

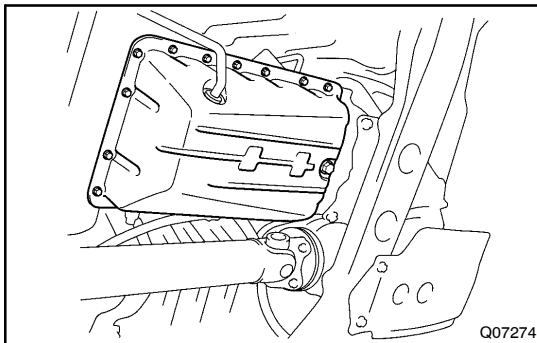
VALVE BODY ASSEMBLY ON-VEHICLE REPAIR

AT089-01

CAUTION:

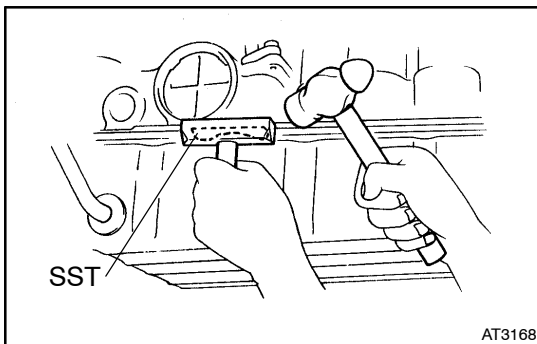
- When working with FIPG material, you must observe the followings.
- Using a razor blade and a gasket scraper, remove all old FIPG material from the gasket surfaces.
- Thoroughly clean all components to remove all loose material. Clean both sealing surfaces with a non-residue solvent.
- Apply FIPG in 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 NO.2 ENGINE UNDER COVER
2. DRAIN ATF

**3. REMOVE OIL PAN****NOTICE:**

Some fluid will remain in the oil pan.

- (a) Remove the 19 bolts.

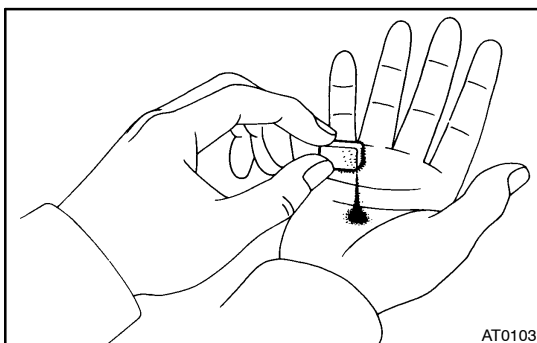


- (b) Install the blade of SST between the transmission case and oil pan, cut off applied sealer and then remove the oil pan.

SST 09032-00100

NOTICE:

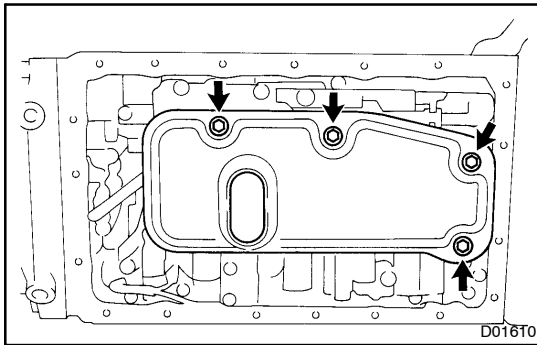
When removing the oil pan, be careful not to damage the oil pan flange.

**4. EXAMINE PARTICLES IN PAN**

Remove the magnets and use them to collect steel particles. Carefully look at the foreign matter and particles in the pan and on the magnets to anticipate the type of wear you will find in the transmission.

Steel (magnetic)...bearing, gear and clutch plate wear

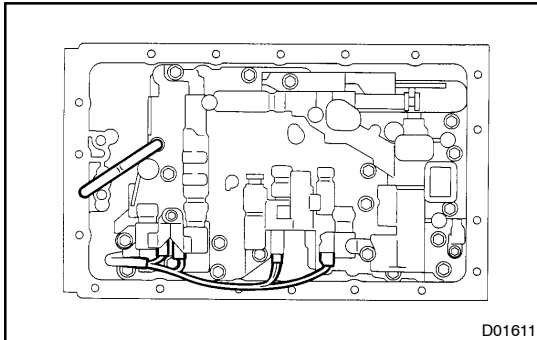
Brass (non-magnetic)...bushing wear

**5. REMOVE OIL STRAINER**

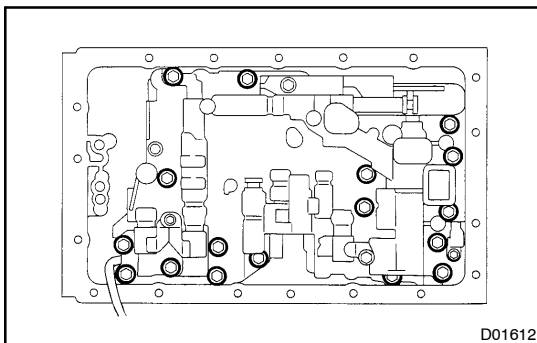
Remove the 4 bolts, oil strainer and 3 gaskets.

NOTICE:

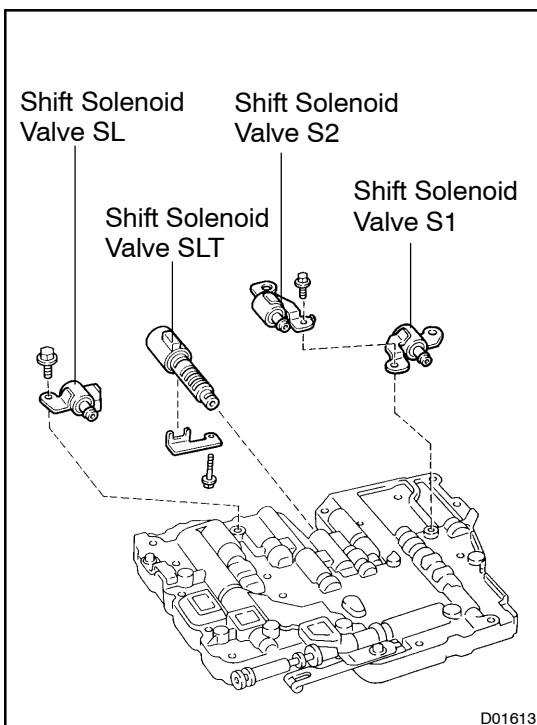
Be careful as some fluid will come out with the oil strainer.

**6. REMOVE OIL PIPE**

Pry up both pipe ends with a large screwdriver and remove the pipe.

7. DISCONNECT 4 CONNECTORS FROM SHIFT SOLENOID VALVES**8. REMOVE VALVE BODY**

Remove the 17 bolts and valve body.

**9. REMOVE SOLENOID VALVE**

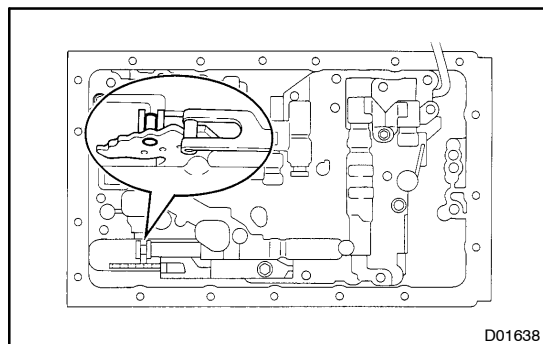
- (a) Remove the 2 bolts and 3 solenoid valves.
- (b) Turn the valve body, remove the bolt, lock plate and solenoid valve.
- (c) Remove the 3 O-rings from the 3 solenoid valves.

10. REMOVE DETENT SPRING**11. REMOVE MANUAL VALVE****12. INSTALL MANUAL VALVE****13. INSTALL DETENT SPRING**

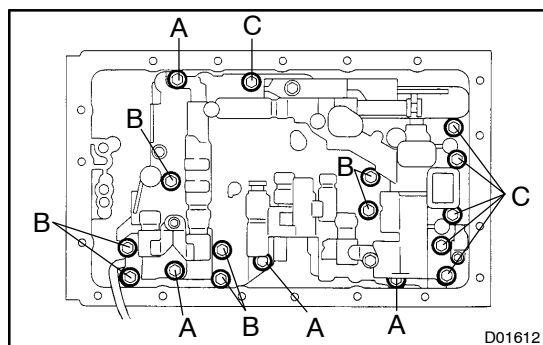
Torque: 10 N·m (100 kgf·cm, 7 ft·lbf)

14. INSTALL SOLENOID VALVE

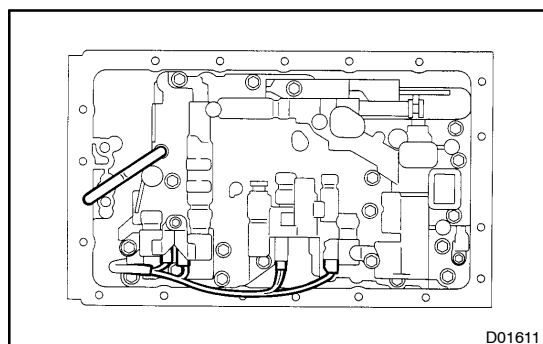
- (a) Install new 3 O-rings to 3 solenoid valves.
- (b) Install the solenoid valve and lock plate with bolt.
Torque: 10 N·m (100 kgf·cm, 7 ft·lbf)
- (c) Install the 3 solenoid valves with the 3 bolts.
Torque: 10 N·m (100 kgf·cm, 7 ft·lbf)

**15. INSTALL VALVE BODY****HINT:**

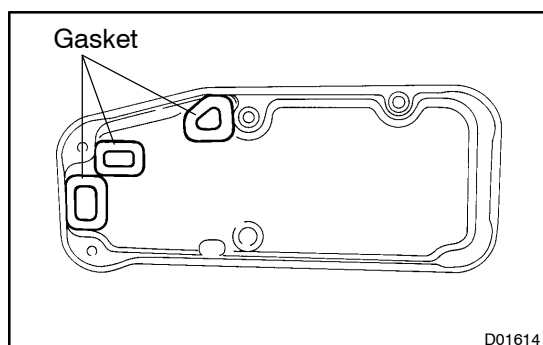
Align the groove of the manual valve with the pin of the lever.



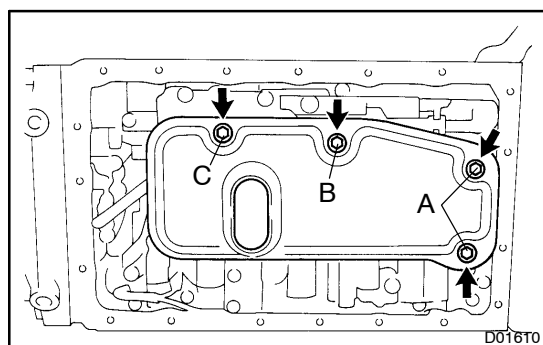
Install the 17 bolts and valve body.

Torque: 11 N·m (110 kgf·cm, 8 ft·lbf)**Bolt length:****Bolt A: 23 mm (0.91 in.)****Bolt B: 28 mm (1.10 in.)****Bolt C: 36 mm (1.42 in.)****16. INSTALL OIL PIPE****NOTICE:**

Make sure that the magnets on the oil pan do not interfere with the oil pipe.

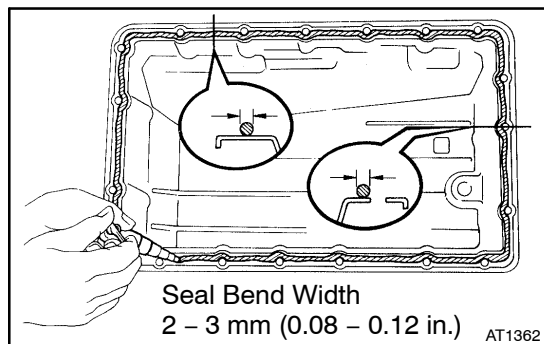
17. CONNECT 4 CONNECTORS TO SHIFT SOLENOID VALVES**18. INSTALL OIL STRAINER**

(a) Install 3 new gaskets.



(b) Install the oil strainer with the 4 bolts.

Torque: 10 N·m (100 kgf·cm, 7 ft·lbf)**Bolt length:****Bolt A: 14 mm (0.55 in.)****Bolt B: 20 mm (0.79 in.)****Bolt C: 23 mm (0.91 in.)**

**19. INSTALL OIL PAN****HINT:**

Remove any packing material and be careful not to drop oil on the contacting surfaces of the transmission case and oil pan.

- (a) Apply FIPG to the oil pan, as shown in the illustration.

FIPG: Part No. 08826-00090, THREE BOND 1281 or equivalent

- (b) Install the 19 bolts and oil pan.

Torque: 7.4 N·m (75 kgf·cm, 65 in·lbf)

20. FILL ATF AND CHECK ATF

- (a) Install a new gasket and drain plug.

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

- (b) Fill new fluid through the filler pipe (See page [DI-164](#)).

21. INSTALL NO.2 ENGINE UNDER COVER