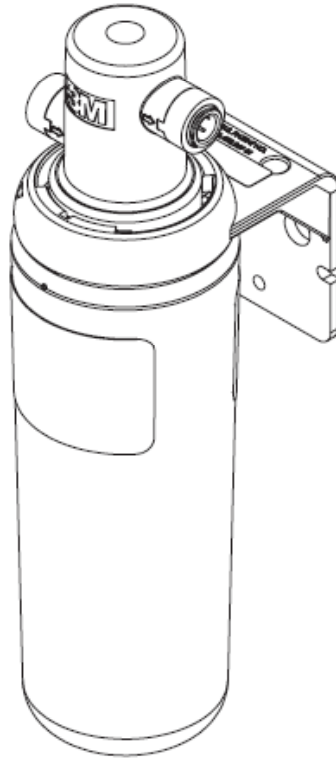




Water Filtration Products





**VH3/OWS120-L**  
**Water Filtration Systems**  
**Installation and Instruction Manual**

## SAFETY INFORMATION

Read, understand and follow all safety information contained in these instructions prior to installation and use of the VH3/OWS120-L. Retain these instructions for future reference.

### Intended use:

The VH3/ OWS120-L is intended for use in filtering potable water for foodservice equipment and has not been evaluated for other uses. These systems are not to be used for residential application. The system is installed at the point of use and must be installed by a qualified professional installer according to these installation instructions.

| <b>EXPLANATION OF SIGNAL WORD CONSEQUENCES</b>  |   |
|---|---|
|  <b>WARNING</b>  | Indicates a potentially hazardous situation, which, if not avoided, could result in death or serious injury and/or property damage. |
| <b>CAUTION</b>  | Indicates a potentially hazardous situation, which, if not avoided, may result in property damage.                                  |
|  <b>WARNING</b>  |   |
| <b>To reduce the risk associated with choking:</b>  |   |
| <ul style="list-style-type: none"> <li>• <b>Do not</b> allow children under 3 years of age to have access to small parts during the installation of this product.</li> </ul>  |   |
| <b>To reduce the risk associated with the ingestion of contaminants:</b>  |   |
| <ul style="list-style-type: none"> <li>• <b>Do not</b> use with water that is microbiologically unsafe or of unknown quality without adequate disinfection before or after the system. Systems certified for cyst reduction may be used on disinfected water that may contain filterable cysts. EPA Establishment #070595-CT-001</li> </ul> |   |
| <b>To reduce the risk associated with hazardous voltage due to an installer drilling through existing electric wiring or water pipes in the area of installation:</b>   |   |
| <ul style="list-style-type: none"> <li>• Do not install near electric wiring or piping which may be in path of a drilling tool when selecting the position to mount the system bracket.</li> </ul>  |   |
| <b>To reduce the risk of physical injury:</b>   |   |
| <ul style="list-style-type: none"> <li>• Depressurize system as shown in manual prior to cartridge removal.</li> </ul>  |   |

| <b>CAUTION</b>   |
|--|
| <b>To reduce the risk associated with property damage due to water leakage:</b>  |
| <ul style="list-style-type: none"> <li>• <b>Read and follow</b> Use Instructions before installation and use of this system.</li> <li>• Installation and use <b>MUST</b> comply with all state and local plumbing codes.</li> <li>• <b>Protect from freezing</b>, remove filter cartridge when temperatures are expected to drop below 40° F (4.4° C).</li> <li>• <b>Do not install</b> systems in areas where ambient temperatures may go above 110° F (43.3° C).</li> <li>• <b>Do not install on hot water supply lines.</b> The maximum operating water temperature of this filter system is 100° F (37.8° C).</li> <li>• <b>Do not install</b> if water pressure exceeds 125 psi (862 kPa). If your water pressure exceeds 80 psi (552 kPa), you must install a pressure limiting valve. Contact a plumbing professional if you are uncertain as to how to check your water pressure.</li> <li>• <b>Do not install</b> where water hammer conditions may occur. If water hammer conditions exist you must install a water hammer arrester. Contact a plumbing professional if you are uncertain how to check for this condition.</li> <li>• Where a backflow prevention device is installed on a water system, a device for controlling pressure due to thermal expansion must be installed.</li> <li>• <b>Do not</b> use a torch or other high temperature sources near filter system, cartridges, plastic fittings or plastic plumbing.</li> </ul> |

## CAUTION

- On plastic fittings, never use pipe sealant or pipe dope. Use PTFE thread tape **only**, pipe dope properties may deteriorate plastic.
- Take care when using pliers or pipe wrenches to tighten plastic fittings, as damage may occur if over-tightening occurs.
- **Do not** install in direct sunlight or outdoors.
- **Do not** install near water pipes which will be in path of a drilling tool when selecting the position to mount the bracket.
- All hydro-pneumatic pressurized tanks must have an appropriate pressure relief valve installed.
- Mount filter in such a position as to prevent it from being struck by other items used in the area of installation.
- Ensure that the location and fasteners will support the weight of the system when installed.
- Ensure all tubing and fittings are secure and free of leaks.
- Do not install unit if collet is missing. Contact your sales representative if collets are missing from any fittings.
- The disposable filter cartridge **MUST** be replaced every 6 months, at the rated capacity or sooner if a noticeable reduction in flow rate occurs.

## IMPORTANT NOTES

- Failure to follow instructions will void warranty.
- Allow a minimum of 3' (7.6 cm) clear space under filter to facilitate cartridge change.
- Install with the inlet and outlet ports as labeled. Make sure not to reverse connections.
- Some local codes may require the use of a licensed plumber or certified installer when disrupting a potable water line.

## 3M™ Water Filtration Products Installation and Operating Instructions

### Specifications

Inlet Size: 3/8" Quick Connect Fitting  
Outlet Size: 3/8" Quick Connect Fitting  
Temperature Range: 40-100°F (4.4-38°C)  
Pressure Range: 25-125 psi (172-862 kPa)  
Dimensions - 3.1" W x 11.9"H (7.9cm x 30.2cm)

### Parts Included

System Head/Bracket Assembly, - Vent Tubing  
Filter Cartridge.

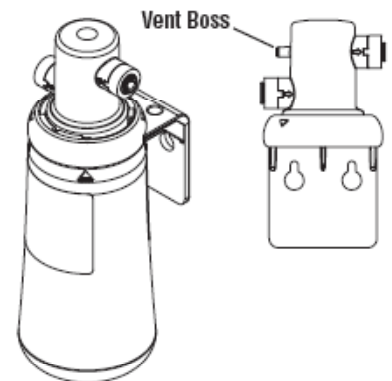
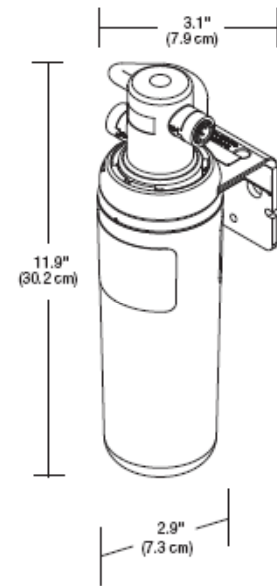


Figure 1.B

## System Installation

### 1. Mount System

Determine mounting location

- △ **Warning:** Before drilling mounting holes, locate any hidden electrical wires or plumbing behind the mounting surface. Note adjacent equipment which may interfere with system fastening screws.
- A. Fasten mounting bracket to mounting surface (screws not included).  
**Note:** 3" (7.6 cm) free space underneath system required to change filter.
- B. Remove the sanitary cap from cartridge. Inspect the cartridge for any damage.
- C. Make sure the o-rings are present and positioned correctly in grooves. Moisten the o-rings with water.
- D. Connect the replacement cartridge to head/bracket assembly. Align tabs with head/bracket assembly and push up until cartridge stops, then rotate 1/4 turn to the right to secure.
- E. Run tubing supplied from vent boss through one of the tubing holes in bracket. Run additional tubing (not supplied) to drain or bucket during cartridge changeout.

### 2. Cold Water Supply

**Warning:** Make sure cold water supply valve is turned off prior to installation.

The filter system's inlet connection is equipped with user-friendly "quick-connect" push-in fittings, compatible with 3/8" plastic or copper tubing. Figure 2.B shows how to use the quick connect fittings.

**Note:** A proper length of 3/8" copper or plastic tubing is required for installation (not included). Installation must comply with existing state and local plumbing codes.

**Note:** Additional fittings may be required.

**Note:** Arrange tubing so that there are no sharp bends. Leave some "play" in the tubing for ease of servicing, then cut tubing to the desired length. Shorter tubing lengths ensure better flow rates.

### 3. Connect System

- A. Your filter system connects directly to the equipment via 3/8" plastic or copper tubing. The filter system's inlet and outlet connections are equipped with user-friendly "quick connect" push-in fittings. Refer to Figure 2.B.

### 4. Test System

- A. Open cold water supply valve.
- B. The system will pressurize. Check for leaks. If any leaks are present, refer to troubleshooting section.

### 5. Flush Filter

- A. Make sure cold water supply is turned on.
- B. Flush 2 gallons through cartridge before use (flush approximately 2 minutes) to remove any trapped air and carbon fines or until water runs clear. Any air left in the system may temporarily cause the water to be cloudy.
- C. Your system is now ready for service.

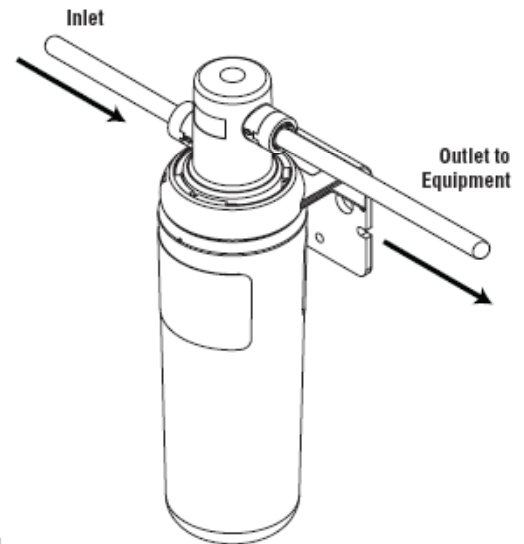


Figure 2.A

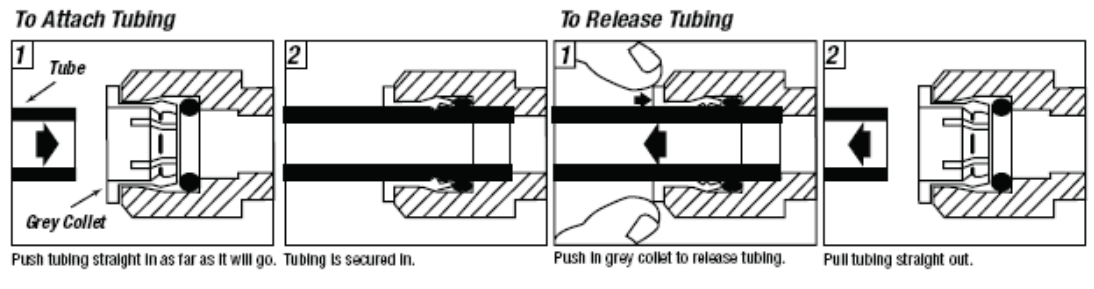
**Figure 2.B**

This product is outfitted with user friendly 'Push In' connectors. Proper use of the connectors is shown in the diagrams.

It is most important that the tubing selected for use with these connectors be of high quality, exact size and roundness, and with no surface nicks or scratches. If it is necessary to cut the tubing, use a plastic tubing cutter or sharp razor knife. Make a clean square cut.

Should a leak occur at a 'Push-In' connector, the cause is usually tubing.

- To Fix:
- Relieve pressure
  - Release tubing
  - Cut off at least 1/4" from end
  - Reattach tubing
  - Confirm connection is leak free



## Troubleshooting Guide

### Water leaks at quick connect fittings

Push tubing in as far as it will go. If leaking continues, shut off cold water supply and remove water line by pushing in on the connector collar while pulling the tubing away. Inspect tubing for cracks. If tubing is cracked, simply cut that portion away and re-insert tubing into quick connect fitting.

### Water does not flow from the filter

Check to see if the original water supply valve is open, allowing water to flow to the filter. If water still does not flow, make sure the filter cartridge is turned to the right as far as it will go. Also, check for crimps or sharp bends in tubing. Check maintenance schedule for cartridge change-out.

### Water appears cloudy or air comes out of filter faucet

Flush 2 gallons through cartridge before use (flush approximately 2 minutes) to remove any carbon fines or trapped air in the filter and water lines. Longer flushing may be required to eliminate air bubbles completely.

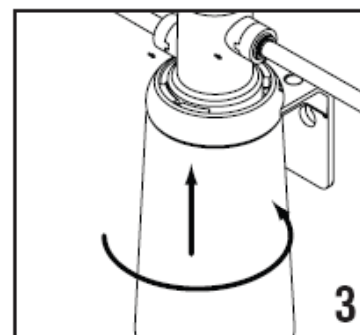
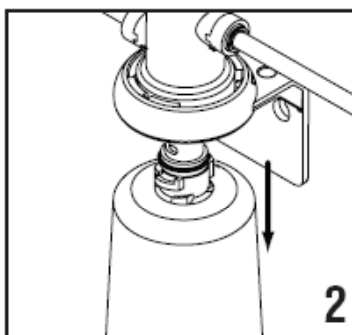
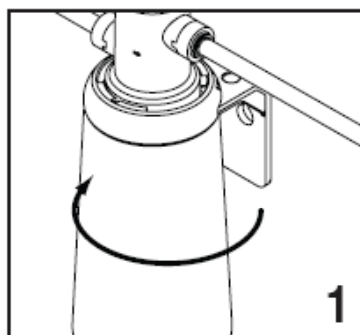
### Cartridge change-out instructions

**Warning: To reduce the risk associated with the ingestion of contaminants:** Do not use with water that is microbiologically unsafe or of unknown quality without adequate disinfection before or after the system.

**Caution: To reduce the risk of property damage due to water leakage:** you **MUST** read and follow installation use instructions **BEFORE** installation and use of this product. The disposable filter cartridge must be replaced every 6 months, at the rated capacity or sooner if a noticeable reduction in flow rate occurs.

**Note:** This system is equipped with an internal shut-off valve.

1. Turn cartridge slowly to the left, about 1/4 turn, until it stops (when arrows line up). At this position, both inlet and outlet ports are closed and water pressure has been relieved.
2. Pull used cartridge straight down and discard. **Note:** There may be a small amount of residual water drainage after pressure is relieved and during cartridge removal.
3. Moisten O-ring with water and push new cartridge into filter head. Turn cartridge 1/4 turn to the right until it stops (when arrows line up). Top surface of cartridge will become flush with bottom of the head when fully engaged.
4. Open downstream valve (if installed) and flush new filter cartridge in accordance with the Performance Data Sheet, expelling any trapped air and carbon fines. Water may run cloudy with air but will quickly clear.



### Limited Warranty:

3M Purification Inc. warrants this Product will be free from defects in material and manufacture for the following periods from the date of purchase: Five (5) years for the Product, except for the replacement filter cartridge and membrane, which are warranted for one (1) year. This warranty does not cover failures resulting from abuse, misuse, alteration or damage not caused by 3M Purification Inc. or failure to follow installation and use instructions. No warranty is given as to the service life of any filter cartridge or membrane as it will vary with local water conditions and water consumption. **3M PURIFICATION INC. MAKES NO OTHER WARRANTIES OR CONDITIONS, EXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, ANY IMPLIED WARRANTY OR CONDITION OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OR ANY IMPLIED WARRANTY OR CONDITION ARISING OUT OF A COURSE OF DEALING, CUSTOMER OR USAGE OF TRADE.** If the Product fails to satisfy this Limited Warranty during the warranty period, 3M Purification Inc. will replace the Product or refund your Product purchase price. This warranty does not cover labor. **The remedy stated in this paragraph is Customer's sole remedy and 3M Purification Inc.'s exclusive obligation.**

This warranty gives you specific legal rights, and you may have other rights which may vary from state to state, or country to country. For any warranty questions, please call 1-866-990-9785 or mail your request to: Warranty Claims, 3M Purification Inc., 400 Research Parkway, Meriden, CT 06450. Proof of purchase (original sales receipt) must accompany the warranty claim, along with a complete description of the Product, model number and alleged defect.

### Limitation of Liability:

3M Purification Inc. will not be liable for any loss or damage arising from this 3M Purification Inc. product, whether direct, indirect, special, incidental, or consequential, regardless of the legal theory asserted, including warranty, contract, negligence or strict liability. Some states and countries do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation or exclusion may not apply to you.



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