

2012 - Mazda6 - HVAC

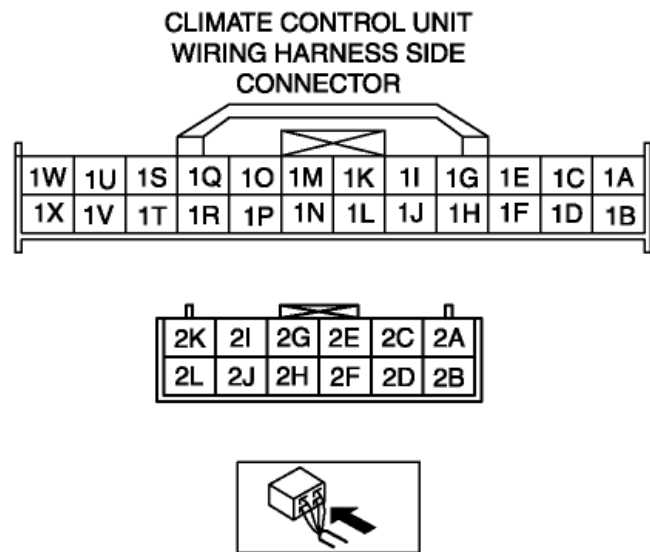
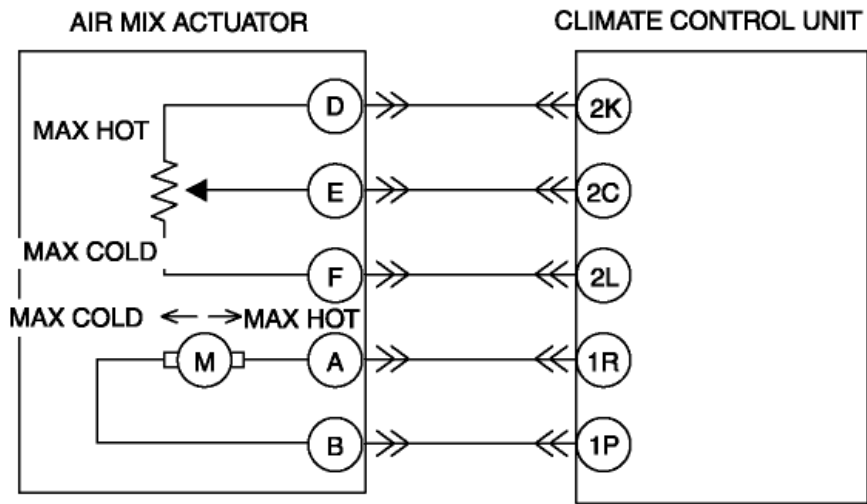
DTC B1081:71, B1082:71

NOTE:

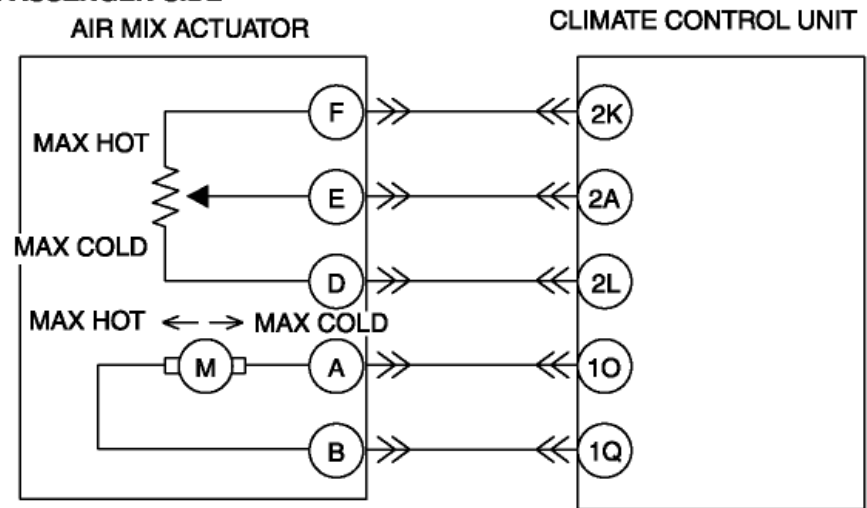
- DTC B1081:71, B1082:71 will be detected when switch the ignition to ON and approx. 30 s have passed since the air mix actuator is operated.

DTC B1081:71	Driver-side air mix actuator motor lock
DTC B1082:71	Passenger-side air mix actuator motor lock
POSSIBLE CAUSE	• Air mix actuator connector malfunction • Air mix actuator malfunction • A/C unit (air mix link and air mix crank) malfunction • Open or short circuit in wiring harness between climate control unit and air mix actuator • Climate control unit connector malfunction • Climate control unit malfunction

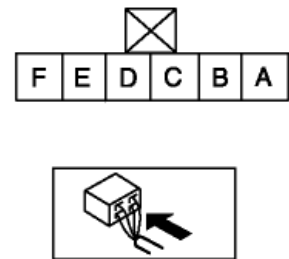
DRIVER-SIDE



PASSENGER-SIDE



AIR MIX ACTUATOR WIRING
HARNESS SIDE CONNECTOR



Diagnostic procedure

STEP	INSPECTION	ACTION
1	INSPECT AIR MIX ACTUATOR CONNECTOR - Switch the ignition to off. - Disconnect the negative battery cable. - Disconnect the air mix actuator connector. - Inspect the connector and terminals (corrosion, damage, pin disconnection). - Are the connector and terminals normal?	YesGo to the next step.
		No Repair/replace the connector or terminal. After repair procedure, go to the next step.
2	INSPECT AIR MIX ACTUATOR OPERATION - Disconnect the air mix actuator connector. - Apply battery positive voltage and connect the ground to the air mix actuator terminals A and B, and then inspect the air mix actuator. - Does the air mix actuator operate?	YesConnect the connector, then go to Step 4.
		No Go to the next step.
3	INSPECT AIR MIX LINK OPERATION Remove the air mix actuator.	YesReplace the air mix actuator. (See AIR MIX ACTUATOR REMOVAL/ INSTALLATION [FULL-AUTO AIR

	• Operate the air mix link manually. • Does the air mix link operate smoothly?	CONDITIONER.) Go to the next step.
		No Replace the air mix link and the air mix crank. Go to the next step.
4	INSPECT AIR MIX ACTUATOR CIRCUIT FOR OPEN CIRCUIT OR SHORT TO GROUND • Disconnect the climate control unit connector. • Apply battery positive voltage and connect the ground to the climate control unit terminal 1R and 1P, and then inspect the air mix actuator. (Driver-side) • Apply battery positive voltage and connect the ground to the climate control unit terminal 1O and 1Q, and then inspect the air mix actuator. (Passenger-side) • Does the air mix actuator operate?	Yes Go to the next step. No Repair/replace the malfunctioning vehicle wiring harness. After repair procedure, go to the next step.
5	VERIFY CLIMATE CONTROL UNIT CONNECTOR CONDITION • Inspect the connector and terminals (corrosion, damage, pin disconnection). • Are the connector and terminals normal?	Yes Go to the next step. No Repair/replace the malfunctioning vehicle wiring harness, connector, or terminal. After repair procedure, go to the next step.
6	VERIFY THAT SAME DTC IS NOT OUTPUT AGAIN • Reconnect the disconnected connectors. • Clear the past malfunction from memory. • Verify DTCs. • Is DTC B1081:71 or B1082:71 output?	Yes Repeat the inspection from Step 1. • If the malfunction does not recur, go to the next step. • If the malfunction recurs, replace the climate control unit. (See CLIMATE CONTROL UNIT REMOVAL/ INSTALLATION [FULL-AUTO AIR CONDITIONER].) then go to the next step. No Go to the next step.
7	VERIFY THAT NO OTHER DTCs ARE PRESENT • Verify other DTCs displayed. • Are any other DTCs output?	Yes Perform the corresponding DTC inspection. No DTC troubleshooting completed.

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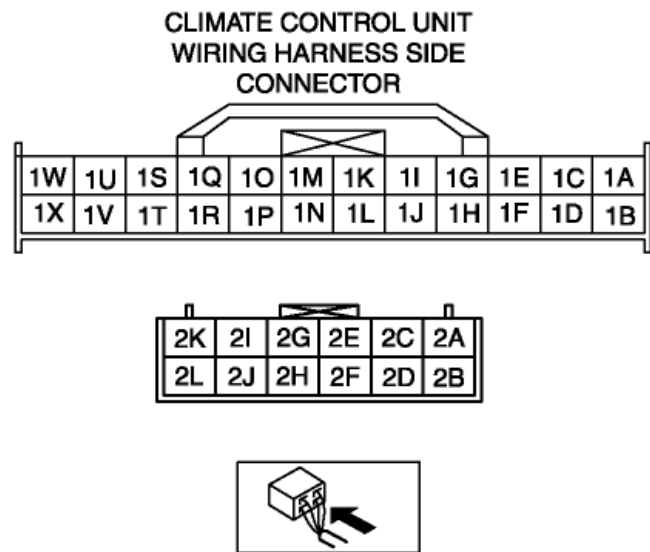
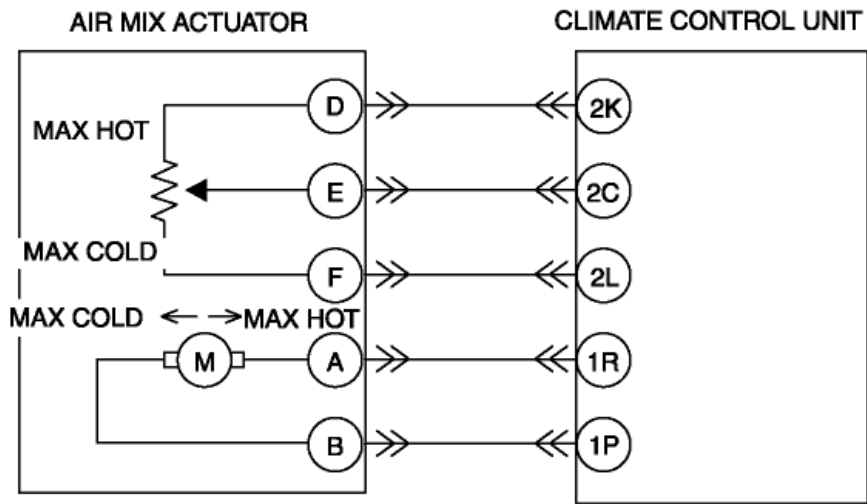
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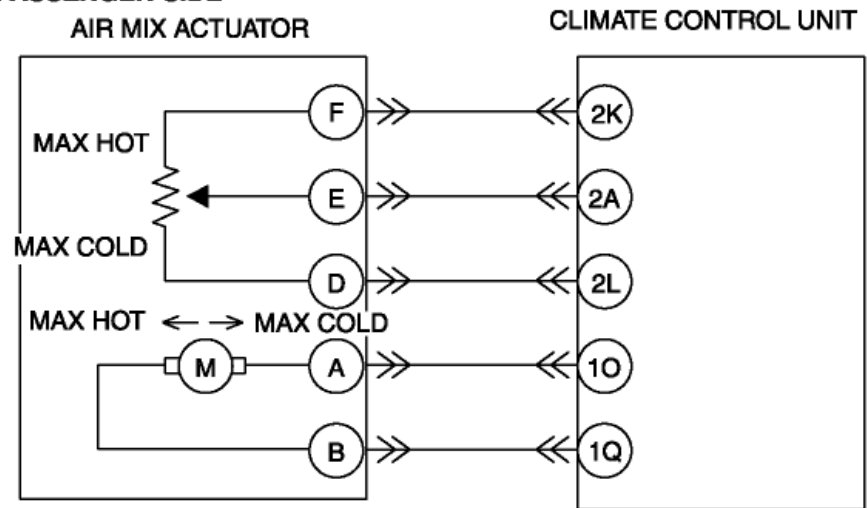
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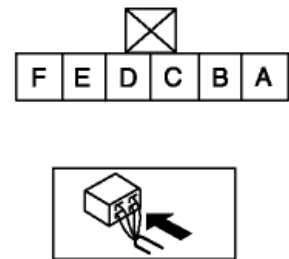
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