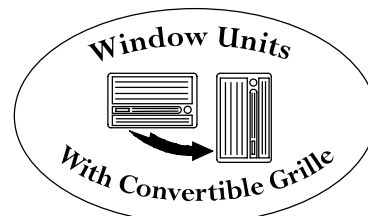


CHAMPION•ESSICK

Window Evaporative Cooler Manual



Convertible Kit Not Shipped With Cooler
Available Upon Request At No Additional Cost

Manual Control Units

WC37 • N37W

WC44 • N44W

WC46 • N46W

WC50 • N50W

Remote Control Units

RWC35 • RN35W

RWC46 • RN46W

RWC50 • RN50W



**Circle the model of your cooler and
record the serial number below.**

*Encierre con un círculo el modelo de su
enfriador y escribe el número de serie abajo.*

Serial #

Número De Serie _____

**Read Carefully All Of This Manual
Before Installing The Unit.**

*Lea Con Cuidado Todo Este Manual Antes
De Instalar La Unidad.*

Read And Save These Instructions

Vea el Español en el interior

Evaporative Cooling

Evaporative cooling is nature's way of cooling. When air is moved over a wet surface, water is evaporated and heat is absorbed. When stepping out of a swimming pool with the wind blowing, evaporative cooling makes you feel cool, even though the air may be warm. The human body itself is cooled primarily by the evaporation of perspiration.

This unit works on the same principle. Air is drawn across wet filter pads where the air is cooled by evaporation and then circulated throughout the building. It is this combination of cooled air and the movement of air over the skin which makes it feel cool.

Unlike refrigeration systems which recirculate the air, an evaporative cooler continually brings in fresh air while exhausting old air. You are completely replacing the air every 2 to 4 minutes by opening windows or doors or a combination of both. The air is always fresh, not stale, laden with smoke and odors as happens with refrigerated air conditioning.

Safety Rules

1. Read these instructions carefully.
2. Unit must be in the **Off Position** and **Unplugged** from power receptacle when installing or performing any maintenance.
3. This cooler will run on 120 volt A.C., 60 Hz (cycle) current only.
4. Motor and pump are grounded and have an automatic thermal overload switch which will shut motor off when it overheats. The motor will restart automatically when it cools down.
5. Pump receptacle is for grounded evaporative cooler pump only. Do not plug anything else into receptacle.

⚠WARNING: To reduce the risk of fire or electric shock, do not use this fan with any "solid-state fan speed control device."

Operation

Manual Control Units

- **Pump setting.** The rotary switch has 6 settings. The “Pump” setting will operate the pump without the blower. For best results turn the switch to “Pump” for a few minutes to wet the pads before operating the fan.
- **High and low cool settings.** The “High Cool” and “Low Cool” settings operate both the pump and the blower. Turn the unit to “Low Cool” when possible. This lower speed allows the air to stay longer in the wet pads and therefore increases its cooling efficiency.
- **High and low vent settings.** The “High Vent” and “Low Vent” settings operate the blower without the pump. This is useful on cool nights or at times when just a fan is desired.

Remote Control Units

These units may be controlled using the 3 buttons on the front panel of the cooler or with the remote control.

- **PUMP button.** Pressing this button toggles the pump on and off. When the LED is lit, the pump is running. For best results turn on the pump for a few minutes to wet the pads before operating the fan. The pump must be on while operating the fan for cooling. You may also want the pump turned off at times when just a fan is desired.
- **FAN button.** Pressing this button will cycle the fan through High Speed / Low Speed / Off. The LED's on the front of the control indicate whether the fan is on high speed, low speed or off (no LED's lit). **Note: There will be a 2 second delay between a button press and the operation of the fan.**
- **ON/OFF button.** Pressing this button while the pump or fan is on will turn everything off. Pressing it again while in the off state will return the fan and pump to their previous operating settings. When first plugging in the cooler or after power has been interrupted, pressing the On/Off button will start the cooler in the default state which is with the pump on and the fan on high.
- **Remote Control.** To operate the cooler with the remote you must be within 20 feet and in sight of the cooler. Aim the remote at the front panel. The buttons on the remote control have the same functions as the buttons on the front panel of the cooler. The remote uses two AAA alkaline batteries which are included. A holder for mounting on a wall is also included with the unit.

Open Windows To Exhaust Air

An often misunderstood concept of evaporative cooling is the amount of air that should be exhausted. How much should you open your windows? The fact is that most people do not open their windows enough. The following method will help you determine the amount to open your windows.

Champion Air Balancing Method

1. Take a piece of tissue paper and cut it lengthwise into 3 equal strips.
2. Turn your cooler on High Cool.
3. Open one window at least six inches wide in each room that you want to cool.
4. Take the piece of tissue paper and put it up against the screen of the open window furthest from the cooler discharge opening. Let go of it. It will do one of three things.

- IF* It falls down.
THEN CLOSE all of the windows one inch and try step 4 again.
- IF* It plasters itself to the screen.
THEN OPEN all of the windows one inch and try step 4 again.
- IF* It stays on the screen lightly.
THEN PERFECT. You are done. Enjoy your cooler.

Notes:

- When switching to Low Cool, you must rebalance your home. Repeat step 4.
- Once you balance your home you can cool some areas more than others by opening those windows more and closing the others by the same amount. Repeat step 4 to make sure your home is still air balanced.

Cooler Installation

Installing House Legs

- **NOTE: If installing unit without the use of the installation kit, omit these directions and those pertaining to Fig. 2.**
- Remove two corner screws in the bottom pan (A-Fig 1).
- Place the house leg bracket in the corner of the bottom pan, using the two top holes in the bracket (B-Fig 1). Replace the two previously removed screws to hold the house leg bracket in place (As shown by dotted house leg bracket).
- Refer to the instructions “Adjust house legs” below for adjusting the house legs.

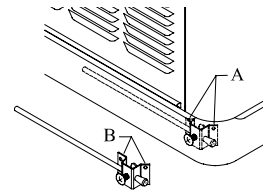


Fig. 1

Mounting Cooler

⚠CAUTION: Make sure that the mounting surface is strong enough to support the operating weight of the cooler when in use. (For operating weight, see Specification Table.)

⚠CAUTION: Never plug in cooler until installation is complete and unit has been tested for rigidity.

- **Lift out all removable louvered sides.**
- **Screw chain hooks into window facing.** Position the two chain hooks above the neck of the cooler a distance equal to the width of the cooler apart (A-Fig. 2). Hook one hanger chain in each hook and then one “S” hook in the other end of each chain.

NOTE: The chain hooks supplied with this mounting kit are for use in wood. Additional anchors can be purchased at your local hardware store for anchoring in other types of materials such as concrete or brick.

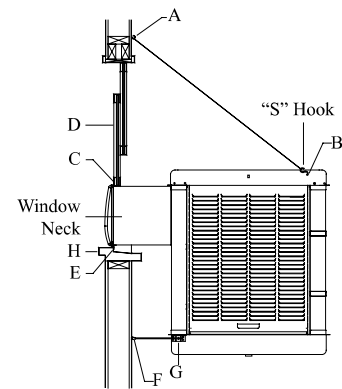


Fig. 2

- **Install window panel retainers.** Place two panel retainer strips onto bottom of neck flange and position to the width of the window. Cut the strips to fit if necessary. These strips hold the window fill-in panels (Fig. 3).

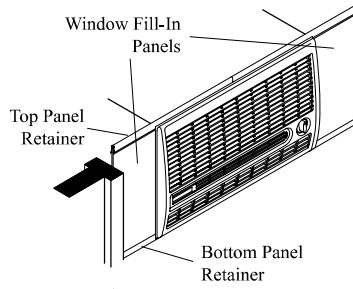


Fig. 3

- **Position cooler in window.** Position neck of cooler so that bottom of neck flange rests on window sill and flange (E-Fig. 2) is snug against edge of sill (H-Fig. 2). With cooler in position, hook the "S" hooks into the holes of the top pan near the back of the cooler (B-Fig. 2).
- **Break fill-in panels to fit.** With cooler installed, as described above, measure for each window fill-in panel and score with sharp knife and straight edge guide to desired width. To break window fill-in panels, the panel should be laid over the edge of a straight flat surface at the point to be broken off. Apply pressure on the edge of the panel that extends over the edge of the surface and break off unwanted piece.
- **Install fill-in panels.** Place one window fill-in panel on each side of grill and into panel retainer strip at bottom of grill. Place the other panel retainer strips onto top of neck flange and fill-in panels. Be sure the panels are snug up against cooler neck.
- **Place window behind retainer strip.** Raise back of cooler so that the window (D-Fig. 2) may be brought down behind top of panel retainer strip (C-Fig. 2).
- **Level Cooler.** Adjust the chains to level the cooler.
- **Adjust house legs.** Pull out house legs so that the rubber bumpers rest against house siding (F-Fig. 2). Tighten screw in retaining collar. (G-Fig. 2).

Connecting Water

- **Install overflow assembly.** Remove nut and place nipple through the hole in the pan, with the rubber washer between the pan and the head of the drain nipple (Fig. 4). Screw on nut and draw up tight against bottom of pan. Insert overflow pipe in nipple to retain water. Overflow pipe may be removed to drain pan when necessary. A garden hose may be screwed on the drain nipple to drain water away from your unit.
- **Connect water supply line.** Install a sillcock and water valve on faucet as shown by figure 5. Place the nut and ferrule on the tubing and tighten the nut until water tight.

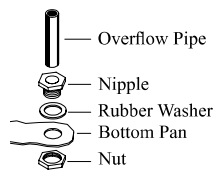


Fig. 4

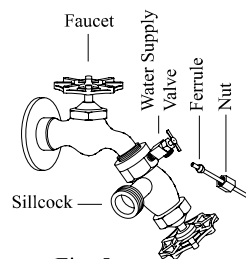


Fig. 5

- **Install float valve.** Install valve in the provided hole in corner post (Fig. 6) and attach water supply line.
- **Fill pan.** Allow water to fill to within 1" of the top of the overflow pipe and adjust float to maintain this water level. This can be accomplished by bending the float rod (Fig. 6).

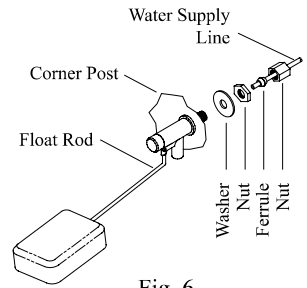


Fig. 6

Maintenance

⚠WARNING: Before doing any maintenance be sure power is off and unit is unplugged. This is for your safety.

Spring Start-Up

- **Oil bearings.** The blower bearings and cooler motor in this unit should be oiled with a few drops of non-detergent 20/30 weight oil once each year. The motor does not need oil if it has no oil lines for oiling. Motors that have no oil lines are lifetime oiled at the factory and require no further oiling for the life of the unit.

⚠CAUTION: Do not over oil.

Over oiling can cause motor burn out, due to excessive oil getting into motor winding.

- **Check belt tension.** A 3 lb. force should deflect the belt 3/4 inches (see Fig. 7). Readjust belt if needed.

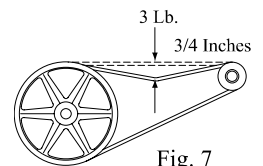


Fig. 7

- **Clean pump.** Cleaning the pump is necessary once a year at start-up. For your safety, turn unit off and unplug from power receptacle. Remove the pump from the mount slot. Remove the base of the pump as shown in Fig. 8. Clean the pump and turn the impeller to ensure free operation. Remove the pump spout and check for any blockage. After cleaning, reinstall the base onto the pump. Press firmly to make sure it is secure. Reattach the pump to the mount in the cooler using the plastic retainer to ensure that the pump will not overturn. Do not forget to replace the spout and water delivery tube onto the pump outlet.

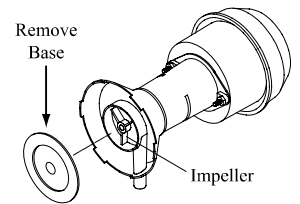


Fig. 8

- **Replace Pads.** Aspen pads should be replaced once or twice a season, depending upon the length of the season. At the beginning and at mid season a clean pad is more absorbent and efficient and will deliver substantially more cool air.

Winter Shut Down

- **Drain water.** Always drain all of the water out of the cooler and water supply line when not in use for prolonged periods, and particularly at the end of the season. Keep the water line disconnected from both the unit and water supply so that it does not freeze.
- **Cover unit.** To protect the life of the finish, a cover for the unit is suggested in extended periods of non use.

- **Cover grill.** To help keep out cold air you can use the optional plastic grill cover. This cover may be purchased from your local distributor. To install the cover, line up the grill cover with the grill so that the tabs on the cover will slide over the center section of the grill. Slide the grill cover onto the grill. The tabs will snap into place. To remove, just pull the grill cover straight forward away from the grill.

- **Unplug unit from power supply during extended periods of non-use.**

By following the operating, installation, and maintenance suggestions as outlined, you can get many years of efficient and satisfactory service from your cooler. In the event additional information is desired, your dealer will be more than glad to assist you in every possible way.

Vertical Duct Conversion

This window unit can be reconfigured to a vertical tunnel configuration for installation into smaller width openings. Follow the subsequent steps if this is desired. **Note: Tunnel mount strips used to convert tunnel are not shipped with this cooler. If desired, call Customer Service at 1-800-643-8341 to have it shipped to you at no cost.**

1. Remove the 9 screws from the sides and bottom of the tunnel.
2. Remove the top 4 middle screws of the top pan while holding the tunnel in place (Fig 9). Be careful not to drop the tunnel, or damage to the electric cords could occur. You may need to loosen other screws in the top pan to make it easier to remove the tunnel.
3. Rotate the tunnel 90 degrees counter-clockwise (Fig 10). Be careful as you rotate the tunnel that you don't damage or disconnect the cords which are still connected to the controls and the front panel.

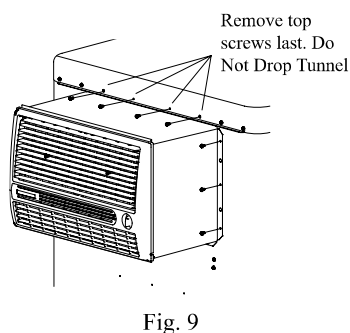


Fig. 9

4. Insert the flange of the tunnel between the front panel and the top pan. Line up the two larger holes in the tunnel with the center two holes of the top pan. (Fig 11).
5. Using the screws taken from the top pan, secure the tunnel to the unit. Do not tighten the screws, leave them loose until the rest of the tunnel has been secured.
6. Line up the three holes at the bottom of the tunnel with the holes in the front panel. Using the screws taken from the bottom of the tunnel previously, secure the tunnel to the front panel.
7. Make sure all the screws removed from the top pan are in place and tighten all screws.
8. Skip this step for the RWC35 & RN35W models. Remove the three screws (2 in models WC37 & N37W) from each side of the front panel as shown in figure 12.

CAUTION: Make sure that you do not remove the bottom most screw. It holds the blower housing in place.

9. To cover up the gap in the front panel, use the two strips of metal obtained from Customer Service. Line up the holes in the metal strips to the holes in the front panel and secure them with the screws previously removed in step 8. (See Fig. 12) Install the metal strips so that there is no gap between the top pan and the metal strip. If there is a gap, turn the metal strip around.

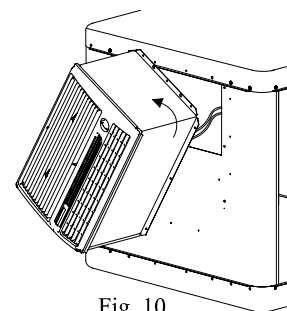


Fig. 10

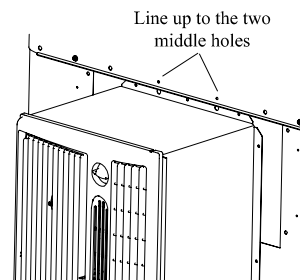


Fig. 11

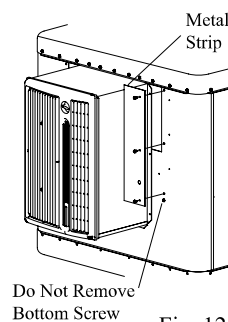
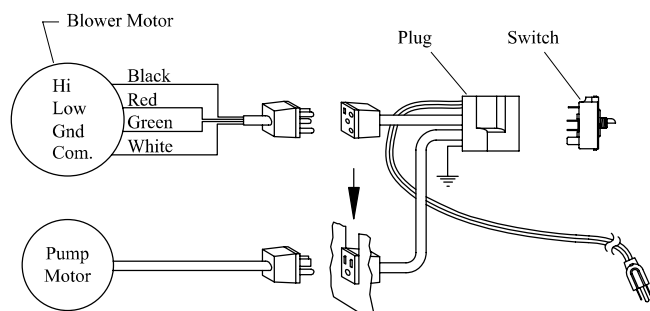


Fig. 12

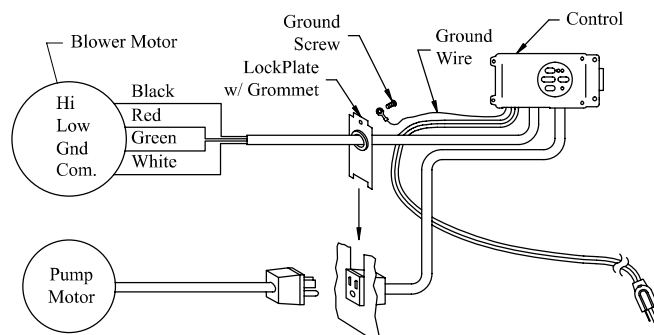
NOTE: When mounting a cooler with this type of vertical tunnel configuration, the unit should be supported by a flat support or stand. The installation method mentioned in the owner's manual using chains and legs should not be used. The filler panels in the installation kit may be used to seal off the window above the cooler duct.

Wiring Diagrams

Manual Control



Remote Control



Troubleshooting

<u>Problem</u>	<u>Possible Cause</u>	<u>Remedy</u>	<u>Problem</u>	<u>Possible Cause</u>	<u>Remedy</u>
Failure to start or no air delivery	<ol style="list-style-type: none"> 1. No electrical power to unit <ul style="list-style-type: none"> • Fuse blown • Circuit breaker tripped • Electric cord unplugged or damaged 2. Belt too loose or tight 3. Motor overheated <ul style="list-style-type: none"> • Belt too tight • Blower bearings dry 4. Motor locked 	<ol style="list-style-type: none"> 1. Check power <ul style="list-style-type: none"> • Replace fuse • Reset breaker • Plug in cords or replace if damaged 2. Adjust belt tension 3. Determine cause of overheating <ul style="list-style-type: none"> • Adjust belt tension • Oil blower bearings 4. Replace motor 	Motor cycles on and off	<ol style="list-style-type: none"> 1. Low voltage 2. Excessive belt tension 3. Blower shaft tight or locked 4. Bearings dry 	<ol style="list-style-type: none"> 1. Check voltage 2. Adjust belt tension 3. Oil or replace bearings (Unplug unit) 4. Oil bearings
Inadequate air delivery with cooler running	<ol style="list-style-type: none"> 1. Insufficient air exhaust 2. Belt too loose 3. Pads plugged 	<ol style="list-style-type: none"> 1. Open windows or doors to increase air flow 2. Adjust belt tension or replace if needed 3. Replace pads 	Noisy	<ol style="list-style-type: none"> 1. Bearings dry 2. Wheel rubbing blower housing 3. Loose parts 	<ol style="list-style-type: none"> 1. Oil bearings 2. Inspect and realign (Unplug unit) 3. Tighten loose parts
Inadequate cooling	<ol style="list-style-type: none"> 1. Inadequate exhaust in house 2. Pads not wet <ul style="list-style-type: none"> • Pads plugged • Open spots in pads • Trough holes clogged • Pump not working properly 	<ol style="list-style-type: none"> 1. Open windows or doors to increase air flow 2. Check water distribution system <ul style="list-style-type: none"> • Replace pads • Repack pads • Clean trough and unplug holes • Replace or clean pump (Unplug unit) 	Excessive humidity in house	<ol style="list-style-type: none"> 1. Inadequate exhaust 	<ol style="list-style-type: none"> 1. Open doors or windows
			Musty or unpleasant odor	<ol style="list-style-type: none"> 1. Stale or stagnate water in cooler 2. Pads mildewed or clogged 3. Pads not wetting properly <ul style="list-style-type: none"> • Trough holes clogged • Pump not working properly 	<ol style="list-style-type: none"> 1. Drain pan and clean pads 2. Replace pads 3. Check water distribution system <ul style="list-style-type: none"> • Clean • Replace or clean pump (Unplug unit)
			Water draining from cooler	<ol style="list-style-type: none"> 1. Float arm not adjusted properly 2. Overflow assembly leaking 	<ol style="list-style-type: none"> 1. Adjust float 2. Tighten nut and overflow pipe.

Limited Warranty

This warranty is extended to the original purchaser of an evaporative cooler installed and used under normal conditions. It does not cover damages incurred through accident, neglect, or abuse by the owner. We do not authorize any person or representative to assume for us any other or different liability in connection with this product.

Terms And Conditions Of The Warranty

For Eight Years from date of purchase, we will replace the original base assembly if water leakage should occur due to rust out.

For One Year from date of purchase, we will replace any original component provided by Champion Cooler which fails due to any defect in material or factory workmanship only.

Exclusions From The Warranty

We are not responsible for replacement of cooler pads. These are disposable components and should be replaced periodically. We are not responsible for any incidental or consequential damage resulting from any malfunction.

We are not responsible for any damage received from the use of water softeners, chemicals, descale material, plastic wrap, or if a motor of a higher horsepower than what is shown on the serial plate is used in the unit.

We are not responsible for the cost of service calls to diagnose cause of trouble, or labor charge to repair and/or replace parts.

For limited warranty to be valid the evaporative cooler must be maintained per the Maintenance Section of this manual.

How To Obtain Service Under This Warranty

Contact the Dealer where you purchased the evaporative cooler. If for any reason you are not satisfied with the response from the dealer, contact the Customer Service Department: 5800 Murray Street, Little Rock, Arkansas 72209. 1-800-643-8341. Email: info@championcooler.com.

This limited warranty applies to the original purchaser only.