

MANUAL SHIFTING TEST

1. MANUAL SHIFTING TEST

HINT:

- Through this test, it can be determined whether the trouble occurs in the electrical circuit or if it is a mechanical problem in the transmission.
- If any abnormalities are found in the following test, the problem is in the transmission itself.

- (a) Disconnect the connector of the transmission wire.

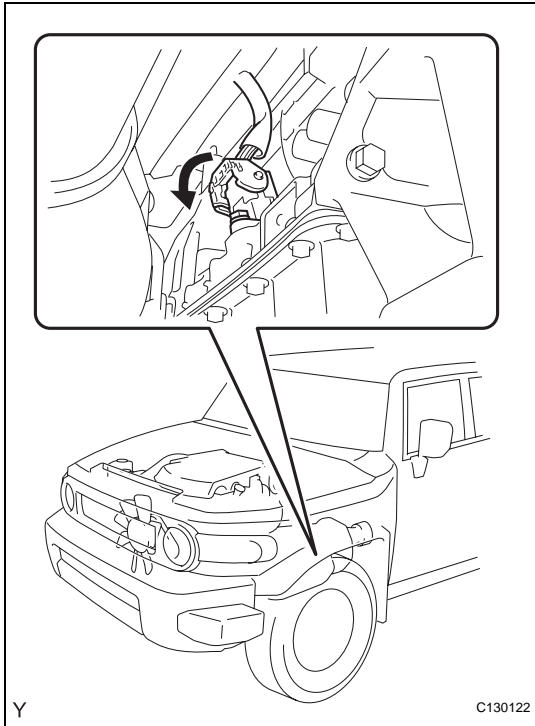
HINT:

It is possible to deactivate the electrical shift control by disconnecting the transmission wire. The gear positions can then be changed mechanically with the shift lever.

- (b) Drive with the transmission wire disconnected. Shift the shift lever to each position to check whether the gear position changes as shown in the table below.

Shift Lever Position	Gear Position
D	4th
4	4th
3	3rd
2	1st
L	1st
R	R
P	P

- (c) Connect the connector of the transmission wire.
 (d) Clear the DTC (See page [AT-33](#)).



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INITIALIZATION

1. RESET MEMORY

CAUTION:

Perform the RESET MEMORY (AT initialization) when replacing the automatic transmission assembly, engine assembly or ECM.

NOTICE:

Intelligent tester only

HINT:

The ECM stores the conditions under which the ECT (Electronic Controlled Automatic Transmission) controls the automatic transmission and engine assemblies according to their characteristics. Therefore, when the automatic transmission assembly, engine assembly, or ECM has been replaced, it is necessary to reset the memory so that the ECM can store the new information. Reset procedure is as follows.

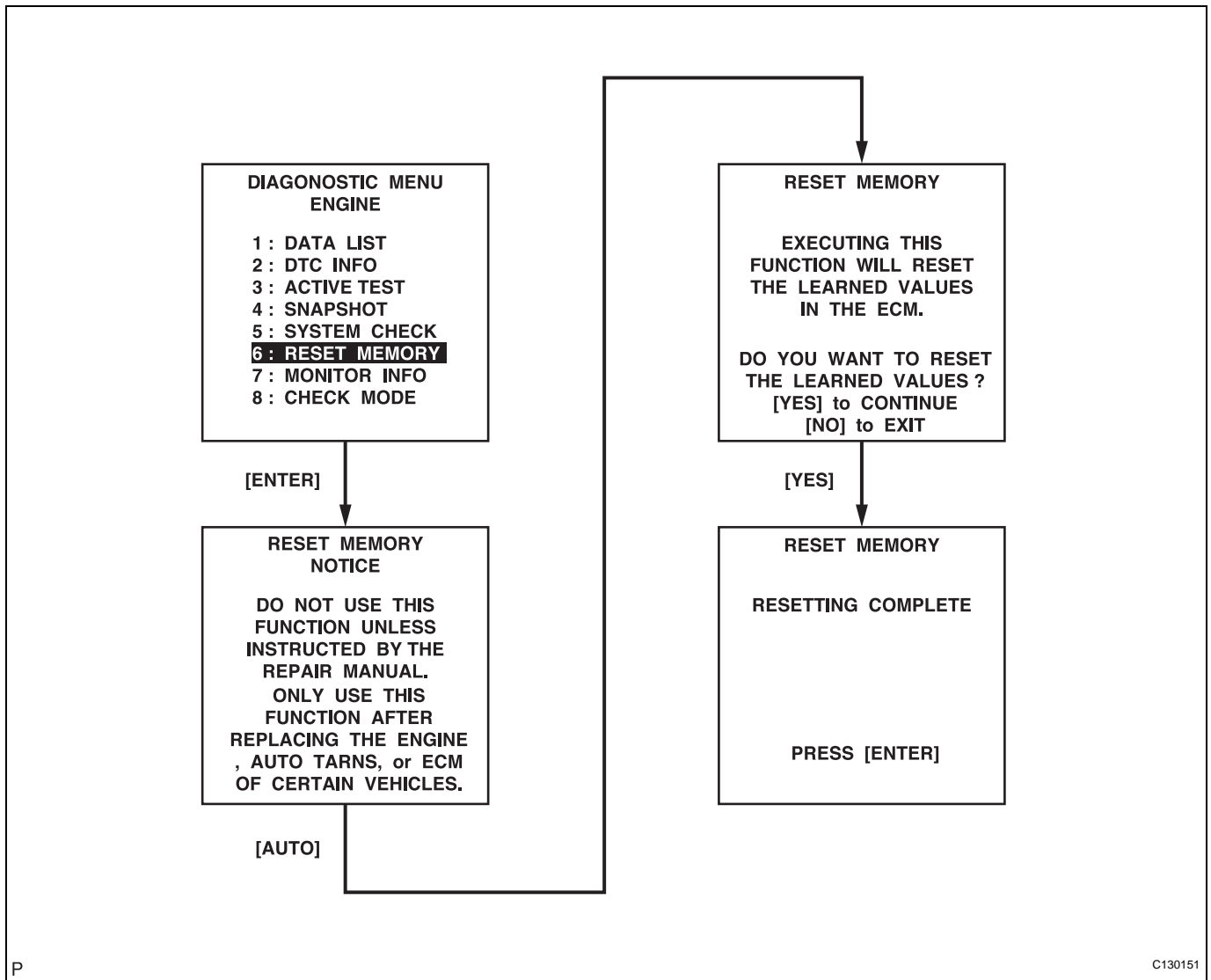
- (a) Turn the ignition switch off.
- (b) Connect the intelligent tester together with the CAN VIN (controller area network vehicle interface module) to the DLC3.
- (c) Turn the ignition switch to the ON position and push the intelligent tester main switch on.
- (d) Select the items "DIAGNOSIS / ENHANCED OBD II".
- (e) Perform the reset memory procedure from the ENGINE menu.

CAUTION:

After performing the RESET MEMORY, be sure to perform the ROAD TEST (See page [AT-13](#)) described earlier.

HINT:

The ECM stores the new information during the ROAD TEST.



2. SET UP FUNCTION OF ATF TEMPERATURE WARNING LIGHT (ONLY 4WD VEHICLE)

CAUTION:

Re-set the function of the ATF (Automatic Transmission Fluid) temperature warning light, if the ECM has been replaced or RESET MEMORY (AT initialization) has been performed.

HINT:

- The ATF temperature warning light is built into the 4WD vehicles. When the ATF temperature is too high, the ATF temperature warning light illuminates to warn the driver. If the ECM has been replaced or RESET MEMORY has been performed, this function does not work unless the following procedure is performed.
- Once the ECM is set up, its memory will not be cleared by only disconnecting the negative cable from the battery.

(a) Start the engine.

(b) Shift the transfer high and low shift lever to the 4WD position. Check that the 4WD indicator illuminates.

(c) Shift the transfer high and low shift lever to the 2WD position.

(d) Drive the vehicle at a vehicle speed of 25 mph (40 km/h) or more.

NOTICE:

If the battery is disconnected before driving the vehicle at a vehicle speed of 25 mph (40 km/h) or more, the memory will be cleared. If the battery has been disconnected, perform steps (a) to (d) again.