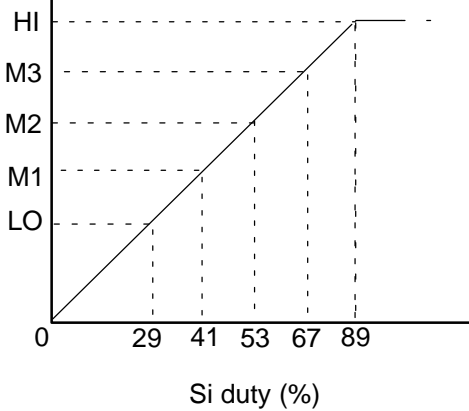
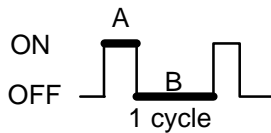


## BLOWER MOTOR CIRCUIT

### Blower Level



$$\text{Duty Ratio} = \frac{A}{A + B} \times 100 (\%)$$



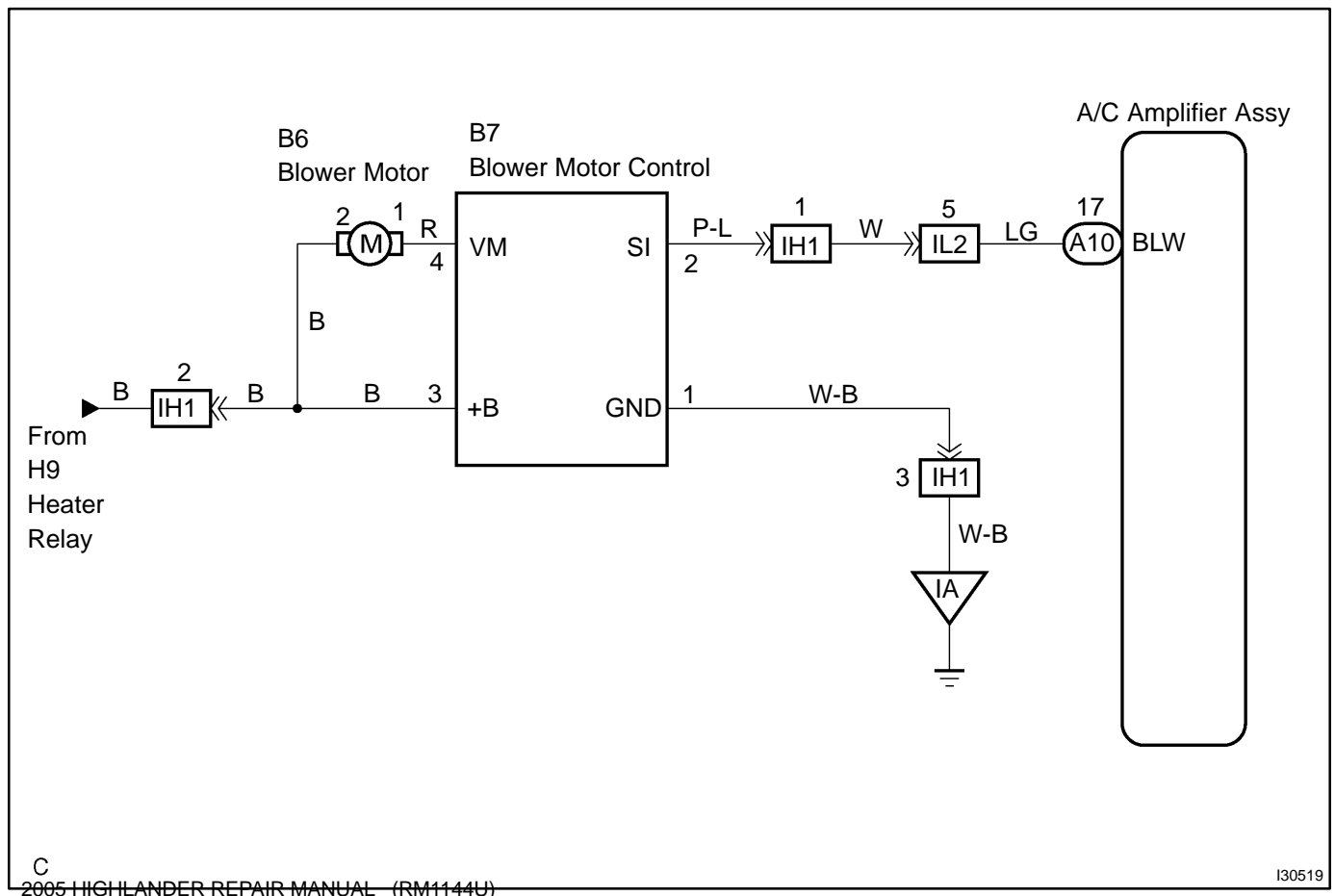
### CIRCUIT DESCRIPTION

The blower motor is operated by signals from the A/C amplifier assy. Blower motor speed signals are transmitted by changes in the Duty Ratio.

#### Duty Ratio

The duty ratio is the ratio of the period of continuity in one cycle. For example, if A is the period of continuity in one cycle, B is the period of non-continuity.

### WIRING DIAGRAM



## INSPECTION PROCEDURE

### 1 PERFORM ACTUATOR CHECK

- Set the actuator check mode (see page 05-1 117).
- Press the blower switch to change to the step operation.
- Check the air flow level by hand.

Display Code	Blower level
0	0
1	1
2	14
3	14
4	14
5	14
6	14
7	14
8	14
9	31

**OK:**

Blower level changes in accordance with each display code.

**NG**

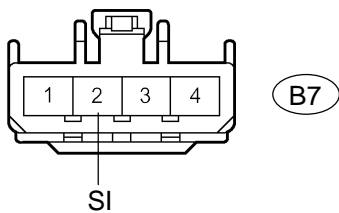
Go to step 2

**OK**

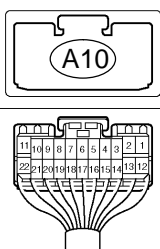
PROCEED TO NEXT CIRCUIT INSPECTION SHOWN IN PROBLEM SYMPTOMS TABLE (SEE PAGE 05-1 129)

### 2 CHECK HARNESS AND CONNECTOR(BLOWER MOTOR CONTROLLER - A/C AMPLIFIER)

**Blower Motor Controller Connector  
Front View:**



**A/C Amplifier Connector  
Wire Harness View:**



I41004

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

**Standard:**

Tester connection	Condition	Specified condition
A10-17 (BLW) - B7-2 (SI)	Always	Below 1 $\Omega$
A10-17 (BLW) - Body ground	Always	10 k $\Omega$ or higher

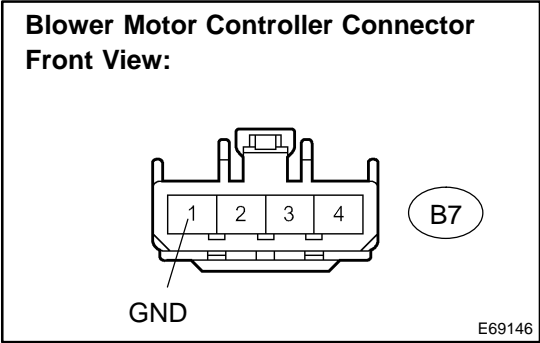
**NG**

REPAIR OR REPLACE HARNESS OR CONNECTOR

**OK**

3

CHECK HARNESS AND CONNECTOR(BLOWER MOTOR CONTROLLER - BODY GROUND)



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

**Standard:**

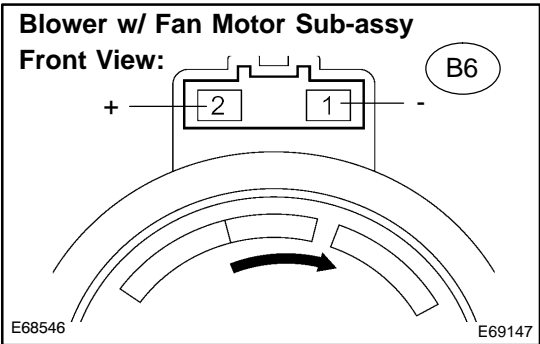
Tester connection	Condition	Specified condition
B7-1 (GND) - Body ground	Always	Below 1 $\Omega$

**NG** REPAIR OR REPLACE HARNESS OR CONNECTOR

**OK**

4

INSPECT COOLING UNIT MOTOR SUB-ASSY W/FAN



- (a) Remove the blower w/ fan motor sub-assy.
- (b) Connect positive (+) lead to terminal 2 of the blower motor connector and negative (-) lead to terminal 1.

**Standard: Blower motor operates smoothly.**

**NG** REPLACE COOLING UNIT MOTOR SUB-ASSY W/FAN

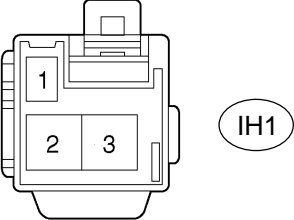
**OK**

5

CHECK A/C SUB NO.2 WIRE

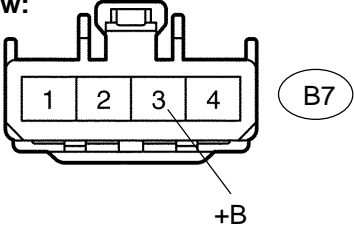
A/C Sub No.2 Wire Connector  
Front View:

Wire to wire



IH1

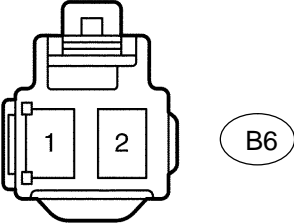
A/C Sub No.2 Wire Connector  
Front View:



B7

+B

A/C Sub No.2 Wire Connector  
Front View:



B6

I41008

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

Standard:

Tester connection	Condition	Specified condition
IH1-2 - B6-2	Always	Below 1 Ω
IH1-2 - B7-3 (+B)	Always	Below 1 Ω
B6-2 - B7-3 (+B)	Always	Below 1 Ω

OK

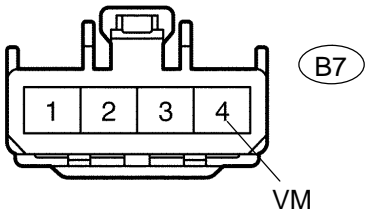
NG

REPAIR OR REPLACE A/C SUB NO.2 WIRE

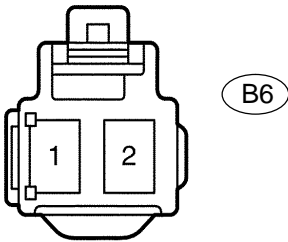
6

CHECK HARNESS AND CONNECTOR(BLOWER MOTOR CONTROLLER - BLOWER MOTOR)

Blower Motor Controller Connector  
Front View:



Blower Motor Connector Front View:



P

I36240

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

Standard:

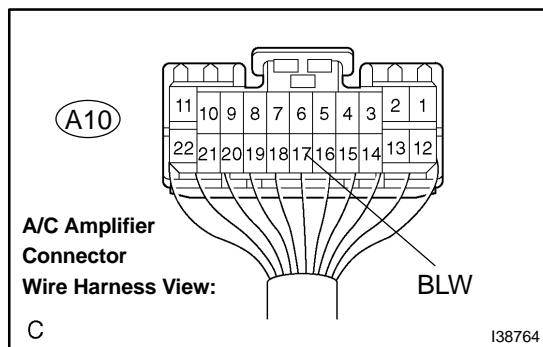
Tester connection	Condition	Specified condition
B7-4 (VM) - B6-1	Always	Below 1 Ω
B7-4 (VM) - Body ground	Always	10 kΩ or higher

NG

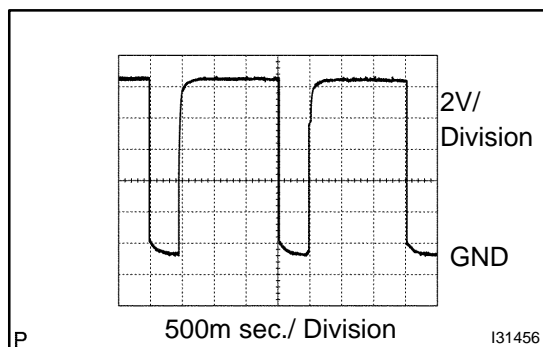
REPAIR OR REPLACE HARNESS OR CONNECTOR

OK

## 7 INSPECT AIR CONDITIONING AMPLIFIER(BLW - BODY GROUND)



- Remove the A/C amplifier with the connectors still connected.
- Turn the ignition switch to the ON position.
- Turn the blower switch on (Lo).



- Measure the waveform between terminal BLW (A10-17) of the A/C amplifier and body ground.

**OK:**

**Waveform operates as shown in the illustration.**

**HINT:**

Waveform varies with the blower level.

**NG**

**REPLACE AIR CONDITIONING AMPLIFIER**

**OK**

**REPLACE BLOWER MOTOR CONTROL**