

DTC	12	ACTUATOR MAGNETIC CLUTCH CIRCUIT
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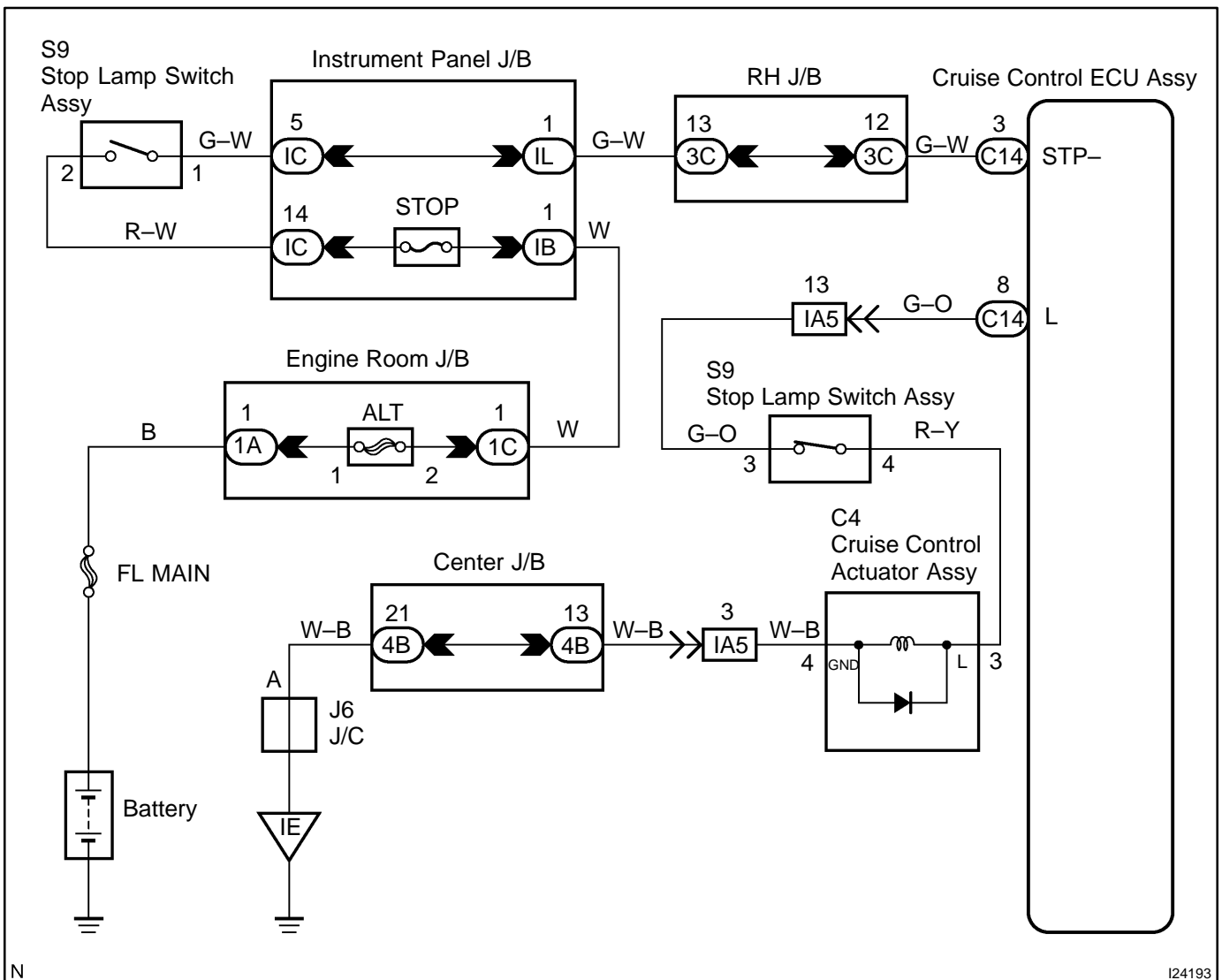
CIRCUIT DESCRIPTION

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 lamp switch assy 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 8 km/h (5 mph), the ECU turns the safety magnet clutch OFF. If the vehicle speed later drops to within 5 km/h (3 mph) above the set speed, then cruise control at the set speed is resumed.

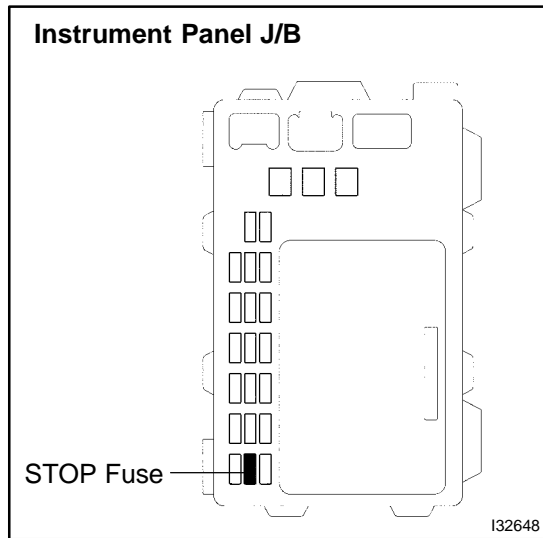
DTC No.	DTC Detecting Condition	Trouble Area
12	<ul style="list-style-type: none"> • Short in actuator magnetic clutch circuit. • Open (0.8 sec.) in actuator magnetic clutch circuit. 	<ul style="list-style-type: none"> • STOP Fuse • Stop lamp switch assy • Cruise control actuator assy (Actuator magnetic clutch) • Actuator magnetic clutch circuit • Cruise control ECU assy

WIRING DIAGRAM



INSPECTION PROCEDURE

1 INSPECT FUSE(STOP)



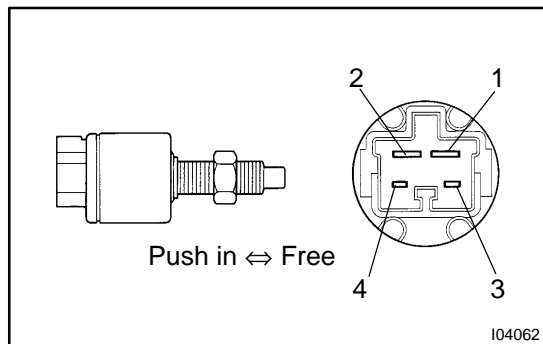
- (a) Turn the ignition switch to OFF.
- (b) Remove the STOP fuse from the instrument panel J/B.
- (c) Check continuity of the STOP fuse.

OK: Continuity

NG → REPLACE FUSE

OK

2 INSPECT STOP LAMP SWITCH ASSY



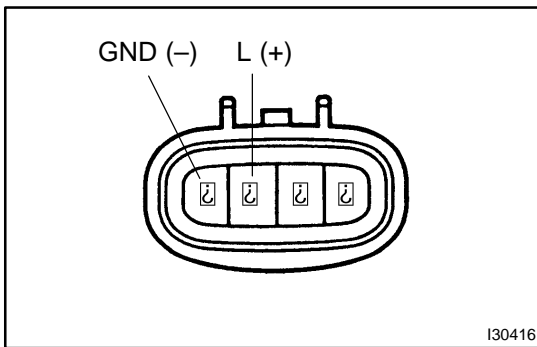
- (a) Disconnect the stop lamp switch assy connector.
- (b) Check continuity between each terminal of stop lamp switch assy.

OK:

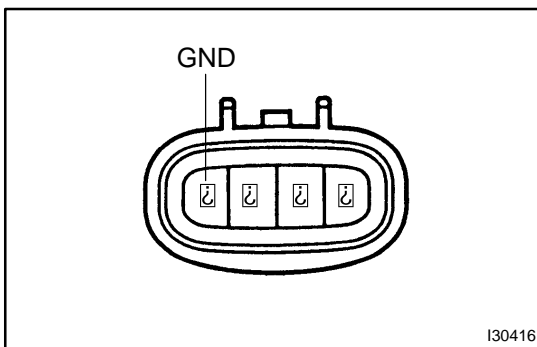
Stop Lamp Switch Assy	Terminal	Specification
Brake pedal depressed (Switch pin free)	1 - 2	Continuity
	3 - 4	No continuity
Brake pedal released (Switch pin pushed in)	1 - 2	No continuity
	3 - 4	Continuity

NG → REPLACE STOP LAMP SWITCH ASSY

OK

3 INSPECT CRUISE CONTROL ACTUATOR ASSY

- (a) Turn the ignition switch to OFF.
- (b) Disconnect the cruise control actuator assy connector.
- (c) Measure resistance between terminals 3 (L) and 4 (GND) of the cruise control actuator assy.

OK:**Resistance: 34.65 – 42.35 Ω****NG****REPLACE CRUISE CONTROL ACTUATOR ASSY****OK****4 CHECK HARNESS AND CONNECTOR(BETWEEN CRUISE CONTROL ACTUATOR ASSY AND BODY GROUND)**

- (a) Check continuity between the terminal 4 (GND) of the cruise control actuator assy and body ground.

OK: Continuity**NG****REPAIR OR REPLACE HARNESS OR CONNECTOR****OK****5 CHECK HARNESS AND CONNECTOR(BETWEEN CRUISE CONTROL ECU ASSY AND CRUISE CONTROL ACTUATOR ASSY)**

- (a) Check for open and short circuit in harness and connector between cruise control ECU assy and cruise control actuator assy (actuator magnetic clutch) (See page 01-30).

NG**REPAIR OR REPLACE HARNESS OR CONNECTOR****OK****CHECK AND REPLACE CRUISE CONTROL ECU ASSY (See page 01-30)**