

Preliminary Check

1. CHECK FLUID LEVEL

HINT:

The vehicle must have been driven so that the engine and transmission are at normal operating temperature. (Fluid temperature: 70–80 °C or 158–176 °F)

Only use the COOL range on the dipstick as a rough reference when the fluid is replaced or the engine does not run.

- (a) Park the vehicle on a level surface, set the parking brake.
- (b) With the engine idling, shift the shift lever into all positions from P to L position and return to P position.

HINT: Depress brake pedal.

- (c) Pull out the transmission dipstick and wipe it clean.
- (d) Push it back fully into the tube.
- (e) Pull it out and check that the fluid level is in the HOT range.

If the level is at the low side, add fluid.

Fluid type: ATF DEXRON® II

NOTICE: Do not overfill.

2. CHECK FLUID CONDITION

If the fluid smells burnt or is black, replace it as following procedures.

- (a) Remove the drain plug and drain the fluid.
- (b) Reinstall the drain plug securely.
- (c) With the engine OFF, add new fluid through the oil filler tube.

Fluid type ATF DEXRON® II

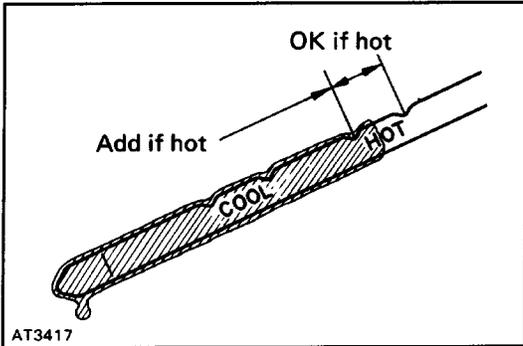
Capacity:

Total: 7.2 liters (7.6 US qts, 6.3 Imp qts)

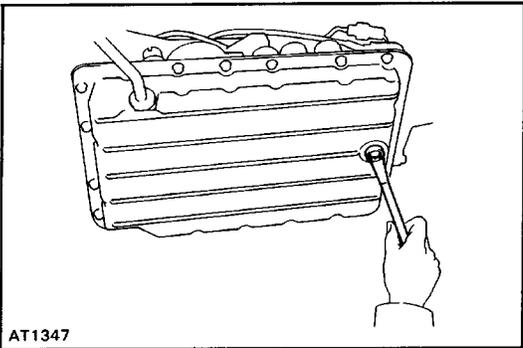
Drain and refill: 1.6 liters (1.7 US qts, 1.4 Imp.qts)

- (d) Start the engine and shift the shift lever into all positions from P to L position and then shift into P position.
- (e) With the engine idling, check the fluid level. Add fluid up to the COOL level on the dipstick.
- (f) Check the fluid level with the normal operating temperature (70–80 °C or 158–176 °F) and add as necessary.

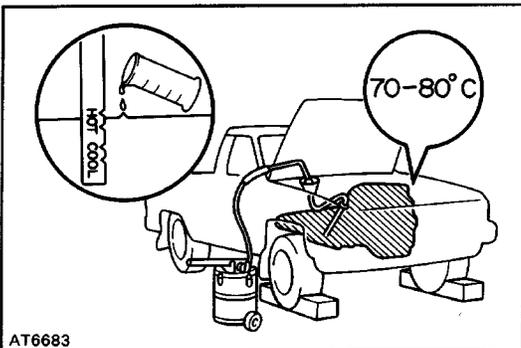
NOTICE: Do not overfill.



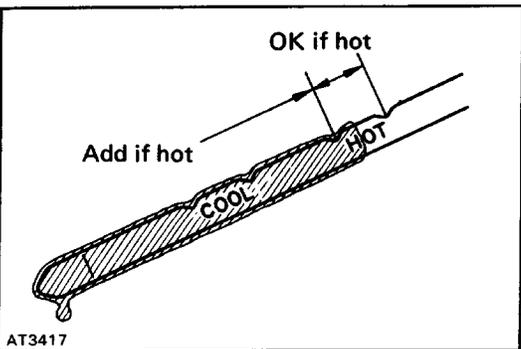
AT3417



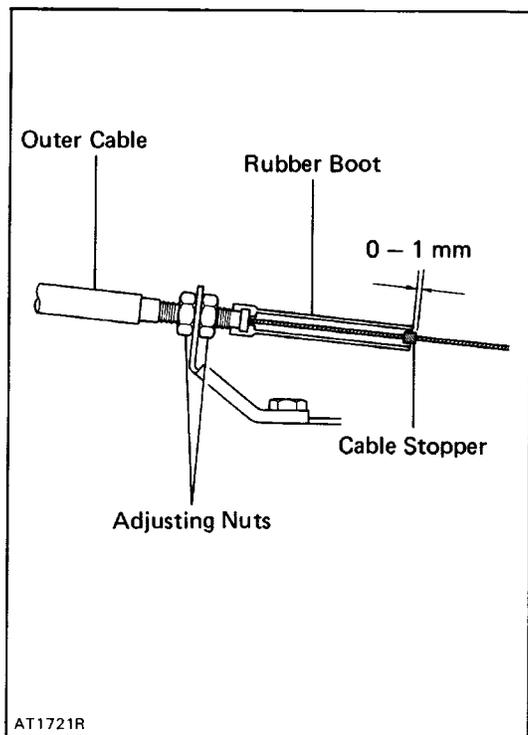
AT1347



AT6683



AT3417



3. INSPECT THROTTLE CABLE

(a) Depress the accelerator pedal all the way and check that the throttle valve opens fully.

HINT: If the valve does not open fully, adjust the accelerator cable.

(b) Fully depress the accelerator pedal.

(c) Measure the distance between the end of the boot and stopper on the cable.

Standard distance: 0-1 mm (0-0.04 in.)

If the distance is not standard, adjust the cable by the adjusting nuts.

4. INSPECT SHIFT LEVER POSITION

When shifting the shift lever from the N position to other positions, check that the lever can be shifted smoothly and accurately to each position and that the position indicator correctly indicates the position.

If the indicator is not aligned with the correct position, carry out the following adjustment procedures.

(Column shift)

(a) Remove the nut on the cross shaft rod.

(b) Push the cross shaft rod fully downward.

(c) Return the cross shaft rod two notches to N position.

(d) Set the shift lever to N position.

(e) While holding the shift lever lightly toward the R position side, adjust the cross shaft rod nut.

(f) Tighten the cross shaft rod nut.

(g) Start the engine and make sure that the vehicle moves forward when shifting the lever from the N to D position and reverse when shifting it to the R position.

(Floor shift)

(a) Remove the nut on the cross shaft rod.

(b) Push the cross shaft rod fully downward.

(c) Return the cross shaft rod three notches to N position.

(d) Set the shift lever to N position.

(e) While holding the shift lever lightly toward the R position side, adjust the cross shaft rod nut.

(f) Tighten the cross shaft rod nut.

(g) Start the engine and make sure that the vehicle moves forward when shifting the lever from the N to D position and reverse when shifting it to the R position.

5. INSPECT PARK/NEUTRAL POSITION SWITCH

Check that the engine can be started with the shift lever only in the N or P position, but not in other positions.

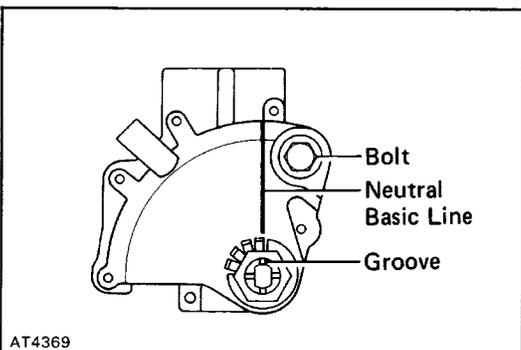
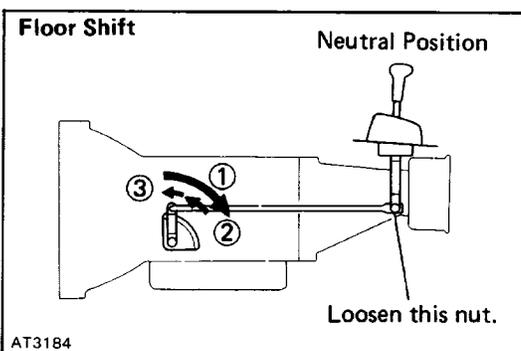
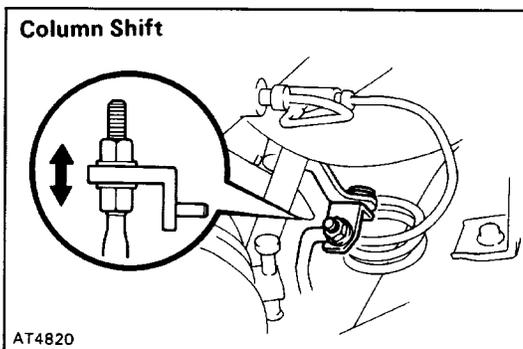
If not as stated above, carry out the following adjustment procedures.

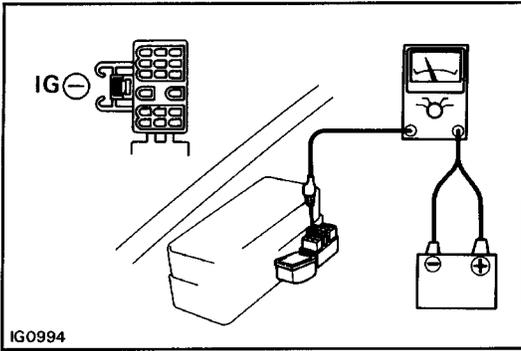
(a) Loosen the park/neutral position switch bolt and set the shift lever to the N position.

(b) Align the groove and neutral basic line.

(c) Hold in position and tighten the bolt.

Torque: 13 N-m (130 kgf-cm, 9 in.⋅lbf)

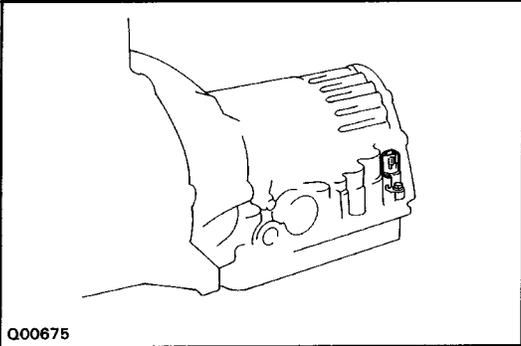




6. INSPECT IDLE SPEED (IN POSITION)

Connect a tachometer test probe to the data link connector 1 terminal IG ⊖, inspect the idle speed.

Idle speed: 800 RPM



Manual Shifting Test

HINT: With this test, it can be determined whether the trouble lies within the electrical circuit or is a mechanical problem in the transmission.

1. DISCONNECT SOLENOID WIRE

2. INSPECT MANUAL DRIVING OPERATION

Check that the shift and gear position correspond with the table below.

Shift position	D position	2 position	L position	R position	P position
Gear position	O/D	3rd	1st	Reverse	Pawl Lock

HINT: If the L, 2 and D position gear positions are difficult to distinguish, perform the following road test.

- While driving, shift through the L, 2 and D positions. Check that the gear change corresponds to the shift position.

If any abnormality is found in the above test, the problem lies in transmission itself.

3. CONNECT SOLENOID WIRE

4. CANCEL OUT DIAGNOSTIC TROUBLE CODE

(See page [AT-56](#))