



# MARCH PUMPS

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## 809-HS 12 & 24 VDC HOT WATER PUMPS

### DESCRIPTION:

March 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.

### INSTALLATION:

Pumps are not self-priming, lack a suction lift, and thus require a flooded suction. Pumps cannot be run dry. The 809 Series 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 screws on the rear housing are loosened.

### GENERAL SAFETY INFORMATION:

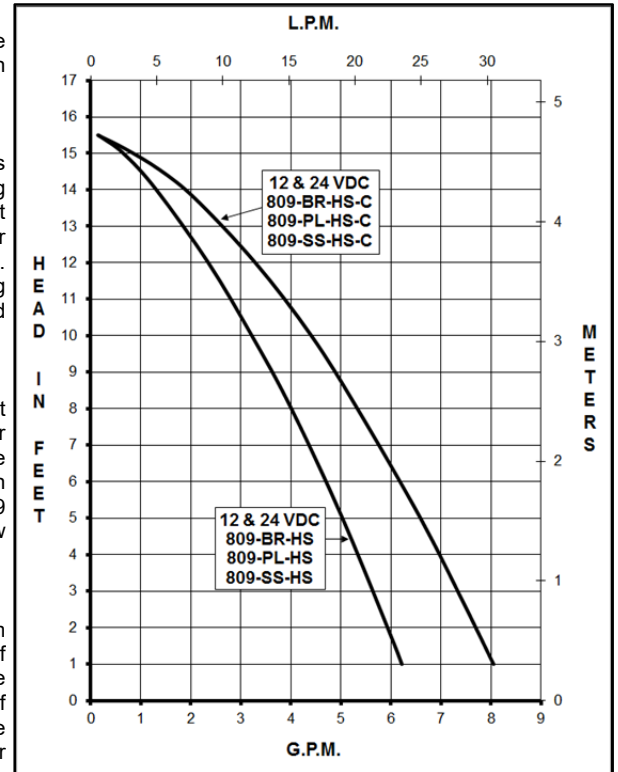
Follow all local electrical and safety codes, and the Occupational Safety and Health Act (OSHA). Make certain that the power source conforms to the requirements of your equipment. Always disconnect power before performing any work on or near the electric motor. Caution must be exercised to relieve any 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.

### 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.

### ELECTRICAL:

Motors are DC brush type.  
 Red lead is positive & Blue lead is negative.

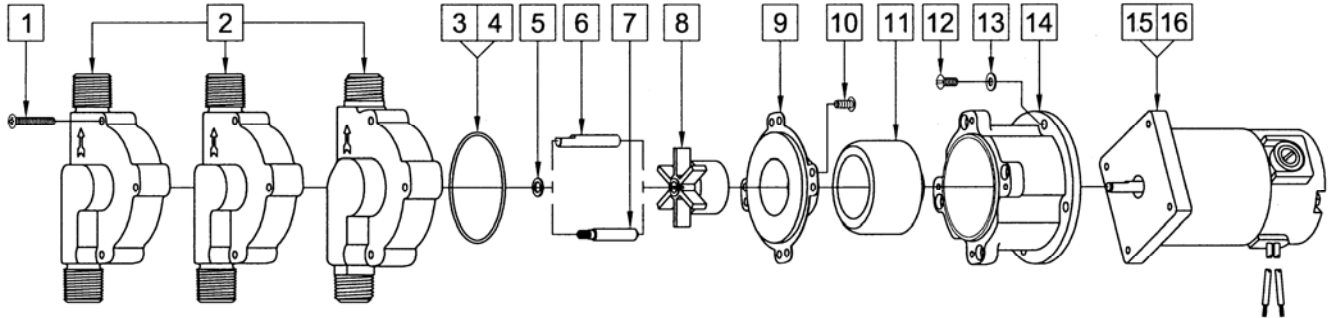


SPECIFICATIONS		809-BR-HS					809-SS-HS					809-PL-HS					809-BR-HS-C					809-SS-HS-C					809-PL-HS-C																																	
Product #	12 V	0809-0101-0100					0809-0215-0300					0809-0157-0100					0809-0146-0300					0809-0177-0400					0809-0180-0300																																	
	24 V	0809-0103-0100					0809-0215-0400					0809-0158-0100					0809-0146-0400					0809-0177-0300					0809-0180-0400																																	
Model Abbreviations		BR: Bronze					SS: Stainless					PL: Polysulfone					BR: Bronze					SS: Stainless					PL: Polysulfone																																	
		Inline Inlet					Inline Inlet					Inline Inlet					C: Center Inlet					C: Center Inlet					C: Center Inlet																																	
Max Flow	6 gpm - 22.7 lpm															6 gpm - 22.7 lpm															8 gpm - 30.2 lpm															8 gpm - 30.2 lpm														
Max Head	15.5 ft / 6.7 psi - 4.7 m															15.5 ft / 6.7 psi - 4.7 m															15.5 ft / 6.7 psi - 4.7 m															15.5 ft / 6.7 psi - 4.7 m														
Inlet	1/2" MPT					1/2" MPT					1/2" MPT					3/4" MPT					3/8" FPT & 3/4" MPT																																							
Outlet	1/2" MPT					1/2" MPT					1/2" MPT					1/2" MPT					1/2" MPT																																							
Internal Pressure	150 psi / 1034 kPa Max															50 psi / 344 kPa Max															150 psi / 1034 kPa Max															50 psi / 344 kPa Max														
Liquid Temperature	250 °F / 121 °C Max															250 °F / 121 °C Max															250 °F / 121 °C Max															250 °F / 121 °C Max														
Packed Weight	5.5 lbs / 2.5 kg					4.5 lbs / 2 kg					5.5 lbs / 2.5 kg					4.5 lbs / 2 kg																																												
ELECTRICAL	W	A	Hp	kW	Rpm	W	A	Hp	kW	Rpm	W	A	Hp	kW	Rpm	W	A	Hp	kW	Rpm	W	A	Hp	kW	Rpm																																			
	12 V	43	3.5	1/25	0.029	3650	43	3.5	1/25	0.029	3650	43	3.5	1/25	0.029	3650	43	3.5	1/25	0.029	3650	43	3.5	1/25	0.029	3650																																		
24 V	43	1.8	1/25	0.029	3650	43	1.8	1/25	0.029	3650	43	1.8	1/25	0.029	3650	43	1.8	1/25	0.029	3650	43	1.8	1/25	0.029	3650																																			
Overall Size	Height	Width				Length				Height	Width				Length				Height	Width				Length				Height	Width				Length																											
	Inches	4.87				3.31				6.94				4.88				3.38				6.94				4.69				4.50				8.33				4.56				4.50				7.83														
	cm	17.6				8.4				12.3				17.6				8.5				12.3				11.9				11.4				21.1				11.5				11.4				19.8														

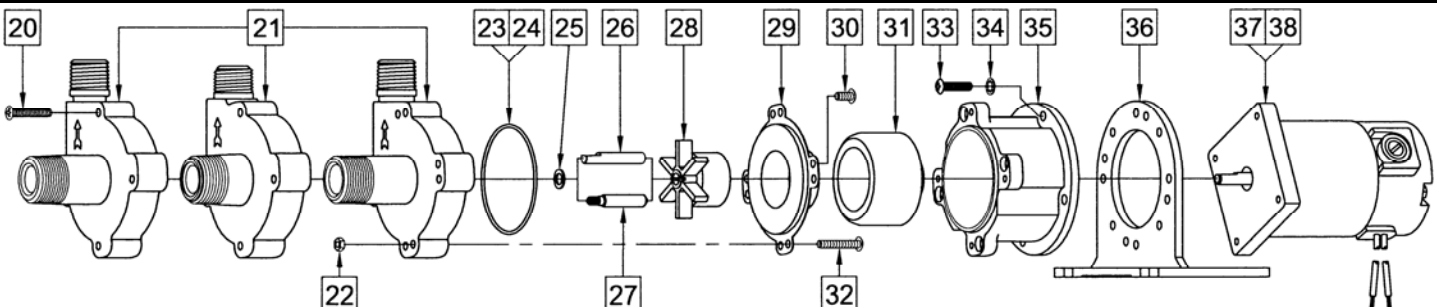
All specifications & data are based on pumping water & are intended as a guideline only. Specifications may vary with different motors.

**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)

**PARTS LIST**



#	DESCRIPTION	MATERIAL	SIZE (Inches)	QTY.	809-BR-HS	809-PL-HS	809-SS-HS
1	Screw (Housing)	Steel	#8-32 x 1 Lg.	4	0923-0003-1000		
	Screw (Housing)	Stainless	#8-32 x 1 Lg.	4			0809-0205-1000
2	Pump Housing	Bronze	Inline Inlet & Outlet	1	0809-0013-0000		
	Pump Housing	Polysulfone	Inline Inlet & Outlet	1		0809-0079-0100	
	Pump Housing	Stainless	Inline Inlet & Outlet	1			0809-0211-0010
3	"O" Ring	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	Stainless	"D" Flat	1		0809-0161-1000	
7	*Shaft	Stainless	Left-Hand Thread	1	0809-0214-1000		0809-0214-1000
8	Impeller	Ryton/Teflon/Glass	1-11/16 Dia.	1		0809-0005-0200	
9	Rear Housing	Stainless		1		0809-0012-1000	
10	Screw	Stainless	#8-32 x 3/8 Lg.	4		0135-0040-1000	
11	Drive Magnet		0.250 Bore	1		0125-0083-0100	
12	Screw	Stainless	#8-32 x 1/2 Lg.	4		0150-0015-1000	
13	Washer	Stainless	#8	1		0858-0004-1000	
14	Motor Bracket	Plastic		1		0809-0058-1000	
15	Motor (12 VDC Brush)		3650 RPM	1		0809-0101-1000	
16	Motor (24 VDC Brush)		3650 RPM	1		0809-0103-1000	



#	DESCRIPTION	MATERIAL	SIZE (Inches)	QTY.	809-BR-HS-C	809-PL-HS-C	809-SS-HS-C
20	Screw (Housing)	Steel	#8-32 x 1 Lg.	4	0923-0003-1000		
	Screw (Housing)	Stainless	#8-32 x 1 Lg.	4			0809-0205-1000
21	Pump Housing	Bronze	Center Inlet	1	0809-0142-0000		
	Pump Housing	Polysulfone	Center Inlet	1		0809-0179-0100	
	Pump Housing	Stainless	Center Inlet	1			0809-0150-0010
22	Hex Nut	Stainless	#8-32	1			0991-0004-1000
23	"O" Ring	Silicone	0.070 CS x 2.441 ID	1	0809-0165-1000		0809-0165-1000
24	"O" Ring	Silicone	1/16 CS x 2-3/8 ID	1		0809-0027-1000	
25	Thrust Washer	Teflon		1		0809-0043-1000	
26	*Shaft	Stainless	"D" Flat	1		0809-0161-1000	
27	*Shaft	Stainless	Left-Hand Thread	1	0809-0214-1000		0809-0214-1000
28	Impeller	Ryton/Teflon/Glass	1-11/16 Dia.	1		0809-0005-0200	
29	Rear Housing	Stainless		1		0809-0012-1000	
30	Screw (Rear Housing)	Stainless	#8-32 x 3/8 Lg.	4	0135-0040-1000		
31	Drive Magnet		0.250 Bore	1		0125-0083-0100	
32	Screw (Rear Housing)	Stainless	#8-32 x 1 Lg.	4			0809-0205-1000
33	Screw	Stainless	#8-32 x 3/4 Lg.	4		0210-0036-1000	
34	Lock Washer	Stainless	#8	4		0620-0010-1000	
35	Motor Bracket	Plastic		1		0809-0058-1000	
36	Base	Plastic		1		0125-0106-1000	
37	Motor (12 VDC Brush)		3650 RPM	1		0809-0101-1000	
38	Motor (24 VDC Brush)		3650 RPM	1		0809-0103-1000	

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

0809-0053-1400 R10

\*Check shaft type before ordering replacement parts.