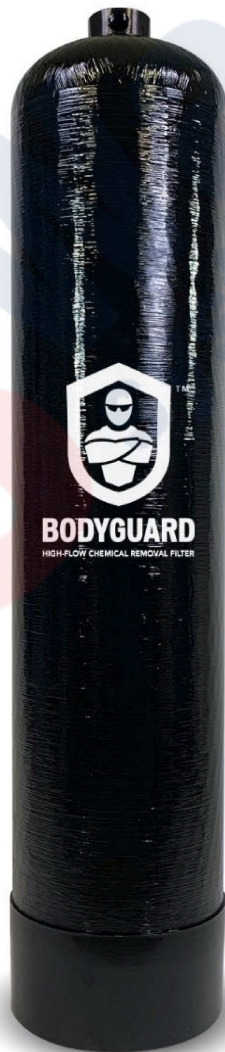


**USWater**  
systems.com

# Bodyguard High Flow Chemical Removal Filter

117-PBG-1.5-XXX



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## Unpacking and Inspection

Be sure to check the entire unit for any shipping damage or lost parts. Also note damage to the shipping cartons. Contact US Water Systems at 1-800-608-8792 to report any shipping damage within **24 hours of delivery**. Claims made after 24 hours may not be honored. Small parts, needed to install the unit, will be in a parts bag. To avoid loss of the small parts, keep them in the parts bag until you are ready to use them.

## Safety Guide

- Check and comply with your provincial / state and local codes. You must follow these guidelines
- Use care when handling the system. Do not turn upside down, drop, drag, or set on sharp protrusions
- **WARNING:** This system does not remove biological contaminants. US Water Systems recommends that bacteria levels be checked periodically to ensure there is no bacteria present. Coliform and E.coli most importantly.

## Bodyguard High Flow Chemical Removal Filter

Made for heavy-duty commercial applications, the Bodyguard High-Flow Chemical Removal Filter is designed to provide the highest performance at the lowest maintenance cost. This filter uses premium Coconut Shell Granular Activated Carbon and Catalytic Carbon rated at 5 years or 1,000,000 gallons to remove chlorine, chloramine, and a plethora of chemicals and pesticides. The Bodyguard High-Flow Chemical Removal Filter features all NSF & WQA certified components, it is easy to install, and comes backed with a 10-year parts warranty.

### Benefits

- Reduces or removes chlorine, chloramine, chemicals and pesticides
- Eliminates tastes and odors
- Delivers softer skin and hair by eliminating the chemical irritants
- Uses no electricity
- No wasted water
- Uses all NSF & WQA certified components
- Easy installation - just two connections
- Highly durable commercial grade system
- Carbon lasts 5 years or up to 1,000,000 gallons
- 10 Year Parts Warranty

## Before Starting Installation

### Proper Installation

*This water system must be properly installed and located in accordance with the Installation Instructions before it is used or the warranty will be void.*

- **Do not** install or store where it will be exposed to temperatures below freezing or exposed to any type of weather. Water freezing in the system will break it. Do not attempt to treat water over 100°F
- **Do not** install in direct sunlight. Excessive sun or heat may cause distortion or other damage to non-metallic parts.
- Maximum allowable inlet water pressure is 100 psi. If daytime pressure is over 80 psi, night time pressure may exceed the maximum. Use a pressure reducing valve to reduce the pressure.
- System must be operated in a vertical position. Do not lay it down during operation.
- A bypass valve should be installed on every system to facilitate installation and service.
- Observe all local plumbing and building codes when installing the system.

## Specifications

Please review operating pressures, temperatures and water chemistry limitations to ensure compatibility.

Specifications	PBG-1.5-300	PBG-1.5-400	PBG-1.5-500	PBG-1.5-700
Tank Size	14" x 65"	16" x 65"	18" x 65"	21" x 62"
Plumbing Connections	1.5" FPT			
Gravel Quantity - Pounds	50	75	100	150
Carbon Blend - Cubic Feet	3	4	5	7
Maximum Flow Rate	25 GPM	30 GPM	38 GPM	50 GPM
Approximate Flow Rate @ 15 PSI Pressure Drop	15 GPM	20 GPM	25 GPM	35 GPM
Approximate Flow Rate @ 25 PSI Pressure Drop	25 GPM	30 GPM	38 GPM	50 GPM
Electrical Requirements	No Electricity Needed			
Water Pressure	Min. 20 - Max 125 PSI			
Temperature	40°F - 110°F			
pH	6.5 - 8.5			
Chlorine	< 3 mg/L			
Ferrous Iron, Max*	0.3 mg/L			

Due to the unique properties of the BodyGuard media, there are some requirements for using the Bodyguard High Flow Chemical Removal Filter in conjunction with other filtration or forms of water treatment.

- Do not apply phosphate or any other anti-scalant before the Bodyguard filter.
- Iron or other "blinding" contaminants should be removed prior to the Bodyguard filter.
- Do not use the Bodyguard filter on water with chlorine concentrations higher than 3 mg/L (ppm)

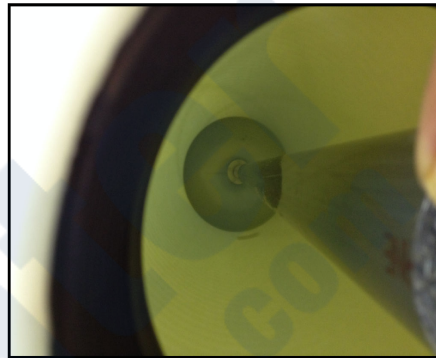
## System Dimensions

Dimensions	PBG-1.5-300	PBG-1.5-400	PBG-1.5-500	PBG-1.5-700
A	68.1"	68.1"	68.1"	65.1"
B	65"	65"	65"	62"
C	14"	16"	18"	21"

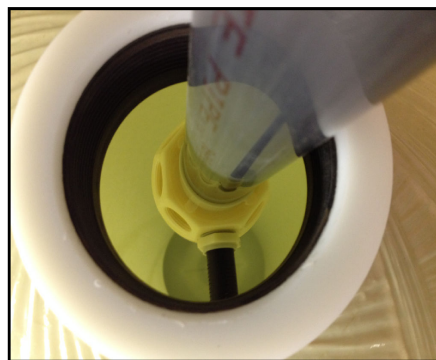
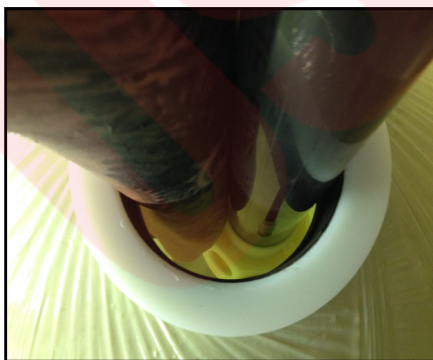


## Installation

1. Remove the tank from the shipping carton.
2. Tanks will be shipped with a distributor system. These can be conventional "stack" distributors or "hub and lateral" distributors. The stack distributor is complete when shipped and only needs to be centered in the pressure vessel.

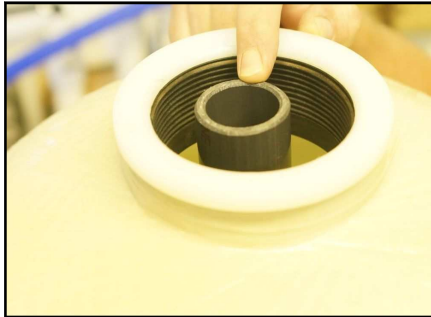


Hub and lateral distributors may be assembled or have to be assembled onsite. This will depend on the tank size. The hub and lateral distributor is installed by inserting the hub and distributor tube in the tank. Then the laterals can be installed by reaching in the tank and screwing them clockwise in the hub. These should be installed hand tight and snugged further about 1/8" of turn using channel locks or an adjustable wrench. Once all the laterals are screwed into the hub, the entire hub and lateral distributor can be centered in the tank.





3. Use a piece of duct tape to cover the top of the distributor tube to ensure media does not enter the tube.



4. Use the funnel provided to pour the media into the tank. The order the media is poured is important. Begin by pouring the gravel media first. Once done, the distributor stack or hub and lateral should be completely covered by the gravel. Proceed to pour the carbon blend media next. A helper may be needed to hold the funnel during the filling process.

**CAUTION:** If a hub and lateral distributor is used, fill the tank with water about 10" - 12" above the hub and lateral. This will prevent the gravel and media from breaking the laterals when it is poured in the tank.

**NOTE:** It is recommended that a dust mask and safety goggles be worn to prevent possible injury.

5. Once the media has been installed, remove the funnel and duct tape from the distributor tube.
6. Lubricate the inner and outer O-ring of the in/out head.
7. Install the in/out head onto the distributor tube inside the media tank. Once installed, turn the head clockwise to tighten it hand tight. Be sure the head is not cross threaded.



8. Install plumbing fittings into the inlet of the in/out head. Be sure to use Teflon tape on the fittings. Tighten them hand tight then, using a pair of channel locks, tighten an additional 1/4 turn.



9. Proceed to connect the inlet plumbing to the inlet port of the in/out head.



10. Install plumbing fittings into the outlet of the in/out head. Be sure to use Teflon tape on the fittings. Tighten them hand tight then, using a pair of channel locks, tighten an additional 1/4 turn.



11. Place a bucket close to the outlet port of the filter system. Convey a piece of piping or a drain line from the outlet port of the in/out head to the bucket. This will be used to flush the system.
12. Slowly open the main supply valve (user supplied) to the Bodyguard High Flow Chemical Removal Filter system. Allow the tank to fill with water. Close the supply valve when a steady stream of water comes out of the outlet port and the water is running clear.

**NOTE: The water may have a black tint until the carbon filter is flushed. This is normal.**

13. Once the system is flushed, connect the outlet of the in/out head to the plumbing supplying the rest of the treatment system.



14. Open faucets downstream from the Bodyguard High Flow Chemical Removal Filter system to relieve any trapped air.
15. Check for leaks. Repair as needed.
16. The system is now ready for service.

## Warranty

For the lifetime of the original purchaser, at the original residential place of installation of this Bodyguard High Flow System, **US WATER SYSTEMS, INC.** warrants the following:

**10 YEARS: Media Tank** - Free of all costs to you except transportation and labor charges, we warrant that, for ten (10) years from the date of purchase, we will replace or repair the fiberglass media tank, if for any reason it is found to be defective, because of faulty materials or workmanship.

**10 YEARS: Head Assembly** - We warrant that, for ten (10) years from the date of purchase, we will replace the head assembly at no charge to you except for transportation and standard labor charges.

**GENERAL PROVISIONS** - This warranty does not apply to any commercial or industrial installations or to any part of the water conditioner which has been subjected to misuse, neglect, alteration or accident; or to any damage caused by fire, flood, freezing, Acts of God, or any other casualty, or if the original serial numbers have been removed. Fouling or damage to the media caused by iron, sulfur, bacterial iron, silt, sand, tannins, organics, bacteria, hot water or chlorine voids the warranty on media.

These warranties are in lieu of all other warranties expressed, or implied, and we

do not authorize any person to assume for us any other obligation on the sale of this water conditioner. No responsibility is assumed for delays or failure to meet these warranties caused by strike, government regulations or other circumstances beyond the control of US WATER SYSTEMS, INC.

To obtain warranty service, call or write: US WATER SYSTEMS, INC. 1209 Country Club Road Indianapolis, IN 46234 (800) 608-USWA.

ANY IMPLIED WARRANTIES OF FITNESS OR MERCHANTABILITY ARE LIMITED TO THE TERMS OF THIS EXPRESSED WARRANTY AND THERE ARE NO WARRANTIES WHICH EXTEND BEYOND THOSE HEREIN. US WATER SHALL NOT BE LIABLE FOR ANY INCIDENTAL OR CONSEQUENTIAL DAMAGES.

Some states do not allow the exclusion or limitations of incidental or consequential damages so the above limitation may not apply to you. This warranty gives you specific legal rights, and you may also have other rights which vary from state to state.

THIS WARRANTY MAY BE TRANSFERRED TO A SUBSEQUENT OWNER WITH WRITTEN APPROVAL OF US WATER AND PAYMENT OF STANDARD TRANSFER FEE.