



## Installation and User's Guide

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

## Customer Service

If you have questions about ordering Pentair Water Pool and Spa ("Pentair") replacement parts, and pool products, please use the following contact information:

### Customer Service (8 A.M. to 5 P.M. — Eastern and Pacific Times)

Phone: (800) 831-7133

Fax: (800) 284-4151

### Technical Support

#### Sanford, North Carolina (8 A.M. to 5 P.M. — Eastern Time)

Phone: (919) 566-8000

Fax: (919) 566-8920

#### Moorpark, California (8 A.M. to 5 P.M. — Pacific Time)

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

Fax: (805) 553-5515

### Web site

visit [www.pentairpool.com](http://www.pentairpool.com) or [www.staritepool.com](http://www.staritepool.com) to find information about Pentair products

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Congratulations on purchasing the SandShark™ robotic cleaner! With years of carefree pool enjoyment, as it efficiently vacuums your pool.

First, you'll have to install SandShark™ and after installation, perhaps make some minor adjustments and check to make sure the cleaner is operating properly. This manual also covers the steps needed to install and adjust your SandShark™.

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Please record the serial number of your SandShark™ cleaner in the space below. This way if you need to refer to the serial number in the future, (e.g. if you call the Customer Helpline), it will be readily available.

**SandShark™ Serial Number** \_\_\_\_\_

### *Activate SandShark's Warranty*

You will also need to record this serial number on the SandShark™ Warranty Registration Card. Complete and return the card to activate the SandShark's limited warranty. The registration card is self-addressed and postage-paid for your convenience. Please thoroughly review the warranty card and additional warranty information in this Installation and Operation Manual so you are familiar with the terms of your warranty coverage.

## 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

The SandShark™ pool cleaners are 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.

**WARNING** — **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.



**WARNING** — **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.

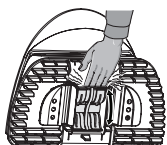


**WARNING** — **Stop pump** before attempting to clean unit. Do not allow swimmers in pool while pool cleaner is operating.

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

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

**CAUTION** — Oscillator 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. Pentair Water Pool and Spa, Inc. 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:**

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, fill the hose with water:**

Always make sure the cleaner head is submerged and the hose is full of water before connecting the hose to the filtration system (whether through a skimmer or dedicated wall fitting). Air in the system can damage the pump through dry running and overheating.

#### **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. 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 Water Pool and Spa, Inc. is not responsible for any pattern removal, abrasions or markings on vinyl liners.

## WARRANTY INFORMATION

### Limited Warranty Terms & Conditions

Before installing your cleaner, review and understand all warnings, safety and warranty 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, Pentair Water Pool and Spa, Inc. disclaims any liability for repairs or replacement to any of these structures or components of the customer's pool.

The Cleaner manufacturer, Pentair Water Pool and Spa, Inc. ("Manufacturer"), hereby provides the following limited warranty to the purchaser ("Customer"): WHICH IS SUBJECT ONLY TO THE FOLLOWING CONDITIONS AND EXCLUSIONS:

This limited warranty does not include replacement of parts which become discolored due to exposure to sunlight or chemicals, or parts which, even if worn, do not affect performance of the cleaner. Nicks, scratches, fading, discoloration, etc. are cosmetic conditions that do not affect mechanical performance. **Both Manufacturer and Pentair Water Pool and Spa's dealer reserve the right to deny any and all warranty claims made for worn parts if the wear does not negatively affect mechanical performance of the cleaner.**

The Cleaner is designed to function in a properly designed, constructed and maintained pool. This limited warranty does not extend in the circumstances where the pool's design, construction or maintenance is defective, substandard or inappropriate for the Cleaner's operation.

Deterioration, discoloration or brittleness of any pool finish can be caused over time separately by, or in combination with, age, an imbalance in water chemistry, improper installation, and other factors. Customer hereby disclaims any and all claims, and releases Manufacturer from any and all claims for damages to any pool plaster or vinyl liner in Customer's pool by reason of the use and/or operation of the Cleaner.

Under no circumstances shall Manufacturer be liable for any loss or damage, whether direct, consequential or incidental, arising out of the use or inability to use the Cleaner or the Hose in Customer's pool.

This limited warranty does not apply to any injury, loss, damage, defect, or malfunction of the Cleaner or failure to function resulting from any failure to operate or maintain the Cleaner in accordance with the directions contained in the Installation and Operation Manual or operating instructions provided by Pentair Water Pool and Spa or any injury, loss, damage, defect, or malfunction, or failure to function resulting from any accident, acts of God, alterations in the Cleaner by anyone other than Manufacturer; or misuse, unreasonable use, tampering, abuse, acts, omissions, failure or negligence by anyone other than Manufacturer including but not limited to such damages or injuries to parts resulting from improper installation, or damage to pump parts resulting from running the pump dry (e.g., interruption in or inadequate supply of water to internal pump parts due to loss of prime, or obstruction in lines or otherwise); or damage, defect or malfunction resulting from defects in, failure or malfunction of, or negligence, abuse, or misuse with respect to equipment other than the Cleaner; or any damage or loss of any nature whatsoever and personal injury caused due to the presence of a foreign object in or about the pool.

### Disclaimer of Liability About Your Pool and SandShark™

There are a multitude of factors that contribute to the life of your pool. The SandShark™ automatic 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. An automatic pool cleaner, such as SandShark™, 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 SandShark™. 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.

# Section 1

## Pool Preparation

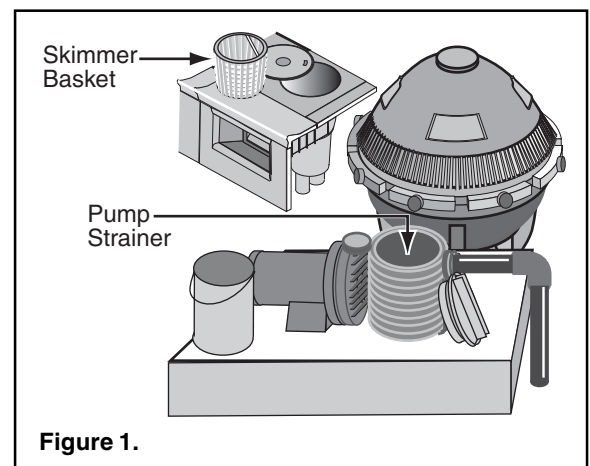
The following general information describes how to set-up your new SandShark™ automatic pool cleaner.

**NOTE: Before setting up this product, read and follow all warning notices and instructions starting on page ii.**

### Preparation of your pool

Before you assemble and install your new SandShark™ automatic pool cleaner, you should make sure that your pool is clean and free of algae. If necessary, make the following preparations before proceeding:

- Chemically balance the pool water
- Brush the pool and let the debris settle
- Hand vacuum the pool thoroughly
- Backwash and clean the filter and clean the pump strainer basket, (see Figure 1)

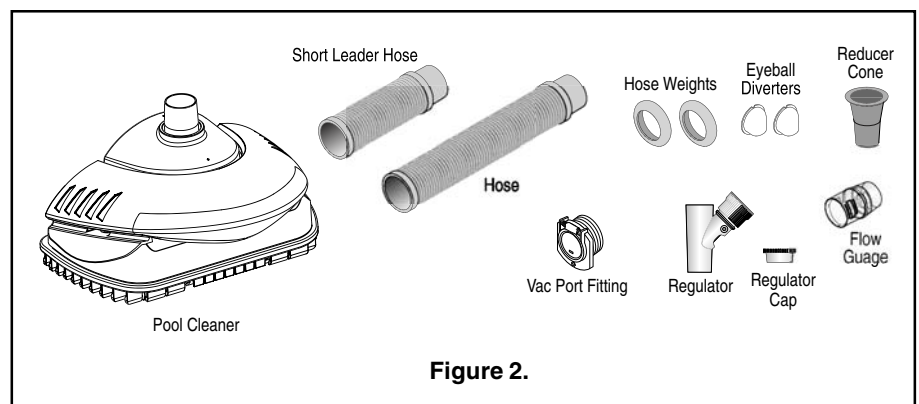


### Cleaner Assembly

#### Check Parts

Remove the Cleaner and all of its parts from the box and check to make sure that all components were included, (see Figure 2).

- Pool Cleaner
- Short Leader Hose (1 Length, 12 inches)
- Hose (10 Lengths, 40 inches)
- Hose Weights (2)
- Eyeball diverters (2)
- Reducer Cone
- Vac Port Fitting
- Regulator
- Regulator Cap
- Flow Gauge

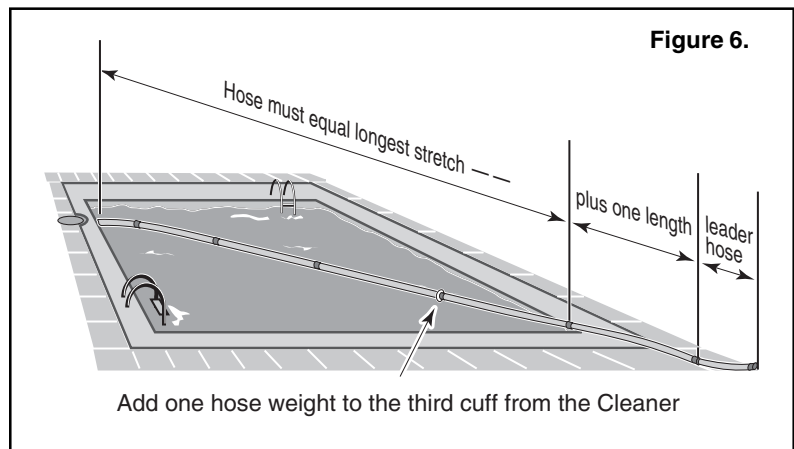
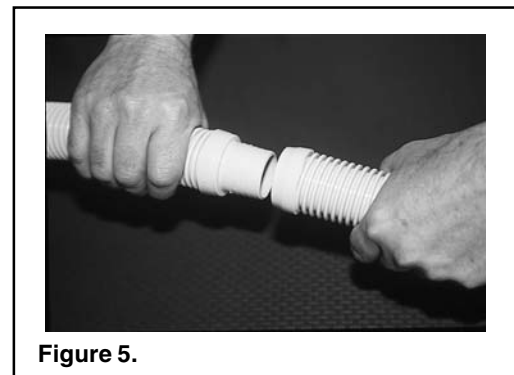
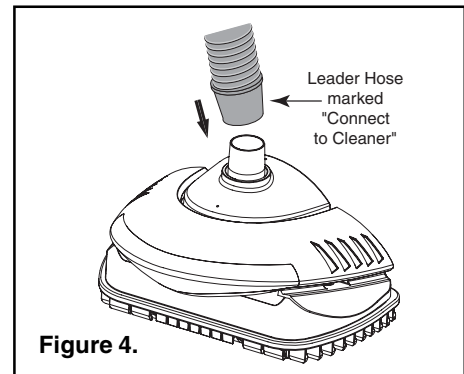
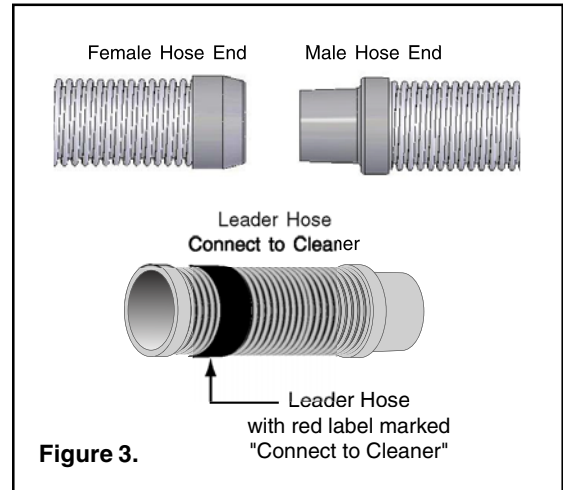


## Assemble the Hose

### Connect the Hose Sections

For best results and to maintain proper operation, use only original hoses, or direct replacements, (see Replacement Parts page).

1. A special “leader” hose section (12 inches long) is designed to connect to the cleaner and is marked with a red label, (see Figures 3 & 4). Failure to use this leader hose section **will hinder your cleaner’s performance**.
2. Connect the hose sections by twisting and pushing the female ends onto the male ends after wetting the ends in the pool, (see Figure 5).
3. Make sure the connections are snug. The number of sections that you will need depends on the size of your pool.
4. The overall length of hose needed will be the distance from: the point at which you attach the hose to the suction connection, to the furthest point in the pool, plus one hose length, plus the leader hose, (see Figure 6).





## Section 2

# Installation

This section describes how to install your new pool cleaner. The SandShark™ is designed to work in a wide variety of swimming pools. Both the standard in-skimmer installation and optional vac port installation are covered in these Instructions. If your pool configuration is unlike any of the examples, contact your Pentair Water Pool and Spa dealer for assistance, or call our toll-free Customer Helpline at 1-800-831-7133.

### Standard Installation

**⚠ WARNING — Hazardous suction.** Suction through the SandShark™ can entrap bathers, causing severe injuries or drowning. Do not operate the SandShark™ cleaner while people are using the swimming pool. Do not allow anyone to play with the cleaner or its hoses.

#### For Pools with one Skimmer, using the Vacuum Regulator

The advantage of this installation is its use of the vacuum regulator to balance the water flow between the pool's skimmer, (see Figure 7), and the SandShark™. The vacuum regulator, (see Figure 8), can be adjusted to changes in the amount of water flow to provide the SandShark™ with the power necessary to ensure proper cleaning performance, **and we strongly recommend the use of the vacuum regulator valve** for maximum safety and performance.

1. Turn the pool pump off.
2. Adjust valves for vacuuming. Adjust the pump valves (if your system has valves) to direct all suction to the skimmer. Close the main drain and all suction lines, except the line from the skimmer to which the SandShark™ will be connected.
3. Remove the skimmer basket from the skimmer.
4. The vacuum regulator must be installed in conjunction with the reducer cone, (see Figures 8 and 9). The reducer cone is required to make most skimmer connections. It will keep the hose and vacuum regulator in place once the filter system is stopped.
5. To install the vacuum regulator, insert it and the reducer cone in the skimmer. Attach the end of the hose to the regulator, (see Figure 10). Make sure the vacuum regulator is submerged at all times. If not, the pump will suck air and lose prime. This could damage the pump.
6. Submerge the hose so it fills with water and expels air from the hose. Attach one end of the hose to the vacuum source as described above. Keep the other end of the hose accessible.

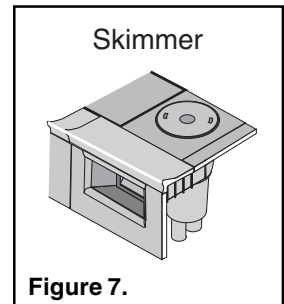


Figure 7.

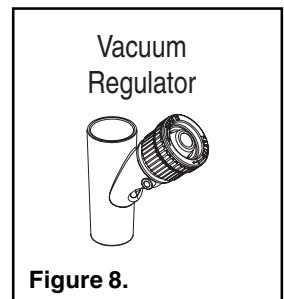


Figure 8.

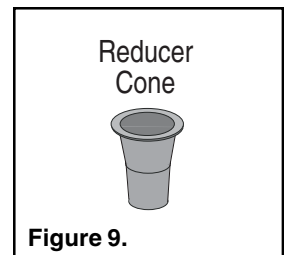


Figure 9.

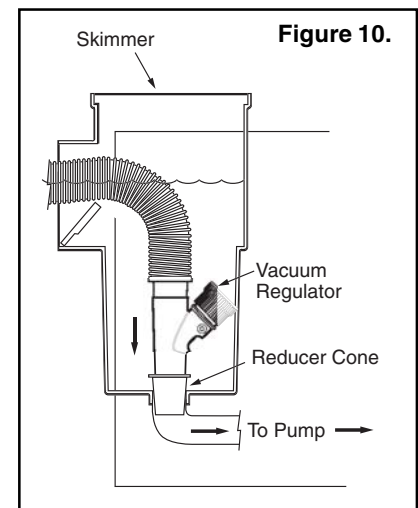


Figure 10.

Vacuum regulator installed in the skimmer with the hose attached.

## Standard Installation, *cont'd.*

### Adjust Flow

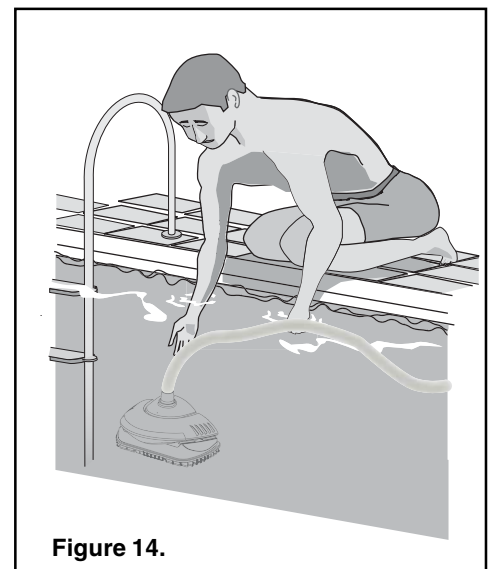
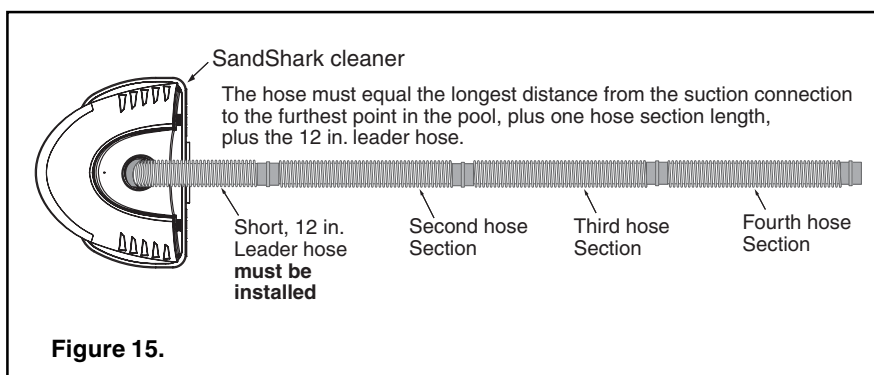
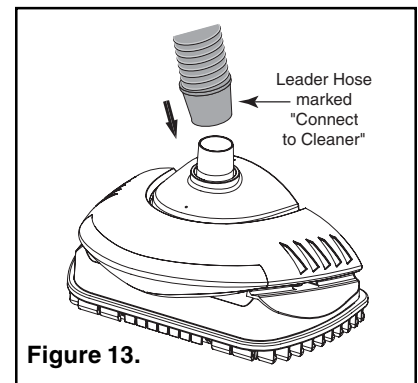
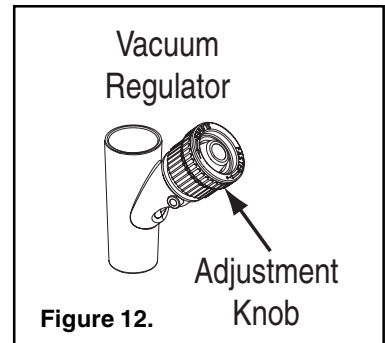
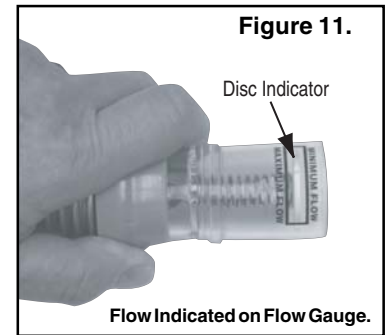
1. With the main drain closed, and one end of the hose attached to the vacuum regulator installed in the skimmer, insert the flow gauge into the other end of the hose (the end with the “leader” hose attached).
2. Keep the hose and flow gauge underwater.
3. Turn on the pump. With the pump running, adjust the vacuum regulator (in your skimmer) until the indicator on the flow gauge is between minimum and maximum flow, (see Figure 11).
4. Use the vacuum regulator in conjunction with your pool cleaner system at all times. The vacuum regulator has an adjustment knob, (see Figure 12). If suction is too high, the knob is turned counterclockwise to decrease the suction. If the suction is too low, the knob is turned clockwise to increase the suction.

**NOTE:** The flow gauge is calibrated for use with the “Y” shaped vacuum regulator valve. The flow gauge will not indicate the correct flow for the cleaner if you are not using the “Y” shaped vacuum regulator valve.

5. Remove the flow gauge from the end of the hose (the end with the “leader” hose attached) and attach the “leader” hose to the cleaner’s swivel.

### Connect the Hose to the Cleaner

1. Connect the leader hose to the cleaner (correct end of hose is marked with a red label), (see Figure 13).
2. Fill the cleaner with water and let it sink to the bottom, (see Figure 14).
3. Verify hose connections as shown in Figure 15.



## Optional Installation

**⚠ WARNING — 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.

### Vac Port Installation with Vacuum Regulator in Skimmer

If your pool has a dedicated wall fitting “vac port”, (see Figure 16), you can install the SandShark™ using the **Optional Installation**.

1. Turn the pool pump off.
2. Adjust valves for vacuuming. Adjust the pump valves (if your system has valves) to direct all suction to the dedicated vacuum line and the skimmer. Close the main drain and all remaining suction lines, except the line from the dedicated vacuum line to which your SandShark™ cleaner will be connected, and the skimmer where the vacuum regulator will be installed.
3. A spring loaded safety cover, (“vac port fitting”), is included with this pool cleaner (see Figure 17). Install it on the dedicated vacuum line to prevent entrapment and injury. For details please refer to the *Vac Port Instruction sheet* included with your vac port fitting. To install the included vac port fitting:
  - a. Screw the vac port fitting into the dedicated vacuum line opening.
  - b. Orient the vac port fitting so the arrow on the door points up.
  - c. Secure the cover by tightening the Allen-screw below the door, into the dedicated vacuumline fitting.
4. Remove the skimmer basket from the skimmer, (see Figure 18).

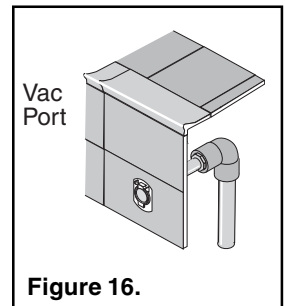


Figure 16.

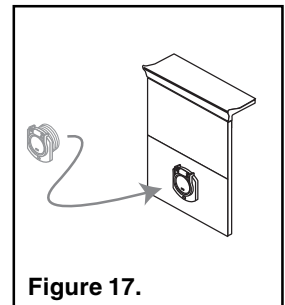


Figure 17.

**⚠ WARNING — Hazardous suction.** Can cause entrapment with severe personal injury or drowning.

5. Insert the vacuum regulator and reducer cone in the skimmer, (see Figure 19). To prevent water from flowing through the top of the vacuum regulator, attach the regulator cap to the vacuum regulator.
6. Attach the end of the hose to the vac port fitting installed in the dedicated vacuum line, (see Figure 20).

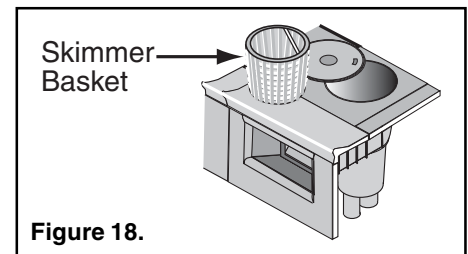


Figure 18.

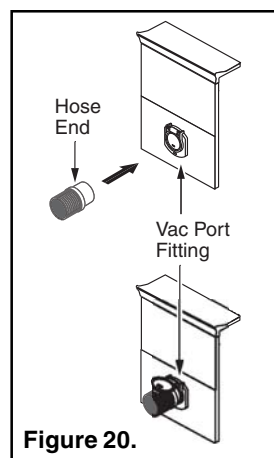


Figure 20.

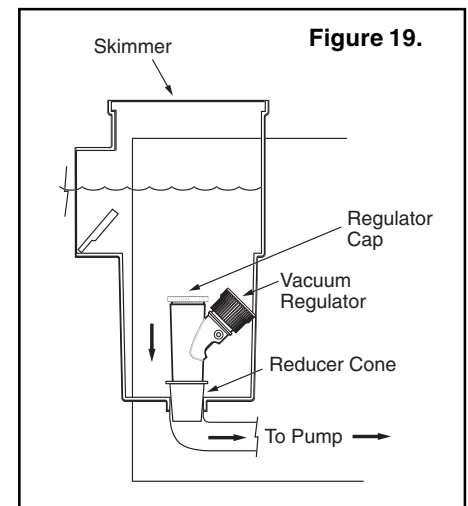


Figure 19.

## Optional Installation, *cont'd.*

### Adjust Flow

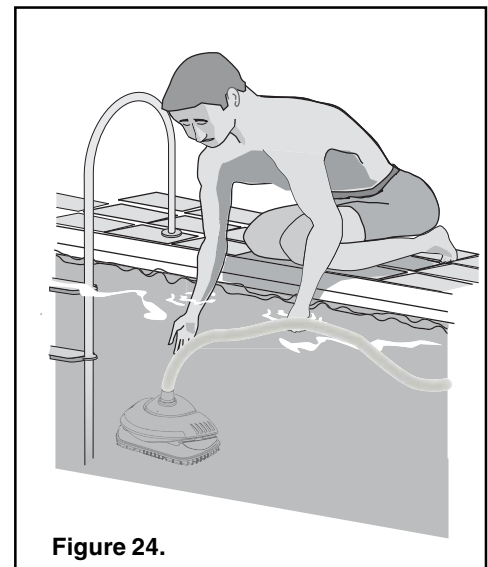
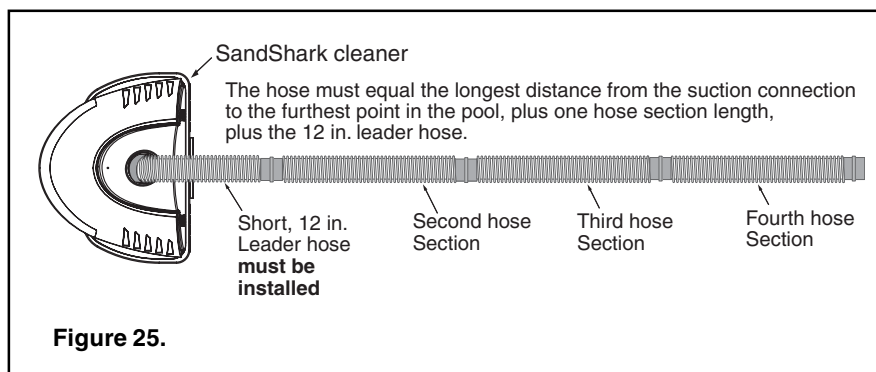
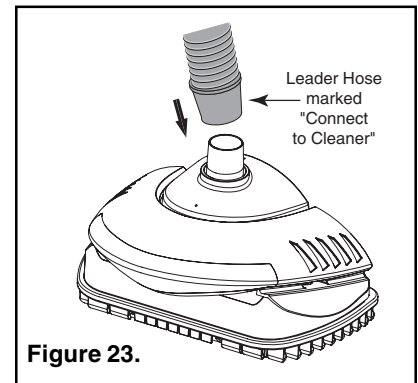
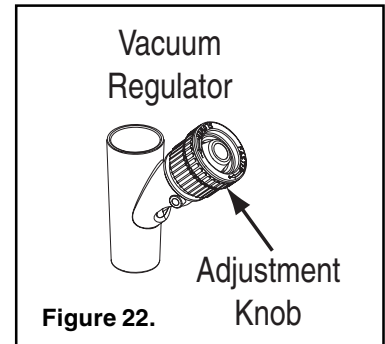
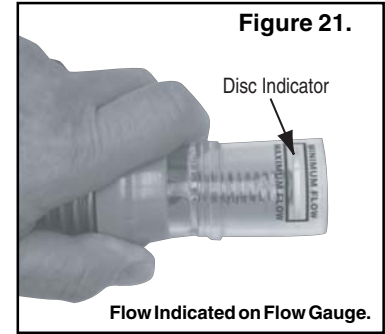
1. With the main drain closed, and one end of the hose attached to the vacuum regulator installed in the skimmer, insert the flow gauge into the other end of the hose (the end with the “leader” hose attached).
2. Keep the hose and flow gauge underwater.
3. Turn on the pump. With the pump running, adjust the vacuum regulator (in your skimmer) until the indicator on the flow gauge is between minimum and maximum flow (Figure 21).
4. Use the vacuum regulator in conjunction with your pool cleaner system at all times. The vacuum regulator has an adjustment knob, (see Figure 22). If suction is too high, the knob is turned counterclockwise to decrease the suction. If the suction is too low, the knob is turned clockwise to increase the suction.

**NOTE: The flow gauge is calibrated for use with the “Y” shaped vacuum regulator valve. The flow gauge will not indicate the correct flow for the cleaner if you are not using the “Y” shaped vacuum regulator valve.**

5. Remove the flow gauge from the end of the hose (the end with the “leader” hose attached) and attach the “leader” hose to the cleaner’s swivel.

### Connect the Hose to the Cleaner

1. Connect the leader hose to the cleaner (correct end of hose is marked with a red label), (see Figure 23).
2. Fill the cleaner with water and let it sink to the bottom, (see Figure 24).
3. Verify hose connections as shown in Figure 25.



## Section 3

# Adjustments

After completing the installation, **turn the pool pump on** and allow it to run for a couple of minutes to ensure that all air cycles out of the system. The SandShark™ should be moving about the pool at a rate of 10 to 14 feet per minute. Check each of the following initial adjustments as described in this section to the SandShark™ at this time.

**NOTICE:** Each pool's hydraulic system and vacuum connections are different. Be sure you have installed the **vacuum regulator** before you "fine-tune" the system. This not only regulates vacuum, but also acts as a safety device.

**⚠ WARNING** — **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 (the "Vac Port Fitting") is included with this pool cleaner. Install it on the vac port to prevent entrapment and injury. For details please refer to the Vac Port Fitting instruction sheet included with your cleaner.

## Hose Adjustments

### Hose Length

**IMPORTANT:** The pump must be on when you check the hose length. The hose contracts when the pump is operating and will be longer when the pump is off.

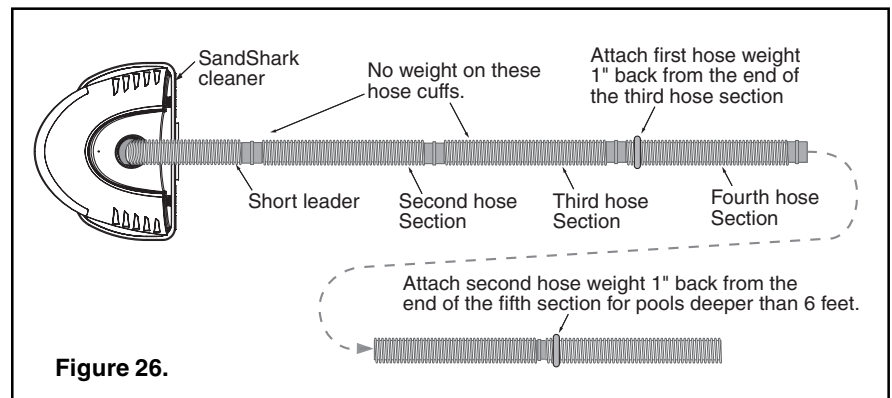
With the SandShark™ operating, position it at the furthest point of the pool from where it's attached. (It is easy to position SandShark™ in the pool by moving it about with your pool pole and brush.) SandShark's hose should be long enough to reach the end of the pool, plus one hose section, plus the 12 in. leader hose. If necessary, remove extra hose sections from the center portion of the hose. Removing center hose sections avoids having to disturb the hose weight placement. Save extra hose sections for use as needed for replacement.

**NOTE:** Turn pool pump off when adding or removing hose sections.

### Hose Balance

It may or may not be necessary to add weight to your hose, depending on your pool's size, shape, and depth. Try the cleaner first without any hose weights. If the hose is too buoyant, add the weight as shown in Figure 26.

To determine correct hose balance, **turn the pump off** and observe SandShark™. Hose balance is correct when SandShark's rests flat on the pool floor. SandShark™ achieves the best cleaning coverage when the hose neither weighs down nor pulls up on the unit. Adjust hose weights one inch at a time as needed, until proper hose balance is achieved. In pools with both shallow and deep areas, adjust hose weights first in the deep area and then in the shallow area.



## Adjusting the Flow

1. Turn the pool pump off. Remove the Cleaner and connect the Flow Gauge to the end of the hose, make sure you keep the hose submerged to prevent any air to enter into it, (see Figure 27). Then turn the pump on.
2. With the pump running, turn the Adjustment Knob of the Regulator Valve “Faster” or “Slower” until the disc indicator in the Flow Gauge settles between “Maximum” and “Minimum” flow, (see Figure 28).

**NOTE: If you have very strong pump and the flow is still over the “Maximum” you may need to open the main drain only slightly.**

3. Turn the pool pump off. Remove the Flow Gauge and connect the Cleaner to the end of the hose, make sure you keep the hose submerged to prevent any air to enter into it. Allow the cleaner to drop to the pool floor. Then turn the pump on.

### Too much Vacuum Flow?

You have too much vacuum if the cleaner climbs up the pool wall past the water line to the point that the cleaner sucks air and the pump loses prime. Frequent loss of prime will damage the pump. To correct this, adjust the regulator by turning the adjustment knob counterclockwise. This will decrease the suction. If the cleaner still climbs out and sucks air, open the main drain valve slightly.

### Not enough Vacuum Flow?

You don't have enough vacuum if the cleaner does not climb the pool walls, moves sluggishly, or not at all. Be sure the filter system is clean and the regulator and all valves are adjusted to give you maximum vacuum. If the cleaner is still not moving, your pump may not be strong enough to operate the cleaner. Please refer to the “*Troubleshooting Section*” on [page 13](#).



Figure 27.

Flow Gauge

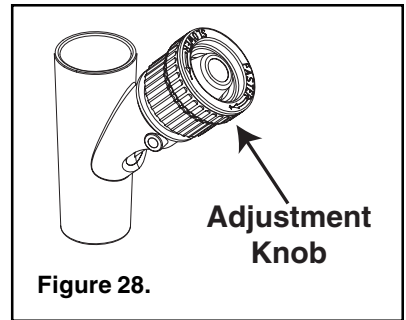


Figure 28.

Adjustment  
Knob

## Return Line Water Flow Adjustments

**Important:** The cleaner must move randomly throughout the pool. Water circulating at the surface will influence the hose thus limiting the SandShark's coverage. It may cause the SandShark™ to steer away from the end of the pool where the return line is located, or it may cause the SandShark™ to remain in one section of the pool. To correct this, use the eyeball diverter included with your SandShark™. (If the eyeball does not fit your pool, use the wire diverter (P/N K121620) accessory available for purchase from your Pentair Water Pool and Spa dealer.)

### Eyeball Diverter Positions

1. Position the diverter opening to redirect the return line water flow so it does not interfere with the SandShark's movement as shown in Figure 29.
2. To adjust the Eyeball Diverters; loosen the lock ring and redirect the Eyeball Diverters slightly downwards and also try different directions to see what works best in your pool.

- flow directed along the side of pool (the tile line).
- flow directed downward.
- **flow directed against the hose will help steer the SandShark™ away from obstructions such as stairs and ladders.**

Allow time for the body of water to settle into the new pattern.

3. If it is difficult to adjust your existing Eyeball Diverters, replace the eyeball component with the new Eyeball Diverters (included).

### To install the eyeball diverter:

1. First make sure your **pool pump is off**. Remove the original eyeball from the return line at the pool by unscrewing the lock ring.
3. Replace the original eyeball with the SandShark's eyeball diverter, (see Figure 30).
4. Replace the lock ring and tighten. Make sure the opening of the eyeball diverter points in the proper direction before tightening fully. See "Eyeball Diverter Positions" above.
5. After installing the eyeball diverter, **turn the pool pump on**. The SandShark™ should begin moving across the pool floor vacuuming up debris in its path.

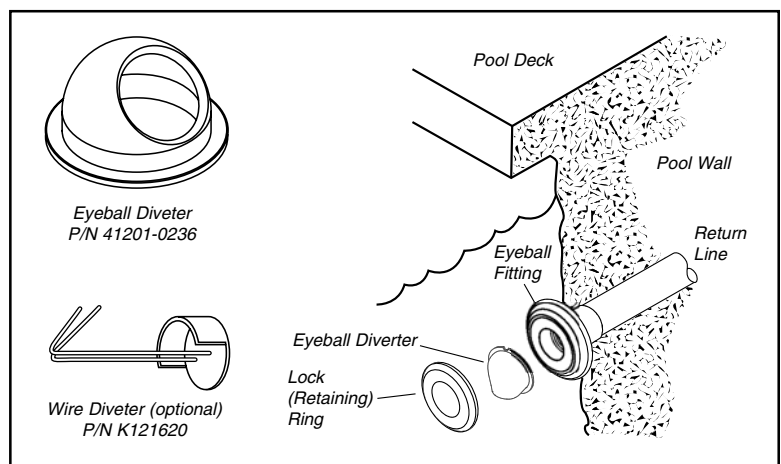
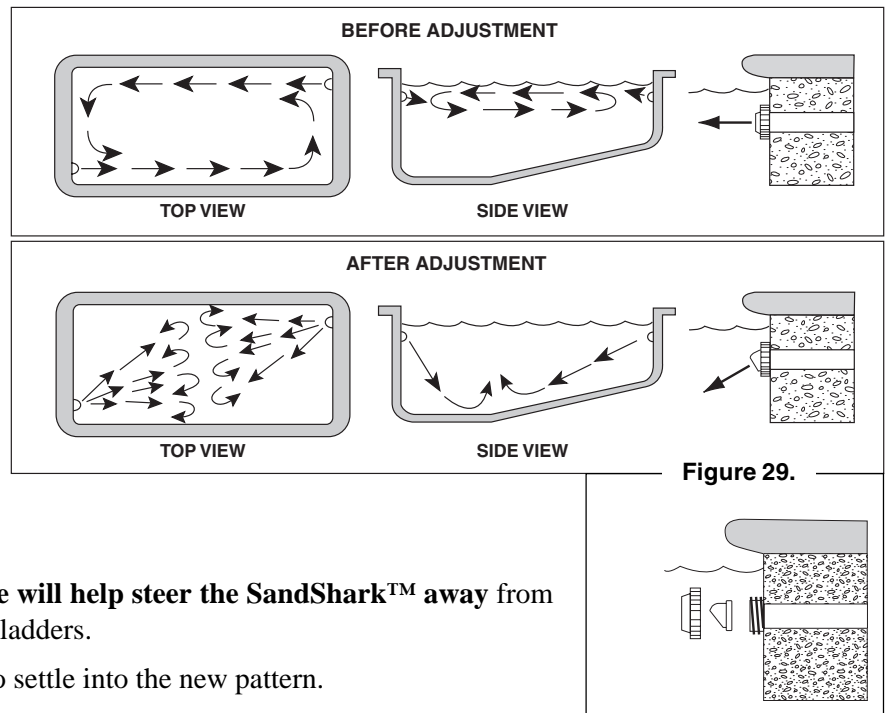


Figure 30.

### In-Line Leaf Canisters

If your pool is exposed to large quantities of leaves, we suggest purchasing and installing an in-line leaf canister, (P/N R211084 or R211086), see Figure 31. A leaf canister will provide more debris-loading capacity and also provides a water by-pass when the canister is full. It is very important that the pump will not starve for water!



**Figure 31.**



## Section 4

# Maintenance

This section describes the service and maintenance of your SandShark™ cleaner.

**⚠ WARNING — Hazardous suction.** Suction through the cleaner can entrap bathers, causing severe injuries or drowning. Do not operate the SandShark™ cleaner while people are using the swimming pool. Do not allow anyone to play with the SandShark™ cleaner or its hoses.

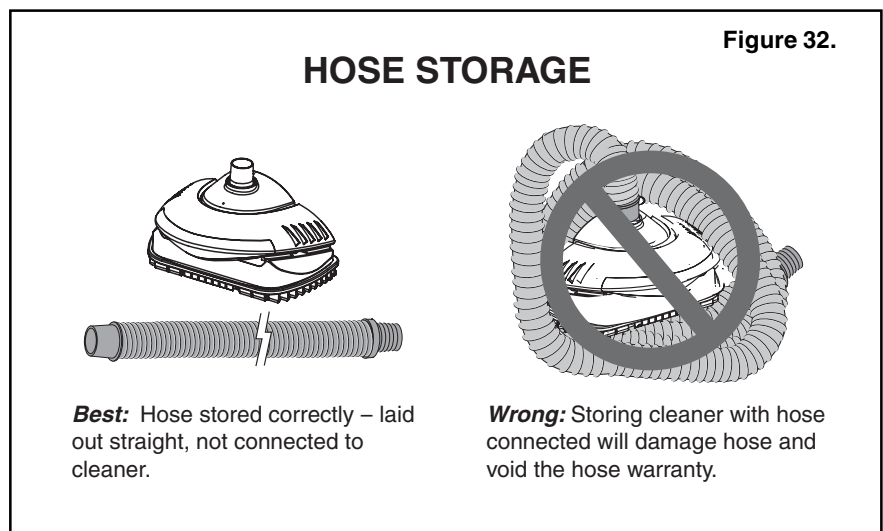
Your new pool cleaner requires almost no maintenance. Manually open and close the regulator valve from time to time to flush away accumulated dirt and debris and ensure smooth operation. Also, from time to time, visually inspect the SandShark™ to be sure that:

- The oscillator moves freely and is not obstructed by debris.
- The vacuum pad is not excessively worn. When the traction pads on the bottom have worn down, it's time for replacement.
- Keep skimmer basket and pump strainer basket clean and free of debris.
- Remove the pool cleaner from the pool before super chlorinating (shocking) or chemical balancing. Wait at least four hours after the chemical procedure before reinstalling the cleaner.
- If cleaner jams with large debris (leaves, sticks, etc.), clean the debris from bottom of unit.
- When people are using the pool, disconnect the cleaner and pull it to one side of the pool.
- We recommend that you leave the SandShark™ cleaner in your pool, **except during chemical shock treatments.**

### Hose Storage

**NOTICE:** When storing the SandShark™, **do not coil the hose.** Instead, lay it out straight and flat in an area protected from direct sunlight. If hose sections are disconnected, try not to disturb the hose weight locations. Use only a genuine SandShark™ hose. The warranty is void if the cleaner is operated with another hose other than a genuine SandShark™ hose.

- Remove the hose from the cleaner when removing the cleaner from the pool. Store the hose flat and straight.
- Don't store the cleaner with the hose connected to the cleaner body or with the hose coiled, see (Figure 32). To do so will cause the hose to take a set or kink over a period of time. When reinstalled in the pool, the hose will tend to stay coiled and will cause the cleaner to malfunction.
- If the hose has taken a set, uncoil it as far as possible without damaging it and lay it out in the sun for several hours to straighten itself. Once it has relaxed and straightened out, store it laid out flat and straight (no coiling).



## Disassembly

1. With a screwdriver, carefully work the rubber vacuum pad down over the lip of the Outer Housing, (see Figure 33).
2. Lift the Outer Housing straight up off of the chassis, (see Figure 34).
3. Squeeze and pull the Sprocket Clips to release the Drive Shaft Assembly and Center Sprocket, (see Figure 35).
4. Pull the Oscillator Straight out from the bottom of the Outer Housing. Be careful not to lose the Sliding Seals, (see Figure 36).
5. Squeeze the latching tabs and pull up on the Swivel Housing and Swivel. The assembly will come up, releasing the Swivel Sprocket. Squeeze the latching tabs to remove the Clutch Clip, (see Figure 37).
6. Remove the Shaft Plug with the stainless steel shaft and the Large Steering Drive Assembly, (see Figure 38).
7. Remove the Oscillator Sleeve, releasing the Oscillator Sleeve Bushing and the Clutch assembly, (see Figure 39).
8. If you need to replace the bumper, turn the housing/bumper assembly upside down and remove the two flex snaps holding the bumper to the housing, (see Figures 40 & 41). Use a piece of  $\frac{1}{2}$  in. (inside diameter) PVC pipe to slide over the flex snap ends to squeeze the flex snaps together so they can be slid out of the housing. Use a pair of pliers to pop the flex snaps off of the bumper.

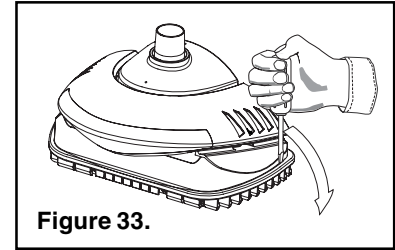


Figure 33.

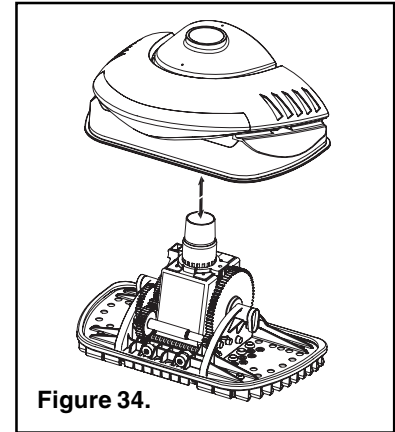


Figure 34.

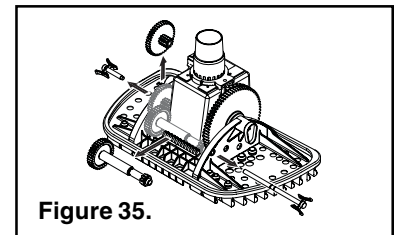


Figure 35.

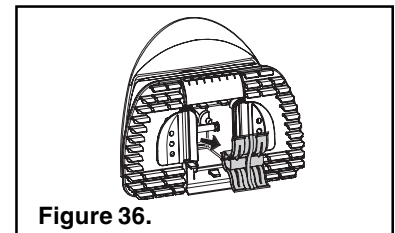


Figure 36.

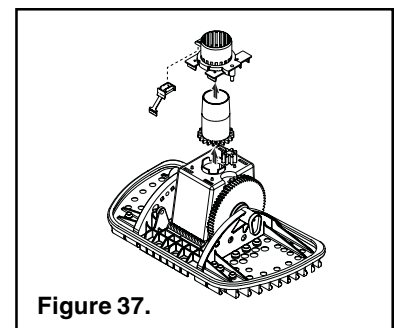


Figure 37.

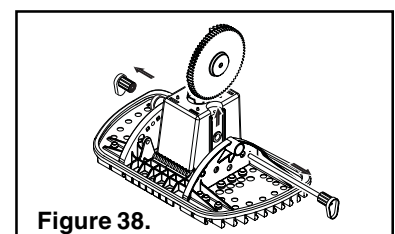


Figure 38.

## Reassembly

To reassemble the SandShark™, reverse the steps above.

**NOTE:** The notch on the center disk of the Large Steering Drive Assembly must be down, (as shown in Figure 42), for assembly.

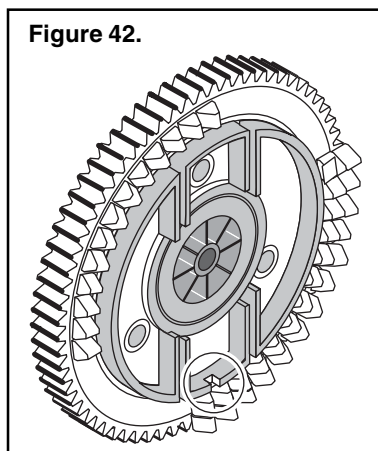


Figure 42.

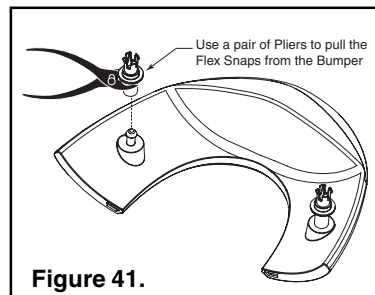


Figure 41.

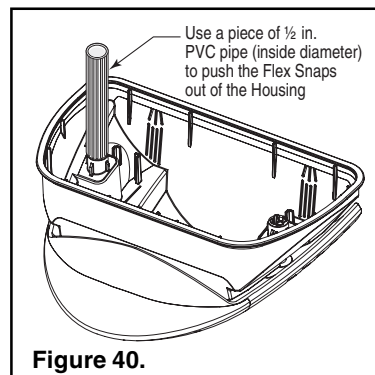


Figure 40.

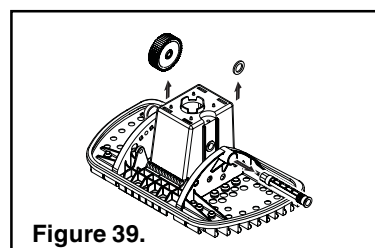


Figure 39.

# Section 5

## Troubleshooting

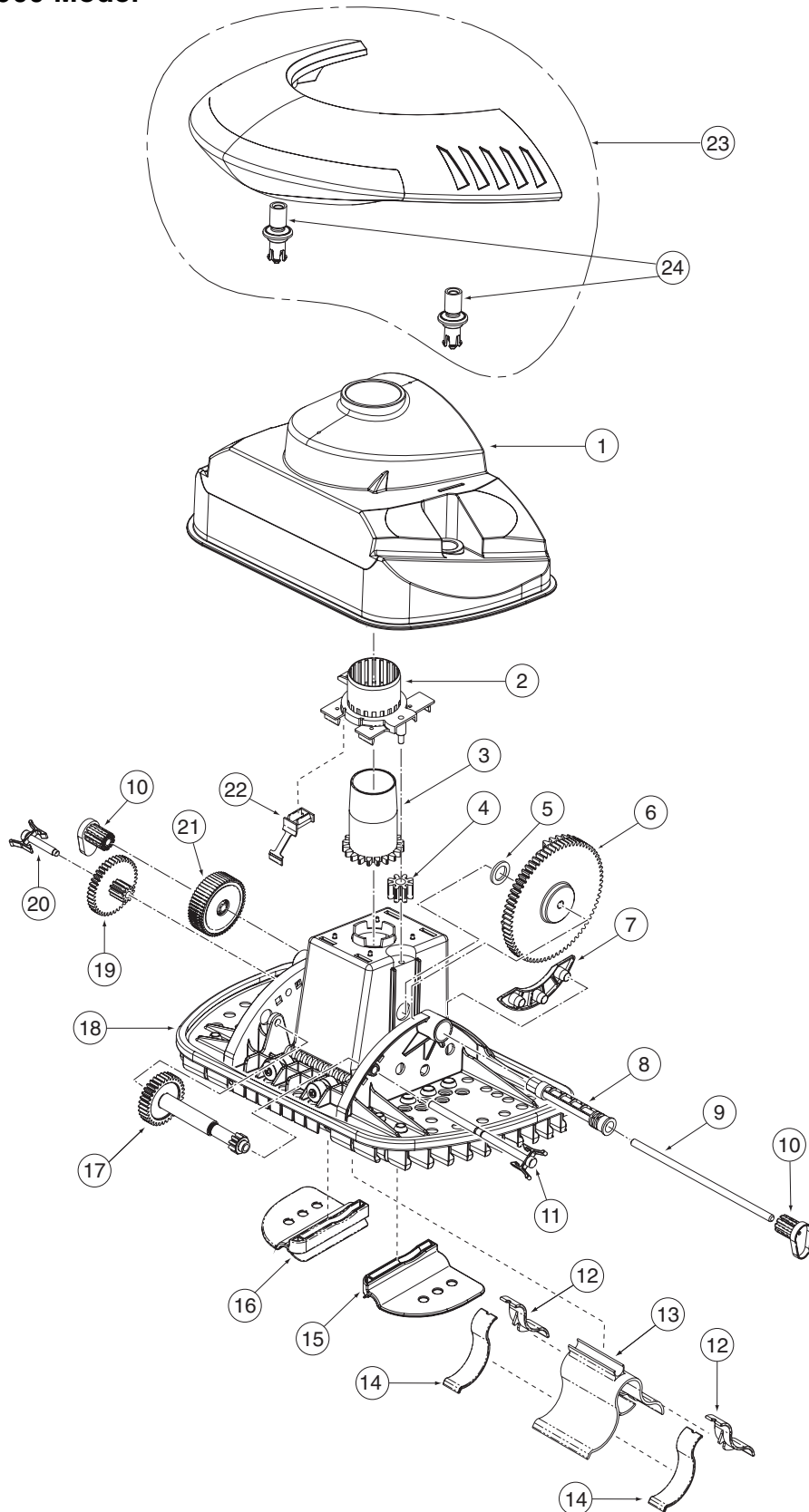
Use the following troubleshooting information to resolve possible problems with your SandShark™ pool cleaner.

<b>Problem</b>	<b>Corrective Action</b>
<p><b>If SandShark™ moves slow or fails to climb walls:</b></p> <p><i>Dirty filter –</i></p> <p><i>Dirty basket in pump hair and lint strainer –</i></p> <p><i>Debris blocking the bottom of the cleaner –</i></p> <p><i>Leaks in the hose –</i></p> <p><i>Debris in the regulator –</i></p> <p><i>Low water flow through the cleaner –</i></p>	<p>Clean the filter.</p> <p>Clean the basket.</p> <p>Remove the Debris.</p> <p>Remove the leaky section.</p> <p>Clean the regulator valve.</p> <p>Close the main drain.</p>
<p><b>If SandShark™ doesn't move or pulsates slowly or doesn't climb pool walls properly:</b></p>	<p>Make sure that the main drain and all other suction lines are closed except the suction line to which the SandShark™ is attached.</p> <p>Check for sufficient flow through cleaner hose.</p> <p>Check for debris in the filter or the pump strainer basket.</p> <p>Check for debris in the SandShark's oscillator. Debris may prevent oscillator movement or restrict the flow through the cleaner.</p> <p>Check the oscillator for: damage; lost seals (there should be 4 seals): obstructed seals (seals should slide freely on the oscillator).</p> <p>Be sure that the short, soft flexible leader hose section is the first section in the hose assembly (next to the cleaner).</p>
<p><b>If SandShark™ climbs pool wall to water surface and sucks air:</b></p>	<p>Reduce water flow through cleaner, see Adjust Flow on <a href="#">page 4, 6 or 8</a>.</p>
<p><b>The water flow from the return line can push the SandShark's hose, causing the SandShark™ to steer away from the return line or to remain in one area of the pool. To correct this, adjust your existing return line diverters or install the eyeball diverters supplied with the SandShark™ cleaner:</b></p>	<p><i>To install the eyeball diverter as follows:</i></p> <ol style="list-style-type: none"> <li>A. Turn off the main circulation pump.</li> <li>B. Unscrew the lock rings from the pool's return line fittings and remove the original eyeball diverters.</li> <li>C. Replace them with the SandShark's eyeball diverters.</li> <li>D. Replace the lock rings and tighten them. Be sure that the openings of the eyeball diverters point down (6:00 o'clock position) or to the side (3:00 or 9:00 o'clock positions), before fully tightening the rings.</li> </ol> <p>Usually, directing the return line water flow against the side of the pool (as described above) works best. However, you may want to try pointing the flow downward or in different positions to see which works best in the pool.</p> <p>After installing the eyeball diverter, turn the circulation pump on.</p> <p>The SandShark™ should begin moving across the pool floor, vacuuming up the debris in its path.</p> <ol style="list-style-type: none"> <li>E. If the SandShark's eyeball diverters do not fit your existing return line fittings, adjust your existing fittings as best you can as described above.</li> </ol>
<p><b>If SandShark™ tracks in a repetitive pattern:</b></p>	<p>Check the pool return line water flow and redirect it as necessary with a return line eyeball diverter (see above "To install the eyeball diverter").</p> <p>Check the SandShark's hose to be sure that it has not become bent or kinked. Do not coil the hose, as it will retain the coiled shape and reduce the cleaning coverage.</p> <p>To check the hose, lay each hose section flat on the pool deck (or another flat surface) and look down the length of the hose. It should be perfectly flat and straight. Replace any sections which are bent or kinked.</p> <p>Check the oscillator for: damage; lost seals (there should be 4 seals): obstructed seals (seals should slide freely on the oscillator).</p> <p>Be sure that the short, soft flexible leader hose section is the first section in the hose assembly (next to the cleaner).</p>

## Section 6

# Replacement Parts

SandShark™ 7900 Model



## Replacement Parts List for the SandShark™ 7900 Model

Item No.	Description	Qty.	P/N
	<b>Steering Kit (Incl. Item N<sup>o</sup>s 2, 3, 4 &amp; 22)</b>		<b>GW7910</b>
2	Swivel Housing	1	
3	Swivel		
4	Swivel Sprocket		
22	Clutch Clip		
	<b>Clutch Kit (Incl. Item N<sup>o</sup>s 5, 8 &amp; 21)</b>		<b>GW7503</b>
5	Oscillator Sleeve Bushing	1	
8	Oscillator Sleeve	1	
21	Clutch Assembly	1	
	<b>Gear Kit (Incl. Item N<sup>o</sup>s 6,10,11,17,19 &amp; 20)</b>		<b>GW7504</b>
6	Large Steering Drive Assembly	1	
10	Shaft Plug	2	
11	Long Sprocket Clip	1	
17	Drive Shaft Assembly	1	
19	Center Sprocket	1	
20	Short Sprocket Clip	1	
	<b>Oscillator Kit (Incl. Item N<sup>o</sup>s 12,13 &amp; 14)</b>		<b>GW7912</b>
12	Small Sliding Seal	2	
13	Oscillator	1	
14	Large Sliding Seal	2	
	<b>Seal Flap Kit (Incl. Item N<sup>o</sup>s 15 &amp; 16)</b>		<b>GW7913</b>
15	Right Seal Flap	1	
16	Left seal Flap	1	
1	<b>Outer Housing</b>	1	<b>GW7903</b>
18	<b>Chassis with Pad</b>	1	<b>41201-0242W</b>
23	<b>Bumper with Flex Snaps</b>	1	<b>GW7902</b>
24	<b>Flex Snaps Kit</b>		<b>GW7904</b>
	<b>Accessory Kit (Not shown)</b>		<b>GW7901</b>
	Regulator	1	
	Regulator Cap	1	
	Hose Weight	2	
	Flow Gage	1	
	Reducer Cone	1	
	Eyeball Diverter	2	<b>41201-0236</b>
	Vac Port Fitting	1	
	<b>Short Leader Hose</b>	1	<b>GW7911</b>
	<b>Suction Hose, 12 in. Section</b>	10	<b>41201-0254</b>
	<b>Parts Not Available Separately</b>		
7	Support Brace	1	
9	Stainless Steel Axle	1	

## SAVE THESE INSTRUCTIONS

# NOTES



