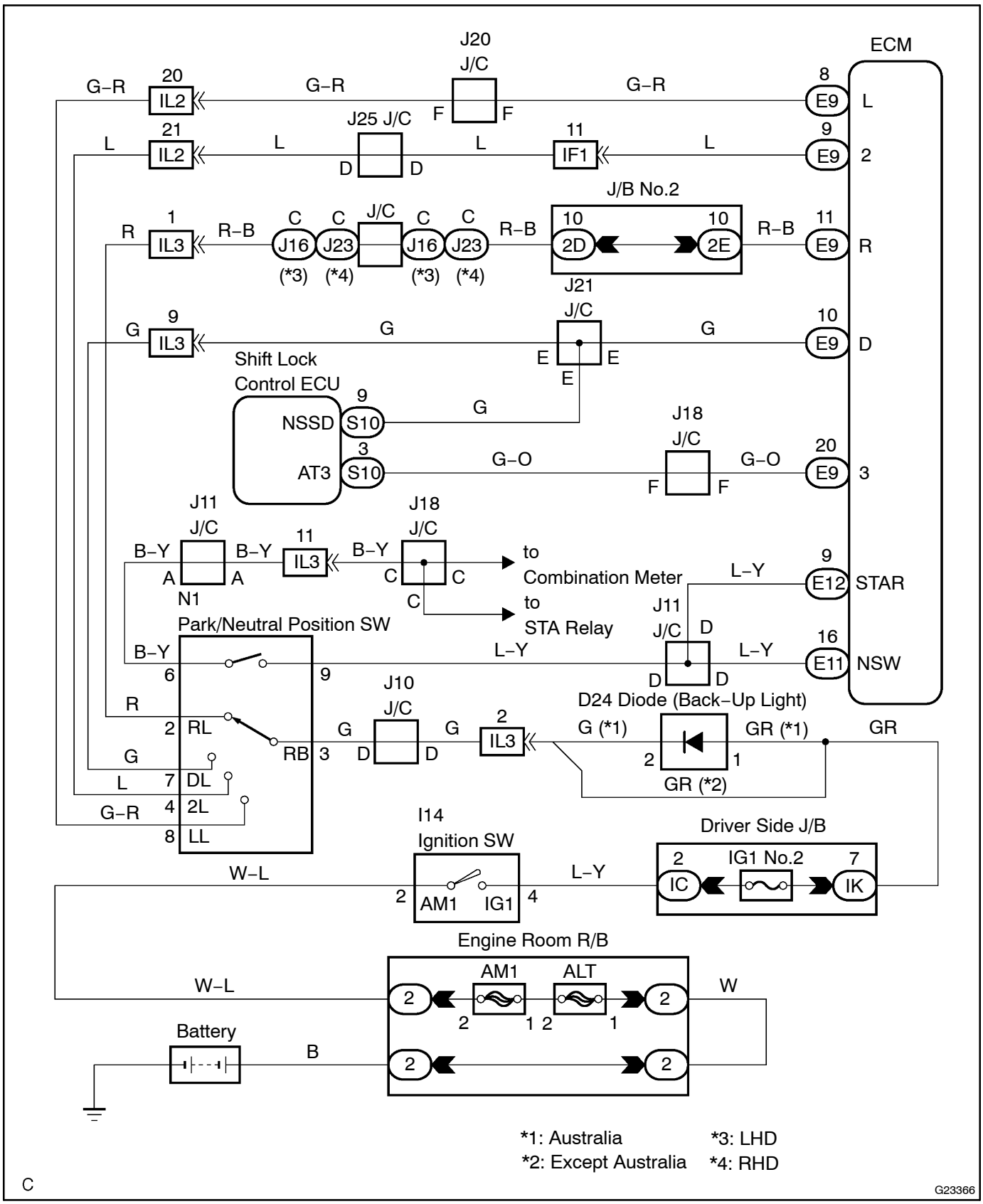
PARK/NEUTRAL POSITION SWITCH CIRCUIT

CIRCUIT DESCRIPTION

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

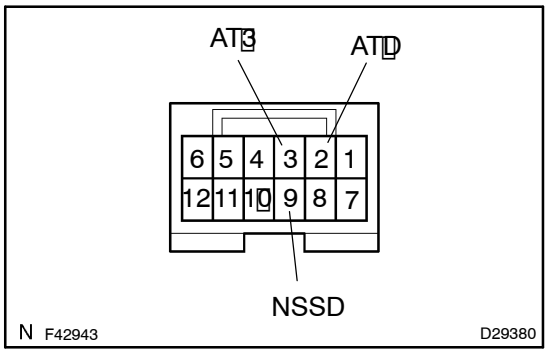
WIRING DIAGRAM



INSPECTION PROCEDURE

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

1 INSPECT SHIFT LOCK CONTROL ECU SUB–ASSY



(a) Disconnect the shift lock control ECU connector.
(b) Check continuity between each terminal shown below when the shift lever is moved to each range.

OK:

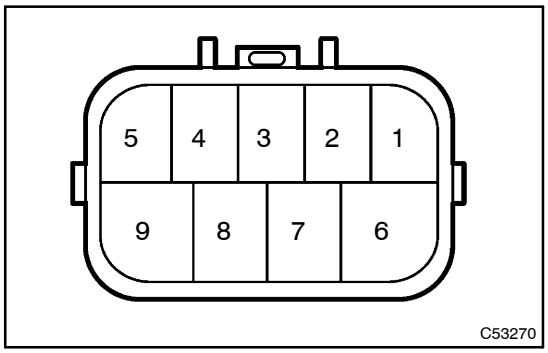
Standard:

Shift range	Tester connection	Specified value
D	9 – 2 (NSSD – ATD)	Continuity
3		No continuity
D	9 – 3 (NSSD – AT3)	No continuity
3		Continuity

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

OK

2 INSPECT PARK/NEUTRAL POSITION SWITCH ASSY



(a) Connect the shift lock control ECU connector.
(b) Jack up the vehicle.
(c) Disconnect the park/neutral position switch connector.
(d) Check continuity between each terminal shown below when the shift lever is moved to each range.

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

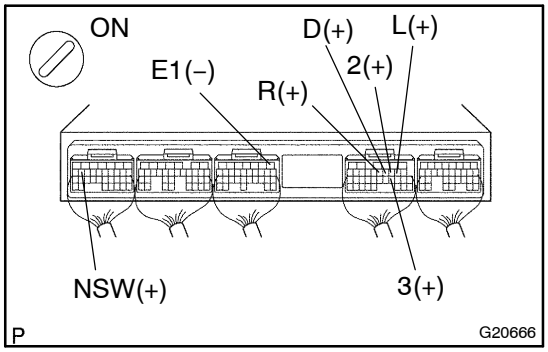
OK:

There is continuity.

NG → **REPLACE PARK/NEUTRAL POSITION SWITCH ASSY(See page 40–1)**

OK

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



(a) Connect the park/neutral position switch connector.

(b) Turn the IG switch ON and measure the voltage between each terminal shown below when the shift lever is shifted to the following position.

OK:

Tester connection	Condition	Specified condition
NSW – E1	Shift lever position: P and N	Below 1 V
	Shift lever position: Except P and N	Battery voltage
R – E1	Shift lever position: R	Battery voltage*
D – E1	Shift lever position: D and 3	Battery voltage
3 – E1	Shift lever position: 3	Battery voltage
2 – E1	Shift lever position: 2	Battery voltage
L – E1	Shift lever position: L	Battery voltage

HINT:

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

NG → **REPAIR OR REPLACE HARNESS OR CONNECTOR (See page 01–35)**

OK

PROCEED TO NEXT CIRCUIT INSPECTION SHOWN ON PROBLEM SYMPTOMS TABLE (See page 05–299)