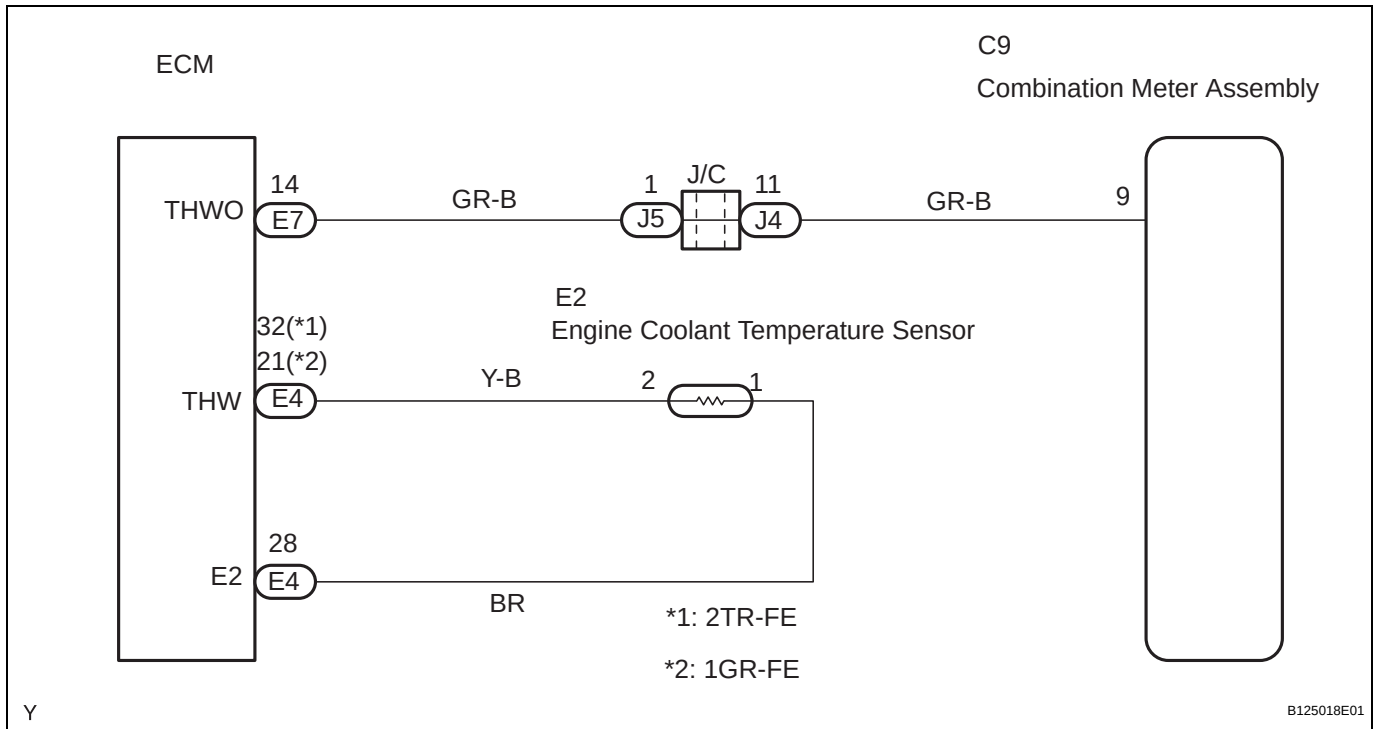


Malfunction in Water Temperature Warning Light

WIRING DIAGRAM



HINT:

- Start the inspection from step 1 when using an intelligent tester and start from step 2 when not using an intelligent tester.
- If there is an open or short in the engine coolant temperature sensor circuit, the ECM outputs DTCs. Troubleshoot those DTCs by following the SFI System.
2TR-FE: (See page [ES-10](#))
1GR-FE: (See page [ES-10](#))

1 READ VALUE OF INTELLIGENT TESTER (ENGINE COOLANT TEMPERATURE)

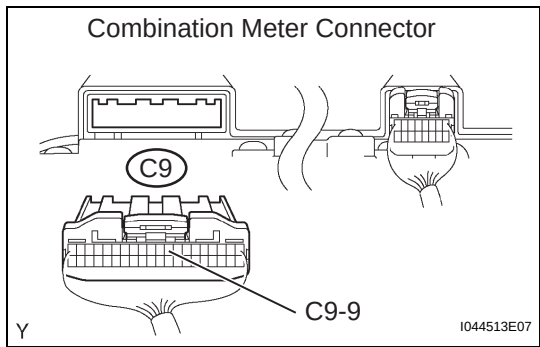
- Connect an intelligent tester to the DLC3.
 - Turn the ignition switch to ON.
 - Turn the tester ON.
 - On the tester, select the following menu items:
DIAGNOSIS / ENHANCED OBD II / DATA LIST / ALL / COOLANT TEMP.
 - Read the value displayed on the tester.
- Standard:**
Between 80°C and 97°C (176°F and 207°F) with the engine warmed up.

NG

GO TO ENGINE CONTROL SYSTEM

OK

2INSPECT COMBINATION METER ASSEMBLY



- (a) Disconnect the C9 combination meter connector.
(b) Measure the voltage.

Standard Voltage

Tester Condition	Condition	Specified Condition
C9-9 - Body ground	Ignition switch ON, Coolant temperature is 90°C (194°F)	10 to 14 V

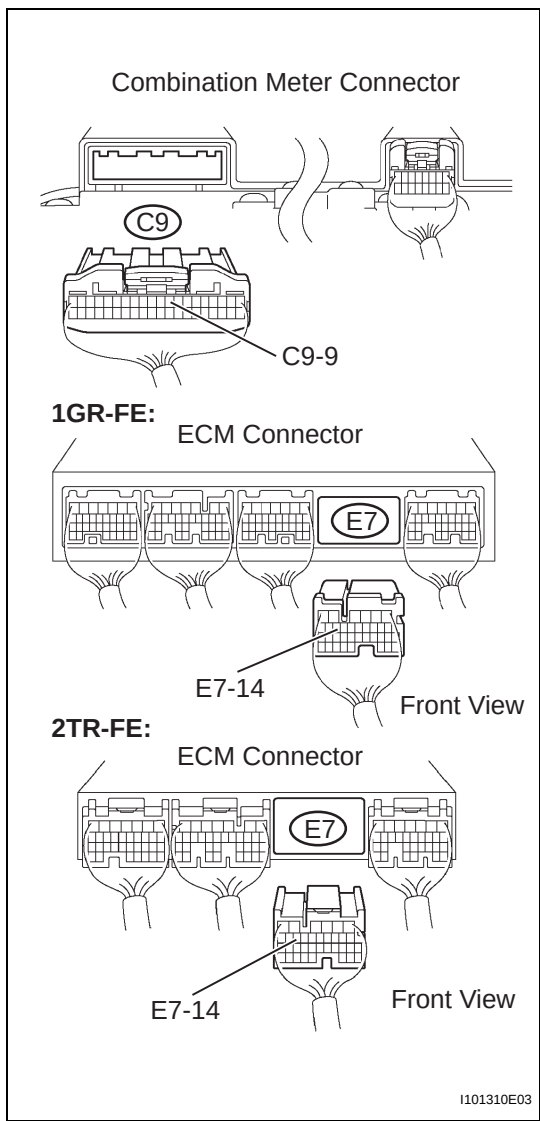
- (c) Reconnect the combination meter connector.

OK

REPLACE COMBINATION METER ASSEMBLY

NG

3CHECK HARNESS AND CONNECTOR (COMBINATION METER ASSEMBLY - ECM)



- (a) Disconnect the C9 combination meter connector.
(b) Disconnect the E7 ECM connector.
(c) Measure the resistance.

Standard Resistance

Tester Connection	Specified Condition
C9-9 - E7-14	Below 1 Ω
C9-9 or E7-14 - Body ground	10 k Ω or higher

- (d) Reconnect the ECM connector.
(e) Reconnect the combination meter connector.

NG

REPAIR OR REPLACE HARNESS OR CONNECTOR

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OK

REPLACE ECM