

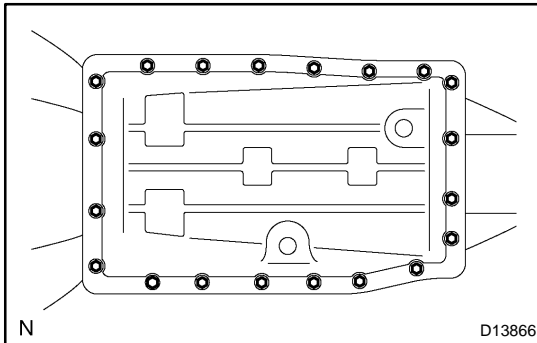
VALVE BODY ASSEMBLY ON-VEHICLE REPAIR

AT13P-01

1. DRAIN AUTOMATIC TRANSMISSION FLUID

- Remove the drain plug and gasket, and drain the ATF.
- Install a new gasket and the drain plug.

Torque: 20 N·m (204 kgf-cm, 15 ft-lbf)

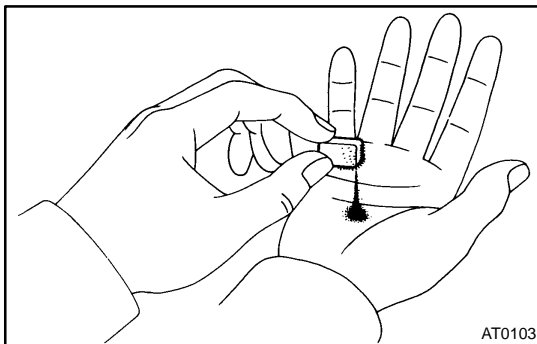


2. REMOVE OIL PAN

NOTICE:

Some fluid will remain in the oil pan.

- Remove the 20 bolts.
- Remove the oil pan gasket.

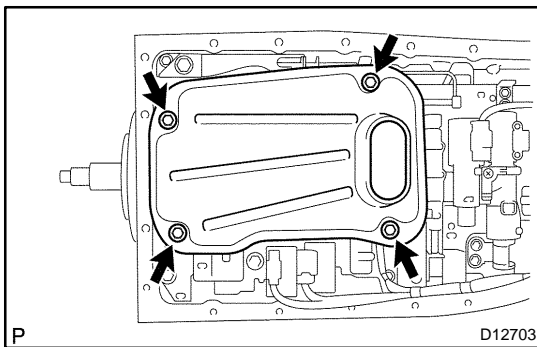


3. EXAMINE PARTICLES IN PAN

Remove the magnets and use them to collect any 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

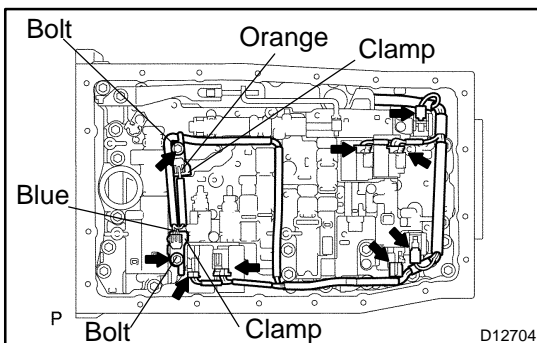


4. REMOVE OIL STRAINER

Remove the 4 bolts, the oil strainer and the O-ring.

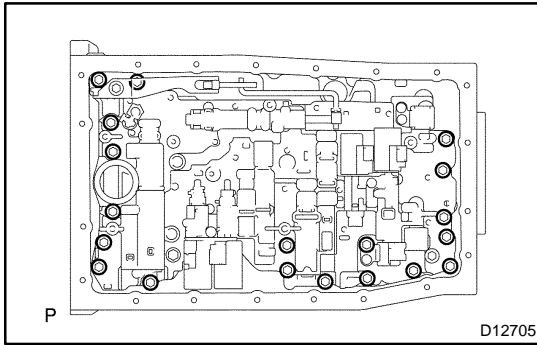
NOTICE:

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



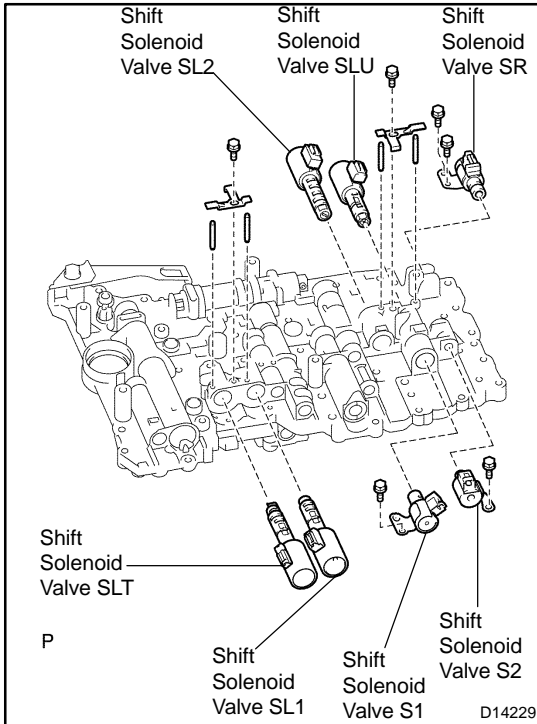
5. REMOVE ATF TEMPERATURE SENSOR

- Disconnect the 7 solenoid valve connectors.
- Remove the 2 bolts, clamps and ATF temperature sensors.



6. REMOVE VALVE BODY

- Remove the 19 bolts and the valve body.
- Remove the 3 drum seal gaskets.



7. REMOVE SOLENOID VALVE

- Remove the 2 bolts and the shift solenoid valve SR.
- Remove the 3 bolts and the shift solenoid valves S1 and S2.
- Remove the 2 bolts, 2 solenoid lock plates and the 4 straight pins.
- Remove the shift solenoid valves SL2 and SLU.
- Remove the shift solenoid valves SL1 and SLT.
- Remove the O-ring from the solenoid valve S2.

8. INSTALL SOLENOID VALVE

- Install a new O-ring to the shift solenoid valve S2.
- Install the shift solenoid valves SL1 and SLT.
- Install the shift solenoid valves SL2 and SLU.
- Install the 4 straight pins and the 2 solenoid lock plates with the 2 bolts.

Torque: 6.4 N·m (65 kgf-cm, 57 in-lbf)

- Install the shift solenoid valve S1 with the bolt.

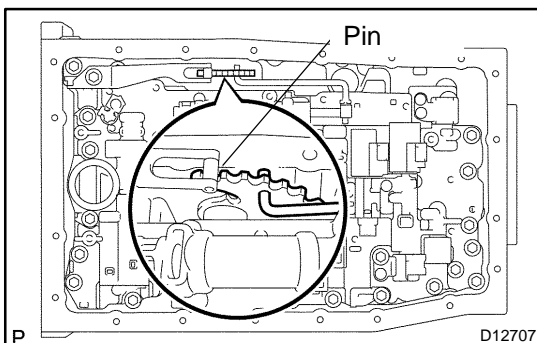
Torque: 6.4 N·m (65 kgf-cm, 57 in-lbf)

- Install the shift solenoid valve S2 with the bolt.

Torque: 10 N·m (102 kgf-cm, 7 ft-lbf)

- Install the shift solenoid valve SR with the 2 bolts.

Torque: 6.4 N·m (65 kgf-cm, 57 in-lbf)

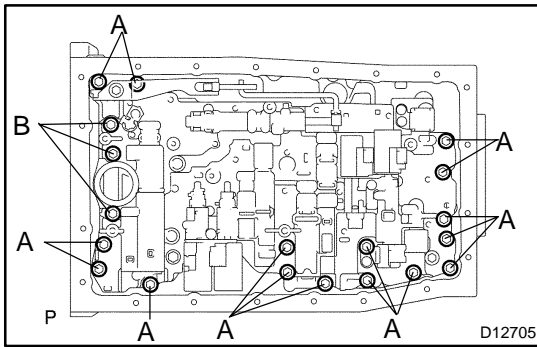


9. INSTALL VALVE BODY

HINT:

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

- Install 3 new drum seal gaskets to the transmission case.



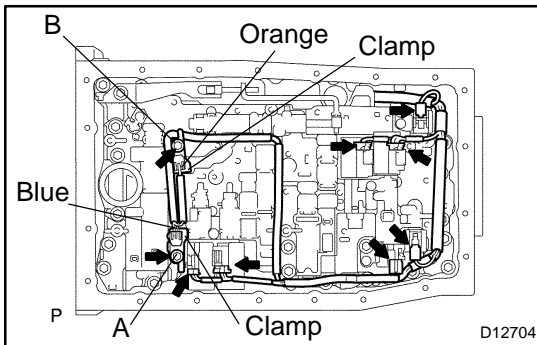
- (b) Install the 19 bolts and the valve body.

Torque: 11 N·m (112 kgf·cm, 8 ft·lbf)

Bolt length:

Bolt A: 25 mm (0.98 in.)

Bolt B: 36 mm (1.42 in.)



10. INSTALL TEMPERATURE SENSOR

- (a) Connect the 7 solenoid valve connectors.
(b) Install the 2 temperature sensors and clamps to the valve body with the 2 bolts.

HINT:

In order to install the ATF temperature sensors properly, check the wire harness color prior to installation.

Torque:

A: 11 N·m (112 kgf·cm, 8 ft·lbf)

B: 10 N·m (100 kgf·cm, 7 ft·lbf)

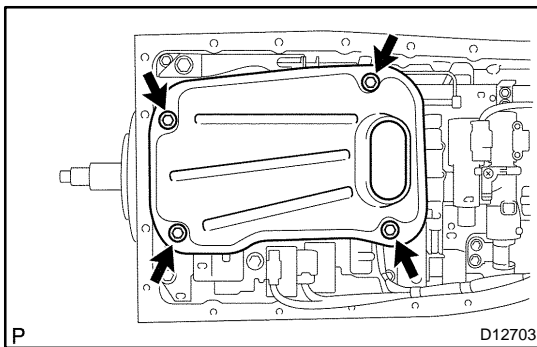
Bolt length:

Bolt A: 36 mm (1.42 in.)

Bolt B: 12 mm (0.47 in.)

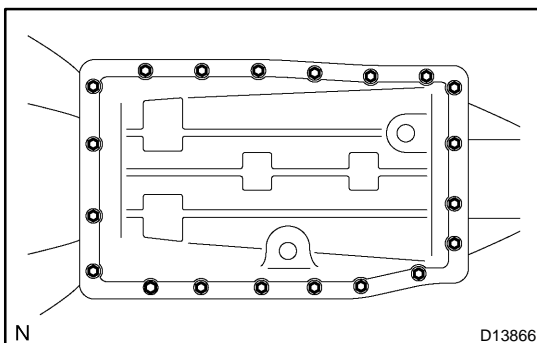
Sensor wire harness:

Wire harness	Color
for linear control	Orange
for oil temp. warning lamp	Blue



11. INSTALL OIL STRAINER

- (a) Install a new O-ring.
(b) Install the oil strainer with the 4 bolts.
Torque: 10 N·m (100 kgf·cm, 7 ft·lbf)



12. INSTALL OIL PAN

HINT:

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

Using a new gasket, install the oil pan with the 20 bolts.

Torque: 4.4 N·m (45 kgf·cm, 39 in·lbf)

13. FILL TRANSMISSION (See page AT-4)