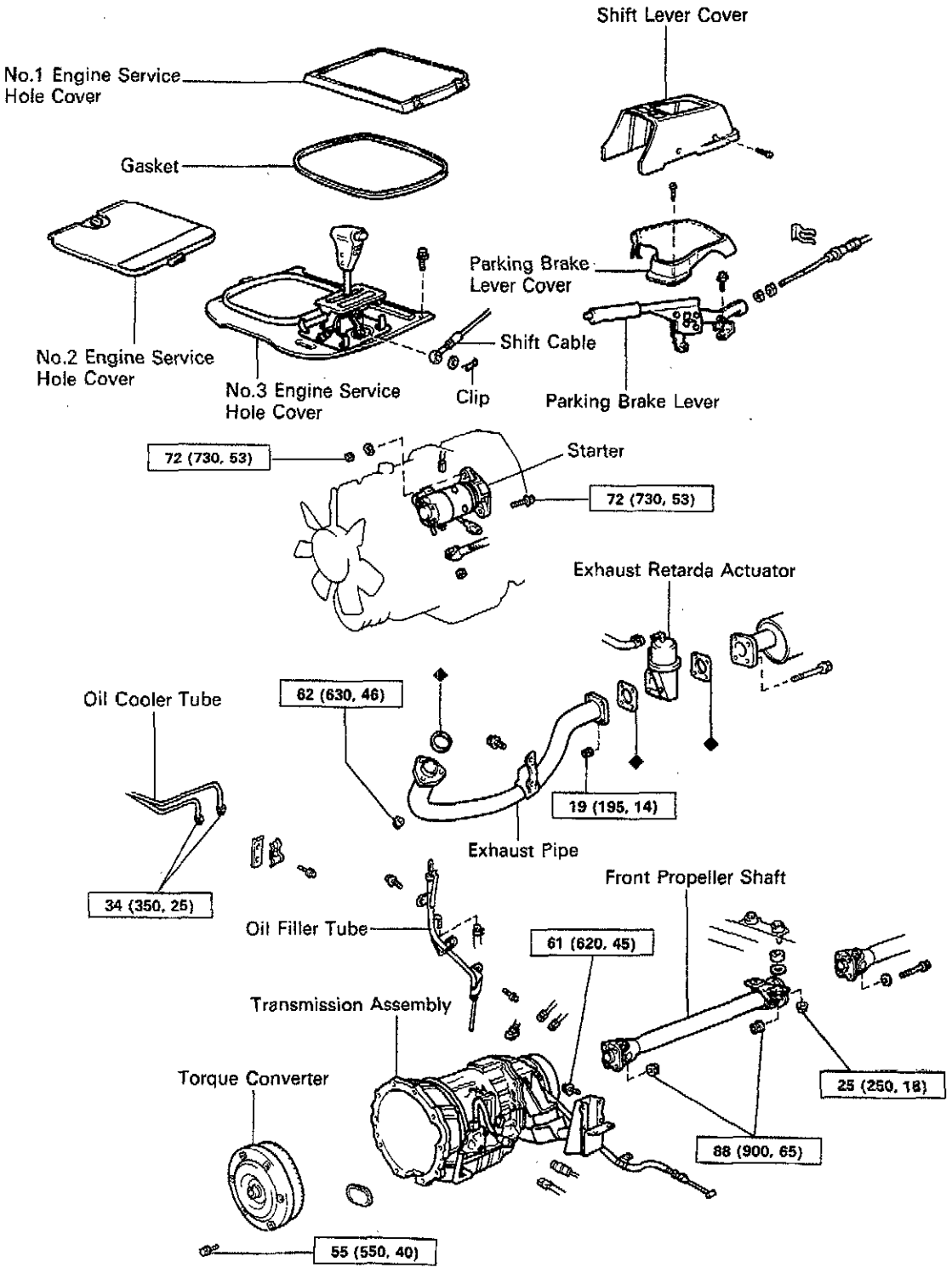
ASSEMBLY REMOVAL AND INSTALLATION

COMPONENTS

AT0GB–01

AT



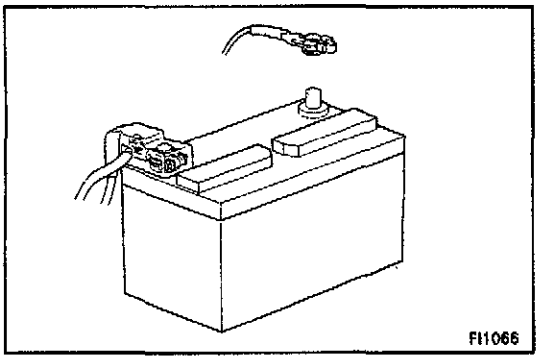
N·m (kgf-cm, ft·lbf) : Specified torque

◆ Non-reusable part

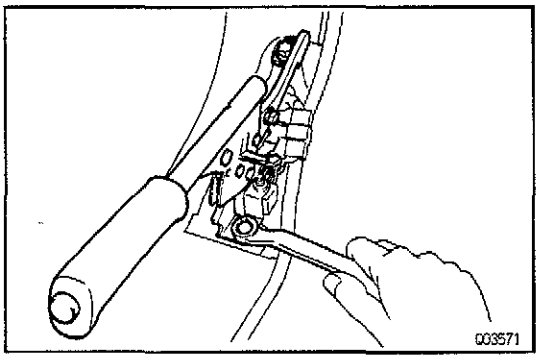
003573

AT05V-02

TRANSMISSION REMOVAL

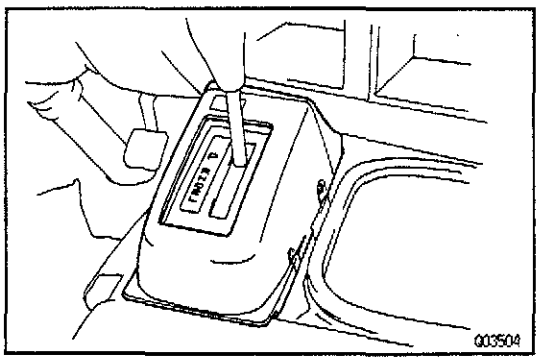


1. DISCONNECT BATTERY CABLE FROM NEGATIVE TERMINAL



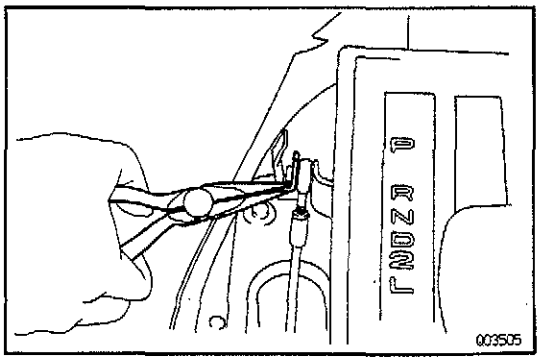
2. REMOVE PARKING BRAKE LEVER

(a) Remove the 3 screws and parking brake lever cover.
(b) Remove the parking brake cable lock and adjusting nuts.
(c) Remove the parking brake lever.
(d) Remove the clip and disconnect the parking brake cable from the cable support bracket.
(e) Remove the parking brake cable and wire harness protector from the front wheel house.
(f) Remove the parking brake cable clamps.
(g) Pull out the parking brake cable to the transmission side.

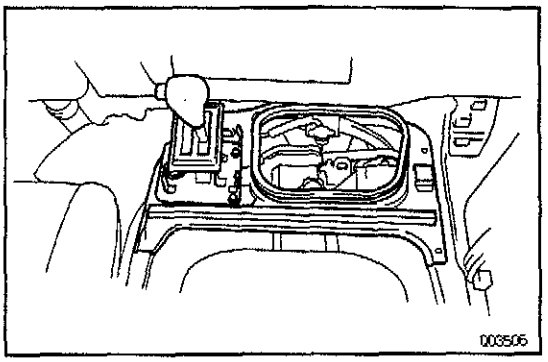


3. REMOVE ENGINE ROOM HOLE COVER

(a) Remove the engine room service hole covers.
(b) Remove the shift lever cover

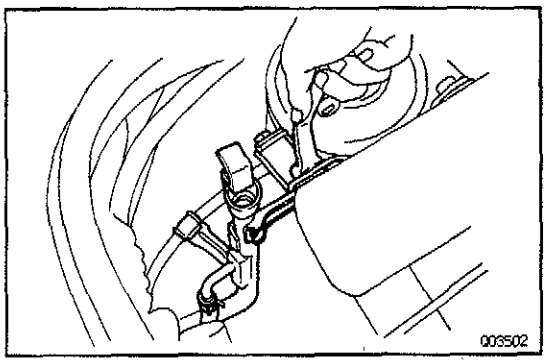


(c) Remove the clip and disconnect the shift cable from the shift lever.



(d) Remove the engine room hole cover with the shift lever.

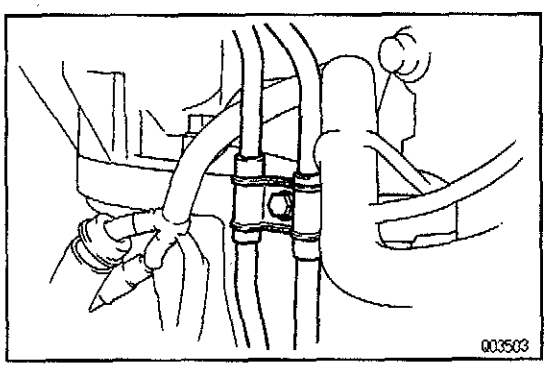
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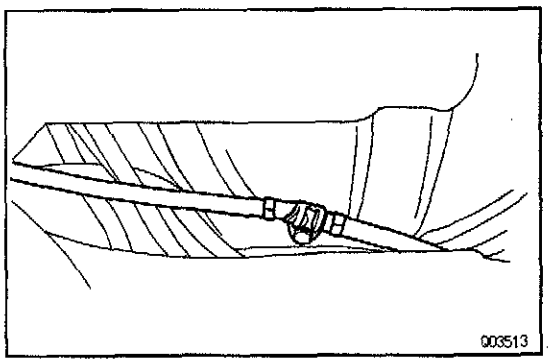
4. REMOVE OIL FILLER TUBE

(a) Disconnect the bleeder hose.

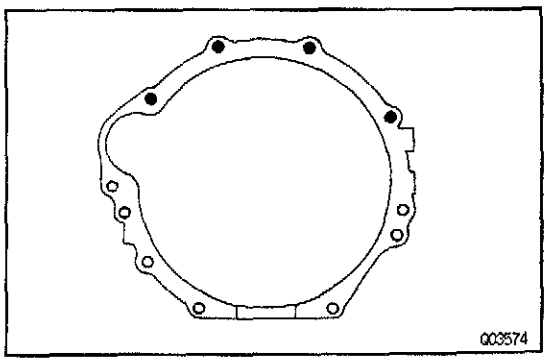
(b) Remove the 2 nuts and oil filler tube.



5. REMOVE OIL COOLER TUBES CLAMP

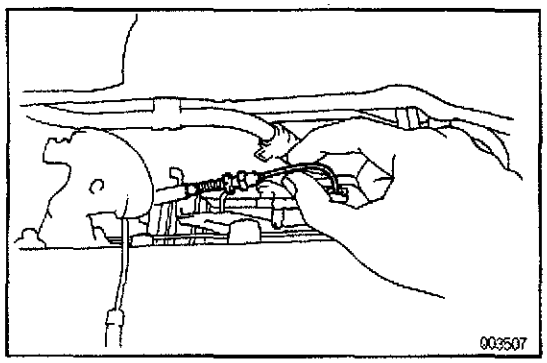


6. REMOVE THROTTLE CABLE CLAMP



7. REMOVE STARTER UPPER SET NUT

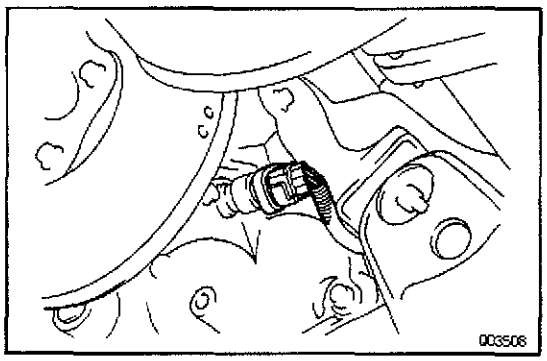
8. REMOVE 3 TRANSMISSION SET BOLTS



9. DISCONNECT THROTTLE CABLE

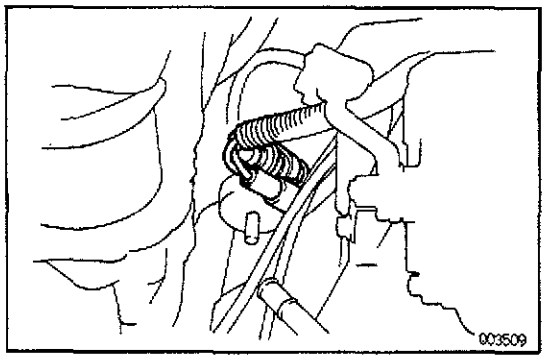
(a) Remove the transmission shift cable bracket.

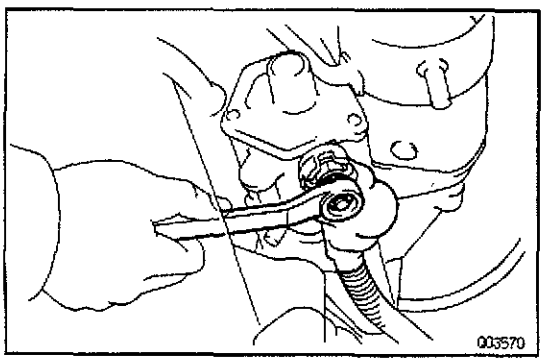
(b) Loosen the throttle cable lock nut and disconnect the throttle cable from the throttle cam.



10. DISCONNECT FOLLOWING CONNECTORS

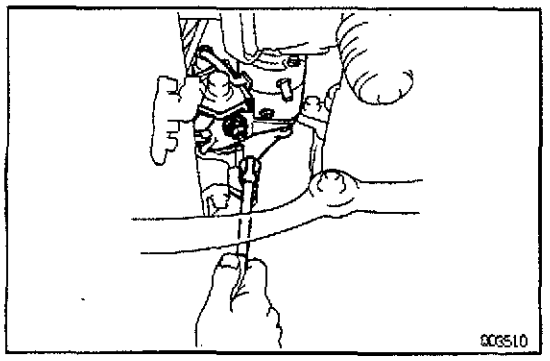
- No.1 speed sensor connector
- No.2 speed sensor connector
- Solenoid connector
- Neutral switch connectors



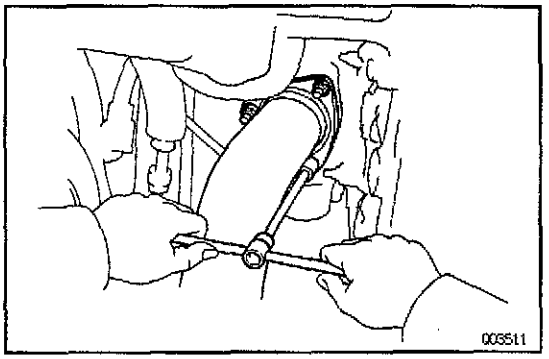


11. REMOVE STARTER

(a) Disconnect the cable and connector.

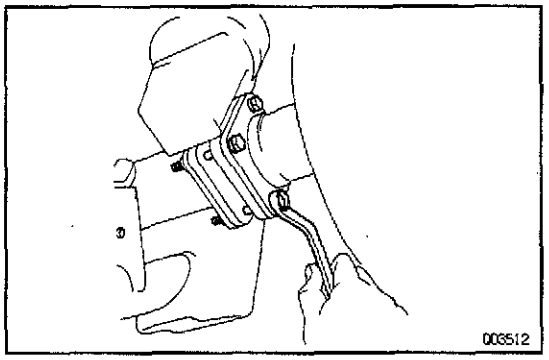


(b) Remove the starter lower set bolt and starter.

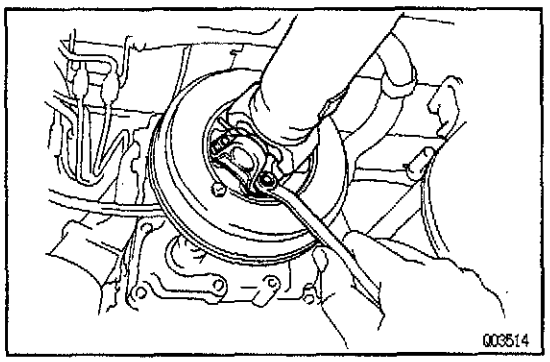


12. REMOVE EXHAUST PIPE

(a) Remove the 3 nuts.



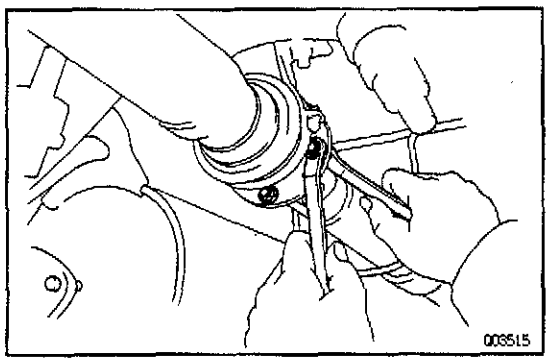
(b) Remove the exhaust retarder and exhaust pipe



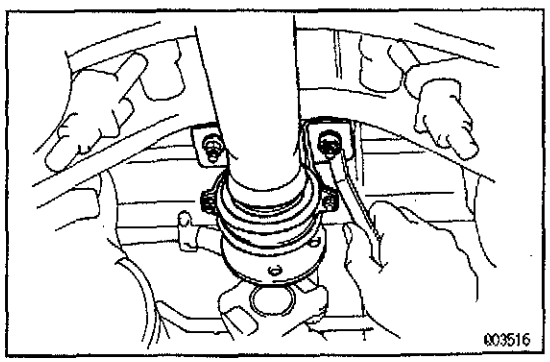
13. REMOVE FRONT PROPELLER SHAFT

(a) Place the match marks on the propeller shaft front and rear flanges.

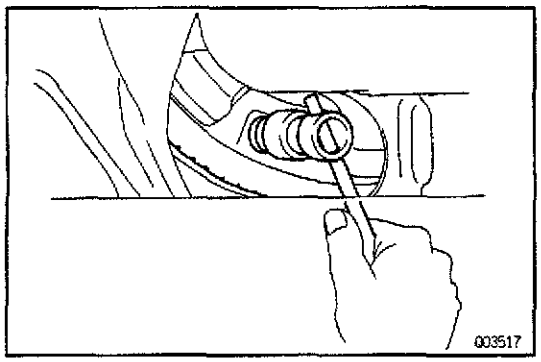
(b) Disconnect the front propeller shaft from the parking brake drum.



(c) Disconnect the front propeller shaft from rear propeller shaft.



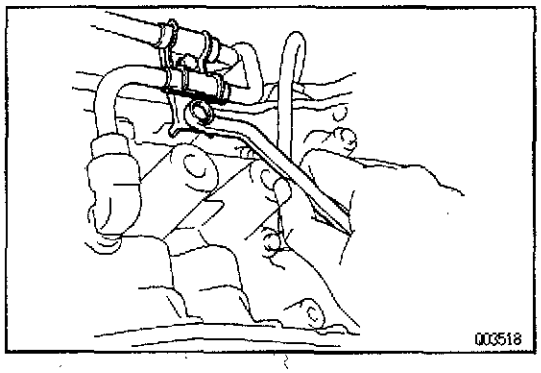
(d) Remove the center bracket mounting bolts and propeller shaft.



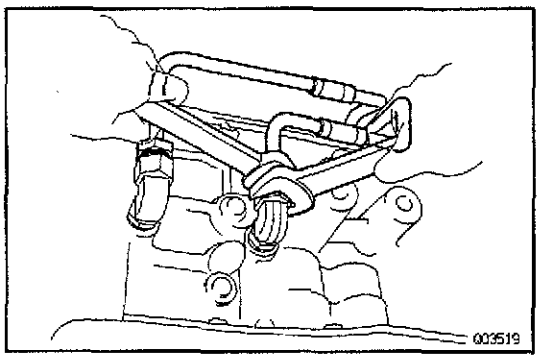
14. REMOVE TORQUE CONVERTER MOUNTING BOLTS

(a) Remove the torque converter service hole cover.

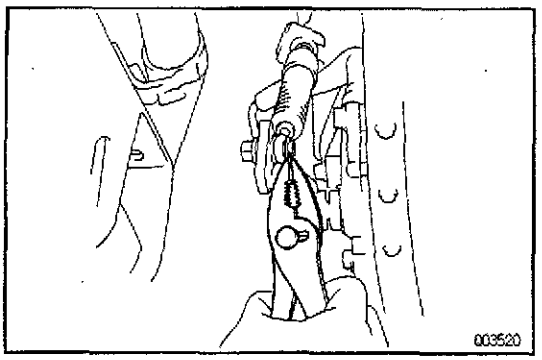
(b) While turning the crankshaft to gain across and remove the 6 bolts.



15. REMOVE OIL COOLER PIPES BRACKET

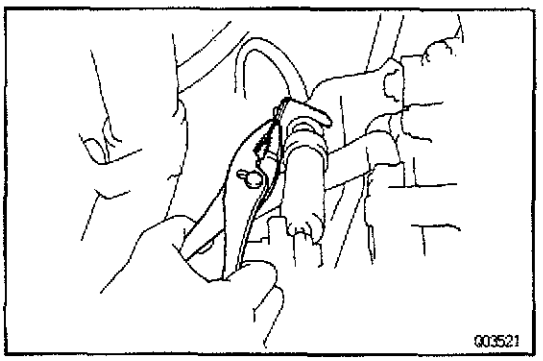


16. DISCONNECT OIL COOLER PIPE UNIONS

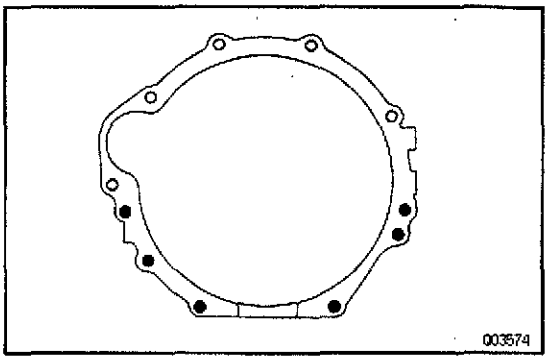


17. DISCONNECT SHIFT CABLE

(a) Remove the clip and disconnect the shift cable from the manual shift lever.

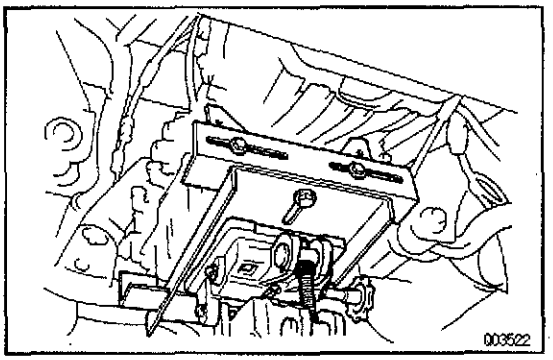


(b) Remove the shift cable clamp.

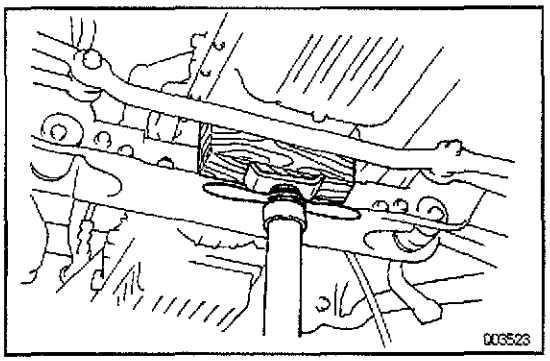


18. REMOVE TRANSMISSION SET BOLTS

AT



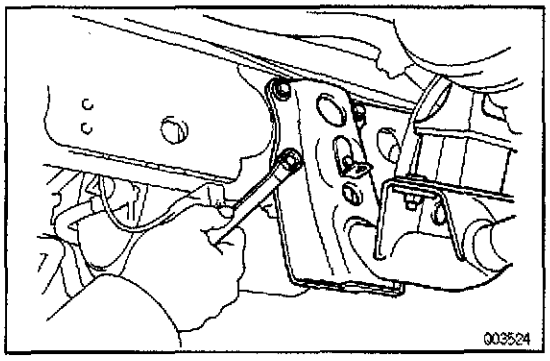
19. SUPPORT TRANSMISSION



20. SUPPORT ENGINE

NOTICE:

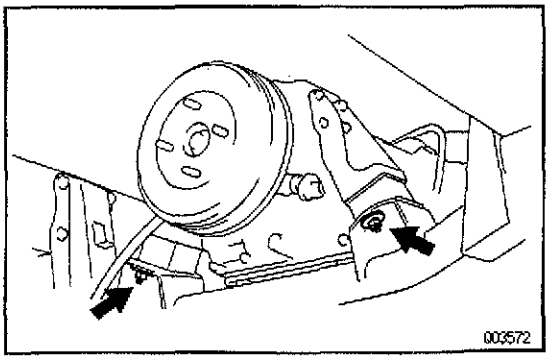
Using a wooden block so as not to damage the engine oil pan.



21. REMOVE TRANSMISSION

(a) Remove the transmission rear mounting cross member set bolts.

(b) Remove the transmission with member.

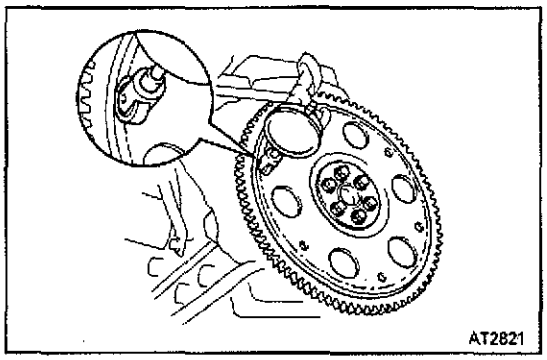


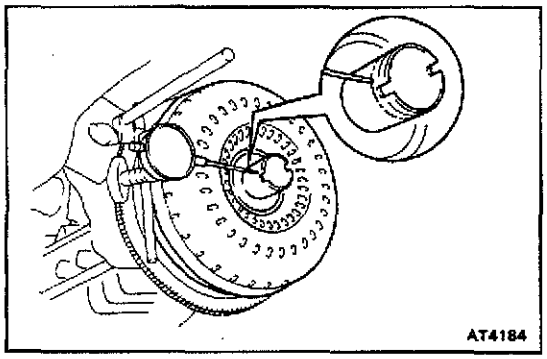
(c) Remove the member from transmission.

TORQUE CONVERTER CLUTCH CLEANING

AT09W-01

If the transmission is contaminated, the torque converter clutch and transmission cooler should be thoroughly flashed with ATF.





TORQUE CONVERTER CLUTCH AND DRIVE PLATE INSPECTION

AT0GC-01

AT

1. **MEASURE DRIVE PLATE RUNOUT AND INSPECT RING GEAR**

Set up a dial indicator and measure the drive plate runout. If runout exceeds 0.20 mm (0.0079 in.) or if the ring gear is damaged, replace the drive plate. If installing a new drive plate, note the orientation of spacers and tighten the bolts.

Torque: 100 N·m (1,000 kgf·cm, 72 ft·lbf)

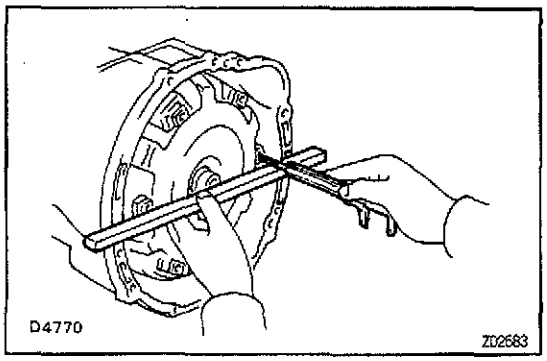
2. **MEASURE TORQUE CONVERTER CLUTCH SLEEVE RUNOUT**

(a) Temporarily mount the torque converter clutch to the drive plate. Set up a dial indicator.

If runout exceeds 0.30 mm (0.0118 in.), try to correct by reorienting the installation of the converter clutch. If excessive runout cannot be corrected, replace the torque converter clutch.

HINT: Mark the position of the converter clutch to ensure correct installation.

(b) Remove the torque converter clutch.



TRANSMISSION INSTALLATION

AT0SY-02

1. **INSTALL TORQUE CONVERTER IN TRANSMISSION**

If the torque converter been drained and washed, refill with new ATF.

Fluid type:

ATF DEXRON ® II

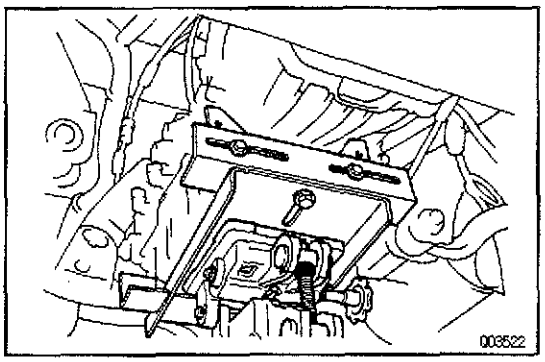
2. **CHECK TORQUE CONVERTER INSTALLATION**

Using calipers and a straight edge, measure from the installed surface to the front surface of the transmission.

Correct distance:

43.8 mm (1.724 in.)

AT

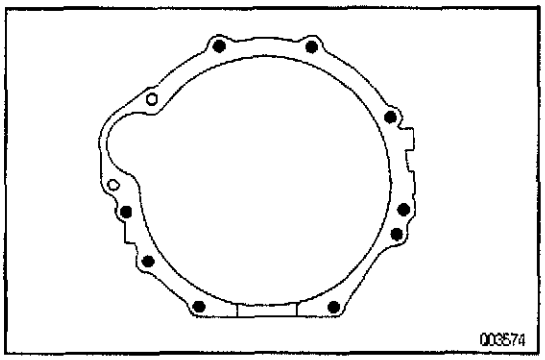


3. PLACE TRANSMISSION AT INSTALLATION POSITION

Jack up and push the transmission fully into position.

HINT:

- Make sure the engine and transmission are aligned precisely.
- Adjust the angle of the engine and transmission so that the engine installation surface and transmission surface parallel.
- Install the bleeder hose and throttle cable above the oil cooler tubes.



4. INSTALL TRANSMISSION BOLTS

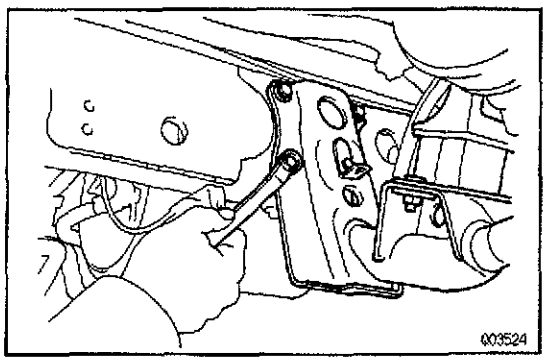
Install the transmission with the bolts.

Torque: 14 mm (0.55 in.) head bolt

37 N·m (380 kgf·cm, 27 ft·lbf)

Torque: 17 mm (0.67 in.) head bolt

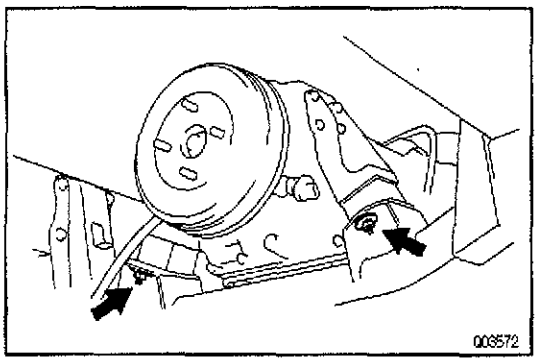
72 N·m (730 kgf·cm, 53 ft·lbf)



5. INSTALL TRANSMISSION REAR CROSS MEMBER

(a) Install the transmission rear cross member to the frame.

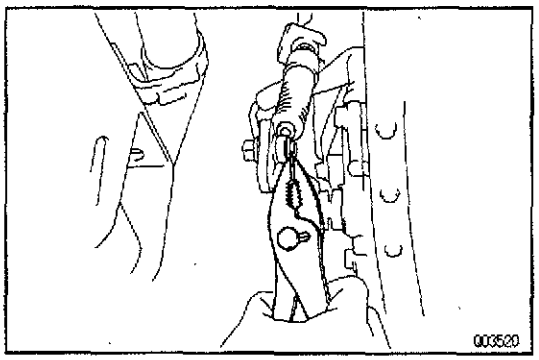
Torque: 50 N·m (510 kgf·cm, 37 ft·lbf)



(b) Tighten the transmission rear mounting set nuts.
Torque: 59 N·m (600 kgf·cm, 43 ft·lbf)

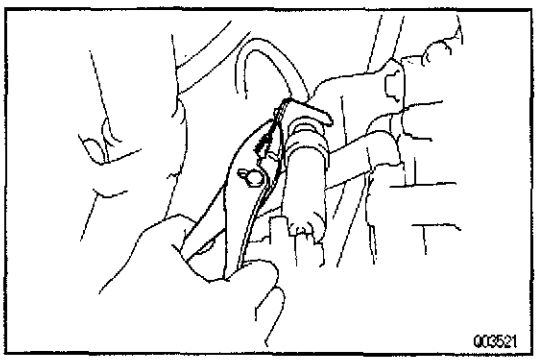
6. REMOVE TRANSMISSION JACK

7. REMOVE ENGINE SUPPORT

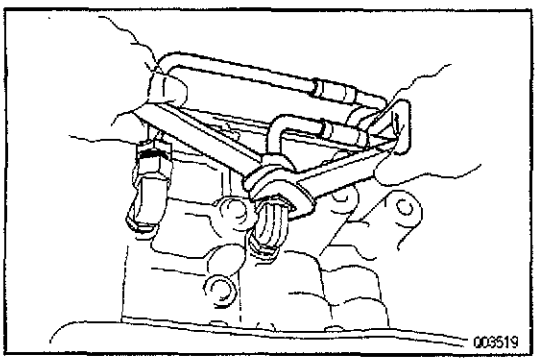


8. CONNECT SHIFT CABLE

(a) Connect the shift cable to the manual shift lever.

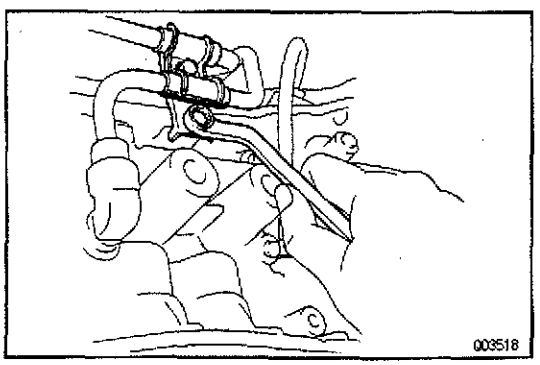


(b) Install the shift cable clamp.



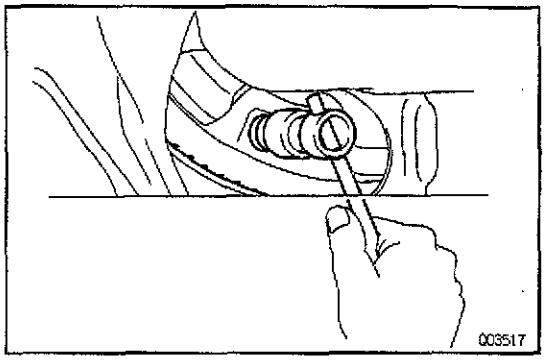
9. CONNECT 2 OIL COOLER TUBES

Connect the 2 oil cooler tubes.
Torque: 34 N·m (350 kgf·cm, 25 ft·lbf)



10. INSTALL OIL COOLER PIPES CLAMP

10 N·m (100 kgf·cm, 7 ft·lbf)

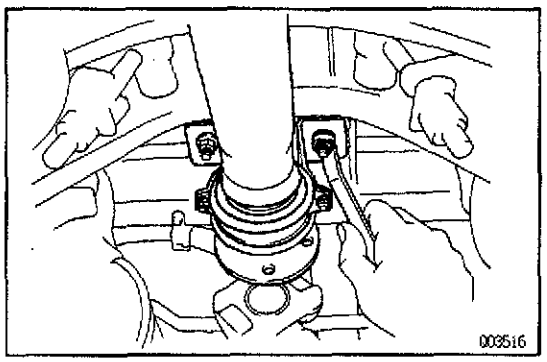


11. INSTALL TORQUE CONVERTER MOUNTING BOLTS

(a) Install the 6 bolts while turning the crankshaft.
Torque: 55 N·m (550 kgf·cm, 40 ft·lbf)

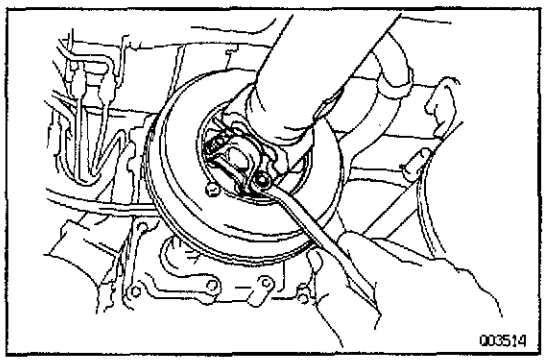
(b) Install the converter hole cover.

AT

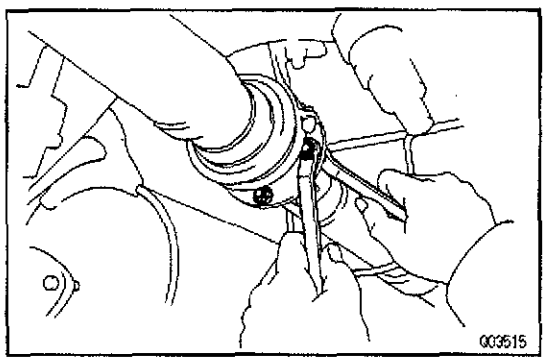


12. INSTAL FRONT PROPELLER SHAFT

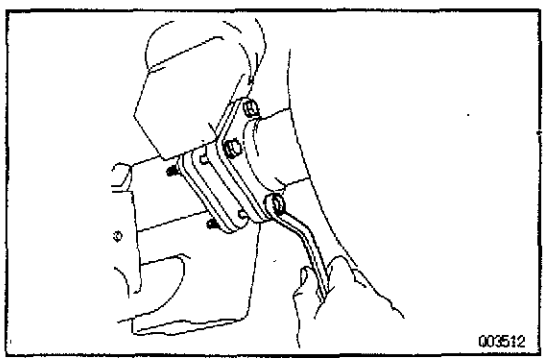
(a) Install the center support mounting bolts.
Torque: 25 N·m (250 kgf·cm, 18 ft·lbf)



(b) Align the match marks on the propeller shaft and connect the front propeller shaft to the parking brake drum.
Torque: 88 N·m (900 kgf·cm, 65 ft·lbf)

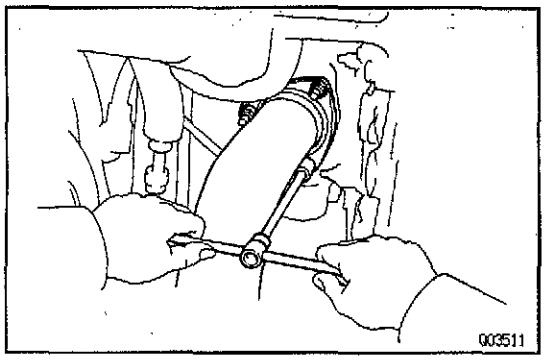


(c) Align the match marks on the propeller shaft and connect the front propeller shaft to the rear propeller shaft.
Torque: 88 N·m (900 kgf·cm, 65 ft·lbf)

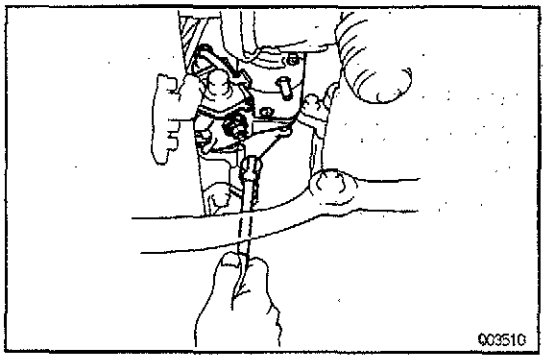


13. INSTALL EXHAUST PIPE

(a) Install the front exhaust pipe and exhaust retarder with 2 new gaskets.
Torque: 19 N·m (195 kgf·cm, 14 ft·lbf)

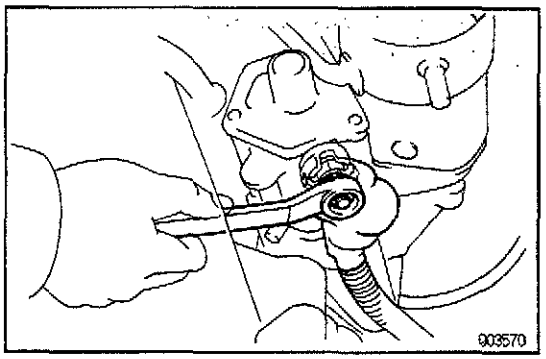


(b) Connect the front exhaust pipe to the exhaust manifold with a new gasket.
Torque: 62 N·m (630 kgf·cm, 46 ft·lbf)

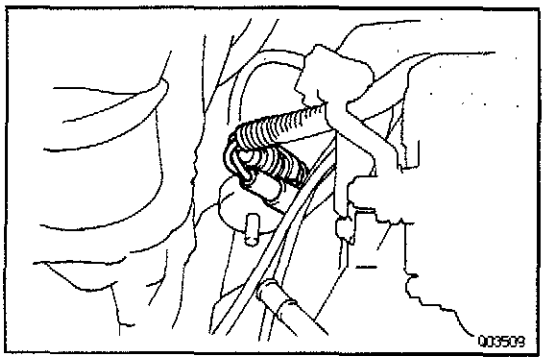


14. INSTALL STARTER

(a) Connect the connector and install the starter to the torque converter housing.
Torque:
Upper 72 N·m (730 kgf·cm, 53 ft·lbf)
Lower 72 N·m (730 kgf·cm, 53 ft·lbf)

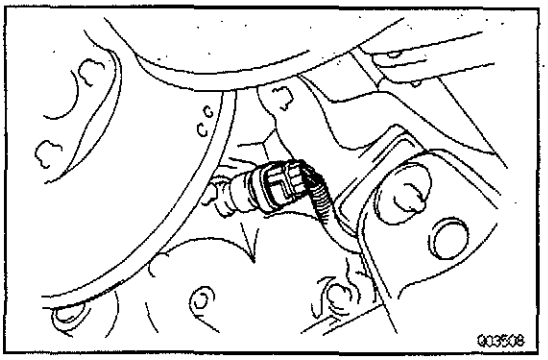


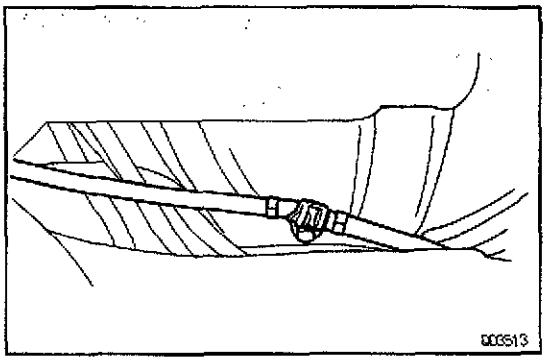
(b) Connect the cable to the starter.



15. CONNECT FOLLOWING CONNECTORS

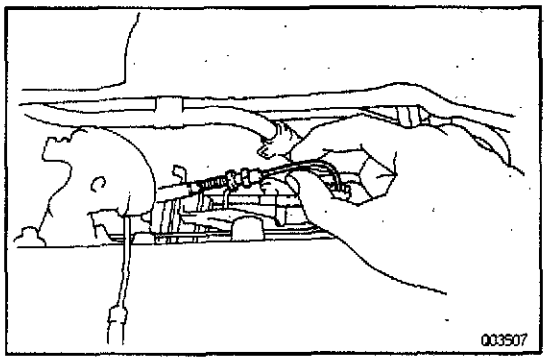
- No.1 speed sensor connector
- No.2 speed sensor connector
- Solenoid connector
- Neutral switch connectors





16. INSTALL THROTTLE CABLE CLAMP

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17. CONNECT THROTTLE CABLE

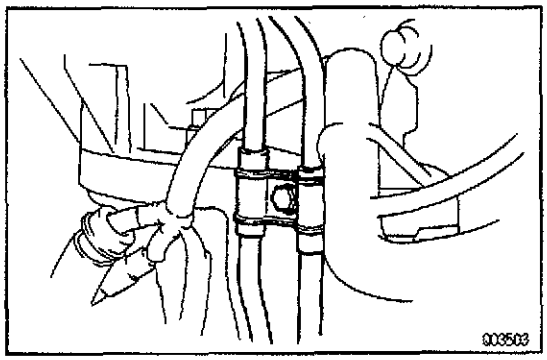
(a) Connect the throttle cable to the throttle linkage

(b) Temporarily tighten the adjusting nut.

18. ADJUST THROTTLE CABLE

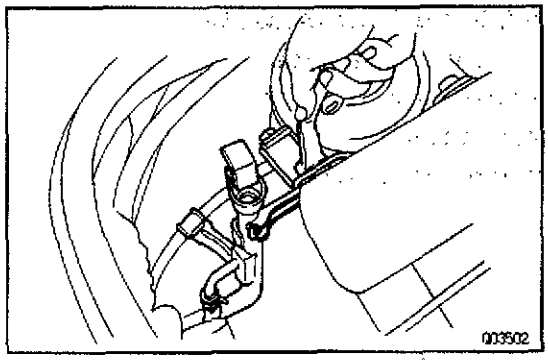
(See page AT–25)

19. INSTALL SHIFT CABLE BRACKET



20. INSTALL OIL COOLER TUBES CLAMP

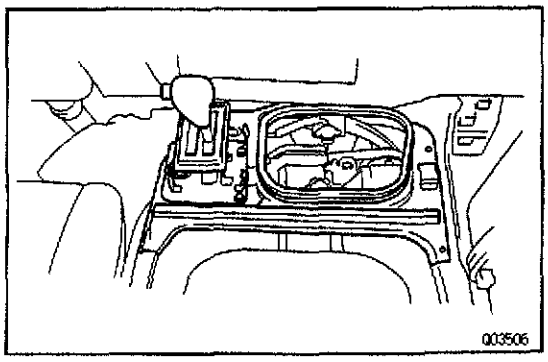
Torque: 10 N·m (100 kgf·cm, 7ft·lbf)



21. INSTALL OIL FILLER TUBE

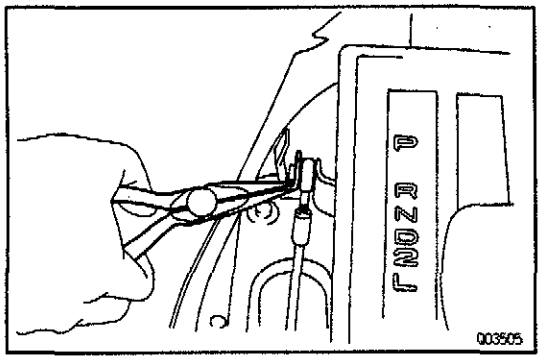
(a) Install the 2 nuts and oil filler tube.

(b) Connect the bleeder hose.

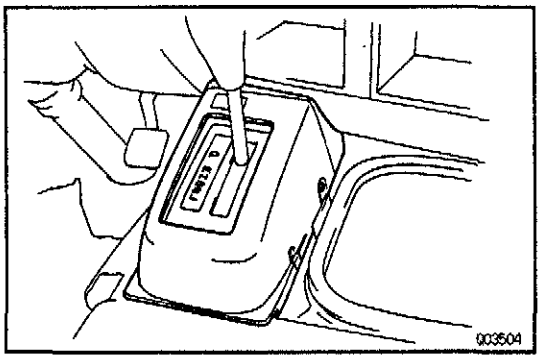


22. INSTALL ENGINE ROOM HOLE COVER

(a) Install the engine room hole cover with the shift lever.

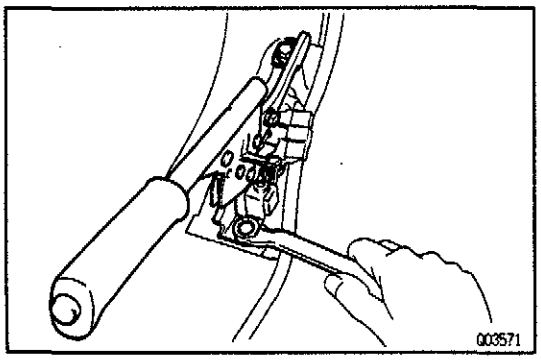


(b) Connect the shift cable to the shift lever and install the clip.



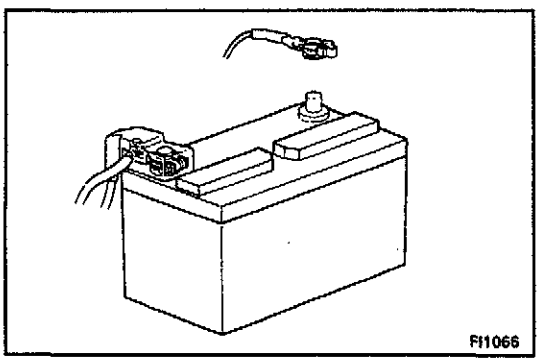
(c) Install the shift lever cover.
(d) Install the engine room service hole covers.

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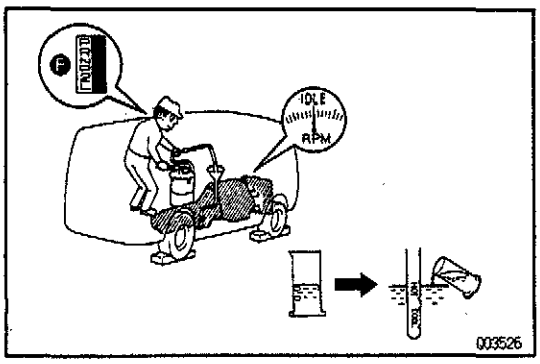
23. INSTALL PARKING BRAKE LEVER

(a) Install the parking brake cable at installation position.
(b) Install the parking brake cable to the cable support bracket.
(c) Install the clip.
(d) Install the parking brake lever.
(e) Adjust the parking brake lever stroke.
(f) Install the parking brake lever cover.



24. CONNECT BATTERY CABLE TO NEGATIVE TERMINAL

25. ADJUST SHIFT CONTROL ROD



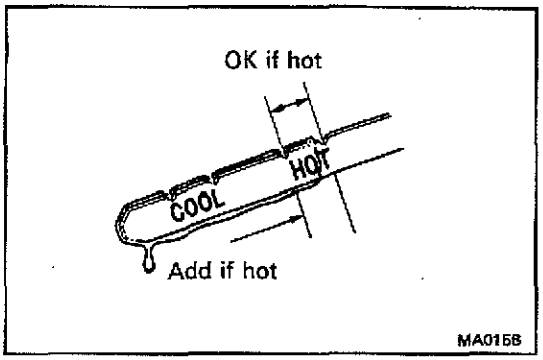
26. FILL TRANSMISSION FLUID

Fluid type:

ATF DEXRON® II

Capacity:

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



27. CHECK FLUID LEVEL
(See page AT–24)

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