

DTC	P1780	Park/Neutral Position Switch Malfunction
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CIRCUIT DESCRIPTION

The park/neutral position switch goes on when the shift lever is in the N or P shift position. When it goes on, terminal NSW of the ECM is grounded to body ground via the starter relay, thus the terminal NSW voltage becomes 0 V. When the shift lever is in the D, 4, 3, 2, L or R position, the park/neutral position switch goes off, so the voltage of ECM Terminal NSW becomes battery voltage, the voltage of the ECM internal power source. If the shift lever is moved from the N position to the D position, this signal is used for air-fuel ratio correction and for idle speed control (estimated control), etc.

DTC No.	DTC Detection Condition	Trouble Area
P1780	2 or more switches are ON simultaneously for P, R, N, D, 4, 3, 2 and L positions. (2 trip detection logic)	<ul style="list-style-type: none"> • Short in park/neutral position switch circuit • Park/neutral position switch • ECM
	When driving under conditions (a) and (b) for 30 seconds or more, park/neutral position switch is ON (N position): (2 trip detection logic) (a) Vehicle speed: 70 km/h (44 mph) or more (b) Engine speed: 1,500 – 2,500 rpm	

HINT:

After confirming DTC P1780, use the LEXUS hand-held tester to confirm the PNP switch signal from the CURRENT DATA.

WIRING DIAGRAM

Refer to DTC P1780 on page [DI-445](#).

INSPECTION PROCEDURE

Refer to DTC P1780 on page [DI-445](#).

HINT:

Read freeze frame data using LEXUS hand-held tester or OBD II scan tool. Because freeze frame records the engine conditions when the malfunction is detected. When troubleshooting, it is useful for determining whether the vehicle was running or stopped, the engine was warmed up or not, the air-fuel ratio was lean or rich, etc. at the time of the malfunction.