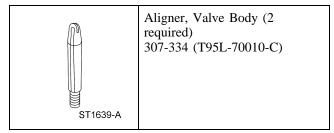
IN-VEHICLE REPAIR

Main Control Valve Body

Special Tool(s)



Material

Item	Specification
MERCON® V Automatic Transmission Fluid XT-5-QM	MERCON® V

Removal

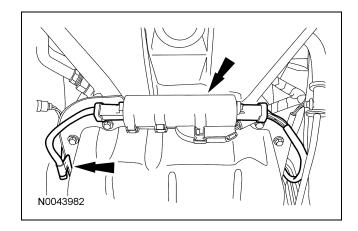
CAUTION: Lubricate the fluid filter seals with clean automatic transmission fluid or they may be damaged.

NOTE: Make sure that the fluid filter seals are correctly seated on the filter.

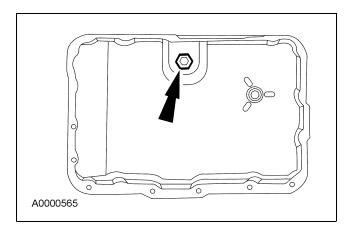
NOTE: Clean the area around the solenoid body connector contamination.

NOTE: The transmission fluid pan gasket is reusable. Clean and inspect for damage. If not damaged, the gasket should be reused.

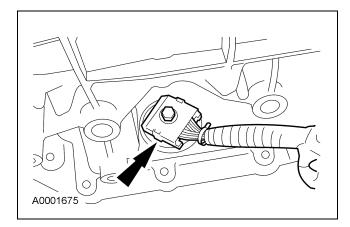
- With the vehicle in NEUTRAL, position it on a hoist. For additional information, refer to Section 100-02.
- 2. Remove the heated oxygen sensor connectors from the front of the transmission pan rail and disconnect the wire retaining clip from the right side of the transmission pan rail.



3. Drain the transmission fluid.

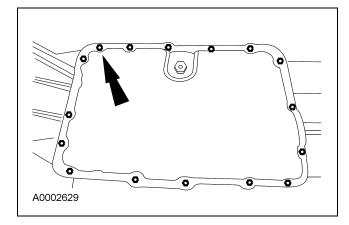


 NOTE: Clean the area around the solenoid body connector to prevent contamination.
Disconnect the solenoid body harness electrical connector.

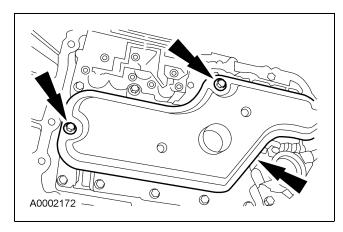


5. **NOTE:** The transmission fluid pan gasket is reusable. Clean and inspect the gasket for damage. If not damaged, the gasket should be reused.

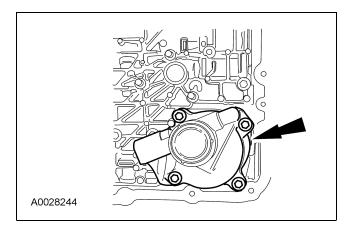
Remove the transmission fluid pan and gasket.



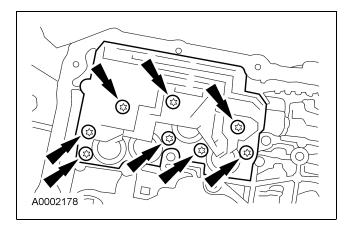
6. Remove the transmission fluid filter.



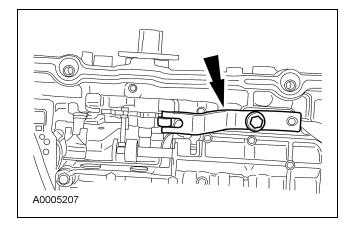
7. Remove the 4 screws attaching the reverse servo to the transmission case and remove the servo.



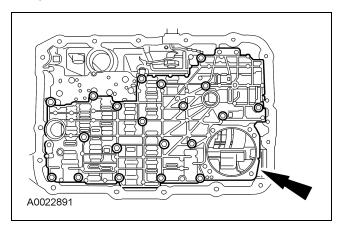
8. Remove the screws and the solenoid body.



9. Remove the manual control valve detent spring.

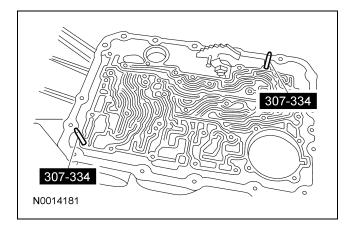


 Remove the main control valve body bolts, main control valve body, separator plate and gasket.

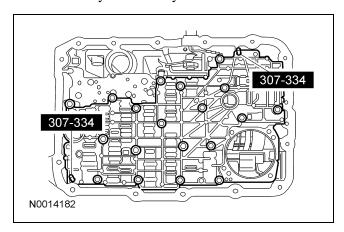


Installation

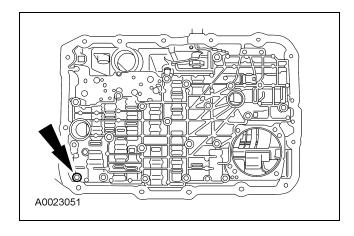
1. Install the special tools into the transmission case.



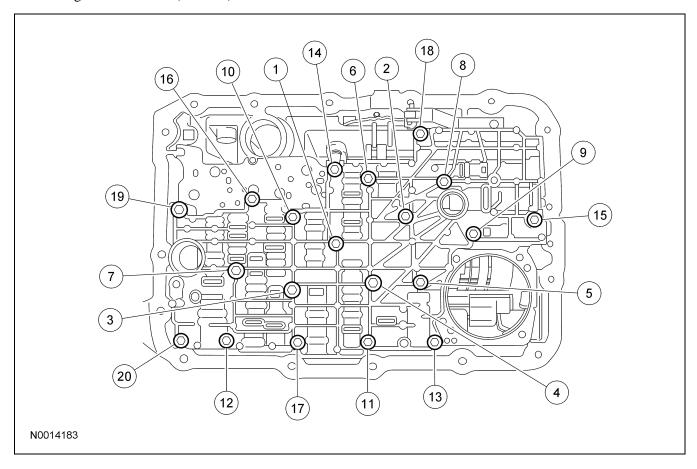
2. Using the special tools, install the main control valve body and loosely install the screws.



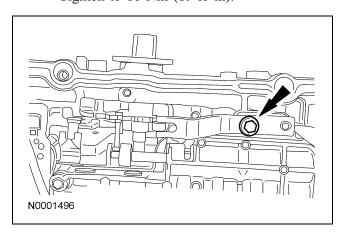
3. Remove the special tool and loosely install the screw.

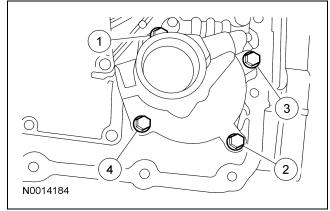


- 4. Tighten the screws in the sequence shown.
 - Tighten to 10 Nm (89 lb-in).



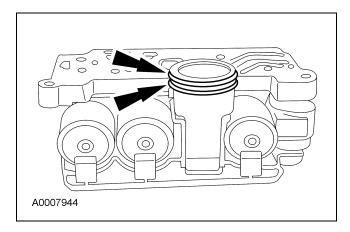
- 5. Install the manual control valve detent spring.
 - Tighten to 10 Nm (89 lb-in).





- 6. Install the reverse servo and the 4 screws in 2 stages, in the sequence shown.
 - Stage 1: Tighten to 5 Nm (44 lb-in).
 - Stage 2: Tighten to 10 Nm (89 lb-in).

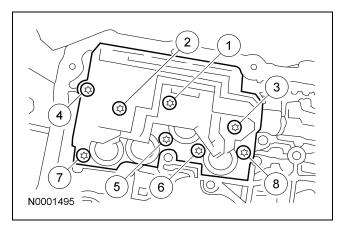
7. Install new O-ring seals on the solenoid body connector. Lubricate the O-ring seals with clean automatic transmission fluid.



8. CAUTION: Inspect the transmission case bore to make sure it is free of foreign material and not damaged. If it is damaged, transmission leak may occur.

Install the solenoid body. Tighten the screws in sequence shown.

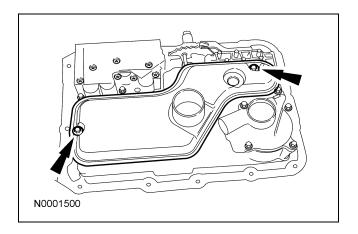
• Tighten to 8 Nm (71 lb-in).



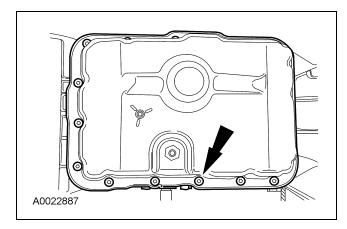
NOTE: Make sure that the fluid filter seals are correctly seated on the filter.

Lubricate the seals and install the transmission fluid filter.

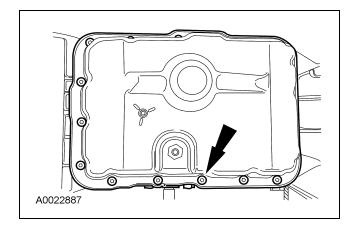
• Tighten to 10 Nm (89 lb-in).



10. Install the transmission fluid pan and gasket and loosely install the screws.



- 11. Tighten the screws in a crisscross sequence.
 - Tighten to 10 Nm (89 lb-in).



12. **CAUTION:** Damage will occur to the solenoid body assembly if the screw is tightened above specification.

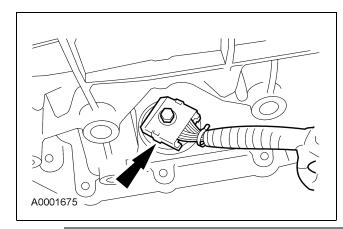
NOTE: Always install new O-ring seals on the vehicle harness connector.

NOTE: Clean the area around the connector to prevent contamination of the solenoid body connector.

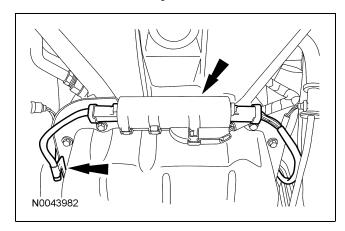
NOTE: Use petroleum jelly to lubricate the O-ring seals to aid in the installation process.

Install and lubricate new O-ring seals on the transmission connector and connect the connector.

• Tighten to 5 Nm (44 lb-in).



13. Install the heated oxygen sensor connectors to the front of the transmission pan rail and connect the wire retaining clip to the right side of the transmission pan rail.



14. Fill the transmission to the correct level. For additional information, refer to Transmission Fluid Drain and Refill — Without Torque Converter Drain Plug in this section.