



MARCH

“MAGNE-BOOST”[®] HOT WATER PUMP

MODEL 809 SERIES PUMP

INSTALLATION INSTRUCTIONS

SERVICE AND REPAIR PARTS LIST

DESCRIPTION: Your March hot water booster pump is a non-self priming unit built to handle liquid transfer in heating and cooling operations. Applications include home heating systems, solar heating systems, heat recovery systems and recirculating water in domestic and commercial hot water tanks.

Contact the factory for applications other than those listed, and for liquids other than water.

SPECIFICATIONS	
INLET AND OUTLET CONNECTIONS:	1/2" MPT or 5/8 Flare Tube Conn. or Center Inlet Style
ELECTRICAL:	809 115 Volts, 60 Hz, 1 Phase, 30 Watts, 0.3 Amps, 1600 RPM, 1/100 HP
	809 HS 115 Volts, 60 Hz, 1 Phase, 80 Watts, 1.2 Amps, 3400 RPM, 1/25 HP
	809 HS—815 115 Volts, 60 Hz, 1 Phase, 85 Watts, 1.4 Amps, 3400 RPM, 1/25 HP
MAXIMUM LIQUID TEMPERATURE:	250°F
MAXIMUM INTERNAL PRESSURE:	150 PSI
CONSTRUCTION:	Bronze, Stainless Steel, Ryton Plastic
DIMENSIONS:	Height over Threads 4-7/8"
	Width 3-3/8"
	Length w/1600 RPM Mtr. 6-1/2"
	Length w/3400 RMP Mtr. 7-1/2"
CAPACITY:	809 1600 RPM 3.1 GPM Maximum and 1.8 PSI Maximum
	809 HS 3400 RPM 5.3 GPM Maximum and 5.0 PSI Maximum
	809 HS—815 3400 RPM 5.5 GPM and 6.53 PSI Maximum
APPROVAL:	Motors are U.L. Yellow Card listed, impedance protected or thermal overload protected. Complete pump under U.L. file E43564(N)*

*UL recognition on pumps, file E43564, is for water only.

INSTALLATIONS: The 809 Series pump is assembled and ready for installation. The pump should be mounted with the Electric Conduit Box (Item 18) on the bottom. The oil ports will then be on the top of the motor. The pump housing should be installed with the arrow on our housing pointing in the direction of the water flow within the system. If the arrow indicating water flow is not in the direction you require when the motor is in position, remove the four round housing screws (Item 1) holding the housing to the motor assembly and rotate the housing assembly as required. Replace the four screws and tighten.

The pump is made up of two basic sub-assemblies. They are the Wet End Assembly; and the Drive Magnet, Bracket and Motor Assembly (Items 19 or 20). To separate the 2 assemblies, simply remove the 4 round head screws (Item 1). The pump will then separate into the 2 sub-assemblies. The water will still be contained within the Wet End assembly unless you loosen the screws (Item 10) on the rear of the Wet End assembly.

LUBRICATION: The motor should be oiled at least once a year at the start of the heating season with 4 or 5 drops of SAE 20 weight non-detergent oil in each bearing. If the pump is used year around it should be oiled every six months. Do not over oil. No oiling is required on the ball bearing motors.

GENERAL SAFETY INFORMATION: Follow all local electrical and safety codes, and the Occupational Safety and Health Act (OSHA). Make certain that the power source conforms to the requirements of your equipment. Always disconnect power source before performing any work on or near the electric motor. Caution must be exercised to relieve any pressure in the system and in draining hot water from the pump or the system.

DISASSEMBLY AND REASSEMBLY:

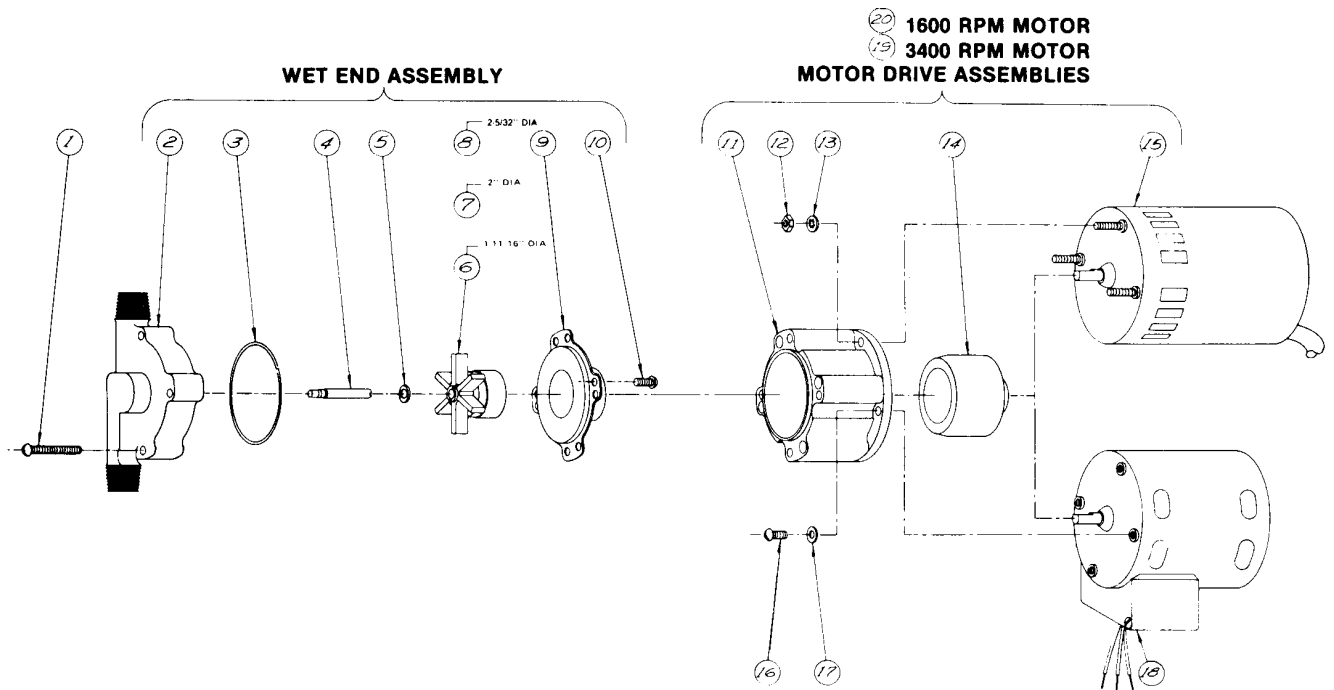
- 1—The motor assembly (Items 19 or 20) can be removed from the Wet End assembly without having to drain the liquid out of the system.
- 2—Remove four screws (Item 1) and slide the motor assembly away from the Wet End assembly.
- 3—If you must replace parts inside the pump housing assembly, then first close off the valves that supply water to the heating system or to the hot water tank. Drain the system to relieve any pressure.
- 4—After the system is drained and cool enough to handle, then remove the four screws (Item 10) on the rear of the housing.
- 5—The impeller magnet housing (Item 9) can now be removed. It may be snug fit into the pump housing and it may be necessary to pry evenly, under the four ears to loosen it.
- 6—Remaining pump parts can now be lifted out in sequence as shown on the exploded view. Replace any worn or damaged parts. Replace the “O” ring (Item 3) anytime the impeller magnet housing is removed.

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809-053-10R8



REPAIR PARTS LIST

ITEM	DESCRIPTION	PART NUMBER	QUANTITY
1	#8 x 1-1/4 Long Rd. Hd. Screw	923-003-10	4
2a	Pump Housing w/1/2" MPT	809-013-10	1
2b	Pump Housing w/Center Inlet Style*	809-142-00	1
2c	Pump Housing Plastic w/1/2" MPT*	809-079-10	1
3	"O" Ring, Silicon Rubber	809-027-10	1
4a	Impeller Shaft w/Thread	809-008-10	1
4b	Impeller Shaft w/"D" Flat	809-161-10	1
5	Thrust Washer	809-043-10	1
6	Impeller & Magnet Assembly 1-11/16 Dia. (3400 RPM) 809 HS	809-005-02	1
7	Impeller & Magnet Assembly 2 Dia. (1600 RPM) 809	809-005-01	1
8	Impeller & Magnet Assembly 2-5/32 Dia. (3400 RPM) 815	809-107-02	1
9	Impeller Magnet Housing	809-012-10	1
10	#8 x 3/8 Long Rd. Hd. Screw	135-040-10	4
11	Connecting Bracket	809-058-10	1
12	#8 Hex Nut	410-039-10	3
13	#8 Lock Washer	620-010-10	3
14	Drive Magnet Assembly	125-083-01	1
15	Motor, 115 Volt, 3400 RPM	809-090-10	1
16	#8 x 3/8 Long Rd. Hd. Screw	135-040-10	4
17	#8 Flat Washer	858-004-10	4
18	Motor, 115 Volt, 1600 RPM	809-064-10	1
19	Motor, Drive Magnet, Bracket Assembly (3400 RPM)	809-070-01	1
20	Motor, Drive Magnet, Bracket Assembly (1600 RPM)	809-071-01	1

* Old Style Housings Require Threaded Imp. Shaft (4a)
 New Housings Require Round Imp. Shaft with "D" Flat (4b)

