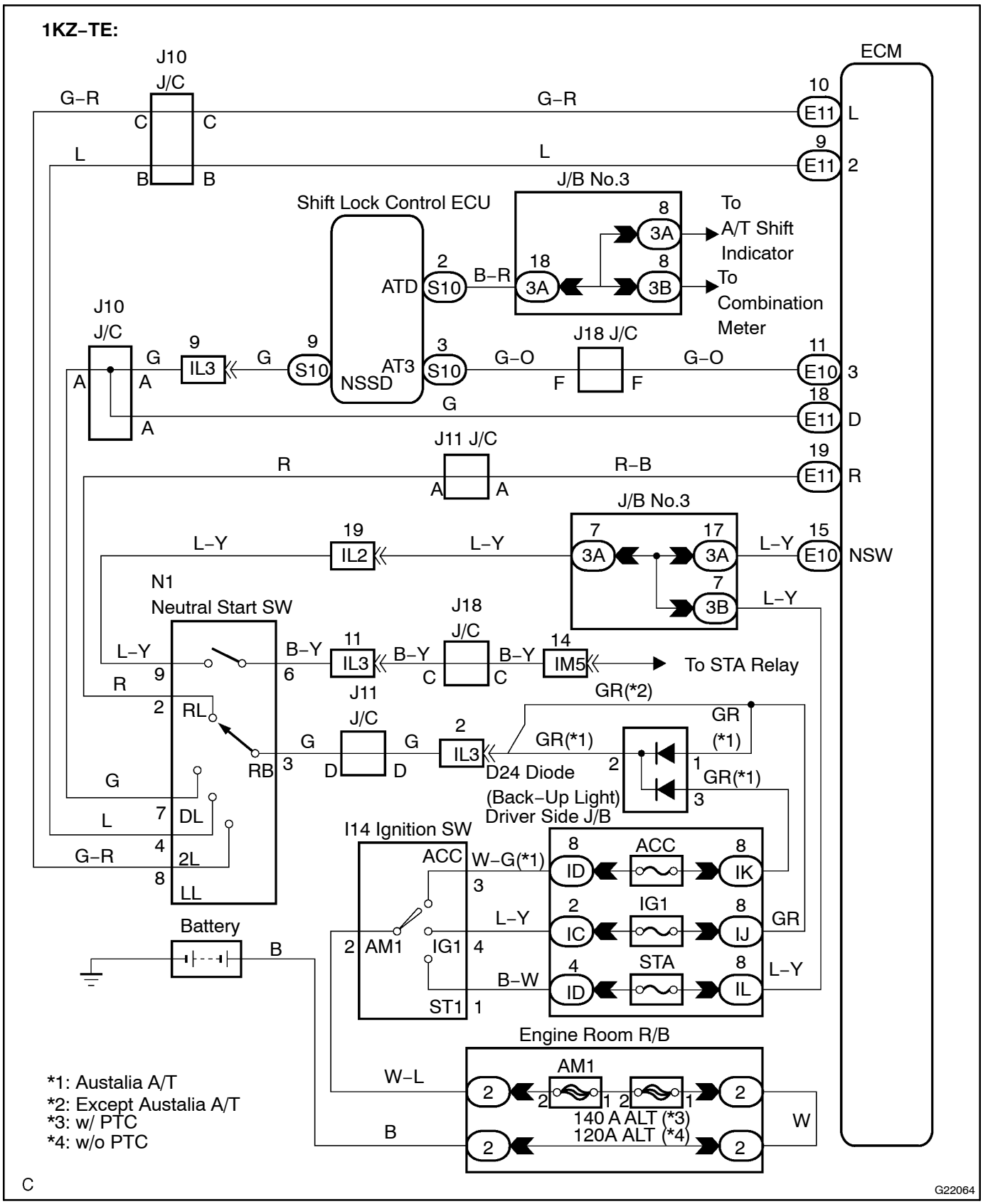
# PARK/NEUTRAL POSITION SWITCH CIRCUIT

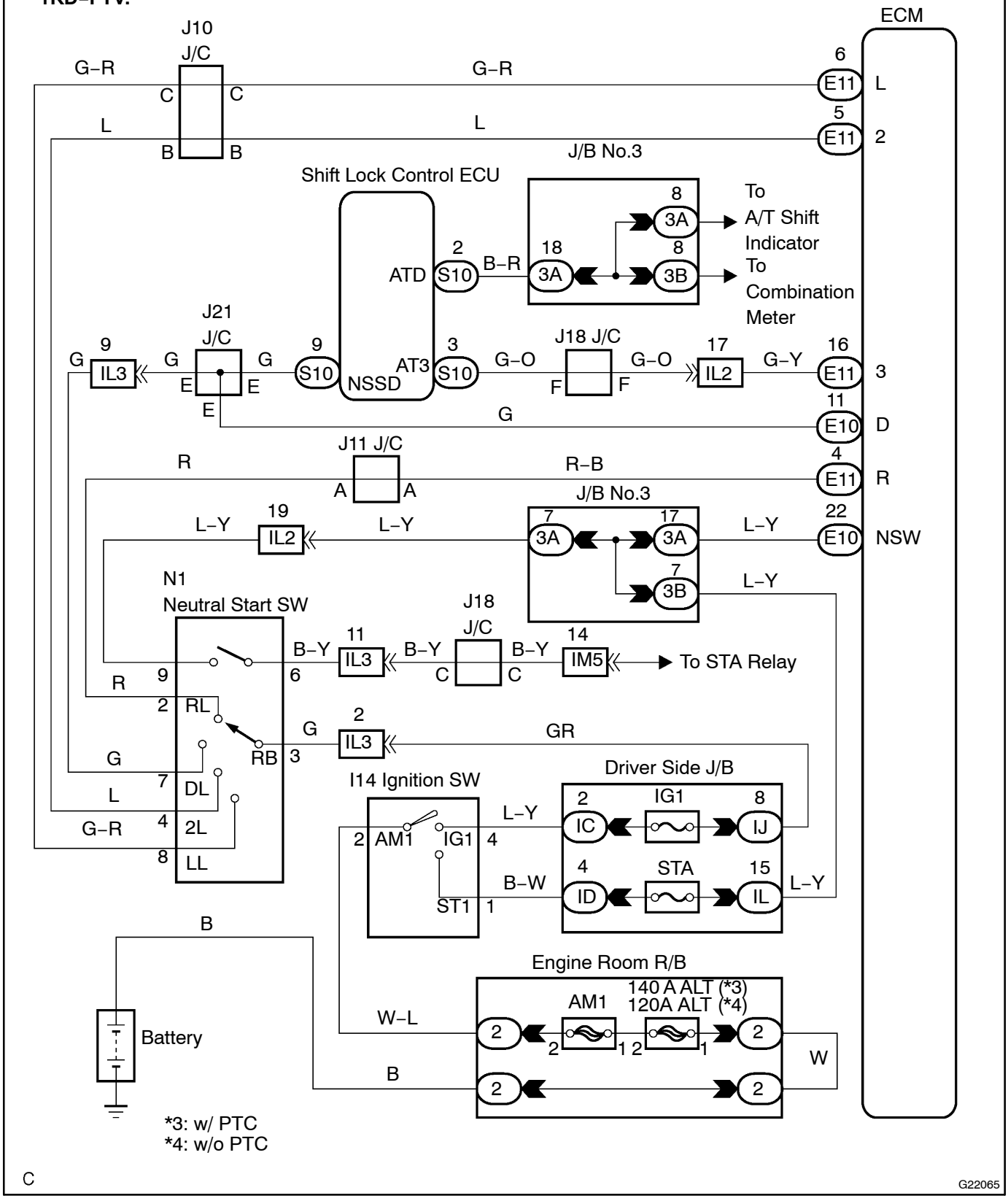
## CIRCUIT DESCRIPTION

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

# WIRING DIAGRAM



**1KD–FTV:**

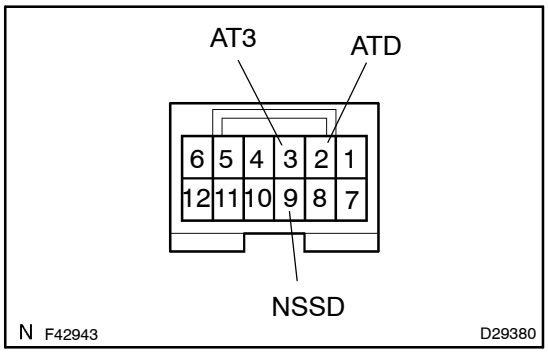

ECM
J10 J/C
G–R
G–R
L
L
J/B No.3
Shift Lock Control ECU
ATD
B–R
To A/T Shift Indicator
To Combination Meter
J21 J/C
J18 J/C
NSSD
AT3
G–O
G–Y
J11 J/C
R–B
J/B No.3
L–Y
N1 Neutral Start SW
J18 J/C
B–Y
To STA Relay
RL
RB
GR
I14 Ignition SW
Driver Side J/B
AM1
IG1
ST1
IC
ID
IJ
IL
STA
B–W
Engine Room R/B
140 A ALT (*3)
120A ALT (*4)
W–L
W
B
Battery
*3: w/ PTC
*4: w/o PTC
G22065

## 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.

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

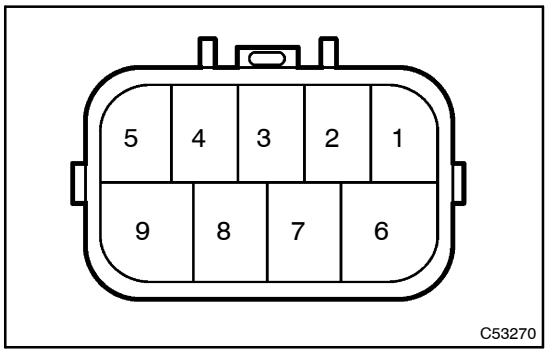
**OK:**

**There is continuity.**

**NG** → **REPLACE SHIFT LOCK CONTROL ECU SUB–ASSY(See page 40–62)**

**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 | – |

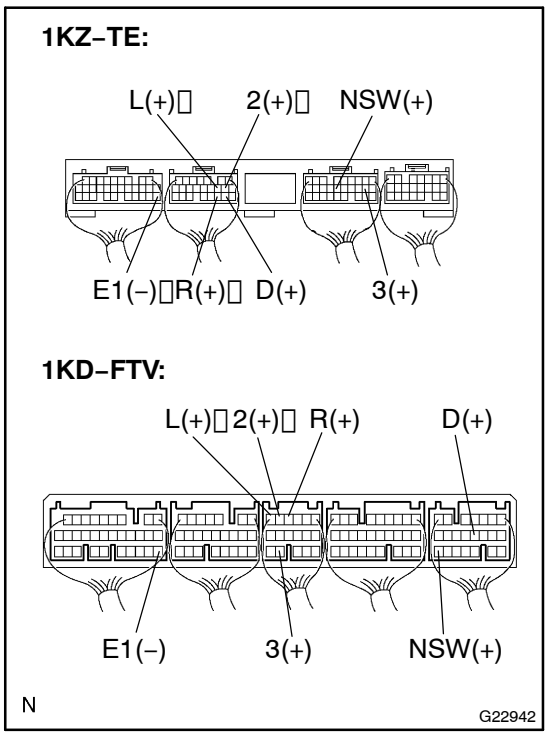
**OK:**

**There is continuity.**

**NG** → **REPLACE PARK/NEUTRAL POSITION SWITCH ASSY(See page 40–3)**

**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 range.

**OK:**

| Tester connection | Condition | Specified condition |
|---|---|---|
| NSW – E1 | Shift lever range: P and N | Below 1 V |
| | Shift lever range: Except P and N | Battery voltage |
| R – E1 | Shift lever range: R | Battery voltage* |
| D – E1 | Shift lever range: D and 3 | Battery voltage |
| 3 – E1 | Shift lever range: 3 | Battery voltage |
| 2 – E1 | Shift lever range: 2 | Battery voltage |
| L – E1 | Shift lever range: 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 01–36)**

**OK**

**PROCEED TO NEXT CIRCUIT INSPECTION SHOWN ON PROBLEM SYMPTOMS TABLE (See page 05–984)**