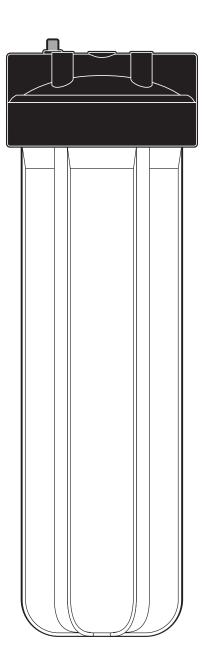


# FLOPLUS PROTECT 20BB HEAVY DUTY PFAS REDUCTION SYSTEM INSTALLATION AND OPERATING INSTRUCTIONS



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#### **SPECIFICATIONS**

Pressure Range:	30–90 psi (2.1–6.9 bar)
Flow Rate:	5 gpm (18.9 Lpm)
Temperature Range: .	40-100°F (4.4-37.7°C)
Capacity:	40,000 Gallons (151,416 L)
System Includes	

#### System Includes

- Housing
- FloPlus Protect 20BB cartridge
- Mounting bracket
- · Housing wrench

#### Materials Required (not supplied)

Depend on location and type of pipe
Galvanized fittings must be used on galvanized pipe

#### **Tools Required**

- Pencil
- Adjustable wrenches (2)
- File
- Screwdriver
- Pipe cutter or hacksaw

#### PRECAUTIONS

**WARNING:** Do not use with water that is microbiologically unsafe or of unknown quality without adequate disinfection before or after the system.

**CAUTION:** Filter must be protected against freezing, which can cause cracking of the filter and water leakage.

**CAUTION:** The rubber O-ring provides the watertight seal between the cap and the bottom of the housing. It is important that the O-ring be properly seated in the groove below the threads of the housing or a water leak could occur.

**CAUTION:** Because of the product's limited service life and to prevent costly repairs or possible water damage, we strongly recommend that the bottom of all plastic housings be replaced every ten (10) years. If the bottom of your housing has been in use for longer than this period, it should be replaced immediately. Date the bottom of any new or replacement housing to indicate the next recommended replacement date.

NOTE: For cold water use only.

NOTE: Do not install where system will be exposed to direct sunlight.

NOTE: Make certain that installation complies with all state and local laws and regulations.

**NOTE:** The contaminants or other substances removed or reduced by the selected cartridge are not necessarily in your water. Ask your local water municipality for a copy of their water analysis, or have your water tested by a reputable water testing lab.

**NOTE:** After prolonged periods of non-use (such as during a vacation) it is recommended that the system be flushed thoroughly. Let water run for five (5) to six (6) minutes before using.

**NOTE:** The filter cartridges used with this system have a limited service life. Changes in taste, odor, and/or flow of the water being filtered indicate that the cartridge should be replaced.

**NOTE:** Please read all instructions, specifications, and precautions before installing and using this filter.

NOTE: Spent adsorption media will not be regenerated and used.

**NOTE:** If adsorption media is affected by chlorine, influent water will need to be treated to remove chlorine.

## INSTALLATION

## NOTE:

- For installation on galvanized, copper or plastic pipe. Style of fittings may vary from those shown, depending on type and size of pipe.
- Use only plumber's tape for fitting housing connections.
- Install filter cartridge in filter housing according to the filter cartridge replacement instructions (below) before proceeding with installation.
- Install filter after water meter or pressure tank.
- Numbered diagrams correspond with numbered steps.
- 1. Turn off cold water supply (A) and open nearest faucet (B) to release pressure in pipes before starting installation.
- 2. Assemble all fittings. Start adapters into cap by hand. Use a wrench to tighten firmly. **DO NOT OVERTIGHTEN.**
- Measure length (C) across assembled fittings and subtract 1" if you are installing on 3/4" pipe, or 11/2" if you are installing on 1" pipe. Mark section of main line pipe to be removed.

Using a pipe cutter or hacksaw, cut pipe and remove marked section (C) and thread ends of the remaining pipe. Wrap threads with plumber's tape.

Align filter assembly with ends of pipe, making certain cap opening marked "IN" is facing your incoming water supply. It will be necessary to spread ends of pipe apart to install filter assembly. Using two (2) adjustable wrenches, hold inlet adapter securely with one wrench and tighten with second wrench. Repeat process for outlet adapter.

**CAUTION:** If water pipes are used to ground electrical systems, appliances or phones, be certain to install a jumper wire.

4. Attach bracket to cap with screws. Attach bracket with cap to wall.

**NOTE:** The top of the bracket should be no less than 34" off the floor allowing a 5" clearance below housing to enable filter cartridge changes.

## FILTER CARTRIDGE REPLACEMENT

- A. (1) Turn off water supply to filter. (2) Depress red pressure-relief button to release trapped air.
- B. Place a bucket or container under bottom of housing.
- C. Remove bottom of housing by turning clockwise.

**NOTE:** If turning off water supply to the filter will also turn off water to the rest of the home, be sure to fill a bucket of water first to allow you to clean the housing after it has been removed.

D. Locate and remove large O-ring (3), wipe clean of lubricant, and set aside. Discard used cartridge (4). Rinse out bottom of housing and fill 1/3 full with water. Add two (2) tablespoons of bleach and scrub cap and bottom of housing with non-abrasive sponge or cloth. Rinse thoroughly.

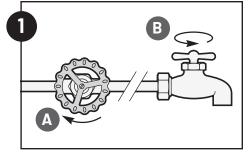
Lubricate  $\mbox{O-ring}(3)$  with clean silicone grease. Insert  $\mbox{O-ring}$  back into groove and smooth into place with finger.

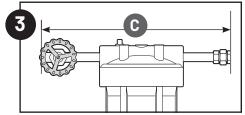
**NOTE:** This step is important to ensure proper housing seal. Make sure O-ring is seated level in the groove.

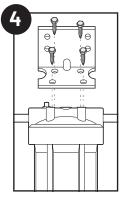
Insert new cartridge (3) over standpipe in bottom of housing.

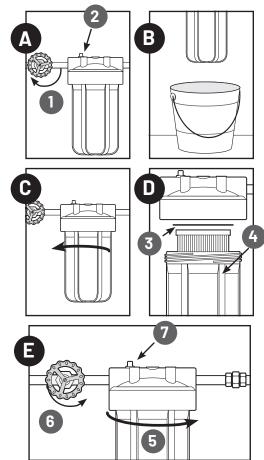
E. (5) Screw bottom of housing onto the cap and hand-tighten. **DO NOT OVERTIGHTEN.** Make certain cap standpipe slips into cartridge.

(6) Turn on water supply slowly to allow filter to fill with water. (7) Depress red pressurerelief button (if present) to release trapped air. Flush cartridge for five (5) minutes at 5 gpm before use. Check for leaks before leaving installation.









## TROUBLESHOOTING

#### Leaks ...

## ...between cap and bottom of filter housing:

- 1. Turn off water supply and open a faucet closest to the system to release trapped air. Remove bottom of housing.
- 2. Clean O-ring and O-ring groove (located directly beneath threads of housing). Lubricate O-ring with clean silicone grease and replace securely into groove. Screw bottom of housing onto cap and hand-tighten. **DO NOT OVERTIGHTEN.**

## ... on inlet/outlet connections:

- 1. Turn off water supply. For brass fittings, tighten nut snugly about half of a turn with a wrench.
- 2. Turn on water supply. If leaks persist, or if there are other leaks on the system, turn off water supply. Call Pentair Technical Support at 800.279.9404.

## MAINTENANCE

Filter must be maintained according to manufacturer's instructions, including replacement of the filter cartridge. Contact your nearest Pentair water filter dealer for replacement cartridge pricing, or call 800.279.9404.

#### **PERFORMANCE DATA**

**Important Notice:** Read this performance data and compare the capabilities of the system with your actual water treatment requirements. It is recommended that the supply water be tested, before installing a water treatment system, to determine your water treatment needs.

**NOTE:** The contaminants or other substances removed or reduced by this system are not necessarily in your water.

This system has been tested according to NSF/ANSI 53 for the reduction of the substances listed below. The concentration of the indicated substances in water entering the system was reduced to a concentration less than or equal to the permissible limit for water exiting the system, as specified in NSF/ANSI 53. Testing was performed under standard laboratory conditions; actual performance may vary.

#### Model: FloPlus Protect 20BB with FloPlus Protect 20BB Cartridge

Substance	Influent Challenge Concentration	Max Permissible Product Water Concentration	Average Reduction
Perfluorooctanoic Acid (PFOA) and Perfluorooctane Sulfonate (PFOS)	0.0015 mg/L ± 20%	0.00002 mg/L	99.82%
Perfluorohexane Sulfonic Acid (PFHxS)	0.0003 mg/L ± 20%	0.00002 mg/L	99.39%
Perfluorononanoic Acid (PFNA)	0.0004 mg/L ± 20%	0.00002 mg/L	98.34%
Perfluoroheptanoic Acid (PFHpA)	0.0005 mg/L ± 20%	0.000006 mg/L	97.48%

## **Test Conditions:**

Flow Rate:	. 5 gpm (18.9 Lpm)
Inlet Pressure:	. 60 psi (4.1 bar)
pH:	. 7.5 ±0.5
Temperature:	. 68°F ±5F° (20°C ±2.5C°)

## Operating Requirements for Floplus Protect 20BB System:

Pressure:	. 30-90 psi (2.1-6.1 bar)
Temperature:	.40-100°F(4.4-37.8°C)
Capacity	. 40,000 Gallons (151,416 L)
Pressure Drop:	. 3.55 psig

**WARNING:** Do not use with water that is microbiologically unsafe or of unknown quality without adequate disinfection before or after the system.

**NOTE:** The system must be maintained according to manufacturer's recommendations, including replacement of filter cartridges.

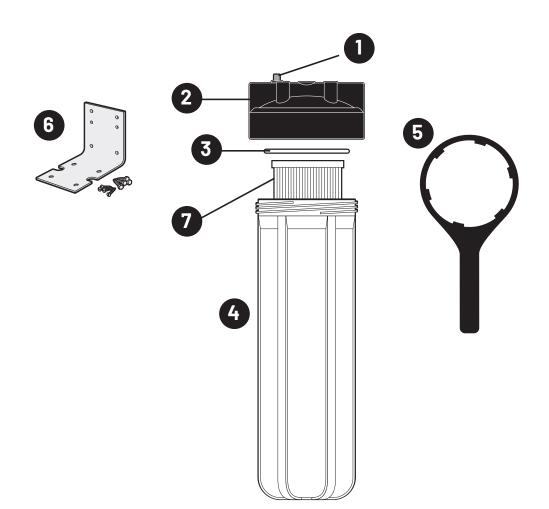


The FloPlus Protect 20BB is certified by IAPMO R&T against NSF/ANSI 53 for the reduction of claims specified on the Performance Data Sheet.

# **REPLACEMENT PARTS**

1	151039	Pressure Relief Button Kit
2	154166	Black Cap, 1" w/Pressure Relief
3	151122	0-ring, Cap
4	153070	20" Blue Housing
5	SH144368	Housing Wrench for 20" BB Housing
6	150061	Mounting Bracket, Screw Kit
7	655230-43	FloPlus Protect 20BB Cartridge

For replacement parts, contact your nearest Pentair water filter dealer or call 800.279.9404



For Pentair Product Warranties visit the website or contact Pentair at the phone numbers below: Para obtener garantías de productos Pentair, visite el sitio web o comuníquese con Pentair a los números de teléfono a continuación: Pour connaître les garanties des produits Pentair, visitez le site Web ou contactez Pentair aux numéros de téléphone ci-dessous :

Pentair.com/assets/residential-filtration-warranty



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