

ON-VEHICLE REPAIR

Valve Body

REMOVAL OF VALVE BODY

1. CLEAN TRANSMISSION EXTERIOR

To prevent contamination, clean the exterior of the transmission.

2. DRAIN TRANSMISSION FLUID

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

3. REMOVE OIL PAN, FILLER TUBE AND GASKET

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

Remove all pan bolts, and carefully remove the pan assembly. Discard the gasket.

4. REMOVE OIL TUBES

Pry up both tube ends with a large screwdriver and remove the tubes.

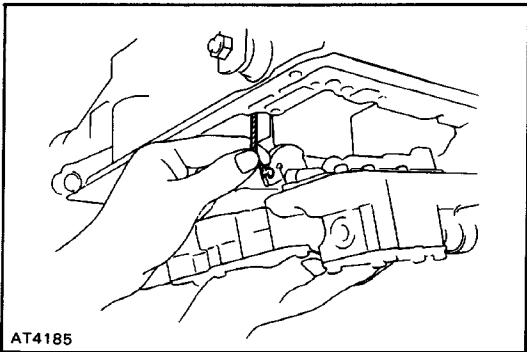
5. REMOVE OIL STRAINER

Remove the six bolts, and the oil strainer.

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

6. REMOVE VALVE BODY

(a) Remove the seventeen bolts.

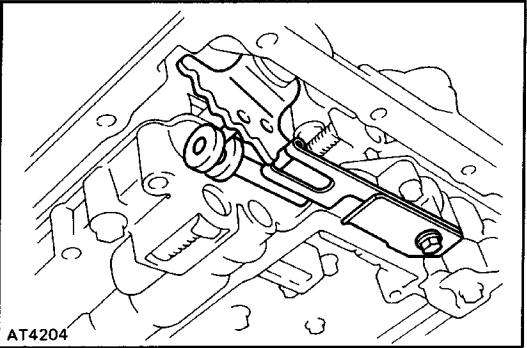


(b) Disconnect the throttle cable from the cam and remove the valve body.

INSTALLATION OF VALVE BODY

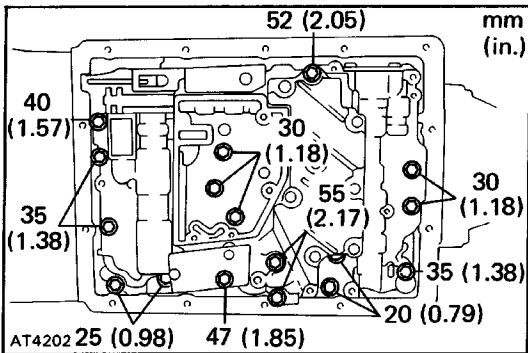
1. CONNECT THROTTLE CABLE TO CAM

Push the cable fitting into the cam.



2. INSTALL VALVE BODY

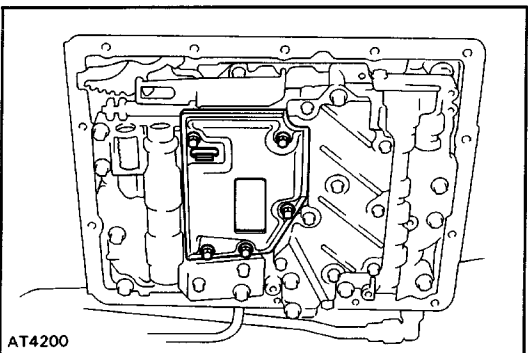
(a) Align the manual valve lever with the manual valve.



(b) Finger tighten the all bolts first. Then tighten the bolts evenly.

HINT: Each bolt length (mm, in.) is indicated in the figure.

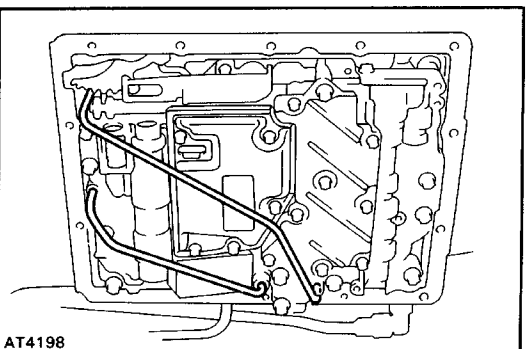
Torque: 10 N-m (100 kgf-cm, 7 ft-lbf)



3. INSTALL OIL STRAINER

Be sure the screen is clean. Torque the bolts.

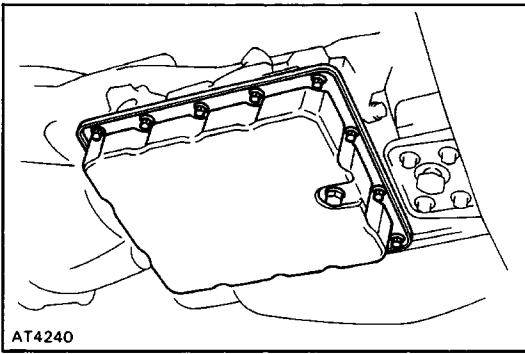
Torque: 5.4 N-m (55 kgf-cm, 48 in.⋅lbf)



4. INSTALL OIL TUBES

Tap the tubes with a plastic hammer to install them into the positions in the figure.

NOTICE: Be careful not to bend or damage the tubes.



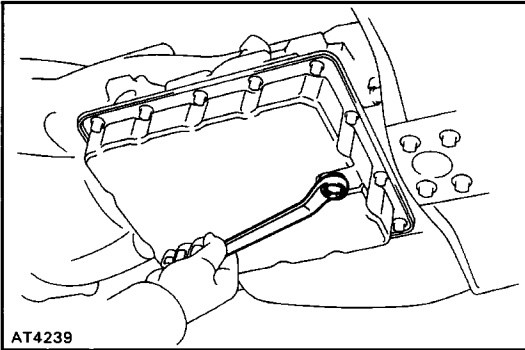
5. INSTALL PAN WITH NEW GASKET

Be sure the pan is clean and the two magnets are in place.

NOTICE: Do not use gasket sealer.

Tighten the bolts evenly.

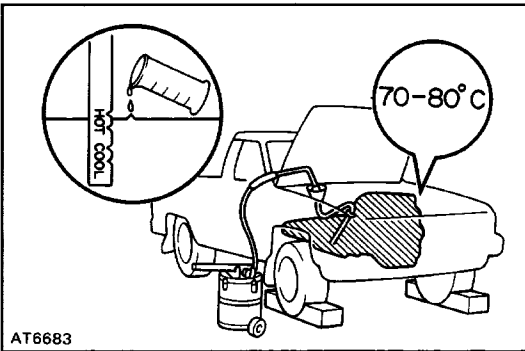
Torque: 5.4 N-m (55 kgf-cm, 48 in.·lbf)



6. INSTALL DRAIN PLUG

Torque the drain plug.

Torque: 20 N-m (205 kgf-cm, 15 ft-lbf)

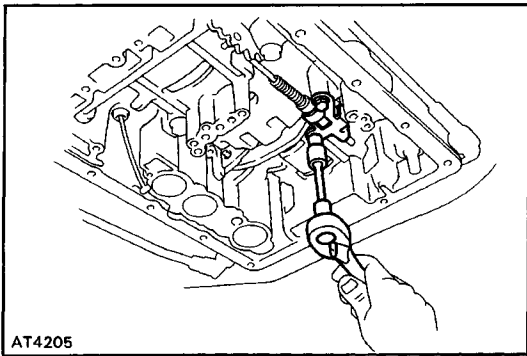


7. FILL TRANSMISSION WITH ATF

Add only about two liters of ATF. Start the engine and shift through all the positions. Check the fluid level and add as necessary.

NOTICE: Do not overfill.

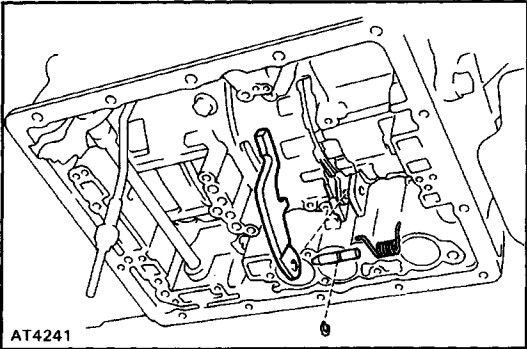
Fluid type: ATF DEXRON[®]III



Parking Lock Pawl

REMOVAL OF PARKING LOCK PAWL

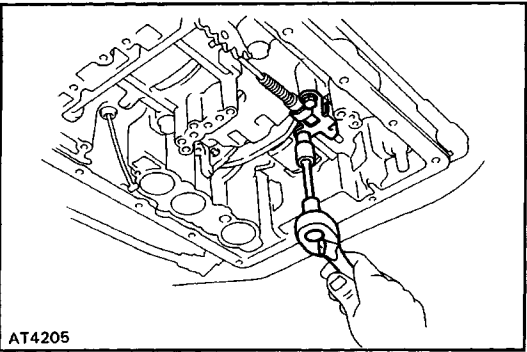
1. REMOVE VALVE BODY (See page [AT-28](#))
2. REMOVE PARKING LOCK PAWL BRACKET
Remove the two bolts and the bracket.



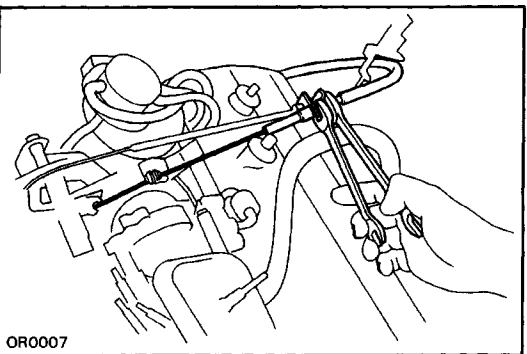
3. REMOVE SPRING FROM PARKING LOCK PAWL PIVOT PIN
4. REMOVE PIVOT PIN AND PARKING LOCK PAWL

INSTALLATION OF PARKING LOCK PAWL

1. INSTALL PARKING LOCK PAWL AND PIVOT PIN
2. INSTALL SPRING



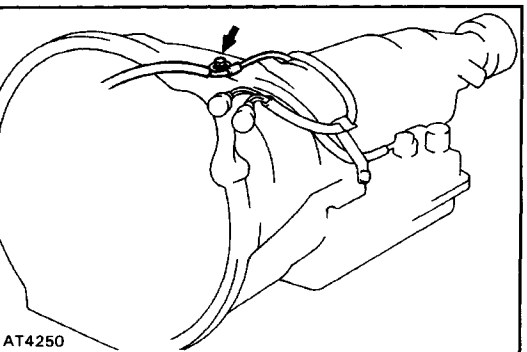
3. INSTALL VALVE BODY (See page [AT-29](#))
 - (a) Push lock rod fully toward.
 - (b) Install the two bolts finger tight
 - (c) Check that the pawl operates smoothly.
 - (d) Torque the bolts.
Torque: 7.4 N.m (75 kgf.cm, 65 in.·lbf)
4. INSTALL VALVE BODY (See page [AT-29](#))



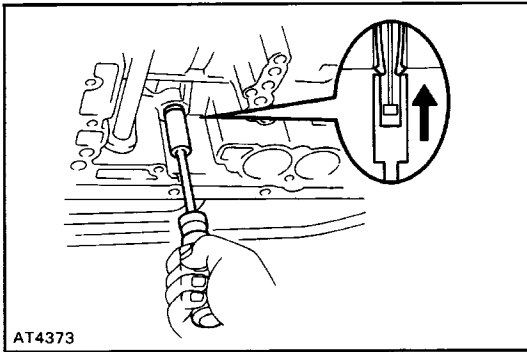
Throttle Cable

REMOVAL OF THROTTLE CABLE

1. DISCONNECT THROTTLE CABLE
 - (a) Disconnect the cable housing from the bracket.
 - (b) Disconnect the cable from the throttle linkage.

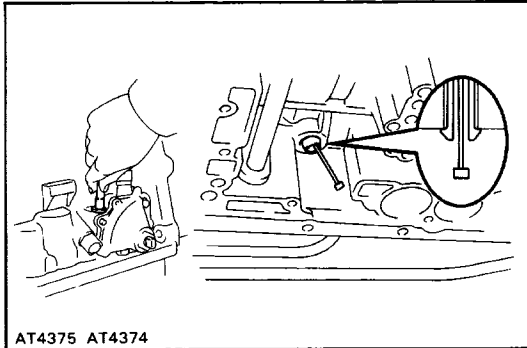


- (c) Disconnect the cable from the torque converter clutch housing.



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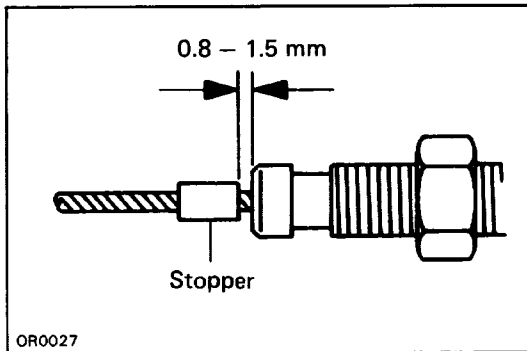
2. REMOVE VALVE BODY (See page [AT-28](#))
3. PUSH THROTTLE CABLE OUT OF TRANSMISSION CASE
Using a 10-mm socket, push the throttle cable out.



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INSTALLATION OF THROTTLE CABLE

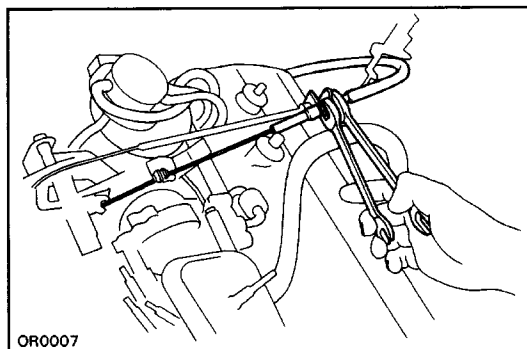
1. INSTALL CABLE IN TRANSMISSION CASE
Be sure to push it in all the way.
2. INSTALL VALVE BODY (See page [AT-29](#))



OR0027

3. IF THROTTLE CABLE IS NEW, STAKE STOPPER ON INNER CABLE

- (a) Pull the inner cable lightly until a slight resistance is felt, and hold it.
- (b) Stake the stopper as shown, 0.8–1.5 mm (0.031–0.059 in.) in width.

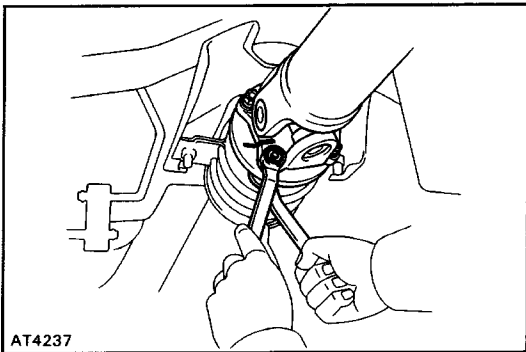


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4. CONNECT THROTTLE CABLE

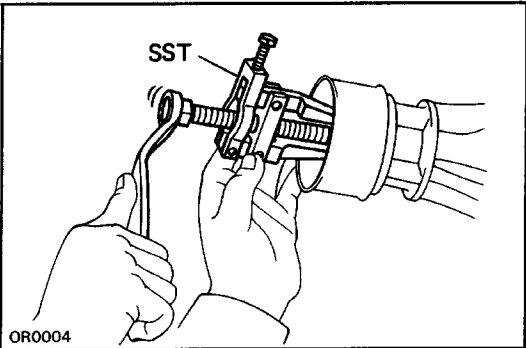
- (a) Connect the cable to the throttle linkage.
- (b) Connect the cable housing to the bracket.
- (c) Connect the cable to the torque converter clutch housing.

5. ADJUST THROTTLE CABLE (See page [AT-15](#))
6. TEST DRIVE VEHICLE



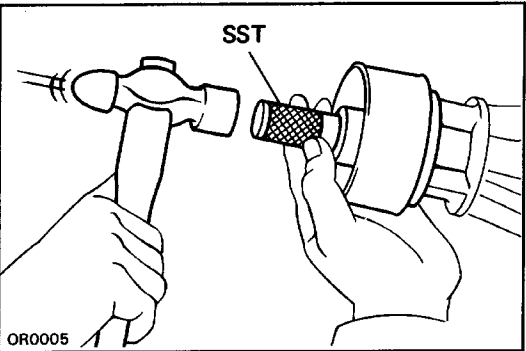
Extension Housing REPLACEMENT OF OIL SEAL

1. RAISE VEHICLE, AND POSITION PAN TO CATCH ANY FLUID THAT MAY DRIP
2. REMOVE PROPELLER SHAFT



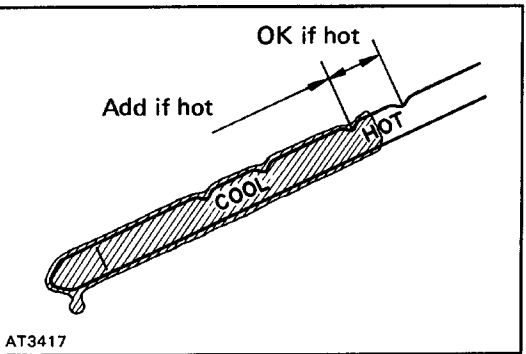
3. REMOVE REAR OIL SEAL
NOTICE: Clean the rear extension housing before removing the seal.

Using SST, remove the oil seal.
SST 09308-10010



4. INSTALL NEW OIL SEAL

Using SST, drive in a new oil seal as far as it will go.
SST 0932 5-20010



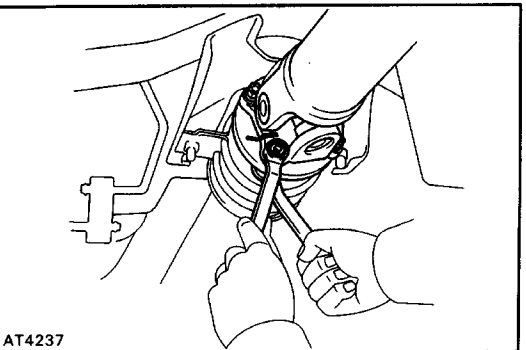
5. INSTALL PROPELLER SHAFT
6. LOWER VEHICLE AND CHECK FLUID LEVEL

Start the engine, shift the shift lever into each position and, then check the fluid level with the transmission in P position.

Add fluid as necessary.

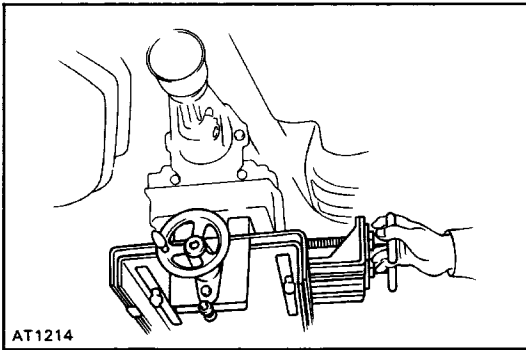
NOTICE: Do not overfill.

Fluid type: ATF DEXRON[®] II



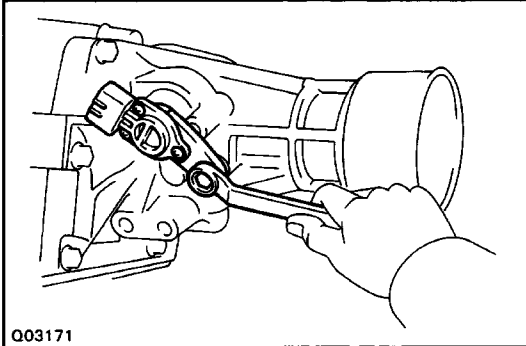
REMOVAL OF EXTENSION HOUSING

1. RAISE VEHICLE AND POSITION PAN TO CATCH ANY FLUID THAT MAY DRIP
2. REMOVE PROPELLER SHAFT



3. JACK UP TRANSMISSION SLIGHTLY

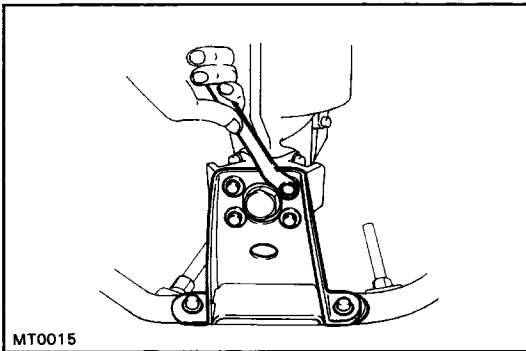
Securely support the transmission on a transmission jack. Lift the transmission slightly to remove weight from the rear support member.



4. DISCONNECT CONNECTOR

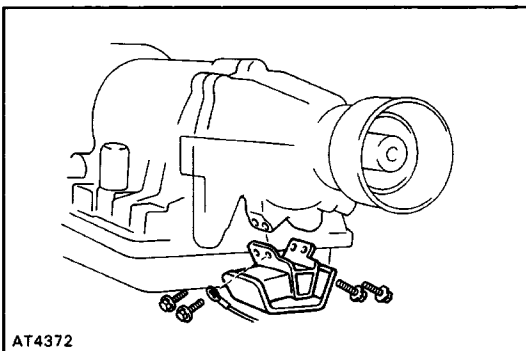
5. REMOVE NO. 1 VEHICLE SPEED SENSOR

- (a) Remove the bolt and the vehicle speed sensor.
- (b) Remove the O-ring from the sensor.



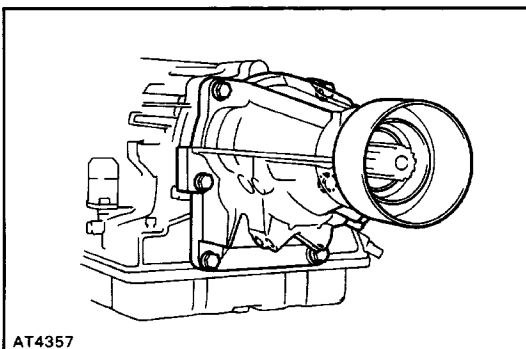
6. DISCONNECT ENGINE REAR MOUNTING FROM BRACKET

Remove four bolts from the bracket.



7. REMOVE ENGINE REAR MOUNTING FROM EXTENSION HOUSING

Remove four bolts and the engine rear mounting from the extension housing.



8. REMOVE EXTENSION HOUSING AND GASKET

Remove the six bolts. If necessary, tap the extension housing with a plastic hammer or wooden block to loosen it.

INSTALLATION OF EXTENSION HOUSING

1. INSTALL NEW GASKET AND EXTENSION HOUSING ON TRANSMISSION

- (a) Clean the threads of the $\frac{1}{2}$ " bolt and bolt hole.
- (b) Coat the threads of the $\frac{1}{2}$ " bolt with sealant.

Sealant: Part No. 08833-00080, THREE BOND 1344, LOCTITE 242 or equivalent

- (c) Install the extension housing over a new gasket with bolts, and then torque them.

HINT: The two lower bolts are shorter.

Torque: 34 N-m (345 kgf-cm, 25 ft-lbf)

2. INSTALL ENGINE REAR MOUNTING

- (a) Install the engine rear mounting to the extension housing. Tighten the four bolts.

Torque: 25 N-m (250 kgf-cm, 18 ft-lbf)

- (b) Lower and rest the transmission on the mounting bracket.

- (c) Connect the mounting to the bracket. Tighten the four bolts.

Torque: 13 N-m (130 kgf-cm, 9 ft-lbf)

3. INSTALL PROPELLER SHAFT

4. INSTALL NO. 1 VEHICLE SPEED SENSOR

- (a) Install a new O-ring on the sensor.
- (b) Install the vehicle speed sensor with the bolt.

5. CONNECT CONNECTOR

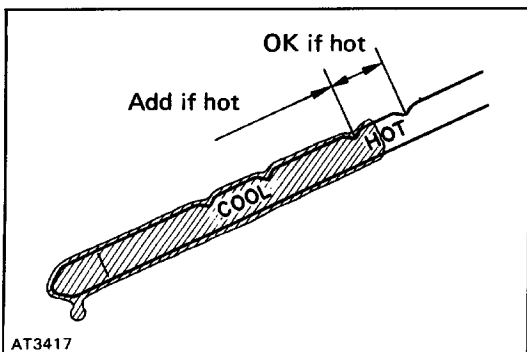
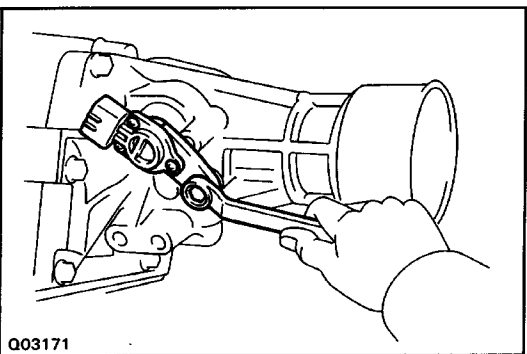
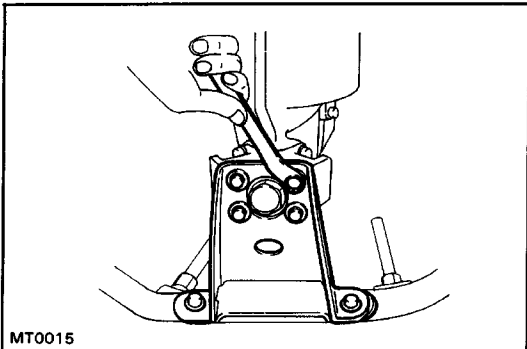
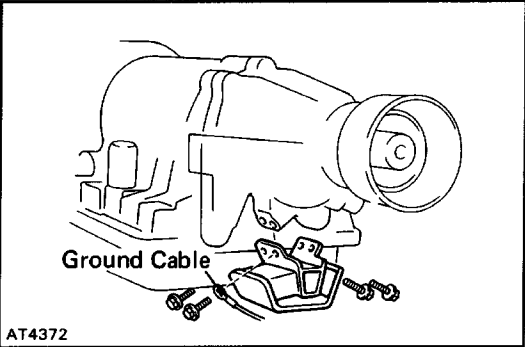
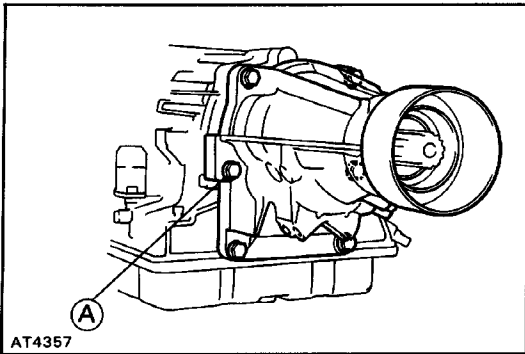
6. LOWER VEHICLE AND CHECK FLUID LEVEL

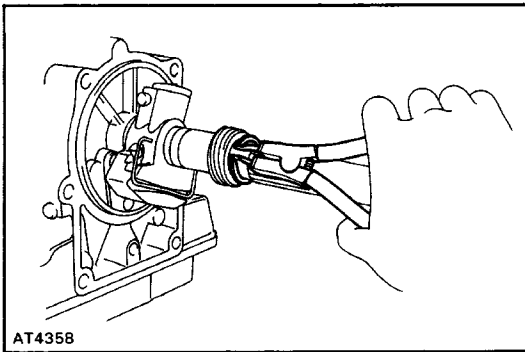
Start the engine, shift the shift lever into each position, and then check the fluid level with the transmission in P position.

Add fluid as necessary.

NOTICE: Do not overfill.

Fluid type: ATF DEXRON® II





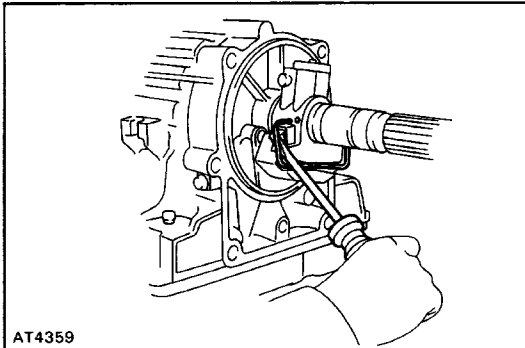
Governor Body

REMOVAL OF GOVERNOR BODY

1. REMOVE EXTENSION HOUSING (See page AT-33)

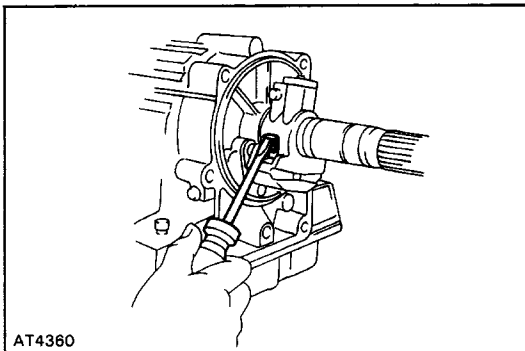
2. REMOVE SPEEDOMETER DRIVE GEAR

- (a) Using snap ring pliers, remove the snap ring.
- (b) Slide off the speedometer gear.
- (e) Remove the lock ball and the outer snap ring.



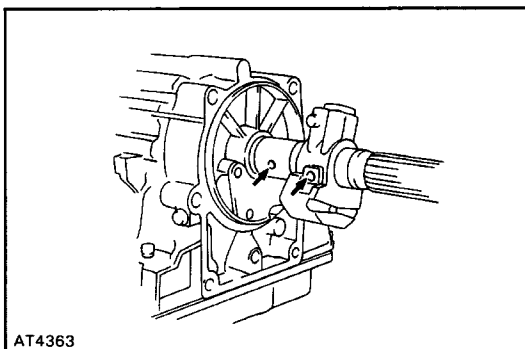
3. REMOVE GOVERNOR FROM OUTPUT SHAFT

- (a) Using a large screwdriver, remove the retaining clip.



- (b) Unstack the lock plate, remove the bolt and lock plate.

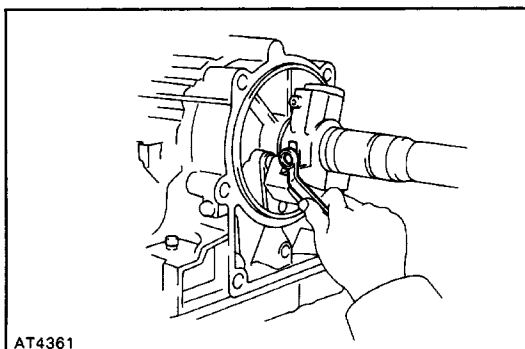
- (c) Remove the governor body.



INSTALLATION OF GOVERNOR BODY

1. INSTALL GOVERNOR ON OUTPUT SHAFT

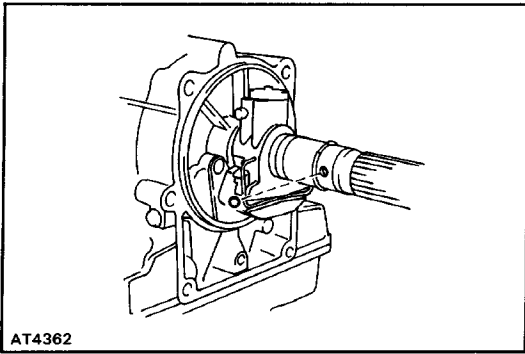
- (a) Align the governor body and bolt hole on the output shaft.



- (b) Install the bolt and lock plate, stake the lock plate.

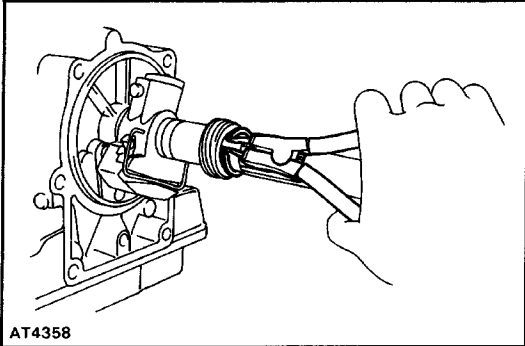
- (c) Using a large screwdriver, install the retaining clip into the hole in the output shaft.

- (d) Check that the governor assembly is secure.



2. INSTALL SPEEDOMETER DRIVE GEAR

- (a) Install the snap ring and lock ball.



- (b) Slide the speedometer drive gear on the shaft.

- (c) Using snap ring pliers, install the outer snap ring.

3. INSTALL EXTENSION HOUSING (See page [AT-34](#))