

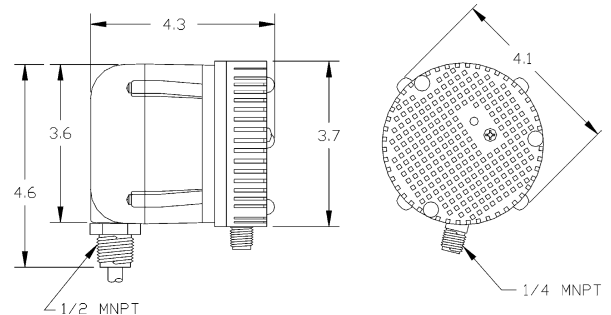
## 1-YS Parts Washer Pump (Submersible only)

Oil filled cast aluminium for use with Stoddard solvent and deodorized kerosene submerged parts washer applications only. Seal unit has double-lip Viton® seal and nylon volute with 1/4" MNPT discharge. 6' power cord without plug has "Master Builders" conduit fitting at pump housing for mounting. For pumping unheated metal parts cleaning solvent which is UL classified as PJQU, as described in the Gas and Oil Equipment Directory. These refine petroleum distillates are free from tendency to heat spontaneously; they have a closed cup flash point not lower than 38°C. Thermally protected.

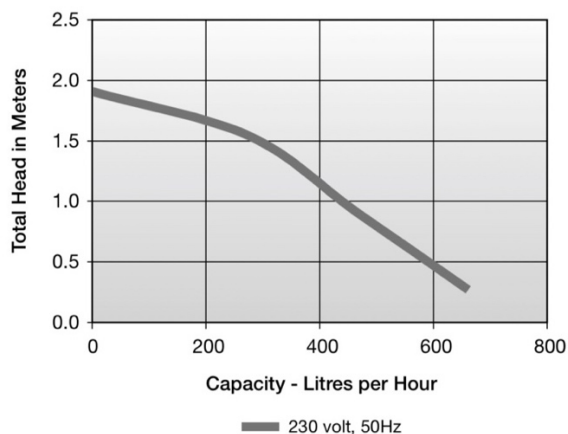
- 1/150 HP oil filled motor
- Cast aluminium housing
- Nylon volute
- Viton® shaft seal
- Polyethylene screen
- 25.4mm conduit fitting
- IP 68



<b>Capacity:</b>	719 LPM @ 0.31m
<b>Shut Off:</b>	1.89m
<b>Liquid Temp:</b>	50°C
<b>Discharge:</b>	12.5mm O.D
<b>Electrical:</b>	230V, 50Hz, 0.6 amps, 70 watts
<b>MODEL:</b>	<b>501027</b>



Performance Curve 1-YS 230V 50Hz



**THE RIGHT PUMP FOR  
MECHANICAL REPAIR SHOPS  
STODDART SOLVENT +  
DEODORISED KEROSENE USE  
ONLY**



## 1-YS

### Installation

The 1-YS pump is designed for submerged use only. Its motor is hermetically sealed in a diecast aluminum housing, which is oil-filled for heat transfer and permanent lubrication. It is intended to pump unheated metal parts-cleaning solvent that is UL classified as PJQU as described in the Gas and Oil Equipment Directory. These are refined petroleum distillates that are free from the tendency to heat spontaneously. They have a closed cup flash point not lower than 100 degrees F. These are typical fluids that are compatible with the pump materials (except the power cord.) See Installation step 1.

**NOTE:** This pump is intended for use only in parts cleaners listed by Underwriters Laboratories. The combination of the fluid pumped, the pump, and the design of the parts washer will determine if additional safety devices, such as a low liquid level cut off, are required. Refer to parts washer manufacturer's instructions to see if this is required.

### SAFETY GUIDELINES

Before servicing the pump, see solvent and equipment manufacturer's instructions for further safety information and possible hazards.

Follow all local electrical and safety codes, as well as the National Electrical Code (NEC) and the Occupational Safety and Health Act (OSHA).

This pump must be properly grounded while in use to protect the operator from electrical shock.

Always disconnect power source before working on the pump. If the power disconnect point is out of sight, lock in the open position and tag to prevent unexpected application of power.

Do not attempt to make your own parts cleaners.

The low flash point of these combustible liquids does present a moderate fire hazard. Operating the pump fully submerged offers added protection from fire risk. For other solvent handling precautions, consult the material safety data sheet (OSHA-20 form, or equivalent) for the solvent used.

Use only UL-approved metal parts cleaning solvents. The use of fluids such as gasoline and lower flash point solvents is dangerous and may cause explosions or fire. Solvents other than UL-approved metal parts cleaning solvents will void the warranty of this product.

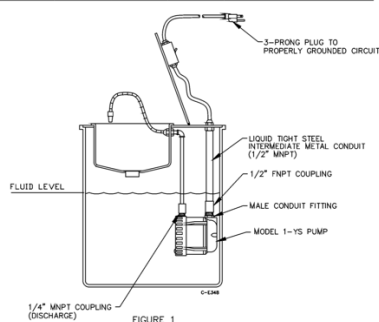
### INSTALLATION

Do not allow the pump's power cord to come in contact with solvent. The solvent may damage the cord insulation, causing the cord to become stiff or lower its insulating properties. The pump is supplied with a three-conductor power cord. The third conductor is to ground the pump to prevent possible electrical shock hazard.

1. Seal the power cord inside of liquid-tight, 1/2" NPT steel intermediate metal conduit. Use caution to ensure that cord will not be nicked or cut.
2. Consult pump nameplate data for proper voltage and frequency. Please note, the black (or brown) and white (or blue) wires are live and the green (or green/yellow) wire is ground.
3. Be sure that the pump is fully submerged in the cleaning solvent.
4. The pump power supply cord must be connected to a properly grounded, grounding-type receptacle.

#### PERFORMANCE (115V 60HZ)

MODEL	GALLONS PER HOUR				SHUT-OFF PSI
	1'	3'	5'	7.5'	
1-YS	180	144	102	0	3.2





## MAINTENANCE

**WARNING:** UNPLUG THE UNIT BEFORE ATTEMPTING TO SERVICE OR REMOVE ANY COMPONENT!

**CAUTION:** This unit is permanently lubricated. Oiling is not required. Do not open the sealed portion of the unit or remove housing screws.

Periodic cleaning of the pump parts will prolong the life and efficiency of the pump. Refer to Fig. 2 for the assembly and disassembly of the pumping head.

1. Lightly clean any corrosion or debris that may clog the impeller. Use a brush and penetrating oil and lightly scrape.  
NOTE: Do not allow sediment from parts being washed to build up and restrict the flow of fluid into the pump.
2. Turn the impeller by hand to make sure it is free. If it does not turn or if pump is tripping circuit breaker, or not operating properly after cleaning, return to an authorized Little Giant service center. Do not attempt repairs yourself. If it does turn, replace volute and re-install into parts washer.
3. Be certain power cord is protected from solvent and has no nicks or cuts.

Do not remove housing screws. Will void warranty.

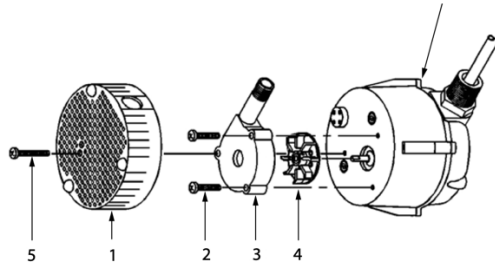


Figure 2

## TROUBLESHOOTING

**CAUTION:** Do not open the sealed portion of the unit or remove the housing screws.

1. Should the unit fail to operate, check the following:
  - a. Power supply and connections
  - b. Is the pump below liquid level?
  - c. Is air trapped in the pump head?
2. d. Is there sediment build-up over pump inlet?
3. An air lock or bubble will prevent the unit from pumping. Trapped air can usually be removed by turning the pump off and restarting. Ensure that the discharge line is sloping upward to prevent formation of air pockets.
4. If these operations do not restore the unit to full service, call your dealer or service technician.