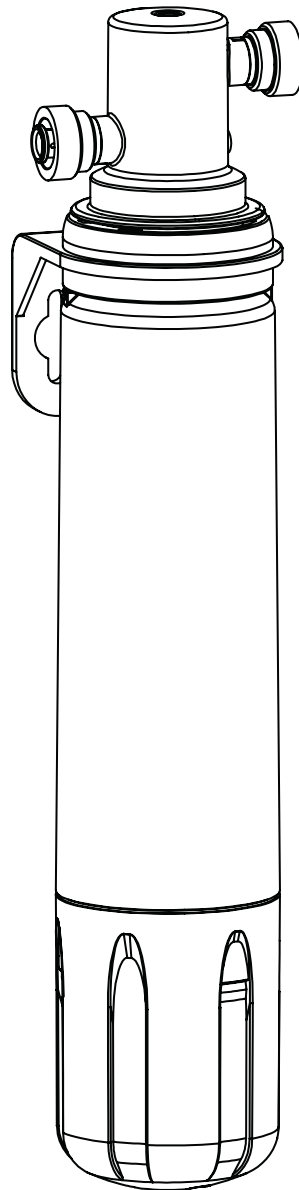




## 3M Clean Water Solutions

### Installation and Operating Instructions For 3MDW101 Drinking Water System





**Homeowner: Please retain for operation and future maintenance instructions.**


# SAFETY INFORMATION

Read, understand, and follow all safety information contained in these instructions prior to installation and use of the 3MDW101 Drinking Water System. Retain these instructions for future reference.

**Intended use:**

The 3MDW101 Drinking Water System is intended for use in filtering potable water in homes and has not been evaluated for other uses. The system is installed at the point of use and typically installed under a sink. System must be installed as specified in the installation instructions by a qualified professional.

<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 minor or moderate 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>
<p><b>To reduce the risk associated with choking:</b></p> <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>
<p><b>To reduce the risk associated with ingestion of contaminants:</b></p> <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>
<p><b>To reduce the risk associated with a hazardous voltage due to an installer drilling through existing electric wiring or water pipes in the area of installation:</b></p> <ul style="list-style-type: none"> <li>• <b>Do not</b> install near electric wiring or piping which may be in the path of a drilling tool when selecting the position to mount the filter bracket.</li> </ul>

 <b>CAUTION</b>
<p><b>To reduce the risk of eye injury while drilling countertop for faucet installations:</b></p> <ul style="list-style-type: none"> <li>• Safety glasses <b>MUST</b> be worn during the sink hole drilling operations.</li> </ul>

<b>CAUTION</b>
<p><b>To reduce the risk associated with property damage due to water leakage:</b></p> <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 filter from freezing</b>, remove replacement filter when temperatures are expected to drop below 40°F (4.4°C).</li> <li>• <b>Do not</b> install 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 120 psi (827 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 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> <li>• On plastic fittings, never use pipe sealant or pipe dope. Use PTFE thread tape <b>only</b>, pipe dope properties may deteriorate plastic.</li> <li>• <b>Do not</b> install in direct sunlight or outdoors.</li> <li>• <b>Do not</b> install near water pipes which will be in path of a drilling tool when selecting the position to mount the bracket;</li> <li>• Mount filter in such a position as to prevent it from being struck by other items used in the area of installation (waste baskets, etc.);</li> <li>• Ensure that the location and fasteners will support the weight of the system when installed and full of water.</li> <li>• Ensure all tubing and fittings are secure and free of leaks.</li> <li>• Do not install unit if collet is missing. Contact 3M if collets are missing from any fittings.</li> <li>• The disposable replacement filter <b>MUST</b> be replaced every 6 months, at the rated capacity or sooner if a noticeable reduction in flow rate occurs.</li> </ul>

<b>IMPORTANT NOTES</b>
<ul style="list-style-type: none"> <li>• Failure to follow instructions will void warranty.</li> <li>• Allow a minimum of 2.5" (6.4 cm) clear space under filter to facilitate filter change.</li> <li>• Install with the inlet and outlet ports as labeled. Make sure not to reverse connections.</li> </ul>

## GETTING STARTED



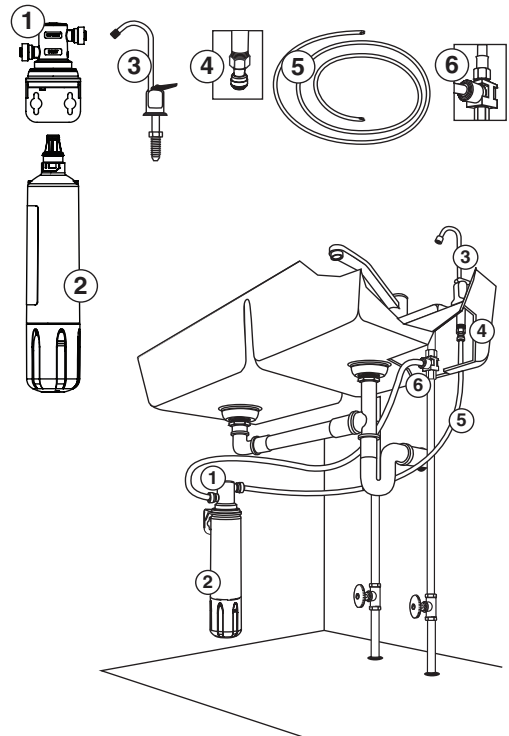
- Installation requires some household tools and novice plumbing skills. If you replace your own kitchen and bathroom faucets, you can handle this!
- Installation may require drilling a hole in your sink top. A variable speed drill and specialized drill bits may be needed. We highly recommend professional installation!

### **Parts and Materials Included:**

1. Filter Head Assembly
2. Replacement Filter
3. Tubing Attached Faucet
4. 1/4" Union Adapter
5. 36" of 1/4" Tubing
6. 1/4" Feedwater Adapter
7. 2 Phillips Mounting Screws (not shown)

### **Items Required (not included):**

- Drill (Cordless recommended)
- Adjustable wrench
- Phillips head screwdriver
- Razor knife or tube cutter
- May require special drill bits if drilling hole in sink for dedicated faucet



## FILTER REPLACEMENT

### **CAUTION**

To reduce the risk associated with property damage due to water leakage:

- The disposable replacement filter **MUST** be replaced every 6 months, at the rated capacity or sooner if a noticeable reduction in flow rate occurs.

# DRINKING WATER FAUCET INSTALLATION

## ⚠ CAUTION

To reduce the risk of eye injury while drilling countertop for faucet installations:

- Safety glasses **MUST** be worn during the sink hole drilling operations.

## IMPORTANT NOTES

- The drinking water system faucet should be located on a flat surface, conveniently located near the sink, so that it empties into the sink. Most sinks have pre-drilled holes designated for sprayers, soap dispensers, and other accessories. If your sink does not have an extra hole, **we highly recommend professional installation.**
- Porcelain, enamel, and ceramic sinks require special procedures for drilling holes. **Professional installation is highly recommended. (See page 6)**

### Drilling 9/16" diameter hole through countertop or stainless steel sink:

1. Locate area to be drilled. Mark center of hole with center punch.
2. Drill hole with 9/16" drill bit suitable for countertop materials or cast iron/stainless steel.
3. With grinding wheel or file, smooth out any rough edges.

### Installing the faucet:

1. Slide the following parts in the order specified up blue tubing and threaded stem:
  - a. Metal bezel
  - b. Large rubber washer
2. Next, feed blue tubing and faucet stem down through faucet mounting hole.
3. From underneath sink, assemble the black spacer, star washer, and hex nut (as shown) onto the threaded stem and tighten by hand.
4. With a padded adjustable wrench, turn the faucet base (above the counter) to the right to securely fasten. Raise faucet handle and remove plastic shipping tube from base.
5. Insert faucet neck onto base until seated and align over sink. Lower faucet handle.

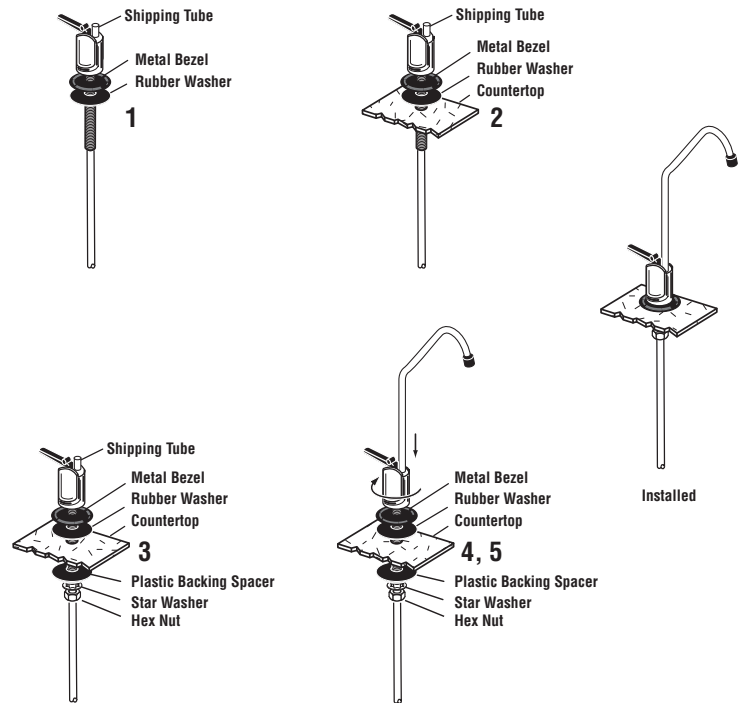


Figure 1

## IMPORTANT: INSTALLATION INSTRUCTIONS

### For Use With Cold Water Only.

NOTE: Remove items from under the sink. Place catch basin under cold water faucet stem to collect small amounts of water that may run out when disconnecting water supply lines.

1. Open faucet and turn off cold water supply valve and remove existing water supply tubing and/or fitting.
2. Select and mark a location for the system under the sink that allows access for replacement filter changeout and convenient hook up to the tubing attached faucet.  
NOTE: 1/4" union adapter along with segment of 36" long tubing can be used to extend tubing attached faucet.
3. Using Filter Head Assembly as a guide, fasten Filter Head Assembly to wall with 2 Phillips mounting screws supplied.

Mark hole locations so that there is 1 1/2" between the screws (see Figure 2), from center of each screw. When installed, filter bottom should be at least 2 1/2" from sink cabinet floor to facilitate filter change. Install screws, but only halfway, so you can easily slip the bracket to wall before firmly setting screws.

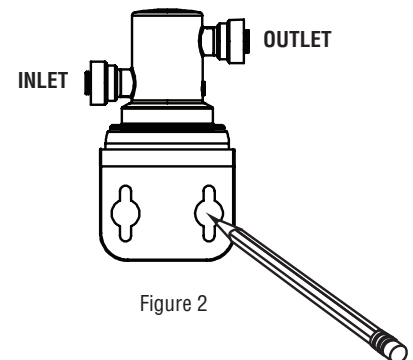


Figure 2

# INSTALLATION INSTRUCTIONS (CONTINUED)

- Determine length of tubing required from filter head assembly to faucet and from water supply line to filter head assembly by holding tubing in place ensuring it is of appropriate length. Do not kink tubing as this will impede water flow. If necessary, loop tubing around to avoid it being kinked.

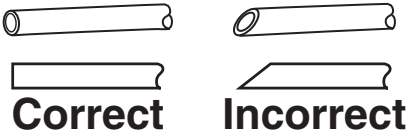


Figure 3

Cut tubing straight with a utility knife. (See Figure 3).

- Locate the cold water stem on the underside of the faucet fixture. Place basin or towel under the cold water supply valve. Unscrew the cold water feed tube from the faucet stem. Locate the 1/4" Feedwater Adapter that came with your Drinking Water System. Insert the black gasket into the threaded adapter and tighten onto the 1/2" IPS Faucet Stem undersink, making sure that 1/4" side connection is accessible and not facing the wall. Make sure not to over tighten.

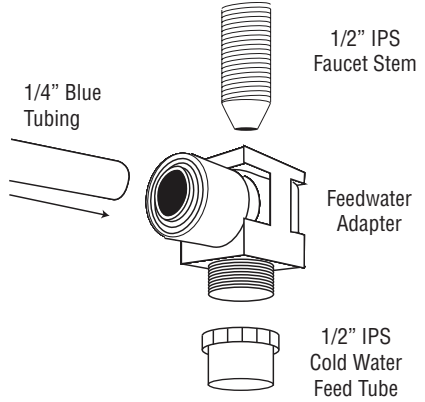


Figure 4

Take the 1/2" IPS Cold Water Feed Tube and attach to the Feedwater Adapter, making sure not to over tighten.

Locate the 1/4" Blue Tubing and insert into the 1/4" outlet of Feedwater Adapter (Figure 4). See "Using Push-In Fittings."

**"Using Push-In Fittings"**

<p><b>To Attach Tubing</b></p> <p>Push tubing in as far as it will go. Tubing must be inserted past o-ring and hit backstop. Pull tube to ensure it is secured.</p>	<p><b>To Release Tubing</b></p> <p>Push in grey collet to release tubing. With collet held, pull tubing straight out.</p>
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**CAUTION**

To reduce the risk associated with property damage due to water leakage:

- Ensure all tubing and fittings are secure and free of leaks.

①

② Backstop

③ Collet

④

- Insert blue tubing from the 1/4" Feedwater Adapter into the filter INLET fitting as shown in Figure 5. Refer to the "Using Push-In Fittings" section for detailed instructions.
- Insert tubing from faucet into the filter OUTLET fitting as shown in Figure 5. Refer to the "Using Push-In Fittings" section for detailed instructions.
- Remove filter from box, and remove sanitary protective cap from replacement filter. Ensure both o-rings are present on the new filter and are seated into grooves; moisten o-rings with water. DO NOT use any petroleum products to lubricate the o-rings.
- Align tabs of replacement filter with head assembly and insert replacement filter into head assembly. Turn replacement filter to the right (clockwise) until it stops (about 1/4 turn). The filter is now installed. (See Figure 5).
- Turn water supply back on from the shutoff valve on cold water line. This will pressurize the filter system and begin sending filtered water to the faucet. Look for leaks. **If leaks occur, see Troubleshooting Guide. Flush the filter for four (4) gallons (approx. 5 minutes).**

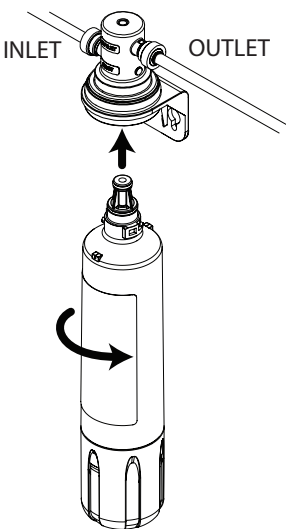


Figure 5

# DRILLING HOLE THROUGH PORCELAIN/ENAMEL/CERAMIC SINKS

IF YOU ARE READING THIS SECTION, PROFESSIONAL INSTALLATION IS HIGHLY RECOMMENDED.

## ⚠ CAUTION

To reduce the risk of eye injury while drilling countertop for faucet installations:

- Safety glasses **MUST** be worn during the sink hole drilling operations.

### Drilling Hole through Porcelain/Enamel/Ceramic Sinks

#### Recommended Tools:

- Variable Speed Drill
- Porcelain Cutter Tool Set (9/16" Size)
- Plumber's Putty

**Note:** It is important to understand this procedure.

1. The glassy layer of porcelain/enamel/ceramic must be scored through to the metal base, creating a disk.
2. This disk must be removed while protecting the surrounding decorative coating against chipping or fracturing.
3. The base metal must be drilled through to complete the hole.

#### Procedure:

1. Mark center for 9/16" hole.
2. Form a dam of shallow putty around hole location and fill with enough water to lubricate carbide drill bit.
3. Carefully drill pilot hole through porcelain/enamel/ceramic and base metal using a carbide pilot drill bit. Always operate drill with light pressure at slow speed (300 - 400 rpm).
4. Drill porcelain/enamel/ceramic using special 9/16" cutting tool, making certain a complete ring has been cut through to the sink's metal base.
5. Change to metal cutting drill bit and drill out the center of the ring, making sure not to contact other rim of decorative coating. Cut through metal sink base.

# FILTER REPLACEMENT INSTRUCTIONS

## CAUTION

To reduce the risk associated with property damage due to water leakage:

- The disposable replacement filter **must** be replaced every 6 months, at the rated capacity or sooner if a noticeable reduction in flow rate occurs.

1. Grasp installed filter and turn to the left (counterclockwise) until filter comes to a complete stop. Gently pull downward to remove.
2. Remove replacement filter from box, and remove sanitary protective cap from replacement filter. Ensure both o-rings are present on the new replacement filter and are seated into grooves; moisten o-rings with water. **DO NOT** use any petroleum products to lubricate the o-rings.
3. Align tabs of new replacement filter with existing filter head and insert new replacement filter into head. Turn filter to the right (clockwise) until filter stops.
4. Open the dedicated faucet and flush new replacement filter for four (4) gallons (approximately 5 minutes) before use. It may sputter as it releases trapped air.
5. Close dedicated faucet. System is now under pressure and can be inspected for leaks. Repair any leaks as needed before continuing. The system is now ready for use.

# TROUBLESHOOTING GUIDE

#### Water leaks at push-in connections:

Push tubing in as far as it will go. If leaking continues, shut off water at the cold water supply valve and remove water line by pushing in on the connector collar while pulling the tubing away. Inspect tubing for cracks and scratches. If tubing is cracked or scratched, simply cut that portion away and reinsert tubing into push-in fitting.

Make sure tubing is cut straight. If not, recut correctly. Refer to Figure 3.

If water leaks, please verify that the o-rings are properly seated in their grooves.

#### Water does not flow from the drinking water system faucet:

Check to see if the main water line valve is open, allowing water to flow to the filter.

#### Water appears cloudy or air comes out of the drinking water system faucet:

Flush the filter for four (4) gallons (approx. 5 minutes) to remove any trapped air.

## LIMITED WARRANTY

**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 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. If the Product fails to satisfy this Limited Warranty during the warranty period, 3M 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'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 1-877-238-9119 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 will not be liable for any loss or damage arising from this 3M 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 of limitation of incidental or consequential damages, so the above limitation or exclusion may not apply to you.

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INSTR8032 0810



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