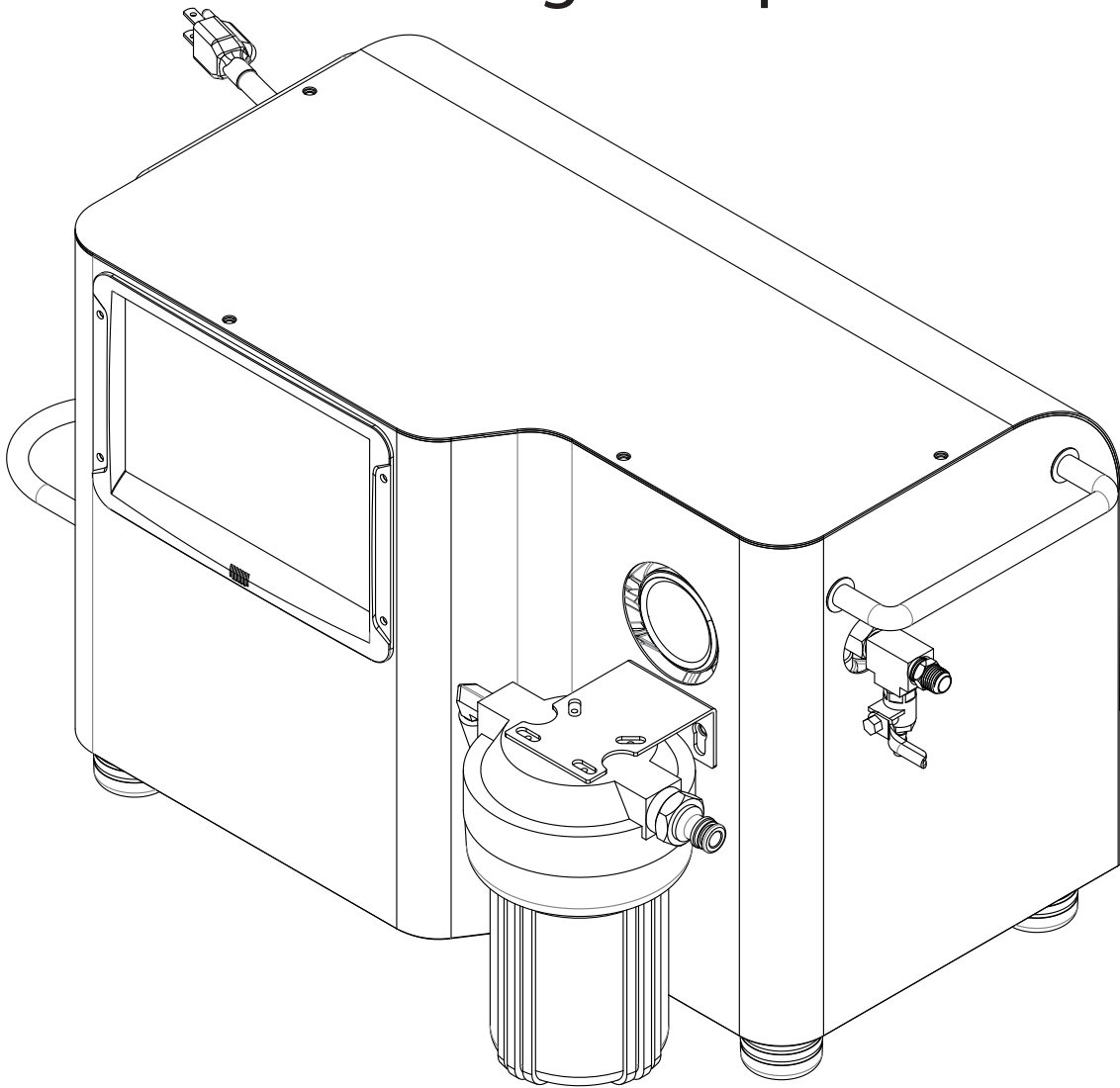




ADVANCED
MISTING SYSTEMS

Pro Series
Misting Pump



Operating Manual

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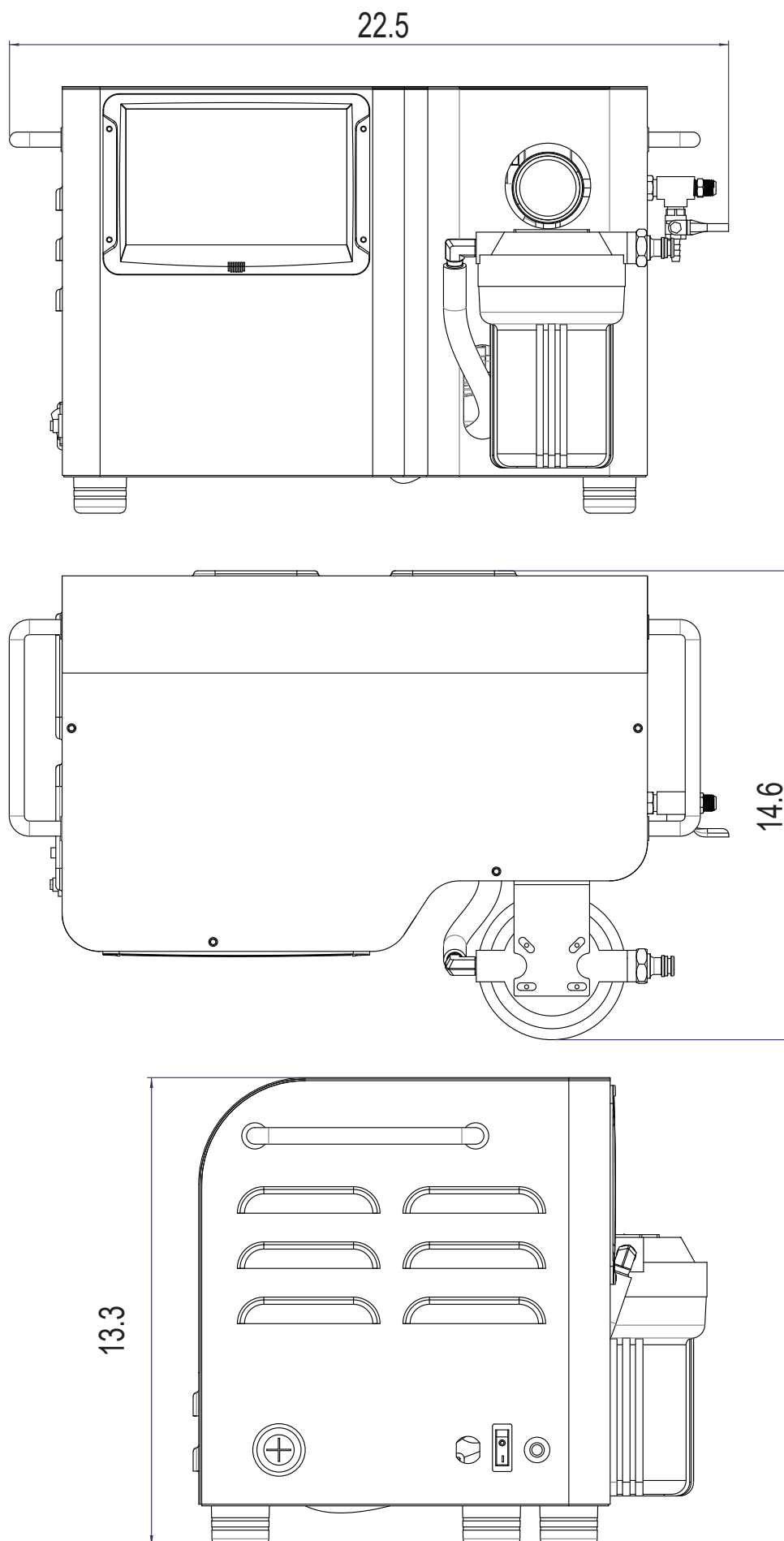
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1 - Overview

1.1 Specifications and Basic Functions

Model	Pro 75 (F10-04-007)	Pro 100 (F10-04-008)
Max. Pressure	1000 PSI / 70 BAR	
Flow Rate	Pro 75 0.72 gpm @ 1750rpm	Pro 100 0.95 gpm @ 1750rpm
Electric Motor	Single Phase Induction Motor 120V/60Hz Pro75 = 3/4HP Pro 100 = 1 HP	
L x W x H	21.7 x 13 x 14.6 in.	
Net Weight	Pro 75 : 60 lbs	Pro 100 : 62 lbs
Standard Components	· Electric Solenoid Valve, Inlet · Electric Solenoid Valve, Outlet · LCD Control Panel · 5" Particulate Filter · Water Supply Sensor · Infrared Remote Control	
Functions	· Automatic Shut Off if Water Supply Fails · Motor Overload Protection (Breaker Switch) · Temperature & Humidity Sensing · Total Run Time Counter · 300 Hour Maintenance Reminder · Pressure Regulator with Internal Bypass · Mode 1 : 15 sec. Misting / 20 sec. Stop · Mode 2 : 25 sec. Misting / 30 sec. Stop · Mode 3 : 40 sec. Misting / 40 sec. Stop · Mode 4 : Custom Programmable · Mode 5 : Weekly Cycle (set by user) · Mode 6 : Continuous Misting	
Notice	Do not use the pump during adverse weather conditions.	

1.2 Dimensions (inches)



1.3 Identifying the Components

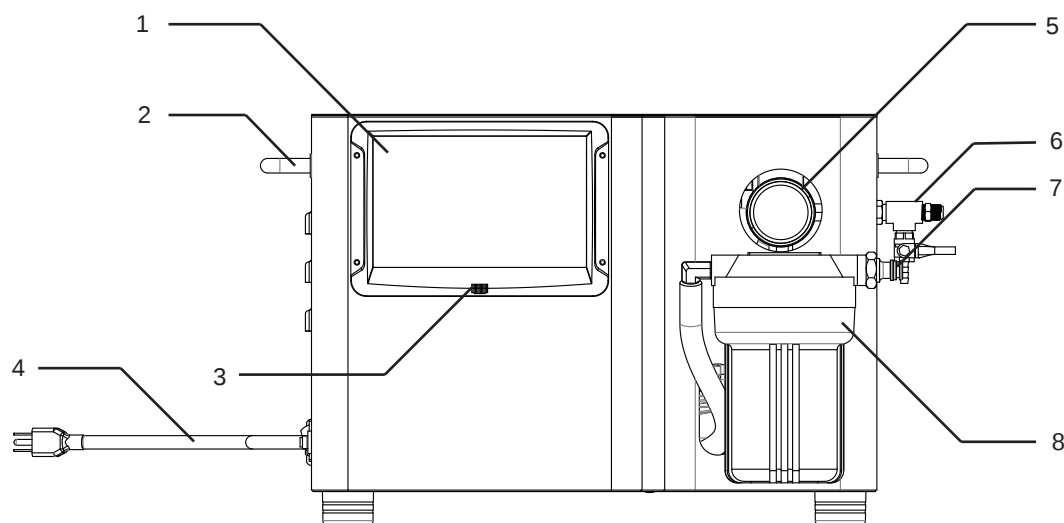


Table 1			
1	LCD control Panel	5	Pressure Gauge
2	Carry Handle	6	1/4" Connector, Outlet
3	Sensor for Temp. & Humidity	7	Hose Coupler, Inlet
4	Power Cable with Plug	8	5" Inlet Water filter Housing

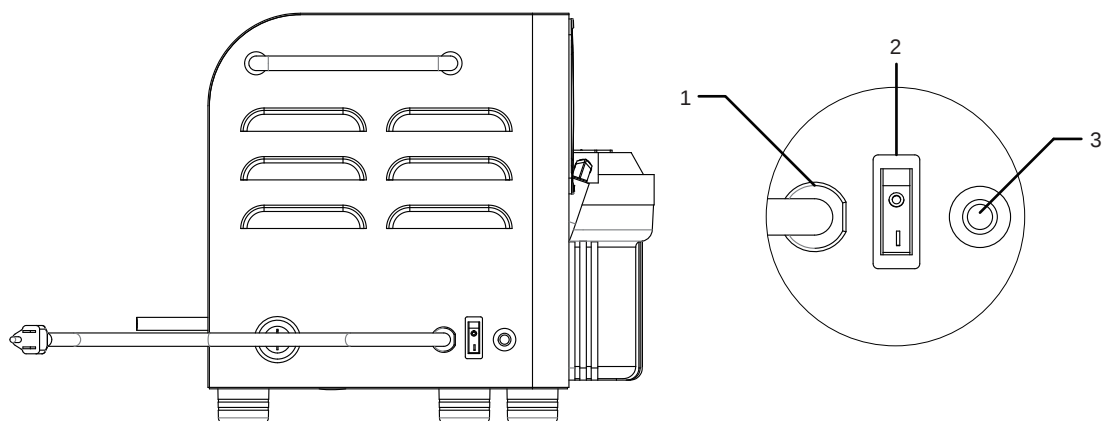


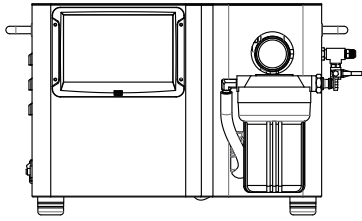
Table 2			
1	Power Cable Port	3	Motor Overload Breaker Reset
2	Main Power Button		

CAUTION: The Power Cable provides electricity into the pump housing. If the power cable is plugged in there is electricity present inside of the machine. ALWAYS UNPLUG THE POWER CABLE BEFORE OPENING THE CABINET ACCESS PANEL.

2 - Quick Set-up

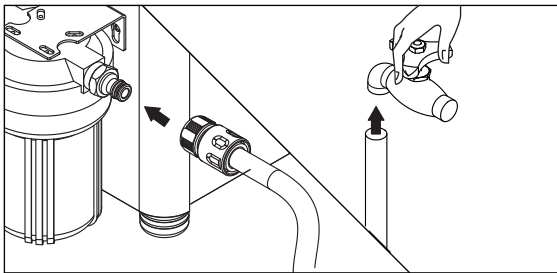
2.1 Installing the Machine

2.1.1 Unpack the Machine



2.1.1.1 Remove the pump from the box and verify all accessories present. Check the machine to see if there is any damage.

2.1.2 Install the water supply line

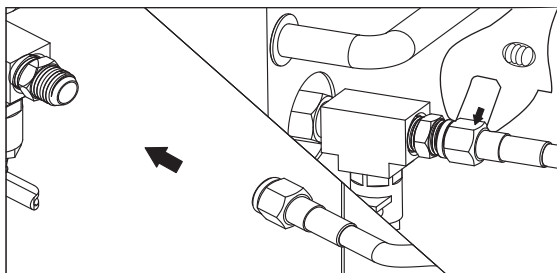


2.1.2.1 Connect a garden hose to the inlet fitting securely.

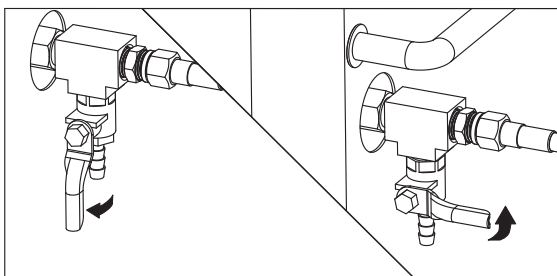
2.1.2.2 Connect the hose to a water supply.

2.1.2.3 Pressurize and check for leaks before turning on the pump.

2.1.3 Connect the outlet to misting system.

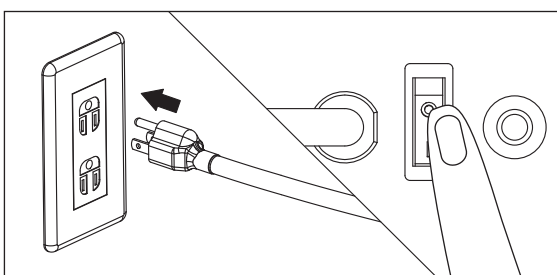


2.1.3.1 Connect a high pressure misting fitting to the 1/4" NPT brass outlet fitting on the machine.



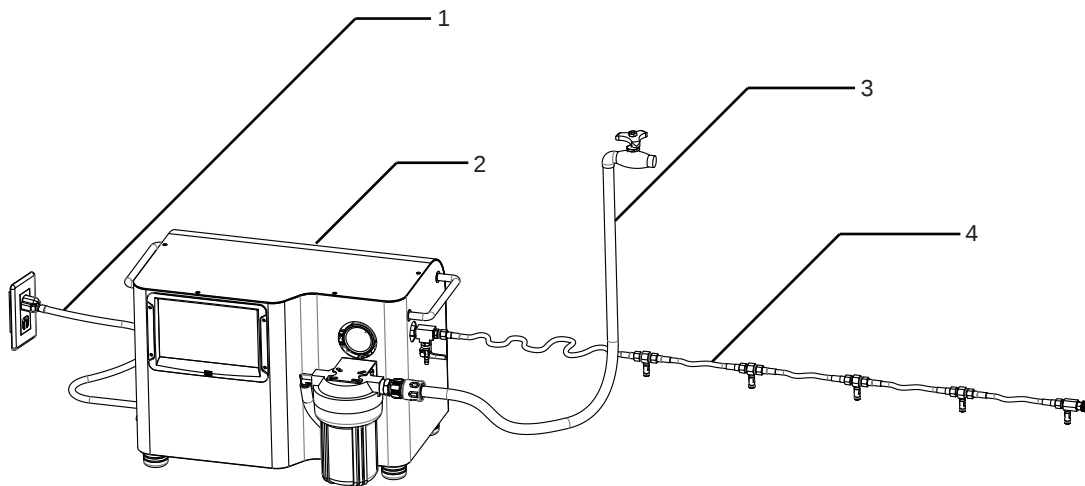
2.1.3.2 The outlet port has an built in ball valve. It is used to vent any air trapped inside the pump. You may need to initially vent the air using this valve. Close the valve when a steady stream of water flows out, and the pump will pressurize to full operating pressure.

2.1.4 Connect the electrical power



2.1.4.1 Verify the voltage and current requirements before plugging the power cable into the socket. Push the main power button to "ON" .

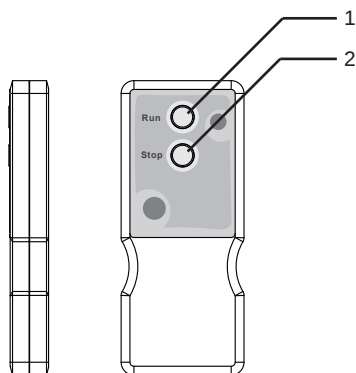
2.2 Misting System Diagram



A Basic Diagram of Misting System

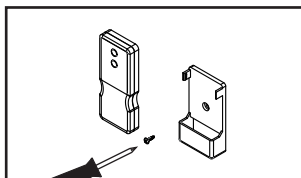
1	Power Cable	3	Water Supply Hose
2	PRO II Misting Pump	4	Misting Nozzle Circuit

2.3 Infrared Remote Control

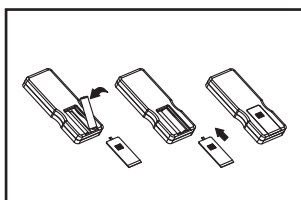


Function Keys for Remote Control

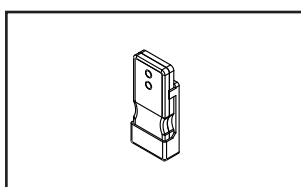
1	START key
2	STOP key



2.3.1 Attach the provided remote control holder onto a wall or other location with the included screw.



2.3.2 Remove the plastic cover on the back of the remote control unit. Install 2 AAA batteries into the unit and reinstall the cover.



2.3.3 Put the remote control unit in the holder when not in use.

2.3.4 The ideal distance to use the infrared remote control is within 15 feet. The remote must have a direct line of sight for successful operation. Direct sunlight can decrease the effective range of the infrared remote.

3 - Correct Use

3.1 Attention

- 3.1.1 The pump should not be powered on during adverse weather conditions (such as rain, electrical storm, flood, or other dangerous weather).
- 3.1.2 Only trained operators should use the pump. Children and adults who are not trained should be restricted from operating the machine.
- 3.1.3 Power sources must be equipped with proper grounding and circuit breakers. The National Electric Code, or your local municipal building code, may have special requirements for installations of this type of equipment (such as GFCI receptacles for wet locations).
- 3.1.4 Do not operate the pump in or below freezing temperatures (32° F / 0° C)
- 3.1.5 Do not move or operate the machine in excessively wet environments.
- 3.1.6 Place the machine on cement or another solid, flat surface that provides a firm level support to all four feet of the pump. Keep the machine and its surroundings dry. Keep the pump away from flammable gases or fumes. Sparking and excessive heat can ignite flammable gases, liquids, or materials.
- 3.1.7 Always read the entire manual before operating the pump. Consult a professional if you are unable to successfully complete installation.

3.2 CAUTION

- 3.2.1 Before starting the machine, verify that oil is present inside of the pump.
- 3.2.2 Connect only to a power source with correct electrical voltage (V), frequency (Hz), and adequate current supply according to machine's specifications.
- 3.2.3 Do not increase the operating pressure of the pump over 1000PSI.
- 3.2.4 Do not run the pump without an adequate water supply. Insufficient water supply will damage the components inside the pump and significantly shorten the life of the machine.
- 3.2.5 During operation, do not open the cover and do not touch either the motor, the pump, components, or wires. Risk of burns or electrocution is possible. If you plan to service the pump, disconnect the power.
- 3.2.6 Before running the machine, visually inspect the wires, hoses, components, and connections for any abnormal wear or breakage.

3.3 Operational Notices

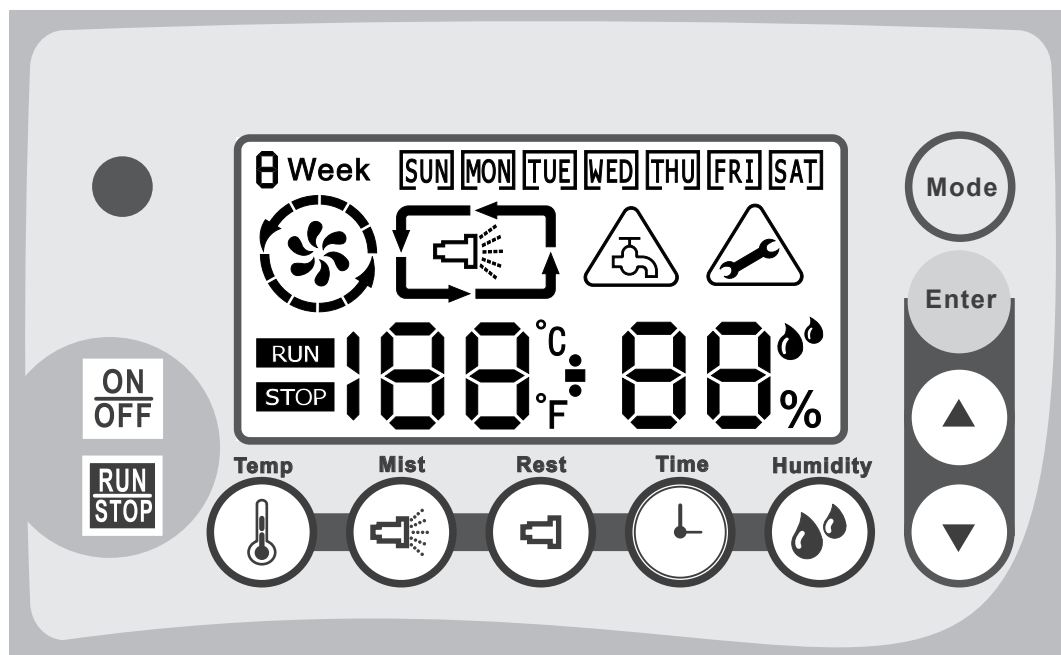
- 3.3.1 The water supply hose must be at least 3/8" size garden hose.
- 3.3.2 Extension cables should not be used to power the unit. If necessary, keep the cable length below 25 feet, and use an adequately rated cord designed for outdoor use.
- 3.3.3 Verify the flow rate for water supply is at least 1 gpm. The water pressure at pump inlet should be at least 40 PSI.
- 3.3.4 Water temperature must not exceed 140 °F, and must be well-filtered. Poor water quality will decrease the service life of the pump and components.
- 3.3.5 Where applicable, install a pressure relief device in the event that excess pressure over 1500 PSI occurs in the misting system.
- 3.3.6 A valve installed at the end of a misting system is recommended. It will help purge the system of air inside the pipes or lines. This can also be useful to flush lines before winter weather to prevent freezing water damage due to expansion.
- 3.3.7 When misting, check all nozzles and ensure none are blocked. If blocked, clean or replace the damaged nozzle.
- 3.3.8 Check that all connections are watertight and not leaking. Leaking connections will decrease the system pressure and affect misting nozzle performance.
- 3.3.8 For winter storage, run the pump, shut off the water supply, and allow the pump to shut off due to the inlet water sensor. Remove water from filter housing and purge any lines or pipes connected to the high pressure side of the misting system.

4 - Operating Guide

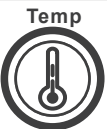
4.1 Control Box Specifications

- 4.1.1 Acceptable power sources include AC 100V-240V, 50Hz or 60 Hz.
- 4.1.2 Ambient Temperature must be between 32-120°F and relative humidity between 5% - 95%.
- 4.1.3 Internal power for controls is DC 12V.
- 4.1.4 3 relays control the functions.
 - RY1 : drives the electric motor.
 - RY2 : drives the inlet solenoid valve.
 - RY3 : drives the by-pass solenoid valve
- 4.1.5 Blue back-light LED screen.
- 4.1.6 Infrared transmission remote control.
- 4.1.7 RTC time control, programmable.
- 4.1.8 6 operating modes available.
- 4.1.9 Both Celsius and Fahrenheit systems are available.
- 4.1.10 Detecting function for humidity.
- 4.1.11 Buzzer/alarm for timer.

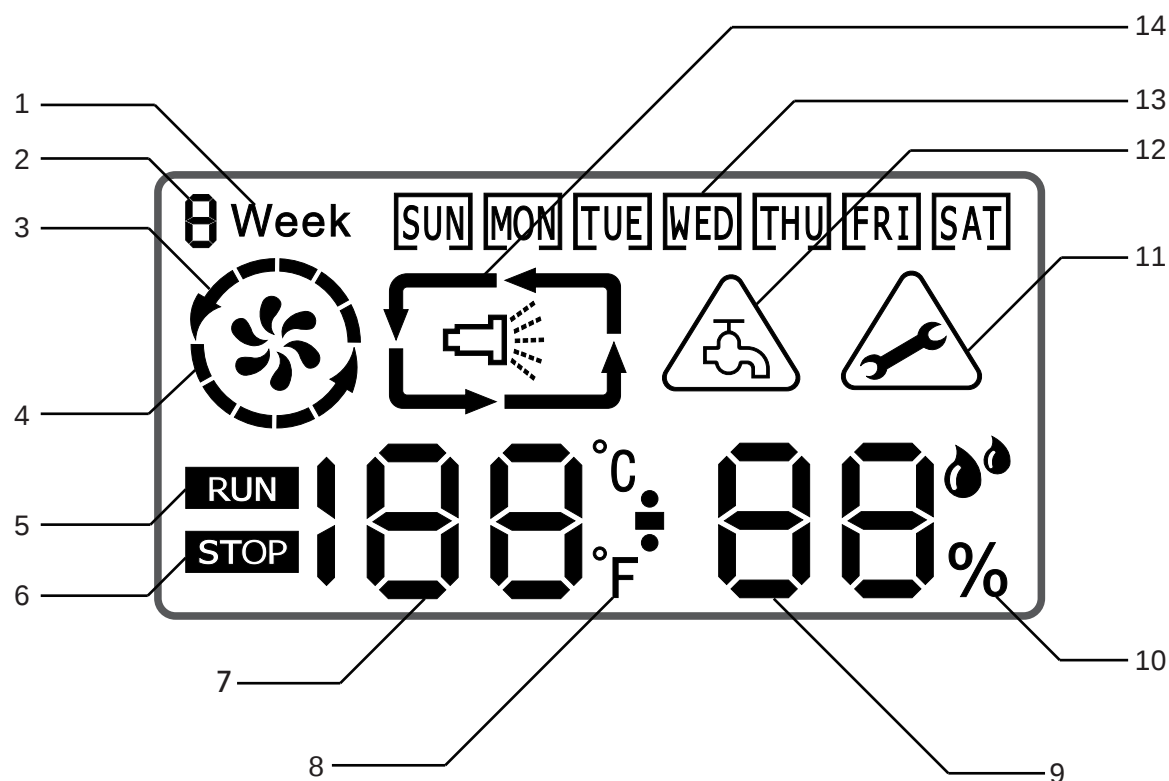
4.2 Control Panel Functions



Guide of Function Keys

1		ON/OFF Control Panel Power	7		Humidity Control Button
2		RUN/STOP Current Program	8		Mode Change Button
3		Temperature Control Button	9		Enter Button
4		Mist ActivateTime Setting Button	10		Up Button
5		Rest Time Setting Button	11		Down Button
6		Time Button			

4.3 Overview of the LCD Monitor



Introduction of the LCD Monitor

1	Week Schedule	8	Display Units (Celsius/Fahrenheit)
2	Displays the Mode Selected	9	Numerical Value (Humidity/Time)
3	Display for 1st Time Interval	10	% (When Humidity Value)
4	Display for 2nd Time Interval	11	Displayed When Maintenance is Required
5	Displays During Running	12	Insufficient Water Supply Symbol
6	Displays When Stopped (Standby)	13	Weekday Selection
7	Numerical Value (Temp./Time)	14	Display indicator for Misting/Rest

4.4 Misting Controller Operation

4.4.1 Remote Controller, Buzzer, Function Keys

- 4.4.1.1  Push the ON/OFF button once to turn on the control screen (the water sensor alarm will sound until water is supplied to the pump inlet). Push the button again to turn off the control screen.
- 4.4.1.2 With the control screen on, pressing the RUN key on the remote control will activate the current program.
- 4.4.1.3 With the pump running, pressing the STOP key on the remote will stop the current program.

4.4.2 Power On and LCD Backlight

- 4.4.2.1 After pressing the ON/OFF button, the back light of the LCD is on for 3 seconds.
- 4.4.2.2 After powering on the control panel, the back light will turn off after 30 seconds if no further operation is executed.

Note: Before turning off the main power switch or LCD control box, it is recommended to stop the unit from running. Abnormal shutdown procedures can result in pump damage over time and should be avoided.

4.4.3 ON/OFF-Key: (not the main external power supply switch)

- 4.4.3.1 When pump is standing by with power on, pressing the ON/OFF button will turn off the LCD screen on the control panel. The control panel is off.
- 4.4.3.2 When the machine is powered off, pressing the ON/OFF button will power on the LCD screen and the control panel is active.
- 4.4.3.3 The ON/OFF button will shut down the pump even if the external power supply switch is on.

4.4.4 RUN/STOP-Key

- 4.4.4.1 With machine standing by, push the RUN/STOP button to activate the current program. The LCD will show a "RUN" indicator.
- 4.4.4.2 While the machine is running, push RUN/STOP to stop the program. LCD shows a "STOP" indicator.

4.4.5 MODE-Key

- 4.4.5.1 When the pump is running, this key does not work.
- 4.4.5.2 When the machine is in the status of STOP, the user can push the MODE key and revolve the mode in 1→2→3→4→5→6 sequence.



- 4.4.6.1 Select a function key to set the mode/function, push UP key and/or DOWN key to adjust the value, then push ENTER key to confirm the selection.



- 4.4.7.1 When the machine is in STOP status, push the key one time to activate or disable temperature monitoring function.

Push the  key to revolve the mode. Example:

Activate Temp Monitoring → Disable Temp Monitoring → Activating Temp monitoring ...

- 4.4.7.2 Temperature monitoring display is shown as follows:

- When users activate the temperature monitoring function, the numerical value shows and the "°C or °F" flashes.
- When users disable the temperature monitoring function, the numerical value still shows, but the "°C or °F" is steady (not flashing).

- 4.4.7.3 With machine in STOP status, push the  key for 3 seconds and LCD will show flashing numerical value for "°C or °F". Adjust the temperature setting by pushing UP or DOWN keys.

- Push  UP-key : 10 → 11 → 12 → → 60
- Push  DOWN-key : 60 → 59 → 58 → → 10

- 4.4.7.4 After selecting the temperature, either push TEMP key or wait for 15 seconds to confirm the setting.

- 4.4.7.5 The temperature monitoring function works as below :

When the ambient temperature reading is less than the set temperature (+/- 2 degrees), the numerical value will flash and the pump will not run until the temperature rises above set value.

- 4.4.7.6 The setting range is between 10 °C (50 °F) ~ 60 °C (140 °F) and default value is 29 °C (84 °F).

- 4.4.7.7 The highest sensible temperature is 65 °C (150 °F).

- 4.4.7.8 The temperature monitoring function applies to all modes.



- 4.4.8.1 When the machine is in STOP status, push the HUMIDITY key to activate or disable humidity monitoring function.

Push the HUMIDITY key to revolve the mode. Example:

Activate Humidity Monitoring → Disable Humidity Monitoring → Activate Humidity Monitoring...

4.4.8.2 Humidity monitoring display is shown as follows:

- When users activate the humidity monitoring function, the numerical value is shown and the “%” indicator flashes.
- When users disable the humidity monitoring function, the “%” indicator will be steady (not flashing).

4.4.8.3 When the machine is in STOP status, push the  key for 3 seconds and the numerical value and the “%” indicator will flash on the LCD.

Adjust the humidity setting by pushing UP or DOWN keys.

- Push  : 30→35→40→.....→95
- Push  : 95→90→85→.....→30

4.4.8.4 After setting the humidity value, either push HUMIDITY key one time or wait for 15 seconds to confirm the setting.

4.4.8.5 The humidity monitoring function works as below :

- The temp monitoring function is prior to humidity monitoring function.
- When the ambient humidity is equal to or lower than the set humidity (+/- 3%), the pump will activate.
- When the ambient humidity is higher than the set humidity value, the numerical value will flash and the pump will stop running until the humidity reading decreases to below the humidity set value.

4.4.8.6 The setting range is between 30% ~ 95%. The default humidity is 70%.

4.4.8.7 The humidity monitoring function applies to all modes.

4.4.9 MIST-Key

4.4.9.1 When the machine is in STOP status, select mode 4 to customize mist interval.

4.4.9.2 Set “Minute” by pushing UP or DOWN keys.

- Push  : 00 -> 01 ...-> 57-> 58-> 59
- Push  : 59 -> 58 ...-> 02-> 01-> 00

4.4.9.3 After setting the “Minute” value, push ENTER for “Second” setting. Set the value pushing UP or DOWN keys

- Push  : 00 -> 01 ...->57->58->59
- Push  : 59 -> 58 ...-> 02-> 01-> 00

Note : If the “ Minute” is set as 0, the setting interval for “Second” is 15 sec.

4.4.9.4 The MIST image  will be visible to indicate a misting status.

4.4.9.5 Push MIST key one time or wait for 15 seconds to confirm and quit the setting.

4.4.9.6 The default value is 【One minute】 and 【Zero second】 .

4.4.10 REST-Key

4.4.10.1 When the machine is in STOP status, select mode 4 to set the rest time.

4.4.10.2 Set "Minute" by pushing UP or DOWN keys.

- Push  UP key : 00 -> 01 ...->57->58->59
- Push  DOWN key : 59 -> 58 ...-> 02-> 01-> 00

4.4.10.3 After setting the "Minute" , push ENTER for "Second" setting.
Set the value pushing UP or DOWN keys

- Push  UP key : 00 -> 01 ...->57->58->59
- Push  DOWN key : 59 -> 58 ...-> 02-> 01-> 00

4.4.10.4 The REST image  will be visible to show non-misting (rest) period.

4.4.10.5 Push REST key one time or wait for 15 seconds to confirm and quit the setting.

4.4.10.6 The default value is 【One minute】 and 【Zero second】 .

4.4.11 TIME-Key - The controller uses a 24:00 hour clock format.

4.4.11.1 At any time, the LCD will show the time when you push the TIME key.

4.4.11.2 When the LCD is showing time, push the TIME key once or wait 15 seconds, the system will go back to show temperature and/or humidity again. When the machine is in STOP status, push TIME key to show the time and then ENTER key to set the time.

- Push the ENTER key and revolve the module in WEEK → HOUR → MINUTE → WEEK... sequence.

4.4.11.3 Push UP key to cycle values, as shown below :

- Week : SUN → MON → TUE → WED → THU → FRI → SAT → SUN (in sequence)...
- Hour : 00 → 01 → 02 → ... → 23 → 00...
- Minute : 00 → 01 → 02 → ... → 59 → 00...

4.4.11.4 Push DOWN key to decrease value progressively, as below :

- Week : SUN → SAT → FRI → THU → WED → TUE → MON → SUN (in sequence)...
- Hour : 00 → 23 → 22 → ... → 01 → 00...
- Minute : 00 → 59 → 58 → ... → 01 → 00...

4.4.11.5 Push TIME key one time or wait for 15 seconds to confirm and quit the setting.

4.4.12 Definition of Misting Modes 1 to 6

- 4.4.12.1 Mode 1 : Misting 15 sec. and rest 20 sec.
- 4.4.12.2 Mode 2 : Misting 25 sec. and rest 30 sec.
- 4.4.12.3 Mode 3 : Misting 40 sec. and rest 40 sec.
- 4.4.12.4 Mode 4 : Programmable, refer to 4.4.9. and 4.4.10.
- 4.4.12.5 Mode 5 : Weekly cycle set by user.
- 4.4.12.6 Mode 6 : Continuous Misting.

4.4.13 MODE 5 - Weekly Cycle Setting

- 4.4.13.1 When the machine is in STOP status, push TIME key for at least 3 seconds to set the weekly cycle.
- 4.4.13.2 Set demand period (total 14 periods) by pushing UP or DOWN keys. The selected "weekday" will flash with brackets around the selected day.
 - The periods revolve in a sequence as shown below
SUN →  →  → MON →  →  → TUE...
 - Whenever selecting a specified period, the system will show RUN and STOP settings alternating back and forth.
- 4.4.13.3 Push ENTER key to start the setting procedure for the specified period.
- 4.4.13.4 Push UP and DOWN keys to adjust "Hour" of run time, and the numerical time value with flash during setting. Press ENTER to confirm.
- 4.4.13.5 Push UP and DOWN keys to adjust "Minute" of run time, and the numerical time value will flash during setting. Press ENTER to confirm.
- 4.4.13.6 Push UP and DOWN keys to adjust "Hour" of stop time, and the numerical time value will flash during setting. Press ENTER to confirm.
- 4.4.13.7 Push UP and DOWN keys to adjust "Minute" of stop time, and the numerical time value will flash during setting. Press ENTER to confirm.
- 4.4.13.8 Save the setting and return to 4.4.13.2. to select another weekday and period.
- 4.4.13.9 There are two periods for every weekday. Period 1  , Period 2 .

4.4.13.10 The setting RUN and STOP data will not be saved, until both periods are set. Any time, when users push TIME key or wait for 15 seconds without setting new value during the setting procedure, system will neglect current setting.

In order to save current settings, the time of weekday RUN and STOP periods must be set. Cycle back to weekday (brackets around weekday flashing) and press TIME key or wait for 15 seconds to save the setting.

- The whole setting procedure is as below :
SUN (whatever day) → RUN/STOP → Period options → HOUR setting → MINUTE setting → SUN

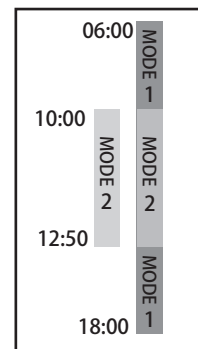
4.4.13.11 When Mode 5 is active, the machine displays a "5" for the mode status.

4.4.13.12 The LCD will show "WEEK X" where "X" stands for the current mode number (0,1,2, 3,4, or 6) within the mode 5.

4.4.13.13 When both Period 1 and Period 2 are selected, Period 1 is prior to Period 2.

4.4.13.14 Attention : If the mode is selected as 0 in a specified period, the machine will not be activated.

Priority of the time periods within a day.



4.4.13.15 The default values the manufacturer has set :

DAY	SUN	MON	TUE	WED	THU	FRI	SAT	Note
Period 1	08:00 ∩ 11:30	08:00 ∩ 11:30	08:00 ∩ 11:30	08:00 ∩ 11:30	08:00 ∩ 11:30	08:00 ∩ 11:30	08:00 ∩ 11:30	Time of the period and mode can be set by user
Mode	1	1	1	1	1	1	1	
Period 2	13:30 ∩ 17:30	13:30 ∩ 17:30	13:30 ∩ 17:30	13:30 ∩ 17:30	13:30 ∩ 17:30	13:30 ∩ 17:30	13:30 ∩ 17:30	
Mode	1	1	1	1	1	1	1	

4.4.14 Insufficient Water Supply Warning

- 4.4.14.1 When water supply is insufficient, the warning icon  will flash and the alarm will sound. The alarm will continue to sound and the pump will stay stopped until water is supplied to the inlet.
- 4.4.14.2 In order to relieve the WARNING, please check and eliminate the insufficient water supply condition. The system will automatically detect the inlet water pressure and the alarm will stop, allowing the machine to operate normally.

4.4.15 Service Mode - Display units and service reset.

- 4.4.15.1 When the machine is standing by, push ,  at the same time for 3 seconds, then the system enters into the service mode.
- 4.4.15.2 When you push the ENTER key, the options of service mode revolve as follows: 1 → 2 → 3 → 1... in sequence.
- 4.4.15.3 During service mode, the system will go back to the normal operating modes if you push MODE or wait 15 seconds.
- 4.4.15.4 When total running time reaches 300 hours, the maintenance icon will illuminate and the alarm will sound. The action will not influence any functionality, but maintenance should be performed at this time.
- 4.4.15.5 To reset the Maintenance Warning Icon, after maintenance, enter into service mode, go to mode 2, push DOWN key 3 seconds to turn off the warning.

Operating Mode

Mode	Description	Setting Procedure
1	Celsius / Fahrenheit	Push TEMP key one time to switch Celsius / Fahrenheit system. After the change, the temperature monitoring units will alter accordingly.
2	Total Running Time for Motor	Push DOWN key 3 seconds, then the existed running time will be eliminated (normally, reset after maintenance).
3	Sum of the Total Running Time of the System	The sum value can't be reset. If the user changes a machine's motor or pump, please check with the manufacturer to reset the total running time sum.

5 - Troubleshooting

Problem	Probable Cause	Solution
No mist comes out of nozzles	• The misting nozzle is blocked.	• Clean the nozzle, If it doesn't work, change the nozzle.
	• Air exists in the system.	• Purge air from system.
	• Air inside the pump.	• Tighten all joints connected to the water inlet. • Check inside pump cabinet for leakage and repair if necessary.
	• Valves worn out or the pump cavity is clogged.	• Have the valves cleaned or replaced.
	• Misting nozzle worn out.	• Change misting nozzle.
The pump fails to pump water	• No water supply.	• Turn on the water faucet.
	• Valves worn out or the pump is clogged.	• Change or clean the valves, then reset the pump.
	• Air inside the pump.	• Tighten all joints connected to the water inlet. • Purge air at the brass outlet fitting. Close valve and retry.
	• The water filter is blocked.	• Clean or replace water filters.
	• The seals or packings inside the pump are worn out.	• Replace the worn out seals or packings.
Unstable output pressure	• The pump's regulator can be worn out or get stuck.	• Dismantle the regulator, clean and/or change related parts if necessary.
	• The pump's valves worn out.	• Clean or change valves.
	• The seals or packings inside the pump are worn out	• Replace the worn out seals or packings.
Abnormal noise or vibration	• Low oil level	• Add or change oil
	• Misting lines or nozzles blocked	• Clean or change nozzles, lines, and/or water pipes.
	• Water supply (including inlet pressure) is abnormal.	• Check water supply line, clean or change it.
Oil or water leaks	• The seals or packings inside the pump are worn out or are damaged.	• Replace the worn out or damaged seals or gaskets.
Motor won't run	• The voltage of the power supply is not stable. • The power wire extends too long, and causes voltage and current drop.	• Apply a constant voltage regulator and/or shorten the extension of the power cable. Try a different power supply.
	• The built-in thermostatic switch (breaker) activates to protect the motor.	• Check the operating pressure is within a proper range. • Add ventilation to reduce heat at the pump location.
	• The settings of the control panel prevent motor operation.	• Refer back to the manual and check all settings are correct.

6 - Maintenance Guide

In order to avoid any possibility of getting electric shock, please power off the machine before doing any maintenance and/or inspection. UNPLUG the power cable.

6.1 Open the discharge valve at the end of the pump outlet, and clean off the unit.

6.2 Remove the water supply hose and high pressure misting hose, keep the unit dry.

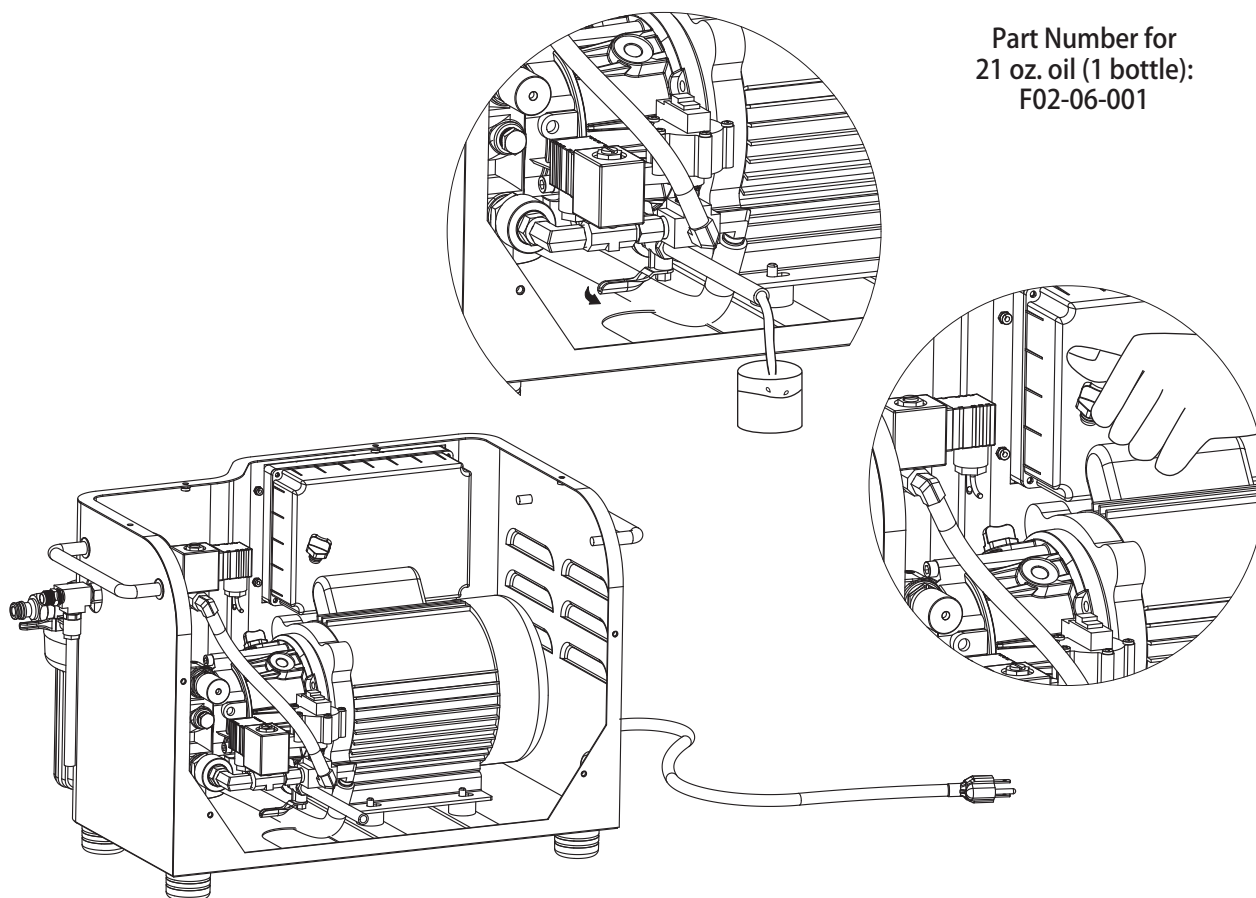
6.3 Check the bottom of the machine to see if there is any leakage of oil from pump body.

6.4 Check the oil inside the pump. If the oil is not visible, refill it. If the quality of oil is not good (oil shows white color, dirty, smells burnt, and/or excessively thick), change it.

6.5 After the first 50 hours operating, empty the oil from the pump and change oil totally. After that, please change oil every 250~300 hours with 150mL (5 Oz.) ISO 68 (or equivalent).

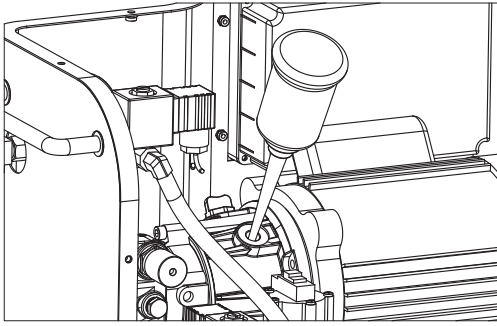
Note: For winter storage, run the pump, shut off the water supply, and allow the pump to shut off due to the inlet water sensor. Remove water from filter housing and purge any lines or pipes connected to the high pressure side of the misting system.

6.6 - Procedure for Oil Change

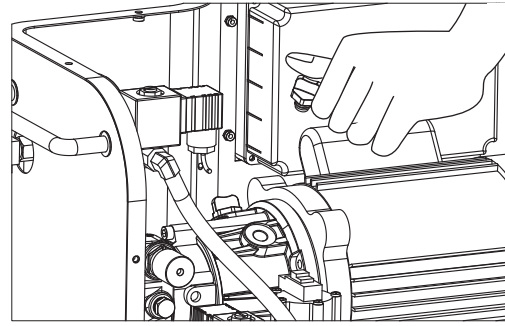


6.6.1 Remove the refill screw on the top of the pump.

Prepare a container to collect used oil before opening the drain valve at the bottom of the pump.



6.6.2 Close the drain valve, then add 150 c.c. oil through the top refill hole using the provided squeeze bottle.

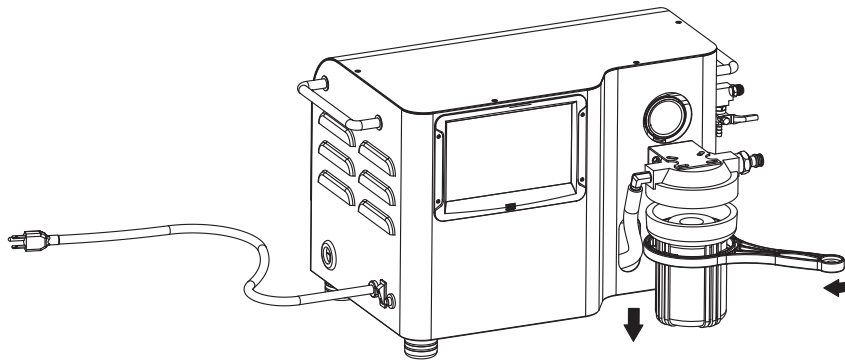


6.6.3 Tighten the top refill screw.

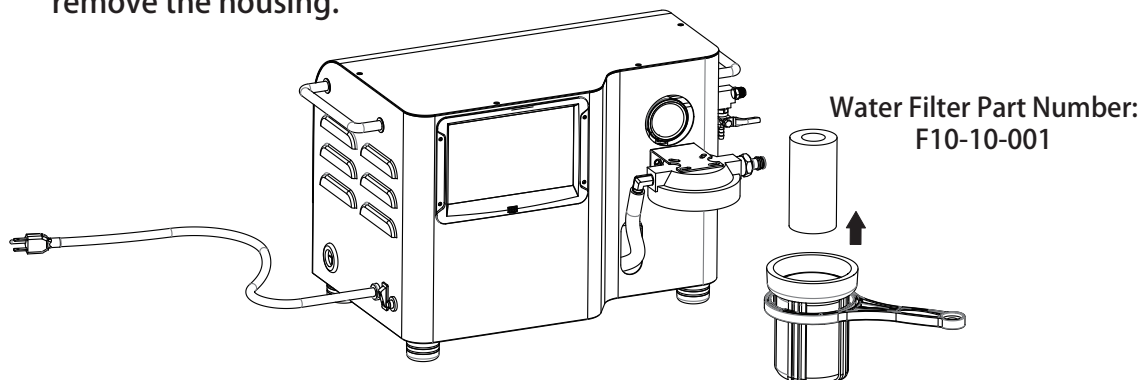
6.6.4 After maintenance, please recheck all bolts, screws and connectors are all tighten and fixed firmly, and check that there is no oil leaking when the pump is running..

6.7 - Changing Water Filter Cartridge

Please check the inlet water filter every 500 running hours or every three months. Change the filter cartridge if the filter get blocked or is too dirty. If the user adds one more filters, the manufacturer recommends to change the first filter cartridge (from water inlet side) every three months and six months for the second one.



6.7.1 Use the special spanner wrench to turn the filter housing counterclockwise, then remove the housing.



6.7.2 Replace the filter cartridge with a new one, then turn the housing clockwise to fix the filter housing back with the spanner.

7 - Periodic Check and Inspection

Items	Period				
	Before operation	50h	100h	200h	300h
Main Pump Unit					
Check All Components Tightened	◆				
Check Water Lines for Leakage	◆			◆	
Check Pump for Oil leakage	◆	◆	◆	◆	◆
Abnormal Sound and Vibration Check	◆			◆	
Frame and Cover Damage Inspection	◆				◆
Hose / pipe					
Check Connectors and Hoses for Damage or leaks	◆				◆
Check and Clean Inlet Water Filter	◆				◆
Check Nozzle Leaking or Blocked	◆		◆		◆
Electric Wire					
Check Power Circuitry for Damage	◆				◆
Check Electric Cord for Damage	◆				◆
Accessories					
Check any external pressure regulators or valves for leakage	◆				◆
High Pressure Pump					
Check Oil Level	◆				
Change		◆ (only for the first time)			◆
Check pressure Relief Valve					◆
Change the Oil Seal					◆
Check the Plunger					◆
Motor					
Check the Isolation on the Motor					◆
* Before doing check, make sure that power has been off and unit is unplugged. * The interval mentioned above does not indicate a period of durability. * The checking list is only for reference, actual change time should be judged by frequency of use. * Some items may require professional service to be performed by a qualified technician.					

8 – Product Warranty

8.1 Warranty Content

- Advanced Misting Systems warrants this product to be free from manufacturing defects in material and workmanship as follows: For a period of one (1) year from the date of shipping (whether or not actual use begins on that date). Advanced Misting Systems will repair or replace defective parts at no charge. This warranty does not include labor or other costs incurred for diagnosing, removing, installing, shipping, servicing or handling of either defective parts or replacement parts. This warranty applies solely to equipment supplied by Advanced Misting Systems. No agent, dealer or distributor is authorized to give any other warranty or to assume any liability on behalf of Advanced Misting Systems.

8.2 Warranty Conditions

- This warranty is extended only to the purchaser of this product and is non-transferable.
- A purchase receipt or other proof of the date of original purchase will be required before warranty service is rendered.
- Installation, use, care and maintenance must be normal and in accordance with the instructions contained in this operating manual.
- Failure to do so shall void this warranty.
- All claims for failure to conform to specifications, or of defects in material or workmanship under this warranty must be made promptly after discovery and, in any event, must be received by Advanced Misting Systems not more than one year after the original purchase date.
- Advanced Misting Systems reserves the right to inspect the machine prior to any decision involving a warranty claim.

8.3 Manufacturer's Obligation under the warranty shall not apply to:

- Any machine, which has been damaged by negligence, misuse, abuse, neglect and/or improper adjustment, accident, acts of natural disasters and war, whether declared or undeclared, improper application, or any other contingency beyond the control of Advanced Misting Systems.
- Cosmetic damage and/or damage in transit. Shipping damage must be reported to the carrier immediately.
- Failures caused by incompatible products not supplied by Advanced Misting Systems.
- Failures, which result from faulty installation, set-up, adjustment, improper operation, power line surge, improper voltage supply, or damage from lighting.
- Any machine that has been repaired or altered without authorization from Advanced Misting Systems, or in a manner inconsistent with such authorization.
- Any unit that has not been maintained in accordance with the operating manual.

Except for commentaries or academic purposes, neither full manual nor partial segment of the document are allowed to be quoted and/or duplicated without written permission from Advanced Misting Systems .

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Advanced Misting Systems reserves the right to make changes to products, specifications, and this manual without notice.