# PORTACOOL 510 OWNER'S MANUAL

**PAC510** 



\* Applies to all 120 and 240V products for global configurations

PORTACOOL.

## **QUICK SETUP**







For setup, Kuul Comfort™ evaporative media should appear wet before starting the fan. Be sure to turn the pump on before starting the fan. Check the water gauge to monitor water level in tank.

Your Portacool portable evaporative cooler is meant to be used in an open-air environment, such as a patio. If you plan to use your evaporative cooler in a more closed environment – such as a garage, sunroom or barn – you must provide adequate ambient airflow to ensure your evaporative cooler works at its highest efficiency. When using in a semi-closed environment, be sure to leave a door or window open to allow for the proper amount of airflow.

Once product is plugged in and filled, turn on the pump switch and the fan

Ensure proper airflow is available

### SAFETY

#### **OPERATION WARNINGS**

- 1) Not for use by children
- 2) Not for use by persons with reduced physical, sensory or mental capabilities
- 3) Not for use by persons who have not reviewed the owner's manual and familiarized themselves with the operation of the product

#### SAFE OPERATION

#### To reduce the risk of electric shock, fire or injury:

- Do not operate any evaporative cooler with a damaged cord or plug.
- Do not run power cord under carpeting or cover with throwrugs, runners or similar coverings. Arrange power cord away from traffic areas to avoid tripping hazards.
- Read the evaporative cooler's instructions, owner's manual and labels thoroughly before use.
- Always unplug the power cord to the evaporative cooler before performing inspections or repairs.
- Always unplug the evaporative cooler during filling and cleaning.
- Do not step on or roll over power cord with heavy or sharp objects.
- Do not operate evaporative cooler unless all Kuul Comfort™ evaporative media is securely in place.
- Test the GFCI receptacle or breaker monthly to ensure it is functioning properly.
- Remove the plug from the electrical receptacle by pulling on the plug, not the power cord.
- Operation near open flames or sparks is not recommended.

- If operating near open flame or sparks, ensure the pump is continuously running in order to saturate and wet Kuul Comfort evaporative media.
- When cleaning your evaporative cooler, ensure water does not get into the motor or electrical system to prevent damage.
- The use of extension cords with your evaporative cooler is not recommended. However, if the owner determines that his or her circumstance or intended use requires the use of an extension cord, the following requirements must be met:
  - Extension cord must be 14 gauge or greater;
  - Extension cord must not exceed 50 (15.24 meters) feet in length; and
  - Extension cord must be properly grounded.
- Evaporative coolers should not be modified in any way (other than repairs made by qualified individuals with Portacool replacement parts).
- If the evaporative cooler is damaged or malfunctions, do not continue to operate it. Refer to the warranty, troubleshooting or FAQ sections of this owner's manual, call Portacool, LLC Customer Service at (936) 598-5651 or (800) 695-2942, or email support@portacool.com.

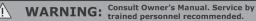
## OVERVIEW

### PORTACOOL® 510





\*Red light on control panel only illuminates when reservoir is empty and pump has shutoff due to low water.







Some components flammable Keep flames and heat away.



<sup>\*\*</sup>Use caution when moving product filled with water.

#### How to Safely Move or Relocate Your 510 Evaporative Cooler to Avoid the Release of Water:

When attempting to move or relocate your 510 evaporative cooler more than a few feet away from its current location using the rolling casters affixed to the cooler, Portacool recommends the water reservoir level be less than 1/2 full to avoid the potential for water being spilled or released. When transporting your 510 evaporative cooler, where the use of the rolling casters is not an option, Portacool recommends draining the water reservoir completely to avoid the potential for water being spilled or released. The User should reference the "water level gauge" to verify water level before moving or relocating the cooler.



The Portacool® 510 utilizes a GFCI (Grounded Fault Circuit Interrupter) to help protect users against ground electrical faults, which prevent some fire and electrical shock hazards. These devices are intended to trip at very low leakage currents.

The Portacool 510 model (PAC5101A1) uses a GFCI, which is built into the power cord. The GFCI on these models will automatically reset when the evaporative cooler is plugged into an electrical outlet.

If the GFCI is tripped and a simple "reset" will not work, please contact the Portacool Customer Service at (936) 598-5651 or (800) 695-2942 for more troubleshooting information.

### **FEATURES**

#### WATER LEVEL INDICATOR / PUMP SHUTOFF

A water level indicator with integral shutoff gives a visual indication of the water level in the evaporative cooler and will shut off the pump once the water reaches a certain threshold. When this occurs, a red light on the control panel will illuminate to draw attention to the low water level condition and alert the user that the pump has shut off. This light may cycle on and off for a few minutes to draw attention to the low water condition as it tries to exhaust the remaining water. In order to restart the pump and reset the light, water must be added to the tank of the evaporative cooler.

Portacool® 510 portable evaporative coolers must be operated on a level surface. If the product is not completely level, there may be some discrepancy in the readings on your WLI. Please note the pump will shut off when there is not sufficient water.

#### **OSCILLATING LOUVERS**

The Portacool® 510 evaporative cooler comes with built-in oscillating louvers to push airflow to a wider area. Operating the louvers is easy – simply flip the blue "louver" rocker switch found on the control panel up. This should illuminate the button and cause the louvers to swing side to side.

### START UP

#### **PLACEMENT**

- 1) Make sure there is a clear, unobstructed path in front of the evaporative cooler to provide maximum airflow.
- 2) If the evaporative cooler is positioned on a raised platform, ensure the platform is stable, well constructed and will not allow the evaporative cooler to tip over. Ensure it allows for the full weight of the evaporative cooler, including a tank full of water. The evaporative cooler must be level and in the upright position to prevent movement.
- 3) If placed near a wall or other obstruction, position the evaporative cooler a minimum of 3 feet (0.9 meters) from the wall or obstruction with the Kuul® evaporative media facing the wall. This allows the unrestricted flow of warm air to the Kuul evaporative media. When using multiple evaporative coolers in close proximity, be sure to aim each evaporative cooler so the air flows complement each other to achieve maximum cooling capacity.

#### STARTING THE PUMP

Once the tank is full of water, flip the pump switch into the on position. The water level in the tank may drop suddenly. This is a normal condition, as the Kuul evaporative media requires a large amount of water for proper wetting.

New Kuul evaporative media requires an initial 'breaking-in' period before the Kuul evaporative media begins readily absorbing water. It may require up to a week to achieve maximum efficiency.

When turning the evaporative cooler off at the end of the day or week, the pump should be turned off about 15 minutes before the fan to allow the Kuul evaporative media to dry.

#### STARTING THE PORTACOOL EVAPORATIVE COOLER

Start the fan by turning the fan switch to either the high or low position. Before starting your evaporative cooler, make sure any locking casters are in locked position.

## MAINTENANCE

While the rugged, corrosion-resistant construction ensures low maintenance will be required, keeping your evaporative cooler clean will ensure it stays in peak operating condition.

#### **DAILY MAINTENANCE**

The pump should be turned off approximately 15 minutes before the fan is turned off, which allows the Kuul® evaporative media to dry. Ensuring your Kuul evaporative media is dry at the end of the day not only extends its life, it also helps control the growth of mildew, mold, bacteria and other odor-causing elements.

#### **WEEKLY MAINTENANCE**

Your Portacool portable evaporative cooler should be shut down, disconnected from power and the tank should be drained once a week by removing the drain cap. Once the tank is drained and the power disconnected, the Kuul evaporative media may be removed to allow cleaning of the tank, where dust may collect over time. Replace Kuul evaporative media in correct airflow direction, referring to the label on the Kuul evaporative media.

If conditions - such as hard water - warrant, Portacool Hard Water Treatment™ can be purchased at shop.portacool.com or from authorized distributors. Portacool Hard Water Treatment keeps minerals present in your water in solution and off of your Kuul evaporative media by changing the ionic structure of the particles. It can increase cooling efficiency, remove and inhibit scale building up, reduce equipment corrosion, and extend evaporative media life.

#### **STORAGE**

- 1. Drain all water from the tank and wipe the tank clean, ensuring the Kuul evaporative media and tank are dry.
- 2. Roll up the power cord and secure it to ensure it will not be rolled over, tripped over or caught in equipment.
- 3. Cover the evaporative cooler completely to prevent dust build-up and store in a dry area. This also helps to prevent damage to the Kuul evaporative media. Optional protective covers are available from your distributor or at shop.portacool.com.



# **TROUBLESHOOT**

Turn off all power to your evaporative cooler before attempting to troubleshoot any of the following symptoms. For problems not listed, please contact Customer Service.

SYMPTOM	POSSIBLE CAUSES	REMEDY
Evaporative cooler fails to start or deliver air	<ol> <li>No electricity to the evaporative cooler</li> <li>A. Circuit breaker tripped</li> <li>B. GFCI tripped</li> <li>C. Power cord unplugged or damaged</li> </ol>	<ol> <li>Check power</li> <li>A. Reset breaker*</li> <li>B. Reset GFCI**</li> <li>C. Plug in cord(s) or replace if damaged</li> </ol>
	2. Motor overheated and/or frozen	2. Replace motor
Evaporative cooler starts, but air delivery is inadequate	Kuul evaporative media side of the evaporative cooler is too close to a wall	Move evaporative cooler at least three feet from the wall
	2. Fan motor failure	2. Replace fan motor
	3. Capacitor failure	3. Replace capacitor
Water draining from the evaporative cooler	1. Seam in float valve leaking	1. Replace float valve
	2. Drain plug not tight	2. Tighten plug
Knocking, shaking, or rattling sounds	1. Loose parts	1. Check and tighten where needed
	2. Fan blade rubbing shroud	2. Inspect and adjust, or replace fan blade

<sup>\*</sup> If condition persists, call electrician \*\* See GFCI section

## TROUBLESHOOT

#### **POSSIBLE CAUSES**

Musty or unpleasant odor

- 1. Stale or stagnant water in tank
- 2. Kuul evaporative media is mildewed or clogged

Water droplets in the air stream

- 1. Too much water delivered to Kuul evaporative media
- 2. Leaking hose

#### REMEDY

- 1. Drain, flush and clean tank
- 2. Replace Kuul evaporative media
- Make sure Kuul evaporative media is properly positioned in the frames and evaporative cooler is level
- 2. Tighten connection or replace hose





#### **TECHNICAL SUPPORT**

Technical support and service is available directly from your distributor or call Portacool, LLC Customer Service at (800) 695-2942 for the distributor nearest you. You may also contact Support for consultation on troubleshooting and parts replacement.

Please have serial number and model number of evaporative cooler available.

#### **WARRANTY AND REPLACEMENT PARTS**

#### PORTACOOL® EVAPORATIVE COOLER LIMITED WARRANTY

For one (1) year from date of purchase, Portacool, LLC (hereafter "Portacool") warrants any original component part or parts of its Portacool™ portable evaporative coolers (the "Equipment") that are found, upon examination by factory-authorized personnel, to be defective in material or workmanship.

Notwithstanding anything herein to the contrary, Portacool warrants its Portacool 510 housings for the full lifetime of the product to the extent they are found, upon examination by factory-authorized personnel, to be defective in material or workmanship. The Lifetime Warranty on product housings is void if the housing is found upon examination by Portacool to have been misused, abused or otherwise tampered with by unqualified personnel. The Lifetime Warranty on product housings does not cover ordinary wear and tear and is non-transferrable.

If the Equipment and/or its original component parts, develop a defect covered by this limited warranty within the applicable time periods described above, the same may be repaired by the customer after receiving the appropriate parts from Portacool or entirely replaced with a new product of the same by Portacool at the option of Portacool.

All transportation charges for shipment of the Equipment and/or its component parts that are submitted for replacement or repair under this warranty must be borne by the purchaser.

This warranty is void if: i) the Equipment and/or its component parts are found to have been misused, abused, repaired by or tampered with by unqualified personnel; ii) any of the product's component parts have been replaced with parts that were not authorized Portacool replacement parts; iii) the product has been modified in any way (other than repairs made by qualified individuals with Portacool replacement parts); iv) the product has not been appropriately registered by its original purchaser; or v) the customer cannot show proof of purchase as the product's original owner.

#### PORTACOOL LIMITATION OF LIABILITY

IN THE CASE OF A BREACH OF ANY IMPLIED OR WRITTEN WARRANTY RELATING TO THE EQUIPMENT AND/OR ITS COMPONENT PARTS, PORTACOOL SHALL NOT BE LIABLE FOR ANY INCIDENTAL OR CONSEQUENTIAL DAMAGES, AND THE LIMITS OF LIABILITY AGAINST PORTACOOL FOR ANY SUCH BREACH SHALL NOT EXCEED THE COST OF REPLACEMENT OR REPAIR OF THE EQUIPMENT.

## PORTACOOL PROTECT

Portacool, LLC is proud to provide world-class service and support. Portacool Protect™ brings together our commitment to service and support in the form of best-in-class warranties, service programs, technical support and live customer service to provide our customers with an ownership experience that is second to none.

Each of the following components are included with your Portacool® 510 product:

Year warranty on Portacool 510 motor and electrical components



Lifetime warranty on all molded housings



Live, U.S.-based Customer Service

For complete warranty information and limitations, please see Warranty page. Beyond these aspects of Portacool Protect™, we ask that you not hesitate to contact us with any additional questions or comments you might have. For more than 30 years, we have built our business on service and support. We look forward to speaking with you.

### FAQ

#### Q. What assembly is required?

A. None. Portacool® 510 evaporative coolers are ready to use right out of the box.

#### Q. How do I prepare my evaporative cooler for storage?

A. Drain the evaporative cooler, dry out the evaporative media, cover the evaporative cooler and store in a dry place.

### Q. I just ran my evaporative cooler for the first time and there is an unpleasant odor.

A. Our unique design and manufacturing technique, together with our superior materials, enable our products to perform efficiently within a wide range of conditions. When installed correctly, our evaporative media products allow complete molecular evaporation of water ensuring a pure, clean stream of air. When new, it is possible that a small amount of aromatic molecules may evaporate along with the water molecules, which could be detected as a slight smell. This scent lessens in time. Our product does not, in any way, allow harmful chemicals to be evaporated into the air stream.

#### Q. My evaporative cooler is not putting out any cool air.

A. First, make sure the water source and electricity source are connected and working. Second, check to see if the Kuul evaporative media is wet. If not, make sure there is water in the tank. It should be allowed to fill before you turn the pump on.

#### Q. What is the best environment to produce the most cool air?

 ${\sf A.}$  For optimum performance, the temperature should be 85 $^{\circ}$  F or higher and the relative humidity should be below 75%. However, Portacool evaporative coolers will reduce the temperature in almost any environment, making it more comfortable.

### Q. How often should my Kuul Comfort™ evaporative media be replaced?

A. Depending on the quality of maintenance and frequency of use, Kuul Comfort evaporative media typically last up to five years. However, should you have any questions about the life of the media in your Portacool portable evaporative cooler, please call our Customer Service department for more detailed information.

### Q. What is the difference between evaporative cooling and misting systems?

A. Misting systems spray a shower of water into the air that will collect on people, objects, equipment, floors, etc. Portacool evaporative coolers use the process of evaporation to produce cooler air, but do not produce a mist.

#### Q. Where can I buy replacement parts?

A. Replacement parts may be purchased online at shop.portacool.com or from any Portacool distributor. You may also contact Portacool Customer Service department for additional assistance.

#### Q. What is the amount of moisture produced?

A. An increase in humidity of approximately two to five percent is produced, depending on the temperature and humidity of the environment. This increase is not noticeable in a ventilated area where the air produced by the cooler is exhausted.

#### Q. How long will the water supply last in the tank?

A. With no direct water source available, the water will evaporate in a filled tank within two to 10 hours of operation, depending on the water capacity of the evaporative cooler, ambient conditions, temperature and humidity. A water source for refilling the tank is recommended by the manufacturer.

## FAQ

#### Q. Where are the model and serial numbers found?

A. The model number can be found on a metal plate on the outside of the evaporative cooler. Model numbers begin with the letters "PAC." Serial numbers are all digits.

#### Q. What if my questions are not answered here?

A. Check out our videos on www.portacool.com or our YouTube channel. Our U.S.-based Service staff is available 8 a.m. to 5 p.m. Central Time, Monday though Friday at (800) 695-2942 or you can e-mail them at support@portacool.com.

### HOW TO REPLACE YOUR KUUL COMFORT™ EVAPORATIVE MEDIA

#### Step 1

Be sure to unplug your Portacool portable evaporative cooler before doing any maintenance. When present, lock the casters to keep your evaporative cooler from moving while you are working. Remove the flap and Kuul Comfort $^{\text{TM}}$  evaporative media from the evaporative cooler. The flap is attached at the top of the evaporative cooler with screws. Remove the screws and set the flap aside.

#### Step 2

All Kuul Comfort evaporative media must be removed before accessing the inside of the evaporative cooler. Remove the center set of Kuul Comfort evaporative media first by grasping at the top and tilting it out and away from the evaporative cooler. While tilting the Kuul Comfort evaporative media out, lift it up and out of the evaporative cooler.

#### Step 3

Remove remaining Kuul Comfort evaporative media in the same manner. Set aside in a safe place to prevent damage while out of the evaporative cooler. Once all the Kuul Comfort evaporative media has been removed, you should have access to the inside of the evaporative cooler and internal components.

#### Step 4

Replace your Kuul Comfort evaporative media by beginning on the outer edges and working towards the center. Pay close attention to the stickers on the evaporative media the arrow sticker should point up and inward. Replace the evaporative media flap, securing it with screws.

# NOTES

·

## PORTACOOL.

THE HOME OF KUUL

CUSTOMER SERVICE CONTACT SUPPORT@PORTACOOL.COM 1-936-598-5651 \* 1-800-695-2942

TECHNICAL/PARTS CONTACT SUPPORT@PORTACOOL.COM 1-936-598-5651 \* 1-800-695-2942

VISIT PORTACOOL.COM OR CALL 1-936-598-5651 FOR MORE INFORMATION

Portacool, LLC • Manufacturer of Portacool<sup>™</sup> portable evaporative coolers and Kuul® evaporative media 711 FM 2468 • Center, Texas 75935 • 936-598-5651 www.portacool.com • www.thekuuleffect.com

The manual is available in other languages.

To download a digital copy, please visit

www.portacool.com.

El manual está disponible en otros idiomas. Para descargar una copia digital, por favor visite www.portacool.com.

Le manuel est disponible en d'autres langues. Pour télécharger une copie numérique, se il vous plaît visitez www.portacool.com.

> MANRO020 November 2021

REGISTER YOUR PRODUCT

AT WWW.PORTACOOL.COM