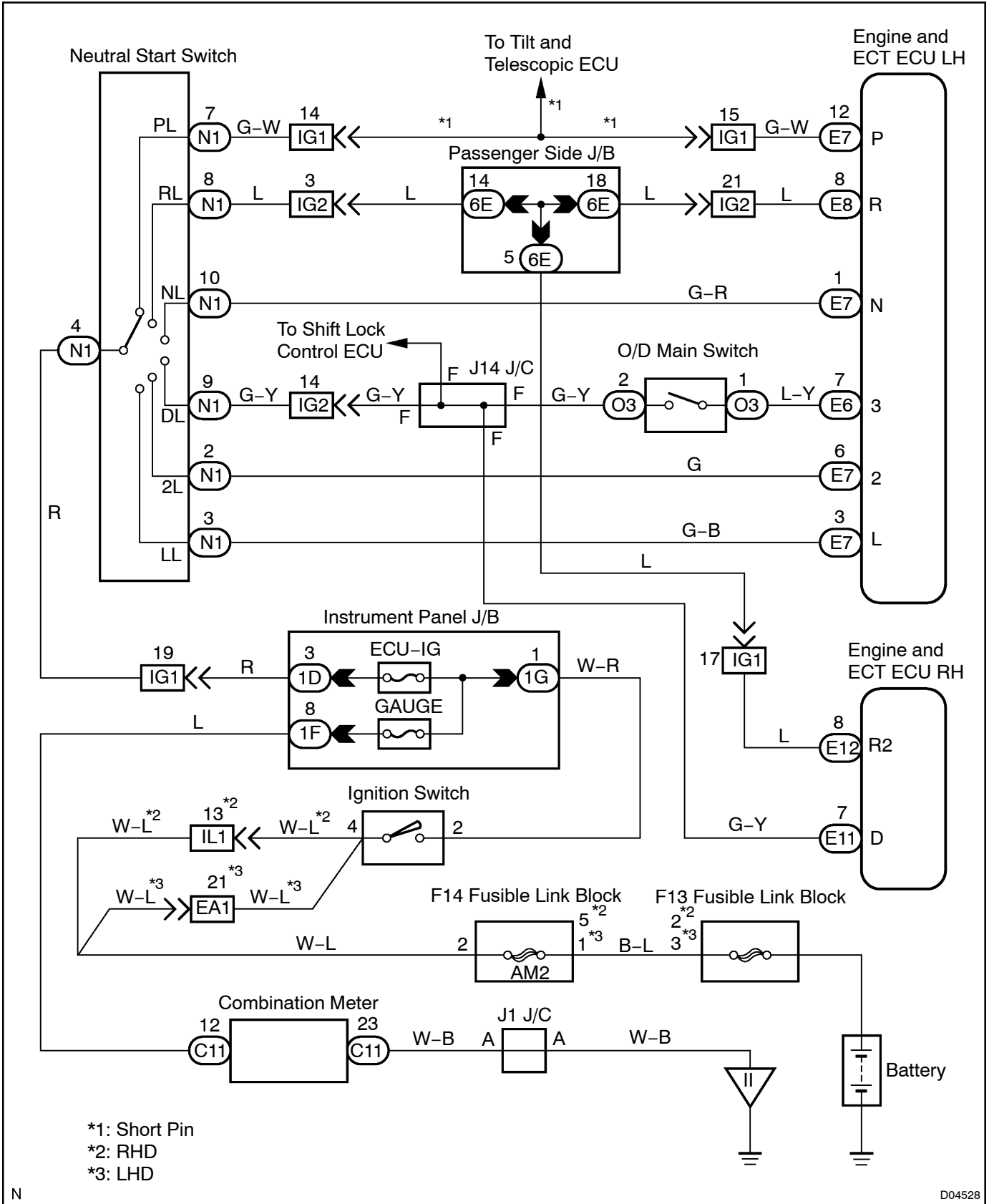


Neutral Start Switch Circuit

CIRCUIT DESCRIPTION

The neutral start switch detects the shift lever range and sends signals to the Engine and ECT ECU. The Engine and ECT ECU receives signals (NSW, R, 2 and L) from the neutral start switch. When the signal is not sent to the Engine and ECT ECU from the neutral start switch, the Engine and ECT ECU judges that the shift lever is in D range.

WIRING DIAGRAM



INSPECTION PROCEDURE

1	Read PNP SW, REVERSE, 2ND and LOW signals.
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When using hand-held tester:**PREPARATION:**

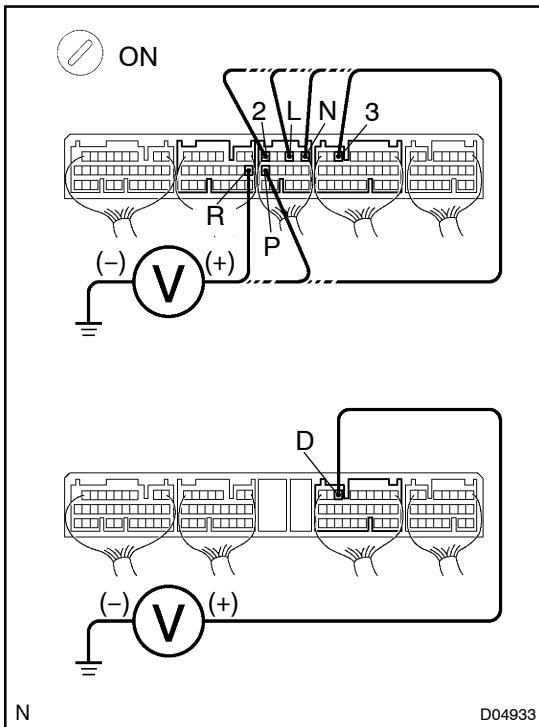
- (a) Remove the DLC3 cover.
- (b) Connect a hand-held tester to the DLC3.
- (c) Turn the ignition switch ON and turn the hand-held tester main switch ON.

CHECK:

Shift lever into the P, R, N, 2 and L ranges, and read the PNP SW, REVERSE, 2ND 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 SW OFF → ON



When not using hand-held tester:

PREPARATION:

Turn the ignition switch ON.

CHECK:

Measure voltage between terminals P, R, N, D, 3, 2 and L of Engine and ECT ECU and body ground when the shift lever is shifted to the following ranges.

OK:

Tester connection	Condition	Specified condition
P - Body ground	Shift lever range P	Battery positive voltage
R - Body ground	Shift lever range R	Battery positive voltage*
N - Body ground	Shift lever range N	Battery positive voltage
D - Body ground	Shift lever range D Transmission control SW (for D and 3) OFF	Battery positive voltage
3 - Body ground	Shift lever range 3 Transmission control SW (for D and 3) OFF	Battery positive voltage
2 - Body ground	Shift lever range 2	Battery positive voltage
L - Body ground	Shift lever range L	Battery positive voltage
NSW - Body ground	Shift lever range P and N	Battery positive voltage

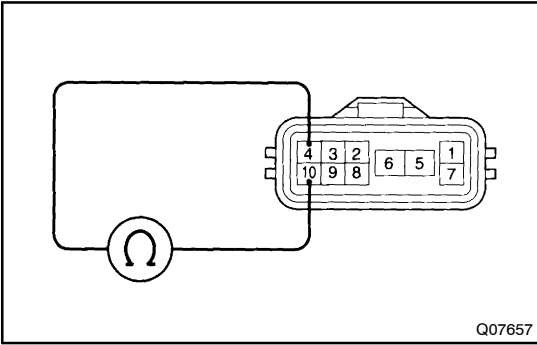
HINT:

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

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

NG

2 Check neutral start switch.



PREPARATION:

- (a) Jack up the vehicle.
- (b) Remove the neutral start switch
(See page AT-10)

CHECK:

Check continuity between each terminal shown below when the shift lever is shifted in each range.

OK:

Shift Range	Terminal No. to	Continuity
P	4 - 7	5 - 6
R	4 - 8	-
N	4 - 10	5 - 6
D, 3	4 - 9	-
2	2 - 4	-
L	3 - 4	-

NG

Replace the neutral start switch.

OK

Repair or replace harness and connector between battery and neutral start switch, neutral start switch and Engine and ECT ECU (See page N-30).