



PULLEY DRIVEN 1000 PSI MISTING PUMP MANUAL

FOR MODELS

50099-HDE-LP, 50100-HDE-LP, 50101-HDE-LP, 50150-HDE-LP, 50151-HDE-LP, 50200-HDE-LP, 50201-HDE-LP

1-833-FOR-MIST

AEROMIST.COM

PULLEY DRIVEN MISTING PUMP SPECIFICATIONS



DIMENSIONS

WEIGHT

24"L x 17"W x 13"H

Up to 110 lbs.

FEATURES

- GP PUMP
- TEFC MOTOR
- 3/8" INLET SOLENOID VALVE
- LIQUID FILLED PRESSURE GAUGE
- POWDER COAT FINISH
- LOW PRESSURE SWITCH
- 6 FT POWER CORD
- INTERNALLY FAN COOLED
- RUBBER FEET
- SCALE X FILTER & 5 MICRON
- DRAIN VALVE

TECHNICAL SPECS

MAX DISCHARGE PRESSURE	1000 PSI
MOTOR OVERLOAD	AUTOMATIC
INLET PSI RANGE	30-60 PSI
MAX LIQUID TEMPERATURE	140° F
PRESSURE GAUGE	0-2000 PSI
SWITCH	PANEL SWITCH
OIL CAPACITY	14 OZ

Model	Flow GPM	Volts Input	Motor (HP)	Pump RPM	Motor Amps	Nozzle Cap. (.012)	MSRP
50099-HDE-LP	0.5	120-1	1.0	450	10.8	18	\$2,799
50100-HDE-LP	1.0	120-1	1.0	518	10.8	36	\$2,899
50101-HDE-LP	1.0	230-1	1.0	518	6.0	36	\$3,099
50150-HDE-LP	1.5	120-1	1.5	736	14.0	54	\$2,999
50151-HDE-LP	1.5	230-1	1.5	736	7.0	54	\$2,999
50200-HDE-LP	2.0	120-1	1.5	940	14.0	72	\$3,099
50201-HDE-LP	2.0	230-1	1.5	940	7.0	72	\$3,099



PUMP OVERVIEW





GENERAL SAFETY PRECAUTIONS

AWARNING CAN cause DEATH, SEVERE INJURY or substantial property damage.

<u>A</u>CAUTION CAN cause MINOR INJURY or property damage.

GENERAL SAFETY PRECAUTIONS

Consequently, it is essential to comply with the instructions in this manual as well as local and national rules and safety regulations.

AWARNING HAZARDOUS VOLTAGE. Can cause serious injury or death. Disconnect power before servicing pump. Pump must be connected to a properly grounded circuit. Do not operate pump in wet conditions.

MOVING PARTS. Pump may start automatically. Disconnect power, before servicing. Lockout/Tag out misting pump.

HOT SURFACES. Can cause serious injury. Do not touch. Allow to cool before servicing.

- **HIGH PRESSURE WATER.** Bypassing, modifying or removing safety/relief regulator valves can cause serious injury or death. Do not bypass, modify or remove safety/relief valves. If a leak should occur shut unit off before attempting to tighten any fittings or tube repairs. Do not change any pressure settings above maximum rating. Maximum pressure is 1000 PSI / 70 Bar
- **CAUTION RISK OF LEAKING or BURSTING.** Use only suitable tubing and fittings acceptable for pressure of not less than the maximum allowable working pressure of the pump. Remove water from lines and filter bowls during winter months to prevent freezing damage to pump or tubing.

<u>A</u>CAUTION Install pump in a suitable place to prevent property damage in the event a leak should occur.

AWARNING Electrical installation and service should be performed by a qualified electrician who is familiar with all applicable local, state and federal laws and regulations.

GENERAL. The motor rating, as shown on the motor nameplate, and the power supply must have compatible voltage, phase and hertz characteristics.

WIRE SIZE. The electrical wiring between the power supply and electric motor varies according to motor horsepower and other factors. Install adequately sized power leads to protect against exces-sive voltage drop during start-up. Refer to the National Electric Code (NEC) for information on se-lecting the proper wire size and securing electrical connections. If you connect additional electrical equipment to the same circuit, consider the total electrical load when selecting the proper wire size. **DO NOT UNDERSIZE WIRING. DO NOT USE EXTENSION CORDS.**



OPERATION

The Aeromist 1000 PSI Pump takes ordinary city water pressure, which is normally about 50-70 PSI, and "boosts" it up to 1000 PSI. The higher water pressure created by the pump enhances mist cooling and heat absorption in two ways. First, it produces a higher flow of water through the nozzle. More water being expelled from the nozzle means more cooling. Second, it creates a smaller finer mist droplet that allows the droplet to evaporate more quickly. Better evaporation means better cooling.

There are many applications for the 1000 PSI Pump. Applications include patio cooling for homes and restaurants, greenhouses, humidification, dust control, odor control and many more.

Caution, Warning and Safety Instructions:

- 1. **Warning:** Before plugging in the unit for the first time, read the following section carefully. To reduce the risk of electric shock, plug in supplied grounded cord into a properly grounded receptacle. When servicing this unit, unplug power cord before attempting any service or repair.
- 2. Outdoor use ONLY! Not for indoor use.
- 3. Install pump in a suitable place to prevent property damage, in the event that a leak should occur.
- 4. Turn water off, and disconnect power to the unit when not in use for extended periods of time.
- 5. Do not place pump in damp or wet environments.
- 6. Feed system with potable cold water supply only. Do not connect pump to hot water supply.

Do not expose pump to freezing temperatures. When winterizing disconnect pump from power and water supply, and store in a dry safe place. Make sure all water is drained from the system to prevent damage in the event of a freeze.

INSTALLATION

- 1. Install pump above grade level on a pre-formed concrete pad (16" x 16"). This pump is nonsubmersible. Locate pump in a location where flooding and roof runoff does not occur to avoid water damage to the electric motor.
- 2. Verify water feed to pump location is potable cold water supply only.
- Connect cold water feed to pump inlet and connect nylon tubing to pump outlet. <u>Important</u>: Install 50 ft. or more of nylon tubing from the pump to the metal line to prevent line noise and vibration.
- 4. Remove black shipping cap on the pump crankcase and install the red breather cap provided. Unit is pre-filled with oil and ready to operate. Oil should be half full on the sight glass when unit is off. Do not overfill.
- 5. Plug pump into a properly grounded receptacle. Do not use extension cords!
- 6. On new misting systems, flush lines before installing nozzles. The pump will not build pressure until all of the noz-zles are installed.
- 7. Do not exceed 1000 PSI and do NOT run the pump without water.



MAINTENANCE & PARTS

Change oil every 500 hours of operation or once a year. Use approved pump oil (57030) Proper oil level is half full on the sight gauge when the unit is off. Do not overfill. Oil capacity is 14 oz and Scale Ex. Change water filter cartridge annually or as needed. (57011/57011-ES) 5 Micron Cartridge. Winter shutdown:

Unplug pump power cord, shut off water supply, remove filter bowl and drain water. Drain water out of all lines using compressed air to prevent freeze damage.

57251 PRESSURE GAUGE 0-2000 PSI



31000 PANEL SWITCH 20 AMP







30375 SOLENOID VALVE 3/8" 30375-C CORD with DIN CONNECTOR





66400K LOW WATER PRESSURE CUT-OUT SWITCH KIT

57030 GP PUMP OIL 21 oz.



30215-CAT THERMAL PROTEC-TOR





54001 Drain Valve Kit



PUMP PARTS

GENERAL PUMP A member of the Interpump Group

FEATURES

- Flex coupling and bell housing available for direct drive
- · Oversized bearings for long life
- · New generation seal system for longer life
- · Forged brass manifold

TX Series "63"

Triplex Plunger Pump, Solid Shaft



SPECIFICATIONS						
Pump Model	TX1810S17	TX1812S17	TX1512S17	TX1506S34	TX1508S34	TX1510S34
Maximum Volume	3.2 GPM	3.8 GPM	2.6 GPM	2.6 GPM	3.0 GPM	4.0 GPM
Maximum Discharge Pressure	2500) PSI		3000) PSI	
Horsepower	4.2 EBHP	5.2 EBHP	5.3 EBHP	5.3 EBHP	6.2 EBHP	8.2 EBHP
Maximum Pump Speed		1750 RPM			3400 RPM	
Maximum Inlet Pressure			125	PSI		
Minimum Inlet Pressure	3 Ft	. Water / 2.6 in.	Hg.		Flooded	
Plunger Bore (in / mm)	.709 in /	/ 18 mm		.591 in /	/ 15 mm	
Plunger Stroke (in / mm)	.394 in / 10 mm	.472 in	/ 12 mm	.256 in./6.5 mm	.315 in / 8 mm	.394 in / 10mm
Oil Capacity			14.	0 oz		
Maximum Fluid Temperature			16	5°F		
Inlet Port Thread			1/2 - 14	BSPP-F		
Discharge Port Thread			3/8 - 19	BSPP-F		
Shaft Diameter			.945 in	/ 24 mm		
Weight	0		19	lbs		
Dimensions	0		8.4 x 8.3	3 x 4.8 in		2

PUMP PARTS



PARTS LIST

ITEM	PART NO. DESCRIPTION	QTY.	ITEM	PART NO. DESCRIPTIO	N KIT NO.	QTY.	ITEM	PART NO.	DESCRIPTION	KIT NO.	QTY.
1.	63120041 Manifold, 15 mm	1		63020865 Crankshaft, 8	mm	1	36.	90164100	Oil Seal		1
	63120341 Manifold, 18 mm	1	20.	63021265 Crankshaft, 1	0 mm	1	37.	50200074	Rail		2
2.	99319200 Screw, M8 x 65	8	0	63021665 Crankshaft, 1	2mm	1	38.	96701600	Lockwasher, M8		4
3.	96701400 Lockwasher, M8.4	8	21.	91489200 Key		1	39.	99303700	Screw, M8 x 16		4
4.	90384100 O-ring	6	22.	63050066 Plunger Guid	е	3	40.	63080070	Seal Retn'r, 15mm	162,166	3
5.	36200366 Valve Seat	6	23.	63030022 Connecting F	lod	3		63080170	Seal Retn'r, 18mm	163,167	3
6.	36200176 Valve Plate	6	24.	90392000 O-ring, Cover		1	41.	90360800	O-ring	166,167	3
7.	94737600 Spring	6	25.	63160022 Rear Crankca	ase Cover	1	42.	90260800	Seal, LP,15mm	160,166	3
Β.	36202551 Valve Cage	6	26.	99183700 Screw, M6 x	14	4		90265000	Seal, LP,18mm	161,167	3
9.	90384700 O-ring	6	27.	701013 O-ring		1	43.	63216070	Int. Ring,15mm	164,166	3
10.	98222600 Valve Cap	6	28.	98204100 Plug, 1/4" G		2	-	63216170	Int. Ring,18mm	165,167	3
11.	36711501 Valve Assembly	6	29.	97733500 Connecting F	lod Pin	3	44.	90261200	Packing Assy,15mn	n 160, 166	3
12.	99180700 Screw, M6 x 10	8	30.	96707500 Flinger Wash	er	3		90265400	Packing Assy,18mn	n 161, 167	3
13.	50150074 Bearing Cover	2	31.	660024 Anti-extrusion	Ring	3	45.	98210000	Plug, 3/8" G		1
14.	44211801 Oil Level Indicator	1	32.	701009 O-ring	631	3	46.	98217600	Plug, 1/2" G		1
15.	90409700 O-ring	1	33.	52040009 Ceramic Plur	iger, 15mm	3	47.	96738000	Washer, M17.5		1
16.	91832900 Ball Bearing	2		44040109 Ceramic Plur	ger, 18mm	3	48.	96751400	Washer, M21.5		1
17.	90159500 Oil Seal	3	34.	44211570 Bushing		3	49.	63210051	Oil Level Indicator		1
18.	63010022 Crankcase	1	35.	92221600 Nut, M8		3	50.	90405100	O-ring		1
19.	98210300 Oil Dip Stick	1									

REPAIR KITS

KIT NO.	K123	K124	K159	K160 or K161	K162 or K163	K164 or K165	K166 or K167
ITEM NO's INCLUDED IN KIT	4, 5, 6, 7, 8 (11)	9, 10	17	42, 44	40	43	40, 41, 42, 43, 44
NUMBER OF ASSEMBLIES IN KIT	6	6	3	3	3	3	1
NUMBER OF CYLINDERS KIT WILL SERVICE	3	3	3	3	3	3	1

TORQUE SPECS*

Pos.	Ft/lb	Nm
2	14.7	20
10	95.9	130
12	7.3	10
26	7.3	10
28	14.7	20
35	11.0	15
39	14.7	20
45	29.4	40
46	29.4	40

WARNING: High Pressure Systems require a primary pressure regulating device (i.e. regulator, unloader) and a secondary pressure relief device (i.e. pop-off valve, relief valve). Failure to install such relief devices properly could result in personal injury or damage to pump or property. GP does not assume any liability or responsibility for the operation of the user's high pressure system.



WARNING: This product can expose you to chemicals including lead, which is know to the state of California to cause cancer and birth defects or other reproductive harm. For more information, go

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WARRANTY

Warranty and Statement

Aeromist warrants to its customers that Aeromist products, excluding nozzles, to be free of defects in materials and workmanship for a period of (3) years from the date of purchase to the original purchaser. With customers proof of receipt Aeromist will fix or replace the defective part or parts. Aeromist reserves the right to inspect the defective part or parts prior to replacement. Aeromist will not be responsible for consequential or incidental cost or damage caused by the product failure. Aeromist liability under this warranty is limited solely to the replacement or repair of defective parts.

Neither this warrant nor any implied warranty applies to damage or harm caused by any or all of the following:

- 1. Freight damage
- 2. Damage cause from freezing, fire, natural disaster, improper installation, chemicals, unusual characteristics of water supply.
- 3. Damage caused by parts, accessories, or components not obtained from or approved by Aeromist.
- 4. Damage due to misapplication and/or misuse.
- 5. Normal wear of moving parts or components affected by moving parts

The liability of Aeromist under the foregoing warranty is limited to the repair or replacement at the discretion of Aeromist. The return of the entire pump or other product to Aeromist factory must be within the warranty period, at the sole expense of the purchaser. Upon examination the returned product will be deemed to have been defective in material or workmanship.

Aeromist expressly warrants its pumps and other products as above stated. There are no other express warranties. Any implied warranties including implied warranty of merchantability or of fitness for a particular purpose are limited in duration to three years from the date of purchase by the original purchaser except in states that do not allow time limitations on implied warranties. There is no implied warranty of fitness for a particular purpose or merchantability when this product is put to an industrial, commercial or rental use.

No person including any dealer or representative of Aeromist is authorized to make any representation or war-ranty concerning Aeromist products on behalf of Aeromist or to assume for Aeromist the obligations contained in the warranty. Aeromist reserves the right to install the same upon its existing products or products then in process or manufacture. This warranty gives you specific legal rights, and you may also have other rights, which vary from state to state.

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