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 (18.65 mph) or more) and STOP (less than 3 km/h (1.86 mph)) pattern 5 times (2 trip detection logic)	• Short in stop light switch circuit • Stop light switch • ECM

MONITOR DESCRIPTION

The circuit prevents the engine from stopping when the vehicle is stopped by sudden braking when the torque converter clutch is in the "lock-up" mode. The ECM receives the signal from the stop light switch when the brake pedal is depressed. Then, the ECM sends a signal to the lock-up solenoid valve to turn lock-up off.
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 (18.65 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

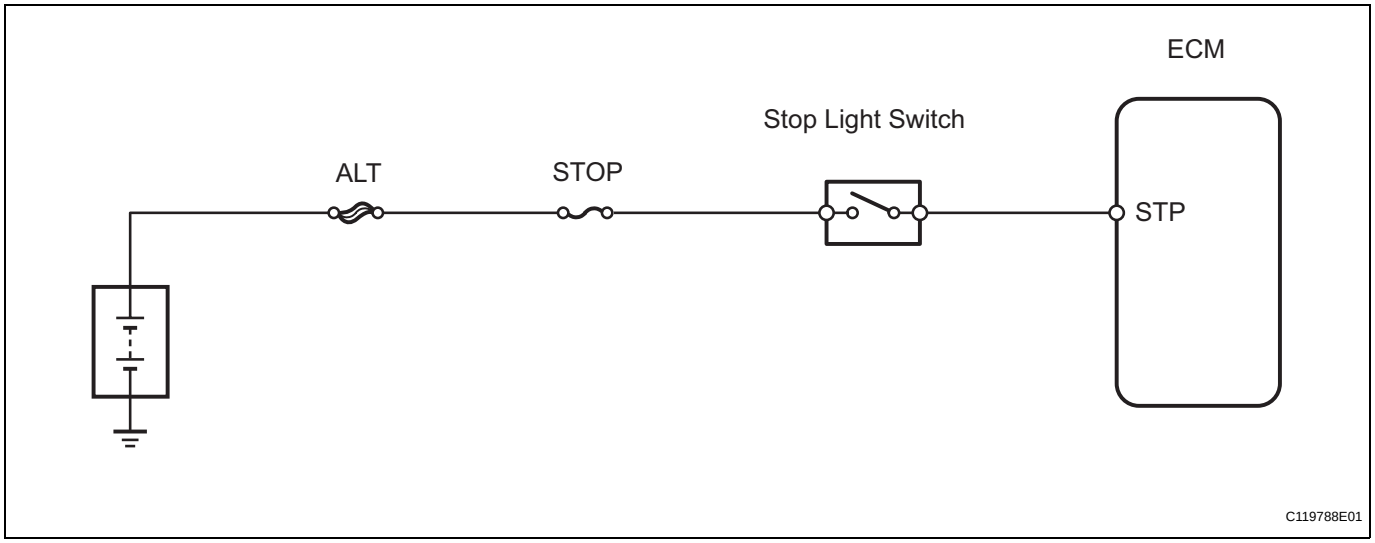
The stop light switch remains on while GO and STOP is repeated 5 times.
GO and STOP are defined as follows:

The monitor will run whenever the following DTCs are not present	None
GO: Vehicle speed	30 km/h (18.65 mph) or more
STOP: Vehicle speed	Less than 3 km/h (1.86 mph)

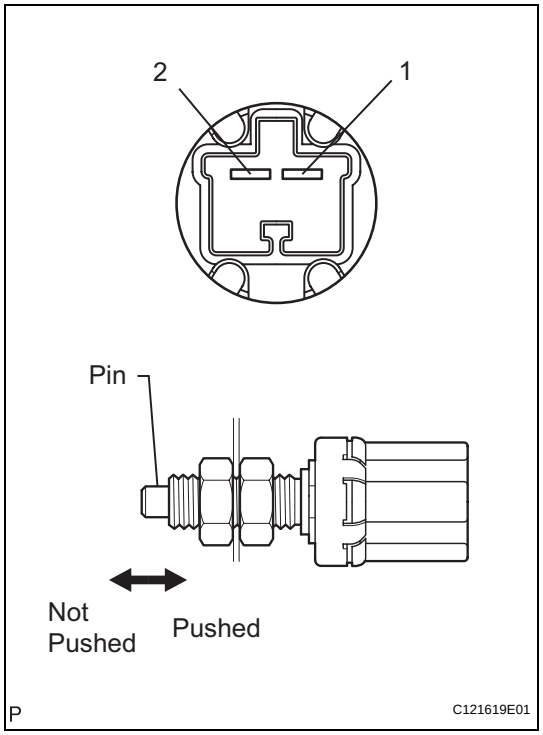
TYPICAL MALFUNCTION THRESHOLDS

Brake switch status	Stuck ON

WIRING DIAGRAM



1	INSPECT STOP LIGHT SWITCH



(a) Remove the S8 stop light switch.
(b) Measure the resistance of the switch.

Standard resistance

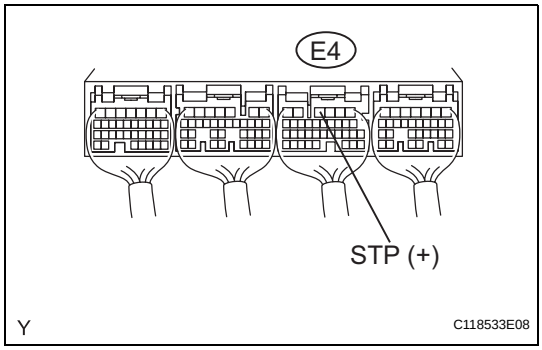
Tester Connection	Switch Condition	Specified Condition
1 - 2	Pin pushed (pedal released)	10 kΩ or higher
1 - 2	Pin not pushed (pedal depressed)	Below 1 Ω
3 - 4	Pin pushed (pedal released)	10 kΩ or higher
3 - 4	Pin not pushed (pedal depressed)	Below 1 Ω

NG → REPLACE STOP LIGHT SWITCH

OK

AX

2	CHECK WIRE HARNESS (STOP LIGHT SWITCH - ECM)



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

Tester Connection	Condition	Specified Condition
E4-4 (STP) - Body ground	Brake pedal is depressed	7.5 to 14 V
E4-4 (STP) - Body ground	Brake pedal is released	Below 1.5 V

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

OK

REPLACE ECM