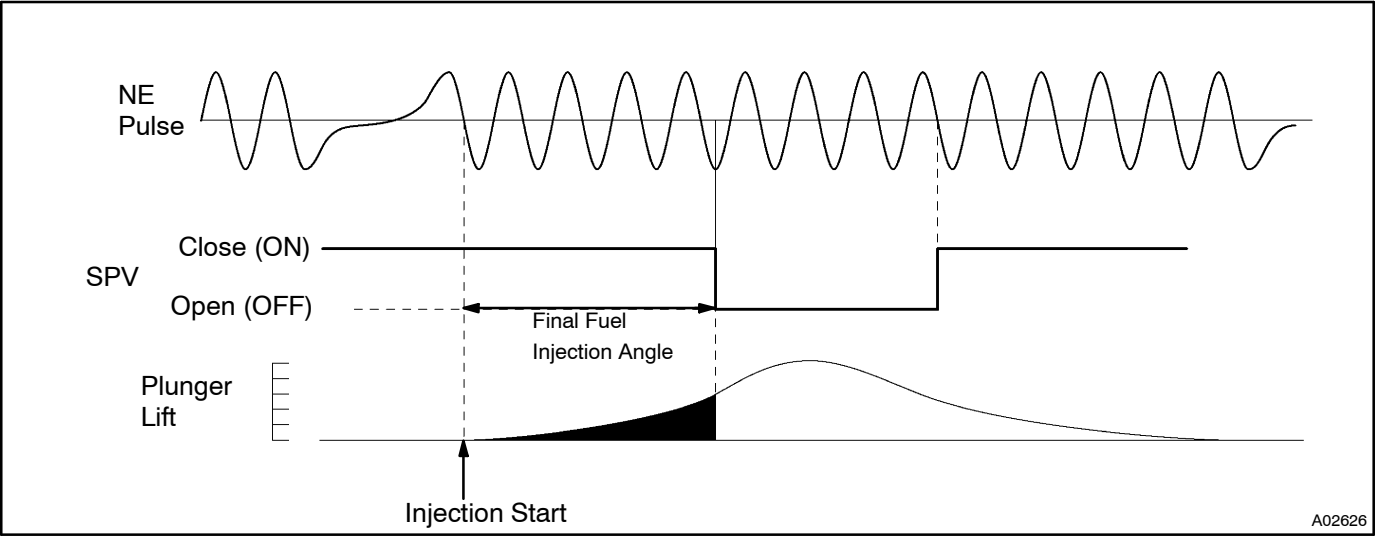


DTC	18	Spill Control Circuit Malfunction
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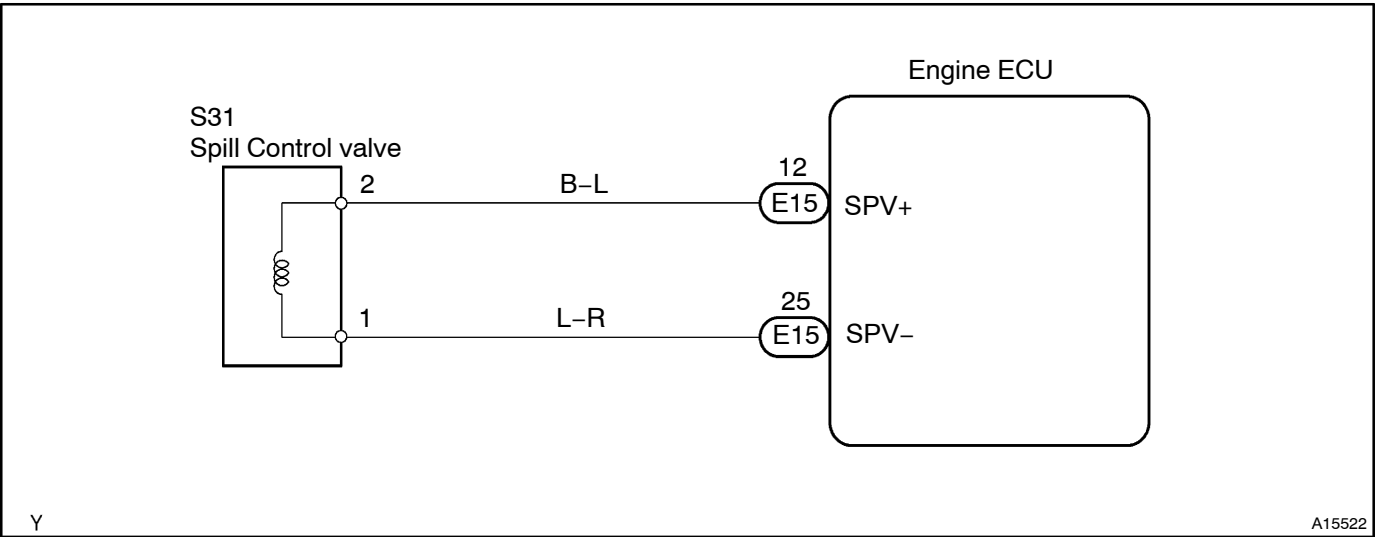
CIRCUIT DESCRIPTION

The engine ECU controls the fuel injection volume by the spill control valve (SCV). The SCV is mounted on the supply pump, and opens or closes the injection pressure releasing port by the solenoid valve in the SCV (During injection; valve is close (ON)). The engine ECU decides the basic fuel injection volume by the engine speed and accelerator pedal opening angle, and calculates the final fuel injection angle to add the various corrections on the basic fuel injection volume. The engine ECU counts the NE pulse to detect the angle from the injection, and then starts and operates the SCV from ON to OFF (The injection pressure releasing port is open.) at the position where the final fuel injection angle is monitored.



DTC No.	DTC Detecting Condition	Trouble Area
18	Open or short in spill control valve at 500 rpm or more	• Open or short in spill control valve circuit • Spill control valve • Engine ECU

WIRING DIAGRAM



INSPECTION PROCEDURE

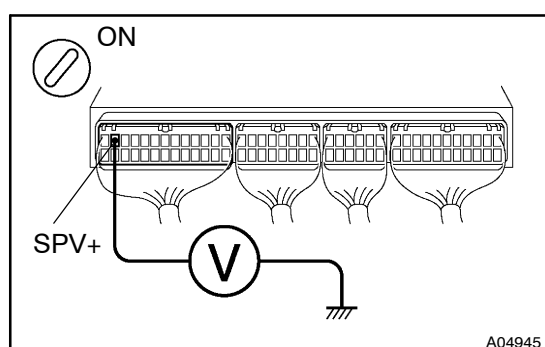
1 Check spill control valve (See page ED-7).

NG

Replace injection pump.

OK

2 Check voltage between terminal SPV+ of engine ECU connector and body ground.



PREPARATION:

(a) Remove the glove compartment door.

(b) Turn the ignition switch ON.

CHECK:

Measure the voltage between terminal SPV+ of the engine ECU connector and the body ground.

OK:

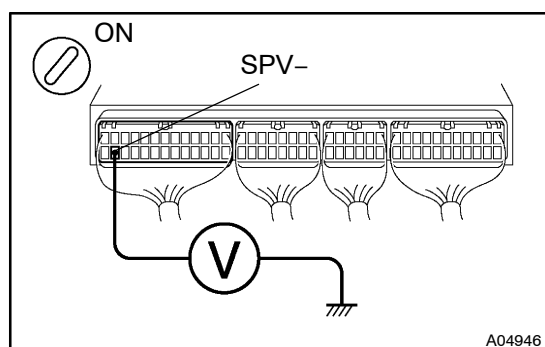
Voltage: 9 – 14 V

NG

Check and replace engine ECU (See page IN-19).

OK

3 Check voltage between terminal SPV- of engine ECU and body ground.



PREPARATION:

(a) Remove the glove compartment door.

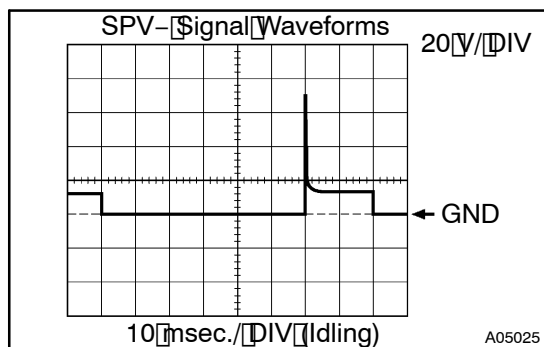
(b) Turn the ignition switch ON.

CHECK:

Measure the voltage between terminals SPV- of the engine ECU and the body ground.

OK:

Voltage: 9 – 14 V

**Reference: INSPECTION USING OSCILLOSCOPE**

During idling, check the waveform between terminals SPV- and E1 of the engine ECU.

HINT:

The correct waveform is as shown in the illustration.

NG

Check and replace engine ECU
(See page N-19)

OK

Check for open or short in harness and connector between spill control valve and engine ECU (See page N-19)