NO.2 AMOUNT OF AIR BLOWN FROM VENTS DOES NOT CHANGE [FULL-AUTO AIR CONDITIONER]

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2	**Amount of air blown from vents does not change.**
DESCRIPTION	• Malfunction in blower system
POSSIBLE CAUSE	• Blower unit malfunction • Blower motor malfunction • Malfunction in power MOS FET system • Climate control unit 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 make sure connectors, terminals and wiring harnesses are connected correctly and undamaged.

Diagnostic procedure

STEP	INSPECTION		ACTION
1	**INSPECT HEATER 40 A FUSE** • Inspect the HEATER 40 A fuse. • Is it normal?	Yes	Go to the next step.
		No	**If the fuse is melted:** Repair or replace wiring harness for short to GND and replace the fuse. **If the fuse is deterioration:** Replace the fuse. Then go to Step 15.
2	**INSPECT TO SEE WHETHER MALFUNCTION IS IN BLOWER UNIT OR ELSEWHERE** • Switch the ignition ON (engine off or on). • Turn the fan dial clockwise. • Recirculate air inside the vehicle. • Does the blower motor rotate smoothly?	Yes	Go to the next step.
		No	Go to Step 4.
3	**INSPECT BLOWER UNIT INTAKE VENT** • Is blower unit intake vent clogged?	Yes	Remove obstruction, then go to Step 15.
		No	Inspect if there are any obstruction in the A/C unit passage, then go to Step 15.
4*	**INSPECT TO SEE WHETHER MALFUNCTION IS IN BLOWER RELAY SYSTEM OR POWER MOS FET SYSTEM** • Switch the ignition ON (engine off or on). • Turn the fan dial clockwise. • Measure the voltage at the following blower motor terminal. — Terminal A (blower motor operation signal) • Is voltage **approx. 12 V**?	Yes	Go to Step 8.
		No	Go to the next step.
5*	**INSPECT TO SEE WHETHER MALFUNCTION IS IN WIRING HARNESS (LACK OF CONTINUITY BETWEEN FUSE BLOCK AND BLOWER RELAY) OR ELSEWHERE** • Measure the voltage at the following blower relay terminals. — Terminal A (B+ signal) — Terminal B (B+ signal) • Is the voltage **approx. 12 V**?	Yes	Go to the next step.
		No	Repair the wiring harness for lack of continuity between the blower relay and HEATER 40 A fuse, then go to Step 15.
6*	**INSPECT TO SEE WHETHER MALFUNCTION IS IN WIRING HARNESS (LACK OF CONTINUITY BETWEEN BLOWER RELAY AND GROUND) OR ELSEWHERE** • Measure the voltage at the following blower relay terminal. — Terminal D (GND signal) • Is the voltage **approx. 0 V**?	Yes	Go to the next step.
		No	Repair the wiring harness for lack of continuity between the blower relay and front body control module (FBCM), then go to Step 15.

STEP	INSPECTION		ACTION
7*	**INSPECT TO SEE WHETHER MALFUNCTION IS IN WIRING HARNESS (LACK OF CONTINUITY BETWEEN BLOWER RELAY AND BLOWER MOTOR) OR BLOWER RELAY** • Measure the voltage at the following blower relay terminal. — Terminal C (blower motor operation signal) • Is the voltage **approx. 12 V**?	Yes	Repair the wiring harness for lack of continuity between the blower relay and blower motor, then go to Step 15.
		No	Replace the blower relay, then go to Step 15.
8*	**INSPECT TO SEE WHETHER MALFUNCTION IS IN BLOWER MOTOR OR ELSEWHERE** • Measure the voltage at the following blower motor terminal. — Terminal B (blower motor operation signal) • Is the voltage **approx. 12 V**?	Yes	Go to the next step.
		No	Inspect the blower motor, then go to Step 15. (See BLOWER MOTOR INSPECTION [FULL-AUTO AIR CONDITIONER].)
9*	**INSPECT TO SEE WHETHER MALFUNCTION IS IN WIRING HARNESS (LACK OF CONTINUITY BETWEEN BLOWER MOTOR AND POWER MOS FET) OR ELSEWHERE** • Measure the voltage at the following terminal of power MOS FET. — Terminal B (blower motor operation signal) • Is voltage **approx. 12 V**?	Yes	Go to the next step.
		No	Repair the wiring harness for lack of continuity between the blower motor and power MOS FET, then go to Step 15.
10*	**INSPECT TO SEE WHETHER MALFUNCTION IS IN WIRING HARNESS (LACK OF CONTINUITY BETWEEN POWER MOS FET AND GROUND) OR ELSEWHERE** • Measure the voltage at the following power MOS FET terminal. — Terminal A (GND) • Is the voltage **approx. 0 V**?	Yes	Go to the next step.
		No	Repair the wiring harness for lack of continuity between the power MOS FET and ground, then go to Step 15.
11	**INSPECT BLOWER UNIT** • Inspect the fan in blower unit. — Is the fan free of interference with the blower unit case? — Is the fan free of foreign material and obstruction? • Is the fan normal?	Yes	Go to the next step.
		No	Remove obstruction, repair or replace the fan and A/C unit case, then go to Step 15.
12*	**INSPECT TO SEE WHETHER MALFUNCTION IS IN POWER MOS FET OR ELSEWHERE** • Disconnect power MOS FET connector. • Turn the fun switch to 1st position from off. • Measure the voltage at the following power MOS FET terminal. — Terminal E (blower motor speed control signal) • Is voltage **approx. 10 V**?	Yes	Replace the power MOS FET, then go to Step 15. (See POWER METAL OXIDE SEMICONDUCTOR FIELD EFFECT TRANSISTOR (POWER MOS FET) REMOVAL/ INSTALLATION [FULL-AUTO AIR CONDITIONER].)
		No	Go to the next step.
13*	**INSPECT TO SEE WHETHER MALFUNCTION IS IN WIRING HARNESS (LACK OF CONTINUITY BETWEEN POWER MOS FET AND CLIMATE CONTROL UNIT) OR ELSEWHERE** • Switch the ignition off. • Disconnect climate control unit connector. • Inspect for continuity at the following terminals between the power MOS FET and climate control unit. — Terminal E—2D blower motor speed control signal) — Terminal B—2A (blower motor speed feedback signal) • Is there continuity?	Yes	Go to the next step.
		No	Repair the wiring harness for lack of continuity between the power MOS FET and climate control unit, then go to Step 15.

STEP	INSPECTION		ACTION
14*	**INSPECT TO SEE WHETHER MALFUNCTION IS IN CLIMATE CONTROL UNIT OR WIRING HARNESS (SHORT TO GROUND IN WIRING HARNESS BETWEEN POWER MOS FET AND CLIMATE CONTROL UNIT)** • Inspect for continuity at the following terminal between the power MOS FET and ground. — Terminal E (blower motor control signal)—ground — Terminal B (blower motor feedback signal)—ground • Is there continuity?	Yes	Repair the wiring harness for short to GND between the power MOS FET and ground, then go to the next step.
		No	Replace the climate control unit, then go to the next step. (See CLIMATE CONTROL UNIT REMOVAL/ INSTALLATION [FULL-AUTO AIR CONDITIONER].)
15	**CONFIRM THAT MALFUNCTION SYMPTOM DOES NOT RECUR AFTER REPAIR** • Is air discharged from vent?	Yes	Troubleshooting completed. Explain repairs to customer.
		No	Recheck malfunction symptoms, then repeat from Step 1 if the malfunction recurs.