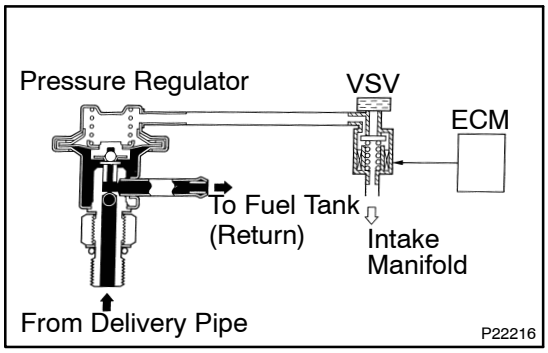
DI5PZ–02

Fuel Pressure Control Circuit



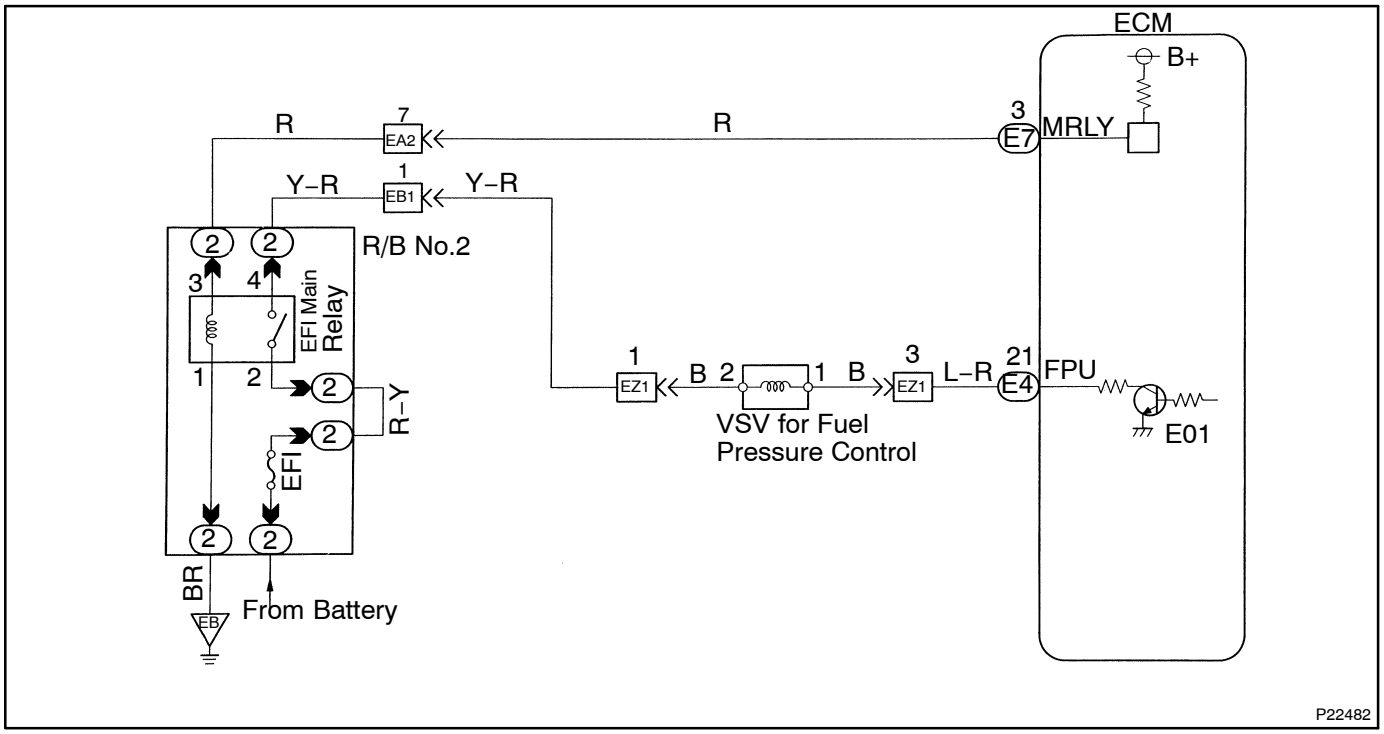
CIRCUIT DESCRIPTION

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. 120 sec. after the engine is started.

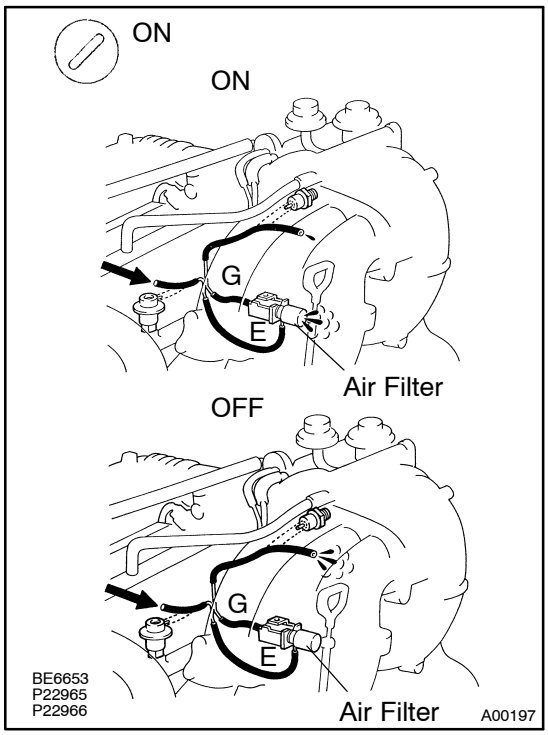
WIRING DIAGRAM



INSPECTION PROCEDURE

TOYOTA hand–held tester

1	**Connect the TOYOTA hand–held tester and check operation of VSV for fuel pressure control.**



PREPARATION:

(a) Remove the fuse cover on the instrument panel.
(b) Connect the TOYOTA hand–held tester to the DLC3.
(c) Turn ignition switch ON and TOYOTA hand–held tester main switch ON.
(d) Select the ACTIVE TEST mode on the TOYOTA hand–held tester.

CHECK:

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

OK:

VSV is ON:
Air from pipe E is flowing out through the air filter.
VSV is OFF:
Air from pipe E is flowing out through pipe G.

OK	**Check and repair fuel pressure regulator (See page SF–18).**

NG

2	**Check VSV for fuel pressure control (See page SF–58).**

NG	**Replace VSV for fuel pressure control.**

OK

3	**Check for open and short in harness and connector between EFI main relay (Marking: EFI) and ECM (See page IN–27).**

NG → **Repair or replace harness or connector.**

OK

Check and replace ECM (See page IN–27).

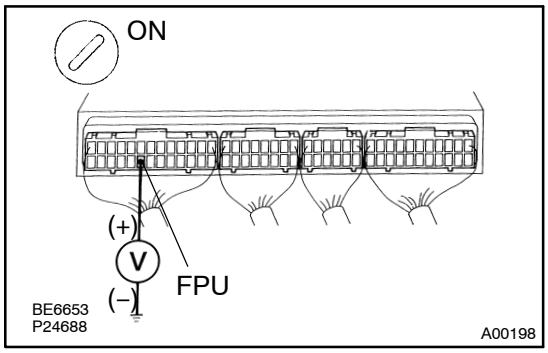
OBD II scan tool (excluding TOYOTA hand–held tester)

1	**Check VSV for fuel pressure control (See page SF–58).**

NG → **Replace VSV for fuel pressure control.**

OK

2	**Check voltage between terminal FPU of ECM connector and body ground.**



PREPARATION:

(a) Remove instrument panel speaker No.1 panel (See page SF–64).

(b) Turn ignition switch ON.

CHECK:

Measure voltage between terminal FPU of 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 IN–27).**

OK

3	Check fuel pressure regulator (See page SF–18).

NG → Repair or replace fuel pressure regulator.

OK →

Check and replace ECM (See page IN–27).