibit a engine and/or transmission overheating condition, and usually occurs in heavy duty operation, such as Police and Taxi use.

CAUSE: The Primary Cooling Fan Relay may overheat and fail, rendering the cooling fan inoperative and resulting in the overheat condition. The Secondary fan may operate, but will not provide enough cooling air tp prevent the overheat condition.

CORRECTION: A new service package is available under OEM part number 12167644, that moves the Primary Cooling Fan Relay to a new location and upgrades the terminal ends. No instructions are provided in the service package, so you will need this bulletin for installation instructions. Contents of the service package are shown in Figure 1.

(1) Disconnect the Negative battery cable.

(2) Locate the underhood Electrical Center, located at the top rear of the right front wheel housing, and remove the cover.

(3) Remove the Electrical Center from the casing, by releasing the tabs using a small screwdriver, as shown in Figure 2.

(4) Remove the current Primary Cooling Fan Relay and the 40 Amp, number 12 Maxi-fuse, as shown in Figure 2.

(5) From the back of the Electrical Center, as shown in Figure 3:
- (A) Remove the 10 gauge "Red" jumper wire and terminals from cavities "K2" and "C4", and discard this jumper wire.
- (B) Remove the 10 gauge "Blue" wire and terminal from cavity "B6". Cut off the terminal end and discard, and tape the wire end.
- (C) Remove the 22 gauge "Brown" wire and terminal from cavity "B4", and the 22 gauge "Green" wire and terminal from cavity "C6". These wires will be reused in step seven.

(6) Locate connector number "C103", located just in front of the Electrical Center, as shown in Figure 4. Unplug the connector and remove the "Blue" 10 gauge wire and terminal from cavity "A". Cut off the terminal end and discard, and tape the bare end of the wire.

Continued on Next Page.

Installation procedure continued.

(7) Locate the new cooling fan relay and harness assembly from the service package, and insert the "Red" wire and terminal int cavity "K2" of the Electrical Center, as shown in Figure 5. Cut the old terminal ends from the "Brown" and "Green" wires that were previously removed from the Electrical Center in Step 5, and discard. Using the crimp connectors from the service package, connect the "Brown" wire from the new harness assembly to the "Brown" wire removed from terminal "B4", as shown in Figure 5. Using the remaining crimp connector from the service package, connect the "Green" wire from the new harness assembly to the "Green" wire removed from terminal "C6", as shown in Figure 5. Heat shrink the connections to insure a water tight seal, and reinstall the Electrical Center into the case.

(8) Reinstall the 40 Amp, number 12 Maxi-fuse.

(9) At connector number "C103", install the "Blue" wire and terminal from the new harness assembly into cavity "A", as shown in Figure 6, and plug the connector back together.

(10) Remove the hex nut that secures the hood ground strap to the cowl, as shown in Figure 7. Install the new cooling fan relay bracket on top of the ground strap, leaving the ground strap in place, and reinstall the hex nut. Refer to Figure 7.

(11) Secure the new harness into position, making sure there are no rub or pinch points, reconnect the Negative battery cable, and verify the operation of the cooling fan.

ADDITIONAL "IMPORTANT" INFORMATION

It has come to our attention that some models have the external transmission cooler mounted directly behid the front bumper, and greatly restricted from the air flow. Make sure you check the mounting in the vehicle that you are working on, and if in this location, it would be advisable to "remount" the external transmission cooler so that it is higher, and in the direct air flow from the front of vehicle.

CONTENTS OF SERVICE PACKAGE
PART NUMBER 12167644

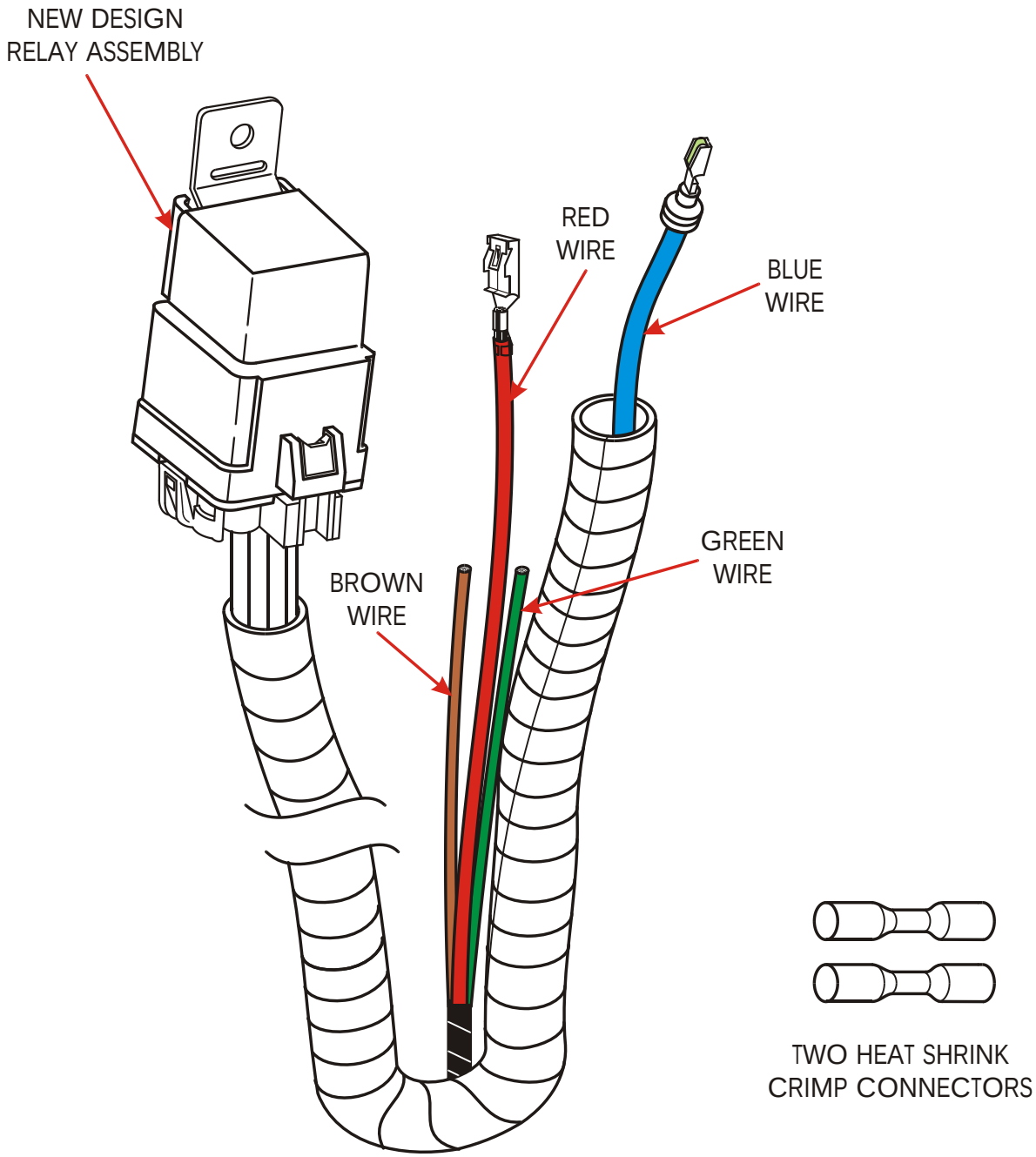

Figure 1

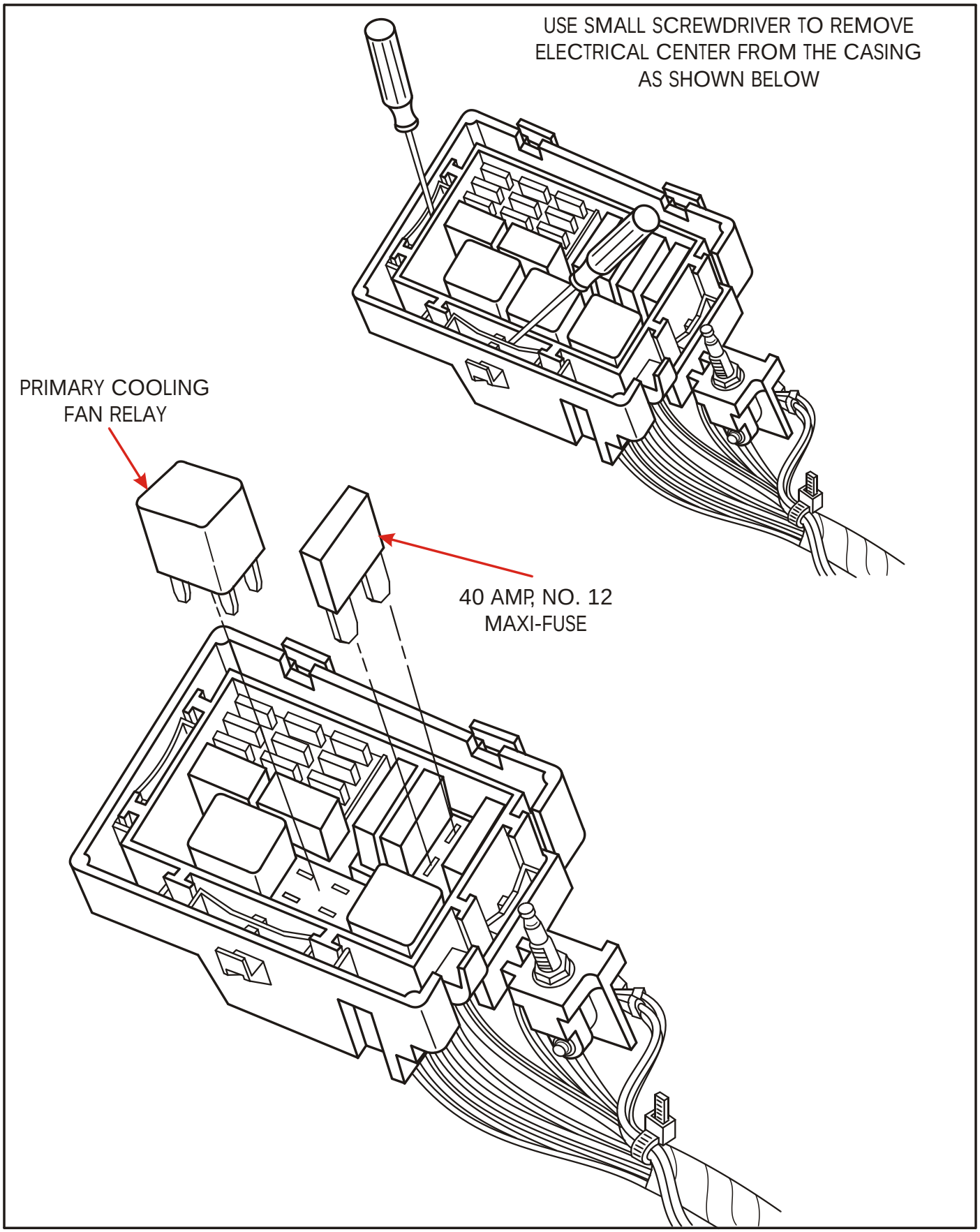
USE SMALL SCREWDRIVER TO REMOVE
ELECTRICAL CENTER FROM THE CASING
AS SHOWN BELOW
PRIMARY COOLING
FAN RELAY
40 AMP, NO. 12
MAXI-FUSE

Figure 2

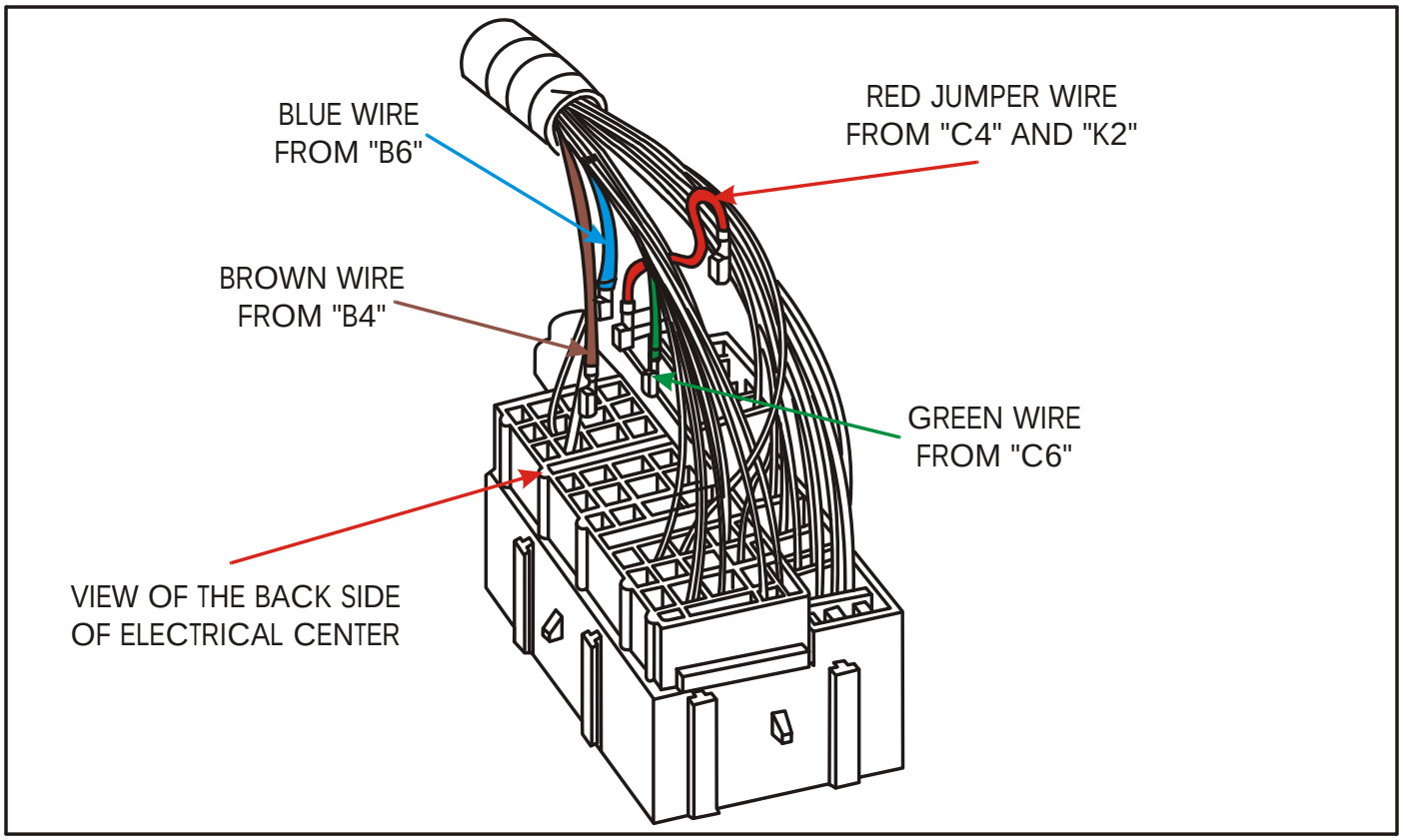

Figure 3

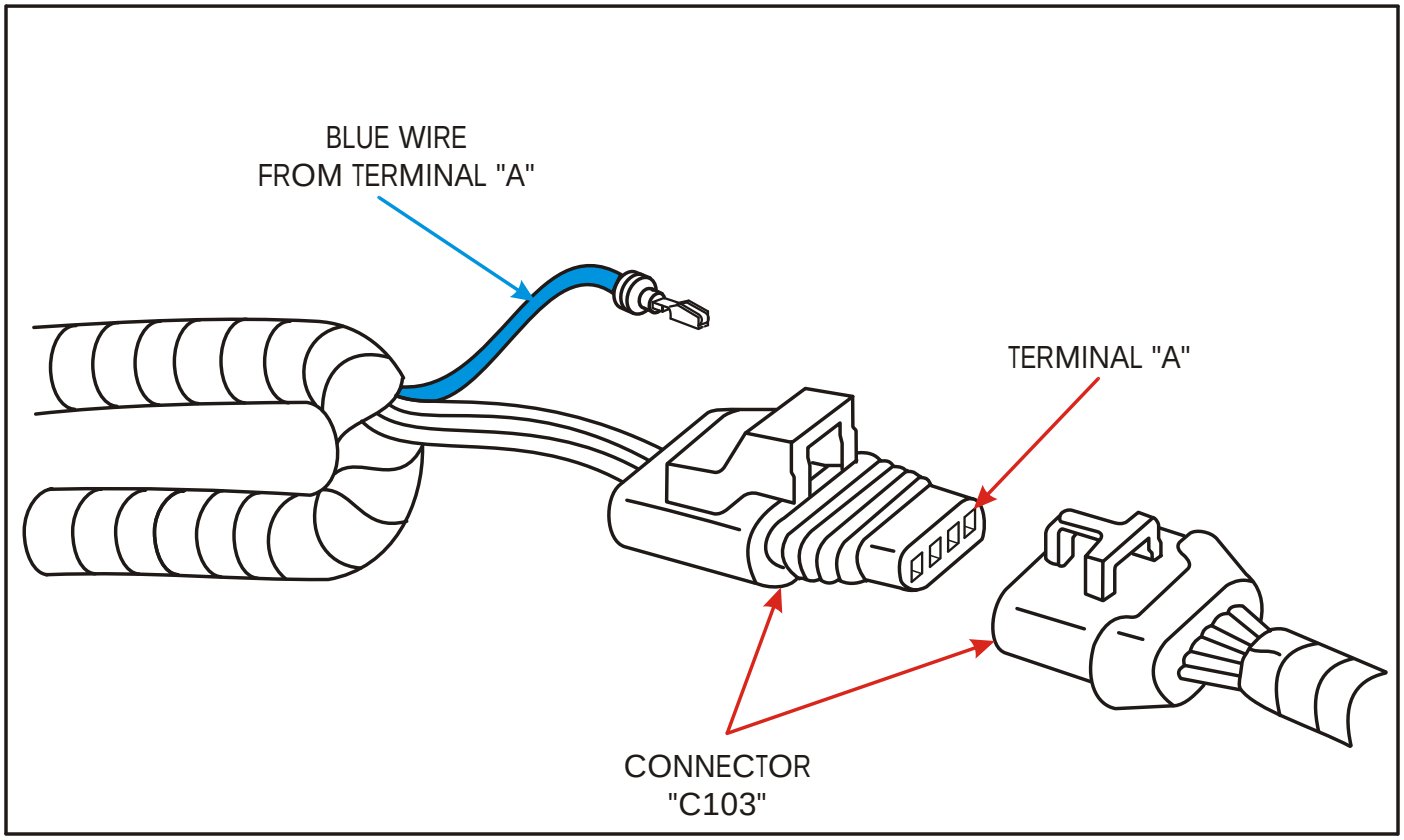

Figure 4

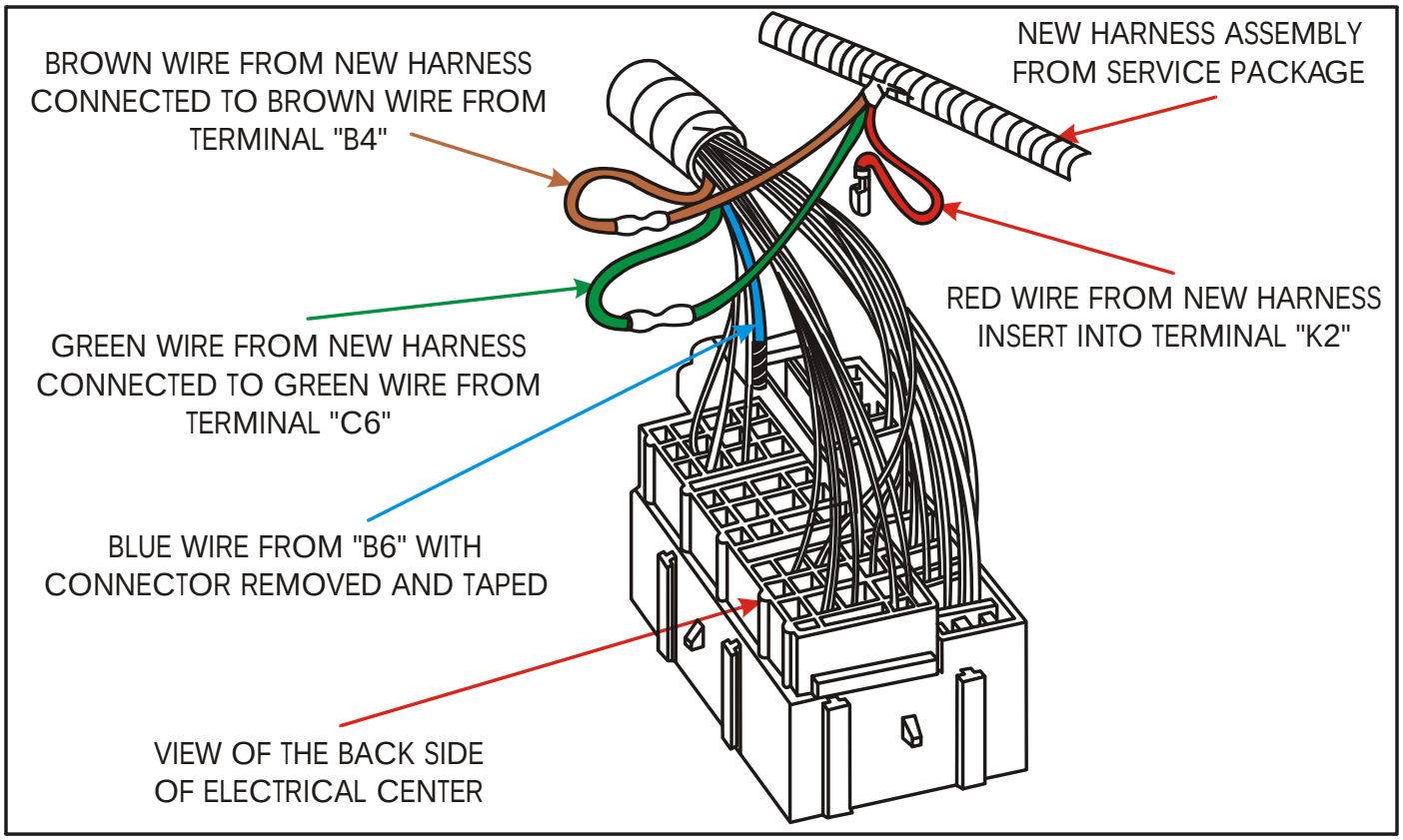

Figure 5

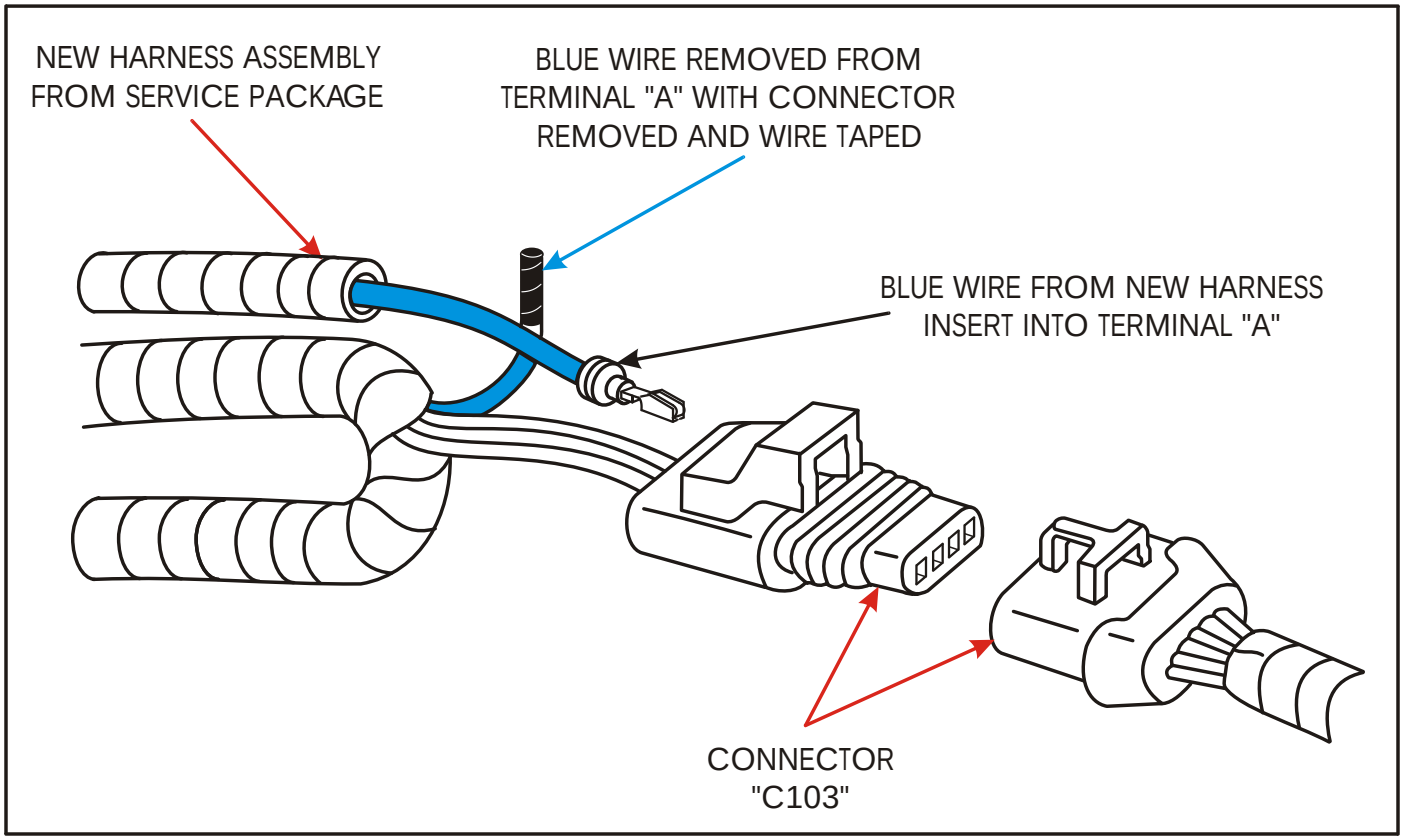

Figure 6

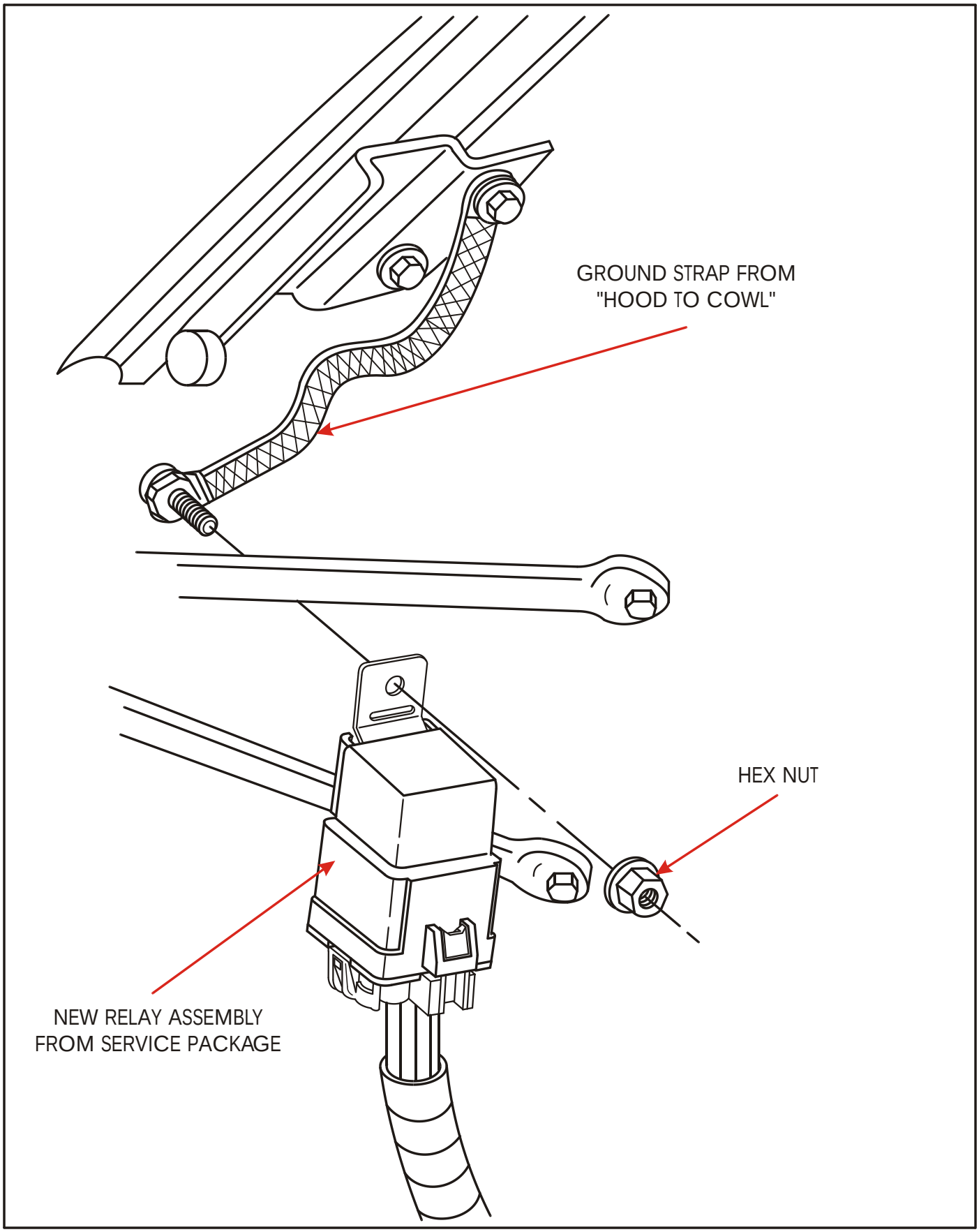
GROUND STRAP FROM
"HOOD TO COWL"
HEX NUT
NEW RELAY ASSEMBLY
FROM SERVICE PACKAGE

Figure 7