

VALVE BODY ASSEMBLY ON-VEHICLE REPAIR

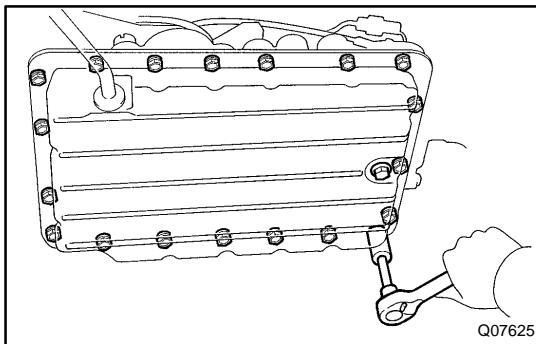
ATOYO-01

CAUTION:

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

- 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 DRAIN PLUG AND DRAIN ATF

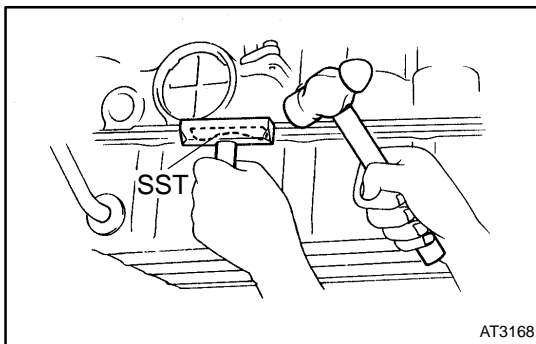


2. REMOVE OIL PAN

NOTICE:

Some fluid will remain in the oil pan.

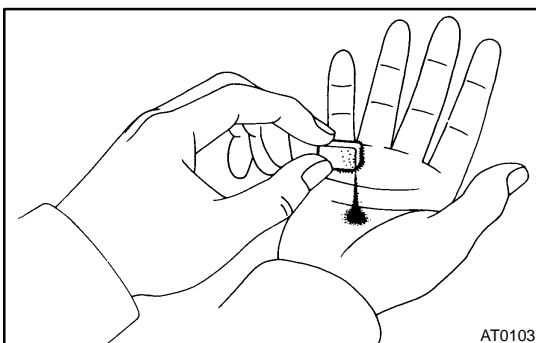
- (a) Remove the 19 bolts.



- (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.

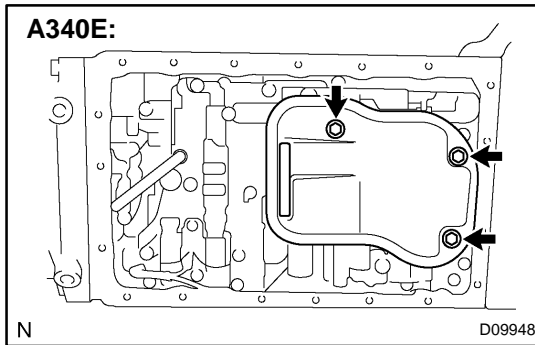


3. EXAMINE PARTICLES IN PAN

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

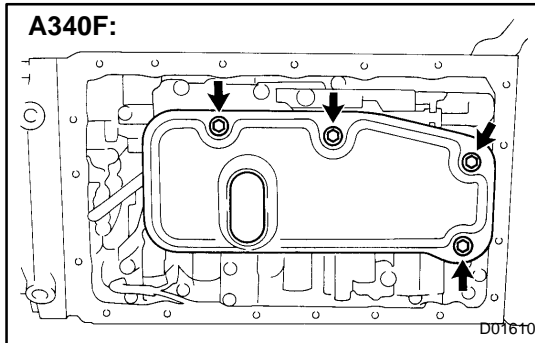
Brass (non-magnetic) ... bushing wear



**4. A340E:
REMOVE OIL STRAINER**

NOTICE:

Be careful as some fluid will come out of the oil strainer.
Remove the 3 bolts, oil strainer and gaskets.

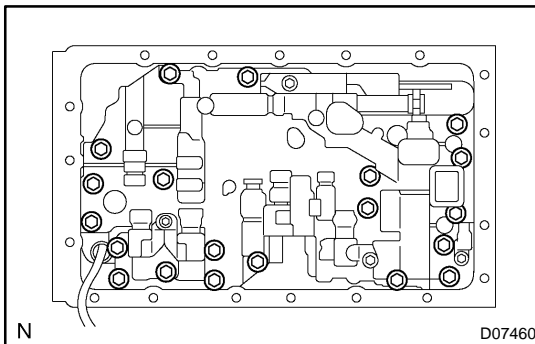


**5. A340F:
REMOVE OIL STRAINER**

NOTICE:

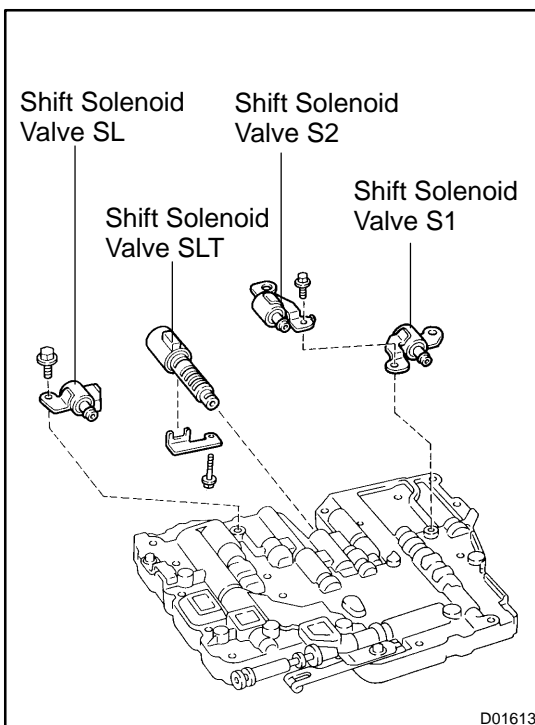
Be careful as some fluid will come out of the oil strainer.
Remove the 4 bolts, oil strainer and gaskets.

6. DISCONNECT 4 CONNECTORS FROM EACH SHIFT SOLENOID VALVE



7. REMOVE VALVE BODY

Remove the 20 bolts and valve body.



8. REMOVE SHIFT SOLENOID VALVE

- Remove the 2 bolts and 3 shift solenoid valves.
- Turn the valve body, remove the bolt, lock plate and shift solenoid valve.

- Remove the 3 O-rings from the 3 solenoid valves.

9. REMOVE DETENT SPRING

10. REMOVE MANUAL VALVE

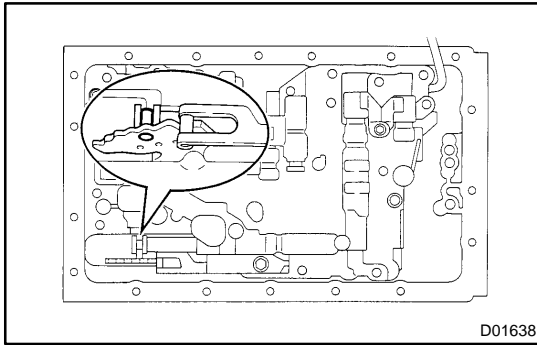
11. INSTALL MANUAL VALVE

12. INSTALL DETENT SPRING

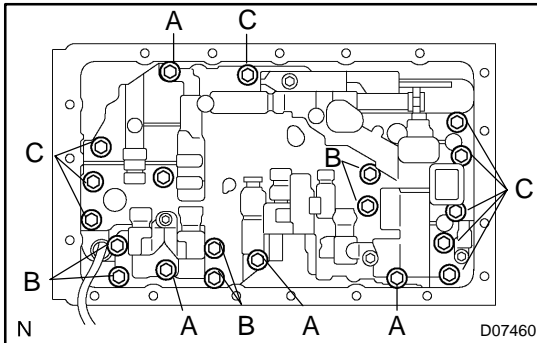
Torque: 10 N·m (100 kgf-cm, 7 ft-lbf)

13. INSTALL SOLENOID VALVE

- Install 3 new O-rings to 3 shift solenoid valves.
- Install the shift solenoid valve and lock plate with the bolt.
Torque: 10 N·m (100 kgf-cm, 7 ft-lbf)
- Install the 3 shift solenoid valves with the 2 bolts.
Torque: 10 N·m (100 kgf-cm, 7 ft-lbf)

**14. INSTALL VALVE BODY**

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



- (b) Install the valve body with the 20 bolts.

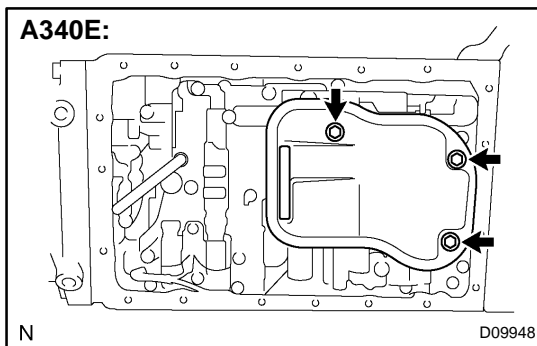
Torque: 11 N·m (110 kgf-cm, 8 ft-lbf)

Bolt length:

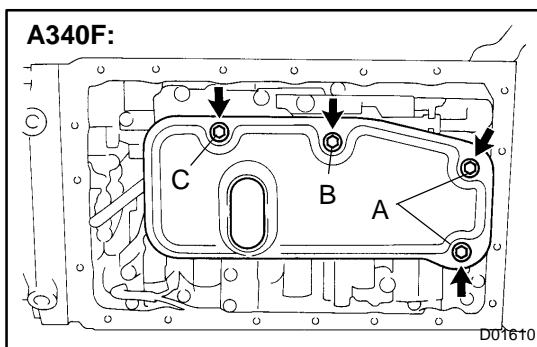
Bolt A: 23 mm (0.91 in.)

Bolt B: 28 mm (1.10 in.)

Bolt C: 36 mm (1.42 in.)

15. CONNECT 4 CONNECTORS TO SHIFT SOLENOID VALVES**16. A340E:****INSTALL OIL STRAINER**

- (a) Install the oil strainer with the 3 bolts.
Torque: 10 N·m (100 kgf-cm, 7 ft-lbf)
 (b) Clamp the solenoid wire.

**17. A340F:****INSTALL OIL STRAINER**

Install the oil strainer with the 4 bolts.

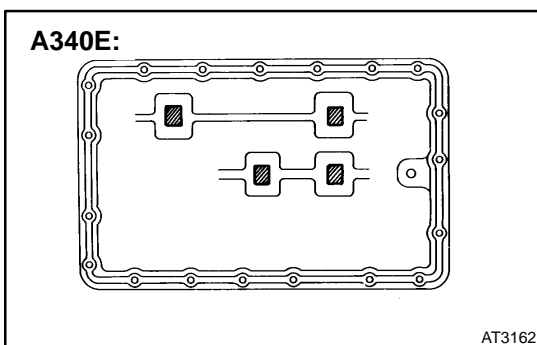
Torque: 10 N·m (100 kgf-cm, 7 ft-lbf)

BOLT length:

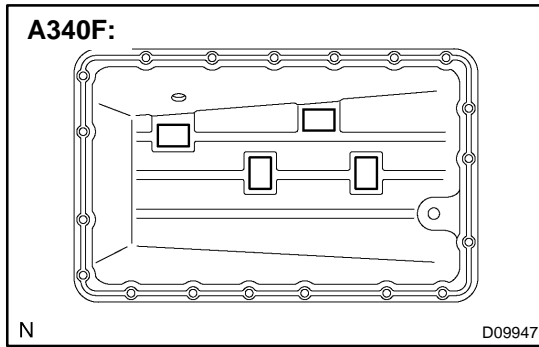
Bolt A: 14 mm (0.55 in.)

Bolt B: 20 mm (0.79 in.)

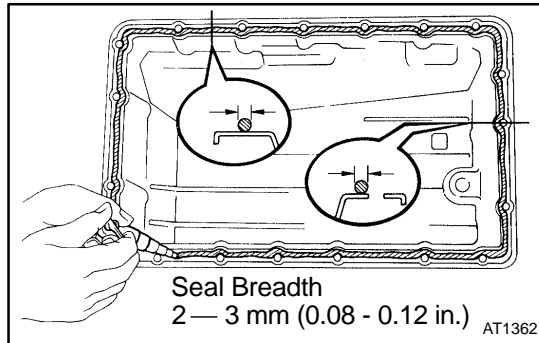
Bolt C: 23 mm (0.91 in.)

**18. INSTALL OIL PAN**

- (a) A340E:
 Install the 4 magnets in the indications of the oil pan.



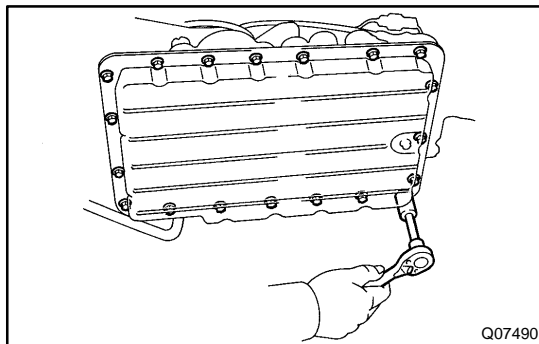
- (b) A340F:
Install the 4 magnets in the indications of the oil pan.



- (c) Remove any FIPG material and be careful not to drop oil on the contacting surfaces of the transmission case and oil pan.
(d) Apply FIPG to the oil pan.

FIPG:

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



- (e) Install the oil pan with the 19 bolts.
Torque: 7.4 N·m (75 kgf·cm, 65 ft·lbf)
19. INSTALL DRAIN PLUG
Torque: 20 N·m (205 kgf·cm, 15 ft·lbf)
20. FILL AND CHECK ATF (See page [DI-159](#))