

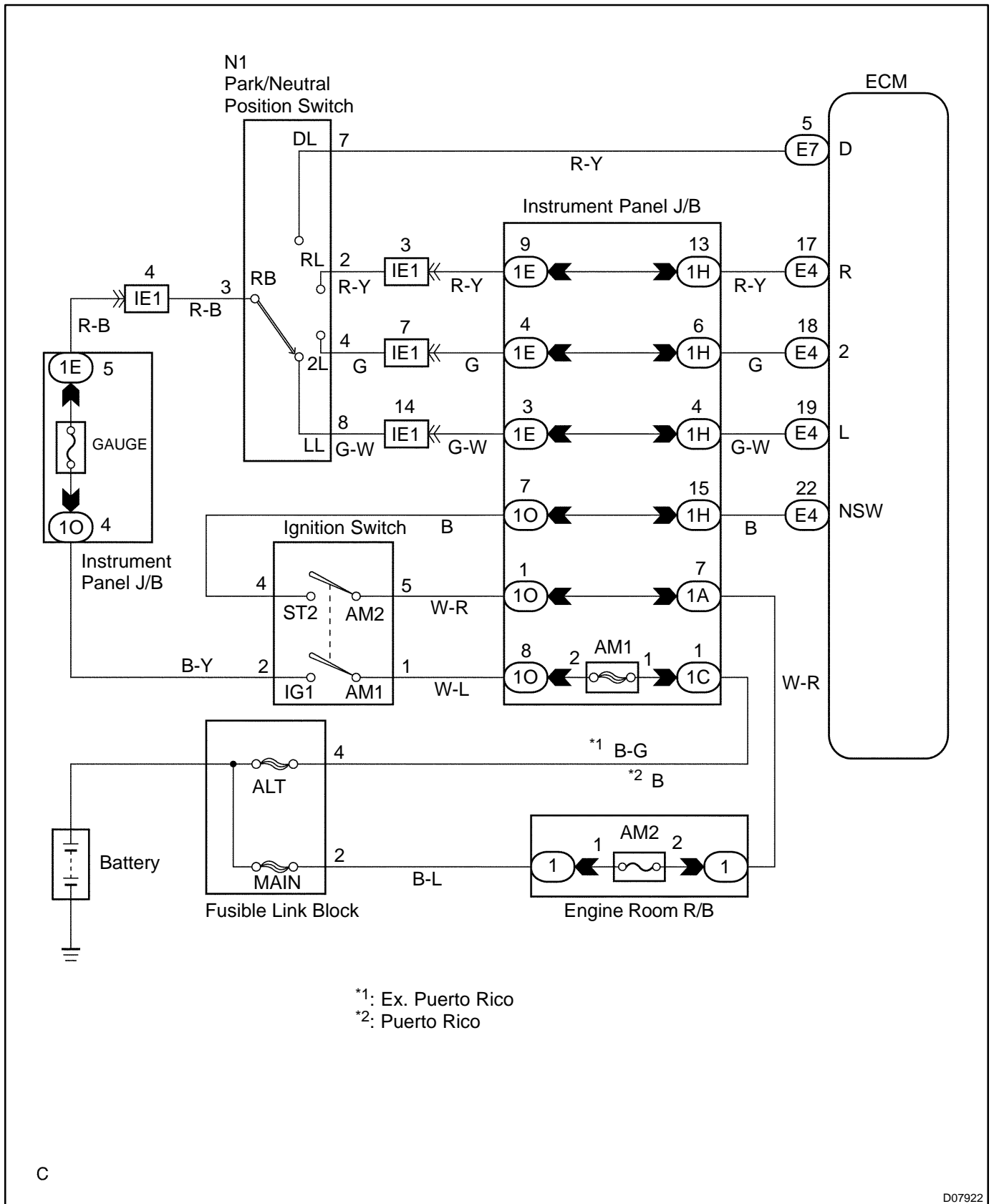
DTC	P1780	Park/Neutral Position Switch Malfunction
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CIRCUIT DESCRIPTION

The neutral start switch detects the shift lever position and sends signals to the ECM. The ECM receives signals (NSW, R, D, 2 and L) from the park/neutral position switch.

DTC No.	DTC Detecting Condition	Trouble Area
P1780	When driving under conditions (a), (b), (c) and (d) for 30 seconds or more, the park/neutral position switch is ON (N position). (2-trip detection condition) (a) Vehicle speed: 70 km/h (44 mph) or more (b) Engine speed: 1,500 - 2,500 (c) Engine load: 0.6 g/rev (d) Manifold absolute pressure: 350 mmHg or more	<ul style="list-style-type: none"> • Shot in park/neutral position switch circuit • Park/neutral position switch • ECM

WIRING DIAGRAM



D07922

INSPECTION PROCEDURE

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

PREPARATION:

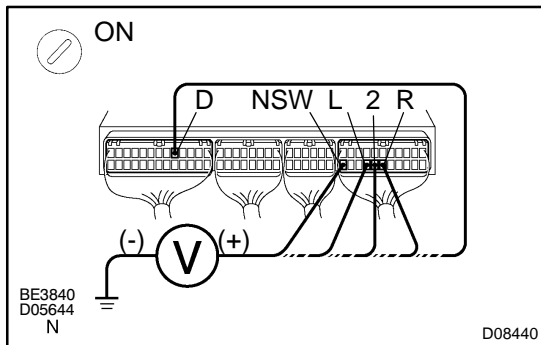
- (a) Connect a hand-held tester to the DLC3.
- (b) Turn the ignition switch ON and TOYOTA hand-held tester main switch ON.

CHECK:

Shift lever into the P, R, N, 2 and L positions, and read the NSW, 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	NSW OFF → ON



When not TOYOTA using hand-held tester:

PREPARATION:

Turn the ignition switch ON.

CHECK:

Measure voltage between each of terminals NSW, R, D, 2 and L of ECM and body ground when the shift lever is shifted to the following positions.

OK:

Position	NSW-Body ground	R-Body ground	D-Body ground	2-Body ground	L-Body ground
P	9 - 14 V	0 V	0 V	0 V	0 V
R	0 V	9 - 14 V	0 V	0 V	0 V
N	0 V	0 V	0 V	0 V	0 V
D	0 V	0 V	9 - 14 V	0 V	0 V
2	0 V	0 V	0 V	9 - 14 V	0 V
L	0 V	0 V	0 V	0 V	9 - 14 V

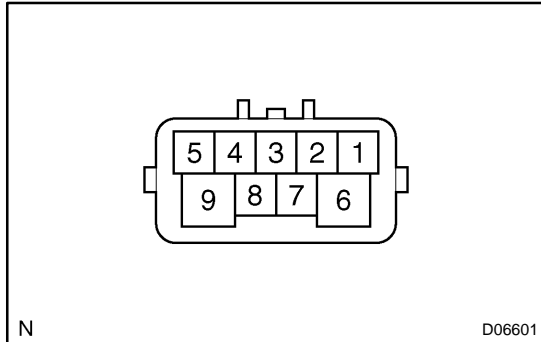
HINT:

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

OK	Check and replace the ECM.
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2 Check park/neutral position switch.



PREPARATION:

Remove the park/neutral position switch.

CHECK:

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

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

OK:

There is continuity.

NG

Replace the park/neutral position switch.

OK

3 Check harness and connector between battery and park/neutral position switch, park/neutral position switch and ECM (See page [IN-29](#)).

NG

Repair or replace the harness and connector.

OK

Check and replace the ECM
(See page [IN-29](#)).