# **Eagle™ Pump Owners Manual**

# IMPORTANT SAFETY INSTRUCTIONS READ AND FOLLOW ALL INSTRUCTIONS SAVE THESE INSTRUCTIONS

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## **AWARNING**

Before installing this product, read and follow all warning notices and instructions accompanying this product. Failure to follow safety warnings and instructions can result in severe injury, death, or property damage. Call (805) 523-2400 for additional free copies of these instructions.

# **Important Notice**



Attention Installer.

This manual contains important information about the installation, operation and safe use of this product. This information should be given to the owner/operator of this equipment.

Pentair Pool Products

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Because reliability matters most

#### SECTION I. INSTALLATION

#### **Notice to Installer**

When pump is mounted permanently within 5 ft. of the inside walls of a swimming pool, you must use a No. 8 AWG or larger conductor to connect to bonding conductor lug.

### **AWARNING**



#### Risk of electrical shock or electrocution.

This pool pump must be installed by a licensed or certified electrician or a qualified pool serviceman in accordance with the National Electrical Code and all applicable local codes and ordinances. Improper installation will create an electrical hazard which could result in death or serious injury to pool users, installers, or others due to electrical shock, and may also cause damage to property.

Always disconnect power to the pool pump at the circuit breaker before servicing the pump. Failure to do so could result in death or serious injury to serviceman, pool users or others due to electric shock.

## **AWARNING**

To reduce the risk of injury, do not permit children to use this product unless they are closely supervised at all times.

## **ACAUTION**

This pump is for use with permanently installed pools and may also be used with hot tubs and spas if so marked. Do not use with storable pools. A permanently installed pool is constructed in or on the ground or in a building such that it cannot be readily disassembled for storage. A storable pool is constructed so that it may be readily disassembled for storage and reassembled to its original integrity and has a maximum dimension of 18 feet (5.49m) and a maximum wall height of 42 inches (1.07m).

## **ACAUTION**

For hot tubs and spa pumps, do not install within an outer enclosure or beneath the skirt of a hot tub or spa unless so marked.

#### SECTION II. OPERATION & MAINTENANCE

#### A. The Pump Strainer

This unit, sometimes referred to as the "Hair and Lint Pot", is the unit in front of the pump volute (6-1/2" in diameter). The lid screws directly into the pot and should be hand tightened only. DO NOT OVERTIGHTEN. Inside the chamber is the basket. This basket must be kept clean of leaves at all times. View basket through "See Through Lid" to inspect for leaves and debris.

## **ACAUTION**

To prevent damage to the pump and filter and for proper operation of the system, clean pump strainer and skimmer baskets regularly.

#### NOTE

It is important that the lid 0-ring be kept clean and well lubricated. We recommend a silicone-base lubricant for best results.

#### To Clean:

- 1. Turn off pump.
- 2. Remove lid by unscrewing (counter-clockwise rotation).
- 3. Remove the plastic basket and empty debris.
- 4. Replace the basket, fill with water, replace lid securely to prevent air from entering. Do not use tools.
- 5. Open air relief valve on top of filter.
- 6. Stand clear of filter. Turn on pump.
- 7. Close air relief valve when a steady stream of water comes out of the air relief valve.

If pump is installed below water level of pool, close return and suction lines prior to opening hair and lint pot on pump. Make sure to re-open valves prior to operating.

Regardless of the length of time between filter cleaning, it is most important to visually inspect the hair and lint pot basket at least twice a week. A dirty basket will reduce the efficiency of the filter and heater and also put an abnormal stress on the pump motor which could result in a costly repair bill.

DO NOT run pump dry. If pump is run dry, the mechanical seal will be damaged and the pump will start leaking. In the event this occurs, the damaged seal must be replaced.

ALWAYS maintain proper water level in your pool (half way up skimmer opening). If the water level falls below the skimmer opening, the pump will draw air through the skimmer, losing the prime and causing the pump to run dry, resulting in a damaged seal. Continued operation in this manner could cause a loss of pressure, resulting in damage to the pump case, impeller and seal.

#### B. Priming The Pump

- 1. Turn off pump.
- 2. Remove lid by unscrewing (counter-clockwise rotation).
- 3. Fill pot with water at least to the level of the suction line.
- 4. Make sure the O-ring is in place.
- 5. Tighten by hand.
- 6. Open air relief valve on top of filter.
- 7. Stand clear of filter. Turn on pump.
- 8. The pump will now prime, with the priming time depending upon the suction lift, and the horizontal distance of the suction piping.
- 9. Close air relief valve when a steady stream of water comes out of the air relief valve.

#### C. Electric Motor

The electric motor should be protected from foreign matter, splashing pool water, deck hosing and the weather. Any enclosure should be well ventilated to prevent motor from overheating. Whenever a motor has become wet, let it dry before running it. If a motor has been damaged by water or dirt, it voids the motor guarantee.

#### D. The Shaft Seal

The shaft seal consists primarily of two parts, a rotating ceramic seal and a spring-loaded carbon seal.

## **ACAUTION**

The highly polished and lapped faces of the seal are easily damaged. Handle the seal with care.

This centrifugal pump requires little or no service other than reasonable care. Occasionally, however, a shaft seal becomes damaged and must be replaced.

#### E. Protect Motor Against Heat

- 1. Shade the motor from the sun.
- 2. Provide ample cross ventilation.

#### F. Protect Motor Against Dirt

- 1. Keep motor, motor vents, and surrounding area clean.
- 2. Avoid sweeping or stirring up dust near the motor while it's running.
- 3. Avoid storing (or spilling) pool chemicals near the motor.

#### G. Protect Motor Against Moisture

- 1. Provide protection from rain, snow, lawn sprinklers, etc.
- 2. Locate motor on a slight elevation so water will not run or puddle nearby.
- 3. Avoid spilling or dripping liquid chemicals on or near motor.
- 4. Avoid splashing water near the motor.
- Do not wrap motor with plastic or other air-tight materials.
   (Exception: The motor may be covered during a storm, when hosing, winter storage, etc.; never when motor is running or expected to be running).

#### NOTE

When replacing motor, be certain that motor support (part number 39201300) is correctly turned and positioned to support type of motor being installed.

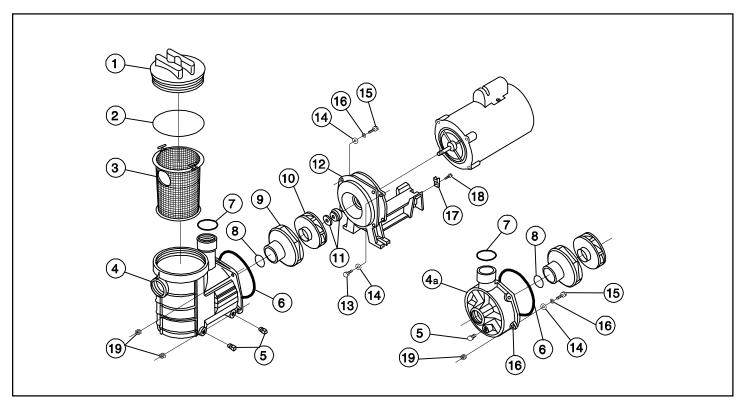
## **ACAUTION**

In mild climate area - when temporary freezing conditions may occur, run your filtering equipment all night to prevent freezing.

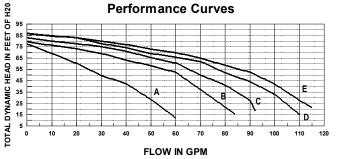
#### SECTION III. TROUBLESHOOTING

System Problem Failure to Pump		ause	Remedy  Check suction piping and valve glands on any suction gate valves. Secure lid on pump strainer pot and make sure lid gasket is in place. Check water level to make sure skimmer is not drawing air.	
		Pump will not prime - too much air.		
	2.	Pump will not prime - too little water.	Make sure suction lines, pump strainer, and pump volute are full of water. Make sure valve on suction line is working and open (some systems do not have valves). Check water level to make sure water is available through skimmer.	
	3.	Pump strainer clogged.	Clean pump strainer pot.	
	4.	Pump strainer gasket defective.	Replace gasket.	
Reduced Capacity and/or Head		Air pockets or leaks in suction line.	Check suction piping and valve glands on any suction gate valves. Secure lid on pump strainer pot and make sure lid gasket is in place. Check water level to make sure skimmer is not drawing air.	
	2.	Clogged impeller.	Remove, clean and adjust.	
	3.	Pump strainer clogged.	Clean suction trap.	

#### SECTION IV. TECHNICAL DATA



Item	Part	Description		 Item	Part	Description
No.	No.	F		No.		
1	39200211	Lid, baquacil resistant,	black	10	39251200	Impeller, 1/2 HP, 50 cycle
1	39200200	Lid, clear		10	39251300	Impeller, 3/4 HP, 50 cycle
2	39204100	O-ring		10	39251400	Impeller, 1 HP, 50 cycle
3	39200100	Basket		10	39251500	Impeller, 1-1/2 HP, 50 cycle
4	39201700	Integral pot & volute, 2"	suction port	10	39251600	Impeller, 2 HP, 50 cycle
4	39202100	Integral pot & volute, 1-	1/2" suction port	11	39702000	Seal 1000
4a	39201100	Volute, booster		12	39201000	Seal Plate
5	98206400	Plug, 1/4" with O-ring		13	98203400	Bolt, hex, 3/8 - 16 x 3/4"
6	39200300	O-ring, volute		14	98210300	Washer, Flat, 3/8"
7	39204600	Reinforcing ring, S/S		15	98216200	Bolt, hex, 3/8 - 16 x 1-1/4"
8	39204800	Gasket		16	37413000	Nut
9	39204700	Diffuser		17	39201300	Support, motor
10	39200500	Impeller, 1/2 HP		18		Screw 13-16 x 3/4" high-low
10		Impeller, 3/4 HP		19		Nut, hex 3/8-16, volute to seal plate
10	39200700	Impeller, 1 HP				·
10	39200800	Impeller, 1-1/2 HP				
10		Impeller, 2 HP	50	Perfor	mance Cu	rves



A = ½ hp full rated or 3/4 hp up rated B = 3/4 hp full rated or 1 hp up rated C = 1 hp full rated or 1½ hp up rated D = 1½ hp full rated or 2 hp up rated

## SAVE THESE INSTRUCTIONS.

D = 1½ hp full rated or 2 hp up rated E = 1½ hp full rated or 2 hp up rated

 $F = 2 \text{ hp full rated or } 2\frac{1}{2} \text{ hp up rated}$ 



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