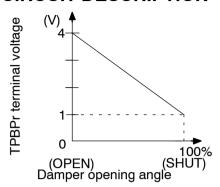
DTC B1435 MAX COOL DAMPER POSITION SENSOR CIRCUIT (PASSENGER SIDE)

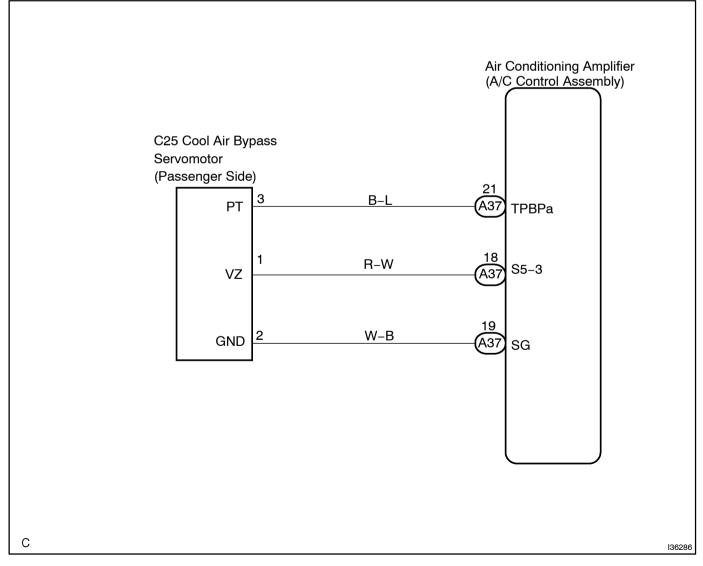
CIRCUIT DESCRIPTION



This sensor detects the position of the cool air bypass servomotor (Max cool damper servomotor) and sends the appropriate signals to the A/C amplifier. The position sensor is built in the cool air bypass servomotor.

DTC No.	Detection Item	Trouble Area
B1435	Max cool bypass damper position sensor circuit (Passenger side) (Open or short)	Cool air bypass servomotor (Max cool damper servomotor) Harness or connector between cool air bypass servomotor (Max cool damper servomotor) and A/C amplifier A/C amplifier

WIRING DIAGRAM



INSPECTION PROCEDURE

1 READ VALUE ON HAND-HELD TESTER

- (a) Connect the hand-held tester to the DLC3.
- (b) Turn the ignition switch to the ON position and push the hand-held tester main switch on.
- (c) Select the item below in the DATA LIST, and read the display on the hand-held tester.

DATA LIST / AIR CONDITIONER:

Item	Measure Item/Display (Range)	Normal Condition	Diagnostic Note
A/B DAMP POS-P	Cool air bypass damper position (Passenger side) / min.: –14% max.: 113.5%	OPEN: Approx. 0 % SHUT: Approx. 100%	-

OK:

The display is as specified in the normal condition.

Result:

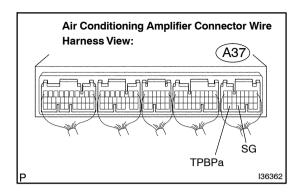
NG	A
OK (Checking from the PROBLEM SYMPTOM TABLE)	В
OK (Checking from the DTC)	С

B PROCEED TO NEXT CIRCUIT INSPECTION SHOWN IN PROBLEM SYMPTOMS TABLE (SEE PAGE 05–885)

C REPLACE AIR CONDITIONING AMPLIFIER (SEE PAGE 55–16)

_ A

2 INSPECT AIR CONDITIONING AMPLIFIER(TPBPa – SG (SG-7))



- (a) Remove the A/C amplifier with connectors still connected.
- (b) Turn the ignition switch to the ON position.
- (c) Change the set temperature to activate the cool air bypass servomotor.
- (d) Measure the voltage according to the value(s) in the table below.

Standard:

Tester connection	Condition	Specified condition
A37-21 (TPBPa) - A38-19 (SG)	MAX. Hot	0.5 to 1.8 V
A37-21 (TPBPa) - A38-19 (SG)	MAX. Cool	3.5 to 4.5 V

HINT:

As the set temperature increases, the voltage decreases gradually without interruption.

Result:

NG	Α
OK (Checking from the PROBLEM SYMPTOMS TABLE)	В
OK (Checking from the DTC)	С



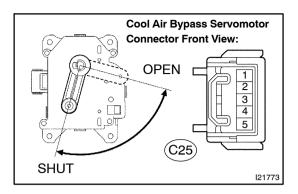
PROCEED TO NEXT CIRCUIT INSPECTION SHOWN IN PROBLEM SYMPTOMS TABLE (SEE PAGE 05-885)



REPLACE AIR CONDITIONING AMPLIFIER (SEE PAGE 55-16)

Α

3 INSPECT COOL AIR BYPASS SERVOMOTOR



- (a) Remove the cool air bypass servomotor.
- (b) Measure the resistance according to the value(s) in the table below.

Standard:

Tester connection	Condition	Specified condition
C25-1 (VZ) - C25-2 (GND)	Always	4.2 to 7.2 kΩ

(c) Measure the resistance according to the value(s) in the table below.

HINT:

See page 05–964 for operation procedure for cool air bypass servomotor.

Standard:

Tester connection	Condition	Specified condition
C25-3 (PT) - C25-2 (GND)	Max. Cool	3.33 to 4.03 kΩ
C25-3 (PT) - C25-2 (GND)	Max. Hot	0.80 to 1.60 kΩ

HINT:

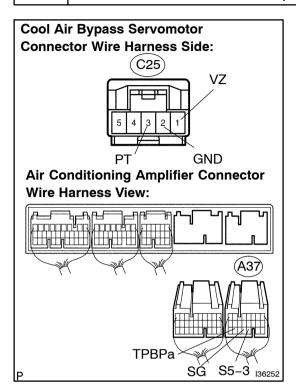
As the cool air bypass servomotor moves from the cool side to the hot side, the resistance decreases gradually without interruption.



REPLACE COOL AIR BYPASS SERVOMOTOR

OK

CHECK HARNESS AND CONNECTOR(COOL AIR BYPASS SERVOMOTOR – AIR CONDITIONING AMPLIFIER) (SEE PAGE 01-42)



(a) Measure the resistance according to the value(s) in the table below.

Standard:

Tester connection	Condition	Specified condition
A37-21 (TPBPa) - C25-3 (PT)	Always	Below 1 Ω
A37-18 (S5-3) - C25-1 (VZ)	Always	Below 1 Ω
A37-19 (SG) - C25-2 (GND)	Always	Below 1 Ω
C25–3 (PT) – Body ground	Always	10 kΩ or higher
C25-1 (VZ) - Body ground	Always	10 kΩ or higher
C25–2 (GND) – Body ground	Always	10 kΩ or higher

NG	REPAIR	OR	REPLACE	HARNESS	OR
	CONNECTOR				

ОК

REPLACE AIR CONDITIONING AMPLIFIER (SEE PAGE 55-16)