

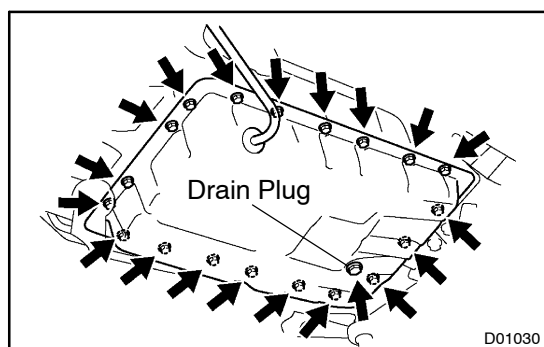
VALVE BODY ASSEMBLY ON-VEHICLE REPAIR

AT040-03

NOTICE:

When working with FIPG material, you must observe the following items.

- Using a razor blade and gasket scraper, remove all the old FIPG material from the sealing surfaces.
- Thoroughly clean all components to remove all the loose material.
- Clean both sealing surfaces with a non-residue solvent.
- Apply FIPG in an approx. 1 mm (0.04 in.) wide bead along the sealing surface.
- Parts must be assembled within 10 minutes of application. Otherwise, the FIPG material must be removed and reapplied.

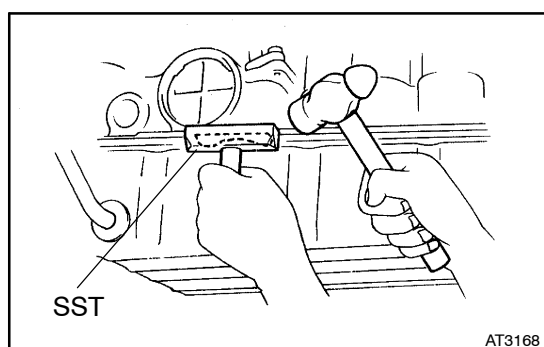


1. REMOVE DRAIN PLUG AND DRAIN ATF
2. REMOVE OIL PAN

NOTICE:

Some fluid will remain in the oil pan.

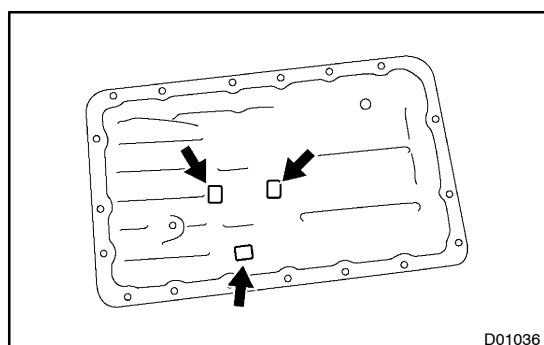
- (a) Remove the 19 bolts.



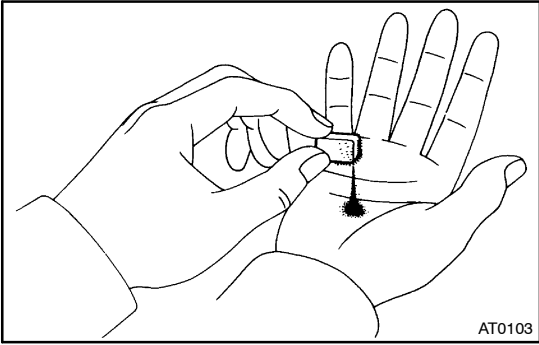
- (b) Install the blade of SST between the transmission case and oil pan, cut off applied sealer, and remove the oil pan.
SST 09032-00100

NOTICE:

When removing the oil pan, be careful not to damage the oil pan flange.



3. REMOVE 3 MAGNETS FROM OIL PAN

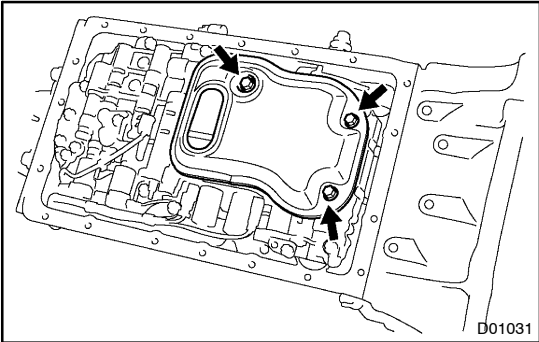


4. EXAMINE PARTICLES IN PAN

Remove the magnets and use them to collect any steel chips. Look carefully at the chips and particles in the pan and the magnet to anticipate what type of wear you will find in the transmission.

Steel (magnetic): bearing, gear and plate wear

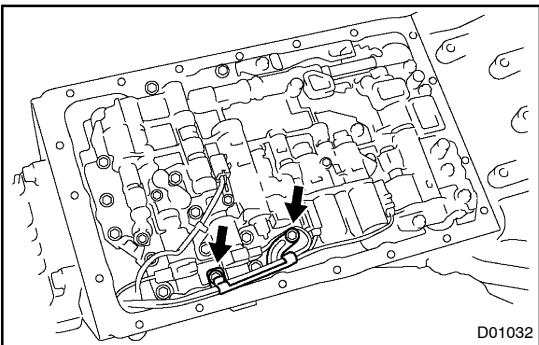
Brass (non-magnetic): bushing wear



5. REMOVE OIL STRAINER

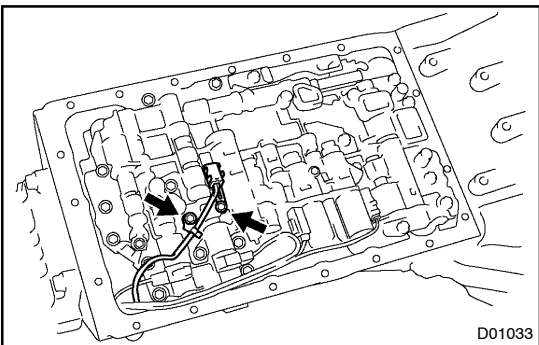
(a) Remove the 3 bolts and oil strainer from the valve body.

(b) Remove the 3 gaskets from the oil strainer.

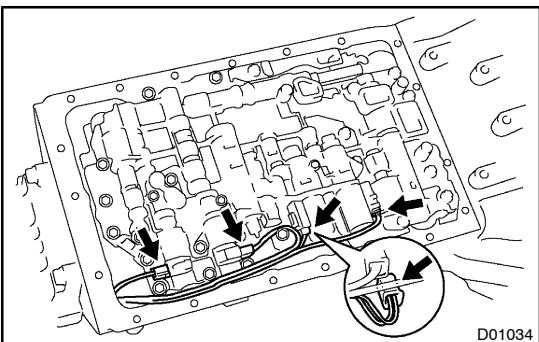


6. REMOVE SOLENOID WIRING

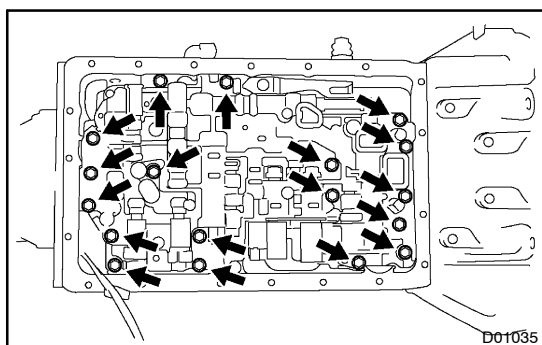
(a) Remove the 2 bolts and clamp.



(b) Remove the 2 set bolts of the clamp and disconnect the ATF Temp. sensor.



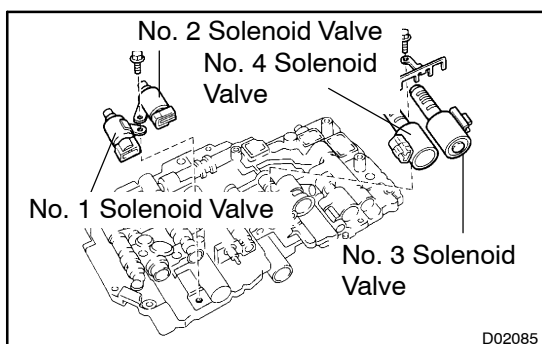
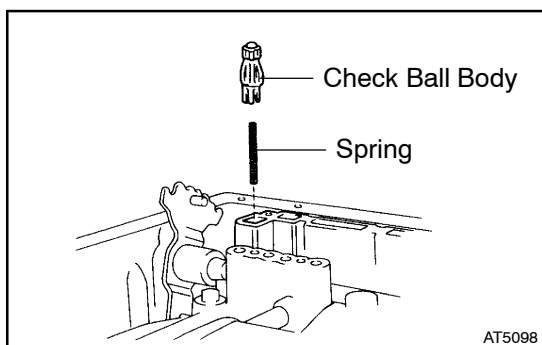
(c) Disconnect the 5 connectors from the solenoid.

**7. REMOVE VALVE BODY**

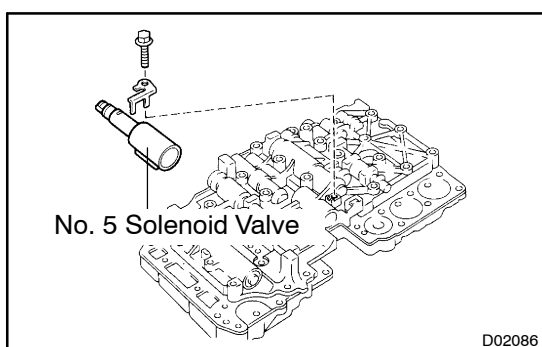
- (a) Remove the 18 bolts.
- (b) Remove the valve body.

NOTICE:

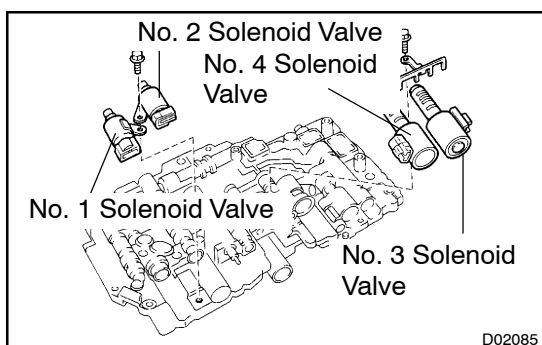
Do not drop the check ball body and spring.

**8. REMOVE SOLENOID VALVES**

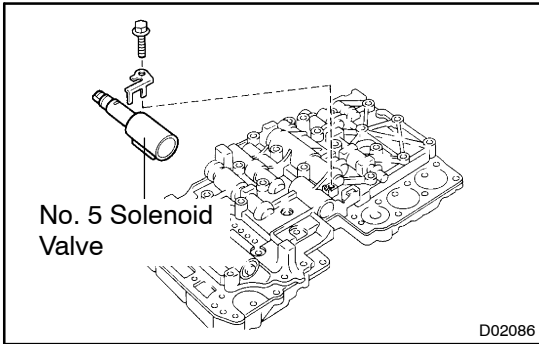
- (a) Remove the bolt, No. 1 and No. 2 solenoid valves.
- (b) Remove the 2 O-rings from the No. 1 and No. 2 solenoid valves.
- (c) Remove the bolt, lock plate, No. 3 and No. 4 solenoid valves.



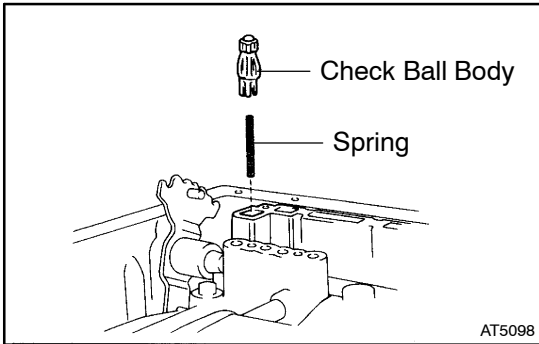
- (d) Remove the bolt, lock plate and No. 5 solenoid valve.

**9. INSTALL SOLENOID VALVES**

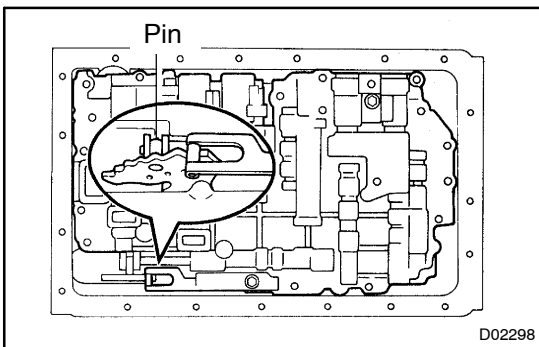
- (a) Install the No. 1, No. 2, No. 3 No. 4 solenoid valves and lock plate with 2 bolts to the lower valve body.



- (b) Install the No. 5 solenoid valve and lock plate to the upper valve body with the bolt.

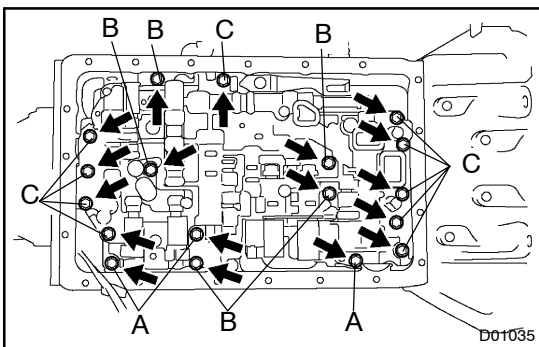


10. INSTALL CHECK BALL BODY AND SPRING AND HOLD THEM

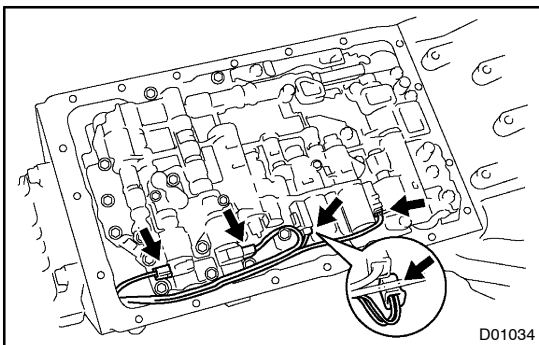


11. INSTALL VALVE BODY

- (a) Align the groove of the manual valve with the pin of the lever.

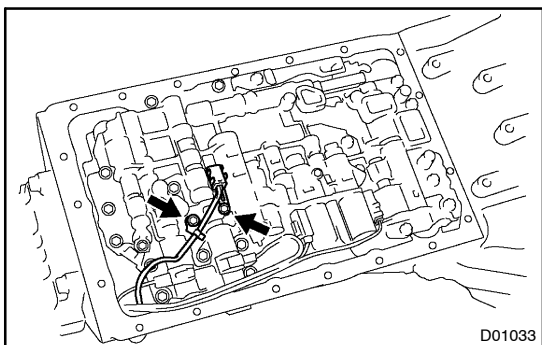


- (b) Install the valve body.
 - (c) Install and torque the 18 bolts.
- Bolt length:**
A bolt: 28.6 mm (1.13 in.)
B bolt: 33.6 mm (1.32 in.)
C bolt: 41.6 mm (1.64 in.)
Torque: 10 N·m (100 kgf·cm, 7 ft·lbf)

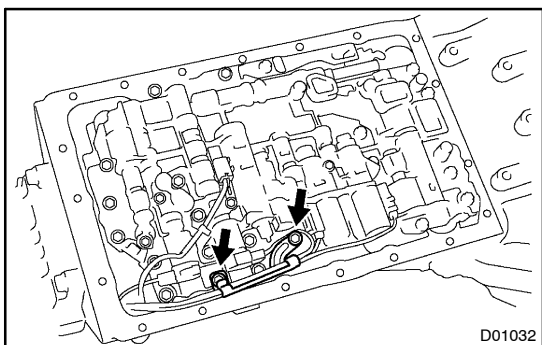


12. INSTALL SOLENOID WIRING

- (a) Connect the 5 connectors to the 5 solenoid valves.



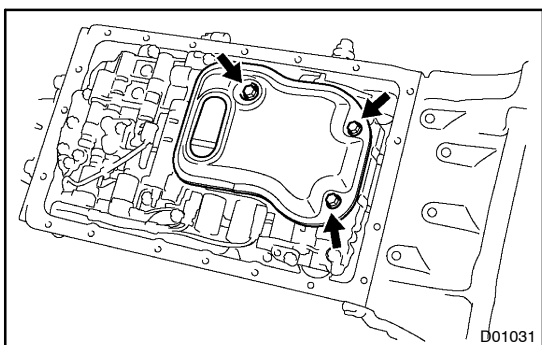
- (b) Set the ATF Temp. sensor.
- (c) Install and torque the 2 set bolts of the clamp.
Torque: 6.6 N·m (68 kgf·cm, 58 in·lbf)



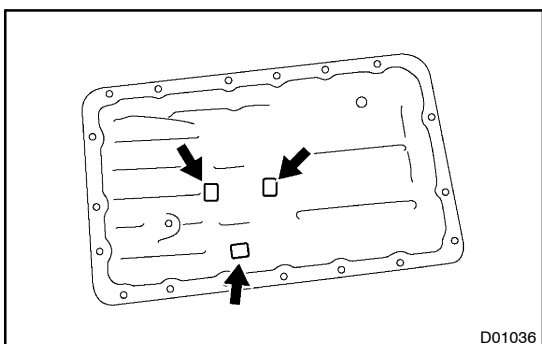
- (d) Install the clamp.
- (e) Install and torque the 2 bolts.
Torque: 10 N·m (100 kgf·cm, 7 ft·lbf)

13. INSTALL OIL STRAINER

- (a) Install new 3 gaskets to the oil strainer.

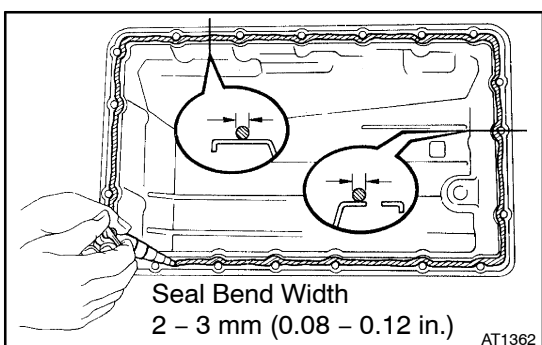


- (b) Install the oil strainer to the valve body.
- (c) Install and torque the 3 bolts.
Torque: 10 N·m (100 kgf·cm, 7 ft·lbf)

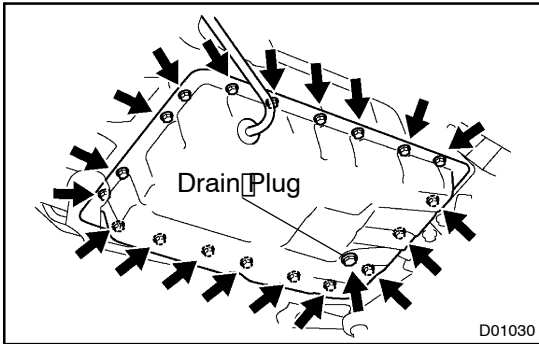


14. INSTALL OIL PAN

- (a) Install the 3 magnets in the indentations of the oil pan, as shown in the illustration.



- (b) Remove any FIPG, and be careful not to drop oil on the contacting surfaces of the transmission case and oil pan.
- (c) Apply FIPG to the oil pan, as shown in the illustration.
FIPG:
Part No. 08826-00090, THREE BOND 1281 or equivalent



(d) Install the oil pan to the transmission case.

(e) Install and torque the 19 bolts.

Torque: 7.3 N·m (75 kgf·cm, 65 in·lbf)

15. INSTALL AND TORQUE DRAIN PLUG

Torque: 20 N·m (205 kgf·cm, 15 ft·lbf)

16. FILL ATF AND CHECK FLUID LEVEL

(See page DI-3)