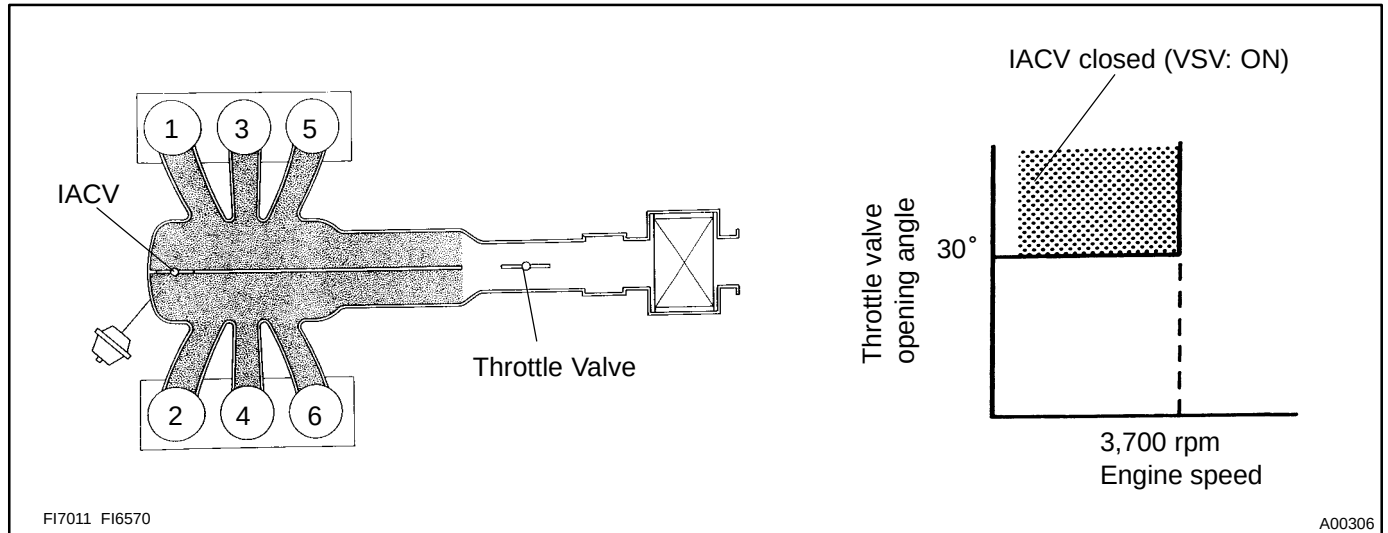


IACV Control VSV Circuit

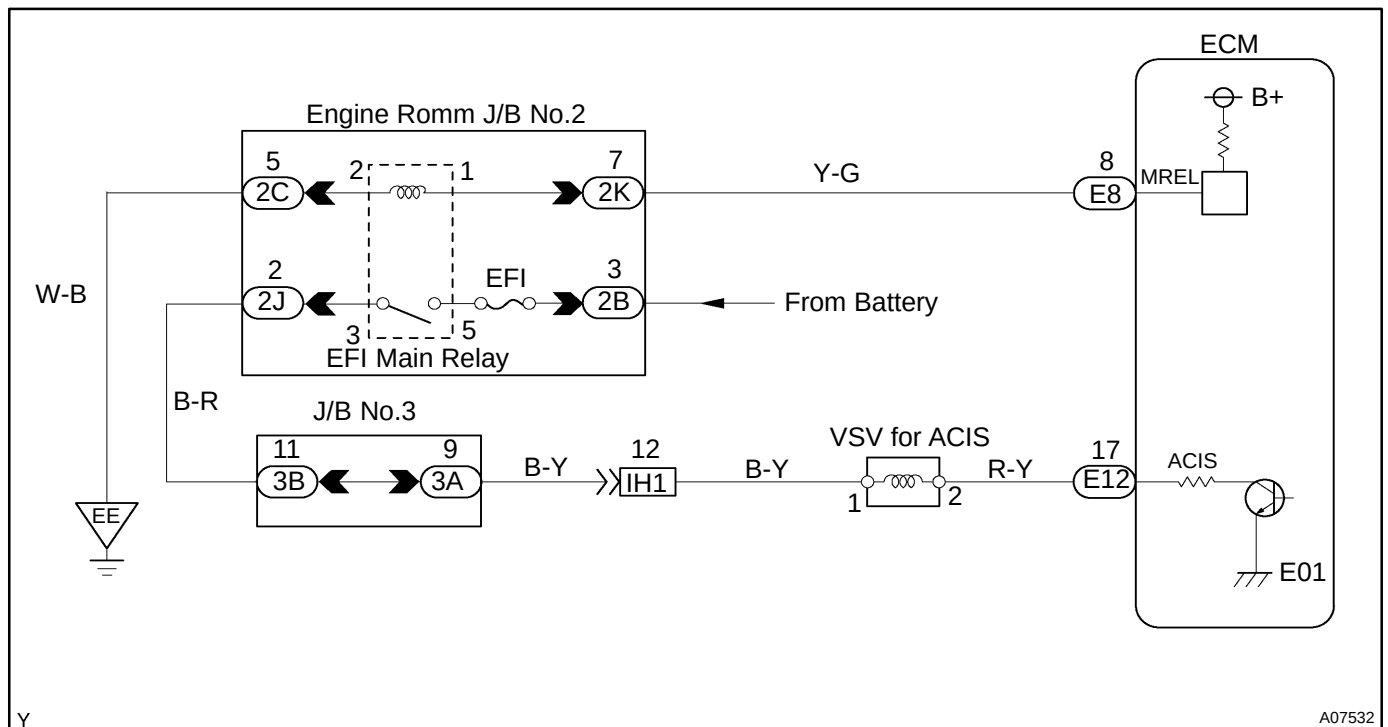
CIRCUIT DESCRIPTION

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

When the engine speed is 3,700 rpm or less and the throttle valve opening angle is 60° or more, the ECM turns the VSV ON and closes the IACV. At all other times, the VSV is OFF, so the IACV is open.



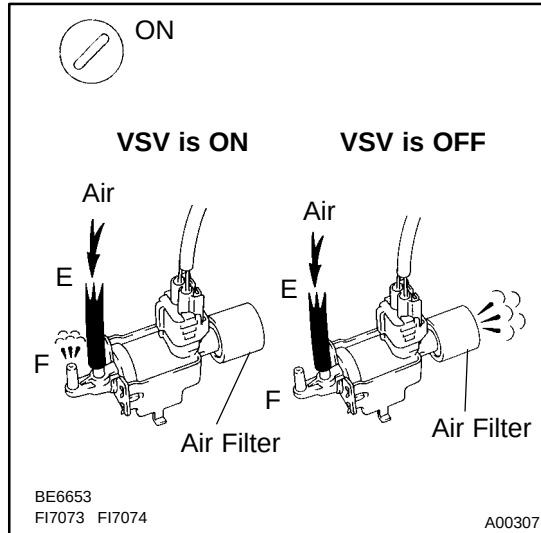
WIRING DIAGRAM



INSPECTION PROCEDURE

TOYOTA hand-held tester

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



PREPARATION:

- Remove the fuse cover on the instrument panel.
- Connect the TOYOTA hand-held tester to the DLC3.
- Turn the ignition switch ON and TOYOTA hand-held tester main switch ON.
- Select the ACTIVE TEST mode on the TOYOTA hand-held tester.

CHECK:

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

OK:

VSV is ON:

Air from pipe E is flowing out through pipe F.

VSV is OFF:

Air from pipe E is flowing out through the air filter.

OK

Check for vacuum tank (See page [SF-62](#)).

NG

2 Check VSV for ACIS (See page [SF-71](#)).

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-31](#)).

NG

Repair or replace harness or connector.

OK

Check and replace ECM (See page [IN-31](#)).

OBD II scan tool (excluding TOYOTA hand-held tester)

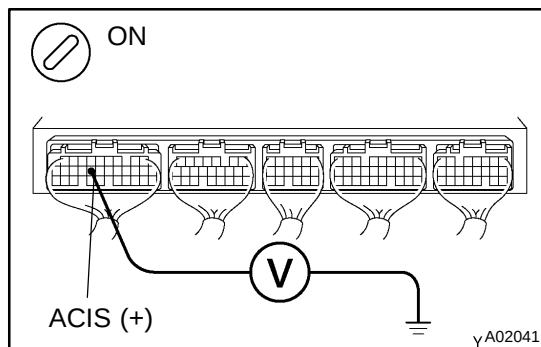
- 1** Check VSV for ACIS (See page [SF-71](#)).

NG

Replace VSV for ACIS.

OK

- 2** Check voltage between terminal ACIS of ECM connector and body ground.



PREPARATION:

- (a) Remove the glove compartment (See page [SF-83](#)).
- (b) Turn the ignition switch ON.

CHECK:

Measure voltage between terminal ACIS of the ECM connector and body ground.

OK:

Voltage: 9 - 14 V

NG

Check for open and short in harness and connector between EFI main relay (Marking: EFI) and ECM (See page [IN-31](#)).

OK

3	Check for vacuum tank (See page SF-62).
---	--

NG

Repair or replace.

OK

Check and replace ECM (See page [IN-31](#)).