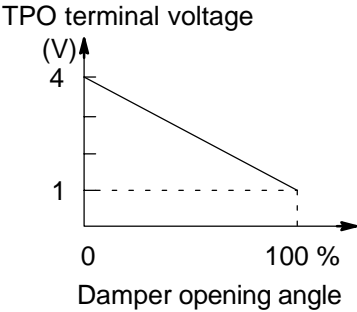


DTC	33	AIR OUTLET DAMPER POSITION SENSOR CIRCUIT
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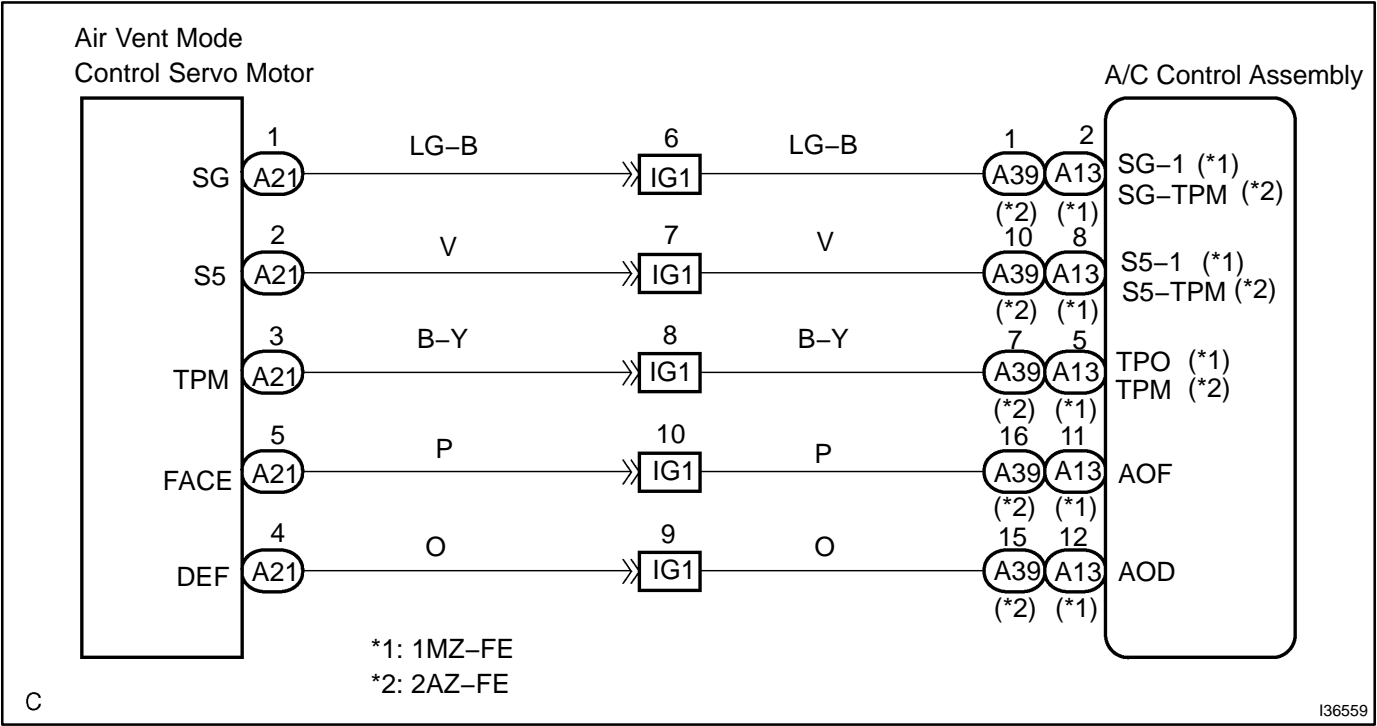
CIRCUIT DESCRIPTION



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

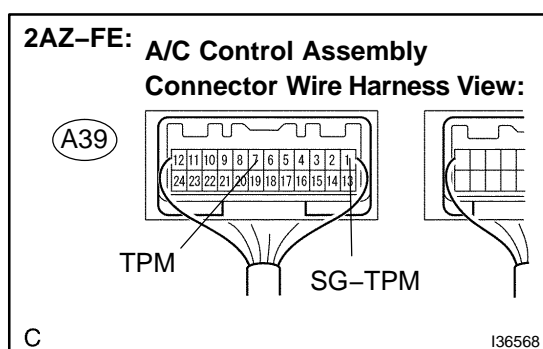
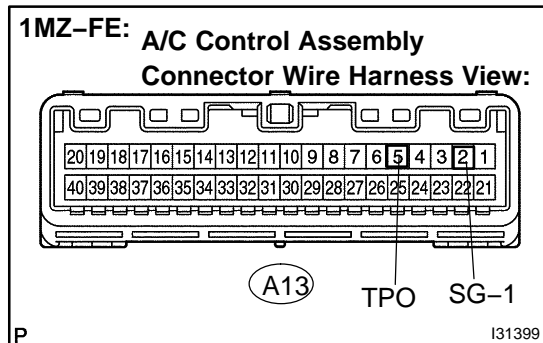
DTC No.	Detection Item	Trouble Area
33	Open or short in air outlet damper position sensor circuit.	<ul style="list-style-type: none">• Air outlet damper position sensor.• Harness or connector between mode damper servo sub-assy and A/C amplifier• A/C amplifier

WIRING DIAGRAM



INSPECTION PROCEDURE

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



- (a) Remove the A/C amplifier assy with connectors still connected.
- (b) Turn the ignition switch to the ON position.
- (c) 1MZ-FE:
Measure voltage according to the value(s) in the table below.

Standard:

Terminal No.	Condition	Specified Condition
A13-5 (TPO) – A13-2 (SG-1)	FACE	3.5 to 4.5 V
A13-5 (TPO) – A13-2 (SG-1)	DEF	0.5 to 1.5 V

HINT:

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

- (d) 2AZ-FE:
Measure voltage according to the value(s) in the table below.

Standard:

Terminal No.	Condition	Specified Condition
A39-7 (TPM) – A39-1 (SG-TPM)	FACE	3.5 to 4.5 V
A39-7 (TPM) – A39-1 (SG-TPM)	DEF	0.5 to 1.5 V

HINT:

As the mode damper servo sub-assy 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 IN PROBLEM SYMPTOMS TABLE**

C

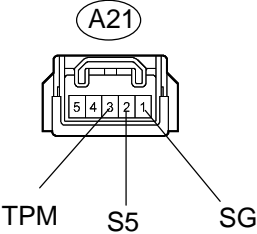
**CHECK AND REPLACE HEATER CONTROL
HOUSING SUB-ASSY**

A

2

INSPECT MODE DAMPER SERVO SUB-ASSY

Air Vent Mode Control Servo Motor
Connector Wire Harness View:



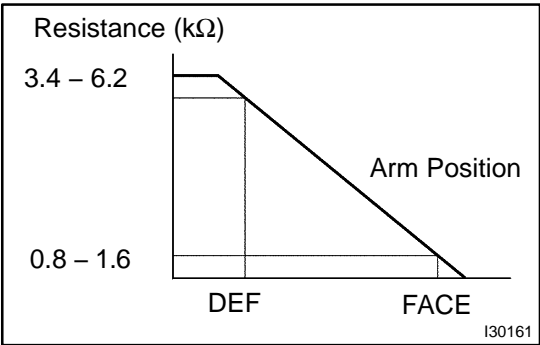
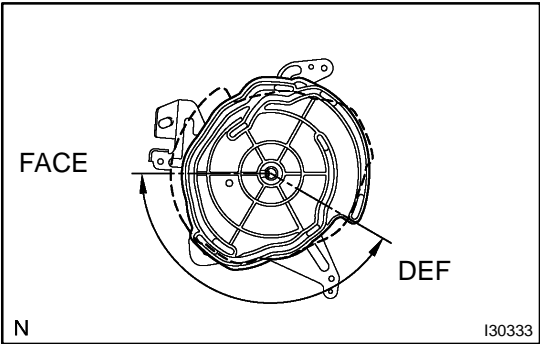
I30157

- (a) Remove the mode damper servo sub-assy.
- (b) Measure the resistance according to the value(s) in the table below.

Standard:

Terminal No.	Condition	Specified Condition
A21-1 (SG) – A21-2 (S5)	Always	4.2 to 7.8 kΩ
A21-1 (SG) – A21-3 (TPM)	DEF	3.4 to 6.2 kΩ
A21-1 (SG) – A21-3 (TPM)	FACE	0.8 to 1.6 kΩ

HINT:
As the mode damper servo sub-assy moved from DEF side to FACE side, the resistance decreases gradually without interruption.



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NG

REPLACE MODE DAMPER SERVO SUB-ASSY

OK

3

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

NG

REPAIR OR REPLACE HARNESS OR CONNECTOR

OK

CHECK AND REPLACE HEATER CONTROL HOUSING SUB-ASSY