DTC U200D:11 [FULL-AUTO AIR CONDITIONER]

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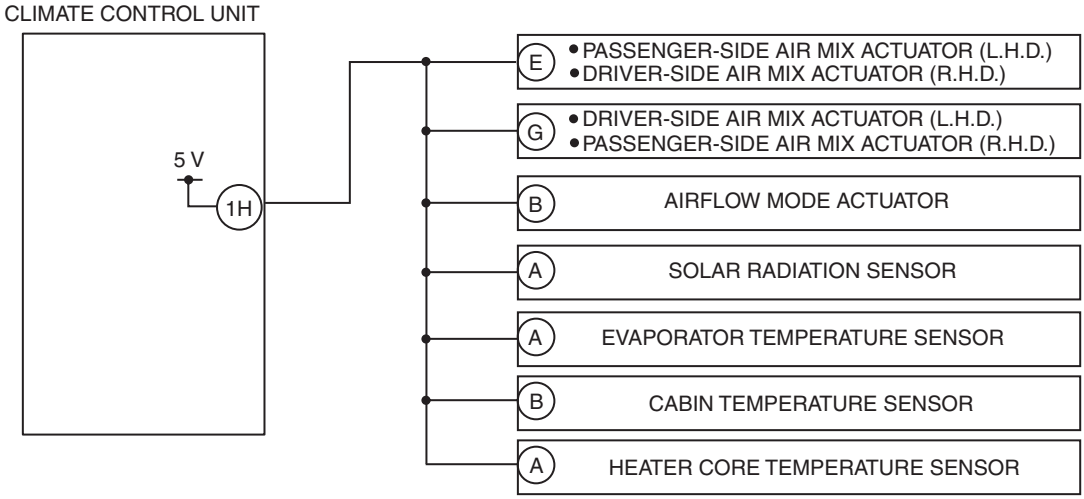
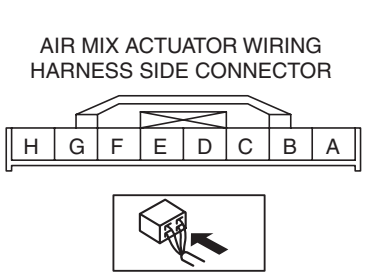
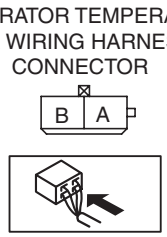
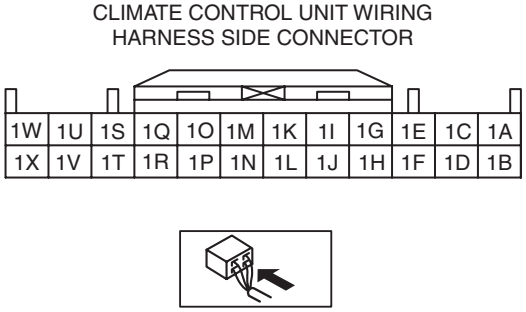
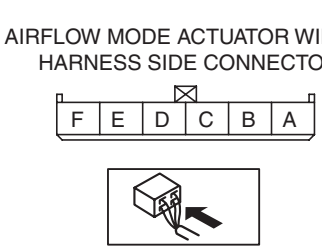
System malfunction location	• Climate control unit circuit voltage (+5V) circuit short to ground
Detection condition	• Malfunction in wiring harness between climate control unit circuit voltage (+5V) and each sensor/actuator
Fail-safe	—
Possible cause	• Connector or terminal malfunction • Each sensor/actuator malfunction • Short to ground in wiring harness between climate control unit and air mix actuator • Short to ground in wiring harness between climate control unit and airflow mode actuator • Short to ground in wiring harness between climate control unit and solar radiation sensor • Short to ground in wiring harness between climate control unit and evaporator temperature sensor • Short to ground in wiring harness between climate control unit and cabin temperature sensor • Short to ground in wiring harness between climate control unit and heater core temperature sensor (with heater core temperature sensor) • Climate control unit malfunction

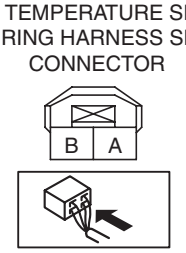


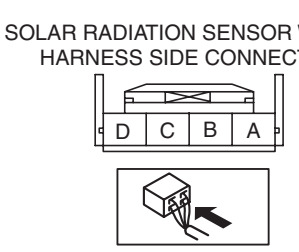


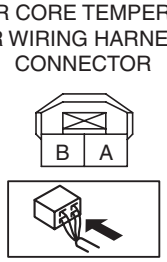












Diagnostic Procedure

STEP	INSPECTION		ACTION
1	**VERIFY CLIMATE CONTROL UNIT CONNECTOR CONDITION** • Switch the ignition off. • Disconnect the negative battery cable. (See NEGATIVE BATTERY CABLE DISCONNECTION/CONNECTION [SKYACTIV-G 2.0, SKYACTIV-G 2.5].) (See NEGATIVE BATTERY CABLE DISCONNECTION/CONNECTION [SKYACTIV-G 2.0, SKYACTIV-G 2.5 (WITHOUT i-stop)].) (See NEGATIVE BATTERY CABLE DISCONNECTION/CONNECTION [SKYACTIV-D 2.2].) • Disconnect the climate control unit connectors. • 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.
2	**VERIFY CONNECTOR CONDITION** • Disconnect the following each sensor/actuator connectors. — Air mix actuator (See AIR MIX ACTUATOR REMOVAL/INSTALLATION [FULL-AUTO AIR CONDITIONER].) — Airflow mode actuator (See AIRFLOW MODE ACTUATOR REMOVAL/INSTALLATION [FULL-AUTO AIR CONDITIONER].) — Solar radiation sensor (See SOLAR RADIATION SENSOR REMOVAL/ INSTALLATION [FULL-AUTO AIR CONDITIONER].) — Evaporator temperature sensor (See EVAPORATOR TEMPERATURE SENSOR REMOVAL/INSTALLATION [FULL-AUTO AIR CONDITIONER].) — Cabin temperature sensor (See CABIN TEMPERATURE SENSOR REMOVAL/ INSTALLATION [FULL-AUTO AIR CONDITIONER].) — Heater core temperature sensor (See HEATER CORE TEMPERATURE SENSOR REMOVAL/ INSTALLATION [FULL-AUTO AIR CONDITIONER].) • Inspect the connector and terminals (corrosion, damage, pin disconnection). • Are the connector and terminals normal?	Yes	Go to the next step.
		No	Replace the malfunctioning part. After replace procedure, go to the next step.

STEP	INSPECTION		ACTION
3	**INSPECT EACH SENSOR/ACTUATOR** • Inspect the following each sensor/actuator connectors. — Air mix actuator (See AIR MIX ACTUATOR INSPECTION [FULL-AUTO AIR CONDITIONER].) — Airflow mode actuator (See AIRFLOW MODE ACTUATOR INSPECTION [FULL-AUTO AIR CONDITIONER].) — Solar radiation sensor (See SOLAR RADIATION SENSOR INSPECTION [FULL-AUTO AIR CONDITIONER].) — Evaporator temperature sensor (See EVAPORATOR TEMPERATURE SENSOR INSPECTION [FULL-AUTO AIR CONDITIONER].) — Cabin temperature sensor (See CABIN TEMPERATURE SENSOR INSPECTION [FULL-AUTO AIR CONDITIONER].) — Heater core temperature sensor (See HEATER CORE TEMPERATURE SENSOR INSPECTION [FULL-AUTO AIR CONDITIONER].) • Is it normal?	Yes	Go to the next step.
		No	Replace the malfunctioning sensor/actuator. After repair procedure, go to the next step.
4	**INSPECT EACH SENSOR/ACTUATOR CIRCUIT FOR SHORT TO GROUND** • Inspect for continuity between the following terminals (wiring harness-side) and body ground: — Climate control unit 1H • Is there continuity?	Yes	Repair the wiring harness. Go to the next step.
		No	Go to the next step.
5	**VERIFY THAT SAME DTC IS NOT OUTPUT AGAIN** • Reconnect the disconnected connectors. • Connect the negative battery cable. (See NEGATIVE BATTERY CABLE DISCONNECTION/CONNECTION [SKYACTIV-G 2.0, SKYACTIV-G 2.5].) (See NEGATIVE BATTERY CABLE DISCONNECTION/CONNECTION [SKYACTIV-G 2.0, SKYACTIV-G 2.5 (WITHOUT i-stop)].) (See NEGATIVE BATTERY CABLE DISCONNECTION/CONNECTION [SKYACTIV-D 2.2].) • Clear the past malfunction from memory. • Verify DTCs. • Is DTC U200D:11 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].) Go to the next step.
		No	Go to the next step.
6	**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.