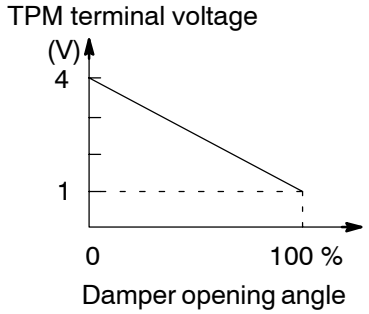
DTC	33	AIR OUTLET DAMPER POSITION SENSOR CIRCUIT

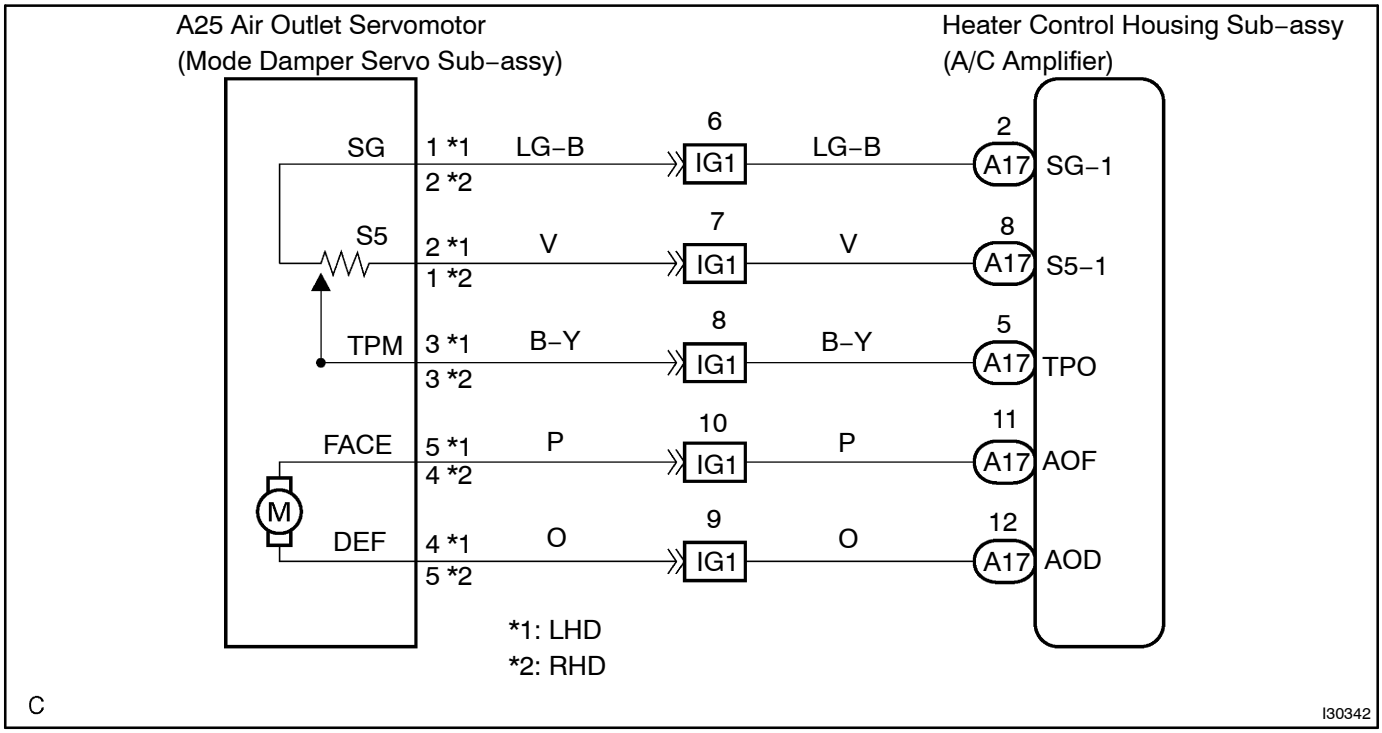
CIRCUIT DESCRIPTION



This sensor detects the position of the air outlet damper and sends the appropriate signals to the A/C amplifier. The position sensor is built into the mode damper servo sub–assy.

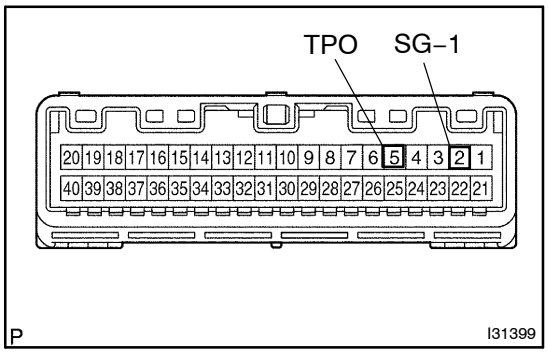
DTC No.	Detection Item	Trouble Area
33	Short to ground or power source circuit in air outlet damper position sensor circuit.	• Air outlet damper position sensor • Harness or connector between mode damper servo sub–assy and A/C amplifier • A/C amplifier

WIRING DIAGRAM



INSPECTION PROCEDURE

1	INSPECT HEATER CONTROL HOUSING SUB–ASSY(TPO, SG–1)



(a) Remove the A/C amplifier with connectors still connected.
(b) Turn ignition switch ON.
(c) Measure voltage between terminals TPO and SG–1 of A/C amplifier.
Voltage:
FACE: 3.5 – 4.5 V
DEF: 0.5 – 1.5 V

HINT:
As the air outlet servomotor is moved from FACE side to DEF side, the voltage decreases gradually with out interruption.

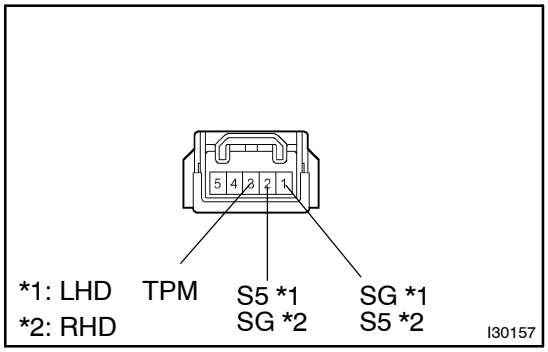
A	NG
B	OK (when checking from the PROBLEM SYMPTOM TABLE)
C	OK (Checking from the DTC)

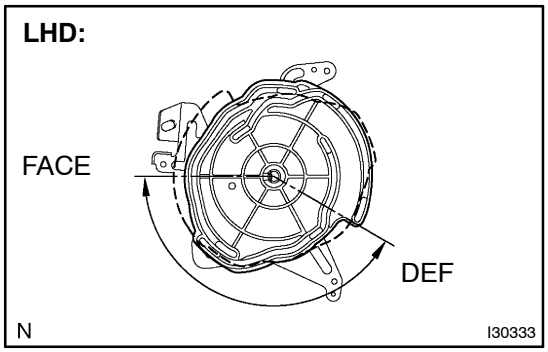
B → **PROCEED TO NEXT CIRCUIT INSPECTION SHOWN ON PROBLEM SYMPTOM TABLE**

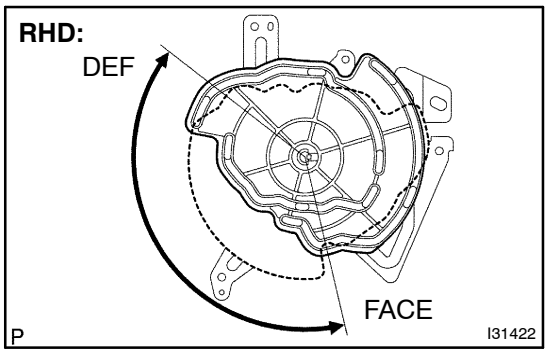
C → **CHECK AND REPLACE HEATER CONTROL HOUSING SUB–ASSY**

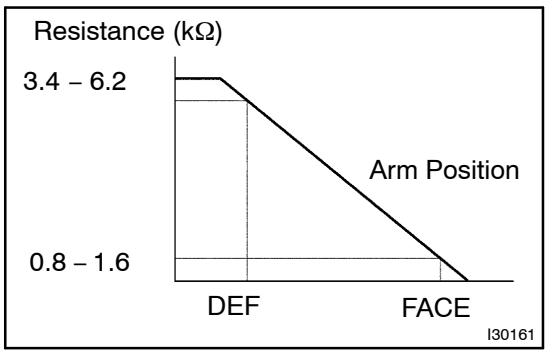
A

2 INSPECT MODE DAMPER SERVO SUB–ASSY









(a) Remove the mode damper servo sub–assy.

(b) Measure resistance between terminals SG and S5 of mode damper servo sub–assy connector.

Resistance: 4.2 – 7.8 kΩ

(c) While operating mode damper servo sub–assy as in the procedure on page 05–730, measure resistance between terminal SG and TPM of mode damper servo sub–assy.

Resistance:

DEF: 3.4 – 6.2 kΩ

FACE: 0.8 – 1.6 kΩ

HINT:

As the mode damper servo sub–assy moved from DEF side to FACE side, the resistance decreases gradually with out interruption.

NG → **REPLACE MODE DAMPER SERVO SUB–ASSY**

OK

3	**CHECK HARNESS AND CONNECTOR(BETWEEN AIR OUTLET DAMPER POSITION SENSOR AND HEATER CONTROL HOUSING SUB–ASSY)**

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

OK

CHECK AND REPLACE HEATER CONTROL HOUSING SUB–ASSY