DTC	49	COMMON RAIL PRESSURE SENSOR CIRCUIT MALFUNCTION

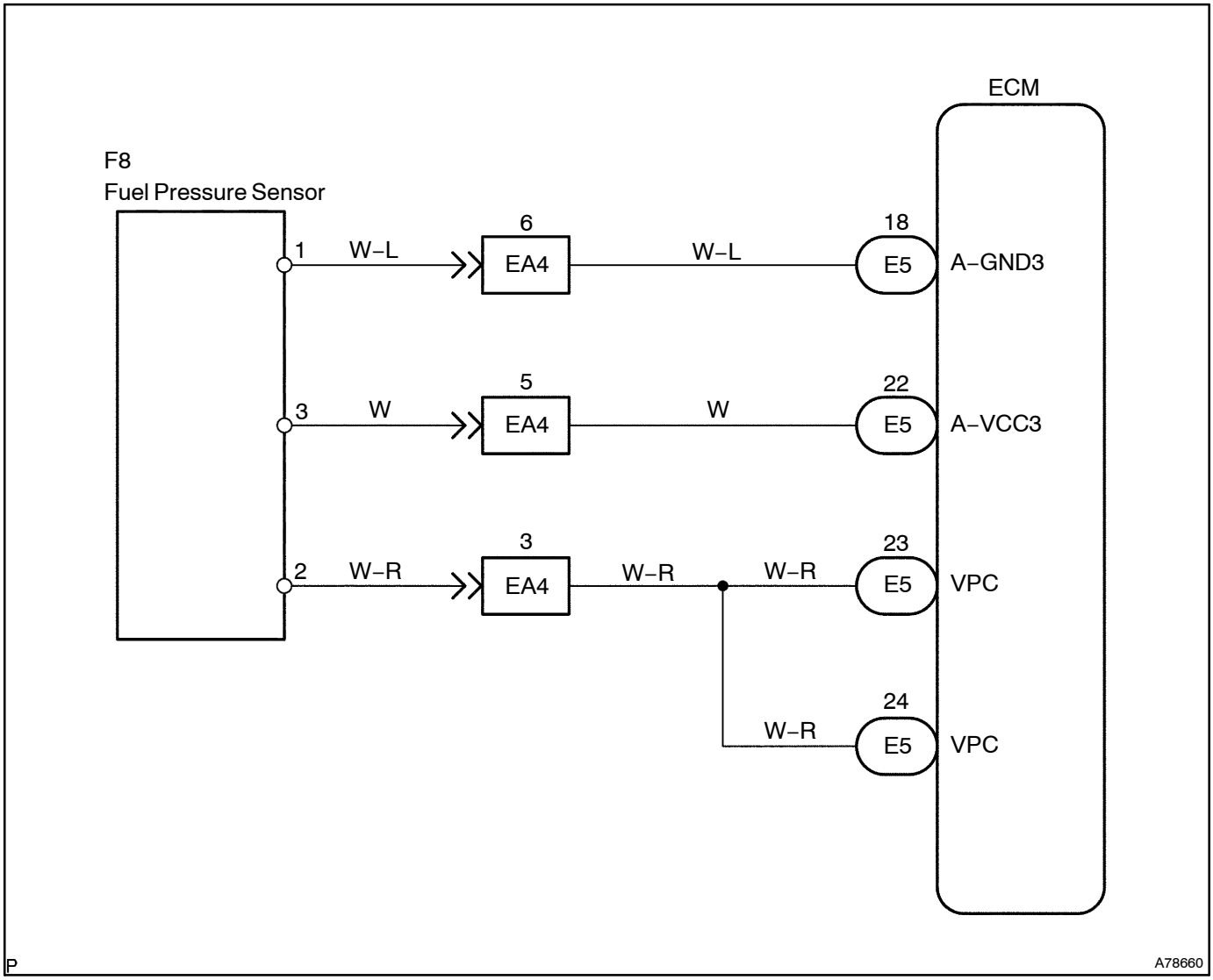
DTC	83	COMMON RAIL SYSTEM MALFUNCTION

CIRCUIT DESCRIPTION

The fuel pressure sensor installed on the common rail detects the fuel pressure and controls the feedback of the pump discharge in order to maintain the target pressure set by the ECM.

DTC No.	DTC Detection Condition	Trouble Area
49 83	Open or short in fuel pressure sensor circuit for common rail	• Open or short in fuel pressure sensor circuit for common rail • Fuel pressure sensor (built in common rail) • ECM

WIRING DIAGRAM



INSPECTION PROCEDURE

HINT:

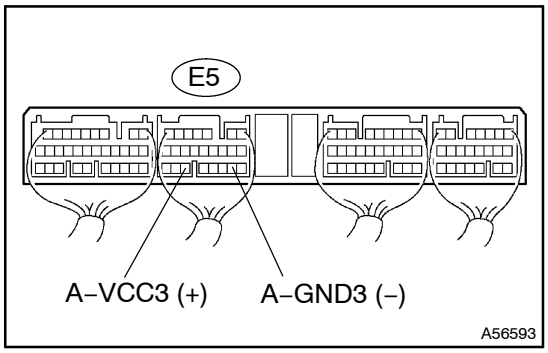
If DTCs 22 and 39 are output simultaneously, terminal A–GND3 (sensor ground) may be open.

1 CHECK FUEL PRESSURE

NG → **REPLACE COMMON RAIL ASSY (See page 11–169)**

OK

2 CHECK ECM (VOLTAGE)



(a) Turn the ignition switch ON.

(b) Check the voltage between the terminals of the ECM connector.

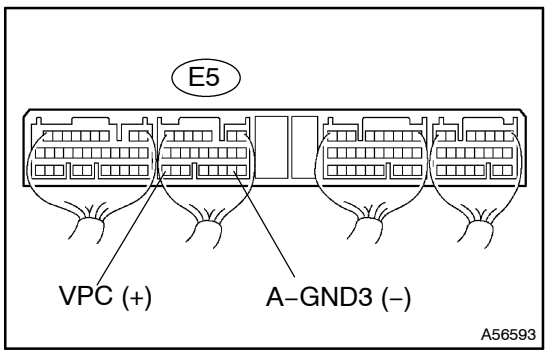
Voltage:

Symbols (Terminal No.)	Voltage
A–VCC3 (E5–22) ⇔ A–GND3 (E5–18)	4.75 – 5.25 V

NG → **CHECK AND REPLACE ECM (See page 01–27)**

OK

3 CHECK ECM (VOLTAGE)



(a) Start the engine.

(b) Check the voltage between the terminals of the ECM connector.

Voltage (at 20°C (68°F)):

Symbols (Terminal No.)	Voltage
VPC (E5–24) ⇔ A–GND3 (E5–18)	0.7 – 4.7 V

OK → **CHECK AND REPLACE ECM (See page 01–27)**

NG

4 CHECK WIRE HARNESS (ECM ⇔ FUEL PRESSURE SENSOR FOR COMMON RAIL) (See page 01–27)

NG → **REPAIR OR REPLACE HARNESS AND CONNECTOR**

OK

REPLACE COMMON RAIL ASSY (See page 11–169)