

Emaux MFV Top Mount Sand Filter User Manual

Model: MFV | Brand: Emaux

1. INTRODUCTION

The Emaux MFV Top Mount Sand Filter is engineered with innovative design and advanced technology to deliver superior filtration performance and crystal clear water for your pool or hot tub. This manual provides essential information for the safe and efficient operation, installation, and maintenance of your filter.



Image 1.1: The Emaux MFV Top Mount Sand Filter, featuring its robust, one-piece polyethylene tank and top-mounted multiport valve with pressure gauge.

Key features include:

- Designed for domestic in-ground and above-ground pools/hot spa tubs.

- Maximum operating pressure of 40 PSI / 2.8 BAR.
- Maximum temperature tolerance of 50°C (122°F).
- Universal standard union connection provided for ease of installation.
- Equipped with ABS lateral for efficient water distribution.
- Features a unique one-piece clamp with screw-type lock for simplified installation and tool-free servicing.
- Includes a multiport valve with 6 functions for versatile operation.
- Easy-to-read pressure gauge for convenient inspection of filter performance.

2. SAFETY INFORMATION

Always read and follow all instructions carefully before installing or operating this product. Failure to do so could result in serious injury or property damage.

- Ensure the power supply to the pump is disconnected before performing any service or maintenance.
- Do not operate the filter above the maximum rated operating pressure of 40 PSI (2.8 BAR).
- Always relieve pressure from the filter before opening the multiport valve or performing any service.
- Keep children away from the filter system during operation and maintenance.
- Use only genuine Emaux replacement parts.

3. SETUP AND INSTALLATION

Proper installation is crucial for the filter's performance and longevity. It is recommended that installation be performed by a qualified professional.

3.1 Site Selection

Choose a well-drained area, preferably shaded, that is easily accessible for maintenance. The filter should be placed on a firm, level base, such as a concrete slab, to prevent settling or shifting.

3.2 Filter Media Installation

1. Ensure the internal laterals are properly seated at the bottom of the filter tank.
2. Partially fill the tank with water to cover the laterals. This helps cushion the laterals when adding sand.
3. Carefully add the recommended filter media (sand, suggested size: 0.5-0.8mm) into the tank. Refer to the filter's specifications for the correct amount.
4. Level the sand surface.

3.3 Multiport Valve Installation

1. Clean the top opening of the filter tank and the O-ring on the multiport valve.
2. Carefully insert the multiport valve into the tank opening, ensuring the standpipe from the laterals aligns with the valve's opening.
3. Secure the multiport valve to the tank using the unique one-piece clamp with screw-type lock. Tighten securely but do not overtighten.

3.4 Plumbing Connections

Connect the pool plumbing to the multiport valve ports:

- **PUMP:** Connect the pipe from the pool pump discharge to this port.
- **RETURN:** Connect the pipe leading back to the pool inlets to this port.
- **WASTE:** Connect a waste line to this port, leading to a suitable drain or disposal area.

Ensure all connections are watertight using appropriate sealants and fittings. The universal standard union connection is provided for convenience.

4. OPERATING INSTRUCTIONS

The multiport valve allows for various operational modes. Always turn off the pump before changing the valve position to prevent damage.

4.1 Multiport Valve Functions

Position	Description
FILTER	Normal filtering mode. Water flows through the sand bed, trapping debris, and returns to the pool.
BACKWASH	Reverses water flow through the filter to flush trapped debris out to the waste line. Used for cleaning the filter media.
RINSE	Used after backwashing to settle the sand bed and flush any remaining dirty water to waste before returning to FILTER mode.
WASTE	Bypasses the filter and sends water directly from the pump to the waste line. Used for vacuuming heavy debris directly to waste or lowering pool water level.
RECIRCULATE	Bypasses the filter and circulates water directly back to the pool. Used for chemical mixing without filtering.
CLOSED	Shuts off all flow to the filter and pool. Do not operate the pump with the valve in this position.

4.2 Initial Startup

1. Ensure all plumbing connections are secure.
2. Set the multiport valve to the **BACKWASH** position.
3. Turn on the pump and backwash for 2-3 minutes, or until the water in the sight glass (if present) runs clear.
4. Turn off the pump.
5. Set the multiport valve to the **RINSE** position.
6. Turn on the pump and rinse for 30-60 seconds.
7. Turn off the pump.
8. Set the multiport valve to the **FILTER** position.
9. Turn on the pump. Note the initial pressure reading on the gauge. This is your clean filter operating pressure.

5. MAINTENANCE

5.1 Backwashing

Backwash the filter when the pressure gauge reads 8-10 PSI above the clean filter operating pressure, or when water clarity diminishes. Follow the steps outlined in "Initial Startup" for backwashing and rinsing.

5.2 Sand Replacement

Filter sand typically needs replacement every 3-5 years, depending on usage and water quality. Consult a pool professional for this procedure.

5.3 Winterization

In freezing climates, the filter must be drained and winterized to prevent damage. Consult your local pool professional for proper winterization procedures.

6. TROUBLESHOOTING

Problem	Possible Cause	Solution
High Pressure Gauge Reading	Dirty filter media; clogged skimmer/pump basket.	Backwash the filter; clean skimmer and pump baskets.
Low Pressure Gauge Reading / Low Flow	Clogged pump impeller; air leak in suction line; pump not primed.	Check/clean impeller; inspect plumbing for leaks; re-prime pump.
Water Returning to Pool is Cloudy	Insufficient backwashing; damaged laterals; incorrect sand type/amount.	Perform thorough backwash/rinse; inspect laterals; verify sand specifications.
Water Leaking from Multiport Valve	Worn O-rings/gaskets; loose clamp.	Inspect and replace O-rings/gaskets; tighten clamp.

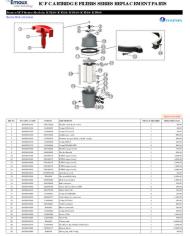
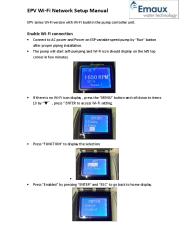
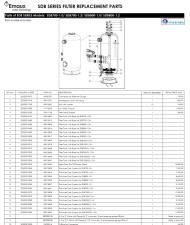
7. SPECIFICATIONS

- Brand:** Emaux
- Model:** MFV Top Mount Sand Filter
- Max Operating Pressure:** 40 PSI / 2.8 BAR
- Max Temperature:** 50°C (122°F)
- Suggested Media Size:** 0.5-0.8mm
- Connection Type:** Universal Standard Union Connection
- Valve Type:** Multiport Valve with 6 Functions
- Tank Material:** High Density Polyethylene
- ASIN:** B083XL2PTV
- Date First Available:** 15 January 2020

8. WARRANTY AND SUPPORT

For specific warranty details, please refer to the warranty card included with your product or contact Emaux customer support directly. Keep your proof of purchase for warranty claims.

For technical assistance, spare parts, or further inquiries, please contact your authorized Emaux dealer or visit the official Emaux website.

	<p><u>Emaux Filter Max Series: Pool Sand Filter Installation, Operation, and Maintenance Guide</u></p> <p>Detailed user manual for the Emaux Filter Max Series pool sand filters (MFV17 to MFV35). Covers installation steps, how the filter works, start-up procedures, valve functions, winterizing, troubleshooting, pool chemistry guidelines, and technical specifications.</p>
	<p><u>Emaux ICF Cartridge Filters Series Replacement Parts List</u></p> <p>Official replacement parts list for Emaux ICF series cartridge filters, including models ICF230, ICF330, ICF430, ICF530, and ICF680. This document details all available spare parts with their respective codes, descriptions, and retail prices.</p>
	<p><u>Emaux ICF Cartridge Filters Series Replacement Parts Guide</u></p> <p>Comprehensive replacement parts list for Emaux ICF100, ICF150, and ICF200 cartridge filter models, detailing components, part numbers, and pricing.</p>
	<p><u>Emaux EPV Wi-Fi Network Setup Manual</u></p> <p>A guide to setting up the Wi-Fi network for Emaux EPV variable speed pumps, covering direct connection and home network integration.</p>
	<p><u>Emaux SDB Series Filter Replacement Parts</u></p> <p>A comprehensive list of replacement parts for Emaux SDB Series pool filters, including model numbers SDB700-1.0, SDB700-1.2, SDB800-1.0, and SDB800-1.2. The document details part numbers, descriptions, quantities required, and retail prices.</p>
	<p><u>Emaux EL-S100 Underwater Light Operating Manual</u></p> <p>This manual provides operating instructions and replacement parts information for the Emaux EL-S100 underwater light.</p>