Pattern Select Switch Circuit (2nd Start Switch) & 2nd Start Switch Indicator Light Circuit
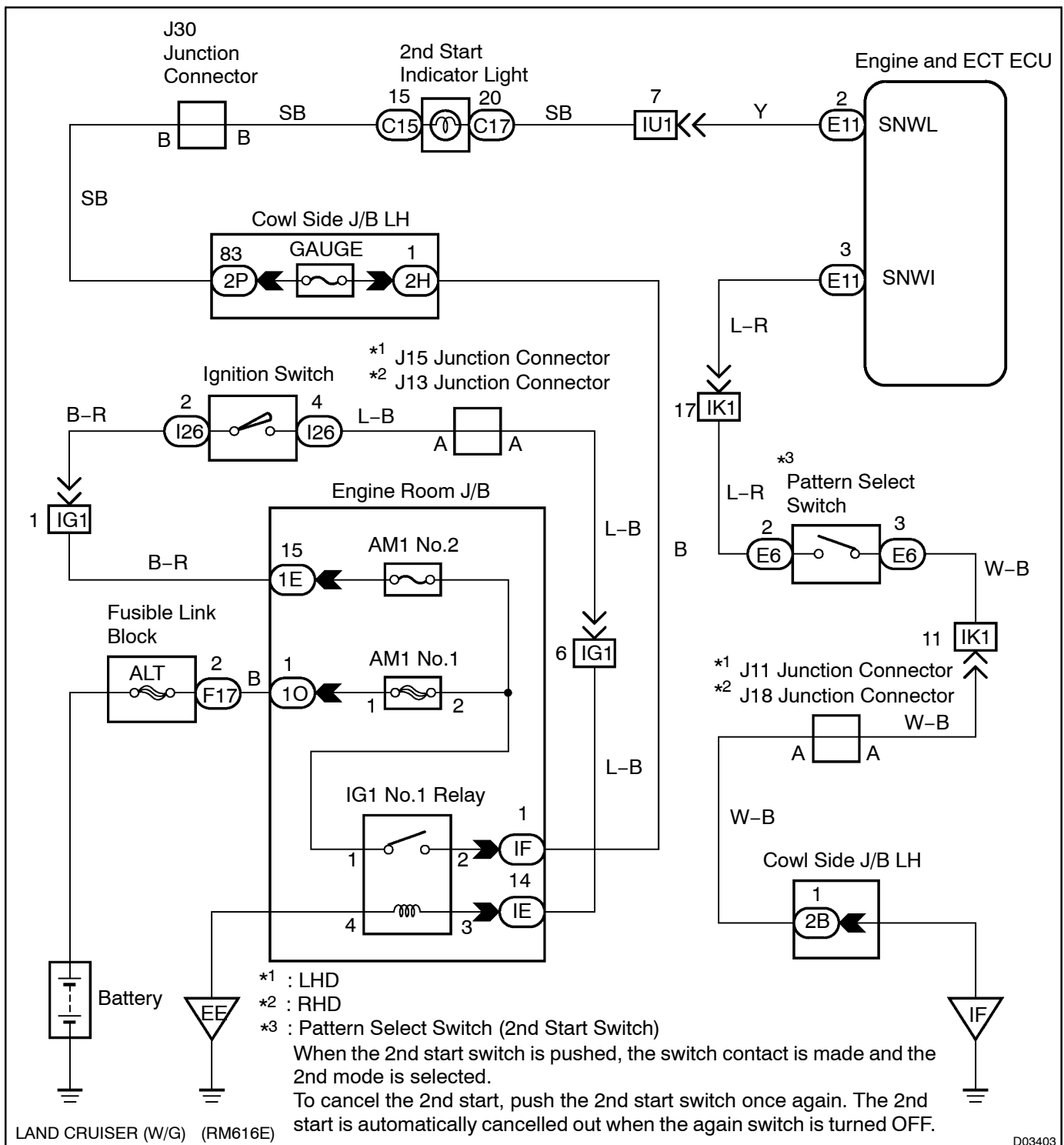
CIRCUIT DESCRIPTION

When 2nd start mode is selected with the pattern select switch, the Engine and ECT ECU controls the solenoid valves and the transmission starts from 2nd gear.

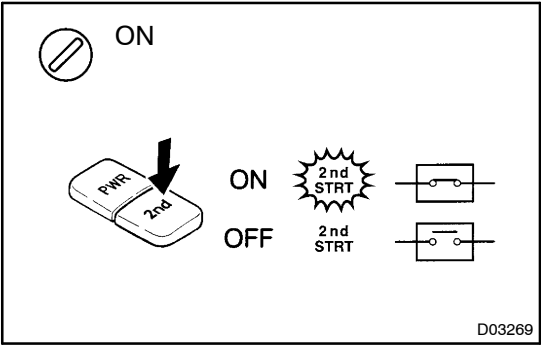In D range, the transmission automatically shifts up through 3rd to O/D as usual.

In 2nd position, the transmission is held in 2nd gear.

WIRING DIAGRAM

LAND CRUISER (W/G)   (RM616E)

D03403

INSPECTION PROCEDURE

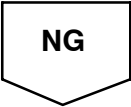| 1	Check operation of 2nd start switch.

PREPARATION:
Turn the ignition switch ON.
CHECK:
(a) Check "2nd STRT" indicator light when 2nd start switch is pushed in to ON.
(b) Check "2nd STRT" indicator light when 2nd start switch is pushed again, or PWR mode switch is pushed into ON.
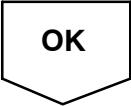**OK:**

(a)"2nd STRT" indicator light lights up.
(b)"2nd STRT" indicator light goes off. When PWR mode switch is pushed in to ON, "2nd STRT" indicator light goes off, and "PWR" indicator light lights up.
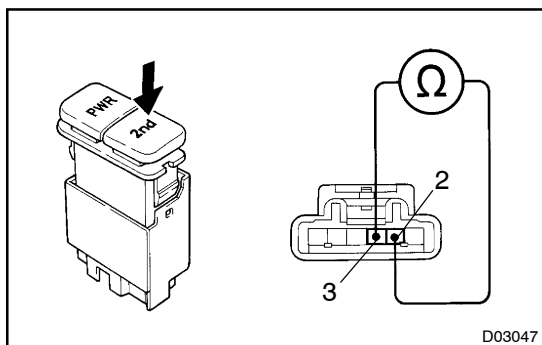
OK	Proceed to next circuit inspection shown in problem symptoms table (See page DI–22).

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2	Check 2nd start indicator bulb.

NG	Replace the 2nd start indicator bulb.

OK

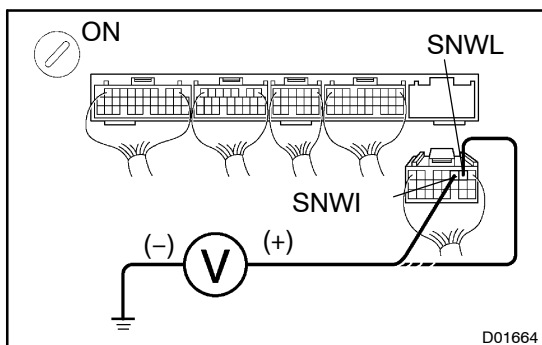| 3	Check 2nd start switch.

D03047

PREPARATION:
Disconnect the pattern select switch connector.
CHECK:
Check continuity between terminals 2 and 3 of pattern select switch connector when pattern select switch is set to 2nd start switch ON and OFF.
OK:

2nd start switch	Specified condition
Press continuously "2nd" switch	Continuity
Release "2nd" switch	No continuity

NG >	Replace the 2nd start indicator bulb.

OK

4	Check voltage between terminal SNWL and SNWI of Engine and ECT ECU and body ground.

D01664

PREPARATION:
(a)   Turn the ignition switch ON.
(b)   Disconnect the connector of Engine and ECT ECU.
CHECK:
Check voltage between terminal SNWI of Engine and ECT ECU and body ground when the select switch is set to 2nd start switch ON and OFF.
OK:

2nd start switch	Voltage
ON	Below 1.5 V
OFF	9.0 – 14 V

CHECK:
Check voltage between terminal SNWL of Engine and ECT ECU and body ground.
OK:

Voltage:
2nd start mode: Below 1.5 V
Other mode: 9.0 – 14 V

OK >	Check and replace the Engine and ECT ECU (See page IN–35).

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Check and replace harness and connector between battery and patten select switch, pattern select switch and Engine and ECT ECU, battery and 2nd start indicator light, 2nd start indicator light and Engine and ECT ECU (See page IN−35).