

2012 - Mazda6 - HVAC

AIR MIX ACTUATOR INSPECTION [FULL-AUTO AIR CONDITIONER]

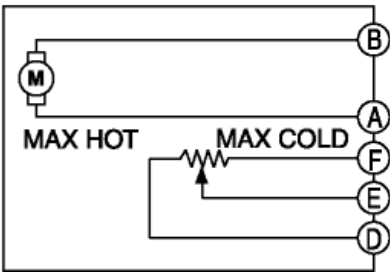
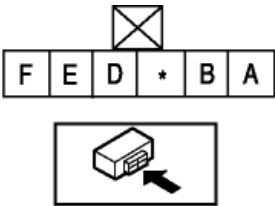
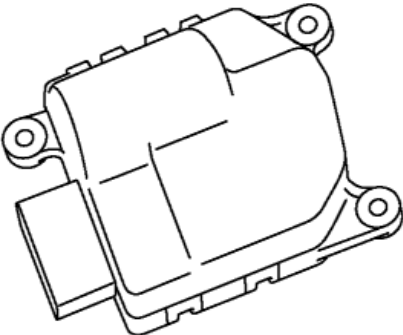
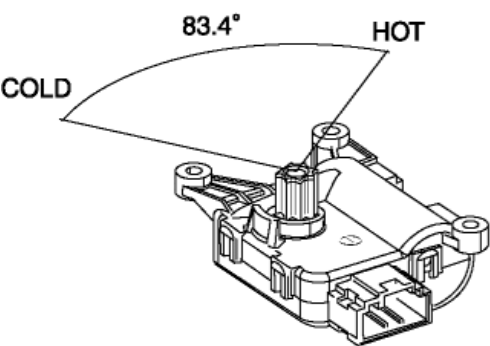
CAUTION:

- If the door position exceeds the operation range shown in the figure, the circuit in the actuator could be damaged. Always perform an actuator operation inspection with the door movement within the range shown in the figure.

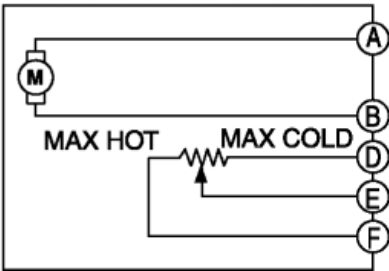
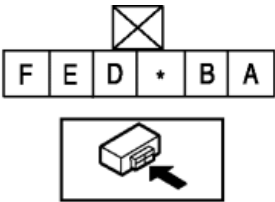
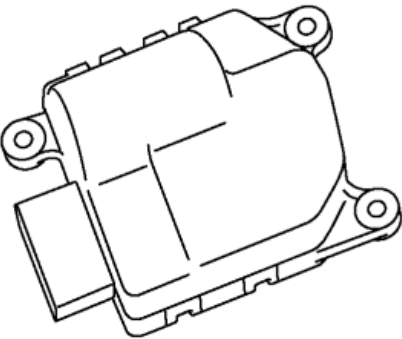
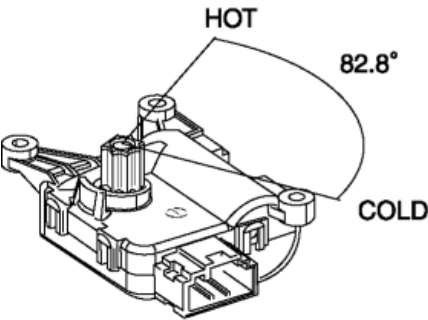
1. Connect battery positive voltage to air mix actuator terminal A (or B), connect terminal B (or A) to ground, and then verify that the air mix actuator operates as shown in the table.

- If the operation condition is not normal, replace the air mix actuator.

Driver's side



Passenger's side



Driver's side

Terminal		Air mix actuator operation
A	B	

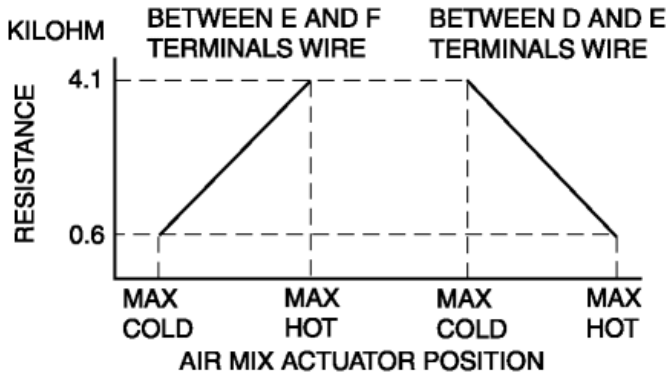
Ground	B+	COLD → HOT
B+	Ground	HOT → COLD

Passenger’s side

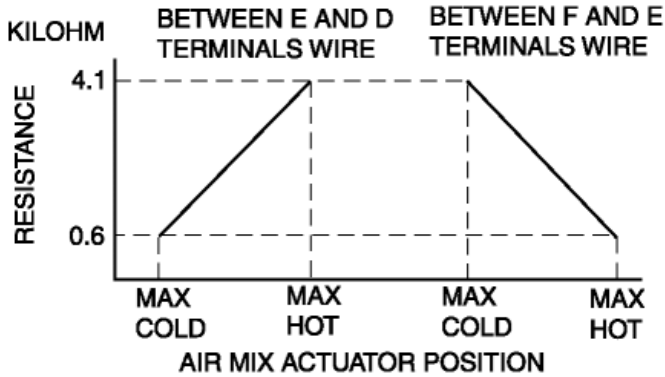
Terminal		Air mix actuator operation
A	B	
B+	Ground	COLD → HOT
Ground	B+	HOT → COLD

2. Verify that the resistance between terminals D and E, and E and F matches the air mix actuator operation as shown in the graph.
- If the operation condition and resistance are not normal, replace the air mix actuator.

Driver’s side



Passenger’s side



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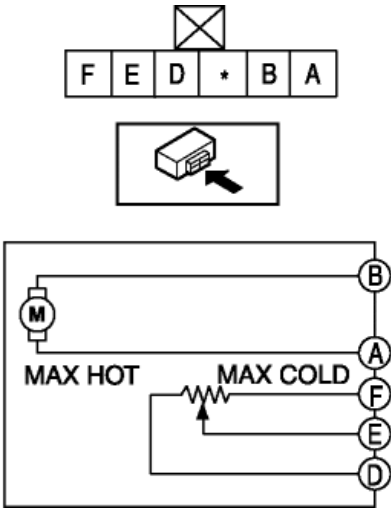
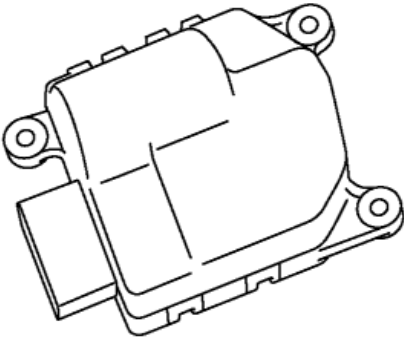
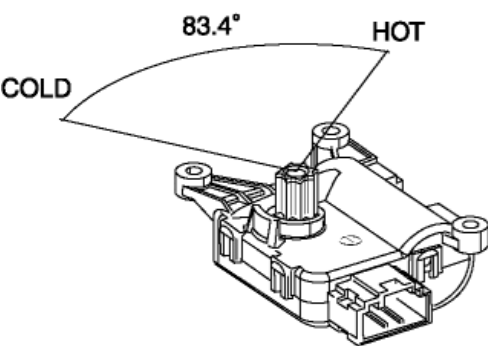
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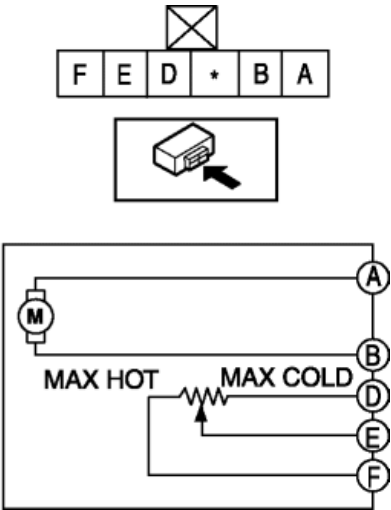
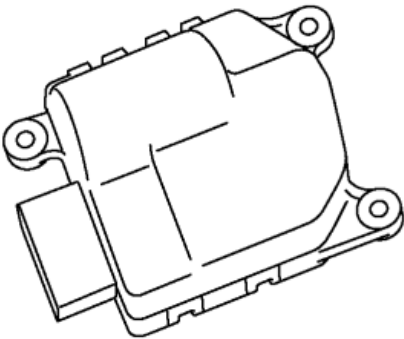
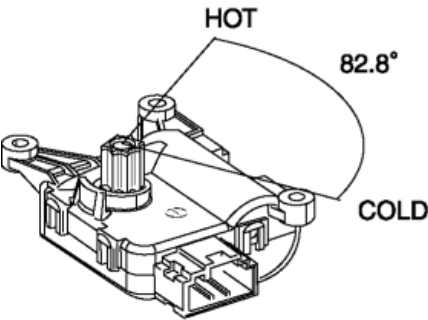
1. Connect battery positive voltage to air mix actuator terminal A (or B), connect terminal B (or A) to ground, and then verify that the air mix actuator operates as shown in the table.

- If the operation condition is not normal, replace the air mix actuator.

Driver’s side



Passenger’s side



Driver’s side

Terminal		Air mix actuator operation
A	B	

Ground	B+	COLD → HOT
B+	Ground	HOT → COLD

Passenger’s side

Terminal		Air mix actuator operation
A	B	
B+	Ground	COLD → HOT
Ground	B+	HOT → COLD

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