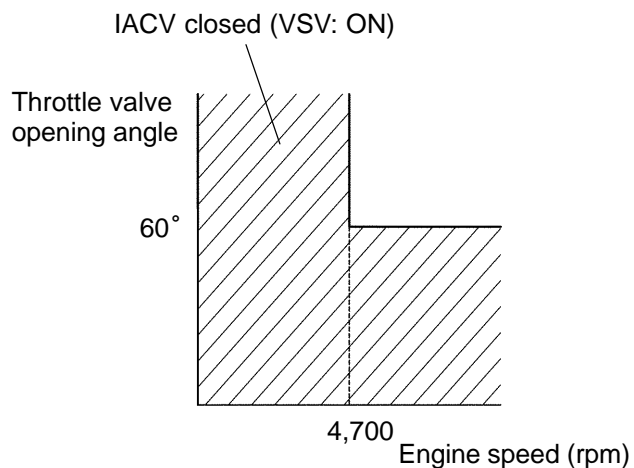
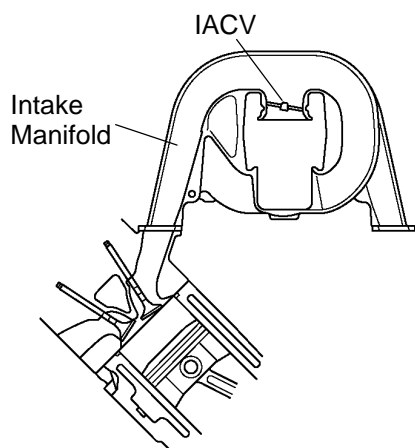


IACV Control Circuit

CIRCUIT DESCRIPTION

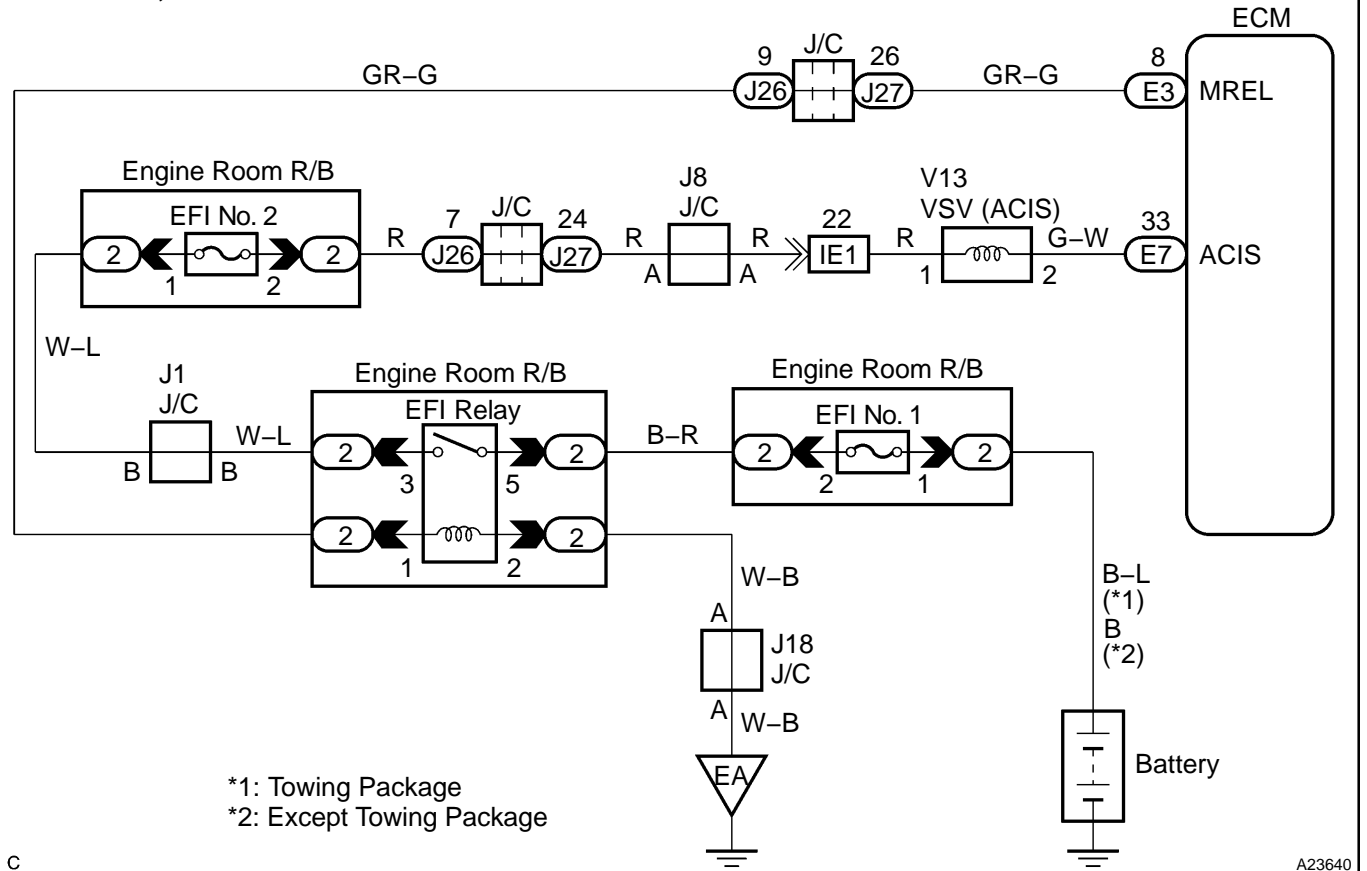
This circuit opens and closes the Intake Air Control Valve (IACV) in response to the engine load in order to increase the intake efficiency (ACIS: Acoustic Control Induction System).

When the engine speed is 4,700 rpm or more and the throttle valve opening angle is 60° or more, the VSV is OFF, so the IACV is open. All the other times, the ECM turns the VSV ON and closes the IACV.



WIRING DIAGRAM

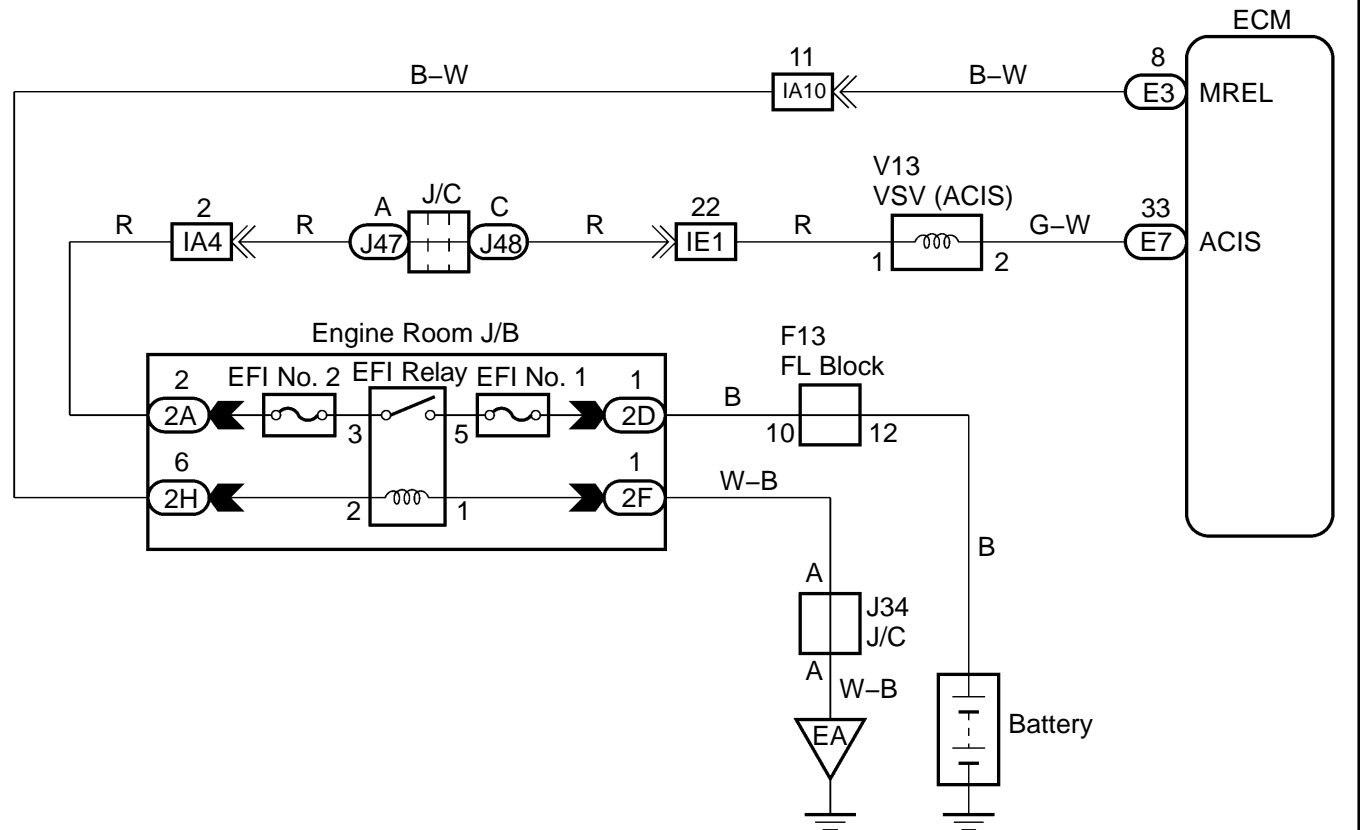
Access Cab, Standard Cab:



C

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Double Cab:

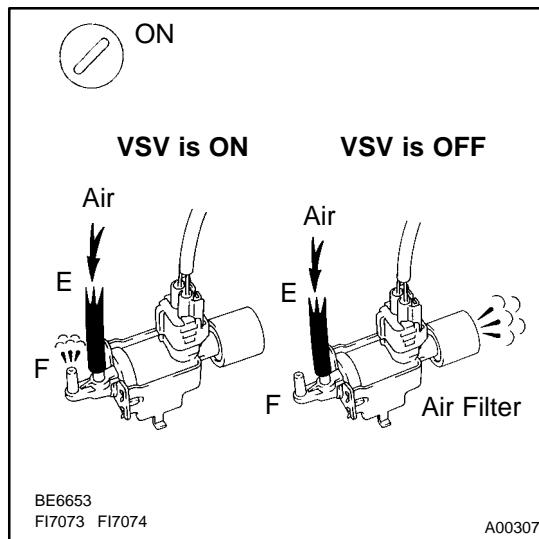


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INSPECTION PROCEDURE

- | | |
|----------|---|
| 1 | Connect hand-held tester, and check operation of VSV for ACIS. |
|----------|---|

**PREPARATION:**

- (a) Connect the hand-held tester to the DLC3.
- (b) Turn the ignition switch ON and push the hand-held tester main switch ON.
- (c) Select the ACTIVE TEST mode on the hand-held tester.

CHECK:

Check the operation of the VSV when the VSV is operated by the hand-held tester.

OK:

VSV is ON:

Air from port E flows out through port F.

VSV is OFF:

Air from port E flows out through the air filter.

OK**Check for vacuum tank (See page [SF-56](#)).****NG**

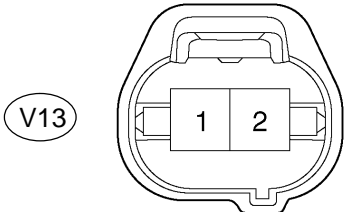
- | | |
|----------|---|
| 2 | Check VSV for ACIS (See page SF-51). |
|----------|---|

NG**Replace VSV for ACIS.****OK**

3

Check for open and short in harness and connector between EFI main relay (Marking: EFI) and ECM (See page [IN-30](#)).

Wire Harness Side



VSV for ACIS connector

Y

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- (a) Check the wire harness between the VSV for ACIS and connector the ECM connector.
- (1) Disconnect the VSV for ACIS connector.
 - (2) Disconnect the E5 and E7 ECM connector.
 - (3) Check for resistance between the wire harness side connectors.

Standard (Check for open):

Symbols (Terminal No.)	Specified condition
VSV for ACIS (V13-2) – ACIS (E7-33)	Below 1 Ω

Standard (Check for short):

Symbols (Terminal No.)	Specified condition
VSV for ACIS (V13-2) or ACIS (E7-33) – E1 (E5-1)	10 kΩ or higher

- (b) Check the wire harness between the VSV for ACIS connector and the EFI relay.
- (1) Disconnect the VSV for ACIS connector.
 - (2) Remove the EFI relay from the engine room R/B.
 - (3) Check for resistance between the wire harness side connectors.

Standard (Check for open):

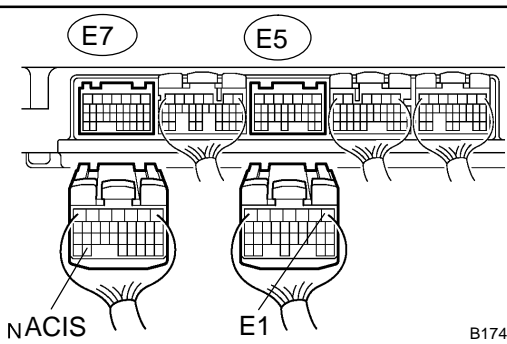
Symbols (Terminal No.)	Specified condition
VSV for ACIS (V13-1) – EFI relay terminal 3 of R/B	Below 1 Ω

NG

Repair or replace harness or connector.

OK

Replace ECM (See page [SF-82](#)).



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