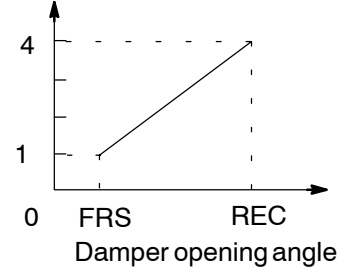


DTC	B1432	AIR INLET DAMPER POSITION SENSOR CIRCUIT
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CIRCUIT DESCRIPTION

LHD Models:

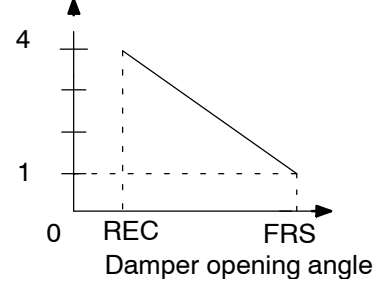
TPI terminal voltage (V)



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

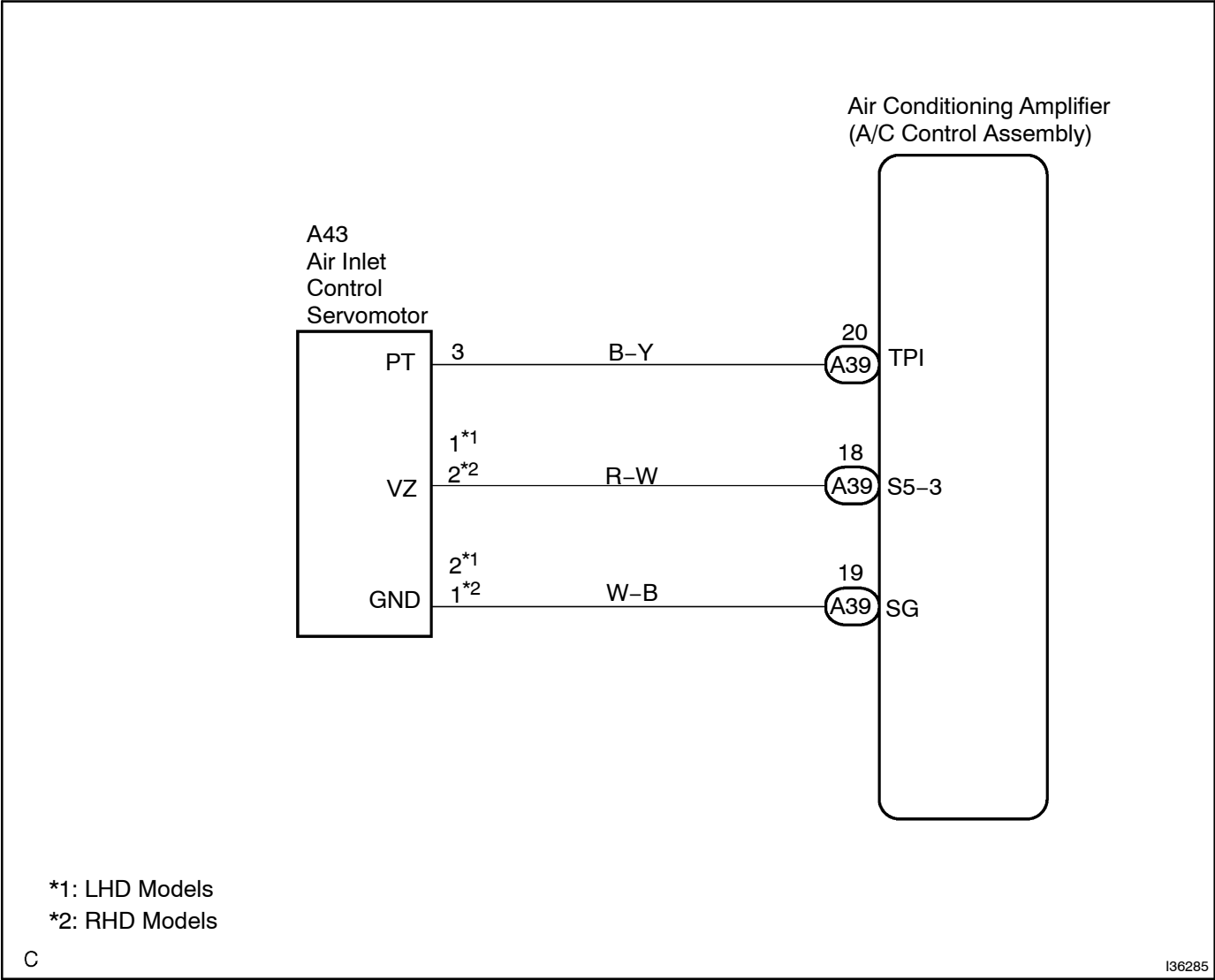
RHD Models:

TPI terminal voltage (V)



DTC No.	Detection Item	Trouble Area
B1432	Air inlet damper position sensor circuit (Open or short)	• Air inlet servomotor • Harness or connector between air inlet servomotor and A/C amplifier • A/C amplifier

WIRING DIAGRAM



INSPECTION PROCEDURE

1 READ VALUE ON INTELLIGENT TESTER

- (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 items below in the DATA LIST, and read the displays on the Intelligent Tester II.

DATA LIST / AIR CONDITIONER:

Item	Measure Item/Display (Range)	Normal Condition	Diagnostic Note
Air Inlet Damper position (A/I Damp Pos)	Air Inlet Damper position min.: -14% max.: 113.5%	RECIRCULATION: Approx. 0% FRESH: Approx. 100%	-
Air Inlet Damper Target position (A/I Damp Targ)	Air Inlet Damper Target min.: -14% max.: 113.5%	RECIRCULATION: Approx. 0% FRESH: Approx. 100% HARF-RECIRCULATION: 43 to 99.5%	-

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

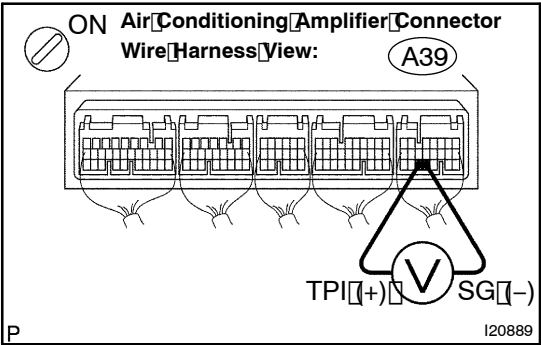
**PROCEED TO NEXT CIRCUIT INSPECTION
SHOWN IN PROBLEM SYMPTOMS TABLE
(SEE PAGE 05-778)**

C

**REPLACE AIR CONDITIONING AMPLIFIER
(SEE PAGE 55-16)**

A

2 INSPECT AIR CONDITIONING AMPLIFIER (TPI - SG)



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

Standard:

Tester Connection	Condition	Specified Condition
A39-20 (TPI) - A39-19 (SG)	RECIRC	3.5 to 4.5 V
A39-20 (TPI) - A39-19 (SG)	FRESH	0.5 to 1.5 V

HINT:

LHD:

As the air inlet servomotor moves from the RECIRC side to the FRESH side, the voltage decreases gradually without interruption.

RHD:

As the air inlet servomotor moves from the RECIRC side to the FRESH side, the voltage increase gradually without interruption.

Result:

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

B

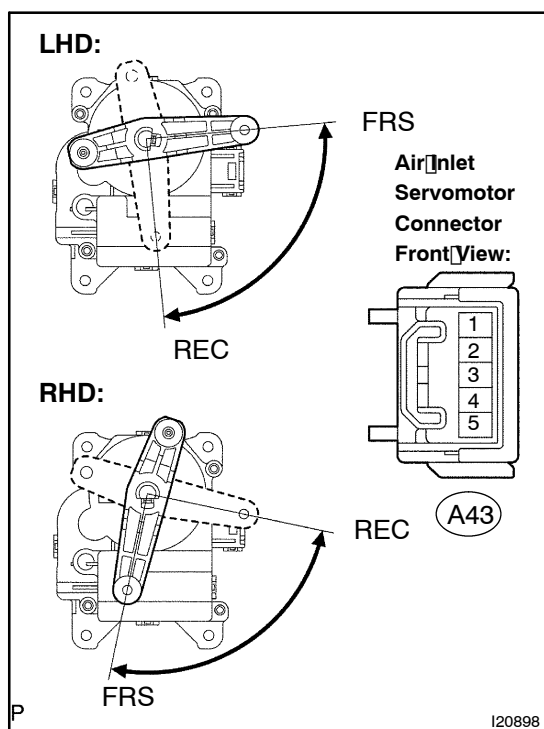
PROCEED TO NEXT CIRCUIT INSPECTION SHOWN IN PROBLEM SYMPTOMS TABLE (SEE PAGE 05-778)

C

REPLACE AIR CONDITIONING AMPLIFIER (SEE PAGE 55-16)

A

3 INSPECT AIR INLET SERVOMOTOR



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

Standard:

Tester Connection	Condition	Specified Condition
A43-1(VZ) - A43-2(GND) 1	Always	4.2 to 7.8 kΩ
A43-2(VZ) - A43-1(GND) 2	Always	4.2 to 7.8 kΩ

HINT:

- *1: LHD
- *2: RHD

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

HINT:

See page 05-863 for operation procedure for the air inlet servomotor.

Standard:

Tester Connection	Condition	Specified Condition
A43-3(PT) - A43-2(GND) 1	RECIRCULATION	3.4 to 6.2 kΩ
A43-3(PT) - A43-2(GND) 1	FRESH	0.8 to 1.6 kΩ
A43-3(PT) - A43-1(GND) 2	RECIRCULATION	3.4 to 6.2 kΩ
A43-3(PT) - A43-1(GND) 2	FRESH	0.8 to 1.6 kΩ

HINT:

- *1: LHD
- *2: RHD
- LHD:

As the air inlet servomotor moves from fresh to recirculation, the resistance decreases gradually without interruption.

- RHD:

As the air inlet servomotor moves from fresh to recirculation, the resistance increase gradually without interruption.

- See page 05-863 for operation procedure for the air inlet servomotor.

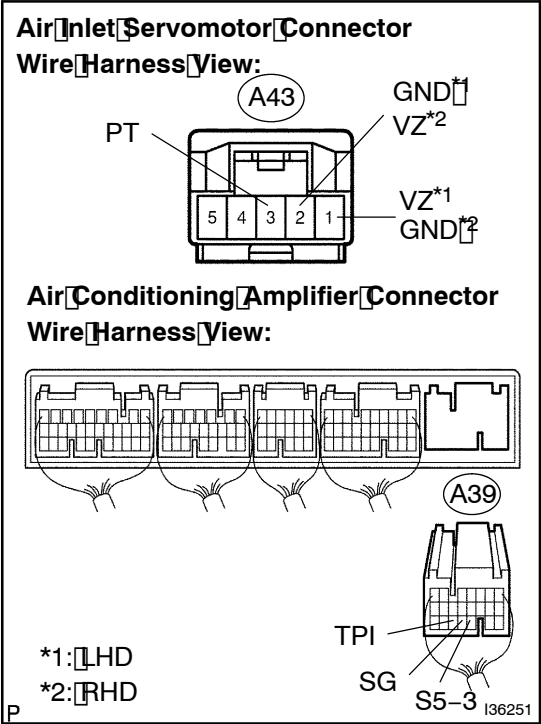
NG

REPLACE AIR INLET SERVOMOTOR

OK

4

CHECK HARNESS AND CONNECTOR (AIR INLET 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
A39-20 (TPI) - A43-3 (PT)	Always	Below 1 Ω
A39-18 (S5-3) - A43-1 (VZ) *1	Always	Below 1 Ω
A39-18 (S5-3) - A43-2 (VZ) *2	Always	Below 1 Ω
A39-19 (SG) - A43-2 (GND) *1	Always	Below 1 Ω
A39-19 (SG) - A43-1 (GND) *2	Always	Below 1 Ω
A39-20 (TPI) - Body Ground	Always	10 kΩ or higher
A39-18 (S5-3) - Body Ground	Always	10 kΩ or higher
A39-19 (SG) - 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)