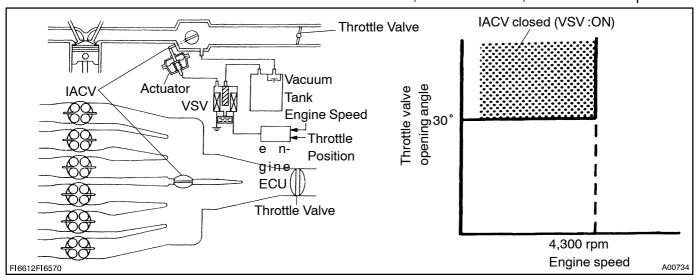
DI2FR-08

# **IACV Control VSV Circuit**

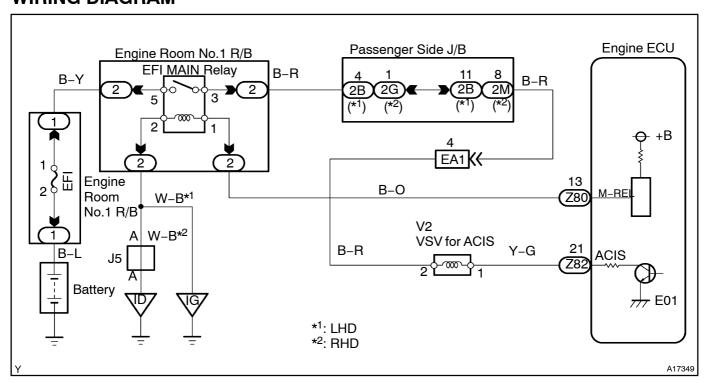
# **CIRCUIT DESCRIPTION**

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 4,300 rpm or less and the throttle valve opening angle is 30° or more, the engine ECU turns the VSV ON and closes the IACV. At all other times, the VSV is OFF, so the IACV is open.



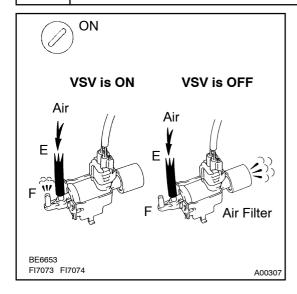
# WIRING DIAGRAM



# **INSPECTION PROCEDURE**

# When using hand-held tester

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 hand-held tester main switch ON.
- (c) Select ACTIVE TEST mode on the hand-held tester.

#### **CHECK:**

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

### <u>OK:</u>

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.

ОК

Check for vacuum tank (See page FI-48).

NG

2

Check VSV for ACIS (See page FI-58).

NG

Replace VSV for ACIS.

OK

Check for open and short in harness and connector between EFI main relay and engine ECU (See page IN-34).

NG

Repair or replace harness or connector.

OK

Check and replace engine ECU (See page IN-34).

# When not using hand-held tester

1 Check VSV for ACIS (See page FI-58).

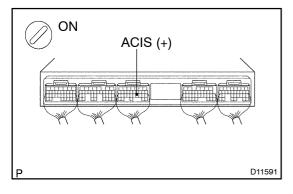
NG

Replace VSV for ACIS.

OK

2

Check voltage between terminal ACIS of engine ECU connector and body ground.



# PREPARATION:

- (a) Remove the engine room engine ECU hood and cover.
- (b) Turn the ignition switch ON.

#### CHECK:

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

#### OK:

Voltage: 9 ~ 14 V

NG

Check for open and short in harness and connector between EFI main relay and engine ECU (See page IN-34).

OK

3 Check for vacuum tank (See page FI-48)

NG

Repair or replace.

ОК

Check and replace engine ECU (See page IN-34).