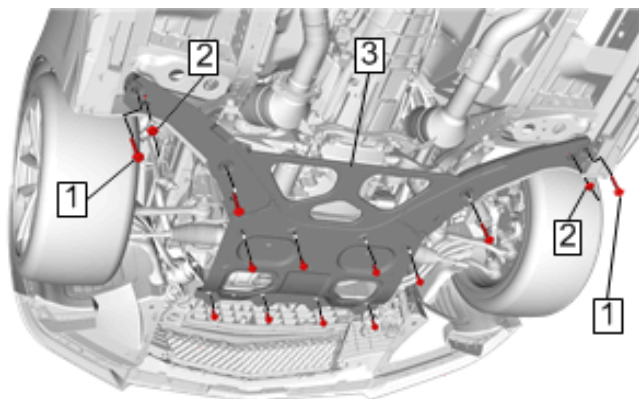
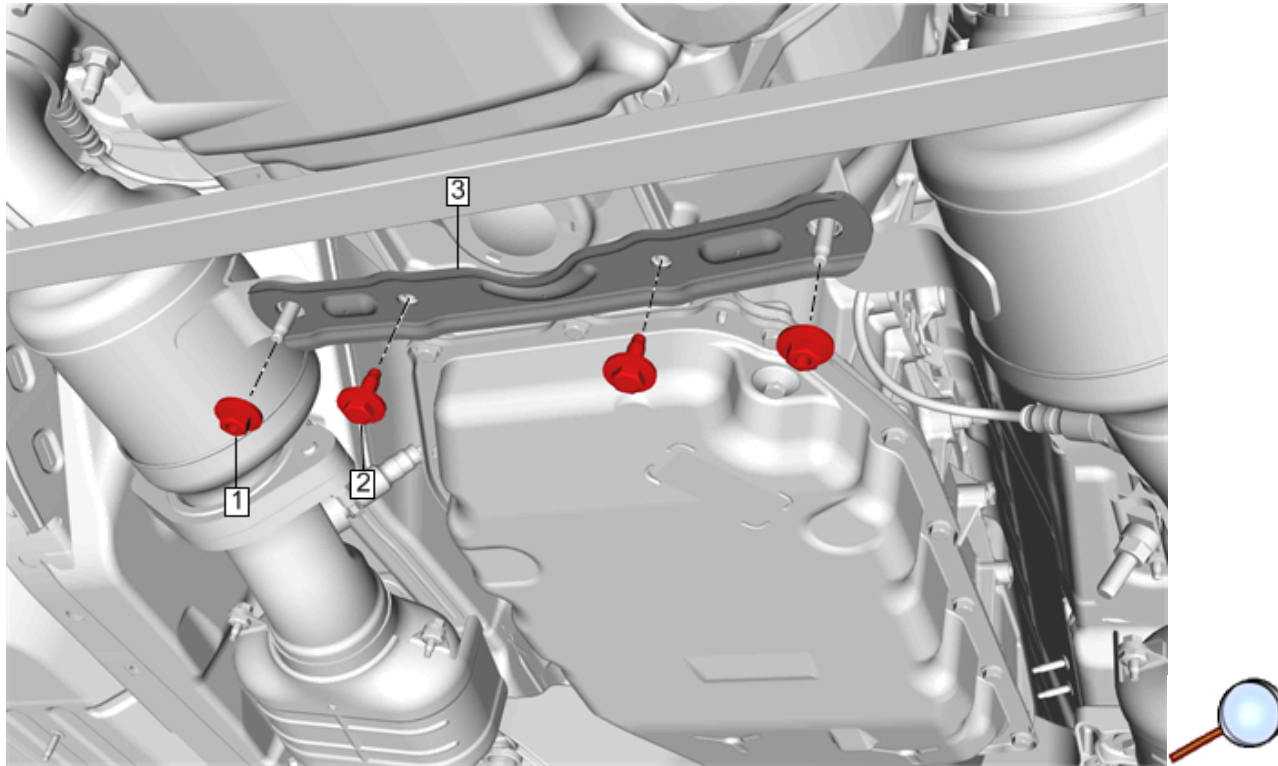


## Transmission Replacement (MM6 with LT1 Engine)

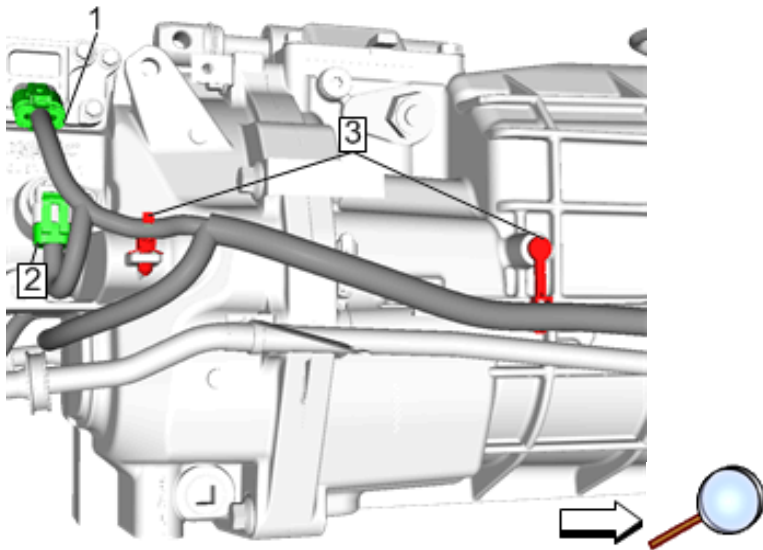
### [Removal Procedure](#)



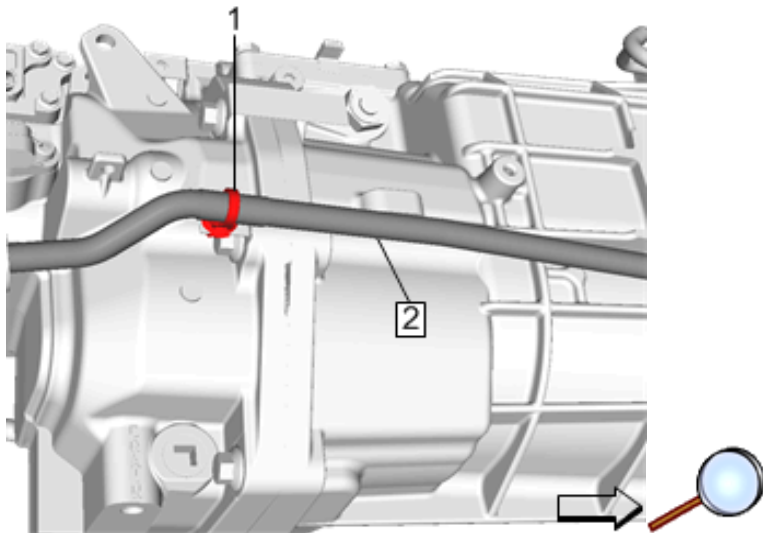
1. Remove the front cradle shear plate (3). [Front Cradle Shear Plate Replacement](#)



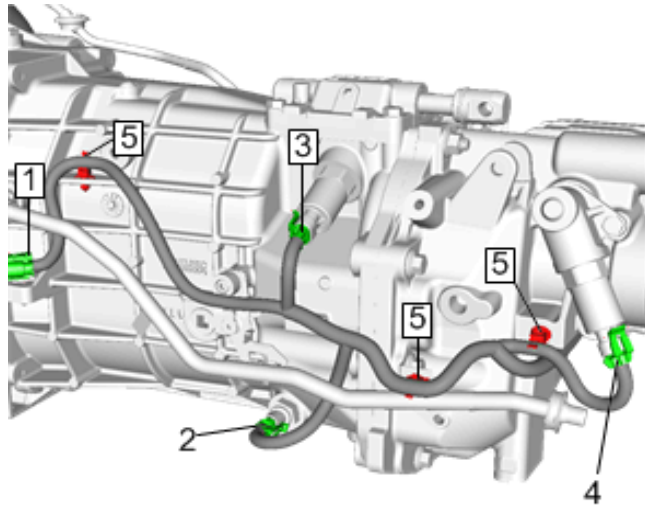
2. Remove the catalytic converter brace bracket. [Catalytic Converter Brace Bracket Replacement](#)
3. Support the transmission using a suitable transmission jack.
4. Disconnect the shift control assembly from the transmission. [Shift Control Assembly Replacement](#)



5. Disconnect the following electrical connectors:
- Shift Fork Position Sensor (1)
  - Vehicle Speed Sensor (2)
6. Disconnect the wiring harness clips (3) from the transmission.



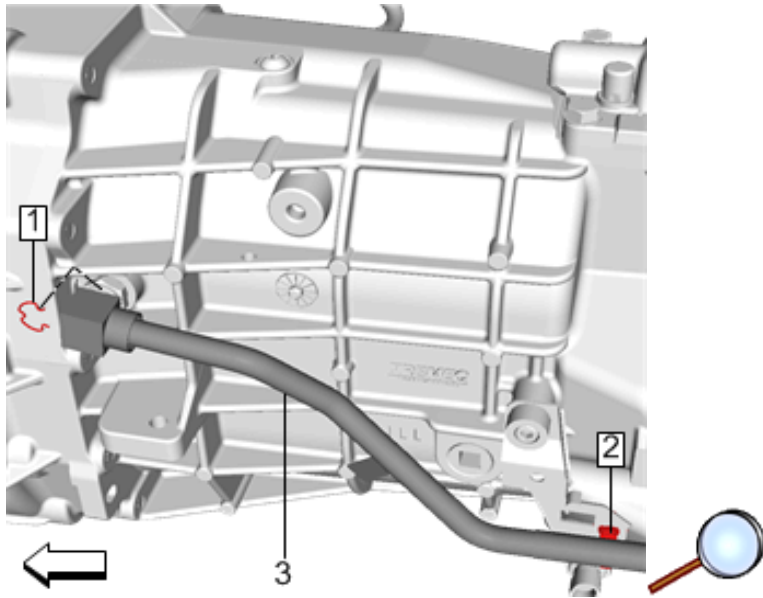
7. Disconnect the oil cooler line clip (1) from the transmission.



8. Disconnect the following electrical connectors:

- Oxygen Sensor (1)
- Fluid Temperature Sensor (2)
- Skip Shift Solenoid (3)
- Reverse Lockout Solenoid (4)

9. Disconnect the wiring harness clips (5) from the transmission.

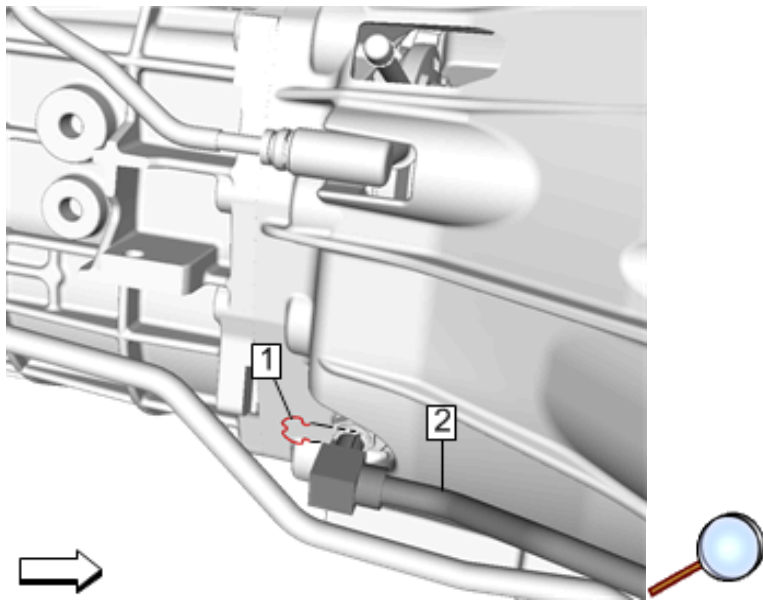


10. Remove the retaining clip (1).

11. Disconnect the cooler pipe retainer (2).

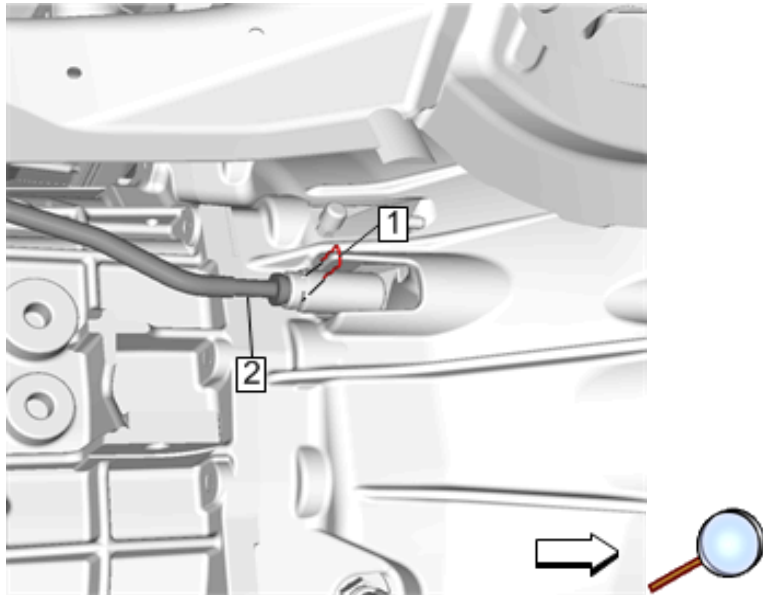
**Note:** Plug or cap all open transmission fluid cooler pipe connections.

12. Disconnect the cooler pipe (3) from the transmission.



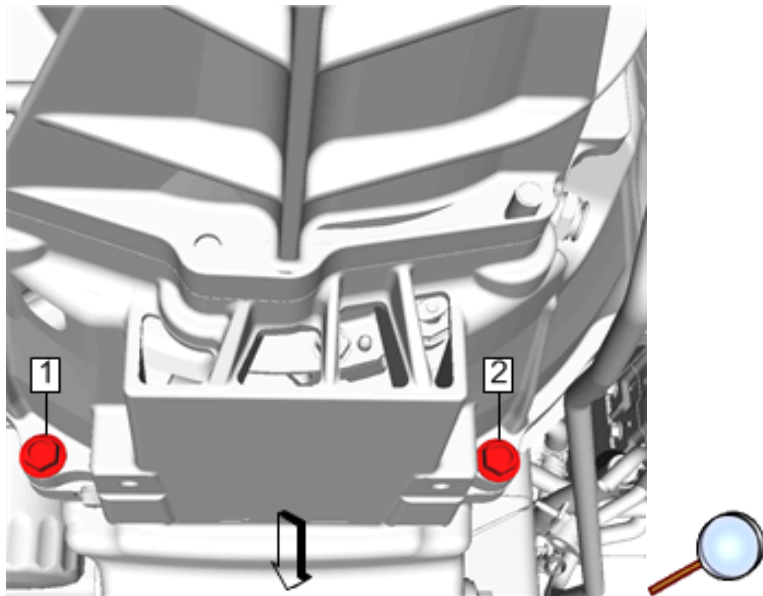
13. Remove the retaining clip (1).

14. Disconnect the cooler pipe (2) from the transmission.

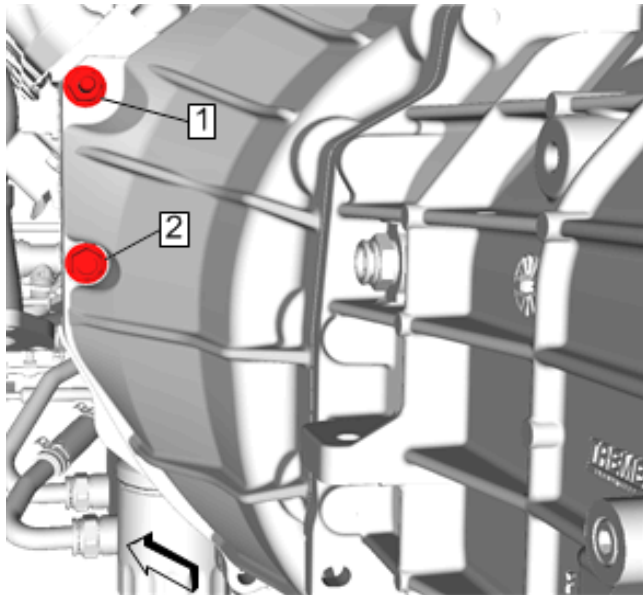


15. Remove the hydraulic clutch hose/pipe (1) retaining clip from the clutch slave cylinder.

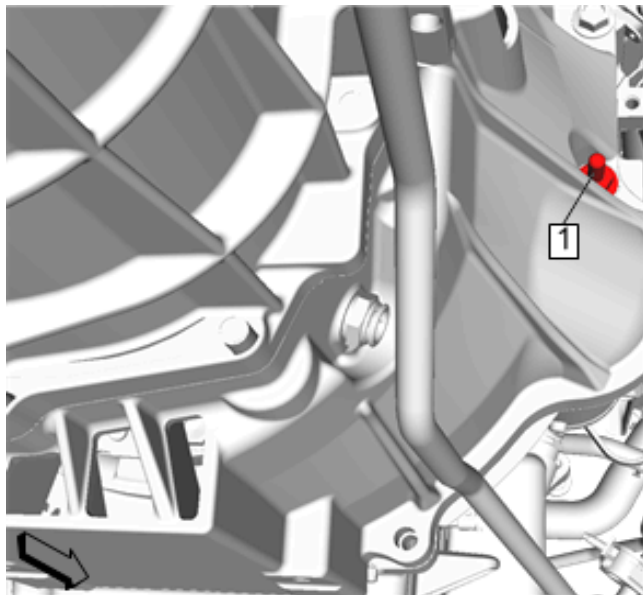
16. Disconnect the hydraulic clutch hose/pipe (2) from the clutch slave cylinder. Plug the lower hose end.



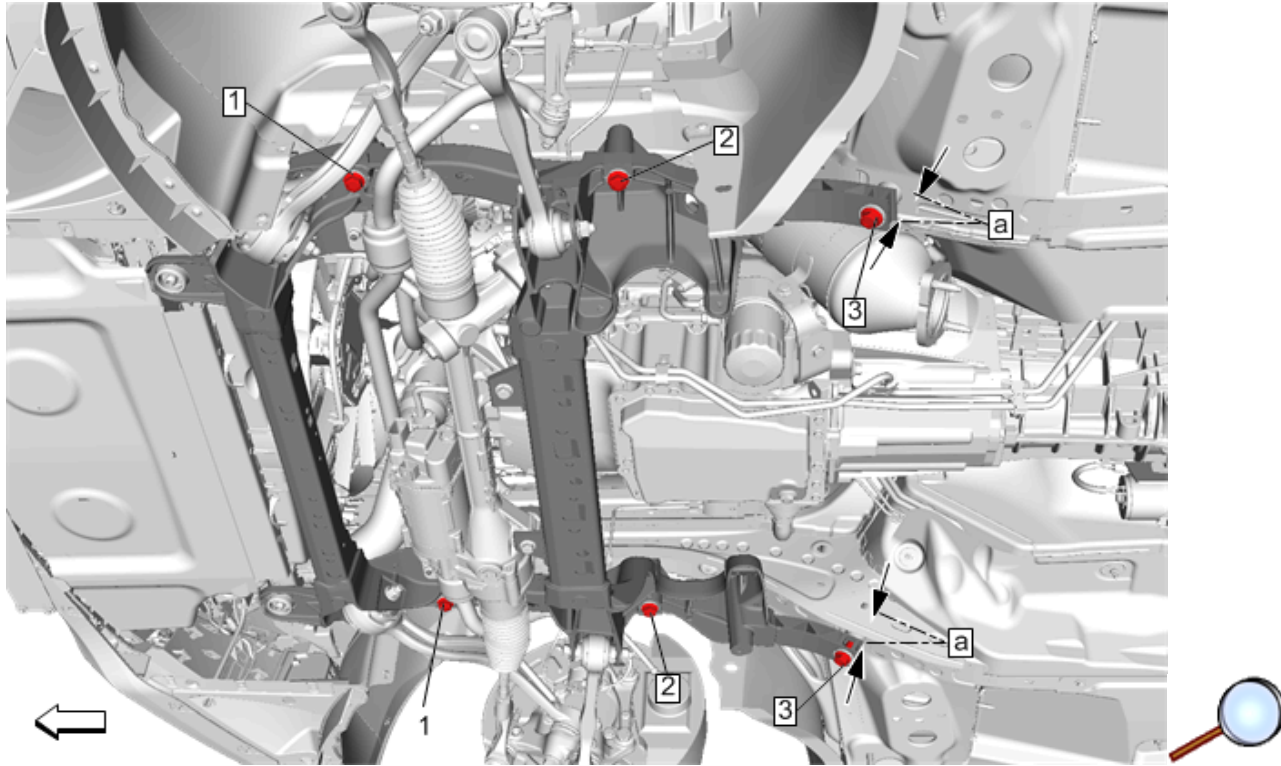
17. Remove the lower transmission clutch housing to engine fasteners (1, 2).



18. Remove the left side transmission clutch housing to engine fasteners (1, 2).



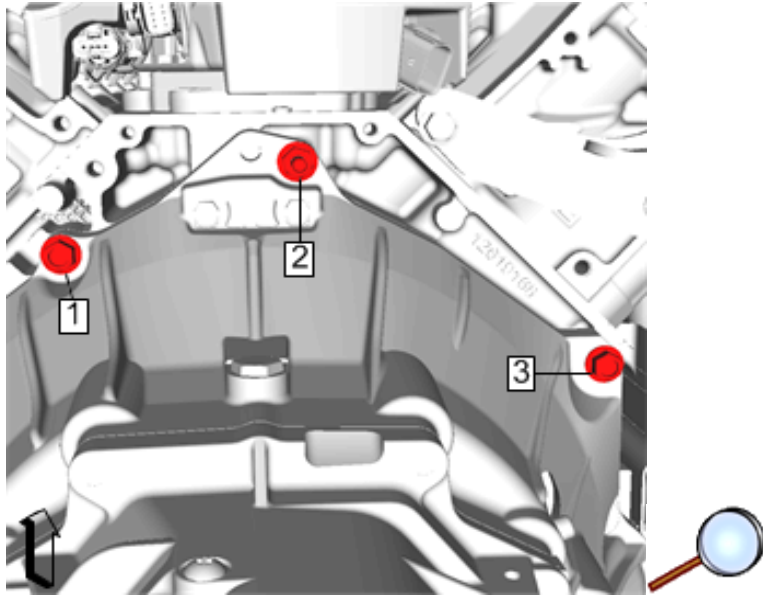
19. Remove the right side lower transmission clutch housing to engine fastener (1).



**Note:** Securely support the drivetrain and front suspension cradle with an adjustable jack.

20. Loosen the front cradle bolts (1) one turn, remove the rear cradle bolts (3) completely, loosen the middle cradle bolts (2) enough to allow the rear of the cradle support to tilt down with the jack approximately 25 mm (1 in) (a).





21. Remove the three upper transmission clutch housing to engine fasteners (1, 2, 3).

**Note:** Do not leave the engine tilted on its mounts for an extended amount of time.

22. Remove the transmission from the vehicle. To clear the body structure, the front of the engine can be pushed up to tilt the engine and transmission.

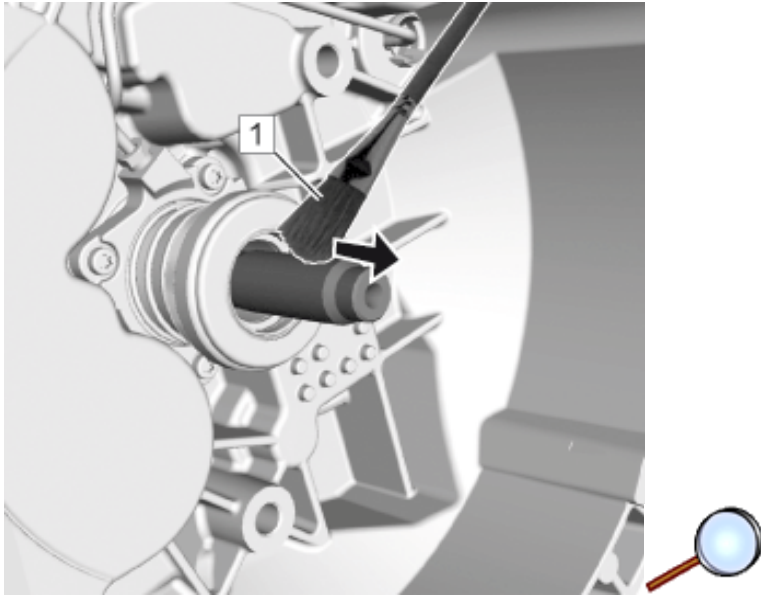
23. Flush and flow test the transmission oil cooler and lines. [Transmission Fluid Cooler Flushing and Flow Test](#)

24. Transfer components as necessary.

### **Installation Procedure**

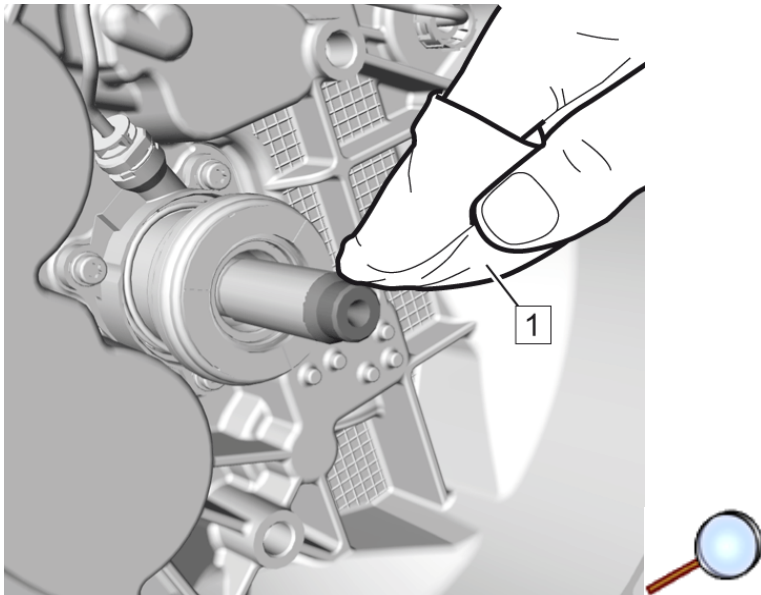
**Warning:** Use care when cleaning the clutch hub. The clutch hub may have sharp edges and can cause personal injury if contact is made. Wear protective gloves to avoid personal injury.

1. Clean the clutch hub and the input shaft from any debris and contaminants with a lint-free towel.



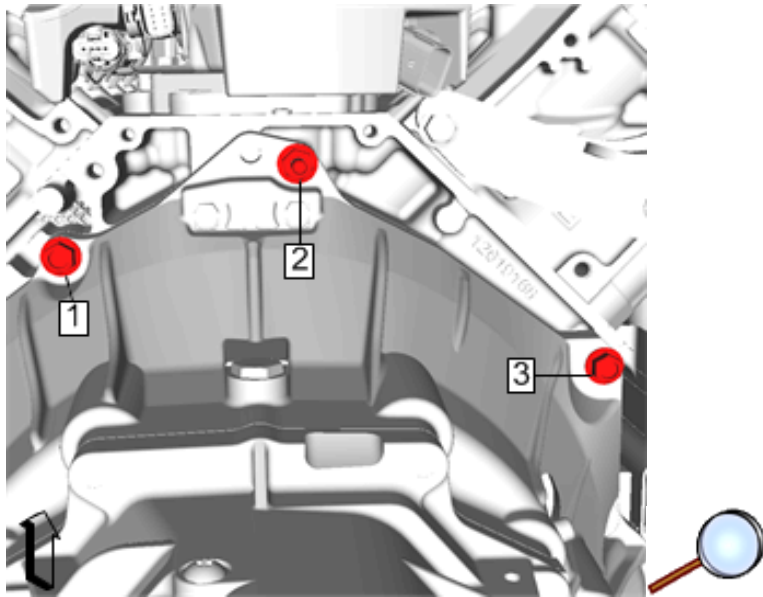
**Caution:** Applying too much or the wrong type of grease on the transmission input shaft may cause damage, clutch slippage or failure. Always apply the correct type of grease. Never apply more grease than is necessary to coat the transmission input shaft with a very thin film of grease.

2. Use a clean flat brush (1) to apply very light coating of multi-purpose grease to input shaft until the metal is only shiny . No visible clumps of grease are permissible regardless of size.



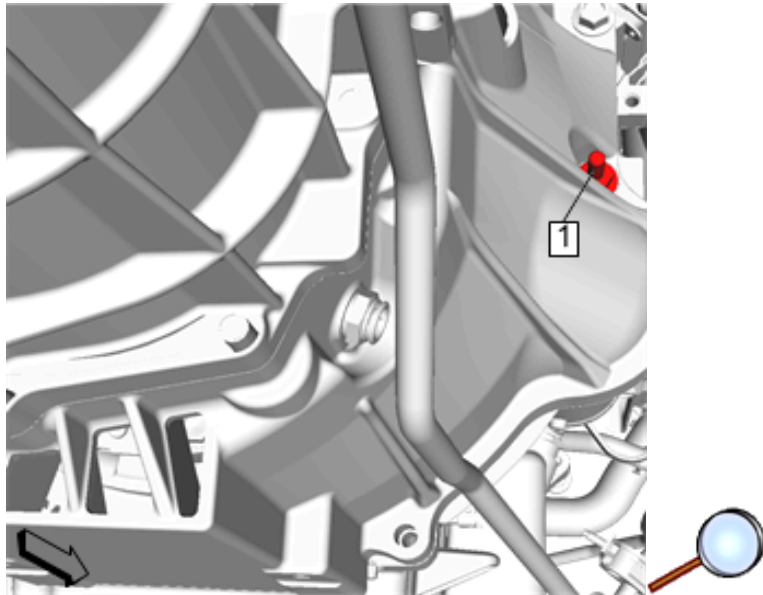
**Caution:** Ensure that no grease remains on the lead surface of the transmission input shaft. Clean the lead surface of the transmission input shaft prior to the assembly of the transmission to the engine. Failure to maintain a clean surface may cause clutch slippage or failure.

3. Clean the entire lead surface of the input shaft with a NEW, lint-free towel (1).
4. Position the transmission to the engine.

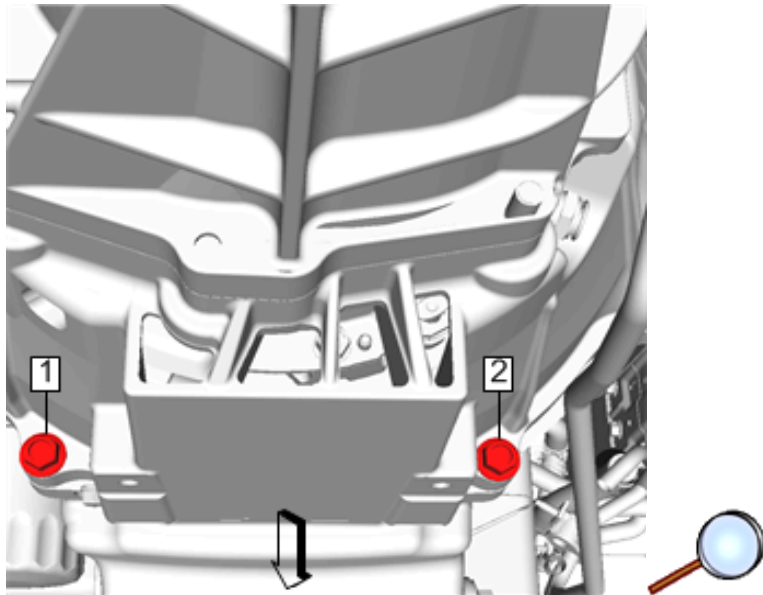


**Caution:** Refer to [Fastener Caution](#).

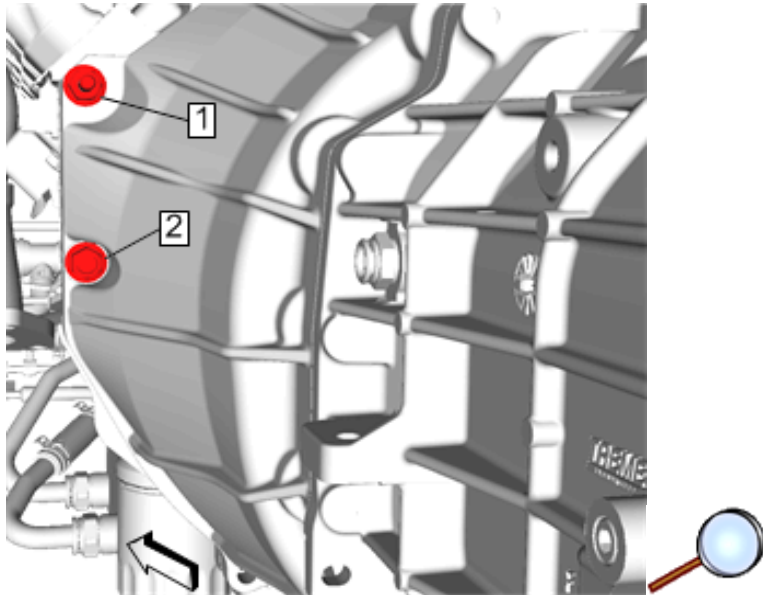
5. Install the three upper transmission clutch housing to engine fasteners (1, 2, 3) and tighten to **50 N•m (37 lb ft)**.



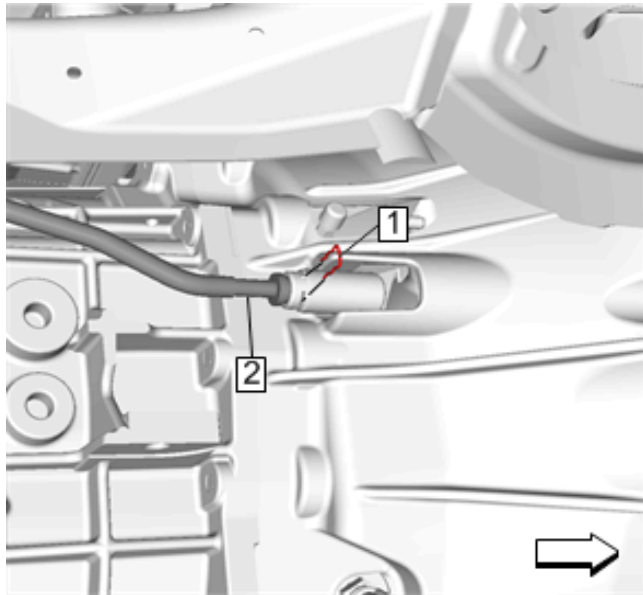
6. Install the right lower transmission clutch housing to engine fastener (1) and tighten to **50N•m (37 lb ft)**.



7. Install the lower transmission clutch housing to engine fasteners (1, 2) and tighten to **50N•m (37 lb ft)**.

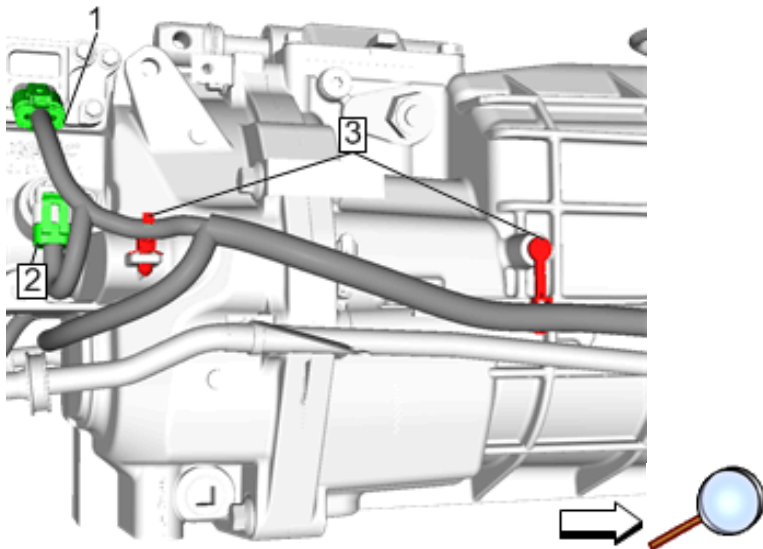


8. Install the left side transmission clutch housing to engine fasteners (1, 2) and tighten to **50N•m (37 lb ft)**.
9. Connect the shift control assembly to the transmission. [Shift Control Assembly Replacement](#)
10. Tilt engine and transmission up and tighten all cradle bolts. Refer to [Drivetrain and Front Suspension Cradle Replacement](#).
11. Install the transmission mount. Refer to [Transmission Rear Mount Replacement](#).



12. Connect the lower slave cylinder hose (2) to the slave cylinder.

13. Install the hydraulic clutch hose/pipe retaining clip (1) to the clutch slave cylinder.

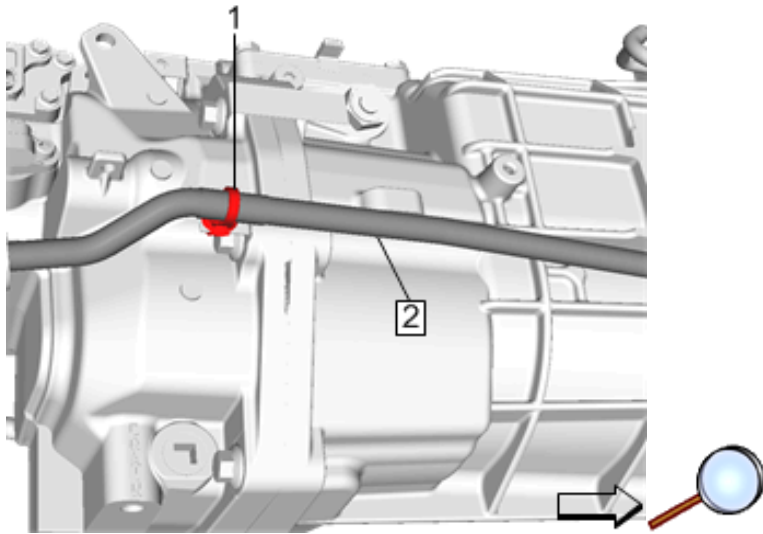


14. Connect the following electrical connectors:

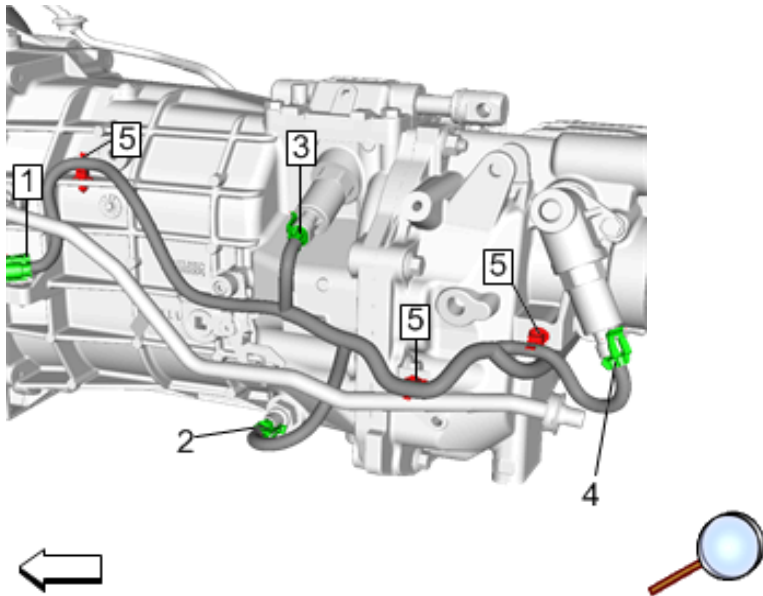
- Shift Fork Position Sensor (1)

- Vehicle Speed Sensor (2)

15. Connect the wiring harness clips (3) to the transmission.



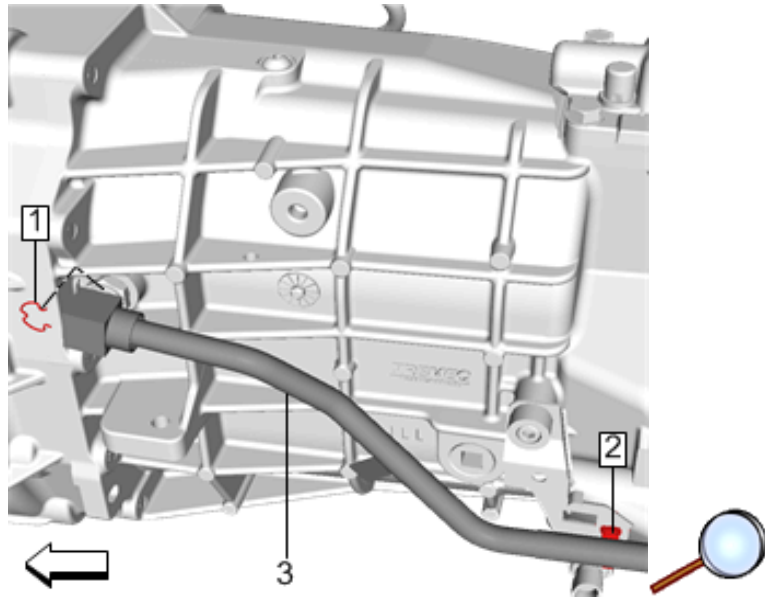
16. Connect the oil cooler line clip (1) to the transmission.



17. Connect the following electrical connectors:

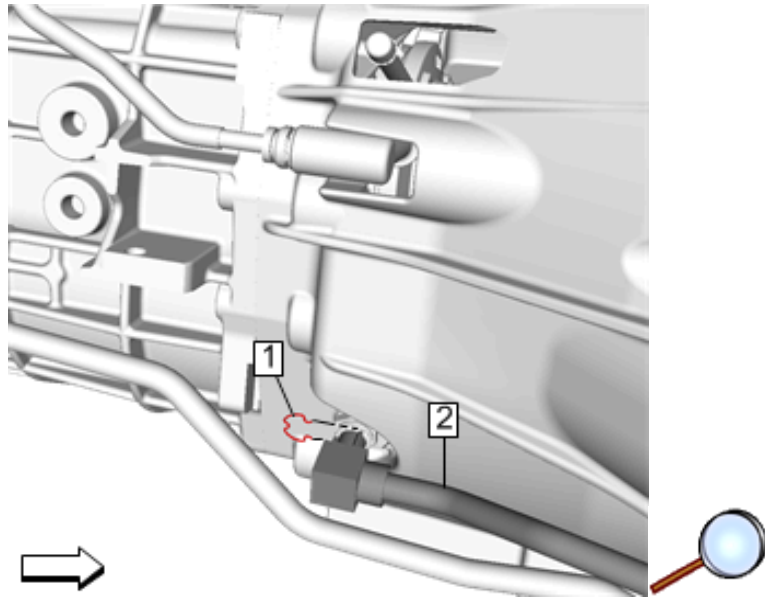
- Oxygen Sensor (1)

- Fluid Temperature Sensor (2)
- Skip Shift Solenoid (3)
- Reverse Lockout Solenoid (4)

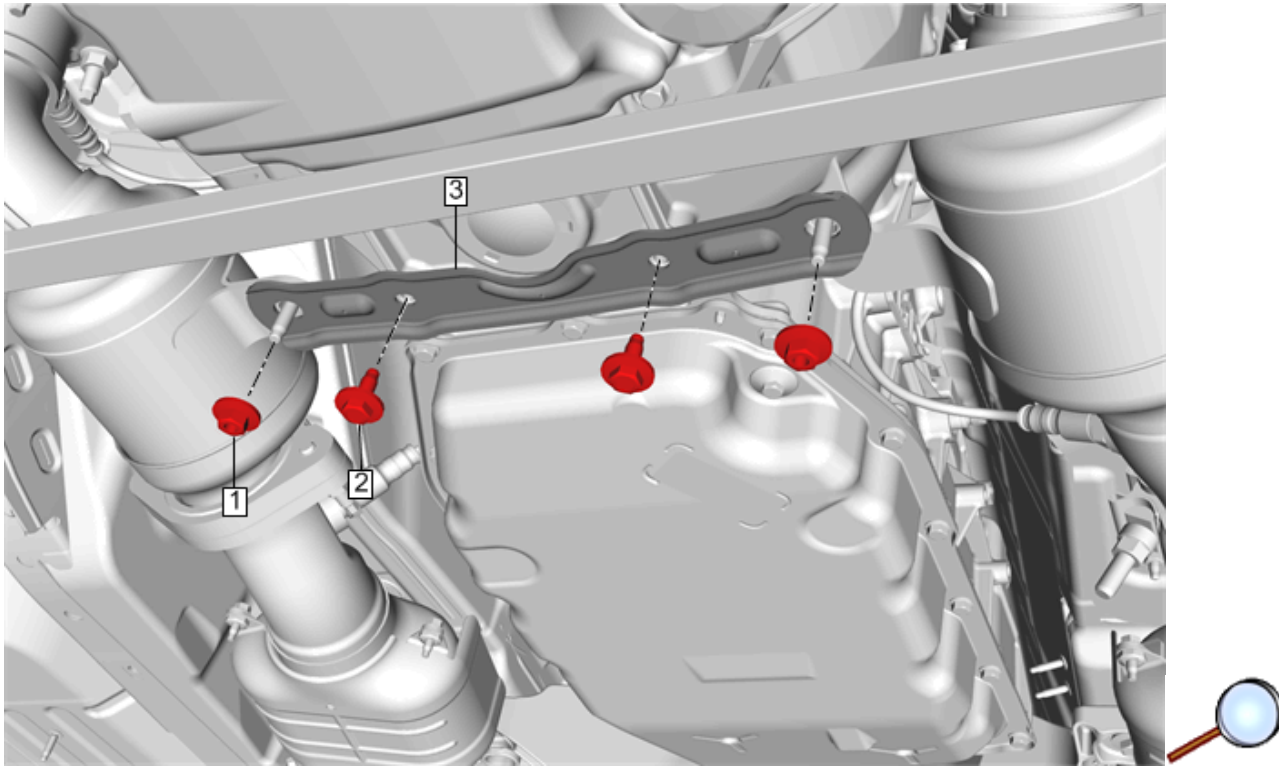


18. Connect the cooler pipe retainer (2).
19. Connect the cooler pipe (3) to the transmission.
20. Install the retaining clip (1).

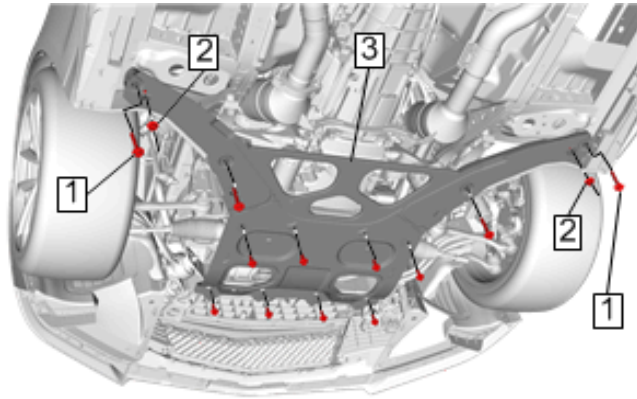




21. Connect the cooler pipe (2) to the transmission.
22. Install the retaining clip (1).
23. Bleed to hydraulic clutch system. Refer to [Hydraulic Clutch System Bleeding](#).
24. Check the transmission fluid and fill as necessary. Refer to [Transmission Fluid Level Inspection](#).



25. Install the catalytic converter brace bracket. [Catalytic Converter Brace Bracket Replacement](#)



26. Install the front cradle shear plate (3). [Front Cradle Shear Plate Replacement](#)