



MARCH PUMPS

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809-HS HOT WATER PUMPS

DESCRIPTION & OPERATION:

809-HS 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.

INSTALLATION:

809-HS 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:

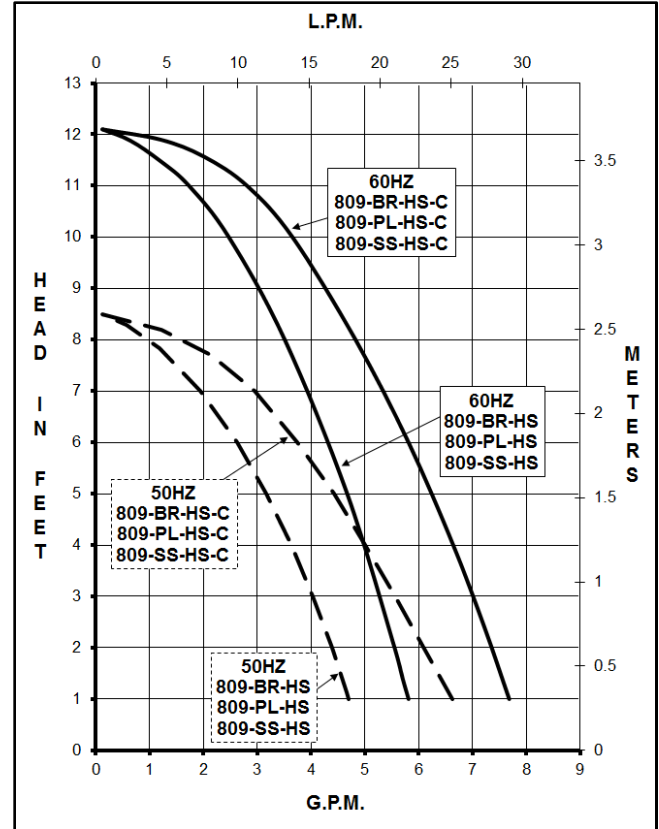
The motor should be oiled annually at the start of the heating season with 4 or 5 drops of SAE 20 weight non-detergent oil in each bearing. If the pump is used year round it should be oiled every six months. Do not over oil.

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. 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-HS, 809-PL-HS) Motors are U.L. Yellow Card listed, impedance protected or thermal overload protected. Complete pump under U.L. file E80954.

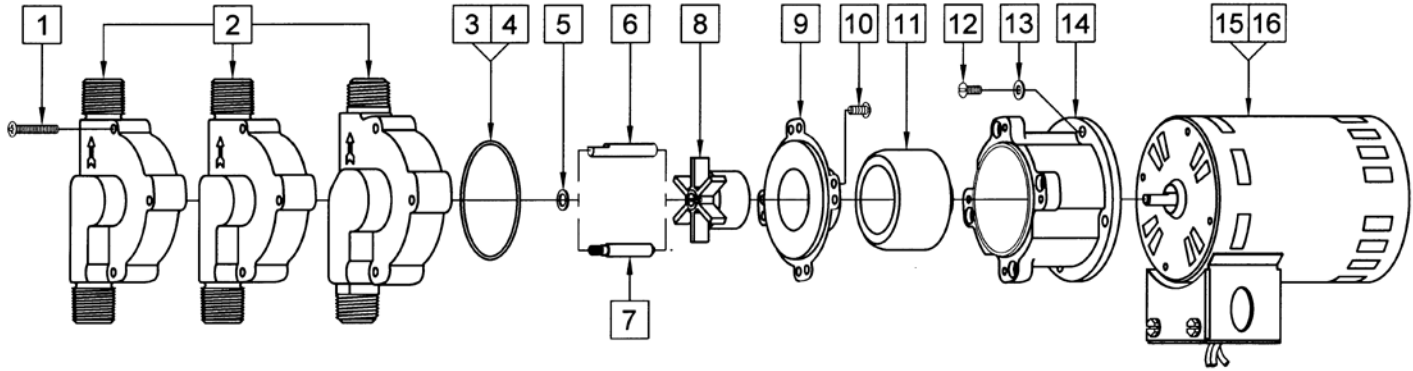
LIMITED WARRANTY: March pumps are guaranteed only against defects in workmanship or materials for a period of one year from date of manufacture pumping water. For the complete warranty and to register online go to www.marchpump.com/warranty-registration



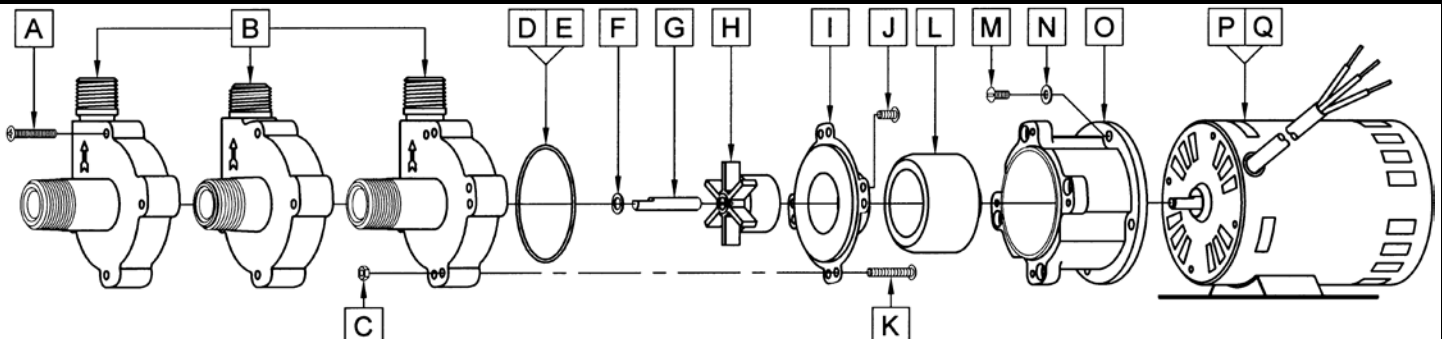
SPECIFICATIONS		Inline Inlet & Outlet			C: Center Inlet				
		809-BR-HS	809-PL-HS	809-SS-HS	809-BR-HS-C	809-PL-HS-C	809-SS-HS-C		
Model Abbreviations		BR: Bronze	PL: Polysulfone	SS: Stainless	BR: Bronze	PL: Polysulfone	SS: Stainless		
Max Flow		60Hz {6 gpm} - 50Hz {18.9 lpm}			60Hz {7.5 gpm} - 50Hz {26.4 lpm}				
Max Head		60Hz {12.1 ft / 5.23 psi} - 50Hz {2.5 m}			60Hz {12.1 ft / 5.23 psi} - 50Hz {2.5 m}				
Inlet		1/2" MPT			3/4" MPT	3/8" FPT & 3/4" MPT	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	150 psi / 10 bar Max	50 psi / 3.4 bar Max	150 psi / 10 bar Max		
Liquid Temperature		250°F / 121°C Max			250°F / 121°C Max				
Packed Weight		5.80 lbs / 2.63 kg	5 lbs / 2.3 kg	6 lbs / 2.7 kg	6.20 lbs / 2.81 kg	5 lbs / 2.3 kg	6 lbs / 2.7 kg		
Overall Pump Size (H x W x L)	115V	5.31" x 3.33" x 7.74"	5.31" x 3.38" x 7.74"	5.31" x 3.33" x 7.74"	4.50" x 3.50" x 8.94"	4.37" x 3.50" x 8.43"	4.50" x 3.50" x 8.62"		
	230V	13.4 x 8.4 x 19.6 cm	13.4 x 8.5 x 19.6 cm	13.4 x 8.4 x 19.6 cm	11.4 x 8.8 x 22.7 cm	11.0 x 8.8 x 21.4 cm	11.4 x 8.8 x 21.8 cm		
Motor Type		Air Cooled				Air Cooled			
		60Hz - 115V	50Hz - 115V	60Hz - 230V	50Hz - 230V	60Hz - 115V	50Hz - 115V	60Hz - 230V	50Hz - 230V
1Ph	Watts - Amps	87 - 1.4	100 - 1.4	90 - 0.7	104 - 0.7	97 - 1.4	109 - 1.4	101 - 0.7	110 - 0.7
	Hp / Kw - Rpm	1/25 - 3450	0.029 - 2850	1/25 - 3450	0.029 - 2850	1/25 - 3450	0.029 - 2850	1/25 - 3450	0.029 - 2850
Electrical Connection		Conduit Box		3 ft (0.9 m) Cord		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-HS	809-PL-HS	809-SS-HS	SIZE (Inches)	QTY.	809-BR-HS	809-PL-HS	809-SS-HS
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
3	"O" Ring	Silicone		Silicone	0.070 CS x 2.441 ID	1	0809-0165-1000		0809-0165-1000
4	"O" Ring		Silicone		1/16 CS x 2-3/8 ID	1		0809-0027-1000	
5	Thrust Washer		Teflon			1		0809-0043-1000	
6	Shaft (Current Style)		Stainless		"D" Flat	1	0809-0161-1000		
	Shaft (Old Style)		Stainless		"D" Flat	1			0809-0161-1000
7	Shaft (Current Style)		Stainless		Left-Hand Thread	1			0809-0214-1000
	Shaft (Old Style)		Stainless		Left-Hand Thread	1	0809-0008-1000		
8	Impeller		Ryton/Teflon/Glass		1-11/16 Dia.	1		0809-0005-0200	
9	Rear Housing		Stainless			1		0809-0012-1000	
10	Screw (Rear Housing)		Stainless		#8-32 x 3/8 Lg.	4		0135-0040-1000	
11	Drive Magnet					1		0125-0083-0100	
12	Screw		Stainless		#8-32 x 3/8 Lg.	4		0135-0040-1000	
13	Washer		Stainless		#8	4		0858-0004-1000	
14	Motor Bracket		Plastic			1		0809-0058-1000	
15	Motor 115V, 50/60Hz				Conduit Box	1		0809-0090-1000	
16	Motor 230V, 50/60Hz (Not Shown)				w/Cord, No Base	1		0135-0037-1000	



#	DESCRIPTION	809-BR-HS-C	809-PL-HS-C	809-SS-HS-C	SIZE (Inches)	QTY.	809-BR-HS-C	809-PL-HS-C	809-SS-HS-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		1-11/16 Dia.	1		0809-0005-0200	
I	Rear Housing		Stainless			1		0809-0012-1000	
J	Screw (Rear Housing)		Stainless		#8-32 x 3/8 Lg.	4	0135-0040-1000		
K	Screw		Stainless		#8-32 x 1 Lg.	4			0809-0205-1000
L	Drive Magnet					1		0125-0083-0100	
M	Screw		Stainless		#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, 50/60Hz				w/Cord & Base	1		0809-0123-1000	
Q	Motor 230V, 50/60Hz				w/Cord & Base	1		0809-0124-1000	

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 rear housing 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.

0809-0053-1100 R9