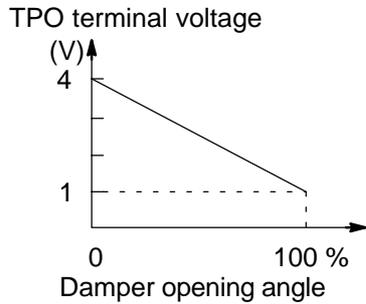


DTC	33	AIR OUTLET DAMPER POSITION SENSOR CIRCUIT
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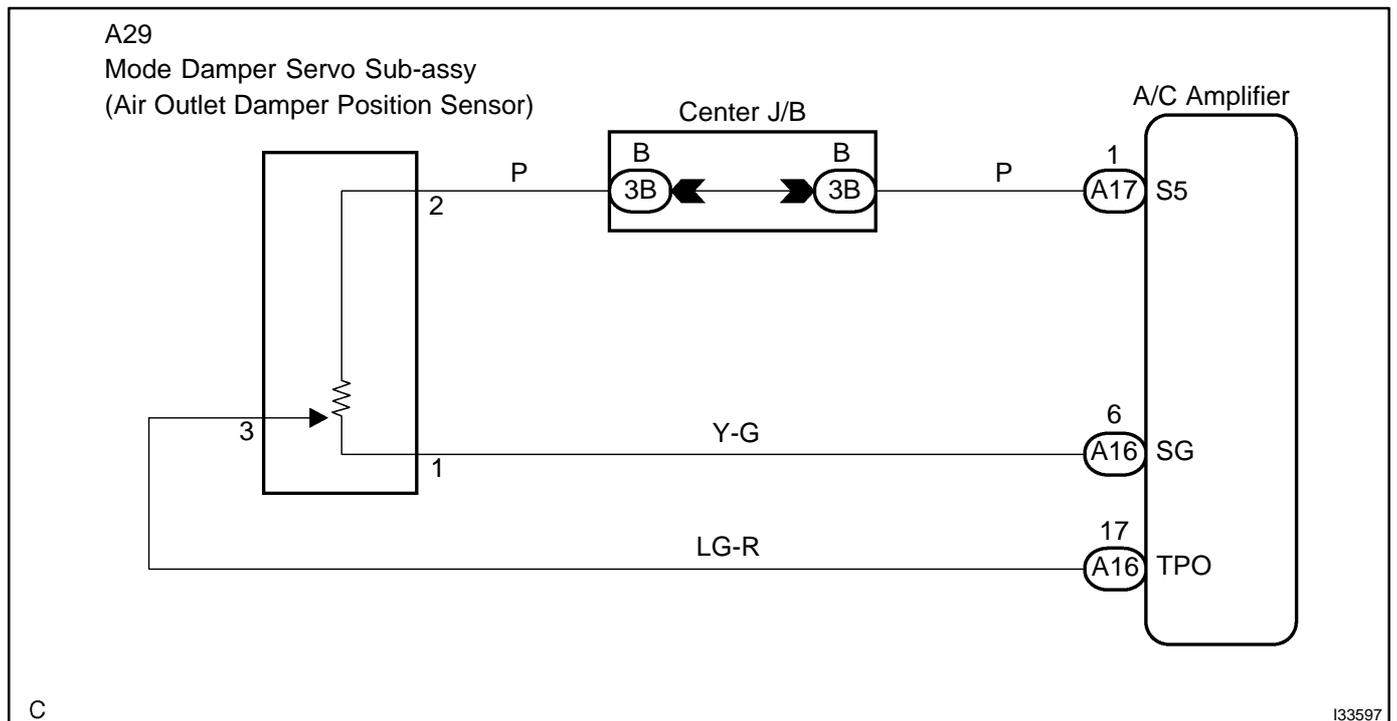
CIRCUIT DESCRIPTION



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

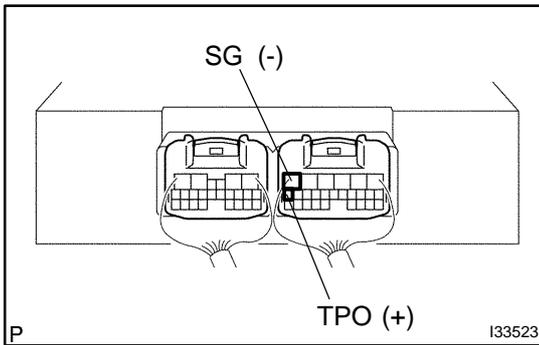
DTC No.	Detection Item	Trouble Area
33	Open or short in air outlet damper position sensor circuit.	<ul style="list-style-type: none"> • Mode damper servo sub-assy (air outlet damper position sensor) • Harness or connector between mode damper servo sub-assy and A/C amplifier • A/C amplifier

WIRING DIAGRAM



INSPECTION PROCEDURE

1 INSPECT AIR CONDITIONING AMPLIFIER(TPO, SG)



- (a) Remove the A/C amplifier with the connectors being connected.
- (b) Turn the ignition switch to ON.
- (c) Change the set air flow mode to activate the mode damper servo sub-assy, and measure voltage between terminal TPO and SG of the A/C amplifier.

Voltage:

FACE: 3.5 - 4.5 V

DEF: 0.5 - 1.5 V

HINT:

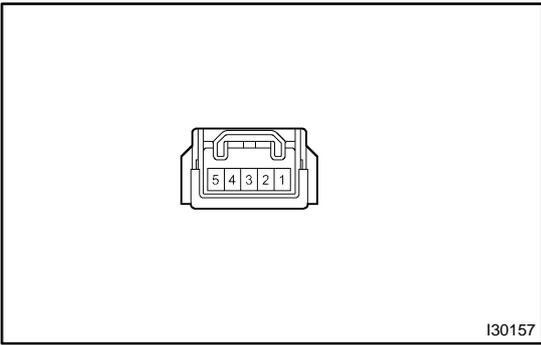
As the mode damper is moved from FACE side to DEF side, the voltage decreases gradually without interruption.

OK

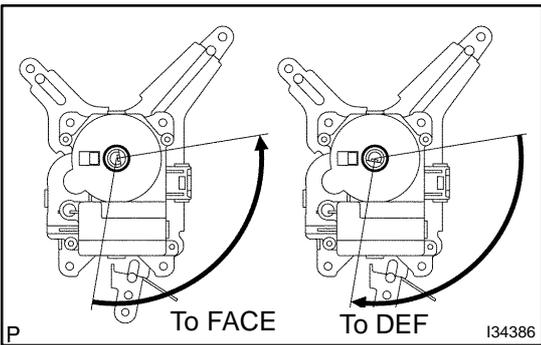
PROCEED TO NEXT CIRCUIT INSPECTION SHOWN ON PROBLEM SYMPTOMS TABLE

NG

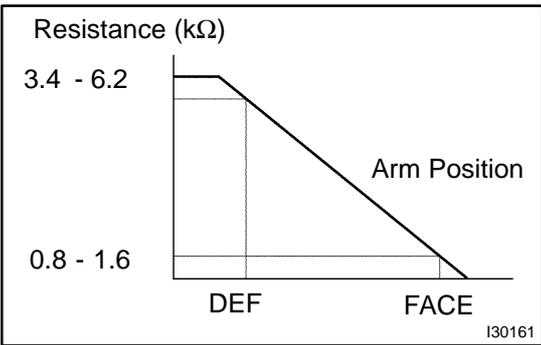
2 INSPECT MODE DAMPER SERVO SUB-ASSY



- (a) Remove the mode damper servo sub-assy.
- (b) Measure resistance between terminal 1 and 2 of the mode damper servo sub-assy connector.
Resistance: 4.2 - 7.8 kΩ
- (c) While operating the mode damper servo sub-assy as in the procedure on page 05-580, measure resistance between terminal 1 and 3 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 without interruption.



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

OK

3 CHECK HARNESS AND CONNECTOR(BETWEEN AIR OUTLET DAMPER POSITION SENSOR AND AIR CONDITIONING AMPLIFIER)

- (a) Check for open and short circuit in the harness and the connector between the mode damper servo sub-assy (air outlet damper position sensor) and the A/C amplifier (See page 01-35).

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

OK

4 CHECK DIAGNOSTIC TROUBLE CODE

- (a) Start up the DTC check mode.
- (b) Check that DTC 33 is not output again.

Standard: DTC 33 is not output.

OK**SYSTEM OK****NG****CHECK AND REPLACE AIR CONDITIONING AMPLIFIER**