

HYDRO SS 700

- ▶ BENCH TOP
- ▶ HANGING SUMP



OPERATOR'S MANUAL



⚠ NOTICE

Read & Understand
Retain for Future Reference

GENERAL SAFETY

1. Read operator's manual carefully and thoroughly. Understand all safety warnings and instructions before attempting operation of the unit.
2. **DO NOT OPERATE THE UNIT DRY (FULL WATER SUPPLY REQUIRED IN THE SUMP).** This would cause permanent damage to the unit's sump pump.
3. Hydro 700 must be properly grounded as a precaution against possible electric shock. Always check for the correct voltage.
4. Always disconnect power before inspecting or servicing machine.
5. Keep cord away from heat, oil, sharp edges and moving parts. Replace damaged cords immediately. Damaged cords increase the risk of electric shock.
6. If use of an extension cord is necessary, use a heavy, gauge 3 wire extension cord with a molded three-prong plug (See installation).
7. Keep hands and all objects from entering the path of the blade.
8. Install the Hydro SS 700 at bench-top height or higher for added safety and optimum performance.
9. Do not use flammable liquids, caustic materials, or corrosive materials with the Hydro SS 700.
10. When servicing Hydro SS 700, use only identical replacement parts and follow instructions in the maintenance section of this manual. Use of unauthorized parts or failure to follow maintenance instructions may damage equipment or cause personal injury.



CAUTION

THE HYDRO SS 700 CAN BE AUTOMATED WHEN USED IN CONJUNCTION WITH A CONTROL. A FAN MAY NOT APPEAR POWERED BUT COULD SUDDENLY BEGIN HIGH-SPEED ROTATION AS A FUNCTION OF THE PRESET CONTROL.



NOTICE

GROUND FAULT RECAPTACLES ARE STRONGLY RECOMMENDED AND MAY BE REQUIRED BY LAW.

UNPACKING

When unpacking your unit,
Locate the following items.

- 1 - Bench Top or Hanging Sump unit
- 1 - Operator's Manual
- 5 - Wire Ties
- 1 - Hanger Bolt Assy. (Hanging Sump only)
- 1 - Allen Wrench (for Blade Assy. service)

PLACEMENT & LAYOUT

Placement Guidelines

Mount the fan high overhead in the largest available open area. As a general rule, the higher the better when mounting your fan. Allow one foot above the unit and adequate room in front of and below the fan for the unobstructed propulsion of the fog.



Mount the fan near the intake end of a ventilated structure. In structures with no ventilation, install the unit at the largest, most open end and propel the fog toward the opposite end.

Utilize the pivoting fogging head in order to maximize the unit's performance.

DO NOT Propel the fog into the wind (direction of airflow).

DO NOT Pivot the fogging head to propel fog at a sharp downward angle.

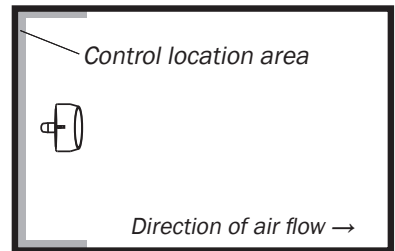
DO NOT Cramp the fan in tight spaces or skinny aisleways.

DO NOT Mount the fan near the ground or underneath tables or benches. This would result in a high loss of fog onto the ground, though it would not cause mechanical harm to the unit.

Layout Guidelines

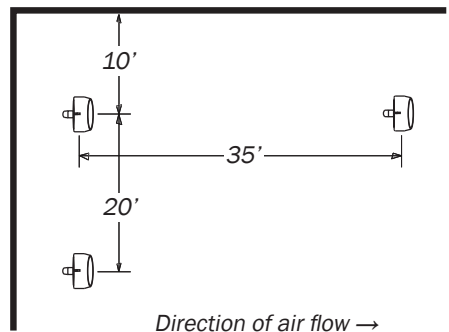
Small structures

In applications requiring only one unit, install the unit anywhere along one end wall, propelling the fog up and horizontally down the length of the structure. If there is forced ventilation, choose the intake end of the structure. The best location for automated controls is behind the fan at an easily-accessible level for monitoring.



Large structures

Equally space the units within the structure. Lower humidity and/or cooling requirements can allow for greater distance between fans. Usually, the maximum distance between fans should be 20' from the side and 35' from the front. If the structure has forced ventilation, shift the fans closer to the intake end. The fans should always be propelling their fog with the direction of natural or forced air flow.



INSTALLATION & OPERATION

Installation

Find a Suitable Location:

For Bench Tops, find a stable, flat surface.

For Hanging Sumps, locate a support capable of handling over 25 pounds. Drill a 5/16" clearance hole through the support where you want to hang the unit. Using 1/2" wrenches, secure the unit into position with hardware provided. **See Fig. 1**

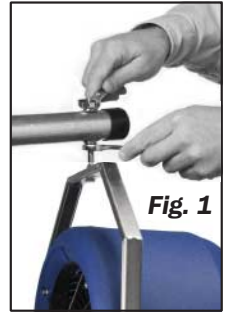


Fig. 1

Insert Drainage Line: Place the drainage line into the sump box. **See Fig. 3A**

Connect Water Supply: Hydro SS units come equipped with a standard garden hose connector and 1/4" water line tubing. Simply connect to an available hose bib.

To remove hose connector, apply pressure to the retaining clip while pulling on the tubing. **See Fig. 2**

Connect Power Supply: Plug directly into a properly grounded receptacle. If equipped with a Humidistat, Thermostat, or Cycle Timer Control, plug the control into a receptacle and then plug the fan into the female side of the control's pre-wired plug. **See Fig. 3**

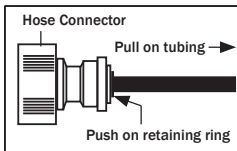


Fig. 2

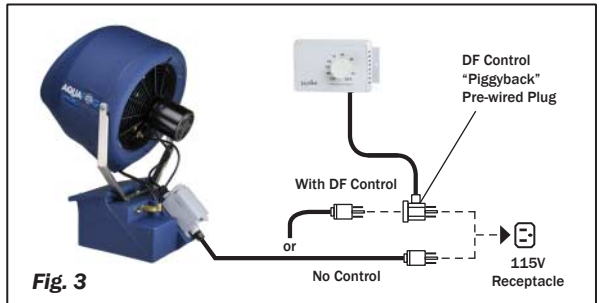


Fig. 3

Operation

Adjusting fog output: After the unit has been plugged in and the water turned on, you can adjust fogging output with the quarter turn flow control valve located at the back of the unit next to the switch box. The valve is fully open when the lever is down, pointing straight back, and fully closed when the lever is pointing straight up. You may also adjust it anywhere in between.

Pivot Feature: Pivot the fogging head anywhere between 15° down and 40° up from neutral. The manufacturer's recommended angle is about 30° up.

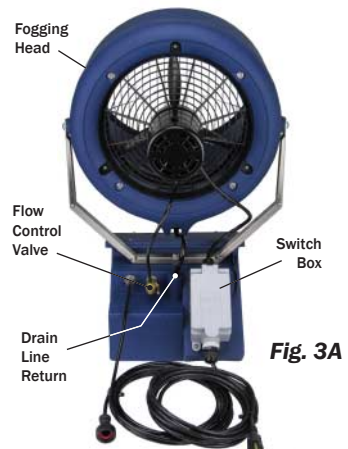
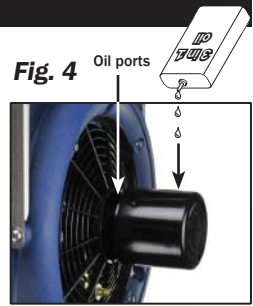


Fig. 3A

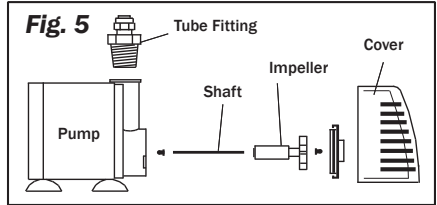
MAINTENANCE

Lubricate Motor: Remove two blue plugs at the top of the motor. Apply 4-5 drops of light grade petroleum based oil at each bearing location 1 to 2 times a year or as needed. Replace blue plugs. **See Fig. 4**

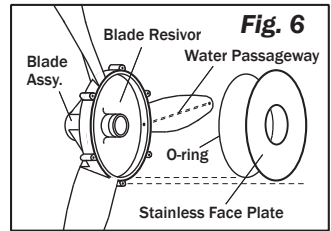


Clean Pump and Sump: Periodically clean debris from inside the sump area and nearby the pump. If you need to clean inside the pump, the cover easily snaps off. **See Fig. 5**

Clean Blade Assembly: After carefully removing the blade assembly, remove the stainless steel cover and O-ring. Soak the blades in CLR for one hour, scrub clean and rinse off with water. Carefully check the small holes leading into passageways that extend the length of each blade. **See Fig. 6** When thoroughly clean, test by blowing a small amount of air through each blade.



Winterizing: Protect your unit from winter damage. If storing unit in freezing temperatures, be sure all fluid is drained from the unit.



Troubleshooting

Possible Cause(s)	Corrective Action
NO FOG	
1. Clogged Pump Filter	1. Clean Sump Area. Remove pump filter, wash with soapy water and reinstall.
2. Badly Worn Pump Impeller	2. Make sure sump is getting ample water. Replace with new pump or impeller.
3. Clogged or Dead Pump	3. Remove, disassemble, clean and electrically test before reinstalling.
4. Not Getting Enough Water	4. Check, clean or replace float valve assembly. Check water supply line for kinks.
5. Low Water Pressure Supply	5. A booster pump may be necessary with some low pressure RO supplies.
6. Stiff/Locked Motor Tube	6. Remove, ream out with a small wire, clean and reinstall.
SPORADIC FOG	
1. Worn/ Loose Pump Impeller	1. Replace with a new pump impeller or new pump.
2. Not Getting Enough Water	2. Check float valve assembly. Check water supply for kinks or low water pressure.
POOR QUALITY FOG	
1. Clogged Blade Assembly	1. Remove assembly and clean out the rear reservoir and the blades' passageways.
2. Clogged Pump Filter	2. Clean sump area. Remove pump filter, wash with soapy water and reinstall.
3. Stiff/Locked Motor Shaft	3. Lubricate motor bearings while manually rotating shaft back and forth until loose.
FAN DOES NOT SPIN	
1. Stiff/Locked Motor Shaft	1. Lubricate motor bearings while manually rotating shaft back and forth until loose.
2. Bad Motor	2. If motor smells, doesn't start or shaft will not loosen-up, replace motor.
3. Bad Electrical Connections	3. Check for loose connections. Test motor and controls with a direct power supply.
MOTOR OVERHEATING	
1. Stiff/Locked Motor Shaft	1. Lubricate motor bearings while manually rotating shaft back and forth until loose.
2. Bad Motor	2. If motor smells, doesn't start or shaft will not loosen-up, replace motor.
OVER FLOWING	
1. Leaking Float Valve Assy.	1. Check for a bad seal or debris in float valve assembly. Replace if necessary.

SERVICE & REPAIR

Atomizing Ring/Front Guard Assembly

Using a 3/8" nut driver or wrench, remove four 10-24 flange nuts located at the back of the housing. To remove and reinstall the assembly, it needs to be rotated horizontally in order to clear the lip of the front housing.

See Fig. 7.



Fig. 7

Fan Blade Assembly

First remove the atomizing ring/front guard assembly. The blade assembly is now accessible and is secured to the motor shaft with a setscrew. Loosen the setscrew using 1/16" Allen wrench (provided) and carefully leverage assembly straight off the shaft.

See Fig. 8

To reinstall, line up setscrew with flat of the motor shaft and secure onto position with the blade assembly flush to the end of the shaft.



Fig. 8

Motor

Disconnect the electrical power. After removing the atomizing ring/front guard assembly, and the blade assembly, use a 3/8" nut driver or wrench to remove the four 10-24 nuts behind the blade assembly securing the motor to the rear guard. **See Fig. 8**

Pump

Disconnect the electrical power. With a Phillips screwdriver, remove the sump cover screws and the pump support screws. **See Fig. 9** Disconnect the plumbing on top of the pump and un-wire the pump's electrical cord that leads inside the ON/OFF Switch Box. Reinstall in the reverse order. **Note:** Only finger tighten the brass tube fitting when threading it into the top of the pump.

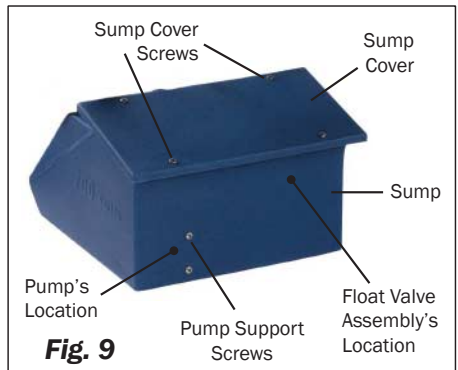
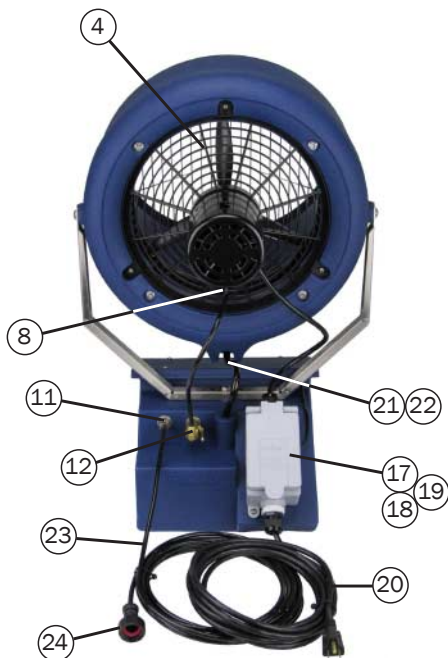


Fig. 9

REPLACEMENT PART IDENTIFICATION

BENCH TOP
MODEL

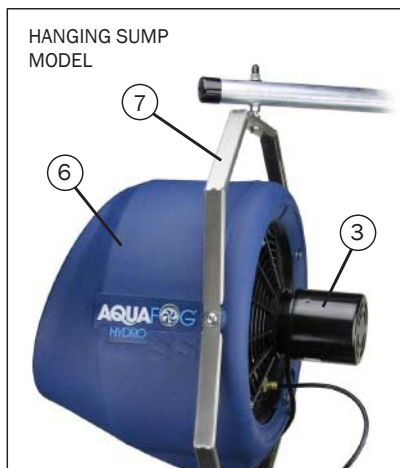


DESCRIPTION

PART NO.

1	Atomizing Ring	400-001
2	Front Guard	400-002
3	Motor 1/20hp 115V	400-110
4	Rear Guard	400-127
5	Blade Assembly	400-128
6	Housing	400-100
7	SST Hanger/Support	a-620
8	SST Water Feed Tube	400-130
9	Pivot Location	NA
10	Sump	400-131
11	Float Valve Assembly	400-132
12	Flow Control Valve	400-016
14	Pump	400-134
15	Pump Bracket	400-135
16	Pump Filter	400-137
17	115V Power Switch	109
18	Switch Box	82
19	Switch Box Cover	85
20	Power Cord	400-023
21	Drain Barb Fitting	400-114
22	Drain Hose	400-089
23	1/4" Water Tubing	W-14
24	Garden Hose Connect	W-2

HANGING SUMP
MODEL





ONE YEAR LIMITED WARRANTY

Aquafog and accessories are warranted to the original purchaser against defects in material and workmanship under normal use for one full year from date of purchase. Any part determined to be defective and returned to the manufacturer, shipping cost prepaid, will be repaired or replaced at Jaybird Manufacturing, Inc.'s discretion without charge. Proof of purchase date and an explanation of the problem or complaint must accompany the returned portion of the machine.

Jaybird Manufacturing, Inc. reserves the right to verify the legitimacy of claimed defects. The provisions of this warranty do not apply to damage resulting from direct or indirect misuse, negligence, accident, lack of maintenance, or unauthorized repairs or alterations which affect the machine's performance or reliability.

LIMITATIONS OF LIABILITY. TO THE EXTENT ALLOWABLE UNDER APPLICABLE LAW, JAYBIRD MANUFACTURING, INC.'S LIABILITY FOR DEATH, INJURIES TO PERSONS OR PROPERTY, OR FOR CONSEQUENTIAL OR INCIDENTAL DAMAGES ARISING FROM THE USE OF OUR EQUIPMENT IS EXPRESSLY DISCLAIMED. JAYBIRD MANUFACTURING, INC.'S LIABILITY IN ALL EVENTS IS LIMITED TO, AND SHALL NOT EXCEED, THE PURCHASE PRICE PAID. NO OTHER WARRANTY, EXPRESSED OR IMPLIED, IS AUTHORIZED, INCLUDING WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE.

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