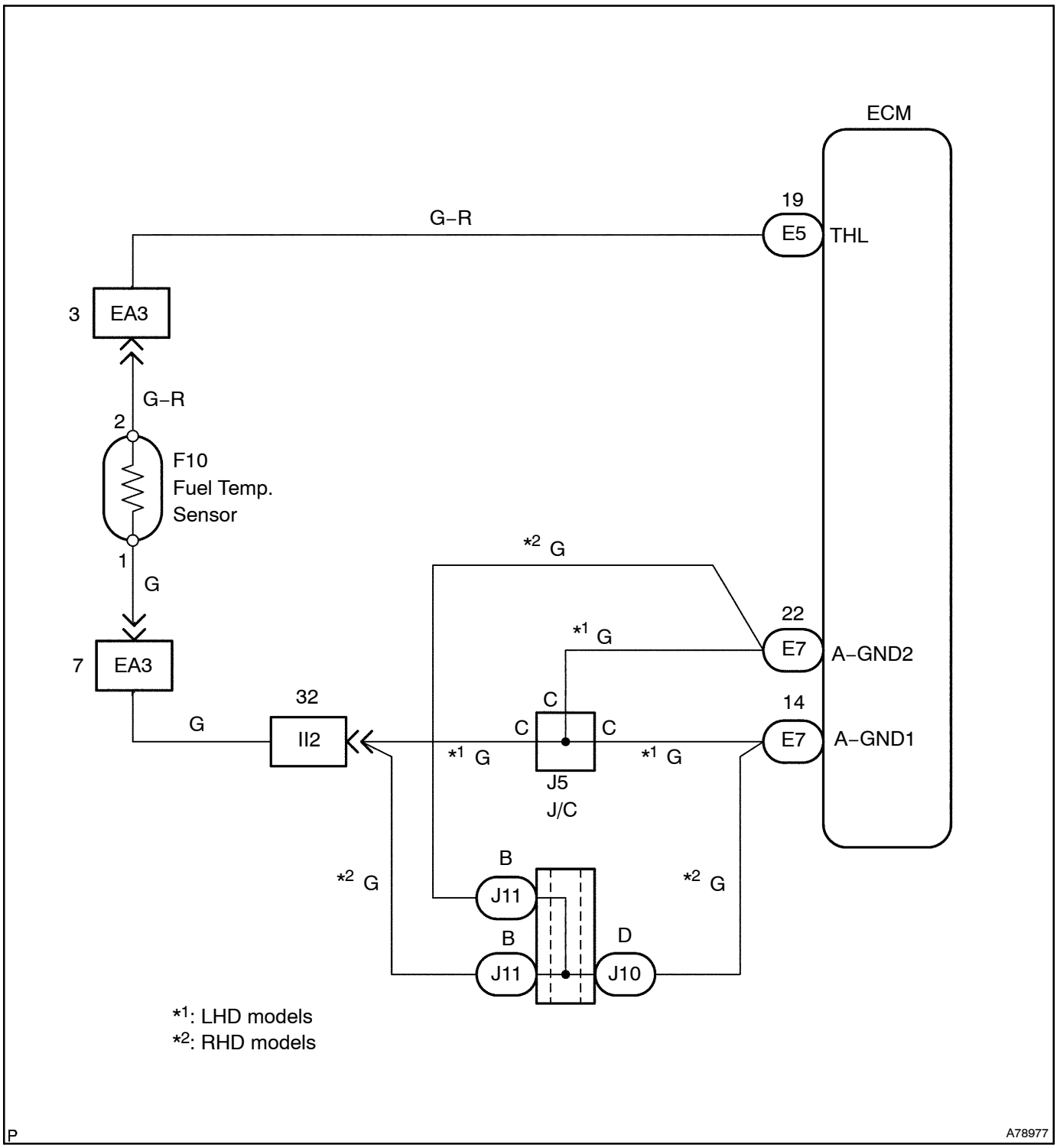
DTC	39	FUEL TEMPERATURE TOO HIGH

CIRCUIT DESCRIPTION

The fuel temperature sensor senses the fuel temperature. A thermistor built into the sensor changes the resistance value according to the fuel temperature. The lower the fuel temperature is, the greater the thermistor resistance value becomes, and the higher the fuel temperature is, the lower the thermistor resistance value becomes (See Fig. 1). The fuel temperature sensor is connected to the ECM (See the WIRING DIAGRAM). The 5 V power source voltage in the ECM is applied to the fuel temperature sensor from terminal THL via a resistor R. That is, resistor R and the fuel temperature sensor are connected in series. When the resistance value of the fuel temperature sensor changes in accordance with the changes in the fuel temperature, the potential at terminal THL also changes. Based on this signal, the ECM performs the pressure control compensation of the supply pump and error detection compensation of the highly pressurized fuel system.

DTC No.	DTC Detection Condition	Trouble Area
39	Open or short in fuel temp. sensor circuit for 3 sec. or more	• Open or short in fuel temp. sensor circuit • Fuel temp. sensor • ECM

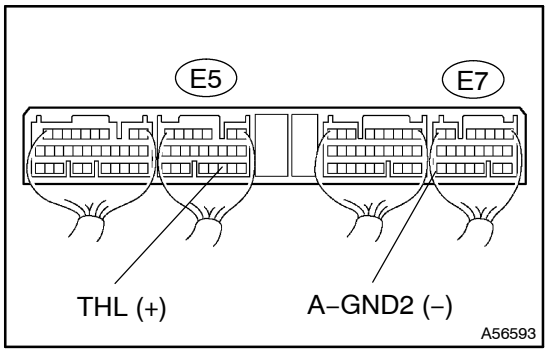
WIRING DIAGRAM



INSPECTION PROCEDURE

HINT:
If DTCs 22, 35 and 39 are output simultaneously, terminal A–GND2 (sensor ground) may be open.

1 CHECK ECM (RESISTANCE)



(a) Turn the ignition switch to LOCK.
(b) Check the resistance between the terminals of the ECM connector.

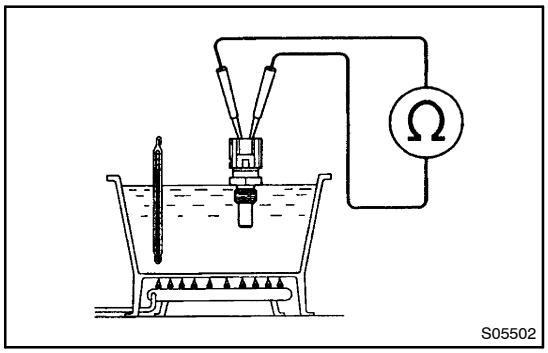
Resistance:

Fuel Temp. °C(°F)	Symbols (Terminal No.)	Resistance
20 (68) (Engine is cool)	THL (E5–19) ⇔ A–GND2 (E7–22)	Approx. 2.4 kΩ
80 (176) (Engine is hot)	THL (E5–19) ⇔ A–GND2 (E7–22)	Approx. 530 Ω

OK → **CHECK FOR INTERMITTENT PROBLEMS (See page 05–104)**

NG

2 INSPECT FUEL TEMPERATURE SENSOR (RESISTANCE)



(a) Disconnect the F10 fuel temperature sensor connector.
(b) Remove the fuel temperature sensor.
(c) Measure the resistance between the terminals.

Resistance:

Water temp. °C(°F)	Resistance
20 (68)	Approx. 2.4 kΩ
80 (176)	Approx. 530 Ω

NG → **REPLACE FUEL TEMPERATURE SENSOR**

OK

3 CHECK WIRE HARNESS (ECM ⇔ FUEL TEMPERATURE SENSOR) (See page 01–27)

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

OK

CHECK AND REPLACE ECM (See page 01–27)