

Hayward ECX4077B1

Hayward ECX4077B1 Check Valve Replacement Instruction Manual

1. PRODUCT OVERVIEW

The Hayward ECX4077B1 is a replacement check valve designed for use with various Hayward pool filter systems. This component is crucial for preventing the backflow of water and filter media (such as Diatomaceous Earth, or D.E.) into the pump or pool system when the filter is not operating. Proper functioning of the check valve ensures efficient filtration and prevents contamination.

This check valve is compatible with the following Hayward filter models:

- **Perflex Extended-Cycle Basic and D.E. Filter Models:** EC65A, EC75A, EC65, EC75, EC50A, EC30, EC40, EC40AC, EC50AC, I_PFPPTS, EC50C80X5S, EC40C90 Series.
- **ASL Filter.**
- **ReGenX Grid Element D.E. Filter.**
- **Star-Clear Cartridge Filter Models:** C85075XES, C125080X5S, RG450, RG700.



Figure 1: Hayward ECX4077B1 Check Valve Replacement. This image shows the check valve component, featuring a white plastic housing, a dark rubber flap, and a brass-colored disc with a central white button.

2. SETUP AND INSTALLATION

Replacing the check valve requires careful attention to detail and may involve disassembling parts of your filter system. It is recommended to consult your specific filter model's manual for detailed disassembly and reassembly instructions.

2.1 Safety Precautions

- Always turn off the pool pump and disconnect power before performing any maintenance or installation.
- Relieve all pressure from the filter system before opening.
- Wear appropriate personal protective equipment, such as gloves and eye protection.

2.2 General Installation Steps

1. **Access the Check Valve:** The check valve is typically located within the filter's internal assembly, often in the flanged elbow or diffuser. Accessing it may require removing the filter's top, internal grids, or other components.
2. **Remove the Old Valve:** The old check valve might be difficult to remove due to accumulated debris or tight fit. Gentle but firm pulling or prying may be necessary. In some cases, if the valve is severely stuck or damaged, careful cutting might be required, ensuring not to damage the surrounding filter housing or threads.
3. **Clean the Area:** Thoroughly clean any debris, D.E. residue, or mineral deposits from the valve's

seating area and surrounding components.

4. **Install the New Valve:** Insert the new ECX4077B1 check valve into its designated position. Ensure proper orientation; the brass-colored metal piece should generally face upwards. Some fittings have a tiny notch for alignment.
5. **Reassemble the Filter:** Reassemble all filter components, ensuring all O-rings and gaskets are properly seated and lubricated with a silicone-based lubricant (if applicable) to prevent leaks.
6. **Test the System:** After reassembly, slowly turn on the pump and check for leaks. Monitor the system for proper operation, ensuring no D.E. or debris is returning to the pool.

Video 1: Check Valve Replacement. This video demonstrates the physical components of a check valve and its assembly, providing a visual aid for understanding the part's structure.

3. OPERATING PRINCIPLES

The Hayward ECX4077B1 check valve operates as a one-way valve. During normal filter operation, water flows through the valve, pushing the internal flap open. When the pump is turned off, the water flow stops, and the flap closes due to gravity and back pressure, preventing water and filter media from flowing backward into the pump or pool. This is particularly important for D.E. filters, where backflow can lead to D.E. entering the pool.

4. MAINTENANCE

Regular inspection of the check valve is recommended to ensure optimal performance of your pool filter system. While the check valve itself requires minimal active maintenance, its condition should be assessed during routine filter cleaning or when issues arise.

- **Visual Inspection:** Periodically inspect the check valve's rubber flap for signs of wear, tearing, warping, or hardening. A damaged flap will not seal properly.
- **Cleanliness:** Ensure the valve area is free from debris, scale, or D.E. buildup that could impede the flap's movement or prevent a complete seal.
- **Replacement:** If the check valve shows signs of damage or is no longer functioning effectively (e.g., D.E. backing up into the pump), it should be replaced promptly.

5. TROUBLESHOOTING

If you experience issues with your filter system that may be related to the check valve, consider the following troubleshooting steps:

- **D.E. Backing Up into Pump/Pool:** This is a primary indicator of a faulty check valve. The internal flap may be damaged, warped, or obstructed, preventing it from closing completely when the pump is off. Inspect and replace the check valve if necessary.
- **Reduced Filtration Efficiency:** While less direct, a partially obstructed or improperly seating check valve can affect water flow and overall filter performance.
- **Difficulty Removing Old Valve:** If the old valve is stuck, ensure all retaining clips or rings are removed. Applying a penetrating lubricant and gently wiggling the component may help. Avoid excessive force that could damage the filter housing.
- **New Valve Not Sealing:** Double-check that the new check valve is installed correctly and oriented properly. Ensure no debris is preventing the flap from seating.

6. SPECIFICATIONS

- **Model Number:** ECX4077B1
- **Item Weight:** Approximately 0.16 ounces
- **Manufacturer:** Hayward
- **Function:** Check valve replacement for compatible Hayward pool filter systems.

7. GENERAL INFORMATION ABOUT HAYWARD

Hayward has been a prominent American company since 1925, dedicated to delivering exceptional products in the pool and spa industry. They focus on innovative technology and customer service, with manufacturing and distribution facilities across the United States.

Video 2: Hayward: An American Story Since 1925. This video provides an overview of Hayward's history, manufacturing processes, and commitment to quality and innovation in the pool industry.

8. WARRANTY AND SUPPORT

Information regarding the specific warranty for the Hayward ECX4077B1 Check Valve Replacement or direct customer support contact details was not available in the provided product data. Please refer to the official Hayward website or contact your product retailer for warranty claims and technical support.