

IMPORTANT INFORMATION

OWNER'S MANUAL

Polaroid 60

V A C • S W E E P

Introduction

Thank you for buying the Polaris Vac-Sweep 160. We think you'll find it thoroughly cleans your in-ground vinyl-lined pool. Quickly. Easily. Automatically. And it's simple to use and easy to install. Just follow the simple step-by-step instructions in this manual.

Like any mechanical device, however, the Polaris 160 must be correctly installed to operate properly. It comes with 31 feet of hose, but depending on the location of the pool's return lines, additional hose may be required. The Polaris 160 comes packed in a high quality box that makes an ideal long-term storage container.

Always insist on genuine Polaris replacement parts. You can be sure that you are buying genuine Polaris replacement parts if they come in a Polaris part bag 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 your Polaris or may even damage it. If you are unable to find genuine Polaris replacement parts, contact us directly at 1-800-VAC-SWEEP to receive the name of the participating Polaris dealer nearest you.

To avoid any frustration during installation, we suggest that you read these instructions completely before starting. Each step is shown with clear illustrations to make installation a breeze. If you have questions regarding these instructions, call our Customer Service Department toll-free at 1-800-VAC-SWEEP.

Congratulations. You have just taken the first step towards enjoying your pool a lot more!

Table of Contents

I. Operation	3
II. Installation	3
Adjusting the Sweep Hose	4
Changing the Hose Connector	4
Assembling the Polaris 160	5
Pool Connections	5
Installing the Universal Wall Fitting	6
Connecting the Polaris 160	6
Adjusting the Float Hose	7
Turning on the Polaris 160	7
III. Maintenance	8
Emptying the Filter Bag	8
Cleaning the Filter Screen	9
Storage	9
Winterizing	9
Exploded Parts Diagram	10
IV. Troubleshooting	11
V. Warranty	13

Operation

The Polaris 160 will move randomly through the pool, cleaning as it goes. It will remove debris as fine as sand or as large as leaves. It will pick up bugs, pine needles, stones, and grass.

The Polaris 160 will move easily around most objects in the pool. We recommend, however, that

you remove large objects, like floating lounges, so that it can work more efficiently.

Please note that the Polaris 160 should always be removed from the pool before swimmers enter the water.

□ □ □ □ □ □ □

Installation

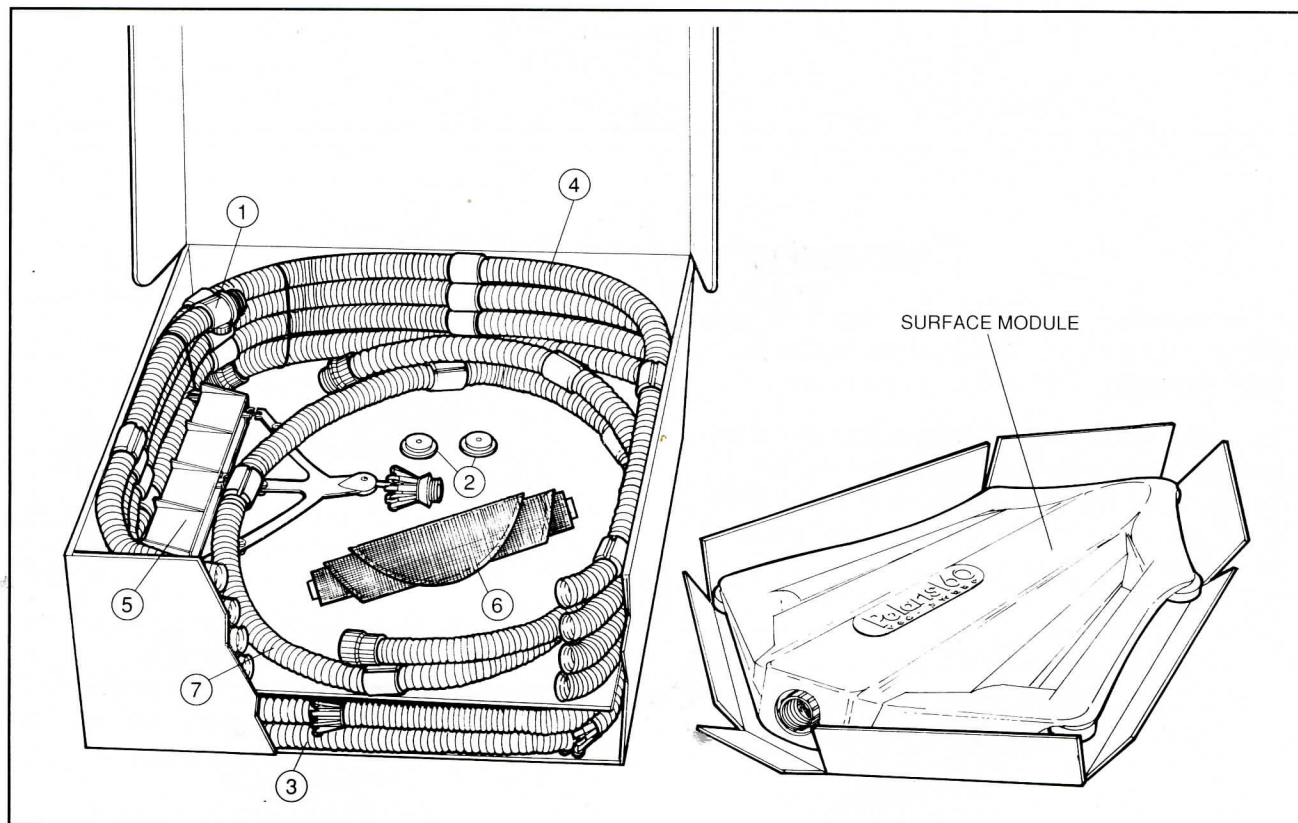
It is important to clean your pool filter before you install the Polaris 160. Open the box and remove the surface module. Check that the box contains the following parts:

1. One Quick Disconnect with Universal Wall Fitting attached
2. Two Eyeball Regulator Disks
3. One Sweep Hose, 10 Ft.
4. One Float Hose, 24 Ft.
5. One Jet Sweep
6. One Filter Bag
7. One Float Hose Extension, 7 Ft.

If you are missing any of these parts, place what you do have back into the box, return it to the location where you purchased the Polaris 160 and exchange it for a new one. It can be very frustrating to start a job and then find out that you do not have all the parts.

The only tools required for installation are a sharp knife or a pair of scissors.

NOTE: We encourage you to read through the entire manual before you begin assembling the Polaris 160.



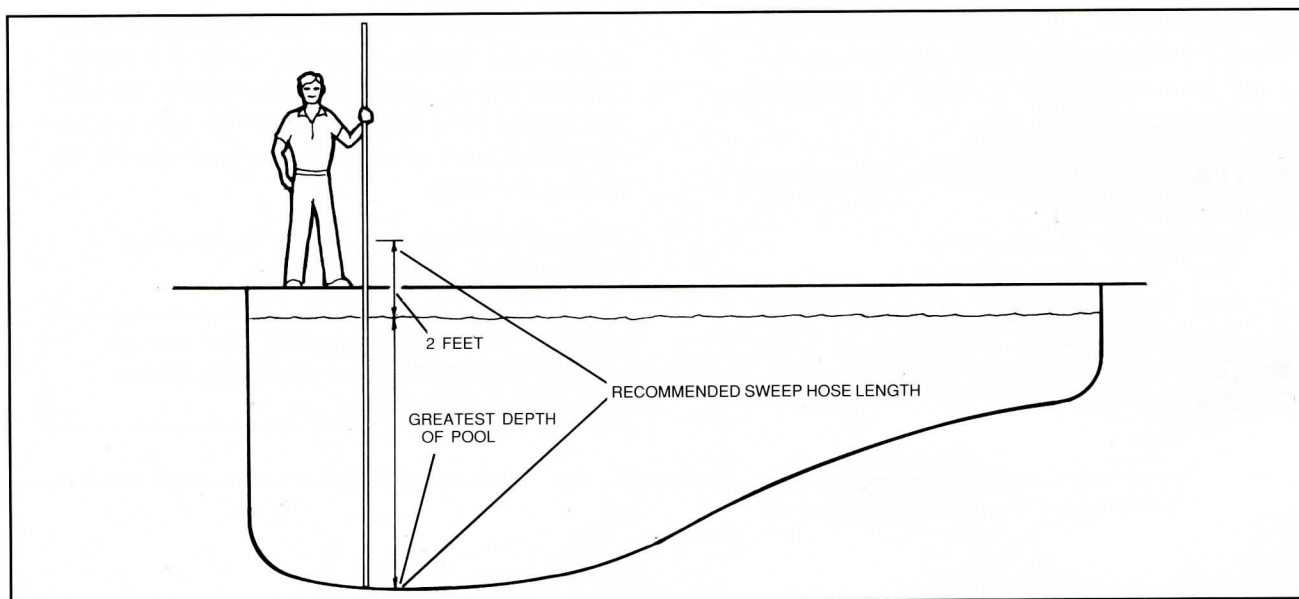
Adjusting the Sweep Hose

1. The sweep hose should be adjusted to the greatest depth of the pool plus two feet. If you are unsure about the depth of the pool, place the pool pole into the deepest part of the pool and make a mark on the pole two feet above the surface of the water. Lay the pole next to the sweep hose and mark the hose. The ten foot sweep hose should be sufficient for pools up to a depth of eight feet. If the pool is deeper than eight feet,

you will need to obtain an additional sweep hose (part #6-114-00).

2. Cut the hose at the mark you made in step 1. The cut should be made at the bottom of a corrugation, not on the top of one.

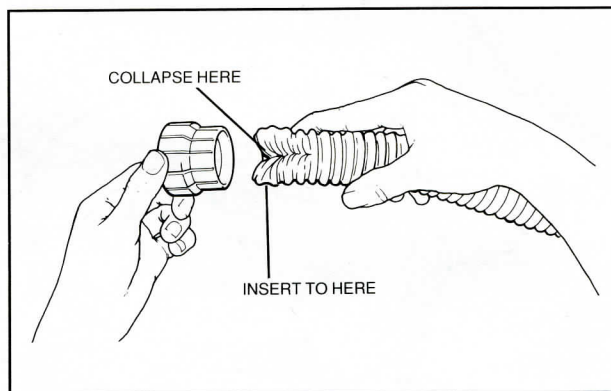
3. Remove the hose connector from the excess length of hose and attach it to the new end of the sweep hose (see section below).



Changing the Hose Connector

To remove the hose connector, collapse the hose with your fingers by bending it in half inside the hose connector. Pull off the hose connector.

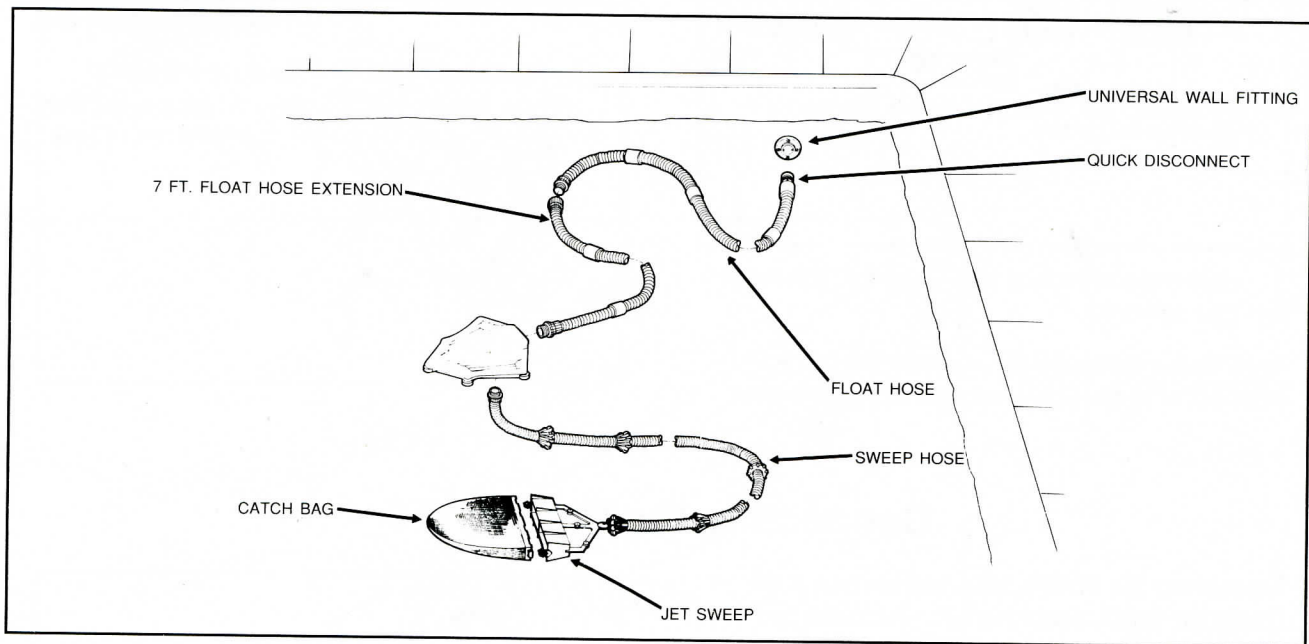
To replace the connector, collapse the end of the hose and slide on the connector; be sure only the first corrugation of the hose is inside the lip of the connector. Stick your fingers inside the hose and pop it back into shape.



Assembling the Polaris 160

1. Turn off the pool pump.
2. Attach the filter bag by sliding the clips on both sides of the jet sweep assembly through the brackets on the filter bag frame. Pull back to make sure they have locked into place.
3. Screw the jet sweep assembly into the female connector on the sweep hose.
4. Screw the male connector on the sweep hose into the bottom of the surface module.
5. Screw the male connector on the float hose into the back of the surface module.

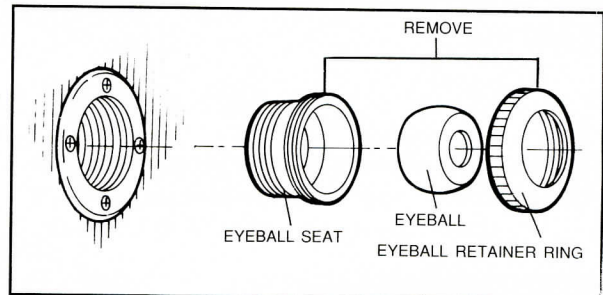
NOTE: The connectors twist independently of the hose. When attaching them, twist only the connectors so the hose does not get twisted.



Pool Connections

The Polaris 160 comes ready to connect to 1½" female threads. If the return lines end in 1½" female threads, locate the return line that is nearest the centerpoint of the longest wall of the pool. If they are an equal distance from the centerpoint, select the return line that is closer to the pool equipment and install the universal wall fitting (see next section).

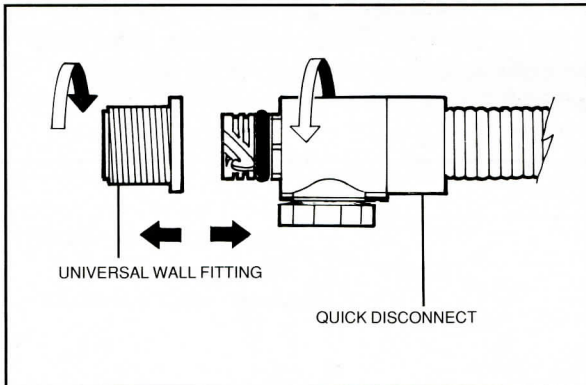
If the pool has "eyeball" type return line fittings, you may have threaded 1½" female return lines under the "eyeball" fittings. Remove the eyeball retainer ring, the eyeball, and the eyeball seat by twisting counterclockwise.



Once you have removed these parts and a threaded 1½" female return line is exposed, you can install the universal wall fitting (see next section).

Installing the Universal Wall Fitting

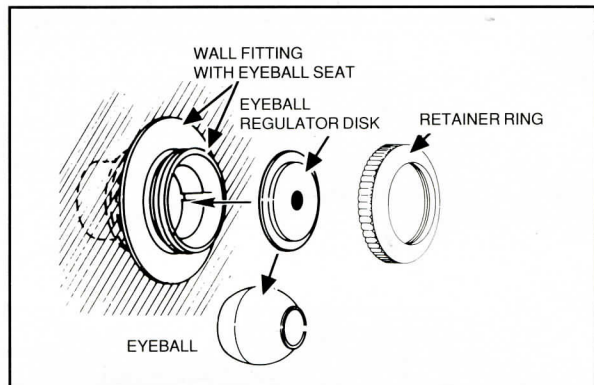
1. Turn off the pool pump.
2. Remove the universal wall fitting from the quick disconnect by pushing them together and twisting counterclockwise.



3. Screw the universal wall fitting into the return line you selected.
4. When it is hand tight, connect the quick disconnect to the universal wall fitting (see next

section), and use it to further tighten the universal wall fitting into place. Be sure not to overtighten. Once the universal wall fitting is secure, you will be able to remove the quick disconnect by pushing in and twisting it counterclockwise $\frac{1}{4}$ turn without unscrewing the universal wall fitting.

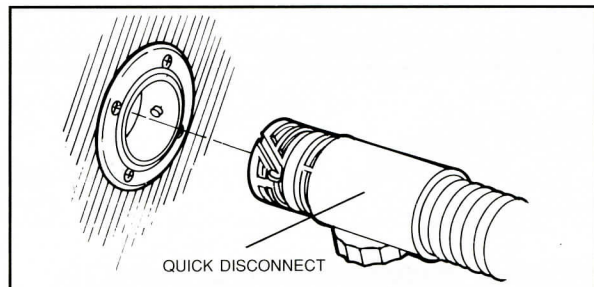
5. Place the eyeball regulator disks into the remaining return lines.



Connecting the Polaris 160

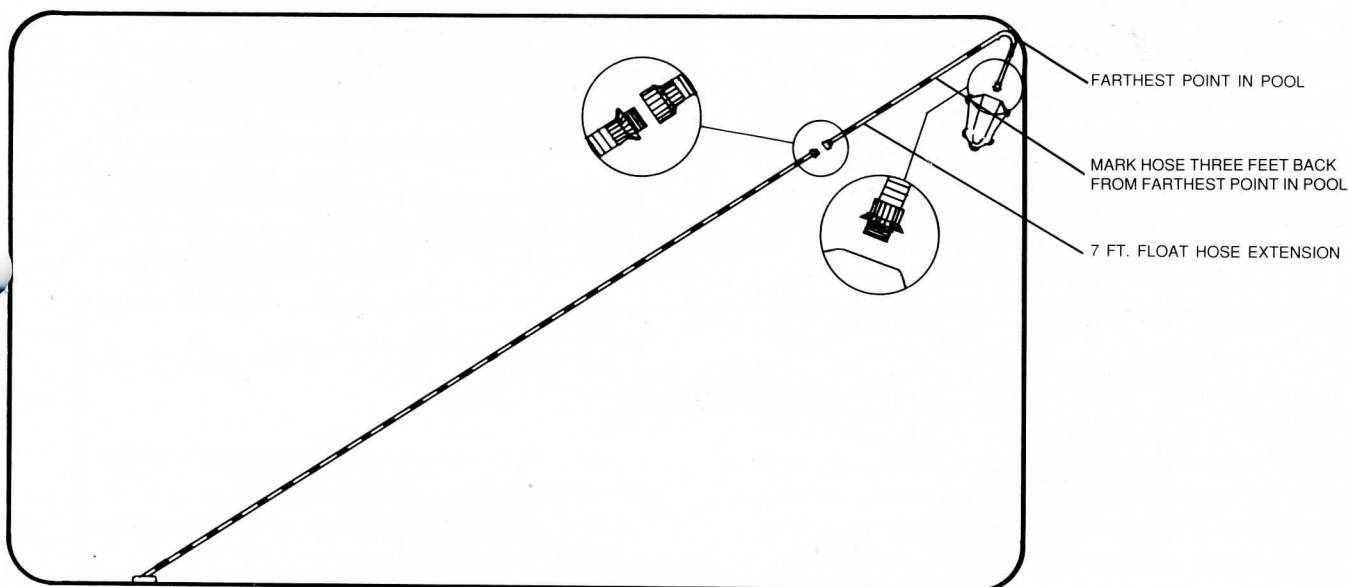
To connect the Polaris 160, turn the pump off. Grasp the quick disconnect and align the two tracks with the two inner pegs of the universal wall fitting. Twist clockwise $\frac{1}{4}$ turn and pull out from the wall to secure.

To disconnect the Polaris 160, turn off the pool pump. Grasp the quick disconnect, push in and twist counterclockwise $\frac{1}{4}$ turn, and remove from the pool wall.



Adjusting the Float Hose

1. Adjust the float hose to the size of the pool while the Polaris 160 is under pressure. Turn on the pool pump. Pull the surface module toward the farthest point of the pool. If it is more than three feet short of the farthest point in the pool, you will need to turn off the pool equipment and add the float hose extension that is included with the Polaris 160. Always add the float hose extension between the existing float hose section and the surface module. After adding the hose, turn the pool pump back on.
2. While the surface module is stretched to the farthest point in the pool, make a mark on the hose three feet back from the farthest point.
3. Turn off the pool pump.
4. Unscrew and remove the float hose from the rear of the surface module.
5. Find the mark that you made on the float hose and cut the hose. The cut should be made at the bottom of a corrugation, not on the top of one.
6. Remove the connector from the excess length of hose and place it on the new end of the float hose (see "Changing the Hose Connector" on page 4).
7. Reconnect the float hose to the rear of the surface module.



Turning on the Polaris 160

1. Now that the unit is assembled, you'll see that the filter bag will naturally settle to the bottom of the pool and that the rest of the unit will float.
2. Prior to turning on the pump, make sure that the float hose is floating evenly across the surface of the pool. Any dips or bends should be removed by gently twisting the hose inside one of the male connectors. The dips or bends could cause the module to roll over at start-up.
3. Turn on the pool pump and watch the Polaris 160 do the work for you.

Maintenance

The most important steps in maintaining the Polaris 160 are emptying the filter bag, cleaning the filter screen in the quick disconnect, and cleaning the pool filter on a regular basis.

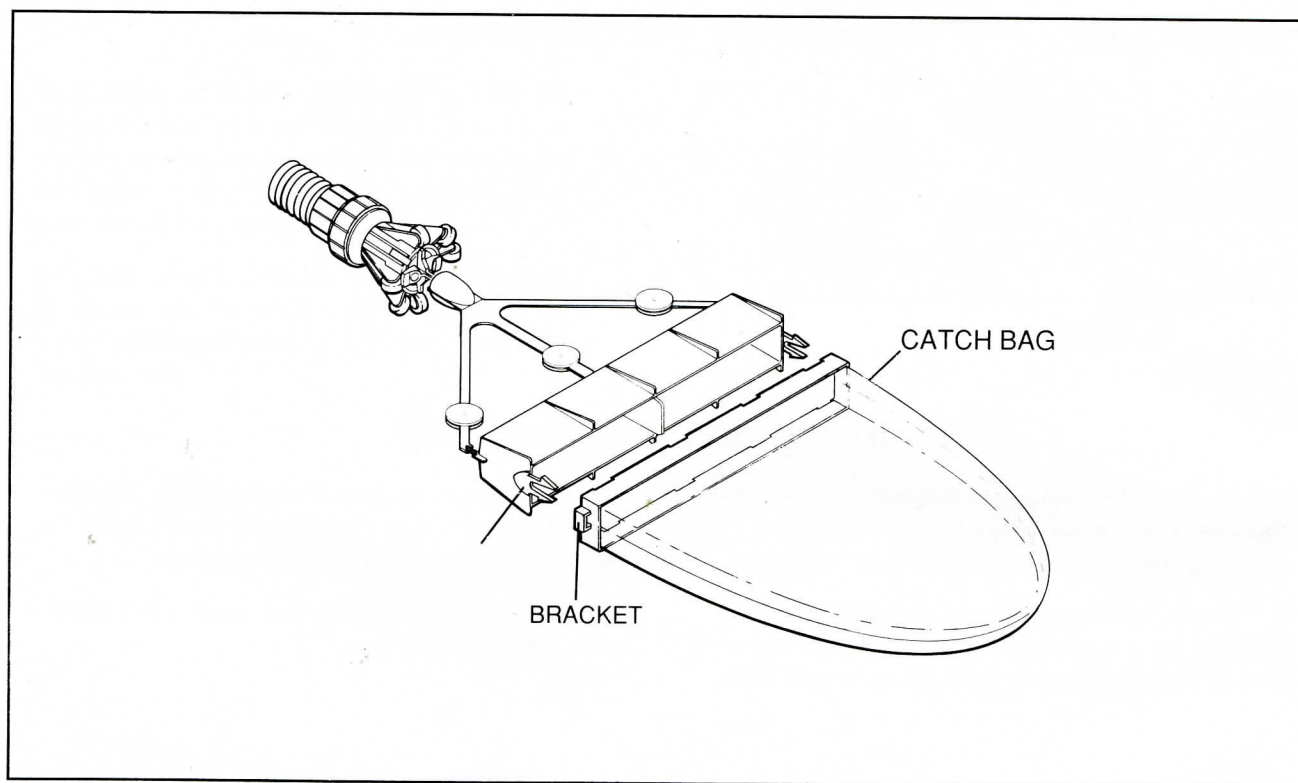
A dirty pool filter can result in sluggish or inefficient operation of the Polaris. When cleaning your pool filter, the Polaris must be disconnected from the pool wall. After you have cleaned it, run the filter for five minutes before reconnecting the Polaris.

A clean filter bag will also improve performance and it should be checked regularly, especially whenever the bag seems heavy or the action seems to be slowing down.

The filter screen inside the quick disconnect keeps large debris out of the Polaris. It should be checked and cleaned regularly so it does not restrict the water flow to the Polaris. If the filter screen continually becomes clogged, see your participating Polaris dealer for possible problems with the pool's filtration system.

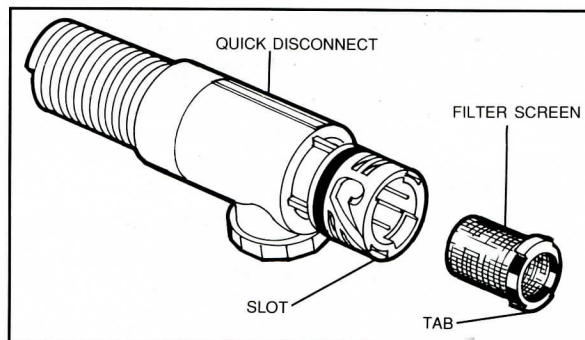
Emptying the Filter Bag

1. Turn off the pool pump.
2. Pull the surface module toward you.
3. Lift the filter bag out of the pool.
4. Compress the clips on the sides of the jet sweep assembly and slide them out of the brackets on the filter bag frame.
5. Turn the bag inside out over a trash can. If some fine silt remains, rinse it off with a hose.
6. Reattach the bag by sliding the clips back through the brackets on the filter bag frame. Pull back to make sure they have locked into place.
7. Turn the pump back on to continue cleaning.



Cleaning the Filter Screen

1. Remove the quick disconnect from the wall by pushing in and twisting counterclockwise 1/4 turn.
2. Remove the filter screen by placing your finger inside the filter screen, applying pressure to the side of the screen, and pulling it out.
3. Rinse out the filter screen.
4. Replace the filter screen into the quick disconnect by lining up the tabs with the mating slots and pressing the filter firmly in place.



Storage

1. Remove the Polaris 160 from the pool.
2. Unscrew and remove the sweep hose from the underside of the surface module.
3. Unscrew and remove the jet sweep assembly from the sweep hose.
4. Unscrew and remove the float hose from the rear of the surface module.

5. Drain the surface module carefully. It is very important that you get all the water out of the module. Twist it in all directions to aid in the removal of the water.

We suggest that you store the Polaris 160 with the hoses straight and in a clean, dry environment out of direct sunlight.

Winterizing

When storing the Polaris 160 for winter, you need to remove the universal wall fitting and the eyeball regulator disks from the pool.

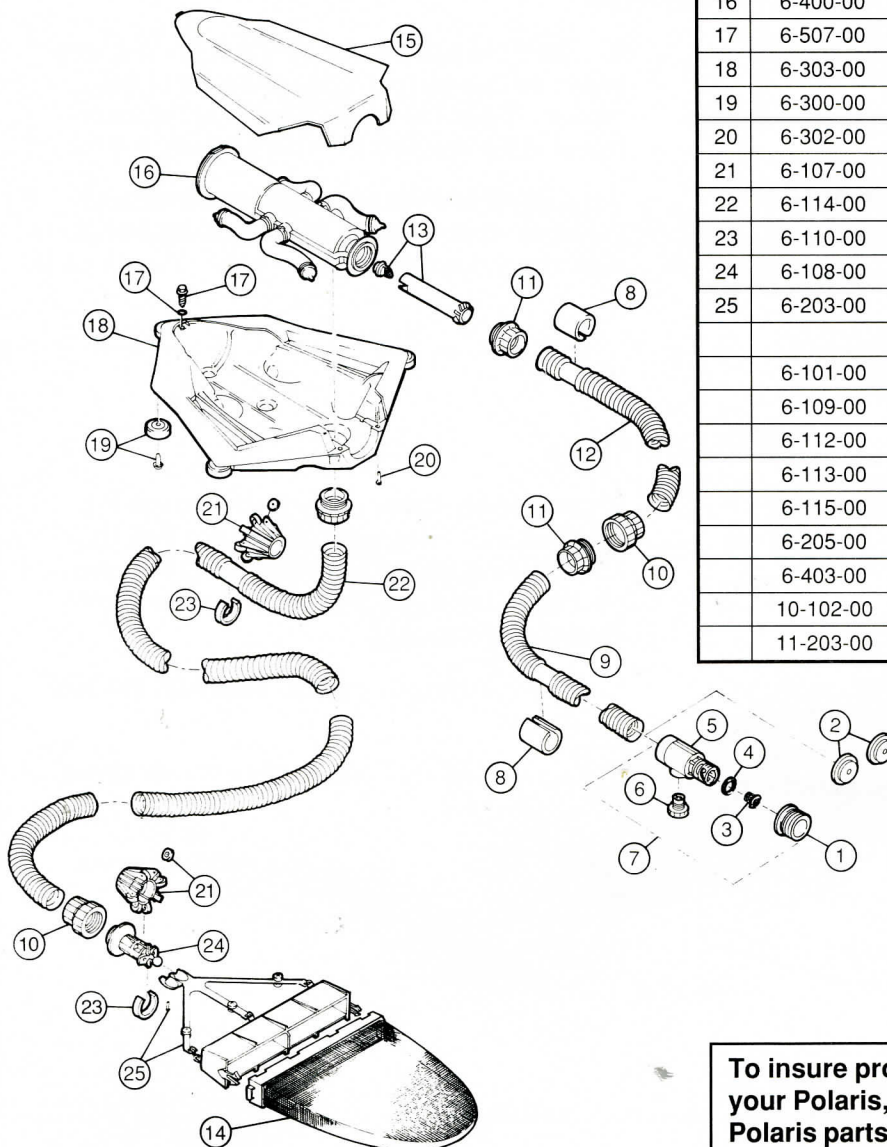
To remove the universal wall fitting, grasp the quick disconnect and pull it away from the wall. As you pull away, turn it in a counterclockwise direction. This will cause the universal wall fitting to unscrew from the wall. Leave the universal wall fitting attached to the quick disconnect while storing the unit.

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

Remove the eyeball regulator disks from the pool return lines.

Drain and store the Polaris 160 as shown above.

Exploded Parts Diagram



No.	Part #	Description	Qty.
1	6-500-00	Universal Wall Fitting	1
2	9-100-8006	Eyeball Regulator Disk	2
3	6-504-00	Filter Screen, UWF/QD	1
4	6-505-00	O-ring, UWF/QD	1
5	6-502-00	Quick Disconnect, UWF	1
6	6-503-00	Pressure Relief Valve, Blue	1
7	6-508-00	UWF Connector Assembly	1
8	6-102-00	Float	30
9	6-105-00	Float Hose Complete	1
10	6-104-00	Hose Connector, Female	2
11	6-103-00	Hose Connector, Male	3
12	6-111-00	Float Hose Extension Kit, 7 Foot	1
13	6-406-00	Filter Connector/Randomizer Tube Kit	1
14	6-204-00	Filter Bag Assembly, Snap	1
15	6-506-00	Surface Module Top	1
16	6-400-00	Mechanism	1
17	6-507-00	Drain Plug Assembly	1
18	6-303-00	Body Bottom Assembly	1
19	6-300-00	Body Bottom Wheel Kit	5
20	6-302-00	Screw, Phillips-Pan, #10 x 3/4"	2
21	6-107-00	Wheel Cage Assembly	13
22	6-114-00	Sweep Hose Complete	1
23	6-110-00	Hose Weight	13
24	6-108-00	Jet Body	1
25	6-203-00	Jet Sweep Assembly, Snap	1
Parts Not Shown			
	6-101-00	Adapter Kit for 1 1/4" or 2"	
	6-109-00	Hanger Kit (Includes 8 Brackets)	
	6-112-00	Sweep Hose, 10 Foot (Hose Only)	
	6-113-00	In-line Pressure Tester	
	6-115-00	Float Hose, 24 Foot (Hose Only)	
	6-205-00	Leaf Bag Assembly, Snap	
	6-403-00	Randomizer Ball	
	10-102-00	UWF Removal Tool	
	11-203-00	Adjustable Plug, UWF	

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

Troubleshooting

To locate and identify specific parts, refer to the Exploded Parts Diagram on page 10.

Problem: Surface module dives under the water or rolls onto its side.

Solution:

1. Make sure the hose is not twisted, see "Turning on the Polaris 160" on page 7.
2. Hold the surface module out of the water and drain the water. Shake the surface module. If you hear water sloshing in the body bottom of the unit, you will need to drain the body bottom (the blue portion of the surface module).

To drain the body bottom, disconnect both the float hose and the sweep hose. Remove the two phillips-head screws at the back of the underside of the surface module. Remove the white top and the mechanism. Remove the drain plug from the front of the body bottom and drain the unit. Replace the drain plug, white top, two screws, and hoses.

Problem: Surface module moves too fast, banging into the pool walls.

Solution: Feel around the pressure relief valve. If it is releasing excess water, try removing one of the eyeball regulator disks from another return line. If this causes the unit to move too slowly, contact Polaris.

Problem: Bag does not stay on the pool floor.

Solution:

1. Check that the bag has been installed correctly, see "Assembling the Polaris 160" on page 5.
2. The flow of water through the 160 could be too high. See "Surface module moves too fast" above.
3. Check for air bubbles at the connection of the bag and the hose. If there are any, you may have air entering your plumbing line. Contact your participating Polaris dealer.

Problem: Polaris 160 does not clean the entire pool.

Solution:

1. Feel around the pressure relief valve. If it is not releasing excess water, clean both the pool filter and the filter screen in the quick disconnect.

2. Check that eyeball regulator disks are installed in all of the return lines.

3. Check the float hose length, see "Adjusting the Float Hose" on page 7.

4. Check the surface module operation:

A. To remove the surface module top, unscrew the two phillips-head screws from the bottom of the module, lift slightly at the rear of the module and pull back.

B. Check that the randomizer tube is moving from front to back. If it is, refer to C below. If it is not, the filter connector may be clogged. To check, disconnect the float hose from the module and look into the mechanism. About half way down in the center of the randomizer tube you can see the filter connector. It should be white and free of debris. If it is surrounded by debris, it needs to be replaced. If it is not, the mechanism will need to be replaced.

C. Watch the balls in the mechanism. If they do not move within two minutes and the randomizer tube is moving back and forth, the mechanism will need to be replaced.

Problem: The hose remains coiled.

Solution:

1. See "Polaris 160 does not clean the entire pool" above.

2. Lay the hoses out straight in the sun to remove the coils that have formed.

Problem: Unit runs slowly.

Solution: See "Polaris 160 does not clean the entire pool" above.

If none of the above solutions work, contact our Customer Service Department toll-free at 1-800-VAC-SWEEP, Monday through Friday, 7:30 a.m. - 5:00 p.m. PST.

Limited Warranty

Polaris Vac-Sweep 160 Automatic Swimming Pool Cleaner

This Limited Warranty is extended to the original consumer purchaser of this Polaris Vac-Sweep 160 Automatic Swimming Pool Cleaner manufactured by Polaris Pool Systems, Inc., P.O. Box 1149, San Marcos, California 92079-1149.

Polaris warrants the cleaning unit it manufactures, including all parts and components thereof, to be free of defects in material and workmanship. The Polaris 160 is intended for use in vinyl-lined or fiberglass swimming pools only. The warranty does not apply if the Polaris 160 is used in any other type of pool. The warranty does not cover normal replacement items, including the filter bag. It does not cover improper installation of the Polaris 160, but our instruction manual is complete enough to solve any problems, particularly if it is read before, rather than after, the installation. If you have any questions regarding the Polaris 160, please feel free to write us. Be sure to include the serial number of your unit.

The warranty commences on the date of installation of the unit 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 unit as established by the serial number.

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

The consumer must deliver or ship 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 or part to the plant of manufacture must be obtained from the Polaris Customer Service Department. Check with your authorized Polaris 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. Be sure you insure your shipments against loss or damage in transit.

Polaris is not responsible for the cost of removal of the unit or part, damages due to removal, or any other expenses incurred in shipping the unit or part to or from the factory or its Authorized Service Centers, or 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 or part 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 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 160 AUTOMATIC POOL CLEANER WITH A SUBSTANDARD POOL CIRCULATION SYSTEM.

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 does not apply to Polaris 160 Automatic Swimming Pool Cleaners sold or installed in any other country.