NO.3 AIR INTAKE MODE DOES NOT CHANGE [MANUAL AIR CONDITIONER]

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3	**Air intake mode 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

- 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.

Note

- The climate control unit controls the air intake mode when the airflow mode is in DEFROSTER so that it is fixed at FRESH mode. At this time, the airflow mode cannot be changed from FRESH to RECIRCULATE even if the REC switch is pressed, but this does not indicate a malfunction.

Diagnostic procedure

STEP	INSPECTION		ACTION
1	**INSPECT TO SEE WHETHER MALFUNCTION IS IN AIR INTAKE ACTUATOR OR ELSEWHERE** • Disconnect the air intake actuator connector. • Measure the voltages at the following air intake actuator terminals. **L.H.D.** — Terminal C (FRESH motor drive signal) — Terminal B (RECIRCULATE motor drive signal) **R.H.D.** — Terminal B (FRESH motor drive signal) — Terminal C (RECIRCULATE motor drive signal) • Are voltages normal?	Yes	Go to the next step.
		No	Go to Step 3.
2	**INSPECT AIR INTAKE ACTUATOR** • Inspect air intake actuator. (See AIR INTAKE ACTUATOR INSPECTION [MANUAL AIR CONDITIONER].) • Is it normal?	Yes	Go to the Step 6.
		No	Replace the air intake actuator, then go to Step 8. (See AIR INTAKE ACTUATOR REMOVAL/INSTALLATION [MANUAL AIR CONDITIONER].)
3	**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 and climate control unit disconnected. • Switch the ignition ON (engine off or on). • Measure the voltages at the following air intake actuator terminals. **L.H.D.** — Terminal C (FRESH motor drive signal) — Terminal B (RECIRCULATE motor drive signal) **R.H.D.** — Terminal B (FRESH motor drive signal) — Terminal C (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 8.

STEP	INSPECTION		ACTION
4	**INSPECT TO SEE WHETHER MALFUNCTION IS IN WIRING HARNESS (SHORT TO GROUND BETWEEN CLIMATE CONTROL UNIT AND AIR INTAKE ACTUATOR) OR ELSEWHERE** • Air intake actuator and climate control unit connectors disconnected. • Switch the ignition off. • Inspect for continuity at the following terminals between the air intake actuator and ground. **L.H.D.** — Terminal C (FRESH motor drive signal) — Terminal B (RECIRCULATE motor drive signal) **R.H.D.** — Terminal B (FRESH motor drive signal) — Terminal C (RECIRCULATE motor drive signal) • Is there continuity?	Yes	Repair the wiring harness for short to ground between the climate control unit and air intake actuator, then go to Step 8.
		No	Go to the next step.
5	**INSPECT TO SEE WHETHER MALFUNCTION IS IN WIRING HARNESS (OPEN CIRCUIT BETWEEN CLIMATE CONTROL UNIT AND AIR INTAKE ACTUATOR) OR ELSEWHERE** • Air intake actuator and climate control unit connectors disconnected. • Switch the ignition off. • Inspect for continuity at the following terminals between the climate control unit and air intake actuator. — Air intake actuator terminal C (L.H.D.) /B (R.H.D.) and climate control unit terminal E (FRESH motor drive signal) — Air intake actuator terminal B (L.H.D.) / C (R.H.D.) and climate control unit terminal C (RECIRCULATE motor drive signal) • Is there continuity?	Yes	Go to the next step.
		No	Repair the wiring harness for open circuit between the climate control unit and air intake actuator, then go to Step 8.
6	**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 8.
7	**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.
		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.
8	**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.