

<b>DTC</b>	<b>P1780</b>	<b>Park/Neutral Position Switch Malfunction (Only for A/T)</b>
------------	--------------	--

## 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 0V. When the shift lever is in the D, 2, L, or R position, the park/neutral position switch goes off, so the voltage of ECM. Terminal NSW becomes battery positive 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 Detecting Condition	Trouble Area
P1780	2 or more switches are ON simultaneously for "N", "2", "L" and "R" position (2 trip detection logic)	<ul style="list-style-type: none"> <li>• Short in park/neutral position switch circuit</li> <li>• Park/neutral position switch</li> <li>• ECM</li> </ul>
	When driving under conditions (a) and (b) for 30 sec. or more the park/neutral position switch is ON (N position): (2 trip detection logic) (a) Vehicle speed: 80 km/h (50 mph) or more (b) Engine speed: 2,000 ~ 5,000 rpm	

### HINT:

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

## WIRING DIAGRAM

Refer to DTC P1780 on page [DI-189](#) for the WIRING DIAGRAM.

## INSPECTION PROCEDURE

### HINT:

Read freeze frame data using TOYOTA 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 warmed up or not, the air-fuel ratio lean or rich, etc. at the time of the malfunction.

Refer to DTC P1780 on [DI-189](#) for the INSPECTION PROCEDURE.