

## CROWN VICTORIA POLICE INTERCEPTOR (CVPI) PACKAGE OPTIONAL UPGRADE KIT

**AFFECTED VEHICLES:** CERTAIN 1992 THROUGH 2003 MODEL YEAR CROWN VICTORIA  
POLICE INTERCEPTOR (CVPI) VEHICLES  
CURRENTLY IN POLICE DUTY

### OVERVIEW

This procedure provides details for installation of the following:

For all affected vehicles

- Two (2) rear axle shields
- One (1) differential cover shield
- Two (2) fuel tank strap shields

Additional parts required for 1998 through 2003 model year vehicles

- Two (2) foam pads onto the evaporative emissions canister
- Replacement of evaporative emissions canister retainer bolts and J-clips (located along the front edge of the canister) with three (3) rivets

### SERVICE PROCEDURE

1. Raise the vehicle on a hoist.

2.  NOTE: Shields are molded with "LH" and "RH" to ease identification.

Install the left and right axle shields being sure to position them so there is clearance between the shield and the stabilizer bar as illustrated. On 1992 to 1997 model year vehicles, be sure the ABS circuit wiring harness is not pinched under the shield and the right side parking brake cable is positioned in the notch molded into the shield. Tighten the clamps to 6 Nm (53 lb-in). See Figures 1 and 2.

In some cases, excess weld material on the coil spring seat or stabilizer bar bracket can interfere with clamp installation. If necessary, grind away only enough excess weld material to allow for correct seating of the shield and clamp onto the axle. **DO NOT grind the parent metal.**

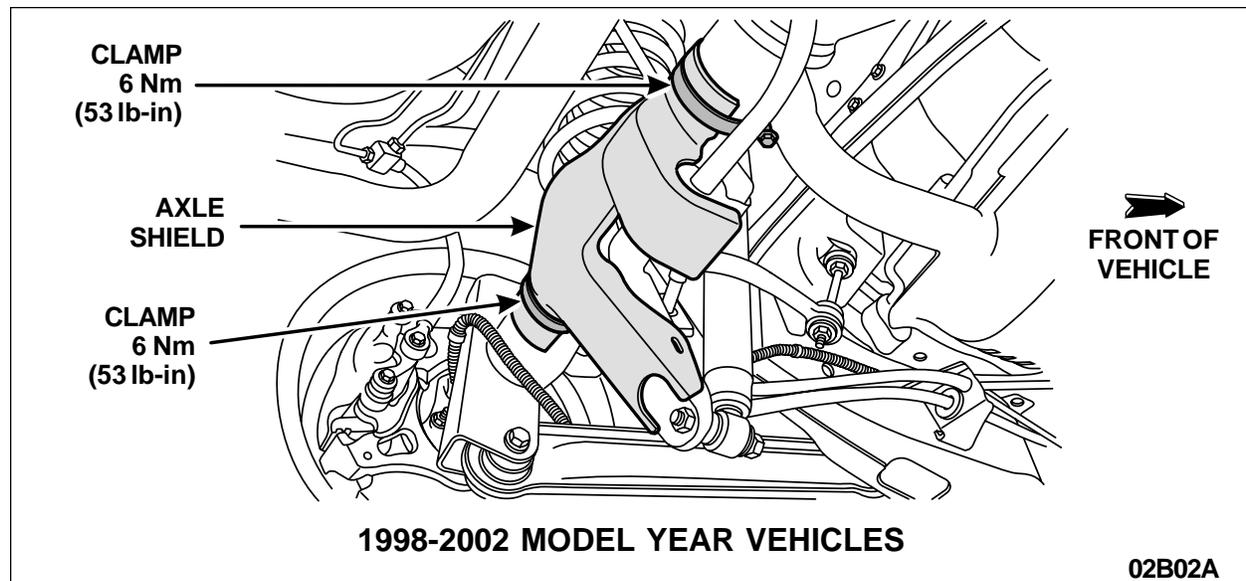


FIGURE 1

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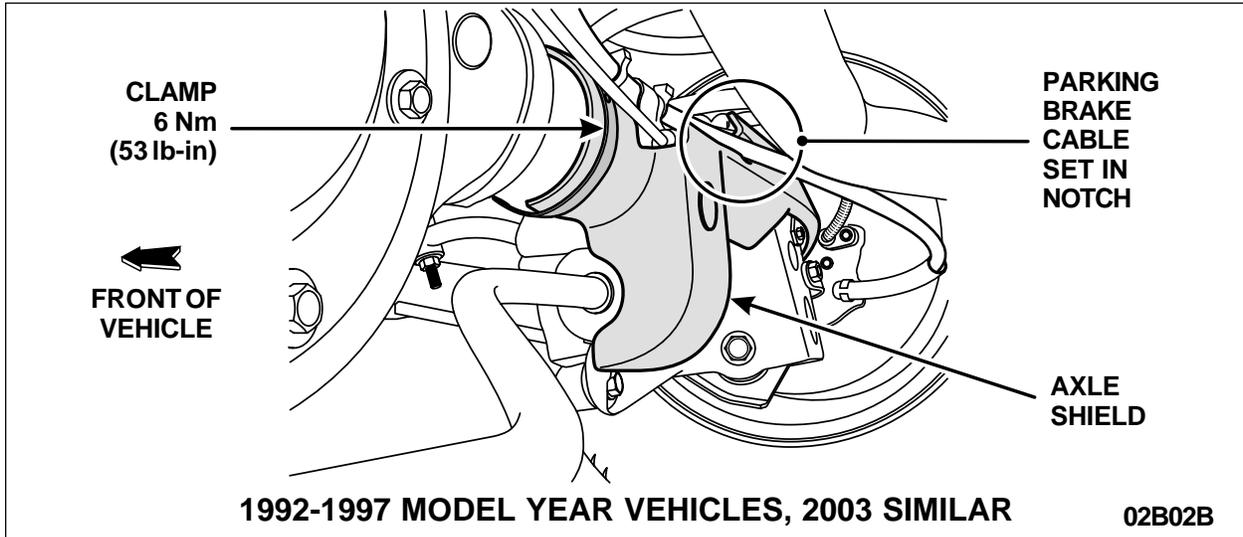


FIGURE 2

3. **CAUTION:** Tie straps, which are required for 1998 to 2002 model year vehicles only, have specific heat resistant properties. Use of a tie strap other than what is supplied in the kit can jeopardize the repair. Also, correct orientation of the tie strap is critical to the repair. The head of the tie strap must be positioned on the forward-facing side of the shock mount bracket.

On 1998 to 2002 model year vehicles, install one (1) tie strap on each shield to secure it to the shock absorber lower mount bracket as illustrated. If necessary, use pliers and LIGHT force to engage the locking feature of the tie strap. **DO NOT STRETCH THE TIE STRAP UNNECESSARILY.** See Figure 3.

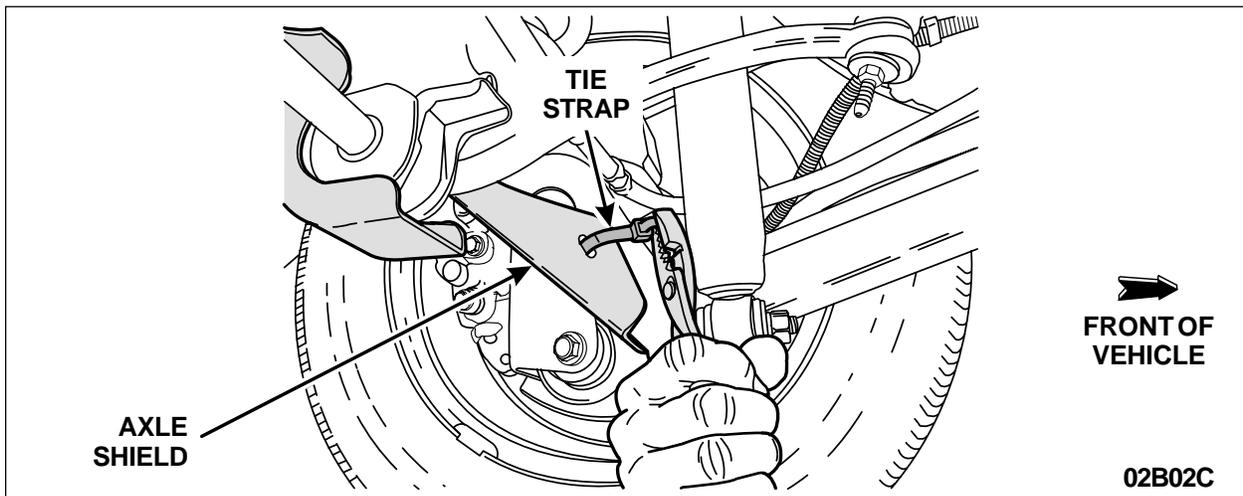


FIGURE 3

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- On 1992 to 1997 model year vehicles, install the supplied convolute over the ABS circuit wiring leading to each rear wheel. Position the convolute so it is up against the grommet as shown in the illustration. Secure with vinyl tape. See Figure 4.

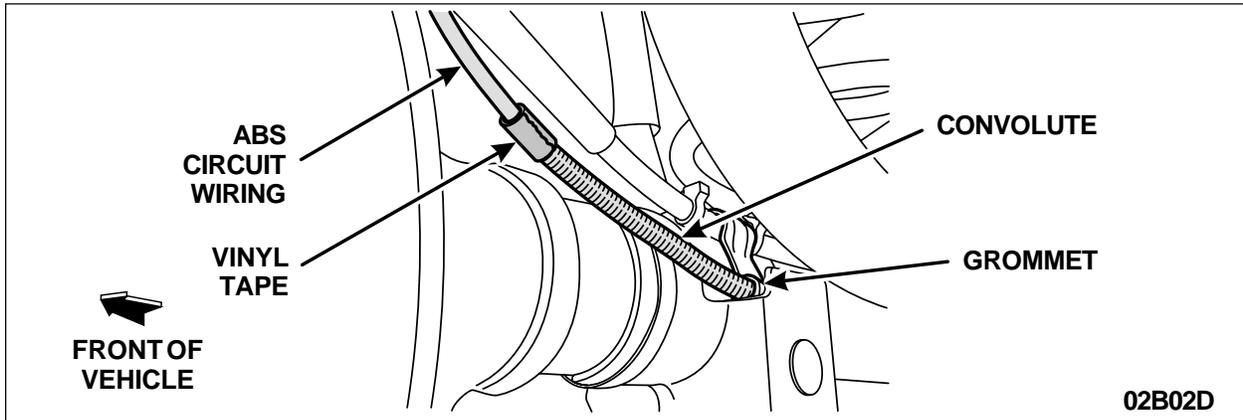


FIGURE 4

- CAUTION: Do not loosen or remove more than three (3) differential cover bolts at any one time or a leak may develop.**

NOTE: If the axle identification tag (all affected model year vehicles) and/or fluid identification tag (2002 to 2003 model year vehicles only) interferes with the installation of the differential cover shield, relocate the tag(s) as necessary to another bolt location on the cover. In some instances, the tag may simply need to be rotated to avoid interference with the shield installation.

Reposition the axle and/or fluid identification tag as necessary. Hand-tighten the bolt(s) at this time. See Figure 5.

-  Remove and **discard** the three (3) differential cover bolts located at the 4, 6 and 8 o'clock positions. Position the differential cover shield and press into place. The cover should fit snug over the existing bolts. Install the three (3) **new** bolts. Tighten all loosened or removed bolts to 45 Nm (33 lb-ft). See Figure 5. Be sure to also tighten the axle tag bolt(s) to specification.

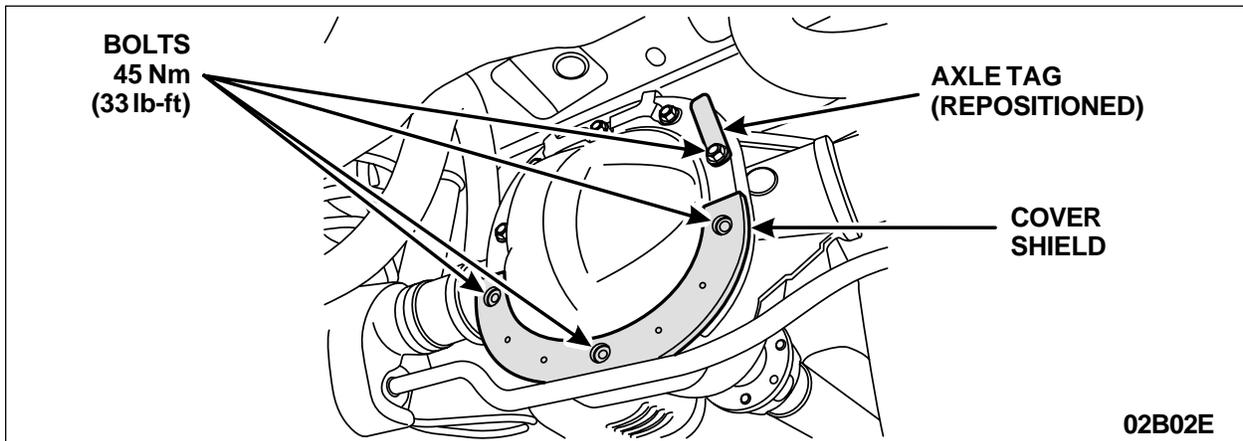


FIGURE 5

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-  7. **CAUTION:** The fuel tank strap shields are marked for right and left sides of the vehicle. Be sure to install them in the correct location and so that they are oriented from the outside toward the center of the vehicle.

NOTE: Spray the area around the fuel tank and strap brackets with silicone lubricant to assist with shield installation. Use a rubber mallet to lightly tap the shields into position only if necessary.

Install the left and right fuel tank strap shields as follows. See Figure 6.

- Insert the shield between the fuel tank and the strap from the outside, pushing it in toward the center of the vehicle.
- Position the long tab up into the strap bracket.
- Secure the push-pin retainers into the mating holes in the strap bracket to secure the shield.
- Visually check to make sure the shield is correctly positioned. Peel the backing off the adhesive strip and, while holding the upper portion against the fuel tank flange, secure the two halves firmly together.

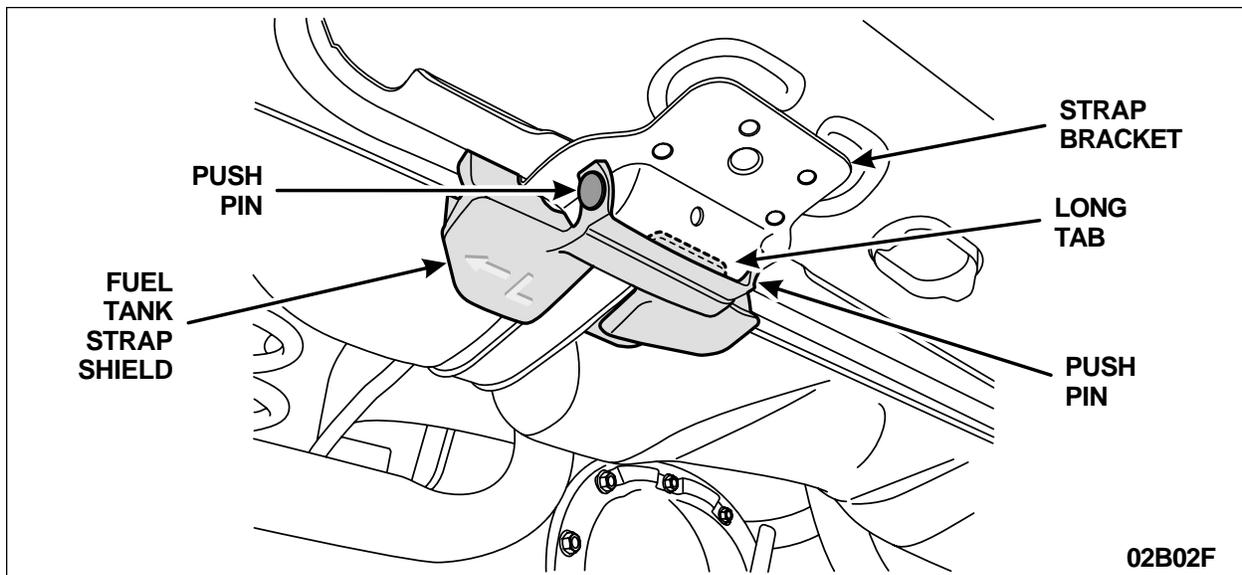


FIGURE 6

**NOTE**

- For 1992 to 1997 model year vehicles, the service procedure is complete. Lower the vehicle.
- For 1998 to 2003 model year vehicles, continue with this procedure.

8. Remove the two (2) evaporative emissions canister retainer bolts from the front edge along the Z-bracket.

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9. Using a straightedge, draw a line indicating the centerline connecting the (2) two bolt holes. Then, measuring from the edge of either of the two bolt holes, mark the centerline at 50 mm (2-in), 101 mm (4-in) and at 152 mm (6-in). See Figure 7.

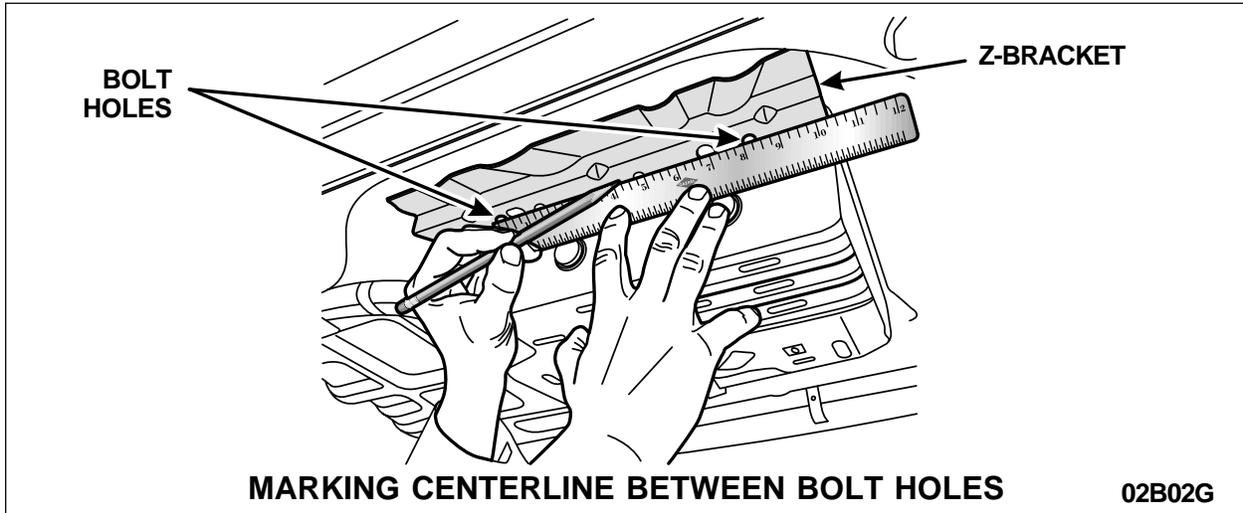


FIGURE 7

10. **CAUTION: DO NOT drill through the trunk floor when drilling the rivet holes. Place a drill stop or an abundance of tape 12 mm (1/2-inch) from the tip of the drill bit.** Reinstall one of the removed bolts to hold the canister securely, then drill the three, 5 mm (13/64-inch) rivet holes through the Z-bracket and the evaporative emissions canister mounting flange. See Figure 8.

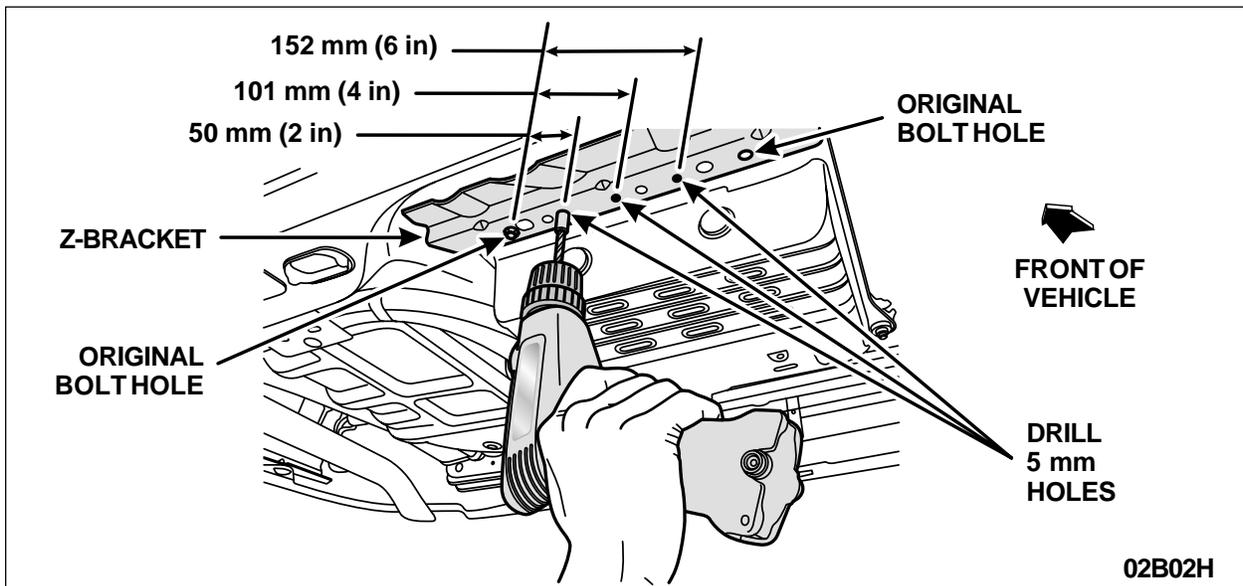


FIGURE 8

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11. Remove the one (1) bolt and the two (2) evaporative emissions canister retaining nuts and lower the canister off of the studs and disconnect the canister purge valve electrical connector.  
**Discard** both removed canister bolts.
12. Remove and **discard** the two (2) J-nuts from the evaporative emissions canister flange.
13. Using Motorcraft Brake Parts Cleaner or equivalent and a clean shop rag, clean the top surface of the canister. Affix the two (2) self-adhesive foam pads onto the canister in the position shown in the illustration. See Figure 9.

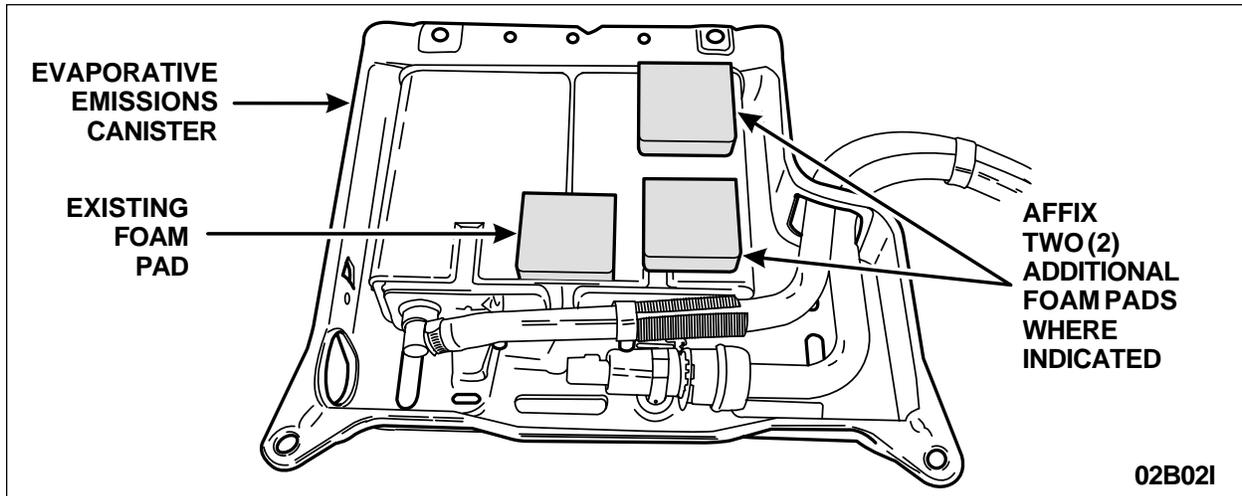


FIGURE 9

14. Reconnect the canister purge valve, then position the evaporative emissions canister and install the two (2) retaining nuts finger tight.
15.  **CAUTION: The rivets supplied in the kit provide a high clamp-load and MUST be used. Using rivets other than what is supplied in the kit may jeopardize the repair.**

NOTE: The kit comes with a total of five (5) rivets. Only three (3) are required for this repair. These rivets are very sturdy and may be difficult to install with a small, hand-held pop rivet installer. The use of a large capacity or air/hydraulic rivet installer is recommended but is not necessary.

Install the three (3) rivets, then tighten the two canister retaining nuts to 6 Nm (53 lb-in).

16. Lower the vehicle.

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