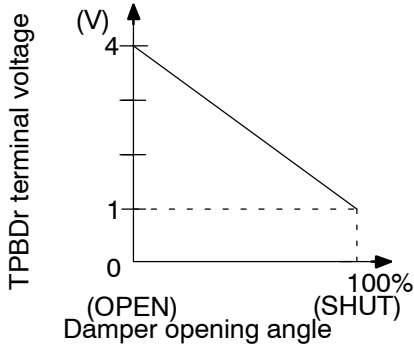


DTC	B1434	MAX COOL DAMPER POSITION SENSOR CIRCUIT (DRIVER SIDE)
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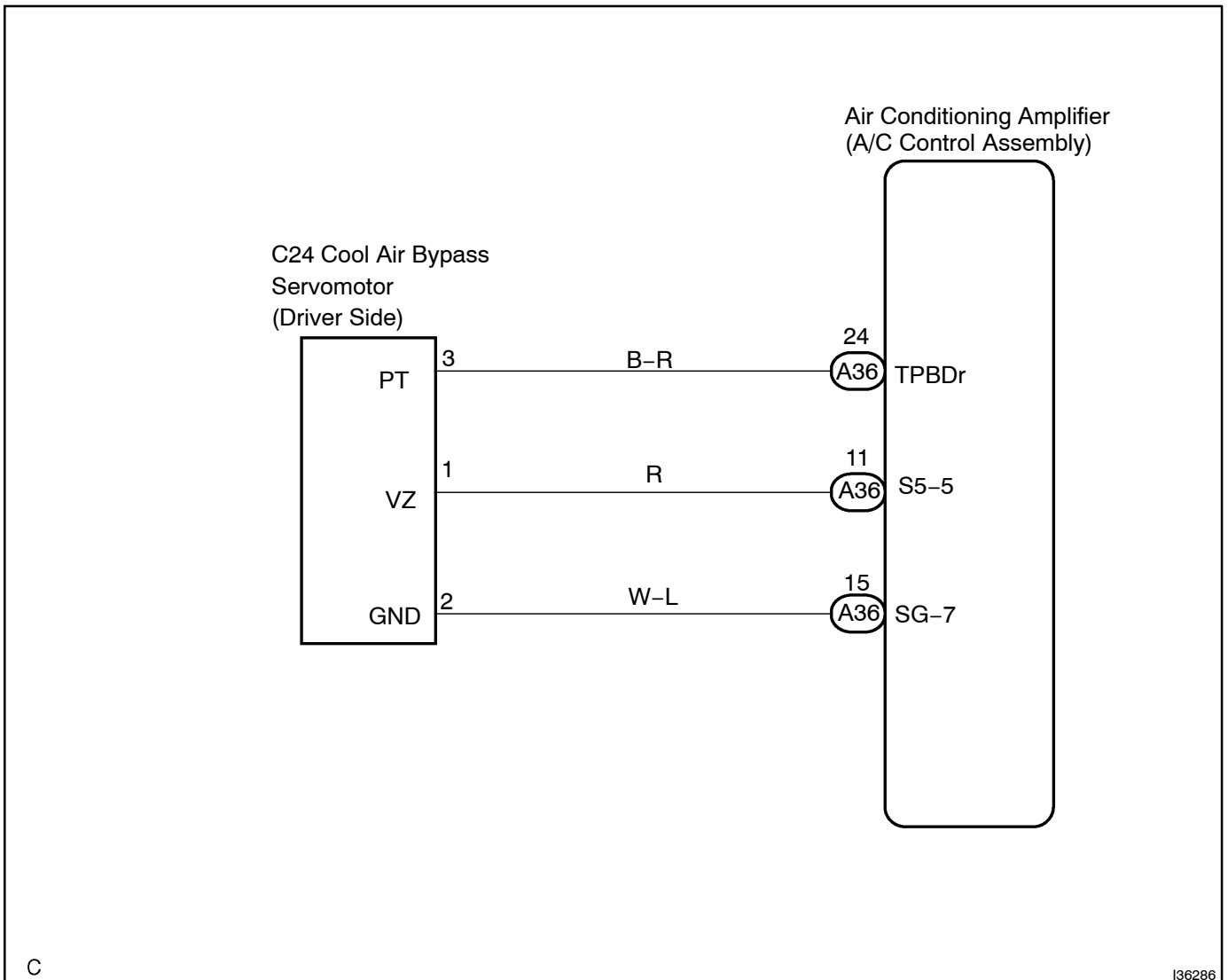
CIRCUIT DESCRIPTION



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
B1434	Max cool bypass damper position sensor circuit (Driver side) (Open or short)	<ul style="list-style-type: none"> • 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-D	Cool air bypass damper position (Driver side) / min.: -14% max.: 113.5%	OPEN: Approx. 0 % SHUT: Approx. 100%	-

OK:

The display is as specified in the normal condition.

Result:

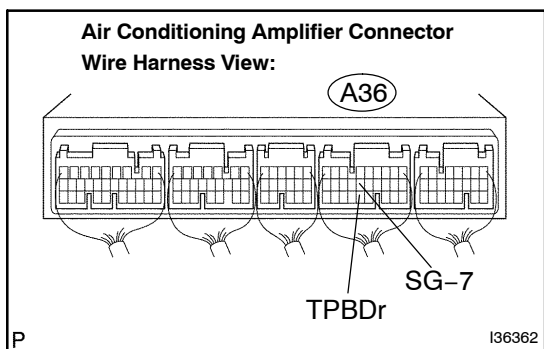
NG	A
OK (Checking from the PROBLEM SYMPTOM TABLE)	B
OK (Checking from the DTC)	C

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(TPBDr - 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
A36-24 (TPBDr) - A36-15 (SG-7)	MAX. Hot	0.5 to 1.8 V
A36-24 (TPBDr) - A36-15 (SG-7)	MAX. Cool	3.5 to 4.5 V

HINT:

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

Result:

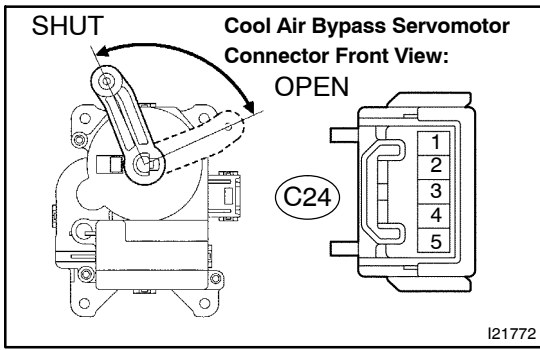
NG	A
OK (Checking from the PROBLEM SYMPTOMS TABLE)	B
OK (Checking from the DTC)	C

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

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
C24-1 (VZ) - C24-2 (GND)	Always	4.2 to 7.2 kΩ

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

HINT:

See page 05-961 for operation procedure for the cool air bypass servomotor.

Standard:

Tester connection	Condition	Specified condition
C24-3 (PT) - C24-2 (GND)	Max. Cool	3.33 to 4.03 kΩ
C24-3 (PT) - C24-2 (GND)	Max. Hot	0.80 to 1.60 kΩ

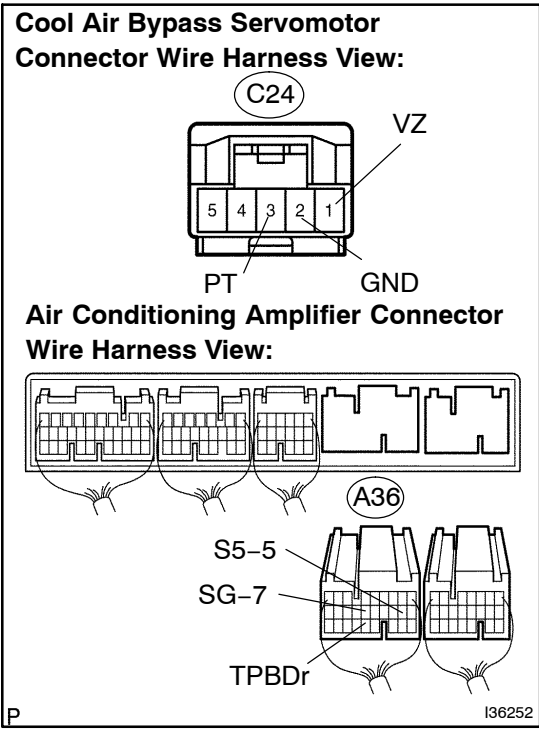
HINT:

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

NG → **REPLACE COOL AIR BYPASS SERVOMOTOR**

OK

4 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
A36-24 (TPBDr) - C24-3 (PT)	Always	Below 1 Ω
A36-11 (S5-5) - C24-1 (VZ)	Always	Below 1 Ω
A36-15 (SG-7) - C24-2 (GND)	Always	Below 1 Ω
C24-3 (PT) - Body ground	Always	10 kΩ or higher
C24-1 (VZ) - Body ground	Always	10 kΩ or higher
C24-2 (GND) - Body ground	Always	10 kΩ or higher

NG REPAIR OR REPLACE HARNESS OR CONNECTOR

OK

REPLACE AIR CONDITIONING AMPLIFIER (SEE PAGE 55-16)