



3. Heater unit upper case	11. Blower motor	19. Air flow control actuator	27. Aspirator hose
4. Heater unit lower case	12. Blower motor cap	20. Air flow control links	28. Drain hose
5. Foot duct	13. Blower motor controller	21. Air flow control door assembly	29. Packing
6. HVAC air filter (if equipped)	14. Heater core	22. Temperature control actuator	 30. O-ring : Apply compressor oil.
7. Cover (without HVAC air filter)	15. Evaporator	23. Temperature control link	 : Do not reuse.
8. Air intake control actuator	16. Evaporator temperature sensor	24. Temperature control door assembly	

HVAC Unit Removal and Installation

S6RW0C7226003

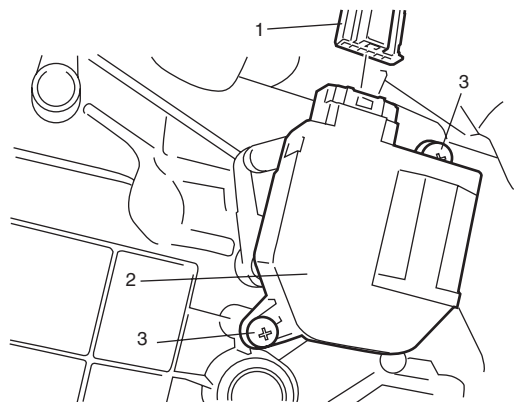
Refer to "HVAC Unit Removal and Installation".

Temperature Control Actuator Removal and Installation

S6RW0C7226004

Removal

- 1) Disconnect negative (-) cable at battery.
- 2) Remove steering column hole cover from instrument panel.
- 3) Remove driver side foot duct from HVAC unit.
- 4) Disconnect temperature control actuator connector (1).
- 5) Remove temperature control actuator (2) from HVAC unit by removing screws (3).

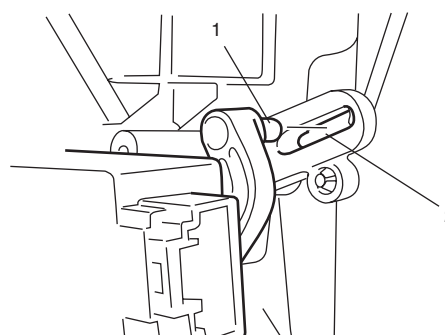


I7RW01722018-01

Installation

Reverse removal procedure noting the following instructions.

- Before installing actuator, make sure that position of actuator lever is in between "MAX HOT" position and "MAX COOL" position.
- Be sure to insert pin (1) of temperature control actuator into the groove (2) of link.



I7RW01722019-01

Temperature Control Actuator and Its Circuit Inspection

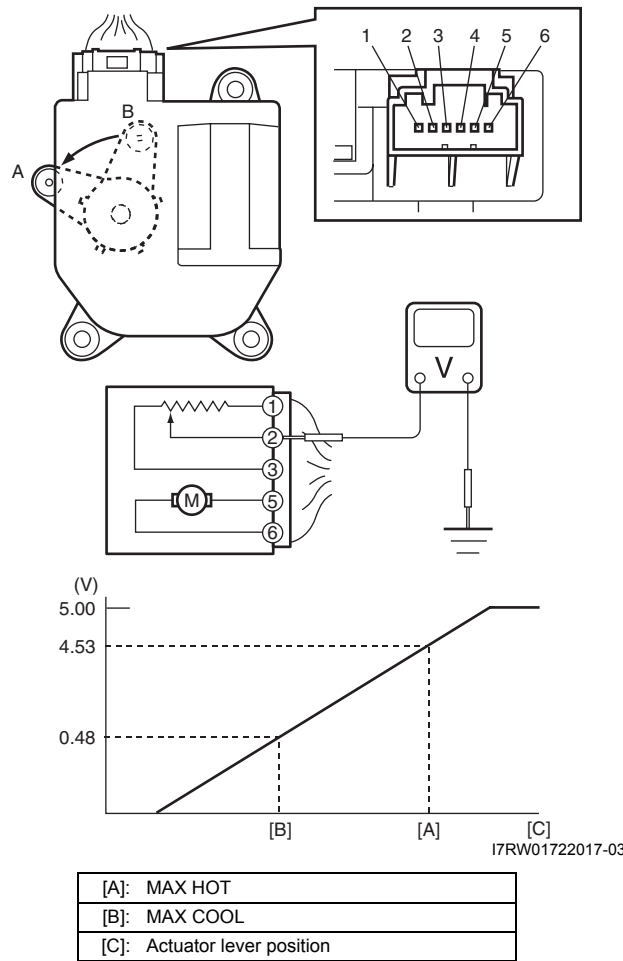
S6RW0C7226005

- 1) Remove temperature control actuator from HVAC unit referring to "Temperature Control Actuator Removal and Installation".
- 2) Connect connector to temperature control actuator.
- 3) Set temperature selector to "MAX COOL" position with ignition switch turned ON.
- 4) Connect voltage meter between terminal "2" and body ground.
- 5) Turn temperature selector to "MAX HOT" position.

- 6) Measure output voltage variation while temperature control actuator is operated from "MAX COOL" position (B) to "MAX HOT" position (A) as following specification.

If measure voltage is out of specification or does not vary linearly as the shown in graph, check related wire circuit and HVAC control module. If wire circuits and HVAC control module are OK, go to next step.

Temperature control actuator output voltage
0.48 – 4.53V (linear variation as following graph)



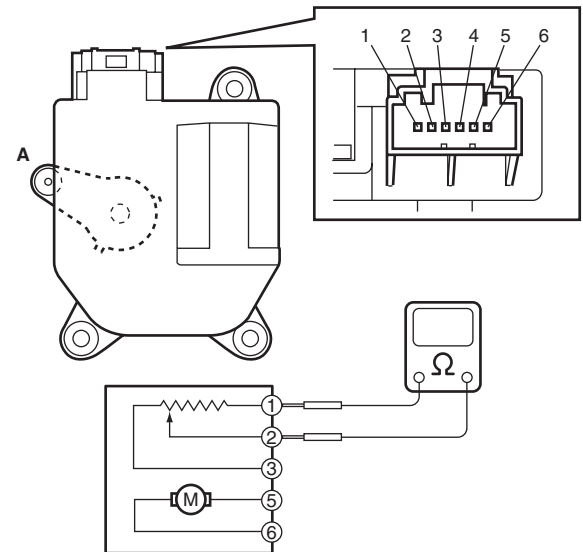
- 7) Set temperature selector of HVAC control module to "MAX HOT" position with ignition switch turned ON, and make sure if the position of actuator lever is "MAX HOT" position (A).
- 8) Turn ignition switch to OFF position, and then disconnect connector from temperature control actuator.

- 9) Measure resistance between terminal "1" and "2".

Temperature control actuator resistance between terminal "1" and "2" (MAX HOT position)

(Reference value)

Approx. 0.45 kΩ at 25 °C (77 °F)



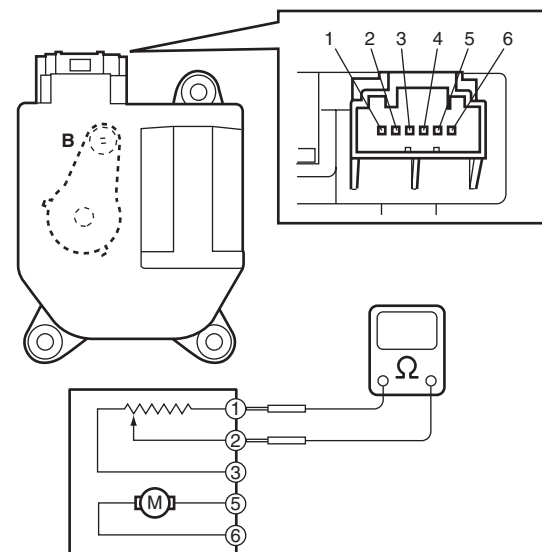
I7RW01722020-02

- 10) Connect connector to temperature control actuator.
- 11) Set temperature selector of HVAC control module to "MAX COOL" position with ignition switch turned ON, and make sure if the position of actuator lever is "MAX COOL" position (B).
- 12) Turn ignition switch to OFF position, and then disconnect connector from temperature control actuator.
- 13) Measure resistance between terminal "1" and "2".

Temperature control actuator resistance between terminal "1" and "2" (MAX COOL position)

(Reference value)

Approx. 4.3 kΩ at 25 °C (77 °F)



I7RW01722021-02

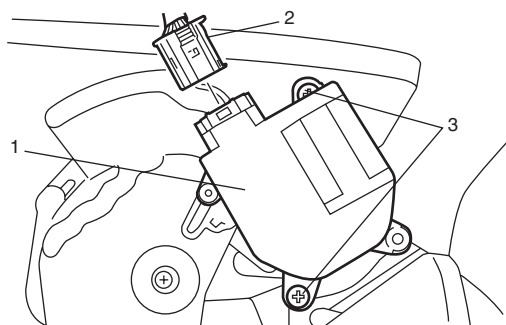
If measure resistance is out of specification, replace the actuator with new one.

Air Flow Control Actuator Removal and Installation

S6RW0C7226006

Removal

- 1) Disconnect negative cable at battery.
- 2) Remove steering column hole cover from instrument panel.
- 3) Remove driver side foot duct from HVAC unit.
- 4) Disconnect air flow control actuator connector (2).
- 5) Remove air flow control actuator (1) from HVAC unit by removing screws (3).

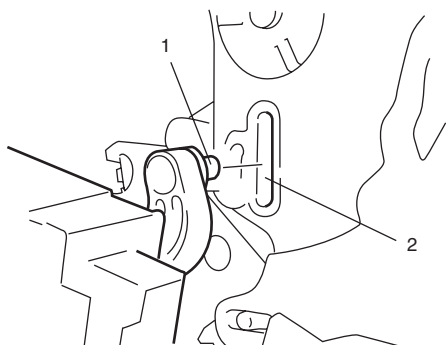


I7RW01722022-01

Installation

Reverse removal procedure noting the following instructions.

- Before installing actuator, make sure that position of actuator lever is in between “BENT” position and “DEF” position.
- Be sure to insert pin (1) of air flow control actuator into the groove (2) of link.



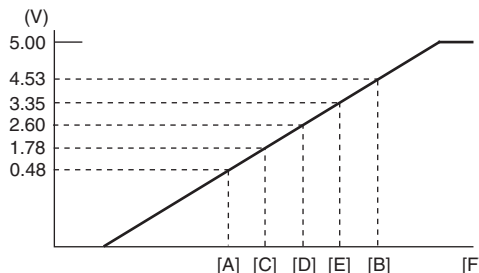
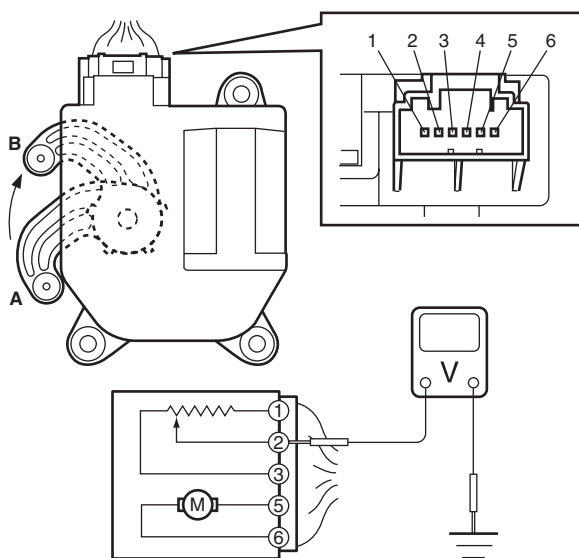
I7RW01722023-02

Air Flow Control Actuator and Its Circuit Inspection

S6RW0C7226007

- 1) Remove air flow control actuator from HVAC unit referring to “Air Flow Control Actuator Removal and Installation”.
- 2) Connect connector to air flow control actuator.
- 3) Set air flow selector to “BENT” position with ignition switch turned ON.
- 4) Connect voltage meter between terminal “2” and body ground.
- 5) Turn air flow selector to “DEF” position.
- 6) Measure output voltage variation while air flow control actuator is operated from “BENT” position (A) to “DEF” position (B) as following specification. If measure voltage is out of specification or does not vary linearly as the shown in graph, check related wire circuit and HVAC control module. If wire circuits and HVAC control module are OK, go to next step.

Air flow control actuator output voltage
0.48 – 4.53 V (linear variation as following graph)



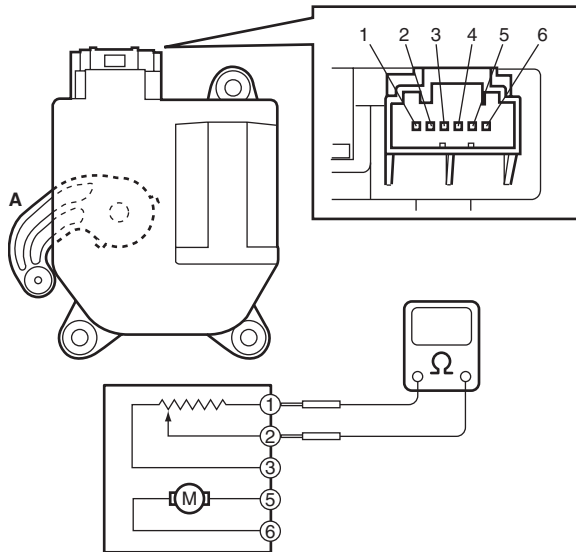
I7RW01722024-02

[A]: BENT	[D]: FOOT
[B]: DEF	[E]: DEF / FOOT
[C]: BI-LEVEL	[F]: Actuator lever position

- 7) Set air flow selector of HVAC control module to “DEF” position with ignition switch turned ON, and make sure if the position of actuator lever is “DEF” position (A).
- 8) Turn ignition switch to OFF position, and then disconnect connector from air flow control actuator.
- 9) Measure resistance between terminal “1” and “2”.

Air flow control actuator resistance between terminal “1” and “2” (DEF position) (Reference value)

Approx. 0.45 kΩ at 25 °C (77 °F)

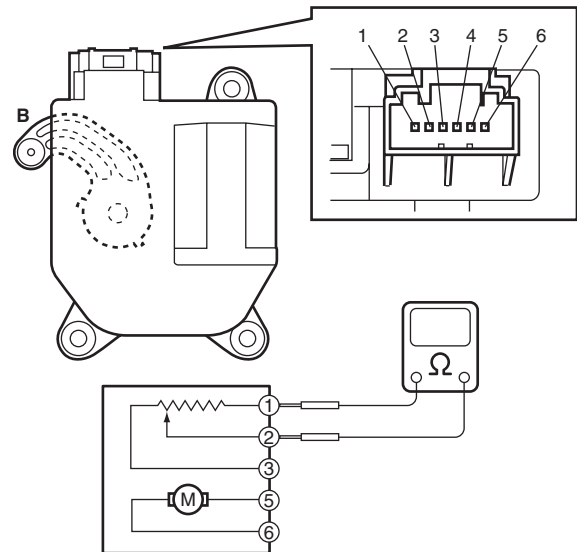


- 10) Connect connector to air flow control actuator.
- 11) Set air flow selector of HVAC control module to “VENT” position with ignition switch turned ON, and make sure if the position of actuator lever is “VENT” position (B).
- 12) Turn ignition switch to OFF position, and then disconnect connector from air flow control actuator.

- 13) Measure resistance between terminal “1” and “2”.

Air flow control actuator resistance between terminal “1” and “2” (VENT position) (Reference value)

Approx. 4.3 kΩ at 25 °C (77 °F)



If measure resistance is out of specification, replace the actuator with new one.

Air Intake Actuator Removal and Installation

S6RW0C7226008

Remove and install air intake actuator referring to “Air Intake Control Actuator Removal and Installation in Section 7A”.

Air Intake Actuator Inspection

S6RW0C7226009

For inspection, refer to “Air Intake Control Actuator Inspection in Section 7A”.

Actuator Linkage Inspection

S6RW0C7226010

- Check if each actuator linkage operates smoothly.
- Check actuator rod for bend.
- Check each actuator linkage for breakage.
- Make sure if there is not any obstruction in operating range of actuator linkage.
If any malfunction is found, repair or replace faulty part(s).

Blower Motor Controller Removal and Installation

S6RW0C7226011

Refer to “Blower Motor Resistor Removal and Installation in Section 7A”.