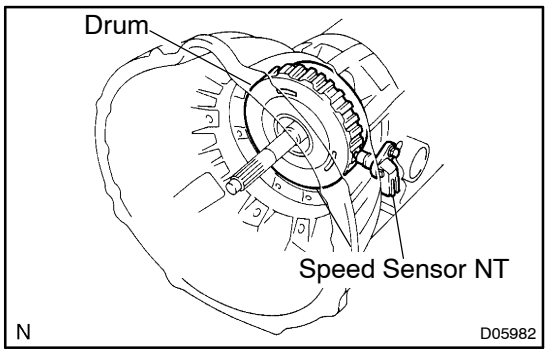
DIAUL–01

DTC	P07 17/37	Input Speed Sensor Circuit No Signal

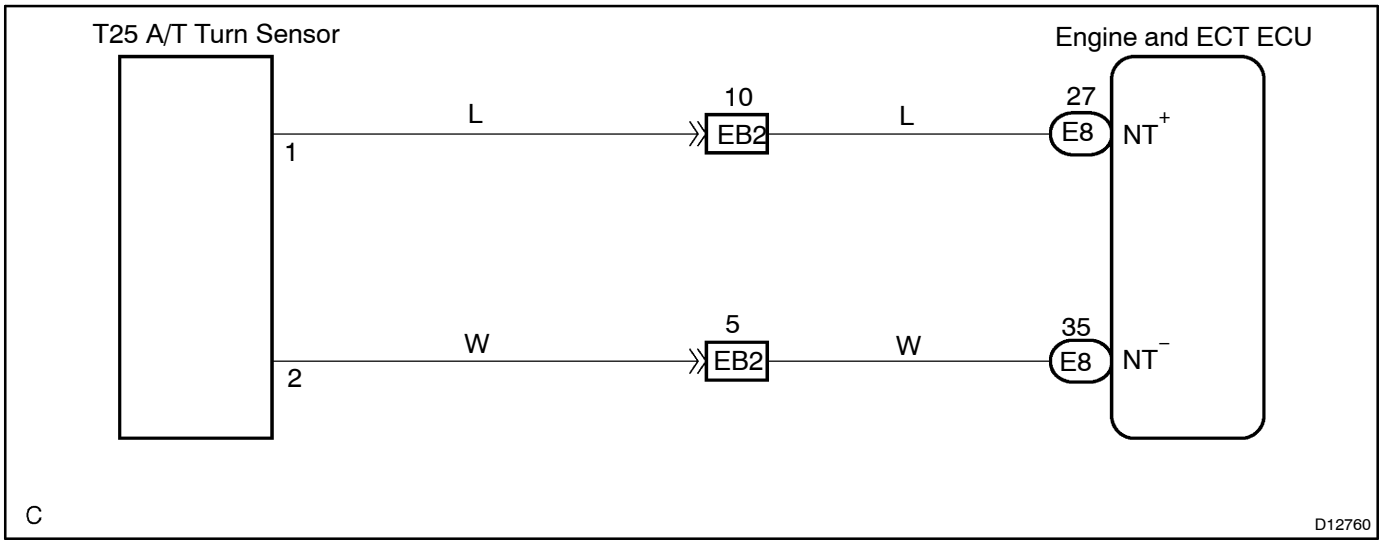
CIRCUIT DESCRIPTION



The speed sensor NT detects the rotation speed of the input shaft from the rotation of the drum. Its construction is the same as that of the speed sensor SP2.
By comparing the speed sensor NT signal and speed sensor SP2 signal, the Engine and ECT ECU detects the shift timing of the gears and appropriately controls the engine torque and hydraulic pressure in response to various conditions, thus doing smooth gear shift.

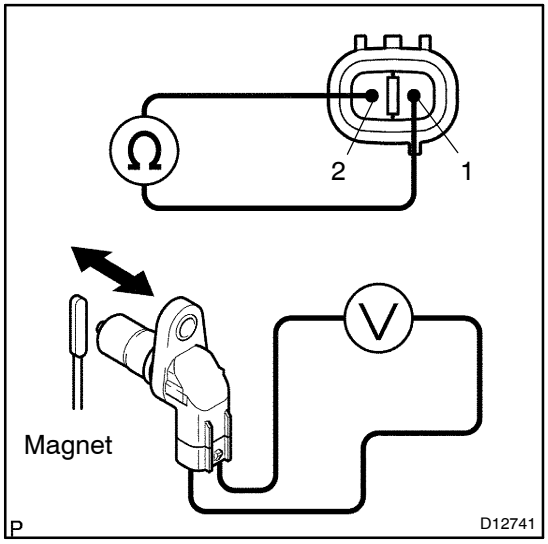
DTC No.	DTC Detection Condition	Trouble Area
P0717/37	All conditions below are detected for 5 secs. or more (1–trip detection logic) (a) Gear change not being performed (b) Gear range: 1st, 2nd, 3rd, 4th or 5th (c) T/M input shaft rpm: 300 rpm or less (d) T/M output shaft rpm: 1,000 rpm or more (e) Neutral start switch: OFF (f) Shift solenoid valves, park/neutral posotion switch and vehicle speed sensor are in normal operation	• Open or short in speed sensor NT circuit • Speed sensor NT • Engine and ECT ECU • Automatic transmission assembly

WIRING DIAGRAM



INSPECTION PROCEDURE

1	Check speed sensor NT.



PREPARATION:
Remove the speed sensor NT.
CHECK:
(a) Measure the resistance between the sensor terminals.
Standard: 560 – 680 Ω at 20°C (68 °F)
(b) Measure the voltage between the sensor terminals when a magnet is put close to the front end of the sensor then kept away quickly.
Standard: Sensor generates voltage intermittently
HINT:
The generated voltage is extremely low.
OK:
Standard.

NG → **Replace speed sensor NT.**

OK

2	Check harness and connector between Engine and ECT ECU and speed sensor NT (See page IN–38).

NG → **Repair or replace harness and connector.**

OK

Check and replace the Engine and ECT ECU (See page IN–38).