

# HEATER AND VENTILATOR

**4-6**

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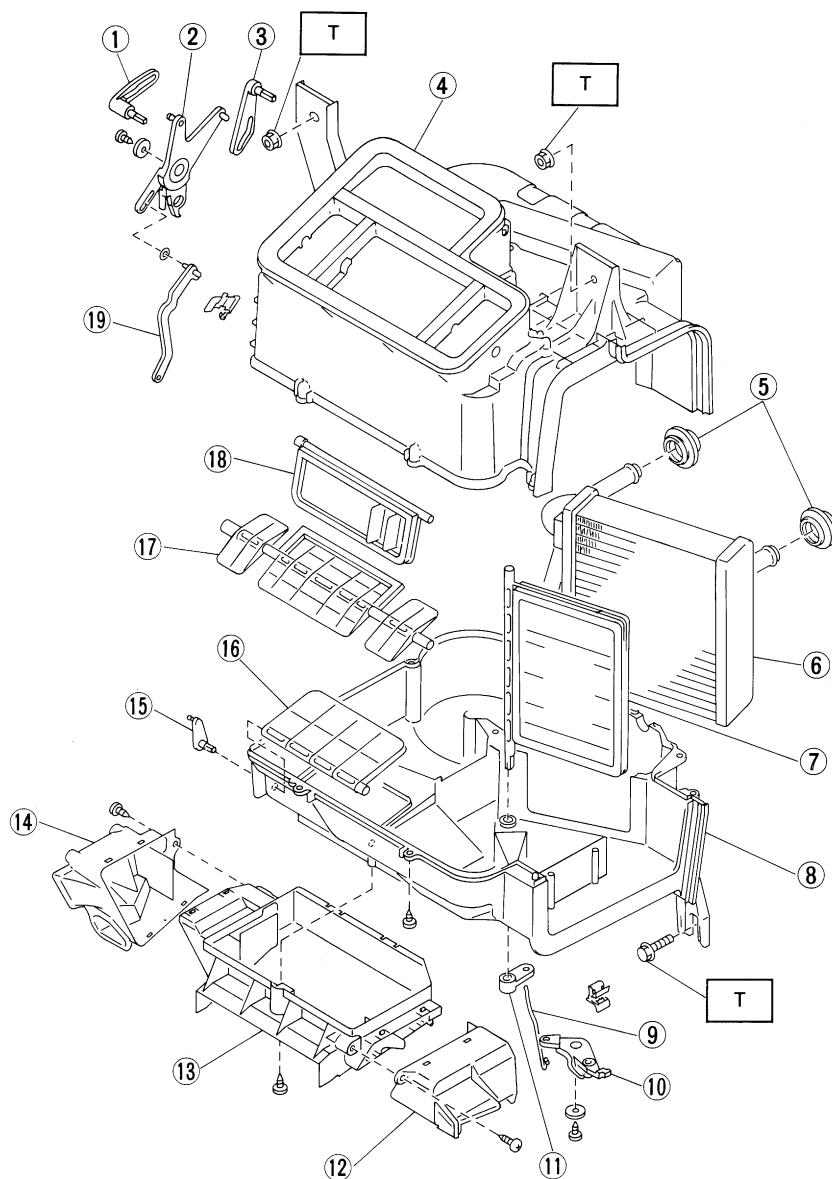
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## 1. Heater and Ventilation

### A: SPECIFICATIONS

Item	Specifications	Condition	
Heating capacity	4.652 kW (4,000 kcal/h, 15,872 BTU/h) or more	<ul style="list-style-type: none"> <li>• Mode selector switch : HEAT</li> <li>• Temp. control switch : FULL HOT</li> <li>• Temperature difference between hot water and inlet air : 65°C (149°F)</li> <li>• Hot water flow rate : 360 ℥ (95.1 US gal, 79.2 Imp gal)/h</li> </ul>	
Air flow rate	270 m <sup>3</sup> (9,534 cu ft)/h	Heat mode (FRESH), FULL HOT at 12.5 V	
Max air flow rate	480 m <sup>3</sup> (16,949 cu ft)/h	<ul style="list-style-type: none"> <li>• Temperature control switch : FULL COLD</li> <li>• Blower fan speed : 4th position</li> <li>• Mode selector switch : RECIRC (MAX. A/C)</li> </ul>	
Heater core size (height x length x width x thickness)	192.4 x 152.0 x 25.0 x 1.8 mm (7.57 x 5.98 x 0.984 x 0.071 in)	—	
Blower motor	Type Fan type and size (diameter x width)	Magnet motor 230 W or less Sirocco fan type 150 x 75 mm (5.91 x 2.95 in)	at 12 V —

## 1. Heater Unit



G4M0551

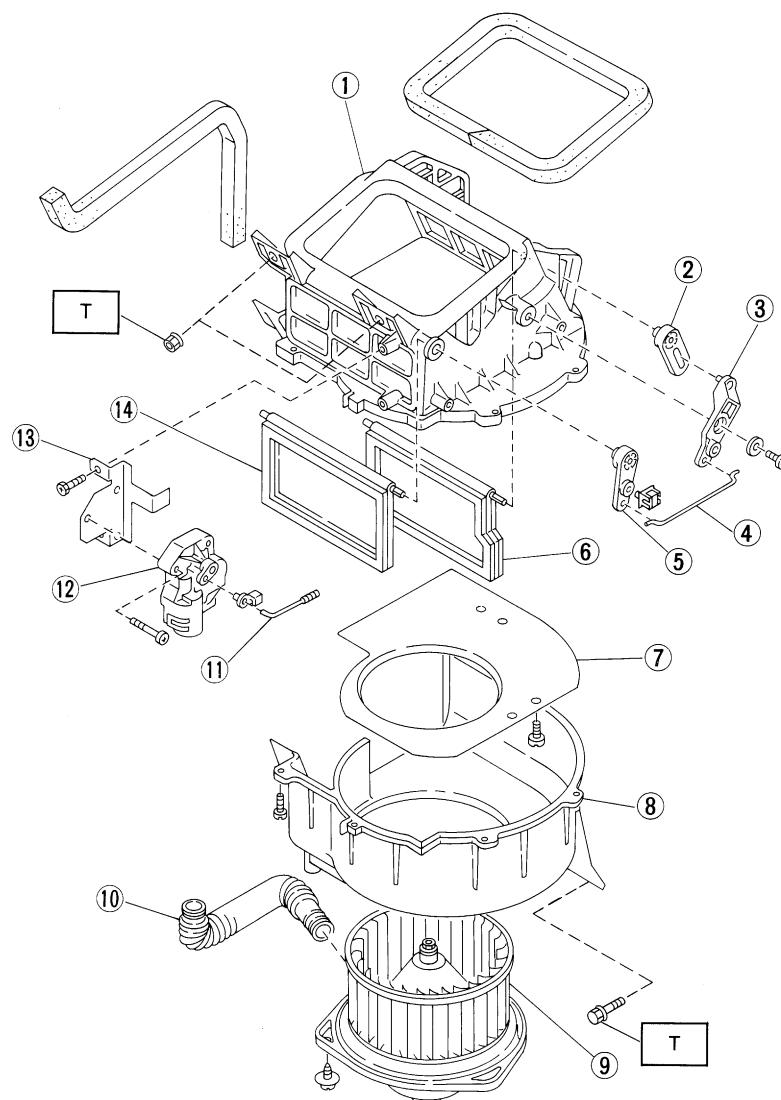
- ① Vent lever
- ② Side link
- ③ DEF. lever
- ④ Heater case upper
- ⑤ Heater grommet
- ⑥ Heater core
- ⑦ Mix door
- ⑧ Heater case lower

- ⑨ Mix rod
- ⑩ Mix link
- ⑪ Mix lever
- ⑫ Foot duct (RH)
- ⑬ Foot duct (CTR)
- ⑭ Foot duct (LH)
- ⑮ Foot lever lower
- ⑯ Foot door

- ⑰ Vent door
- ⑱ DEF. door
- ⑲ Foot lever upper

**Tightening torque: N·m (kg·m, ft·lb)**  
**T:  $7.35 \pm 1.96$**   
**(0.750  $\pm 0.200$ , 5.421  $\pm 1.446$ )**

## 2. Intake Unit



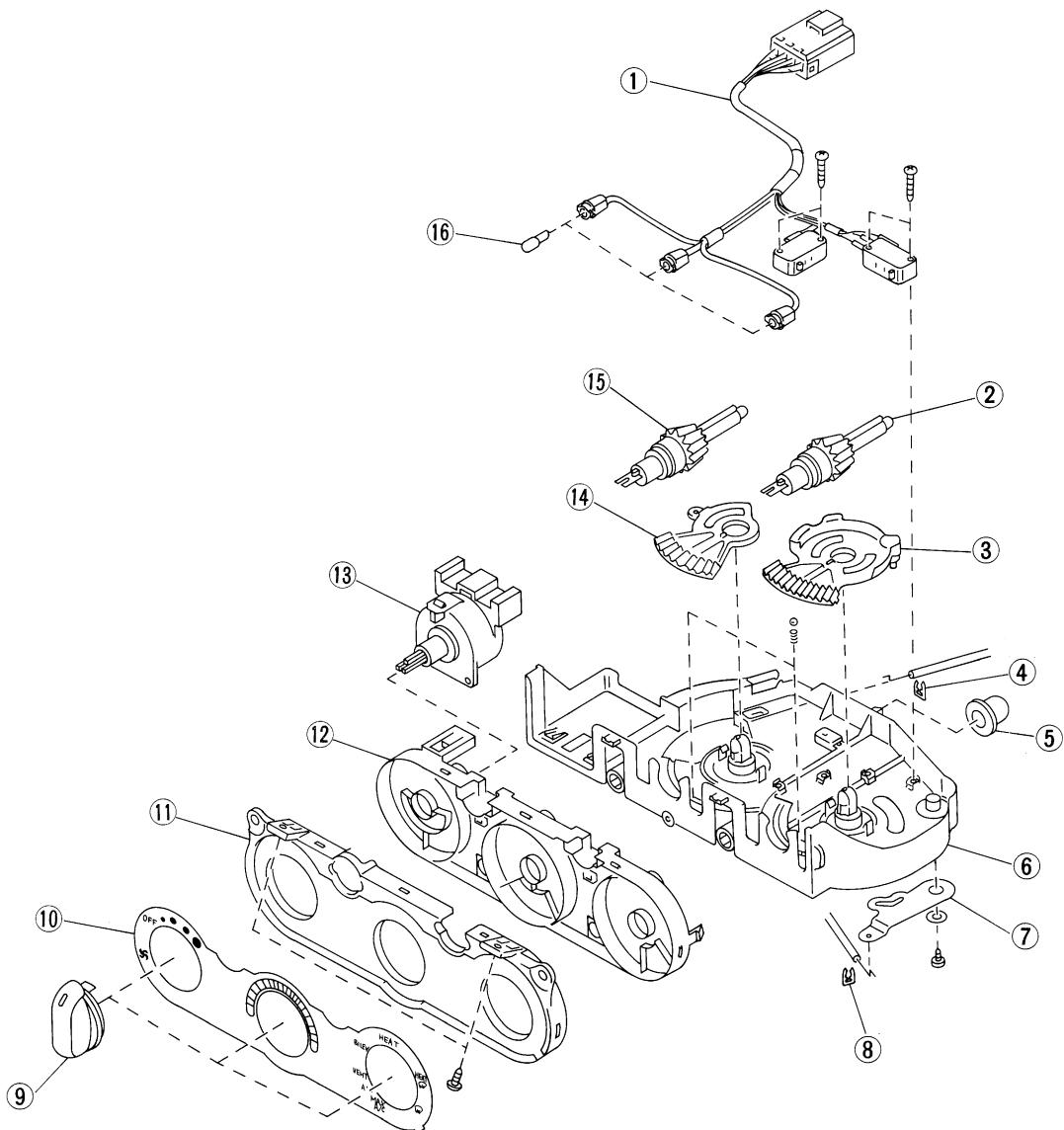
G4M0552

- ① Intake unit case upper
- ② Lever (A)
- ③ Link
- ④ Rod
- ⑤ Lever (B)
- ⑥ Door (A)
- ⑦ Bell mouth-intake

- ⑧ Intake unit case lower
- ⑨ Blower motor ASSY
- ⑩ Hose
- ⑪ Actuator rod
- ⑫ Actuator motor
- ⑬ Actuator bracket
- ⑭ Door (B)

**Tightening torque: N·m (kg·m, ft·lb)**  
**T:  $7.35 \pm 1.96$**   
 $(0.750 \pm 0.200, 5.421 \pm 1.446)$

## 3. Control Unit



G4M0553

- ① Harness ASSY
- ② Shaft
- ③ Mode lever LH
- ④ Clip
- ⑤ Grommet
- ⑥ Base plate

- ⑦ Link
- ⑧ Clip
- ⑨ Control dial knob
- ⑩ Plate
- ⑪ Base plate

- ⑫ Light box
- ⑬ Switch ASSY
- ⑭ TEMP. lever
- ⑮ Shaft
- ⑯ Bulb

## 1. Supplemental Restraint System "Airbag"

Airbag system wiring harness is routed near the instrument panel, heater unit, blower motor and control unit.

### CAUTION:

- All Airbag system wiring harness and connectors are colored yellow. Do not use electrical test equipment on these circuit.
- Be careful not to damage Airbag system wiring harness when servicing the instrument panel, heater unit, blower motor and control unit.

## 2. Heater Unit

### A: REMOVAL

- 1) Disconnect GND cable from battery.
- 2) Remove heater hoses (inlet, outlet) in engine compartment.

#### NOTE:

Drain as much coolant from heater unit as possible, and plug disconnected hose with cloth.

- 3) Disconnect temperature control cable and mode door control cable from heater unit.

<Ref. to 5-4 [W1A0].>

- 4) Remove instrument panel.

<Ref. to 5-4 [W1A0].>

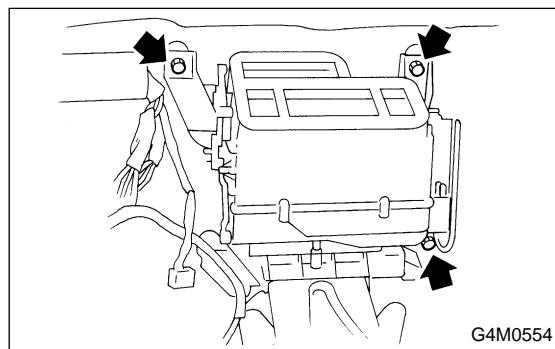
- 5) Remove steering support beam.

<Ref. to 5-1 [C600].>

- 6) Remove cooling unit.

<Ref. to 4-7 [W14A0].>

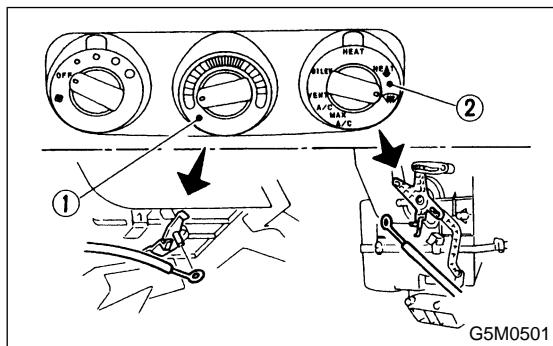
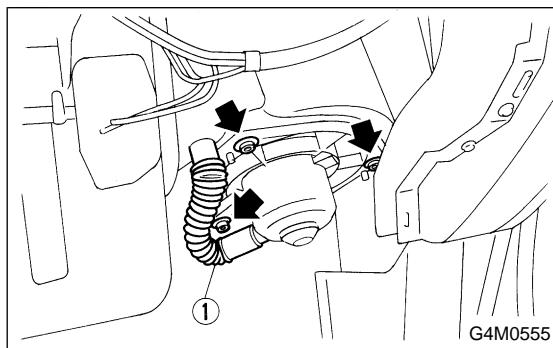
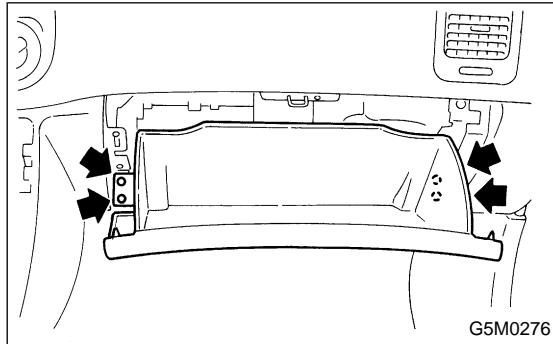
- 7) Remove heater unit.



## B: INSTALLATION

Installation is in the reverse order of removal.

**Fitted length of heater hose over pipe:**  
25 — 30 mm (0.98 — 1.18 in)



## 3. Blower Motor Assembly

### A: REMOVAL

- 1) Disconnect GND cable from battery.
- 2) Remove glove box.
- 3) Disconnect blower motor harness connector.
- 4) Disconnect aspirator pipe ①.
- 5) Remove blower motor mounting screw.
- 6) Remove blower motor assembly.

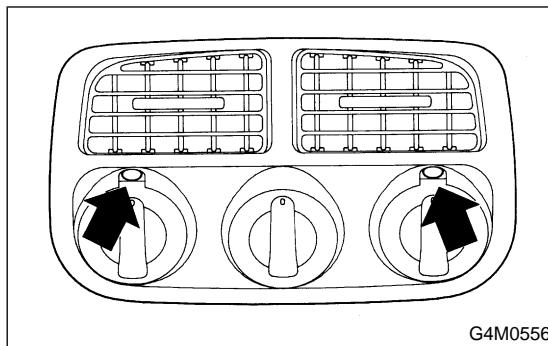
## 4. Control Unit

### A: REMOVAL

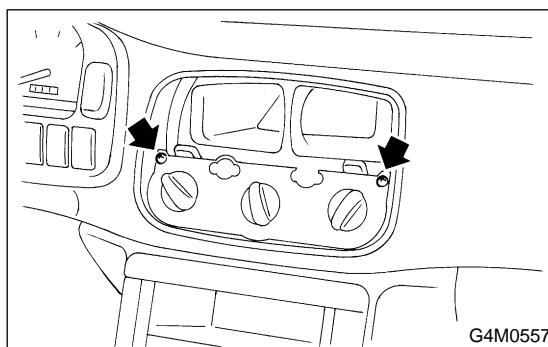
- 1) Disconnect GND cable from battery.
- 2) Set temperature control switch ① to "FULL COLD" and mode selector switch ② to "DEF" position.
- 3) Remove temperature control cable and mode door control cable from heater unit.

**NOTE:**

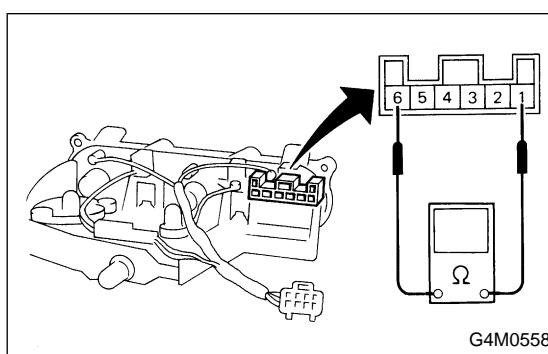
- Do not attempt to move links during installation.
- Before control unit installation, set temperature control switch to "FULL COLD" and mode selector switch to "DEF" position.



4) Remove center panel.



5) Remove control unit assembly and disconnect connector.



## B: INSPECTION

### 1. FAN SWITCH

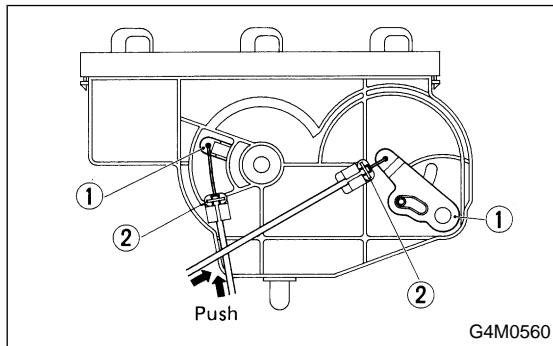
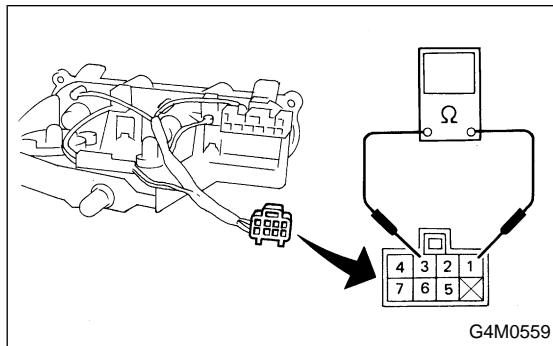
Check continuity between terminals at each switch position.

Switch position	Terminals					
	1	2	3	4	5	6
Low	○	○				○
Med. 1	○		○			○
Med. 2	○			○		○
High	○				○	○

## 2. CONTROL UNIT

- 1) Ignition switch is turned OFF.
- 2) Disconnect connector from control unit.
- 3) Check circuit continuity between each terminal.

Terminal	Mode selector switch position		Illumi.
	MAX A/C (RECIRC)	Except MAX A/C (FRESH)	
1	○	○	
2	○		
3		○	
4			○
5			○
6			○
7			○

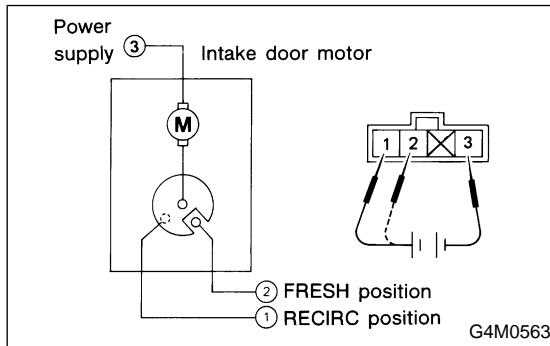
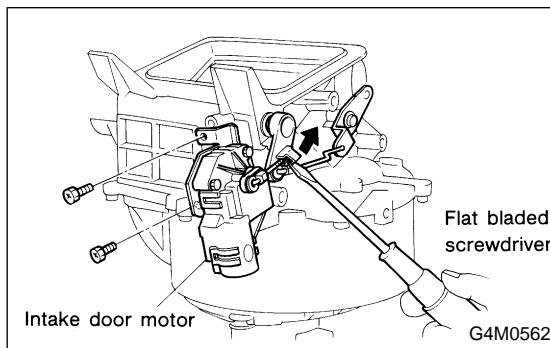
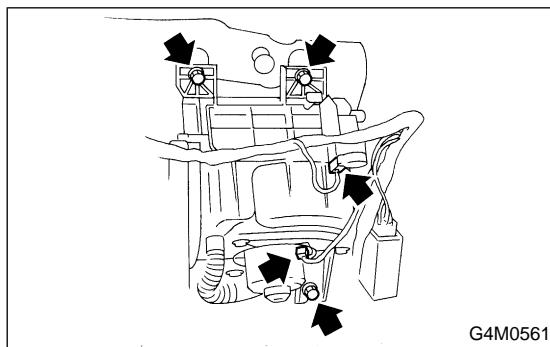
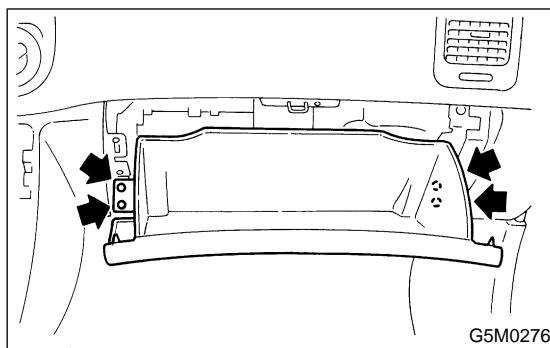


## C: ADJUSTMENT

- 1) Operate temperature control switch to "FULL COLD" and mode selector switch to "MAX A/C" position.
- 2) Install control cable to lever ①. While pushing outer cable, secure control cable with clip ②.

## D: INSTALLATION

Installation is in the reverse order of removal.



## 5. Intake Door Motor

### A: REMOVAL

- 1) Disconnect GND cable from battery.
- 2) Remove glove box.
- 3) Remove heater duct (or cooling unit with A/C model).  
<Ref. to 4-7 [W14A0].>

- 4) Remove intake unit from the vehicle.

- 5) Remove screws which secure intake door motor to intake unit.

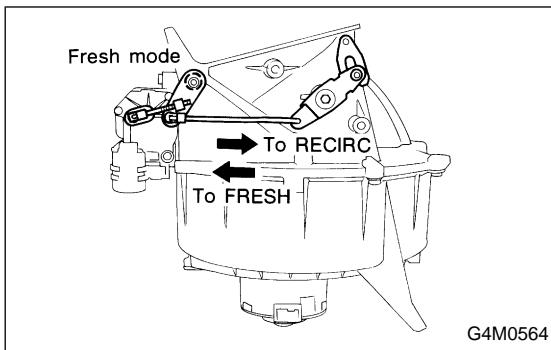
**NOTE:**

Ensure that RECIRC switch is set to "ON".

### B: INSPECTION

When approx. 12 V is applied to the intake door motor terminals, intake door motor operates as follows.

Intake door motor position	Terminal		Intake door motor operation
	⊕	⊖	
FRESH	3	2	Door motor moved to FRESH position.
RECIRC		1	Door motor moved to RECIRC position.



- 1) Connect harness to intake door motor.
- 2) Turn ignition switch to "ACC" and set RECIRC switch to "ON" switch to "RECIRC".

**NOTE:**

Ensure that intake door motor is set in the "RECIRC" mode.

- 3) Install intake door motor on intake unit.
- 4) Secure rod holder to link, and install link to intake unit.
- 5) Manually set rod in the "RECIRC" mode, and secure to rod holder.
- 6) Operate mode selector switch to ensure that system changes from intake air to "RECIRC" and from "RECIRC" to intake air in full-stroke range.

## C: INSTALLATION

Installation is in the reverse order of removal.