

<b>DTC</b>	<b>P1125/41</b>	<b>THROTTLE CONTROL MOTOR CIRCUIT MALFUNCTION</b>
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## CIRCUIT DESCRIPTION

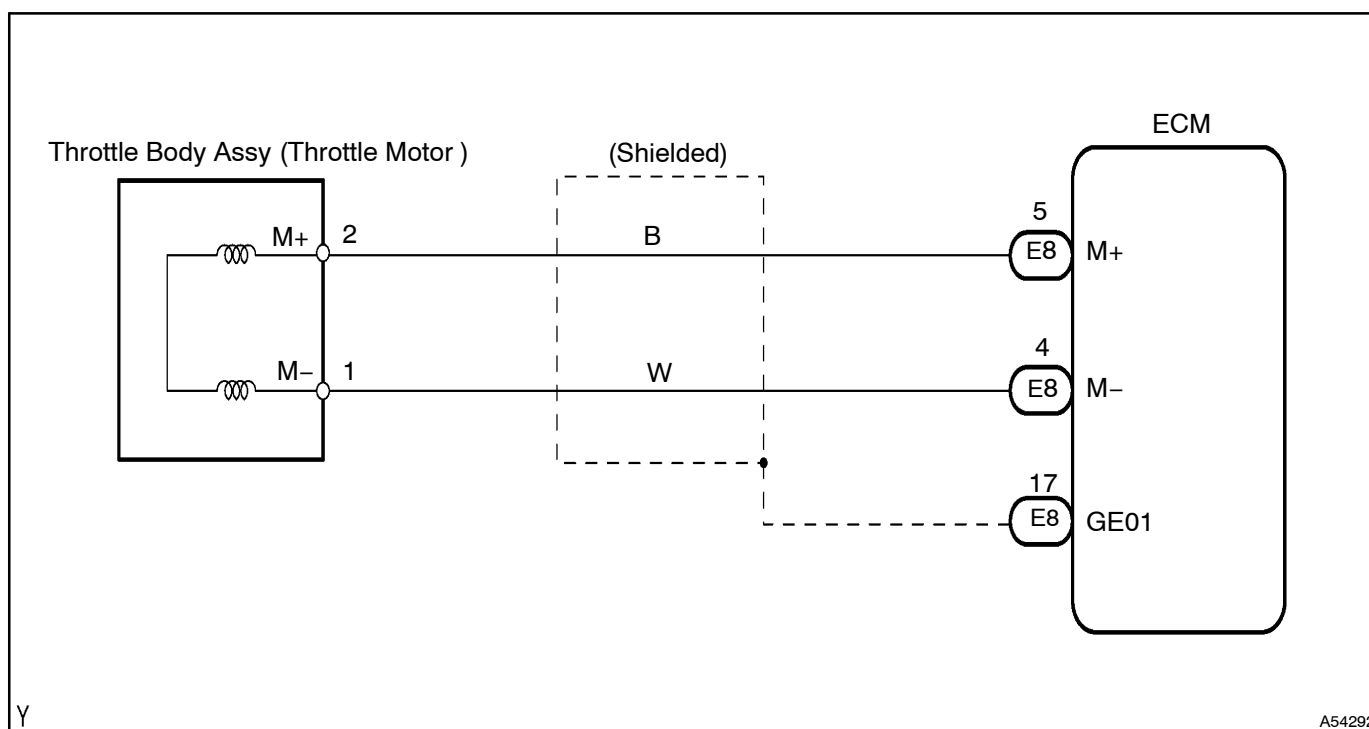
Throttle motor is operated by the ECM and it opens and closes the throttle valve.

The opening angle of the throttle valve is detected by the throttle position sensor which is mounted on the throttle body and it provides feedback to the ECM to control the throttle motor in order to control the throttle valve opening angle properly in response to driving condition.

If this DTC is stored, the ECM shuts down the power for the throttle motor, and the throttle valve is fully closed by the return spring.

DTC No.	DTC Detection Condition	Trouble Area
P1125/89	Conditions (a) and (b) continue for 2.0 seconds: (a) Throttle control motor output duty $\geq 80\%$ (b) Throttle control motor current $< 0.5\text{ A}$	<ul style="list-style-type: none"> <li>• Open or short in throttle control motor circuit</li> <li>• Throttle body assy (throttle motor)</li> <li>• ECM</li> </ul>
	Throttle control motor current $\geq 16\text{ A}$	
	Condition (a) continues for 0.6 seconds: (a) Throttle control motor current $\geq 7\text{ A}$	

## WIRING DIAGRAM

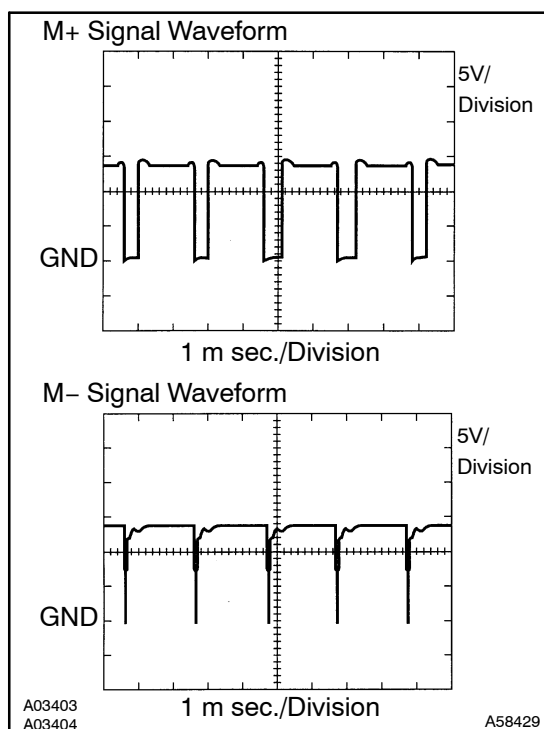


## INSPECTION PROCEDURE

### HINT:

Read freeze frame data using hand-held tester, as freeze frame data records the engine conditions when a 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 INSPECT THROTTLE BODY ASSY(MOTOR CIRCUIT)



- (a) Check the waveform between E8 ECM terminals M+ or M- and E1 when the engine is idling.

HINT:

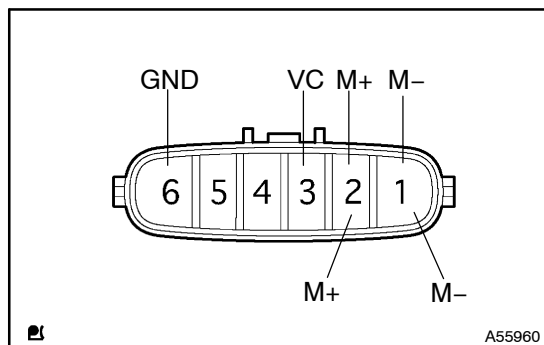
The waveform frequency changes depending on the throttle opening.

OK

CHECK AND REPLACE ECM

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# 2 INSPECT THROTTLE BODY ASSY(THROTTLE MOTOR)



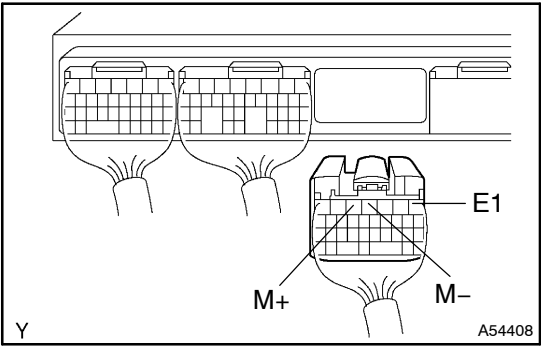
- (a) Disconnect the throttle body connector.  
 (b) Measure the resistance between terminals M+ and M-.  
**Standard resistance: 0.3 – 100  $\Omega$  at 20°C (68°F)**

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REPLACE THROTTLE BODY ASSY

OK

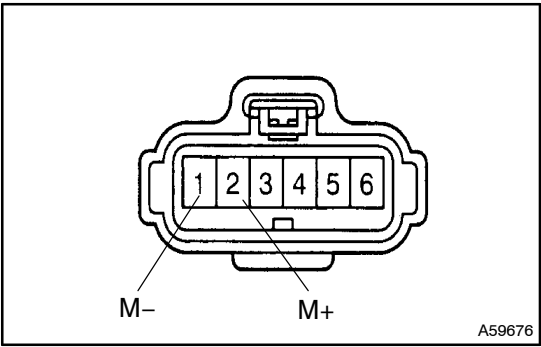
3 CHECK WIRE HARNESS(ECM-THROTTLE MOTOR)



- (a) Disconnect the E8 ECM connector.
- (b) Disconnect the throttle body connector.
- (c) Check the continuity between terminals in the chart below.

Standard:

Throttle motor connector terminal	ECM connector terminal	Continuity
M+ (2)	M+ (E8-5)	Continuity
M- (1)	M- (E8-4)	Continuity
M+ (2)	E1 (E8-1)	No continuity
M- (1)		No continuity



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REPAIR OR REPLACE HARNESS AND CONNECTOR

OK

CHECK AND REPLACE ECM