DTC	51	STOP LIGHT SWITCH CIRCUIT MALFUNCTION

CIRCUIT DESCRIPTION

In this system, the signal of the stop light switch is used to judge whether the acceleration system is abnormal or not.

The stop light switch has a duplex system (signals STP and ST1–) to memorize the abnormality when the signals of depressing and releasing the brake pedal are detected simultaneously.

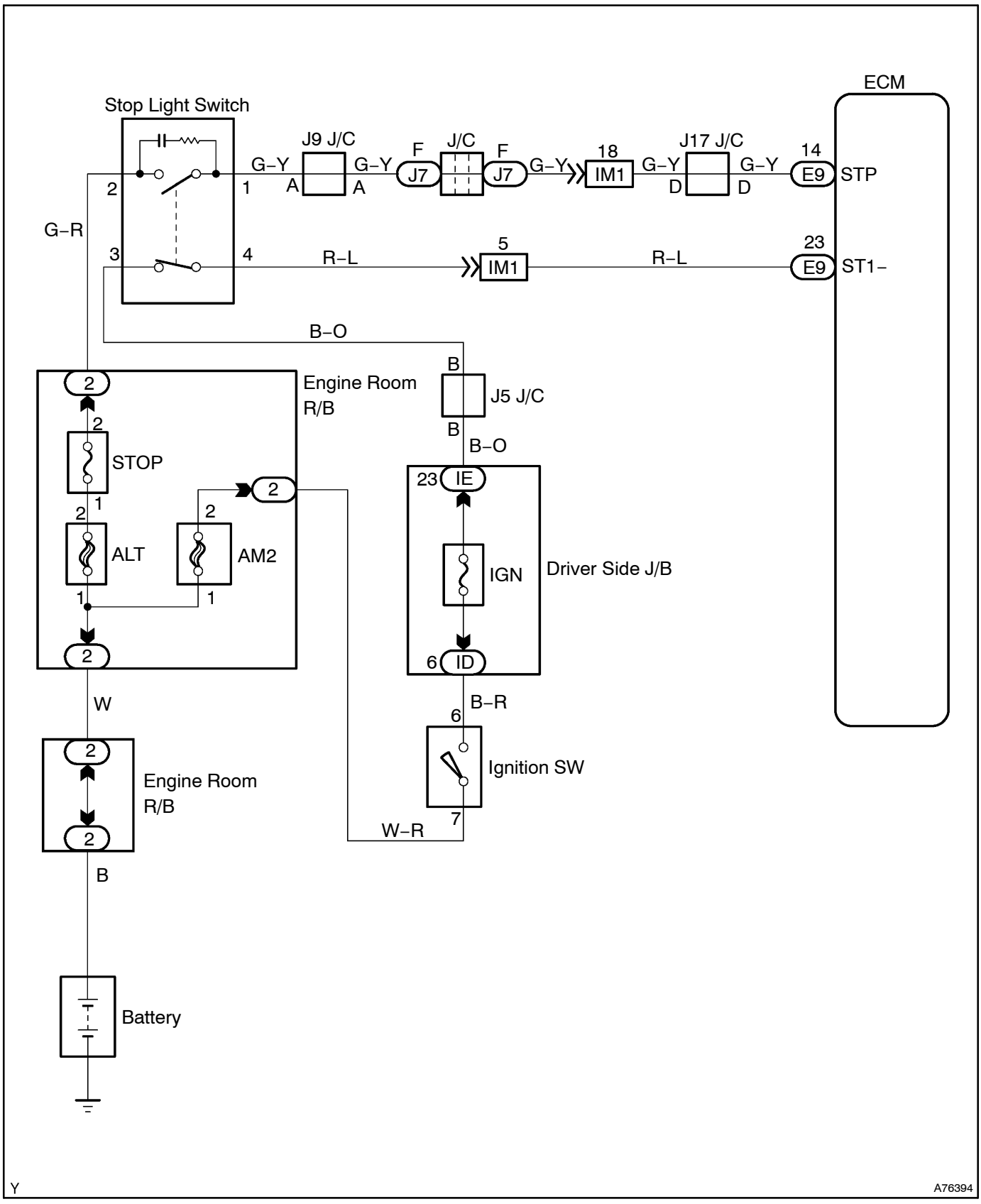
HINT:

Normal condition is as shown in the table.

Signal	Brake pedal released	In transition	Brake pedal depressed
STP	OFF	ON	ON
ST1–	ON	ON	OFF

DTC No.	DTC Detection Condition	Trouble Area
51	When STP (without depressing the brake pedal) and ST1– (with the brake pedal depressed) signals continue for longer than 0.5 seconds with the ignition switch ON	• Open or short in stop light switch signal circuit • Stop light switch • ECM

WIRING DIAGRAM



INSPECTION PROCEDURE

HINT:

Read freeze frame data using the hand–held tester,as freeze frame data 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.

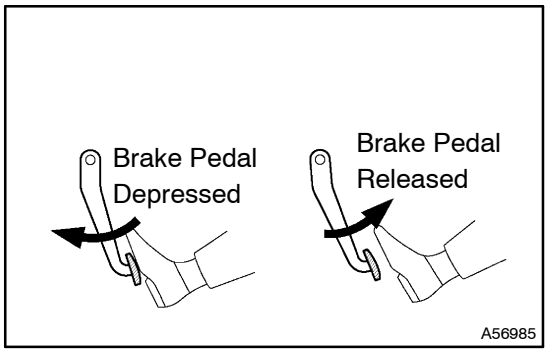
1 CHECK OPERATION OF STOP LIGHT

(a) Check if the stop lights go on and off normally when the brake pedal is depressed and released.

NG → **REPAIR STOP LIGHT SWITCH CIRCUIT**

OK

2 INSPECT ECM(CHECK VOLTAGE)

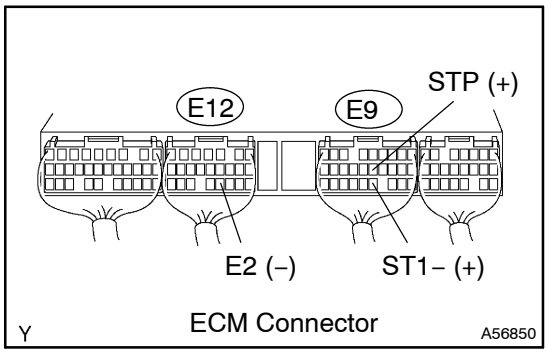


(a) Turn the ignition switch ON.

(b) Measure the voltage between the terminals of the ECM E12 and E9 connector.

Voltage:

Symbols (Terminal No.)	Brake Pedal	Voltage
STP (E9 – 14) ⇔ E2 (E12 – 20)	Depressed	7.5 – 14 V
	Released	Below 1.5 V
ST1– (E9 – 23) ⇔ E2 (E12 – 20)	Depressed	Below 1.5 V
	Released	7.5 – 14 V

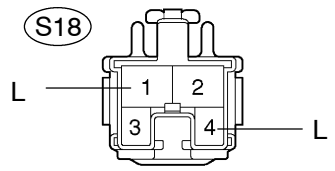


NG

OK → **CHECK FOR INTERMITTENT PROBLEMS** (See page 05–429)

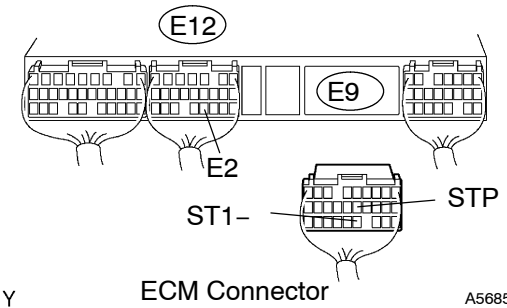
3 CHECK HARNESS AND CONNECTOR(ECM – STOP LIGHT SWITCH)

Wire Harness Side



Stop Light Switch Connector

Y A56986



Y ECM Connector A56853

(a) Disconnect the stop light switch connector.
(b) Disconnect the ECM E9 connector.
(c) Check the continuity between the wire harness side connector.

Standard (Check for open):

Symbols (Terminal No.)	Specified condition
L (S18 – 1) ⇔ STP (E9 – 14)	Continuity
L (S18 – 4) ⇔ ST1– (E9 – 23)	

Standard (Check for short):

Symbols (Terminal No.)	Specified condition
STP (E9 – 14) ⇔ E2 (E12 – 20)	No continuity
ST1– (E9 – 23) ⇔ E2 (E12 – 20)	

NG → **REPAIR OR REPLACE HARNESS OR CONNECTOR**

OK →

CHECK AND REPLACE ECM