

# Polaris165

## Important Information

The following are important points to remember when installing and operating the Polaris Vac-Sweep® 165.

- Always disconnect the Polaris from the pool wall when cleaning or backwashing the pool filter.
- After cleaning or backwashing, let the filtration system run for at least five minutes before reconnecting the Polaris.
- New plumbing lines should be flushed out before installing the Polaris.
- Always handle the Polaris with care. Do not let children play with it; it is not a toy.
- Never handle the Polaris when it is operating.
- Always remove the Polaris **before swimmers enter the pool**.
- Always remove the Polaris from the pool before chemical shock treatments. As a general rule, any pool water that is unsafe for swimming is unsafe for the Polaris.
- Carefully cut the hoses following the instructions on page 3.

By following these simple guidelines, you can help protect against injury and prolong the life of the Polaris 165.

When replacing any Polaris parts, always insist on genuine Polaris replacement parts. You can be sure you are buying genuine Polaris parts if they come in Polaris part bags or have the Polaris logo on them. Non-Polaris parts are not made to our specifications. They may have an adverse effect on the operation of the Polaris or may even damage it. If you are unable to find genuine Polaris parts in your area, contact us at 1-800-VAC-SWEEP to receive the name of the participating Polaris dealer nearest you.

If you have any questions regarding these instructions, please call our Customer Service Department toll-free at 1-800-VAC-SWEEP (USA and Canada only) or (760) 599-9600, Monday through Friday, 7:30 a.m. - 5:00 p.m., PST.

Before installing the Polaris, please take a moment to record the serial number. For the location of the serial number, refer to the diagram in Section A on page 2. You will be asked for this number when you contact our Customer Service Department.

**Serial #** \_\_\_\_\_

# I. Introduction

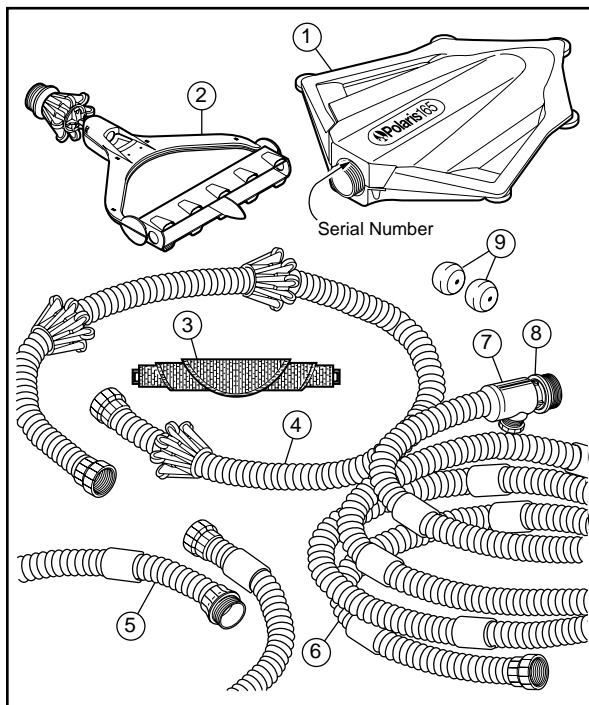
Thank you for choosing a Polaris 165. You will find that it vacuums the bottom and sweeps the sides of any size or shape in-ground vinyl, fiberglass or tile pool. The Polaris 165 does all the hard work for you, leaving you with a sparkling clean pool. It's simple to use and easy to install. Just follow these step-by-step instructions.

# II. Installation Instructions

## A. Polaris 165 Components

The Polaris 165 box contains:

1. Surface Module
2. Jet Sweep Assembly
3. All-Purpose Bag
4. Sweep Hose, 10 Ft.
5. Float Hose Extension, 8 Ft.
6. Float Hose, 24 Ft.
7. Quick Disconnect
8. Universal Wall Fitting
9. Two Eyeball Regulators

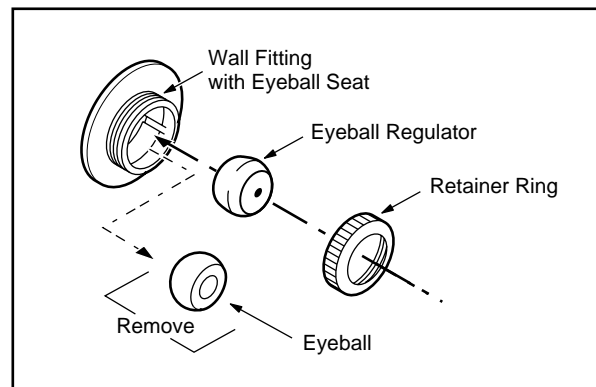


## B. Installing the Universal Wall Fitting

It is important to have a clean pool filter before installing the Polaris 165.

1. Turn on the pool filtration pump and flush out the plumbing line. Turn off the pump.

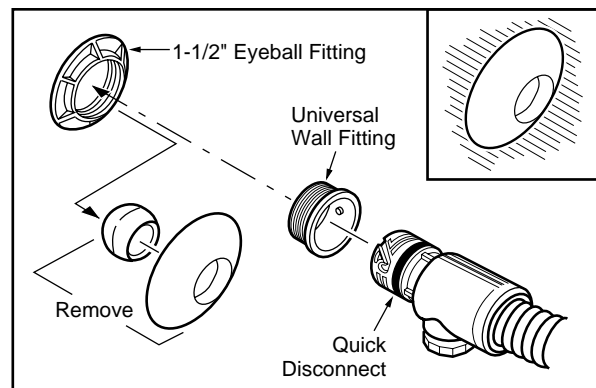
2. Choose the return line nearest the center-point of the longest pool wall for the Polaris. If there are two return lines at an equal distance from the centerpoint, select the return line that is closer to the pool equipment. Place the eyeball regulators into the remaining return lines.



3. Unscrew the universal wall fitting from the quick disconnect.

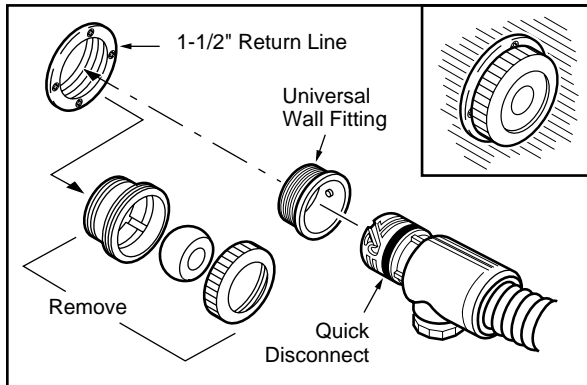
- If the return line for the Polaris has 1½" female threads exposed, screw in the universal wall fitting by hand. Turn the quick disconnect clockwise (also by hand) into the universal wall fitting to tighten the universal wall fitting into place; **do not overtighten**. Once the universal wall fitting is secure, the quick disconnect can be removed without removing the universal wall fitting.

- If the return line for the Polaris looks like the one below, remove the parts shown and install the universal wall fitting as described above.



- If the return line for the Polaris looks like the one at the top of the next page, remove the parts

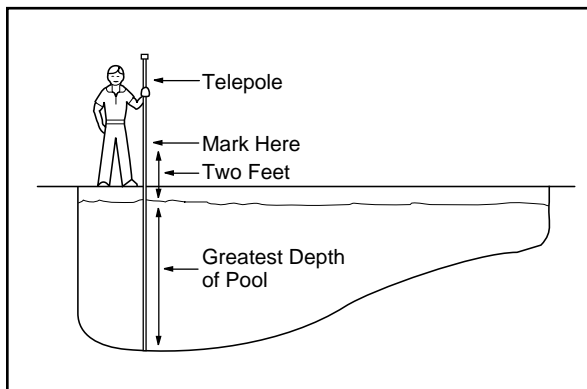
shown and install the universal wall fitting as described in number 3 on page 2.



If the return line does not look like those shown, contact our Customer Service Department at 1-800-VAC-SWEEP.

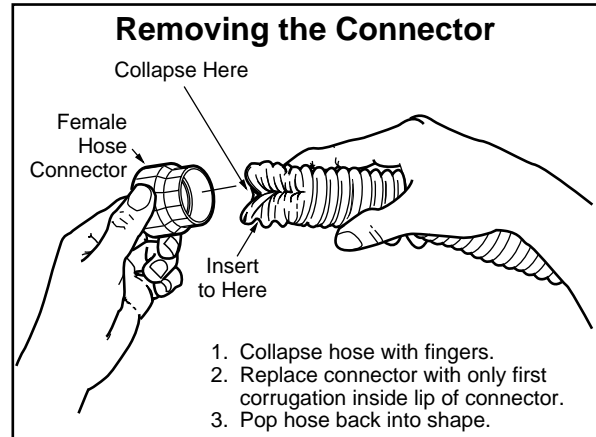
### C. Adjusting the Sweep Hose

1. The sweep hose should be two feet longer than the greatest pool depth. Measure the deepest part of the pool (usually the main drain) with a telepole. Mark the pole two feet above the water level.



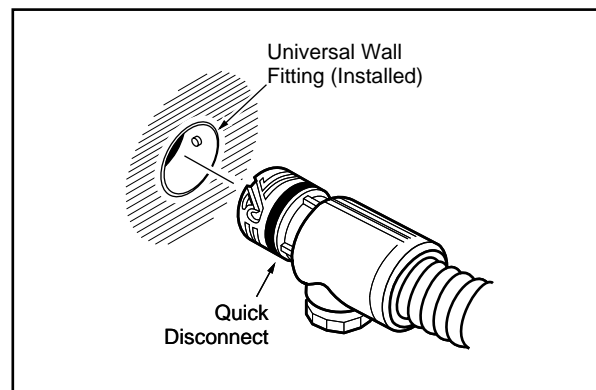
If the pool depth is over eight feet, an additional sweep hose (part #6-106-00) will be needed.

2. Lay the telepole next to the sweep hose. If the sweep hose is longer than the mark on the telepole, cut off the excess hose.
3. Remove the hose connector from the portion of excess hose that was removed. Attach it to the new end of the sweep hose. See the diagram at the top of the next column.

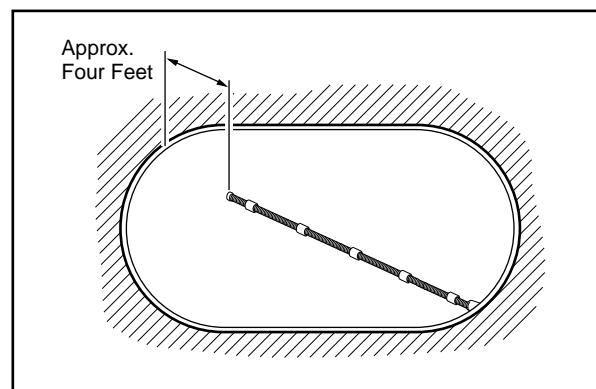


### D. Adjusting the Float Hose

1. With the pool filtration pump off, connect the float hose to the pool wall by turning the quick disconnect clockwise into the universal wall fitting.



2. Extend the float hose to the farthest point in the pool.
3. Cut the float hose so it is four feet short of the farthest point in the pool.

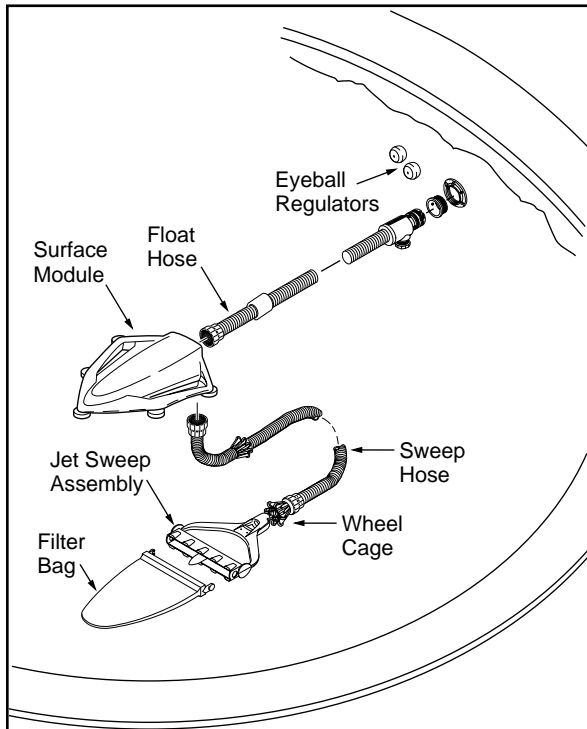


If the float hose is shorter than four feet of the farthest point in the pool, the float hose extension that is included with the Polaris 165 will need to be added. Add the float hose extension between the existing float hose section and the surface module and repeat Steps 2 and 3.

4. Remove the hose connector from the portion of excess hose that was removed. Attach it to the new end of the float hose. See the "Removing the Connector" diagram on page 3.

5. Attach the sweep hose and filter bag to the jet sweep assembly. When attaching the bag, make sure its frame is completely open.

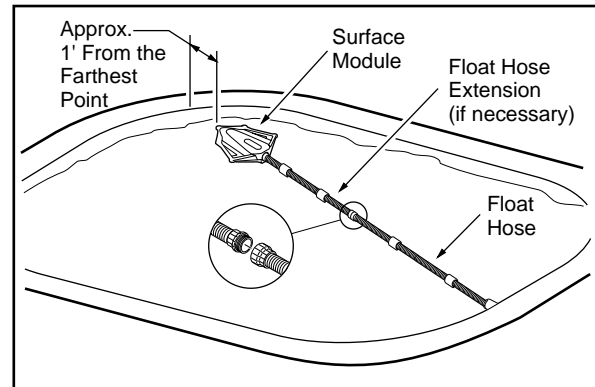
6. Attach the float hose and the sweep hose to the surface module. When attaching the sweep hose, make sure the large ends of the wheel cages are pointing toward the bag.



NOTE: The connectors twist independently of the hose. When attaching them, twist only the connectors so the hose does not get twisted.

7. Put the Polaris in the pool and turn on the pool filtration pump. Extend the float hose back to the farthest point in the pool. The float hose is

cut correctly if the surface module is approximately one foot from the pool wall when the pool pump is running.



## E. Operation

When operating correctly, the surface module of the Polaris 165 will float level on the surface of the water. As it moves randomly throughout the pool, it recirculates clean, filtered water.

The filter bag will spend a majority of its time on the pool floor collecting dirt and debris. It will remove debris as large as leaves or as fine as sand. The Polaris 165 will vacuum and sweep the pool in three hours or less.

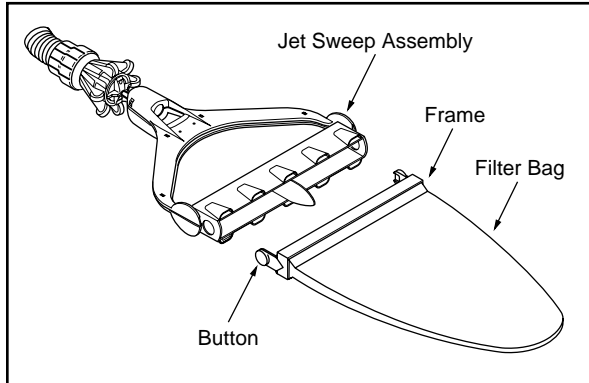
The Polaris comes equipped with an automatic pressure relief valve in the quick disconnect. If the Polaris is receiving too much water pressure it will release water at the quick disconnect.

## III. Maintenance

To ensure the Polaris is operating at its optimal efficiency, it is important to empty the filter bag and clean the filter screen on a regular basis. It is also important to maintain a clean pool filter. A dirty filter can result in sluggish or inefficient operation. **Make sure the Polaris 165 is disconnected from the pool wall before cleaning and backwashing the pool filter.**

### A. Emptying the Filter Bag

1. Turn off the pool pump. Push in on the buttons and slide the filter bag off the jet sweep assembly. See the diagram at the top of the next page.



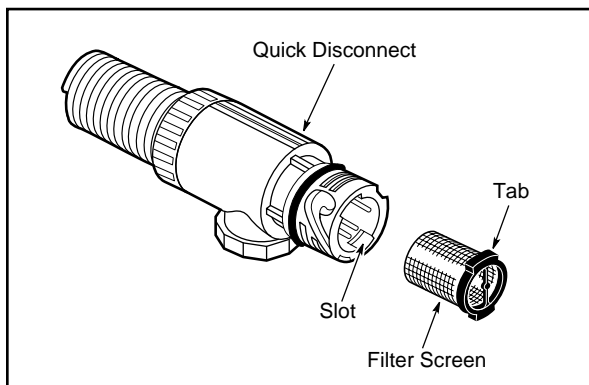
2. Turn the filter bag inside out over a trash can.
3. Reattach the filter bag making sure the frame of the bag is completely open.

## B. Cleaning the Filter Screen

Inside the quick disconnect there is a filter screen. It acts as a safety filter to keep any debris that is not caught by your pool filtration system out of the Polaris. If the filter screen clogs often, consult your pool professional.

Please Note: Running the Polaris without the filter screen can damage the Polaris.

To clean the filter screen, pull it out of the quick disconnect. Rinse out the debris and press the filter screen firmly back into place.



## C. Backwashing the Pool Filter

Always disconnect the Polaris from the pool wall before cleaning or backwashing the pool filter. After cleaning or backwashing, let the pool filtration system run for at least five minutes to flush out the return lines before reconnecting the Polaris.

## D. Storage and Winterizing

When storing the Polaris 165, remove the sweep hose and float hose from the surface module. Also remove the jet sweep assembly from the sweep hose.

Drain the surface module carefully. Twist it in all directions to aid in the removal of the water. **THIS IS ESPECIALLY IMPORTANT WHEN YOU ARE PUTTING THE POLARIS 165 AWAY FOR THE WINTER.** We suggest storing the surface module in a clean, dry and warm environment out of direct sunlight. We also recommend the jet sweep assembly lay flat and the hoses lay or hang straight.

Remove the universal wall fitting when winterizing your pool. With the quick disconnect attached, pull the quick disconnect away from the wall as you unscrew the universal wall fitting. Leave the universal wall fitting attached to the quick disconnect while storing the Polaris.

In some cases, it may be necessary to use a universal wall fitting removal tool (part #10-102-00) to remove the universal wall fitting from your pool wall. The tool is available from a participating Polaris dealer.

## E. Accessories

### 1. Leaf Bag (Part #6-207-00)

The Polaris 165 comes with an All-Purpose Bag especially designed with very fine mesh for collecting sand, silt, light leaf loads and other debris. The leaf bag is made of a more durable material to collect larger, heavier types of debris such as large quantities of leaves and acorns. You may want to purchase the Polaris leaf bag and rotate between the two filter bags as needed.

### 2. WaterStars (Part #7-400-00) and WaterStars WF (Part #11-100-00)

Now you can instantly beautify your pool with a Polaris WaterStars or WF fountain. Choose a gentle rainfall display or a cascading waterfall display and transform your pool into a lovely showcase for that special party. If you live in a hot climate, our WaterStars are a wonderful way to cool your pool and the surrounding area.

## IV. Troubleshooting

The numbers in parentheses below refer to specific parts on the Exploded Parts Diagram on page 8. For best results, follow the troubleshooting solutions in the order they are listed.

### A. Problems and Solutions

**Problem:** Polaris 165 does not clean the entire pool or runs slowly.

**Solution:**

1. Feel around the pressure relief valve (#31). If it is not releasing excess water, clean the pool filter.
2. Check the filter screen (#35) in the quick disconnect for debris and clean it, if necessary. See page 5.
3. Check that the eyeball regulators (#34) are installed in all of the return lines.
4. Check the float hose (#28) length, see "Adjusting the Float Hose" on page 3.
5. Check the surface module operation by following the steps below.
  - a. Remove the surface module top (#1) by unscrewing the two phillips-head screws (#15) from the body bottom (#12) and lifting slightly at the rear of the surface module top.
  - b. Turn on the Polaris. Make sure the randomizer tube (#9) is moving from front to back. If it is, refer to Step C at the top of the next column. If it is not, the filter connector (#9) may be clogged.

To check the filter connector, disconnect the float hose (#28), or float hose extension (#26) if installed, from the mechanism (#2) and look into the mechanism. About half way down in the center of the randomizer tube, you can see the white filter connector. If it is covered with debris or algae, remove the connector chamber (#10), pull out

the randomizer tube and clean the filter connector. If it is not, the piston (#5) will need to be replaced.

c. While the Polaris is operating, watch the randomizer ball (#8) in the mechanism (#2). If it does not move within two minutes and the randomizer tube (#9) is moving back and forth, the mechanism will need to be replaced.

6. Verify that the water pressure is between 5 and 10 psi. A pressure tester (part #6-113-00) is available through your participating Polaris dealer.

**Problem:** Surface module dives under the water or leans to one side.

**Solution:**

1. Make sure the hoses are not twisted.
2. Hold the surface module out of the water and drain the water. Shake the surface module. If there is water sloshing in the body bottom (#12), it will need to be drained.

To drain the body bottom, disconnect both the float hose (#28), or the float hose extension (#26) if installed, and the sweep hose (#18) from the surface module. Remove the two phillips-head screws (#15) on the bottom of the surface module. Remove the surface module top (#1) and the mechanism (#2). Remove the drain plug (#11) from the front of the body bottom and drain the water. Reinstall the drain plug, mechanism, top, two screws, and hoses.

3. Unscrew the pressure relief valve (#31) to expose the holes on the side of the valve. Adjust it in or out until the surface module levels off.

**Problem:** The float hose remains coiled.

**Solution:**

1. See "Polaris 165 does not clean the entire pool".
2. Lay the float hose out straight in the sun to remove the coils.

**Problem:** Surface module moves too fast.

- Solution:**
1. Feel around the pressure relief valve (#31). If it is releasing excess water, try removing one of the eyeball regulators (#34) from another return line. If this causes the Polaris to move too slowly, reinstall the eyeball regulators and go to the next step.
  2. Unscrew the pressure relief valve (#31) to expose the holes on the side of the valve. Adjust it in or out until the surface module slows down.
  3. Verify that the water pressure is between 5 and 10 psi. A pressure tester (part #6-113-00) is available through your participating Polaris dealer.

**Problem:** Bag does not stay on the pool floor.

- Solution:**
1. Check that the bag (#24) has been installed correctly, see page 4.
  2. The flow of water through the Polaris 165 could be too high. See "Surface module moves too fast".
  3. Check for air bubbles around the jet body assembly (#19). If bubbles are present, there may be air entering the plumbing line. Contact a pool professional.

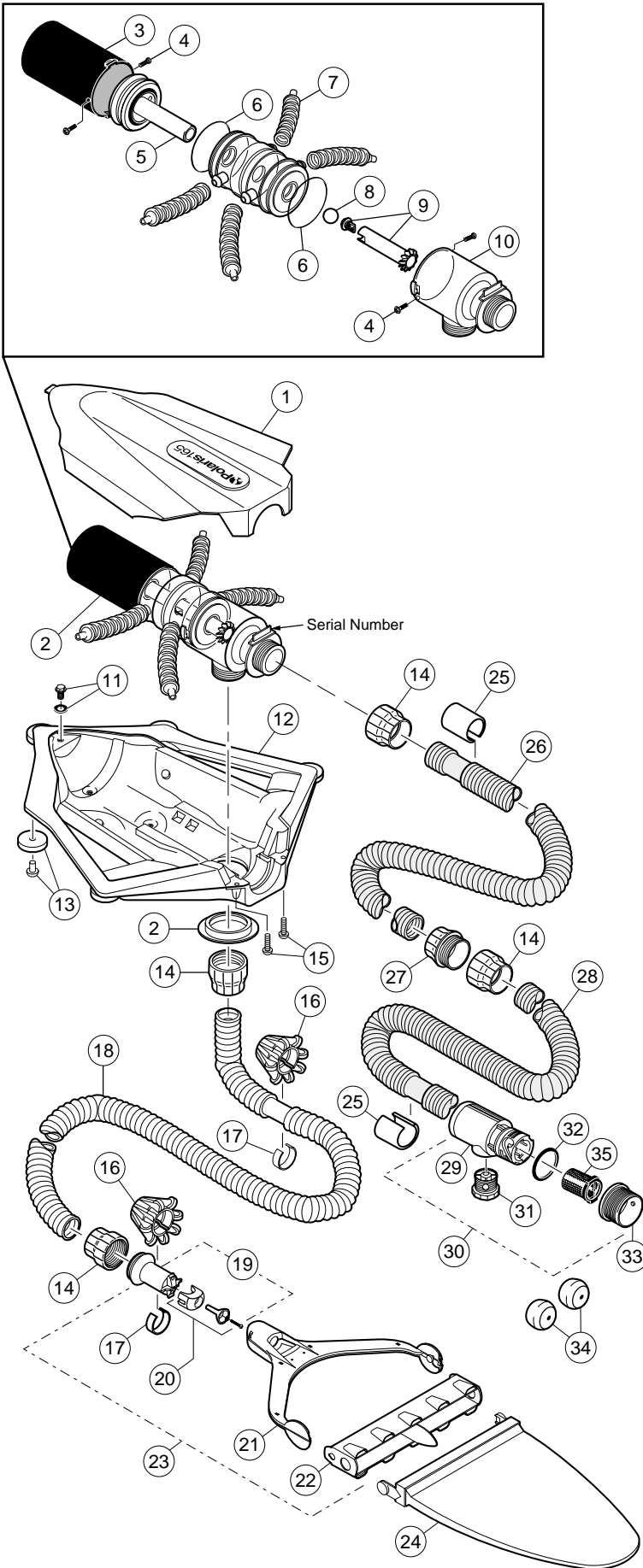
## B. Troubleshooting Worksheet

If none of the troubleshooting solutions worked, please fill in the following information and either contact your participating Polaris dealer or our Customer Service Department at 1-800-VAC-SWEEP (USA and Canada only) or (760) 599-9600, Monday through Friday, 7:30 a.m. - 5:00 p.m. PST.

In order to provide faster and more convenient service, have the following information available at the time of your call or when taking the Polaris in for service.

1. **Serial #:** \_\_\_\_\_  
(See page 2 for the location of the serial #.)
2. **Is the hose the proper length?**  
(See page 3.)  
 Yes       No  
Length of the sweep hose: \_\_\_\_\_  
Length of the float hose: \_\_\_\_\_
3. **Is the filter connector clear of debris?**  
(See Solution 5b on page 6.)  
 Yes       No
4. **Are there any broken tabs on the mechanism?**  
 Yes       No

# Polaris165



No.	Part #	Description	Qty
1	6-306-00	Surface Module Top, Granite	1
2	6-400-00	Mechanism	1
3	6-407-00	Cylinder	1
4	6-413-00	Screw, Mechanism, #6 x 5/16" SS Sheet Metal, Blunt-end	4
5	6-411-00	Piston Assembly	1
6	6-412-00	O-ring, Chamber Assembly	2
7	6-410-00	Jet Nozzle Hose Assembly	4
8	6-403-00	Randomizer Ball	1
9	6-406-00	Filter Connector/Randomizer Tube Kit	1
10	6-408-00	Connector Chamber	1
11	6-507-00	Drain Plug Assembly	1
12	6-305-00	Body Bottom Assembly, Gray	1
13	6-301-00	Body Bottom Wheel Kit, Gray	5
14	6-104-00	Hose Connector, Female	4
15	6-302-00	Screw, Top, #10 x 3/4" SS Sheet Metal, Pan Head	2
16	6-107-00	Wheel Cage Assembly	9
17	6-110-00	Hose Weight	9
18	6-114-00	Sweep Hose Complete, 10 Foot	1
19	6-116-00	Jet Body Assembly	1
20	6-119-00	Jet Body Ball Kit	1
21	6-211-00	Jet Sweep Harness	1
22	6-210-00	Jet Sweep Head	1
23	6-212-00	Jet Sweep Assembly	1
24	6-206-00	All-Purpose Bag	1
25	6-222-00	Float, Gray	24
26	6-221-00	Float Hose Extension Kit, 8 Ft. Gray	1
27	6-103-00	Hose Connector, Male	1
28	6-225-00	Float Hose, 24 Ft., Gray (Hose only)	1
29	6-502-00	Quick Disconnect, UWF	1
30	6-508-00	UWF Connector Assembly	1
31	6-503-00	Pressure Relief Valve, Blue	1
32	6-505-00	O-ring, UWF/QD	1
33	6-500-00	Universal Wall Fitting	1
34	10-107-00	Eyeball Regulator	2
35	6-504-00	Filter Screen, UWF/QD	1

### Parts Not Shown

6-109-00	Hanger Kit (Includes 8 brackets)
6-112-00	Sweep Hose, 10 Foot (Hose only)
6-113-00	In-line Pressure Tester
6-207-00	Leaf Bag
6-511-00	UWF Eyeball Fitting
9-100-8021	Vinyl Eyeball Kit
10-102-00	UWF Removal Tool, Plastic
11-203-00	Adjustable Plug, UWF

To insure proper operation and long life for the Polaris, be sure to insist on genuine Polaris parts.