Pentair EC-180009

Pentair EC-180009-60 Sq. Ft. DE Pool Filter Instruction Manual

Brand: Pentair | Model: EC-180009

Product Overview

The Pentair EC-180009-60 Sq. Ft. DE Pool Filter is designed for efficient pool water filtration, ensuring a clean and clear swimming experience. Its robust construction and user-friendly features make maintenance straightforward.

- **Fiberglass-reinforced polypropylene tank:** Provides durability and longevity.
- **Hi-flow manual air relief valve:** Allows for easy air purging from the system.
- **Removable filter grid pack:** Simplifies the cleaning process of the internal filter elements.
- **Almond color:** Blends seamlessly with most outdoor environments.
- **Compatible with various valves:** Supports different plumbing configurations including 2" PVC Slide (261047), 2" HiFlow (261049, 261142), 2" MPV threaded (261152), 1-1/2" MPV threaded (261177), and Push Pull 7.5" (263064, 263051).





Figure 1: The Pentair EC-180009-60 DE Pool Filter, showcasing its almond-colored tank and top-mounted pressure gauge.

Setup & Installation

Proper setup is crucial for optimal filter performance. Ensure all connections are secure and follow local plumbing codes.

Connecting the Filter

The filter is designed for easy integration into your existing pool system. It features an inlet and an outlet port for water circulation.



Figure 2: Close-up view of the filter's inlet and outlet ports, clearly labeled for correct plumbing connections.

For backwashing, a slide valve or multi-port valve can be connected to the filter. If no valve is present, bulkhead unions can be used to connect directly to the filter ports.

Adding DE Powder

After initial setup or backwashing, Diatomaceous Earth (DE) powder must be added to the filter to create the filtration membrane. This is typically done through the pool's skimmer while the pump is running.
For this filter size, approximately 6 pounds of DE powder is recommended to properly coat the internal membrane, ensuring crystal clear water.

Operation

The filter operates by circulating pool water through the DE-coated grids, trapping microscopic particles and debris. Monitoring the pressure gauge is essential for efficient operation.



Figure 3: The top of the filter showing the pressure gauge and air relief valve. The gauge indicates the internal pressure of the filter.

The pressure gauge allows you to set a 'start' pressure for a clean filter. When the pressure increases by approximately 10 PSI above this starting point, it indicates that the filter has collected a significant amount of debris and requires cleaning or backwashing.
This filter is designed to provide excellent flow rates, which helps in cycling more water through the filter daily, contributing to cleaner pool water.

Maintenance

Regular maintenance ensures the longevity and efficiency of your Pentair DE Pool Filter.

Backwashing

When the pressure gauge indicates it's time to clean the filter, backwashing is the primary method. This involves reversing the water flow to flush out accumulated debris.

1. Turn off the pool pump.
2. Adjust the slide valve (or multi-port valve) to the 'backwash' position. This will redirect water flow out of the waste port.
3. Turn on the pump and allow it to backwash until the water running to waste is clear.
4. Turn off the pump and return the valve to the 'filter' position.
5. Re-add the appropriate amount of DE powder (approximately 6 pounds for this model) through the skimmer.

It is important to re-add DE powder every time after backwashing to maintain the filter's effectiveness.

Deep Cleaning

Periodically, a more thorough cleaning of the filter grids may be necessary, especially if backwashing does not sufficiently reduce the pressure. This involves disassembling the filter to manually clean the grids.
The easy-access clamp on the filter simplifies the process of opening the tank to remove and clean the filter media and mesh inside.

Troubleshooting

Here are some common issues and their potential solutions:

- **Low Flow Rate:** Check the pressure gauge. If it's high, the filter may be dirty and require backwashing or deep cleaning. Ensure the pump basket and skimmer baskets are clear of debris.
- **Cloudy Water:** This can indicate insufficient filtration. Ensure proper DE powder levels. Check pool chemistry and consider a deep cleaning of the filter grids.
- **Filter Not Holding Pressure:** Inspect the filter's O-rings and seals for wear or damage. Ensure the clamp is securely fastened.
- **Water Leaks:** Check all plumbing connections and unions for tightness. Inspect the filter tank for any cracks or damage.

Specifications

Specification	Detail
Item Weight	83 pounds
Manufacturer	Pentair
ASIN	B08MWTRQ6M
Item model number	EC-180009
Customer Reviews	4.2 out of 5 stars (246 ratings)
Best Sellers Rank	#80,846 in Patio, Lawn & Garden; #93 in Sand Pool Filters

Warranty & Support

This Pentair DE Pool Filter comes with a limited warranty. For specific warranty details and terms, please refer to the documentation included with your product or contact Pentair customer support directly.
Customer support is available for assistance with product inquiries, troubleshooting, and parts. Please visit the official Pentair website or refer to your product packaging for contact information.

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