

# Owners Manual For All Electric Models

















READ AND SAVE THESE INSTRUCTIONS



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#### FOR ELECTRIC MODELS

PAC2K482S, PACHR3600, PAC2K361S, PAC2K363S, PAC2K36HPVS, PAC2K24HPVS, PAC2K16HPVS, PAC2K163SHD, PAC163SVT, PACJS1600, PACJS2400, PAC2KCYC01, PAC2KCYC01A, PACCYC02A, PACCYC02A, PACCYC03A PACCYC04, PACCYC04A

#### **INCLUDES EXPORT MODELS**

PACCYC01-22050, PACCYC01-22060, PACCYC01-22050A, PACCYC01-22060A, PACJS160022050, PACJS160022060, PACJS240022050, PACJS240022060, PACJS240022050, PACJS240022060, PACJS240022060, PACJS240022060, PACJS240022060, PACJS240022060, PACZYC02-22060A, P

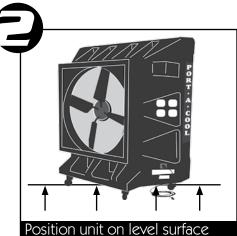
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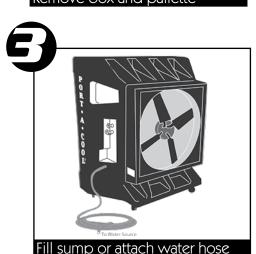
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# **QUICK SET UP GUIDE**











For setup, pads should appear wet before starting the fan. Check the water gauge\* (see instructions for model setup in this manual) to monitor water level in tank.

\* Water gauge is not applicable to all models

Fill the tank then turn on the pump switch and the fan.



#### SAFE OPERATION

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

- Do not operate any unit with a damaged cord or plug. Discard unit or return to an authorized service facility for examination and/or repair.
- Do not run cord under carpeting. Do not cover cord with throw rugs, runners, or similar coverings.
   Arrange cord away from traffic area where it will not be tripped over.
- Read instructions and labels carefully.
- Always unplug the electric cord to the Port-A-Cool unit before performing inspections or repairs.
- Plug into three-prong grounded GFCI protected electrical receptacle only.
- Do not operate if there is any damage to the plug or cord.
- Do not step on or roll over power cord with heavy or sharp objects.
- Do not operate unit unless all pads are securely in place.
- Remove the plug from the electrical receptacle by pulling on the plug and not the cord.
- Test the GFCI receptacle or breaker monthly to ensure it is functioning properly.
- Do not operate near open containers of flammable liquids or gases.
- Ensure evaporative cooler pumps are running continuously to saturate and wet combustible media when used
  in close proximity to open flame or spark producing activities. A distance of at least 35 feet away from open
  flame or sparks is recommended to ensure safe operation.
- Never wash the unit cabinet with a garden hose; water may harm the motor and electrical system.
- If the unit is damaged or it malfunctions, do not continue to operate it. Refer to the warranty, troubleshooting or FAQ section, call Port-A-Cool, LLC, Technical Support at 1-888-266-5243, or email support@port-a-cool.com.

# **UNIT OVERVIEW**

#### **SETUP**

# Unpacking the PORT-A-COOL® unit.

PORT-A-COOL® units are shipped completely assembled. The PAC2K482S, PAC2K361S, PACHR3600, PAC2K363S, PAC2K36HPVS, PAC2K24HPVS, PAC163SVT, PACJS1600, PACJS2400, PAC2KCYC01, PAC2KCYC01A, PACCYC04, and PACCYC04A models ship on a plastic pallet with a cover box strapped over the unit. Cut the straps and remove the box by lifting it over the unit. Remove the protective plastic dust cover and lift the unit off the pallet.

Models PAC2K163SHD, PAC2K16HPVS, PACCYC02, PACCYC02A, PACCYC03, and PACCYC03A are shipped in an enclosed corrugated box and need only to be removed from the box.

# Connecting the water and electricity.

#### **Water Connection**

#### PORT-A-COOL® UNIT MUST BE IN UPRIGHT AND LEVEL POSITION

Locate the brass hose adapter on the side of the PORT-A-COOL® unit (all models except PAC163SVT) near the water adjustment and drain valves. Verify that the hose washer is in position and in good condition. Attach a standard garden hose to the brass hose adapter and tighten to preclude leaks. Turn water on to fill the sump tank.

On models equipped with a manual water fill and sight tube, the water tank in the lower portion is designed to be filled at a remote location and can be used without a water hose connected. Simply fill the lower tank using the sight tube as a gauge.

UNIT IS EQUIPPED WITH 50 PSI WATER REGULATOR. DO NOT BYPASS.
WATER INLET PRESSURE SHOULD NOT EXCEED 50 PSI MAXIMUM

Visually inspect water connections for leaks and verify that the connections are secure. Remove the pads by following the instructions in this owners manual. Once the sump tank is filled, the water flow should cease and the inlet connections may now be visually checked for leaks. All of these inspections have been performed at the factory but shipping may have caused connections to loosen. Replace the pads by reversing the removal operation.

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#### **Electrical Connection**

#### PORT-A-COOL® UNIT MUST BE IN UPRIGHT POSITION WITH COOLING PADS INSTALLED!

All models utilize a single power cord and control switches. Before connecting the plug to an outlet, ensure that there is no standing water where the cord may lie or the operator is standing. The use of separate multiple outlet devices are not recommended.

When making electrical connections, ensure that local and national codes are adhered to. Use only with GFCI Protected Receptacles. Please refer to the <u>Barcode Product Label</u> on the side of the unit for specific electrical requirements.

#### **OPERATING PROCEDURES**

# **Specifications**

Each PORT-A-COOL® unit has its own set of operational specifications, sizes, weights, voltage, frequency, current requirements, etc. Please ask for the specifications for your model from your distributor, check the serial number plate, or visit www.port-a-cool.com for the specifications for your Port-A-Cool® unit.

## Placement of the PORT-A-COOL® unit.

#### PORT-A-COOL® UNITS SHOULD BE USED IN WELL-VENTILATED AREAS ONLY

There are three primary considerations when deciding where to place the PORT-A-COOL® unit.

- 1) Fresh Air Supply If used indoors, the inlet side of the PORT-A-COOL® unit (pad side) should be placed near a fresh air supply, like a door or window, to ensure that a smooth, uninterrupted supply of fresh air is available.
- 2) Air Pattern The cool air discharged from (fan side) the PORT-A-COOL® unit should have a clear area in which to circulate, being as free of obstructions as possible.
- 3) Ventilation When positioned so that a fresh air supply is pushed through the inlet or pad side of the unit, a second source of fresh air should be utilized for expulsion of the cooled air. This is to prevent the unit from recirculating air that has already been through the cooling process and provides the optimal environment for the unit to produce the most efficient cooling.

A primary consideration when deciding where to place the PORT-A-COOL® unit is the direction of the airflow. The PORT-A-COOL® unit creates a fan-shaped air pattern that disburses the air over a large area. This pattern may be disturbed or broken up by obstacles such as shelves, work benches, etc. It is important to ensure that a clean, unbroken path for the air from the unit is provided to the maximum extent possible.

It may be desirable to raise the PORT-A-COOL® unit above any low obstructions in order to increase the overall coverage. When raising the height, ensure that the platform constructed for holding the unit is stable, well constructed, and will not allow the unit to tip over. The unit must be level and in the upright position. When supporting with a platform, allow for the full weight of a functioning unit by including the weight of the water, both in the sump tank and the added weight of the water saturated cooling pads. The total weight could be in excess of 500 lbs. (927 kg.).

When the PORT-A-COOL® unit is placed near a wall or other obstruction, it is recommended that a distance of at least 3 feet (0.9 meters) from the wall or obstruction to the face of the cooling pads be maintained. This allows the unrestricted flow of warm air to the cooling pad side of the unit. When using multiple units in close proximity, be sure to aim the unit so that the air flows complement each other and not oppose. Opposition will negate the airflow and allow an area of dead air to accumulate between units.

# Starting the pump and adjusting the water flow

#### CAUTION - DO NOT RUN PUMP WHEN SUMP IS DRY

Once the sump tank is full, moving the pump switch to the "ON" position will turn on the pump.

When initially turning on the pump, the level in the sump will drop suddenly and restart the flow of supply water. This is a normal condition, as the cooling pads require a large amount of water for proper wetting.

When the PORT-A-COOL® unit is new, the new pads will require an initial 'breaking-in' period. This period is required for the pads to begin readily absorbing water. It may require up to a week to achieve maximum efficiency.

It is important to ensure that the spray bar is properly adjusted when first starting the water flow in the PORT-A-COOL® unit. Increasing the flow using the <u>SPRAY BAR ADJUSTMENT</u> valve on the side of the unit makes this adjustment.

Proper water adjustment should leave the pads saturated with water, but not flooded. Pads should appear wet, however, cascading amounts of water can actually reduce cooling efficiency. Proper adjustment will prevent problems and increase cooling capacity.

When turning the unit off at the end of the day or week, the pump should be turned off about 15 minutes before the unit to allow the cooling pads to dry. This will increase the life of the pads.

# Starting the unit

#### COOLING PADS MUST BE INSTALLED AND CASTER LOCKS MUST BE ENGAGED

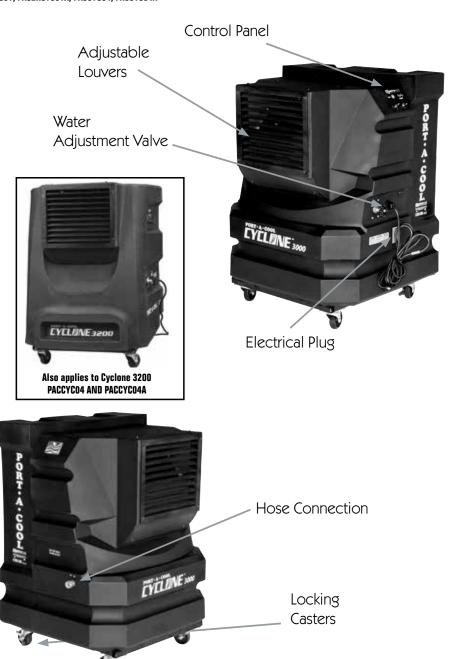
Start the fan by turning the fan switch to the 'ON' position, or to one of the available speeds on the multispeed models. On the multi-speed model, it is preferred to step slowly through the speeds allowing the fan to obtain its full speed at the LOW speed before going to MEDIUM and before going to HIGH.

# **UNIT OPERATION WARNINGS**

- 1) Not intended for use by children
- 2) Not intended for use by persons with reduced physical, sensory or mental capabilities
- Not intended for use by persons with lack of experience and knowledge, unless they have been given instruction and are supervised during operation
- 4) Children should be supervised to ensure that they do not play with the appliance

# PORT-A-COOL CYCLONE® 3000 UNIT OVERVIEW

PAC2KCYCO1, PAC2KCYCO1A, PACCYCO4, PACCYCO4A



# PORT-A-COOL CYCLONE® 2000 UNIT OVERVIEW



Also applies to Cyclone 2200 PACCYCO3 AND PACCYCO3A

Casters



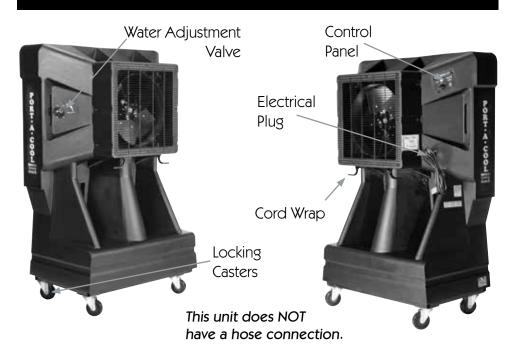
Adjustable Louvers

Water Adjustment Valve

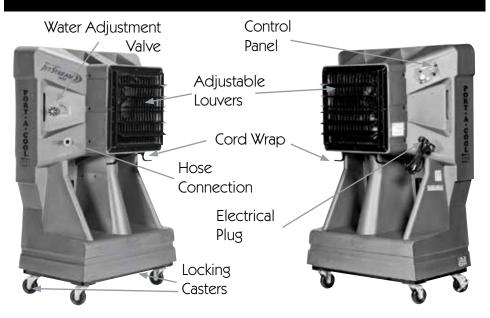
Hose Connection

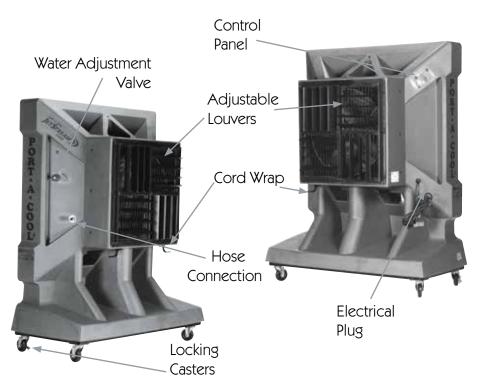


# 16" VERTICAL TANK UNIT OVERVIEW

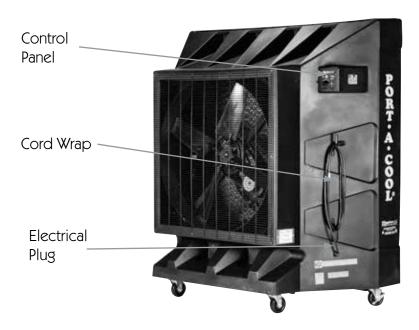


# PORT-A-COOL JETSTREAM® UNIT OVERVIEW





# PORT-A-COOL® UNIT OVERVIEW





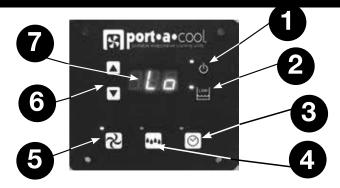
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# **PORT-A-COOL® HURRICANE UNIT OVERVIEW**





# HURRICANE® 3600 USER INTERFACE



The user interface includes touch sensitive buttons for operation of the Port-A-Cool Islander. The user interface also includes status indicator LEDs and a 7-segment LED display to show the cooling unit's status.

The green Power LED is illuminated when the unit is plugged in.



Water level

The red water level LED is illuminated when the float switch detects a low water level and the pump is not turning on. This LED flashes if the pump is running during a low water occurrence to indicate that more water needs to be added in order to continue running the pump.



The controller features five pre-programmed modes which control the fan / pump sequence for a pre-defined period. The LED flashes slowly if continuously held and flashes quickly if the

timer is enabled and then the Pump or Fan buttons are continuously held, prompting the user to turn off the timer in order to exit fan and pump operation. The green Timer LED is illuminated when the Timer



button is activated. Each touch of the program button cycles through the five modes: 1HR, 2HR, 4HR, 8HR, and TIMER OFF. During the program run, the user can adjust the maximum fan speed with the up/down buttons. When the program is active, the Timer LED will be on and, for five seconds, the user will be shown which program (1H, 2H, 4H, or 8H) is active.

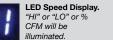
#### Pump

Press the pump button once to power on and again to power off. The green Pump LED is illuminated when the enabled. The LED flashes slowly if continuously

the timer is disabled.

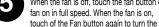


LED Temp Display. Temperature of the internal cooled air in









When the fan is off, touch the fan button once to turn the fan on in full speed. When the fan is on.

fan off. The green Fan LED is illuminated when the fan is active. The LED flashes slowly if continuously held and the timer is disabled.



#### Speeds

The buttons control the air velocity of the unit. Beginning with "Lo", or 50% air flow, up to "Hi" or 100% airflow and

increasing in five percent increments.



7-Segment LED Display LEDs are used to display the status of the cooling unit. The LED flashes slowly if continuously held and flashes quickly if the timer is

enabled and then the Pump or Fan buttons are continuously held, prompting the user to turn off the timer in order to exit fan and pump operation.

Two digits display the unit's temperature, fan speed, and timer program. If the unit does not have a temperature sensor connected, the display will constantly show fan speed. If the unit does feature a temperature sensor, then the temperature is displayed unless; a fan speed change is being called upon either by means of the up/down button or by the timer's program. When a fan speed change is requested, the fan speed will be displayed for five seconds before returning to the unit temperature.

#### LOCK OUT FEATURE

If the operator would like to lock settings so that they can't be adjusted, simply press the "up" arrow and the fan button simultaneously to lock the controls. To unlock, press the "down" button and the fan icon. When enabled, "L-E", or "Lock Enabled", will be displayed in the LED.



Fahrenheit or Celcius.





LED Timer Display. Shows one of the 5 modes: 1HR, 2HR, 4HR, 8HR, or OFF.

#### PRE-PROGRAMMED TIMER FUNCTION

- 1) PUMP STARTS (INCLUDES FIVE SECOND DELAY TO ALLOW WATER TO START REACHING THE PADS)
- 2) FAN STARTS AT 100% (HI) SPEED (A "KICK START" FOR BEST VARIABLE SPEED MOTOR OPERATION)
- 3) FAN RAMPS DOWN TO 50% SPEED
- 4) FAN RAMPS UP TO FULL SPEED IN 10% STEPS AT ONE MINUTE INTERVALS (BEGIN INCREASING AIRFLOW AS THE PADS WET OUT

#### FOR BEST EFFICENCY)

- 5) FAN RUNS AT MAXIMUM SPEED FOR THE DURATION OF THE TIMER SETTING (100% SPEED IS DEFAULT, OR IT CAN BE WHAT-EVER THE USER SELECTS)
- 6) PUMP SHUTS OFF WHEN TIMER SETTING EXPIRES
- 7) FAN RAMPS DOWN TO 50% SPEED
- 8) FAN RUNS 30 MINUTES (PAD DRYING PERIOD)
- 9) FAN SHUTS OFF

#### MAINTENANCE & STORAGE

Very little maintenance is required on the PORT-A-COOL® unit. Cleanliness is the most important part of a maintenance program. Keeping the unit clean will do more than any other single item to keep your unit in peak operating condition. The rugged, corrosion-resistant construction of the unit and industrial grade components ensure low maintenance characteristics. In excessively dusty or dirty environments, optional filters are available from your distributor or at www.port-a-coolparts.com

# **Daily Maintenance**

Daily maintenance is an operational routine rather than actual maintenance. On a daily basis, the pump should be turned off approximately <u>15 minutes</u> before the fan is turned off. This will allow the cooling pads to dry out and extend their life. This also helps to control the growth of mildew, mold, bacteria and other odor causing elements.

# **Weekly Maintenance**

At the end of the week or at a scheduled time, the unit should be shut down and the sump tank should be drained. Closing the Spray Bar Adjustment Valve and opening the Drain Valve will accomplish this. If desired, a hose may be attached to the Drain Valve to direct the drained water to a remote disposal area. Once the Drain Valve is open, starting the pump will drain the unit. When the pump has removed most of the water, a small amount will be left in some areas. The PAC2KCYC01, PAC2KCYC01A, PACCYC02, PACCYC02A, PACCYC03, PACCYC04, PACJS1600, PACJS2400, PACHR3600, and PAC163SVT models come equipped with a drain plug. Removal of the drain plug will accomplish the same results without the use of the pump.

Once the sump is drained and the power disconnected, the pads may be removed to allow inspection and cleaning of the sump tank. Dust may collect in the sump tank over time. This dirt, and any remaining water, may be vacuumed out using a wet/dry shop vacuum and wiped clean with a cloth. Also, inspect and clean the Inlet Strainer located on the bottom of the pump. Replace pads in correct airflow direction, referring to the label on the pads.

# Storage

- 1) Drain all water from the sump tank and clean, ensuring that the pads and sump are completely dry.
- Roll up the electrical power cord and secure it to ensure that it will not be rolled over, tripped over, or caught in equipment.
- Cover the unit completely to prevent dust build-up and store in a dry area. This also helps to prevent damage to the pads. Optional dust covers are available from your distributor or at www.port-a-coolparts.com.

CAUTION — DISCONNECT POWER BEFORE REMOVING COOLING PADS FROM THE PORT-A-COOL® UNIT!

NOTICE — POWER CORD MAY BE REPLACED ONLY BY THE MANUFACTURER OR QUALIFIED AGENT!

#### **TECHNICAL SUPPORT**

Technical support and service is available directly from your distributor or call PORT-A-COOL, LLC Technical Support Hot Line at 888-266-5243 for the distributor nearest you. You may also contact the Support Hot Line for consultation on troubleshooting and parts replacement.

Please have serial number and model number of unit available.

### WARRANTY AND REPLACEMENT PARTS

# Port-A-Cool® Unit Limited Warranty

All Port-A-Cool® units are warrantied for one full year from date of purchase. This warranty covers defects in original material, workmanship, parts, and components. To ensure that the warranty is put into effect, be sure to submit the warranty registration online or complete the warranty card that is shipped with your unit. Please register online at http://www.port-a-cool.com. Factory-authorized personnel will make the final determination concerning repairing or replacing parts or components based on customer claims.

The manufacturer of the variable speed (HP) motor offers a three year warranty on that part. The variable speed motor can be found in the following Port-A-Cool® models: PAC2K36HPVS, PAC2K24HPVS, PACJS1600, PACJS2400, and PAC2K16HPVS.

All transportation charges on parts submitted for replacement or repair under this warranty must be bome by the purchaser. PORT-A-COOL, LLC., will not be held liable for any incidental or consequential damages. This warranty is declared void if the equipment is found to have been misused, abused or tampered with by unauthorized personnel.

# Returned Merchandise Authorization (RMA) Procedures

All Port-A-Cool® units, parts, or materials being returned to PORT-A-COOL, LLC for warranty replacement or repair require an RMA (Return Merchandise Authorization) number.

Warranty parts can be replaced by:

- The distributor can purchase the part with an RMA number and will only be charged for the cost of the part, not for the shipping. When the defective part is returned freight paid, the distributor's account will be credited for the cost of the part.
- The customer / distributor can call Tech Support to get an RMA number to send the defective part back to PORT-A-COOL, LLC. Once the part is received by PORT-A-COOL, LLC, a replacement part will be sent at no charge.

Information needed to get an RMA number:

- 1. The unit serial number.
- 2. The unit model number (ex. PAC2K363S)
- 3. The part number or description of the part to be replaced.

Only major component parts need an RMA number, i.e. fans, motors, pumps, and some plumbing parts. For replacement of small parts, the serial and model numbers are still required, but the parts do not need to be returned to <u>PORT-A-COOL, LLC</u>.

For warranty replacement parts call PORT-A-COOL® Technical Support at 1-888-266-5243. FAX: 936-598-1431.

Shipping Address
PORT-A-COOL, LLC
PORT-A

To expidite your request, please submit the RMA form found on our website at www.port-a-cool.com/returns

#### TROUBLESHOOTING

# **Troubleshooting**

The PORT-A-COOL® unit consist of three systems — the fan system, the electrical system, and the water system. It is important to determine which system of the PORT-A-COOL® unit the problem is associated with. Certain problems may be associated with more than one system.

Since several things may cause a particular problem (i.e., the pump is not running), when determining which system that the problem is associated with, first define the problem. A careful check of all systems should be made to fully understand the extent of the problem.

With an understanding of all three systems of the PORT-A-COOL® unit and how they depend on each other, it becomes much simpler to define and solve any problems.

Although the PORT-A-COOL® unit is designed to be simple to maintain, it will be necessary to have some basic hand tools (screwdrivers, pliers, adjustable wrenches, etc.).

### CAUTION

Please use caution when troubleshooting or repairing any electrical components.

Be certain that all power is disconnected from the PORT-A-COOL® unit before the cooling pads are removed to gain access to the fan.

# **Repair and Replacement Procedures**

Ensure that all water is removed from the PORT-A-COOL® unit and all power is disconnected. Remove all impediments to access the component you are checking or replacing.

# REPLACING THE COOLING MEDIA (PADS) (All Models)

#### **CAUTION - DISCONNECT POWER BEFORE PERFORMING THIS OPERATION!**

The flap must be removed to allow access to the cooling pads. Start with the center pad, which can be tilted out from the top and lifted out of the drain trough. The two pads to either side of the center pad may then be removed in the same manner. To remove the two outside pads, they must first be pulled sideways toward the center of the PORT-A-COOL® unit until they clear the side retainer before removing in the same manner as the other pads.



Locate the set screw in the rear of the unit on the upper right side



Remove set screw and lower front flap to vertical position (see illustration)



Once the front flap is moved, grasp the right pad and tilt out at a 90 degree angle (see illustration).



Pull the pad up to remove from unit. Repeat for other pads.

### **FAN SYSTEM**

This section is divided into the two categories of fans used on all PORT-A-COOL® models: Direct Drive and Belt Drive. Both have some symptoms in common, and both have problems that are particular to each.

#### **BELT DRIVE MODELS**

PROBLEM	CHECK	SOLUTION
Fan motor won't run and makes no sound.	Power cord, switches, circuit breaker, etc.	Check switch connection Reconnect power, reset breaker.
Fan motor won't run and	Blade in contact with shroud	Check mounting bolts.
makes a humming sound.	Motor stalled (will not turn by hand)	Replace motor.
Breaker trips or fuse blows	Motor stall (as above).	Replace motor.
when fan is started.	Other items on circuit.	Remove other items.
Motor overheating and shutting off and restarting several minutes later.	Inlet air obstructed or too close to wall.	Provide minimum 36 inch inlet clearance.
Switch making good contact. makes soft clicking sound.	Faulty motor. Replace switch	Replace motor.
Fan motor won't run and has a burning smell and hums.	Motor stall (as above).	Replace motor.
Fan blade doesn't turn and	Fan Belt, loose.	Tighten or replace fan belt.
unit makes squealing sound.	Fan pulley spinning on shaft.	Tighten pulley set screw.
Fan belts do not last very long. Motor and fan pulleys misaligned		Realign motor and mount.
Fan will not reach speed but turns and makes humming sound.	Capacitor (where visible) and motor electrical connections.	Replace motor.

#### **DIRECT DRIVE**

PROBLEM	CHECK	SOLUTION	
Fan motor won't run and makes no sound.	Power cord, switches, circuit breaker, etc. cord, reset breaker.	Check switch connection Reconnect power	
Fan motor won't run and	Blade in contact with shroud	Check mounting bolts.	
makes a humming sound.	Motor stalled (will not turn by hand)	Replace motor.	
Breaker trips or fuse blows when	Motor stall (as above).	Replace motor.	
fan is started.	Other items on circuit.	Remove other items.	
Motor overheating and shutting off and restarting several minutes later.	Inlet air obstructed or too close to wall.	Provide minimum 36 inch inlet clearance.	
Fan motor won't run and switch makes soft clicking sound.	Faulty motor. Switch making good contact.	Replace motor. Replace switch.	
Fan motor won't run and has a	Start capacitor leaking from cover.	Replace motor .	
buming smell.	Motor stall (as above).	Replace motor.	

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#### **WATER SYSTEM**

The water system consists of three primary elements: 1) Water Delivery System, 2) Spray Bar Assembly; 3) Pump. Troubleshooting of this system is fairly simple.

The **Water Delivery System** consists of two assemblies: A) The <u>Water Inlet Assembly</u> and B) The <u>Plumbing</u> Assembly.

The **Water Inlet Assembly** is made up of three components: 1) The <u>Bulkhead Fitting</u>, 2) The <u>Float Valve</u>. <u>Connection Hose</u>, and 3) The <u>Float Valve</u>.

The **Plumbing Assembly** consists of three elements: 1) <u>Riser</u> (PVC components), 2) <u>Drain Valve</u>, and 3) The Spray Bar Adjustment Valve. (The PACQK163SHD and PACQK163HPVS models have no riser or drain valve.)

The **Spray Bar Assembly** consists of two components: 1) <u>Spray Bar</u>, 2) <u>Connection Hose</u>.

The pumps that actually move the water through the delivery system are discussed in the charts below. These charts indicate the major symptoms of problems that may be encountered with the Water System components.

#### WATER INLET SYSTEM

PROBLEM	CHECK	SOLUTION
Floor near the PORT-A-COOL® unit is wet. Water flow is too heavy.	Water inlet hose is loose at supply hose or inlet hose is loose at bulkhead fitting	Adjust water flow. Tighten connections and/or replace hose washers.
PORT-A-COOL® unit overflows from sump tank or is spitting water through fan.	Float valve hose is loose at bulkhead fitting or at float valve.	Tighten connections and /or replace hose washers.
	Water pressure is too high to allow float valve to shutoff. (50 psi max.)	Reduce water pressure by checking in-line reducer.
	Float valve is not seating properly.	Check for particles in valve. Replace float valve.
	Spray bar valve adjustment.	Close down adjustment valve to reduce excess water flow.

#### PLUMBING ASSEMBLY

PROBLEM	CHECK	SOLUTION
Water spitting from the unit.	Cracked riser assembly. Spray Bar Adjustment valve.	Replace riser assembly.
Water leaking from Drain Valve.	Washer worn.	Replace washer.
	Stem worn.	Replace Drain Valve.
Water leaking from Spray Bar Valve.	Washer worn.	Replace washer.
	Stem wom.	Replace Spray Bar Valve.

# SPRAY BAR ASSEMBLY (ALL MODELS)

PROBLEM	CHECK	SOLUTION
Too many dry streaks in the pads.	Holes in spray bar blocked	Remove and clean spray bar.
	by foreign material.	Clean individual holes.
Water spitting from the unit.	Hose connection loose.	Tighten hose.  Replace hose and washer.  Reseat spray bar end caps
Excess water in air coming from the fan.	Pad Installation	Pads must be installed according to air flow direction label on the pad.

# SUBMERSIBLE PUMPS PROBLEM CHECK SOLUTION

PROBLEM	CHECK	SOLUTION	
Pump will not run when switch is turned on.	Power cord, switches, circuit breaker, switch box, connection, etc.	Reconnect power, reset breaker or reconnect in switch box.	
	Air lock in hose.	Disconnect hose at base of pump, run pump to release air, then reconnect.	
Pump hums when switch is	Inlet filter clogged.	Clean filter.	
turned on, but does not pump water.	Pump motor locked.	Replace pump.	
Breaker trips or fuse blows when switch is turned on.	Wiring short in line between pump and switch box.	Check and/or replace wiring.	
Pump cycling on and off	Sump tank is empty.	Fill with water.	
periodically	Spray bar valve is closed.	Open valve.	
Pump will not run and power is available and pump is functional.	Switch making closure contact.	Check continuity/ Replace switch.	
Unit has water spraying from front.	If the unit is equipped with a PUMP-016-4Z.	If so, disconnect the unit and remove the pads to access the pump. Turn it towards the rear of the unit .	
	Water level	Units equipped with PUMP-016-4Z need to maintain water levels to cover the pump.	

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# **BRONZE PUMP (PAC2K36HZ or PAC2K48HZ)**

PROBLEM	CHECK	SOLUTION
Pump motor will not run when switch is turned on.	Power cord, switches, circuit breaker, etc.	Reconnect power, reset breaker.
Pump motor hums when switch is turned on, but does not pump water.	Air Locked. Pump/Motor locked.	Disconnect hose at base of pump, run pump to release air, then reconnect. Replace pump/motor.
Pump makes loud noise while running	Pump bearings. Object in impeller housing.	Replace pump. Clear object.
Breaker trips or fuse blows when switch is turned on.	Pump motor locked.	Replace pump/motor.
Pump will not run and power is available and pump is functional	Switch making closure contact.	Replace switch.
Pump motor running but pump is not turning.	, ,	

# SHAFT TYPE PUMP (16" models)

PROBLEM	CHECK	SOLUTION
Pump motor will not run when switch is turned on.	Power cord, switches, circuit breaker, switch box, connections, etc.	Reconnect power cord, reset breaker. or reconnect to switch box.
Pump motor hums when switch is turned on, but does not pump water.	Object jammed into impeller blade.  Air Locked.  Pump motor locked.	Remove object. Prime pump. Replace pump.
Pump makes loud noise while running.	Pump bearings. Object in impeller housing.	Replace pump. Clear object.
Breaker trips or fuse blows when switch is turned on.	Pump motor locked.	Replace pump.
Pump won't run and power is available and pump is functional.	Switch making closure contact.	Replace switch.



# FREQUENTLY ASKED QUESTIONS

### Q. WHAT ASSEMBLY IS REQUIRED?

A. None. PORT-A-COOL® units are ready to use right out of the box.

## Q. HOW DO I PREPARE MY PORT-A-COOL® UNIT FOR STORAGE?

A. Drain the unit, dry out the pads and place the unit, preferably covered, in a dry place for the winter season. For more details, please call our Tech Support Hotline at 1-888-COOL-AID.

# Q. I JUST HOOKED UP MY PORT-A-COOL® UNIT FOR THE FIRST TIME AND THERE'S AN UNPLEASANT ODOR! WHAT'S WRONG?

A. A new unit will go through a break-in period during which it may emit some odor. The pads, located in the back of your PORT-A-COOL® unit, have never been wet. The resin in the pads will emit an odor the first time you wet them that lasts approximately one to three weeks. Keep the unit in an open area until the odor goes away or put a capful of laundry softener directly in the tank in the bottom of your unit. After approximately two weeks of operation, the odor should disappear. If the unit is not a new unit, algae or bacteria growth in the unit from improper maintenance will cause odors. Please refer to your owner's nanual for proper cleaning and maintenance.

# Q. MY PORT-A-COOL® UNIT ISN'T PUTTING OUT ANY COOL AIR.

A. First, make sure the water source and electricity source are connected and working. Second, check the back of your unit to see if the pads are damp. Adjust the water flow. For the evaporation process to occur, the pads must be damp before you turn on the fan. Third, make sure there is water in the tank. It should be allowed to fill before you turn the pump on. Fourth, if none of these options fix the problem, call our Tech Support Hotline at 1-888-COOL-AID for additional assistance.

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# FREQUENTLY ASKED QUESTIONS (continued)

# Q. WHAT IS THE BEST ENVIRONMENT FOR THE PORT-A-COOL® UNIT TO PRODUCE THE MOST COOL AIR?

A. For optimum performance, the temperature should be 85° F or higher and the relative humidity should be below 75%. However, PORT-A-COOL® units will reduce the temperature in almost any environment, making it more pleasant.

# Q. WHAT IS THE DIFFERENCE BETWEEN EVAPORATIVE COOLING AND MISTING SYSTEMS?

A. Misting units spray a shower of water into the air that will collect on people, objects, equipment, floors, etc. The PORT-A-COOL® unit uses the process of evaporation to produce cooler air, but does not discharge a mist.

## Q. SHOULD I OIL THE FAN MOTOR?

A. That is not required. The motor bearings are sealed and cannot be oiled.

#### Q. WHERE CAN I BUY REPLACEMENT PARTS?

A. Unit replacement parts may be purchased from any PORT-A-COOL® product distributor or directly from Port-A-Cool® Parts/Technical Support department. You may also visit www.port-a-coolparts.com to order online.

### Q. HOW OFTEN DO PADS HAVE TO BE REPLACED?

A. Depending on the quality of maintenance and frequency of use, pads typically last up to five years. However, should you have any questions about the life of the pads for your unit, please call our tech support department for more detailed information about replacing your pads.

(CONTINUED)

# FREQUENTLY ASKED QUESTIONS (continued)

#### Q. WHAT IS THE AMOUNT OF MOISTURE PRODUCED BY A UNIT?

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 unit is exhausted.

#### Q. HOW LONG WILL THE WATER SUPPLY LAST IN THE SUMP TANK?

A. With no direct water source available, the unit will evaporate the water in a filled sump tank within two to 10 hours of operation, depending on the water capacity of the unit and ambient conditions. The evaporation rate will vary depending on temperature and humidity. A water source for refilling the sump tank is recommended by the manufacturer. Most units have an internal float valve for regulating water flow into the sump.

### Q. SHOULD I USE ICE IN THE SUMP TANK FOR BETTER COOLING?

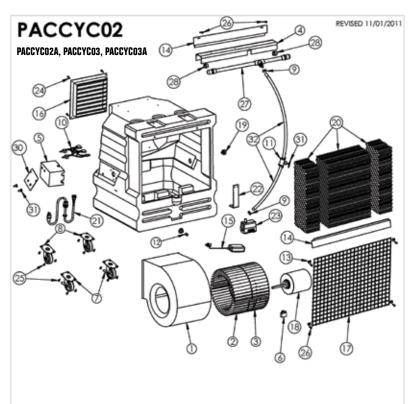
A. Some of the vapor from the ice water may be picked up and distributed by the fan, but this does not increase evaporation and therefore will not produce significant cooling.

#### Q. WHERE ARE THE MODEL AND SERIAL NUMBERS FOUND ON THE UNIT?

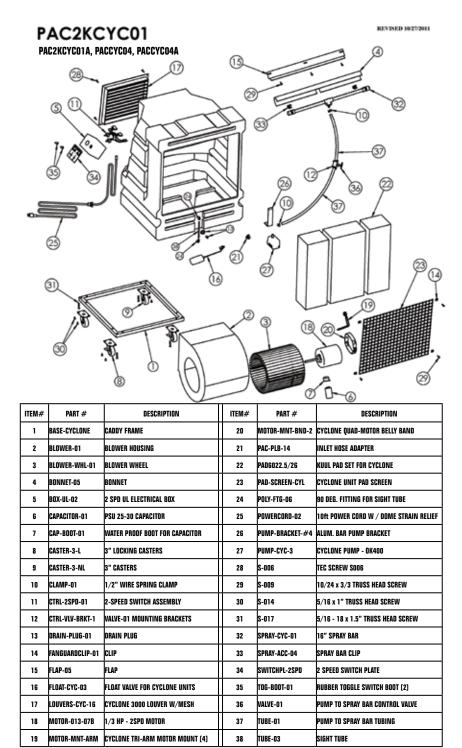
A. On the outside of every unit is a metal plate with a white label with printed barcodes and other information. Unit model numbers begin with the letters "PAC." Serial numbers are all-digits. Always provide the unit's serial number and model number when contacting Parts/Technical Support.

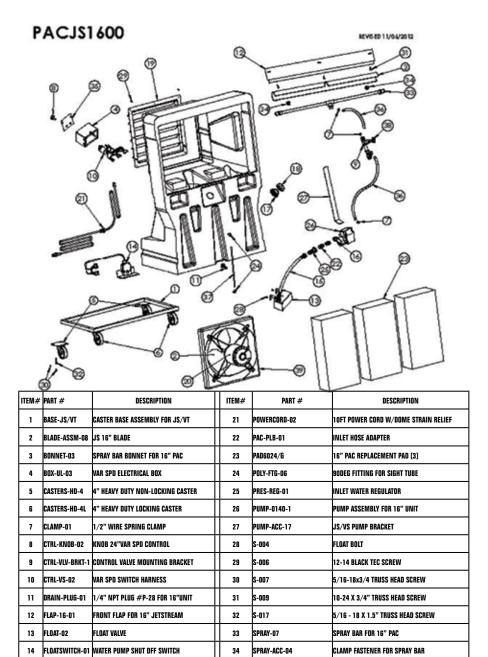
#### Q. WHAT IF MY QUESTIONS AREN'T ANSWERED HERE?

A. Our Tech Support staff is available 8 a.m. to 5 p.m. Central Time, Monday though Friday at 1-888-COOL-AID or you can e-mail them at support@port-a-cool.com.



ITEM#	PART #	DESCRIPTION	ITEM#	PART #	DESCRIPTION
1	BLOWER-02	BLOWER HOUSING - CYCLONE2000	18	MOTOR-016-01	CYCLONE2000 - 2SPD MOTOR
2	BLOWER-WHL-2CW	CYCLONE2000 BLOWER WHEEL (PART 1)	19	PAC-PLB-14	INLET HOSE ADAPTER for CYCLONE2000
3	BLOWER-WHL-3CCW	CYCLONE2000 BLOWER WHEEL (PART 2)	20	PAD6019/22	KUUL PAD SET FOR CYCLONE2000
4	BONNET-06	22.5" EXTRUDED BONNET-CYCLONE2000	21	POWERCORD-02	10ft POWER CORD W / DOME STRAIN RELIEF
5	BOX-UL-02	1 & 2 SPD UL ELECTRICAL BOX	22	PUMP-BRACKET-5	PUMP MOUNT BRACKET-CYCLONE2000
6	CAPACITOR-04	RUN CAPACITOR FOR CYCLONE2000	23	PUMP-CYC-3	CYCLONE PUMP - OK400
7	CASTER-3-L	3" LOCKING CASTERS	24	S-002	TEC SCREW S006
8	CASTER-3-NL	3" CASTERS	25	S-007	10/24 x 3/3 TRUSS HEAD SCREW
9	CLAMP-01	1/2" WIRE SPRING CLAMP	26	S-011	5/16 x 1" TRUSS HEAD SCREW
10	CTRL-2SPD-01	2-SPEED SWITCH ASSEMBLY	27	SPRAY-CYC-02	SPRAY BAR FOR CYCLONE2000
11	CTRL-VLV-BRKT-01	VALVE-01 MOUNTING BRACKETS	28	SPRAY-ACC-01	SPRAY BAR CLIP
12	DRAIN-PLUG-01	DRAIN PLUG	29	SPIN-FTG-02	SPIN FITTING FOR 16" UNIT
13	FANGUARDCLIP-01	CLIP	30	SWITCHPL-2SPD	2 SPEED SWITCH PLATE
14	FLAP-CYC-2	FLAP/SPLASHGAURD-CYCLONE2000	31	TOG-B00T-01	RUBBER TOGGLE SWITCH BOOT (2)
15	FLOAT-CYC-03	FLOAT VALVE	32	VALVE-01	PUMP TO SPRAY BAR CONTROL VALVE
16	LOUVERS-CYC-11	LOUVER W/MESH - CYCLONE2000	33	TUBE-01	PUMP TO SPRAY BAR TUBING
17	PAD-SCREEN-2	CYCLONE2000 UNIT PAD SCREEN			





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17 JS-ACC-01

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HOSE-FM18

HOSE-FTG-05

.IS-ACC-02

INIIVERS-JS

MOTOR-013-04

18"FLOAT HOSE

SWIVEL HOSE FITTING

2" THREADED FILLER CAP

1/3HP VOSTERMAN MOTOR

2" THREADED FILLER CAP RING

FRONT LOUVER FOR JS/VT UNITS

SWITCHPL-VARSPD

TUBE-01

TURF-03

VAIVE-N1

VENT16-INJ-01

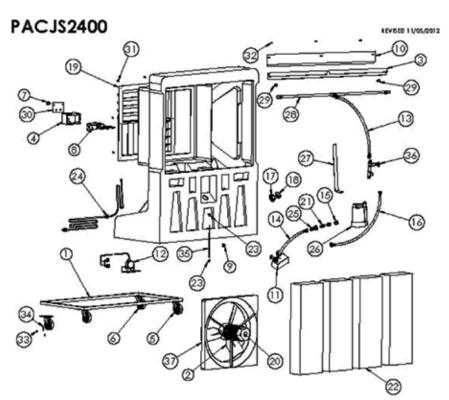
SWITCH COVER PLATE

SOFT PLASTIC TUBE

VENTURI FOR 16" FAN

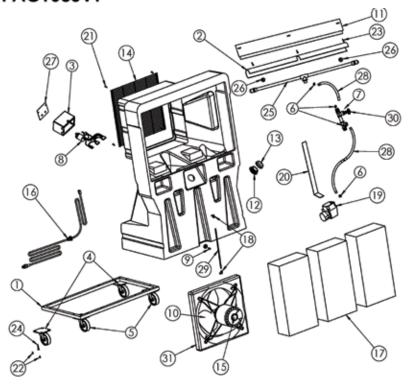
PIIMP TO SPRAYRAR CONTROL VALVE

CIGHT THRE



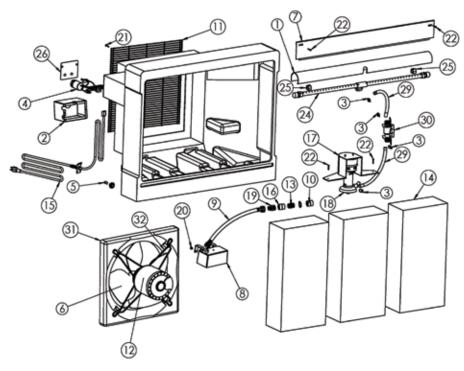
ITEM#	PART #	DESCRIPTION		ITEM#	PART #	DESCRIPTION
1	BASE-JS-24	CASTER BASE ASSEMBLY	П	20	MOTOR-012-06	24" HP MOTOR
2	BLADE-ASSM-24	24" JS FAN BLADE	П	21	PAC-PLB-01	INLET HOSE ADAPTER
3	BONNET-02	SPRAY BAR BONNET FOR 24" PAC	$\ $	22	PAD6036/G	24" REPLACEMENT PAD
4	BOX-UL-03	VAR SPD ELECTRICAL BOX	П	23	POLY-FTG-06	90DEG. FITTING FOR SITE TUBE
5	CASTERS-HD-4	4" HEAVY DUTY JS/VT CASTER	П	24	POWERCORD-02	POWERCORD W/DOME STRAIN RELIEF
6	CASTERS-HD-4L	4" HEAVY DUTY JS/VT LOCKING CASTER		25	PRESS-REG-01	INLET WATER REGULATOR
7	CTRL-KNOB-02	KNOB FOR 24" VAR/SPD CONTROL	$ box{}$	26	PUMP-016-4R	PUMP 1/6 HP (LG)
8	CTRL-VS-02	24" VAR/SPD SWITCH HARNESS ASSM	$\ $	27	PUMP-ACC-18	JS/VT PUMP BRACKET
9	DRAIN-PLUG-01	1/4" NPT PLUG	П	28	SPRAY-04	SPRAY BAR FOR 24" PAC
10	FLAP-24-01	FLAP FOR 24" PAC	П	29	SPRAY-ACC-01	#12 NYLON CLIP
11	FLOAT-02	FLOAT VALVE BOX	П	30	SWITCHPL-VARSPD	VAR SPD SWITCH COVE PLATE
12	FLOATSWITCH-01	WATER PUMP SHUT OFF SWITCH	П	31	S-006	#12 X 1 1/4" TEK SCREW
13	HOSE-FF-33	33" SINGLE FEM HOSE	П	32	S-009	10-24 X 3/4" TRUSS HEAD SCREW
14	HOSE-FM30	18" FLOAT HOSE	Т	33	S-014	5/16" - 1" TRUSS HEAD SCREW
15	HOSE-FTG-05	FEM/FEM 3/4" X 3/4" BRASS SWIVEL	П	34	S-017	5/16" - 18 X 1.5" TRUSS HEAD SCREW
16	HOSE-F47	SINGLE FEM HOSE PLUMBING TO PUMP		35	TUBE-03	1/4" POLY SIGHT TUBE
17	JS-ACC-01	2" TREADED RING	П	36	VALVE-01	1/2" GATE VALVE
18	JS-ACC-02	2" TREADED CAP		37	VENTURI-24-02	24" VENTURI
19	LOUVERS-JS-24	LOUVER W/MESH FOR 24" JS/VT	Т			

# PAC163SVT

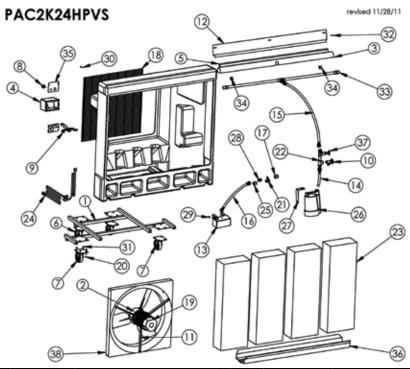


ITEM#	PART #	DESCRIPTION		ITEM#	PART #	DESCRIPTION
1	BASE-JS/VT	CASTER BASE ASSEMBLY FOR JS/VT	T	17	PAD6024/G	16" PAC REPLACEMENT PAD
2	BONNET-03	SPRAY BAR BONNET FOR 16" PAC	Τ	18	POLY-FTG-06	90DEG FITTING FOR SIGHT TUBE
3	BOX-UL-01	3SPD ELECTRICAL BOX	Ť	19	PUMP-0140-1	PUMP ASSEMBLY FOR 16" UNIT
4	CASTERS-HD-4	4" JS/VT HEAVY DUTY NON-LOCKING CASTER	Ť	20	PUMP-ACC-17	JS/VS PUMP BRACKET
5	CASTERS-HD-4L	4" JS/VT HEAVY DUTY LOCKING CASTER	Ť	21	S-006	12-14 BLACK TEC SCREW
6	CLAMP-01	1/2" WIRE SPRING CLAMP	Ť	22	S-007	5/16 -18x3/4 TRUSS HEAD SCREW
7	CTRL-VLV-BRKT-1	CONTROL VALVE MOUNTING BRACKET	Ť	23	S-009	10-24 X 3/4" TRUSS HEAD SCREW
8	CTRL-3SPD-02	3SPD SWITCH HARNESS	Ť	24	S-017	5/16 - 18 X 1.5" TRUSS HEAD SCREW
9	DRAIN-PLUG-01	1/4" NPT PLUG #P-28 FOR 16"UNIT	Ť	25	SPRAY-07	SPRAY BAR FOR 16" PAC
10	FAN-ASSM-15	16" VT FAN BLADE	Ť	26	SPRAY-ACC-04	CLAMP FASTENER FOR SPRAY BAR
11	FLAP-16-01	FRONT FLAP FOR 16" JETSTREAM	Ť	27	SWITCHPL-REV3SP	3SPD SWITCH COVER PLATE
12	JS-ACC-01	2" THREADED FILLER CAP RING	Ť	28	TUBE-01	SOFT PLASTIC TUBE
13	JS-ACC-02	2" THREADED FILLER CAP	Ť	29	TUBE-03	SIGHT TUBE
14	MESH-PAC-05	FAN GUARD SCREEN FOR 16" UNITS	T	30	VALVE-01	PUMP TO SPRAYBAR CONTROL VALVE
15	MOTOR-012-04E	16" HD, FC,VT 3SPD MOTOR	T	31	VENT16-INJ-01	VENTURI FOR 16" FAN
16	POWERCORD-03	10FT POWER CORD W/STRAIN RELIEF/NUT/ Washer	T			•

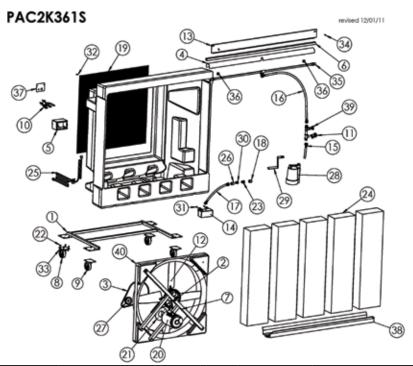
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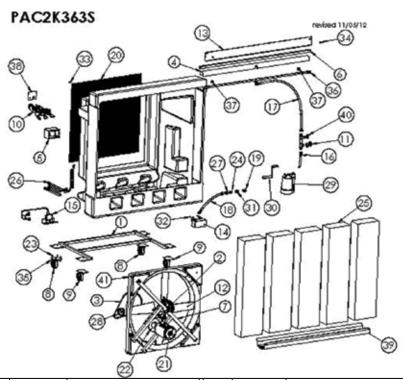
ITEM#	PART #	DESCRIPTION	ITEM#	PART #	DESCRIPTION
1	BONNET-03	SPRAY BAR BONNET	15	POWERCORD-01	16' POWER CORD W/STRAIN RELIEF
2	BOX-UL-01	3 SPD ELECTRICAL BOX	16	PRES-REG-01	WATER PRESSURE REGULATOR
3	CLAMP-01	1/2" CLAMP FOR PLASTIC TUBE	17	PUMP BRACKET	PLASTIC PUMP COVER/BRACKET
4	CTRL-3SPD-02	3-SPD HARNESS W/SALZER SWITCH	18	PUMP-0150-1	PUMP 1/70HP W/NETTING
5	DRAIN-PLUG-01	DRAIN PLUG 16 PAC	19	PVC-ADP-01	3/4 X 1/2 ADAPTER
6	FAN-ASSM-15	16" VT FAN BLADE	20	S-004	1/4-20 X 1/2" BOLT FOR FLOAT
7	FLAP-16-01	FRONT FLAP FOR 16"	21	S-006	#12 X 1 1/4" TEK SCREW
8	FLOAT-02	FLOAT VALVE	22	S-009	10-24 x 3/4" TRUSS HEAD SCREW
9	HOSE-FM18	1/2" X 18" F/M HOSE	23	SPRAY-07	SPRAY BAR FOR 16" PAC
10	HOSE-FTG-05	FEM/FEM 3/4" BRASS SWIVEL	24	SPRAY-ACC-04	CLAMP FASTENER 1029
11	MESH-PAC-05	FAN SCREEN	25	TUBE-01	1/2" PLASTIC TUBE (PER FOOT)
12	MOTOR-012-04E	16" HD,FC,VT 3 SPD MOTOR	26	VALVE-01	1/2" GATE VALVE
13	PAC-PLB-01	BRASS INLET FITTING	27	VENT16-INJ-01	INJECTION MOLDED VENTURI
14	PAD6024/G	PAD FOR 16" UNIT (3 per unit)	28	VENTURI-MNT-01	N/S H/D MOTOR MOUNT FRAME



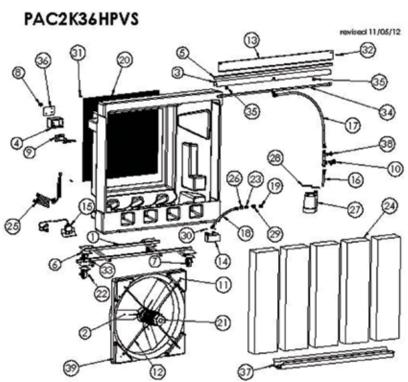
ITEM #	PART #	DESCRIPTION	$\prod$	ITEM #	PART #	DESCRIPTION
1	BASE-2K24	CADDY	$\prod$	20	LOCKNUT-FNG-516	5/16-18 FLANGE NYLON INSERT LOCK NUT
2	BLADE-ASSM-02	VOSTERMAN 24" FAN BLADE ASSY. (33deg.)	П	21	PAC-PLB-01	BRASS INLET FITTING
3	BONNET-02	SPRAY BAR BONNET FOR 24" PAC	П	22	PAC-PLB-02	BLACK PLUMBING ASSEMBLY
4	BOX-UL-03	ELECTRICAL BOX	Π	23	PAD6036/G	PAD FOR 24" PAC (4 per unit)
5	BRACE-24-01	BONNET STEEL BAR	П	24	POWERCORD-01	16' POWER CORD ASSEMBLY
6	CASTERS-HD-4	SWIVEL CASTER	П	25	PRES-REG-01	WATER PRESSURE REGULATER
7	CASTERS-HD-4L	LOCKING SWIVEL CASTER	П	26	PUMP-016-4R	SUBMERSIBLE 1/6 HP PUMP
8	CTRL-KNOB-02	D-SHAFT KNOB FOR CONTROL SWITCH	П	27	PUMP-ACC-15	PUMP BRACKET- 1/6 HP PUMP 24" PAC
9	CTRL-VS-02	SWITCH SET FOR 24" HPVS UNIT	$\prod$	28	PVC-ADP-01	3/4" X 1/2" REDUCING ADAPTER
10	DRAIN-01	1/2" BOILER DRAIN	П	29	S-004	1/4-20 X 1/2" BOLT FOR FLOAT
11	FAN24HP-MNT-01	MOTOR MOUNT ARM FOR 24" HPVS UNIT	П	30	S-006	#12 X 1 1/4" TEK SCREW
12	FLAP-24-01	FRONT FLAP FOR 24" PAC	П	31	S-007	5/16" TRUSS HEAD SCREW FOR CASTER
13	FLOAT-02	FLOAT VALVE	П	32	S-009	10-24 X 3/4" TRUSS HEAD SCREW
14	HOSE-FF30	1/2" X 30" FEM/FEM HOSE TO PLB TO PUMP	П	33	SPRAY-04	SPRAY BAR FOR 24" PAC
15	HOSE-FF37	1/2" X 37" FEM/FEM HOSE TO SPRAYBAR TO PLB	П	34	SPRAY-ACC-04	CLAMP FASTENER 1029
16	HOSE-FM22	1/2" X 22" FEMALE/MALE HOSE INLET TO FLOAT	П	35	SWITCHPL-VARSPD	SWITCH PLATE FOR HP UNIT
17	HOSE-FTG-05	FEM/FEM 3/4" X 3/4" BRASS SWIVEL	П	36	TROUGH-02	PAD TROUGH FOR 24" PAC
18	MESH-PAC-03	FAN SCREEN FOR 24" PAC	П	37	VALVE-01	1/2" GATE VALVE
19	MOTOR-012-06	1/3 HP DIRECT DRIVE VOSTERMAN MOTOR	П	38	VENTURI-24-02	PLASTIC VENTURI FOR 24"HPVS UNIT



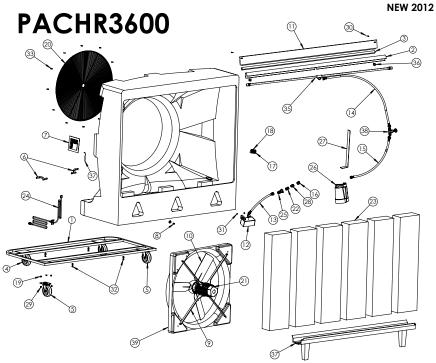
ITEM#	PART #	DESCRIPTION	п	TEM#	PART #	DESCRIPTION
1	BASE-2K36	CADDY		21	MOTOR-MNT-01	MOUNT FOR 36" MOTOR
2	BEARING-FAN-01	BEARING FOR 24" & 36" PAC		22	N-516-NYLOK	5/16" NYLOCK NUT FOR CASTERS
3	BELT2K-38-01	A-38 FAN BELT		23	PAC-PLB-01	BRASS INLET FITTING
4	BONNET-01	SPRAY BAR BONNET		24	PAD6048/G	PAD FOR 36" PAC (5 per unit)
5	BOX-UL-02	1 SPD ELECTRICAL BOX		25	POWERCORD-01	POWER CORD ASSEMBLY
6	BRACE-36-02	BONNET BRACE		26	PRES-REG-01	WATER PRESSURE REGULATOR
7	BRACE-36-03	36" PULTRUSION ASSEMBLY		27	PULLEY-3.75	3.75 O.D. PULLEY
8	CASTERS-HD-4	HEAVY DUTY CASTER		28	PUMP-016-4R	L/G 1/6HP SUBMERSIBLE PUMP
9	CASTERS-HD-4L	HEAVY DUTY LOCKING CASTER		29	PUMP-ACC-13	SUBMERSIBLE PUMP BRACE
10	CTRL-1SPD-01	1 SPEED SWITCH SET		30	PVC-ADP-01	3/4" X 1/2" REDUCING ADAPTER
11	DRAIN-01	1/2" BOILER DRAIN VALVE		31	S-004	1/4-20 X 1/2" BOLT FOR FLOAT
12	FAN-ASSM-01	PLASTIC BLADE & HUB ASSEMBLY FOR 36" PAC		32	S-006	#12 X 1 1/4" TEK SCREW
13	FLAP-36-01	FRONT FLAP FOR 36"		33	S-007	5/16-18 TRUSS HEAD SCREW
14	FLOAT-02	FLOAT VALVE		34	S-009	10-24 X 3/4" TRUSS HEAD SCREW
15	HOSE-FF24	1/2" X 24" FEM/FEM HOSE PUMP TO PLB		35	SPRAY-06	SPRAY BAR FOR 36" PAC
16	HOSE-FF50	1/2" X 50" FEM/FEM HOSE PLB TO SPRAYBAR		36	SPRAY-ACC-04	CLAMP FASTENER 1029
17	HOSE-FM30	1/2" X 30"FEM/MALE HOSE INLET TO FLOAT		37	SWITCHPL-1SPD	SWITCH COVER PLATE
18	HOSE-FTG-05	FEM/FEM 3/4" BRASS SWIVEL		38	TROUGH-01	PAD TROUGH FOR 36" PAC
19	MESH-PAC-02	FAN SCREEN		39	VALVE-01	1/2" GATE VALVE
20	MOTOR-012-01STA	1SPD STUD MOUNT MOTOR (PRODUCED W/9K922B)		40	VENTURI-36-01	36" RTM FAN VENTURI



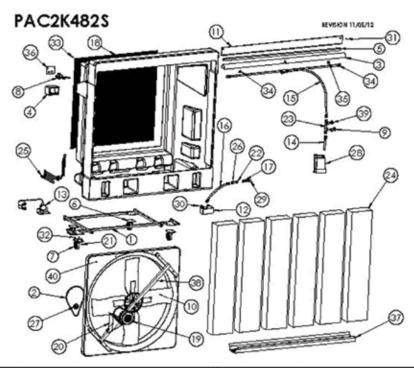
ITEM#	PART #	DESCRIPTION	ITEM#	PART #	DESCRIPTION
1	BASE-2K36	CADDY	22	MOTOR-MNT-01	MOUNT FOR 36" MOTOR
2	BEARING-FAN-01	BEARING FOR 24"/36" FAN BLADE ASSEMBLY	23	N-516-NYLOK	5/16" NYLOCK NUT FOR CASTERS
3	BELT2K-38-01	A-38 FAN BELT	24	PAC-PLB-01	BRASS INLET FITTING
4	BONNET-01	SPRAY BAR BONNET	25	PAD6048/G	PAD FOR 36" PAC (5 per unit)
5	BOX-UL-01	3 SPD ELECTRICAL BOX	26	POWERCORD-01	16' ELECTRICAL CORD
6	BRACE-36-02	BONNET BRACE	27	PRES-REG-01	WATER PRESSURE REGULATOR
7	BRACE-36-03	36" PULTRUSION ASSEMBLY	28	PULLEY-3.75	3.75 O.D. PULLEY
8	CASTERS-HD-4	HEAVY DUTY SWIVEL CASTER	29	PUMP-016-4R	1/6 HP SUBMERSIBLE PUMP FOR 36" PAC
9	CASTERS-HD-4L	HEAVY DUTY LOCKING SWIVEL CASTER	30	PUMP-ACC-13	PUMP BRACE
10	CTRL-3SPD-02	3 SPEED SALZER SWITCH SET	31	PVC-ADP-01	3/4"X1/2" REDUCING ADAPTER
11	DRAIN-01	1/2" BOILER DRAIN VALVE	32	S-004	1/4-20 X 1/2" BOLT FOR FLOAT
12	FAN-ASSM-01	PLASTIC BLADE & HUB ASSEMBLY	33	S-006	#12 X 1 1/4" TEK SCREW
13	FLAP-36-01	FRONT FLAP FOR 36"	34	S-007	5/16-18 TRUSS HEAD SCREW
14	FLOAT-02	FLOAT VALVE	35	S-009	10-24 X 3/4" TRUSS HEAD SCREW
15	FLOATSWITCH-01	WATER PUMP SHUT OFF SWITCH	36	SPRAY-06	SPRAY BAR FOR 36" PAC
16	HOSE-FF24	1/2" X 24" FEM/FEM HOSE PLB TO PUMP	37	SPRAY-ACC-04	CLAMP FASTENER 1029
17	HOSE-FF50	1/2" X 50" FEM/FEM HOSE SPRAY BAR TO PLB	38	SWITCHPL-3SPD	SWITCH COVER PLATE - 3SPD
18	HOSE-FM30	1/2" X 30" MALE/FEM HOSE INLET TO FLOAT	39	TROUGH-01	PAD TROUGH FOR 36" PAC
19	HOSE-FTG-07	FEM/FEM 3/4" BRASS SWIVEL	40	VALVE-01	1/2" GATE VALVE
20	MESH-PAC-02	FAN SCREEN	41	VENTURI-36-01	36" FAN VENTURI
21	MOTOR-012-02ST	3 SPD MOTOR			



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ITEM #	PART #	DESCRIPTION	ITEM	#	PART #	DESCRIPTION
1	BASE-2K36	CADDY	21		MOTOR-012-05	1/2 HP DIRECT DRIVE VOSTERMAN MOTOR
2	BLADE-ASSM-01	VOSTERMAN 36" FAN BLADE ASSEMBLY	22	!	N-516-NYLOK	5/16-18 NYLOK NUT
3	BONNET-01	SPRAY BAR BONNET FOR 36" PAC	23		PAC-PLB-01	BRASS INLET FITTING
4	BOX-UL-03	ELECTRICAL BOX	24	ļ	PAD6048/G	PAD FOR 36" PAC (5 per unit)
5	BRACE-36-02	BONNET BRACE	25	i	POWERCORD-01	ELECTRICAL CORD FOR PAC
6	CASTERS-HD-4	HEAVY DUTYSWIVEL CASTER	26	l	PRES-REG-01	WATER PRESSURE REGULATER
7	CASTERS-HD-4L	HEAVY DUTY LOCKING SWIVEL CASTER	27	1	PUMP-016-4R	SUBMERSIBLE 1/6 HP PUMP
8	CTRL-KNOB-01	LONG EXT. KNOB FOR CONTROL SWITCH	28		PUMP-ACC-13	PUMP BRACKET- 1/6 HP PUMP
9	CTRL-VS-01	VAR. SPD. SWITCH SET FOR 36" HPVS	29	ı	PVC-ADP-01	3/4" X 1/2" REDUCING ADAPTER
10	DRAIN-01	1/2" BOILER DRAIN	30	l	S-004	1/4-20 X 1/2" BOLT FOR FLOAT
11	FANHP-BOOTS	BOOTS FOR 36" MTR CONNECTS TO ARMS	31		S-006	#12 X 1 1/4" TEK SCREW
12	FAN36HP-MNT-01	PI-CO 3VP1006 MOTOR SUPPORT ARM-36" PAC	32	!	S-007	5/16-18 TRUSS HEAD SCREW
13	FLAP-36-01	FRONT FLAP FOR 36" PAC	33	ł	S-009	10-24 X 3/4" TRUSS HEAD SCREW
14	FLOAT-02	FLOAT VALVE	34		SPRAY-06	SPRAY BAR FOR 36" PAC
15	FLOATSWITCH-01	WATER PUMP SHUT OFF SWITCH	35	i	SPRAY-ACC-04	CLAMP FASTENER 1029
16	HOSE-FF24	FEM/FEM HOSE 24" LONG	36		SWITCHPL-VARSPD	SWITCH COVER PLATE VAR. SPD.
17	HOSE-FF50	FEM/FEM HOSE 50" LONG	37		TROUGH-01	PAD TROUGH FOR 36" PAC
18	HOSE-FM30	FEM/MALE HOSE 30" LONG	38		VALVE-01	1/2" GATE VALVE
19	HOSE-FTG-07	FEM/FEM 3/4" BRASS SWIVEL	39	l	VENTURI-36-01	36" FAN VENTURI
20	MESH-PAC-02	FAN SCREEN FOR 36" PAC				

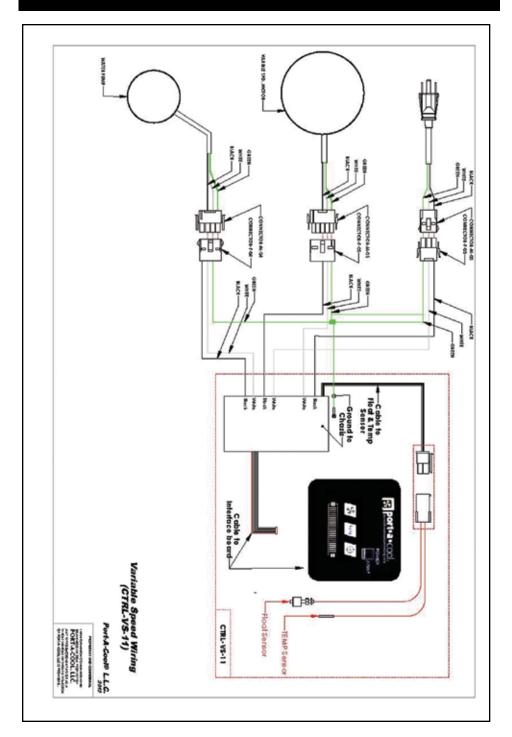


ITEM #	PART #	DESCRIPTION	Γ	ITEM #	PART #	DESCRIPTION
1	BASE-SD-36	CASTER BASE ASSEMBLY 36" (HURRICANE)	Γ	21	MOTOR-034-01	36" SD 3/4HP VAR SPD MOTOR (HESSAIRE)
2	BONNET-04	SPRAY BAR BONNET FOR 48" PAC	Γ	22	PAC-PLB-01	BRASS INLET FITTING
3	BRACE-48-03	BONNET BRACE FOR 48" UNIT	Γ	23	PAD6048/G	PAD FOR 36" PAC (5 per unit)
4	CASTERS-HD-6	HD 6" SWIVEL CASTER	Γ	24	POWERCORD-01	16' ELECTRICAL CORD
5	CASTERS-HD-6L	HD 6" LOCKING SWIVEL CASTER	Γ	25	PRES-REG-01	WATER PRESSURE REGULATER
6	CORD-WRAP-01	CORD WRAP (2EA)	Γ	26	PUMP-016-4Z	ZOELLER 1/4HP SUBMERSIBLE PUMP
7	CTRL-VS-11	ELECTRONIC TOUCH PAD CONTROL	Γ	27	PUMP-ACC-18	24" JETSTREAM PUMP BRACKET
8	DRAIN-PLUG-34	3/4" NPT PLUG	Γ	28	PVC-ADP-01	3/4" X 1/2" REDUCING ADAPTER
9	FAN36HP-MNT-01	MOTOR SUPPORT ARM FOR 36HPVS	Γ	29	S-007	5/16-18 TRUSS HEAD SCREW
10	FAN-ASSM-34	36" SD FAN 3 BLADE ASSEM.	Γ	30	S-009	10-24 X 3/4" TRUSS HEAD SCREW
11	FLAP-48-01	FRONT FLAP FOR 48" PAC	Γ	31	S-015	1/4-20 X 3/8 MACHINE SCREW
12	FLOAT-02	FLOAT VALVE	Γ	32	S-017	5/16-18 X 1.5" TRUSS HEAD SCREW
13	HOSE-FF	FEM/FEM HOSE 24" LONG	Γ	33	S-026	12-14 (1") TEK SCREW
14	HOSE-F68	68" SINGLE FEMALE HOSE	Γ	34	SENSOR-TEMP-11	TEMPERATURE SENSOR KIT
15	HOSE-F37	SINGLE FEMALE HOSE 37" LONG	Γ	35	SPRAY-08	SPRAY BAR FOR 48" PAC
16	HOSE-FTG-05	FEM/FEM 3/4" BRASS SWIVEL	Γ	36	SPRAY-ACC-04	CLAMP FASTENER 1029
17	JS-ACC-01	2" OD TREADED RING	Γ	37	TROUGH-03	PAD TROUGH FOR 48" PAC
18	JS-ACC-02	2" THREADED CAP	Γ	38	VALVE-01	1/2" GATE VALVE
19	LOCKNUT-FNG-516	5/16-18 NYLON INSERT LOCKNUT	Γ	39	VENTURI-36-01	36" FAN VENTURI
20	MESH-PAC-34	36" SUPER-DUTY FAN GUARD SCREEN	Γ			

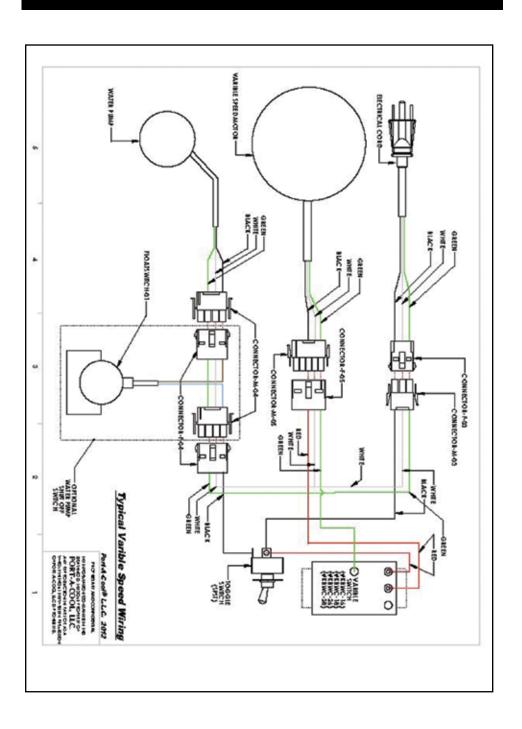


ITEM#	PART #	DESCRIPTION	ITEM#	PART #	DESCRIPTION
1	BASE-2K48	CADDY	21	N-516-NYLOK	5/16-18 NYLOK NUT FOR CASTERS
2	BELT2K-45-01	A-45 FAN BELT	22	PAC-PLB-01	BRASS INLET FITTING
3	BONNET-04	SPRAY BAR BONNET	23	PAC-PLB-02	BLACK PLUMBING ASSEMBLY
4	BOX-UL-02	2 SPD ELECTRICAL BOX	24	PAD6060/G	PAD FOR 48" PAC (6 per unit)
5	BRACE-48-03	BRACE FOR BONNET	25	POWERCORD-01	ELECTRICAL POWER CORD
6	CASTERS-8	8" CASTERS	26	PRES-REG-01	WATER PRESSURE REGULATOR
7	CASTERS-8L	8" LOCKING CASTERS	27	PULLEY-3.25	3.25 MOTOR PULLEY
8	CTRL-2SPD-01	2 SPEED SWITCH SET	28	PUMP-016-4R	L/G 1/6HP SUBMERSIBLE PUMP
9	DRAIN-01	1/2" BOILER DRAIN VALVE	29	PVC-ADP-01	3/4" X 1/2" ADAPTER
10	FAN-ASSM-05	FAN BLADE ASSEMBLY FOR 48" UNIT	30	S-004	1/4-20 X 1/2" BOLT FOR FLOAT
11	FLAP-48-01	FRONT FLAP FOR 48" PAC	31	S-006	#12 X 1 1/4" TEK SCREW
12	FLOAT-02	FLOAT VALVE	32	S-007	5/16-18 TRUSS HEAD SCREW FOR CASTERS
13	FLOATSWITCH-01	WATER PUMP SHUT OFF SWITCH	33	S-009	10-24 X 3/4" TRUSS HEAD SCREW
14	HOSE-FF37	1/2" X 37" FEM/FEM HOSE PLB TO PUMP	34	SPRAY-08	SPRAY BAR FOR 48" PAC
15	HOSE-FF68	1/2" X 68" FEM/FEM HOSE SPRAY BAR TO PLB	35	SPRAY-ACC-04	CLAMP FASTENER 1029
16	HOSE-FM25	1/2" X 25" MALE/FEM HOSE INLET TO FLOAT	36	SWITCHPL-2SPD	2SPD SWITCH COVER PLATE
17	HOSE-FTG-05	FEM/FEM 3/4" X 3/4" SWIVEL	37	TROUGH-03	PAD TROUGH FOR 48" PAC
18	MESH-PAC-06	FAN SCREEN	38	UPRIGHTS-48	UPRIGHT FOR 48" UNIT
19	MOTOR-010-01	1HP/2SPD MOTOR FOR 48" UNIT	39	VALVE-01	1/2" GATE VALVE
20	MOTOR-MNT-48	MOTOR MOUNT FOR 48" UNIT	40	VENTURI-48-02	VENTURI FOR 48" PAC FAN ASSEMBLY

# **WIRING DIAGRAM for HURRICANE MODEL**

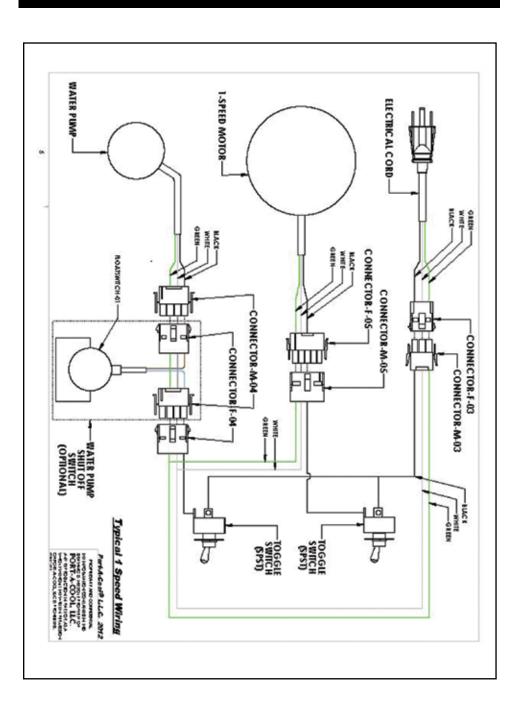


# **WIRING DIAGRAM for VARIABLE SPEED MODELS**

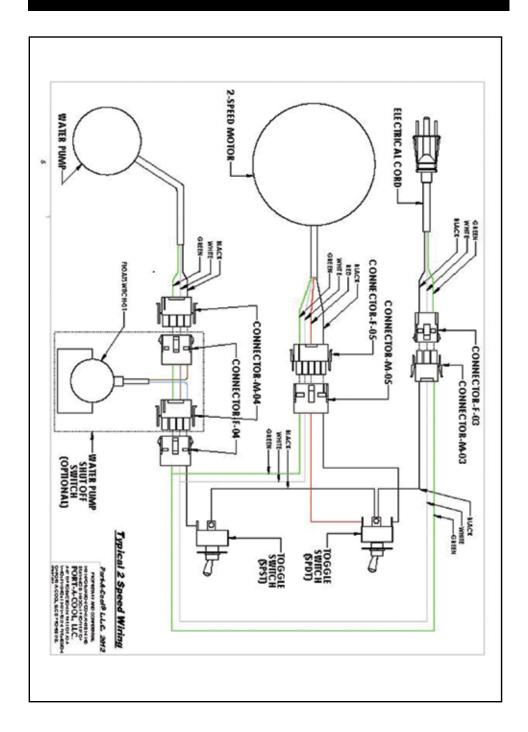


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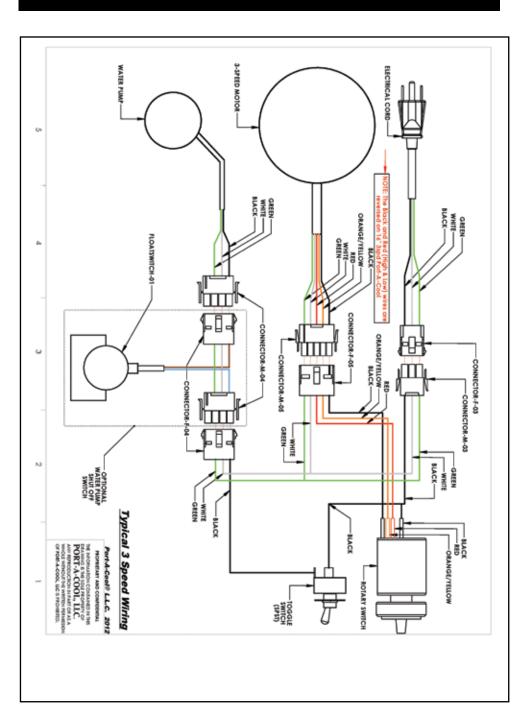
# **WIRING DIAGRAM for ONE-SPEED MODELS**



# **WIRING DIAGRAM for TWO-SPEED MODELS**



# **WIRING DIAGRAM for THREE-SPEED MODELS**





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