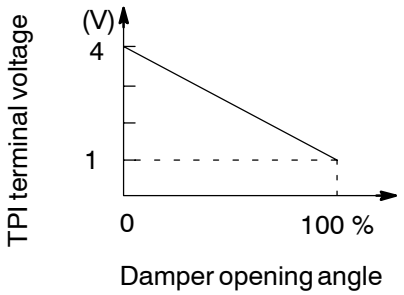
DIAR5–01

DTC	32, 42	Air Inlet Damper Position Sensor Circuit

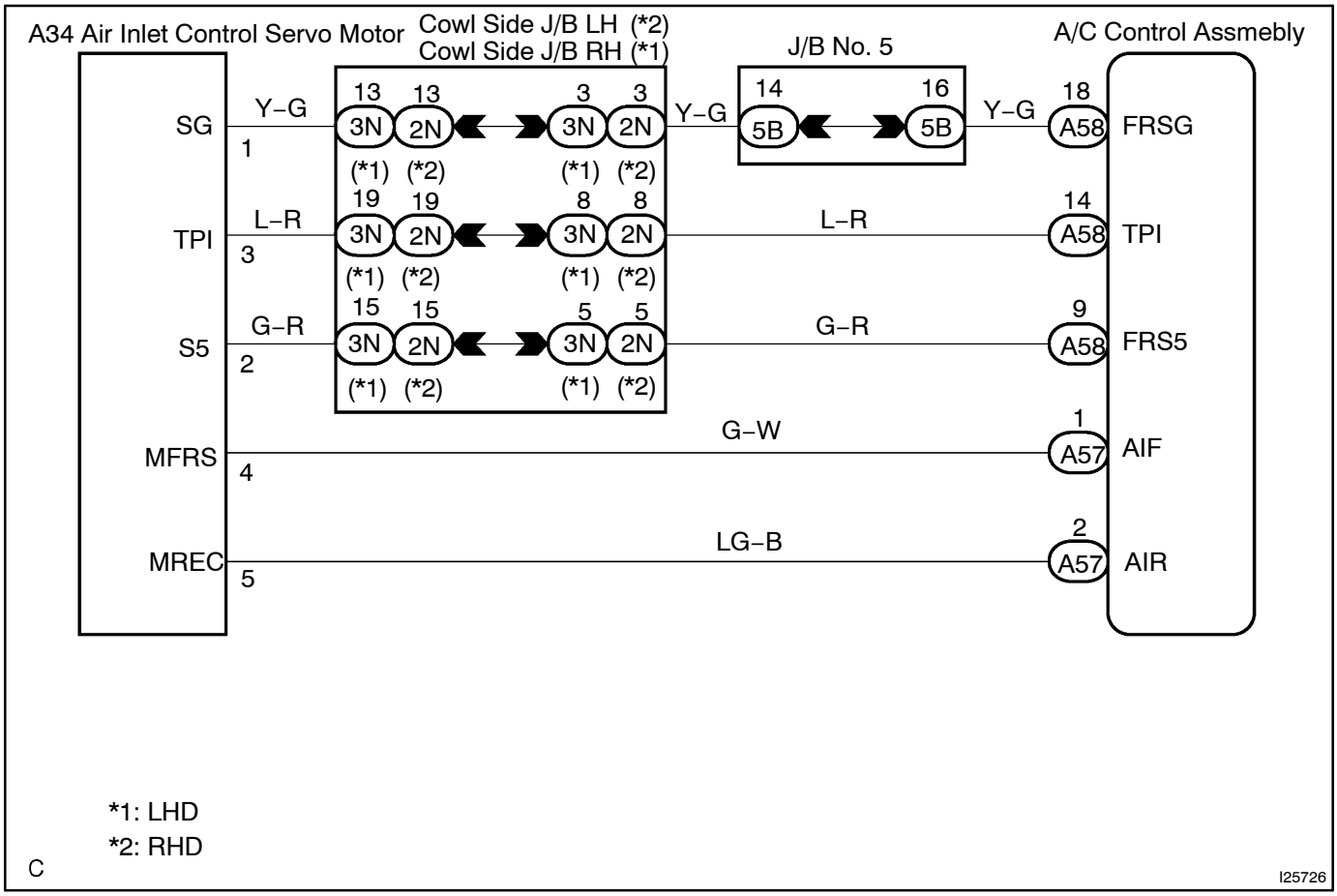
CIRCUIT DESCRIPTION



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

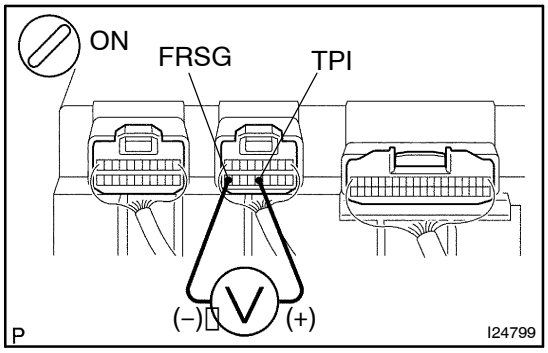
DTC No.	Detection Item	Trouble Area
32	Short to ground or to power source circuit in air inlet damper position sensor circuit	• Air inlet damper position sensor • Harness or connector between air inlet damper positoin sensor and A/C amplifier • A/C amplifier
42	Air inlet damper position sensor value does not change even if A/C amplifier operates air inlet damper control servomotor	

WIRING DIAGRAM



INSPECTION PROCEDURE

1	Check voltage between terminals TPI and FRSG of A/C amplifier connector.



PREPARATION:

Remove A/C amplifier with connectors still connected.

CHECK:

(a) Turn ignition switch to ON.

(b) Press REC/FRS switch to change air inlet between fresh and recirculation air, and measure voltage between terminals TPI and FRSG of A/C amplifier when the air inlet servomotor operates.

OK:

FRS–REC Switch	Voltage
REC	3.5 – 4.5 V
FRS	0.5 – 1.5 V

HINT:

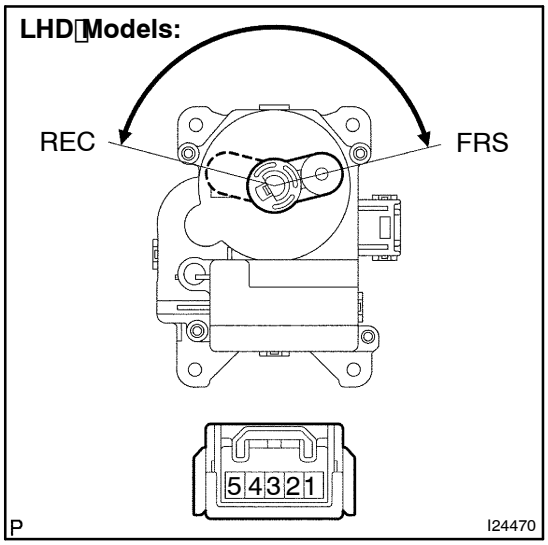
As the air inlet servomotor is moved form REC side to FRS side, the voltage decreases.

NG	Go to step 2.

OK

Proceed to next circuit inspection shown on problem symptoms table (See page DI–1238). However, if DTC 32 or 42 is displayed, check and replace A/C amplifier.

2	**Check air inlet damper position sensor.**



PREPARATION:

Remove air inlet servomotor.

CHECK:

Measure resistance between terminals 1 and 3 of air inlet damper control servomotor connector.

OK:

Resistance: 4.2 – 7.8 kΩ

CHECK:

While operating air inlet damper control servomotor, follow the procedure on page DI–1282 and measure resistance between terminals 1 and 3 of air inlet servomotor connector.

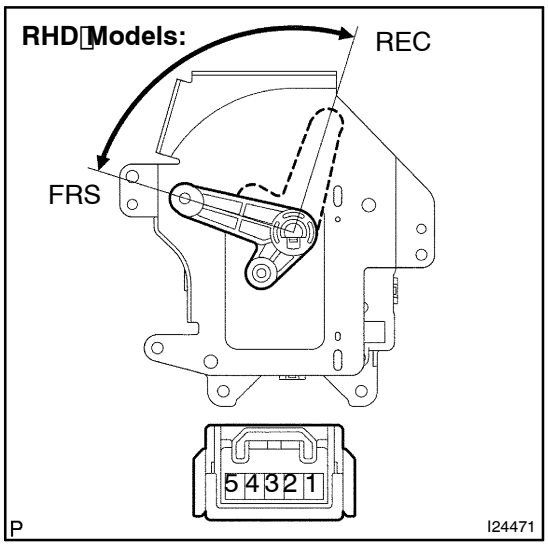
OK:

Resistance

Damper Position	Resistance
REC side	3.1 – 5.8 kΩ
FRS side	0.8 – 1.6 kΩ

HINT:

As the air inlet servomotor moves from REC side to FRS side, the resistance decreases.



NG → **Replace air inlet servomotor.**

OK

3	**Check harness and connectors between air inlet damper position sensor and A/C amplifier (See page IN–38).**

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

OK

Check and replace A/C amplifier.