



March 2014

Dealer Service Instructions for:

Safety Recall P06 / NHTSA 14V-103

Automatic Transaxle Gear Shift Module

Models

2014 (BF) Fiat 500L

NOTE: This recall applies only to the above vehicles equipped with a six-speed Dual Dry Clutch automatic transaxle (sales code DAI) built from April 03, 2013 through February 14, 2014 (MDH 040300 through 021400).

IMPORTANT: Some of the involved vehicles may be in dealer new vehicle inventory. Federal law requires you to complete this recall service on these vehicles before retail delivery. Dealers should also consider this requirement to apply to used vehicle inventory and should perform this recall on vehicles in for service. Involved vehicles can be determined by using the VIP inquiry process.

Subject

The Gear Shift Module (GSM) on about 17,600 of the above vehicles may experience a loss of communication with the transaxle. This may result in an inability to shift the vehicle out of the “Park” position and/or be able to control the transaxle gear selection. Failure to be able to shift the transaxle as requested could cause unintended directional movement and causes a crash without warning.

Repair

The software level in the GSM must be interrogated. Depending on the software level found in the GSM, the GSM must be either reprogrammed or replaced.

CAUTION: The GSM assembly must be at or above 60 F. (15.5 C.) before the GSM software can be interrogated or reprogrammed. Attempting to interrogate or reprogram the GSM software below 60 F. (15.5 C.) may cause permanent GSM damage.

Service Procedure**A. Interrogate Gear Shift Module (GSM) Software**

CAUTION: The GSM assembly must be at or above 60 F. (15.5 C.) before the GSM software can be interrogated. Attempting to interrogate the GSM software below 60 F. (15.5 C.) may cause permanent GSM damage.

NOTE: wiTECH must be used to perform this recall. This procedure must be performed with software release level 14.03 or higher.

1. Open the hood. Install a battery charger and verify that the charging rate provides 13.0 to 13.5 volts. Do not allow the charger to time out during the flash process. Set the battery charger timer (if so equipped) to continuous charge.

NOTE: Use an accurate stand-alone voltmeter. The battery charger volt meter may not be sufficiently accurate. Voltages outside of the specified range will cause an unsuccessful flash. If voltage reading is too high, apply an electrical load by activating the park or headlamps and/or HVAC blower motor to lower the voltage.

2. Connect the wiTECH VCI pod to the vehicle data link connector located to the right of the hood release lever.
3. Place the ignition in the “**RUN**” position.
4. Open the wiTECH Diagnostic application.
5. Starting at the “Select Tool” screen, highlight the row/tool for the wiPOD device you are using. Then select “**Next**” at bottom right side of the screen.
6. Enter your “**User id**” and “**Password**”, then select “**Finish**” at the bottom of the screen.

Service Procedure (Continued)

7. From the “Vehicle View” screen, click on the “**ESM**” icon.

8. From the “ESM View” screen select “**ECU Details**” tab.

9. Select the “**Configuration**” button in the upper right hand corner of the screen.

10. Read the “**ECUSwVerNumber**”:
 - If the ECU value is 120, replace the gear shift module. Continue with **Section C. Replace the Gear Shift Module (GSM)**.

 - If the ECU value is 124 or 125, reprogram the gear shift module. Continue with **Section B. Reprogram the Gear Shift Module (GSM)**.

 - If the ECU value is 126, no further action is required. Return the vehicle to the customer.

Service Procedure (Continued)**B. Reprogram the Gear Shift Module (GSM)**

NOTE: The following procedure is required if the GSM software level is at “version 124 or 125” as determined per the inspection in Section “A.”

CAUTION: The GSM assembly must be at or above 60 F. (15.5 C.) before the GSM software can be reprogrammed. Attempting to reprogram the GSM software below 60 F. (15.5 C.) may cause permanent GSM damage.

1. From the “**ESM View**” screen select the “**Flash**” tab.
2. With the cursor over the desired flash file, click the small green arrow button on the right side of the screen.
3. From the “**Flash Tab**” screen follow the wiTECH screen instructions to complete the software reprogramming process.
4. Verify that all Diagnostic Trouble Codes (DTC’s) have been cleared.
5. If “active” DTC “**U0415-00 Invalid Data Received from Anti-Lock Brake System (ABS) Control Module**” is present, perform the following procedure:

NOTE: The Transmission Control Module (TCM) may set the U0415 Diagnostic Trouble Code (DTC) when the scan tool is connected to the vehicle and the ABS module is being accessed. The DTC sets when the ABS module sends invalid messages to the TCM during tool operation in the ABS module. This only happens when a service tool is connected and accessing ABS diagnostics.

- a. Clear the DTC if in the “Stored” status with the wiTECH scan tool.
 - b. To get the DTC to a “Stored” status use wiTECH scan tool and go into TCM, then “cycle” the ignition key. The DTC will go into the “Stored” status.
 - c. From the TCM, perform the clear stored DTC’s process.
 - d. Disconnect the wiTECH scan tool to complete the process.
6. Turn the ignition to the “**OFF**” position and remove the wiTECH VCI pod and battery charger from the vehicle. Return the vehicle to the customer.

Service Procedure (Continued)**C. Replace the Gear Shift Module**

NOTE: The following procedure is required if the GSM software level is at “version 120” as determined per the GSM interrogation in Section “A.” *Very few vehicles are expected to require gear shift module replacement.*

NOTE: The new GSM assembly doesn’t require reprogramming. The new GSM has the latest version of software required (version 126).



Figure 1 – Gear Shift Boot

1. Position the vehicle on a suitable hoist.
2. Disconnect and isolate the negative battery cable at the battery.
3. Release the snap at the top of the gear shift boot (Figure 1).
4. Detach the hook-and-loop strip holding the gear shift boot together (Figure 1).
5. Using a plastic trim stick, separate the gear shift boot bezel from the floor console (Figure 2).
6. Disconnect the electrical connector from the gear shift boot bezel and remove as an assembly (Figure 2).

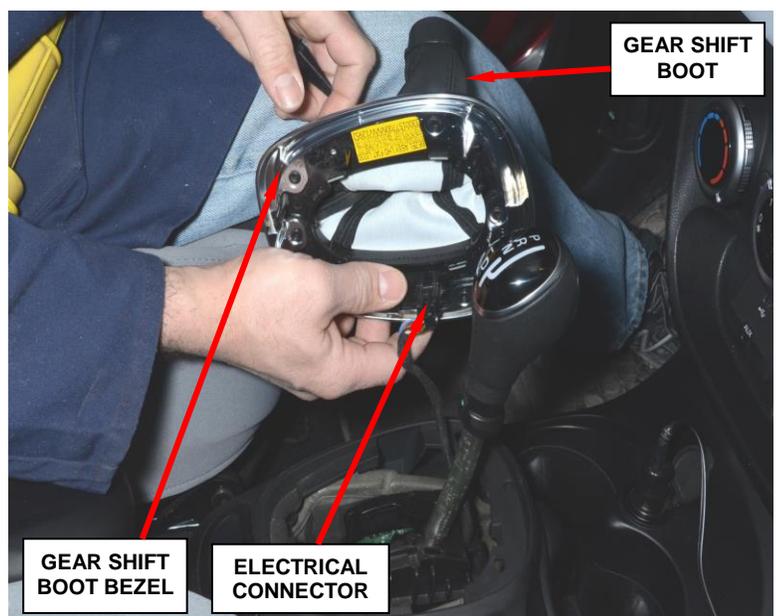
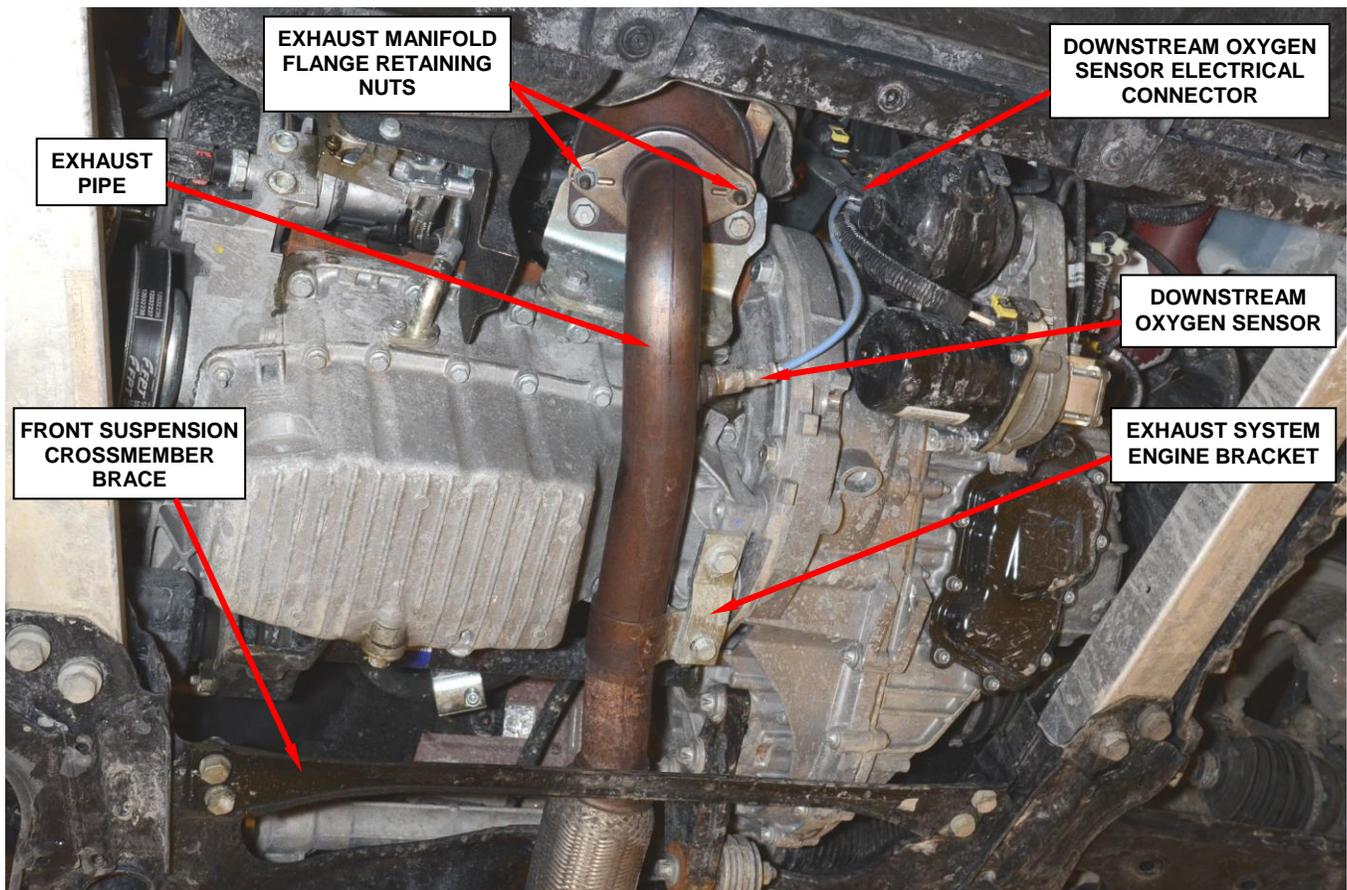


Figure 2 – Gear Shift Boot Bezel

Service Procedure (Continued)**Figure 3 – Exhaust System Components**

7. Raise the vehicle on the hoist.
8. Remove and save the engine under body plastic splash shield.
9. Remove and save the exhaust manifold flange retaining nuts (Figure 3).
10. Disconnect the downstream oxygen sensor electrical connector (Figure 3).
11. Disconnect the exhaust system engine bracket from the engine (Figure 3).
12. Remove and save the front suspension crossmember brace (Figure 3).

Service Procedure (Continued)

13. Disconnect all of the rubber exhaust hangers and lower the exhaust system to gain access to the gear shift module (Figure 4).
14. Disconnect the gear shift cable end from the transaxle gear shift lever.
15. Unsnap the gear shift cable from the transaxle bracket (Figure 5).
16. Unlatch the shift cable from the shift cable plastic routing clip.

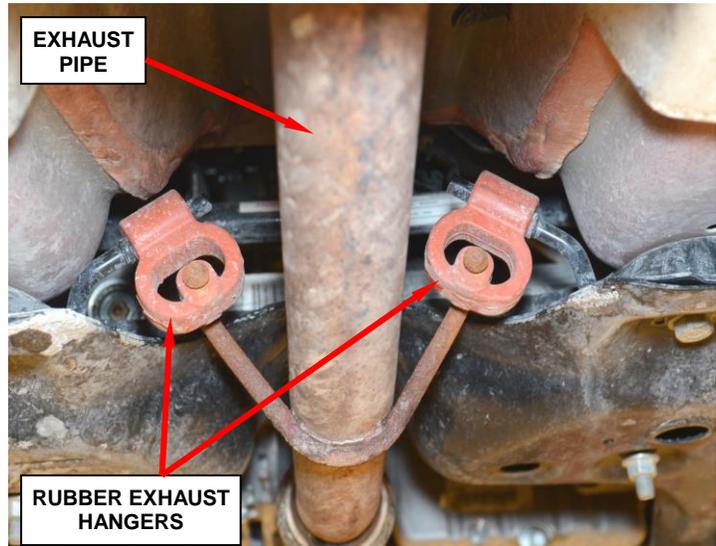


Figure 4 – Rubber Exhaust Hangers (front hanger shown)

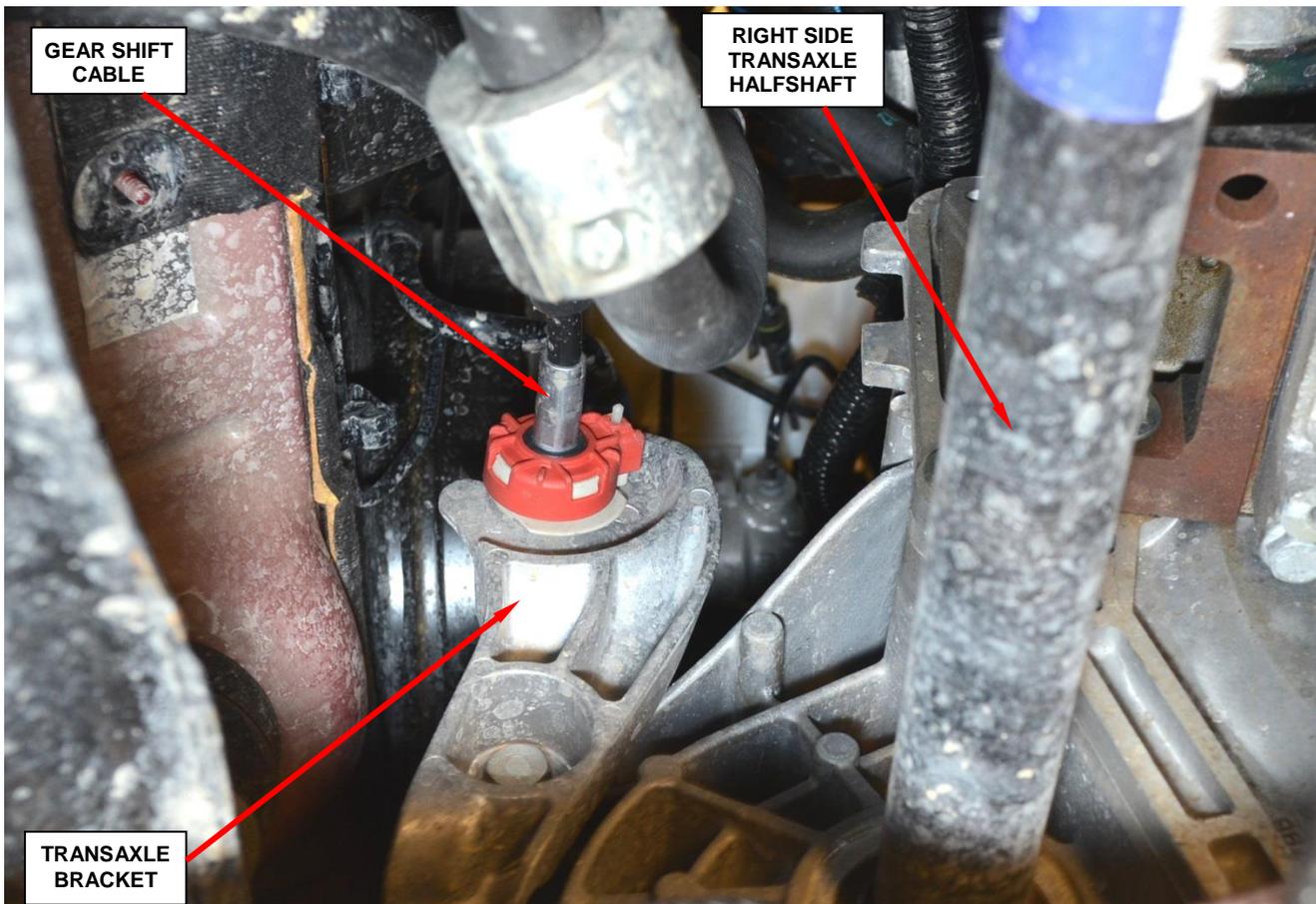


Figure 5 – Gear Shift Cable Transaxle Bracket

Service Procedure (Continued)

17. Remove and save the rear exhaust heat shield retainer clips and exhaust hanger bracket. Carefully remove and save the rear exhaust heat shield (Figure 6 and 7).
18. Remove and save the main exhaust heat shield retaining clips (Figure 7).
19. Remove and save the four gear shift module retaining bolts (Figure 7).
20. Remove and save the main exhaust heat shield (Figure 7).

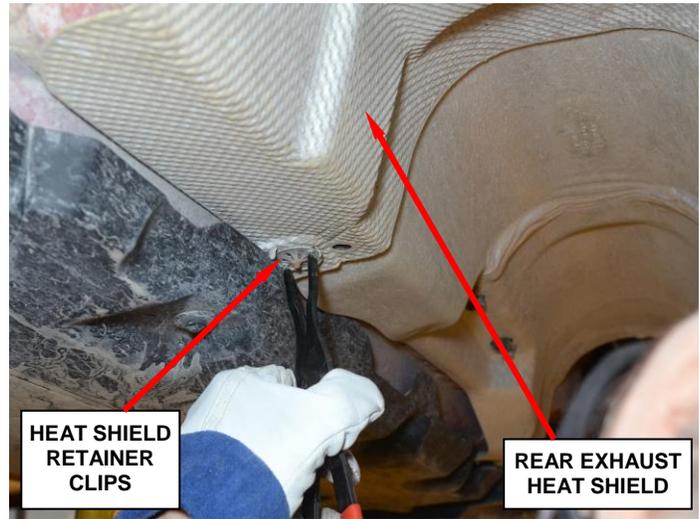


Figure 6 – Rear Exhaust Heat Shield

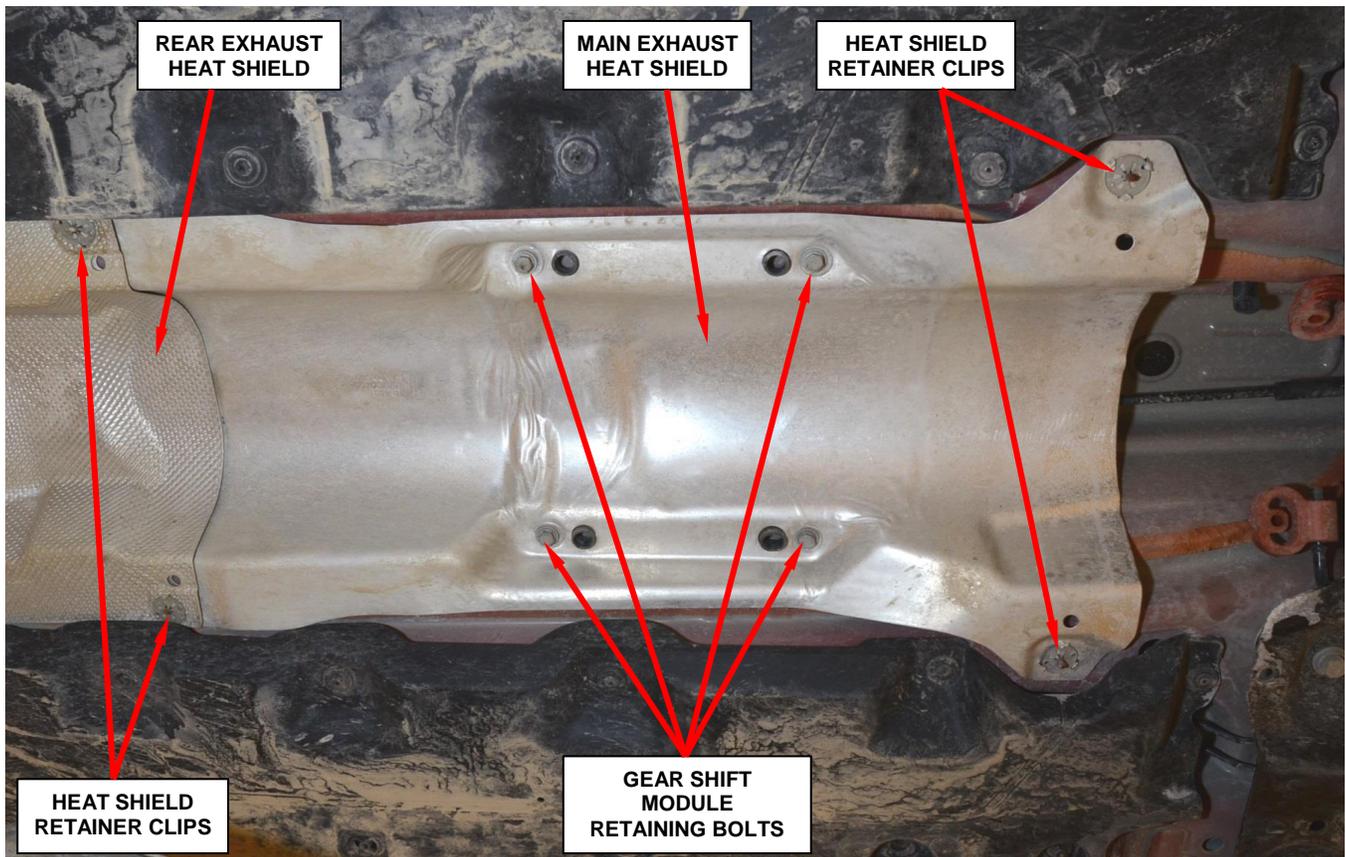


Figure 7 – Exhaust Heat Shields

Service Procedure (Continued)

21. Carefully lower the gear shift module and disconnect the electrical connector. Then remove the gear shift module from the vehicle (Figure 8).

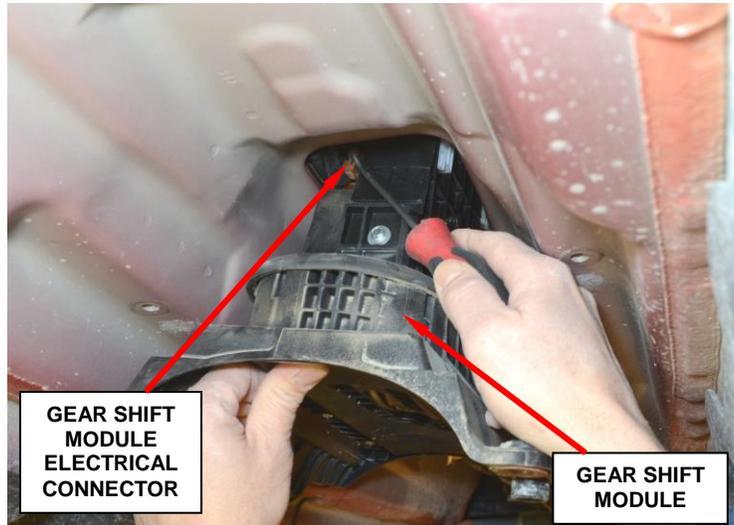


Figure 8 – Gear Shift Module Electrical Connector

22. Use the following procedure to transfer the gear shift knob:

CAUTION: Do not attempt to pull the gear shift knob from the gear shift lever without first removing the gear shift button. Gear shift knob button damage may occur.

- a. Using a trim stick, carefully remove the gear shift knob button (Figure 9).

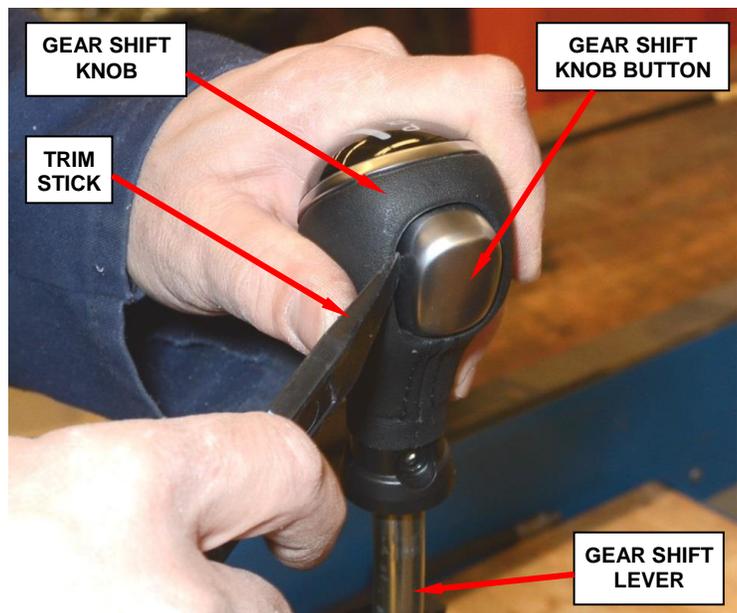


Figure 9 – Gear Shift Knob Button

Service Procedure (Continued)

- b. Remove and save the gear shift knob retaining screw (Figure 10).
- c. Remove the gear shift knob from the original gear shift module lever.
- d. Slide the gear shift knob onto the new gear shift module lever (Figure 10).
- e. Insert the gear shift knob retaining screw and tighten securely (Figure 10).

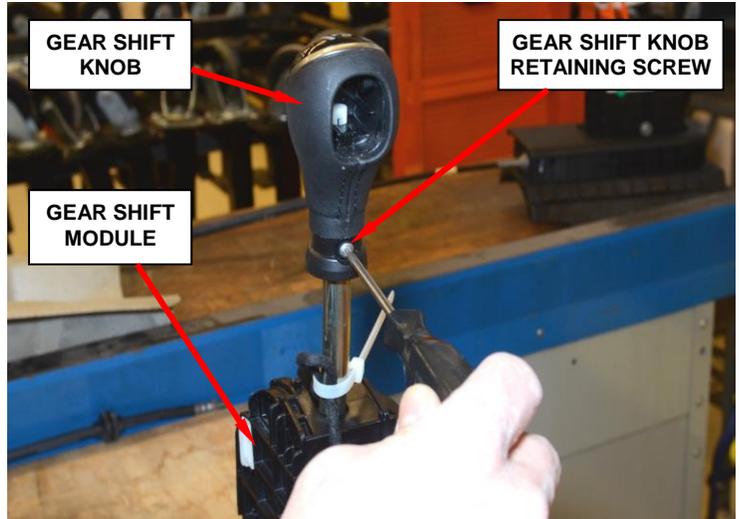


Figure 10 – Gear Shift Knob Retaining Screw

- f. While pulling out on the bottom of the gear shift knob button, insert the gear shift knob button into the gear shift knob (Figure 11).

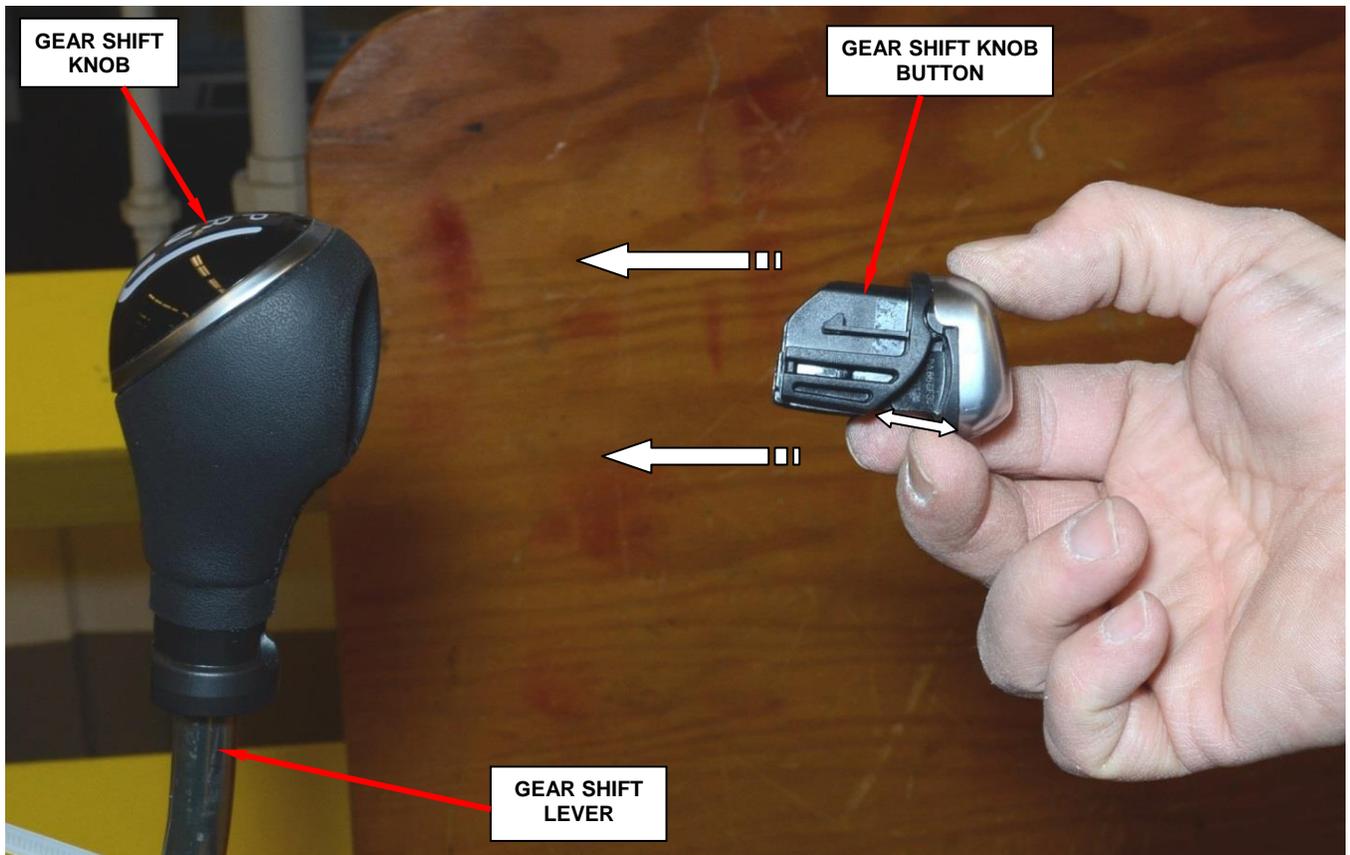
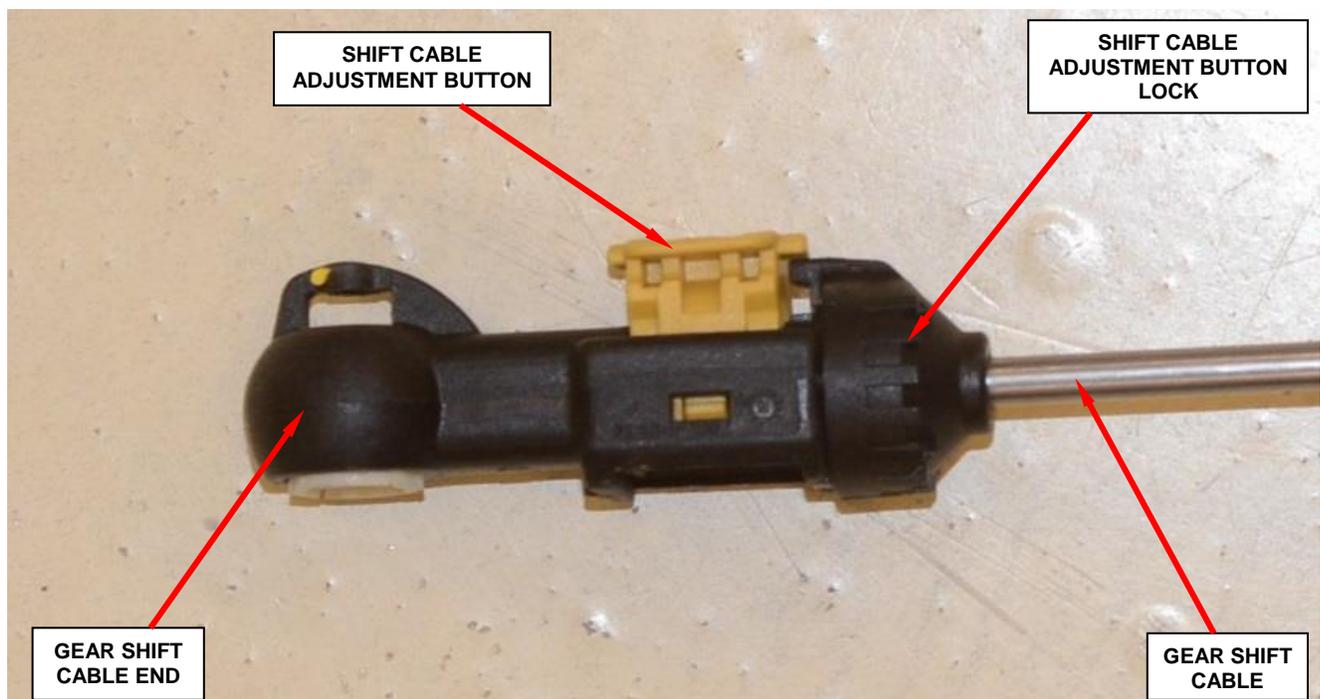


Figure 11 – Gear Shift Knob Button Installation

Service Procedure (Continued)

23. Install the new gear shift module, main heat shield, and four retaining bolts to the vehicle. Tighten the four gear shift module retaining bolts to 18 ft. lbs. (25 N·m).
24. Install the rear heat shield and exhaust hanger.
25. Attach the gear shift cable anchor to the transaxle gear shift cable bracket.
26. Connect the gear shift cable end to the transaxle shift lever.
27. Secure the gear shift cable to the shift cable plastic routing clip.
28. Use the following procedure to adjust the gear shift cable:
 - a. Verify that the transaxle is in the “Park” position.
 - b. Verify that the gear shifter is in the “Park” position.
 - c. Lock the shift cable adjustment button by pushing it inward (Figure 12).
 - d. Turn the shift cable adjustment button lock clockwise to lock the shift cable adjustment button (Figure 12).

**Figure 12 – Gear Shift Cable Adjuster**

Service Procedure (Continued)

29. Install the exhaust system.
30. Connect the downstream oxygen sensor electrical connector (Figure 13).
31. Install the under body plastic splash shield.

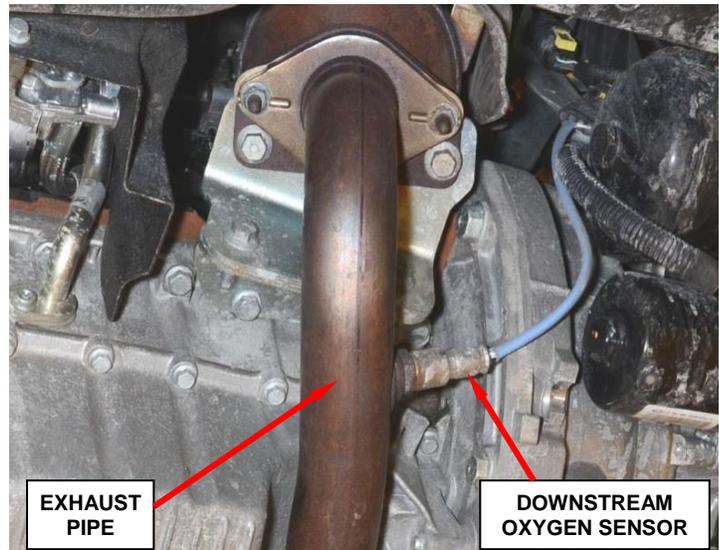


Figure 13 – Downstream Oxygen Sensor

32. Lower the vehicle from the hoist.
33. Place the gear shift boot bezel into position and connect the electrical connector to the gear shift boot bezel.
34. Snap the gear shift boot bezel to the floor console.
35. Secure the hook-and-loop fasteners together and snap the gear shift boot snap together.
36. Connect the negative battery cable to the negative battery post.

Completion Reporting and Reimbursement

Claims for vehicles that have been serviced must be submitted on the DealerCONNECT Claim Entry Screen located on the Service tab. Claims submitted will be used by Chrysler to record recall service completions and provide dealer payments.

Use one of the following labor operation numbers and time allowances:

	Labor Operation Number	Time Allowance
Interrogate GSM software level, no update required	21-P0-61-81	0.2 hours
Interrogate GSM software level and reprogram GSM with new software	21-P0-61-82	0.2 hours
Inspect GSM software level and replace GSM assembly	21-P0-61-83	1.2 hours

Add the cost of the recall parts package plus applicable dealer allowance to your claim.

NOTE: See the Warranty Administration Manual, Recall Claim Processing Section, for complete recall claim processing instructions.

Dealer Notification

To view this notification on DealerCONNECT, select “Global Recall System” on the Service tab, then click on the description of this notification.

Owner Notification and Service Scheduling

All involved vehicle owners known to Chrysler are being notified of the service requirement by first class mail. They are requested to schedule appointments for this service with their dealers. A generic copy of the owner letter is attached.

Enclosed with each owner letter is an Owner Notification postcard to allow owners to update our records if applicable.

Vehicle Lists, Global Recall System, VIP and Dealer Follow Up

All involved vehicles have been entered into the DealerCONNECT Global Recall System (GRS) and Vehicle Information Plus (VIP) for dealer inquiry as needed.

GRS provides involved dealers with an updated VIN list of their incomplete vehicles. The owner's name, address and phone number are listed if known. Completed vehicles are removed from GRS within several days of repair claim submission.

To use this system, click on the “**Service**” tab and then click on “**Global Recall System.**” Your dealer's VIN list for each recall displayed can be sorted by: those vehicles that were unsold at recall launch, those with a phone number, city, zip code, or VIN sequence.

Dealers must perform this repair on all unsold vehicles before retail delivery. Dealers should also use the VIN list to follow up with all owners to schedule appointments for this repair.

Recall VIN lists may contain confidential, restricted owner name and address information that was obtained from the Department of Motor Vehicles of various states. Use of this information is permitted for this recall only and is strictly prohibited from all other use.

Additional Information

If you have any questions or need assistance in completing this action, please contact your Service and Parts District Manager.

Customer Services / Field Operations
Chrysler Group LLC