



[Manuals.plus](#) /

› [Hayward](#) /

› Hayward W3EC40AC Perflex Diatomaceous Earth Pool Filter Instruction Manual

Hayward W3EC40AC

Hayward W3EC40AC Perflex Diatomaceous Earth Pool Filter Instruction Manual

Model: W3EC40AC

[Information](#)

[Setup](#)

[Operation](#)

[Product Overview](#)

[Safety](#)

[Maintenance](#)

[Troubleshooting](#)

[Specifications](#)

[Warranty &](#)

[Support](#)

1. PRODUCT OVERVIEW

The Hayward Perflex Extended-Cycle Diatomaceous Earth Pool Filter, model W3EC40AC, is designed to provide clear, sparkling water for above-ground, on-ground, and small in-ground pools. This filter utilizes exclusive Flex-Tube technology and diatomaceous earth (DE) as the filter media, known for its effectiveness in removing fine particles. The design aims for superior water clarity and extended filter cleaning cycles without the need for traditional backwashing.



Figure 1: Hayward W3EC40AC Perflex Diatomaceous Earth Pool Filter.



Figure 2: Hayward W3EC40AC Perflex Filter with pump assembly.

2. SAFETY INFORMATION

WARNING: Failure to follow these instructions can result in severe injury or death. This product must be installed and serviced by a qualified pool professional in accordance with all applicable local and national codes and ordinances.

- Always disconnect power to the pump before performing any service or maintenance.
- Ensure the filter is properly secured and all connections are tight to prevent leaks.
- Do not operate the filter if any part is damaged or missing.

- Keep children away from pool equipment.
- Always wear appropriate personal protective equipment (PPE) when handling pool chemicals or performing maintenance.
- Maintain proper water chemistry to prevent damage to equipment and ensure safe swimming conditions.
- Consult a qualified professional if you are unsure about any installation or maintenance procedures.

3. SETUP AND INSTALLATION

Proper installation is crucial for the efficient and safe operation of your Hayward Perflex filter. Refer to the detailed installation guide provided with your product for specific diagrams and instructions. The following is a general overview:

3.1 Site Selection

- Choose a level, solid base for the filter, preferably in a well-drained area.
- Ensure adequate clearance around the filter for maintenance and service (refer to specifications for required clearance).
- Position the filter to minimize plumbing runs and ensure easy access to controls.

3.2 Plumbing Connections

- Connect the pool pump discharge to the filter's inlet port.
- Connect the filter's outlet port to the pool return line.
- Use appropriate plumbing fittings and sealants to ensure watertight connections.
- Install a pressure gauge on the filter to monitor operating pressure.

3.3 Electrical Connections

- Ensure all electrical connections for the pump are made by a qualified electrician and comply with local codes.
- The pump must be properly grounded.

3.4 Initial Start-up and DE Charging

1. Ensure all plumbing connections are secure and the filter drain plug is closed.
2. Fill the pool to the proper operating level.
3. Open all suction and return valves.
4. Open the air relief valve on top of the filter.
5. Start the pump. Once a steady stream of water emerges from the air relief valve, close the valve.
6. With the pump running, slowly add the recommended amount of Diatomaceous Earth (DE) powder into the skimmer. Refer to the filter specifications for the correct DE quantity.
7. Allow the filter to run for several minutes to distribute the DE evenly over the Flex-Tubes.

4. OPERATING INSTRUCTIONS

Once installed and charged with DE, your Perflex filter is ready for operation. Monitor the pressure gauge and water clarity to ensure optimal performance.

4.1 Normal Operation

- The filter should operate with the pump running, circulating pool water through the DE media.

- Note the initial clean filter pressure reading on the pressure gauge. This is your baseline.
- The filter will remove microscopic particles, improving water clarity.

4.2 Extended-Cycle Filtration

The Perflex filter's Flex-Tube technology allows for extended cleaning cycles. As dirt accumulates on the DE, the pressure in the filter will gradually rise. Instead of immediate backwashing, the Perflex system allows for "bumping" to refresh the DE.

Your browser does not support the video tag.

Video 1: Demonstrating the bump handle operation on a Hayward Perflex filter. This action helps to refresh the DE media for extended filtration cycles.

5. MAINTENANCE

Regular maintenance ensures the longevity and efficiency of your Perflex filter. The primary maintenance task is cleaning the filter when the operating pressure rises.

5.1 When to Clean (Bump) the Filter

- Clean the filter when the pressure gauge reading rises 7-10 PSI above the initial clean filter pressure.
- Clean the filter if water clarity decreases significantly.

5.2 Cleaning Procedure (Bumping)

1. Turn off the pool pump and disconnect power.
2. Open the air relief valve on top of the filter.
3. Operate the "bump" handle (if equipped) or follow the specific instructions for your model to dislodge the DE from the Flex-Tubes. This action reuses the DE and dirt mixture to form new cleaning surfaces.
4. Close the air relief valve.
5. Restart the pump.
6. If the pressure remains high or water clarity does not improve after bumping, a full disassembly and cleaning of the Flex-Tube assembly may be required.

Your browser does not support the video tag.

Video 2: A user demonstrating the operation of the Hayward Perflex Diatomaceous Earth Pool Filter, including how to use the bump handle.

5.3 Disassembly and Full Cleaning

Periodically, or if bumping does not restore filter performance, a full cleaning of the internal components is necessary. The easy-to-access clamp assembly simplifies this process.

1. Turn off the pump and disconnect power.
2. Open the air relief valve and drain the filter completely.
3. Remove the clamp assembly that secures the filter head to the tank.
4. Carefully lift the filter head and Flex-Tube assembly out of the tank.
5. Rinse the Flex-Tube assembly thoroughly with a garden hose to remove all DE and debris.
6. Inspect the Flex-Tubes for any damage or tears. Replace if necessary.
7. Clean the inside of the filter tank.
8. Reassemble the filter, ensuring the O-ring is clean and properly seated.
9. Secure the clamp assembly firmly.

10. Recharge the filter with new DE as per the initial start-up procedure.

Your browser does not support the video tag.

Video 3: A user demonstrating how to open and clean the Hayward Perflex filter, including removing the clamp and rinsing the internal components.

6. TROUBLESHOOTING

This section addresses common issues you might encounter with your Hayward Perflex filter.

Problem	Possible Cause	Solution
Cloudy Pool Water	<ul style="list-style-type: none">• Insufficient DE powder.• Damaged Flex-Tubes.• Improper water chemistry.• Filter needs cleaning (bumping or full).	<ul style="list-style-type: none">• Add correct amount of DE.• Inspect and replace damaged Flex-Tubes.• Test and adjust pool chemistry.• Perform filter bumping or full cleaning.
Low Water Flow / High Pressure	<ul style="list-style-type: none">• Clogged filter media.• Clogged skimmer or pump basket.• Closed valves.	<ul style="list-style-type: none">• Perform filter bumping or full cleaning.• Clean skimmer and pump baskets.• Ensure all valves are open.
Water Leaking from Filter	<ul style="list-style-type: none">• Loose clamp assembly.• Damaged O-ring.• Cracked filter housing.• Loose plumbing connections.	<ul style="list-style-type: none">• Tighten clamp assembly (do not overtighten).• Inspect and replace O-ring.• Inspect housing for cracks; replace filter if cracked.• Tighten all plumbing connections.
Pump Not Priming	<ul style="list-style-type: none">• Air leak in suction line.• Low water level in pool.• Clogged pump basket.	<ul style="list-style-type: none">• Check all suction line connections for leaks.• Fill pool to proper level.• Clean pump basket.

7. SPECIFICATIONS

Feature	Detail
Model Name	W3EC40AC
Brand	Hayward
Material	ABS Plastic
Color	Gray
Product Dimensions (L x W x H)	16"L x 16"W x 26.5"H

Item Weight	26 Pounds
Power Source	Hydraulic Powered
Control Method	Push Button
Efficiency	High efficiency, Effective, Energy Efficient
Load Capacity	100 Pounds
Required Assembly	No (refers to the filter unit itself, not the full system installation)
Included Components	1 x Hayward W3EC40AC Perflex D.E. Pool Filter
UPC	610377386975

8. WARRANTY & SUPPORT

Hayward products are manufactured to the highest standards of quality and reliability. For specific warranty information regarding your W3EC40AC Perflex Diatomaceous Earth Pool Filter, please refer to the warranty card included with your product or visit the official Hayward website.

For technical support, replacement parts, or service inquiries, please contact Hayward Customer Service. Contact details can typically be found on the Hayward website or in the packaging materials.

Online Resources: For additional information, FAQs, and product registration, please visit the official [Hayward website](#).