

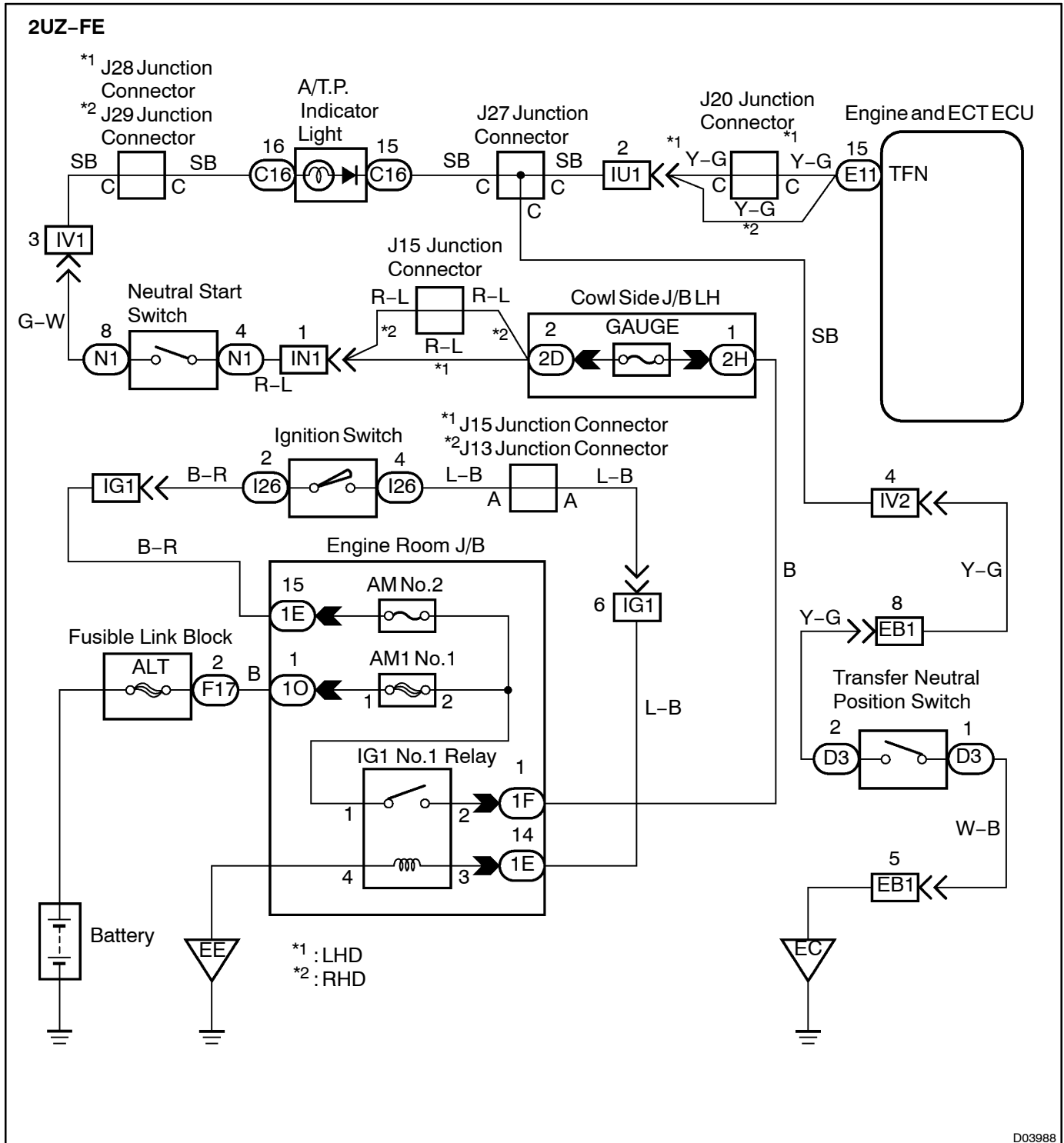
A/T.P. (Automatic Transmission Parking) Indicator Circuit

CIRCUIT DESCRIPTION

The propeller shaft and wheels are free even when the transmission shift lever is set to P as long as the transfer shaft lever is in the Neutral position. The A/T.P. indicator light lights up to warn the drive that the propeller shaft and wheels are not locked.

If the A/T.P. indicator light goes on, the transfer shift lever should be shifted out of N range.

WIRING DIAGRAM



Wiring Diagram for Engine and ECT ECU

Legend:
 *1 : LHD
 *2 : RHD

Key Components and Connections:

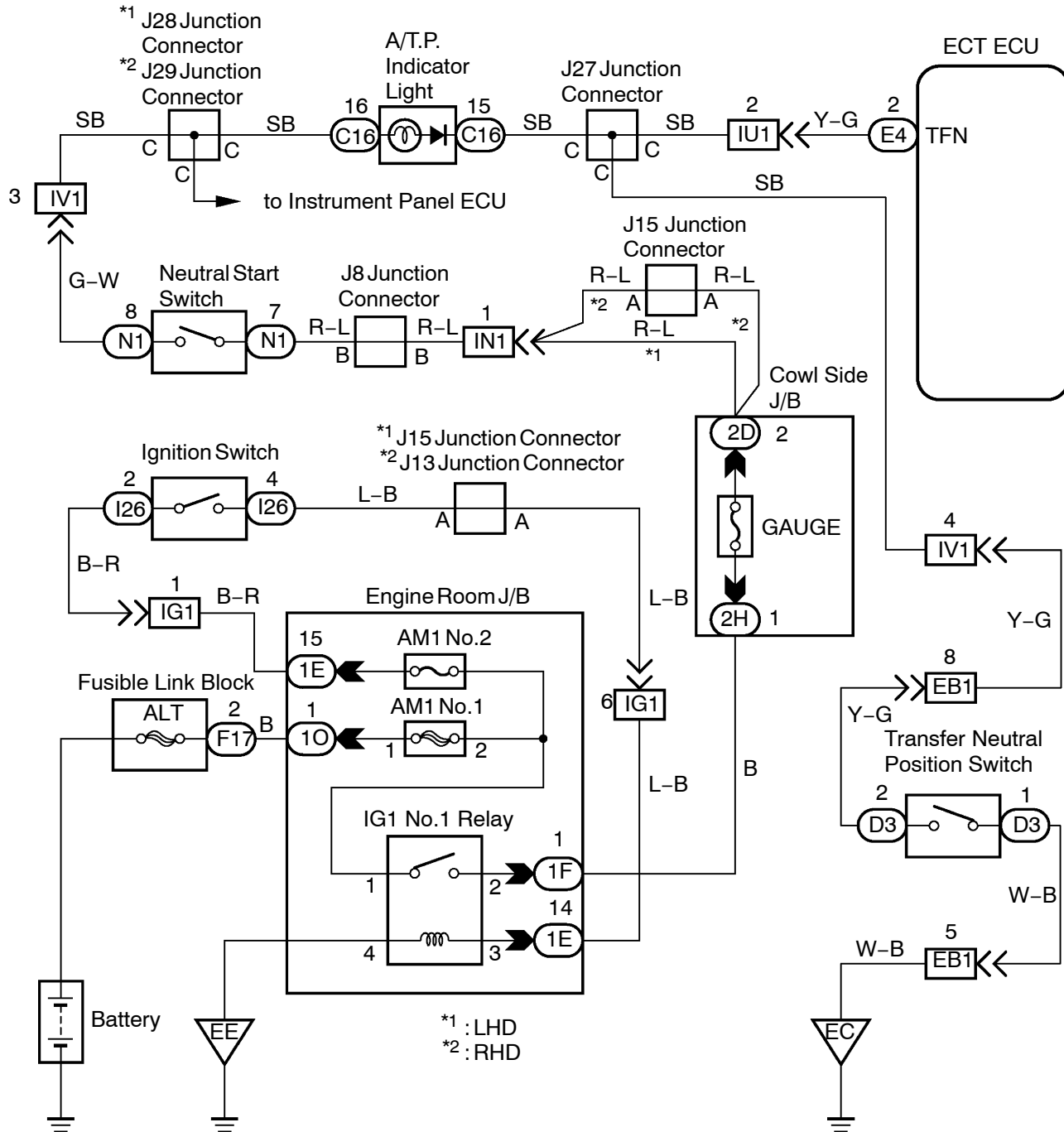
- Battery:** Connected to ground (EE) and the main power line.
- Neutral Start Switch:** Connected to the battery via a fusible link block (ALT, F17) and a junction connector (J28, J29).
- Ignition Switch:** Controls the ignition system, connected to the battery and the engine room junction box (J15, J13).
- Engine Room J/B:** Contains the AM1 No.1 and AM1 No.2 relays, and the IG1 No.1 relay.
- Engine and ECT ECU (TFN):** Receives signals from the ignition switch and the neutral start switch.
- Transfer Neutral Position Switch:** Controls the transfer neutral position, connected to the battery and the engine room junction box.

Wire Colors and Terminal Numbers:

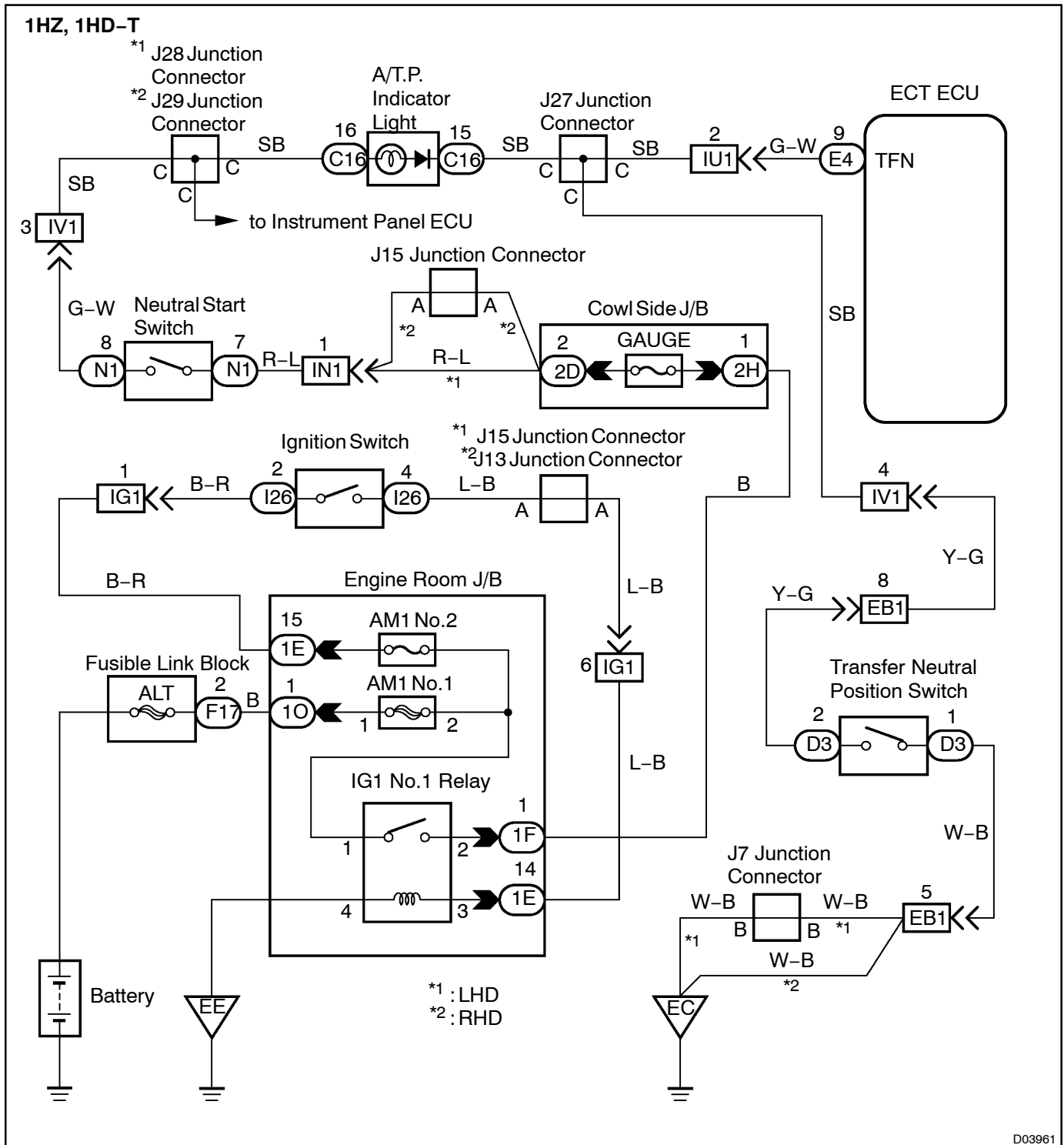
- SB (Signal Blue):** Used for the Neutral Start Switch and the Ignition Switch.
- Y-G (Yellow-Green):** Used for the Ignition Switch and the Transfer Neutral Position Switch.
- B-R (Black-Red):** Used for the Ignition Switch.
- L-B (Light Blue):** Used for the Ignition Switch.
- W-B (White-Black):** Used for the Transfer Neutral Position Switch.
- W-R (White-Red):** Used for the Transfer Neutral Position Switch.

LAND CRUISER (W/G) (RM616E)

1HD-FTE



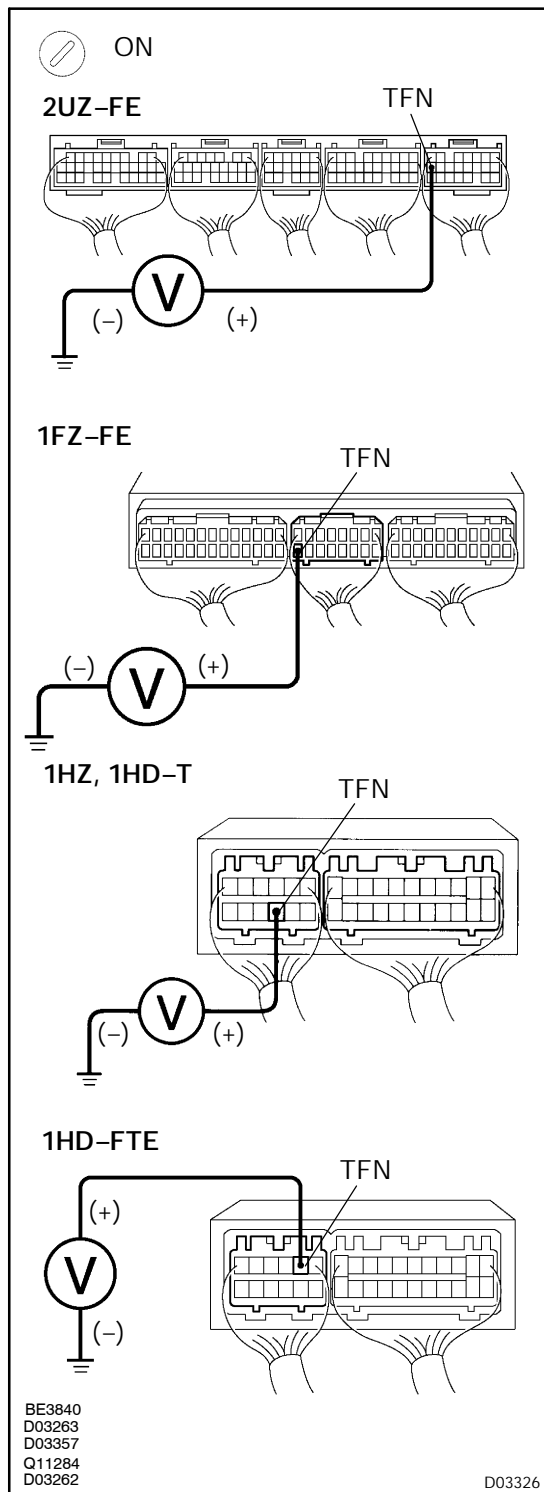
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INSPECTION PROCEDURE

- | | |
|---|--|
| 1 | Check voltage between terminal TFN of Engine and ECT ECU or ECT ECU and body ground. |
|---|--|

**PREPARATION:**

- (a) Remove the glove compartment door
(See page BO-127).
- (b) Turn the ignition switch ON.

CHECK:

Check voltage between terminal TFN of Engine and ECT ECU or ECT ECU and body ground.

OK:

| Transfer shift lever position | Voltage |
|-------------------------------|-------------|
| N position | Below 1.5 V |
| Except N position | 9.0 - 14 V |

OK

Proceed to next circuit inspection shown in symptom problems table (See page DI-108).

NG

LAND CRUISER (W/G) (RM616E)

2 Check neutral start switch ([See page DI-151](#)).

NG

Replace the neutral start switch.

OK

3 Check transfer neutral position switch (Full – Time 4WD: [See page TR-10](#), Part – Time 4WD: [TR-13](#)).

OK

Replace the transfer neutral position switch.

NG

4 Check combination meter ([See page BE-2](#)).

NG

Repair or replace the combination meter.

OK

5 Check harness and connector between battery and neutral start switch, neutral start switch and combination meter, combination meter and ECU, ECU and transfer neutral position switch ([See page IN-35](#)).

NG

Repair or replace harness or connector.

OK

Check and replace Engine and ECT ECU or ECT ECU ([See page IN-35](#)).