DTC	P2118	THROTTLE ACTUATOR CONTROL MOTOR CURRENT RANGE/PERFORMANCE

CIRCUIT DESCRIPTION

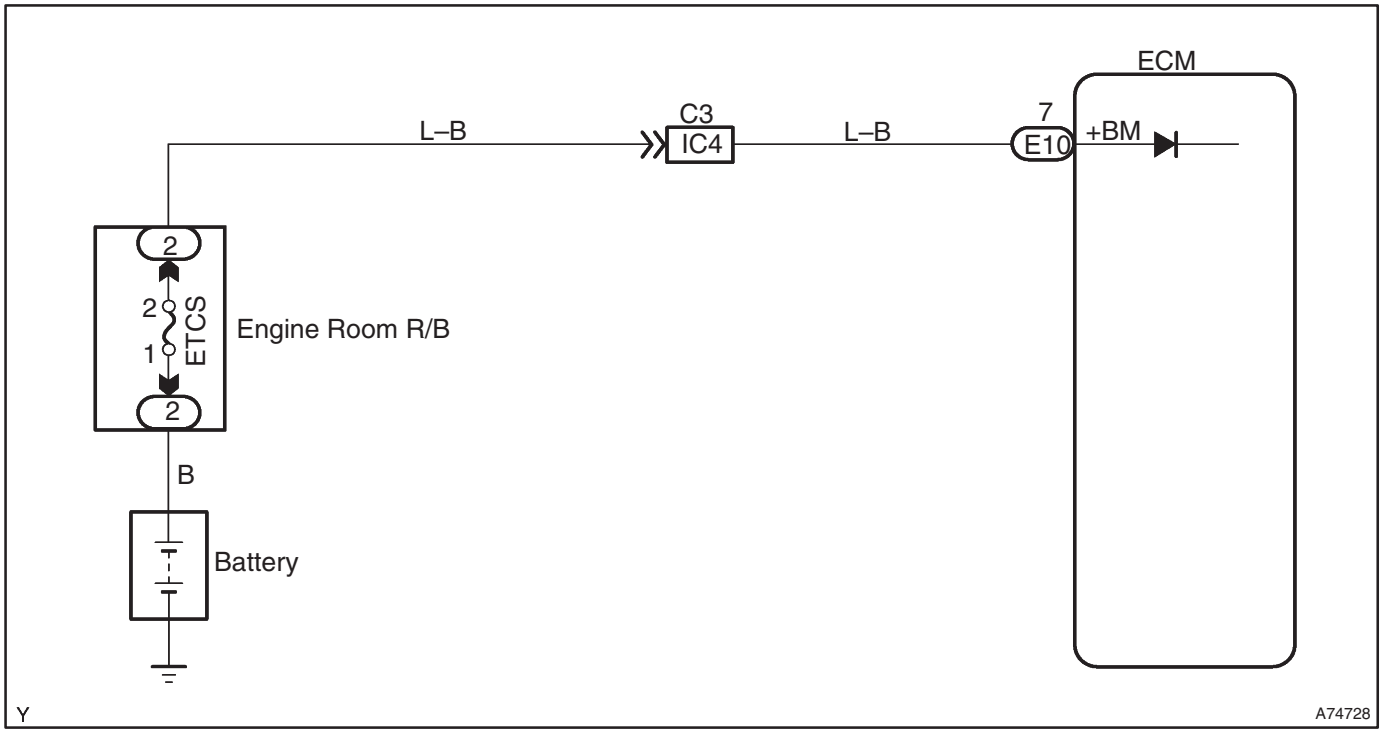
If this malfunction is detected, the ECM shuts down the power for the throttle motor, and the throttle valve is fully closed by the return spring. And the throttle valve is locked at a certain opening angle. Also, the whole electronically controlled throttle operation is cancelled until the system returns to normal and the ignition switch is turned OFF.

HINT:

This electrical throttle control system (ETCS) does not use the throttle cable.

DTC No.	DTC Detection Condition	Trouble Area
P2118	Open in ETCS power source circuit	• Open in ETCS power source circuit • ECM

WIRING DIAGRAM

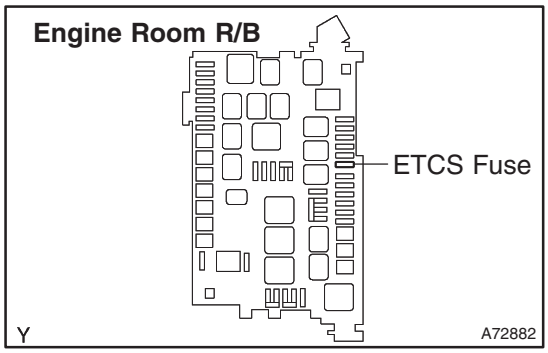


INSPECTION PROCEDURE

HINT:

Read freeze frame data using the Intelligent Tester II. Freeze frame data records the engine conditions when a malfunction is detected. When troubleshooting, freeze frame data can help determine if the vehicle was running or stopped, if the engine was warmed up or not, if the air–fuel ratio was lean or rich, and other data from the time the malfunction occurred.

1	CHECK FUSE(ETCS FUSE)

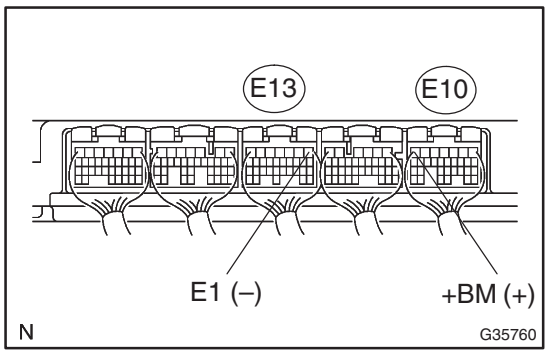


(a) Remove the ETCS fuse from the engine room R/B.
(b) Check for resistance in the ETCS fuse.
Standard: Below 1 Ω

NG → **CHECK FOR SHORT IN ALL HARNESSES AND COMPONENTS CONNECTED FUSE**

OK

2	INSPECT ECM(+BM VOLTAGE)



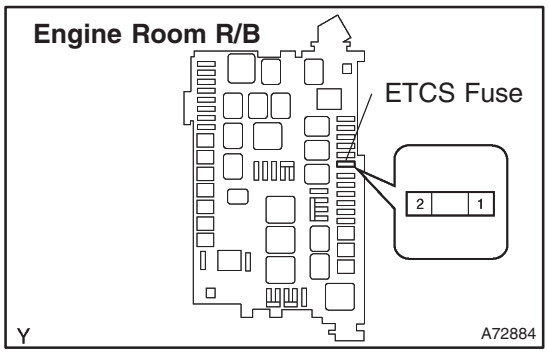
(a) Check the voltage between the terminals of the E10 and E13 ECM connectors.
Standard:

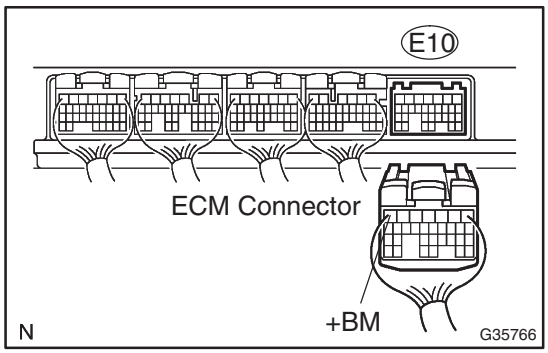
Symbols (Terminal No.)	Specified condition
+BM (E10–7) – E1 (E13–1)	9 to 14 V

OK → **REPLACE ECM (See Pub. No. RM1017E, page 10–11)**

NG

3	CHECK HARNESS AND CONNECTOR(ECM – ETCS FUSE, ETCS FUSE – BATTERY)





(a) Check the harness and the connector between the ETCS fuse and the ECM.
  (1) Remove the ETCS fuse from the engine room R/B.
  (2) Disconnect the E10 ECM connector.
  (3) Check for resistance between the wire harness side connectors.

Standard (Check for open):

Symbols (Terminal No.)	Specified condition
ETCS fuse (2) – +BM (E10–7)	Below 1 Ω

Standard (Check for short):

Symbols (Terminal No.)	Specified condition
ETCS fuse (2) or +BM (E10–7) – Body ground	10 kΩ or higher

(b) Check the harness and the connector between the ETCS fuse and the battery.
  (1) Remove the ETCS fuse from the engine room R/B.
  (2) Disconnect the battery negative terminal.
  (3) Check forresistance between the wire harness side connectors.

Standard (Check for open):

Symbols (Terminal No.)	Specified condition
Battery positive terminal – ETCS fuse (1)	Below 1 Ω

Standard (Check for short):

Symbols (Terminal No.)	Specified condition
Battery positive terminal or ETCS fuse (1) – Body ground	10 kΩ or higher

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

OK

CHECK AND REPLACE ENGINE ROOM RELAY BLOCK