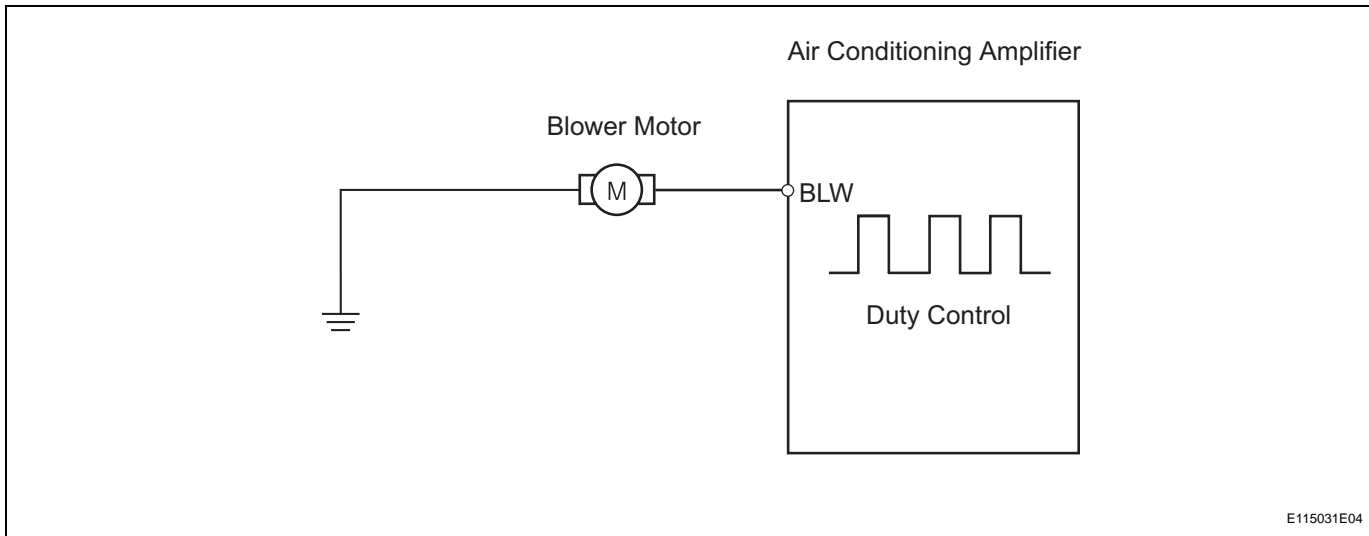


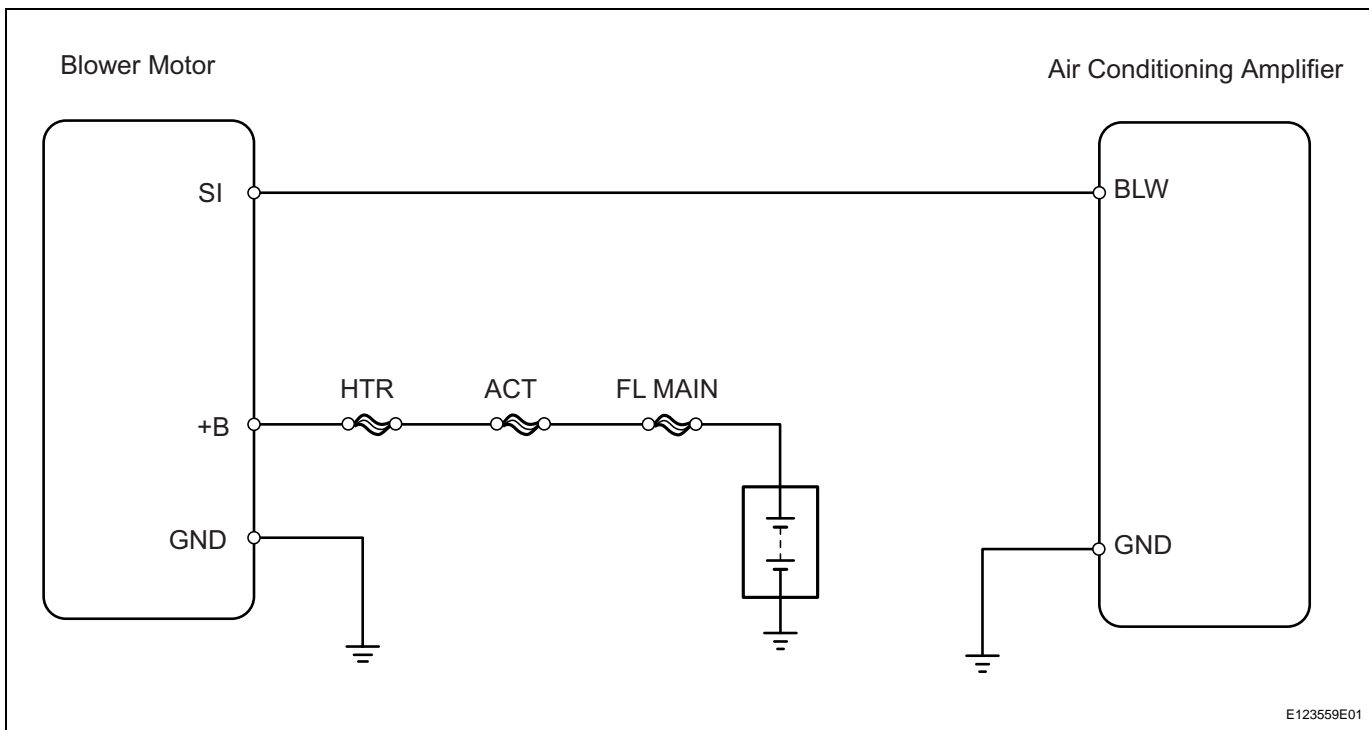
Blower Motor Circuit

DESCRIPTION

The blower motor is operated by signals from the air conditioning amplifier. Blower motor speed signals are transmitted in accordance with changes in the duty ratio.



WIRING DIAGRAM



INSPECTION PROCEDURE

- | | |
|----------|-----------------------------------------------------------------|
| 1 | PERFORM ACTIVE TEST BY INTELLIGENT TESTER (BLOWER MOTOR) |
|----------|-----------------------------------------------------------------|

(a) Connect the intelligent tester to (with CAN VIM) the DLC3.

- (b) Turn the ignition switch ON and turn the intelligent tester main switch ON.
- (c) Select the item below in the ACTIVE TEST, and then check that the blower motor operates.

Air conditioning amplifier

| Item | Test Details / Display | Diagnostic Note |
|--------------|-------------------------------------|-----------------|
| BLOWER MOTOR | Blower motor / Min.: 0, Max.: 31 | - |

Result

| Result | Proceed to |
|------------------------------------------------------|------------|
| NG (blower motor does not operate) | A |
| NG (blower motor operates but does not change speed) | B |
| OK | C |

B → Go to step 6

C → PROCEED TO NEXT CIRCUIT INSPECTION SHOWN IN PROBLEM SYMPTOMS TABLE

A

2 INSPECT FUSE (HTR)

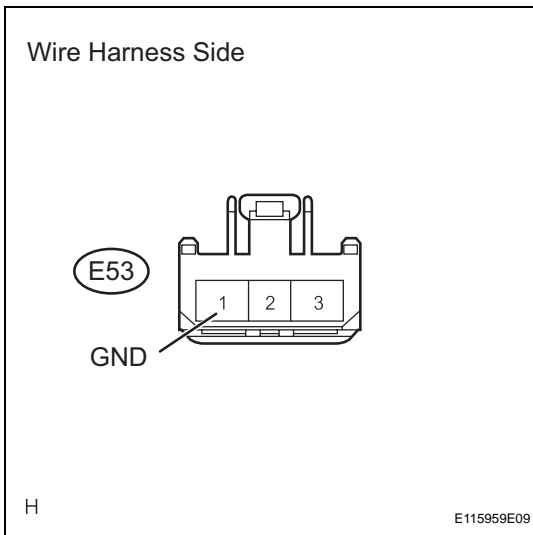
- (a) Remove the HTR H-fuse from the engine room No. 2 relay block.
- (b) Measure the resistance of the H-fuse.
Standard resistance:
Below 1 Ω

NG → REPLACE FUSE

AC

OK

3 CHECK WIRE HARNESS (BLOWER MOTOR - BODY GROUND)



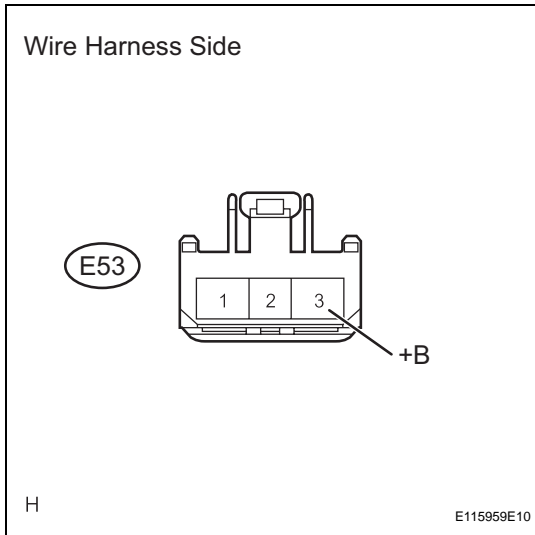
- (a) Disconnect the E53 motor connector.
- (b) Measure the resistance of the wire harness side connector.
Standard resistance

| Tester Connection | Specified Condition |
|---------------------------|---------------------|
| E53-1 (GND) - Body ground | Below 1 Ω |

NG → REPAIR OR REPLACE HARNESS AND CONNECTOR

OK

4 CHECK WIRE HARNESS (BLOWER MOTOR - BATTERY)



- (a) Disconnect the E53 motor connector.
- (b) Measure the voltage of the wire harness side connector.

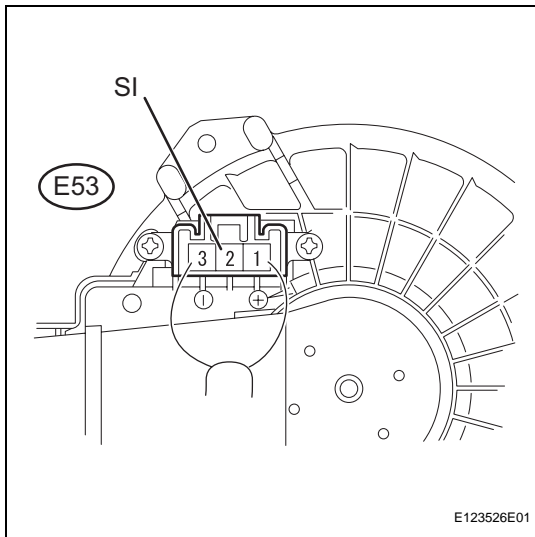
Standard voltage

| Tester Connection | Condition | Specified Condition |
|--------------------------|--------------------|---------------------|
| E53-3 (+B) - Body ground | Ignition switch ON | 10 to 14 V |

NG REPAIR OR REPLACE HARNESS AND CONNECTOR

OK

5 CHECK BLOWER W/ FAN MOTOR SUB-ASSEMBLY



- (a) Disconnect the E37 amplifier connector.
- (b) Connect the E53 motor connector.
- (c) Measure the voltage of the connector.

Standard voltage

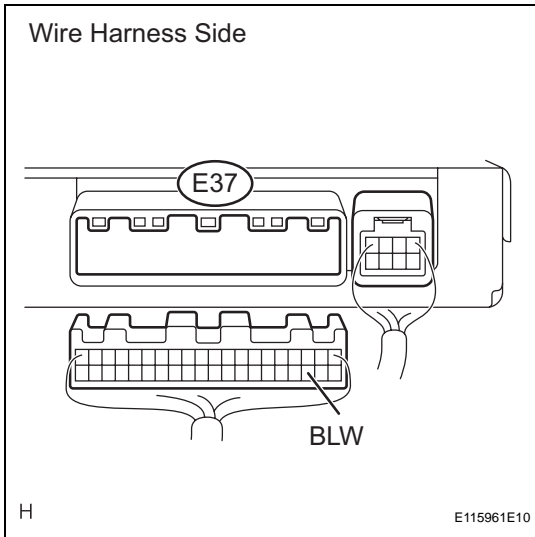
| Tester Connection | Condition | Specified Condition |
|--------------------------|--------------------|---------------------|
| E53-2 (SI) - Body ground | Ignition switch ON | 4.5 to 5.5 V |

NG REPLACE BLOWER W/ FAN MOTOR SUB-ASSEMBLY

OK

AC

6 CHECK WIRE HARNESS (AIR CONDITIONING AMPLIFIER - BODY GROUND)



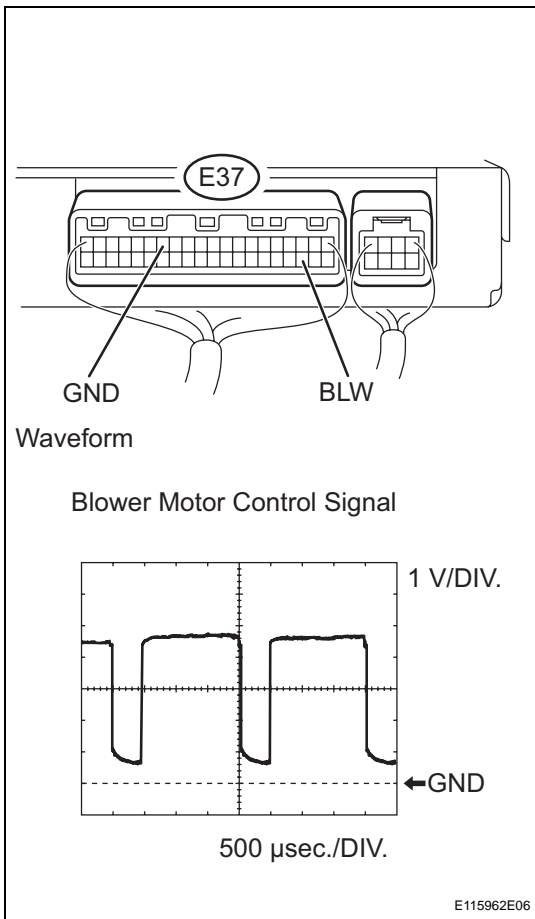
- (a) Disconnect the E37 amplifier connector.
 - (b) Measure the voltage of the wire harness side connector.
- Standard voltage**

| Tester Connection | Condition | Specified Condition |
|----------------------------|-----------------------------------------|---------------------|
| E37-23 (BLW) - Body ground | Ignition switch ON Blower switch OFF | 4.5 to 5.5 V |

NG → **REPAIR OR REPLACE HARNESS AND CONNECTOR**

OK

7 CHECK AIR CONDITIONING AMPLIFIER



- (a) Remove the air conditioning amplifier with its connectors still connected.
 - (b) Check the waveform of the amplifier connector.
- OK:**
Waveform is as shown in the illustration.
- HINT:**
The waveform varies with the blower level.

| Item | Content |
|-------------------|----------------------------------------|
| Tester Connection | BLW (E37-23) - GND (E37-14) |
| Tool Setting | 1 V/DIV., 500 μsec./DIV. |
| Condition | Ignition switch ON Blower switch LO |

NG → **REPLACE AIR CONDITIONING AMPLIFIER**

AC

OK

REPLACE BLOWER W/ FAN MOTOR SUB-ASSEMBLY