NO.3 AIR INTAKE MODE FROM VENT DOES NOT CHANGE [FULL-AUTO AIR CONDITIONER]

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3	**Air intake mode from vent does not change.**
DESCRIPTION	• Air intake mode does not change when switching REC/FRESH mode.
POSSIBLE CAUSE	• Air intake actuator malfunction • Air intake door malfunction • Clogged in blower unit

- When performing an asterisked (*) troubleshooting inspection, shake the wiring harness and connectors while performing the inspection to discover whether poor contact points are the cause of any intermittent malfunctions. If there is a problem, inspect to make sure connectors, terminals and wiring harnesses are connected correctly and undamaged.

Diagnostic procedure

STEP	INSPECTION		ACTION
1	**INSPECT AIR INTAKE ACTUATOR** • Inspect the following item using the M-MDS A/C operation check mode function. (See A/C OPERATION CHECK MODE [FULL-AUTO AIR CONDITIONER].) — Air Intake Actuator • Does the air intake actuator operate?	Yes	Go to Step 7.
		No	Go to the next step.
2	**INSPECT TO SEE WHETHER MALFUNCTION IS IN AIR INTAKE ACTUATOR OR ELSEWHERE** • Disconnect the air intake actuator connector. • Switch the ignition ON (engine off or on). • Measure the voltages at the following climate control unit terminals. — Terminal 2J (FRESH motor drive signal) — Terminal 2L (RECIRCULATE motor drive signal) (See CLIMATE CONTROL UNIT INSPECTION [FULL-AUTO AIR CONDITIONER].) • Are voltages normal?	Yes	Go to the next step.
		No	Go to Step 4.
3	**INSPECT AIR INTAKE ACTUATOR** • Inspect the air intake actuator. (See AIR INTAKE ACTUATOR INSPECTION [FULL-AUTO AIR CONDITIONER].) • Is the air intake actuator normal?	Yes	Go to Step 7.
		No	Replace the air intake actuator. (See AIR INTAKE ACTUATOR REMOVAL/INSTALLATION [FULL-AUTO AIR CONDITIONER].) Then go to Step 9.
4	**INSPECT TO SEE WHETHER MALFUNCTION IS IN WIRING HARNESS (SHORT TO B+ BETWEEN CLIMATE CONTROL UNIT AND AIR INTAKE ACTUATOR) OR ELSEWHERE** • Air intake actuator connector disconnected. • Disconnect the climate control unit connector. • Measure the voltages at the following air intake actuator terminals. — Terminal C (L.H.D.) / B (R.H.D.) (FRESH motor drive signal) — Terminal B (L.H.D.) / C (R.H.D.) (RECIRCULATE motor drive signal) • Are voltages **approx. 0 V**?	Yes	Go to the next step.
		No	Repair the wiring harness for short to B+ between the climate control unit and air intake actuator, then go to Step 9.

STEP	INSPECTION		ACTION
5	**INSPECT TO SEE WHETHER MALFUNCTION IS IN WIRING HARNESS (SHORT TO GROUND BETWEEN CLIMATE CONTROL UNIT AND AIR INTAKE ACTUATOR) OR ELSEWHERE** • Climate control unit and air intake actuator connectors disconnected. • Switch the ignition off. • Inspect for continuity at the following terminals between the air intake actuator and ground. — Terminal C (L.H.D.) / B (R.H.D.) (FRESH motor drive signal) — Terminal B (L.H.D.) / C (R.H.D.) (RECIRCULATE motor drive signal) • Is there continuity?	Yes	Repair the wiring harness between the climate control unit and air intake actuator, then go to Step 9.
		No	Go to the next step.
6	**INSPECT TO SEE WHETHER MALFUNCTION IS IN WIRING HARNESS (LACK OF CONTINUITY OR OPEN BETWEEN CLIMATE CONTROL UNIT AND AIR INTAKE ACTUATOR) OR ELSEWHERE** • Climate control unit and air intake actuator connectors disconnected. • Inspect for continuity at the following terminals between the air intake actuator and climate control unit. **L.H.D.** — Terminal C—2J (FRESH motor drive signal) — Terminal B—2L (RECIRCULATE motor drive signal) **R.H.D.** — Terminal B—2J (FRESH motor drive signal) — Terminal C—2L (RECIRCULATE motor drive signal) • Is there continuity?	Yes	Replace the climate control unit, then go to Step 9. (See CLIMATE CONTROL UNIT REMOVAL/ INSTALLATION [FULL-AUTO AIR CONDITIONER].)
		No	Repair the wiring harness for lack of continuity or open between climate control unit and air intake actuator, then go to Step 9.
7	**INSPECT AIR INTAKE LINK** • Inspect the air intake links. — Is there grease on link? — Are the links securely and properly installed? — Are the links free of obstructions and hindrances? • Are the above items normal?	Yes	Go to the next step.
		No	Apply grease to the links. If any the links are damaged, replace the air intake actuator, then go to Step 9.
8	**INSPECT TO SEE WHETHER MALFUNCTION IS IN CLIMATE CONTROL UNIT OR AIR INTAKE DOOR** • Inspect the blower unit air intake door. — Is the door free of obstructions, cracks, and damage? — Are the doors securely and properly installed? • Are the above items normal?	Yes	Replace the climate control unit, then go to the next step. (See CLIMATE CONTROL UNIT REMOVAL/ INSTALLATION [FULL-AUTO AIR CONDITIONER].)
		No	Remove obstruction, or install the doors in the proper position. If any doors are cracked or damaged, replace them, then go to the next step.
9	**CONFIRM THAT MALFUNCTION SYMPTOMS DO NOT RECUR AFTER REPAIR** • Does the air intake mode change smoothly?	Yes	Troubleshooting completed. Explain repairs to customer.
		No	Recheck malfunction symptoms, then repeat from Step 1 if the malfunction recurs.