



# MARCH PUMPS

1819 PICKWICK AVE., GLENVIEW, IL 60026-1306, U.S.A  
PHONE: (847) 729-5300 - FAX: (847) 729-7062  
WWW.MARCHPUMP.COM

## INSTRUCTIONS & REPAIR PARTS FOR MODEL TE-10K-MD



MODEL TE-10K-MD  
ASS'Y. P/N 0161-016-0100

### PUMP CONSTRUCTION & SERVICING

March "Orbital" Magnetic Drive Pumps eliminate the conventional shaft seals found in most pumps. This means that there is no rotating shaft or seal to wear and allow the liquid being pumped to leak out. The only seal in the pumps is a stationary Viton "O" ring seal between the front and the rear Housings.

The pump can be serviced with the use of an adjustable wrench. The only moving part in the pump, other than the motor, is the Impeller-Magnet Assembly which rotates on a stationary ceramic spindle and up against a ceramic thrust washer. These are the only parts that might wear, and may require replacement. See the repair Parts List for replacement parts.

### CAUTION IN ASSEMBLY/DISASSEMBLY

The magnetic couplings in the series 10 pumps are made of rare earth cobalt material and are very powerful. If you disassemble the pump and remove the Impeller Assembly from the Rear Pump Housing, great care should be taken in handling. The attraction of the Impeller Magnet and the Drive Magnet may pull the Impeller from your grasp.

You should hold onto the O.D. of the impeller vanes with both hands and slowly engage the Impeller into the magnetic field. As you feel the axial magnetic pull, hold the Impeller firmly and resist the pull of the magnets, but slowly allow the Impeller to be into the field. The axial magnetic pull is greatest between 1/3 to 2/3 engagement. The axial pull will diminish as the two magnets become aligned.

If you allow the Impeller Assembly to snap into the rear housing, you may damage the carbon bushing, the rear thrust washer or the plastic.

Care must be taken if you set the magnets down or near a steel surface due to the powerful magnetic pull. These individual magnets may affect the calibration or damage sensitive electronic instruments if set next to the instrument.

### ELECTRICAL AND OPERATION

The standard pump has a TEFC chemical duty motor, 230/460 volts, 60 cycle, 3 phase, 3450 r.p.m. rated as continuous duty. A junction box is located on the side of the motor for making the electrical hook up. The wiring instructions are located on the motor label or on the junction box cover. The motor has U.L. yellow card recognition.

March Pumps rely on the liquid being pumped to lubricate the Impeller-Magnet assembly bushing spinning on the stationary ceramic spindle. The direction of motor rotation should be clockwise looking into the inlet of the pump. Totally enclosed explosion proof and special voltage motors are available upon special order.

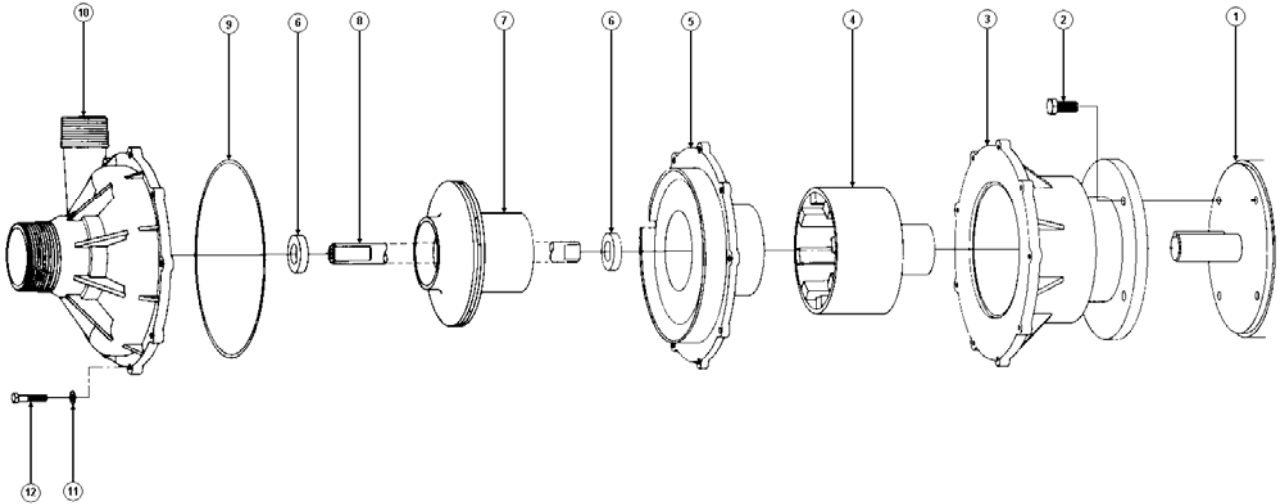
### PUMP MATERIALS

All plastic parts of the pump are molded out of carbon filled Kynar® (PVDF). The stationary spindle and Thrust Washers are made of porcelain ceramic. The "O" ring for the housing is Viton rubber. The bushings in the Impeller Assembly are carbon.

There are no other materials in contact with the solution. Contact the factory for other materials that are available, and if you are uncertain of the material compatibility with your specific solution.

## RATINGS AND SPECIFICATIONS

MODEL NO.	CONNECTORS		ELECTRICAL			GPM AT LISTED HEAD						PSI GAGE	DIMENSIONS			PACK WT.
	INLET	OUTLET	HP	VOLTS	AMPS	10 FT.	60 FT.	90 FT.	120 FT.	150 FT.	168 FT.		HT.	WD	LG.	
TE-10K-MD	3" MPT	2" MPT	10	230/460	26.2/13.1	210	205	200	170	120	30	75	13 ¼	16 7/8	31	260 lbs



### MODEL TE-10K-MD REPAIR PARTS LIST

ITEM	DESCRIPTION	QUANTITY	PART NUMBER
1	Motor T.E.F.C.	1	0161-0012-1000
2	½-13 x 1" Lg. Hex Hd. Screw	4	0160-0031-1000
3	Motor Connecting Bracket	1	0161-0007-0000
4	Drive Magnet Assembly	1	0161-0031-0100
5	Rear Housing (Kynar)	1	0161-0009-1000
6	Thrust Washer (Ceramic)	2	0161-0001-1000
7	Impeller Final Assy. w/Carbon Bushing	1	0161-0005-0400
8	Impeller Shaft (Ceramic)	1	0161-0002-1000
9	9 ¾ I.D. x 1/8 Thk. "O" Ring--Viton	1	0161-0010-1000
10	Front Housing (Kynar)	1	0161-0008-1000
11	11/32" I.D. x 5/8 O.D. x 1/16 Thk. Flat Washer	9	0160-0030-1000
12	5/16-18 x 1 ¾" Lg. Hex Hd. Screw	9	0160-0029-1000

Contact factory for other materials and/or parts not listed.

### LIMITED WARRANTY

March pumps are guaranteed only against defects in workmanship or materials for a period of one year from date of manufacture pumping water. On all other solutions, contact the factory for application assistance. March Pump Application Worksheet 750-130-10 is available for additional warranty information.



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