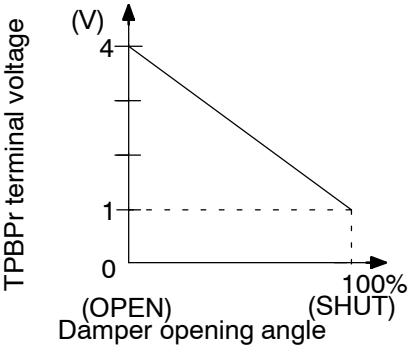


DTC	B1435	MAX COOL DAMPER POSITION SENSOR CIRCUIT (PASSENGER SIDE)
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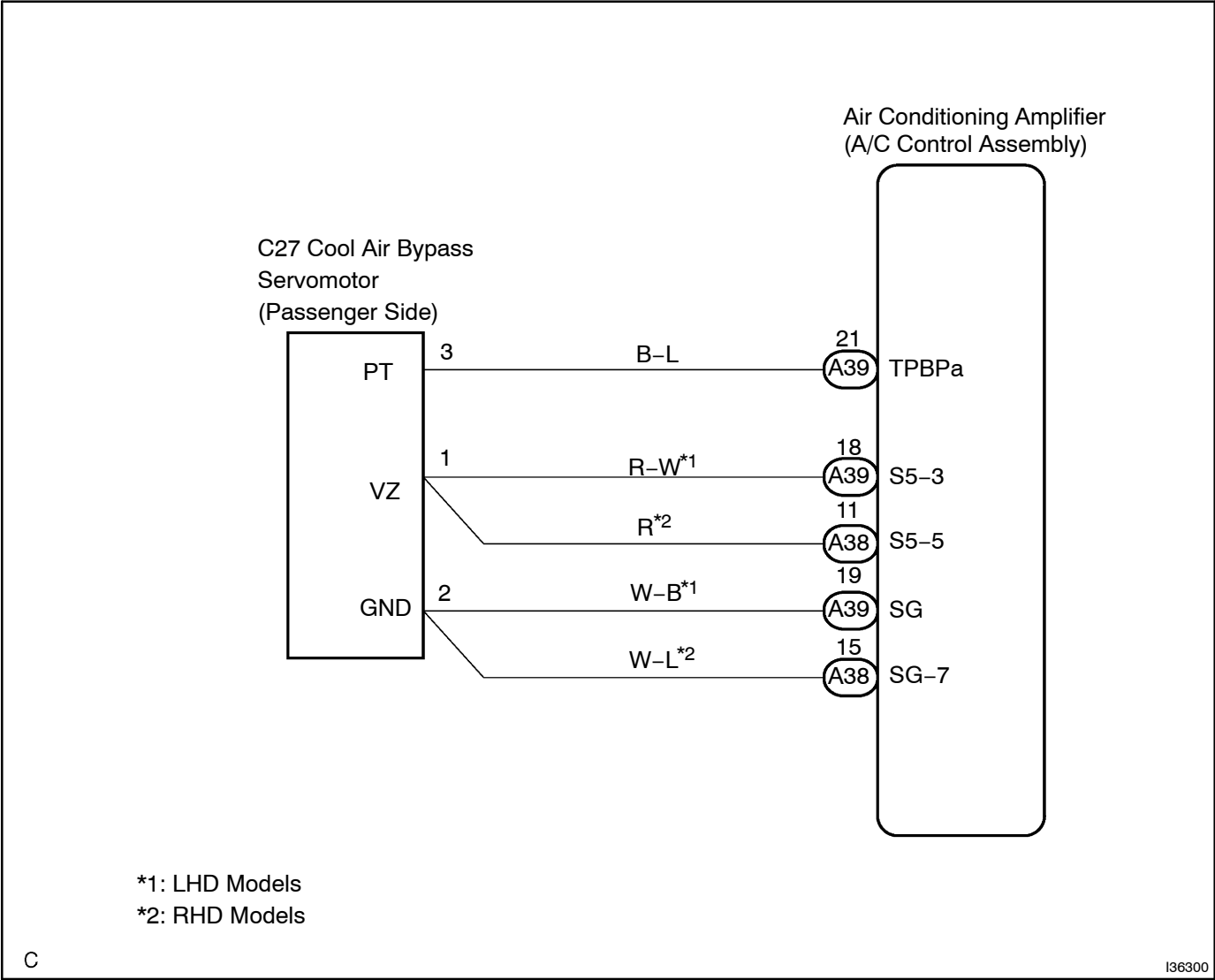
CIRCUIT DESCRIPTION



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
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 INTELLIGENT TESTER II

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

DATA LIST / AIR CONDITIONER:

Item	Measure Item/Display (Range)	Normal Condition	Diagnostic Note
Cool air bypass damper position (P side) (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)	B
OK (Checking from the DTC)	C

B

**PROCEED TO NEXT CIRCUIT INSPECTION
SHOWN IN PROBLEM SYMPTOMS TABLE
(SEE PAGE 05-778)**

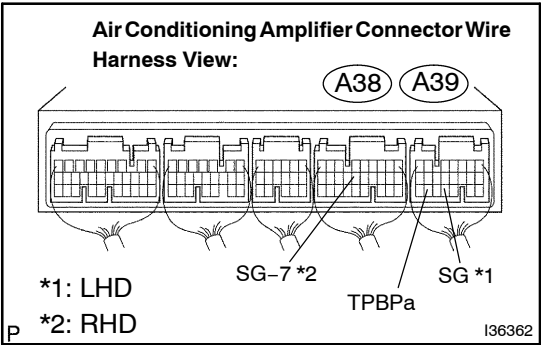
C

**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 by-pass servomotor.
- (d) Measure the voltage according to the value(s) in the table below.

Standard:

Tester connection	Condition	Specified condition
A39-21 (TPBP a) – A38-19 (SG) *1	MAX. Hot	0.5 to 1.8 V
A39-21 (TPBP a) – A38-19 (SG) *1	MAX. Cool	3.5 to 4.5 V
A39-21 (TPBP a) – A38-15 (SG-7) *2	MAX. Hot	0.5 to 1.8 V
A39-21 (TPBP a) – A38-15 (SG-7) *2	MAX. Cool	3.5 to 4.5 V

HINT:

- *1: LHD
- *2: RHD
- 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

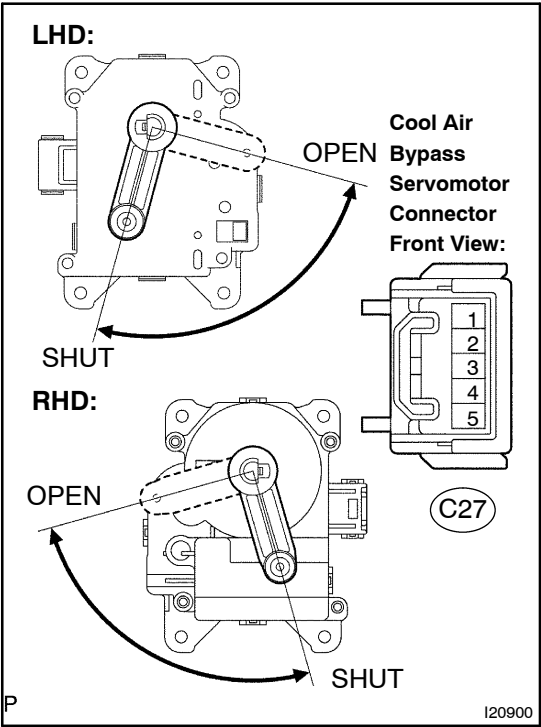
PROCEED TO NEXT CIRCUIT INSPECTION
SHOWN IN PROBLEM SYMPTOMS TABLE
(SEE PAGE 05-778)

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
C27-1 (VZ) - C27-2 (GND)	Always	4.2 to 7.2 kΩ

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

HINT:

See page 05-878 for operation procedure for cool air bypass servomotor.

Standard:

Tester connection	Condition	Specified condition
C27-3 (PT) - C27-2 (GND)	Max. Cool	3.33 to 4.03 kΩ
C27-3 (PT) - C27-2 (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.

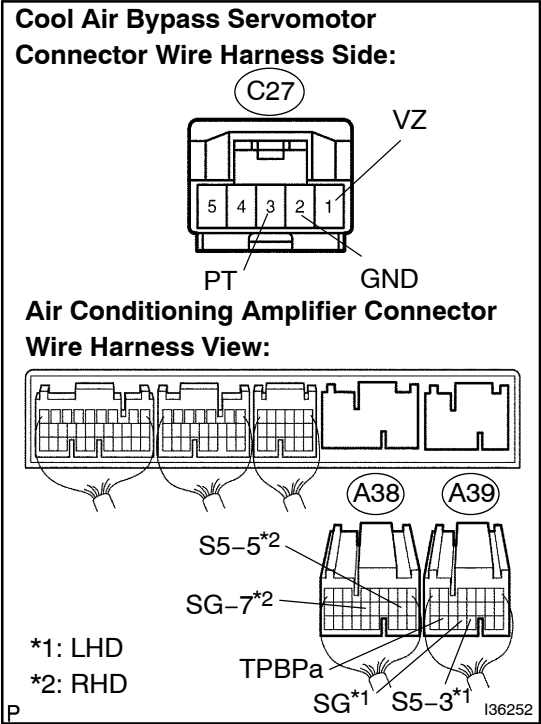
NG

REPLACE COOL AIR BYPASS SERVOMOTOR

OK

4

CHECK HARNESS AND CONNECTOR(COOL AIR BYPASS SERVOMOTOR - AIR CONDITIONING AMPLIFIER) (SEE PAGE 01-44)



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

Standard:

Tester connection	Condition	Specified condition
A39-21 (TPBP a) - C27-3 (PT)	Always	Below 1 Ω
A39-18 (S5-3) - C27-1 (VZ) *1	Always	Below 1 Ω
A38-11 (S5-5) - C27-1 (VZ) *2	Always	Below 1 Ω
A39-19 (SG) - C27-2 (GND) *1	Always	Below 1 Ω
A38-15 (SG-7) - C27-2 (GND) *2	Always	Below 1 Ω
C27-3 (PT) - Body ground	Always	10 kΩ or higher
C27-1 (VZ) - Body ground	Always	10 kΩ or higher
C27-2 (GND) - Body ground	Always	10 kΩ or higher

HINT:

*1: LHD

*2: RHD

NG

REPAIR OR REPLACE HARNESS OR CONNECTOR

OK

REPLACE AIR CONDITIONING AMPLIFIER (SEE PAGE 55-16)