

Trouble shooting your Arctic Breeze 12 volt air conditioning system

NOTE: This battery disconnect will automatically disengage the AC system when battery voltage drops below 12 volts and will automatically restart the system when battery voltage reaches 12.5 volts for a period of 15 to 30 seconds.

Nothing works, not even blower

1	Check the voltage.	Exceeds 12.5 volts	Go to step 2
		Battery voltage low.	Recharge batteries
2	Check system breaker	Was disconnected	Reset
		Was engaged.	Go to step 3
3	Check 7.5 amp ATO fuse inside condenser\ compressor box.(remove from fuse holder has RED wire)	Fuse was blown.	Replace fuse, and check blower operation.
		Fuses OK.	Go to step 4.
4	With a 12 volt test light check for power available in/out of the 7.5 amp ATO	No power at fuse	-check battery connections -ensure 12.5 volts available -check power in/out of breaker -may have faulty small relay -may have faulty battery disconnect switch See wiring diagram or dealer
		Test light indicates power	Go to step 5
5	Disconnect 4 prong weather-pack connector at back of compressor box and check for power on the red wire coming out of the compressor box	Test light indicates power	Wire may have become disconnected at blower switch or faulty ground
		No power on red wire	If power at fuse but no power at red wire on weather-pack connector, then wire must be broken. Repair and try again.

Blower works but compressor does not start.

1	Turn thermostat knob all the way clockwise to max cold position. The compressor and condenser fans should start to operate.	Yes they do.	Check to ensure both condenser fans operate.
		No, the compressor does not start.	Go to step 2.
2	Check 20 amp fuse for condenser fans.	Fuse was blown.	Replace fuse and check system operation.
		Fuses OK.	Go to step 3.
3	Check for 12 volt power at the binary switch, located on dryer.	Yes, 12 volt in and out of switch.	Go to step 4.
		12 volt found on one side only.	System may be low/empty of refrigerant or may have faulty binary switch. If system is low, find and repair leak.
4	Check for 12 volt power and proper ground at small wires of the 75 amp relay. Relay should click as evaporator blower is turned on and off.	Relay has power and clicks, but compressor still does not start. Note: condenser fans should also engage the same time as comp.	Compressor motor may be faulty or require new brushes. Check all cable connections to ensure good contact and 12v power present.
		Relay does not click but 12 volt is available on small white wire and ground is ok.	Check to ensure good ground available.
			Relay may be faulty ----- replace it.

Everything runs, but the system does not blow cold air.

1	Check to ensure the coils are both clean, evap coil located in cab and condenser coil located in compressor box.	Both coils are clean and have lots of air flow.	Go to step 2.
		Coils require cleaning.	Clean the coils and try again.
2	Check system over for refrigerant leaks. Some refrigerant may have leaked out.	Found leaks.	Repair and refill.
		No leaks found.	Check pressures and feel return line temperature. Should be cold.
3	Check belt tension to ensure compressor is operating at proper speed.	Yes, the belt is tight.	
		Belt may have been slipping.	Replace and tension belt.