



Main Control Valve Body

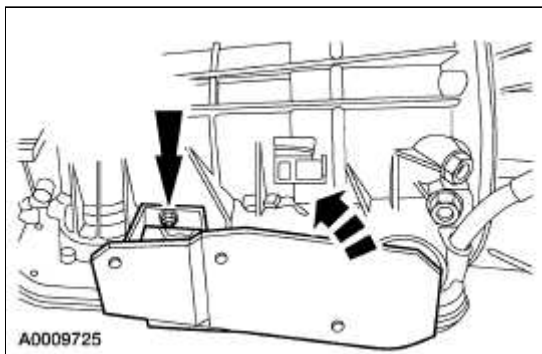
Special Tool(s)

 <p>ST1639-A</p>	Valve Body Aligner (.235) 307-333 (T95L-70010-B)
 <p>ST1639-A</p>	Valve Body Aligner (.248) 307-334 (T95L-70010-C)

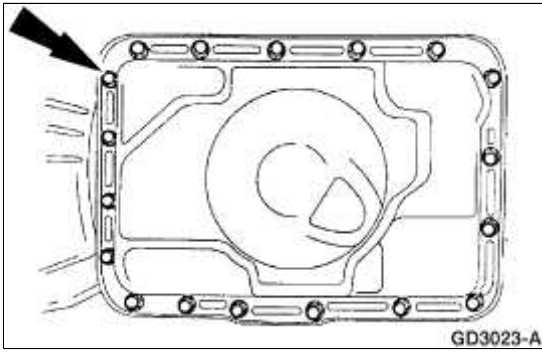
Removal

1. Disconnect the battery ground cable. For additional information, refer to [Section 414-01](#).
2. Raise and support the vehicle. For additional information, refer to [Section 100-02](#).
3. Place a drain pan under the transmission fluid pan.
4. **NOTE:** Transmission servo heat shield needs to be unclipped from the fluid pan rail and positioned out of the way for fluid pan removal.

Loosen the nut and position the heat shield out of the way.



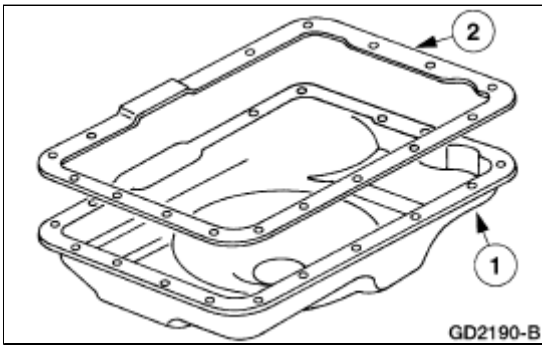
5. Drain transmission fluid.
 - Remove all the transmission fluid pan bolts except for two in the front. Loosen the two front transmission fluid pan bolts. Pry the rear of the transmission fluid pan down and allow fluid to drain. After fluid is drained remove the front two transmission fluid pan bolts.



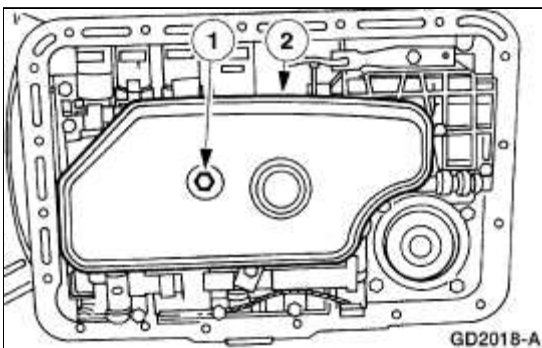
6. **NOTE:** If a transmission has been disassembled to replace worn or damaged parts and the valves in the main control valve body stick repeatedly from foreign material, the torque converter must be removed and cleaned by using a suitable torque converter/fluid cooler cleaner.

Remove the transmission fluid pan.

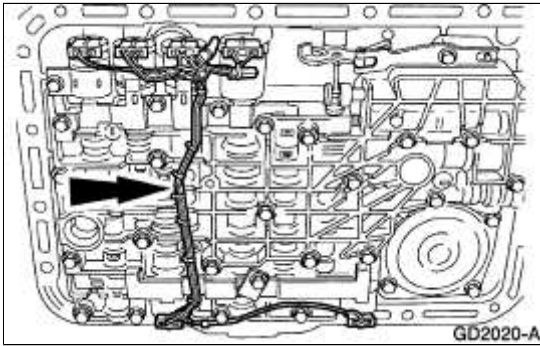
1. Remove the transmission fluid pan.
2. Remove and discard the transmission fluid pan gasket.



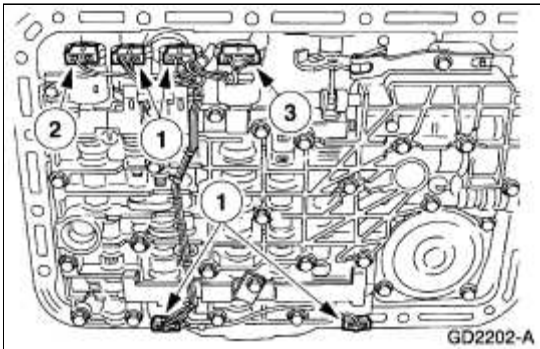
7. Remove and discard the transmission fluid filter.
1. Remove the transmission fluid filter screw.
 2. Remove the transmission fluid filter.



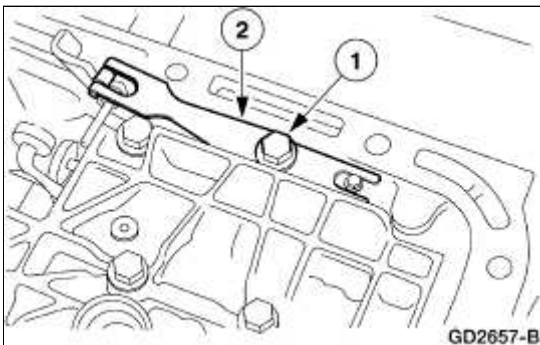
8. Unclip main control valve body wire harness.
- Lift up on wire harness guide and protector and disengage the retaining pins from the solenoid clamps.



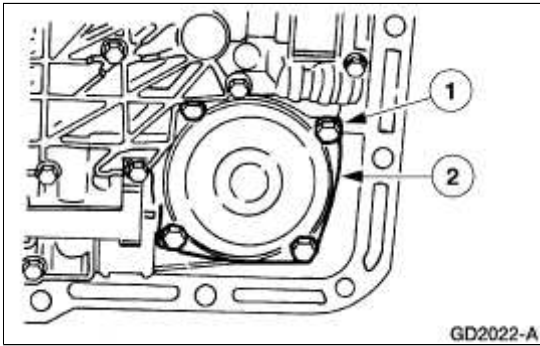
9. Disconnect the six solenoid electrical connectors.
 1. Disconnect the SSA, SSB, SSC and SSD electrical connectors.
 2. Disconnect the torque converter clutch (TCC) solenoid electrical connector.
 3. Disconnect the electronic pressure control (EPC) solenoid electrical connector.



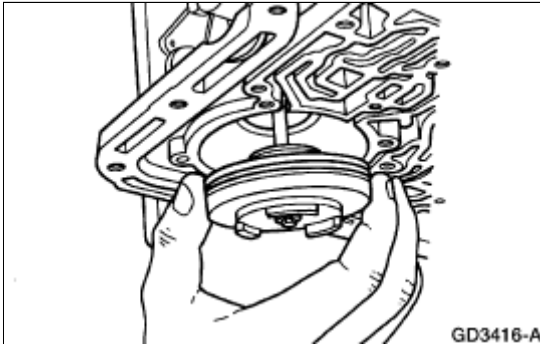
10. Remove the manual control valve detent lever spring.
 1. Remove the manual control valve detent lever spring screw.
 2. Remove the manual control valve detent lever spring.




11. Remove the low/reverse servo.
 1. Remove the low/reverse servo cover screws.
 2. Remove the low/reverse band servo cover and gasket. Discard the low/reverse servo separator plate cover gasket.

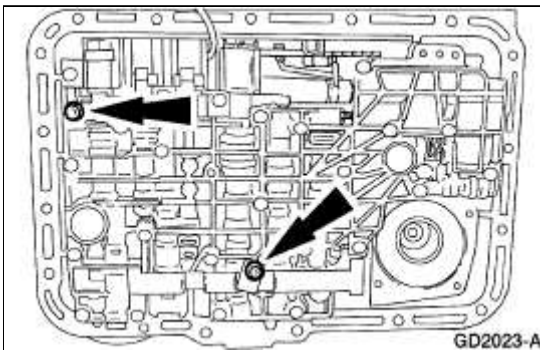


12. Remove the low/reverse band servo piston and rod.



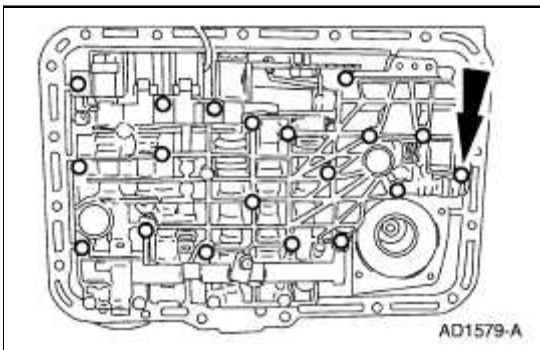
13.  **CAUTION: Support the main control valve body.**

Do not remove the two (gold) screws specified.



14.  **CAUTION: Support the main control valve body.**

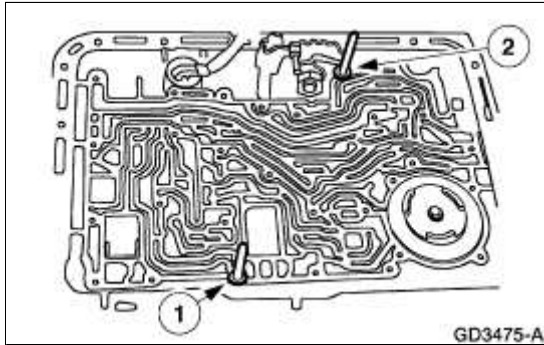
Remove the screws.



15. Remove the main control valve body.

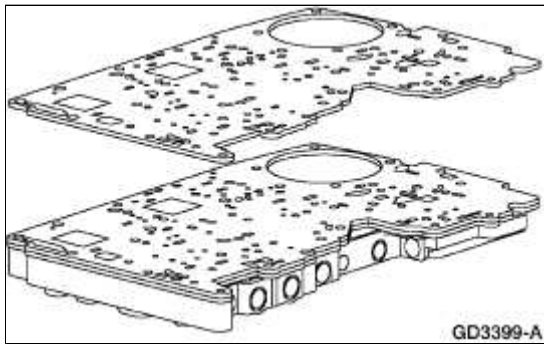
Installation

1. Install the Valve Body Aligner into the transmission case.
 1. Install the Valve Body Aligner (.248).
 2. Install the Valve Body Aligner (.235).

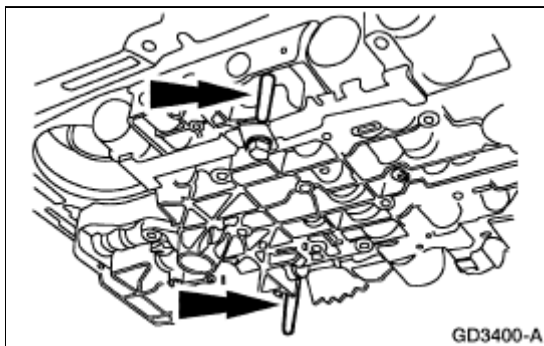


2. **NOTE:** Make sure main control to case gasket is properly aligned.

Install new main control to case gasket.

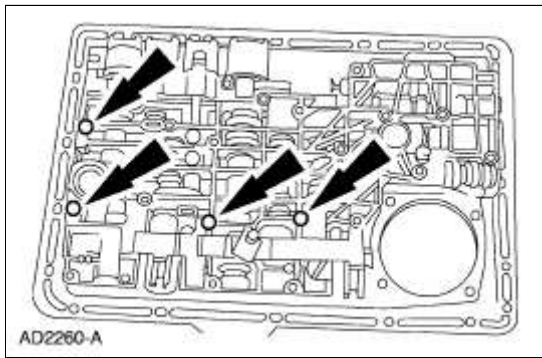


3. Position the main control valve body with the two Valve Body Aligners as a guide.



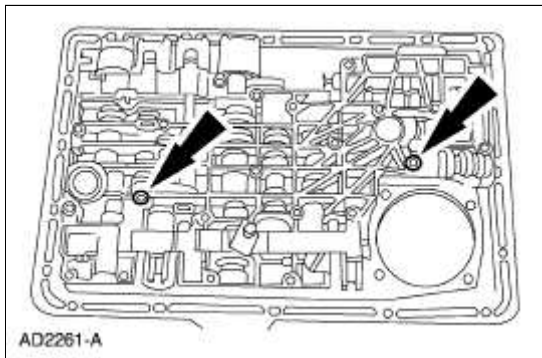
4. **NOTE:** The main control valve body screws will be tightened in later steps.

Loosely install four M6 x 45 mm (1.8 in) screws.



5. **NOTE:** The main control valve body screws will be tightened in later steps.

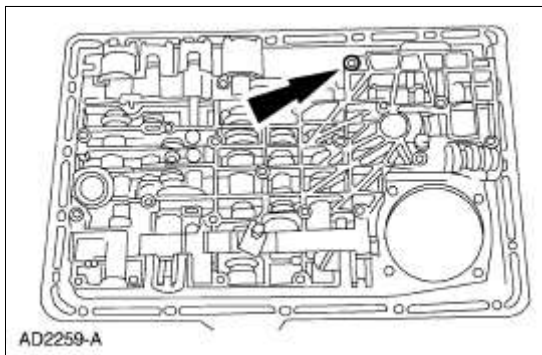
Loosely install two M6 x 35 mm (1.4 in) screws.



6. Remove the Valve Body Aligners.

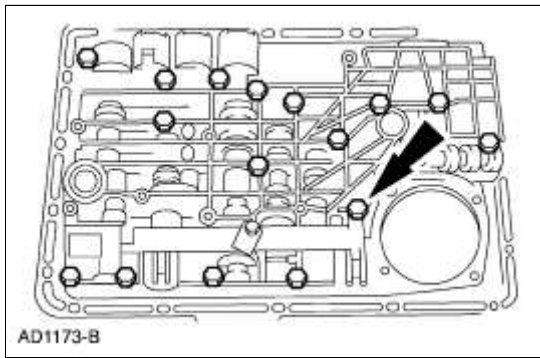
7. **NOTE:** The main control valve body screws will be tightened in later steps.

Loosely install the M6 x 30 mm (1.2 in) screw.

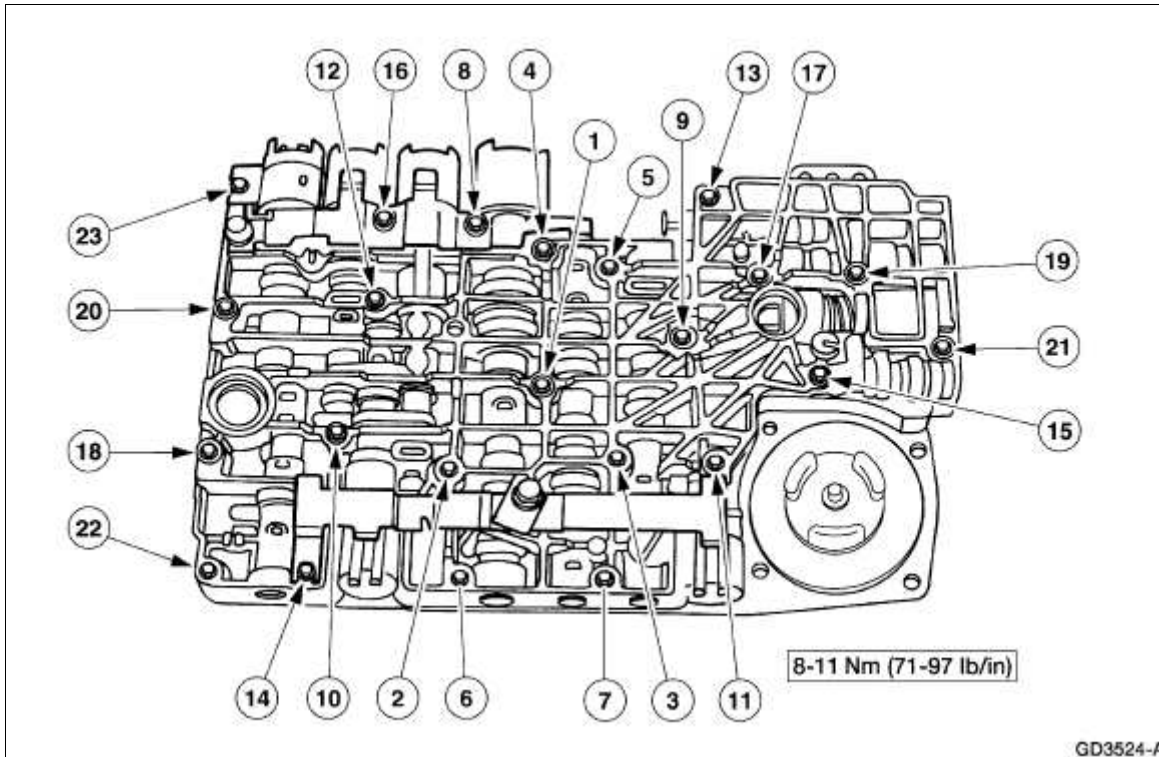


8. **NOTE:** The main control valve body screws will be tightened in later steps.

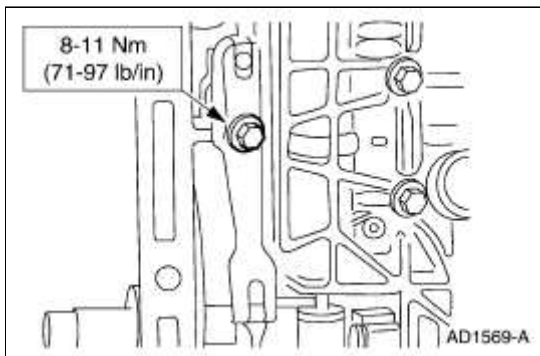
Loosely install the sixteen M6 x 40 mm (1.6 in) main control valve body screws.



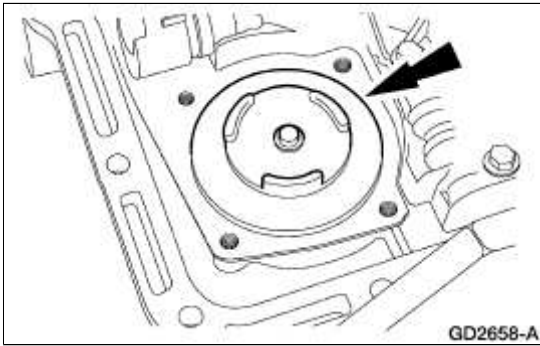
9. Tighten the main control valve body screws in the sequence shown.



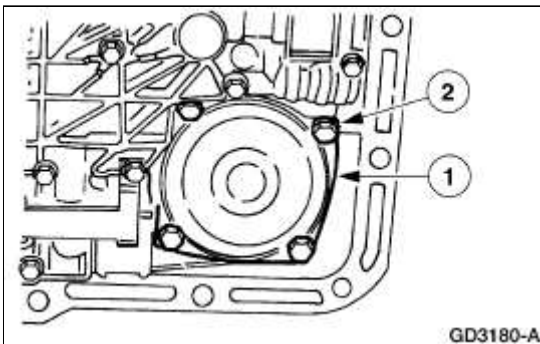
10. Install the manual control valve detent lever spring.



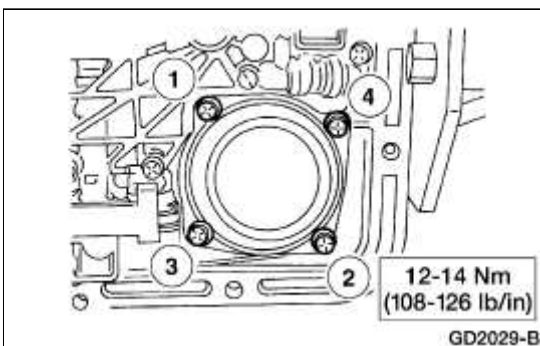
11. Install the low/reverse band servo piston and rod.



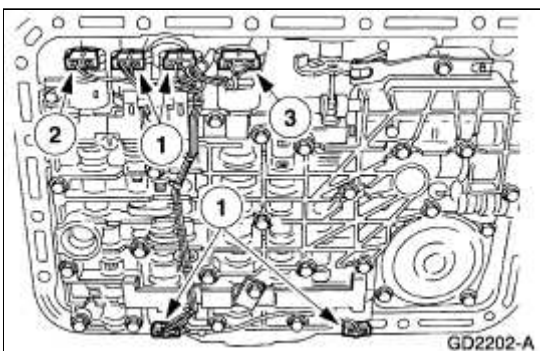
12. Install the low/reverse band servo cover.
1. Install the low/reverse band servo cover and gasket.
 2. Loosely install the low/reverse servo piston cover screws.



13. Tighten the servo cover screws in the sequence shown.



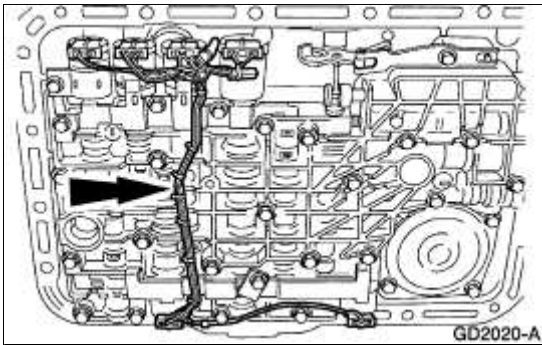
14. Connect the six solenoid electrical connectors.
1. Connect SSA, SSB, SSC, and SSD electrical connectors.
 2. Connect the torque converter clutch (TCC) solenoid electrical connector.
 3. Connect the electronic pressure control (EPC) solenoid electrical connector.



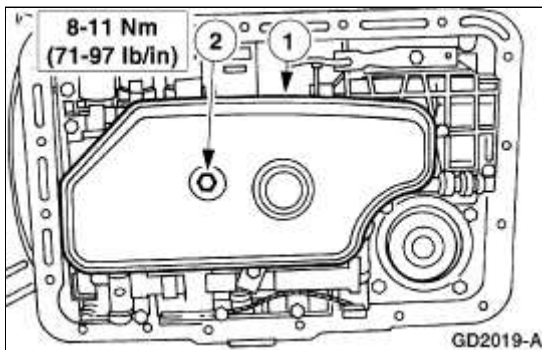
15.  **CAUTION: Excessive pressure may break the locating pins.**

Install the main control valve body wire harness.

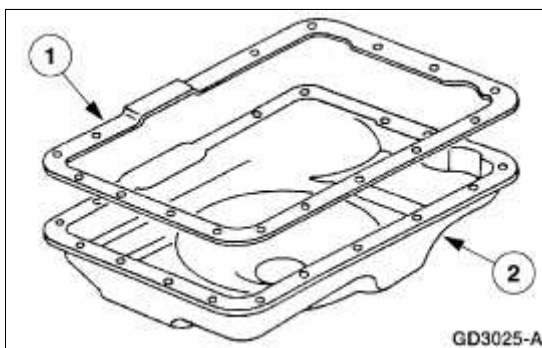
- Align the retaining pins to the holes in the solenoid clamps and press in the main control valve body wire harness guide and protector.



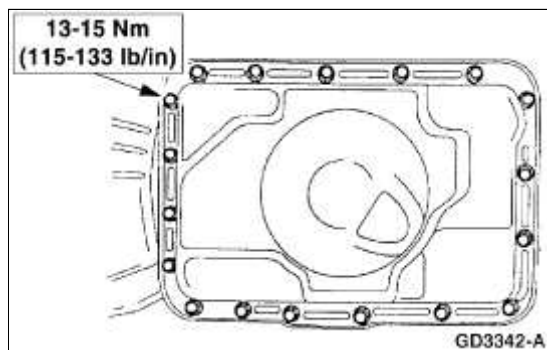
16. Install the transmission fluid filter.
1. Install the transmission fluid filter.
 2. Install the transmission fluid filter screw.



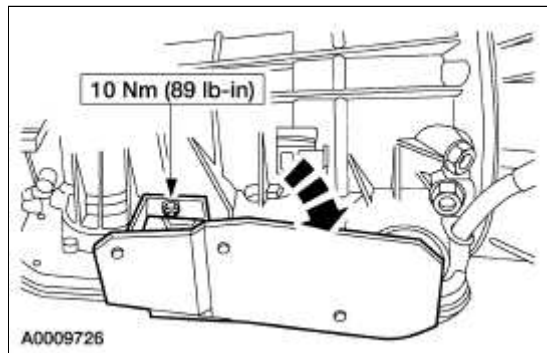
17. Install the transmission fluid pan.
1. Position a new transmission fluid pan gasket on the transmission fluid pan.
 2. Install and align the transmission fluid pan.



18. Tighten the transmission fluid pan screws.
- Use a crisscross sequence to tighten the transmission fluid pan screws.



19. Position the servo heat shield over the servos and clip it to the pan rail.



20. Lower the vehicle.
21. Connect the battery ground cable.
22. Fill the transmission to the proper fluid level and check for proper transmission operation.
- Use MERCON ® V Automatic Transmission Fluid XT-5-QM or equivalent meeting MERCON ® V specification.
-