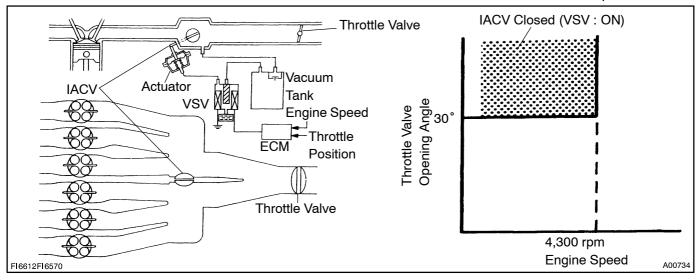
DI64K-04

DTC P1651/96 VSV for ACIS Circuit Malfunction

CIRCUIT DESCRIPTION

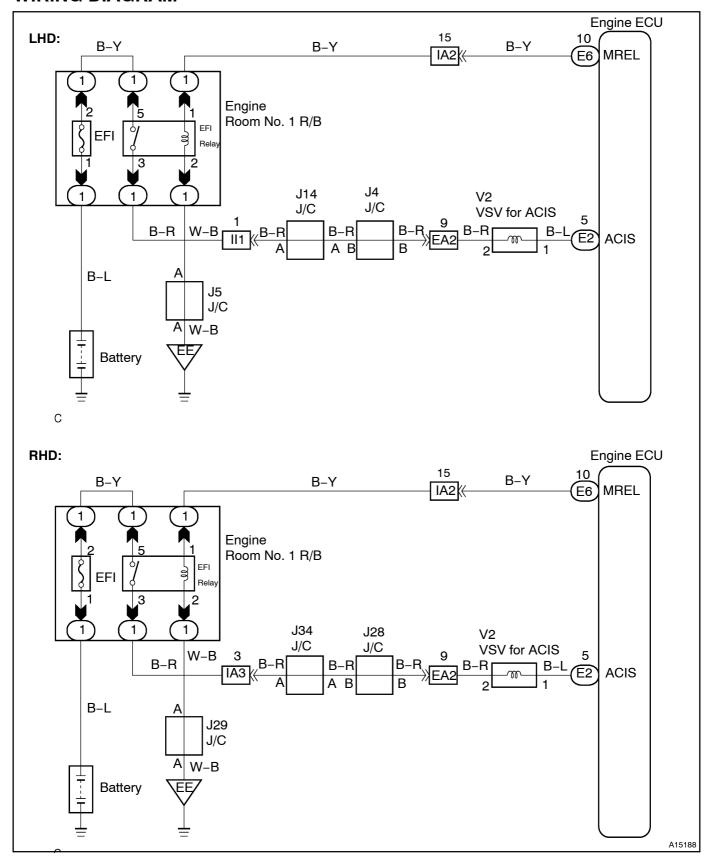
This circuit opens and closes the Intake Air Control Valve (IACV) in response to the engine load in order to increase the intake efficiency (ACIS: Acoustic Control Induction System).

When the engine speed is 4,300 rpm or less and the throttle valve opening angle is 30° 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.



DT	C No.	DTC Detecting Condition	Trouble Area
P16	551/96	Proper response to engine ECU command does not occur (2 trip detection logic)	Open or short in VSV circuit for ACIS VSV for ACIS Engine ECU

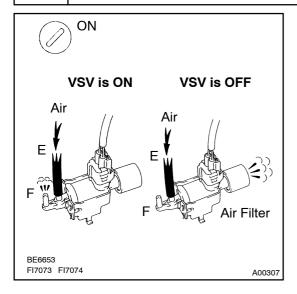
WIRING DIAGRAM



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

CHECK:

Check the operation of the the VSV when the VSV is operated by the LEXUS 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 air filter.

ΟK

Check for vacuum tank.

NG

2

Check VSV for ACIS (See Pub. No. RM588E on page FI-53).

NG

Replace VSV for ACIS.

ΟK

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

NG

Repair or replace harness or connector.

OK

Checkandreplace ECM See page N-30).

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

1 Check VSV for ACIS (See Pub. No. RM588E on page FI-53).

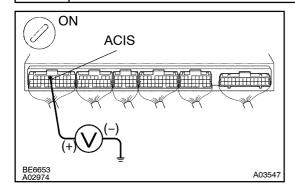
NG

Replace VSV for ACIS.

OK

2

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



PREPARATION:

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

CHECK:

Measure the 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 N-30).

OK

3 Check for vacuum tank.

NG

Repair or replace.

OK

Check[and[replace[ECM[See[page[N-30].