

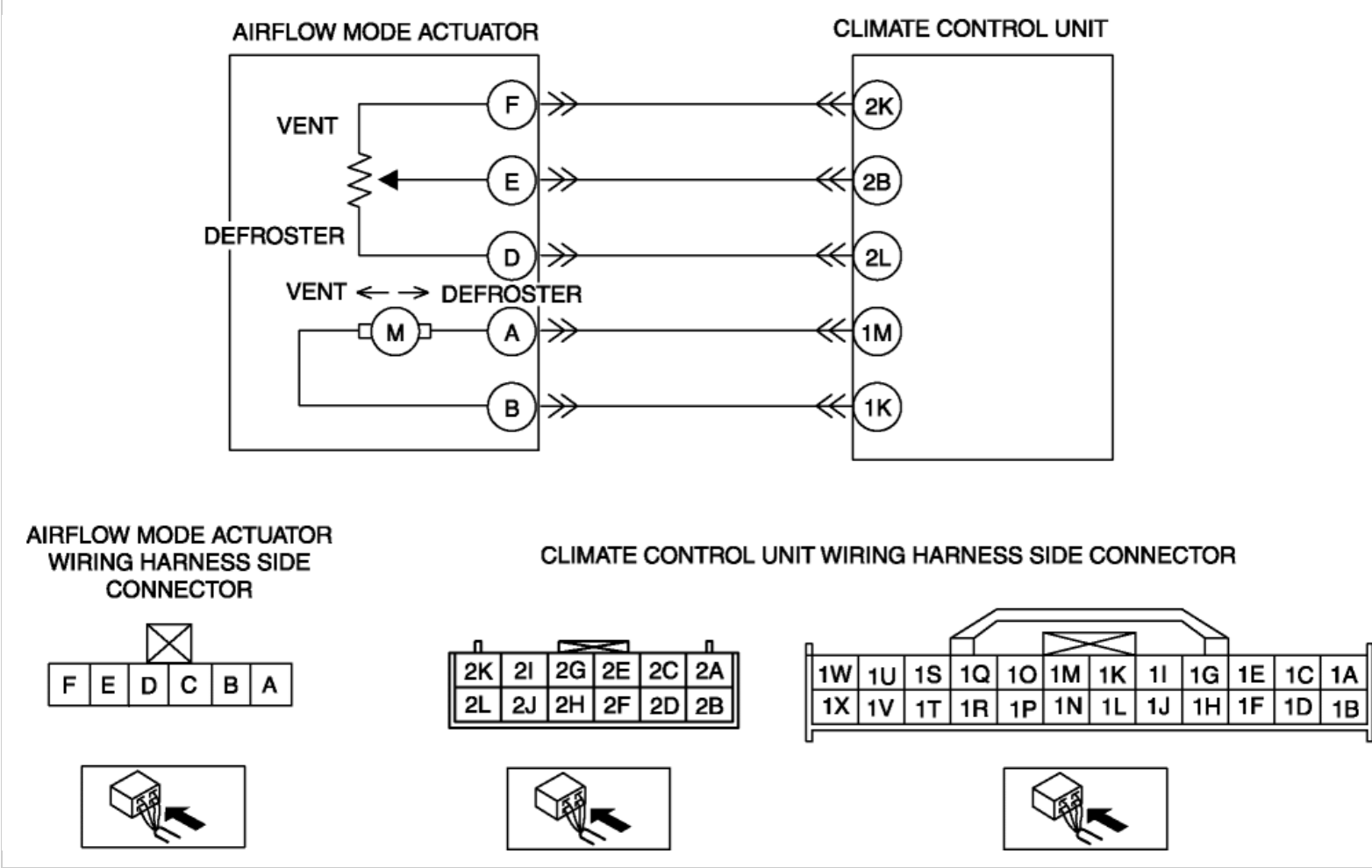
2012 - Mazda6 - HVAC

DTC B1086:71

NOTE:

- DTC B1086:71 will be detected when switch the ignition to ON and approx. 30 s have passed since the airflow mode actuator is operated.

DTC B1086:71	Airflow mode actuator motor lock
POSSIBLE CAUSE	• Airflow mode actuator connector malfunction • Airflow mode actuator malfunction • A/C unit (airflow mode link and airflow mode crank) malfunction • Open or short circuit in wiring harness between climate control unit and airflow mode actuator • Climate control unit connector malfunction • Climate control unit malfunction



Diagnostic procedure

STEP	INSPECTION	ACTION
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1	INSPECT AIRFLOW MODE ACTUATOR CONNECTOR - Switch the ignition to off. - Disconnect the negative battery cable. - Disconnect the airflow mode actuator connector. - 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 connector or terminal. After repair procedure, go to the next step.
2	INSPECT AIRFLOW MODE ACTUATOR OPERATION - Disconnect the airflow mode actuator connector. - Apply battery positive voltage and connect the ground to the airflow mode actuator terminals A and B, and then inspect the airflow mode actuator. - Does the airflow mode actuator operate?	Yes	Connect the connector, then go to Step 4.
		No	Go to the next step.
3	INSPECT AIRFLOW MODE MAIN LINK OPERATION - Remove the airflow mode actuator. - Operate the airflow mode main link manually. - Does the airflow mode main link operate smoothly?	Yes	Replace the airflow mode actuator. (See AIRFLOW MODE ACTUATOR INSPECTION [FULL-AUTO AIR CONDITIONER] .) Go to the next step.
		No	Replace the airflow mode main link, airflow mode sub link, and the airflow mode crank. Go to the next step.
4	INSPECT AIRFLOW MODE 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 connector terminals 1M and 1K, and then inspect the airflow mode actuator. - Does the airflow mode 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 B1086:71 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.

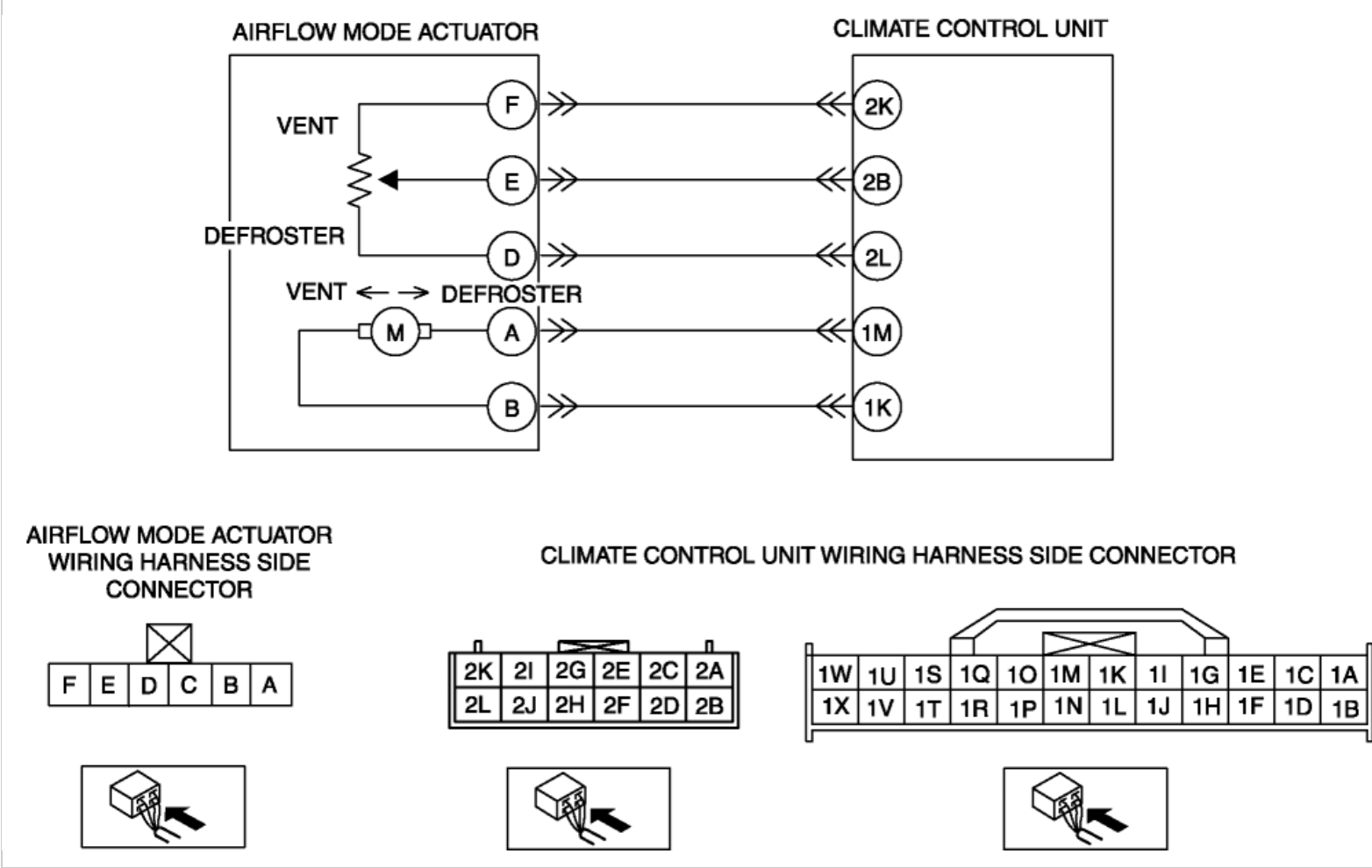
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		No	Repair/replace the connector or terminal. After repair procedure, go to the next step.
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		No	Go to the next step.
3	INSPECT AIRFLOW MODE MAIN LINK OPERATION - Remove the airflow mode actuator. - Operate the airflow mode main link manually. - Does the airflow mode main link operate smoothly?	Yes	Replace the airflow mode actuator. (See AIRFLOW MODE ACTUATOR INSPECTION [FULL-AUTO AIR CONDITIONER] .) Go to the next step.
		No	Replace the airflow mode main link, airflow mode sub link, and the airflow mode crank. Go to the next step.
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		No	Repair/replace the malfunctioning vehicle wiring harness. After repair procedure, go to the next step.
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		No	Repair/replace the malfunctioning vehicle wiring harness, connector, or terminal. After repair procedure, go to the next step.
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		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.
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