# PRIME CHILLER Inline Chiller

Instructions for Models #2645,2646

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JEE 08/07



### SAFETY INSTRUCTIONS

#### WARNING

To guard against injury, basic safety precautions should be observed, including the following:

#### **READ AND FOLLOW ALL SAFETY INSTRUCTIONS**

#### DANGER

To avoid possible electric shock, special care should be taken since water is employed in the use of aquarium equipment. For each of the following situations, do not attempt repairs by yourself. Return the appliance to your retailer or discard the appliance.

- If the appliance falls into the water, or water drips onto the unit, DON'T reach for it! First unplug it and then retrieve it. If electrical components of the appliance get wet, unplug the appliance immediately.
- Always unplug appliance from an outlet when not in use, before putting on or taking off parts, and before cleaning. Never yank cord to pull plug from outlet. Grasp the plug fully and pull out to disconnect.
- Carefully examine the appliance after replacement. It should not be plugged in if there is water on parts not intended to be wet.
- Do not operate any appliance if it has a damaged cord or plug, or if it is malfunctioning or has been dropped or damaged in any manner.
- Do not use the Prime Tower Chiller for anything other then its intended use. The use of attachments not recommended or sold by Current USA may cause unsafe conditions.
- Exposing chiller/power cords to water may cause electrical short and fire.
- Do not allow water or salt to come in contact with thermostat or power cords.
- Do not operate chiller without water flow to the unit. This may cause the evaporator housing to freeze up and result in damage to the unit.

#### SAVE THESE INSTRUCTIONS

#### **GROUND FAULT CIRCUIT INTERRUPTER PROTECTION**

To comply with the National Electrical Code (NFPA 70), and to provide additional protection from the risk of shock, this unit MUST be connected to a ground fault circuit interrupter (GFCI) outlet at all times. Do not use extension cords. WARNING – To reduce the risk of electrocution, keep all connections dry and off the ground. Do not touch plug with wet hands.



## CHILLER INSTALLATION

- 1. Before removing your Prime Chiller from the box, please note any exterior shipping damage to the box. It is strongly recommended to keep the box and packaging material in the unlikely event there is shipping damage or service is required.
- 2. Remove the chiller and controller from the box and inspect thoroughly for any signs of damage, even if the box does not show damage. If you notice any damage (cracked or bent cover, damaged condenser, fins, etc...) please stop and contact your dealer immediately.
- 3. Make sure the chiller is placed on a firm, level surface in a location that has plenty of ventilation and will not be exposed to salt or saltwater. Do not use an extension cord for the chiller or the thermostat.

#### THE REQUIREMENTS FOR VENTILATION ARE:

- a) Back/Front: Condenser (radiator) requires at least 18" clearance to allow air into the chiller.
- b) Sides: Requires at least 6" clearance to allow for proper air flow.
- c) Chiller must not be placed in a closed closet or cabinet. If placing chiller under a cabinet, the cabinet MUST have a back opening at least 30" wide x 30" high for adequate ventilation.
- d) The warm air from the chiller must be completely evacuated from the chiller location. A fan may be necessary to draw warm air away from the chiller. The maximum operating temperature is 95 F.

#### **INSTALLATION:**

- 4. The chiller includes a tapered barb fitting that fits both ¾" and 5/8" flexible hoses. It is not necessary to cut the barb fitting if using ¾" tubing, however if desired, the barb fitting can be cut using PVC cutters. Ensure that you cut the fitting BEFORE attaching it to the chiller.
- 5. Place barb fitting onto inlet and outlet and tighten compression cap. Ensure that the gasket O-ring fits snug and is seated properly between the barb fitting and chiller.
- 6. Slide hose clamps onto hose. Attach hose to inlet/outlet barb fitting and tighten hose clamp.
- 7. Before turning on chiller, ensure the following:
  - a) The chiller must have adequate water flow for proper operation.

Model	<u>HP</u>	Min/Max Flow
2645	1/4	5-10 gpm
2646	1/3	6-12 gpm

- b) Make sure the pump will operate normally without any blockage.
- c) Make sure the chiller is plugged into a GFCI protected 110V power outlet.
- 7. Turn on water pump and check for leaks. IMPORTANT: Do Not Run Chiller without water flow. Doing so may damage evaporator.
- 8. Set the temperature controller to the desired temperature as instructed in Programming Controller section.



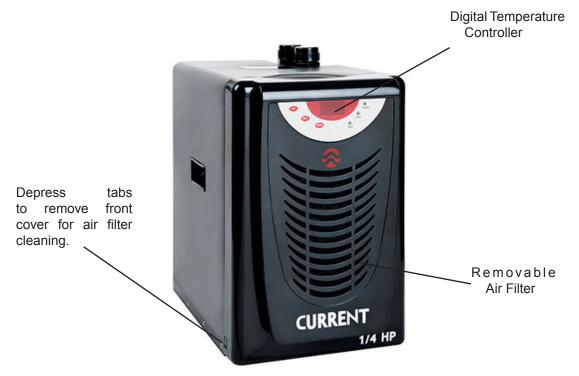
## CHILLER INSTALLATION

#### NOTE:

If Chiller is installed underneath a stand or cabinet, the furniture must have an opening in the back for proper ventilation. a minimum opening of 30"L x 30"w|W is recommended.

If chiller is installed next to or near a wall, allow a minimum space of 18" from the front and back of chiller for proper air ventilation.

Proper ventilation is key for optimum performance and efficiency.



#### Maintenance:

Warning: always disconnect chiller before cleaning or performing any maintenance Monthly:

- Vacuum any dirt or debris from front cover. Remove air filter and vacuum rinse with cold water. Air dry and replace.
- Clean any salt creep that may build up on unit with freshwater.

Please visit www.current-usa.com/repository/newsletter/issue2.html for more tips on chiller maintenance.



## TEMPERATURE CONTROLLER SPECIFICATIONS/INSTALLATION

#### SETTING THE TEMPERATURE SETTING

- 1. Press the SET Key the LCD display will automatically display the current set point.
- 2. Press Up "<" button to increase temperature or press Down ">"button to decrease temperature to your desired setpoint. The temperature must be set between 60-85 degrees F.
- 3. Confirm set temperature by pressing SET button again or waiting for 8 seconds. The current aquarium temperature will then be displayed when chiller begins to operate in normal mode.

Please Note: The chiller has a built-in protection mode that can delay the cooling mode operation for up to three (3) minutes.

#### SENSOR CALIBRATION & TEMPERATURE DIFFERENTIAL

The temperature sensor should not normally need to be calibrated, however when using a additional electronic digital thermometer the sensor can be calibrated to match the thermometer. To calibrate:

- 1. Press the SET key for 10 seconds, the chiller will automatically go into calibration mode.
- 2. Default is set at "00", press Up "<" to change the temperature +1 F and higher, press Down ">" to change the temperature -1 F and lower. Therefore if the chiller reads 80 degrees and the calibration requires it to read 78 degrees, simply go into the calibration mode and depress the Down "<" to -2F.
- 3. Press SET again and to go into the temperature differential mode. To bypass this mode, simply hit SET key again.

NOTE: This unit is preset to a temperature differential of 2 degrees F. We DO NOT recommend changing the differential.

- 4. If changing the differential is required, simply press the "<" up key to change from 2 degrees F to a higher set point.
- 5. Press SET key once the desired differential is reached. The chiller will automatically move into normal mode operation.

#### USING THE INTEGRATED HEATER PORT

This Prime chiller features a dual stage controller and an outlet located on the back for use with aquarium heaters. If using an aquarium heater (not included) with this unit, simply plug the heater into the back of the chiller and the chiller will automatically energize the heater port when the water temperature reaches 2 degrees F below the set temperature.

Please Note: This port is to be used with aquarium heaters up to 300 watts only. We ONLY recommend using UL listed aquarium heaters.



## TEMPERATURE CONTROLLER SPECIFICATIONS/INSTALLATION

#### **TROUBLESHOOTING**

P1 Error - Indicates sensor needs replaced or that water has come in contact with controller. Unplug unit and allow it to try completely before re-starting up. If P1 error continues, contact your dealer for a replacement temperature sensor.

Temperature Error - if the digital display reads an unusual temperature reading (like 122 F), it indicated a temperature sensor malfunction. Contact your dealer or Current-USA for a replacement temperature sensor.

#### **SHORT CYCLING**

Please allow your chiller to operate for a minimum of 48 hours for it to reach the desired setpoint. If the chiller turns on/off in a repeated cycle, this indicates that:

1. The chiller is over heating.

Ensure that enough air flow is flowing through the chiller. The chiller may need to be moved away from a wall or from underneath the stand to allow proper air flow.

2. The fuse needs to be replaced.

The fuse for this chiller is located in the back of the chiller next to the power cord. Replacement fuses can be purchased locally at a hardware or automotive store.

To remove the fuse, simply unscrew the cap in a counter clockwise and remove fuse from cap. Replace with a new fuse and screw cap back on. Fuse is 250V/15A.



### WARRANTY

#### **CURRENT USA, INC. ONE-YEAR LIMITED WARRANTY**

Current USA, Inc. warrants this product against defects in materials and workmanship for a period of ONE (1) YEAR from the date of original retail purchase. Light Bulbs carry a 3 month warranty.

Note: Current-USA, Inc. One-Year Limited Warranty does not cover damage caused by the following: Improper installation, saltwater corrosion, and electrical surges.

Warranty on all Products, including Aquariums, is limited to replacement of the product and does not cover fish loss, personal injury, property loss or direct, incidental or consequential damage arising to the use of this product.

If you discover a defect, Current USA, Inc. will, at it's option, repair or replace the product at no charge to you, provided you return it during the warranty period. It is required that you present this warranty card and a copy of the bill of sale as proof of original purchase date, in the event the product needs repairs, within the warranty period. Please see your dealer for return options. This warranty applies only to products by or for Current USA, Inc. that can be identified by trade name, or logo affixed to them. Current-USA, Inc. does not warrant any products that are not Current-USA, Inc. products. This warranty does not apply if the product has been damaged by accident, abuse, misuse or misapplication or if the product has been modified without the written permission of Current-USA, Inc.; or if any Current-USA, Inc. logos have been removed or defaced.

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