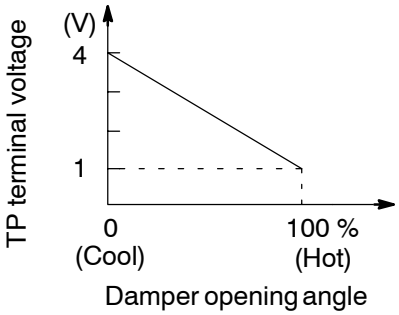
DI90X–01

DTC	RrACSW, REC	Rear Air Mix Damper Position Sensor Circuit

DTC	RrACSW, M 1	Rear Air Mix Damper Position Sensor Circuit

DTC	37, 47	Rear Air Mix Damper Position Sensor Circuit

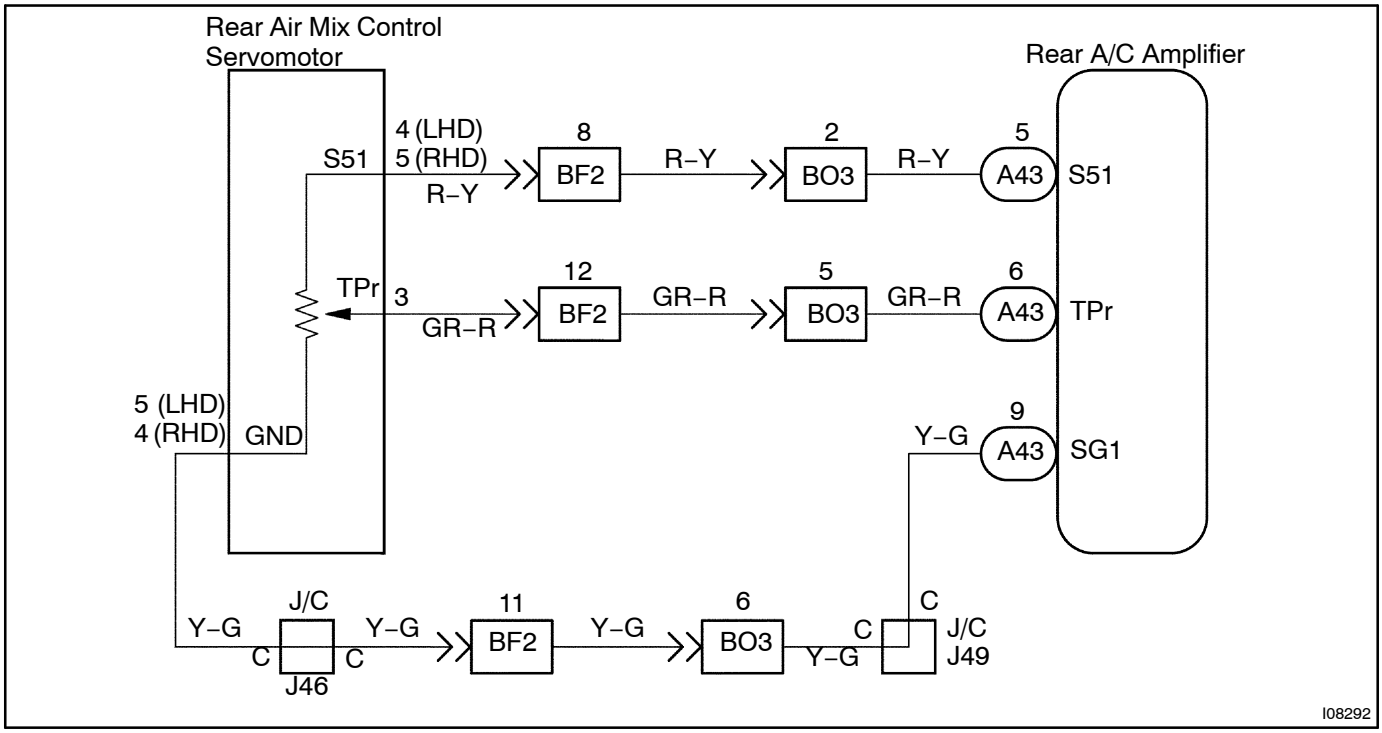
CIRCUIT DESCRIPTION



This sensor detects the position of the air mix damper and sends the appropriate signals to the rear A/C amplifier.
The position sensor is built into the rear air mix damper control servomotor assembly.

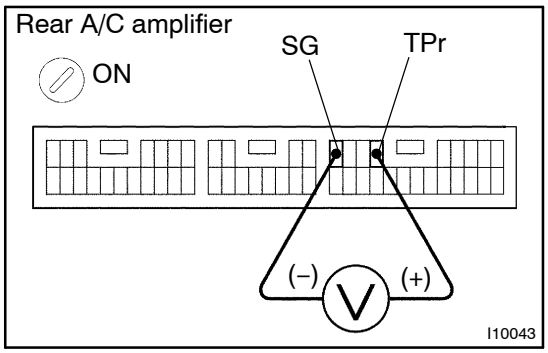
Blinking light	Detection Item	Trouble Area
RrACSW, REC	Short to ground or power source circuit in rear air mix damper position sensor circuit.	• Rear air mix damper position sensor. • Harness or connector between Rear air mix damper control servomotor assembly and A/C amplifier. • Rear A/C amplifier.
RrACSW, M1	Rear air mix damper position sensor value does not change even if A/C amplifier operates rear air mix damper control servomotor.	
DTC No.	Detection Item	Trouble Area
37	Short to ground or power source circuit in rear air mix damper position sensor circuit.	• Rear air mix damper position sensor. • Harness or connector between Rear air mix damper control servomotor assembly and A/C amplifier. • Rear A/C amplifier.
47	Rear air mix damper position sensor value does not change even if A/C amplifier operates rear air mix damper control servomotor.	

WIRING DIAGRAM



INSPECTION PROCEDURE

1	**Check voltage between terminals TPr and SG of rear A/C amplifier connector.**



PREPARATION:

Remove rear A/C amplifier with connectors still connected.

CHECK:

(a) Turn ignition switch to ON.

(b) Change the set temperature to activate the rear air mix damper control servomotor, and measure the voltage between terminals TPr and SG of rear A/C amplifier connector each time when the set temperature is changed.

OK:

Set Temperature	Voltage
Max. cool	3.5 – 4.5 V
Max. hot	0.5 – 1.5 V

HINT:

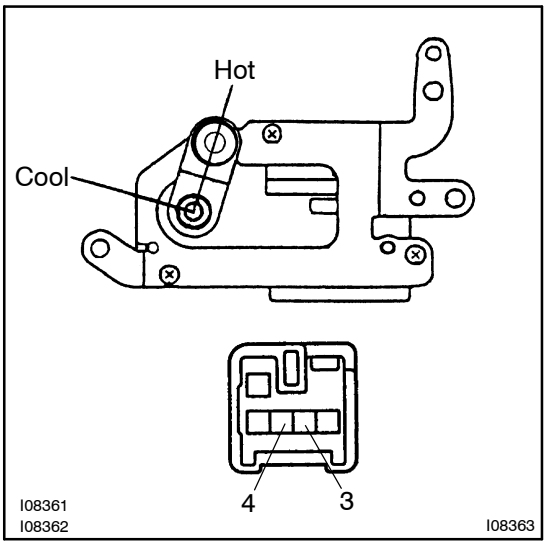
As the set temperature increases, the voltage decreases.

NG	**Go to step 2.**

Ok

Proceed to next circuit inspection shown on problem symptoms table (See page DI–130). However, if RrACSW and REC or M1 indicators light up (or DTC 37 or 47 is displayed), check and replace rear A/C amplifier.

2	**Check rear air mix damper position sensor.**



PREPARATION:
Remove rear air mix servomotor.
CHECK:
Measure resistance between terminals 3 and 4 of rear air mix damper control servomotor assembly connector.
OK:

Resistance : 4.2 – 7.8 kΩ

CHECK:
While operating rear air mix damper control servomotor, following the procedure, measure resistance between terminals 3 and 4 of rear air mix damper control servomotor assembly connector.
OK:

Position	Resistance
Max. cool	3.6 – 6.8 kΩ
Max. hot	0.5 – 1.1 kΩ

HINT:
As the rear air mix damper control servomotor moves from cool side to hot side, the resistance decreases.

NG → **Replace rear air mix damper control servomotor assembly.**

OK

3	**Check harness and connector between rear A/C amplifier and rear air mix damper control servomotor assembly (See page IN–34).**

NG → **Repair or replace harness or connector.**

OK

Check and replace A/C amplifier.