



MARCH PUMPS

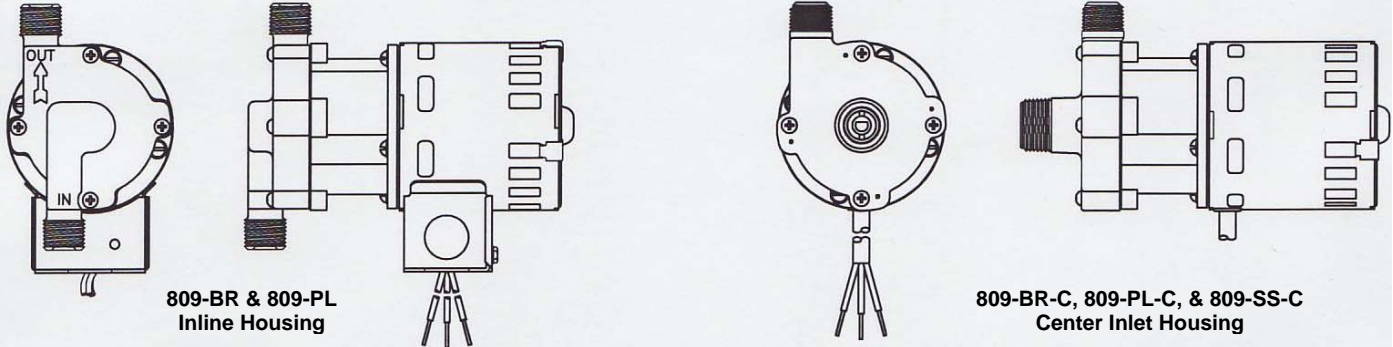
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809 "MAGNE-BOOST" HOT WATER PUMPS

DESCRIPTION:

Your March hot water booster pump is a non-self priming unit build 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.



GENERAL RATINGS & SPECIFICATIONS

MODEL	Max. Flow	Max. Head	Inlet	Outlet	Max Internal Pressure	Max Liquid Temperature	115 Volt Models			Pack Weight	
							Height	Width	Length		
809-BR	4.3 gpm	4.3 ft. 1.86 psi	1/2" MPT	1/2" MPT	150 psi	250 °F 121°C	5.33 in	3.33 in	6.58 in	6 lbs.	
809-PL			3/4" MPT		50 psi			3.38 in		5 lbs.	
809-BR-C	5.0 gpm		3/4" MPT	1/2" MPT	150 psi		4.50 in	3.38 in	7.90 in	6 lbs.	
809-PL-C			3/8" FPT & 3/4" MPT		50 psi					4.37 in	5 lbs.
809-SS-C			3/4" MPT		150 psi			4.50 in		7.84 in	6 lbs.

ABBREVIATIONS:

Pump Housing: BR is Bronze, PL is Polysulfil Plastic, SS is Stainless Steel, C is Center Inlet.

INSTALLATIONS:

The 809 Series pump is assembled and ready for installation. The pump should be mounted with the Electric Conduit Box 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 basics sub-assemblies. They are the Wet End Assembly and the Motor/Bracket/Drive Magnet Assembly. 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 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.

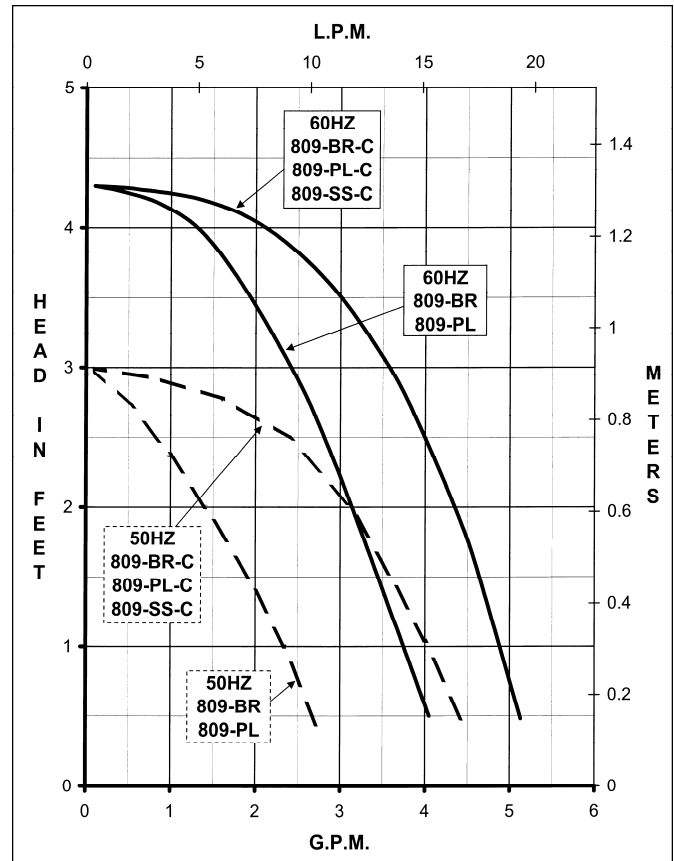
GENERAL SAFETY INFORMATION:

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.

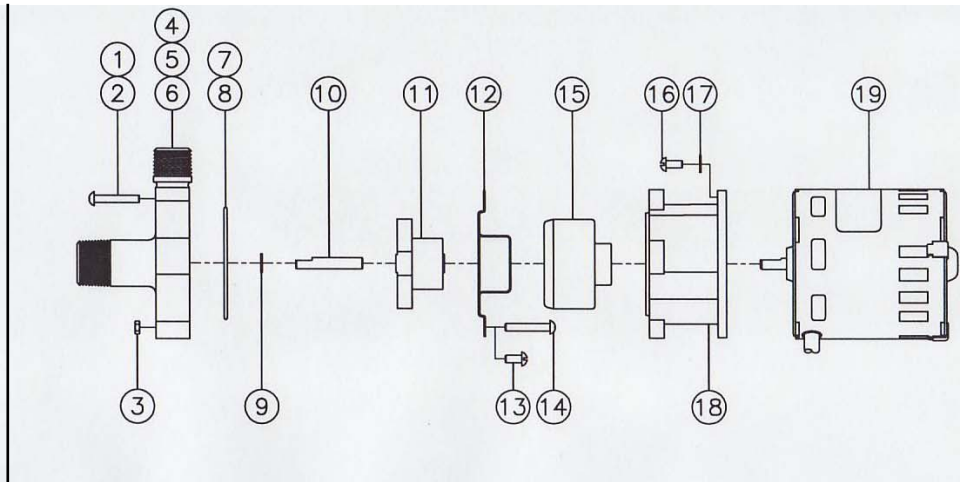
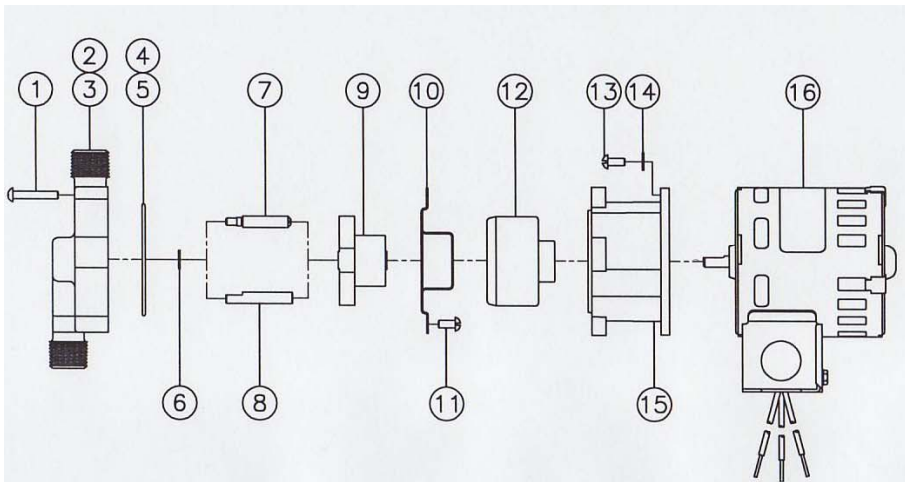
*UL Recognition on pumps, file E80954, is for water only. Motors are U.L. Yellow Card listed, impedance protected or thermal overload Protected. Complete pump under U.L. file E80954.

NOTES:

All specifications & data are based on pumping water and are intended for use as a guideline only. Ratings & dimensions may vary depending on the current motor being used.



MOTOR RATINGS & SPECIFICATIONS						
Volts	Hz	Ph	Hp	Rpm	Watts	Amps
115	60	1	1/100	1750	44	.5
	50	1	1/100	1400	36	.19
230	50	1	1/100	1400	36	.19
	60	1	1/100	1750	44	.25



REPAIR PARTS LIST FOR 809-BR & 809-PL					
ITEM	DESCRIPTION	MATERIAL	QTY.	PART NO.	USED IN
1	Screw #8-32 x 1" Long	Steel	4	0923-0003-1000	All
2	Pump Housing (Inline)	Bronze	1	0809-0013-0000	BR
3	Pump Housing (Inline)	Polysulfil	1	0809-0079-0100	PL
4	"O" Ring .070 CS x 2.441 ID	Silicone	1	0809-0165-1000	BR
5	"O" Ring 1/16" CS x 2-3/8 ID	Silicone	1	0809-0027-1000	PL
6	Thrust Washer	Teflon	1	0809-0043-1000	All
7	Shaft (Threaded)	Stainless	1	0809-0008-1000	BR
8	Shaft	Stainless	1	0809-0161-1000	PL
9	Impeller (2" Dia.)	Ryton/Teflon/Carbon	1	0809-0005-0100	All
10	Rear Housing	Stainless	1	0809-0012-1000	All
11	Screw #8-32 x 3/8" Long	Stainless	4	0135-0040-1000	All
12	Drive Magnet		1	0125-0083-0100	All
13	Screw #8-32 x 3/8" Long	Stainless	4	0135-0040-1000	All
14	Washer	Stainless	4	0858-0004-1000	All
15	Motor Bracket	Plastic	1	0809-0058-1000	All
16a	Motor 115V 50/60Hz		1	0809-0064-1000	All
16b	Motor 230V 50/60Hz (Not Shown)		1	0809-0065-1000	All

REPAIR PARTS LIST FOR 809-BR-C, 809-PL-C, & 809-SS-C					
ITEM	DESCRIPTION	MATERIAL	QTY.	PART NO.	USED IN
1	Screw #8-32 x 1" Long	Steel	4	0923-0003-1000	BR-C, PL-C
2	Screw #8-32 x 1" Long	Stainless	4	0809-0205-1000	SS-C
3	Hex Nut	Stainless	4	0991-0004-1000	SS-C
4	Pump Housing w/Center Inlet	Bronze	1	0809-0142-0000	BR-C
5	Pump Housing w/Center Inlet	Polysulfil	1	0809-0179-0100	PL-C
6	Pump Housing w/Center Inlet	Stainless	1	0809-0150-0000	SS-C
7	"O" Ring .070 CS x 2.441 ID	Silicone	1	0809-0165-1000	BR-C, SS-C
8	"O" Ring 1/16" CS x 2-3/8 ID	Silicone	1	0809-0027-1000	PL-C
9	Thrust Washer	Teflon	1	0809-0043-1000	All
10	Shaft	Stainless	1	0809-0161-1000	All
11	Impeller (2" Dia.)	Ryton/Teflon/Carbon	1	0809-0005-0100	All
12	Rear Housing	Stainless	1	0809-0012-1000	All
13	Screw #8-32 x 3/8" Long	Stainless	4	0135-0040-1000	BR-C, PL-C
14	Screw #8-32 x 1" Long	Stainless	4	0809-0205-1000	SS-C
15	Drive Magnet		1	0125-0083-0100	All
16	Screw #8-32 x 3/8" Long	Stainless	4	0135-0040-1000	All
17	Washer	Stainless	4	0858-0004-1000	All
18	Motor Bracket	Plastic	1	0809-0058-1000	All
19a	Motor 115V 60Hz		1	0135-0109-1000	All
19b	Motor 230V 50/60Hz (Not Shown)		1	0135-0112-1000	All

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

DISASSEMBLY AND REASSEMBLY:

- 1—The motor 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 wet end 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 on the rear of the housing.
- 5—The rear housing 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 anytime the rear housing is removed.

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 0750-0130-1000 is available for additional warranty information.