

Note: Motor configuration may vary from model to model.

Little GIANT®

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3-MDX

INTRODUCTION

This instruction sheet will provide you with information required to safely own and operate the Little Giant MD series pumps. The pump you have purchased is a magnetic driven pump. The MD series pumps handle most mildly corrosive fluids such as low concentrations of acids and alkalis in pH range of 5 to 9 at fluid temperatures up to 150°F. The pump head parts are made of glass filled polypropylene. The spindle shaft and thrust washers are titanium. The impeller driven magnet is uncoated ceramagnet A (barium ferrite) type ceramic. O-ring seals are nitrile. The motor is thermally protected.

This instruction sheet covers the standard models in this pump series. This form is applicable to other models in this series not listed by catalog number in the replacement parts list section of this pamphlet. If the catalog number of your pump is not listed in the replacement parts section, then caution should be exercised when ordering replacement parts. Always give the catalog number of your pump when ordering replacement parts.

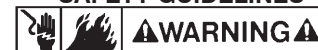
The Little Giant unit you have purchased is of the highest quality workmanship and material. It has been engineered to give you long and reliable service.

The Little Giant pumps are carefully inspected, tested, and packaged to ensure safe operation and delivery. When you receive your pump, examine it carefully to determine that there are no broken or damaged parts that may have occurred during shipment. If damage has occurred, make notation and notify the firm from which you purchased the pump. They will assist you in the replacement or repair, if required. **READ INSTRUCTIONS CAREFULLY BEFORE ATTEMPTING TO INSTALL, OPERATE OR SERVICE THE LITTLE GIANT PUMP, KNOW THE PUMP APPLICATIONS, LIMITATIONS, AND POTENTIAL HAZARDS. PROTECT YOURSELF AND OTHERS BY OBSERVING ALL SAFETY INFORMATION. FAILURE TO COMPLY WITH INSTRUCTIONS COULD RESULT IN PERSONAL INJURY AND/OR PROPERTY DAMAGE! RETAIN INSTRUCTIONS FOR FUTURE REFERENCE.**

REPLACEMENT PARTS LIST			PUMP MODEL & CATALOG NUMBER	
ITEM NO.	PART NO.	DESCRIPTION*	3X-MDX 581030	3-MDX 581031
1	977314	MOTOR, 115V	1	
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2	181411	MAGNET HOUSING BRACKET	1	1
3	181211	VOLUTE	1	1
4	181311	BACKPLATE SEPARATOR	1	1
5	180602	DRIVE MAGNET ASSEMBLY	1	1
6	181111	IMPELLER/MAGNET ASSEMBLY	1	
6	181112	IMPELLER/MAGNET ASSEMBLY		1
7	180058	SHAFT	1	1
8	921067	THRUST WASHER	2	2
9	924007	O-RING	1	1
10	901418	MACHINE SCREW, #8-32 X 1 1/2"	4	4
11	920003	WING NUT, #8-32	4	4
12	901424	MACHINE SCREW, #8-32 X 1/2"	4	4
13	921059	LOCK WASHER, #8	4	4

*Parts list applies to products shown. Other models 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 catalog number and model number when requesting parts.

SAFETY GUIDELINES



Do not use to pump flammable or explosive fluids such as gasoline, fuel oil, kerosene, etc. Do not use in explosive atmospheres. Pump should only be used with liquids compatible with pump component materials.

Do not handle pump with wet hands or when standing on a wet or damp surface, or in water.

This pump is supplied with a grounding conductor and/or grounding type attachment plug. To reduce the risk of electric shock, be certain that it is connected to a properly grounded grounding type receptacle.

The national electric code requires a ground fault circuit interrupter (GFCI) be installed in the branch circuit supplying fountain equipment, pools, etc.

In any installation where property damage and/or personal injury might result from an inoperative or leaking pump due to power outages, discharge line blockage, or any other reason, a backup system(s) and/or alarm should be used.

Support pump and piping when assembling and when installed. Failure to do so may cause piping to break, pump to fail, motor bearing failures, etc.

ELECTRICAL CONNECTIONS



Check the pump label for proper voltage required. Do not connect to voltage other than that shown. If pump is supplied with a 3-prong electrical plug, the third prong is to ground the pump to prevent possible electrical shock hazard. **DO NOT REMOVE** the third prong from the plug. A separate branch circuit is recommended. Do not use an extension cord. Do not cut plug from the cord. If the plug is cut or the cord is shortened, then this action will void the warranty. If the cord is equipped with stripped lead wires, such as on 230v models, be sure that the lead wires are connected to a power source correctly. The green/yellow wire is the ground, the other two are live.

OPERATION

The pump is supplied completely pre-assembled and pretested from the factory. Make sure the wing nuts are tight before operating the pump.

Use a thread sealer on all pipe connections and hand tighten only.

The pump is not self priming. It must be operated with the volute intake below the liquid level. That is, the inlet of the pump must be below the level of the surface of the liquid being pumped (Figure 1).

This pump is not submersible. Operate the pump only in the in-line mode. **DO NOT** put the unit in liquid. Pump should be located in a well ventilated area and away from where accidental water spillage would cause wetting of the pump.

The weight of the pump must be supported adequately. **DO NOT** support the pump by the intake and discharge connections alone.

Do not allow the pump to run dry (without liquid). Heat build up caused by friction will damage the pump parts when dry.

Do not attempt to restrict the intake side of these pumps. Restricting the intake may cause damage to the pump head. If you require reduced flow rates, then place a valve on the discharge side of the pump or, if flexible vinyl tubing is used, a clamp on the tubing to restrict the flow.

If the unit is going to be idle for a period of time, follow the cleaning instructions outlined in the next section. Do not let the unit freeze in the wintertime. This may cause cracking or distortion that may destroy the unit.

SERVICE INSTRUCTIONS



MAKE CERTAIN THAT THE UNIT IS DISCONNECTED FROM THE POWER SOURCE BEFORE ATTEMPTING TO SERVICE OR REMOVE ANY COMPONENT.

The motor's sleeve bearings should be lubricated 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.

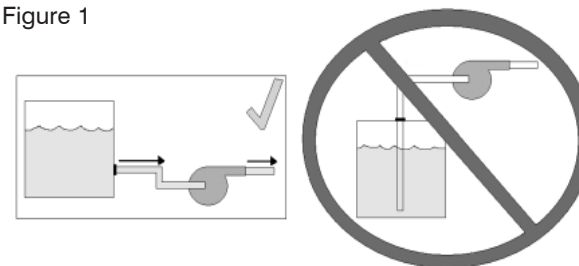
All wetted parts can be serviced by removing the 4 wing nuts (item 11) which hold the volute to the housing. The pump head components can easily be replaced in the field if necessary.

Lightly clean any corrosion or debris which may clog the impeller.

If pump is tripping circuit breakers, GFCI, or not operating properly after cleaning, return to Little Giant or its authorized service center. **DO NOT** attempt repairs yourself.

Be certain power cord is in good condition and contains no nicks or cuts.

Figure 1



SPECIFICATIONS																					
MODEL	INTAKE SIZE	DISCH. SIZE	MOTOR							MOTOR TYPE	MAX. PSI	SHUTOFF HEAD (FT.)	GALLONS PER MINUTE					DIMENSIONS			WEIGHT PACKED (LBS.)
			VOLTS	HERTZ	RPM	PHASE	H.P.	WATTS	AMPS				1 FT.	3 FT.	6 FT.	9 FT.	12 FT.	H	W	L	
3X-MDX	5/8" O.D.	5/8" O.D.	115	60	1550	1	1/50	67	.94	OPEN-FC	3.0	7.0	5.8	5.0	3.3	--	--	5.13	3.75	7.63	6.2
3-MDX	5/8" O.D.	5/8" O.D.	115	60	3000	1	1/25	126	1.65	OPEN-FC	8.2	19.0	7.6	7.0	6.8	6.0	5.0	5.13	3.75	8.38	7.0

KEY: OPEN = open motor
FC = fan cooled

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