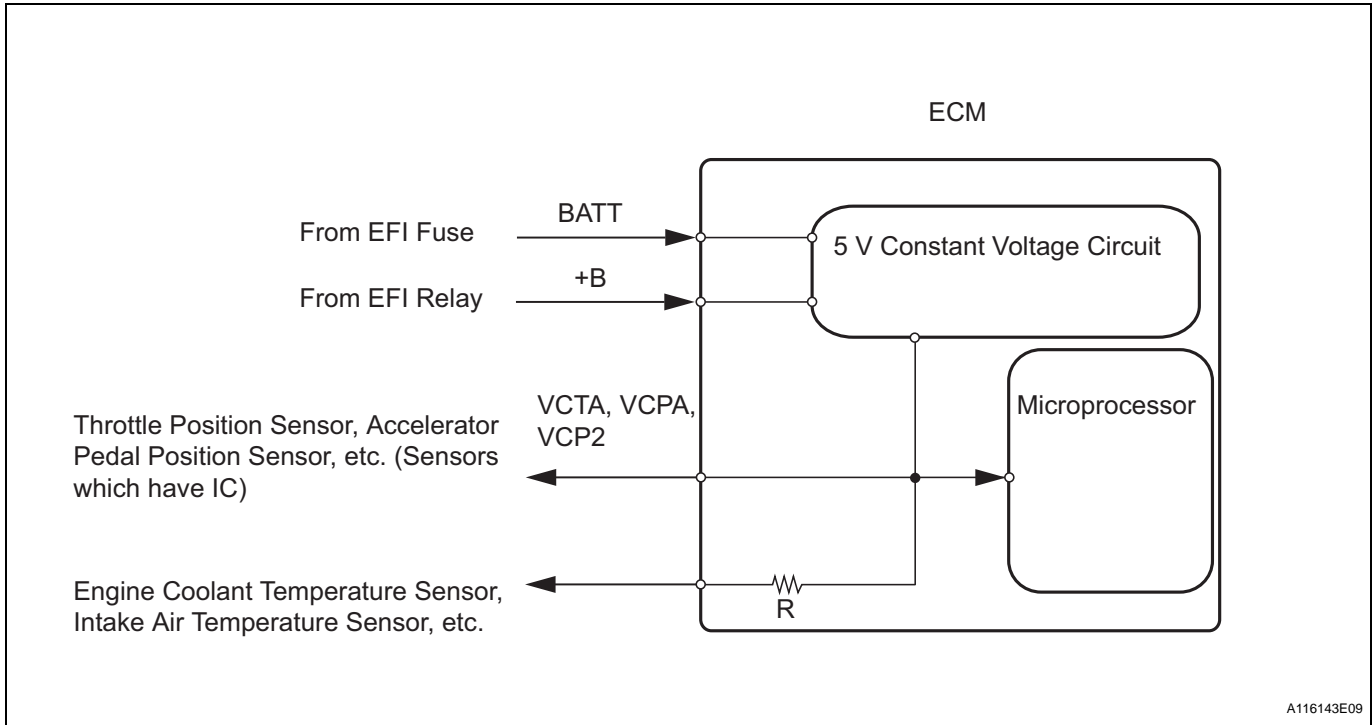


VC Output Circuit

DESCRIPTION

The ECM constantly generates 5 V power from the battery voltage supplied to the +B (BATT) terminal to operate the microprocessor. The ECM also provides this power to the sensors through the VC output circuit.

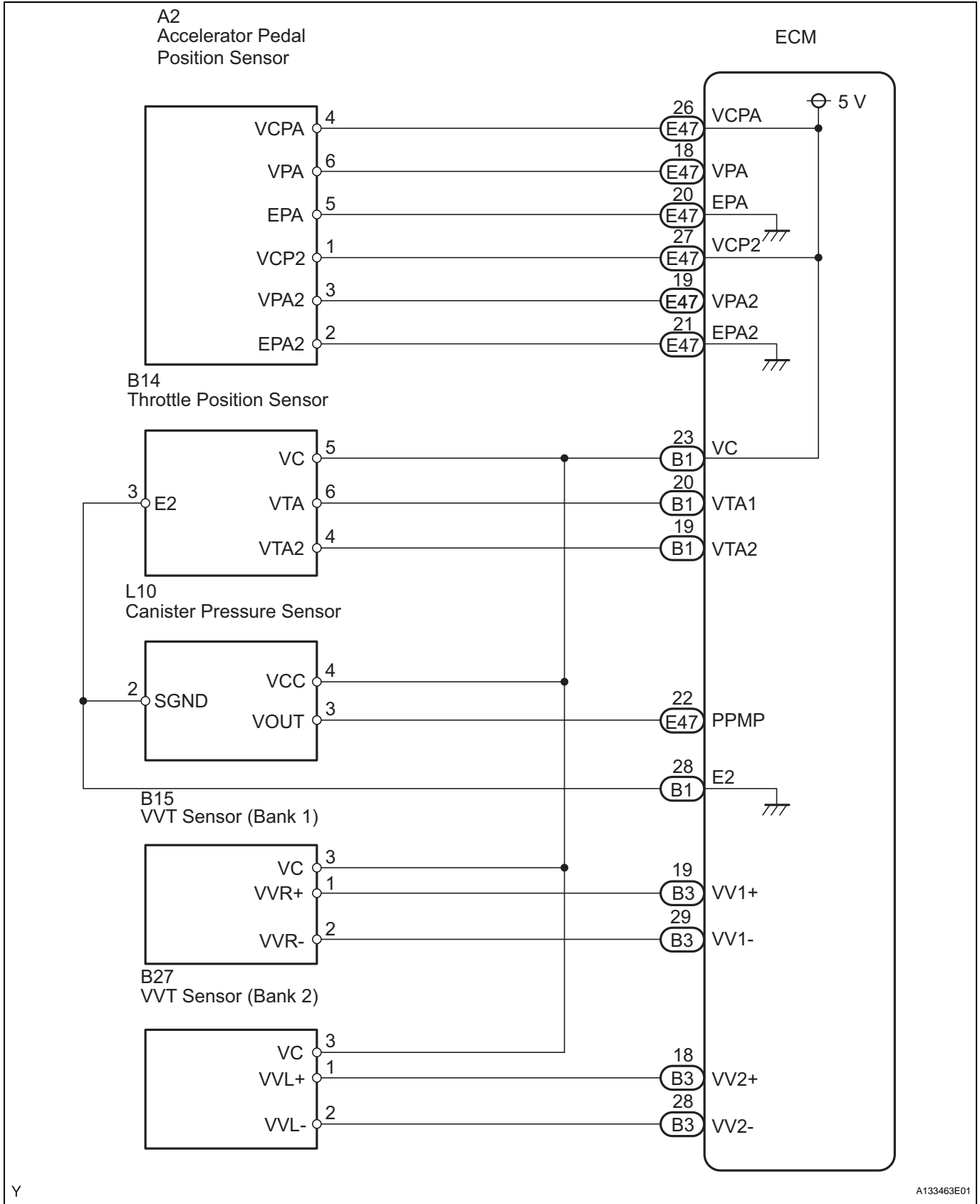


When the VC circuit is short-circuited, the microprocessor in the ECM and sensors that are supplied power through the VC circuit are inactivated because the power is not supplied from the VC circuit. Under this condition, the system does not start up and the MIL does not illuminate even if the system malfunctions.

HINT:

Under normal conditions, the MIL is illuminated for several seconds when the ignition switch is first turned ON. The MIL goes off when the engine is started.

WIRING DIAGRAM



ES

INSPECTION PROCEDURE

1 CHECK MIL

- (a) Check that the Malfunction Indicator Lamp (MIL) lights up when turning the ignition switch ON.

OK:
MIL lights up

OK → **SYSTEM OK**

NG

ES

2 CHECK COMMUNICATION BETWEEN INTELLIGENT TESTER AND ECM

- (a) Connect an intelligent tester to the DLC3.
- (b) Turn the ignition switch ON and turn the tester ON.
- (c) Check the communication between an intelligent tester and ECM.

Result

Result	Proceed to
Communication is possible	A
Communication is not possible	B

A → **GO TO MIL CIRCUIT (See page ES-404)**

B

3 CHECK MIL (THROTTLE BODY)

- (a) Disconnect the throttle body connector.
- (b) Turn the ignition switch ON.
- (c) Check the MIL.

Result

Result	Proceed to
MIL illuminates	A
MIL does not illuminate	B

- (d) Reconnect the throttle body connector.

A → **REPLACE THROTTLE WITH MOTOR BODY ASSEMBLY (See page ES-428)**

B

4 CHECK MIL (ACCELERATOR PEDAL)

- (a) Disconnect the accelerator pedal connector.
- (b) Turn the ignition switch ON.
- (c) Check the MIL.

Result

Result	Proceed to
MIL illuminates	A
MIL does not illuminate	B

- (d) Reconnect the accelerator pedal connector.

A

REPLACE ACCELERATOR PEDAL ROD ASSEMBLY (See page ES-449)

B

5 CHECK MIL (CANISTER PUMP MODULE)

- (a) Disconnect the canister pump module connector.
 (b) Turn the ignition switch ON.
 (c) Check the MIL.

Result

Result	Proceed to
MIL illuminates	A
MIL does not illuminate	B

- (d) Reconnect the canister pump module connector.

A

REPLACE CHARCOAL CANISTER ASSEMBLY (See page EC-9)

B

6 CHECK MIL (VVT SENSOR FOR BANK 1)

- (a) Disconnect the VVT sensor (bank 1) connector.
 (b) Turn the ignition switch ON.
 (c) Check the MIL.

Result

Result	Proceed to
MIL illuminates	A
MIL does not illuminate	B

- (d) Reconnect the VVT sensor connector.

A

REPLACE VVT SENSOR FOR BANK 1 (See page ES-417)

B

7 CHECK MIL (VVT SENSOR FOR BANK 2)

- (a) Disconnect the VVT sensor (bank 2) connector.
 (b) Turn the ignition switch ON.
 (c) Check the MIL.

Result

Result	Proceed to
MIL illuminates	A
MIL does not illuminate	B

(d) Reconnect the VVT sensor connector.

A → **REPLACE VVT SENSOR FOR BANK 2 (See page ES-417)**

B

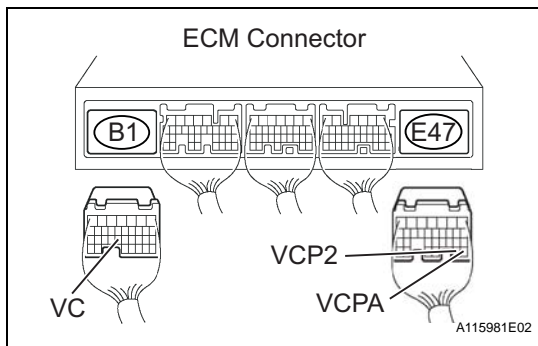
ES

8 CHECK HARNESS AND CONNECTOR (VC OUTPUT CIRCUIT)

- (a) Disconnect the throttle body connector.
- (b) Disconnect the accelerator pedal connector.
- (c) Disconnect the canister pump module connector.
- (d) Disconnect the ECM connector.
- (e) Check the resistance.

Standard Resistance (Check for short)

Tester Connections	Specified Conditions
VC (B1-23) - Body ground	10 kΩ or higher
VCPA (E47-26) - Body ground	
VCP2 (E47-27) - Body ground	



- (f) Reconnect the throttle body connector.
- (g) Reconnect the accelerator pedal connector.
- (h) Reconnect the canister pump module connector.
- (i) Reconnect the ECM connector.

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

OK

REPLACE ECM (See page ES-446)