Pentair EC-160301

Pentair EC-160301 Clean & Clear Plus 420 sq. ft. Cartridge Pool Filter User Manual

Model: EC-160301

1. Introduction

This manual provides essential instructions for the installation, operation, and maintenance of your Pentair EC-160301 Clean & Clear Plus 420 sq. ft. Cartridge Pool Filter. Please read this manual thoroughly before attempting to install or operate the filter to ensure safe and efficient performance. Proper installation and regular maintenance are crucial for the longevity and optimal function of your pool filtration system.

2. Safety Information

Always observe basic safety precautions when installing and operating this product. Failure to follow these instructions could result in injury or property damage.

- **Electrical Safety:** Ensure all electrical connections are made by a qualified electrician and comply with local codes.
- **Pressure Safety:** Do not operate the filter above the maximum recommended pressure. Always relieve pressure before servicing the filter.
- **Chemical Safety:** Handle pool chemicals with care and follow manufacturer guidelines.
- **Children:** Keep children away from pool equipment during operation and maintenance.
- **Professional Installation:** While installation can be straightforward, professional assistance is recommended for plumbing and electrical connections to ensure compliance and safety.

3. Product Overview

The Pentair Clean & Clear Plus 420 sq. ft. Cartridge Pool Filter is designed to provide superior water clarity for your swimming pool. It features a large filtration area and four polyester filter cartridges to effectively remove debris and impurities from the water.

Key Features:

- Large 420 sq. ft. filter area for increased dirt capacity.
- Equipped with four durable polyester filter cartridges.

- Features 2-inch unions for plumbing connections.
- Includes a 1-1/2 inch drain for convenient winterization.
- Integrated internal air bleed for efficient operation.

Components:

The filter system consists of the main filter tank, a pressure gauge, a clamp band, and four internal filter cartridges.





Figure 1: The Pentair Clean & Clear Plus 420 sq. ft. Cartridge Pool Filter unit, showing the inlet, outlet, pressure gauge, and clamp band.

4. Setup and Installation

Careful installation is essential for the proper functioning of your filter. It is recommended to have a qualified pool professional perform the installation.

Installation Steps:

1. **Site Selection:** Choose a level, well-drained area, protected from excessive moisture and direct sunlight. Ensure adequate clearance for maintenance.
2. **Mounting:** Securely mount the filter base to a solid, level surface.
3. **Plumbing Connections:** Connect the pool plumbing to the filter's 2-inch inlet and outlet unions. Ensure all connections are watertight. Refer to Figure 1 for inlet/outlet locations.
4. **Pressure Gauge Installation:** Install the pressure gauge into the designated port on the filter top.
5. **Drain Plug:** Ensure the 1-1/2 inch drain plug is securely closed for operation.
6. **Initial Startup:** Before starting the pump, ensure the filter is filled with water. Open the internal air bleed valve to release trapped air as the filter fills. Close the air bleed once a steady stream of water emerges.

5. Operating Instructions

Once installed, operating your Pentair Clean & Clear Plus filter is straightforward.

Normal Operation:

1. Ensure all valves are in the correct position for filtration.
2. Start the pool pump.
3. Observe the pressure gauge. Note the initial clean filter pressure. This will be your baseline for determining when cleaning is needed.
4. The internal air bleed automatically releases air during operation, ensuring efficient filtration.

The filter should run for a sufficient period each day to circulate and filter the entire volume of your pool water, typically 8-12 hours depending on pool size and usage.

6. Maintenance

Regular maintenance of your filter cartridges is crucial for maintaining water quality and extending the life of your filter system.

Cartridge Cleaning:

Clean the filter cartridges when the pressure gauge reads 8-10 PSI above the initial clean filter pressure, or if water flow to the pool noticeably decreases. This typically occurs every 3 to 6 months, depending on pool usage and environmental factors.

1. **Turn Off Pump:** Always turn off the pool pump and relieve all pressure from the filter system before opening.
2. **Drain Filter:** Open the 1-1/2 inch drain plug at the bottom of the filter to drain the water.
3. **Remove Clamp:** Loosen and remove the clamp band that secures the top of the filter tank.
4. **Remove Top:** Carefully lift off the filter top.
5. **Remove Cartridges:** Extract the four filter cartridges from the tank.
6. **Clean Cartridges:** Rinse each cartridge thoroughly with a garden hose to remove debris from the pleats. For stubborn dirt or oils, use a specialized cartridge cleaning solution.
7. **Inspect Cartridges:** Check cartridges for any damage, tears, or excessive wear. Replace if necessary.
8. **Reassemble:** Place the clean cartridges back into the filter tank, ensuring they are seated correctly. Replace the filter top and secure the clamp band firmly. Close the drain plug.
9. **Restart System:** Follow the initial startup procedure (Section 5) to repressurize the system.



Figure 2: Four individual pleated filter cartridges, as supplied with the Pentair Clean & Clear Plus filter system.



Figure 3: A close-up view of a single pleated filter cartridge, highlighting the filtration material and blue end cap with Pentair branding.

Winterization:

In colder climates, proper winterization is necessary to prevent damage from freezing. Drain the filter completely using the 1-1/2 inch drain plug and ensure all water is removed from the system.

7. Troubleshooting

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

Problem	Possible Cause	Solution
High Pressure Gauge Reading	Clogged filter cartridges	Clean or replace filter cartridges (refer to Section 6).
Low Water Flow	Clogged cartridges, pump issues, closed valves, air in system	Clean cartridges, check pump, ensure all valves are open, bleed air from system.
Water Leaking from Filter	Loose clamp band, damaged O-ring, cracked tank	Tighten clamp band, inspect and replace O-rings, contact support for tank damage.
Cloudy Pool Water	Dirty cartridges, improper chemical balance, insufficient filtration time	Clean cartridges, test and adjust pool chemistry, increase pump run time.

8. Specifications

- **Model Number:** EC-160301
- **Filter Area:** 420 sq. ft.

- **Number of Cartridges:** 4
- **Inlet/Outlet Connections:** 2-inch unions
- **Drain Connection:** 1-1/2 inch
- **Item Weight:** Approximately 74 pounds
- **Manufacturer:** Pentair

9. Warranty and Support

The Pentair EC-160301 Clean & Clear Plus 420 sq. ft. Cartridge Pool Filter comes with a limited warranty. For specific details regarding warranty coverage, terms, and conditions, please refer to the warranty documentation included with your product or visit the official Pentair website.

For technical support, replacement parts, or further assistance, please contact Pentair customer service or an authorized Pentair dealer. You can find contact information and additional resources on the Pentair Store or their official website.

© 2023 Pentair. All rights reserved. Information subject to change without notice.

Ask a question about this manual

Ask about setup, troubleshooting, compatibility, parts, safety, or missing instructions. Manuals+ will review the question and use this page's manual context to help answer it.

Name

Anonymous

Email

you@example.com

After a successful submission, we securely hash the supplied account or form email before sending it to Microsoft Advertising for conversion attribution. Privacy details.

Question

Example: How do I reset this device or fix this error?

Details

Model number, symptoms, what you tried, or the section of the manual you are using.

Submit question