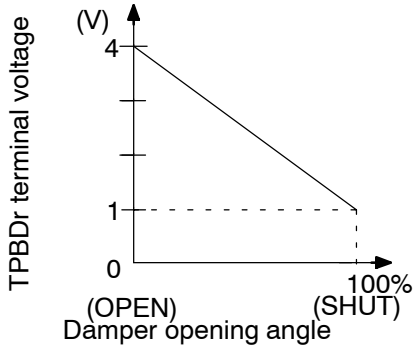
DTC	B1434	MAX COOL DAMPER POSITION SENSOR CIRCUIT (DRIVER SIDE)

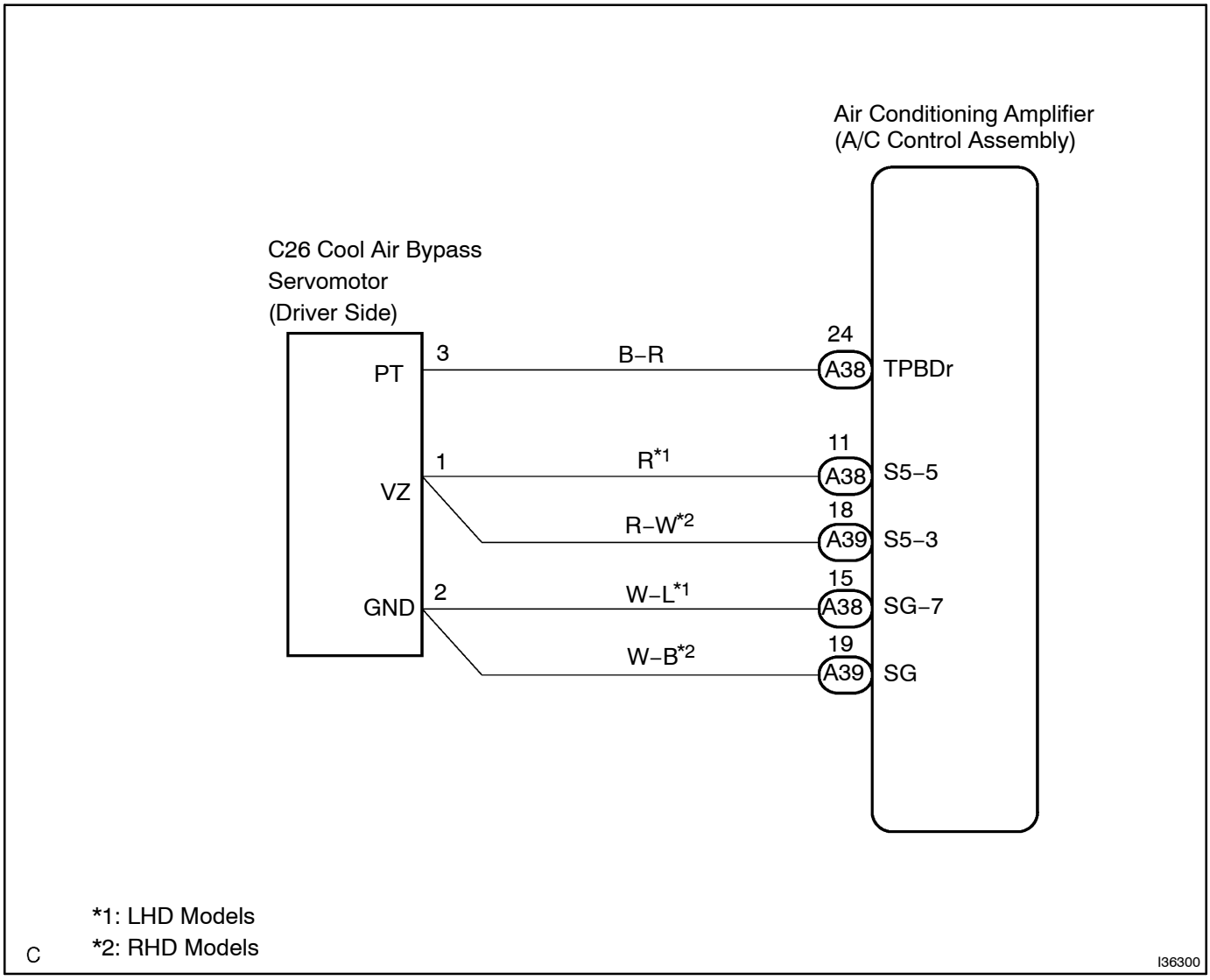
CIRCUIT DESCRIPTION



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
B1434	Max cool bypass damper position sensor circuit (Driver 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 (D side) (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:

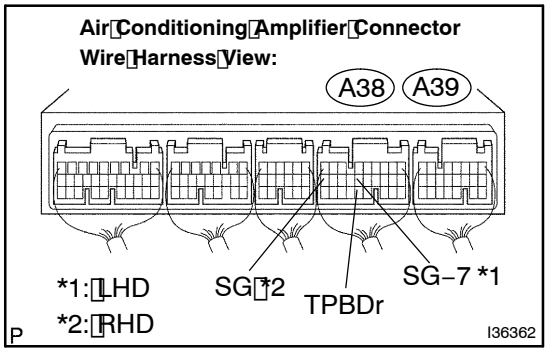
NG	A
OK (Checking from the PROBLEM SYMPTOM TABLE)	B
OK (Checking from the DTC)	C

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

C → **REPLACE AIR CONDITIONING AMPLIFIER (SEE PAGE 55–15)**

A

2 INSPECT AIR CONDITIONING AMPLIFIER(TPBDr – SG–7 (SG))



(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
A38–24 (TPBDr) – A38–15 (SG–7) *1	MAX. Hot	0.5 to 1.8 V
A38–24 (TPBDr) – A38–15 (SG–7) *1	MAX. Cool	3.5 to 4.5 V
A38–24 (TPBDr) – A39–19 (SG) *2	MAX. Hot	0.5 to 1.8 V
A38–24 (TPBDr) – A39–19 (SG) *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:

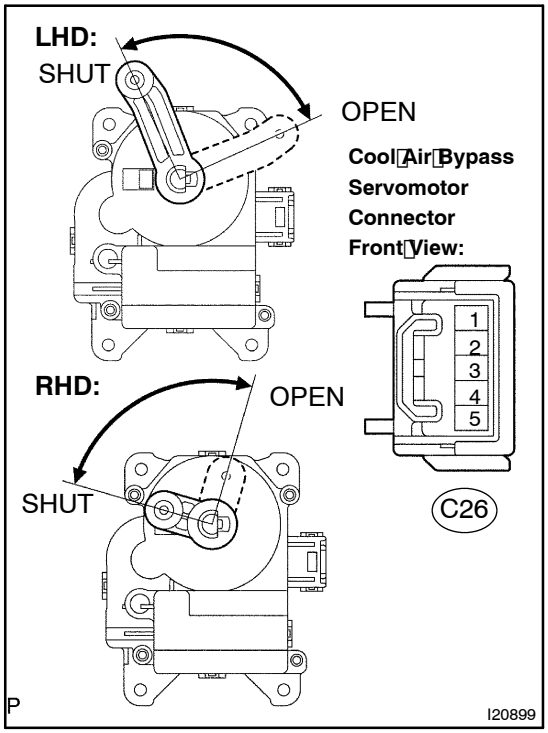
NG	A
OK (Checking from the PROBLEM SYMPTOMS TABLE)	B
OK (Checking from the DTC)	C

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
C26–1 (VZ) – C26–2 (GND)	Always	4.2 to 7.2 kΩ

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

HINT:

See page 05–874 for operation procedure for the cool air bypass servomotor.

Standard:

Tester connection	Condition	Specified condition
C26–3 (PT) – C26–2 (GND)	Max. Cool	3.33 to 4.03 kΩ
C26–3 (PT) – C26–2 (GND)	Max. Hot	0.80 to 1.60 kΩ

HINT:

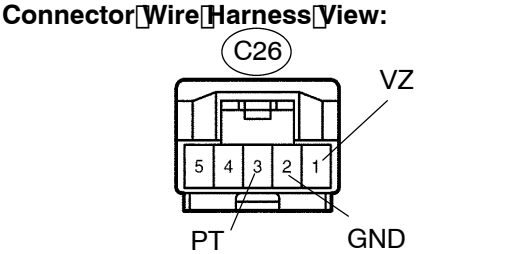
- As the cool air bypass servomotor moves from the cool side to the hot side, the resistance decreases gradually without interruption.

NG → **REPLACE COOL AIR BYPASS SERVOMOTOR**

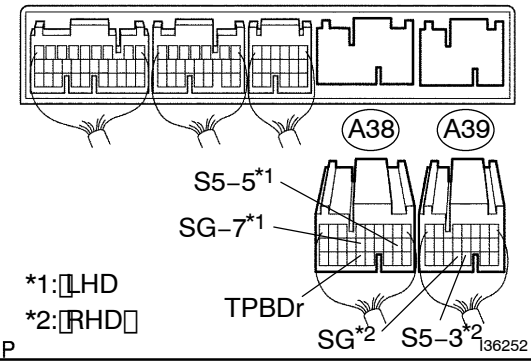
OK

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

Cool Air Bypass Servomotor Connector Wire Harness View:



Air Conditioning Amplifier Connector Wire Harness View:



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

Standard:

Tester connection	Condition	Specified condition
A38–24 (TPBDr) – C26–3 (PT)	Always	Below 1 Ω
A38–11 (S5–5) – C26–1 (VZ) *1	Always	Below 1 Ω
A39–18 (S5–3) – C26–1 (VZ) *2	Always	Below 1 Ω
A38–15 (SG–7) – C26–2 (GND) *1	Always	Below 1 Ω
A39–19 (SG) – C26–2 (GND) *2	Always	Below 1 Ω
C26–3 (PT) – Body ground	Always	10 kΩ or higher
C26–1 (VZ) – Body ground	Always	10 kΩ or higher
C26–2 (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)