

3900 Sport/P39

OWNER'S MANUAL

ENGLISH | FRANÇAIS | ESPAÑOL

Important Information

- Before installing the cleaner, make sure the pool filter is clean.
- New plumbing lines should be flushed out before installing the cleaner.
- The Polaris should not be used to remove plaster dust in new pools.
- Disconnect the cleaner before cleaning or backwashing the pool filter. After cleaning, let the filtration system run for at least five (5) minutes before re-connecting the cleaner.
- Always remove the Polaris from the pool before super oxidation or chlorination treatments.

WARNING

To avoid risk of injury, do not handle the Polaris while it is operating, except when checking the wheel RPM. Always remove the cleaner before swimmers enter the pool.

For customer service or support:

- Please mail Warranty Card immediately.
- For on-line support: www.polarispool.com
- To contact Polaris:

US
Customer Service
2620 Commerce Way
Vista, CA 92081-8438
1-800-822-7933

Canada
2115 South Service Road West, Unit 3
Oakville, Ontario • Canada L6L 5W2
1-888-647-4004

CAUTION: USE OF THE POLARIS IN A VINYL LINER POOL

Certain vinyl liner patterns are particularly susceptible to rapid surface wear or pattern removal caused by objects coming into contact with the vinyl surface, including pool brushes, pool toys, floats, fountains, chlorine dispensers, and automatic pool cleaners. Some vinyl liner patterns can be seriously scratched or abraded simply by rubbing the surface with a pool brush. Ink from the pattern can also rub off during the installation process or when it comes into contact with objects in the pool. Zodiac Pool Systems, Inc. is not responsible for, and the Limited Warranty does not cover, pattern removal, abrasion or markings on vinyl liners.

Introduction

Congratulations on the purchase of your new automatic pool cleaner, and thank you for choosing Polaris. The Polaris 3900 Sport/P39 is designed to give you years of dependable and efficient service.

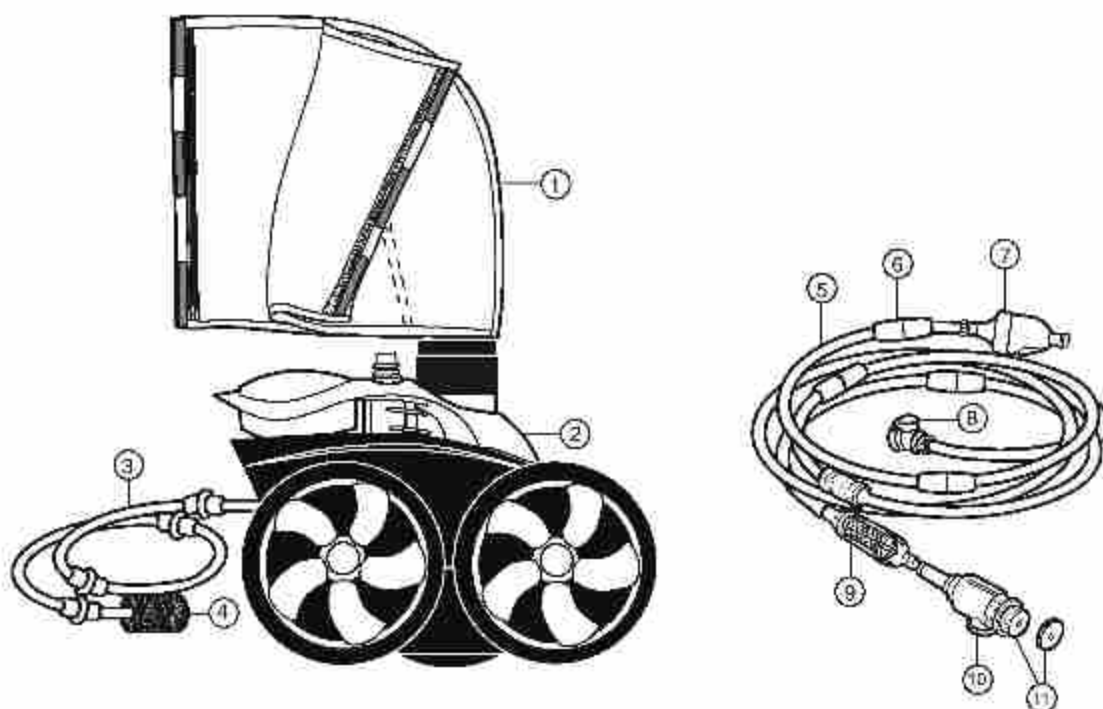
Like most mechanical devices, it will require periodic adjustments, routine maintenance, and the replacement of certain hardworking parts. Please have the cleaner checked occasionally by your local Polaris dealer or service center.

Always insist on genuine Polaris replacement parts. 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.

For best results, the cleaner should be installed by a pool professional. For those with experience and confidence in handling plumbing and mechanical equipment, installation is outlined in this manual.

Polaris 3900 Sport/P39 Components

- | | |
|---|--|
| 1. SuperBag (Double) All-Purpose Zippered Bag | 7. Back-up Valve |
| 2. Cleaner Body | 8. Feed Hose Connector |
| 3. Sweep Hose | 9. In-Line Filter with Filter Screen |
| 4. Tail Sweep Pro® (with Sweep Hose Scrubber) | 10. Quick Disconnect with Universal Wall Fitting |
| 5. Feed Hose | 11. UWF® Restrictor Disks, Red and Blue |
| 6. Hose Floats | |

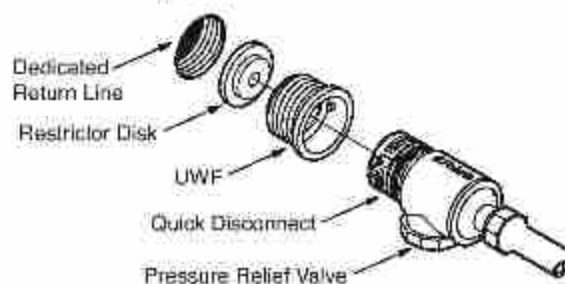


Quick Installation Instructions

1

Install the Universal Wall Fitting

1. Turn on the filtration pump and flush out the plumbing line. Turn pump off.
2. Remove the Universal Wall Fitting (UWF[®]) from the Quick Disconnect and screw it into the return opening with the blue restrictor disk in place.
3. Turn the Quick Disconnect clockwise into the UWF and pull away to secure. The Quick Disconnect will click into place.



2

Adjust Feed Hose To Fit Pool Length

1. Measure the deepest part of the pool. Cut leader hose from the end that attaches to the feed hose (away from the back up valve) so length is equal to the greatest depth of the pool.
2. Attach leader hose to feed hose and connect hose to the pool wall at the return line. Extend hose to farthest point of pool. The hose end must be within 6 inches – longer or shorter – of the farthest point. See diagram below.

If hose is too long: Separate hose at center swivel. Cut half of the overage from each 10-foot feed hose section that attaches to the center swivel.

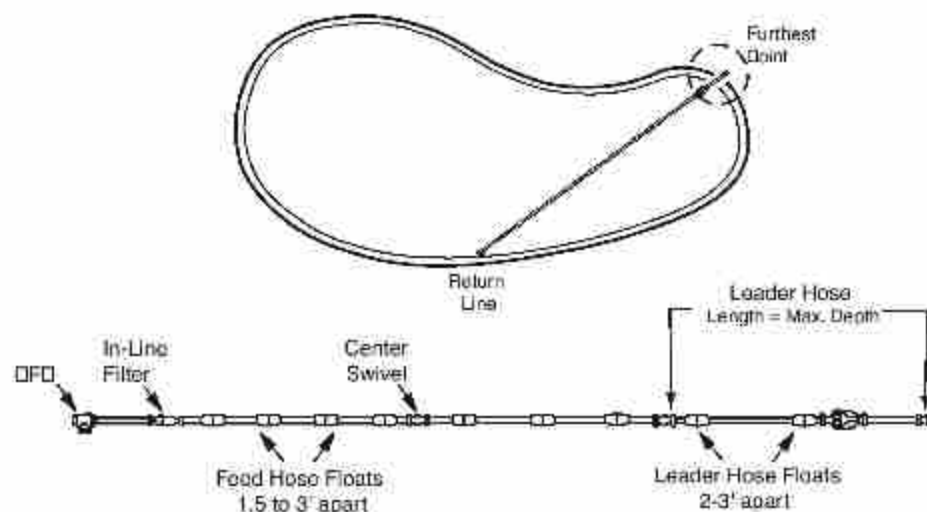
If hose is too short: Add a feed hose section (part #9-100-3104), a swivel (part #D20) and two (2) hose nuts (part #D15). Adjust to proper length.

Each feed hose section should be equal in length after adjustments.

3. After adjusting the length, position the hose floats as shown.

⚠ CAUTION

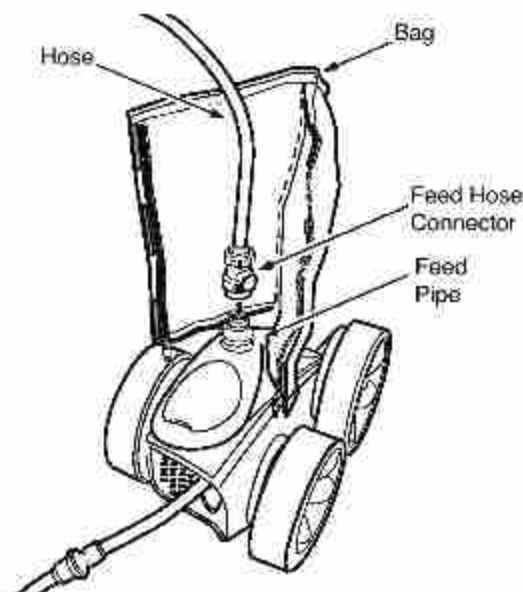
Use caution when cutting the hose to prevent injury inflicted by the cutting tool.



3

Assemble the Cleaner

1. Attach the feed hose connector to the feed pipe by pressing it down firmly until it locks.
2. The filter bag is packaged in the collar area on the vacuum tube. Pull out the bag, separate the velcro strips, wrap it around the hose and resecure with velcro strips.
3. Turn on the pool filtration pump and allow it to prime before turning on the booster pump. (Refer to booster pump manufacturer's instructions for booster pump priming time.)



4

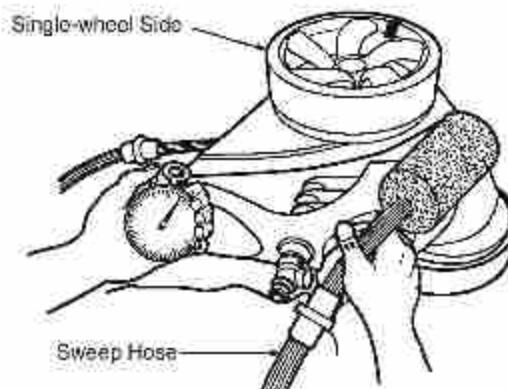
Check for Proper RPM

Before operating the Polaris, check for proper wheel revolutions per minute (RPM).

For maximum efficiency, the cleaner should operate **between 30 and 36 RPM**.

1. Mark the single-wheel side tire.
2. Turn pump on, hold cleaner below water level and count wheel revolutions for one minute.

If count is not in target range, refer to **Adjusting the Wheel RPM** in the Troubleshooting section for more information.

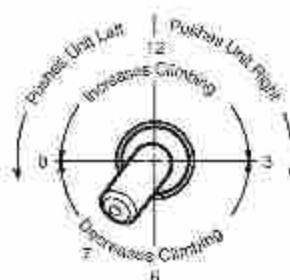


Fine Tuning The Cleaner

When operating correctly, the cleaner vacuums, sweeps and scrubs all surfaces randomly throughout the pool. Approximately every three (3) minutes the cleaner goes into back-up mode. This action pulls the cleaner away from pool obstacles and increases its random pattern.

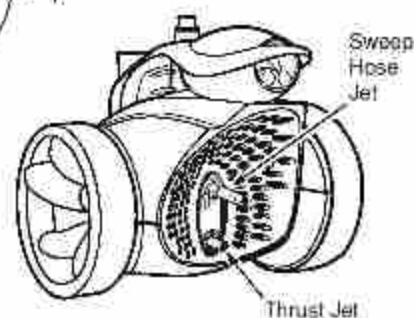
Thrust Jet Adjustment

The thrust jet powers the direction of the cleaner. Factory position is seven (7) o'clock but, depending on the pool, other settings can be helpful to improve cleaner coverage.



Sweep Hose Adjustment

The sweep hose should move in a gentle sweeping motion. To adjust the motion, turn off the booster pump and turn the sweep jet clockwise to increase or counter-clockwise to decrease the movement.

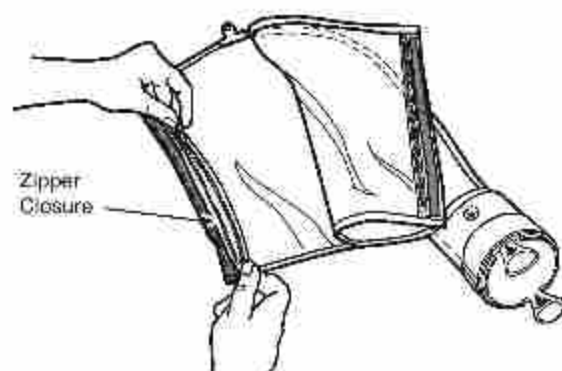


Routine Maintenance

Cleaning the Bag

- ➔ Empty the filter bag when it is half full, especially if the debris load is sand.
- ➔ It is easier to empty the filter bag when it is dry. Alternate between two (2) bags.

To remove the bag, detach the velcro strips. Twist the bag collar and pull up to free the bag from the cleaner. Unzip both sides of the bag to remove the debris.



Cleaning the In-Line Filter Screen

To clean the in-line filter screen, pull it out of the filter assembly, rinse and press firmly back into place.



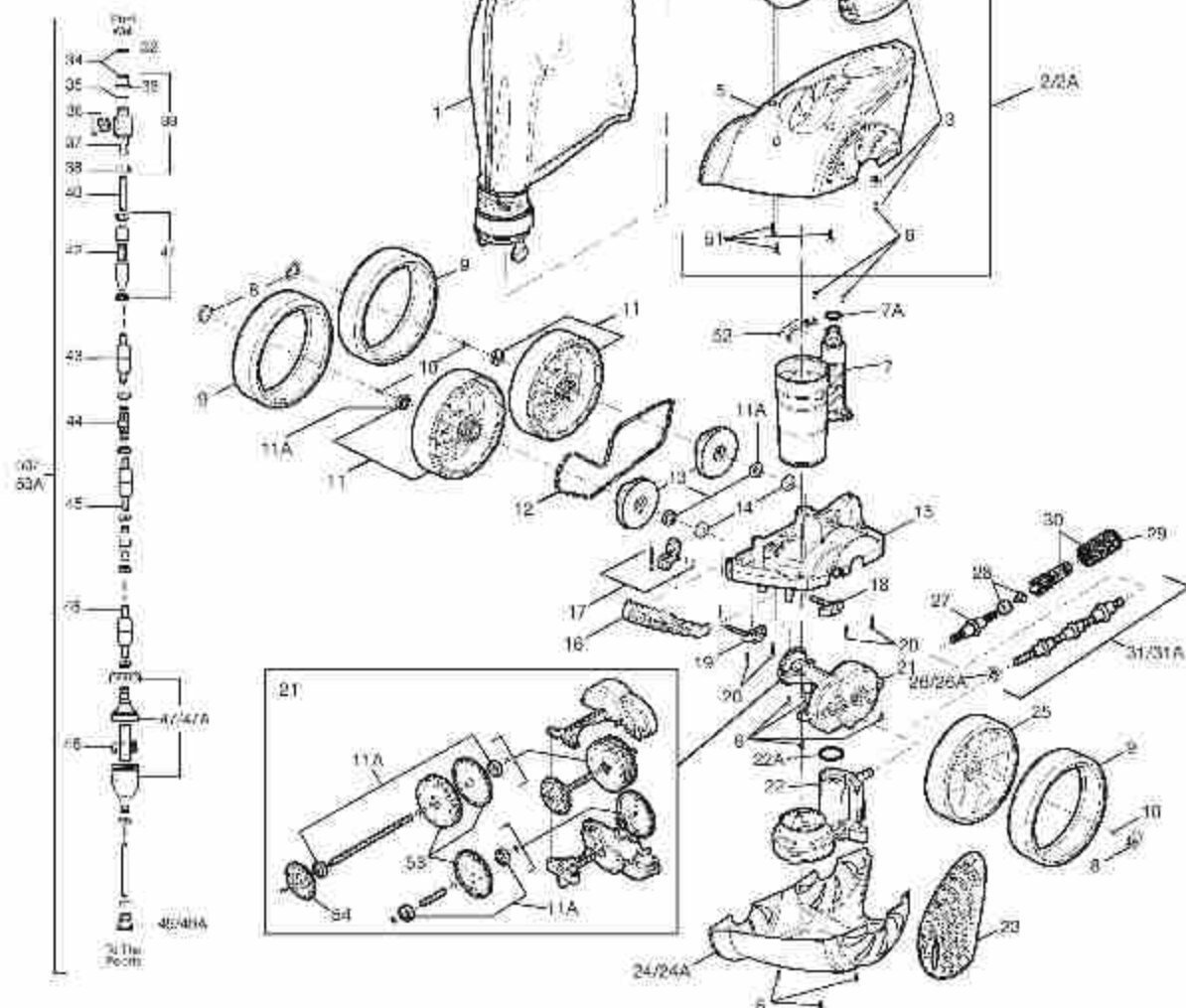
CAUTION

Always disconnect the Polaris before cleaning or backwashing your pool filter to avoid potential clogging or damage to the system. Allow the filtration system run for at least five (5) minutes before re-connecting the cleaner.

Storage and Winterizing

Never store the cleaner in direct sunlight. When storing for the winter, drain all the water from the cleaner (freeze damage is not covered under the warranty). Use the Quick Disconnect to remove the UWF from the pool wall. If necessary, use the UWF Removal Tool (part #10-102-00) available from any Polaris dealer.

Exploded Parts Diagram



No.	Part #	Description	Qty	No.	Part #	Description	Qty	No.	Part #	Description	Qty
1	39-310	3900 Sport/P39 SuperBag®	1	22	39-300	WMS Assembly with O-Ring	1	38	D16	Nut, Feed Hose, Black	10
2	39-003	3900 Top Housing Assembly	1	22A	R0544000	O-ring WMS Upper to Vactube Interface	1	38A	D15	Nut, Feed Hose, Gray	10
2A	R0669900	P39 Top Housing Assembly	1	23	39-005	Rear Housing	1	39	9-100-9005	UWF Connector Assy, Black	1
3	R0538000	Float, Head Kit	1	24	39-004	3900 Bottom Housing	1	39A	9-100-9001	UWF Connector Assy, Gray	1
4	R0537900	Canopy	1	24A	R0669700	P39 Bottom Housing	1	40	D44	Adapter Hose, 8-1/2"	1
5	R0538100	Housing Top	1	25	39-401	Single-Side Wheel	1	41	40-080	In-line Filter Assy, Gray	1
6	C40	Screw, 10-32 x 3/8" SS	17	26	B16	Sweep Hose Attach Clamp, Black	1	41A	48-085	In-line Filter Assy, Black	1
		Pan Head	17	26A	B15	Sweep Hose Attach Clamp, Gray	1	42	40-222	Screen, In-line Filter	1
7	39-006	Vacuum Tube/Feedpipe Assy with O-Ring	1	27	39-021	Sweep Hose Wear Ring, Blue	5	43	D11	Float, Feed Hose, Black	9
7A	48-141	O-ring, Feed Hose Connector	1	28	B25	Orifice Tip w/ Orifice Tip Guard	1	43A	D10	Float, Feed Hose, Gray	9
8	39-008	Hubcap	3	29	9-100-3105	Sweep Hose Scrubber	1	44	D21	Swivel Ball Bearing, Black	3
9	48-232	WideTrax® Tire, Black*	3	29	R0522400	Sweep Hose Scrubber, 3 pk	1	44A	D20	Swivel Ball Bearing, Gray	3
10	48-036	Wheel Lock Screw	3	30	R0540000	Tail Sweep Pro®, Bulk Box (18)	1	45	D47	Feed Hose, 10 ft., Black	2
11	39-410	Double-Side Wheel w/Bearing	2	30	TSP10S	Tail Sweep PRO, Strip Clip	12	45A	D45	Feed Hose, 10 ft., Gray	2
11A	9-100-1108	Ball Bearing	8	31	39-500	Sweep Hose Complete, Black	1	46	D52	Leader Hose, 10 ft., Black	1
12	39-126	Chain*	1	31A	R0669600	Sweep Hose Complete, Gray	1	46A	D50	Leader Hose, 10 ft., Gray	1
13	39-420	Wheel Sprocket Assy w/Bearing	2	32	10-112-00	UWF® Restrictor Del. Red & Blue	2	47	B62	Back-up Valve Kit, Black	1
14	39-602	Wheel Spacer	2	33	6-550-00	Universal Wall Fitting, Black	1	47A	G52	Back-up Valve Kit, Gray	1
15	39-100	Frame (Warranty only)	1	33A	6-550-00	Universal Wall Fitting, Gray	1	48	G53	Mechanism for G52	1
16	39-111	Bumper	1	34	10-108-00	UWF Restrictor Kit, Gray	1	49	40-240	Feed Hose Connector Assembly, Black	1
17	39-120	Chain Tensioner Kit	1	35	8-505-00	O-Ring, UWF	1	49A	48-140	Feed Hose Connector Assembly, Gray	1
18	39-430	Rear Axle Block Assy	1	36	9-100-9006	Pressure Relief Valve, Black	1	50	G6	Feed Hose Assembly Complete, Black	1
19	39-440	Front Axle Block Assy	1	36A	9-100-9002	Pressure Relief Valve, Gray	1	50A	G6	Feed Hose Assembly Complete, Gray	1
20	48-045	Screw, 10-32 x 7/8" SS	4	37	D30	Quick Disconnect, UWF Black	1	51	R0538200	Screw, Self Tapping, Canopy	3
		Pan Head with Star Washer	4	37A	D29	Quick Disconnect, UWF Gray	1	52	R0537800	Chain Guard	1
21	39-200	Gearbox Assembly	1					53	R0547400	Turbine Gear Assy	3
								54	R0547500	Drive Sprocket Assy	2

*Wear items not covered by warranty

Troubleshooting

If the cleaner regularly displays any of the following actions, adjustments may be necessary to restore performance. Refer to the exploded parts diagram for part references.

Action: Cleaner hangs up on steps or other obstacles for longer than 3 minutes.

Solution:

1. Check the wheel RPM.
2. Verify the back-up valve is cycling. Lift the valve out of the water and watch the jet. It should come on and go off.
3. Adjust the thrust jet.
4. Remove unnecessary pool hardware or install a Ladder Guard Kit (part #G21).

Action: Cleaner is sluggish, running with less power than normal.

Solution:

1. Check the filter screen in the in-line filter assembly and clean if necessary.
2. Clean the skimmer basket, pump basket, and pool filter.
3. Check the hoses, hose connections, and swivels for leaks that could cause loss of water pressure.
4. Check the wheel RPM. If below 30 RPM, see **Adjusting the Wheel RPM** to increase flow to cleaner.

Action: Cleaner races around the pool and/or does not make contact with the pool bottom.

Solution:

1. Check the wheel RPM. If more than 36 RPM, see **Adjusting the Wheel RPM** to reduce flow.
2. Verify the back-up valve is cycling. Lift the valve out of the water and watch the jet. It should come on and go off.

Action: Cleaner doesn't back up.

Solution:

1. Verify the back-up valve is cycling. Lift the valve out of the water and watch the jet. It should come on and go off.
2. Check the wheel RPM. If not in 30-36 RPM range, see **Adjusting the Wheel RPM**.
3. If the filter bag is full, empty or replace it.
4. Make sure feed hose is floating.

Action: Cleaner only turns in one direction.

Solution:

1. Adjust the thrust jet.
2. Make sure feed hose is floating.

Action: Feed hose becomes tangled.

Solution:

1. Remeasure the hose to verify that it is adjusted to the proper length for the pool.
2. With the cleaner operating, check that the swivels and hose connections turn freely.
3. Make sure the feed hose is floating.
4. With the Polaris operating, hold the cleaner under water and verify that all three (3) wheels are turning together.

Action: The front end of the cleaner lifts all the time.

Solution:

1. Check the wheel RPM. If not in 30-36 RPM range, see **Adjusting the Wheel RPM**.
2. Adjust the thrust jet downward.
3. Verify the back-up valve is cycling. Lift the valve out of the water and watch the jet. It should come on and go off.
4. Check for water inside the cleaner float.

Action: Sweep hose is sucked into the vacuum tube.

- Solution:**
1. Make sure the opening at the end of the sweep hose is not blocked by the sweep hose scrubber. Replace scrubber if it is worn or missing.
 2. Adjust the sweep hose to a gentle sweeping motion.
 3. Check the wheel RPM. If more than 36 RPM, see **Adjusting the Wheel RPM** to reduce flow.
 4. Add a sweep hose weight (part #B2).

Action: The cleaner does not clean the entire pool.

- Solution:**
1. Verify that feed hose reaches within 6 inches of the farthest point of the pool. If not, order a new hose section from your Polaris dealer.
 2. Adjust thrust jet to improve coverage.

Action: The cleaner is running in circles on its side.

- Solution:**
1. Check for water inside the cleaner float.
 2. Check the filter bag, if full it can weigh the cleaner down on one side.
 3. Check the hose floats to make sure they are spaced evenly.
 4. Check the wheel RPM. If more than 36 RPM, see **Adjusting the Wheel RPM** to reduce flow.

Adjusting the Wheel RPM

If count is less than 30 RPM:

- If an adjustable valve is installed on the cleaner line, open it completely so water can flow freely to the Polaris.
- Check the filter screen in the in-line filter for debris that restricts water flow.
- Clean the skimmer, filter and pump basket, clearing debris that restricts water flow.
- Check the hoses, connections and swivels for leaks that cause loss of water pressure.
- Remove the blue restrictor disk from the UWF.

If count is more than 36 RPM:

- Replace the blue restrictor disk in the UWF with the red restrictor. If the flow is still too high, unscrew the pressure relief valve until the proper RPM is reached.

NOTE The pressure relief valve should only be adjusted when a restrictor is installed.

- If an adjustable valve is installed on the cleaner line, adjust it to reduce the water flow to the cleaner.

Troubleshooting Worksheet

If these solutions do not result in improved performance, contact the Polaris dealer who sold you the cleaner or call Customer Service.

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

1. **Serial #:** _____
2. **Wheel RPM:** _____
3. **Is the back-up valve cycling?**
☐ Yes ☐ No
4. **Is the feed hose the proper length?**
☐ Yes ☐ No
5. **Are the swivels rotating freely?**
☐ Yes ☐ No
6. **How often do you clean the filter screen inside the quick disconnect?**
☐ Never ☐ Once a Week
☐ Twice a Week ☐ Once a Month
7. **Are the vacuum jets obstructed?**
(While the cleaner is operating, hold it upside down and look into the vacuum tube. There should be three (3) distinct, even jets of water.)
☐ Yes ☐ No
8. **Is the drive train functioning?**
(As you spin each wheel independently, all the wheels should spin.)
☐ Yes ☐ No

Zodiac Pool Systems, Inc.

2620 Commerce Way, Vista, CA 92081

1.800.822.7933 | www.ZodiacPoolSystems.com

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