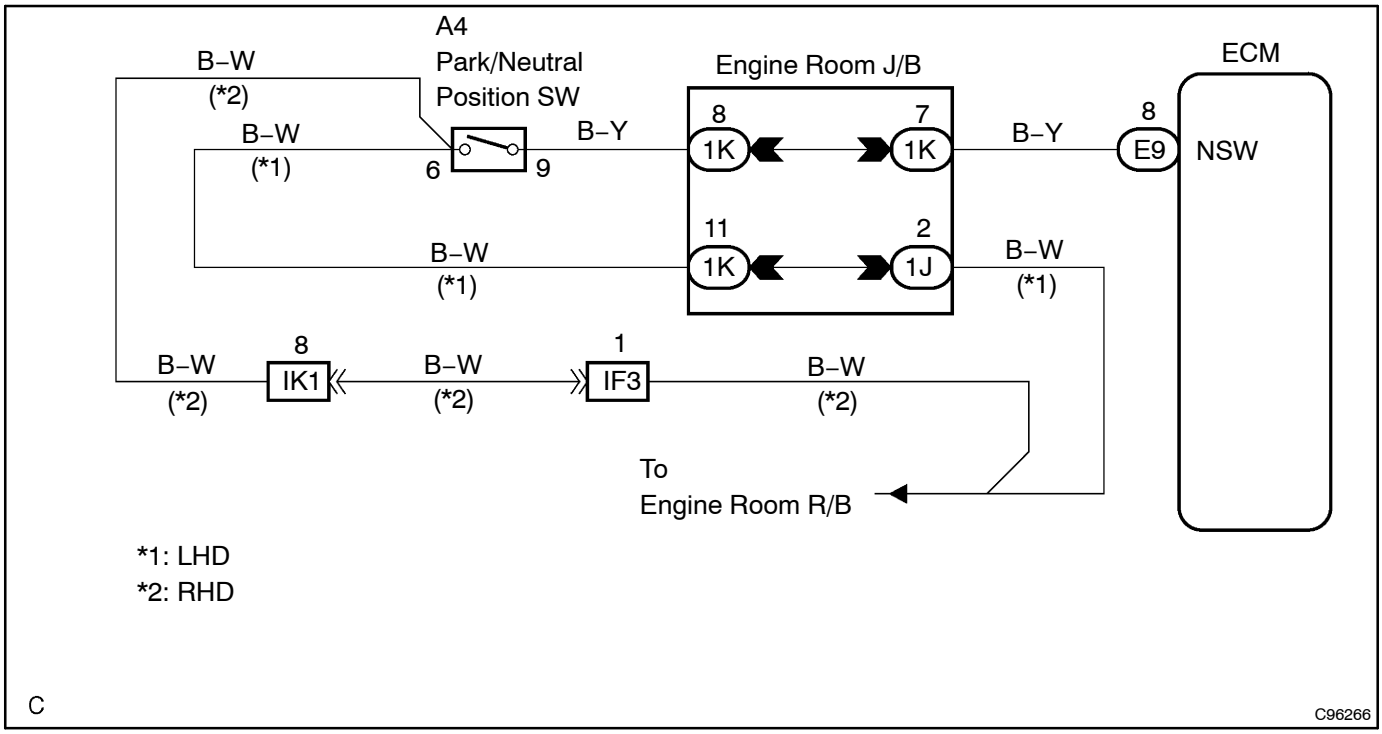
DTC	P1780/97	PARK/NEUTRAL POSITION SWITCH MALFUNCTION

CIRCUIT DESCRIPTION

The park/neutral position switch detects the shift lever range and sends the signals to the ECM.

DTC No.	DTC Detection Condition	Trouble Area
P1780/97	When driving under conditions (a) and (b) for 30 sec. or more, the park/neutral position switch is ON (P and N range) : (2 trip detection logic) (a) Vehicle speed: 70 km/h (44 mph) or more (b) Engine speed: 1,500 – 2,500 rpm	• Park/neutral position switch circuit • Park/neutral position switch assy • ECM

WIRING DIAGRAM



INSPECTION PROCEDURE

HINT:
Start the inspection from step 1 in case of using the hand–held tester and start from step 2 in case of not using hand–held tester.

1 READ VALUE OF HAND–HELD TESTER

(a) Warm up the engine.
(b) Turn the ignition switch OFF.
(c) Connect the Hand–held tester to the DLC3.
(d) Turn the ignition switch ON and push the Hand–held tester main SW ON.
(e) Shift the shift lever to the P and N ranges, select the item ”PNP SW (NSW)” in the DATALIST and read its value displayed on the Hand–held tester.

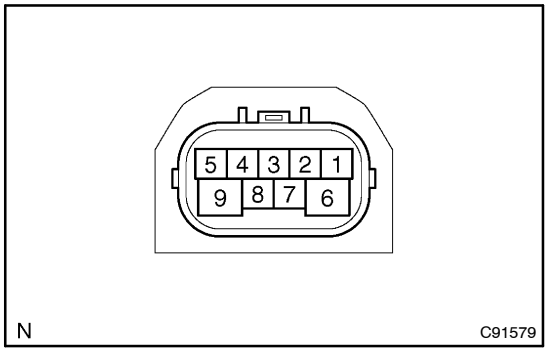
NOTICE:
The values given below for ”Normal Condition” are representative values, so a vehicle may still be normal even if its value differs from those listed here. Do not depend solely on the ”Normal Condition” here when deciding whether or not the part is faulty.

Item	Measurement Item/ Display (Range)	Normal Condition	Diagnostic Note
PNP SW [NSW]	PNP SW Status/ ON or OFF	Shift lever range is; P or N: ON Except P or N: OFF	The shift lever position and these values are different, there are failures of the PNP switch or shift cable adjustment.

OK → **CHECK AND REPLACE ECM(See page 01–31)**

NG

2 INSPECT PARK/NEUTRAL POSITION SWITCH ASSY



(a) Disconnect the park/neutral position switch connector.
(b) Check continuity between each terminal shown below when the shift lever is moved to each range.

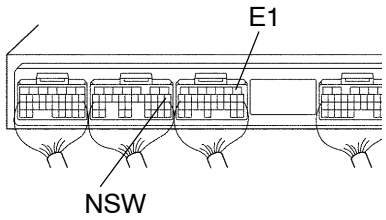
Shift Range	Terminal No. to continuity	
P	1 – 3	6 – 9
N	3 – 5	6 – 9

OK:
There is continuity.

NG → **REPLACE PARK/NEUTRAL POSITION SWITCH ASSY(See page 40–3)**

OK

3	CHECK HARNESS AND CONNECTOR(PARK/NEUTRAL POSITION SWITCH – ECM)



C96242

(a) Connect the park/neutral position switch connector.
(b) Turn the IG switch ON and measure the voltage between terminals NSW of ECM and the E1 when the shift lever is shifted to the following range.

OK:

Shift Range	Terminal	Voltage (V)
P	NSW – E1	Below 1
N	NSW – E1	Below 1
Except P and N	NSW – E1	10 – 14

NG → **REPAIR OR REPLACE HARNESS OR CONNECTOR(See page 01–31)**

OK

CHECK AND REPLACE ECM(See page 01–31)