

 **POWER
BREEZER**

E-CLASS

USER MANUAL
MODELS: E520M, E780L; E1220SL



V1.0_2404

Welcome

Congratulations on your selection of a Power Breezer® Evaporative Cooler, and welcome to a cooler tomorrow. We thank you for your purchase. We are proud of our products and have designed your Power Breezer Evaporative Cooler for years of safe and reliable service.

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Important Safety Information

To help protect your safety, this document utilizes safety messages. They are preceded with a safety alert symbol and one of three safety words: DANGER, WARNING, or CAUTION. Each safety message tells you what the hazard is, what can happen, and what you can do to avoid or reduce injury.

The safety signal words mean:

DANGER means if the danger is not avoided, it **WILL** cause **death or serious injury**.

WARNING means if the warning is not heeded, it **CAN** cause **death or serious injury**.

CAUTION means if the precaution is not taken, it **MAY** cause **minor or moderate injury**.

- This Unit is not intended for use by persons (including children) with reduced physical, sensory, or mental capabilities, or lack of experience and knowledge unless they have been given supervision or instruction concerning the use of the appliance by a person responsible for their safety.
- Children should be supervised to ensure that they do not play with the Unit.
- Check to see if the power cord is damaged prior to use. If the power cord is damaged, it must be replaced by the manufacturer, its service agent, or similarly qualified persons to avoid personal injury.
- Ensure the power cord is fully unwound before use.
- Do not use the Unit in places that use or store volatile substances (diluent, gasoline, kerosene, liquefied gas, and other volatile liquids; magnesium, aluminum, lead, and other volatile dust and vapors) to avoid possible ignition, explosion, or fire.
- Do not physically alter the Unit in any way. Doing so may lead to the Unit's failure and or create a fire hazard.
- The Unit should only be powered by an electrical outlet that adheres to national wiring regulations.
- The Unit is designed for use with a 115V~60Hz, power supply.
- Use a dedicated electrical outlet with a current rating of 15A. Use of an electrical outlet shared with other electrical appliances may cause the Unit to malfunction.
- Do not locate the Unit near a fire or high heat source to avoid deformation of the Unit.
- Connect the machine to a grounded power supply.
- Do not position the Unit up against the wall or position it near any other structure that may restrict the airflow around the Unit. Ensure a 3 foot gap between the Unit and any obstructions while the Unit is in operation.
- Do not use the Unit in an enclosed environment. There must be sufficient air flow for the Unit to function correctly and perform to its full capabilities.
- Do not move the Unit when it is running.

- Never leave the Unit running unattended.
- Immediately power off and or unplug the Unit in case of an error such as stopped fan rotation, strange noises, improper vibrations, and or unusual odors.
- Grip the plug end when unplugging from the power source. Do not unplug by pulling the power cord. Doing so will damage the power cord.
- Use a dry and clean cloth to clean off any dust or moisture on the power plug regularly. A dusty or moist plug may cause poor contact or electric safety hazards.
- Do not bend, drag, twist, pinch, or change the power cord. Do not overload the power cord which may lead to fire, electrocution, and other safety hazards.
- The Unit is designed for indoor use only. Do not use or store the Unit in locations where rain and or snow may have access to the Unit or its power supply. Do not operate the Unit with wet hands.
- Do not use the Unit on boats and other vehicles.
- Do not insert fingers or other objects inside the Unit, doing so may cause bodily injury.
- Do not operate the Unit unless all Evaporative Media is securely in place.

To prevent damage, the Unit cannot be used in the following locations:

- An uneven or severely angled floor
- Stairway, emergency exit, house exit and entrance, etc.

DANGER RISK OF FIRE The Evaporative Media used in the Unit is made of paper-based material. Operating or storing the Unit near open flames and or sparks could result in the Evaporative Media igniting and causing a fire. **Do not store** the Unit where open flames are nearby sparks are present. **If operating** near open flames and or sparks do so **only when the Evaporative Media is fully and continually saturated with water.**

DANGER RISK OF ELECTROCUTION Please follow standard lockout/tagout procedures and disconnect the power source prior to opening or disassembly of the Unit.

DANGER ROTATING BLADE HAZARD The Fan Blade may cause serious bodily injury. Please follow standard lockout/tagout procedures and disconnect the power source prior to opening, removing/replacing Evaporative Media or disassembly of the Unit.

WARNING RISK OF ELECTROCUTION Only trained professional maintenance personnel should assemble, disassemble, and repair the Unit. Others doing so will void the warranty and may be exposed to electrocution, injury, and other safety hazards.

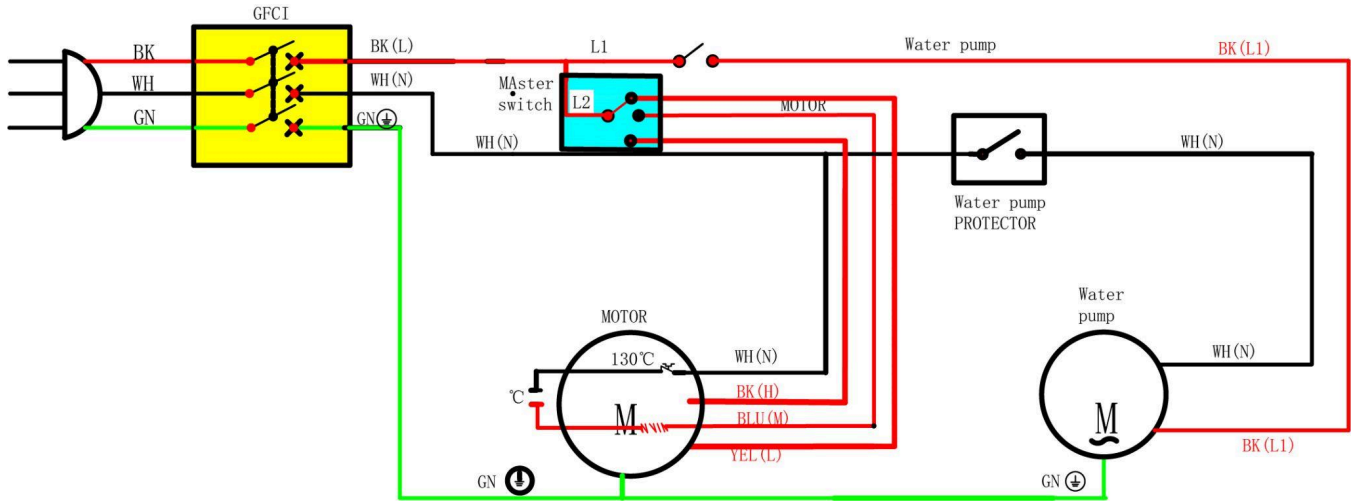
If the Unit becomes damaged or malfunctions, do not attempt to repair the Unit. Doing so will void the warranty. Contact Power Breezer customer service for repair assistance. 1.844.233.5673 | customerservice@powerbreezer.com

Technical Specifications

Model	E520M	E780L	E1220SL
Power Supply (V)	110–120V/60Hz	110–120V/60Hz	110–120V/60Hz
Rated Current (A)	5.8	4.9	8.2
Fan Motor	1.1hp	.85hp	1.2hp
Air Volume (CFM)	5,200	7,800	12,200
Speeds	3	3	3
Fan Blade (In.)	18	24	36
Noise (dBA)	70–90	70–90	70–90
Fan Weight (lbs.)	119.3	153.5	228.6
Water Tank Capacity (Gal.)	20	30	58
Control Interface	Manual	Manual	Manual
Evaporative Media	EM-M520S	EL-M780S	ESL-M1220S

Power Breezers products are continually improved. For accurate technical parameters, please refer to the plate on your Unit.

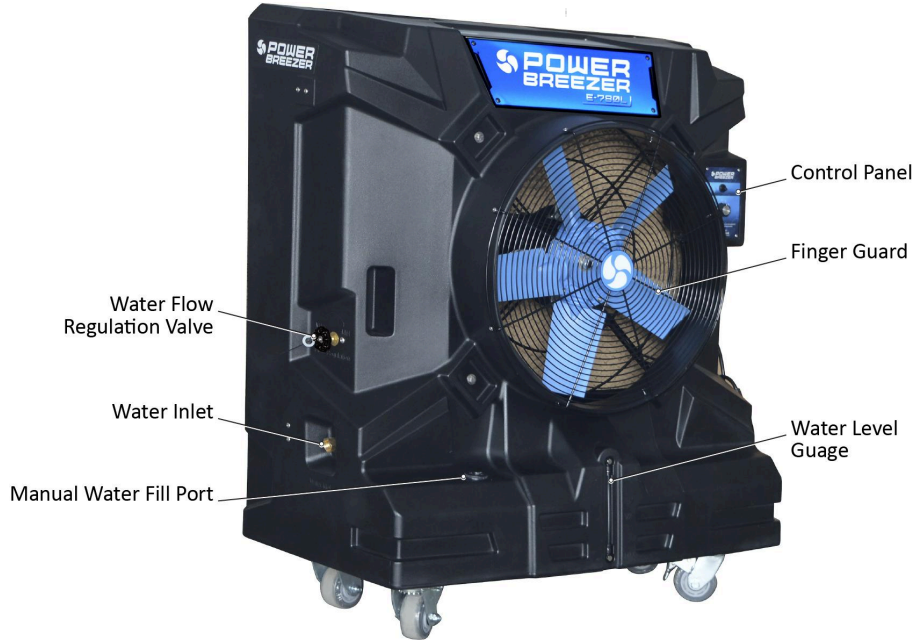
Electrical Wiring Diagram



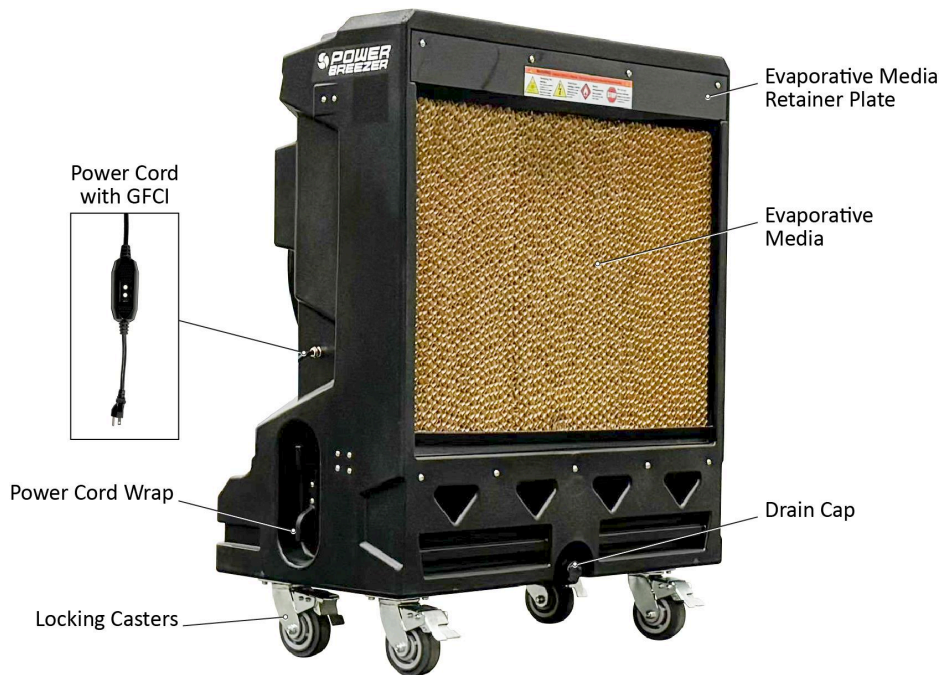
(Figure 1)

Unit Overview

Model E780L used as a common reference.



(Figure 2)



(Figure 3)



(Figure 4)

Installation of the Casters

TOOLS REQUIRED:

- 13mm Socket/Ratchet

ITEMS REQUIRED:

- 4 Casters
- 16 Bolts
- 16 Washers

PEOPLE REQUIRED:

- 1 person model E520M
- 2 people for models E780L and E1220SL

1. Lay the Unit down on its back side onto a level surface.
2. Align a Caster's base with the one of the 4 holes found in each corner at the bottom of the Unit.
3. Hand thread 4 bolts through the Caster base and into the bottom of the Unit.
4. Use Socket/Ratchet to fully tighten the 4 bolts.
5. Repeat steps 2–4 for the remaining 3 Casters.
6. **IMPORTANT:** Set the locking tab on each Caster by pushing it down. Failure to do so may result in the Unit unexpectedly rolling when tilting the Unit upright.
7. Tilt the Unit upright and onto its Casters.

Operation of the Unit

DANGER RISK OF FIRE The addition / use of an extension cord to the Power Cord can cause wire overheating, which can lead to the Power Cord melting, and may ultimately lead to fire and or damage to the Unit. **Do not add any extension cords to the Power Cord.**

The Unit, the Power Cord are intended for **indoor use only**.

Starting the Unit:

1. Add water to fill the Unit.
 - a. Fill the Water Tank either manually via the Fill Port, or connect a water supply hose to the Water Inlet.

NOTE: Do not overfill the Water Tank:

- E520M - 20 Gallons
- E780L - 30 Gallons
- E1220SL - 58 Gallons

WARNING: Use only potable water to fill the Water Tank. Do not add any additives of any kind to the water being used for cooling. The introduced additive(s) when run through the Unit, will become aerosolized which may cause eye, lung and skin hazards. Doing so may also damage the unit.

- b. Turn on water to the water supply hose:
 - i. Ensure that there is no water leaking from the water supply hose and the Flow Regulation Valve.
2. Verify the Fan Speed Control Knob is set to 0.
3. Verify that the Water Pump Switch is set to OFF.
4. Connect the Power Cord to an appropriate power supply.
5. Set the Water Pump Switch to ON. (only after the Unit is full of water)
 - a. Partially open the Water Flow Regulation Valve by turning it counterclockwise, until 30–50% of the Evaporative Media is wetted.

NOTE: Do not open the Water Flow Regulation Valve fully all at once. Doing so may add more water than the Evaporative Media can absorb resulting in water dripping off the media and potentially onto the surrounding floor creating a slipping hazard.

NOTE: The Evaporative Media may take up to ½ hour or more to fully saturate. Newer Evaporative Media may take longer.

- b. Once the Evaporative Media is fully saturated, adjust the Water Flow Regulation Valve so that the Evaporative Media remains saturated, but not flooded as to have excess water running off or drawn off by the fan and blown out of the front of the Unit.
6. Turn on the Fan by turning the Fan Speed Control Knob to 1.

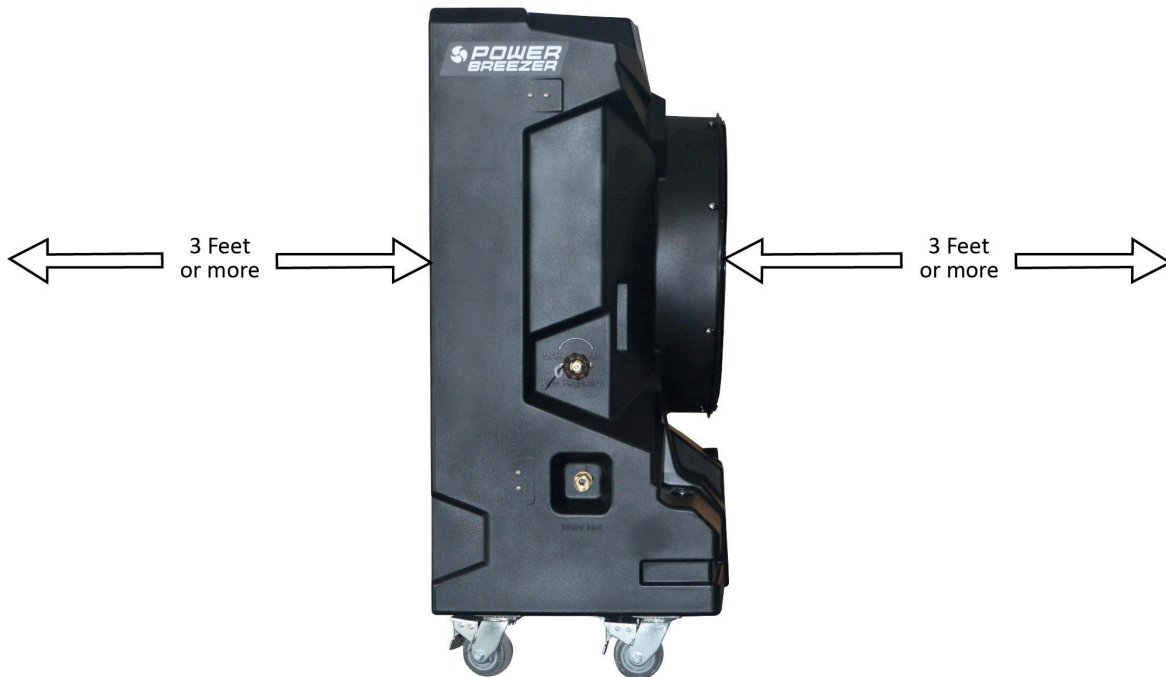
7. Continue turning the Fan Speed Control Knob to 2 and 3 to increase Fan's speed.

Shutting Down the Unit:

1. Set the Water Pump Switch to OFF.
2. Fully Turn OFF the Flow Regulation Valve by turning it clockwise.
3. Run the Fan at a speed setting of 3 for at least 15–45 minutes until the Evaporative Media is dry.
4. Turn the Fan Speed Control Knob to 0.

Positioning the Unit for Safe Operation

When the Unit is running, both the front and the back of the Unit should be 3 feet or more away from the walls or other obstacles (See Figure 4).



(Figure 4)

- Operate the Unit on level surfaces only.
- Do not position the Unit in stairwells, entrances or exits.
- Do not position the Unit up against the wall or position it near any other structure that may restrict the airflow around the Unit. Ensure a 3 foot gap between the Unit and any obstructions while the Unit is in operation.
- Do not use the Unit in an enclosed environment. There must be sufficient air flow for the Unit to function correctly and perform to its full capabilities.

- Lock at least 2 casters prior to operating the Unit.
- **DANGER RISK OF FIRE** The Evaporative Media used in the Unit is made of flammable paper-based material. Operating or storing the Unit near open flames and or sparks could result in the Evaporative Media igniting and causing a fire. **Do not store** the Unit where open flames are nearby sparks are present. **If operating** near open flames and or sparks do so **only when the Evaporative Media is fully and continually saturated with water.**

Maintenance

Warnings:

- Do not spray water or other liquids on the Unit to clean it.
- **DO NOT** clean the Unit while it is plugged in or operating.
- **DO NOT** remove or replace the Evaporative Media while the Unit is plugged in or operating.

Periodically:

- When cleaning the Unit's exterior surfaces do not use harsh chemicals, volatile oils, or other cleaning solutions that may damage the surfaces. Only use soft, non-abrasive cloths on the Unit's exterior surfaces.
- Inspect the Power Cord for any damaged, frayed, pinched areas along its entire length. If damaged, do not use the Unit. The Power Cord must be replaced by the manufacturer, its service agent, or a similarly qualified person to prevent electrical hazards.
- Check for any loose fasteners. If any are found, retighten.

Monthly:

Clean the Water Tank

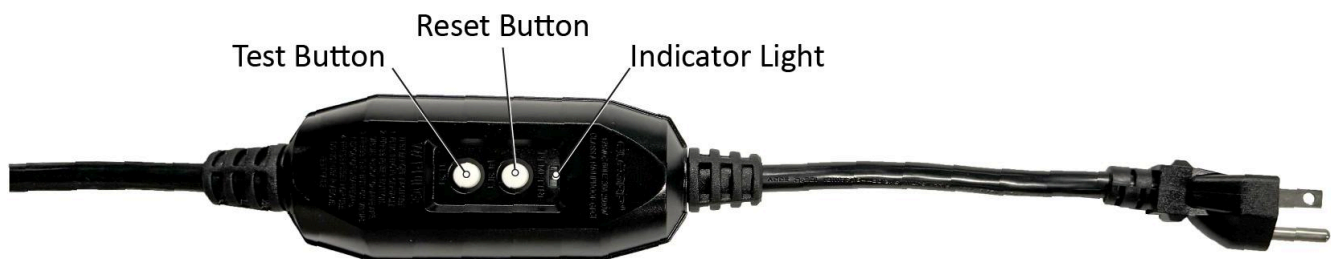
1. Please follow standard lockout/tagout procedures and **disconnect the power source prior to opening or disassembly of the Unit.**
2. Fully drain the Unit in a location that will not introduce a slipping hazard by removing the Drain Cap.
3. Remove the Evaporative Media Retainer Plate:
 - a. Unscrew the fasteners.
 - b. Remove and retain the Media Retainer Plate and fasteners.
4. Remove all of the Evaporative Media: (It must be completely dry before removal)
 - a. Remove the center set of Evaporative Media first by grasping the top part and tilting it out and away from the Unit.
 - b. Remove the remaining Evaporative Media the same way.

5. Remove residual water from the tank with towels or wet-dry vacuum. Wipe clean with rags and remove any mineral deposits. Do not use any harsh chemicals.
6. Replace Evaporative Media and the Retainer Plate.

Clean the Evaporative Media

1. Please follow standard lockout/tagout procedures and **disconnect the power source prior to opening or disassembly of the Unit.**
2. Fully drain the Unit in a location that will not introduce a slipping hazard by removing the Drain Cap.
3. Remove the Evaporative Media Retainer Plate:
 - a. Unscrew the fasteners.
 - b. Remove and retain the Media Retainer Plate and fasteners.
4. Remove all of the Evaporative Media: (It must be completely dry before removal)
 - a. Remove the center set of Evaporative Media first by grasping the top part and tilting it out and away from the Unit.
 - b. Remove the remaining Evaporative Media the same way.
5. Gently vacuum off loose dust and dirt. Rinse the Evaporative Media under running water to clean. Use a soft brush or rag to gently remove accumulated dirt. Do not use highly pressurized water or air to clean the Evaporative Media.
6. Let Evaporative Media completely dry before replacing it in the Unit.
7. Replace Evaporative Media and the Retainer Plate.

Test the GFCI on the Power Cord



1. Ensure that both the Water Pump and Fan are turned to their off position.
2. Plug the Power Cord into a known to be functioning appropriately equipped electrical outlet.
3. The Indicator Light should illuminate.
4. If it does not illuminate, press the Reset Button. If it continues to not illuminate, the Power Cord and or GFCI is damaged. **DO NOT CONTINUE USE OF THE UNIT.**

5. If it does illuminate, press the Test Button. The indicator light should stop illuminating. This means the Power Cord and GFCI have passed the test.
6. Press the Reset button to continue use of the Unit.

Replacing the Evaporative Media

1. Please follow standard lockout/tagout procedures and **disconnect the power source prior to opening or disassembly of the Unit.**
2. Fully drain the Unit in a location that will not introduce a slipping hazard by removing the Drain Cap.
3. Remove the Evaporative Media Retainer Plate:
 - a. Unscrew the fasteners.
 - b. Remove and retain the Media Retainer Plate and fasteners.
4. Remove all of the Evaporative Media:
 - a. Remove the center set of Evaporative Media first by grasping the top part and tilting it out and away from the Unit.
 - b. Remove the remaining Evaporative Media the same way.
5. Replace Evaporative Media by doing steps 2–4 in reverse order.

Buying New Evaporative Media

Each Power Breezer Evaporative Cooler has Evaporative Media designed and sized specifically for it.

Verify which model you have prior to ordering it by checking the model type on the Unit’s Serial Number Label. The Serial Number Label is affixed on the side of the Unit where the Power Cord is located.

Model Number	E520M	E780L	E1220SL
Part Number	EM-M520S	EL-M780S	ESL-M1220S
Size (In.) each Batt	25.2”H x 11.4”W x 3.9”D	31.9”H x 14.2”W x 5.9”D	44.9”H x 18.9”W x 5.9”D
Pieces per Set	3	3	3

To purchase please contact your authorized Power Breezer dealer or visit:

<https://www.powerbreezer.com/product-category/cooling-media/power-breezer-e-class-compatible/>

Storage

1. Before long-term storage of the Unit, unplug from the power source.
2. Prior to storage use the Unit’s integrated Power Cord Wrap to store the Power Cord.
3. Fully drain the Unit in a location that will not introduce a slipping hazard by removing the Drain Cap.
4. Remove Evaporative Media and clean the Water Tank.
5. **DANGER RISK OF FIRE** The Evaporative Media used in the Unit is made of flammable paper-based material. Operating or storing the Unit near open flames and or sparks could result in the Evaporative Media igniting and causing a fire. **Do not store** the Unit where open flames are nearby sparks are present.
6. Store the Unit where children cannot access it. Avoid storing the Unit in locations with high temperatures, water exposure, or direct sunlight.

Fault, Cause Analysis, and Troubleshooting

If the Unit stops functioning properly, please immediately turn the power off and remove the power plug from the electrical source. Refer to the table below for Fault, Cause Analysis, and Troubleshooting.

Fault	Cause Analysis	Troubleshooting
Unit does not power on	Power Plug may be loose or partially inserted in the power source	Please insert the Power Plug firmly in the appropriate power source
	The Power Cord or GFCI may be damaged	Inspect cord and test GFCI
	Faulty Motor	Replace Motor
	Faulty Control Panel	Replace Control Panel
Unit starts but air output is not adequate	Air inlet blocked	Move unit at least 3 feet away from walls or other obstructions
	Faulty Motor	Replace Motor
Water leaking from the Unit	Drain Cap may not be fully tighten or may be cross threaded	Fully tighten Drain Cap
	Float Valve may be damaged	Replace Float Valve
	Water Flow Regulation Valve may be too open to allow the Evaporative Media enough time to absorb the amount of water provided to it	Reduce water flow

	Too much water manually put in the Water Tank	Limit water input to: <ul style="list-style-type: none"> ● E520M - 20 Gallons ● E780L - 30 Gallons ● E1220SL - 58 Gallons Use Water Level Gauge in the front of the Unit as fill reference
	All the Evaporative Media may not be fully installed	Ensure all the Evaporative Media batts are installed
Water droplets being blown from the fan outlet	Water Flow Regulation Valve may be too open to allow the Evaporative Media enough time to absorb the amount of water provided to it	Reduce water flow
Knocking, shaking, or rattling sounds	Loose parts	Check and tighten as needed
	Fan Blade rubbing Finger Guard	Inspect and adjust, or replace fan blade
Musty or unpleasant odor	Stagnant water left in water tank	Drain and clean tank
	Evaporative Media is mildewed or clogged with dirt	Replace Evaporative Media with new Media

Contact Information and Support

General Information or Product / Installation Support:

Customer Service: customerservice@powerbreezer.com

Parts: parts@powerbreezer.com

Phone: 844.233.5673

Visit: www.PowerBreezer.com/support

For Sales Information:

sales@powerbreezer.com

Phone: 844.233.5673

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