



# MARCH PUMPS

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

## 809

## HOT WATER PUMPS

### DESCRIPTION & OPERATION:

809 Series hot water booster centrifugal magnetic drive pumps are built to handle liquid transfer in heating and cooling operations. Contact the factory for application assistance. Pumps are not self-priming, lack a suction lift, and thus require a flooded suction. Pumps cannot be run dry.

### INSTALLATIONS:

Pumps should be installed with the pump housing arrow pointing in the direction of flow within the system. If the arrow indicating flow is not in the direction required, remove the housing screws holding the housing to the motor bracket and rotate the housing assembly as required. Replace the screws and tighten. The pump is composed of a wet end assembly which can be separated by unscrewing the housing screws. The pump will then separate into 2 parts. The liquid will be contained within the wet end assembly unless the rear housing screws on the rear housing are loosened.

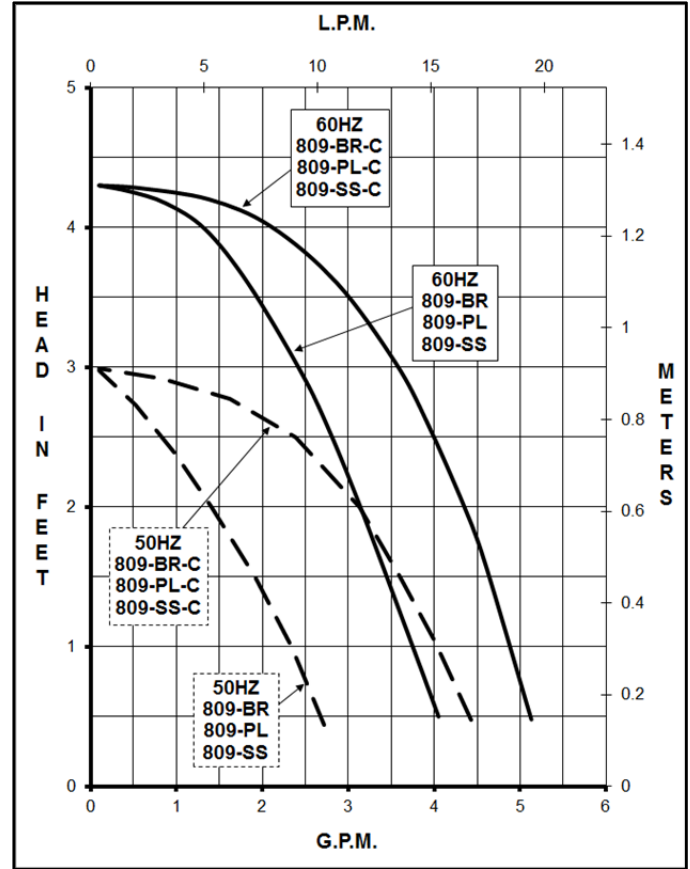
### LUBRICATION:

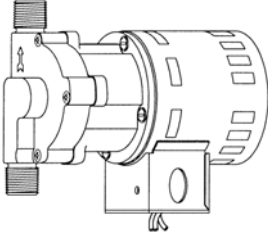
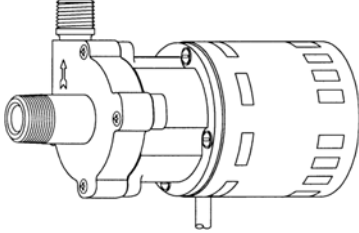
The motor should be oiled at least once a year at the start of the heating season with 4 or 5 drops of SAE 20 weight non-detergent oil in each bearing. If the pump is used daily, it should be oiled every six months. Do not over oil.

### GENERAL SAFETY INFORMATION:

Follow all local safety codes & 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 & in draining hot water from the pump or the system. March cannot recommend the 809 Series out of bronze where the liquid is used for human consumption per California Law due to the presence of lead.

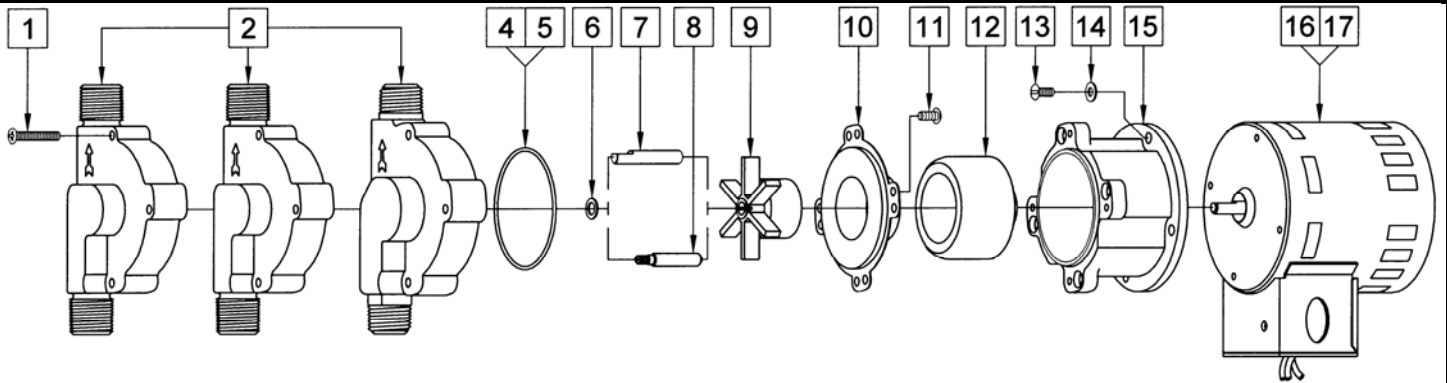
\*UL Recognition on pumps, file E80954, is for water only. (809-BR, 809-PL) Motors are U.L. Yellow Card listed, impedance protected or thermal overload protected. Complete pump under U.L. file E80954.



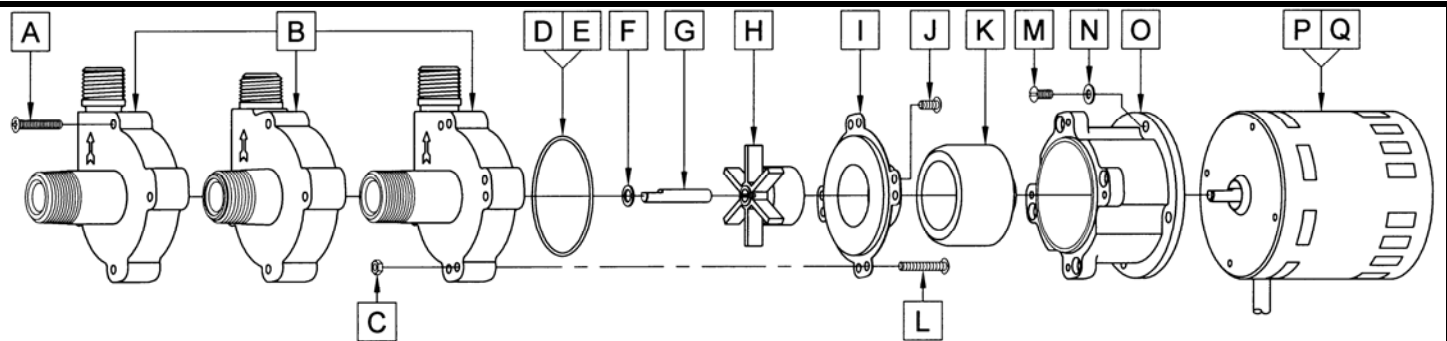
SPECIFICATIONS										
		809-BR & 809-SS		809-PL		809-BR-C & 809-SS-C		809-PL-C		
<b>Model Abbreviations</b>		BR: Bronze, SS: Stainless PL: Polysulfone		BR: Bronze, SS: Stainless PL: Polysulfone		C: Center Inlet				
Max Flow		60Hz {4.3 gpm} - 50Hz {10.3 lpm}				60Hz {5.0 gpm} - 50Hz {16.7 lpm}				
Max Head		60Hz {4.3 ft / 1.86 psi} - 50Hz {0.92 m}				60Hz {4.3 ft / 1.86 psi} - 50Hz {0.92 m}				
Inlet		1/2" MPT		3/4" MPT		3/8" FPT & 3/4" MPT				
Outlet		1/2" MPT		1/2" MPT						
Internal Pressure		150 psi / 10 bar Max		50 psi / 3.4 bar Max		150 psi / 10 bar Max		50 psi / 3.4 bar Max		
Liquid Temperature		250°F / 121°C Max				250°F / 121°C Max				
Packed Weight		5.10 lbs / 2.31 kg		4.35 lbs / 1.97 kg		6 lbs / 2.7 kg		4.25 lbs / 1.92 kg		
<b>Models</b>		809-BR & 809-SS		809-PL		809-BR-C		809-PL-C		809-SS-C
Overall Size (H x W x L)	115V	5.33" x 3.33" x 6.58"		5.33" x 3.38" x 6.58"		4.25" x 3.38" x 7.90"		4.13" x 3.38" x 7.40"		4.25" x 3.38" x 7.84"
		13.5 cm x 8.4 cm x 16.7 cm		13.5 cm x 8.5 cm x 16.7 cm		10.7 x 8.5 x 20.0 cm		10.4 x 8.5 x 18.7 cm		10.7 x 8.5 x 19.9 cm
	230V	5.12" x 3.33" x 6.54"		5.12" x 3.38" x 6.54"		4.25" x 3.38" x 8.15"		4.13" x 3.38" x 7.65"		4.25" x 3.38" x 8.90"
		13.0 cm x 8.4 cm x 16.6 cm		13.0 cm x 8.5 cm x 16.6 cm		10.7 x 8.5 x 20.7 cm		10.4 x 8.5 x 19.4 cm		10.7 x 8.5 x 20.5 cm
<b>Models</b>		809-BR, 809-PL, & 809-SS				809-BR-C, 809-PL-C, & 809-SS-C				
		60Hz -115V	50Hz - 115V	60Hz - 230V	50Hz - 230V	60Hz -115V	50Hz - 115V	60Hz - 230V	50Hz - 230V	
Motor Type		Air Cooled				Air Cooled				
1Ph	Watts - Amps	28 - 0.5	34 - 0.6	31 - 0.17	35 - 0.19	56 - 0.94		52 - 0.45	60 - 0.50	
	Hp / Kw - Rpm	1/100 - 1750	0.007 - 1400	1/100 - 1750	0.007 - 1400	1/55 - 1750		1/40 - 1750	0.018 - 1400	
Electrical Connection		Conduit Box				3 ft (0.9 m) Cord				

All specifications & data are based on pumping water & are intended as a guideline only. Specifications may vary with different motors.

**PARTS LIST**



#	DESCRIPTION	809-BR	809-PL	809-SS	SIZE (Inches)	QTY.	809-BR	809-PL	809-SS
1	Screw (Housing)	Steel	Steel	Stainless	#8-32 x 1 Lg.	4	0923-0003-1000		0809-0205-1000
2	Pump Housing	Bronze	Polysulfone	Stainless	Inline Inlet & Outlet	1	0809-0013-0000	0809-0079-0100	0809-0211-0000
4	"O" Ring	Silicone		Silicone	0.070 CS x 2.441 ID	1	0809-0165-1000		0809-0165-1000
5	"O" Ring		Silicone		1/16 CS x 2-3/8 ID	1		0809-0027-1000	
6	Thrust Washer		Teflon			1		0809-0043-1000	
7	Shaft (Current)		Stainless		"D" Flat	1	0809-0161-1000		
	Shaft (Old Style)		Stainless		"D" Flat	1			0809-0161-1000
	Shaft (Current)		Stainless		Left-Hand Thread	1			0809-0214-1000
	Shaft (Old Style)		Stainless		Left-Hand Thread	1	0809-0008-1000		
9	Impeller		Ryton/Teflon/Glass		2 Dia.	1		0809-0005-0100	
10	Rear Housing		Stainless			1		0809-0012-1000	
11	Screw (Rear Housing)		Stainless		#8-32 x 3/8 Lg.	4		0135-0040-1000	
12	Drive Magnet					1		0125-0083-0100	
13	Screw				#8-32 x 3/8 Lg.	4		0135-0040-1000	
14	Washer		Stainless		#8	4		0858-0004-1000	
15	Motor Bracket		Plastic			1		0809-0058-1000	
16	Motor 115V, 50/60Hz				Conduit Box	1		0809-0064-1000	
17	Motor 230V, 50/60Hz (Not Shown)				Conduit Box	1		0809-0065-1000	



#	DESCRIPTION	809-BR-C	809-PL-C	809-SS-C	SIZE (Inches)	QTY.	809-BR-C	809-PL-C	809-SS-C
A	Screw (Housing)	Steel	Steel	Stainless	#8-32 x 1 Lg.	4	0923-0003-1000		0809-0205-1000
B	Pump Housing	Bronze	Polysulfone	Stainless	Center Inlet	1	0809-0142-0000	0809-0179-0100	0809-0150-0000
C	Hex Nut			Stainless	#8-32	4			0991-0004-1000
D	"O" Ring	Silicone		Silicone	0.070 CS x 2.441 ID	1	0809-0165-1000		0809-0165-1000
E	"O" Ring		Silicone		1/16 CS x 2-3/8 ID	1		0809-0027-1000	
F	Thrust Washer		Teflon			1		0809-0043-1000	
G	Shaft		Stainless			1		0809-0161-1000	
H	Impeller		Ryton/Teflon/Glass		2 Dia.	1		0809-0005-0100	
I	Rear Housing		Stainless			1		0809-0012-1000	
J	Screw (Rear Housing)		Stainless		#8-32 x 3/8 Lg.	4	0135-0040-1000		
K	Drive Magnet					1		0125-0083-0100	
L	Screw		Stainless		#8-32 x 1 Lg.	4			0809-0205-1000
M	Screw				#8-32 x 3/8 Lg.	4		0135-0040-1000	
N	Washer		Stainless		#8	4		0858-0004-1000	
O	Motor Bracket		Plastic			1		0809-0058-1000	
P	Motor 115V, 60Hz				Cord	1		0135-0109-1000	
Q	Motor 230V, 50/60Hz (Not Shown)				Cord	1		0135-0112-1000	

**DISASSEMBLY & REASSEMBLY**

The motor can be removed from the wet end assembly without draining the liquid from the system. To do so remove four housing screws and slide the motor assembly away. If parts inside the wet end assembly must be removed, isolate the pump or drain the system. When the system is drained and cool, remove the four screws from the rear of the housing. The rear housing can now be removed. Remaining pump parts can be removed. Replace any worn or damaged parts. Replace the O-ring anytime the rear housing is removed.

NOTE: Contact Factory for other materials and/or parts not listed

0809-0053-1000 R21

**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. For the complete warranty and to register online go to [www.marchpump.com/warranty-registration](http://www.marchpump.com/warranty-registration)