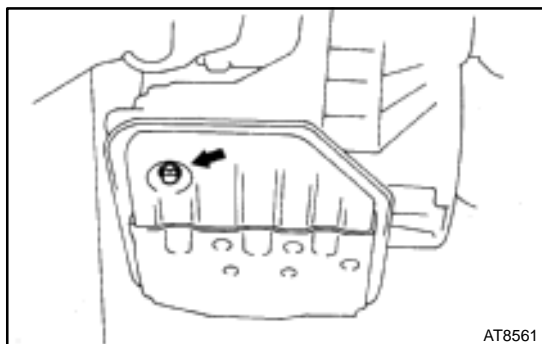


VALVE BODY ASSEMBLY ON-VEHICLE REPAIR

AX097-02

CAUTION:

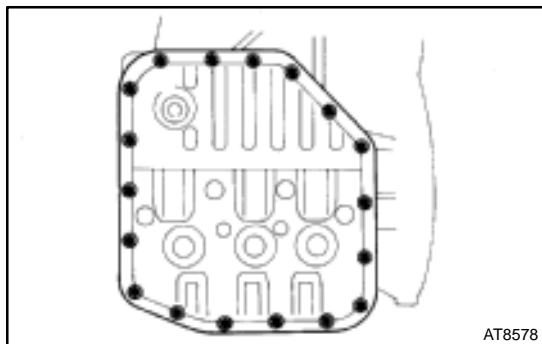
- When working with FIPG material, you must observe the following.
- Using a razor blade and gasket scraper, remove all the old FIPG material from the gasket surfaces.
- Thoroughly clean all components to remove all the loose material.
- Clean both sealing surfaces with a non-residue solvent.
- Apply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



AT8561

1. DRAIN ATF

Remove the drain plug and gasket, and drain ATF into a suitable container.



AT8578

2. REMOVE OIL PAN AND GASKET

Remove the 18 bolts, and carefully remove the oil pan assembly discarding the gasket.

NOTICE:

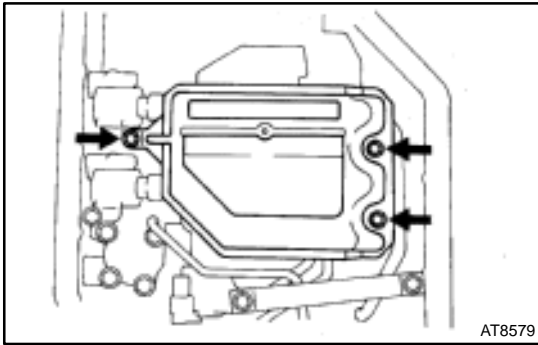
Some fluid will remain in the oil pan.

3. EXAMINE PARTICLES IN PAN

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

Steel (magnetic): bearing, gear and plate wear

Brass (non-magnetic): bushing wear

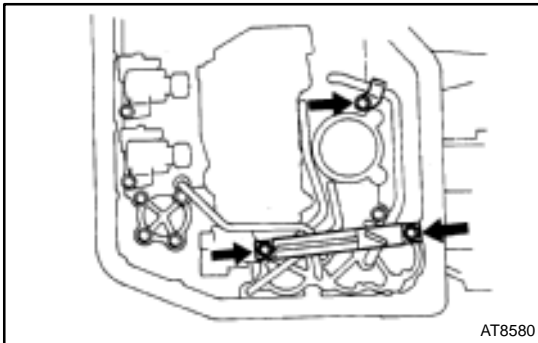
**4. REMOVE OIL STRAINER**

- (a) Remove the 3 bolts and oil strainer.

NOTICE:

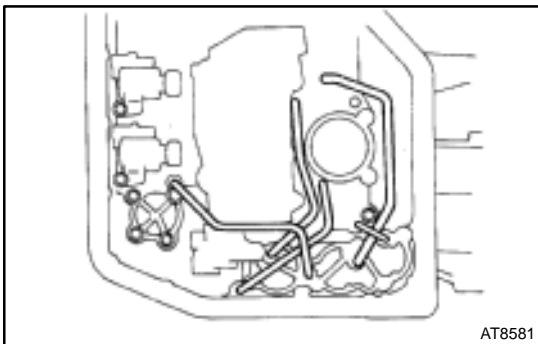
Be careful as some oil will come out with the strainer.

- (b) Remove the gasket from the oil strainer.

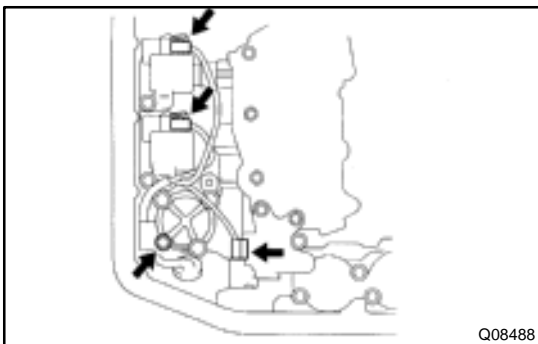
**5. REMOVE OIL PIPE BRACKET AND OIL PIPE CLAMP**

- (a) Remove the 2 bolts and oil pipe bracket.

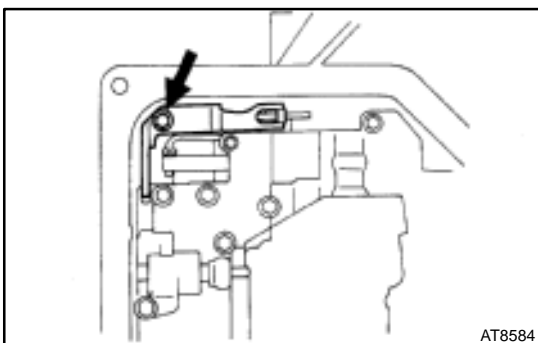
- (b) Remove the bolt and oil pipe clamp.

**6. REMOVE OIL PIPE**

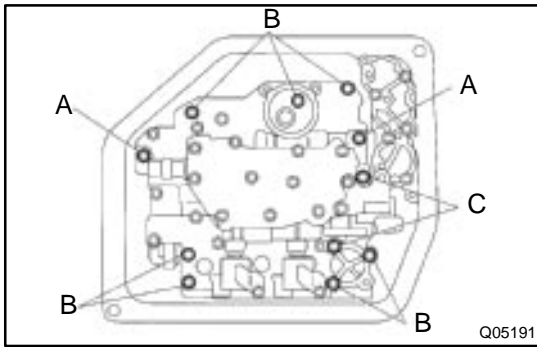
Pry up the both pipe ends with a large screwdriver and remove the 5 pipes.

**7. DISCONNECT 3 SOLENOID CONNECTORS****8. REMOVE SOLENOID WIRE ASSEMBLY CLAMP**

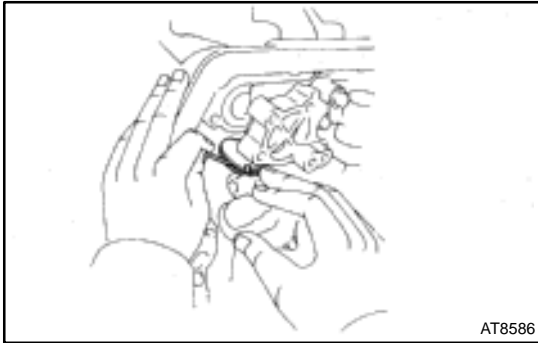
Remove the bolt and clamp.

**9. REMOVE MANUAL DETENT SPRING**

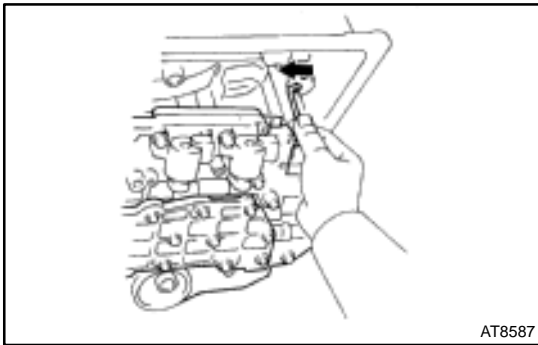
Remove the bolt and manual detent spring.

**10. REMOVE VALVE BODY**

- (a) Remove the 11 bolts.



- (b) Disconnect the throttle cable.



- (c) Remove the manual valve connecting rod.

- (d) Remove the valve body.

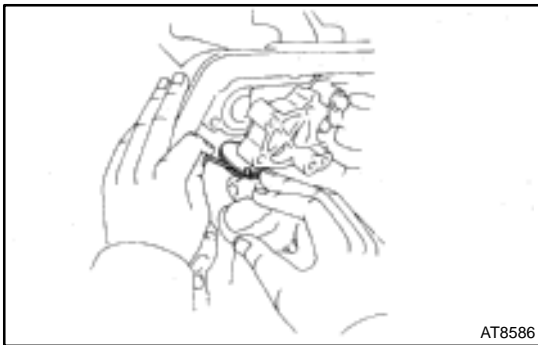
11. INSTALL VALVE BODY

- (a) Install the valve body.

NOTICE:

Be careful not to entangle the solenoid wire.

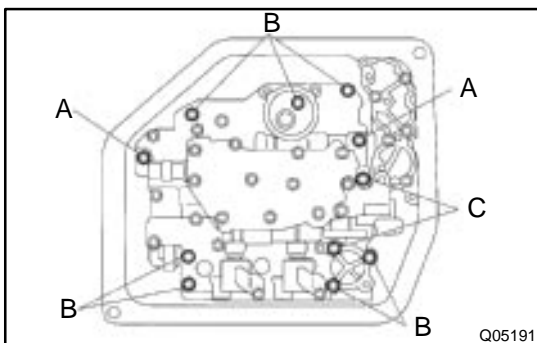
- (b) Install the manual valve connecting rod.



- (c) Connect the throttle cable.

NOTICE:

Be careful not to entangle the solenoid wire.



- (d) Install the 11 bolts.

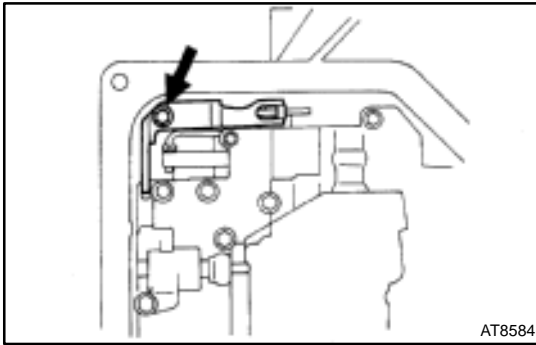
Bolt length:

A bolt: 20 mm (0.79 in.)

B bolt: 30 mm (1.18 in.)

C bolt: 47 mm (1.85 in.)

Torque: 10 N·m (100 kgf·cm, 7 ft·lbf)

**12. INSTALL MANUAL DETENT SPRING**

Install the bolt and manual detent spring.

Torque: 10 N·m (100 kgf-cm, 7 ft-lbf)

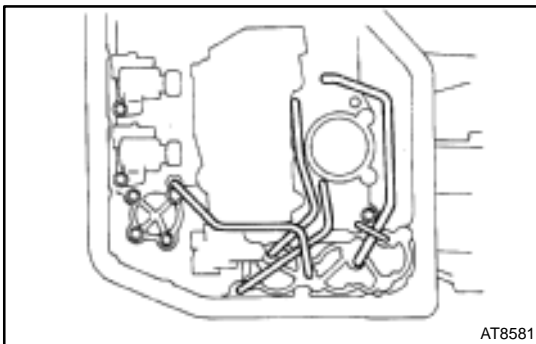
HINT:

Check that the manual valve lever is in contact with the center of the roller at the tip of the detent spring.

**13. INSTALL SOLENOID WIRE ASSEMBLY CLAMP**

Install the bolt and clamp.

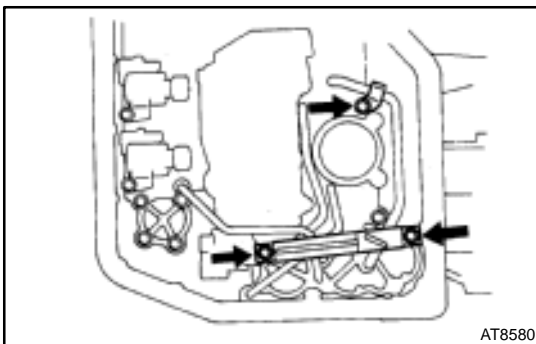
Torque: 10 N·m (100 kgf-cm, 7 ft-lbf)

14. CONNECT 3 SOLENOID CONNECTORS**15. INSTALL OIL PIPE**

Install the 5 pipes.

NOTICE:

Be careful not to bend or damage the pipe.

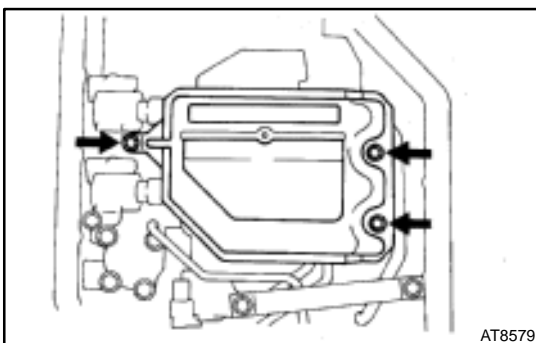
**16. INSTALL OIL PIPE BRACKET AND OIL PIPE CLAMP**

(a) Install the bolt and oil pipe clamp.

Torque: 10 N·m (100 kgf-cm, 7 ft-lbf)

(b) Install the 2 bolts and oil pipe bracket.

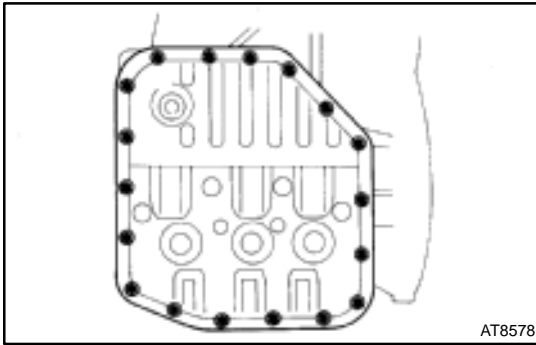
Torque: 10 N·m (100 kgf-cm, 7 ft-lbf)

**17. INSTALL OIL STRAINER**

(a) Install the new gasket to the oil strainer.

(b) Install the 3 bolts and oil strainer.

Torque: 10 N·m (100 kgf-cm, 7 ft-lbf)

**18. INSTALL OIL PAN AND GASKET**

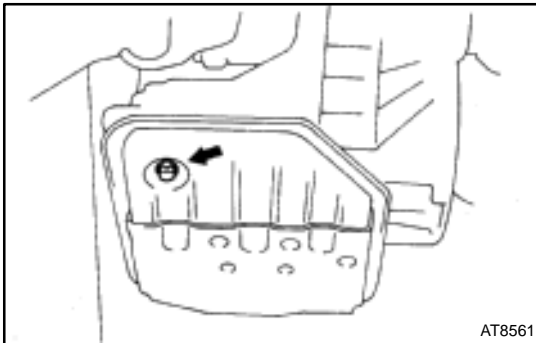
- (a) Install the 2 magnets to oil pan.

NOTICE:

Make sure that the magnet does not interfere with the oil pipes.

- (b) Install the new gasket to the oil pan assembly with the 18 bolts.

Torque: 4.9 N·m (50 kgf·cm, 43 ft·lbf)

**19. ADD ATF**

Install the drain plug and a new gasket.

Torque: 17 N·m (175 kgf·cm, 13 ft·lbf)

HINT:

After installation, fill ATF and check fluid level (See page [DI-126](#)).