Pentek RFFE20-BB

Pentair Pentek RFFE20-BB Big Blue Water Filter Instruction Manual

Model: RFFE20-BB | Brand: Pentek

1. Introduction

The Pentair Pentek RFFE20-BB Big Blue Water Filter is a 20-inch whole house radial flow iron reduction replacement cartridge designed to improve water quality throughout your home. This cartridge effectively reduces dissolved iron, which enhances water taste and helps prevent orange and brown stains on plumbing fixtures and appliances. It is intended for use in Pentek 20-inch Big Blue Filter Housings and similar heavy-duty filter housings.
Key benefits include:

- Greatly improves taste by filtering up to 3 PPM of dissolved iron, eliminating metallic taste.
- Prevents rust stains on sinks, toilets, and plumbing fixtures, and protects appliances from damage.
- Provides whole house filtering on the main water line, suitable for well water applications.
- Chemical-free alternative to traditional chlorination systems for treating iron.

2. Safety Information

WARNING:

- Always turn off the main water supply before attempting any installation or maintenance.
- Release system pressure before opening the filter housing.
- Wear appropriate personal protective equipment, such as gloves and eye protection, during installation and maintenance.
- Ensure all connections are secure to prevent leaks.
- Dispose of used filter cartridges according to local regulations.
- Do not use with water that is microbiologically unsafe or of unknown quality without adequate disinfection before or after the system.

3. Package Contents

Your package should contain the following:

- Pentair Pentek RFFE20-BB Radial Flow Iron Reduction Replacement Cartridge (Pack of 4)

Note: Filter housing, filter wrench, silicone grease, and cleaning supplies are sold separately.

4. Specifications

Attribute	Value
Model Number	RFFE20-BB
Product Dimensions (D x W x H)	4.5"D x 4.5"W x 20"H
Item Weight	9.75 Pounds
Material Type	Iron (filter media)
External Testing Certification	NSF
Product Benefits	Removes Impurities, Reduces Dissolved Iron
Manufacturer	Pentair
Unit Count	4.0 Count

This filter is sized for 20" Big Blue Filter Housings and is also compatible with other 20" heavy duty filter housings.

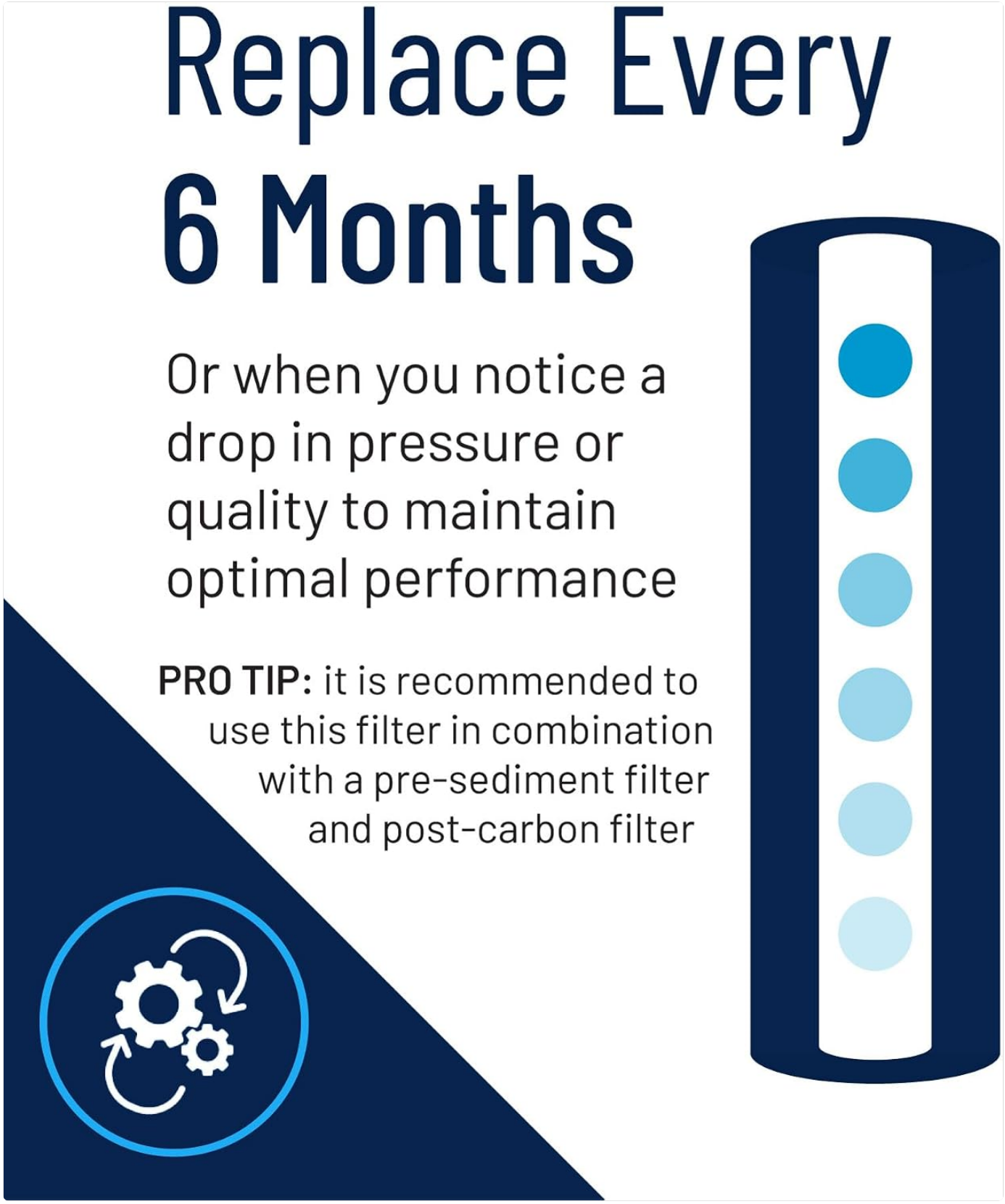


Image: Filter dimensions for 20" Big Blue housings.



Image: Pentek 20" Heavy Duty Water Filter, RFFE20-BB, highlighting iron (Fe) reduction.

5. Installation and Filter Replacement

This section provides instructions for replacing your filter cartridge. For a visual guide, please refer to the embedded video below.

Your browser does not support the video tag.

Video: Filter Cartridge Replacement - Whole House Water Filtration. This video demonstrates the step-by-step process of replacing a whole house water filter cartridge, including preparation, removal of the old filter, cleaning, disinfection, and installation of the new filter.

Required Tools and Supplies:

- New Pentair Pentek RFFE20-BB filter cartridge
- Two large buckets or one large bucket and access to a sink
- Compatible filter wrench (for your housing)
- Tablespoon
- Household bleach (unscented)
- Silicone grease (food-grade)
- Scrub brush or sponge/cloth
- Rubber gloves

Step-by-Step Replacement:

1. **Prepare the Area:** Fill a bucket or sink with warm water. Clear the space directly under your filter housing and place a bucket there to catch any water. Remove anything in the area that should not get wet.
2. **Turn Off Water Supply:** Locate the shut-off valve for your water filter system and turn it off. If your filter has a bypass valve, engage it.
3. **Release Pressure:** Press the red pressure relief button on top of the filter housing (if present) to release trapped

air. Alternatively, open a faucet downstream from the filter until water stops flowing, then close the faucet.

4. **Unscrew Housing:** Use the compatible filter wrench to unscrew the filter housing. The housing will be heavy with water, so handle it carefully to avoid dropping it. Any remaining water in the piping will drain into the bucket.
5. **Remove Old Filter and O-Ring:** Remove the used filter cartridge and discard it. Carefully remove the large O-ring from the housing.
6. **Clean and Disinfect Housing:** Wash the filter housing with dish soap and warm water using a sponge or cloth. Rinse thoroughly. To disinfect, fill the housing approximately one-third full with water and add one tablespoon of unscented household bleach. Scrub the interior of the housing with the brush or sponge, then rinse thoroughly with warm water. Empty the housing.
7. **Inspect and Lubricate O-Ring:** Check the O-ring for any signs of damage (cracks, tears, stretching). If damaged, replace it with a new one. Lubricate the O-ring with clean, food-grade silicone grease (do not use petroleum jelly).
8. **Reinstall O-Ring:** Carefully insert the lubricated O-ring back into its groove in the housing, ensuring it is seated level and not twisted.
9. **Insert New Filter:** Remove all packaging from the new Pentair Pentek RFFE20-BB filter cartridge and insert it into the housing. Ensure the cap standpipe is located in the center of the cartridge. If the cartridge has gaskets, ensure they are properly installed before inserting.
10. **Screw Housing Back On:** Screw the bottom of the housing onto the cap. Hand-tighten only; do not use the wrench to overtighten.
11. **Restore Water Supply:** Slowly turn on the water supply to the filter. Open any shut-off valves that were closed after the filter.
12. **Release Trapped Air (Again):** Press the pressure relief button (if present) to allow any newly trapped air to escape.
13. **Check for Leaks:** Visually inspect the housing for any leaks.
14. **Flush the System:** Open a faucet downstream from the filter and flush the cartridge for 10 minutes. If using a carbon filter (which this is, in part, due to its radial flow design), wait an hour and flush again for 10 minutes. Water may appear cloudy initially due to trapped air; this should clear with use.

6. Operation

The Pentair Pentek RFFE20-BB filter operates by radial flow, meaning water enters from the outside of the cartridge and flows inward, passing through the specialized iron reduction media. This design maximizes contact time with the media, ensuring effective removal of dissolved iron.
After installation, ensure the system is properly flushed as described in the installation section. Your water should then flow clear and taste improved. The filter is designed for continuous whole-house filtration.

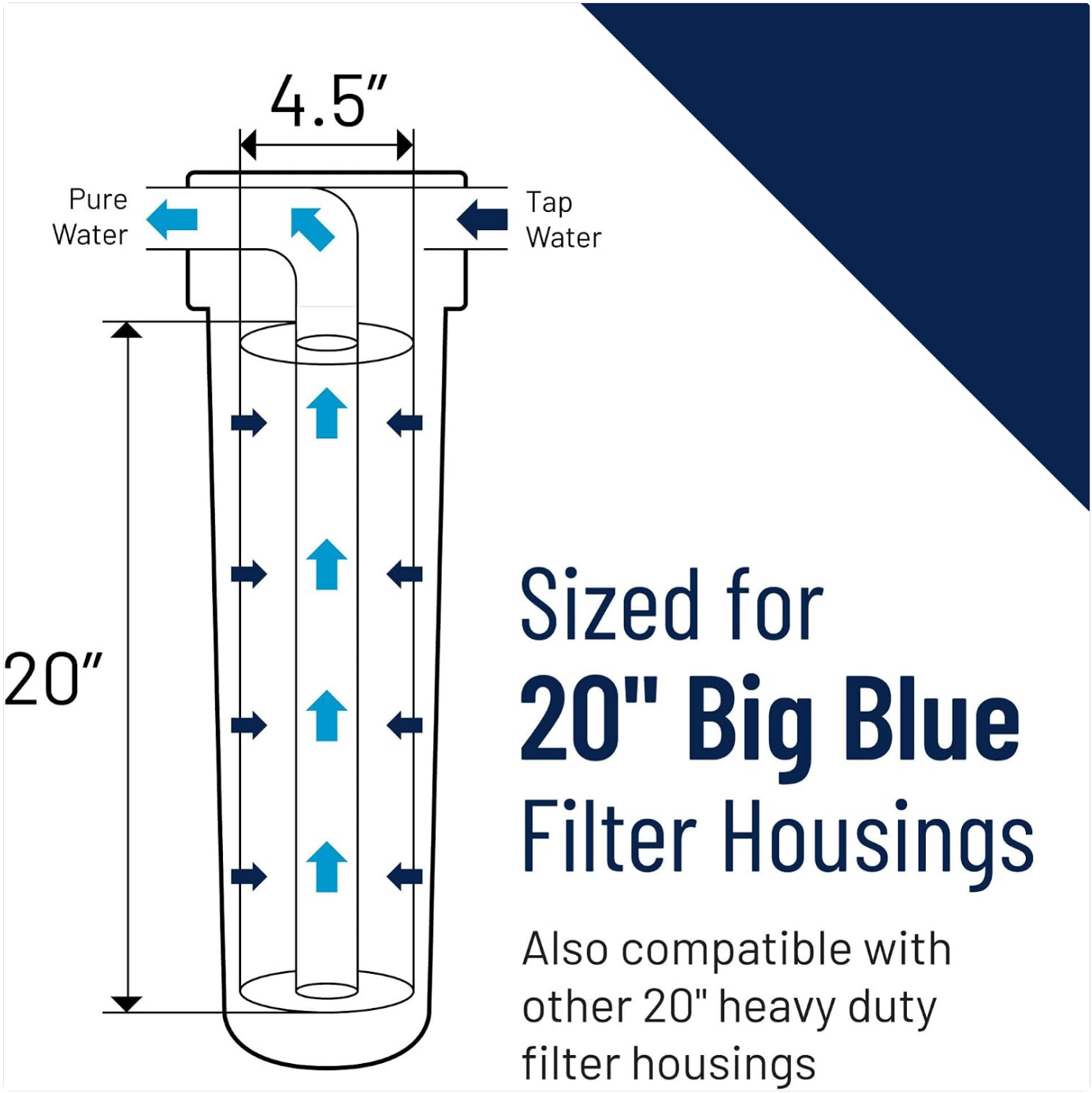


Image: Comprehensive protection for water-using appliances and plumbing fixtures through whole-house filtration.

7. Maintenance

Regular maintenance is crucial for optimal performance of your Pentair Pentek RFFE20-BB filter. The primary maintenance task is timely cartridge replacement.

Filter Replacement Frequency:

It is recommended to replace the Pentair Pentek RFFE20-BB filter cartridge every 3 months for 3 PPM iron reduction with a family of four, or when you notice a drop in water pressure or quality (e.g., return of metallic taste or rust stains). Timing can vary depending on your specific water source and usage.



Image: Filter replacement recommendation and pro tip for combination use.

Approximate System Life:

The approximate life of the system depends on the iron level in your water and daily water usage. The table below provides general estimates:



Image: Approximate life of system based on iron level and water usage.

Note: Water conditions outside of the specified limits may lead to a shortened filtration life. If your water contains iron bacteria, shock chlorination is recommended.

Cleaning the Housing:

The filter housing should be cleaned and disinfected during each filter replacement as detailed in the installation section (Step 6).

8. Troubleshooting

If you encounter issues with your water filtration system, consider the following common problems and solutions:

- **Reduced Water Flow:**
  - **Cause:** The filter cartridge is likely clogged with accumulated sediment and iron particles.
  - **Solution:** Replace the filter cartridge.
- **Cloudy Water After Filter Replacement:**
  - **Cause:** Trapped air in the system.
  - **Solution:** This is normal. Continue flushing the system as per installation instructions. The cloudiness should disappear after a short period of use.
- **Return of Metallic Taste or Rust Stains:**
  - **Cause:** The filter cartridge has reached its capacity for iron reduction.
  - **Solution:** Replace the filter cartridge.
- **Leaks Around Housing:**
  - **Cause:** O-ring is improperly seated, damaged, or not lubricated.
  - **Solution:** Turn off water, release pressure, remove housing, inspect and properly seat/lubricate or replace the O-ring. Ensure housing is hand-tightened securely.

9. Warranty and Support

Manufacturer Warranty:

The Pentair Pentek RFFE20-BB filter cartridge comes with a 30-day manufacturer warranty. Please retain your proof of purchase for warranty claims.

Customer Support:

For further assistance, technical support, or to inquire about replacement parts, please contact Pentair customer service. Refer to the official Pentair website or product packaging for the most current contact information.

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