DIBY8–04

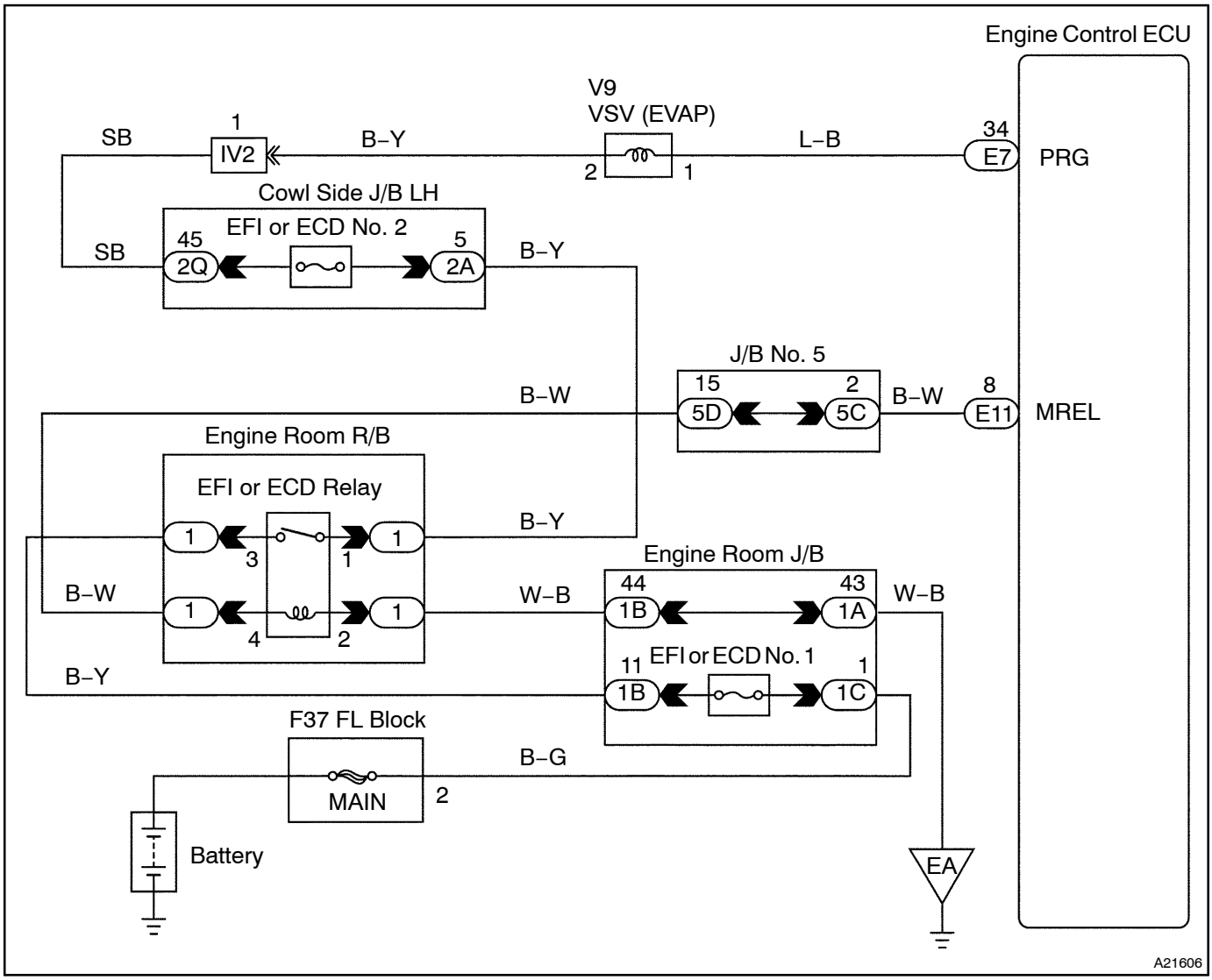
DTC	P0443	Evaporative Emission Control System Purge Control Valve Circuit

CIRCUIT DESCRIPTION

In order to reduce HC emissions, evaporated fuel from the fuel tank is routed through the charcoal canister to the intake manifold for combustion in the cylinders. The engine ECU changes the duty signal to the EVAP VSV. After the engine is warmed up, the intake quantity of HC emissions are appropriate for driving in terms of engine load, engine speed, vehicle speed, and other parameters.
This monitor runs for 1 second when EVAP purge VSV is activated.

DTC No.	DTC Detection Condition	Trouble Area
P0443	EVAP VSV proper response to engine ECU command does not occur (No dury signal from ECM for 10 seconds when commanded duty ratio is 5 to 95 %, 1 trip detection logic)	• EVAP VSV • Open or short in VSV circuit for EVAP • Engine control ECU

WIRING DIAGRAM

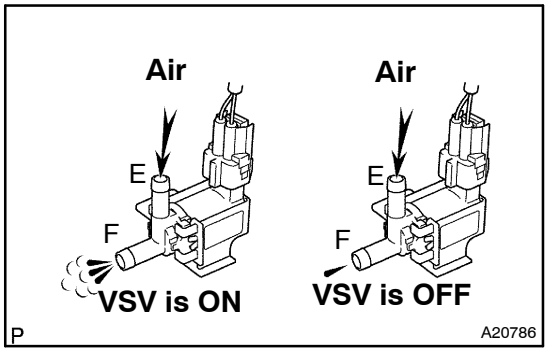


INSPECTION PROCEDURE

HINT:

Read freeze frame data using the hand–held tester. Freeze frame data records the engine conditions when a malfunction is detected. When troubleshooting, freeze frame data can help determine if the vehicle was running or stopped, if the engine was warmed up or not, if the air–fuel ratio was lean or rich, and other data from the time the malfunction occurred.

1	**Check operation of EVAP VSV.**



PREPARATION:

(a) Connect the hand–held tester to the DLC3.

(b) Turn ON the ignition switch and the hand–held tester main switch.

(c) Select the item "DIAGNOSIS / OBD/MOBD / ACTIVE TEST / EVAP VSV" (press the right or left button).

CHECK:

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

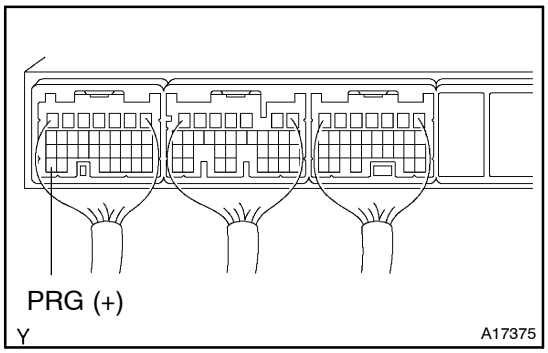
OK:

VSV is ON:
There is no air from port E flows out through port F.
VSV is OFF:
Air from port E flows out through port F.

OK	**Check for intermittent problems (See page DI–3).**

NG

2	**Check voltage between terminal PRG of engine control ECU connector and body ground.**



PREPARATION:

(a) Remove the glove compartment.

(b) Turn the ignition switch ON.

CHECK:

Measure the voltage between terminals PRG of the ECU connector and body ground.

OK:

Voltage: 9 to 14 V.

OK	**Repair or replace engine control ECU (See Pub. No. RM630E, page FI –74).**

NG

3	Check EVAP VSV (See Pub. No. RM630E, page FI–61).

NG → Replace EVAP VSV.

OK

4	Check for open and short in wire harness between EVAP VSV and engine control ECU.

NG → Repair or replace harness and connector.

OK

5	Check for open and short in wire harness between EFI MAIN relay and EVAP VSV.

NG → Repair or replace harness and connector.

OK

Check engine control ECU power source circuit (See page DI–237)