

# Little GIANT®

Little Giant  
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## 3-MD-MT-HC



### SAFETY GUIDELINES



**CAUTION:** To reduce the risk of electric shock, pull plug before servicing this pump.

Read all instructions and safety guidelines thoroughly. Failure to follow the guidelines and instructions could result in serious bodily injury and/or property damage.

Do not pump flammable liquids such as gasoline or fuel oil.

Make sure pump is grounded.

During operation the area surrounding the pump may be covered with water. Take care when handling the pump. Do not disconnect the plumbing connections when pump is in operation.

Do not stand in water when changing fuses.

### PUMP CONSTRUCTION

The patented Little Giant magnetic drive pump design consists of a cylindrical drive magnet attached to the motor shaft which rotates around a chemical resistant plastic separator housing. Inside this housing is a magnet completely encapsulated in chemical resistant plastic, and is fixed to the impeller. The impeller assembly is free to rotate on a spindle that is supported at both ends. The spindle is held captive and does not turn. Front and rear thrust washers are utilized as wear bearings. The washers are held captive and do not revolve. This prevents wear on the shaft. With the magnetic coupling the motor drives the impeller. This coupling eliminates the conventional shaft seal and its possibility of leakage.

Two series are available. The HC series handles highly corrosive chemicals at elevated temperatures because of the unique materials used in its construction. The SC series handles semi-corrosive fluids. Both series are available with various size pumps, and are available in 115V or 230V, 50/60 Hz versions.

The HC models utilize a carbon bushing between the impeller and spindle. The use of this carbon bushing will allow these pumps (HC series) to run dry (without fluid) for up to eight hours at a time. Do not allow the SC models to run dry. They do not have the carbon bushing and heat build up caused by friction will damage the parts when SC models are run dry.

All wetted parts can be serviced by removing 4 wing nuts that hold the volute to the housing. The pump head components can easily be replaced in the field if necessary.

### PUMP MATERIALS

The plastic parts on SC series pumps are made of glass filled polypropylene. The plastic parts on the HC series pumps are glass filled Ryton®. The spindle shaft which is stationary and the captive thrust washers (front and rear) are alumina ceramic. The O-ring seal is Buna-N for the SC series, and Viton® for HC series. The HC series utilizes a pure carbon bushing in the impeller to enable the pump to run dry for periods up to eight hours at a time.

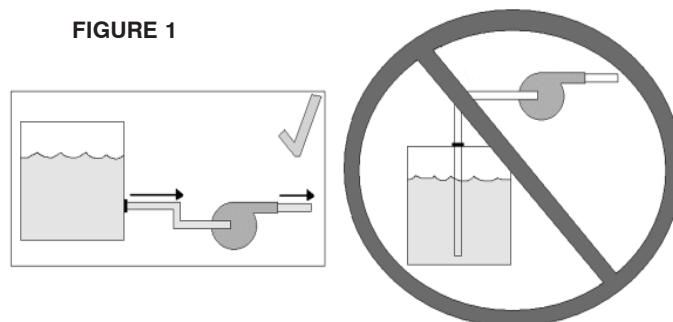
### INSTALLATION



Your Little Giant pump is delivered to you completely pre-assembled and pretested from the factory. It is ready for immediate use. The pump may be installed in any position. It may be mounted vertically with the pump head down. Proper plumbing connections should be made, see specification table to determine what size intake and discharge your pump has. Use a thread sealer on all pipe connections and hand tighten only. Note: On HC models a roll of Teflon® pipe seal tape is supplied. Do not use a wrench to tighten the HC model connections, excessive force may damage the plastic part. Make sure the wing nuts are tight before operating the pump. Motor nameplates list all electrical data. Make sure the pump is connected to proper voltage before operating. When wiring pumps with no plug, the green (or green/yellow) wire is the ground. The other two wires are line (live). Do not allow the SC models to run dry (without fluid). However, because the HC models utilize a carbon bushing in the impeller they may be allowed to run dry for periods up to eight hours at a time. These pumps are not submersible, operate the pumps only in the in-line mode. Do not put the units in liquid. Pump should be installed in a dry area and protected from splash. These pumps are not self priming models, they must be installed so that the pump head (volute) is flooded at the time the pump is to be started. That is, the inlet of the pump must be below the level of the surface of the liquid being pumped. (Figure 1).

Do not restrict the intake side of the pump. Connections on the intake side should not be of smaller inside diameter pipe or tubing or hose than the intake inside diameter of the intake thread designation. If reduced flow is required restrict the discharge side. Installing a valve or other type of restriction device on the discharge side is the proper method for reducing flow from the pump. When using a valve the pump can be throttled to provide various flow rates and pressures without harming the motor or the pump parts. The motors on these models contain sleeve type bearings. These bearings should be oiled every six months with two to three drops of S.A.E. 20 weight non-detergent oil. The oil holes are located on top at each end of the motor.

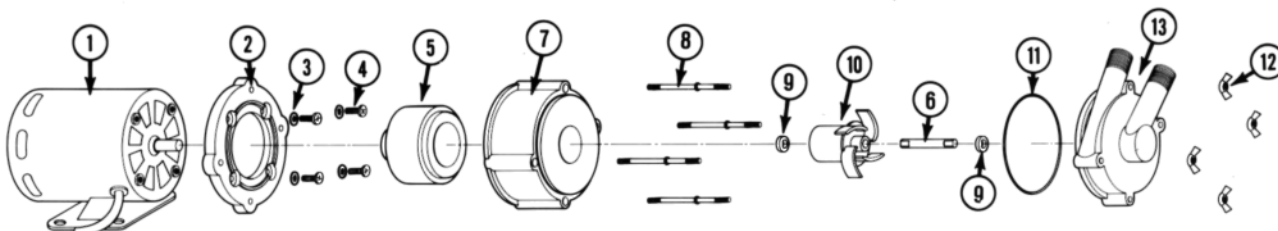
FIGURE 1



SPECIFICATIONS																						
MODEL	INTAKE SIZE	DISCH. SIZE	MOTOR							MOTOR TYPE*	MAX. PSI	MAX HEAD (PSI)	GALLONS PER MINUTE						DIMENSIONS (INCHES)			WEIGHT PACKED (LBS.)
			VOLTS	HERTZ	RPM	PHASE	H.P.	WATTS	AMPS				1'	6'	9'	15'	18'	24'	H	W	L	
3-MD-MT-HC	1/2" MNPT	1/2" MNPT	115 or 230	60	3100	1	1/25	94	1.3	OPEN-FC	7.0	16.2	8.3	7.1	5.9	1.7	--	--	5.5	3.9	7.9	7.2
				50	2600	1	1/25	107	1.5		5.0	11.5	8.0	6.0	4.0	--	--	--				

\*OPEN = open motor  
FC = fan cooled

NOTE: Performance data shown is catalog performance.  
230v data is same as 115v for each frequency.



NOTE: Motor configuration may vary from model to model.  
TE models are not equipped with metal base; they use the polypropylene adaptor/base

REPLACEMENT PARTS LIST*			MODEL & CATALOG NUMBER
ITEM NO.	PART NO.	DESCRIPTION	578603 3-MD-MT-HC
1	977456	MOTOR, 115 VOLT	1
2	180048	BRACKET, MOUNTING	1
3	921075	WASHER, #8, FLAT	4
4	901424	SCREW, MACH., #8-32 X 1/2	4
5	180602	DRIVE MAGNET ASSEMBLY	1
6	180059	SHAFT, IMPELLER	1
7	180005	HOUSING, MAGNET	1
8	911403	STUD, COLLARED	4
9	921077	WASHER, THRUST	2
10	181142	IMPELLER W/BUSHING ASSEMBLY	1
11	924008	O-RING (VITON)	1
12	920003	NUT, WING, #8-32	4
13	181202	VOLUTE	1
14	180800	TEFLON TAPE (NOT SHOWN)	1

\*Parts list applies to product numbers shown. Other products are available, however parts may vary. For other models, contact parts depot, factory, or distributor for replacement parts. Be sure to give the six-digit product number and model number when requesting parts.

### **LITTLE GIANT WARRANTY STATEMENT**

Your Little Giant product is guaranteed to be in perfect condition when it leaves our Factory. It is warranted against defective materials and workmanship for a period of 12 months (90 day warranty on Models: 1-AA-OM, GKPK-SC, PP-1, PPS-1, PP-12, PPS-12, PP-230 and Cooler King) from date of purchase by the user. No warranty on brush wear in Model 35-OM and impeller or cam in Models PP-1, PP-12, and PP-230. Any product that should fail for either of the above two reasons and is still within the warranty period will be repaired or replaced if returned prepaid to our factory. All defective products returned under warranty will be fully inspected to determine "CAUSE OF FAILURE" before any warranty is approved. Little Giant will honor the warranty within the warranty time period specified on satisfactory written proof of purchase. **DISCLAIMER:** Any oral statements about the product made by the seller, the manufacturer, the representatives or any other parties, do not constitute warranties, shall not be relied upon by the user, and are not part of the contract for sale. Sellers and manufacturers only obligation, and buyers only remedy, shall be the replacement and/or repair by the manufacturer of the product as described above. Neither seller nor the manufacturer shall be liable for any injury, loss or damage, direct, incidental or consequential (including, but not limited to, incidental or consequential damages for lost profits, lost sales, injury to person or property, or any other incidental or consequential loss), arising out of the use or the inability to use the product, and the sure agrees that no other remedy shall be available to it. Before using, the user shall determine the suitability of the product for his intended use, and user assumes all risk

of liability whatsoever in connection therewith. THE WARRANTY AND REMEDY DESCRIBED IN THIS LIMITED WARRANTY IS AN EXCLUSIVE WARRANTY AND REMEDY AND IS IN LIEU OF ANY OTHER WARRANTY OR REMEDY, EXPRESSED OR IMPLIED, WHICH OTHER WARRANTIES AND REMEDIES ARE HEREBY EXPRESSLY EXCLUDED, INCLUDING BUT NOT LIMITED TO ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. Some states do not allow the exclusive or limitation of incidental or consequential damages, so the above limitation or exclusion may not apply to you. This warranty gives you specific legal rights, and you may also have other rights which vary from state to state. Warranty will be VOID if any of the following conditions are found:

1. Sealed motor housing opened.
2. Product connected to voltage other than indicated on nameplate.
3. Cord cut off to a length less than three feet.
4. Pump allowed to operate dry (fluid supply cut off).
5. Pump used to circulate anything other than fresh water, light oils, or other mild liquids at approximately room temperature.
6. Product abuse by customer.

The National Electric Code requires a Ground Fault Circuit (GFCI) be installed in the branch circuit supplying fountain equipment rated above 15 volts. Part number 59935, GFCI-1 is in stock and we recommend each pump be used with a GFCI.

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For parts or repair, please contact . . . . . 1.888.572.9933  
For technical assistance, please contact . . . . . 1.888.956.0000

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entrez s'il vous plaît en contact . . . . . 1.888.572.9933  
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