

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

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

When the brake pedal is depressed, this switch sends a signal 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	Stop light switch remains ON even when vehicle is driven in GO (30 km/h (18.63 mph) or more) and STOP (less than 3 km/h (1.86 mph)) 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 GO and STOP driving, the ECM interprets this as a fault in the stop light switch. Then the MIL illuminates and the ECM stores the DTC. The vehicle must GO (30 km/h (18.63 mph) or more) and STOP (less than 3 km/h (1.86 mph)) 5 times for 2 driving cycles in order for the DTC to be output.

MONITOR STRATEGY

Related DTCs	P0724: Stop light switch/Range check/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.	None
Battery voltage	8 V or more
Starter	OFF
Ignition switch	ON
GO (Vehicle speed is 30 km/h (18.63 mph) or more)	Once
STOP (Vehicle speed is less than 3 km/h (1.86 mph))	Once

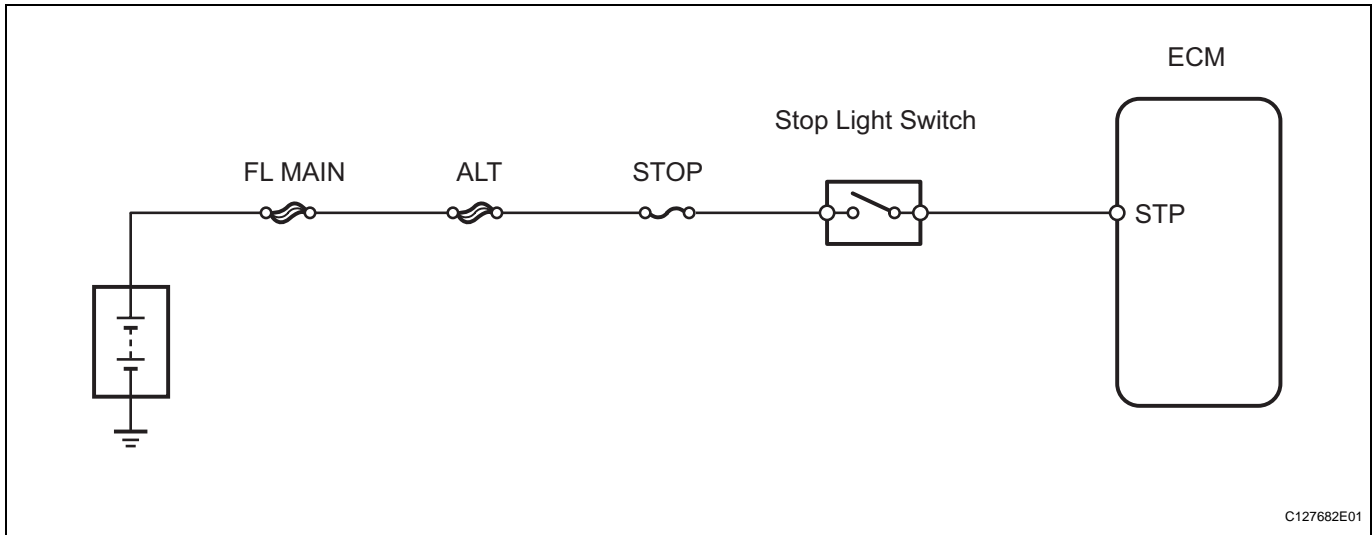
TYPICAL MALFUNCTION THRESHOLDS

Brake switch	Stuck ON
--------------	----------

AX

WIRING DIAGRAM

AX



C127682E01

INSPECTION PROCEDURE

HINT:

Using the intelligent tester's DATA LIST allows switch, sensor, actuator and other item values to be read without removing any parts. Reading the DATA LIST early in troubleshooting is one way to save time.

NOTICE:

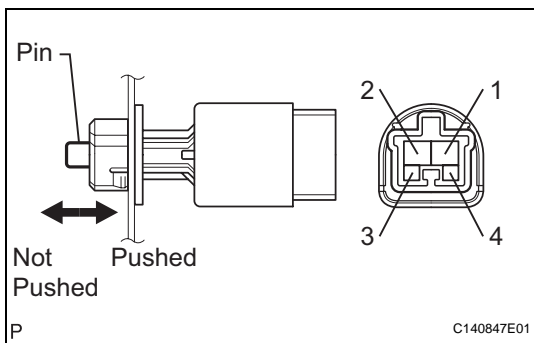
In the table below, the values listed under "Normal Condition" are reference values. Do not depend solely on these reference values when deciding whether a part is faulty or not.

1. Warm up the engine.
2. Turn the ignition switch OFF.
3. Connect the intelligent tester to the CAN VIM. Then connect the CAN VIM to the DLC3.
4. Turn the ignition switch ON and turn the tester ON.
5. Enter the following menus: DIAGNOSIS / ENHANCED OBD II / DATA LIST.
6. Follow the instructions on the tester and read the DATA LIST.

ECM:

Item	Measurement Item/ Range (Display)	Normal Condition	Diagnostic Note
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



- (a) Remove the A3 stop light switch.
- (b) Measure the resistance of the switch.

Standard resistance

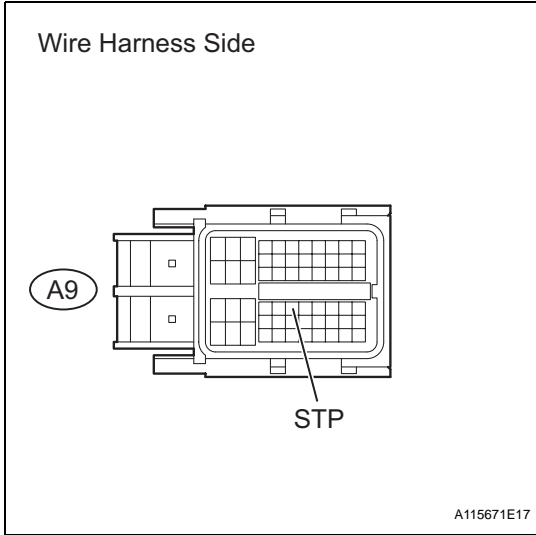
Tester Connection	Switch Condition	Specified Condition
1 - 2	Pin pushed (pedal released)	Below 1 Ω
1 - 2	Pin not pushed (pedal depressed)	10 kΩ or higher
3 - 4	Pin pushed (pedal released)	10 kΩ or higher
3 - 4	Pin not pushed (pedal depressed)	Below 1 Ω

NG **REPLACE STOP LIGHT SWITCH**

OK

2 CHECK WIRE HARNESS (ECM - BATTERY)

AX



(a) Measure the voltage of the wire harness side connector.
Standard voltage

Tester Connection	Condition	Specified Condition
A9-36 (STP) - Body ground	Brake pedal is depressed	10 to 14 V
A9-36 (STP) - Body ground	Brake pedal is released	Below 1 V

NG **REPAIR OR REPLACE HARNESS AND CONNECTOR**

OK

REPLACE ECM