ON-VEHICLE REPAIR

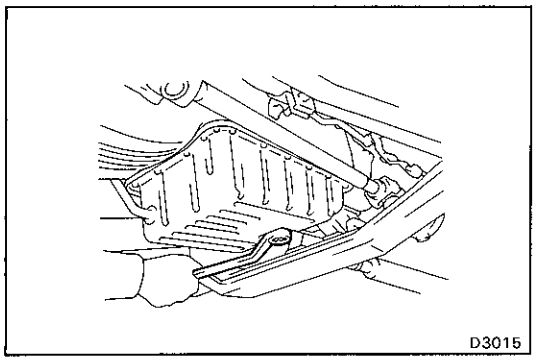
Valve Body

REMOVAL OF VALVE BODY

1. MAKE PLATE TO RETAIN ACCUMULATOR PISTONS

A retainer is helpful for holding accumulator pistons in the case during removal and installation of the valve body.

The plate may be made from aluminum or plastic.



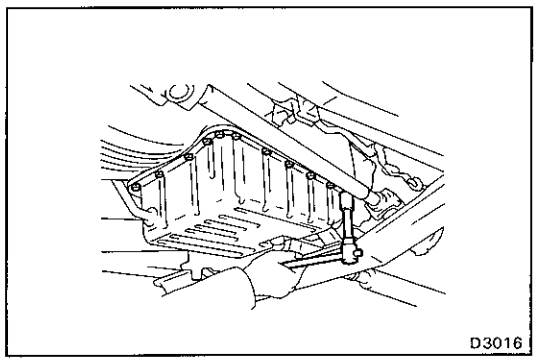
2. REMOVE TRANSMISSION AND TRANSFER UNDER COVERS

3. CLEAN TRANSMISSION EXTERIOR

To help prevent contamination, clean the exterior of the transmission.

4. DRAIN TRANSMISSION FLUID

Remove the drain plug and drain fluid into a suitable container.



5. REMOVE OIL PAN

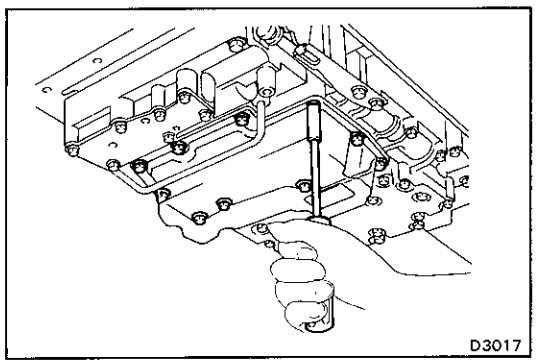
NOTICE: Some fluid will remain in the oil pan. Be careful not to damage the filler tube.

(a) Remove twenty bolts.

(b) Insert the blade of SST between the transmission case and oil pan, cut off applied sealer.

SST 09032-00100

NOTICE: Be careful not to damage the oil pan flange.

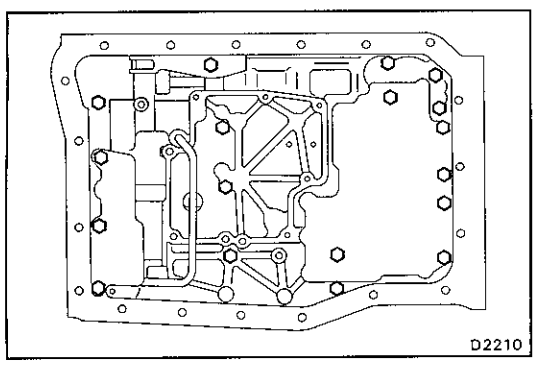


6. REMOVE OIL STRAINER AND GASKET

(a) Remove the ten bolts and oil strainer.

NOTICE: Be careful as some oil will come out with the filter.

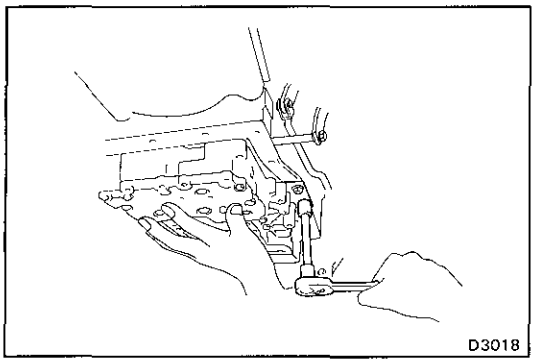
(b) Remove the gasket.



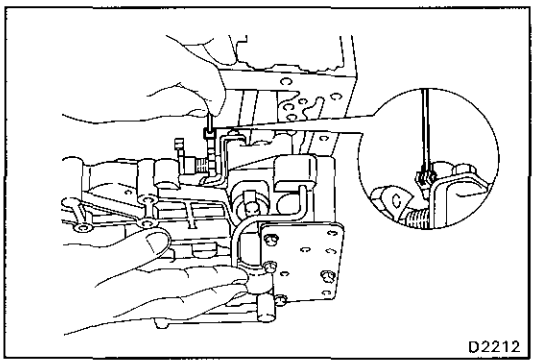
7. REMOVE VALVE BODY

(a) Remove the eighteen bolts.

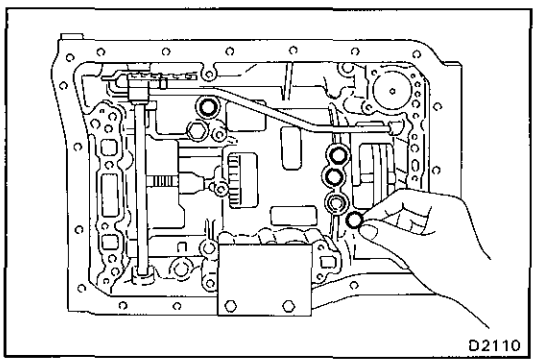
HINT: Support the valve body by hand to prevent it from falling.



(b) Lower valve body slightly, and install the accumulator piston retaining plate. Hold in place with two pan bolts, and hand tighten.



(c) Disconnect the throttle cable from the cam and remove the valve body.

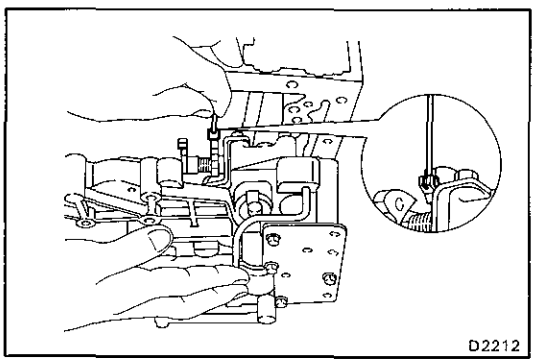


8. REMOVE FOUR CENTER SUPPORT APPLY GASKETS

INSTALLATION OF VALVE BODY

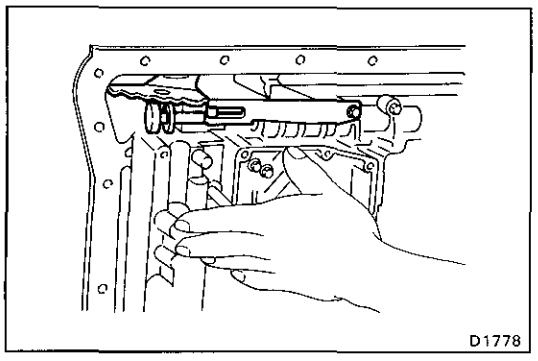
1. INSTALL FOUR CENTER SUPPORT APPLY GASKETS

Install the four center support apply gaskets, facing the pitted sides toward the transmission case.



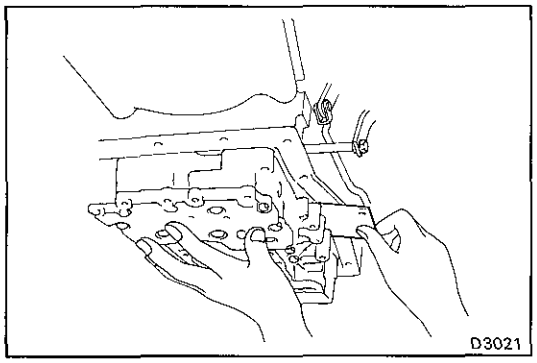
2. CONNECT THROTTLE CABLE TO CAM

Push the cable fitting into the cam.



3. INSTALL VALVE BODY

(a) Align the manual valve lever with the manual valve.



(b) Remove the two pan bolts, and slide out the accumulator retaining plate.

4. INSTALL VALVE BODY BOLTS

(a) Install the three bolts indicated by the arrows.

(b) Install the other bolts.

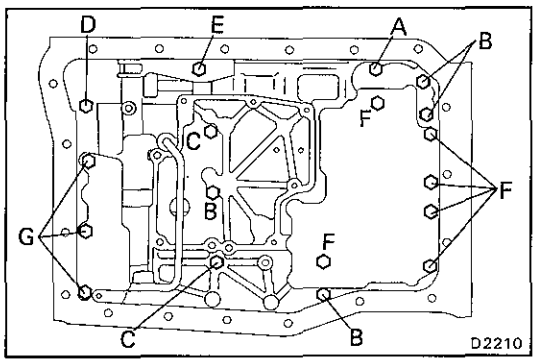
HINT: Each bolt length is indicated in the figure.

A bolt 22 mm (0.866 in.)
B bolt 32 mm (1.260 in.)
C bolt 36 mm (1.417 in.)
D bolt 41 mm (1.614 in.)
E bolt 45 mm (1.772 in.)
F bolt 57 mm (2.244 in.)
G bolt 64 mm (2.520 in.)

(c) Check that the manual valve lever contacts the center of the roller at the tip of the detent spring.

(d) Tighten the bolts.

Torque: 100 kg-cm (7 ft-lb, 10 N·m)



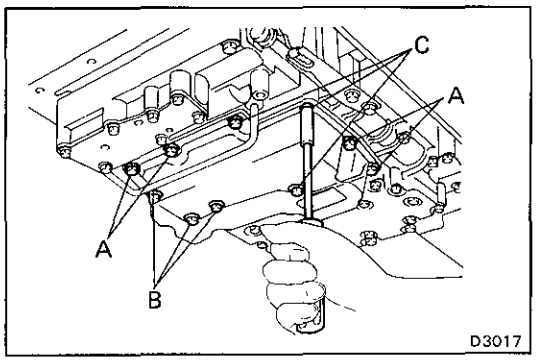
5. INSTALL OIL STRAINER

Be sure the strainer is clean. Install a new gasket and strainer.

HINT: Each bolt length is indicated in the figure.

A bolt 12 mm (0.472 in.)
B bolt 45 mm (1.772 in.)
C bolt 47 mm (1.850 in.)

Torque: 5 mm bolt 55 kg-cm (48 in.-lb, 5.4 N·m)
6 mm bolt 100 kg-cm (7 ft-lb, 10 N·m)



6. INSTALL PAN

(a) Install the two magnets in the oil pan.

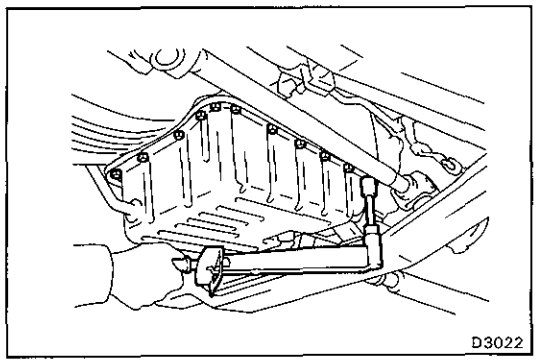
(b) Remove any packing material and be careful not to drop oil on the contacting surface of the transmission case and oil pan.

(c) Apply seal packing to the oil pan.

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

(d) Tighten the bolts evenly.

Torque: 70 kg-cm (61 in.-lb, 6.9 N·m)

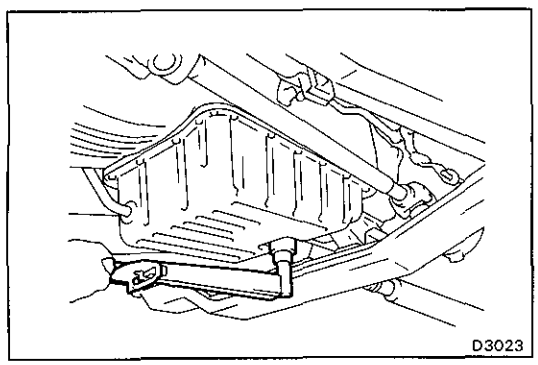


7. INSTALL DRAIN PLUG

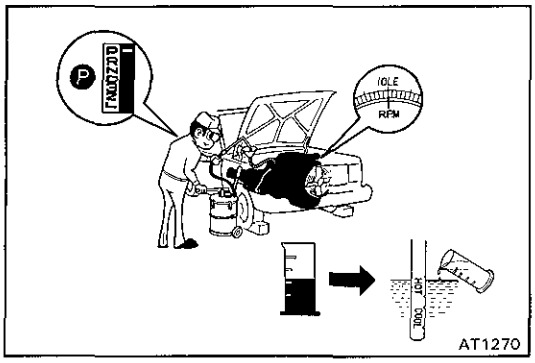
(a) Install a new gasket and drain plug.

(b) Torque the drain plug.

Torque: 280 kg-cm (20 ft-lb, 27 N·m)



8. INSTALL TRANSMISSION UNDER COVER AND TRANSFER UNDER COVER

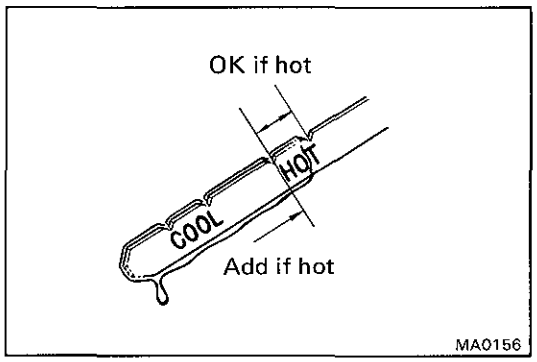


9. **FILL TRANSMISSION WITH ATF**

Add 6.0 liters (6.3 US qts, 5.3 Imp. qts)

NOTICE: Do not overfill.

Fluid type: ATF DEXRON® II

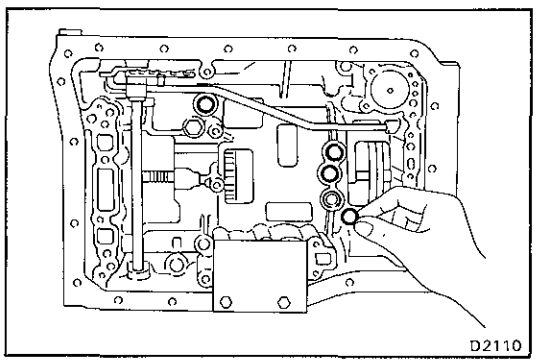


10. **CHECK FLUID LEVEL (See page AT-11)**

Throttle Cable

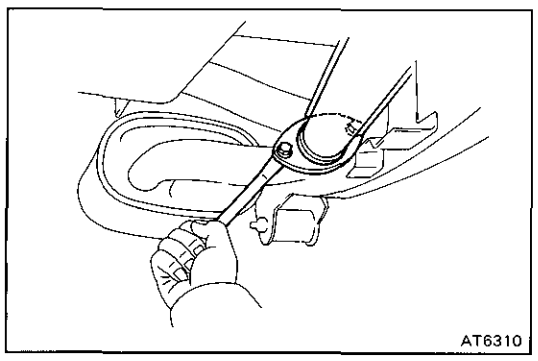
REMOVAL OF THROTTLE CABLE

1. **DISCONNECT THROTTLE CABLE**
   (a) Disconnect the cable housing from the bracket.
   (b) Disconnect the cable from the throttle linkage.
   (c) Disconnect the cable from the torque converter housing.

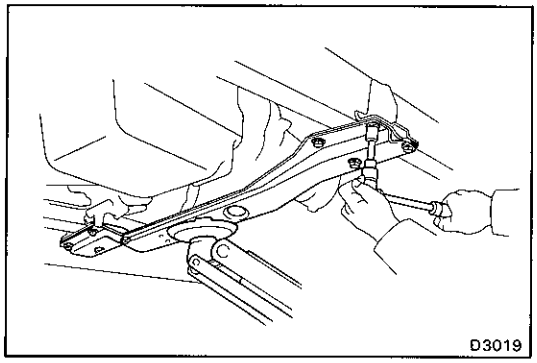


2. **REMOVE VALVE BODY (See page AT-24)**

3. **REMOVE FOUR CENTER SUPPORT APPLY GASKETS**



4. **DISCONNECT EXHAUST FRONT PIPE FROM TAIL PIPE**



5. REMOVE FRAME CROSSMEMBER SET BOLTS

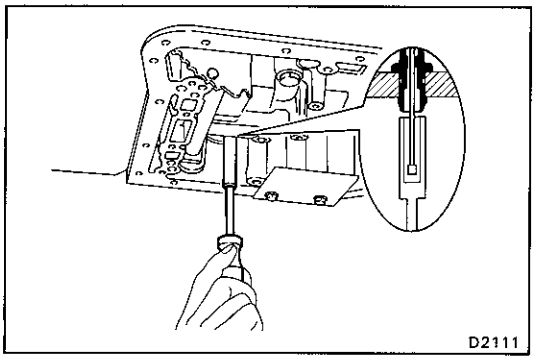
(a) Support the frame crossmember with jack.

(b) Remove the eight set bolts.

6. REMOVE THROTTLE CABLE CLAMP

(a) Lower the jack.

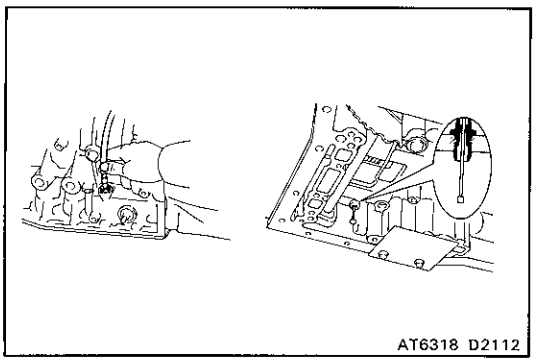
(b) Remove the cable clamp from the transmission housing.



7. PUSH THROTTLE CABLE OUT OF TRANSMISSION CASE

Using 10 mm socket, push the throttle cable out.

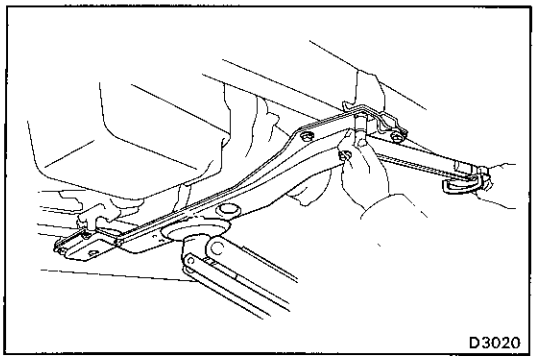
INSTALLATION OF THROTTLE CABLE



1. INSTALL CABLE IN TRANSMISSION CASE

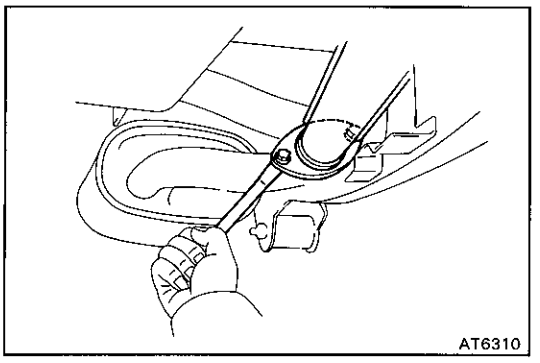
Be sure to push it in all the way.

2. INSTALL THROTTLE CABLE CLAMP TO TRANSMISSION HOUSING



3. INSTALL FRAME CROSSMEMBER SET BOLTS

Torque: 620 kg-cm (45 ft-lb, 61 N·m)

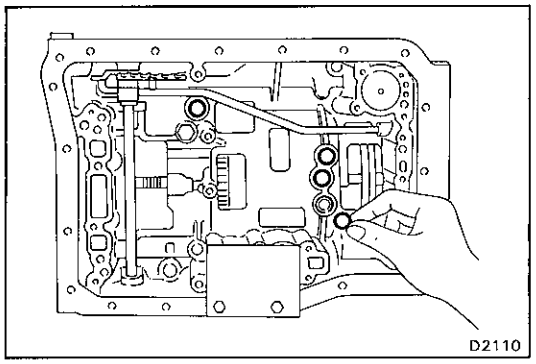


4. CONNECT EXHAUST FRONT PIPE TO TAIL PIPE

(a) Install a new gasket.

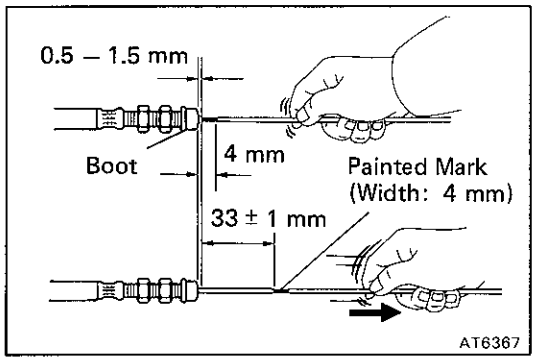
(b) Connect the exhaust front pipe to the tail pipe.

Torque: 400 kg-cm (29 ft-lb, 39 N·m)



5. **INSTALL FOUR CENTER SUPPORT APPLY GASKETS**

6. **INSTALL VALVE BODY (See page AT-25)**



7. **IF THROTTLE CABLE IS NEW, PAINT MARK ON INNER CABLE**

HINT: New cables do not have a cable stopper installed.

Therefore to mark adjustment possible, paint a mark as described below.

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

(b) Pull the inner cable lightly until resistance is felt, and hold it.

(c) Paint a mark as shown, about 4 mm (0.16 in.) in width.

(d) Pull the inner cable fully, measure the cable stroke.

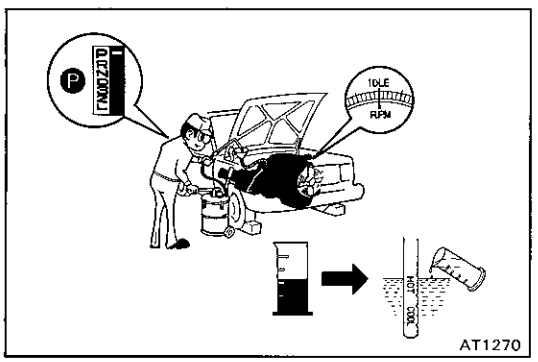
Cable stroke: 33 ± 1 mm (1.30 ± 0.04 in.)

8. **CONNECT THROTTLE CABLE**

(a) Connect the cable to the throttle linkage.

(b) Connect the cable housing to the bracket on the valve cover.

9. **ADJUST THROTTLE CABLE (See page AT-12)**

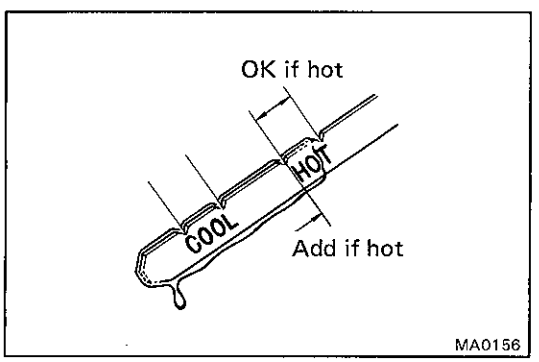


10. **FILL TRANSMISSION WITH ATF**

Add 6 liters (6.3 US qts, 5.3 Imp. qts)

NOTICE: Do not overfill.

Fluid type: ATF DEXRON® II



11. **CHECK FLUID LEVEL (See page AT-11)**