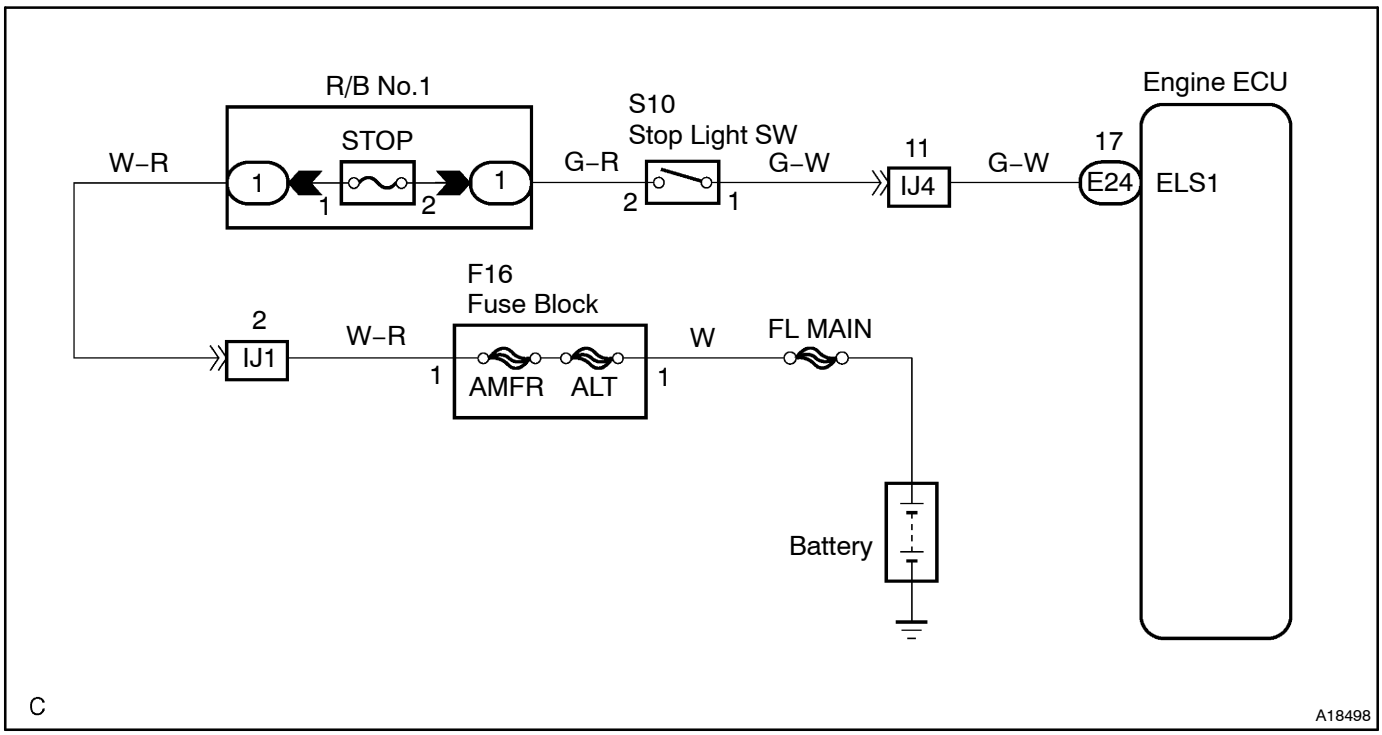
DI9V3–01

Stop Light Switch Signal Malfunction

CIRCUIT DESCRIPTION

This signal is used to detect when the brakes have been applied. The ELS1 signal voltage is the same as the voltage supplied to the stop lights.
The ELS1 signal is used mainly to control the fuel cut–off engine speed (The fuel cut–off engine speed is reduced slightly when the vehicle is braking.).

WIRING DIAGRAM



INSPECTION PROCEDURE

HINT:
Read freeze frame data using a hand–held tester. Because freeze frame records the engine conditions when the malfunction is detected. When troubleshooting, it is useful for determining whether the vehicle was running or stopped, the engine was warmed up or not, the air–fuel ratio was lean or rich, etc. at the time of the malfunction.

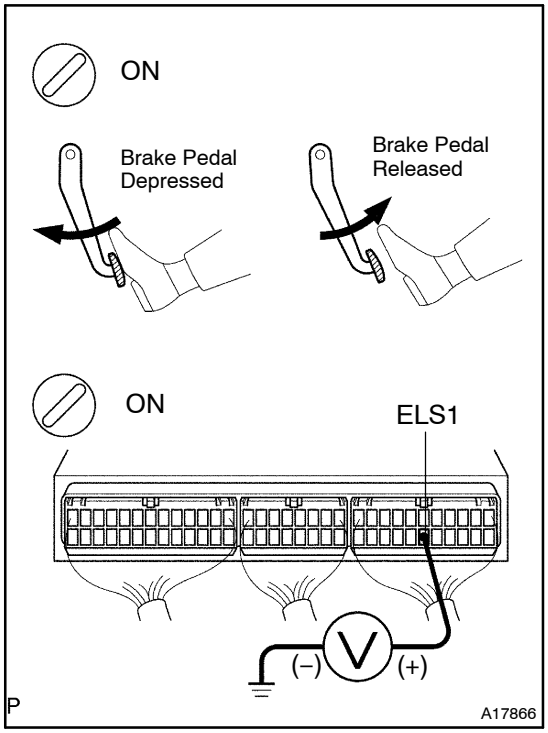
1	**Check operation of stop light.**

CHECK:
Check if the stop lights go on and off normally when the brake pedal is operated and released.

NG → **Check and repair stop light circuit.**

OK

2	**Check ELS1 signal.**



When using hand–held tester:
PREPARATION:
(a) Connect the hand–held tester to the DLC3.
(b) Turn the ignition switch ON and push the hand–held tester main switch ON.
CHECK:
Read the STP signal on the hand–held tester.
OK:

Brake Pedal	STP Signal
Depressed	ON
Released	OFF

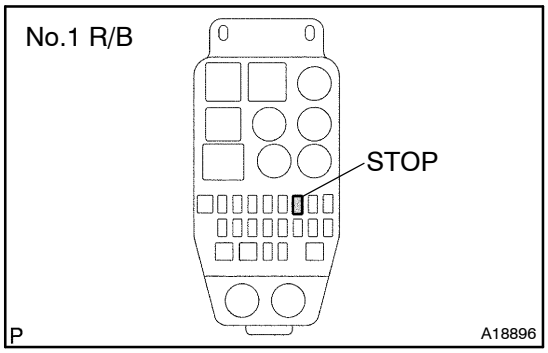
When not using hand–held tester:
PREPARATION:
(a) Remove the side trim bracket (See page FU–48).
(b) Turn the ignition switch ON.
CHECK:
Check the voltage between terminal ELS1 of the engine ECU connector and body ground.
OK:

Brake Pedal	Voltage
Depressed	7.5 – 14 V
Released	Below 1.5 V

OK → **Check for intermittent problems (See page DI–18).**

NG

3	Check STOP fuse.



PREPARATION:
Remove the STOP fuse from the R/B No.1.
CHECK:
Check the continuity of the STOP fuse.
OK:
Continuity

NG → **Check for short in all harness and components connected to STOP fuse.**

OK

4	Check harness and connector (See page IN–20).

NG → **Repair or replace harness or connector.**

OK

Check and replace engine ECU (See page IN–20).