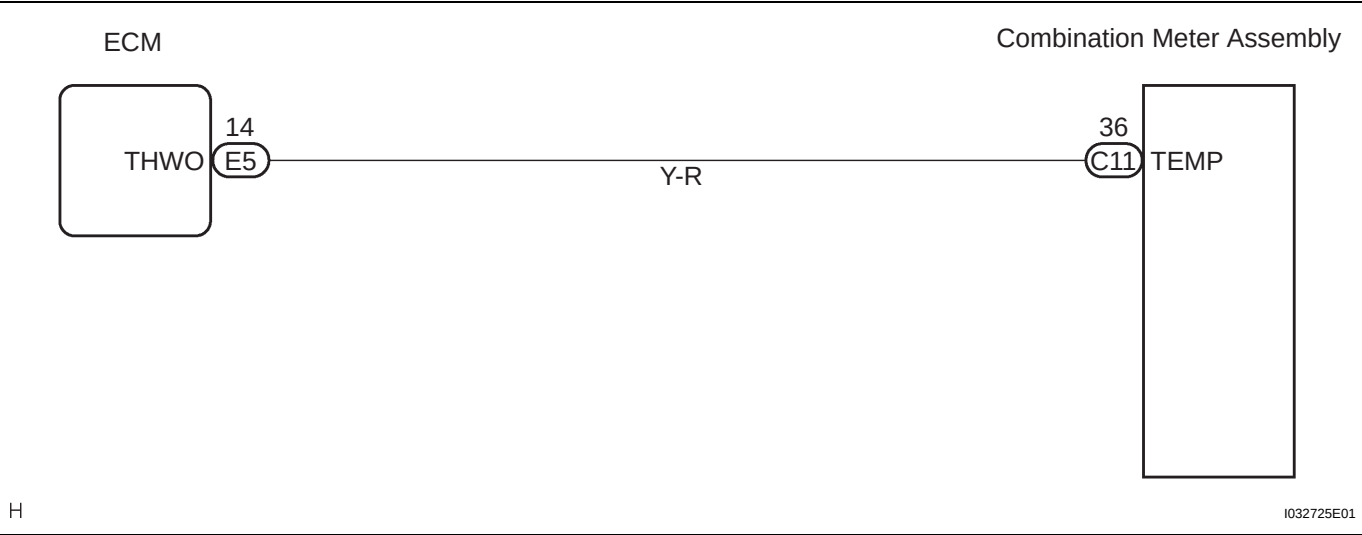


Engine Coolant Temperature Receiver Gauge Malfunction

WIRING DIAGRAM



INSPECTION PROCEDURE

HINT:
If there is an open or short in the engine coolant temperature sensor circuit, the ECM outputs DTCs.
Perform troubleshooting with the "SFI System (See page ES-30)".

1 READ VALUE OF INTELLIGENT TESTER

- (a) Warm up the engine.
- (b) Ignition switch off.
- (c) Connect the intelligent tester to the DLC3.
- (d) Turn the ignition switch to the ON position.
- (e) Turn the tester ON.
- (f) Enter following menus: DIAGNOSIS / OBD/MOBD / ENGINE / DATA LIST.
- (g) Check values by referring to the table below.

ENGINE:

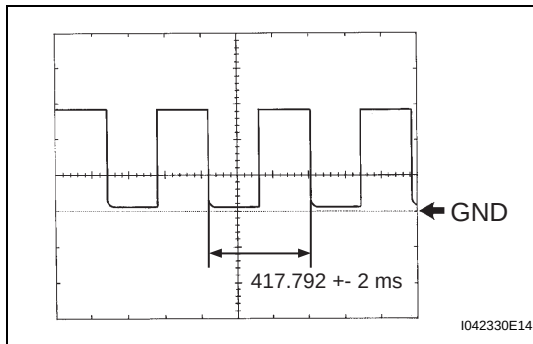
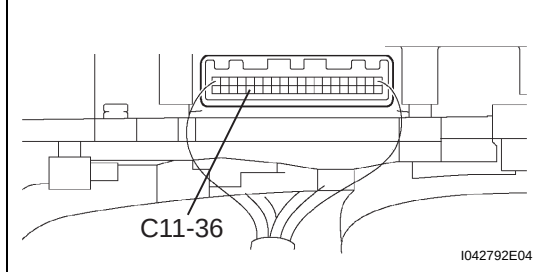
Tester Display	Measurement Item/Range	Normal Condition	Diagnostic Note
COOLANT TEMP	Coolant temperature/Min.: -40°C (-40°F), Max.: 140°C (284°F)	After warming up: 80 to 95°C (176 to 203°F)	If the value is "-40°C (-40°F)" or "140°C (284°F)", sensor circuit is open or shorted.

OK:
Coolant temperature displayed on the tester is between 80°C (176°F) and 95°C (203°F) after warming up.

OK

NG

GO TO SFI SYSTEM

2 INSPECT COMBINATION METER ASSEMBLY**Combination Meter Assembly
Wire Harness View:**

- (a) Check the input signal waveform.
- (1) Remove the combination meter with connectors still connected.
 - (2) Connect the oscilloscope to terminal C11-36 and body ground.
 - (3) Start the engine.

- (4) Check the signal waveform according to the condition(s) in the table below.

Item	Condition
Tool setting	5 V/DIV., 10 ms/DIV.
Vehicle condition	Turn the ignition switch to the ON position

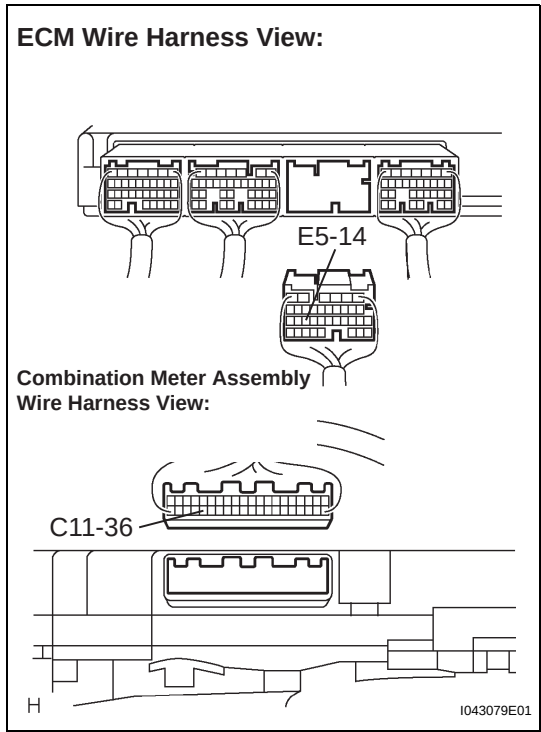
OK:

The waveform is displayed as shown in the illustration.

OK**NG****Go to step 3****REPLACE COMBINATION METER ASSEMBLY**

3

CHECK HARNESS AND CONNECTOR (COMBINATION METER - ECM)



- (a) Disconnect the C11 and E5 connectors.
(b) Measure the resistance according to the value(s) in the table below.

Standard resistance

Tester connection	Condition	Specified condition
C11-36 - E5-14	Always	Below 1 Ω
C11-36 - Body ground	Always	10 kΩ or higher

NG

REPAIR OR REPLACE HARNESS OR CONNECTOR

OK

GO TO SFI SYSTEM