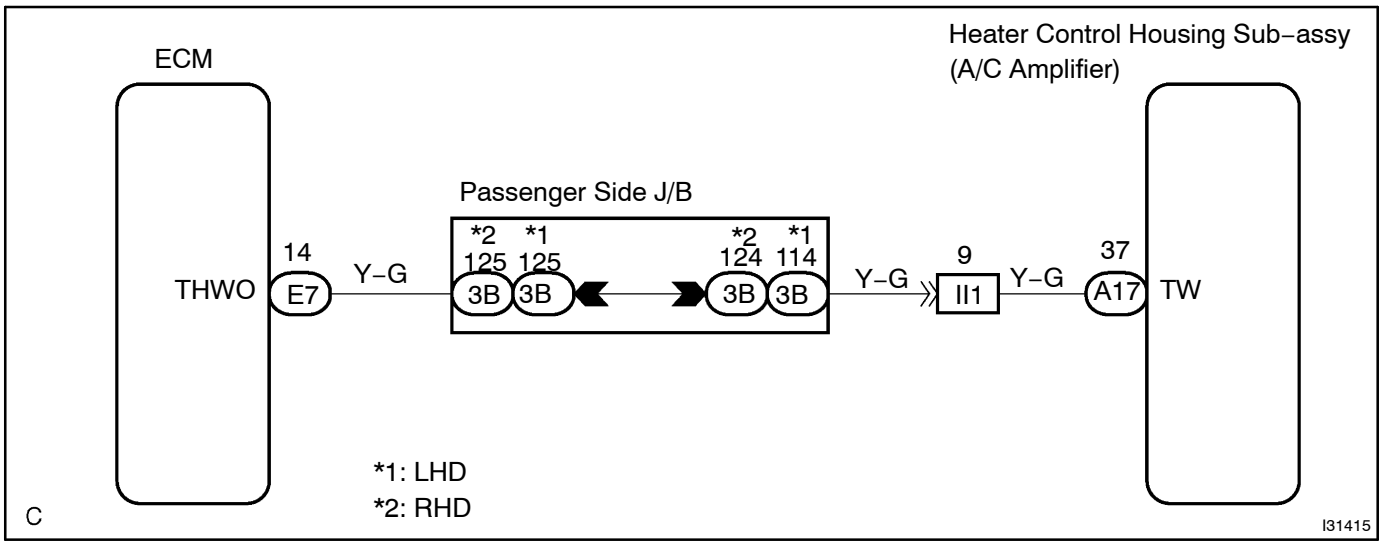
| DTC | 14 | ENGINE COOLANT TEMPERATURE COMMUNICATION CIRCUIT |
|---|---|---|

## CIRCUIT DESCRIPTION

This sensor detects the temperature and sends the appropriate signals to the A/C amplifier. These signals are used for warm up control when engine is cold.

| DTC No. | Detection Item | Trouble Area |
|---|---|---|
| 14 | Open or short in A/C amplifier and ECM circuit. | • ECM<br>• Harness or connector between ECM and A/C amplifier<br>• A/C amplifier |

## WIRING DIAGRAM




## INSPECTION PROCEDURE

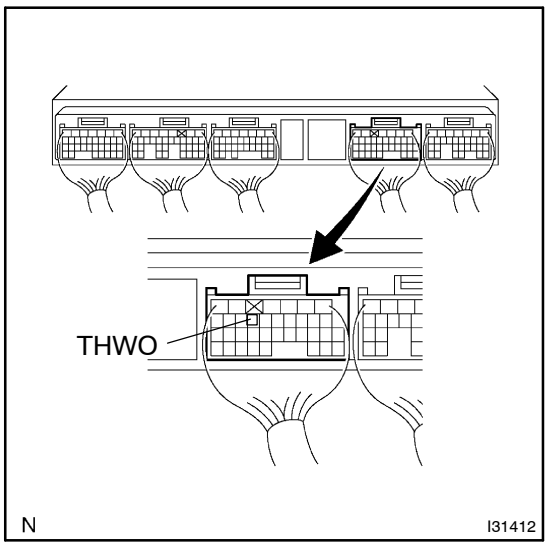
| 1 | DIAGNOSTIC TROUBLE CODE CHECK |
|---|---|

(a) Check that the DTC P0115/22 does not output.

NG → GO TO ENGINE CONTROL SYSTEM

OK

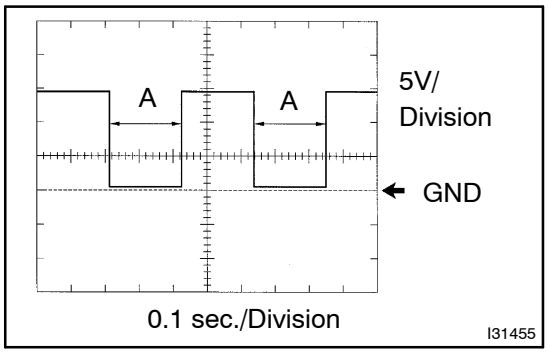
| 2 | INSPECT ECM(THWO) |
|---|---|




(a) Turn the ignition switch ON.
(b) Measure the waveform between terminal THWO of the ECM connector and body ground.
**OK: Pulse generation**

HINT:
- The correct waveform is as shown.
- Water temperature changes A.

| Water temp. | Below 30°C (86°F) | Approx. 75°C (167°F) | 90°C – 100°C (194°F – 212°F) |
|---|---|---|---|
| A | 16ms | 102ms | 262ms |




NG → **CHECK AND REPLACE ECM**

OK

| 3 | CHECK HARNESS AND CONNECTOR(BETWEEN ECM AND HEATER CONTROL HOUSING SUB–ASSY) |
|---|---|

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

OK

**CHECK AND REPLACE HEATER CONTROL HOUSING SUB–ASSY**