

## PARK/NEUTRAL POSITION SWITCH CIRCUIT

### CIRCUIT DESCRIPTION

The park/neutral position switch detects the shift lever position and sends signals to the ECM. The ECM receives signals (R, D, 4, 3, 2 and L) from the park/neutral position switch.

[illegible]

## INSPECTION PROCEDURE

|   |                                                    |
|---|----------------------------------------------------|
| 1 | READ VALUE OF OBD II SCAN TOOL OR HAND-HELD TESTER |
|---|----------------------------------------------------|

- (a) Warm up the engine.
- (b) Turn the ignition switch OFF.
- (c) Connect the OBD II scan tool or Hand-held tester to the DLC3.
- (d) Turn the ignition switch ON and push the OBD II scan tool or Hand-held tester main SW ON.
- (e) Shift the shift lever to the R, D, 4, 3, 2 and L positions, select the item "REVERSE", "5TH/DRIVE", "4TH", "3RD", "2ND" and "LOW" in the DATALIST and read its value displayed on the OBD II scan tool or 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.

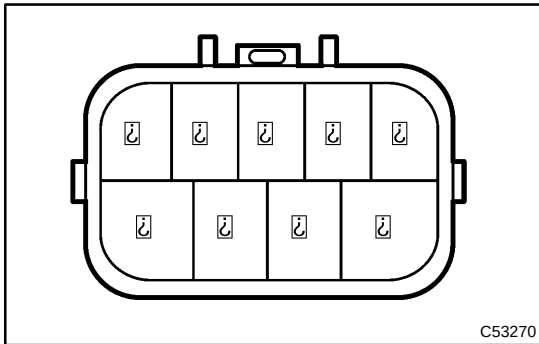
| Item      | Measurement Item/<br>Display (Range) | Normal Condition                                               | Diagnostic Note                                                                                                          |
|-----------|--------------------------------------|----------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------|
| REVERSE   | PNP SW Status/<br>ON or OFF          | Shift lever position is;<br>R: ON<br>Except R: OFF             | The shift lever position and these values are different, there are failures of the PNP switch or shift cable adjustment. |
| 5TH/DRIVE | PNP SW Status/<br>ON or OFF          | Shift lever position is;<br>D and 4: ON<br>Except D and 4: OFF |                                                                                                                          |
| 4th       | PNP SW Status/<br>ON or OFF          | Shift lever position is;<br>4: ON<br>Except 4: OFF             |                                                                                                                          |
| 3rd       | PNP SW Status/<br>ON or OFF          | Shift lever position is;<br>3: ON<br>Except 3: OFF             |                                                                                                                          |
| 2ND       | PNP SW Status/<br>ON or OFF          | Shift lever position is;<br>2 and L: ON<br>Except 2 and L: OFF |                                                                                                                          |
| LOW       | PNP SW Status/<br>ON or OFF          | Shift lever position is;<br>L: ON<br>Except L: OFF             |                                                                                                                          |

OK

CHECK AND REPLACE ECM(See page 01-31 )

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## 2 INSPECT PARK/NEUTRAL POSITION SWITCH ASSY



- Disconnect the park/neutral position switch connector.
- Check continuity between each terminal shown below when the shift lever is moved to each position.

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

**OK:**

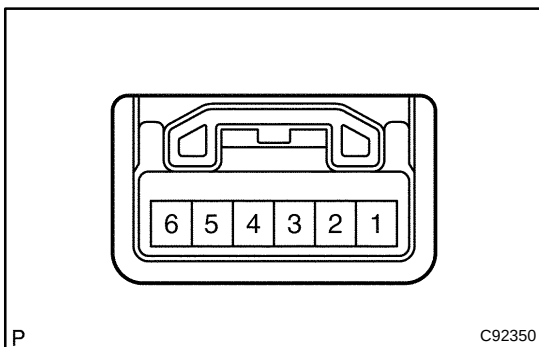
There is continuity.

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**REPLACE PARK/NEUTRAL POSITION SWITCH ASSY(See page 40-3 )**

**OK**

## 3 INSPECT SHIFT LOCK CONTROL UNIT ASSY



- Connect the park/neutral position switch connector.
- Disconnect the transmission control switch connector.
- Check continuity between each terminal shown below when the shift lever is moved to each position.

| Shift Position | Terminal No. to continuity |       |
|----------------|----------------------------|-------|
| P              | 4 - 6                      | 1 - 3 |
| R              | 4 - 6                      | 1 - 3 |
| N              | 4 - 6                      | 1 - 3 |
| D              | 4 - 6                      | 1 - 3 |
| 4              | 4 - 6                      | 1 - 2 |
| 3              | 4 - 6                      | 1 - 2 |
| 2              | 4 - 6                      | 1 - 3 |
| L              | 5 - 6                      | 1 - 3 |

**OK:**

There is continuity.

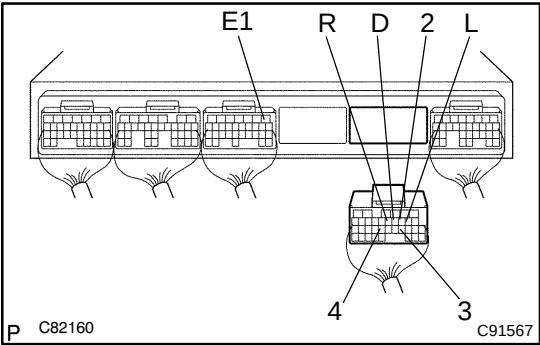
**NG**

**REPLACE SHIFT LOCK CONTROL UNIT ASSY**

**OK**

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



- (a) Connect the transmission control switch connector.
- (b) Disconnect the ECM connector.
- (c) Turn the IG switch ON and measure the voltage between terminals R, D, 4, 3, 2, and L of ECM and the E1 when the shift lever is shifted to the following position.

OK:

| Shift position | Terminal | Voltage (V) |
|----------------|----------|-------------|
| R              | R - E1   | 10 - 14     |
| D, 4           | D - E1   | 10 - 14     |
| 4              | 4 - E1   | 10 - 14     |
| 3              | 3 - E1   | 10 - 14     |
| 2, L           | 2 - E1   | 10 - 14     |
| L              | L - E1   | 10 - 14     |

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REPAIR OR REPLACE HARNESS OR CONNECTOR(See page 01-31 )

OK

CHECK AND REPLACE ECM(See page 01-31 )