

DTC**P0724****Brake Switch "B" Circuit High****DESCRIPTION**

The purpose of this circuit is to prevent the engine from stalling while driving in lock-up condition, when the brakes are suddenly applied.

When the brake pedal is depressed, this switch sends signals to the ECM. Then the ECM cancels the operation of the lock-up clutch while braking is in progress.

DTC No.	DTC Detection Condition	Trouble Area
P0724	The stop light switch remains ON even when the vehicle is driven in a GO (18.6 mph (30 km/h) or more) and STOP (less than 1.9 mph (3 km/h)) pattern 5 times. (2-trip detection logic)	<ul style="list-style-type: none"> • Short in stop light switch signal circuit • Stop light switch • ECM

MONITOR DESCRIPTION

This DTC indicates that the stop light switch remains ON. 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 (less than 1.9 mph (3 km/h)) and go (18.6 mph (30 km/h) or more) 5 times during 2 driving cycles, in order to detect a malfunction.

MONITOR STRATEGY

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

TYPICAL ENABLING CONDITIONS

The stop light switch remains ON during GO and STOP 5 times.

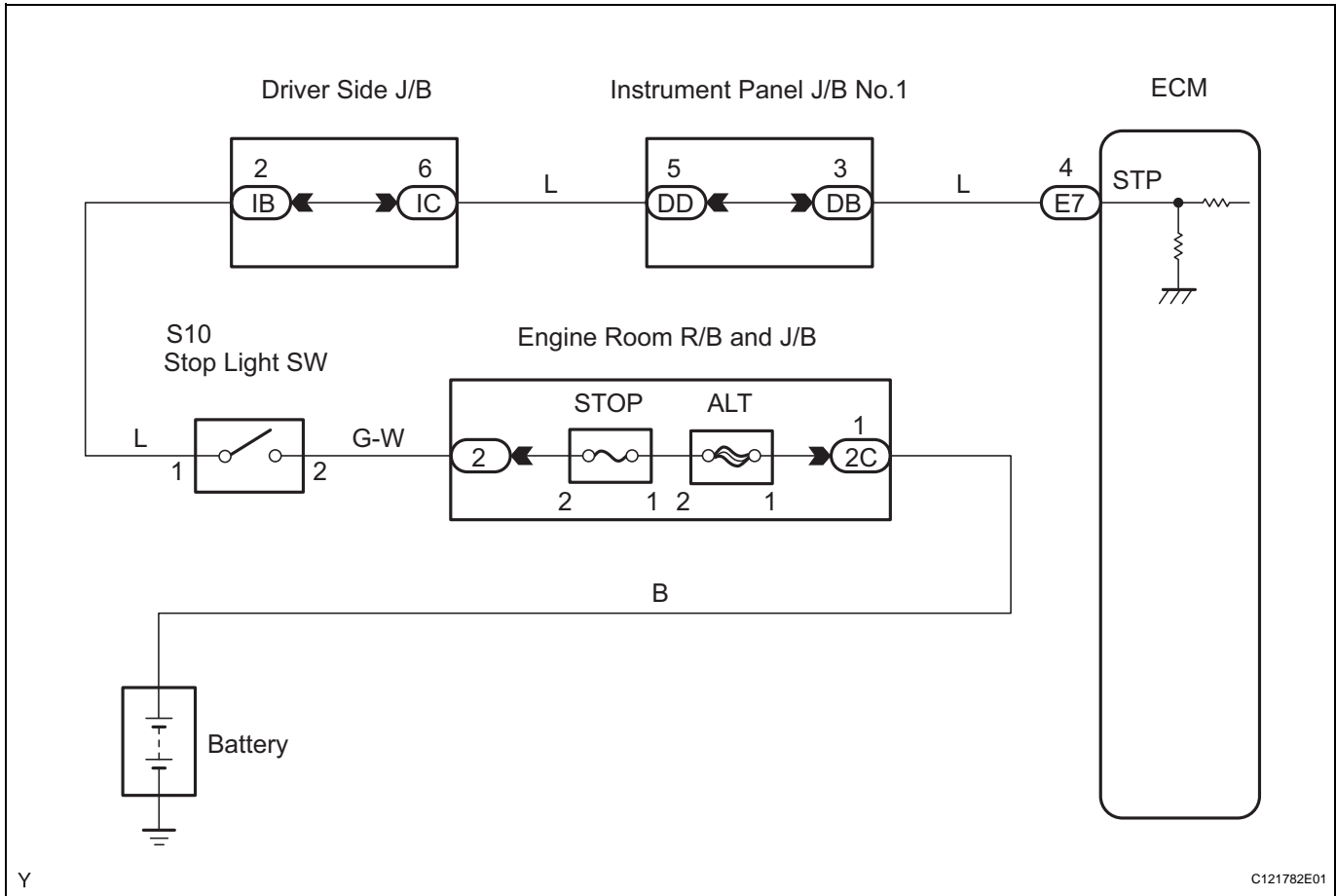
GO and STOP are defined as follows;

The monitor will run whenever the following DTCs are not present.	None
GO: Vehicle speed	18.6 mph (30 km/h) or more
STOP: Vehicle speed	Less than 1.9 mph (3 km/h)

TYPICAL MALFUNCTION THRESHOLDS

Stop light switch status	Stuck ON
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WIRING DIAGRAM



HINT:

According to the DATA LIST displayed on the intelligent tester, you can read the values of components, such as the switches, sensors and actuators, without removing any parts. Reading the DATA LIST as the first step of troubleshooting is one method of shortening labor time.

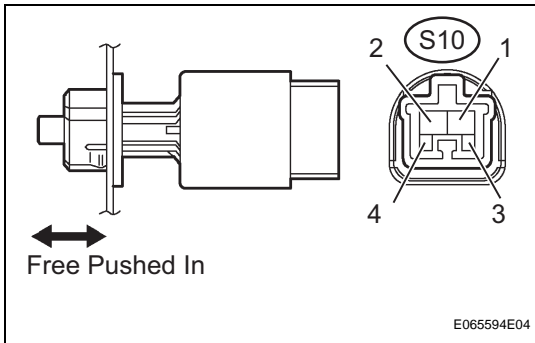
NOTICE:

In the table below, the values listed under "Normal Condition" are for reference only. Do not depend solely on these reference values when judging whether a part is faulty or not.

- (a) Connect the intelligent tester together with the CAN VIM (controller area network vehicle interface module) to the DLC3.
- (b) Turn the ignition switch to the ON position.
- (c) Push the "ON" button of the tester.
- (d) Select the items "DIAGNOSIS/ ENHANCED OBD II/ DATA LIST/ A/T".
- (e) According to the display on the tester, read the "DATA LIST".

Item	Measurement Item/ Range (display)	Normal Condition
STOP LIGHT SW	Stop light Switch Status/ ON or OFF	<ul style="list-style-type: none"> • Brake Pedal is depressed: ON • Brake Pedal is released: OFF

1 INSPECT STOP LIGHT SWITCH ASSEMBLY



- (a) Remove the stop light switch assembly.
- (b) Measure the resistance.

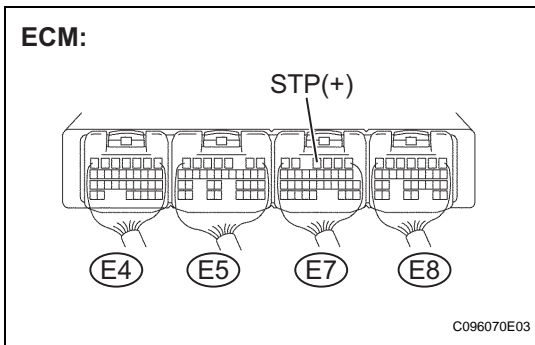
Standard resistance

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

NG → **REPLACE STOP LIGHT SWITCH ASSEMBLY**

OK

2 CHECK HARNESS AND CONNECTOR (STOP LIGHT SWITCH ASSEMBLY - ECM)



- (a) Install the stop light switch assembly.
- (b) Measure the voltage when the brake pedal is depressed and released.

Standard voltage

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

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

OK

REPLACE ECM