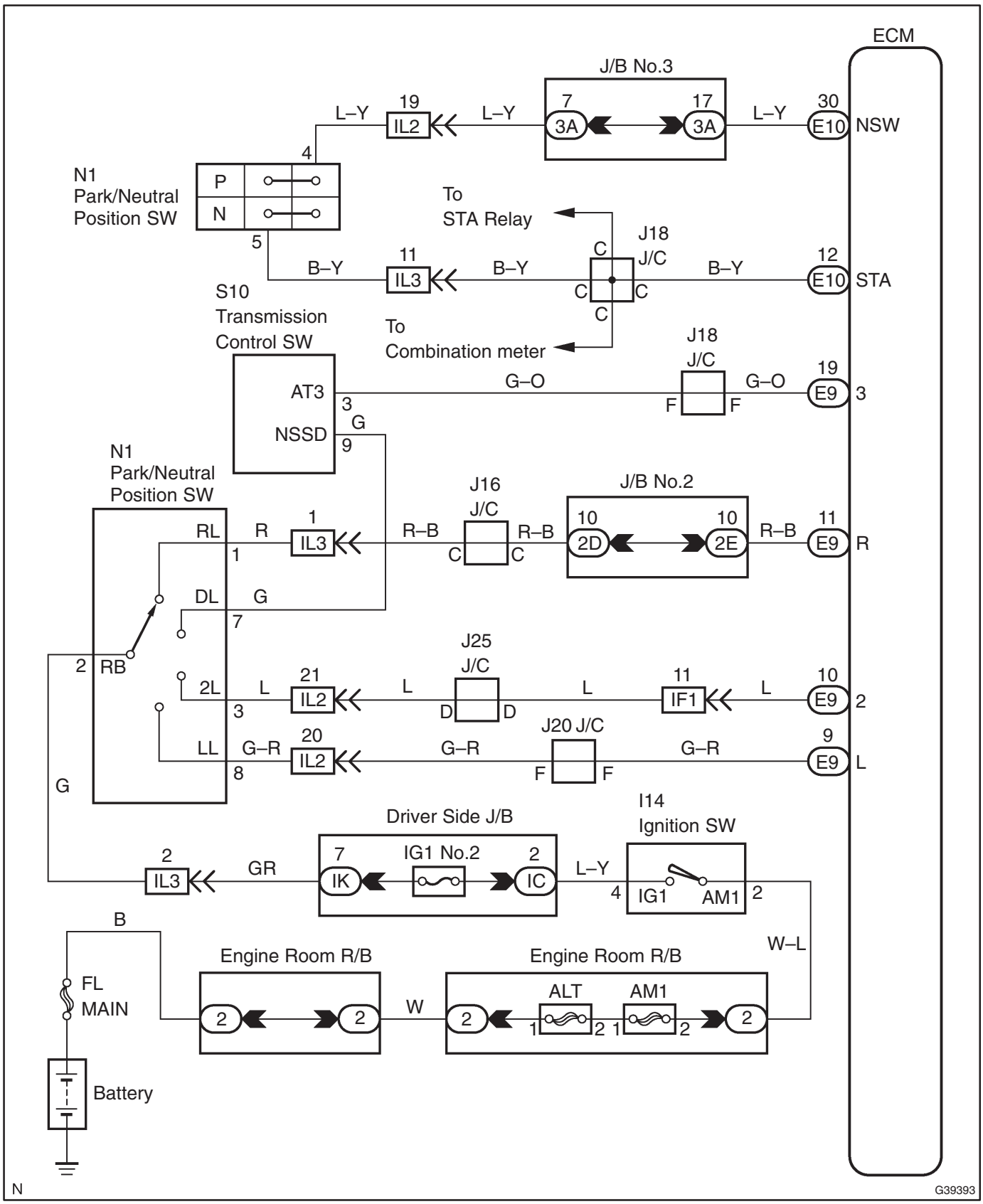
PARK/NEUTRAL POSITION SWITCH CIRCUIT

CIRCUIT DESCRIPTION

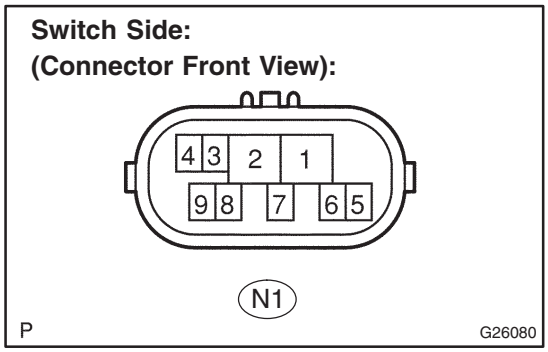
The park/neutral position switch detects the shift lever position and sends signals to the ECM.

WIRING DIAGRAM



HINT:
Start the inspection from the step 1 when the malfunction is found in the 3 position, and start from step 2 when the malfunction is in the other position.

1 INSPECT PARK/NEUTRAL POSITION SWITCH ASSY



(a) Jack up the vehicle.
(b) Disconnect the park/neutral position switch connector.
(c) Measure the resistance according to the value(s) in the table below when the shift lever is moved to each position.

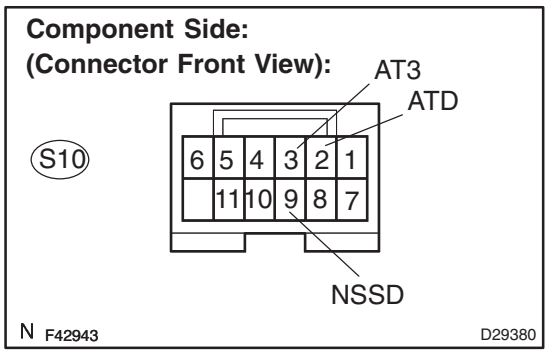
Standard:

Shift Position	Tester Connection	Specified Condition
P	2 – 6 and 4 – 5	Below 1 Ω
Except P	↑	10 kΩ or higher
R	2 – 1	Below 1 Ω
Except R	↑	10 kΩ or higher
N	2 – 9 and 4 – 5	Below 1 Ω
Except N	↑	10 kΩ or higher
D and 3	2 – 7	Below 1 Ω
Except D and 3	↑	10 kΩ or higher
2	2 – 3	Below 1 Ω
Except 2	↑	10 kΩ or higher
L	2 – 8	Below 1 Ω
Except L	↑	10 kΩ or higher

NG → **REPLACE PARK/NEUTRAL POSITION SWITCH ASSY (SEE PAGE 40–10)**

OK

2 INSPECT SHIFT LOCK CONTROL ECU SUB–ASSY



(a) Connect the park/neutral position switch connector.
(b) Disconnect the shift lock control ECU connector.
(c) Measure the resistance according to the value(s) in the table below when the shift lever is moved to each position.

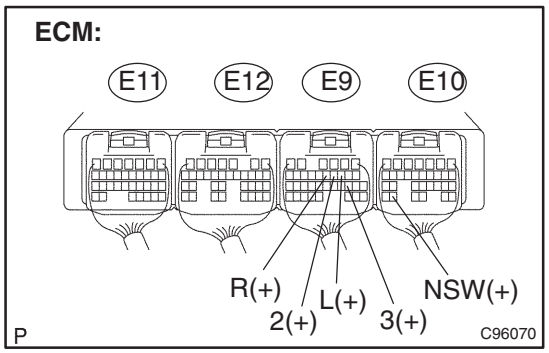
Standard:

Shift position	Tester connection	Specified condition
D	9 – 2 (NSSD – ATD)	Below 1 Ω
3		10 kΩ or higher
D	9 – 3 (NSSD – AT3)	10 kΩ or higher
3		Below 1 Ω

NG → **REPLACE SHIFT LOCK CONTROL ECU SUB–ASSY**

OK

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



(a) Connect the shift lock control ECU connector.

(b) Turn the ignition switch to the ON position, and measure the voltage according to the value(s) in the table below when the shift lever is moved to each position.

Standard:

Shift Position	Tester connection	Specified condition
P and N	E10 – 30 (NSW) – Body ground	Below 2 V
Except P and N	↑	10 to 14 V
R	E9 – 11 (R) – Body ground	10 to 14 V*
Except R	↑	Below 1 V
D and 3	E9 – 19 (3) – Body ground	10 to 14 V
Except D and 3	↑	Below 1 V
2	E9 – 10 (2) – Body ground	10 to 14 V
Except 2	↑	Below 1 V
L	E9 – 9 (L) – Body ground	10 to 14 V
Except L	↑	Below 1 V

HINT:

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

NG → **REPAIR OR REPLACE HARNESS OR CONNECTOR (SEE PAGE 01–36)**

OK

PROCEED TO NEXT CIRCUIT INSPECTION SHOWN IN PROBLEM SYMPTOMS TABLE (SEE PAGE 05–937)