DI08N–17

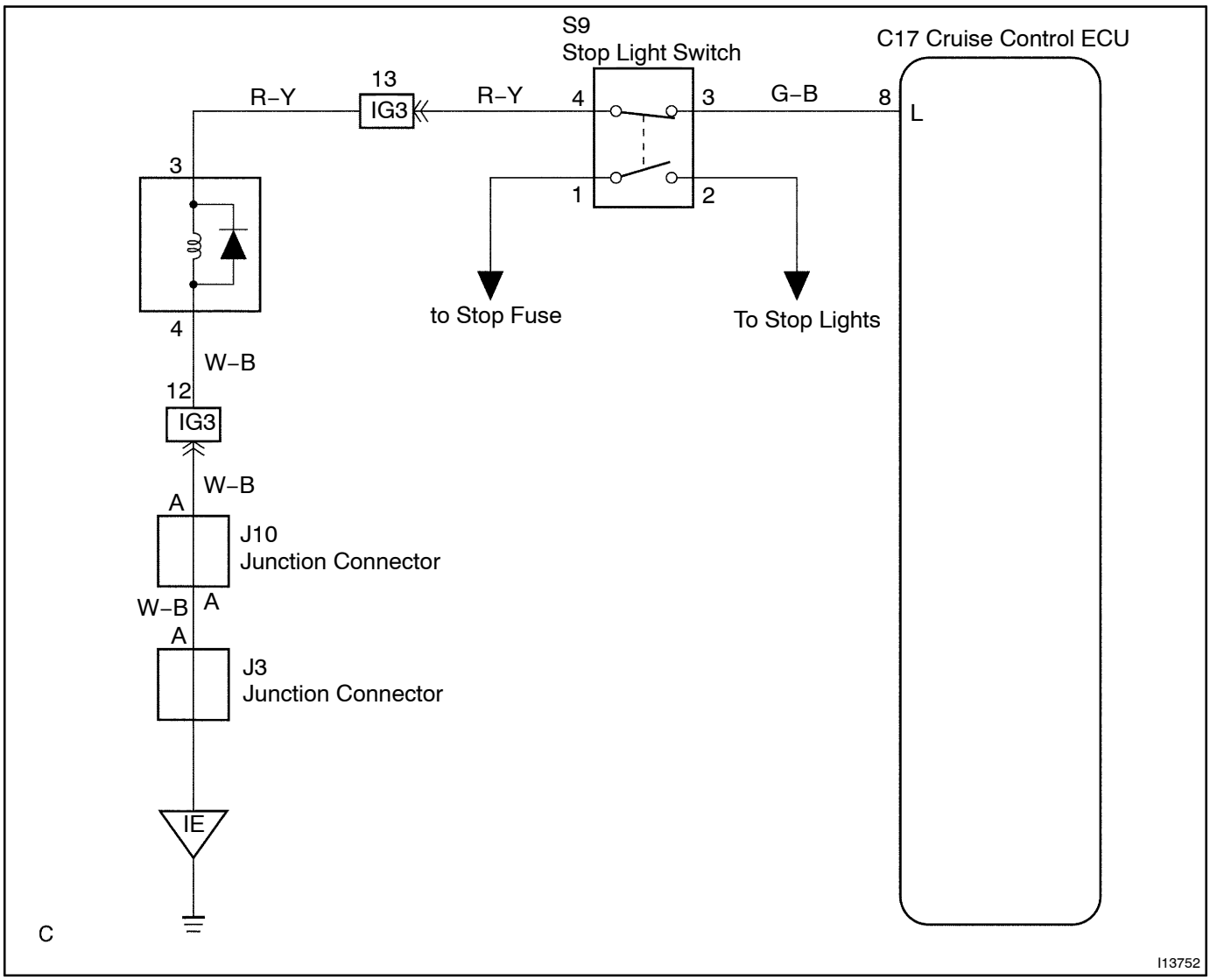
DTC	12, 43	Actuator Magnetic Clutch Circuit

CIRCUIT DESCRIPTION

This circuit turns on the magnetic clutch inside the actuator during cruise control operation according to the signal from the ECU. If a malfunction occurs in the actuator or speed sensor, etc. during cruise control operation, the rotor shaft between the motor and control plate is released.
When the brake pedal is depressed, the stop light switch turns on, supplying electrical power to the stop light. Power supply to the magnetic clutch is mechanically cut and the magnetic clutch is turned OFF.
When driving downhill, if the vehicle speed exceeds the set speed by 15 km/h (9 mph), the ECU turns the safety magnet clutch OFF. If the vehicle speed later drops to within 10 km/h (6 mph), cruise control at the set speed is resumed.

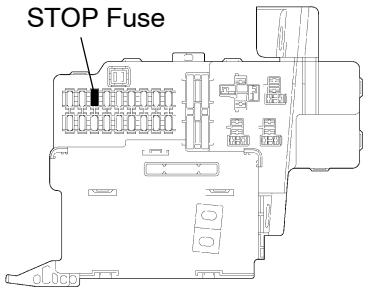
DTC No.	Detection Item	Trouble Area
12	Short in actuator magnetic clutch circuit. Open (0.8 sec.) in actuator magnetic clutch circuit.	• STOP Fuse • Stop light switch • Actuator magnetic clutch • Harness or connector between cruise control ECU and actuator magnetic clutch, actuator magnetic clutch and body ground • Cruise control ECU

WIRING DIAGRAM



INSPECTION PROCEDURE

1	**Check STOP fuse.**



PREPARATION:

(a) Turn ignition switch OFF.

(b) Remove the STOP fuse from instrument panel junction block.

CHECK:

Check fuse continuity.

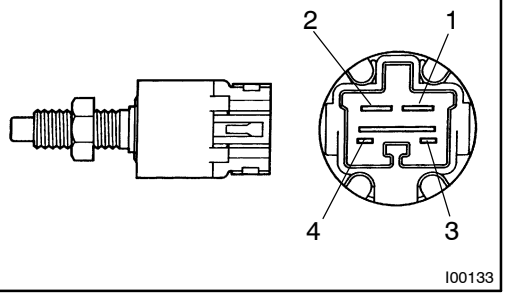
OK:

There is continuity.

NG → **Replace STOP fuse.**

OK

2	**Check stop light switch.**



PREPARATION:

Disconnect the stop light switch connector.

CHECK:

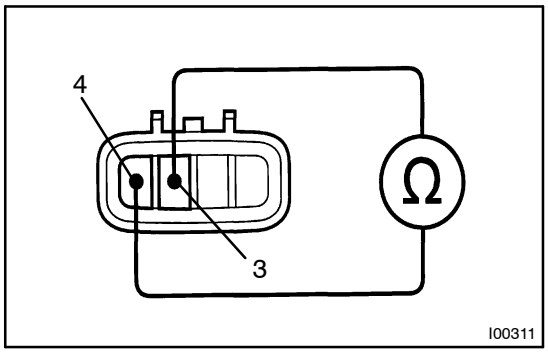
Check continuity between terminals.

Switch position	Continuity
Switch pin free (Brake pedal depressed)	1 – 2
Switch pin pushed in (Brake pedal released)	3 – 4

NG → **Replace stop light switch.**

OK

3	Check resistance between terminals L and GND of actuator magnetic clutch.



PREPARATION:

(a) Turn ignition switch OFF.

(b) Disconnect the actuator connector.

CHECK:

Measure resistance between terminals 3 and 4.

OK:

Resistance: 34.65 – 42.35 Ω.

NG → Replace cruise control actuator.

OK

4	Check for open and short in harness and connectors between cruise control ECU and actuator magnetic clutch, actuator magnetic clutch and body ground (See page IN–30).

NG → Repair or replace harness or connector.

OK

Check and replace cruise control ECU (See page IN–30).