VALVE BODY ASSEMBLY

AT02Q-01

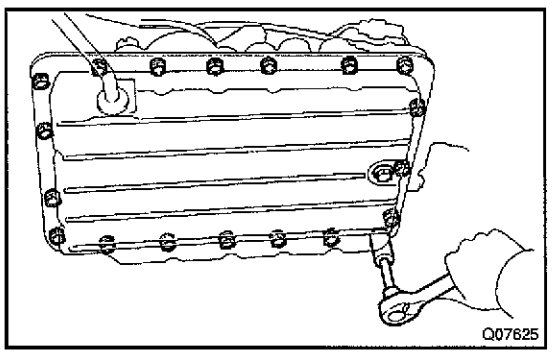
ON–VEHICLE REPAIR

NOTICE:

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 DRAIN PLUG AND DRAIN ATF

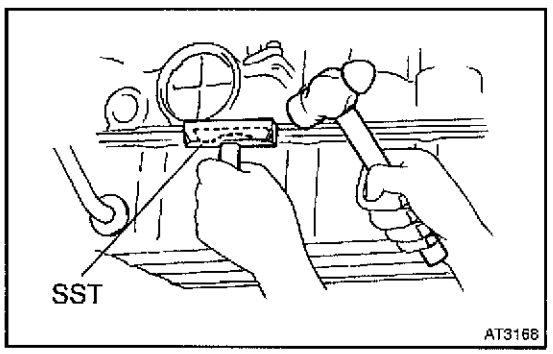


2. REMOVE OIL PAN

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:

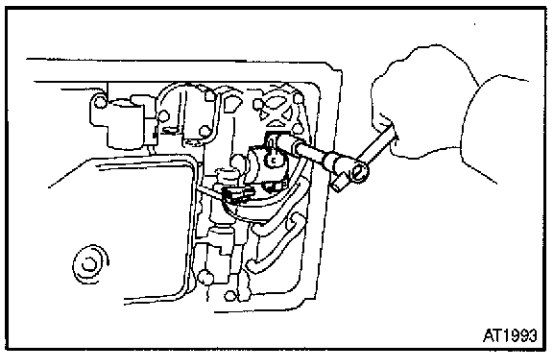
When removing the oil pan, be careful not to damage the oil pan flange.

3. REMOVE 3 MAGNETS FROM OIL PAN

4. EXAMINE PARTICLES IN PAN

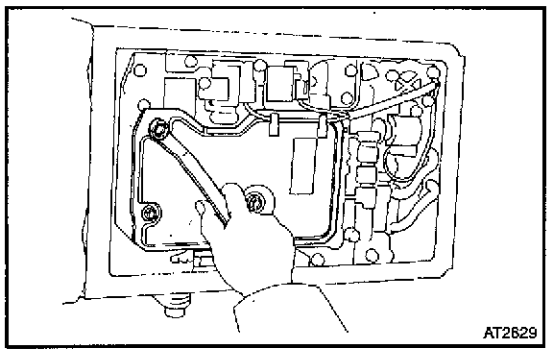
Remove the magnets and use them to collect any steel chips. Look carefully at the chips and particles in the pan and the magnet to anticipate what type of wear you will find in the transmission.

- Steel (magnetic): bearing, gear and plate wear
- Brass (non–magnetic): bushing wear



5. WHEN REPLACING 3 SHIFT SOLENOID VALVES

(a) Disconnect the connectors from the solenoid valves.
(b) Remove the 3 solenoid valve mounting bolts.
(c) Remove the 3 solenoid valves.



6. REMOVE OIL STRAINER AND GASKETS

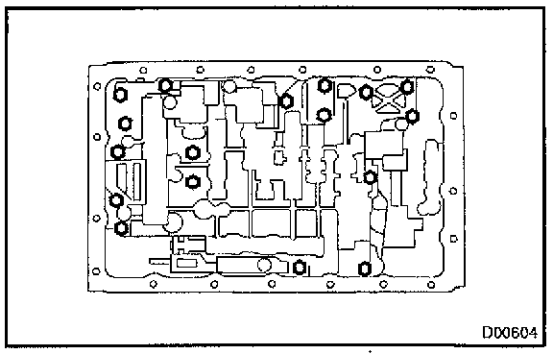
NOTICE:

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

Remove the 3 bolts, the oil strainer and gasket.

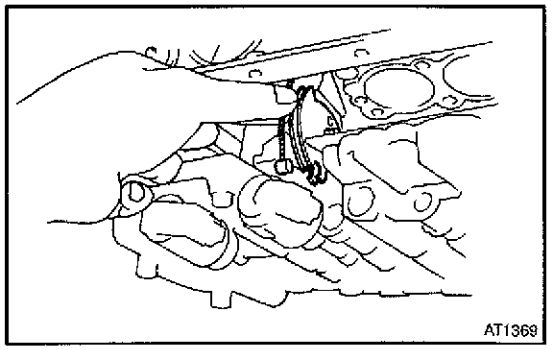
7. REMOVE OIL PIPES

Pry up both pipes ends with a large screwdriver and remove the 2 oil pipes.



8. REMOVE VALVE BODY

(a) Remove the 17 bolts.
(b) Remove the 2 C_0 accumulator piston springs.



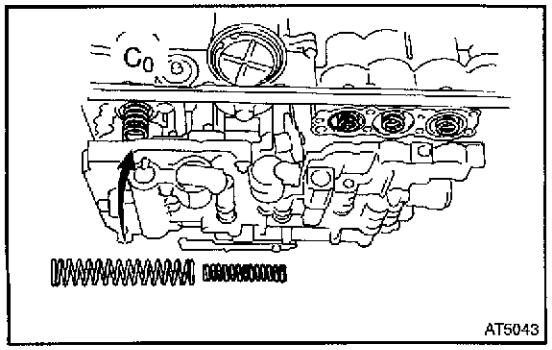
(c) Disconnect the throttle cable from the cam.
(d) Remove the valve body.

NOTICE:

Be careful not to drop the check ball body and spring.

9. INSTALL VALVE BODY

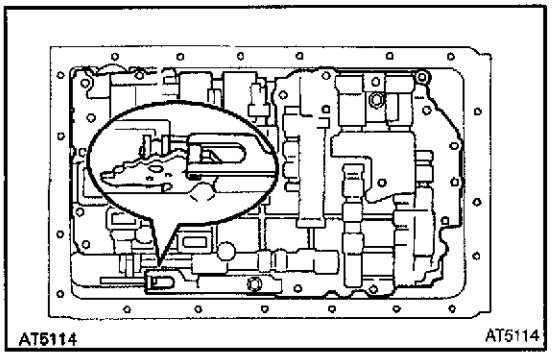
(a) Install the valve body.
(b) Connect the throttle cable to the cam.



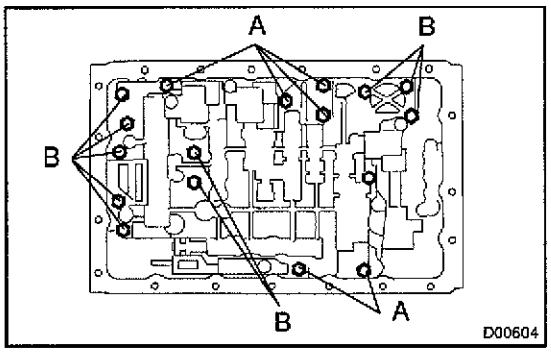
(c) Install the 2 C_0 accumulator piston springs.

C_0 accumulator piston spring:

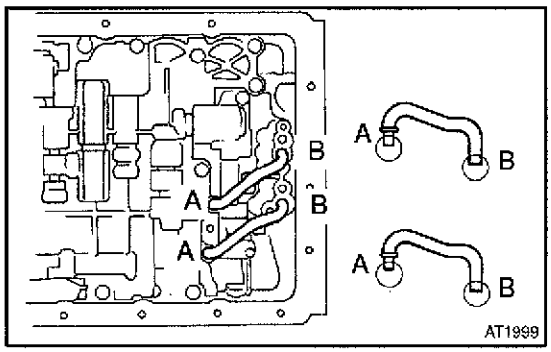
Spring	Outer mm (in.)	Inner mm (in.)
Free length	74.6 (2.937)	46.0 (1.811)
Outer diameter	20.9 (0.823)	14.0 (0.551)
Color	Orange	Yellow



(d) Align the groove of the manual valve to the pin of the lever.



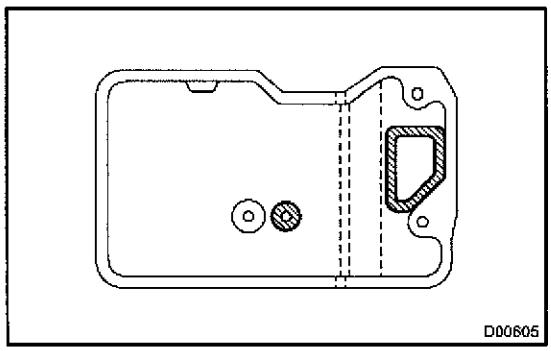
(e) Install the 17 bolts.
Torque: 10 N·m (100 kgf·cm, 7 ft·lbf)
Bolt length:
A bolt: 23 mm (0.91 in.)
B bolt: 32 mm (1.26 in.)



10. INSTALL OIL PIPES

NOTICE:

Make sure that the oil pipes or the magnet do not interfere with the oil pan.



11. INSTALL GASKETS AND OIL STRAINER

(a) Install the 2 new gaskets in the oil strainer.

(b) Install the 3 bolts.
Torque: 10 N·m (100 kgf·cm, 7 ft·lbf)

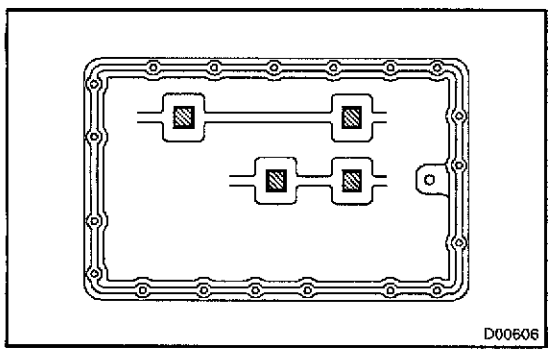
12. WHEN REPLACING 3 SHIFT SOLENOID VALVES

(a) Install the 3 solenoid valves and 3 bolts.
Torque: 10 N·m (100 kgf·cm, 7 ft·lbf)

HINT:

Replace the used O–rings with new ones.

(b) Connect the connectors to the solenoid valves.

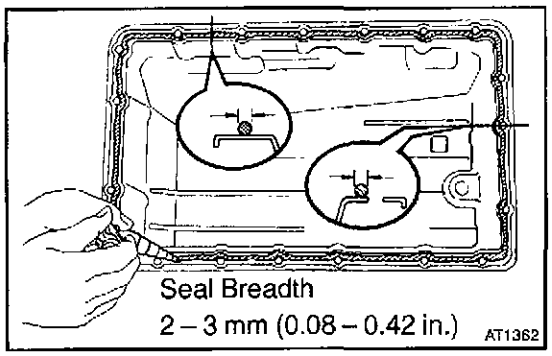


13. INSTALL MAGNETS IN PAN

Install the 3 magnets in the indications of the oil pan.

14. INSTALL OIL PAN

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



(b) Apply FIPG to the oil pan.
FIPG:
Part No. 08826–00090, THREE BOND 1281 or equivalent

(c) Install the 19 bolts.
Torque: 7.4 N·m (75 kgf·cm, 65 in.·lbf)

15. INSTALL DRAIN PLUG
Torque: 20 N·m (205 kgf·cm, 15 ft·lbf)

16. FILL ATF AND CHECK FLUID LEVEL
(See page DI–4)