DTC	P0443	EVAPORATIVE EMISSION CONTROL SYSTEM PURGE CONTROL VALVE CIRCUIT MALFUNCTION

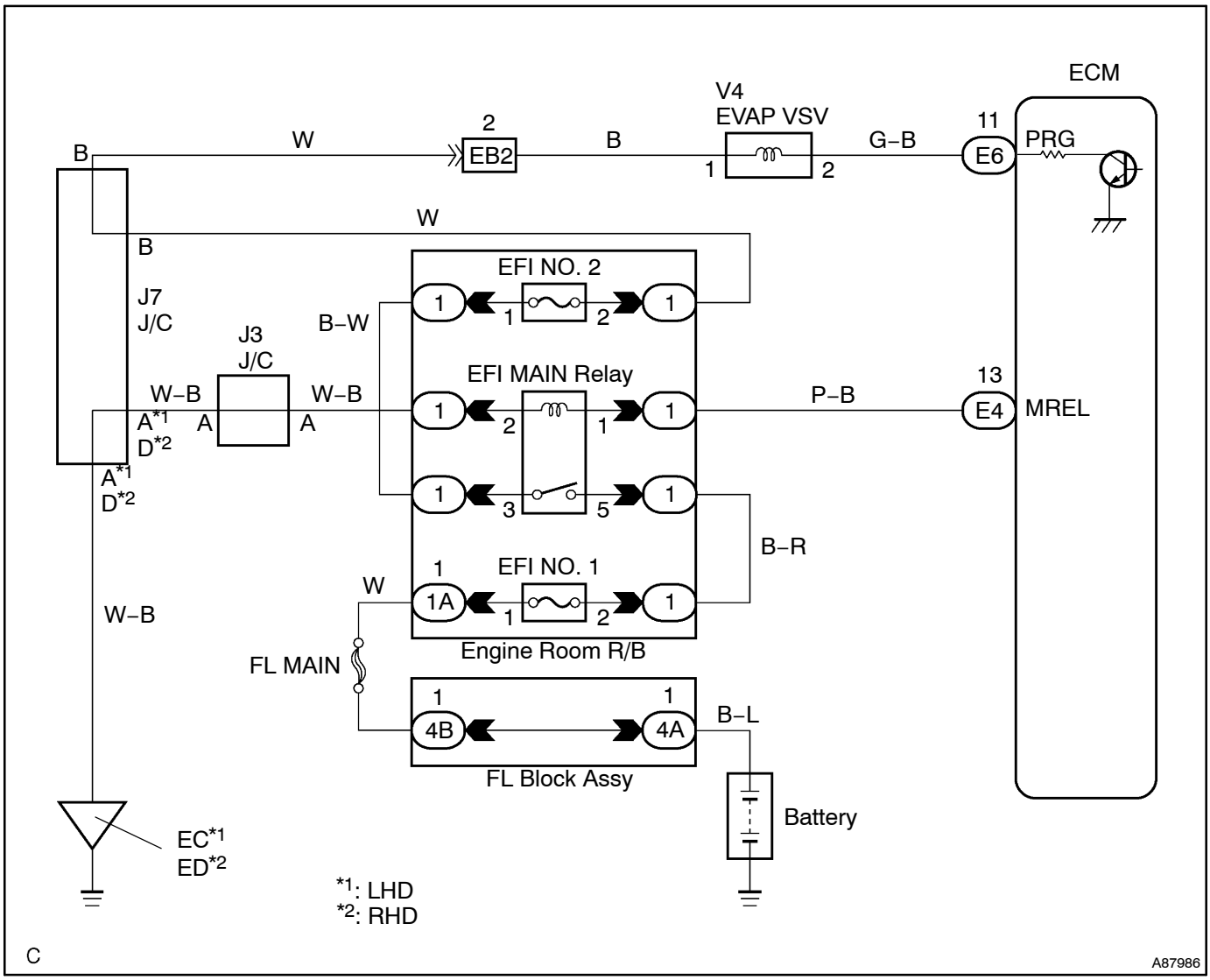
CIRCUIT DESCRIPTION

Evaporative emissions (EVAP) from the fuel tank are routed through the canister to the intake manifold for combustion in the cylinders.

After the engine is warmed–up, the ECM changes the duty signal to the EVAP VSV so that the intake quantity of EVAP is appropriate for the driving conditions (engine load, engine RPM, vehicle speed, etc.).

DTC No.	DTC Detection Condition	Trouble Area
P0443	No duty signal from ECM for 10 seconds when commanded duty ratio is 5 to 95 % (1 trip detection logic)	• Open or short in EVAP VSV

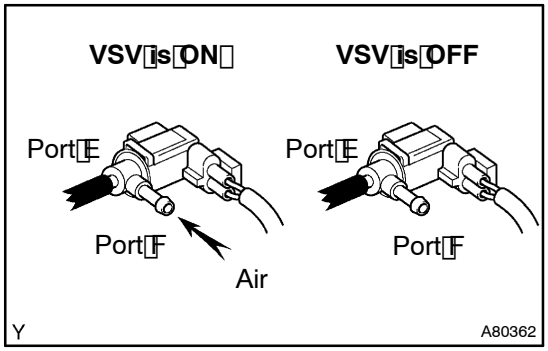
WIRING DIAGRAM



INSPECTION PROCEDURE

HINT:
Read freeze frame data using the Intelligent Tester II. 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	PERFORM ACTIVE TEST (EVAP VSV)

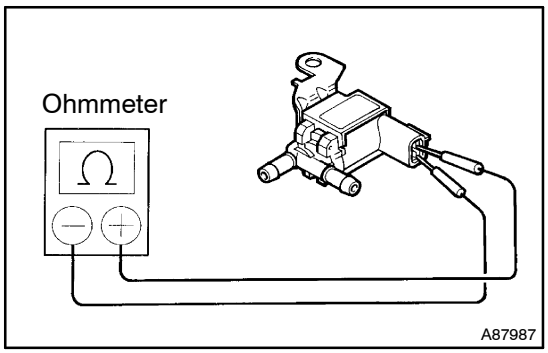


(a) Disconnect the hose from the port F of the EVAP VSV.
(b) Connect the Intelligent Tester II to the DLC3.
(c) Start the engine.
(d) Select the item "Enter / Diagnosis / OBD·MOBD / Power train / Engine and ECT / Active Test / EVAP VSV" and switch the EVAP VSV (ON/OFF).
(e) Switch the EVAP VSV and check air flow at the port F.
Standard:
There is air flow at the port F while EVAP VSV is ON.
There is no air flow at the port F while EVAP VSV is OFF.

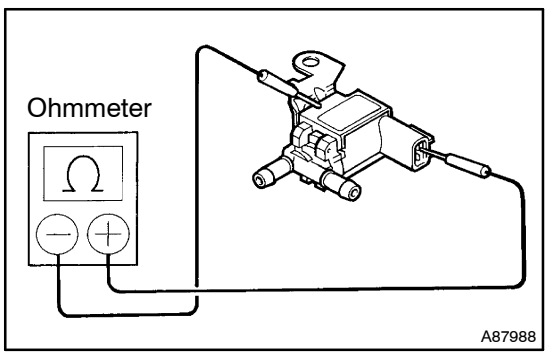
OK	CHECK FOR INTERMITTENT PROBLEMS (See page 05–11)

NG

2	INSPECT EVAP VSV



(a) Remove the EVAP VSV.
(b) Measure the resistance between the terminals.
Standard: 30 to 34 Ω at 20°C (68°F)



(c) Measure the resistance between the terminals and the body.
Standard: 1 MΩ or more

NG	REPLACE DUTY VACUUM SWITCHING VALVE (EVAP VSV)

OK

REPAIR OR REPLACE HARNESS AND CONNECTOR (EVAP VSV – ECM)