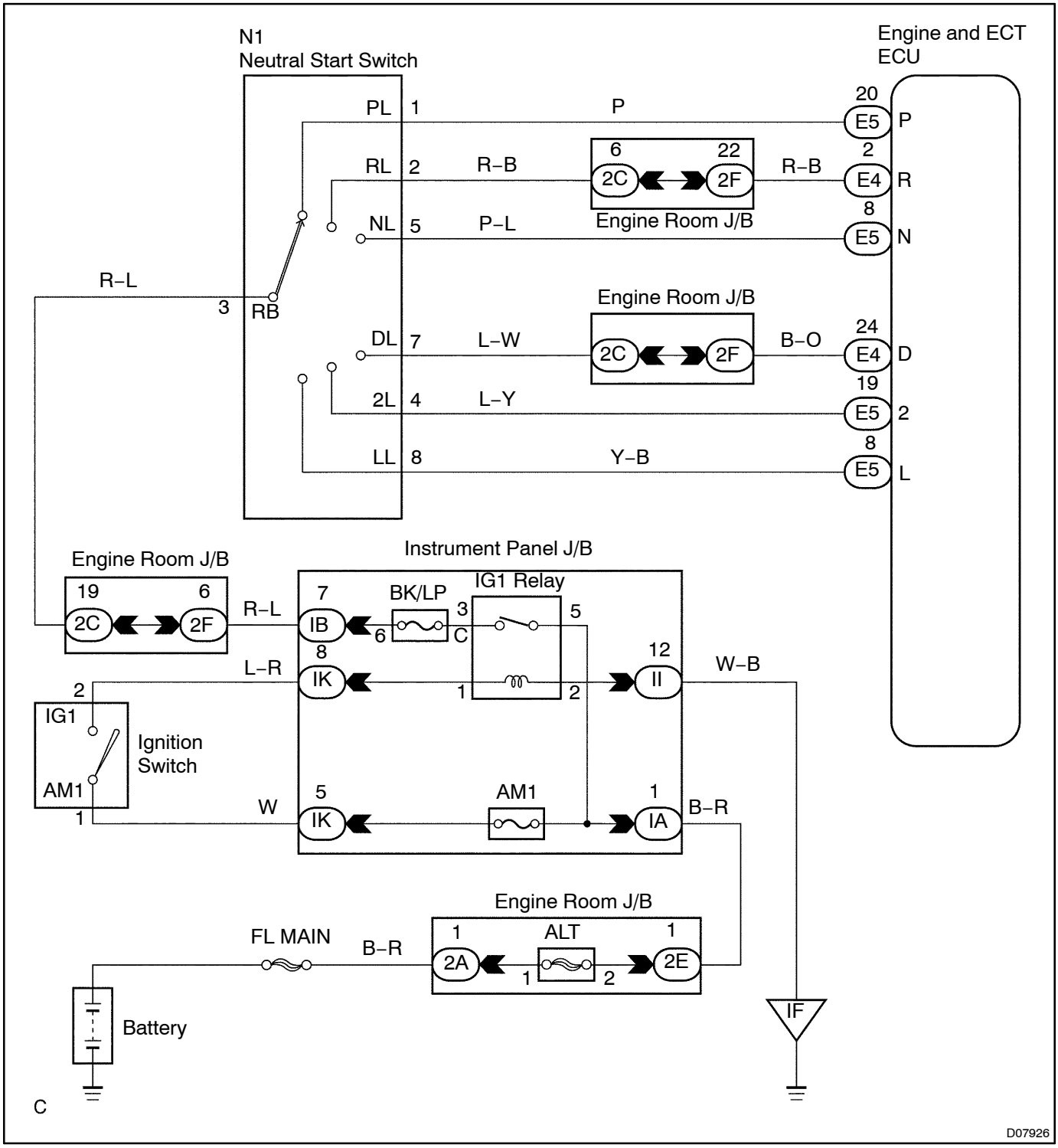
DI68U–02

Neutral Start Switch Malfunction

CIRCUIT DESCRIPTION

The neutral start switch detects the shift lever position and sends signals to the engine ECU.
The engine ECU receives signals (R, R, N, D 2 and L) from the neutral start switch.

WIRING DIAGRAM



INSPECTION PROCEDURE

1	**Read PNP, REVERSE, 2ND DRIVE and LOW signals.**

When using hand–held tester:

PREPARATION:

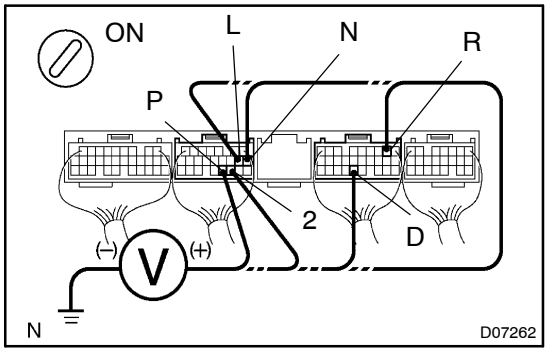
(a) Remove the DLC3 cover.
(b) Connect a hand–held tester to the DLC3.
(c) Turn the ignition switch ON and hand–held tester main switch ON.

CHECK:

Shift lever into the P, R, N, D, 2 and L positions, and read the PNP, REVERSE, 2ND DRIVE and LOW signals on the hand–held tester.

OK:

Shift range	Signal
2	2ND OFF → ON
L	LOW OFF → ON
D	DRIVE OFF → ON
R	REVERSE OFF → ON
P, N	PNP OFF → ON



When not using hand–held tester:

PREPARATION:

Turn the ignition switch ON.

CHECK:

Measure voltage between terminals P. R. N. D. 2 and L of engine ECU and body ground when the shift lever is shifted to the following positions.

OK:

Shift range	Tester connection	Specified value
P	P – Body ground	Battery positive voltage
R	R – Body ground	*Battery positive voltage
N	N – Body ground	Battery positive voltage
D	D – Body ground	Battery positive voltage
2	2 – Body ground	Battery positive voltage
L	L– Body ground	Battery positive voltage

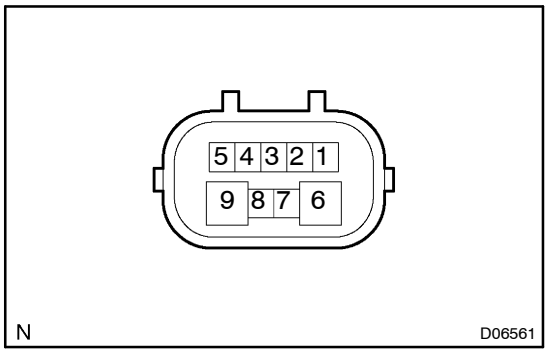
HINT:

*: The voltage will drop slightly due to lighting up of the back up light.

OK → **Check and replace the engine ECU (See page IN–20).**

NG

2	Check neutral start switch.



PREPARATION:

(a) Jack up the vehicle.

(b) Remove the neutral start switch.

CHECK:

Check continuity between each terminal shown below when the shift lever is moved to each position.

Shift range	Terminal No. to continuity	
P	6 – 9	1 – 2
R	2 – 3	–
N	6 – 9	3 – 5
D	3 – 7	–
2	3 – 4	–
L	3 – 8	–

OK:

There is continuity.

NG → **Replace the neutral start switch.**

OK

Repair or replace harness and connector between battery and neutral start switch, neutral start switch and engine ECU (See page IN–20).