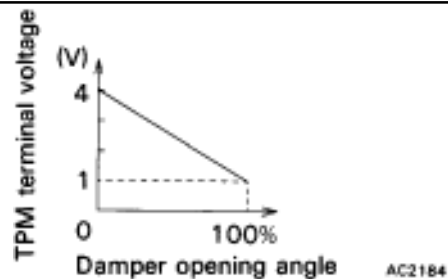


Diag. Code 33, 43 Air Outlet Damper Position Sensor Circuit

CIRCUIT DESCRIPTION

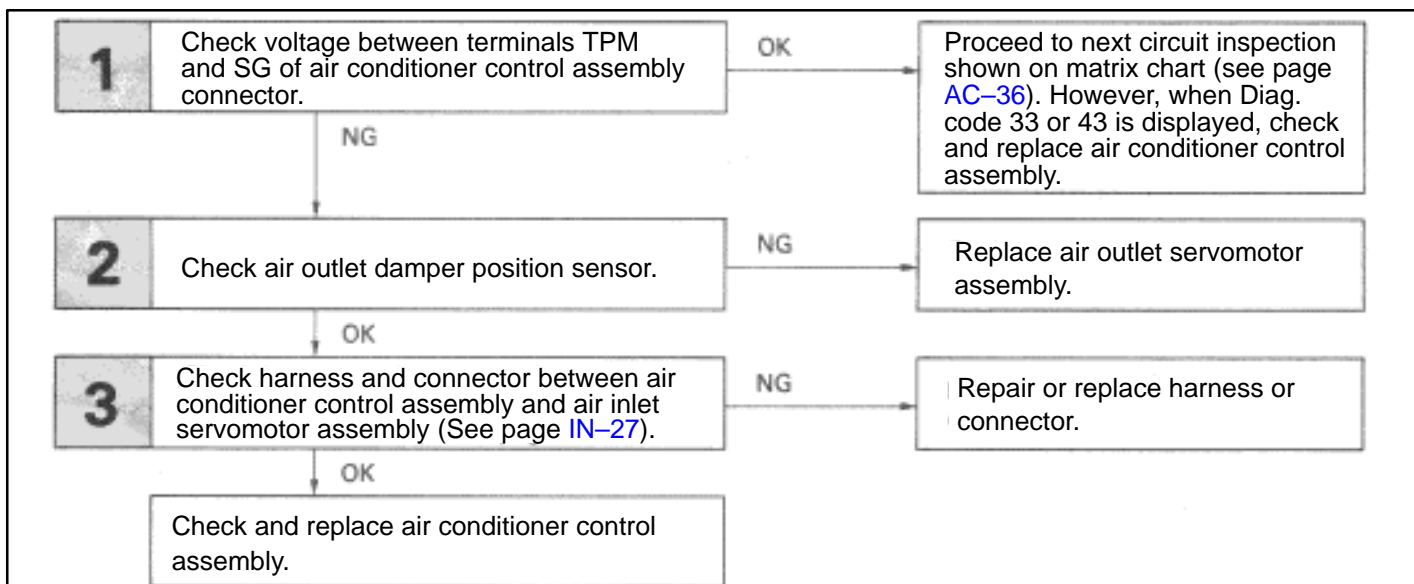
This sensor detects the position of the air outlet damper and sends the appropriate signals to the air conditioner control assembly.

The position sensor is built into the air outlet servomotor assembly.

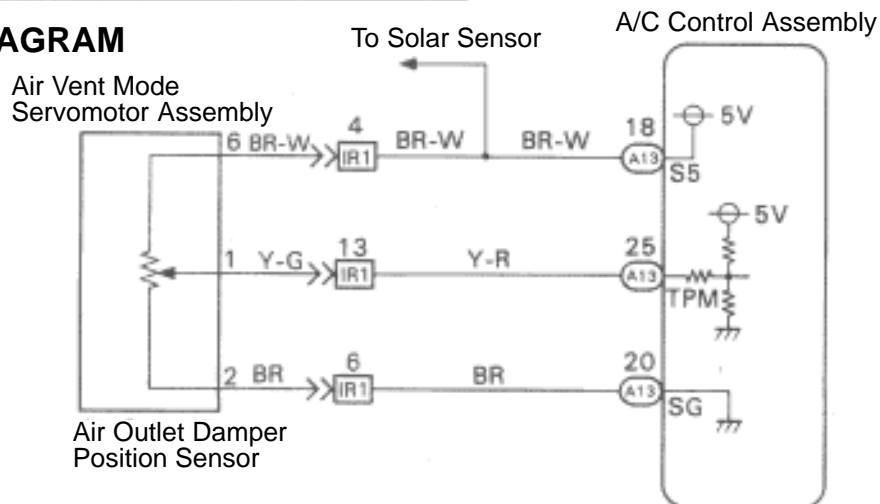


Code No.	Diag. Code Detecting Condition	Trouble area
33	• Short to ground or power source circuit in air outlet damper position sensor circuit.	<ul style="list-style-type: none"> • Air outlet damper position sensor. • Harness or connector between air outlet servomotor assembly and A/C control assembly • A/C control assembly
43	• Air outlet damper position sensor value does not change even if A/C control assembly operates air outlet servomotor.	

DIAGNOSTIC CHART



WIRING DIAGRAM

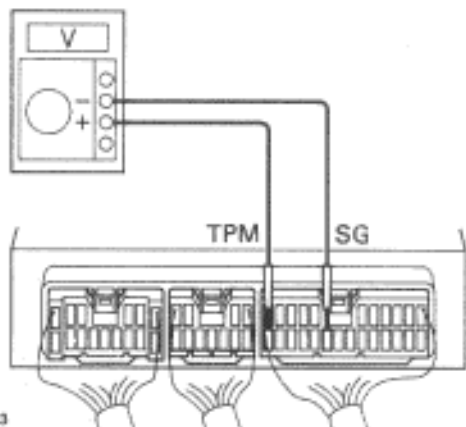


INSPECTION PROCEDURE

1

Check voltage between terminals TPM and SG of air conditioner control assembly connector.

ON
IG ON



NG

P

1. Remove console upper panel (See page [BO-111](#))
2. Remove A/C control assembly with connectors still connected.
3. Turn ignition switch ON.

OK

FRS-REC Switch	Voltage
FACE	3.70 ~ 4.27 V
DEF	0.88 ~ 1.16 V

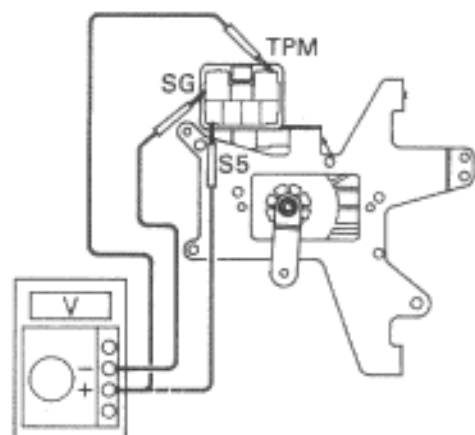
In addition, as the air inlet servomotor is moved from REC side to FRS side, the voltage decreases gradually without interruption.

OK

Proceed to next circuit inspection shown on matrix chart (see page [AC-36](#)). However, when Diag. code 33 or 43 is displayed, check and repair air conditioner control assembly.

2

Check air outlet damper position sensor.



OK

P

1. Remove heater unit. (See page [AC-127](#)).
2. Disconnect air outlet servomotor assembly connector.

C

Measure resistance between terminals S5 and SG of air outlet servomotor assembly connector.

OK

Resistance: 4.7 ~ 7.2 kΩ

C

While operating air outlet servomotor as in the procedure on page [AC-69](#), measure resistance between terminals TPI and SG of air outlet servomotor assembly connector.

OK

Resistance

Damper Position	Resistance
DEF	3.76 ~ 5.76 kΩ
FACE	0.94 ~ 1.44 kΩ

As the air outlet servomotor moves from DEF side to FACE side, the resistance decreases gradually without interruption.

NG

Replace air outlet servomotor assembly.

3

Check for open and short in harness and connector between air conditioner control assembly and air outlet servomotor assembly (see page [IN-27](#)).

OK

NG

Repair or replace harness or connector.

Check and replace air conditioner control assembly.