



# Water Filter

## Installation and Operating Instructions

### Specifications

Filter Housing	Temperature Range	Pressure Range	Optional Accessories
3/4-inch I/O	40–125°F (4.4–51.7°C)	30-125 psi (2.1-8.62 bar) Spanner Wrench (150295)	Mounting Bracket (151011)
1/4, 3/8, 1/2-inch I/O	40–125°F (4.4–51.7°C)	30-125 psi (2.1-8.62 bar) Spanner Wrench (150539)	Mounting Bracket (244047)
1-inch, 1-1/2-inch I/O	40–100°F (4.4–37.8°C)	30-100 psi (2.1-6.89 bar) Spanner Wrench (150296)	Mounting Bracket (150062)

### Tools Required

Screwdriver  
2 Adjustable Wrenches

File  
Pencil

Pipe Cutter or Hacksaw

### Materials Required

Depends on type, size, and location of pipe on which system will be installed. See instructions that relate to your particular installation, or consult your local hardware store or plumbing supplier to find out more about your particular installation needs.

### 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 water-tight 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:** To prevent costly repairs or possible water damage the sump of plastic housings must be replaced every five years for clear, and ten years for opaque. If sump is older than recommended, replace immediately. Date sump for reference and indicate replacement date.

- Install on cold water line only.
- Do not install where system will be exposed to direct sunlight.
- Make certain that installation complies with all state and local laws and regulations.
- For prolonged periods of non-use (such as during a vacation), it is recommended that the system be flushed thoroughly. Let water run for 5–6 minutes before using.
- The filter cartridge has a limited service life. A decrease in water flow indicates that the cartridge should be replaced.
- Some harmless bacteria will attack cellulose media cartridges. If your cartridge seems to disintegrate or has a musty or moldy odor, switch to a synthetic media cartridge or consult the cartridge manufacturer.

# Whole House Installation (1/2 inch or 3/4-inch main cold water line)

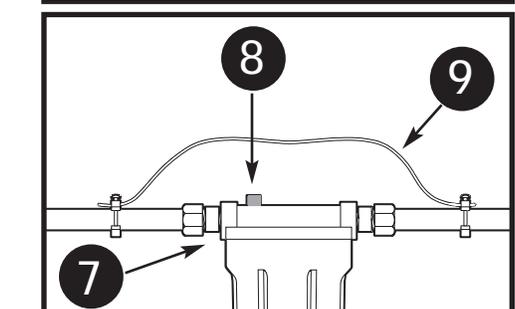
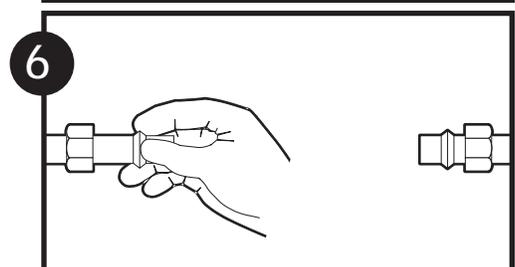
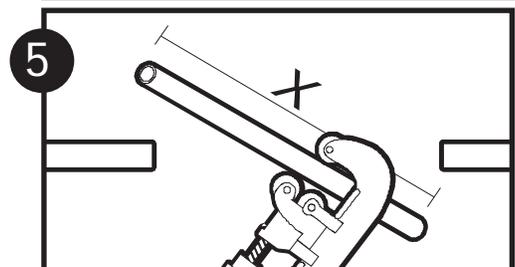
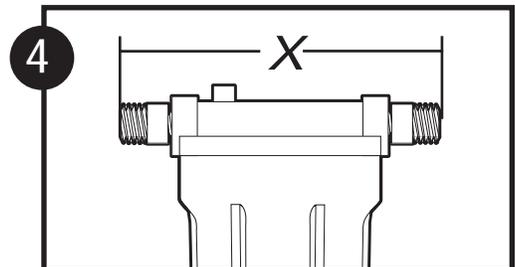
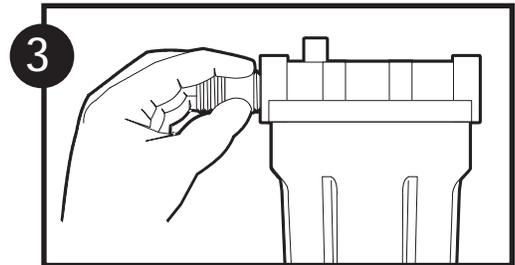
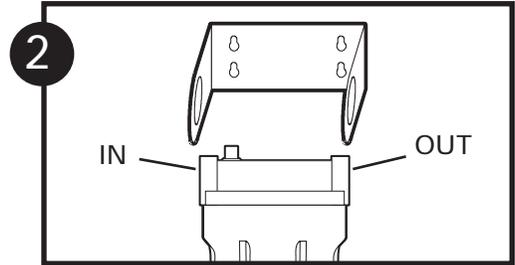
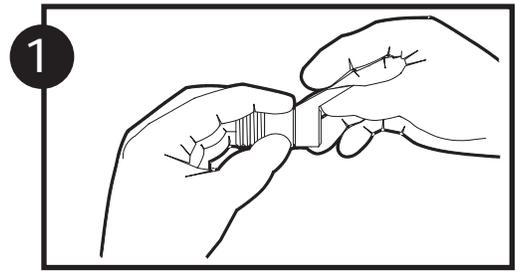
## Materials Required:

- (2) 3/4-inch or 1/2-inch NPT compression fittings
- Teflon® tape
- Reducing adapters (if necessary)

## NOTE:

- Reducing adapters can be used to adapt the filter to different pipe sizes. See your local hardware store or plumbing store for help in selecting the necessary adapters and compression fittings for your installation needs.
- Galvanized fittings must be used with installation on galvanized pipe.
- Filter must be installed after water meter or pressure tank.

1. Turn off cold water supply and open nearest faucet to drain pipes before starting installation. Wrap about 6 inches of Teflon® tape in clockwise direction around pipe threads of each compression fitting.
2. If mounting bracket (not supplied) is to be used, first use bracket as a template to mark screw locations. Then place bracket over cap and align with inlet and outlet ports. Allow 1-1/2 inch clearance below housing to enable cartridge changes.  
**NOTE:** Mounting bracket for heavy-duty filter does not fit over inlet/outlet connections. Heavy-duty bracket should be screwed directly into cap or filter.
3. Start compression fittings into cap by hand and use a wrench to tighten firmly. DO NOT OVERTIGHTEN. About one thread should remain visible. Remove compression nuts from fittings.
4. Measure length (shown as X on Figure 4) across assembled fittings and subtract 1 inch if you are installing on 3/4-inch pipe or 1/2 inches if you are installing on 1/2-inch pipe. Mark section of pipe to be removed.
5. Use a pipe cutter or hacksaw, cut pipe and remove marked section of pipe. File or sand sharp edges on remaining pipe.
6. Slip compression nut and ferrule onto each end of pipe.
7. 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 adjustable wrenches, hold incoming adapter securely with one wrench and tighten nut with second wrench. Repeat process for outgoing adapter.
8. Slowly turn on the water supply to allow filter to fill with water, then press the red pressure-relief button on top of filter to release trapped air. Open nearest faucet and flush water through cartridge for 5 minutes. Check for leaks before leaving installation.
9. **CAUTION:** If water pipes are used to ground electrical systems, appliances, or phones, be certain to install a jumper wire. Contact a qualified electrician with any questions about your home's electrical system.



# Undersink Installation (3/8-inch cold water line)

## Materials Required:

- Teflon® tape
- Plastic tubing
- (2) 3/8-inch compression fittings
- (2) 3/8-inch compression elbows (with ferrules and tubing inserts)
- (2) 3/8-inch to 3/4-inch NPT reducing adapters (for installation of 3/4-inch I/Os / filters)

## NOTE:

- Reducing adapters can be used to adapt the filter to different pipe sizes. See your local hardware store or plumbing store for help in selecting the necessary adapters and compression fittings for your installation needs.
1. Turn off cold water supply and open nearest faucet to drain pipes before starting installation. Place a tray or towel under the cold water line to catch excess water. Wrap about 6 inches of Teflon® tape in clockwise direction around pipe threads of each fitting / adapter.
  2. Attach the mounting bracket:  
3/4-inch filters—see #2 under Whole House Installation  
3/8-inch filters—using the self-tapping screws, attach mounting bracket to cap.  
  
Mark location under sink where filter is to be mounted. Allow 1½ inches under filter to enable cartridge changes.
  3. Assemble fittings/adapters. Start fitting/adapter into inlet of cap by hand, then tighten with a wrench. DO NOT OVERTIGHTEN. About one thread should remain visible. Repeat for outlet on filter cap.
  4. Using a pipe cutter or hacksaw, remove a 3-inch section of pipe from the cold water line. Deburr ends of remaining pipe with a file.
  5. Determine the lengths of tubing needed to connect the inlet and outlet sides of the filter to compression elbows on the cold water line. Measure tubing short enough to prevent kinking. Using two wrenches, tighten compression nuts 1½- to 2-turns.
  6. Turn on water supply to allow filter to slowly fill with water, then press the pressure-relief button on the housing to release trapped air. Open faucet and flush filter with water for 5-minutes. Check for leaks and tighten fittings as needed.

## Cartridge Replacement

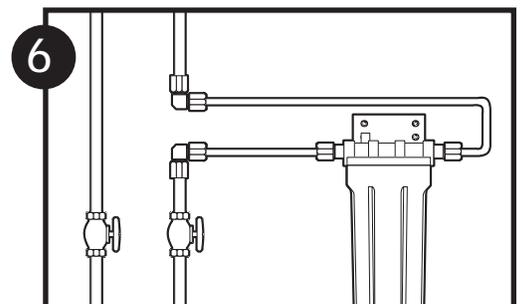
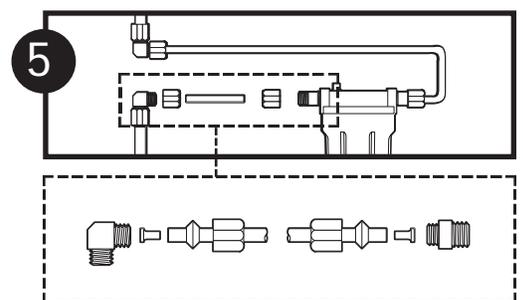
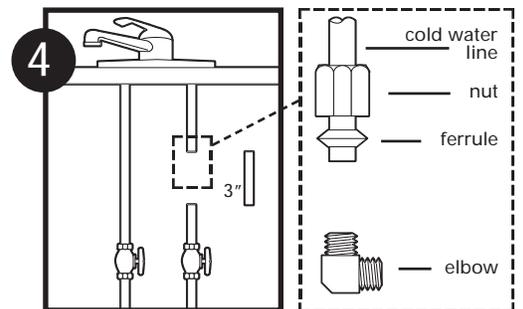
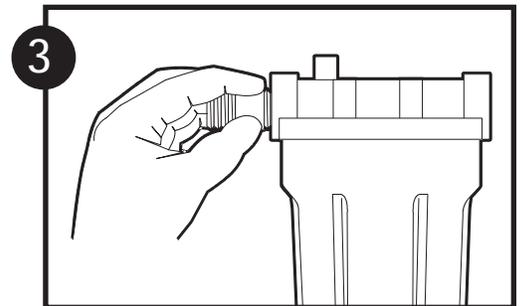
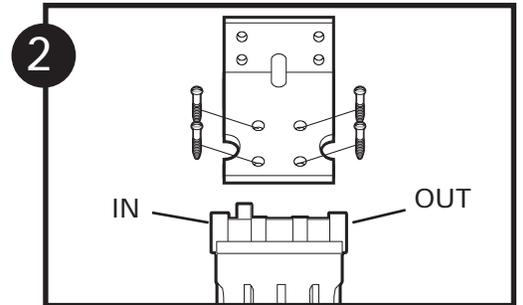
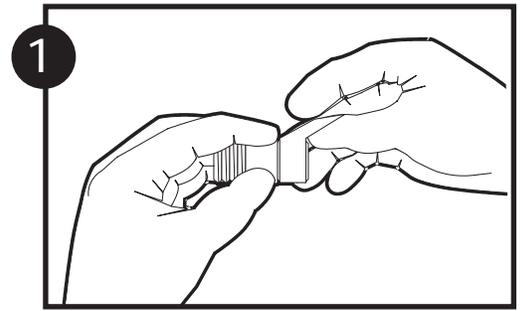
- A. Turn off water supply to filter. Depress red pressure-relief button to relieve the pressure, then twist off bottom of housing.
 

**NOTE:** If turning off water supply to filter will also turn off water supply to the rest of the home, be sure to fill a bucket of water first to allow you to clean housing after it has been removed.
- B. Locate and remove large o-ring, wipe clean of lubricant, and set aside.
 

Discard used cartridge. Rinse out bottom of housing and fill about 1/3 full with water. Add about 1 tablespoon of bleach and scrub cap and bottom of housing with nonabrasive sponge or cloth. Rinse thoroughly.

Lubricate o-ring with clean silicone grease. Clean groove and connection point on cap. Insert o-ring back into groove and smooth into place with finger. Insert new cartridge over standpipe in bottom of housing.
- C. Screw bottom of housing onto the cap and hand-tighten. DO NOT OVER-TIGHTEN. Make certain cap standpipe slips into cartridge.

Slowly turn on the water supply to allow filter to fill with water and then press the red pressure-relief button on top of the filter to release trapped air. Open faucet and flush filter with water for 5-minutes. Check for leaks before leaving installation.



## Troubleshooting

### Leaks...Between cap and bottom of housing:

1. Turn off water supply and press the red pressure-relief button.
2. Clean and lubricate o-ring if necessary, then screw bottom of housing onto cap and hand-tighten. DO NOT OVER-TIGHTEN.

### On unit inlet/outlet connections:

1. Turn off water supply. Tighten compression fittings with a wrench. DO NOT OVERTIGHTEN.
2. Turn on water supply. If leaks persist, or if there are other leaks on unit, turn off water supply. Call Pentek Technical Support at 1-800-861-8758.

## Replacement Filter Cartridges

### WHOLE HOUSE Sediment Cartridges

Model	Filtration Rating	Filter Material / Construction	Max Flow Rate/ Pressure Drop	Filter Life*	Reduces:				
					Scale & rust particles	Coarse sand	Sand, Dirt, silt	Fine sand, dirt, silt	Extra-fine sand, dirt, silt
P5	5 micron nom.	Spun Polypropylene	10 gpm/<1 psi	2 mo.	•	•	•	•	•
CP-5	5 micron nom.	Pleated Cellulose/Poly	10 gpm/< 1psi	2 mo.	•	•	•	•	•
CW-F	10 micron nom.	Cord-Wound	7 gpm/< 1 psi	3 mo.	•	•	•	•	
S1	20 micron nom.	Pleated Cellulose	10 gpm/< 1 psi	4 mo.	•	•	•		
CW-MF	30 micron nom.	Cord-wound	10 gpm/< 1 psi	3 mo.	•	•	•		
R30	30 micron nom.	Pleated polyester	12 gpm/< 1 psi	4 mo.	•	•	•		
R50	50 micron nom.	Pleated polyester	12 gpm/< 1 psi	4 mo.	•	•			

### UNDERSINK DRINKING Water Cartridges

Model	Filtration Rating	Filter Material / Construction	Max Flow Rate/ Pressure Drop	Filter Life*	Reduces:		
					Chlorine Taste & Odor	Bad Taste	Sediment
C1	5 micron nom.	Carbon-impregnated Cellulose	5 gpm/2 psi	3 mo.	•	•	•
CC-10	—	Granular Activated Carbon (coconut-shell)	1 gpm/3 psi	6 mo.	•	•	
GAC-10	—	Granular Activated Carbon	1 gpm/3 psi	6 mo.	•	•	
CBC®-10	.5 micron nom.	Activated Carbon Block	1 gpm/< 2 psi	12 mo.	•	•	•

### HEAVY-DUTY Cartridges

Model	Filtration Rating	Filter Material / Construction	Max Flow Rate/ Pressure Drop	Filter Life*	Reduces:				
					Scale and Rust particles	Coarse sand	Sand, dirt, silt	Fine sand, dirt, silt	Extra-fine sand, dirt, silt
CP5-BB	5 micron nom.	Pleated Cellulose /Polyester	20 gpm/< 1 psi	3 mo.	•	•	•	•	•
S1-BB	20 micron nom.	Pleated Cellulose	20 gpm/< 1 psi	4 mo.	•	•	•		
R30-BB	30 micron nom.	Pleated Polyester	25 gpm/< 1 psi	6 mo.	•	•	•		
R50-BB	50 micron nom.	Pleated Polyester	25 gpm/< 1 psi	6 mo.	•	•			
RFC-BB	25 micron nom.	Granular Activated Carbon	10 gpm/1 psi	3 mo.	Chlorine Taste & Odor	Bad Taste & Odor	Sediment	* Filter life depends on usage and water conditions.	
					•	•	•		

## WARRANTY

Pentek warrants to the original owner (under normal use): all products and parts to be free from defects in material and workmanship for a period of one (1) year. Notwithstanding the foregoing, (a) the warranty period for sumps shall be a period of five (5) years. Any replacement products furnished will be free from defects in material and/or workmanship for the remainder of the original warranty period, or 30 days, whichever is longer. This warranty does not cover: (1) cartridges, media, and accessories (2) defects not reported within the above time period, (3) items manufactured by other companies, (4) problems arising from failure to comply with Pentek instructions, (5) problems and/or damage arising from acts of nature, abuse, misuse, negligence or accident by any party other than Pentek, (6) problems and/or damage resulting in whole or in part from alteration, modification, repair or attempted alteration, modification or repair by any party other than Pentek, (7) noncompliance with applicable codes/ordinances. If a defect in workmanship and/or material in a product or part covered by the warranty should arise, Pentek, at its sole discretion, will repair or replace the defective product or part (Pentek may consider, in good faith, the customer's preference).

All claimed defective product must: (1) be authorized for return by Pentek with an RGA number (2) include proof of the purchase date of the product or part (3) returned to Pentek prior to the expiration of the warranty date, at the customer's expense, shipment pre-paid, (4) be accompanied by a letter detailing the Model Number, Serial Number (if any), and a brief description of the problem. TO THE MAXIMUM EXTENT PERMITTED BY APPLICABLE LAW, PENTEK DISCLAIMS ALL OTHER WARRANTIES, WHETHER EXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTY OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, WITH REGARD TO THE PRODUCTS, PARTS AND ANY ACCOMPANYING WRITTEN MATERIALS.

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