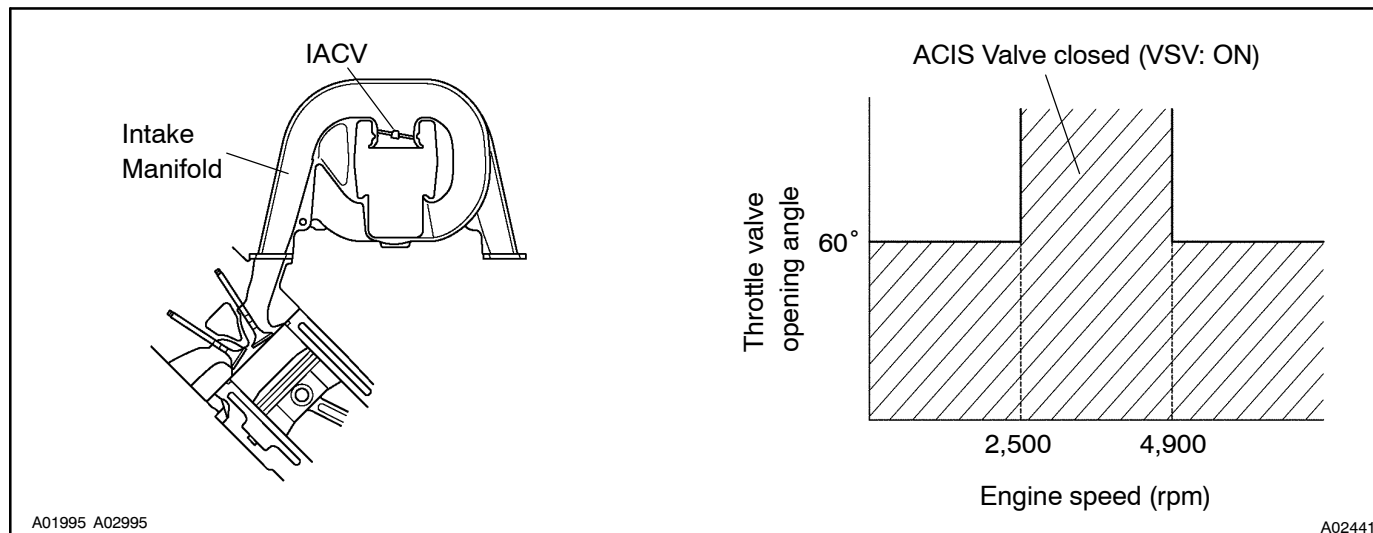


## ACIS Control VSV Circuit

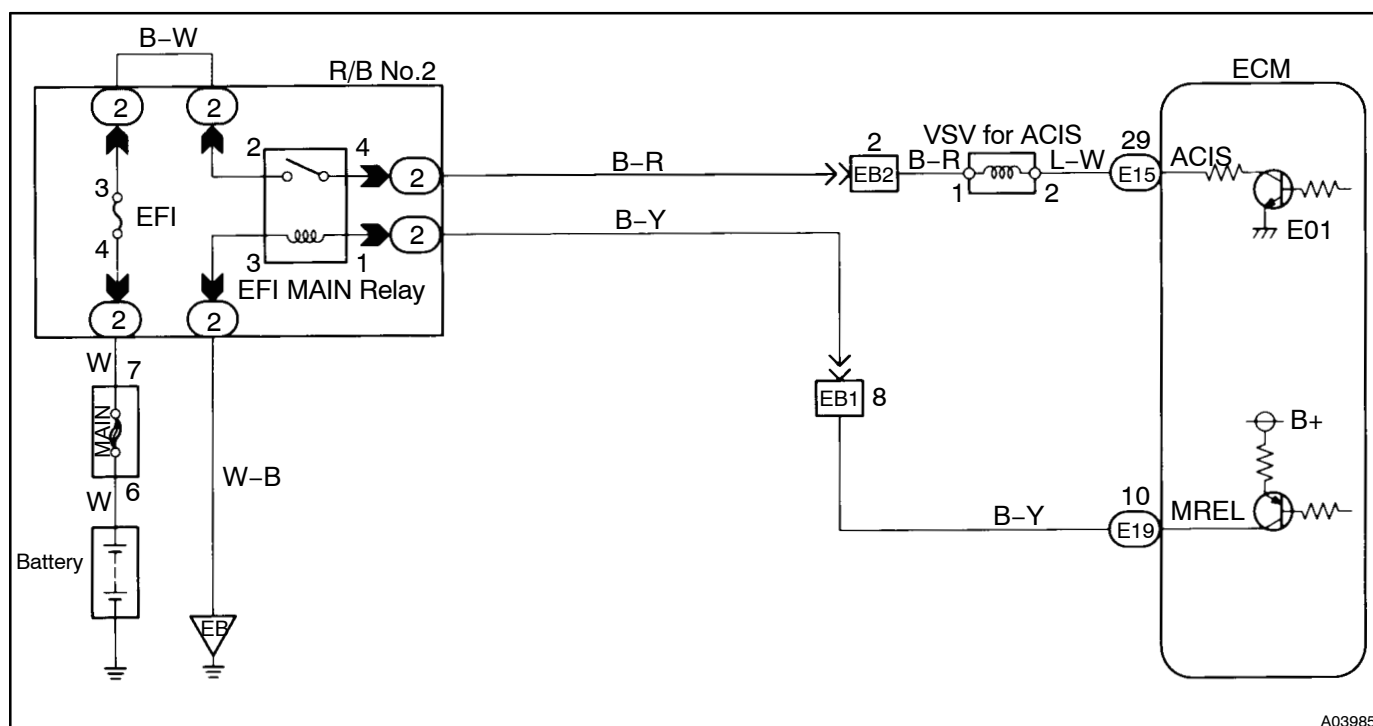
## CIRCUIT DESCRIPTION

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

When the engine speed is 2,500 rpm or less or 4,900 rpm or more and the throttle valve opening angle is 60° or more, the VSV is OFF, so the ACIS valve is open. All the other times, the ECM turns the VSV ON and closes the ACIS valve.



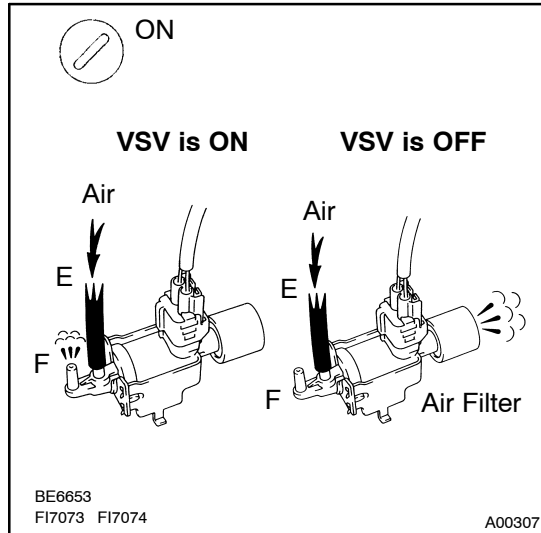
## WIRING DIAGRAM



## INSPECTION PROCEDURE

## LEXUS hand-held tester

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

**PREPARATION:**

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

**CHECK:**

Check operation of the VSV when VSV is operated by the LEXUS 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-60).

NG

## 2 Check VSV for ACIS (See page SF-69).

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-29](#)).

NG

Repair or replace harness or connector.

OK

Check and replace ECM (See page [IN-29](#)).

### OBD II scan tool (excluding LEXUS hand-held tester)

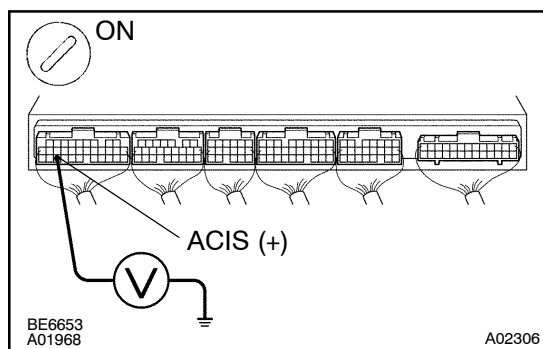
- 1** Check VSV for ACIS (See page [SF-69](#)).

NG

Replace VSV for ACIS.

OK

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



#### PREPARATION:

- (a) Remove the instrument panel under cover.
- (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-29](#)).

OK

3	Check for vacuum tank (See page SF-60).
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NG

Repair or replace.

OK

Check and replace ECM (See page [IN-29](#)).