# **Polaris Booster Pump Installation Instructions**

The Polaris Booster Pump supplies high pressure water to the Polaris pool cleaner. It is **not selfpriming** and should not be running unless the filtration pump is also running. Running the booster pump without the filtration pump will damage the booster pump. **Improper operation of the booster pump will void its warranty**.

#### **Important Safety Instructions**

When installing and using this electrical equipment, basic safety precautions should always be followed.

- 1. READ AND FOLLOW ALL INSTRUCTIONS.
- 2. **WARNING** To reduce the risk of injury, do not permit children to use this product unless they are closely supervised at all times.
- 3. CAUTION 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.
- 4. The electrical hook-up of the Polaris Booster Pump should always be performed by a licensed electrician.
- 5. A solid copper bonding conductor not smaller than No. 8 AWG (8.4 mm<sup>2</sup>) should be connected from the accessible wire connector on the motor to all metal parts of the swimming pool, spa or hot tub structure and to all electrical equipment, metal conduit and metal piping within 5 ft (1.5 m) of the inside walls of a swimming pool, spa or hot tub, when the motor is installed within 5 ft of the inside walls of the swimming pool, spa or hot tub.

6. SAVE THESE INSTRUCTIONS.

#### Electrical Hook-up The motor comes wired for

The motor comes wired for 240 volts. The booster pump motor may be wired for either 120 or 240 volts. To rewire, follow the instructions on the name plate located on the back of the motor or the "sizing" plate on the side of the motor.

A separate time clock (in addition to the filtration system's time clock) is recommended to control the "On" and "Off" functions of the booster pump. However, a manual on/off switch may be used.

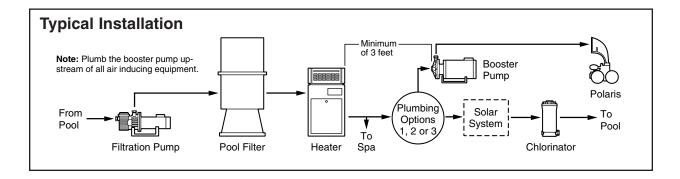
If a time clock is used, it should be set to turn on the cleaner at least one half hour after the pool filtration pump is turned on and turn off the cleaner at least one half hour before the filtration pump shuts off. The Polaris will clean the pool in three hours or less depending on the pool size and the amount of debris. Periodically check the time clock settings to make sure they are properly synchronized.

## Installation with a Heater

If the filtration system has a heater, the booster pump inlet should be tapped into the return line no closer than three feet downstream from the heater discharge (see the Typical Installation diagram). DO NOT TAP THE BOOSTER PUMP INLET INTO THE THREE-FOOT SECTION OF HEAT SINK PIPE THAT COMES DIRECTLY OUT OF THE HEATER.

# Installation with a Solar System

The booster pump must be installed so it is always in the water flow (see the diagram below). Some solar heating systems are designed to use the entire water flow at certain times. Care must be taken not to install the booster pump in a "NON-FLOW" pipe when the solar heating system is on, unless an automatic override is wired into the system. This override will shut the booster pump off while the solar panels are being purged



of air. If the Polaris will not run or runs slowly while the solar heating system is on, contact our Customer Service Department.

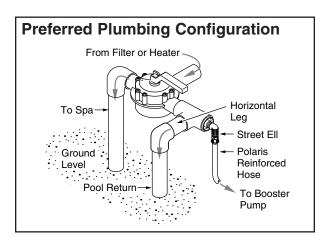
#### Installation with a Chlorinator

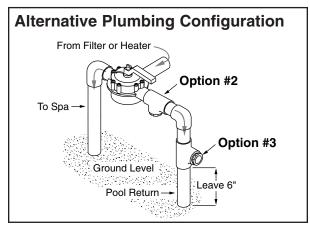
The booster pump inlet port should be plumbed as far away as possible from the chlorinator, higher than the chlorinator and upstream of the chlorinator (see the Typical Installation diagram).

#### **Plumbing Configurations**

The booster pump should be plumbed into the system so it always receives positive flow from the filtration pump. To ensure proper water flow, please follow these guidelines:

- 1. The booster pump inlet connection line should be at least 3/4" pipe.
- 2. Do not tap into the top of a horizontal line.
- 3. Use 90° street ells to minimize bends and loops in the Polaris reinforced hose.
- 4. Follow our recommended plumbing configurations shown below.





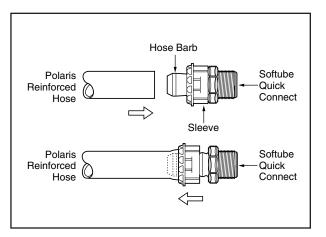
## **Checking Water Flow**

Once the system is plumbed, it is important to verify that there is sufficient water flow to the booster pump. To check the water flow, turn on the filtration pump. If there is no flow exiting the pump inlet port, do one of the following:

- 1. Verify the installation is correct.
- 2. Install a ball valve on the return line after the booster pump inlet.
- 3. Use smaller eyeball fittings in the return lines.
- 4. Plug a return line.
- 5. If none of these suggestions work, contact our Customer Service Department.

#### **Booster Pump Hose Installation**

- Install the Softube<sup>™</sup> quick connect into the pump discharge and supply ports. Use clear silicone as a thread sealant between the Softube quick connect and the pump.
- Measure and cut the hose. Make sure the cut is clean and leaves a straight edge. Avoid any unnecessary loops or bends in the hose.
- Push the hose onto the Softube quick connect until it is flush against the hose barb base.
- While holding the hose in place, pull and twist the sleeve on the Softube quick connect over the hose as far as possible.



Warning: The Softube<sup>™</sup> quick connect is designed to work with the Polaris white reinforced hose (part #P19) only.

#### Pump Installation Kit (part #P17)

This kit is also available separately. It contains four Softube quick connects (part #P133) and one six-foot section of flexible reinforced hose (part #P19).

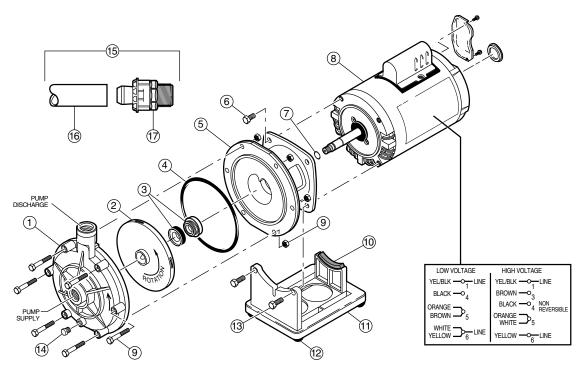
# Universal Wall Fitting Restrictor Kit (part #10-108-00)

The UWF restrictor kit is now included with all new Polaris cleaners that operate with a booster pump. These new restrictors are designed to

## **Exploded Parts Diagram**

work in combination with the pressure relief valve. Together they will release excess water pressure to the cleaner so it can operate at its optimum level of efficiency.

If the Polaris cleaner does not have UWF pressure restrictors, the UWF restrictor kit (part #10-108-00) is available separately through your participating Polaris dealer. To determine if pressure restriction is necessary, refer to the owner's manual for the cleaner or contact the Customer Service Department at 1-800-VAC-SWEEP.



No.	Part #	Description	Qty
1	P5	Volute (Includes drain plug)	1
2	P15	Impeller	1
3	P55	Seal, Stainless Steel Cup/Spring	1
4	P95	O-ring, Bracket	1
5	P10	Bracket	1
6	P35	Bolt, Stainless, Bracket to Motor	2
7	P40	O-ring for Shaft	1
8	P61	Motor, 3/4 HP, Threaded Shaft, 60 Hz	1
9	P25	Bolt/Nut, Stainless for Volute to Bracket	6
10	P80	Rubber Strip, Motor/Bracket	1
11	P70	Pump Stand with Feet, Strip	1
12	P75	Rubber Feet	4
13	P65	Bolt, Stainless, Stand to Bracket and Motor	2
14	P20	1/8" NPTM Plug, Plastic	1
15	P17	Installation Kit with Quick Connects and 6 Foot Hose	1
16	P19	Pump Hose, 6 Foot, Flexible Reinforced	1
17	P133	Softube <sup>™</sup> Quick Connect	4

# **Limited Warranty Polaris Booster Pump**

This limited warranty is extended to the original consumer purchaser of this Polaris Booster Pump manufactured by Polaris Pool Systems, Inc., 2620 Commerce Way, Vista, CA 92081-8438, USA.

Polaris Pool Systems warrants the PB4-60 Booster Pump it manufactures, including all parts and components thereof, to be free of defects in material and workmanship. If you have a question regarding your Polaris Booster Pump, please feel free to call or write us. Be sure to include the serial number of your unit.

The warranty commences on the date of installation of the pump and shall remain in effect for a period of twelve months, but in no event shall it be in effect for more than twenty-four months from the date of manufacture of the pump as established by the serial number.

This limited warranty does not apply if the failure is caused or contributed by any of the following: improper handling, improper storage, abuse, unsuitable application of the unit, lack of reasonable and necessary maintenance, winter freezing or repairs made or attempted by other than Polaris Pool Systems or one of its authorized service centers. Polaris will repair or replace, at its option, a unit or part proved to be defective within the warranty period and under the conditions of the warranty.

Unless local repair is authorized, the consumer must deliver or ship the unit or the warranty parts, freight prepaid to the nearest Polaris Authorized Service Center or return it freight prepaid (after proper authorization) to the plant of manufacture. Authorization to return a unit to the plant of manufacture must be obtained from the Polaris Customer Service Department. For your convenience, please check with your dealer for the local procedure before exercising this warranty. If further directions or instructions should be required, contact the Customer Service Department at 1-800-VAC-SWEEP (USA and Canada only). Be sure to insure your shipments against loss or damage in transit.

Polaris is not responsible for the cost of removal of the unit, damages due to removal, any other expenses incurred in shipping the unit or parts to or from the factory or its authorized service centers, the installation of the repaired or replacement unit. The consumer must bear these expenses.

This warranty does not cover repair or replacement of a unit except at our factory or a Polaris Authorized Service Center.

THIS LIMITED WARRANTY IS IN LIEU OF ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, AND ALL SUCH OTHER WARRANTIES ARE DISCLAIMED EXCEPT TO THE EXTENT ANY IMPLIED WARRANTY MAY BE IMPOSED BY STATE CONSUMER LAW. ANY SUCH IMPLIED WARRANTY IMPOSED BY STATE CONSUMER LAW IS LIMITED IN DURATION TO ONE (1) YEAR FROM DATE OF PURCHASE.

IN NO EVENT SHALL POLARIS POOL SYSTEMS BE LIABLE FOR INCIDENTAL OR CONSEQUENTIAL DAMAGES OF ANY NATURE OR KIND OR FOR DAMAGES TO PERSONS OR PROPERTY, INCLUDING ANY DAMAGE RESULTING FROM THE USE OF THE POLARIS BOOSTER PUMP.

Some states do not allow limitations on how long an implied warranty lasts, or the exclusion or limitation of incidental or consequential damages, so the above limitations may not apply to you.

This limited warranty is valid only in the United States of America and Canada, and it does not apply to Polaris PB4-60 Booster Pumps sold or installed in any other country.



**Polaris** USA: 2620 Commerce Way, Vista, CA 92081-8438 • 760-599-9600 • 1-800-VAC-SWEEP (USA and Canada only) Australia: Unit 4, 19-21 Gibbes Street, Chatswood, NSW 2067 • 02-9882-1111 • ACN 080 168 092 www.polarispool.com