



Point of Use
Compact Whole House Water Filter Housing
Installation and Maintenance Instructions

Caution:

Read and follow all safety rules and operation instructions before first use of these products.

- Safety Guides
- Installation
- Operation
- Cartridge Replacement
- Repair Parts



SAFETY PRECAUTIONS

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

- Check with your state and local public works department for plumbing and sanitation codes. You must follow these guidelines as you install the water filtration System. System should be installed by a licensed plumber or other qualified contractor.
- Use the System on a potable, safe-to-drink, home COLD water supply only.
- Your System will stand up to 100 pounds per square inch (psi) water pressure. If house water supply pressure is higher than 100 psi, install a pressure reducing valve before installing the system. The most common residential operating range is 35-65 psi.
- Read the instructions carefully and learn the specific details regarding installation and use. Failure to follow them could cause serious bodily injury and/or property damage.
- Turn the water off to the house while installing 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: Housings may crack in time causing failure and leakage if exposed to organic solvents, such as those found in aerosol sprays for cleaning products and insecticides.

NOTE:

- Do not install where system will be exposed to direct sunlight.
- Make certain that installation complies with all state and local laws and regulations.
- 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.
- After 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 used with this system has a limited service life. Changes in taste, odor, color, and/or flow of the water being filtered indicate that the cartridge should be replaced.

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PLANNING THE INSTALLATION

When planning the installation, **first decide where to locate the water filter housing**

Select a location for the filter that is:

- Protected from freezing.
- Not exposed to direct sunlight.
- It is recommended that a shut-off valve be placed on both sides of the filter.

There are many variables to consider as you plan. Some of these are

- The water filter housing inlet and outlet internal threads.
- Existing plumbing type (copper, threaded, etc.) and nominal size (3/4" or 1" etc.)
- Tools you have and your plumbing skills.
- Cost of materials needed.
- Space available for installing the filter housing. Make a simple sketch of your proposed installation and a list of plumbing materials you will need. Obtain everything you need before starting the installation. Be sure you have the tools required.

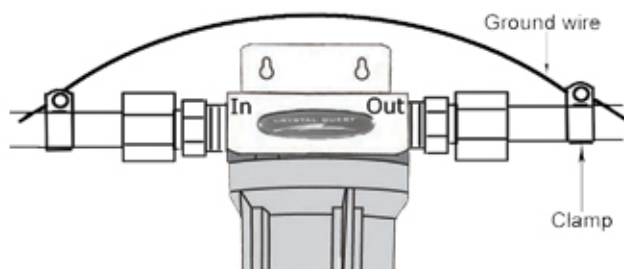
⚠ WARNING: A copper or galvanized cold water pipe may be used to ground electrical outlets in the home. Failure to maintain this ground path may result in an electric shock hazard. If the cold water pipe is used to ground electrical outlets, refer to "Installing the Ground Wire" section before cutting the pipe.

Installing the Ground Wire

NOTE: If your house plumbing is plastic, it would not be used as a grounding path, and this step should be skipped.

IMPORTANT: A copper or galvanized house cold water pipe is often used to ground electrical outlets in the home. Grounding protects you from electrical shock. The water filter housing may have broken this ground path. To restore connection, install an 18" long, 6-gauge copper wire across the filter, tightly clamped using UL approved 1/2"-1" bronze grounding clamps at both ends as shown. Zinc clamps should not be used on copper plumbing. Wire and clamps may be purchased separately from your local hardware store.

- Clean copper pipe and ends of wire with emery paper. Bare wire is recommended. If insulated wire is used, it should be stripped 3/4" at each end before cleaning with emery paper.
- Attach bronze clamps to pipe. Tighten screws.
- Attach wire to clamps as shown. Tighten screws.

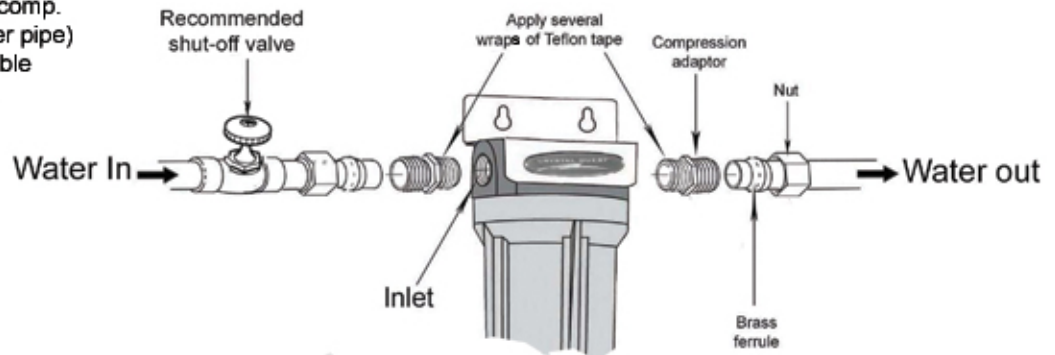


Installation on house main water pipe using compression fittings

Note: Be sure allow a minimum space of 1-1/2" to 2" under the filter for removing the sump

MATERIALS AND TOOLS NEEDED

- 2 compression adaptors, 3/4" or 1" x comp. (compression end to fit existing copper pipe)
- wrenches, either open end or adjustable jaw, size to fit compression adaptors
- tubing cutter
- Teflon tape
- sandpaper or emery-cloth



Select Location

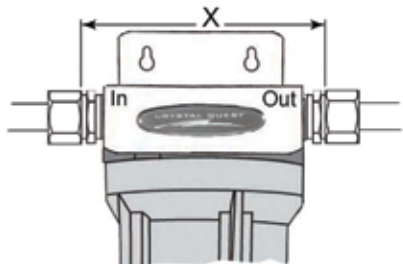
- Select a location for the filter that is:
- protected from freezing.
 - not exposed to direct sunlight.

NOTE: It is recommended that a shut-off valve be placed on both sides of the filter.

Cut Water Line

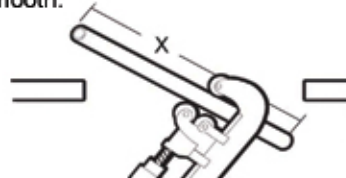
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- Turn off the water supply and open a nearby faucet to drain the water out of pipes.
- Using a tape measure or ruler, measure the distance "X" as shown.



NOTE: Have a bucket and towel available to collect excess water.

- Select a secure location surface to install filter and mounting bracket. The location should align the filter system with inlet and outlet pipe and should not cause the pipes to bend or damage. Mark the distance "X" on the pipe.
- Using a pipe cutter, cut pipe. Sand (file) cut ends of pipe to assure that they are square and smooth.

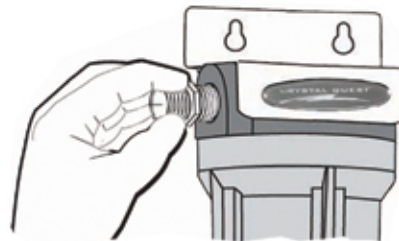


Installing Mounting Bracket and Fittings

- The bracket can be used as a template for marking the location of the mounting screws.
- Apply 4 or 5 wraps of Teflon tape, in a clockwise direction, to the pipe threads of each fitting. **DO NOT** use joint compound on any parts connecting to filter housing.



- Assemble fitting to the inlet and outlet of the head. Start each fitting by hand to make sure they don't cross thread. Use an adjustable wrench to tighten fittings. **DO NOT OVERTIGHTEN.**

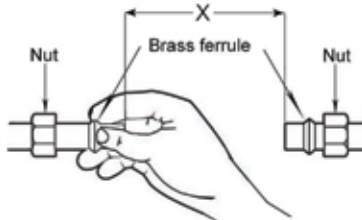


- Use four hex washer-head screws to mount bracket to the wall firmly. Use proper anchors on wall. Anchors are **NOT** included.

Installation on house main water pipe using compression fittings

Attach Fittings to Water Line

- Slip a compression nut onto each pipe.
- Next, slip the brass ferrule onto each pipe..



Installing the Unit

- Align filter assembly with pipe ends making certain that the incoming water supply is going into the filter opening marked "IN". It may be necessary to spread the pipe ends apart to install filter assembly.
- Using two adjustable wrenches, hold incoming fitting securely with one wrench and tighten nut with second wrench. Repeat this procedure for outgoing fitting.
- Install a filter and tighten canister to seal (see filter cartridge replacement section).

Final Check

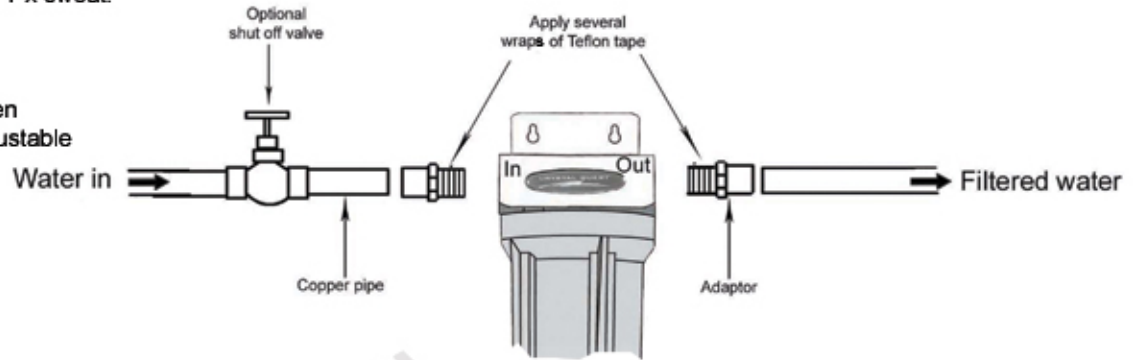
- Install filter if not already done (see Filter Cartridge Replacement Section).
- Slowly turn on water supply.
- Check entire system for leaks.
- If leaking from fittings, shut off water pressure and tighten or reseal fittings. If leaking from the canister, tighten canister with wrench.
- After installation, flush the cartridge for 10 minutes, wait one hour, then flush again for 10 minutes before using.

Installation on house main water pipe using soldered copper fittings

Note: Be sure allow a minimum space of 1-1/2" to 2" under the filter for removing the sump

MATERIALS AND TOOLS NEEDED

- 2 sweat adaptors, 3/4" or 1" NPT x sweat. (Sweat end to fit existing pipe)
- lead-free solder and flux
- soldering torch
- sandpaper or emery-cloth, open end (to fit sweat adaptor) or adjustable jaw wrench
- tubing cutter
- Teflon tape



Select Location

- Select a location for the filter that is:
- protected from freezing.
 - not exposed to direct sunlight.

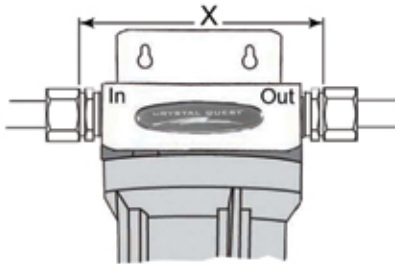
NOTE: It is recommended that a shut-off valve be placed on both sides of the filter.

Cut Water Line

WARNING: A copper or galvanized cold water pipe may be used to ground electrical outlets in the home. Failure to maintain this ground path may result in an electric shock hazard. If the cold water pipe is used to ground electrical outlets, please refer to "Installing the Ground Wire" section (page 3) before cutting the pipe.

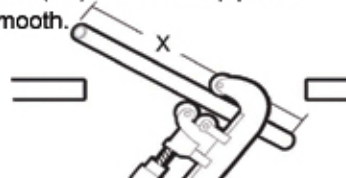
CAUTION: Heat created when soldering can damage the water filter housing. Be sure to use the following procedures to protect the water filter.

- Turn off the water supply and open a nearby faucet to drain the water out of pipes.
- Using a tape measure or ruler, measure the distance "X" as shown.



NOTE: Have a bucket and towel available to collect excess water.

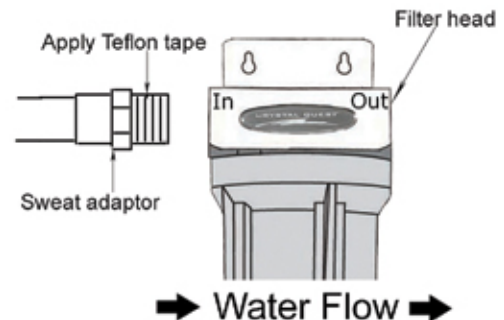
- Select a secure location surface to install filter and mounting bracket. The location should align the filter system with inlet and outlet pipe and should not cause the pipes to bend or damage. Mark the distance "X" on the pipe.
- Using a pipe cutter, cut pipe. Sand (file) cut ends of pipe to assure that they are square and smooth.



- Solder a sweat adaptor onto one of the pipe ends.
- Place, but do not solder, a straight connector onto the other pipe end.

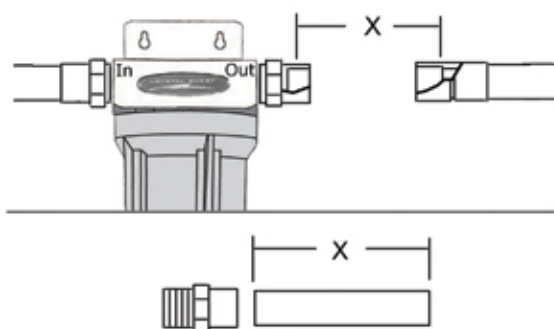


- Remove the sump from the filter head and set the sump aside.
- After it cools, apply several wraps of Teflon tape to the threads on the sweat adaptor fitting.
- Carefully turn the filter head INLET (if water flow is from the left) onto the sweat adaptor fitting. If water flow is from the right turn the outlet side of the head onto the fitting. Do not cross-thread or over-tighten as this will crack the filter head.



Installation on house main water pipe using soldered copper fittings

The distance "X" as shown below. Mark this same dimension on a length of copper pipe. Cut the length of pipe.



- Remove the sweat adaptor fitting from the filter head and solder to the cut length of pipe.
- After it cools, apply several wraps of Teflon tape to the threads on the sweat adaptor fitting. Apply flux and place the pipe end of the soldered assembly into the straight connector. Then turn the adaptor end into the filter head and tighten.
- Solder both sides of the straight connector.
- Before replacing the sump and turning on the water supply; install the filter cartridge

Installing the Unit

- Align filter assembly with pipe ends making certain that the incoming water supply is going into the filter opening marked "IN". It may be necessary to spread the pipe ends apart to install filter assembly.
- Using two adjustable wrenches, hold incoming fitting securely with one wrench and tighten nut with second wrench. Repeat this procedure for outgoing fitting.
- Install a filter and tighten canister to seal (see filter cartridge replacement section).

Final Check

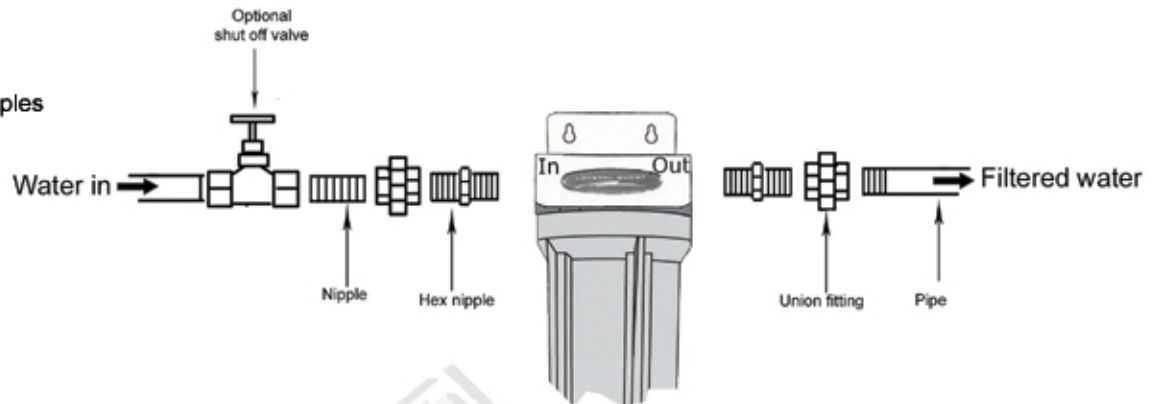
- Install filter, if not already done (see Filter Cartridge Replacement section).
- Slowly turn on water supply.
- Check entire system for leaks.
- If leaking from fittings, shut off water pressure and tighten or reseal fittings. If leaking from the canister, tighten canister with wrench.
- After installation, flush the cartridge for 10 minutes, wait one hour, then flush again for 10 minutes before using.

Installation on house main water pipe using threaded pipe and fittings

Note: Be sure allow a minimum space of 1-1/2" to 2" under the filter for removing the sump

MATERIALS AND TOOLS NEEDED

- pipe threading tool
- pipe wrenches
- pipe joint compound
- union fittings and pipe nipples
- tubing cutter
- Teflon tape



Select Location

Select a location for the filter that is:

- protected from freezing.
- not exposed to direct sunlight.

NOTE: It is recommended that a shut-off valve be placed on both sides of the filter.

⚠ WARNING: A copper or galvanized cold water pipe may be used to ground electrical outlets in the home. Failure to maintain this ground path may result in an electric shock hazard. If the cold water pipe is used to ground electrical outlets, please refer to "Installing the Ground Wire" section before cutting the pipe.

- Use pipe joint compound on all external threads.
- Do not turn pipe or fittings too tightly into the filter head or you may break it.
- It is important to have some linear movement in the house main water pipe. This will allow you to tighten union fittings without damaging the filter head if pipe lengths are not exact.

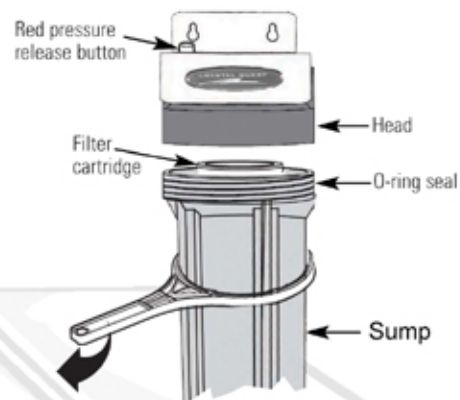
Filter Cartridge Replacement

You should change your filter cartridge when the water flow is noticeably reduced or using the time table below

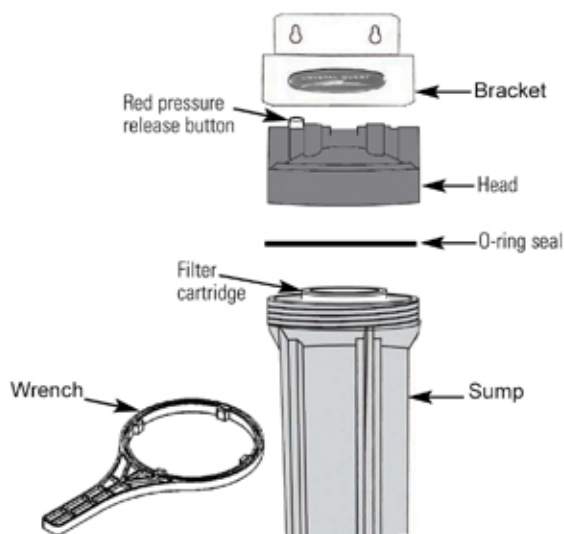
* Sediment every	every 12 months
* GAC or block carbon	every 12 months
* Multi Stages	every 18-24 months

You may need to change your cartridges more than indicated depending on consumption and condition of your water.

- Turn off water to filter. Water must be shut off from an upstream valve.
- Press the red pressure release button to release pressure.
- Unscrew the filter sump and discard used cartridge. Wash the filter sump with mild soap and water. Do not use harsh cleaners or hot water.
- Inspect the filter sump O-ring. Make sure it is lightly lubricated with clean food grade silicone grease or Vaseline. Be sure the O-ring is seated in the groove. It is recommended that you replace the O-ring as needed or if it becomes damaged.
- Place a new filter cartridge into the sump, making sure it is centered and completely seated on the bottom seal.
- Reinstall the filter sump to the unit. Use the canister wrench to tighten the sump. **DO NOT OVERTIGHTEN.**
- Slowly turn on water to the filter by using the upstream shut-off valve.
- Press the red pressure release button to remove trapped air.
- After installation, flush the cartridge for 10 minutes, wait one hour, then flush again for 10 minutes before using the water.



Parts





**KEEP THIS MANUAL FOR FUTURE
REFERENCE AND UNIT MAINTENANCE**

For Further Assistance Contact your
Crystal Quest® Dealer

Or visit us @ www.crystalquest.com

