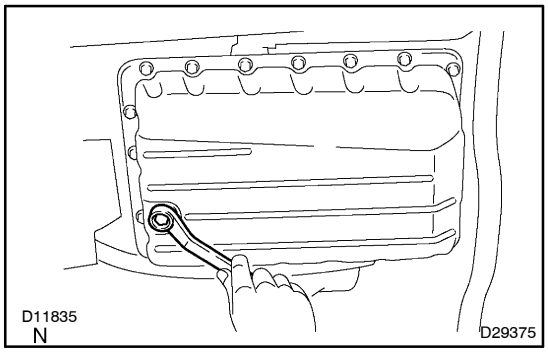
TRANSMISSION VALVE BODY ASSY (ATM)

400TL–01

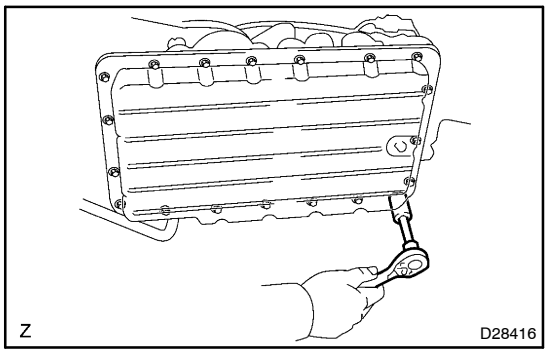
REPLACEMENT

1. SEPARATE BATTERY NEGATIVE TERMINAL
2. REMOVE ENGINE UNDER COVER ASSY REAR
3. REMOVE ENGINE UNDER COVER SUB–ASSY NO.1



4. DRAIN AUTOMATIC TRANSMISSION FLUID

(a) Remove the drain plug and drain the fluid.

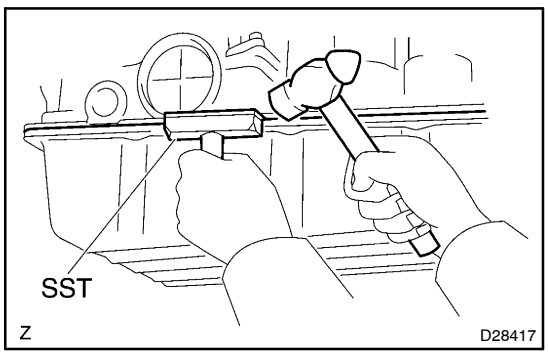


5. REMOVE AUTOMATIC TRANSMISSION OIL PAN SUB–ASSY

(a) Remove the 19 bolts.

NOTICE:

Some fluid will remain in the oil pan.

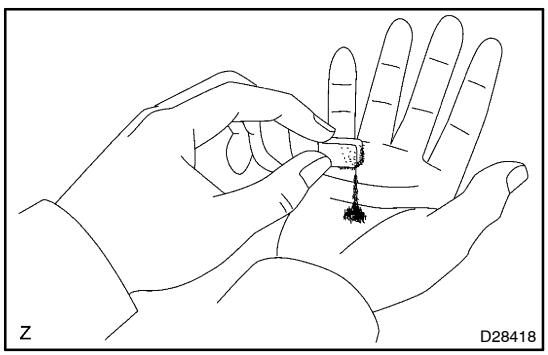


(b) Install the blade of SST between the transmission case and oil pan, cut off applied sealer and remove the transmission oil pan sub–assy.

SST 09032–00100

NOTICE:

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



6. INSPECT TRANSMISSION OIL CLEANER MAGNET

(a) Remove the magnet and use it to collect any steel chips.

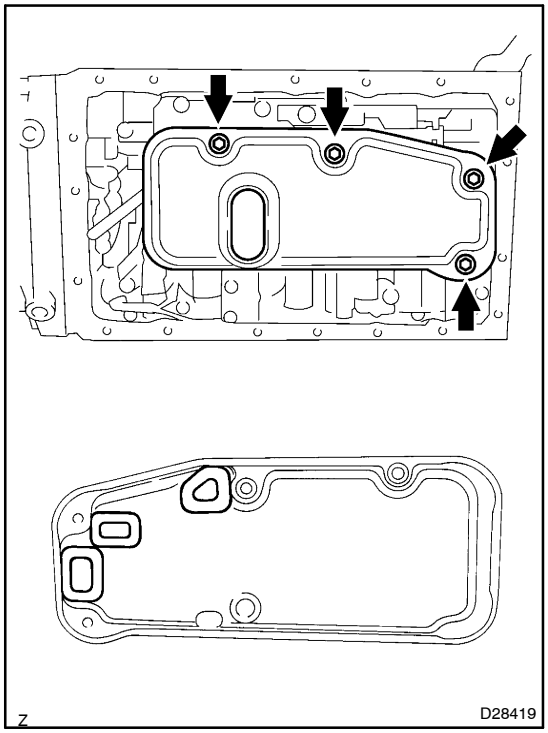
HINT:

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.

NOTICE:

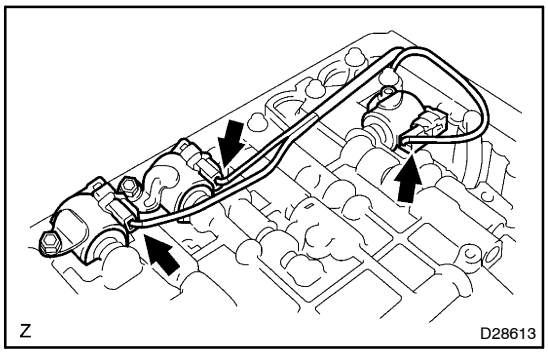
Steel (magnetic) .....bearing, gear and clutch plate wear

Brass (non–magnetic) .....bushing wear



7. REMOVE VALVE BODY OIL STRAINER ASSY

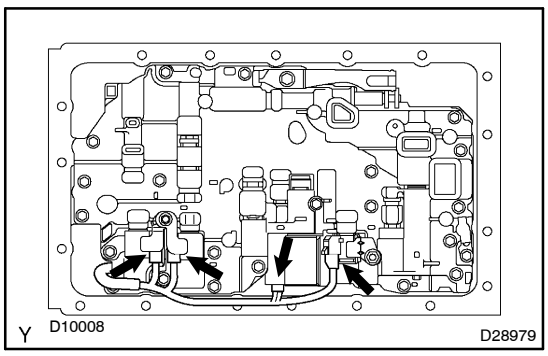
(a) Remove the 4 bolts, oil strainer and 3 gaskets.



8. DISCONNECT TRANSMISSION WIRE

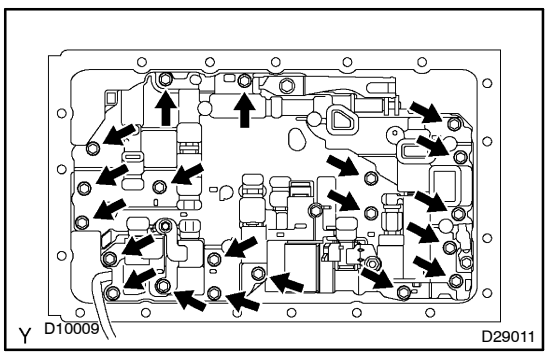
(a) 3RZ–FE:

(1) Disconnect the 3 connectors from the transmission solenoid.



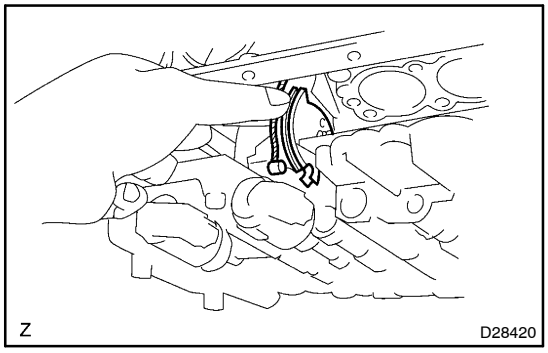
(b) 1KD–FTV, 1KZ–TE:

(1) Disconnect the 4 connectors from the transmission solenoid and line pressure control solenoid.



9. REMOVE TRANSMISSION VALVE BODY ASSY

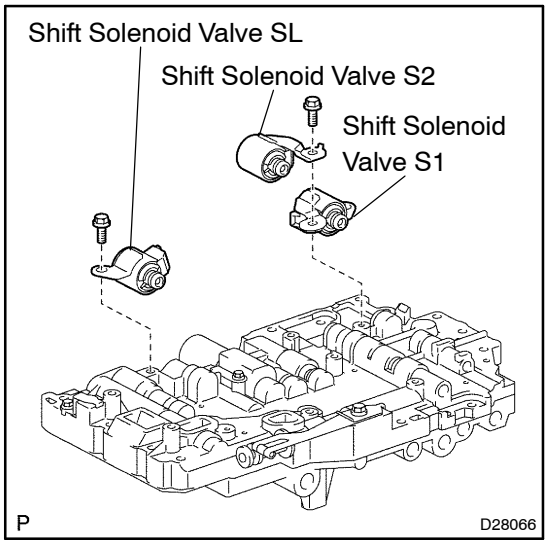
(a) Remove the 20 bolts.



(b) 3RZ–FE: Disconnect the throttle cable from the cam.
(c) Remove the valve body assy.

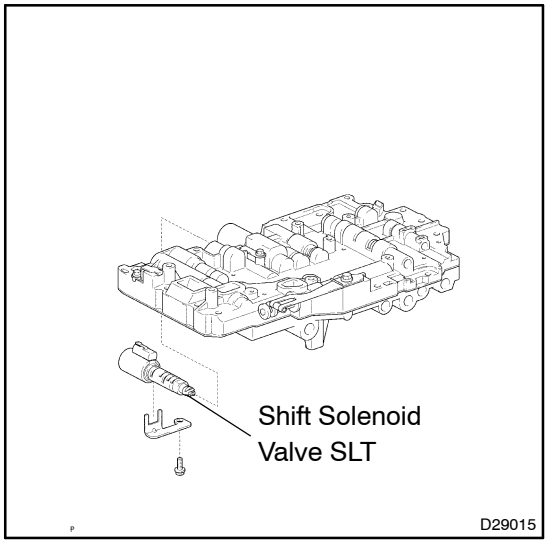
NOTICE:

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

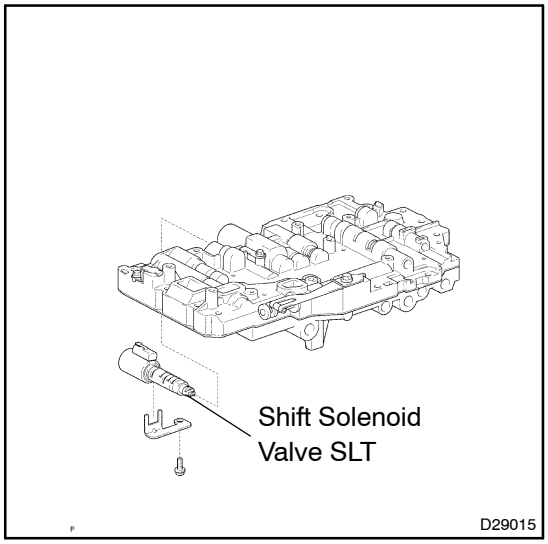


10. REMOVE SHIFT SOLENOID VALVE

(a) Remove the 2 bolts and 3 shift solenoid valves. (SL, S1, S2)
(b) Remove the 3 O–rings from the 3 solenoid valves. (SL, S1, S2)



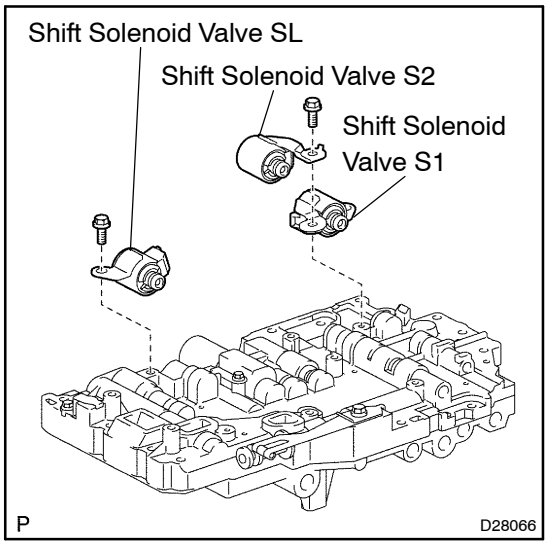
(c) 1KD–FTV, 1KZ–TE:
  (1) Remove the bolt shift solenoid valve assy. (SLT)
  (2) Remove the O–ring from the shift solenoid valve assy. (SLT)



11. INSTALL SHIFT SOLENOID VALVE

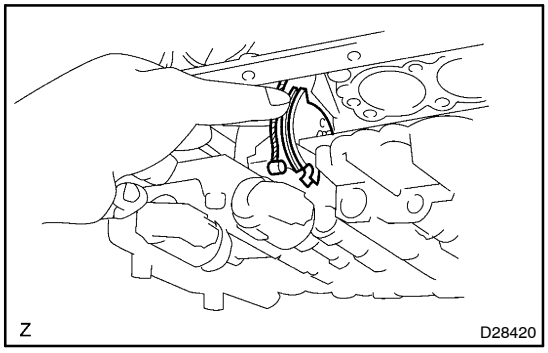
(a) 1KD–FTV, 1KZ–TE: Install a new O–ring on the shift solenoid valve assy. (SLT)

(b) 1KD–FTV, 1KZ–TE: Install the bolt and solenoid valve assy. (SLT)
Torque: 6.4 N·m (65 kgf·cm, 56 in.·lbf)



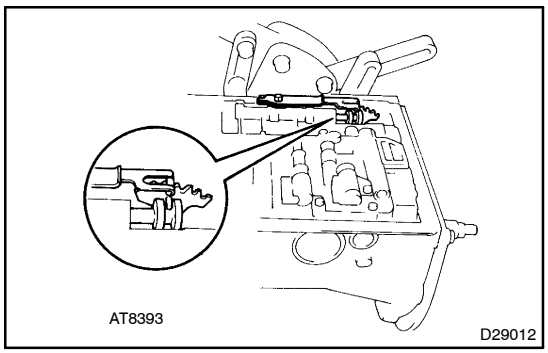
(c) Install 3 new O–ring on 3 shift solenoid assy. (SL, S1, S2)

(d) Install the 2 bolts and 3 shift solenoid assy. (SL, S1, S2)
Torque:
Bolt A: 6.4 N·m (65 kgf·cm, 56 in.·lbf)
Bolt B: 9.8 N·m (100 kgf·cm, 87 in.·lbf)

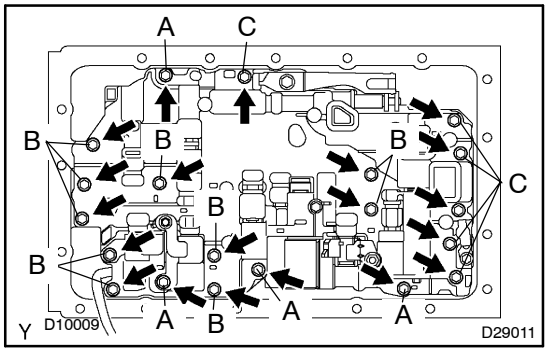


12. INSTALL TRANSMISSION VALVE BODY ASSY

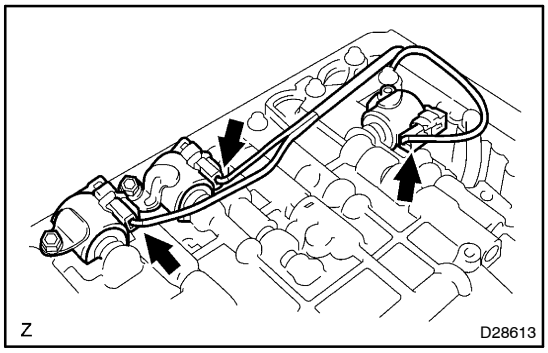
(a) 3RZ–FE: Install the throttle cable on the cam.



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

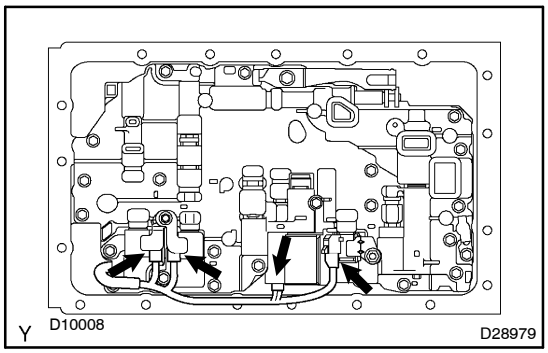


(c) Install the valve body with the 20 bolts.
Torque: 11 N·m (112 kgf·cm, 8 ft·lbf)
Bolt length:
Bolt A: 23 mm (0.91 in.)
Bolt B: 28 mm (1.10 in.)
Bolt C: 36 mm (1.42 in.)

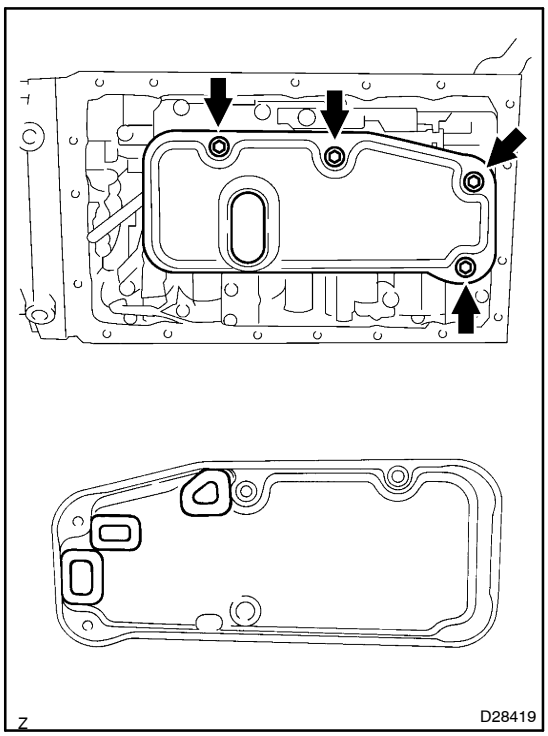


13. CONNECT TRANSMISSION WIRE

(a) 3RZ–FE: Connect the 3 connectors to the transmission solenoid.



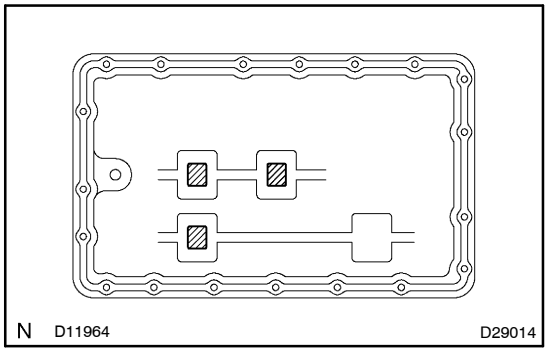
(b) 1KD–FTV, 1KZ–TE: Connect the 4 connectors to the transmission solenoid and line pressure control solenoid.



14. INSTALL VALVE BODY OIL STRAINER ASSY

(a) Install the 3 new gaskets.

(b) Install the oil strainer with the 4 bolts.
Torque: 11 N·m (12 kgf·cm, 8 ft·lbf)

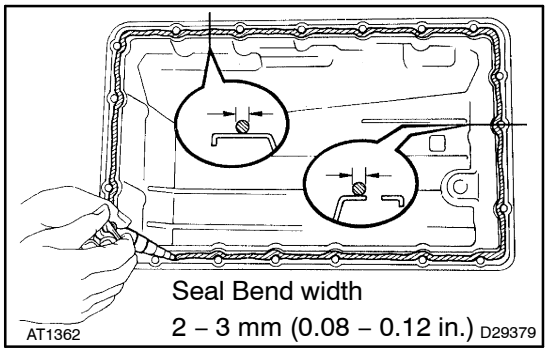


15. INSTALL AUTOMATIC TRANSMISSION OIL PAN SUB–ASSY

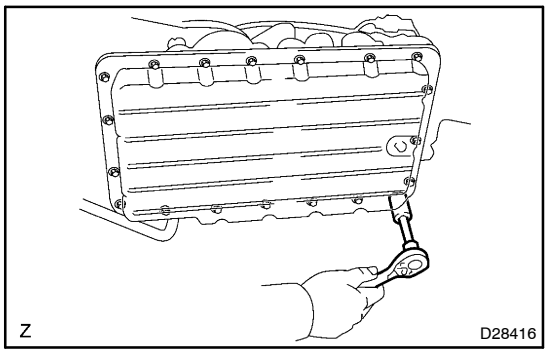
(a) Install the 3 magnets in the indications of the oil pan.

HINT:

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



(b) Apply FIPG to the oil pan, as shown in the illustration.
FIPG: Part NO.08826–0090, THREE BOND 1281 or equivalent.



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

16. ADD AUTOMATIC TRANSMISSION FLUID

(a) Install a new gasket and the drain plug.
Torque: 20 N·m (205 kgf·cm, 15 ft·lbf)

17. CONNECT BATTERY NEGATIVE TERMINAL

18. INSPECT AUTOMATIC TRANSMISSION FLUID (See page 40–2)

19. INSTALL ENGINE UNDER COVER SUB–ASSY NO.1
Torque: 29 N·m (296 kgf·cm, 21 ft·lbf)

20. INSTALL ENGINE UNDER COVER ASSY REAR
Torque: 29 N·m (296 kgf·cm, 21 ft·lbf)