

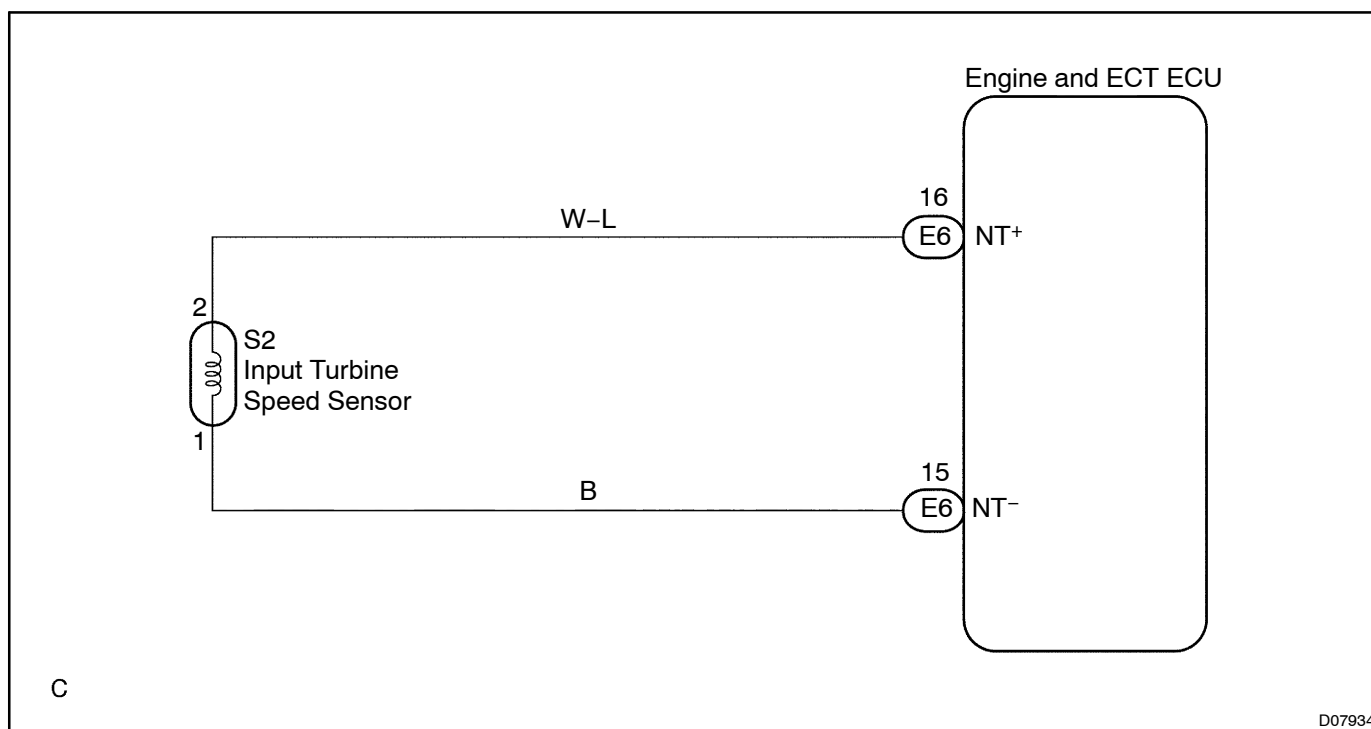
DTC	P1725/37	NT Revolution Sensor Circuit Malfunction (Input Turbine Speed Sensor)
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CIRCUIT DESCRIPTION

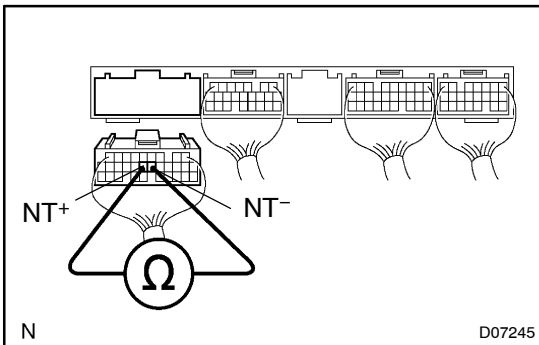
This sensor detects the rotation speed of the input turbine. By comparing the input turbine speed signal (NT) and the counter gear speed sensor signal (NC), the Engine and ECT ECU detects the shift timing of the gears and appropriately controls the engine torque and hydraulic pressure in response to various conditions, thus performing smooth gear shifting.

DTC No.	DTC Detecting Condition	Trouble Area
P1725/37	The Engine and ECT ECU detects conditions (a), (b), (c), (d) and (e) continuity for 5 seconds or more. (1-trip detection logic) (a) Gear change not being performed (b) Gear position: 2nd, 3rd or O/D gear (c) Solenoid valves and neutral start switch are normal (d) T/M input shaft rpm: 300 rpm or less (e) T/M output shaft rpm: 1,000 rpm or less	• Open or short in input turbine (NT) speed sensor circuit • Input turbine (NT) speed sensor • Engine and ECT ECU

WIRING DIAGRAM



INSPECTION PROCEDURE

1 Check resistance between terminals NT⁺ and NT⁻ of Engine and ECT ECU.**PREPARATION:**

Disconnect the connector from Engine and ECT ECU.

CHECK:

Check resistance between terminals NT⁺ and NT⁻ of Engine and ECT ECU.

OK:

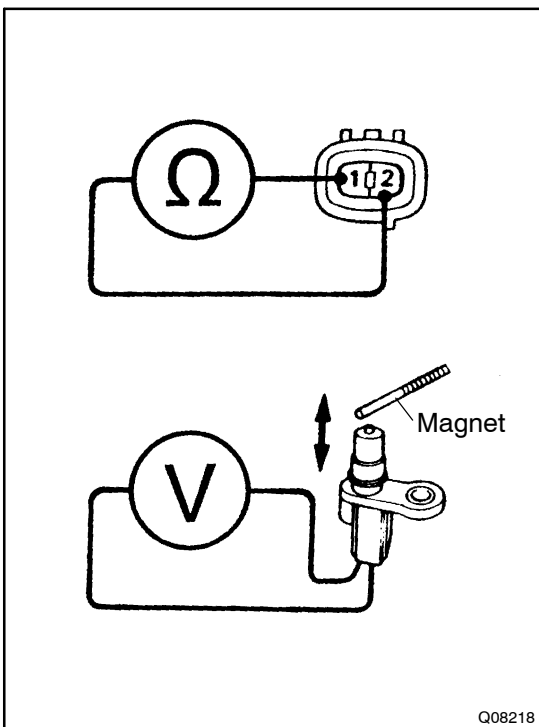
Resistance: $620 \pm 60 \Omega$

OK

Check and replace the Engine and ECT ECU
(See page IN-30).

NG

2 Check input turbine speed sensor.

**PREPARATION:**

Remove the input turbine speed sensor from transaxle.

CHECK:

- (a) Measure resistance between terminals 1 and 2 of speed sensor.
- (b) Check voltage between terminals 1 and 2 of the speed sensor when a magnet is put close to the front end of the speed sensor then taken away quickly.

OK:

(a) Resistance: $620 \pm 60 \Omega$ at 20 °C (68 °F)

(b) Voltage is generated intermittently.

HINT:

The voltage generated is extremely low.

NG

Replace the input turbine speed sensor.

OK

Check and repair the harness and connector
between Engine and ECT ECU and input tur-
bine speed sensor (See page IN-30).