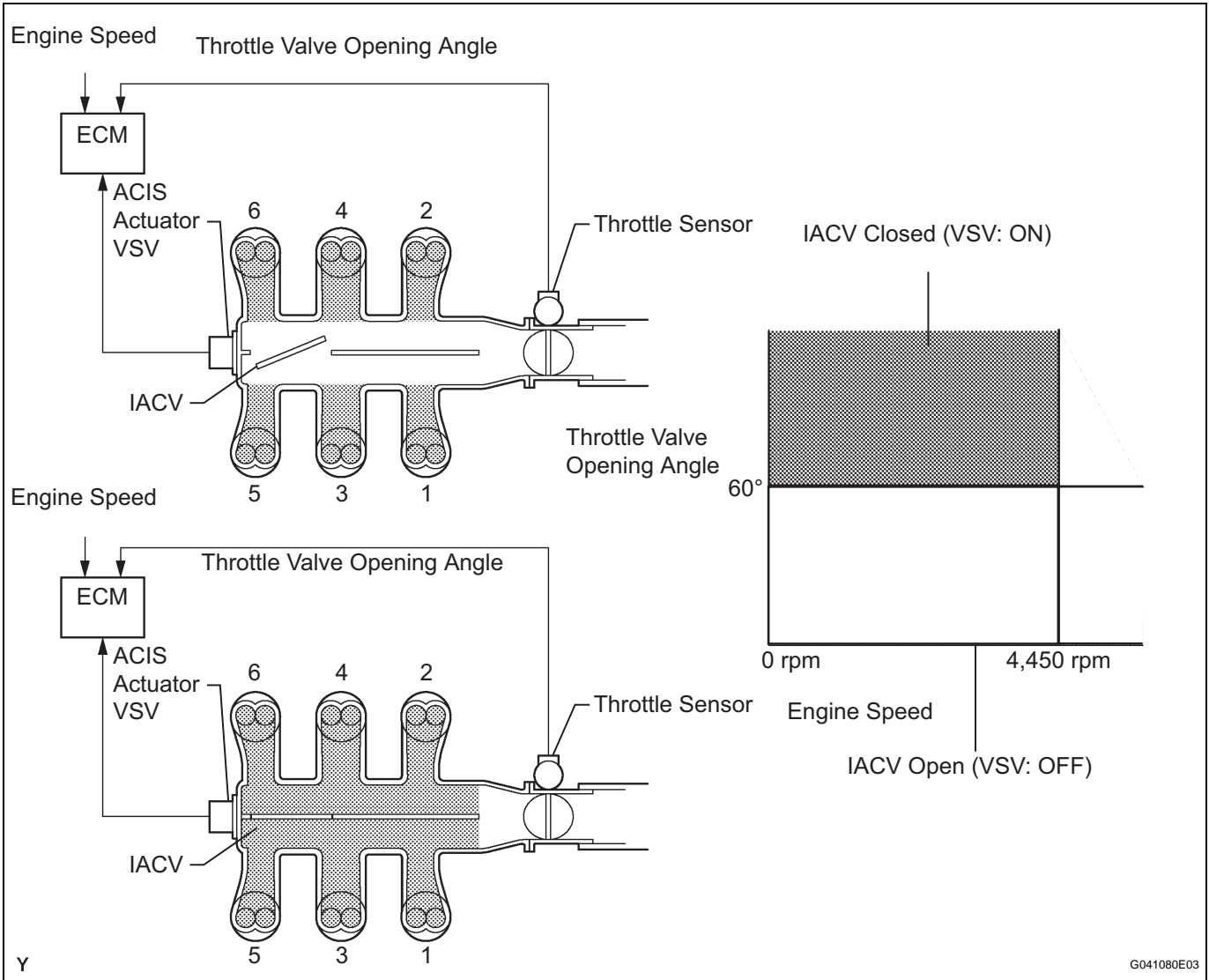


ACIS Control Circuit

DESCRIPTION

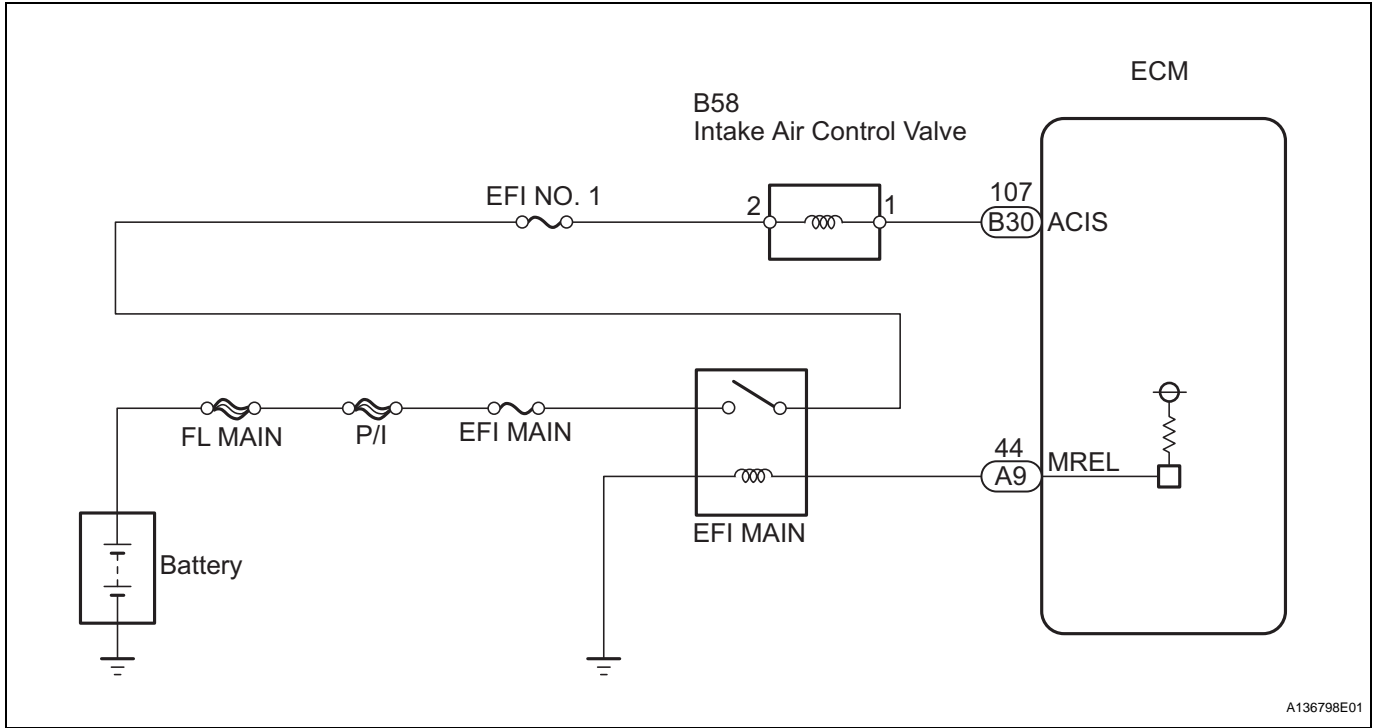
This circuit opens and closes the Intake Air Control Valve (IACV) in response to changes in the engine load in order to increase the intake efficiency (ACIS: Acoustic Control Induction System). When the engine speed is between 0 and 4,450 rpm and the throttle valve opening angle is 60° or more, the ECM supplies current to the VSV (ON status), to close the IACV. Under other conditions, the VSV is usually OFF and the IACV is open.



ES

Y

WIRING DIAGRAM



ES

A136798E01

INSPECTION PROCEDURE

1 PERFORM ACTIVE TEST BY INTELLIGENT TESTER (OPERATE VSV FOR ACIS)

- (a) Connect the intelligent tester to the DLC3.
- (b) Start the engine and turn the intelligent tester on.
- (c) Select the following menu items: DIAGNOSIS / ENHANCED OBD II / ACTIVE TEST / INTAKE CTL VSV1. Operate the VSV for ACIS.

OK:

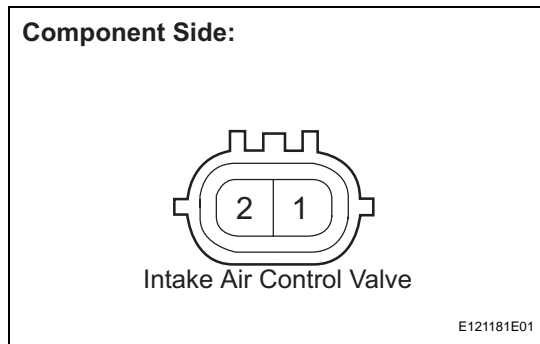
Operational noise can be heard.

OK →

PROCEED TO NEXT CIRCUIT INSPECTION SHOWN IN PROBLEM SYMPTOMS TABLE

NG

2 CHECK INTAKE AIR CONTROL VALVE (OPERATION)



- (a) Disconnect the B58 air intake valve connector.
- (b) Apply battery voltage between the terminals of the air intake valve connector.
- (c) Check the air intake valve operation.

OK:

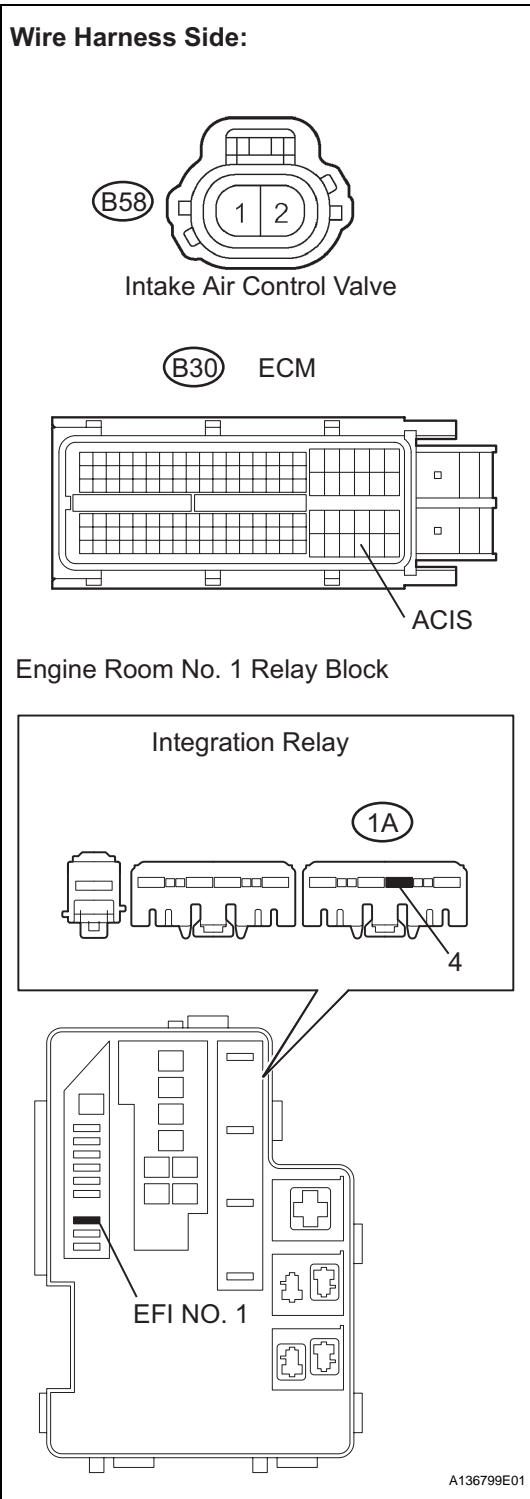
Operational noise can be heard.

NG →

REPLACE INTAKE AIR SURGE TANK

OK

3 CHECK WIRE HARNESS (INTAKE AIR CONTROL VALV - ECM, INTEGRATION RELAY)



- (a) Remove the EFI NO. 1 fuse from the engine room No. 1 relay block.
- (b) Check the EFI NO. 1 fuse.
- (c) Reinstall the EFI NO. 1 fuse.
- (d) Disconnect the B58 intake air control valve connector.
- (e) Disconnect the B30 ECM connector.
- (f) Remove the integration relay from the engine room No. 1 relay block.
- (g) Disconnect the 1A integration relay connector.
- (h) Measure the resistance of the wire harness side connectors.

Standard resistance

Tester Connection	Specified Condition
B58-1 - B30-107 (ACIS)	Below 1 Ω
B58-2 - 1A-4	Below 1 Ω
B58-1 or B30-107 (ACIS) - Body ground	10 kΩ or higher
B58-2 or 1A-4 - Body ground	10 kΩ or higher

- (i) Reconnect the intake air control valve connector.
- (j) Reconnect the ECM connector.
- (k) Reconnect the integration relay connector.
- (l) Reinstall the integration relay.

NG **REPAIR OR REPLACE HARNESS AND CONNECTOR**

OK

REPLACE ECM

ES