

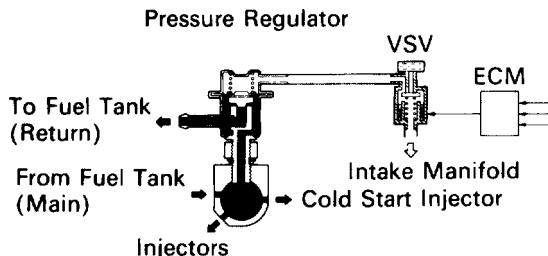
# VSV Circuit for Fuel Pressure Control

## CIRCUIT DESCRIPTION

The ECM turns on a VSV (Vacuum Switching Valve) to draw the air into the diaphragm chamber of the pressure regulator if it detects that the temperature of the engine coolant is too high during engine starting.

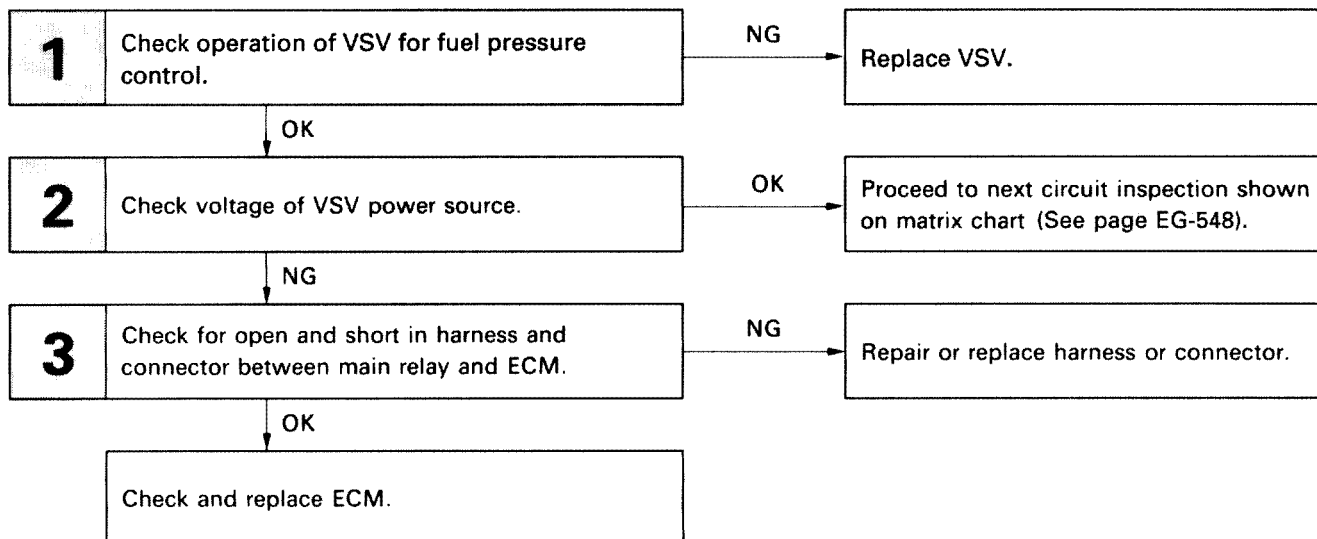
The air drawn into the chamber increases the fuel pressure to prevent fuel vapor lock at high engine temperature in order to help the engine start when it is warm.

Fuel pressure control ends approx. 100 secs. after the engine is started.

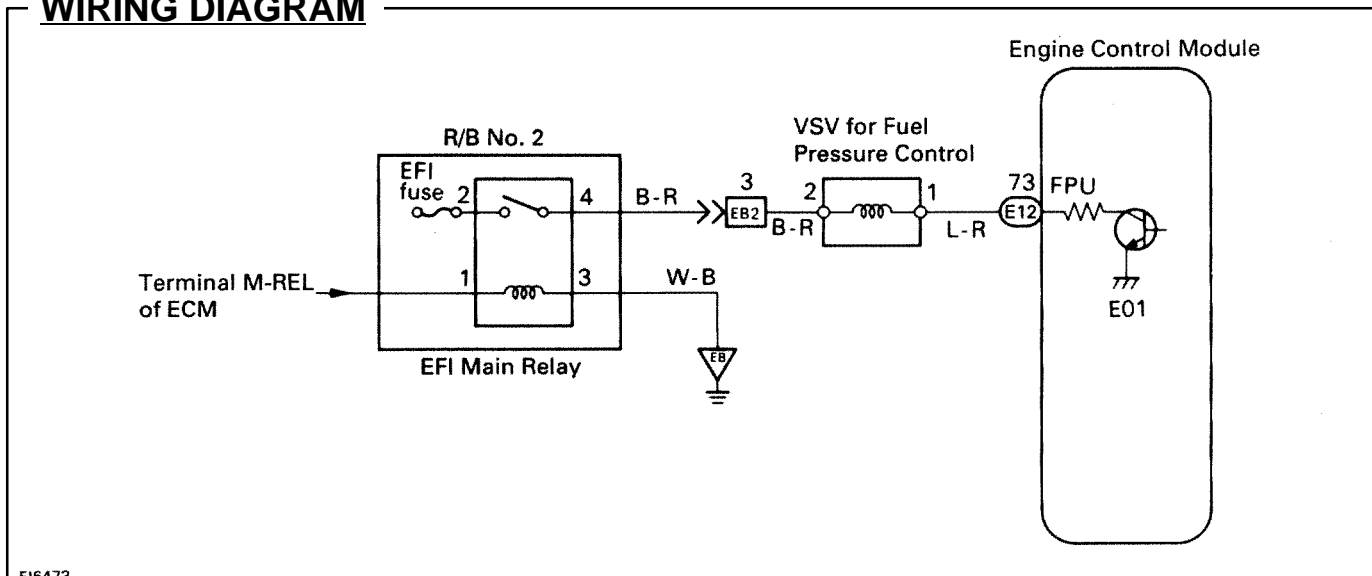


0015EM

## DIAGNOSTIC CHART

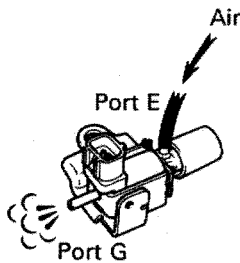
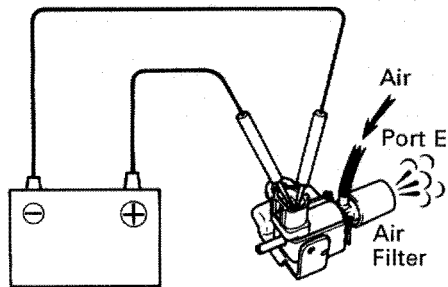
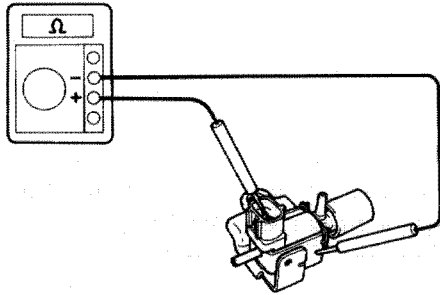
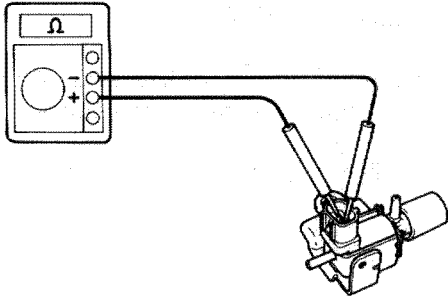


## WIRING DIAGRAM



FI6473

## INSPECTION PROCEDURE

**1** Check operations of VSV for fuel pressure control.

N00592  
N00593  
N00595  
N00594

- P**
1. Disconnect VSV connector.
  2. Remove VSV.

- C**
1. Measure resistance between terminals.
  2. Measure resistance between each terminal and the body.

- Hint**
1. 37 – 44  $\Omega$  at 20°C (68°F)
  2. 1M $\Omega$  or higher

- C** Check operation of VSV when battery positive voltage is applied and released to the VSV terminals.

- Hint** **Battery positive voltage is applied:**  
The air from pipe E is flowing out through the air filter.

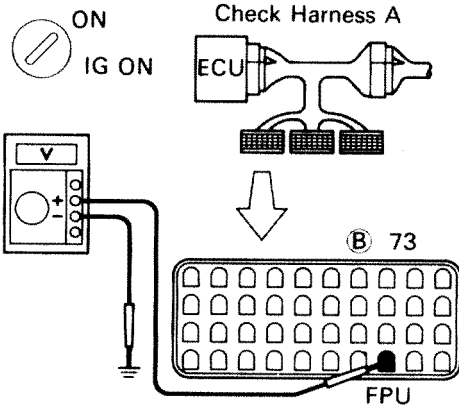
**Battery positive voltage is not applied:**  
The air from pipe E is flowing out through pipe G.

OK

NG

Replace VSV for fuel pressure control.

Go to step 2.

**2 Check voltage between terminal FPU of engine control module connector and body ground.**BE6653  
F16489

- P** 1. Connect the Check Harness A.  
(See page [EG-542](#))
2. Turn ignition switch on.

**C** Measure voltage between terminal FPU of engine control module connector and body ground.

**Hint** Voltage: 9 – 14 V

NG

OK

Proceed to next circuit inspection shown on matrix chart  
(See page [EG-548](#)).

**3 Check for open and short in harness and connector between engine control module and VSV, VSV and EFI main relay (See page [IN-33](#)).**

OK

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Repair or replace harness or connector.

Check and replace engine control module.

-MEMO-