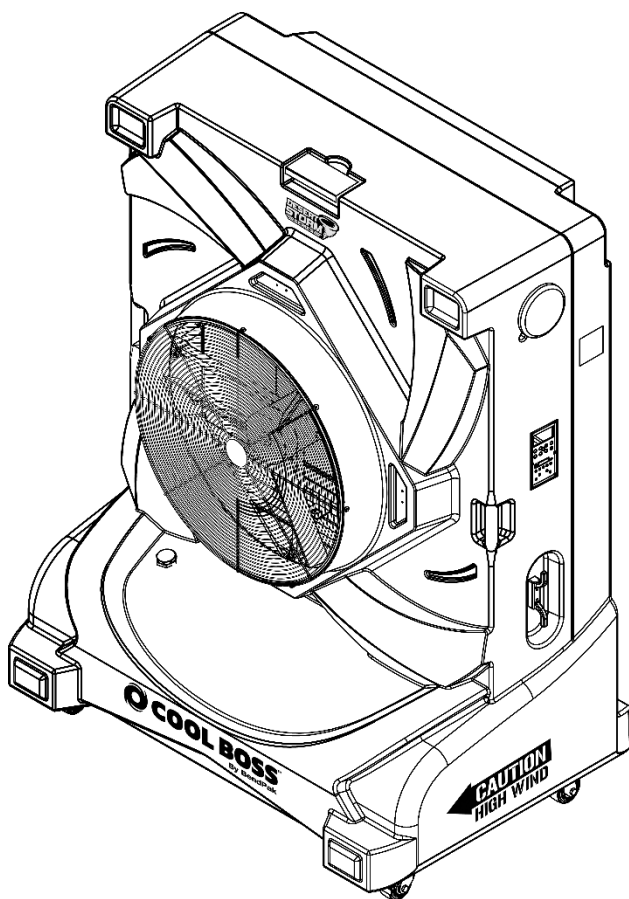


Cool Boss™ Portable Evaporative Air Cooler Installation and Operation Manual *Desert Storm Series*

Manual Revision A — January 2024 — Manual P/N 5900394

Model:

- CB-28HV



DANGER

Read the *entire contents* of this manual *before* using this product. Failure to follow the instructions and safety precautions in this manual can result in serious injury or death. Make sure all other operators also read this manual. Keep the manual near the product for future reference. ***By proceeding with setup and operation, you agree that you fully understand the contents of this manual and assume full responsibility for product use.***

Manual. Cool Boss™ Portable Evaporative Air Cooler, *Installation and Operation Manual*, P/N 5900394, Revision A, January 2024.

Copyright. Copyright © 2024 by Cool Boss LLC a subsidiary of BendPak Inc. All rights reserved. No part of this manual may be reproduced, adapted, translated, or transmitted by any means, electronic or mechanical, for any purpose or in any form, without prior written permission of BendPak Inc. CoolBoss products are protected by one or more patents in the United States, China, Europe, and other countries.

Trademarks. Cool Boss, the Cool Boss logo, and BendPak are trademarks of BendPak Inc. All other company, product, and service names are used for identification only. All trademarks and registered trademarks mentioned in this manual are the property of their respective owners.

Limitations. Every effort has been made to ensure complete and accurate instructions are included in this manual. However, product updates, revisions, and/or changes may have occurred since this manual was published. BendPak reserves the right to change any information in this manual without incurring any obligation for equipment previously or subsequently sold. BendPak is not responsible for typographical errors in this manual.

Warranty. The Cool Boss warranty is more than a commitment to you: it is also a commitment to the value of your new product. Visit www.coolboss.com/warranty for complete warranty information.

Safety. Your new product was designed and manufactured with safety in mind. Your safety also depends on proper training and thoughtful operation. Do not set up, operate, maintain, or repair your Cool Boss without reading and understanding this manual and the labels on the unit.

Owner Responsibility. In order to maintain your product properly and to ensure operator safety, it is the responsibility of the product owner to read and follow these instructions:

- Follow all setup, operation, and maintenance instructions.
- Make sure product setup conforms to all applicable local, state, and federal codes, rules, and regulations, such as state and federal OSHA regulations and electrical codes.
- Read and follow all safety instructions. Keep them readily available for operators.
- Make sure all operators are properly trained, know how to safely operate the unit, and are properly supervised.
- Do not operate the product until you are certain that all parts are in place and operating correctly.
- Carefully inspect the product on a regular basis and perform all maintenance as required.
- Service and maintain the unit only with approved replacement parts.
- Keep all instructions permanently with the product and make sure all labels are clean and visible.

Unit Information. Enter the Model Number, Serial Number, and Date of Manufacture from the label on your unit. This information is required for part or warranty issues.

Model: _____

Serial: _____

Date of Manufacture: _____

COOL BOSS™		Theodore, AL USA www.coolboss.com
MODEL NUMBER		
DESCRIPTION		
VOLTAGE		
DATE CODE	SERIAL NUMBER	
 DANGER! Disconnect Power Before Servicing	UPC	
CE EAC		MADE IN CHINA
WARRANTY VOID IF DATA PLATE IS REMOVED		

Table of Contents


Introduction	3	Operation	23
Shipping Information	4	Maintenance	27
Safety Considerations	4	Troubleshooting	30
Frequently Asked Questions	6	Parts Diagram	32
Specifications	7	Labels	35
Components	9	Maintenance Log	38
Setup	13		

Introduction

This manual describes the Cool Boss Portable Evaporative Air Cooler - Desert Storm Series, which keeps your shop or workplace cool and comfortable on even the hottest summer days. The new Desert Storm Series is a high-speed evaporative air cooler featuring computer-optimized fan blade technology and a high-power, high-speed, energy-efficient motor providing an airflow of almost 18,000 cubic feet per minute at maximum output. Additionally, this portable cooler features an amplified stereo speaker pair with Bluetooth® input for streaming audio from smart devices, a USB Port for charging portable devices and an Anion Negative Ion Air Purifier.

- **CB-28HV:** 220–240 VAC, 50/60Hz, 1 Ph. Power

This manual is mandatory reading for all users of the Cool Boss, including anyone who sets up, operates, maintains, or repairs it.

**DANGER**

Be very careful when setting up, operating, maintaining, or repairing this equipment; failure to do so correctly could result in property damage, product damage, injury, or (in very rare cases) death. Make sure only authorized personnel operate this equipment. All repairs must be performed by an authorized technician. Do not make modifications to the unit; this voids the warranty and increases the chances of injury or property damage. Make sure to read and follow the instructions on the labels on the unit.

Keep this manual on or near the equipment so that anyone who uses or services the unit can refer to it. Assistance with your Cool Boss is available from your dealer, by calling Cool Boss at **(805) 933-9970**, or by emailing support@coolboss.com. You may also contact Cool Boss for parts replacement (please have the serial number and model number of your unit available).

Shipping Information

Your equipment was carefully checked before shipping. Nevertheless, you should thoroughly inspect the shipment **before** you sign to acknowledge that you received it.


When you sign the bill of lading, it tells the carrier the items on the invoice were received in good condition. ***Do not sign the bill of lading until after you have inspected the shipment.*** If any of the items listed on the bill of lading are missing or are damaged, do not accept the shipment until the carrier makes a notation on the bill of lading that lists the missing and/or damaged goods.

If you discover missing or damaged goods **after** you receive the shipment and have signed the bill of lading, notify the carrier at once and request the carrier to make an inspection. If the carrier will not make an inspection, prepare a signed statement to the effect that you have notified the carrier (on a specific date), and that the carrier has failed to comply with your request.

It is difficult to collect for loss or damage after you have given the carrier a signed bill of lading. If this happens to you, file a claim with the carrier promptly. Support your claim with copies of the bill of lading, freight bill, invoice, and photographs, if available. Our willingness to assist in helping you process your claim does not make us responsible for collection of claims or replacement of lost or damaged materials.

Safety Considerations

Read this manual carefully before using your new product. Do not set up or operate the product until you are familiar with all operating instructions and warnings. Do not allow anyone else to operate the product until they are also familiar with all operating instructions and warnings.

 **WARNING** **California Proposition 65.** This product can expose you to chemicals including styrene and vinyl chloride which are on a list of over 900 chemicals identified by the State of California to cause birth defects or reproductive harm. ALWAYS use this product in accordance with Cool Boss or BendPak's instructions. For more information go to www.P65Warnings.ca.gov.

Safety Information

- The product is an air-cooling device. Use it only for its intended purpose.
- The product should only be operated by authorized personnel. Children should **not** be allowed operate the Cool Boss. Make sure all operators read and understand the Warning labels and the *Installation and Operation Manual*. Keep the manual near the device at all times.
- **Never** operate the Cool Boss with a damaged Power Cord or Plug.
- When the product is in use, keep all body parts away from it.
- Only use the product indoors in a well-ventilated area. Ensure a window or door is open to allow adequate air flow.
- Do not make any modifications to the product. This voids the warranty and increases the chances of injury or property damage.
- Avoid using an extension cord; they can overheat. If you must use an extension cord, make sure it is a three conductor (copper) 14 AWG minimum with a three prong plug/receptacle and does not exceed 50-feet in length. For 100-foot extensions cords use 12 AWG minimum.
- Do not spray the outside of the unit with water. Moisture can harm the motor and other components in the electrical system.

-
- Only connect the power cord to a grounded, three-prong GFCI protected receptacle.
 - Lock at least two Casters before starting the fan.
 - Make a visual inspection of the product before using it. Check for damaged or missing parts. **Do not use the product if you find problems with the unit.** Instead, remove it from service, then contact your dealer, call Cool Boss at **(805) 933-9970**, or email Cool Boss at support@coolboss.com.
 - Do **not** operate the Cool Boss if the fan has cracked or damaged blades.
 - Do **not** operate the Cool Boss unless the Media is securely in place.
 - Do **not** operate the Cool Boss within 35-feet (10.6 m) of an open flame or spark.
 - Do **not** operate the Cool Boss if the GFCI does not remove power as the Test button is pressed.
 - **Always** remove the plug from the electrical receptacle by pulling on the plug, not the power cord.
 - Cool Boss recommends making a thorough inspection of the product at least once a year. Replace any damaged or severely worn components, decals, or warning labels.

Save these instructions!

Symbols



DANGER

Calls attention to an immediate hazard that **will** result in death or severe injury.



WARNING

Calls attention to a hazard or unsafe practice that **could** result in death or severe personal injury.



CAUTION

Calls attention to a hazard or unsafe practice that could result in minor personal injury, product, or property damage.



Tip

Calls attention to information that can help you use your product better.

Liability Information

BendPak Inc. Cool Boss assumes **no** liability for damages resulting from:

- Use of the equipment for purposes other than those described in this manual.
- Modifications to the equipment are not permitted without prior, written permission from Cool Boss LLC or BendPak Inc.
- Injury or death caused by modifying, disabling, overriding, or removing safety features.
- Damage to the equipment from external influences.
- Incorrect operation of the equipment.

Frequently Asked Questions

Question: Is the Cool Boss an air conditioner?

Answer: No. it is an evaporative air cooler, sometimes called a swamp cooler. The fan pulls in hot outdoor air, a water drip spray system releases water into a Media, the water droplets evaporate when they meet the hot air, lowering the air temperature by up to 26°F, and the fan blows the cooled air in the desired direction.

Q: How much air does the Cool Boss cool?

A: Each unit can cool approximately:

Model	Airflow	Cooling Area
CB-28HV	17,820 cfm / 504 cmm	3,915 ft ² / 364 m ²

Q: What's the best way to set up my Cool Boss?

A: With the back of the unit facing a source of hot, dry air – which is what the Cool Boss will cool—and the front facing the area you want to keep cool. The Fan will need to be near a power source. And remember, it is portable. So, you can move it to where you need it; it does not have to stay in the same place the whole time.

Q: Does it require special water?

A: No. Clean, ordinary tap water.

Q: Is it hard to control the Cool Boss?

A: Not at all. There are a few, easy-to-understand controls on the unit. It also comes with a remote control, so that you can turn the power on or off or change settings from wherever you happen to be.

Q: What about maintenance?

A: Very little maintenance is required. Keep the Water Reservoir filled with clean tap water and clean the Media occasionally. Dirt and other pollutants from the environment accumulate in the Media and the Reservoir, so it is best to clean it every so often. Do not clean the Media by spraying it with high pressure water while installed in the Cool Boss! Instead, remove the Media using the procedure in the [Installing the Media section](#), then clean it as per the procedure found there.

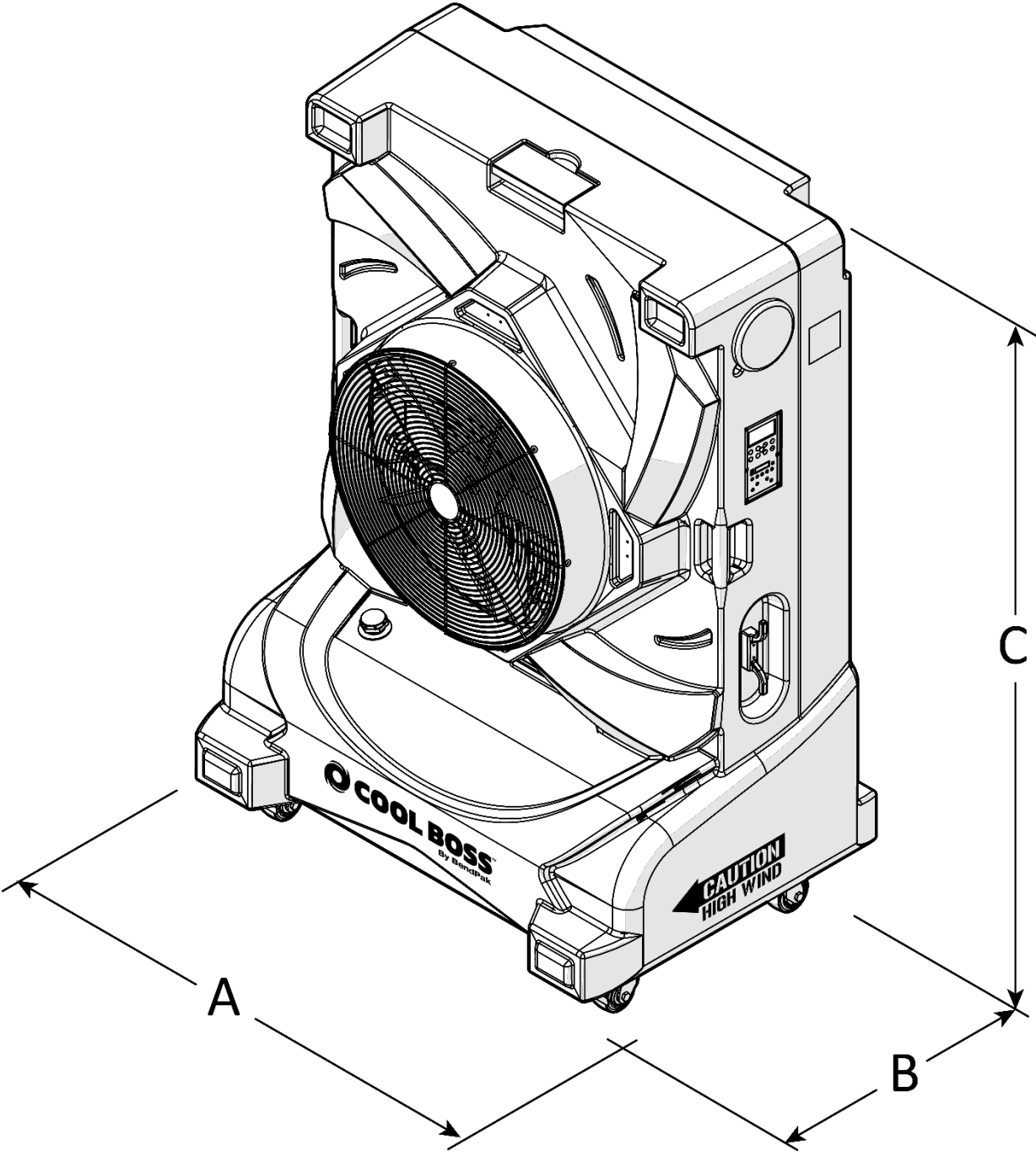
Q: Can I charge my phone on the USB port?


A: Yes, the Cool Boss USB port is a charge only port. No data.

Q: Can I stream music from my phone to the Cool Boss speakers?

A: Yes, the Cool Boss will pair with smart devices via Bluetooth® if your device is compatible with Bluetooth v5.0 and within ≈30 ft. / 9 m. Be aware that Bluetooth range may be reduced by obstacles (e.g., walls, people, and machines.) Electromagnetic interference from equipment or other Bluetooth devices will also negatively impact the actual Bluetooth range.

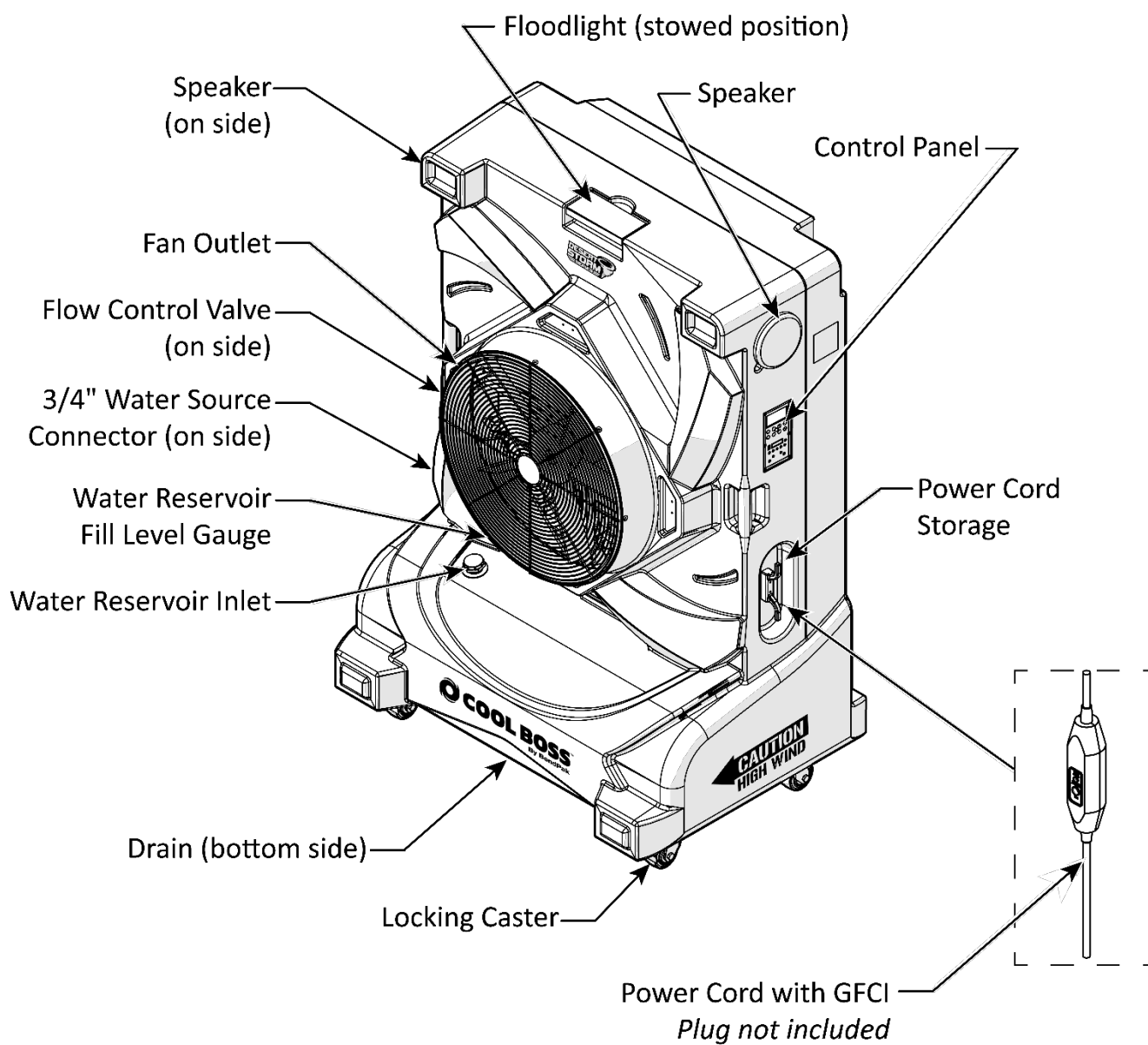
Specifications



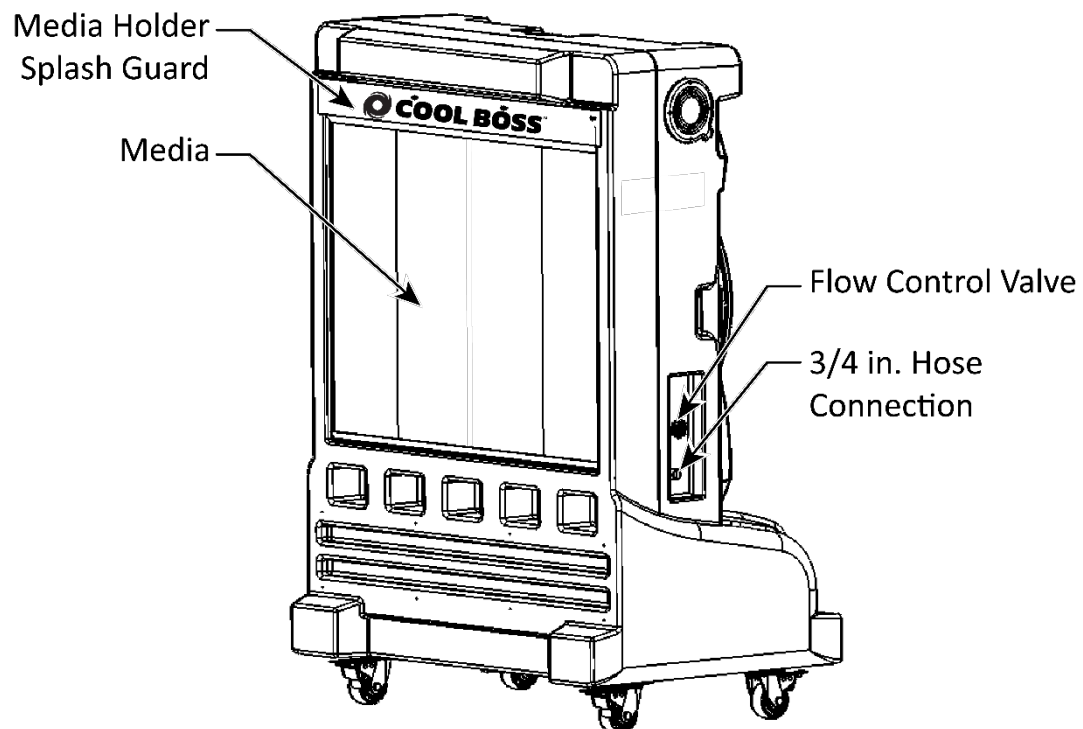
Specification	CB-28HV
Dimensions (A x B x C)	53 in. x 37 in. x 76.5 in. 1,321 mm x 940 mm x 1,943 mm
Fan diameter	28 in. / 711 mm
Weight Empty	235 lbs. / 107 kg
Weight Full	913 lbs. / 415 kg
Water capacity	80 gal. / 303 liters
Water consumption	≈2.6 to 3.2 gal./hr.
Maximum airflow	17,820 ft. ³ / min. (504.6 m ³ / min.)
Sound level	60 to 100 dB
UL® Certified	Yes
Fan RPM	1,434 Max.
Fan Motor Power	13.23A / 3.9HP
Power Source	220 to 240 VAC, 50-60 Hz, 15A, single phase.
Power Cord	15 ft. / 4.5 m with GFCI
Inlet Water Press.	≈28 to 99.5 psi / (2 to 7 kg/cm ²) Max. Automatic Water Source Shutoff.
Water Source Shutoff	The Cool Boss utilizes a Mechanical Float Valve to automatically shut off the Water Source before exceeding maximum Fill.
Fan speed	Variable in 10 speed increments
Fan type	High-Performance Axial
Operating Temperature	+5 to 108°F (-15 to +42°C)
Controls	Manual pushbutton membrane panel with digital LED display or remote control.
LED Floodlight	50W, 4000 lumens
Housing	Linear Low-Density Polyethylene LLDPE
Bluetooth®  5.0	Compatible with Bluetooth® v5.0
USB	USB port is available for charging devices only. USB 2.0 specification .5 A at 5 V

Components

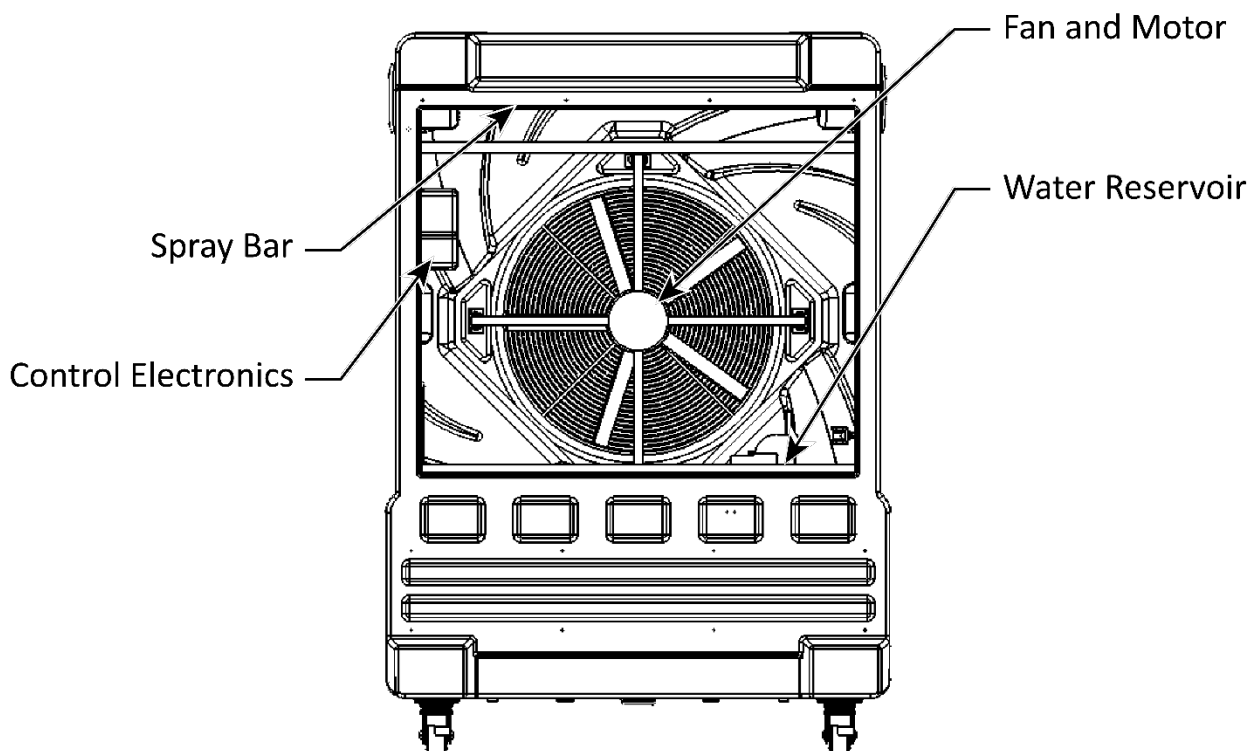
CB-28HV



CB-28HV Back View

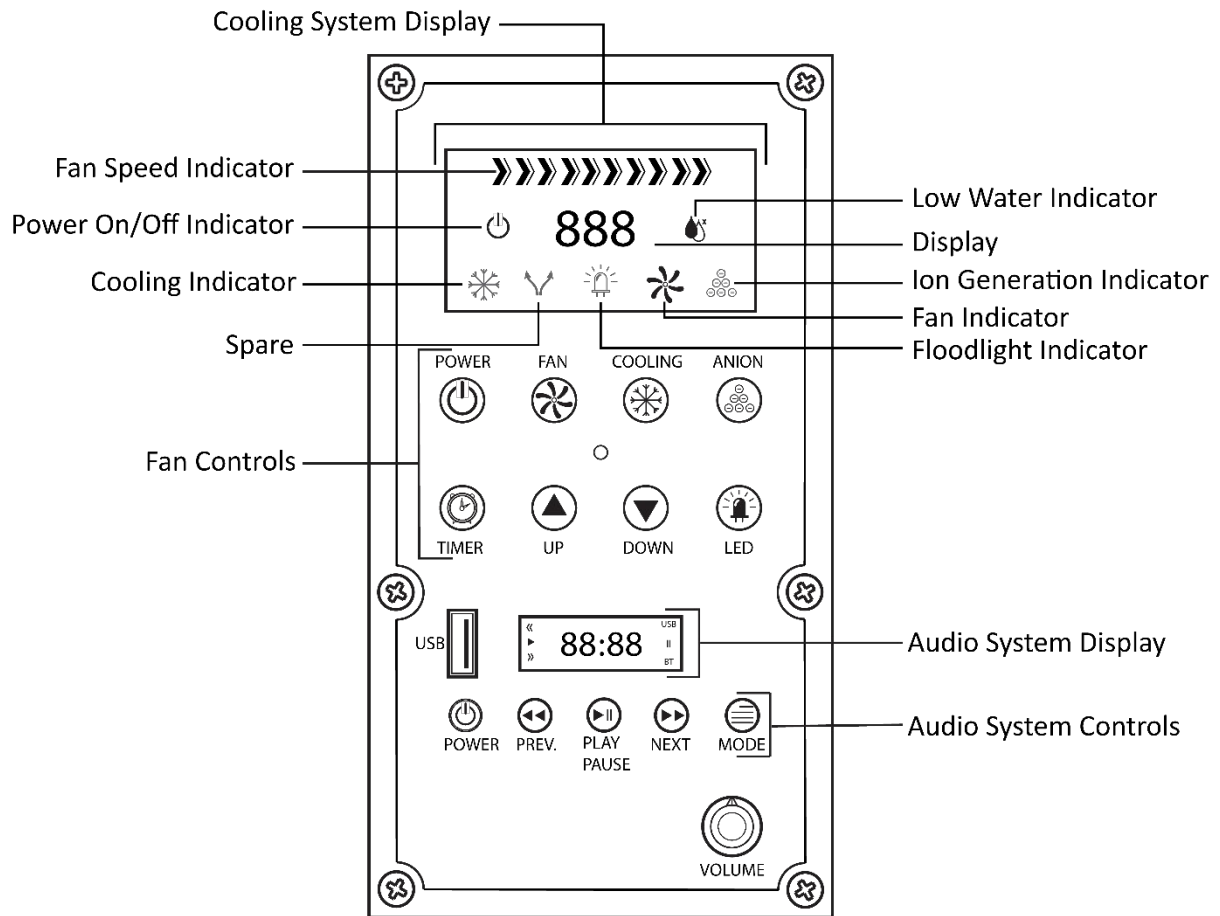


CB-28HV Media Removed



The Cool Boss Control Panel

The figure below details the Control Panel.



Status Display

The Control Panel's Status Display provides the on-off status of the Cool Boss functions, the fan power settings as a percentage, current temperature of the air in °F at the Cool Boss Fan, the timer status, and a low-water warning.

Control Functions

Power – Push on-off. Applies power to the Cool Boss.

Fan – Push on-off. Applies power to the Fan.

Cooling – Push on-off. Applies power to the Pump, which provides water to the Spray Bar over the Media.

Anion Negative Ion Air Purifier – Push on-off. Applies power to the Anion Generator.

Timer – Push to scroll through preprogrammed shutdown times. Allows the operator to select an automatic shutdown time in 1 hour increments. Up to 12 Hours maximum.

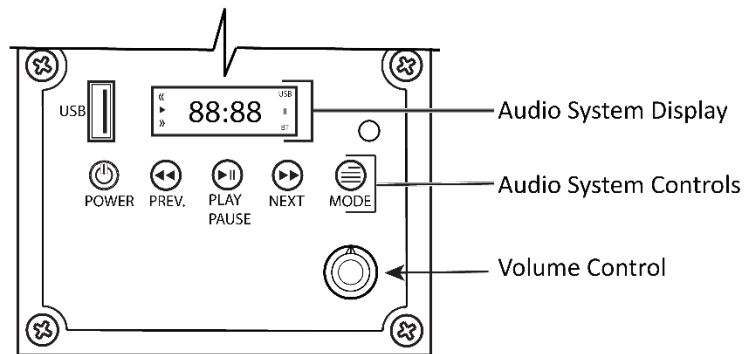
Up – Push to increase the Fan speed.

Down – Push to decrease the Fan speed.

LED – Push on-off. Applies power to the LED Floodlight located near the top of the Cool Boss.

Audio System Display

Indicates audio input, active commands, and current audio file time.



Audio System Controls

Audio Power – Push on-off. Applies power to the Cool Boss Audio section.

Play Pause – Push to begin playback or pause current audio file.

Prev. – Quickly Push-Skips back to the previous audio file.

Next – Quickly Push-Skips forward to the next audio file.

Mode – Not used on the **CB-28HV**.

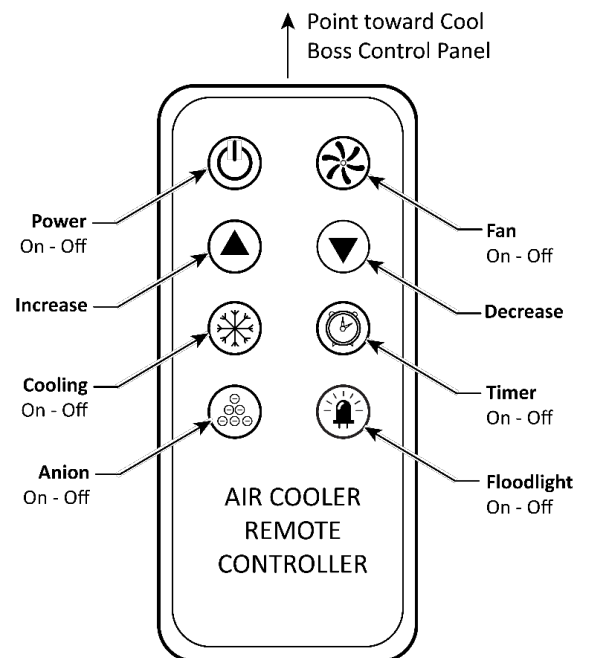
Volume Control – Clockwise increases, Counterclockwise decreases volume.

CAUTION **Do Not** push buttons on Control Panel or Remote Control with any Sharp Object. Physical Damage from Sharp Objects to Control Panel or Remote Control is NOT COVERED under warranty

Remote Control

The figure below details the remote control and identifies the control functions as defined above. The remote will be found in the box with the Casters. The Remote Control requires two (2) AAA 1.5 Volt Batteries. (Batteries are **not** included with the Cool Boss.)

Important: The Remote Control utilizes infrared light to communicate with the Cool Boss. The remote must be within 32 ft. / 10 m and have a direct line-of-sight to the Control Panel.



Setup

There are six basic steps in the Cool Boss set up.

1. Unbox.
2. Install the Casters.
3. Install the Media.
4. Determine the Cool Boss location.
5. Fill the reservoir or connect to water.
6. Connect the Cool Boss to power.

Tools required for Assembly:

- Hammer
- Pry Bar
- Phillips Screwdrivers
- Metric Open End Wrench Set
- Two (2) AAA 1.5 V Batteries

Unboxing the Cool Boss

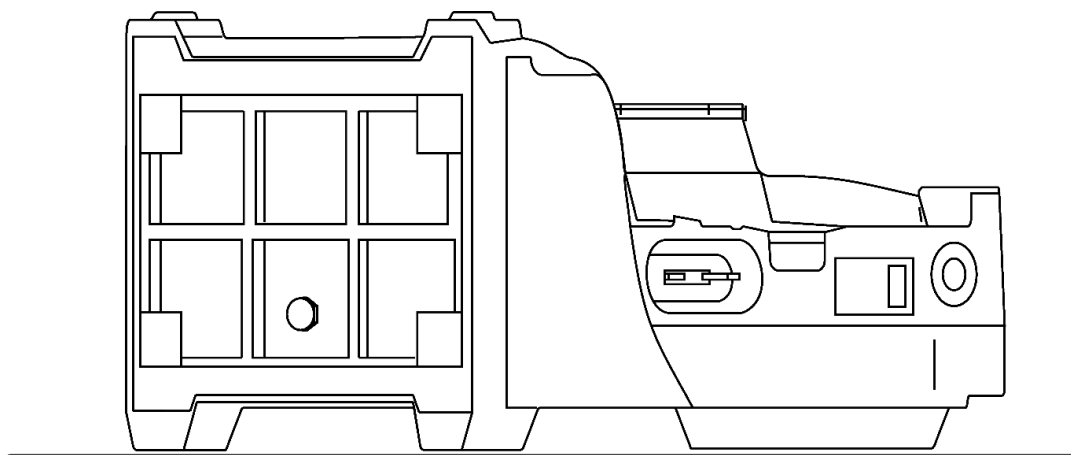
The Cool Boss Cooler is carefully packaged to prevent damage. Exercise care in removing the Cooler from its packaging.

⚠ WARNING Be careful not to injure yourself on sharp edges or fasteners.

⚠ WARNING You must always wear the proper protective equipment during setup and assembly of this Cooler: leather gloves, steel-toed boots, and back belts.

To unbox the Cooler:

1. Use a hammer and pry bar to **carefully** remove the shipping container from around the Cool Boss.
2. Position the Cooler with its back side down to provide access to the bottom of the unit. The back of the shipping container may be used to provide a clear, clean area to work on the Cooler. See figure below.



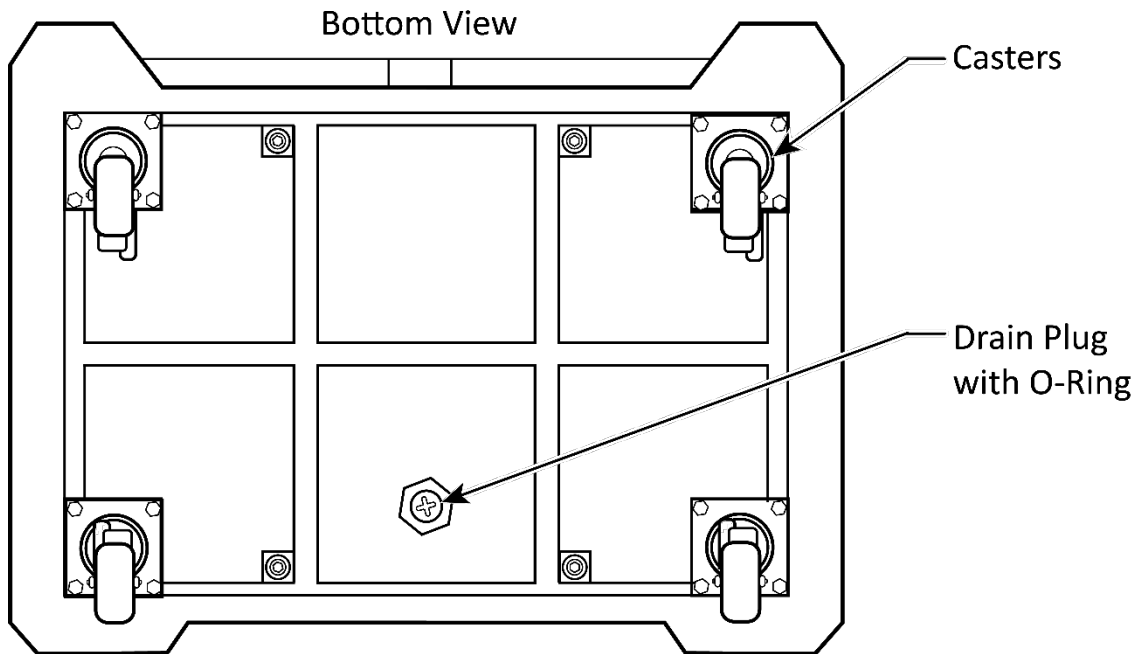
Installing the Casters

The Cool Boss is shipped with heavy-duty locking casters to both support and allow easy movement of the cooler around your facility. The Casters are shipped in a separate box with the Remote Control.

1. Locate and Install the four swivel Casters using the four bolts and flat washers for each Caster. As detailed in the figure below.

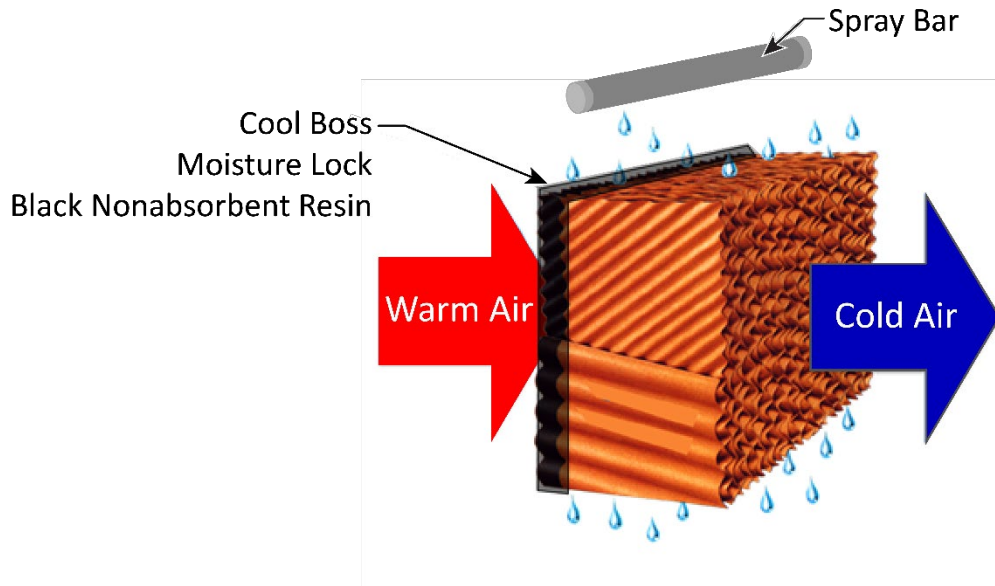
The Casters are shipped in a separate box with the Remote Control.

2. Lock the two rear Casters by pushing down on the larger pedal. Pushing down on the small caster pedal releases the lock.
3. Have an assistant help rotate the Cool Boss upright onto its Casters.



Installing the Media

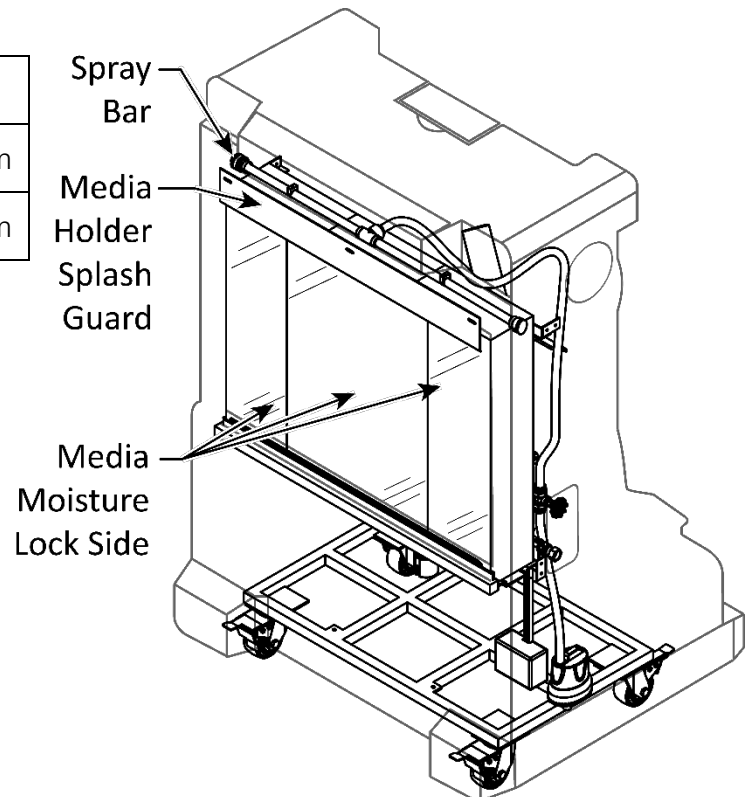
The Cooler pulls warm air through a Media saturated with water. This Media incorporates a Moisture Lock on one side made of a black nonabsorbent resin, which reduces evaporation and increases the efficiency. Properly installed Media is critical to the Cool Boss operation. The black resin side **must always** be installed toward the warm air side. **The internal channels within the media should be oriented so that the water flows down and inward towards the fan.** Refer to the figure below.



To install the Media:

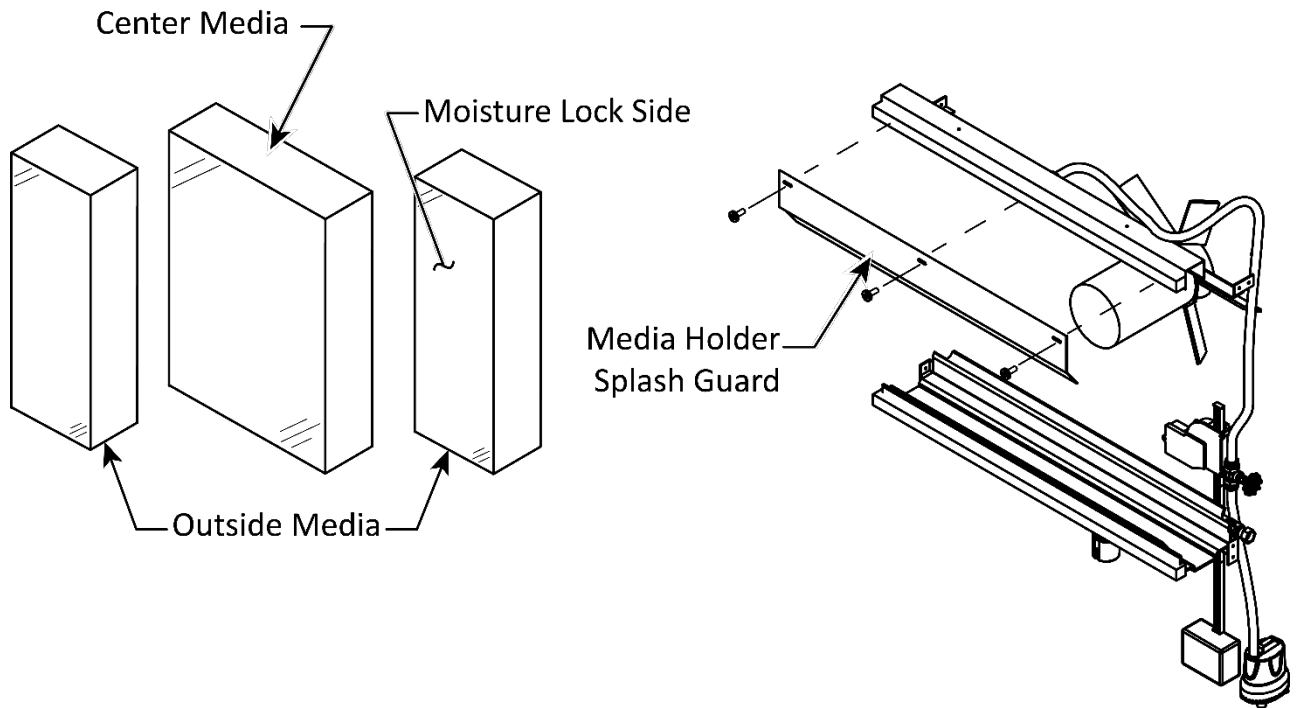
1. Retrieve the Media for the Cool Boss. The CB-28HV uses two different size Media sections. Refer to the table below.

Position	Qty.	Dimension
Center	1	990 x 900 x 150mm
Outside	2	990 x 180 x 150mm



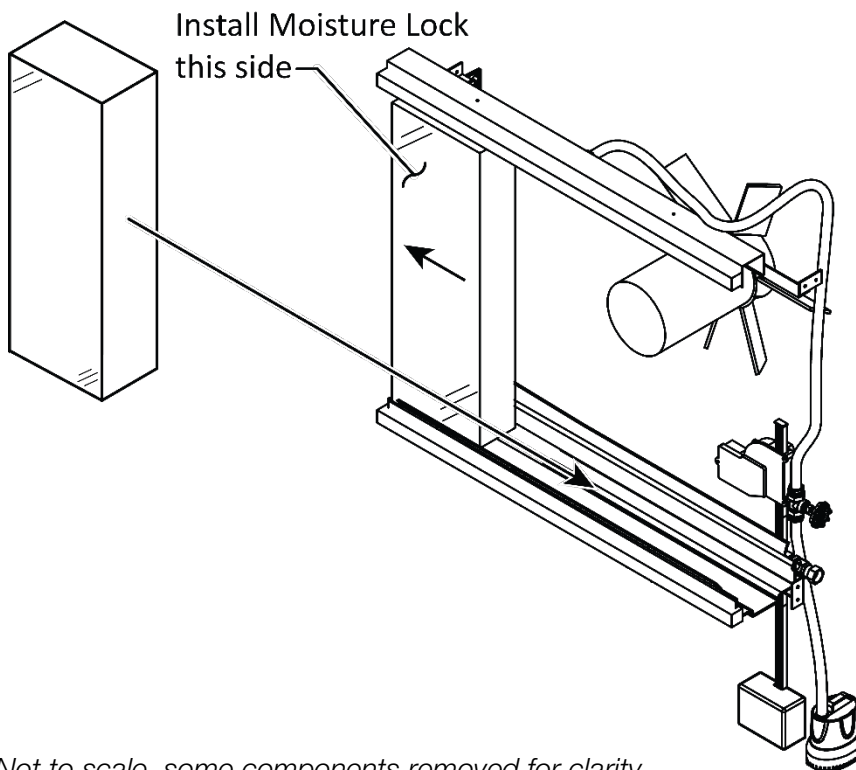
Not to scale, components removed for clarity.

2. Remove and retain the screws securing the Media Holder Splash Guard. Refer to the figure below.



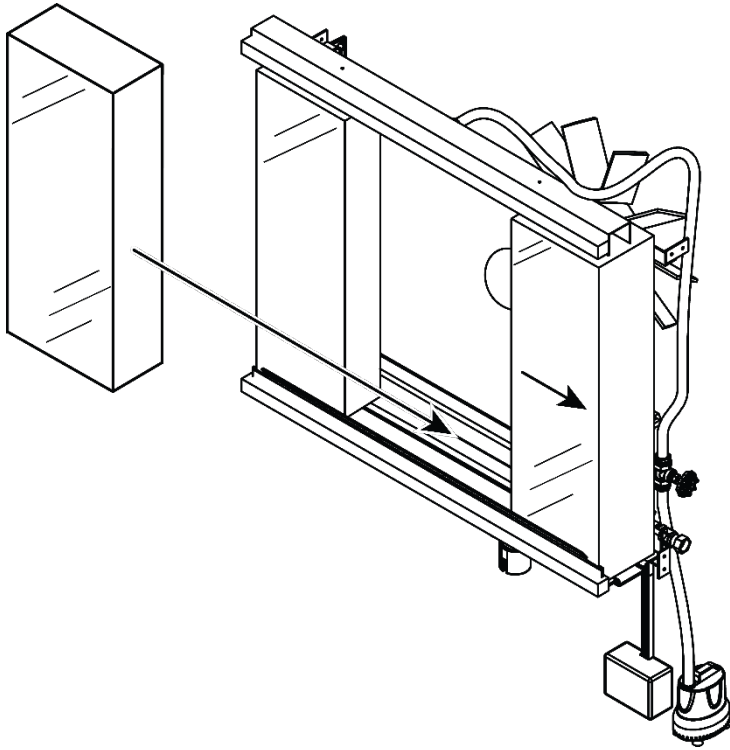
Not to scale, components removed for clarity.

3. Insert one Outside Media section into the Cool Boss. Verify the Moisture Lock Black Resin side of the Media is oriented to the warm-air side. Channels in the Media are oriented to direct the water flow downward and **toward the Warm Air Intake side** of the Cool Boss. Slide the first Media as far left as possible. Refer to the figure below.



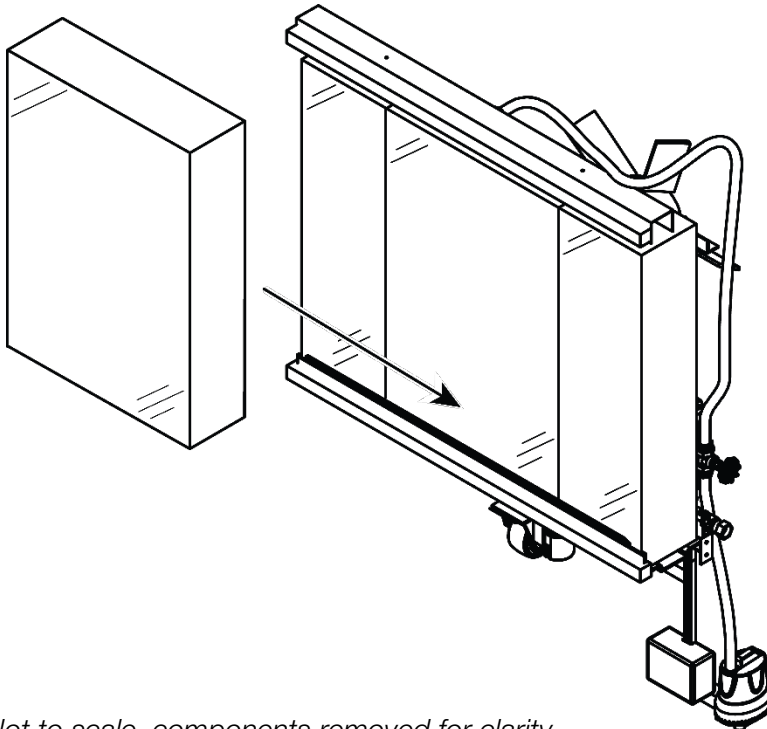
Not to scale, some components removed for clarity.

-
4. Install the remaining outside Media section and slide the new section as far right as possible. Orient the Media channels as in the previous step.



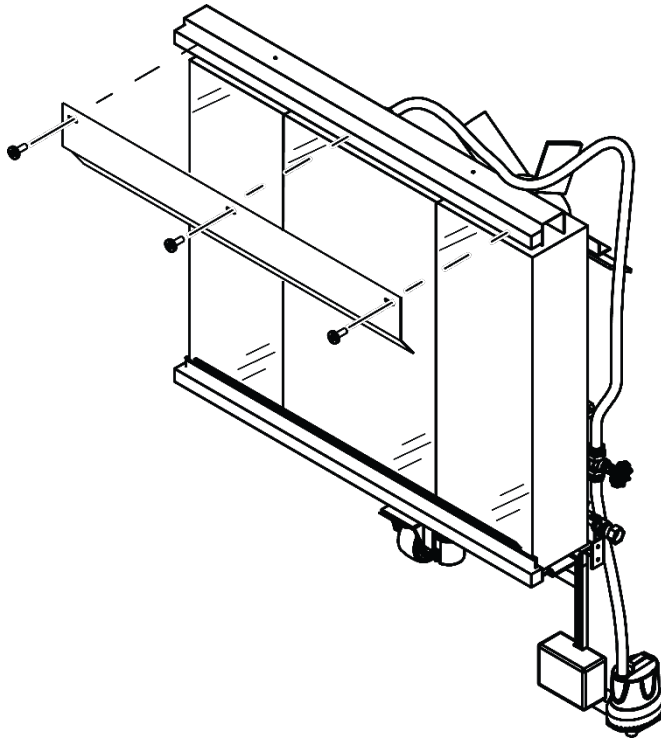
Not to scale, some components removed for clarity.

5. Install the remaining Center Media section as shown below. Orient the Media channels as in the previous steps.



Not to scale, components removed for clarity.

-
6. Install the Media Splash Guard using the three screws removed in step 1.



Not to scale, components removed for clarity.

Find a location for your Cool Boss

Find a suitable location for the Cool Boss (hot air to the rear, cooling area to the front). The Cool Boss should be indoors, near an appropriate power and water source, and in a low-traffic and well-ventilated area.

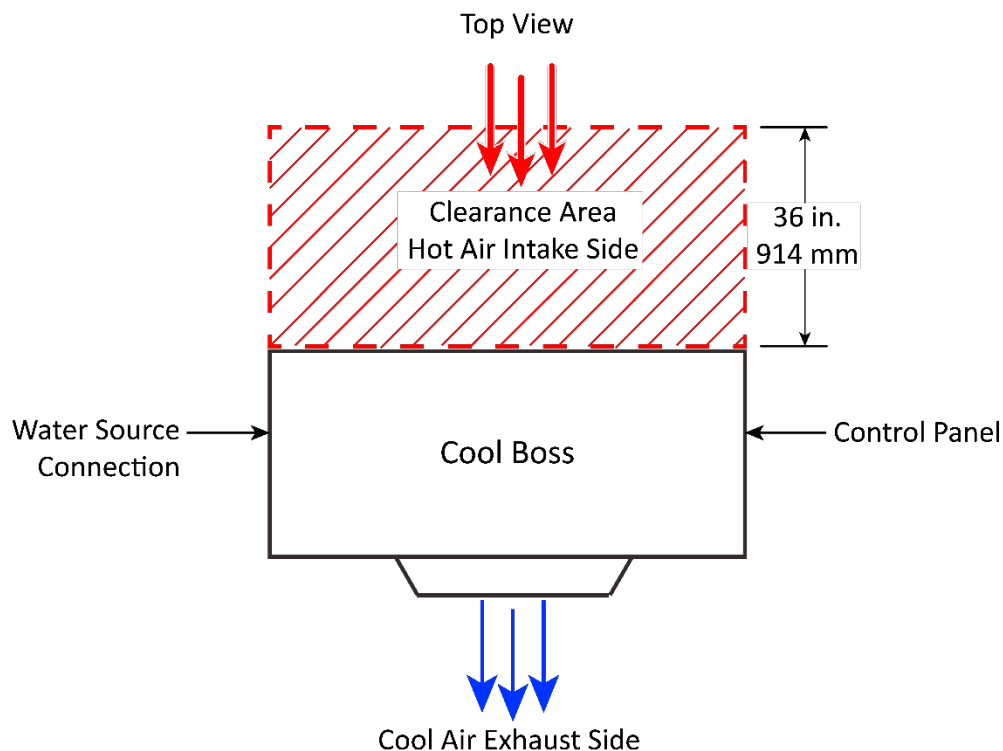
⚠ WARNING This equipment has internal arcing or sparking parts that should not be exposed to flammable vapors. The unit must not be located in a recessed area or below floor level.

⚠ WARNING Verify the floor will support the weight of the Cool Boss with a **full** reservoir; is well constructed and stable enough to prevent the Cooler from tipping over.

To choose a location for the Cool Boss Cooler:

1. Unlock the Casters to roll the Cool Boss. Direct the Fan outlet toward the area to be cooled.

⚠ CAUTION To ensure efficient operation, the Cool Boss requires adequate air flow for intake and exhaust. Verify a window or door is open.



2. Keep 36 in. / 914 mm minimum behind the Cool Boss open for air intake.

⚠ WARNING Verify the Power Cord and Water Supply Hose are routed to prevent a tripping hazard and are not routed under carpets or across sharp edges.

3. Once you have determined and moved the Cool Boss into position, **Lock a minimum of two Casters**, by pressing down with your foot on the large pedal locking mechanism on each Caster. To unlock the Casters, press down on the small pedal.

⚠ CAUTION Do not start the Cool Boss until you have locked a **minimum** of two Casters; this ensures that unintended movement caused by the thrust of the Fan will not occur.

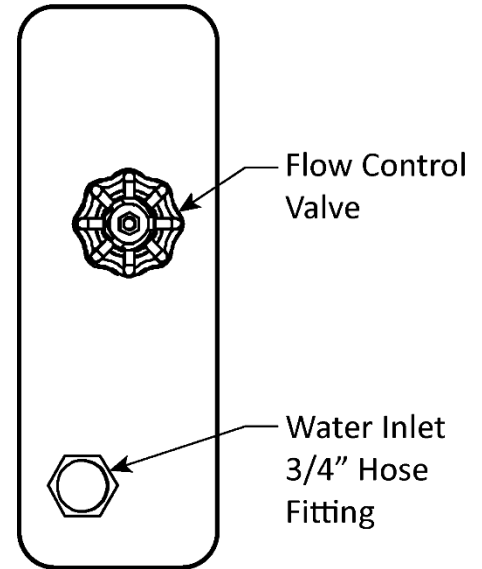
Fill the Water Reservoir

There are two options to fill the Reservoir, using a hose connected to the 3/4 inch Water Inlet Connector with Float Valve, or manually filling the Reservoir through the Reservoir Fill Inlet.

To fill the Reservoir:

1. You may connect to the Water Inlet Connector on the left side of the unit using the standard 3/4 inch Hose fitting and a Hose that is rated to 28 to 99.5psi / (2 to 7 kg/cm²) maximum water pressure at your location. Open the water supply valve and verify there are no leaks at the connection point. A Hose is **not** supplied with the Cool Boss. See figure to the right.

If you are utilizing the 3/4 inch Water Inlet Connector, the Reservoir Float Valve will shut off the water before the maximum fill level is exceeded.



⚠ CAUTION Do **not** connect to a water source with a supply pressure in excess of 99.5psi / (7 kg/cm²).

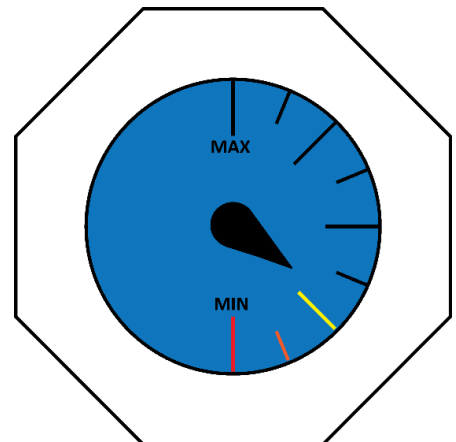
2. Alternatively, you may manually fill the Reservoir using the Water Reservoir Inlet found below the Reservoir Fill Level Gauge. Disconnect the Cool Boss from power. Remove the threaded plug and fill.

Add **clean** water. Avoid spilling water and risk of electrical shock. Fill to the Max. fill level only, do **not** overfill. Monitor the Reservoir level using the Fill Gauge located on the front of the Cool Boss. See the figure below. Water temperature must be less than 113°F (45°C).

After filling, replace the Threaded Plug, remove and dry any spilled water on the Cool Boss or floor around the unit.

Model	Water Capacity
CB-28HV	≈80 gal. / 300 liters

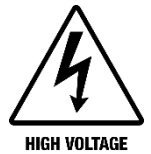
⚠ CAUTION Use only cold clean water to fill the Cool Boss. No detergents or additives of any kind.



Connecting to Power

⚠ DANGER

All electrical work must be accomplished by a **licensed Electrician**, in accordance with national, state, and local electrical codes. If you do not use a licensed Electrician, you void your warranty and put everyone who uses the cooler in danger of injury or, in rare cases, death.



The Cool Boss is supplied with a power cord that incorporates a Ground Fault Circuit Interrupter (GFCI). The Power Cord does **not** include an electrical plug. The Electrician will supply and install an appropriate electrical plug in accordance with electrical codes for your locality. The **CB-28HV** requires 220 to 240 VAC on a properly grounded and dedicated 15 Amp circuit protected by an appropriate fuse or circuit breaker. Cool boss does not recommend connecting to an outlet controlled by a switch, unless it is rated for the full power load presented by the Cool Boss.

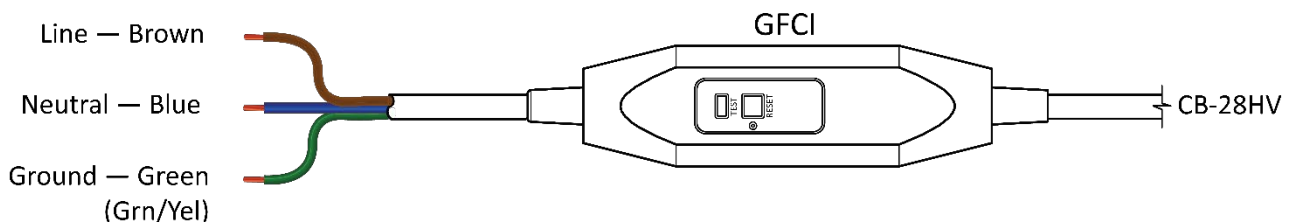
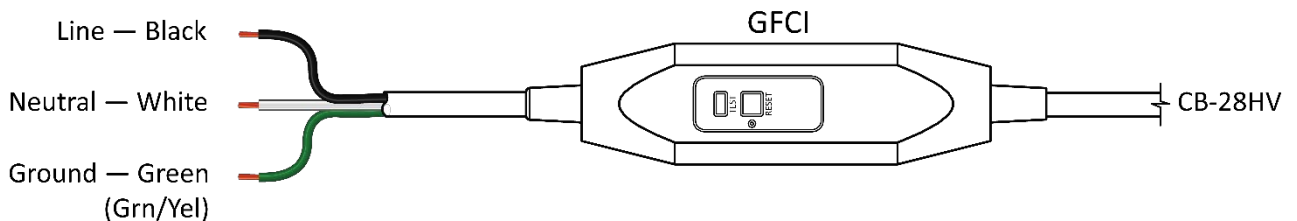
To connect the Cooler to a 220 VAC power source:

1. Verify the Cool Boss is **disconnected from the power source**.

⚠ DANGER

Do not begin to install a 220 VAC plug until you are sure that power has been disconnected from the unit.


2. Verify the Cooler is configured for 220 VAC operation. Locate the Model/Serial Number plate near the Cooler Display. The operating voltage is indicated on this data plate and should indicate 220 – 240 VAC operation.
3. Have a **licensed Electrician** attach a 250 VAC NEMA 30A, 2-Pole, 3-Wire plug. This Plug is not shipped with the Cool Boss. The Electrician must supply the correct plug for the locality.
4. The Electrician will connect the plug based on the color codes as indicated in the figure below.




5. Plug the Cool Boss power cord into a 220 VAC outlet protected by an appropriate circuit breaker.
6. Test the unit to verify the Cooler is working normally.

Additional electrical information:

Damage caused by improper electrical installation (such as not grounding the unit) voids the warranty.


 **WARNING** Disconnect power **before** performing **any** troubleshooting or maintenance. Lockout and Tag Out power to make sure the unit cannot be re-energized until maintenance or installation is complete.

 **WARNING** Connect the CB-28HV to a properly grounded electrical receptacle protected by an appropriate fuse or circuit breaker.

 **WARNING** **Never** remove the Ground Prong from the plug end of the Power Cord.

Ground Fault Circuit Interrupter (GFCI)


The Cool Boss incorporates a Ground Fault Circuit Interrupter. The GFCI acts as a Circuit Breaker in the event of a Ground Fault. A Ground Fault occurs when Voltage comes into direct contact with the equipment's frame or Ground. To test the GFCI refer to the **Maintenance Section**.

 **WARNING** The Cool Boss must be connected to a properly grounded electrical outlet for the GFCI to function. If the Outlet is not correctly grounded or if the Power Cord is damaged, preventing the Ground connection, the GFCI cannot protect you from electrical shock.

Extension Cords

If an extension cord is required, use only cords with a polarized plug/receptacle no longer than 100 feet in length. Never use an extension cord that is not properly rated to handle the electrical load. When making connections, ensure all local and national electrical codes are adhered to.

Minimum requirements for Extension Cords	
25-50 Feet in length	Minimum 14 AWG
Total to 100 Feet in length	Minimum 12 AWG

















 **WARNING** **For generator users and or areas with frequent brownout conditions.** Motor failure due to excessive high or low voltage is **not** covered under warranty. If you plan to use the Cool Boss with a Generator or operate in an area with frequent brownouts, verify that the power source can provide the required current and voltage. While voltage variations are common ($\pm 5\%$) both high and low voltage episodes in excess of 15% to 20% can cause Electric Motor overheating and premature Motor failure.

Low voltage will cause the Motor to draw more electrical current to deliver the same amount of force to the Fan Blades. Excessive current overheats the Motor Windings, eventually burning through the insulation and resulting in complete Motor failure.

High voltage episodes can cause premature failure of electrical and electronic components due to overheating.

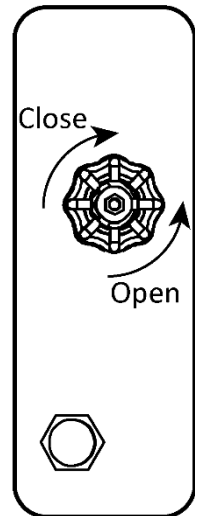
Operation

This section describes how to operate your Cool Boss Evaporative Cooler.

-  **DANGER!** **ALWAYS** unplug the Cool Boss from power before removing media pads.
-  **WARNING** The Cool Boss should only be operated by authorized, trained personnel. This includes reviewing and understanding the Operation Manual and Safety Labels on the Cool Boss. Do **not** allow children or impaired persons to operate the Cool Boss.
-  **WARNING** **Never roll anything heavy or sharp over the power cord.** Find a location where personnel will not be walking over the power cord, presenting a tripping hazard.
-  **WARNING** **Never** operate the Cool Boss unless the Ground Fault Circuit Interrupter (GFCI) is functioning.
-  **WARNING** **Never** remove the Ground Prong from the plug end of the Power Cord.
-  **WARNING** **Do not** run the Power Cord under a rug or other flammable material.
-  **WARNING** Use only in a well-ventilated open environment with a fresh air supply.
-  **WARNING** **Do not** use Cool Boss near airborne pollutants, flammable gases or contaminants.
-  **WARNING** Ambient operating temperature must remain between +5 to 108°F / -15 to 42°C.
-  **WARNING** Never spray unit with water as moisture may harm the motor or other electrical system components.
-  **WARNING** Do **not** operate near open containers of flammable liquids or gases.
-  **WARNING** **Always** maintain minimum 50 ft. / 15 meters from open flame or sparks.
-  **WARNING** **Never** run the cooling pump dry. Severe pump damage or failure will result.
-  **WARNING** Hearing protection **required** when Fan is operating at maximum and personnel are closer than 10 ft. / 3 m for prolonged periods.
-  **WARNING** **Never** operate the Cool Boss unless all Cooling Media are securely in place.
-  **WARNING** **Always** dry the Media after use by turning off the Cooling function and running the Fan without circulating water. This may take from 15 to 45 minutes depending on temperature and humidity.

To operate the Cool Boss for cooling:

1. Before starting the Cool Boss, verify that the Media Holder Splash Guard is secured in place. This will reduce the chances of water splashing out of the Cool Boss and creating a slipping hazard in front of the Media.
2. Open a door or window, if using the Cool Boss indoors. Sufficient airflow for intake and exhaust is critical.
3. Verify that the Cool Boss is connected to a Water Source through the 3/4 in. Hose Inlet or the Water Reservoir is full.
4. **Close** the Flow Control Valve (turn the valve clockwise until it stops). See figure to the right.
5. Verify at least two of the locking Casters are locked to prevent the Cool Boss from moving with the additional thrust from the Fan.
6. Plug-in the Cool Boss to an appropriate electrical receptacle.
7. Press **Power** on the Cool Boss Fan Controls. Refer to the Status Display on the Control Panel to determine current settings and air temperature at the Fan.
8. Press the **Fan** button to supply power to the Fan. The Fan indicator will light on the Status Display. Press **Up** ▲ or **Down** ▼ to adjust the power setting to 25% or less.
9. Verify the Low Water Indicator displays Green 💧 on the Status Display. If the Low Water indicator displays Red 🔥, verify the water source is connected and providing water under pressure. If filling manually, turn off the Cool Boss, unplug it from power and fill the Reservoir.
10. If the Low Water Indicator is Green 💧, Press the **Cooling** button once to provide power to the pump. The Cooling indicator will light on the Status Display.
11. Slowly **open** the Flow Control Valve. Leave the Flow Control Valve on low until the top ~30% of the Media becomes saturated (30 seconds minimum). Once the top 30% of the Media is saturated the Flow Valve may be slowly opened to increase the flow of water.



⚠ CAUTION Fully opening the Flow Control Valve onto dry Media will flood the Media faster than it is capable of absorbing water. Water will then be forced out of the Media onto the floor and surrounding area. Carefully adjust the Flow Control to evenly saturate the Media before increasing the flow of water onto the Media and before applying more power to the Fan.

⚠ CAUTION Verify there is water in the Reservoir before pressing **Cool**; if not, the Pump's internal low-water switch will keep the Pump in the off condition.

⚠ WARNING Rotating Fan Blades! Keep hands, fingers, and loose clothing away from the Fan when it is running. Follow Lockout / Tag Out procedures when servicing.




12. Press **Up** ▲ or **Down** ▼ to adjust the fan speed on the Control Panel or the Remote Control.

13. Increase the flow of water to increase cooling and moisture content in the air as the media becomes saturated. Decrease the water flow to reduce the cooling and moisture content.

To shut down the Cool Boss:

1. **Close** the Flow Control Valve and turn **off** the Pump by pressing the Cooling Button once.
2. If using the 3/4 inch Water Source inlet, **close** the valve supplying the water to the Cool Boss.
3. Run the Fan to dry the Media.
4. When the Media is dry, press the Cool Boss power button to shut down the Cool Boss.

 **WARNING** Always dry the Media after use by turning off the Cooling and running the Fan without circulating water. This may take from 15 to 60 minutes depending on temperature and humidity.

To shut down the Cool Boss using the Timer:

1. **Close** the Flow Control Valve and turn **off** the pump by pressing the Cooling Button once.
2. If using the 3/4 inch Water Source inlet, **close** the Valve supplying the water to the Cool Boss.
3. Press the **Timer** button until the desired number of hours before shut-down are displayed.

The Cooler will shut down based on the time entered.

Anion Negative Ion Air Purifier Operation

The Cool Boss Anion Generator utilizes high voltage to electrically charge the air moving through the Cool Boss. This electrical charge generates negative ions (Anions) in the air. Anions are highly effective in removing particulates from the air.

To use the Anion Negative Ion Air Purifier function:

Push the Anion button once on the Control Panel or the Remote Control and the Anion indicator will illuminate on the Status Display indicating the Generator is in operation.

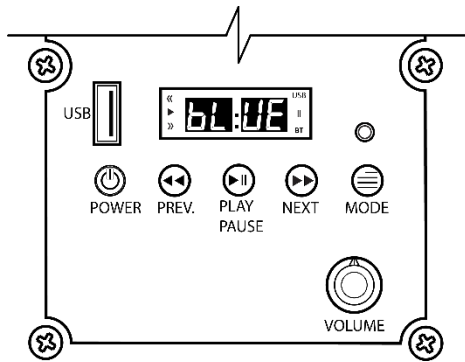
Push the Anion button once more to shut down the Anion generator.

Audio System Operation

The Cool Boss includes a Bluetooth v5.0 receiver that will stream audio files from your mobile device.

To use the Cool Boss Audio System with 5.0 Bluetooth®:

1. Verify power is supplied to the Cool Boss.
2. Turn the Cool Boss Volume Control to a low level.
3. Press the **Power** button in the Cool Boss Audio section.
4. Press the Mode button until the **BT** is illuminated on the Audio Display section of the Cool Boss.
5. A chime will sound from the Cool Boss and **bL:UE** will appear on the audio display. Refer to the figure below.



6. Go to the Bluetooth settings on your mobile device and select **XF-a** from the list of available Bluetooth devices to pair.
7. A chime will sound if your mobile device was successfully paired.
8. Select and play the desired media on your mobile device.
9. Adjust the volume to your desired level.
10. To shut down the Audio System simply press the Power Button once.

To charge a portable device using the USB port:

The Cool Boss includes a USB port that will charge portable electronic devices conforming to the USB 2.0 specification, delivering up to 0.3 Amps at 5 Volts. The USB port provides power anytime the Cool Boss is in the on condition. The USB port will **not** play audio files through the Cool Boss.

⚠ CAUTION Contaminated, wet or damaged USB connectors may cause damage to the Cool Boss Control. Always verify that the USB you are using is clean and dry before plugging into the Cool Boss or your portable device.

1. Connect the Cool Boss to power.
2. Connect your device to the USB connector on the Cool Boss Control Panel using an appropriate USB cable. A USB Cable is **not** provided with the Cool Boss.
3. Press the Cool Boss **Power** button (not the Audio Section) power button.
4. Power should now be provided to the USB device.

Maintenance

DANGER

Disconnect the unit from its power source **before** performing any maintenance! Verify the unit is locked out from power and cannot be energized while maintenance is being performed. If your organization has Lockout/Tag out policies, make sure to implement them before servicing the Cool Boss.



WARNING

Electrical shock hazard. Always disconnect the Power Cord when cleaning the Cool Boss and exercise care to avoid splashing water on the motor or internal electronics.



WARNING

Rotating Fan Blades can cause serious injury! Keep hands and loose clothing clear!

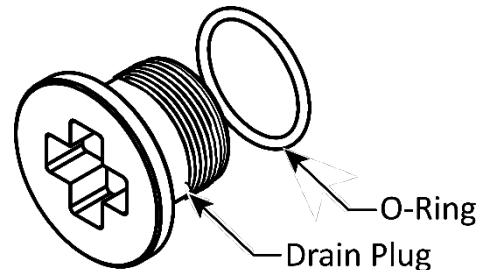


To maintain the Cool Boss:

- **Daily.** Turn off the Cooling Pump and run the Fan to dry the Media and inhibit the growth of bacteria, mold, and mildew. Typically, Media drying can take 15 to 60 minutes depending on the current temperature and humidity.
- **Weekly.** Change the Cool Boss Reservoir water when it becomes dirty. Dirt and other pollutants from the environment will migrate into the water and reservoir. Cool Boss recommends draining and cleaning the Reservoir weekly or more often depending on the frequency of use and the cleanliness of the environment. Regular cleaning can remove these contaminants and reduce the build-up of minerals.

CAUTION

Exercise care when removing the Drain Plug on the bottom of the Reservoir. There is a sealing O-Ring on this plug that may stick to the housing and later fall to the ground and possibly become lost. See figure to the right.



- **Monthly.** Test the GFCI function monthly. Test the GFCI on the Cool Boss Power Cord once a month to ensure it is functioning and protecting you from electrical shock.
- **Monthly.** Clean the outside of the unit. Use no harsh chemicals. Unplug the Cool Boss and wipe down the outside of the unit with a damp cloth. The frequency of use and the cleanliness of the environment will affect the frequency of cleaning required.

WARNING

Do not spray the Cool Boss with water. The electronics are not sealed. Water can damage the motor and/or other components in the electrical system.


- **Monthly.** Empty the Reservoir and clean it.
- **Monthly.** Remove the Media and clean as detailed below. Dirt and other pollutants from the environment will become caught in the Media. Clean it regularly to keep the air fresh and clean.

WARNING


Do not operate your Cooler if you find maintenance issues; instead, remove it from service. Assistance with your Evaporative Cooler is available from your dealer, by calling Cool Boss at **(805) 933-9970**, or by emailing support@coolboss.com. You may also contact Cool Boss for parts replacement (please have the serial number and model number of your unit available).

To clean the Reservoir:

1. The Media must be dry before removing. If the Media is wet, run the Fan without running the Cooling Pump until dry.
2. Turn off and then unplug the Cool Boss.

 **WARNING** Disconnect the unit from its power source before performing any maintenance! Verify the unit is locked out from power and cannot be energized while maintenance is being performed. If your organization has Lockout/Tag out policies, make sure to implement them before servicing the Cool Boss.

3. Remove and retain the Splash Guard fasteners securing the Media Holder Splash Guard and then remove the Splash Guard.
4. Remove the center Media first by pulling the top of the Media away from the Cool Boss. You may need to apply a little pressure to remove the Media. Be careful not to damage the Media.
5. Remove the remaining Media in the same manner.
6. Remove the plug at the bottom of the Reservoir and drain the water into a container or appropriate drain.

 **CAUTION** Take care to retain the O-Ring that provides a seal between the Plug and the Reservoir.

7. Remove any residual water with rags or a wet dry vacuum.
8. Wipe with clean rags and remove any mineral deposits. Use no harsh chemicals.
9. Refill the Reservoir and replace the Media. The Cool boss is ready to use.




Tip

Cool Boss recommends wearing gloves when handling the Media.

To clean the Media:

1. The Media must be dry before removing. If the Media is wet, run the Fan without running the Cooling Pump until the Media is dry.
2. Turn off and then unplug the Cool Boss.


 **WARNING** Disconnect the unit from its power source before performing any maintenance! Verify the unit is locked out from power and cannot be energized while maintenance is being performed. If your organization has Lockout/Tag out policies, make sure to implement them before servicing the Cool Boss.

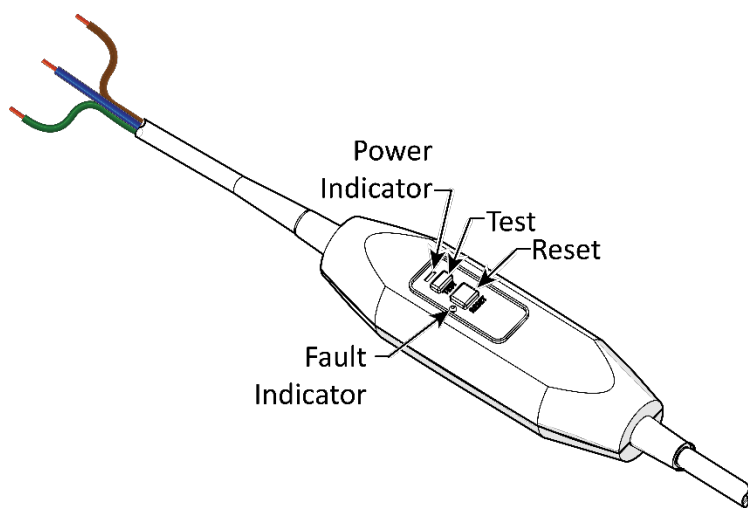
3. Remove and retain the Splash Guard Fasteners securing the Media Holder Splash Guard and then remove the Splash Guard.
4. Remove the center Media first by pulling the top of the Media away from the Cool Boss. You may need to apply a little pressure to remove the Media. Be careful not to damage the Media.
5. Remove the remaining Media in the same manner.
6. Rinse the Media under running water to clean and use a soft brush or rag to gently remove accumulated dirt. Do **not** use high pressure water or air to clean the Media.
7. Dry the Media thoroughly before attempting to reinstall in the Cool Boss.
8. Put the Media back in place. Install the bottom first and then the top. You may need to apply gentle pressure to get the top of the Media into place. Refer to [Installing the Media](#).


To test the GFCI incorporated into the Cool Boss Power Cord:

1. Plug the cord into a properly grounded wall outlet. The power indicator will illuminate if power is present. Refer to the figure below.
 - a. If the power indicator does not illuminate, check the outlet for power.
 - b. If power is present at the outlet, the Power Cord or the GFCI is defective and requires replacement.
2. Press the small Test button. The Power Indicator should go out, the red trip indicator should light. No power should be available at the Cool Boss.
3. Press the Reset Button and the Power Indicator should now illuminate. The Cool Boss should now be ready to operate.
4. If the GFCI does not function, take the unit out of service, contact your dealer or Cool Boss Support at coolboss.com/support, via email at support@coolboss.com, or by phone at **(800) 253-2363**.

 **WARNING** Do not use the Cool Boss if the GFCI fails this test.

 **WARNING** The GFCI does not protect against electrical shock due to contact with both circuit conductors or a fault in the wiring that supplies the GFCI.



 **WARNING** Do not operate your Cooler if you find maintenance issues; instead, remove it from service. Assistance with your Evaporative Cooler is available from your dealer, by calling Cool Boss at **(805) 933-9970**, or by emailing support@coolboss.com. You may also contact Cool Boss for parts replacement (please have the serial number and model number of your unit available).

To store the Cool Boss:

1. Drain the Reservoir and wipe clean and dry.
2. Secure the electrical cord.
3. Cover the Cool Boss to prevent dust build-up and store in a dry, protected area.

Troubleshooting



WARNING

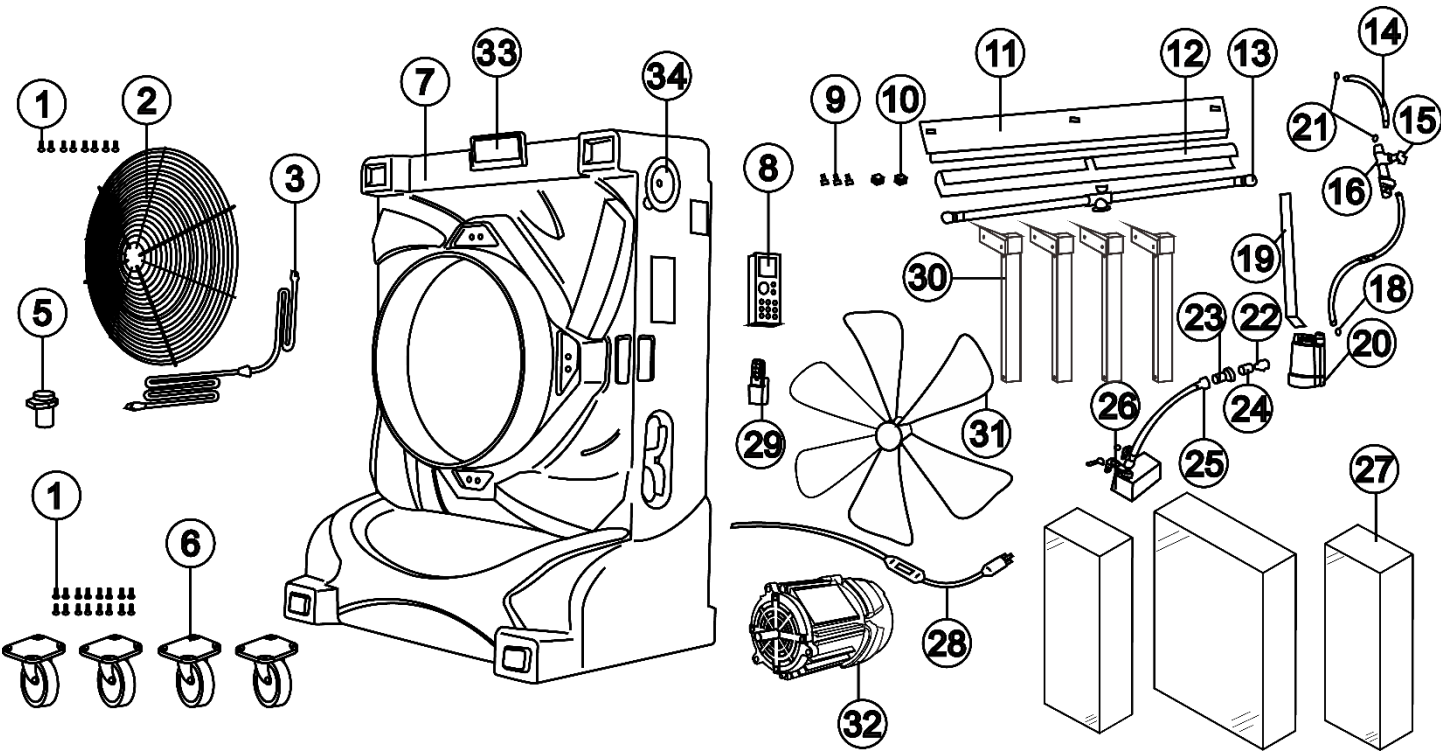
This Evaporative Cooler uses electrical energy; if your organization has Lockout/Tagout policies, make sure to implement them before performing any Troubleshooting.

Issue	Probable Cause	Action to Take
Control Panel inoperative.	No power. Circuit Breaker open. Panel component failure.	– Verify the facility power supply. – Reset the circuit breaker. – Replace the panel.
Unit not working.	No power.	– Cycle the unit power on-off. – Verify the facility power supply.
Fan not working or moving slowly.	Fan is stuck. Fan is broken. Brown-out or low voltage.	– Check for blockage and remove. – Repair fan. – Evaluate/Correct voltage supply issue.
Motor not working.	Control Panel is not working. Motor failure	– Replace Control Panel. – Replace motor.
Drain leaks.	Drain Plug is not tight Drain Plug is cross-threaded. Drain O-Ring is missing	– Tighten Drain Plug. – Replace Plug, if thread is ruined. – Replace O-Ring.
Fan dripping water.	Water tubing is disconnected or leaking.	– Check internal water connections and tubing.
Remote does not function.	Battery is depleted. Something is obstructing receiver or remote. Remote is out of range of the receiver.	– Replace both batteries (AAA 1.5 V). – Clear the obstruction. – The remote must be within 32-ft. / 10 m and have a direct line-of-sight to the Cool Boss Control Panel.
The USB port will not charge my phone.	Damaged cable or connector(s).	– Replace the cable. – Check for debris in the connector – Check for bent or broken pins on the connector(s).
The Cool Boss Audio System is not playing audio through the Aux. Audio Jack.	Damaged cable or connector(s).	– Replace the cable.

Issue	Probable Cause	Action to Take
My Bluetooth device is not connecting.	<p>Cool Boss Audio System not on or not set to Bluetooth operation.</p> <p>Smart device not paired with the Cool Boss.</p> <p>Smart device is out of range.</p> <p>Wireless signal interference.</p> <p>Insufficient frequency available due to the number of active wireless devices in the immediate area.</p> <p>Interference from 4 GHz cordless phone.</p>	<ul style="list-style-type: none"> – Make sure the Cool Boss Audio System is set to BT mode. BT should be illuminated on the Cool Boss audio panel. – Verify your smart device is paired with the Cool Boss Audio System and the Bluetooth function is active. – Perform the Bluetooth Pairing procedure again. – Place your Bluetooth device closer to the Cool Boss – it may be out of range. – Move your Bluetooth device and the Cool Boss away from wireless sources – you may be experiencing interference. – Turn the Cool Boss Audio System off then on again. – If you have multiple Bluetooth Devices, verify you are connected to the correct device. – In heavy Wi-Fi traffic areas, multiple signals in close proximity to the Cool Boss may take up a lot of the frequency spectrum and the Bluetooth may not have any available spectrum. – Move or replace the 4 GHz cordless phone

Assistance with your Cool Boss is available from your dealer, by calling Cool Boss at **(805) 933-9970**, or by emailing support@coolboss.com. You may also contact Cool Boss for parts replacement (please have the serial number and model number of your unit available).

Parts Diagram

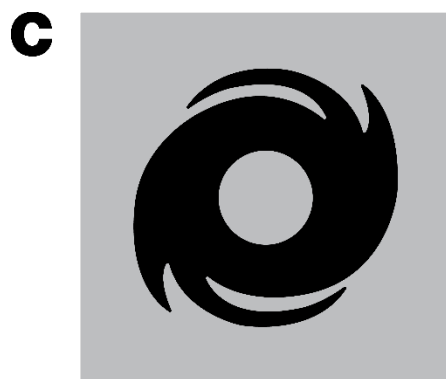
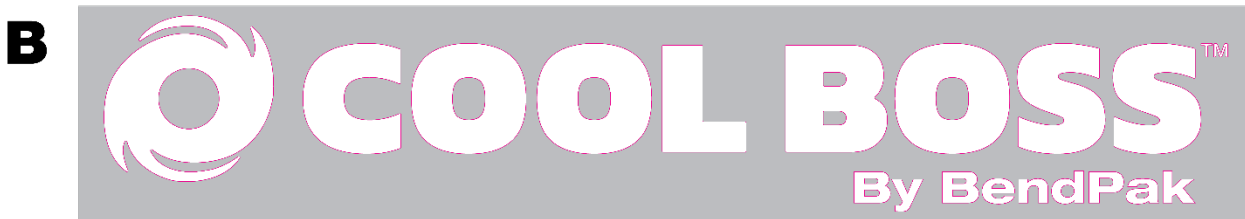


Item	Qty.	Part Number	Description
1	16		Screw
2	1		Grill, Protective Fan Blade
3	1		Electrical Cord, CB-28HV (used inside to connect electrical components)
4			Spare
5	1		Outlet Pipe
6	1 set	5326293	Casters Set; CB-28HV (4 each)
7	1		Housing, Cooling Shell
8	1	5326288	Electronic Touch Pad Control Panel; CB-28HV
9	4		Fasteners (Splash Guard)
10	2		Switch Cover Plate
11	1		Media Holder Splash Guard
12	1		Bonnet, Spray Bar

Item	Qty.	Part Number	Description
13	2	5326301	Spray Bar End Caps; CB-28HV
14	1	5326300	Clear Tubing, CB-28HV, (3/4" inside diameter x 8' for Constant Water Inlet Connection to Shut-off Valve and Submersible Pump to the Spray Bar)
15	1		Valve, Flow Control
16	1		Mounting Bracket, Control Valve
17			Spare
18			Clamp, Wire Spring
19	1		Bracket, Submersible Pump Mount
20	1		Submersible Pump; CB-28HV (220V)
21	2		Clamp, Wire Spring
22	1		Bolt, Float
23	1		Regulator, Inlet Water
24	1		Adapter, Hose
25	1		Hose, Float
26	1	5326295	Constant Water Inlet Shut-Off Valve; CB-28HV (Float Valve)
27	3		Media Pads; With Black Resin Face; CB-28HV (3-pads for each unit) 2 ea. 990 x 180 x 150mm 1ea. 990 x 900 x 150mm
28	1		Electric Power Cord w/ GFCI; CB-28HV (voltage specific does not include 220V plug)
29		5326299	Remote Control And Holder, CB-28HV
30	1		Motor Bracing Bracket
31			Fan Blade Assy.
32	1		Variable Speed Fan Motor 220V; CB-28HV (220VAC)
33	1		Floodlight, LED
34	2		Speaker
35	1		Water Level Indicator Assy.

Item	Qty.	Part Number	Description
36	1	5326287	Spray Bar; CB-36L/CB-36H (size specific; distributes water to the top of the media)
37	1		Anion Negative Ion Air Purifier
38	1	5326302	Fill Cap; CB-28HV
39	1		Protective Cover CB-28HV

Labels



F  **CAUTION
HIGH WIND**


G **CAUTION
HIGH WIND** 

H **⚠ WARNING**

Cooling pads must be installed and caster locks must be engaged before operation.

PN 5905264

PN 5905264

I  **⚠ WARNING**




Rotating fan blades. Keep hands clear. Follow lockout procedure before servicing.

PN 5905259

PN 5905259

J **⚠ WARNING**

THIS COOLING UNIT IS NOT INTENDED FOR USE BY CHILDREN OR PERSONS WITH REDUCED PHYSICAL, SENSORY OR MENTAL CAPABILITIES OR LACK OF EXPERIENCE AND KNOWLEDGE UNLESS THEY HAVE BEEN GIVEN SUPERVISION OR INSTRUCTION CONCERNING USE BY A PERSON RESPONSIBLE FOR THEIR SAFETY.

 READ MANUAL	 HIGH VOLTAGE	 SHOCK HAZARD
--	---	---

SAFE OPERATION

- Read and understand instructions and all warning labels.
- NEVER** modify this equipment in any way or warranty will be voided.
- NEVER** operate if there is any damage to the power cord or plug.
- DO NOT** route power cord under carpeting, flooring, or similar coverings.
- Minimize trip hazard by routing power cord **AWAY** from pedestrian traffic areas.
- NEVER** step on or roll over power cord with heavy or sharp objects.
- DO NOT RUN PUMP DRY** or severe pump damage or failure will result.
- Use only in a ventilated open environment with fresh air supply.
- Ambient operating temperature must remain between 66–113°F (18–45°C).
- Maximum water temperature should never exceed 113°F (45°C).
- DO NOT** operate near open containers of flammable liquids or gases.
- NEVER** spray or wash unit with a garden hose as water may harm motor and other electrical system components.
- DO NOT** open control box compartment. No serviceable parts located inside.
- All repair work **MUST** be performed by qualified personnel.
- DISCONNECT POWER BEFORE PERFORMING ANY MAINTENANCE OR REPAIRS TO THE UNIT!**

IMPORTANT ELECTRICAL INFORMATION

WARNING! ALL WIRING MUST BE PERFORMED BY A CERTIFIED ELECTRICIAN IN ACCORDANCE WITH LOCAL AND NATIONAL ELECTRICAL CODES. USE ONLY WITH GFCI PROTECTED RECEPTACLES.

- BEFORE** connecting this unit to a power source, first verify the voltage that will be required by studying the model nameplate affixed to the machine (110V, 60Hz, 1PH, 16A or 208–230V, 60Hz, 1PH, 15A).
- If your unit is equipped with a plug not applicable to your power source, change the plug as required using only an approved NEMA rated plug.
- Connect only to a fused and grounded electrical supply.
- It is recommended that a separate circuit serving only the unit be provided.
- Use an outlet that cannot be turned off by a switch.
- ALWAYS** remove plug from electrical receptacle by pulling on the plug and not the cord.
- ALWAYS** test the GFCI receptacle or breaker monthly to ensure proper function.
- Check power outlet for correct polarity before use.
- NEVER** use an extension cord that is not properly rated to handle the power load.
- If an extension cord is required, use only cords with polarized and/or three-prong plugs no longer than 100 feet in length (25–50 feet in length MIN. 14 Gauge, or up to 100 feet in length MIN. 12 Gauge).

If the unit is damaged or it malfunctions, **CEASE** operation immediately. Visit www.coolboss.com and refer to the warranty, troubleshooting, and FAQ page. For Cool Boss Technical Support, call 1-855-223-2865, or email support@coolboss.com.

CONSUMER NOTICE: This product contains chemicals which are known to the state of California to cause cancer, birth defects or other reproductive harm.

PN 5906077

PN 5906077

K **⚠ CAUTION**

HOSE CONNECT

ADD WATER HERE. Use clean water only with no detergents or additives. Avoid water spillage and prevent risk of electric shock. Fill reservoir to “MAX FILL” level only.

PN 5905258

PN 5905258

L **⚠ CAUTION**

WATER FILL

ADD WATER HERE. Use clean water only with no detergents or additives. Avoid water spillage and prevent risk of electric shock. Fill reservoir to “MAX FILL” level only.

PN 5905258

PN 5905258

M **⚠ DANGER**

Unplug unit from power source before removing media pad. Fan can start unexpectedly due to the timer control feature.

PN 5905261

PN 5905261

N



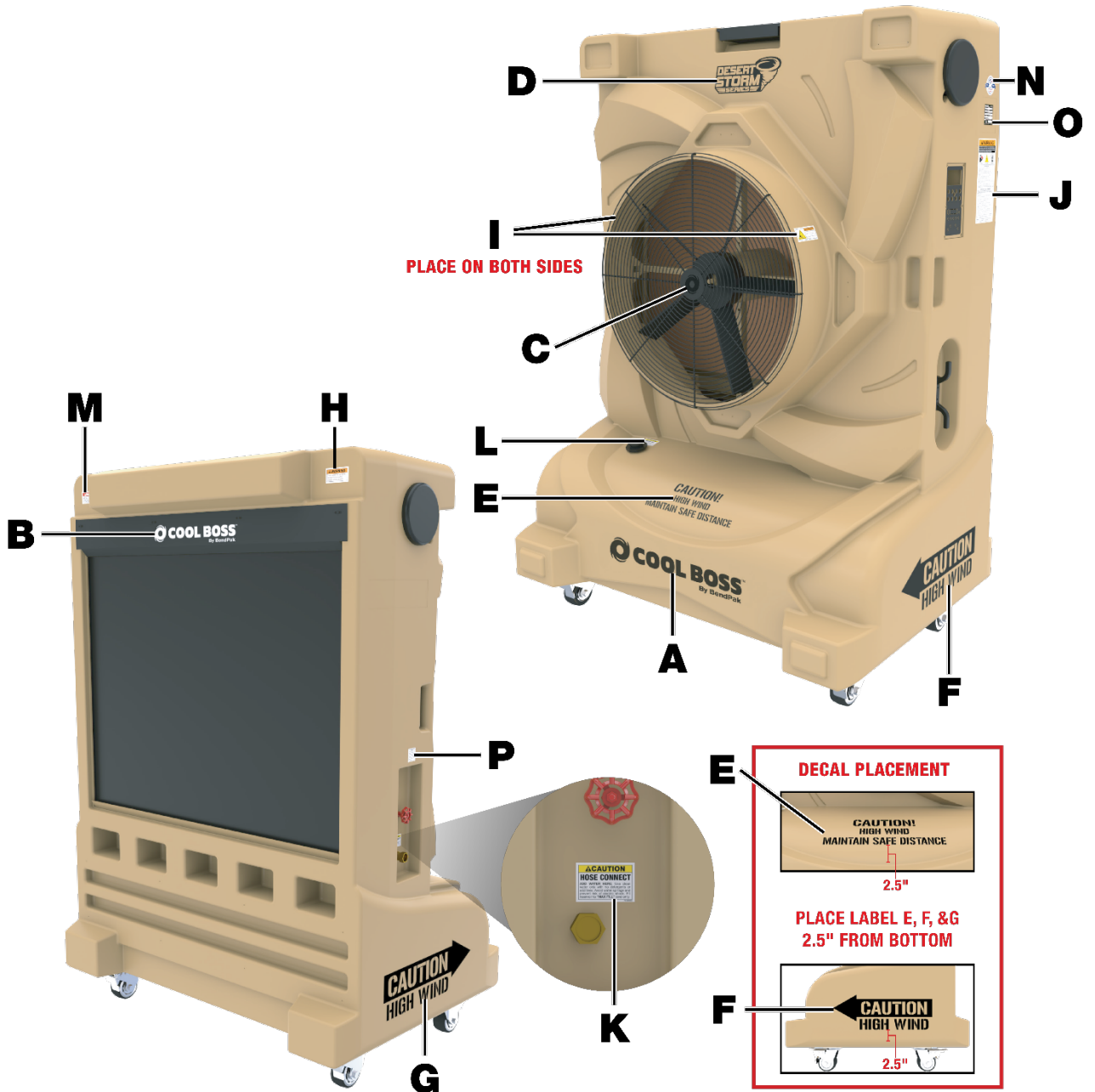
O

COOL BOSS Theodore, AL USA www.coolboss.com	
MODEL NUMBER	
DESCRIPTION	
VOLTAGE	
DATE CODE	SERIAL NUMBER
UPC	
⚠ DANGER! Disconnect Power Before Servicing 	
WARRANTY VOID IF DATA PLATE IS REMOVED MADE IN CHINA	

P

CALIFORNIA PROPOSITION 65
⚠ WARNING ⚠
WARNING! This product can expose you to chemicals including styrene and vinyl chloride which are on the list of over 900 chemicals identified by the State of California to cause cancer, birth defects or reproductive harm. ALWAYS use this product in accordance with the manufacturer's instructions. For more information, go to www.p65warnings.ca.gov. PN 5905775

PN 5905775



Maintenance Log

This image shows a blank sheet of white paper with horizontal ruling lines. The lines are evenly spaced and run across the width of the page. There are no margins, text, or other markings on the paper.

Maintenance Log



5240 Willis Rd.
Theodore, AL 36582 USA
coolboss.com