DTC P0724 BRAKE SWITCH ”B” CIRCUIT HIGH

CIRCUIT DESCRIPTION

The purpose of this circuit is to prevent the engine from stalling while driving in lock−up condition when brakes are suddenly applied.
When the brake pedal is depressed, this switch sends a signals to the ECM. Then the ECM cancels the operation of the lock−up clutch while braking is in progress.

DTC No.	DTC Detecting Condition	Trouble Area
P0724	The stop light switch always remains ON even when the vehicle is driven in a GO (30 km/h) and STOP (3 km/h) fashion 5 times. (2−trip detection logic).	• Short in stop light switch signal circuit • Stop light switch • ECM

MONITOR DESCRIPTION

When the stop light switch remains ON during ”stop and go” driving, the ECM interprets this as a fault in the stop light switch and the MIL comes on and the ECM stores the DTC. The vehicle must stop and go (3 km/h (2 mph) to 30 km/h (19 mph)) 5 times for two driving cycles in order to detect a malfunction.

MONITOR STRATEGY

Related DTCs	P0724: Stop light switch/Rationality
Required sensors/Components	Stop light switch, Vehicle speed sensor
Frequency of operation	Continuous
Duration	GO and STOP 5 times
MIL operation	2 driving cycles
Sequence of operation	None

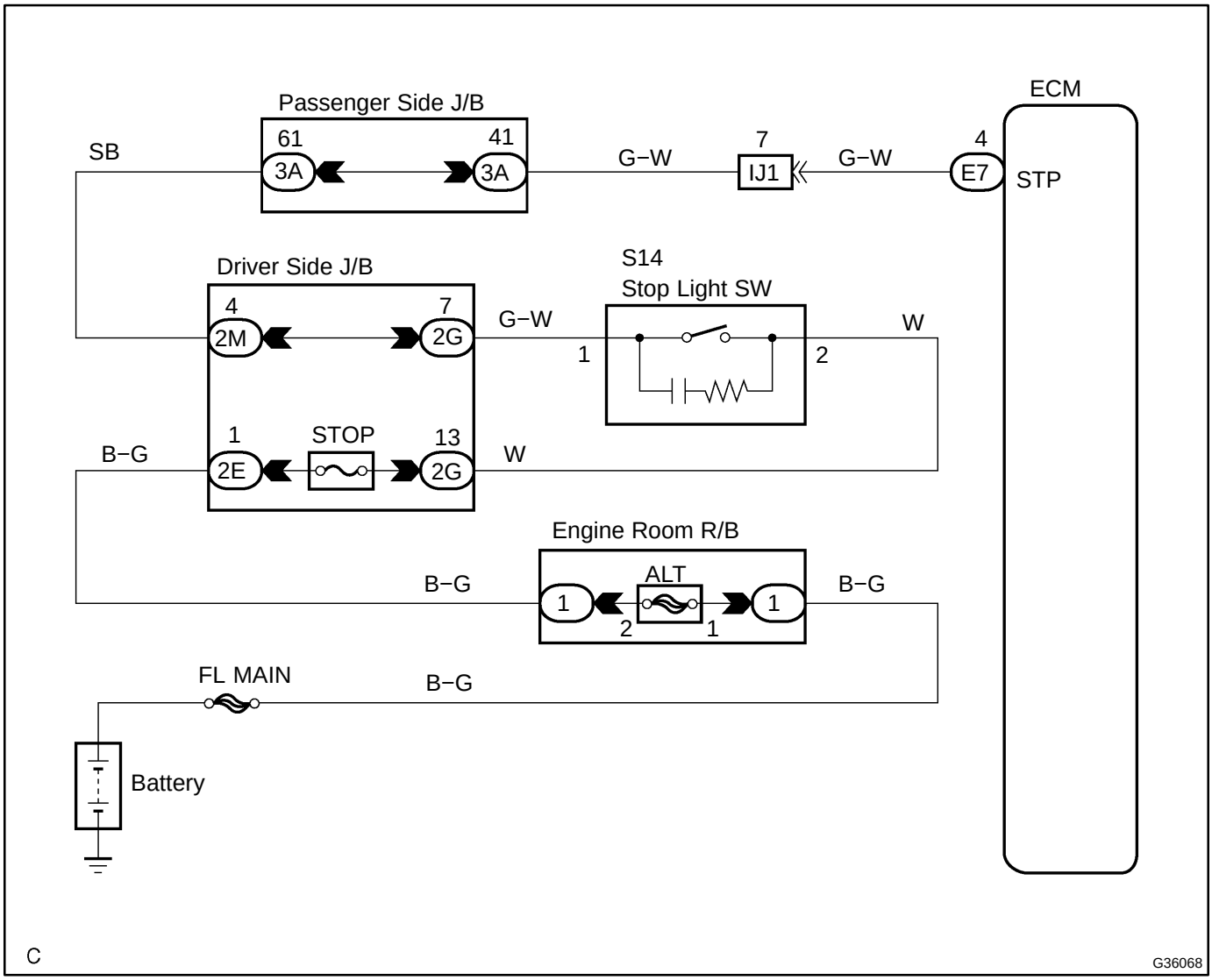
TYPICAL ENABLING CONDITIONS

The monitor will run whenever this DTC is not present.	See page 05−1125
Ignition switch	ON
Starter	OFF
Battery voltage	8 V or more
GO (Vehicle speed is 18.63 mph (30 km/h) or more)	Once
STOP (Vehicle speed is less than 1.86 mph (3 km/h))	Once

TYPICAL MALFUNCTION THRESHOLDS

Brake switch	Remain ON during GO and STOP 5 times

WIRING DIAGRAM



INSPECTION PROCEDURE

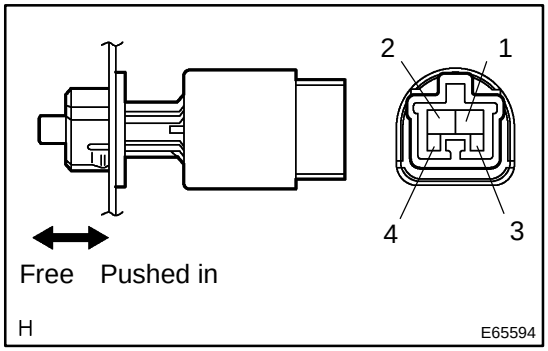
HINT:

According to the DATA LIST displayed by the OBD II scan tool or hand−held tester, you can read the value of the switch, sensor, actuator and so on without parts removal. Reading the DATA LIST as the first step of troubleshooting is one method to shorten labor time.

(a) Warm up the engine.
(b) Turn the ignition switch off.
(c) Connect the OBD II scan tool or hand−held tester to the DLC3.
(d) Turn the ignition switch to the ON position.
(e) Push the ”ON” button of the OBD II scan tool or the hand−held tester.
(f) When you use hand−held tester:
Select the item ”DIAGNOSIS/ENHANCED OBD II/DATA LIST”.
(g) According to the display on the tester, read the ”DATA LIST”.

Item	Measurement Item/ Range (display)	Normal Condition
STOP LIGHT SW	Stop light SW Status/ ON or OFF	• Brake pedal is depressed: ON • Brake pedal is released: OFF

1 INSPECT STOP LAMP SWITCH ASSY



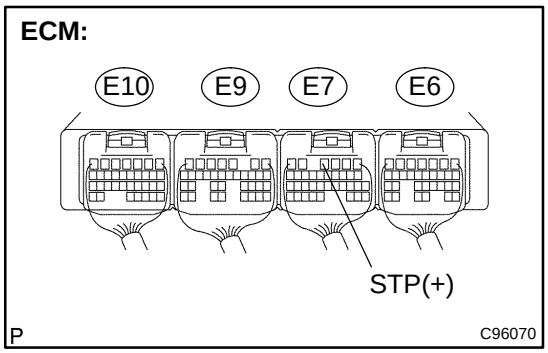
(a) Remove the stop lamp switch assy.
(b) Measure the resistance according to the value(s) in the table below.
Standard:

Switch position	Tester Connection	Specified Condition
Switch pin free	1 − 2	Below 1 Ω
Switch pin pushed in	↑	10 kΩ or higher
Switch pin free	3 − 4	10 kΩ or higher
Switch pin pushed in	↑	Below 1 Ω

NG → **REPLACE STOP LAMP SWITCH ASSY**

OK

2 CHECK HARNESS AND CONNECTOR(STOP LAMP SWITCH ASSY − ECM)



(a) Install the stop lamp switch assy connector.
(b) Measure the voltage according to the value(s) in the table below when the brake pedal is depressed and released.
Standard:

Condition	Tester Connection	Specified Condition
Brake pedal is depressed	E7 − 4 (STP) − Body ground	10 to 14 V
Brake pedal is released	↑	Below 1 V

NG → **REPAIR OR REPLACE HARNESS OR CONNECTOR (SEE PAGE 01−32)**

OK

REPLACE ECM (SEE PAGE 10−9)