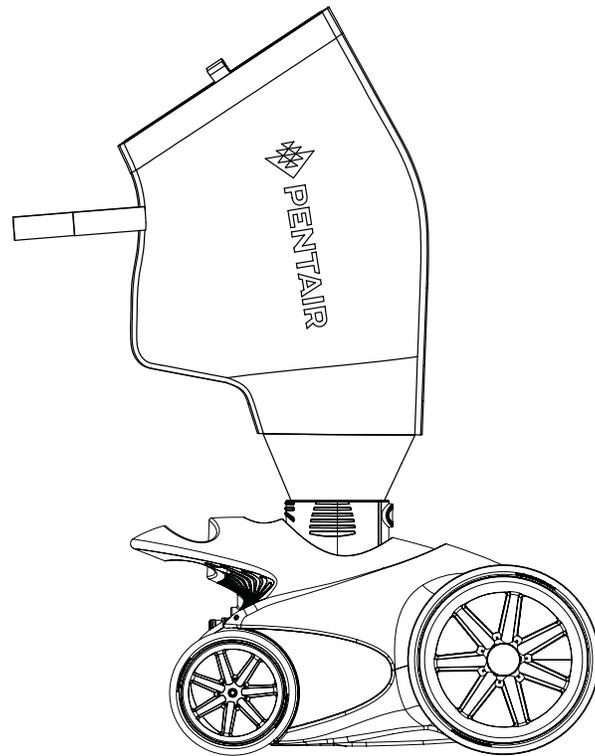




# RACER<sup>®</sup> LS

## PRESSURE SIDE POOL CLEANER



## INSTALLATION AND USER'S GUIDE

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

## CUSTOMER SERVICE / TECHNICAL SUPPORT

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If you have questions about ordering Pentair Aquatic Systems replacement parts, and pool products, please contact:

### Customer Service and Technical Support, USA

(8 A.M. to 5 P.M. — Eastern/Pacific Times)

Phone: (800) 831-7133

Fax: (800) 284-4151

### Web site

Visit [www.pentairpool.com](http://www.pentairpool.com) or [www.staritepool.com](http://www.staritepool.com) for information about Pentair products.

### Sanford, North Carolina (8 A.M. to 5 P.M. ET)

Phone: (919) 566-8000

Fax: (919) 566-8920

### Moorpark, California (8 A.M. to 5 P.M. PT)

Phone: (805) 553-5000 (Ext. 5591)

Fax: (805) 553-5515

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# IMPORTANT WARNING AND SAFETY INSTRUCTIONS



## Important Notice:

**Attention Installer:** This guide contains important information about the installation, operation and safe use of this product. This information should be given to the owner and/or operator of this equipment after installation of the pool cleaner.

**Attention User:** This manual contains important information that will help you in operating and maintaining this pool cleaner. Please retain it for future reference. Consult Pentair with any questions regarding this equipment.



**WARNING** Before installing this product, read and follow all warning notices and instructions which are included. Failure to follow safety warnings and instructions can result in severe injury, death, or property damage. Call (800) 831-7133 for additional free copies of these instructions.

## Consumer Information and Safety

This pool cleaner is designed and manufactured to provide many years of safe and reliable service when installed, operated and maintained according to the information in this manual. Throughout the manual, safety warnings and cautions are identified by the “” symbol. Be sure to read and comply with all of the warnings and cautions.



### HAZARDOUS SUCTION.

Do not play with cleaner or hose or apply to body. Can trap and tear hair or body parts. Hose can trip or entangle swimmers which could result in drowning.



**SUCTION ENTRAPMENT, INJURY, AND DROWNING HAZARD.** If your pool has a dedicated suction port (“vac port”) for vacuuming or for an automatic pool cleaner, it must be covered when not in use. A spring loaded safety cover (a “vac port fitting”) is included with your cleaner. Install it on the suction port to prevent entrapment and injury. If the cover provided does not fit, purchase one that does from your local pool store and install it instead. The cover should conform to IAPMO SPS4-99A.



**Stop pump** before attempting to clean unit. Do not allow swimmers in pool while pool cleaner is operating.



To reduce the risk of injury, do not let children use or play with pool cleaner.



Do not allow swimmers in the pool while pool cleaner is operating. Hose can trip or entangle swimmers which could result in drowning.



Moving parts may injure hands or fingers. Stop pump before attempting to clean out pool cleaner head.

## General Installation Information

### Pre-Installation Check List

Before installing your cleaner, review and understand all warnings and safety information in this guide. Failure to follow these instructions or improper installation of the cleaner can result in damage to the pool finish or the vinyl liner. Most cleaners are not designed to traverse from floor to wall when the pool cove is 90%. There may be other structures installed in the pool that the cleaner cannot navigate, BE AWARE and supervise the cleaner during unique conditions. Pentair Aquatic Systems disclaims any liability for repairs or replacement to any of these structures or components of the customer’s pool.

#### Before installing the cleaner in a vinyl liner pool:

Check liner closely for signs of deterioration or damage from age, chemicals, pool wall damage, etc. If any damage is found, have a qualified pool professional make all the necessary repairs. Also, if there are stones, roots, etc., under the liner, remove them before installing the cleaner.

#### Before installing the cleaner in a gunite pool or a pool that is partially or completely tiled:

Make sure pool finish is in proper condition as staining, etching, cracking or delaminating may worsen.

Repair loose tiles and tighten any loose light rings.

#### Before installing the cleaner, clean your filter system:

Make sure you have cleaned the filter, including backwashing, rinsing, and emptying all baskets. A clean system is necessary for proper cleaner operation and coverage.

#### Before installing the cleaner, understand cleaner coverage:

The cleaner is designed to rid your pool of debris in approximately 4-6 hours. Less time could be needed, depending on the pool size. The cleaner was not designed to automatically clean steps or swimouts, or to work under a solar cover. The cleaner may get stuck in these areas which can result in damage to the pool finish or vinyl liner. Pentair Aquatic Systems disclaims any liability for repairs or replacement to any of these structures or components of the consumer’s pool. It was also not designed to do initial cleanup for a new pool or when opening your pool for the season.

#### AFTER installing the cleaner, make sure the cleaner is operating correctly:

The cleaner may need some minor adjustments to make sure it is operating properly so there is no damage to the pool finish. Certain vinyl liner patterns are particularly susceptible to surface wear, pattern removal, ink rubbing off of, or serious scratches to the pattern caused by objects coming into contact with the vinyl surface, including automatic pool cleaners. Pentair Aquatic Systems is not responsible for any pattern removal, abrasions or markings on vinyl liners. Periodically inspect the cleaner components and the cleaner performance to ensure it is operating as designed. Replace and/or repair any worn or damaged components. Failure to follow instructions or improper installation of the cleaner may result in damage to the cleaner, pool finish or the vinyl liner.

Warnings and safety instructions for Pentair Aquatic Systems pumps and other related products are available at:  
<http://www.pentairpool.com/support/product-warnings.html> or call (800) 831-7133 for additional free copies of these instructions.

Please refer to <http://www.pentairpool.com/support/product-warnings.html> for warning and safety instructions related to this product.

## IMPORTANT WARNING AND SAFETY INSTRUCTIONS

### Disclaimer of Liability About your Pool and Pressure Side Pool Cleaner

There are a multitude of factors that contribute to the life of your pool. The pool cleaner is a very passive product that will have no impact on pool life.

Please be aware that over time, deterioration, discoloration and brittleness of any pool finish can be caused separately by, or in combination with, age, an imbalance in pool water chemistry, improper installation and other factors. Pressure side pool cleaners will not remove or cause wear on “good” pool plaster. In fact, the opposite is true—pool plaster will eventually cause wear on the cleaner.

The same situation holds true for vinyl-lined in-ground swimming pools, because vinyl liners are also affected by the environment and factors such as pool water chemistry, sunlight and the pool’s surroundings. Therefore over time, vinyl can become brittle and weak. In addition, vinyl-lined pools are affected by the workmanship, composition and installation of the liner and the workmanship and quality of construction of the supporting walls and pool base. These are all factors which can contribute to liner failure. The existence of any of these type of conditions in your pool is not caused by the use or operation of the pool cleaner. The manufacturer disclaims any liability for repairs or replacement to any of these structures or components of the customer’s pool.

The pool owner must assume all responsibility for the condition and maintenance of the pool’s surface, water and deck.

Before the cleaner is installed, please take a moment to record the serial number. This number is located on your warranty card and on the back of the cleaner near the rear jets. You will be asked for this number when you contact our Technical Support Department.

SERIAL # \_\_\_\_\_

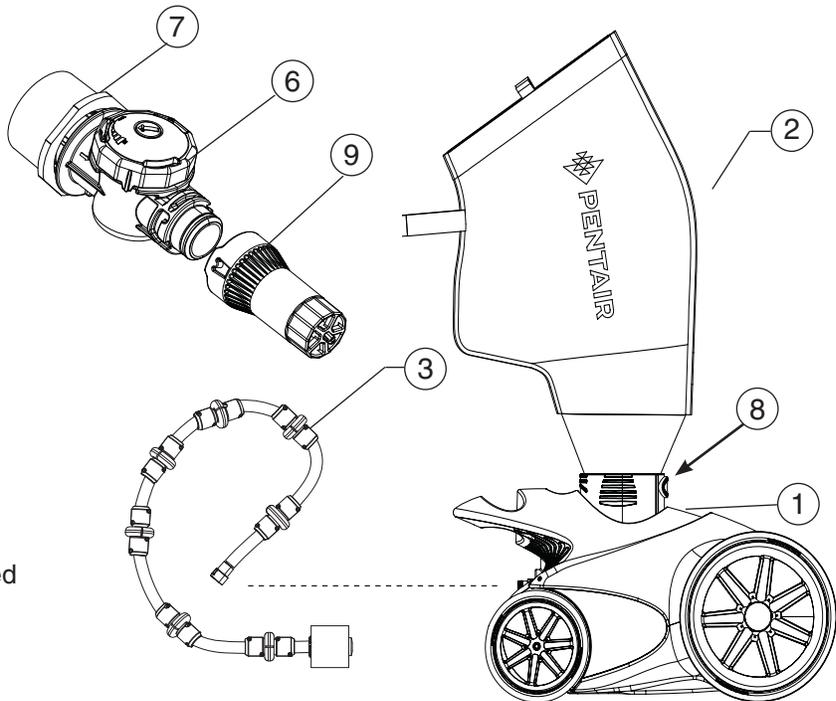
## SAVE THESE INSTRUCTIONS

# CLEANER OVERVIEW

## Cleaner Components

1. RACER LS Cleaner Head
2. Debris Bag
3. Sweep Hose
4. Feed Hose Assembly (Not shown)
  - 2-10 ft. [3 m.] sections
  - 1-7.5 ft. [2.3 m.] section
  - 1-2.5 ft. [0.8 m.] section
5. Backup Valve (Not shown)
6. Wall Fitting
7. Wall Adapter
8. Debris Seal
9. Flow Gauge

**Note:** The cleaner system is delivered with debris seal installed inside of cleaner head.



## Overview

The RACER® LS Pressure Side Pool Cleaner travels in a random pattern throughout the pool, vacuuming and sweeping the bottom. The climbing ability of the RACER LS is dependent on the pools shape. It will climb better in pools without sharp angles or curves in the transition from the pool floor to the pool wall.

Approximately every 3-1/2 minutes the cleaner will go into back up mode. At this time the Backup Valve will pull the cleaner away from its last location, allowing the cleaner to bypass any obstruction and help randomize the pool coverage.

**Note: Before you install and operate your cleaner, read through these important guidelines:**

1. Always disconnect the cleaner from the pool wall when cleaning or back washing the pool filter.
2. Dirt in the plumbing will clog the cleaner. After cleaning or back washing the filter, let the filtration system run for at least five minutes before reconnecting the cleaner.
3. New plumbing lines should be flushed out before installing the cleaner.
4. The cleaner should not be used to remove plaster dust in new pools.
5. Always remove the cleaner before swimmers enter the pool.
6. Always handle the cleaner with care.
7. Always pick up the cleaner by the handle, especially when lifting the unit out of the water.
8. Do not handle the cleaner while it is operating.
9. Always remove the cleaner from the pool before chemical shock treatments (super chlorinate). As a rule, any pool water that is unsafe for swimming is unsafe for the cleaner.
10. Carefully cut the feed hose following the instructions on page 3.
11. By following these simple guidelines, you can help protect against injury and prolong the life of your cleaner.
12. Refer to "Important Warning And Safety Instructions" on pages ii - iii for additional installation and safety information.

# INSTALLATION

## Booster Pump Installation

Please refer to the instructions included with your booster pump for installation information.

**Please follow these instructions carefully.**

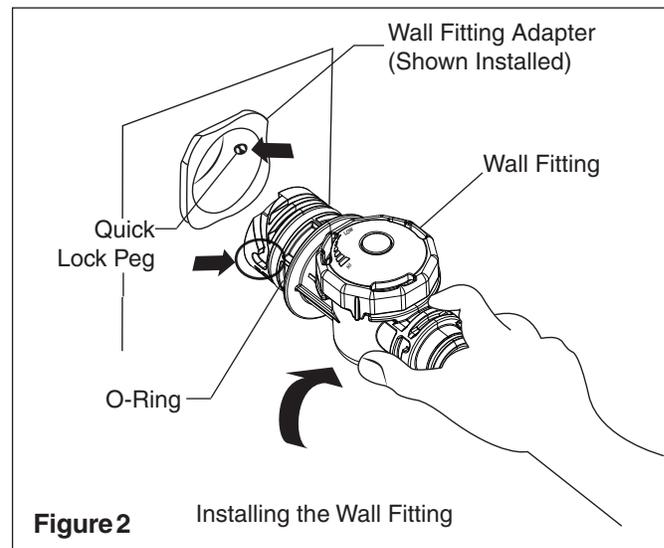
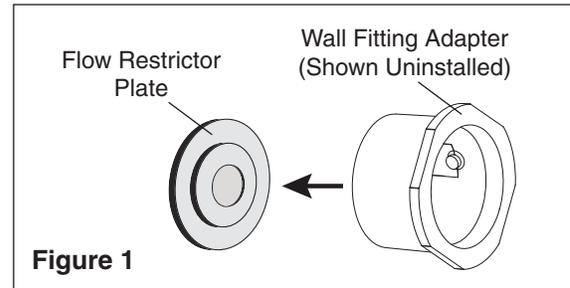
### Installing the Wall Fitting and Adapter

1. Remove and disconnect any existing pool cleaner and/or wall fitting.
2. Switch **on** the filtration pump and booster pump, to flush out the plumbing line.
3. Switch **off** filter pump and booster pump.
4. *If using a wall fitting adapter produced by a manufacturer other than Pentair*, ensure that the red or blue flow restrictor plate is removed from the wall fitting adapter before continuing to next step.

The restrictor plate can be easily removed by pressing it out with your thumbs (See **Figure 1**).

**Note:** Failure to remove the flow restrictor plate from a non-Pentair wall fitting adapter will prevent the cleaner from receiving enough water flow. This will lead to a slow cleaner and longer cleaning cycles.

5. Insert wall fitting adapter into the dedicated 1-1/2" NPT threaded return line. Hand tighten until snug. See **Figure 2**.
6. Align wall fitting with the quick lock pegs inside the wall adapter. Push the wall fitting into the wall adapter until it bottoms out. Twist 1/4 turn clockwise to lock the wall fitting. **Pull gently outward to engage quick lock pegs.** See **Figure 2**.



### Calculating Cleaner Speed/RPM

**To determine whether the RACER® LS Pressure Side Pool Cleaner is receiving the proper water pressure:**

1. Turn off the pool pump, and carefully remove the cleaner from the pool.
2. Mark the front tire/wheel with a marker, such as a blade of grass stuck under the tire.
3. Have someone restart the pool pump and booster pump while you place the cleaner just beneath the pool's water surface.

**Note:** Be sure to hold onto the sweep hose to avoid getting wet, as flow will return to the sweep hose when the pump is restarted.

4. Count the number of full rotations made by the marked wheel over a period of one minute. The number of rotations will give you the revolutions per minute; or RPM's.

**Note:** Be sure that the back-up valve isn't cycling at this time.

5. For proper performance, the RACER LS cleaner operates between 35 - 42 RPMs.

If the RPM is below 35, call your local Pool Professional or contact Pentair's Technical Support Department at 1-800-831-7133.

If the RPM is higher than 42, adjust the valve at the wall fitting, as described under "Adjusting Water Flow to the Cleaner" on page 8, until the RPMs fall back under 42 RPM.

## Adjusting the Hose Assembly to Fit Pool

The hose assembly consists of: Two 10 ft. (3 m.) sections, one 7.5 ft. (2.3 m.) section, one 2.5 ft. (0.8 m.) section and a backup valve.

### Important to the Performance of the Cleaner:

Measure, cut, and assemble the hose sections as described in Step 1 and Step 2. Use strong scissors or a sharp knife to cut the hoses. Be sure to slide the floats out of the way when cutting hose. Cut hose ends as straight as possible.

### Step 1: Sizing Hose Section 1

1. Measure the deepest part of the pool. See **Figure 3**.

**Note:** The grate or domed main drain, at the bottom of the pool, is usually the deepest point. *If the depth is greater than 10 ft. [3 meters], do not cut the hose, and proceed to Step 2.*

2. If the pool depth is less than 10 ft. [3 meters], disconnect the soft light grey lead hose, labeled section one, from the back-up valve. Cut the lead hose so the length with back-up valve is equal to the deepest part of the pool. See **Figure 4**.

**Example:** *If the pool is 8.5 ft. [2.6 meters] deep, cut 1.5 ft. [0.5 meters] off of the hose labelled section one (since the hose is 10 ft. [3 meters]).*

3. Discard excess hose. Reconnect the newly cut lead hose to the back-up valve on the feed hose. All three hose sections should now be connected.

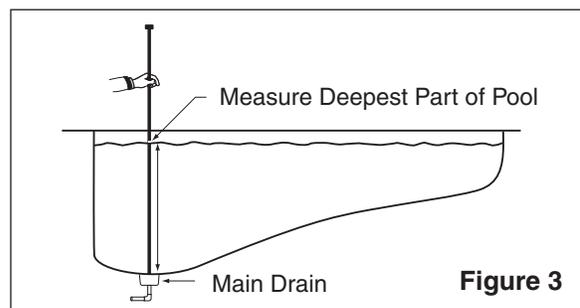
### Step 2: Sizing Hose Sections 2 and 3

4. Attach the hose assembly to the wall fitting. See **Figure 5**. Then attach the wall fitting (with hose) to the wall adaptor. See **Figure 5**. Take the opposite end of the hose assembly and walk to the farthest point of the pool from the wall adaptor. **To prevent over stretching the hose, rest the hose on top of the pool water.** Measure the excess hose length (hose that extends beyond pool edge). This determines the amount of hose to be cut from sections 2 and 3.
5. Disconnect feed hose assembly from the wall adaptor. Disconnect sections 2 and 3 from the first swivel closest to the wall fitting.
6. Cut half of the total excess hose length from each hose labeled section 2 and section 3 (assembled with four floats) equally. **Both feed hose sections should be the same length after cutting.**

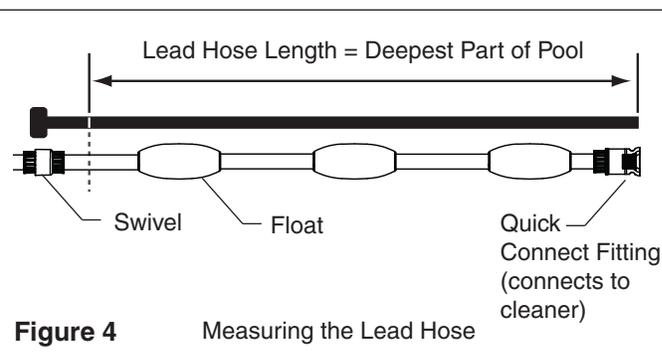
**Example:** *If there is 6 ft. [1.8 meters] of excess hose. Cut 3 ft. [0.9 meters] off of section 2 and section 3. (Half of 6 ft. [1.8 meters] = 3 ft. [0.9 meters] each)*

If more than 3 ft. [0.9 meters] is cut from each hose section, remove one (1) float from each hose section.

**Note:** For large pools requiring extra hose lengths you will need to purchase one (1) additional hose, P/N 360266 (10 ft. [3 meters] single hose). Attach extra hose sections at the wall fitting using supplied swivel and mender nuts.

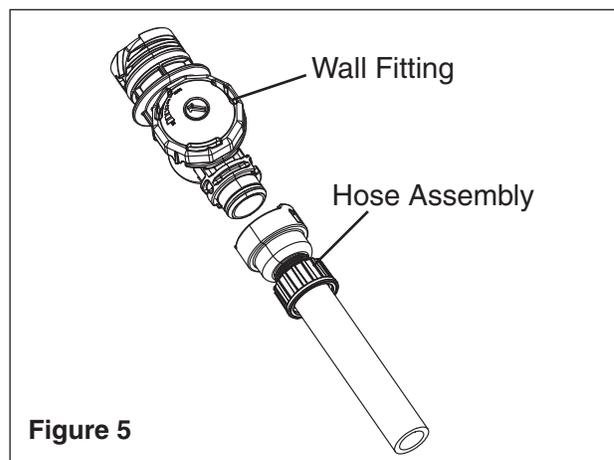


**Figure 3**

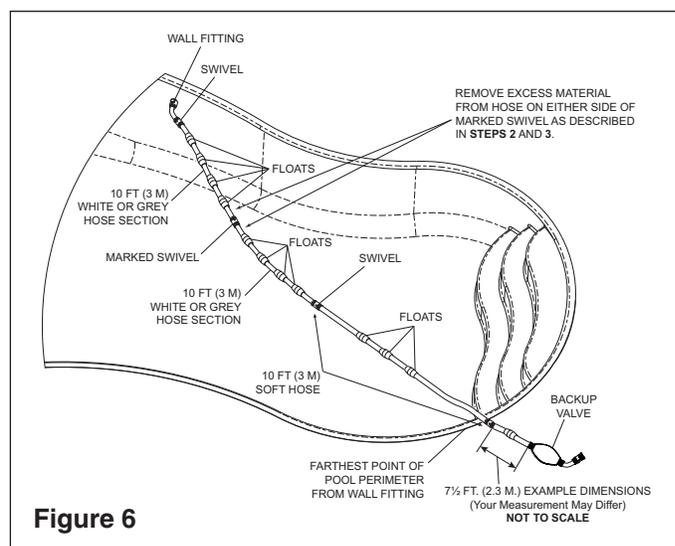


**Figure 4**

Measuring the Lead Hose



**Figure 5**



**Figure 6**

### Step 3: Connecting Hose Sections

1. After the hose sections have been cut to size, reconnect them by pushing the hose end over the barb on the swivel.

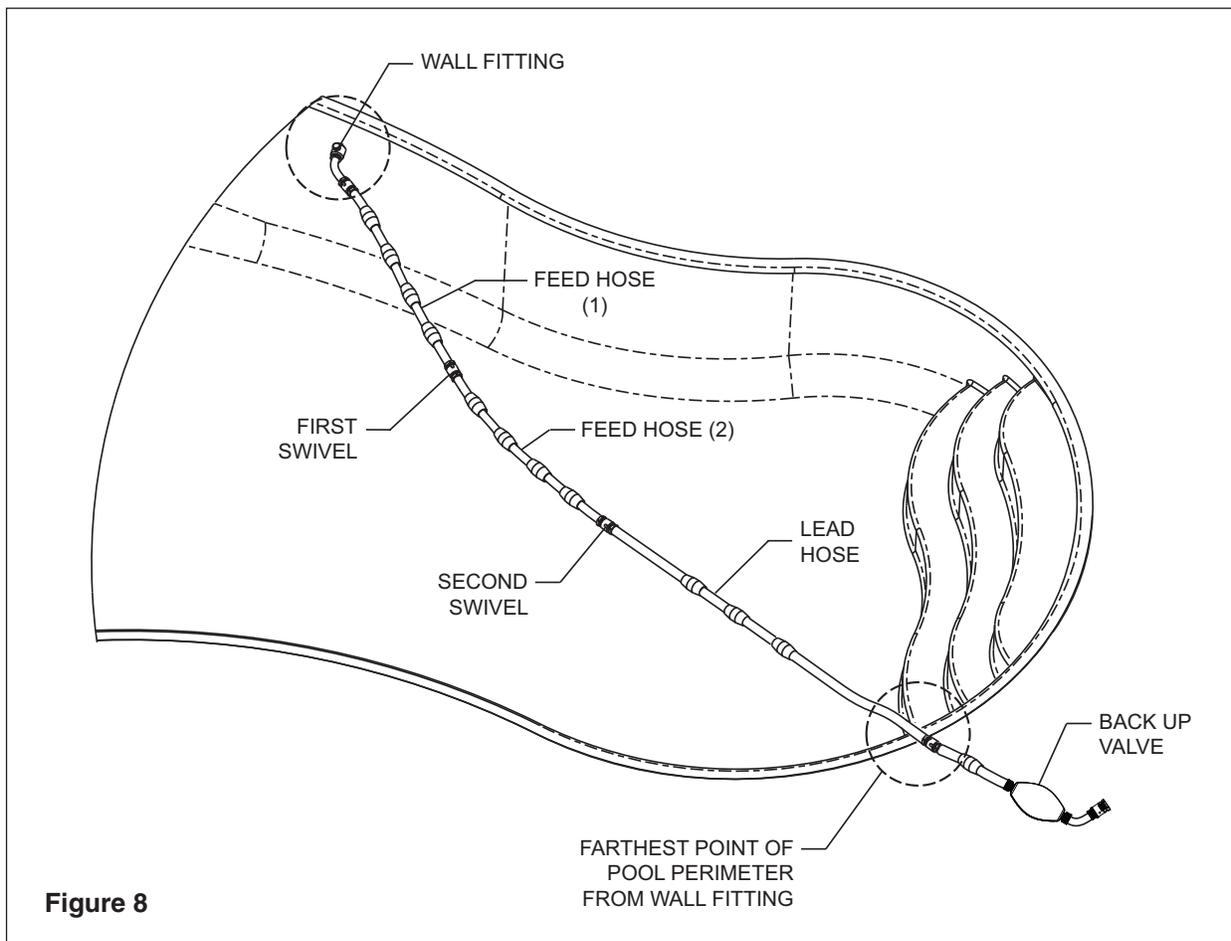
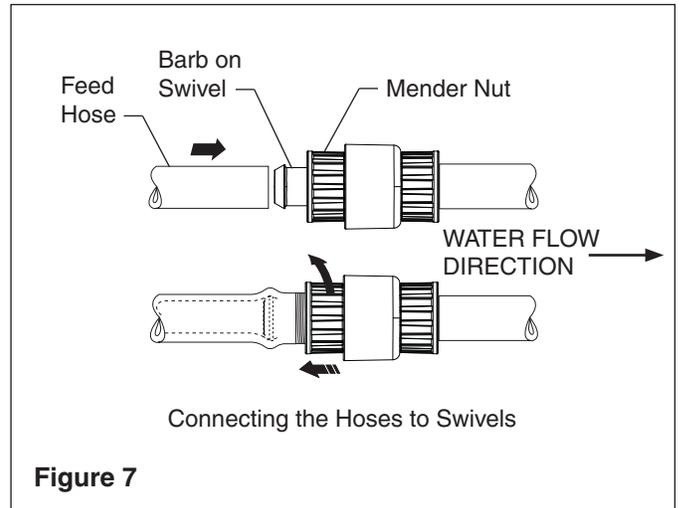
**Note:** Be sure to push the hose all the way to the bottom of the barb.

2. Move the mender nut toward the hose by turning clockwise and rotating until tight on hose. Use pliers if needed.

**Note:** Be sure the same number of floats are left on hose sections 2 and 3, as described in Step 2 on page 3.

3. To check that the hose is cut to the correct length, reconnect the hose and wall fitting to the wall adaptor. Take the opposite end of the hose assembly and walk to the farthest point of the pool from the wall adaptor. The hose should reach the edge of the pool but should not extend more than 6 inches beyond the pool edge.

4. You can now connect the cleaner to the hose.

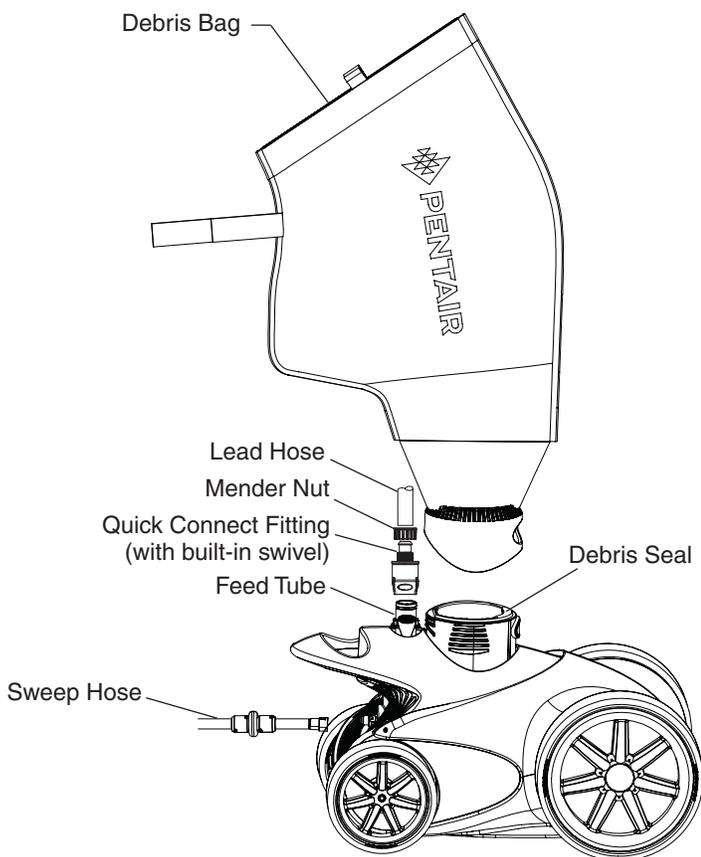


## Assembling the Cleaner

1. Attach the Quick Connect fitting on the end of the hose to the feed tube on the RACER® LS Pressure Side Pool Cleaner. Be sure the snaps are engaged.
2. Attach the debris bag to the cleaner. Push the bag over vacuum tube to click it into place.
3. Review checklist before use:
  - Hoses cut properly and floats evenly spaced.
  - Mender nuts are tight on feed hose.
  - Wall fitting secure and in place.
  - Debris bag and hose assembly attached.
  - Ensure debris seal is attached. See **Figure 9**.

## Using the Cleaner

1. Lower the cleaner carefully into pool.
2. Switch ON the FILTER PUMP.
3. Wait at least 60 seconds to allow air to blow out of the hose.
4. Switch ON the BOOSTER PUMP.



Assembling the Cleaner

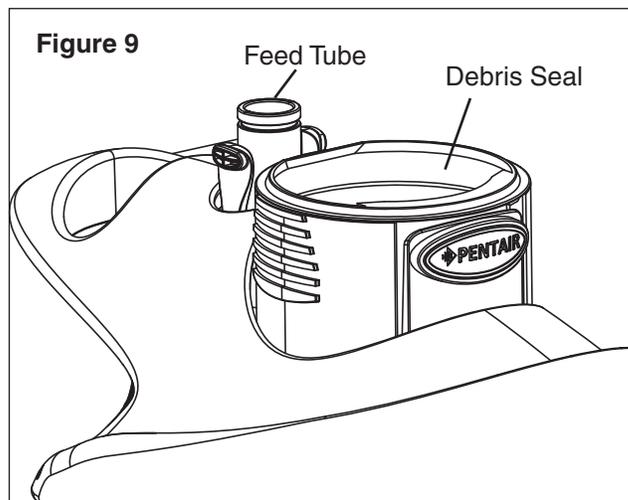


Figure 9

# CLEANER ADJUSTMENTS AND OPERATION

## Cleaner Operation

**Note:** The RACER® LS Pressure Side Pool Cleaner may need some minor adjustments to ensure it is operating properly and to get the best performance possible.

When operating correctly, the cleaner will travel in a random pattern throughout the pool, vacuuming and sweeping the pool.

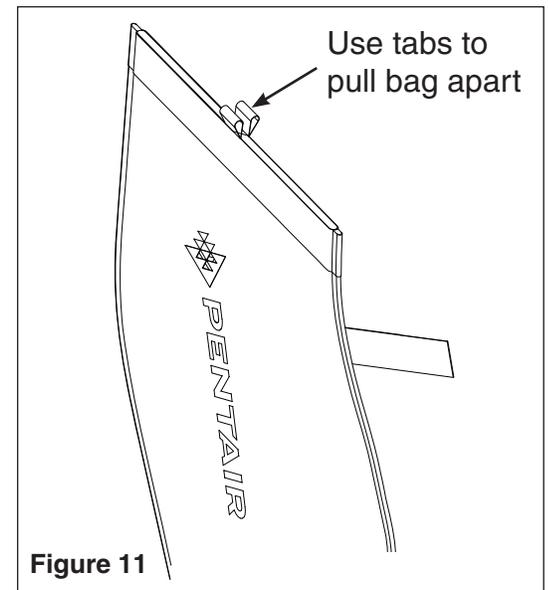
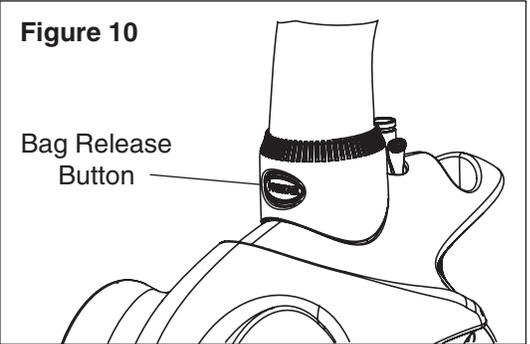
- The climbing ability of the cleaner depends on the pool structure and water flow.
- Two hour cleaning cycle is recommended for average size residential (15' x 30' [4.6 m x 9.1 m]) pools.
- It will perform more efficiently in pools without sharp transitions between pool floor and walls.
- The cleaner goes into a back up mode approximately every 3-1/2 minutes for approximately 15 seconds.
- If pool has a high level of debris, run the cleaner in two short cycles. Empty the debris bag between cycles.

## Cleaning the Debris Bag

1. Detach the bag strap from the hose.
2. Press the release button on the cleaner vacuum tube and carefully pull up to remove the bag from the cleaner. See **Figure 10**.
3. Open bag closure by pulling apart the fabric tabs at the top of the bag (see **Figure 11**). Holding the bottom of the bag, turn over to empty debris out of the top. If needed, rinse bag with a hose.
4. To close, press together the hook and loop fabric at the top of the bag and run finger along entire length of bag so it is completely closed.
5. Be sure debris seal is on the vacuum tube. See **Figure 9**, on page 5.
6. Slide the debris bag collar over the vacuum tube until it clicks in place.
7. Reattach the strap onto the feed hose.
8. To keep bag from folding during operation, attach the strap above first feed line float. Slide float down if needed.

**Note:** It is easier to empty the debris bag when it is dry. A second bag (purchased separately) may be used while the used debris bag is drying.

**Figure 10**

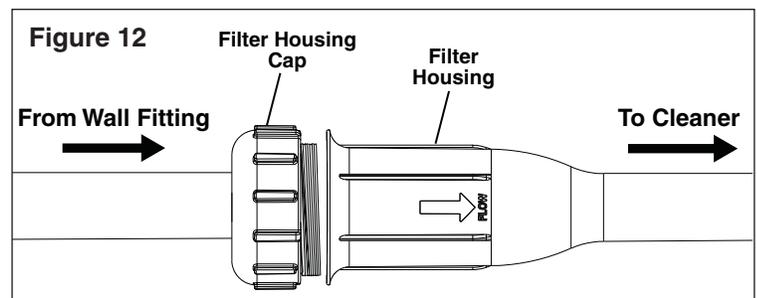


## Cleaning the In-Line Filter

When cleaning the cleaner's debris bag you should also inspect the in-line filter's debris screen. The debris screen will be found roughly 18 inches (45.7 mm) from the wall fitting.

### To clean the in-line filter's debris screen:

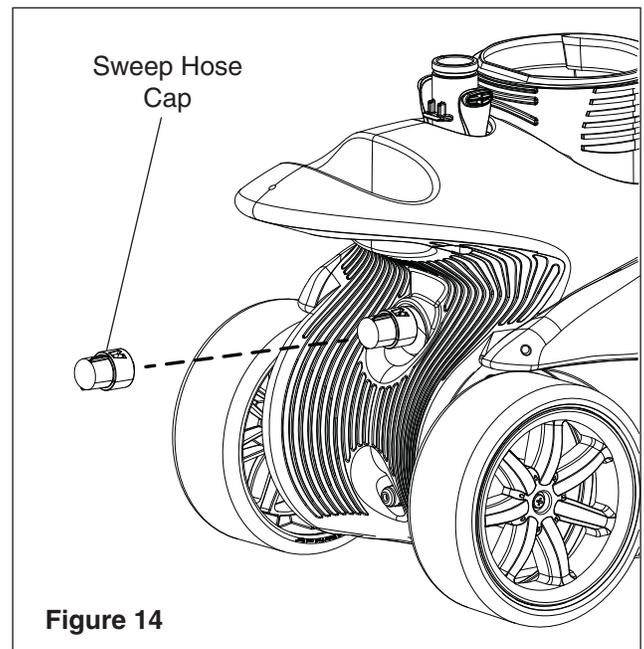
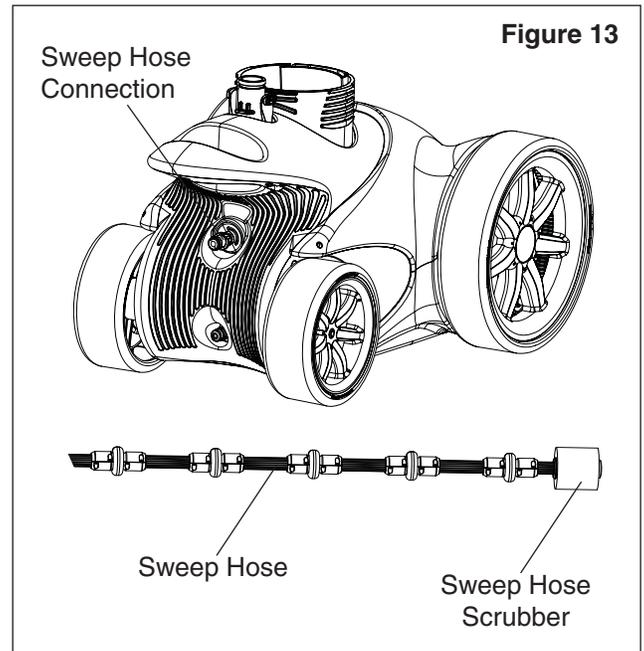
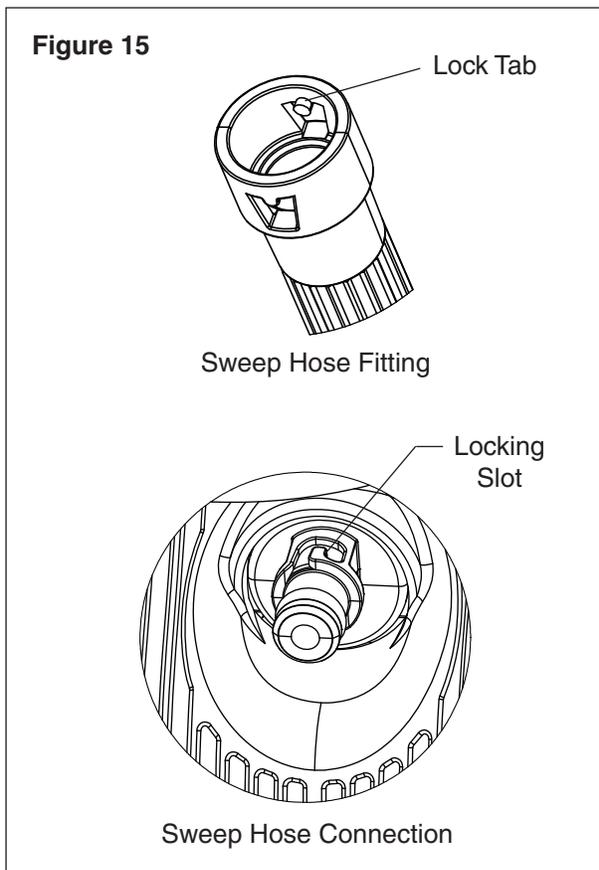
1. Pull the cleaner out of the water and place it flat on the pool deck.
2. Twist apart the filter housing cap and filter housing.
3. Remove the debris screen from the filter housing and remove all debris. Use a hose to flush out any dirt.
4. Reinstall the debris screen into the filter housing and thread the housing cap back onto the housing. Hand tighten only.



## Installing and Removing the Sweep Hose

The Racer® LS Pressure Side Pool Cleaner comes from the factory with a Sweep Hose Cap installed over the Sweep Hose Connection (see **Figure 14**). This cap blocks flow through the sweep hose connection when the sweep hose is not being used.

1. To remove the sweep hose cap, while pushing the sweep hose cap in towards the cleaner, turn it 1/4 turn counter-clockwise to unlock. Remove the cap from the sweep hose connection by pulling it straight off the sweep hose connection.
2. Line up the lock tabs on the inside of the sweep hose fitting (small round fitting on the end of the sweep hose) to the locking slots on the cleaner's sweep hose connection. See **Figure 15**.
3. Push the sweep hose fitting onto the sweep hose connection and turn clockwise until it stops (about 1/4 turn). Pull the sweep hose fitting away from the cleaner to lock it into place.
4. To remove the sweep hose, while pushing the sweep hose fitting towards the cleaner turn counter-clockwise until it stops (about 1/4 turn). Pull the sweep hose from the sweep hose connection and store it in a safe place.



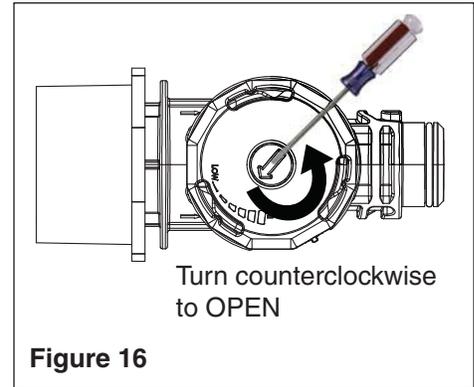
## Adjusting Water Flow to the Cleaner

Incorrect water flow to the RACER® LS Pressure Side Pool Cleaner can cause a variety of performance issues. **To achieve proper performance, the RACER LS cleaner must operate between 35 - 42 RPMs.** See page 2, “Calculating Cleaner Speed/RPM” for instructions on determining your cleaner’s RPM.

Flow can be adjusted at the wall fitting using the wall fitting valve.

### To adjust flow to the cleaner:

1. Using a flathead screwdriver, turn the valve clockwise (to reduce flow) or counter-clockwise (to increase flow). See **Figure 16**.



# MAINTENANCE

## Periodic Maintenance

Periodically inspect the RACER® LS Pressure Side Pool Cleaner and its components. Replace and/or repair any worn or damaged components. Failure to follow instructions or improper installation of the cleaner can result in damage to the cleaner, pool finish, or vinyl liner. The following parts are wear items that should be inspected periodically and replaced as needed:

### Tires

The tires are designed to protect the bottom of your pool and provide traction. Tires will wear and need to be replaced occasionally.

### Debris Bags

The cleaner comes with a general purpose bag and is used for all debris types. Replace bag when the fabric is torn or punctured.

**Note:** To prolong the life of your cleaner, remove it from pool before adding chemicals.

### Sweep Hose

The sweep hose is provided to help keep hard to reach corners of your pool clean. Replace sweep hose scrubber as necessary if used.

### Sweep Hose Roller Rings

Your sweep hose has a series of roller rings to protect the sweep hose. Replace the rings as needed. Ensure the roller rings rotate freely.

## Backwashing the Pool Filter

Always disconnect the cleaner from the pool wall before cleaning or backwashing the pool filter. After cleaning or backwashing, let the pool filtration system and booster pump run for a minimum of five minutes to flush out the return lines before reconnecting the cleaner.

## Storage and Winterizing

You may leave the wall adapter in the wall and store the hoses straight, without any kinks. If storing the hose coiled, be sure to lay the hose straight in the sun for 12 to 24 hours before using again.

## Cleaning the Wall Fitting Debris Screen

Inside the wall fitting is a stainless steel screen that acts as a secondary filter. This screen captures debris that may have passed through the pool filter.



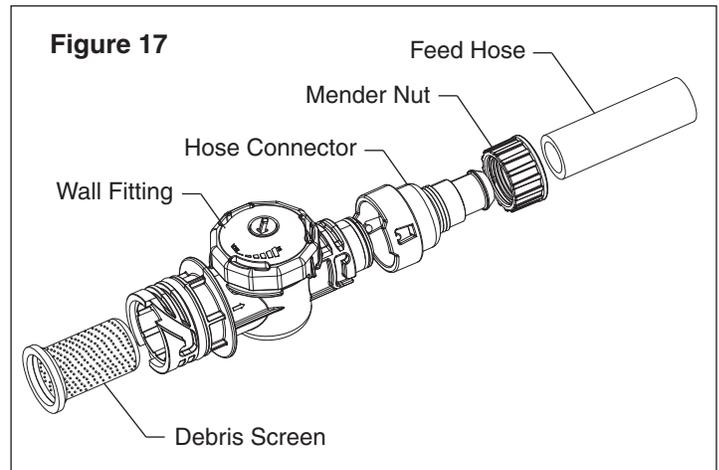
The wall fitting debris screen should be cleaned once a week. Failure to regularly clean the debris screen could damage the cleaner.

**IMPORTANT! A dirty screen may be an indication of potential issues in your pool filter system and you may need to contact your local pool professional.**

**Note:** Running the cleaner without the debris screen can damage the cleaner and void the warranty.

### To clean the debris screen:

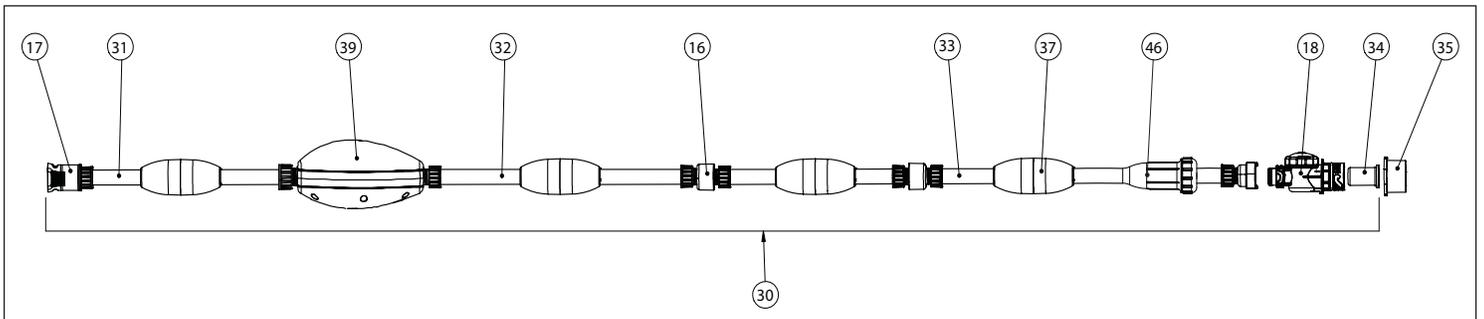
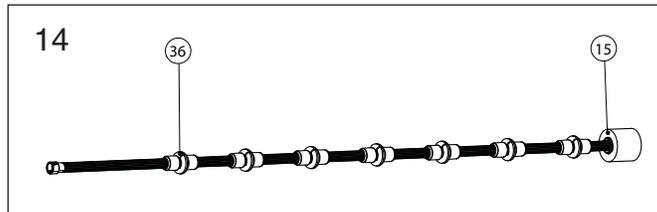
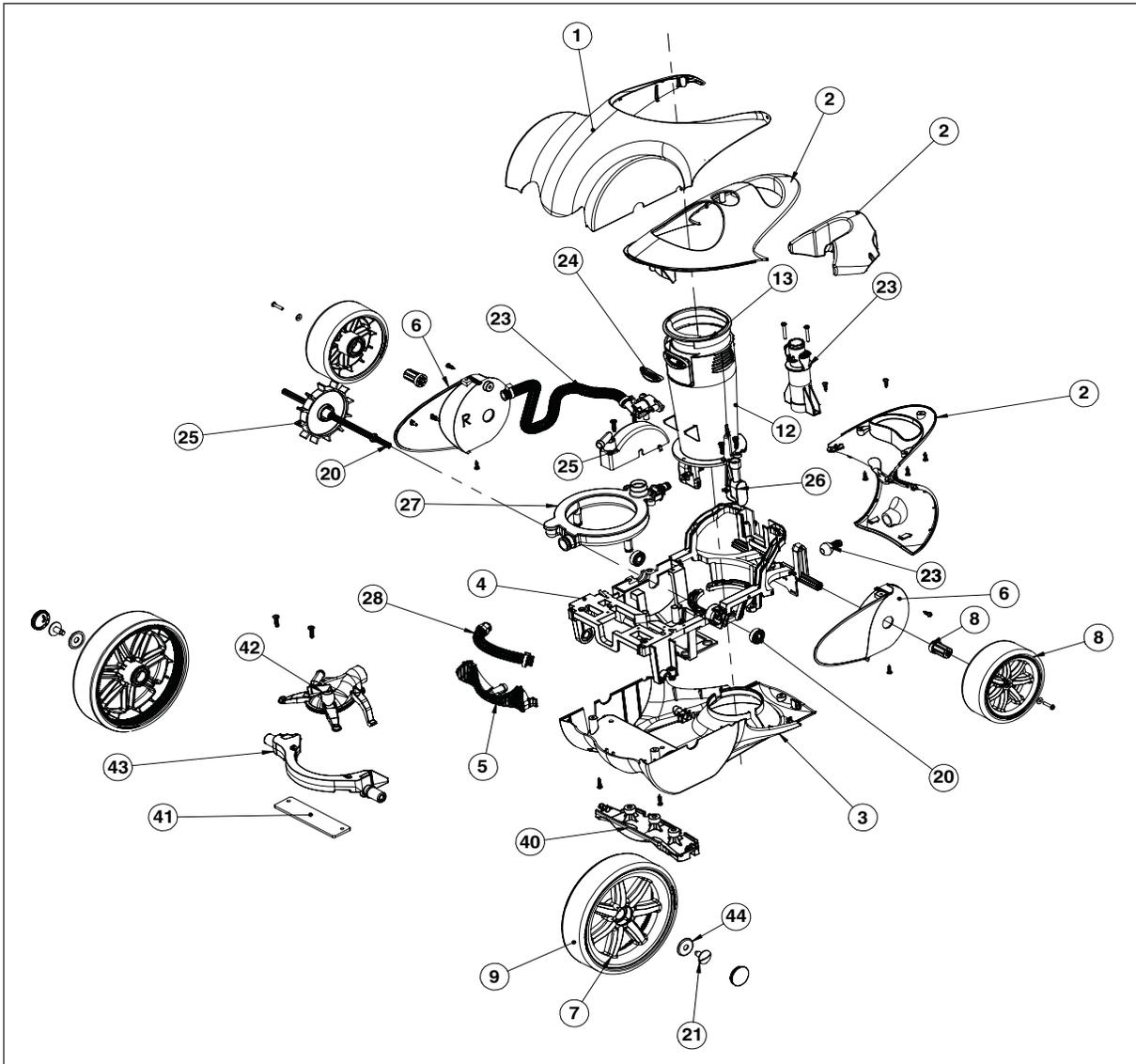
1. Switch the booster pump and then the filtration pump off.
2. Remove the wall fitting from the wall adaptor.
3. Pull the screen out from inside the wall fitting.
4. Rinse thoroughly until clean and insert back inside the wall fitting.
5. Whenever cleaning, backwashing or repairing the pool filter, also clean the wall fitting screen after your first cleaner cycle.



Cleaning the Debris Screen

# REPLACEMENT PARTS

## Illustrated Parts List



## Parts List

ITEM NO.	PART NUMBER	DESCRIPTION
1	360422	Top Front Cover Kit
2	360425	Rear Cover Kit
3	360424	Bottom Cover Kit
4	360427	Chassis Kit
5	360426	Grill Kit
6	360423	Side Covers Kit
7	360235	Large Wheel Kit
8	360236	Small Wheel Kit
9	360237	Large Tires Kit
10*	360240	Debris Bag Kit (w/o collar), hook and loop fastener
11*	360241	Debris Bag Collar Kit
12	360242	Vacuum Tube Kit
13	360243	Debris Valve Kit
14	360244	Sweep Hose Kit
15	360245	Sweep Hose Scrubber Kit
16	360249	Feedline Swivel Kit
17	360250	Feedline Quick Connector Kit
18	360251	Feedline Wall Connector Kit
19	360252	Feed Line Connector Kit
20	360253	Drive Shaft Kit
21	LLC55PMB	Wheel Screw Kit
22*	360255	Screw Kit
23	360419	Thrust Hose Kit
24	360258	Rubber Button Kit

ITEM NO.	PART NUMBER	DESCRIPTION
25	360414	Turbine Housing Kit
26	360260	Venturi Manifold Kit
27	360416	Water Management Kit
28	360420	Turbine Hose Kit
29	360417	Tune Up Kit
30	360431	Hose Assembly, Complete
31	360429	Leader Hose Kit, 2.5'
32	360430	Leader Hose Kit, 7.5'
33	360266	Hard Feedline Hose Kit, 10'
34	E24	Debris Screen
35	LL23PM	Threaded Wall Adapter
36	EB10G	Sweep Hose Wear Ring
37	360270	Feed Line Float
38*	360268	Feed Line O-Ring Kit
39	360428	Backup Valve Kit
40	360421	Scrubber Cover Kit
41	360418	SS Weight Kit
42	360415	Manifold Kit
43	360434	Axle Replacement Kit
44	EC64	Wheel Washer Kit
45*	360436	Sweep Hose Cap
46	360392	In-Line Filter Assembly
47*	360437	Replacement In-Line Filter Screen Kit

**Note: (\*) Not shown**

## TROUBLESHOOTING

Use the following troubleshooting information to solve potential issues with the RACER® LS Pressure Side Pool Cleaner.

Problem	Corrective Action
<b>Cleaner doesn't move or moves slowly.</b>	<p>Ensure filter pump and booster pump are on and moving water. (You may need to clean your pool filter system.)</p> <p><b>Ensure the wall fitting debris screen is free of debris; you may need to remove and rinse. See page 9.</b></p> <p>Ensure the in-line filter's debris screen is free of debris; you may need to remove and rinse. See page 6.</p> <p>Check for proper flow by calculating cleaner speed/RPM (see page 2). Adjust the flow at the wall fitting if needed (see page 8).</p> <p>Check all feed hose connections and swivels for leaks.</p> <p><b>Ensure a flow restrictor plate is not installed in the wall fitting adapter. Remove restrictor plate if present. See page 2.</b></p> <p>Check for debris that may be jammed in the gear teeth on one of the front drive wheels. Gently rotate the front wheels backward to dislodge debris.</p> <p>Check to see if the rear wheels are spinning freely. Replace wheels if necessary.</p> <p>Ensure the backup valve cycles approximately every 3-1/2 minutes, repositioning the cleaner.</p>
<b>Cleaner hangs at steps.</b>	<p>Ensure the backup valve cycles approximately every 3-1/2 minutes, repositioning the cleaner.</p> <p>Check for proper flow by calculating cleaner speed/RPM (see page 2). Adjust the flow at the wall fitting if needed (see page 8).</p>
<b>Cleaner tilts to one side.</b>	<p>Usually indicates a full debris bag. Empty the debris bag (see page 6).</p> <p><b>Note: Cleaner at times will tilt on one side (on two wheels) during a turn cycle. Watch the cleaner for a few minutes to see if it positions itself upright.</b></p>
<b>Cleaner does not go in reverse.</b>	<p>Ensure the backup valve cycles approximately every 3-1/2 minutes, repositioning the cleaner.</p> <p>Check for proper flow by calculating cleaner speed/RPM (see page 2). Adjust the flow at the wall fitting if needed (see page 8).</p> <p>Ensure the wall fitting debris screen is free of debris; you may need to remove and rinse. See page 9.</p> <p>Ensure the in-line filter's debris screen is free of debris; you may need to remove and rinse. See page 6.</p>
<b>Cleaner will not climb.</b>	<p>Check debris bag. Empty the debris bag if full.</p> <p>Check for proper flow by calculating cleaner speed/RPM (see page 2). Adjust the flow at the wall fitting if needed (see page 8).</p> <p><b>Note: The climbing ability of the cleaner depends on pool shape and available water flow. It will climb better in pools without sharp angles or in the transition from the pool floor to the pool wall.</b></p>
<b>Hoses tangling in loops.</b>	<p>Check the length of the feed hose. If it is too long it may cause the hose to tangle or loop. See page 3 for sizing feed hose.</p> <p>Ensure the feed hose is floating on the pool surface. Hose floats should be spaced approximately two feet apart. See page 3 for hose float positioning.</p> <p>Ensure the hose swivels spin freely. Replace swivels if tight.</p> <p>Ensure the feed hose has no kinks or bends.</p>
<b>Booster pump very noisy.</b>	<p>Ensure filter pump and booster pump are on and moving water. (You may need to clean your pool filter system.)</p> <p>Ensure wall fitting is properly installed. If leaking, O-Ring may need to be replaced.</p> <p>Contact your local pool professional - possible booster pump issue.</p>
<b>Rear wheels dragging/not spinning.</b>	<p>Ensure the wheel is free of tangled debris.</p>

# NOTES

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