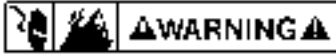




### INSTALLATION

#### 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.

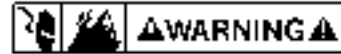
Two series are available. The HC series handles highly corrosive chemicals at elevated temperatures because of the unique materials used in its construction. The SC series handles semi-corrosive fluids. Both series are available with various size pumps, and are available in 115V or 230V, 50/60 Hz versions.

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

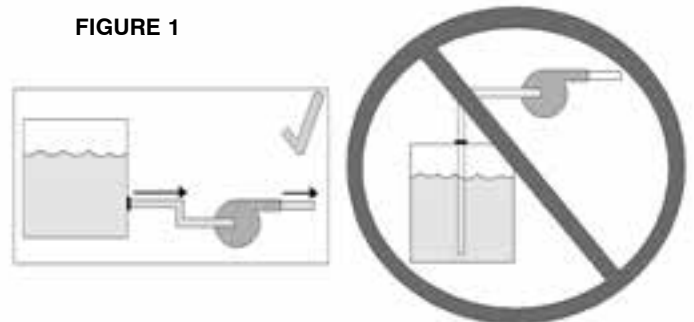
The plastic parts on SC series pumps are made of glass filled polypropylene. The plastic parts on the HC series pumps are glass filled PPS. The spindle shaft which is stationary and the captive thrust washers (front and rear) are alumina ceramic. The O-ring seal is Nitrile for the SC series, and Fluoroelastomer (FKM) 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.



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 PTFE 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.

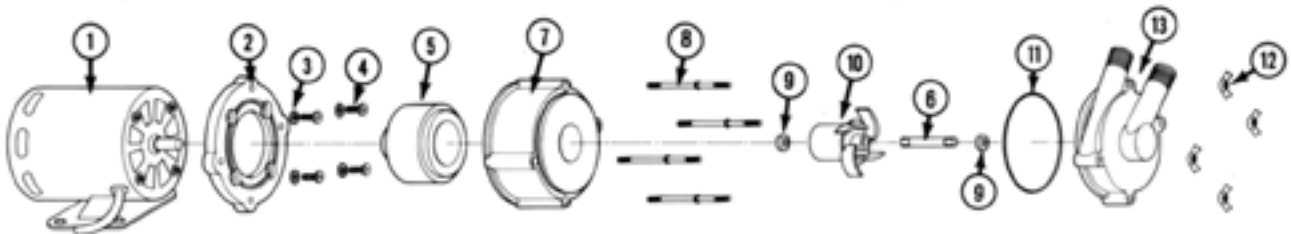
FIGURE 1



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.

## LIMITED WARRANTY

### THIS WARRANTY SETS FORTH THE COMPANY'S SOLE OBLIGATION AND PURCHASER'S EXCLUSIVE REMEDY FOR DEFECTIVE PRODUCT.

Franklin Electric Company, Inc. and its subsidiaries (hereafter "the Company") warrants that the products accompanied by this warranty are free from defects in materials or workmanship of the Company that exist at the time of sale by the Company and which occur or exist within the applicable warranty period. Any distributor, sub-distributor, recipient, end-user and/or consumer agrees that by accepting the receipt of the products, the distributor, sub-distributor, recipient, end user and/or consumer expressly agrees to be bound by the terms of the warranty set forth herein.

#### I. Applicable Warranty Period

The products accompanied by this warranty shall be covered by this Limited Warranty for a period of 12 months from the date of original purchase by the consumer. In the absence of suitable proof of purchase date, the warranty period of this product will begin to run on the product's date of manufacture.

#### II. Instructions Applicable to this Limited Warranty

1. Consumers wishing to submit a warranty claim must return the products accompanied by this warranty to the point of purchase for warranty consideration.
2. Upon discovery of a defect, any personal injury, property damage or any other type of resulting damage, if applicable, shall be reasonably mitigated to the extent possible.
3. At its discretion, the Company may inspect products either at its facilities, or in the field, and after determination of a warranty claim, will, at its option, repair or replace defective parts. Repaired or replaced parts will be returned freight prepaid by the Company.
4. This warranty policy does not cover any labor or shipping charges. The Company shall not be liable for any costs or charges attributable to any product testing, maintenance, installation, repair or removal, or for any tools, supplies, or equipment needed to install, repair, or remove any product.

#### III. Limitations Applicable to this Limited Warranty

##### THIS WARRANTY DOES NOT APPLY TO ANY OF THE FOLLOWING:

1. Brushes, impeller or cam on models with brush-type motors and/or flex-vane impellers.
2. Any product that is not installed, applied, maintained and used in accordance with the Company's published instructions, applicable codes, applicable ordinances and/or with generally accepted industry standards.
3. Any product that has been subject to misuse, misapplication, neglect, alteration, accident, abuse, tampering, acts of God (including lightning), acts of terrorism, acts of war, fire, improper storage or installation, improper use, improper maintenance or repair, damage or casualty, or to an excess of the recommended maximums as set forth in the product instructions.
4. Any product that is operated with any accessory, equipment, component, or part not specifically approved by the Company.
5. Use of replacement parts not sold by the Company, the unauthorized addition of non-Company products to other Company products, and the unauthorized alteration of Company products.
6. Products damaged by normal wear and tear, normal maintenance services and the parts used in connection with such service, or any other conditions beyond the control of the Company.
7. Any product that has been used for purposes other than those for which it was designed and manufactured.
8. Any use of the product where installation instructions and/or instructions for use were not followed.

9. Products connected to voltage other than indicated on nameplate.
10. Products where the pump was exposed to any of the following: sand, gravel, cement, grease, plaster, mud, tar, hydrocarbons, hydrocarbon derivatives (oil, gasoline, solvents, etc.) or other abrasive or corrosive substances.
11. Products in which the pump has been used to pump or circulate anything other than fresh water at room temperature.
12. Products in which the pump was allowed to operate dry (fluid supply cut off).
13. Products in which the sealed motor housing has been opened or the product has been otherwise dismantled by customer.
14. Products in which the cord has been cut to a length of less than three feet.

The Company reserves the right at any time, and from time to time, to make changes in the design and/or improvements upon its product without thereby imposing any obligation upon itself to make corresponding changes or improvements in or upon its products already manufactured and/or previously sold. The Company further reserves the right to substitute parts or components of substantially equal quality in any warranty service required by operation of this Limited Warranty.

This written Limited Warranty is the entire warranty authorized and offered by the Company. There are no warranties or representations beyond those expressed in this document.

**THIS WARRANTY AND REMEDY IS IN LIEU OF ALL OTHER WARRANTIES AND REMEDIES INCLUDING WITHOUT LIMITATION, WARRANTIES OF MERCHANTABILITY AND/OR FITNESS FOR A PARTICULAR PURPOSE, WHICH ARE HEREBY SPECIFICALLY DISCLAIMED AND EXPRESSLY EXCLUDED. CORRECTION OF NON-CONFORMITIES, IN THE MANNER AND FOR THE PERIOD OF TIME AS SET FORTH ABOVE, SHALL CONSTITUTE FULFILLMENT OF ALL LIABILITY OF THE COMPANY TO THE PURCHASER WHETHER BASED ON CONTRACT, NEGLIGENCE, OR OTHERWISE.**

**THE COMPANY SHALL NOT BE LIABLE FOR INCIDENTAL, CONSEQUENTIAL OR SPECIAL DAMAGES SUCH AS, BUT NOT LIMITED TO:**

**DAMAGE TO OR LOSS OF OTHER PROPERTY OR EQUIPMENT, LOSS OF USE OF EQUIPMENT, FACILITIES OR SERVICE, LOSS OF PROFIT OR SALES, COST OF PURCHASES OR REPLACEMENT GOODS, CLAIMS OF CUSTOMERS OF THE PURCHASER, FAILURE TO WARN AND/OR INSTRUCT, LOSS OF OTHER PRODUCTS, OR COSTS OF ENVIRONMENTAL REMEDIATION, OR DIMINUTION IN PROPERTY VALUE. THE REMEDIES OF THE PURCHASER SET FORTH HEREIN ARE EXCLUSIVE, AND THE LIABILITY OF THE COMPANY SHALL NOT, EXCEPT AS EXPRESSLY PROVIDED HEREIN, EXCEED THE PRICE OF THE PRODUCTS UPON WHICH SUCH LIABILITY IS BASED. DAMAGES AS SET FORTH IN THIS PARAGRAPH SHALL BE REASONABLY MITIGATED TO THE EXTENT POSSIBLE. THIS PARAGRAPH SHALL ALSO APPLY TO ALL DAMAGES RESULTING FROM CONDITIONS SET FORTH IN SECTION III ABOVE AND (1) DEFECTS IN PRODUCT PROTOTYPES OR REPLACEMENT PART PROTOTYPES THAT HAVE NOT BEEN PUT INTO PRODUCTION, CIRCULATED AND SOLD BY THE COMPANY, AND/OR (2) DEFECTS THAT WERE NOT FOUND AT THE TIME OF SALE DUE TO SCIENTIFIC AND TECHNOLOGICAL REASONS.**

This Limited Warranty gives you specific legal rights. You may have other rights, which vary according to the applicable laws and regulations. Where any term of this warranty is prohibited by such laws, it shall be null and void, but the remainder of this warranty shall remain in full force and effect.

**DISCLAIMER:** Any oral statements about the product made by the seller, the Company, 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. Seller's and the Company's only obligation, and buyer's only remedy, shall be the replacement and/or repair by the Company of the product as described above. Before using, the user shall determine the suitability of the product for his intended use, and user assumes all risk and liability whatsoever in connection therewith.

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**For technical assistance, please contact . . . . . 800.701.7894**

**Pour l'aide technique, entrez s'il vous plaît en contact . . . . . 800.701.7894**

**Para la ayuda técnica, por favor póngase en contacto . . . . . 800.701.7894**

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