

**mist n** **GO**



**Misting Pump  
User Manual**

## Table of Contents

1. General Information .....	1
2. Specifications .....	2
2.1 Dimensions .....	3
2.2 Components.....	3
3. Quick set-up .....	4
3.1 Installation .....	4
3.2 Misting System Example. ....	6
4. Operation Instructions .....	7
4.1 Dangers .....	7
4.2 Warnings .....	7
4.3 Cautions .....	8
5. Operation.....	10
5.1 LCD Control Panel .....	10
5.2 Operation Modes .....	11
5.3 Remote .....	12
5.4 Storage.....	12
6. Troubleshooting.....	14
7. Maintenance.....	15
7.1 Periodic Check and Inspection .....	15
7.2 Procedure for Oil Change.....	16
7.3 Oil Changes and Checks .....	21
8. Warranty.....	23

## 1. General Information

This manual provides you with the information for proper use and maintenance of the misting pump. Please carefully follow the instructions provided. The manufacturer/supplier is not liable for any damage to people, goods, or to the system itself if the equipment is used differently from as described in this manual.

Information provided in this manual does not replace any safety regulations. Therefore, the user should comply with the regulations in the area where the pump is installed, as well as following common sense rules.

Do not use the product if you notice any defect or wear that may compromise a safe environment. The user or the maintenance technician must report any manufacturer defects to the supplier. The machine is meant for specific misting application only. Do not modify and/or use it for applications other than the ones specified.

Instructions, drawings, tables, and all contents of this document are confidential technical documentation and are the exclusive property of the manufacturer. No information may be released to third parties without written permission by **HydroMist USA**. Descriptions and images in this document are meant for reference and as practical examples. They may be modified at any time and without prior notice. If further technical and functional details are needed, please contact the manufacturer/supplier.

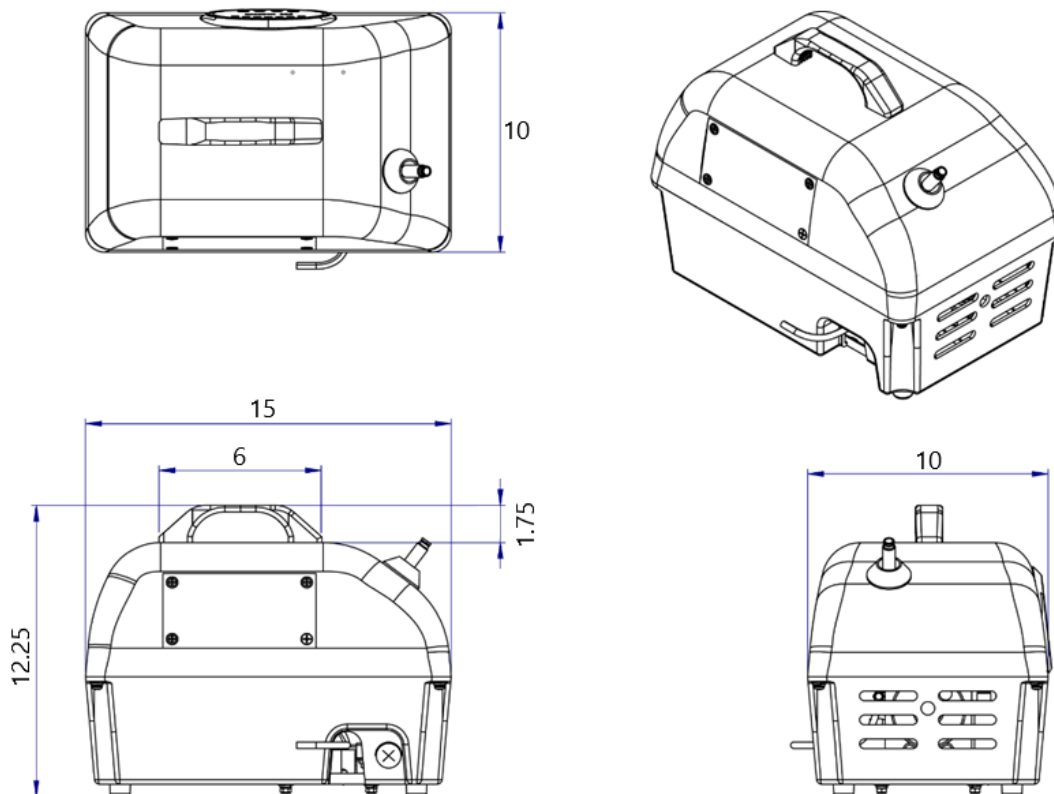
### **IMPORTANT**

- n Please read the information contained in this booklet. It will provide information and instructions required for safe installation, use, and maintenance.
- n The manufacturer is not liable for any damage to people, goods, or to the machine itself if the pump is used differently from what is described in this manual.
- n Keep this booklet in a safe place to make it available for future reference.
- n Upon delivery, check for any possible damages that may have resulted from shipping and handling.

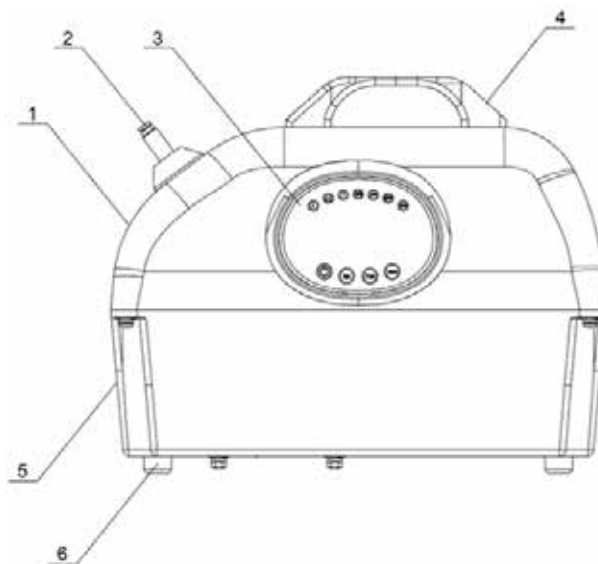
## 2. Specifications

Mist-n-Go Pump Specifications	
Model	Mist-n-Go
Part Number	F10-04-009
Operating Pressure	Max: 850 psi
Flow rate	0.132 GPM @ 1450 RPM
Motor	12 Volt DC Brushless – 150 Watts Continuous Duty
Transformer	Input: 120 Volts AC, 2.0A Max, 60Hz Output: 12Volts DC --- 12A
Dimensions	L×W×H: 15" 10" 12.25 in.
Weight	20 lbs.

## 2.1 Dimensions (In Inches)



## 2.2 Components

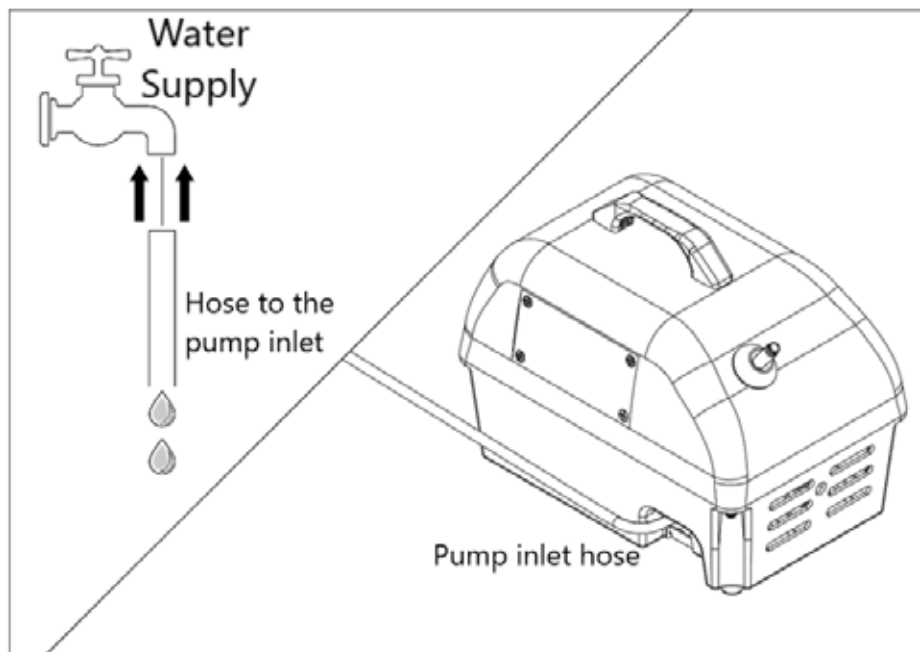


Description of parts			
1	Top cover	4	Carry Handle
2	High Pressure Outlet	5	Bottom cover
3	LCD Control Panel	6	Rubber feet

### 3. Quick set-up

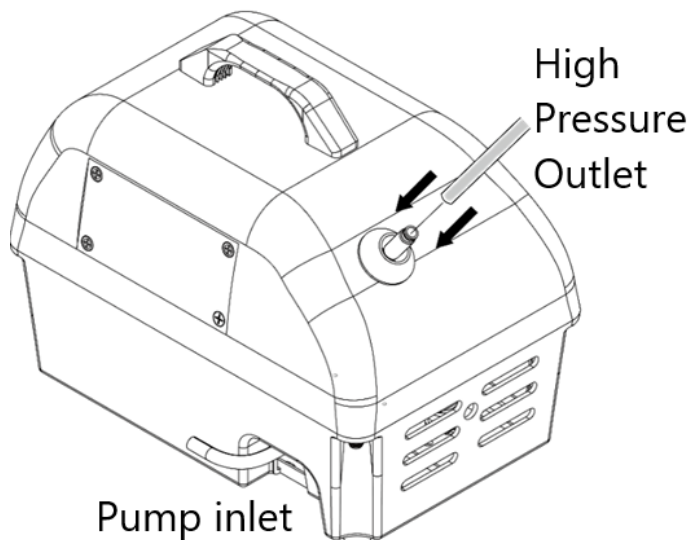
#### 3.1 Installation

- 3.1.1 Open the box and unpack any shipping materials.
  - 3.1.1.1 Remove the pump assembly from the box and verify all accessories present.
  - 3.1.1.2 Inspect the machine for any physical damage.
  - 3.1.1.3 Inspect the pump for any signs of oil leakage. The pump ships from the factory with oil, but if there is an unexpected leak, the pump will need to be filled with oil before operation. (See section 7.2)
- 3.1.2 Connect to a water supply line. Residential pressure is sufficient to supply the pump.



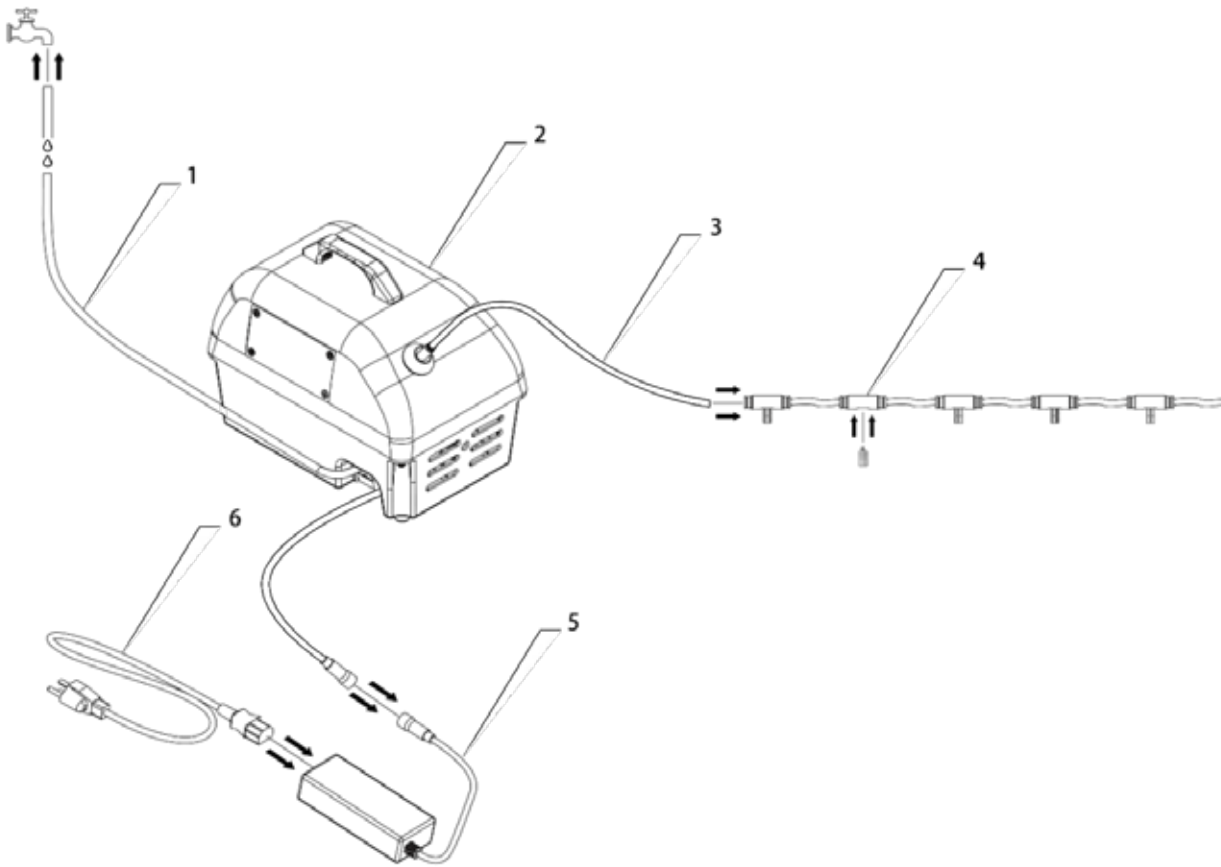
3.1.3 Connect the high-pressure outlet

- 3.1.3.1 Connect the nylon hose of your misting system to the slip lock connector on the high-pressure pump outlet.



- 3.1.3.2 Plug in the power supply and wait for the LCD control panel screen to power up.
- 3.1.3.3 Start using your misting system by selecting your desired misting mode on the LCD control panel.

### 3.2 A Basic Misting System Example.



Parts of a Basic Misting System	
1	Water supply into misting pump
2	Misting pump assembly
3	1/4" High pressure nylon hose, connected to pump outlet
4	In-line nozzle fitting w/ slip lock connectors
5	Power transformer
6	Power cord



## 4. Operation Instructions

### 4.1 Dangers

 **DANGER**

**THE FOLLOWING MUST BE OBSERVED IN ORDER TO PREVENT SERIOUS INJURY OR DEATH.**

- 4.1.1 Do NOT use on rainy days, in wet areas, or near open bodies of water.
- 4.1.2 Only trained personnel may operate this machine. Children and adults who are not well-trained should not operate the machine.
- 4.1.3 The power source must be equipped with overload circuit breaker protection to prevent injury from electrocution, fire, or other unforeseen circumstances.
- 4.1.4 Do NOT move the machine during operation.
- 4.1.5 Mount the machine on a cement surface or another solid, flat surface that provides a firm, level support. Keep the machine and its surroundings dry.
- 4.1.6 Do NOT operate the machine before reading this operating manual carefully.

### 4.2 Warnings

 **WARNING**

- 4.2.1 While the machine is in operation, do not open the cover or touch the motor or pump.
- 4.2.2 Before running the machine, check that the electrical cords are in good condition.

### 4.3 Cautions



- 4.3.1 Do not operate the machine in temperatures below freezing (0°C/32°F).
- 4.3.2 Before use, check for oil inside the pump. If there has been any leakage, fill the oil.
- 4.3.3 Only use a power source with correct electrical voltage (V), frequency (Hz) and current rating according to the machine specifications.
- 4.3.4 Do not set up the operating pressure of the pump over 1000 psi.
- 4.3.5 Do not run the machine when there is inadequate water flow to the inlet port. Insufficient water supply will damage the components inside the pump and shorten the life of the machine.
- 4.3.6 The water supply hose must be at least 5/16" in diameter.
- 4.3.7 Do NOT use a power cable longer than 30 ft. All extension cables must be rated for the required voltage and amperage, and be outdoor rated with a grounding prong.
- 4.3.8 The water pressure at the inlet port should be at least 30 psi for continuous operation.
- 4.3.9 Water temperature must not exceed 50°C/120°F and must be well-filtered.
- 4.3.10 The inlet water must be filtered. Sediment and contamination will clog the pump internals as well as the misting nozzles. It is recommended to use a water treatment or conditioning filter to reduce and prevent the formation of solids in areas with hard water or high mineral concentrations.
- 4.3.11 Before use, check the pump oil for deterioration. Check that inlet fittings and high-pressure fittings are FIRMLY attached and fully seated.

- 4.3.12 The number of nozzles for the best misting effect will vary depending on the pump used. If a lower number of nozzles than recommended is used, the system will be over pressurized, if too many nozzles are used, the pressure will drop and the atomization effect will be poor. Please refer to catalog specifications for details.
- 4.3.13 A valve installed in the end of misting system is recommended. It will help to easily purge air from the system, especially in extensively long installations, or with configurations where air is easily trapped in the misting lines.
- 4.3.14 When misting, check all nozzles and ensure none are blocked. If blocked, clean or change the nozzle.
- 4.3.15 When misting, check that all connectors are without leaks. If there is leak, reinstall the connector or change it.
- 4.3.16 For storage during winter months, or where the pump will not be used for an extended period of time, discharge the system pressure and drain any standing water from the misting system.

## 5. Operation

### 5.1 LCD Control Panel



NO.	Description	
①	POWER	Turn the pump on or off
②	TIME	Cycle through the time intervals
③	MAINTAIN	Error indication (not a button)
④	MODE 1 (0/0)	Continuous misting mode
⑤	MODE 2 (3/10)	Interval Misting: 3 sec. / Stop: 10 sec.
⑥	MODE 3 (10/10)	Interval Misting: 10 sec. / Stop: 10 sec.
⑦	MODE 4 (20/10)	Interval Misting: 20 sec. / Stop: 10 sec.

## 5.2 Operation Modes

### 5.2.1 Continuous Misting:

- | Press ON/OFF button to start operation
- | The machine starts and continues operation until the mode is changed, or powered off.

### 5.2.2 Intermittent Misting:

- | Press the TIME button to cycle through misting modes, the machine will start intermittent misting based on the mode illuminated on the control panel.

### Water Inlet shut-off.

- | When the pump is turned on without a water supply, the pump will run for two minutes and then turn off. The internal current sensor will shut off the pump and the control panel lights will flash.
- | Reset the control panel by pressing the ON/OFF button until the flashing lights turn off.
- | Connect an adequate water inlet supply.
- | After a water supply is connected, press the ON/OFF button again and the pump will resume operation.

### 5.3 Remote



NO.	Description	
①	On	Power on
②	Off	Power off
③	Mpa	<i>Not Used</i>
④	Time	Cycle Through Time Intervals

### 5.4 Storage

- 5.4.1 Please follow the steps below to drain water from the pump.
- a. Disconnect the water supply to the pump.
  - b. Run the pump briefly to expel any water from the internal pump cavities.
  - c. After water stops coming out of the pump outlet, turn the pump off. There may be some intermittent spraying and drainage while the pump purges water from itself.
  - d. Drain misting lines, pipes, and rings of standing water to prevent cracking from freezing.

 **CAUTION**

- When the machine is not in use, please keep it indoors.
- If exposed to rain, stop the machine, and immediately remove the plug to avoid electric shock or leakage.
- Use caution when disassembling the pressure hose, water pipe, nozzles, and filter. There may be pressure (up to 1000 psi) inside and injury can occur.
- Do not use this machine when temperature is below (0°C/32°F). Running the pump with ice in the hoses or pump will cause damage to the pump and can cause an over-pressure situation that may be

## 6. Troubleshooting



Before troubleshooting, disconnect the power source from the machine.

FAULT	CAUSE	REMEDY
No mist comes out of the nozzle	<ul style="list-style-type: none"> <li>• The misting nozzle is blocked.</li> <li>• Air is in the lines.</li> <li>• Air inside the pump.</li> <li>• Misting nozzle is worn out.</li> </ul>	<ul style="list-style-type: none"> <li>• Clean the nozzle. If it doesn't work, change the nozzle.</li> <li>• Purge air from the lines.</li> <li>• Tighten all joints connected to the water inlet. Make sure a steady flow of water supply is present</li> <li>• Change misting nozzle.</li> </ul>
The pump fails to pump water	<ul style="list-style-type: none"> <li>• No water supply.</li> <li>• The pump is clogged.</li> <li>• Air is in the pump.</li> <li>• The water filter is blocked.</li> <li>• The seals or packings inside the pump are worn out.</li> </ul>	<ul style="list-style-type: none"> <li>• Turn on the water faucet.</li> <li>• Purge air from the pump. Turn the pump on/off several times without connection to high-pressure misting system.</li> <li>• Make sure a steady flow of water supply is present.</li> <li>• Clean or replace water filters.</li> <li>• Replace the worn-out seals or packings.</li> </ul>
Abnormal noise or vibration	<ul style="list-style-type: none"> <li>• The pump oil is burned or worn.</li> <li>• Nylon hose and nozzle circuit is blocked.</li> </ul>	<ul style="list-style-type: none"> <li>• Add or change oil.</li> <li>• Clean or change nozzle and/or lines.</li> </ul>
Oil or water leaks	<ul style="list-style-type: none"> <li>• There is a clamp or fitting that is loose or faulty.</li> </ul>	<ul style="list-style-type: none"> <li>• Check the hose clamps, oil filler plug, oil drain plug, and misting line fittings for proper connection.</li> </ul>
Abnormal control panel operation	<ul style="list-style-type: none"> <li>• <b>Control panel is wet.</b></li> </ul>	<ul style="list-style-type: none"> <li>• <b>The control panel must be completely dry for proper operation. Dry off any moisture and reset the panel by unplugging the power supply for 30 seconds and plugging it back in.</b></li> </ul>
Motor doesn't run	<ul style="list-style-type: none"> <li>• The voltage of the power supply is not stable.</li> <li>• The built-in thermostatic switch activated to protect the motor.</li> </ul>	<ul style="list-style-type: none"> <li>• Disconnect any extension cords and try again.</li> <li>• Run the machine in a well-ventilated space or add airflow to the space.</li> </ul>



## 7. Maintenance

### 7.1 Periodic Check and Inspection

Items	Interval				
	Before Operation	50hr	100hr	200hr	300hr
<b>Main Components</b>					
Check All Fittings are Tight	◆				◆
Check Water Lines for Leakage	◆				◆
Check Pump for Oil Leakage	◆				◆
Inspect Top and Bottom Covers	◆				◆
<b>Hose/Pipe/Rings</b>					
Check Connectors and Hoses for Damage or Loose Fittings	◆			◆	
Check and Clean Inlet Water Filter	◆			◆	
Check Nozzles for Leaks or Blockage	◆	◆	◆	◆	◆
<b>Electrical</b>					
Check Power Supply for Damage	◆			◆	
Check Electric Cord for Damage	◆			◆	
<b>Pump</b>					
Pressure Regulator					◆
Check Oil: Quality and Quantity	◆		◆		◆
Change Oil		◆ (Only for the first time)			◆
Pressure Relief Valve					◆
Oil Seals					◆
Plungers					◆
<b>Motor</b>					
Check the Rubber Motor Mounts					◆

The above maintenance schedule is for operation at normal conditions. Varying environmental conditions may cause excess wear on the pump or misting system components, and your equipment may need to be serviced more frequently.

## 7.2 Procedure for Oil Change

Use ISO 68 oil or equivalent, available from Hydromist:

ISO68 Pump Oil, 21oz. bottle: Part# F02-06-001

### **⚠ DANGER**

Always power off the machine and disconnect power before performing any maintenance or inspection.

–Irregular maintenance and failure to change the oil regularly, will cause damage to the machine parts and/or shorten the service life.

### **⚠ CAUTION**

–When changing the oil, make sure to remove the old oil completely. Too much old oil can affect the quality of the new oil.

–Only change the oil with the pump on a level surface.

–Do not change hot oil. Pump operation increases the oil temperature to a dangerous level and can cause severe burns.

7.2.1 Purge pressure and water from the misting system.

7.2.2 Remove the water supply hose and high-pressure misting hose.

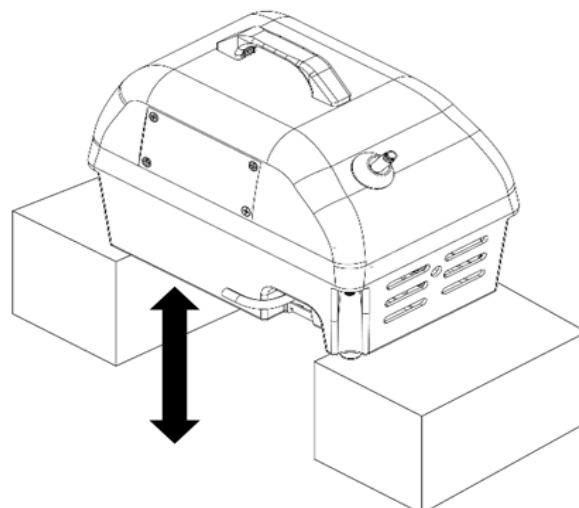
7.2.3 Check the bottom of the machine to see if there is any oil leakage from the pump body. Clean up any oil leaks or spills so that a leak can be detected.

7.2.4 **Oil must be changed after first the 50-hour operation mark, and then be changed every 250-300 hours of running.**

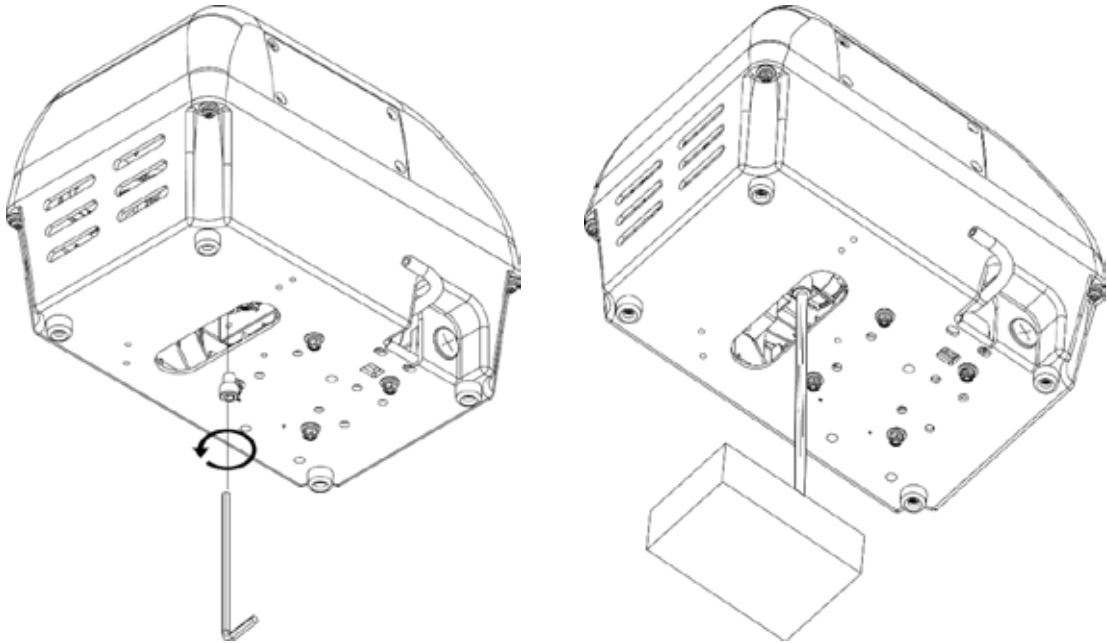
The maximum oil capacity is 2 oz. (60 ml).

7.2.5 Disconnect power first to prevent electric shock.

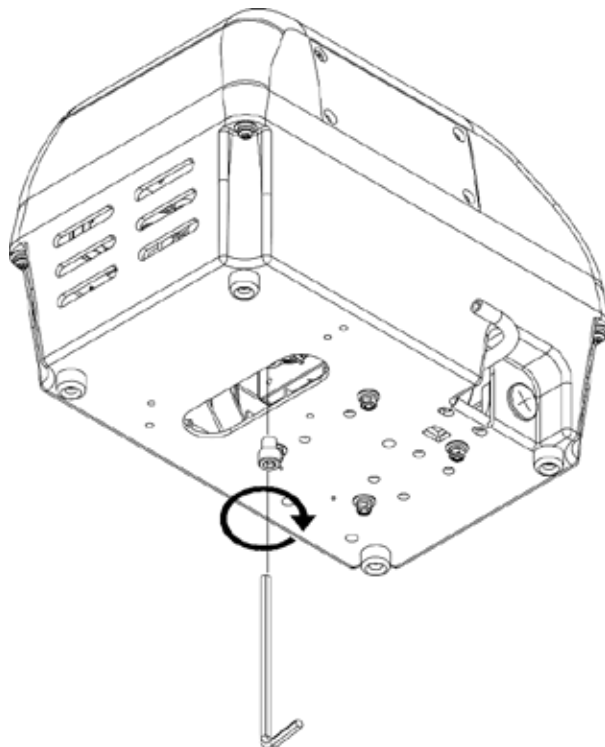
7.2.6 Place wood blocks or similar items on both sides under the pump to raise the body in order to facilitate easy drainage of old oil.



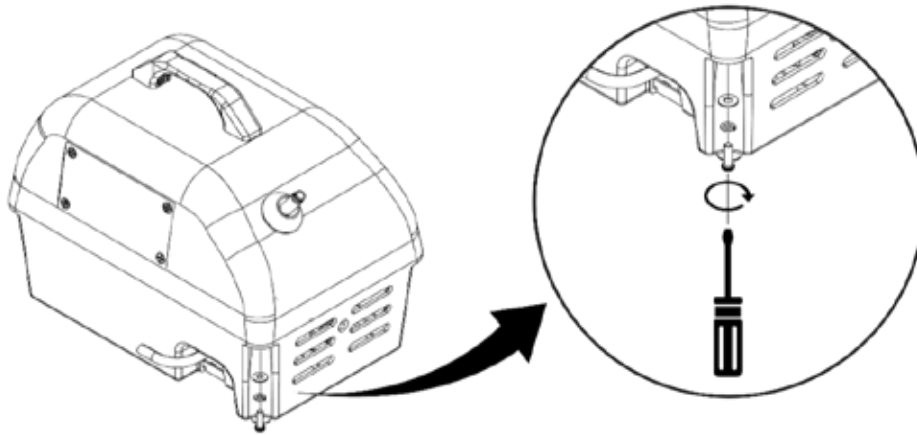
There is an oil drain plug on the bottom side of the pump. Put a catch pan or other small container under the valve and unscrew the bolt to start draining the oil



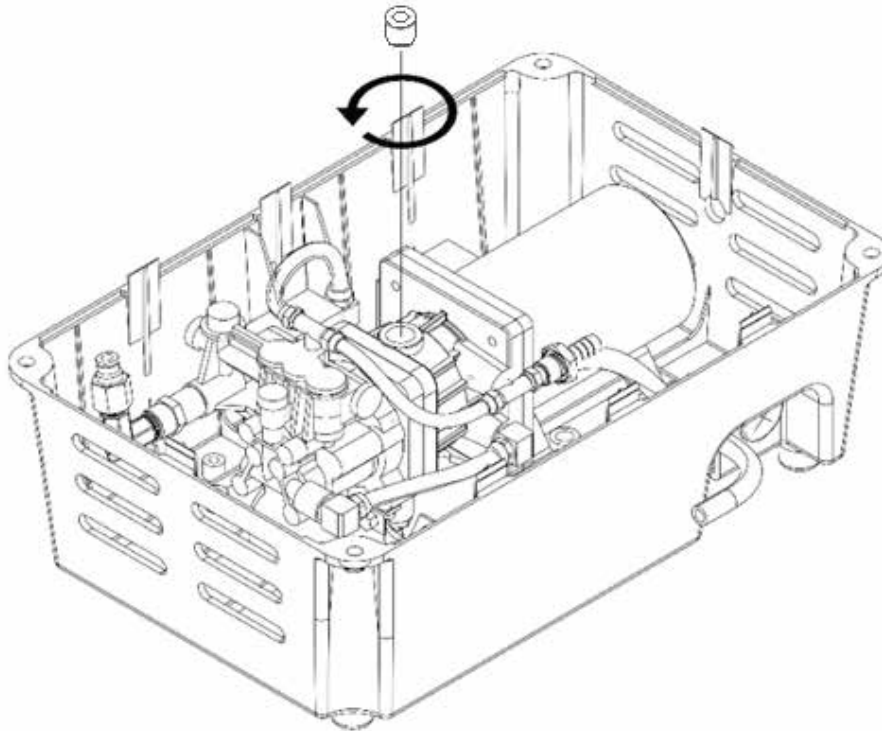
7.2.7 After the oil has drained, reinstall and tighten the drain plug.



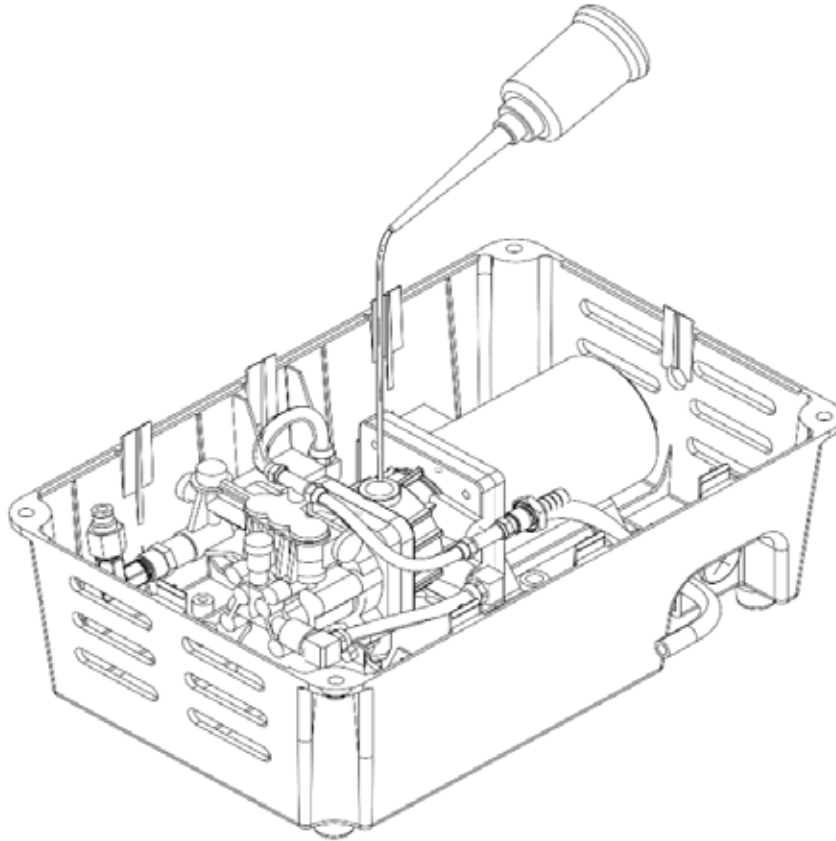
7.2.8 Loosen the screws to remove the top cover. You may need to unplug the LCD control panel cable to fully remove the top cover.



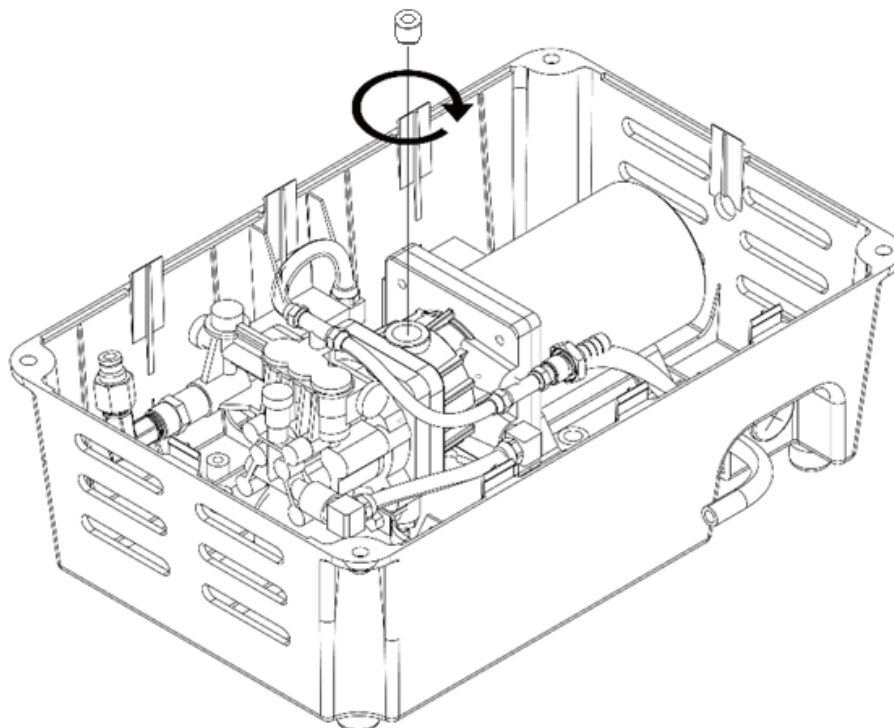
7.2.9 Unscrew the oil fill plug on top of the pump housing.



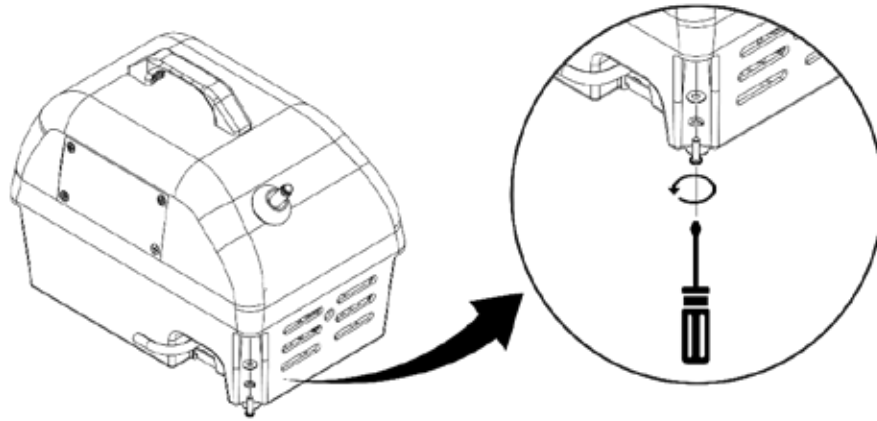
7.2.10 Add 1.5 to 2 oz. (40-60 ml) oil through refill hole.



7.2.11 Tighten the oil fill plug. Wipe up any spilled oil. Visually check the pump and motor to ensure all bolts, screws and connectors are tight and in good condition.



- 7.2.12 Replace the top cover, make sure to reconnect any cables you disconnected upon removal. Tighten the screws to secure the top cover back into place.



- 7.2.13 **RECYCLE YOUR USED OIL.** In many places, it is a crime to dump used oil into the environment, down the drain, or into the trash (even in a sealed container). Save your used oil until you can locate a recycling center and/or bring it to an approved drop-off site where used oil is accepted. Many auto parts retail stores have drop-off sites where used oil can be disposed of safely and properly for free.

**⚠ CAUTION**

- Make sure the oil drain plug and oil fill plug is not leaking after an oil change, and make sure the oil fill plug is securely fastened onto the pump. Make sure the cover screws are securely tightened with the original flat washers and lock washers before carrying the pump by the handle.

### 7.3 Oil Changes and Checks

Question	Reasoning	Actions
<p>What are the guidelines for oil changes?</p>	<ul style="list-style-type: none"> <li>– Use an hourly schedule to maintain oil changes. Overdue or expired changes will cause component damage due to lack of lubrication.</li> </ul>	<ul style="list-style-type: none"> <li>– Change oil regularly (see Section 7.1).</li> </ul>
	<ol style="list-style-type: none"> <li>1. Using improper or inferior quality oil (e.g., recycled oil) does not achieve proper lubricant function and component protection.</li> <li>2. If used oil is not drained completely, the impurities left by the used oil will be dissolved in new oil. This will accelerate the oil deterioration.</li> <li>3. Do not mix different oil types because their chemical composition and additives are different. Mixed oil could cause deterioration.</li> <li>4. <b>Avoid using PAG or ester oils.</b></li> </ol>	<ul style="list-style-type: none"> <li>– 1.1 Please choose good quality gear oil: <b>ISO VG 68 or VG 100</b></li> <li>– Please avoid using inferior oils such as dirty or used oil.</li> <li>– 2.1 Whenever changing oil, please ensure the used oil is drained as much as possible to preserve the quality of new oil.</li> <li>– 3.1 For replacing oil with different oil type, the used oil needs to be drained completely and then the oil reservoir flushed with the new oil before refilling it.</li> <li>– 4.1 Avoid using PAG or ester oil.</li> </ul>

Question	Reasoning	Actions
<p>What are the guidelines for oil changes?</p>	<ol style="list-style-type: none"> <li>1. The highest and the lowest operating temperatures will directly affect the viscosity and lubricity of oil.</li> <li>2. In harsh work environments (e.g., excess heat, air pollutants, direct exposure to sunlight or rain, dust, high humidity, bad air quality), the selection of oil and time between oil changes will directly affect the longevity of the machine.</li> </ol>	<ul style="list-style-type: none"> <li>– 1.1 Please select an oil with adequate viscosity for your operating environment.</li> <li>– 2.1 The oil change interval is based on regular operation. The operator should consider the operating conditions in determining intervals and should shorten the interval depending on the observed condition of the oil (smell, color, viscosity, composition).</li> </ul>
	<ol style="list-style-type: none"> <li>1. If the operator uses the machine under constant overpressure, it will lead to the rapid loss of oil lubricity.</li> <li>2. If the machine is left unused for a long time or only used rarely the oil will deteriorate by oxidation or cause internal component degradation (with possible internal rusting).</li> </ol>	<ul style="list-style-type: none"> <li>– 1.1 If consistently operating in an overpressure condition, then the oil change interval should be shortened.</li> </ul> <p>The performance of machine is limited. Operation in overpressure conditions will lead to component damage and reduce the life span. Follow the configuration recommendations to increase pump lifetime.</p> <ul style="list-style-type: none"> <li>– 2.1 Change the oil before use if the machine remains unused for long periods of time (more than one year without operation).</li> <li>– 2.2 If the machine needs to be run after a long period without use, check the condition of the oil first.</li> <li>– 2.3 If the components are visibly rusted, the pump may need to be replaced. Run the pump briefly every 6 months to lubricate all internal components.</li> </ul>



## 8. Warranty

### HYDROMIST ONE (1) YEAR LIMITED WARRANTY

*All Hydromist products are warrantied for a period of one (1) year for defects in workmanship and materials under normal use and service. This warranty is extended solely to the original purchaser.*

**In General:** If a Hydromist product fails because of defect in material or workmanship under normal use and maintenance within one year from date of purchase, we will, at our option and after inspection, repair or replace the defective product.

**About your Warranty:** Hydromist products, like all mechanical devices, need periodic maintenance and service to perform correctly. Normal use and service means not to operate in excess of recommended maximum speeds, pressures, temperatures or using fluids not recommended or compatible with component materials.

This warranty does not apply to any component which has been repaired or altered to affect the performance, or reliability of the product. Similarly, the warranty is void if the manufacture date or the serial number has been removed or if the equipment has been altered or modified.

Hydromist does not warranty components due to normal wear including nozzles, pumps, motors, and seals. Hydromist does not warranty components due to misuse, abuse, neglect or improper maintenance, shipping, handling, warehousing or improper installation. This warranty excludes wear items such as water filters, spray nozzles, or pumps that have been run without water supplied or oil filled to specified capacities; damage or malfunctions resulting from accidents, abuse, modifications, alterations, or improper servicing or freezing or chemical deteriorations. This warranty excludes failures due to acts of God and other force majeure events beyond the manufacturer's control.

This warranty does not cover normal maintenance such as oil changes, water filters, adjustments, or cleaning, etc. This warranty does not cover damage from lack of maintenance (lack of oil or water filter changes) freezing, and obstruction (due to scale, lime, dirt, chemicals, etc.)

Hydromist is not responsible for the removal and shipping of the system to Hydromist or a service provider, the reinstallation of the product upon its return to the customer, or any incidental or consequential damages resulting from the defect, removal, reinstallation, or shipment of the product.

*Continued on next page...*

**Claims:** All warranty claims must be submitted to Hydromist prior to the expiration of the warranty period. Hydromist will repair or replace any part of the fan product that is defective in material or workmanship. In order to initiate this warranty, a copy of original purchase invoice must be provided. Transportation charges on the product submitted for warranty must be borne by the purchaser. For warranty service, call Hydromist for a Return Materials Authorization (RMA) number. Products shipped collect or without an RMA number will not be accepted.

If Hydromist determines that the problem with the product is not due to defects in workmanship or materials, the customer will be responsible for the cost of any repairs and any freight expense to return the product to the customer.

If the product is covered by this manufacturer's warranty, then Hydromist will pay the freight to send the product back to the customer within the 48 continental United States ONLY.

**No Other Warranties and Liability Limitation:** This limited Warranty and Policy represents Hydromist's sole and exclusive warranty obligation with respect to Hydromist products. Hydromist's liability to a customer or any other person shall not exceed the purchase price of the Hydromist product. Hydromist disclaims all other expressed and implied Warranties including the implied Warranties of fitness for a particular purpose and merchantability.

*There is no other express warranty. Any and all implied warranties are excluded. Liability for incidental or consequential damages are excluded to the extent exclusion is permitted by law. This warranty gives you specific legal rights and you may also have other rights which vary from state to state and country to country.*

