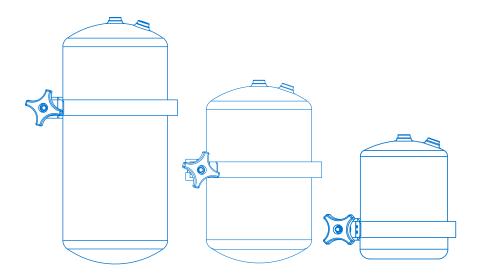
# Drinking Water Systems

### Installation Guide



#### About the Multipure Drinking Water System

- The Multipure Aquaperform (MP880), Aquaversa (MP750), or Aquamini (AQUAMINI) Drinking Water System (DWS) is designed for use on the countertop next to the sink, below the sink, or inline with other devices.
- If installation or operation assistance is required, please contact your Multipure Independent Builder. If the Independent Builder is unavailable, please contact Multipure Customer Service at 1.800.622.9206.

#### **Before You Begin**

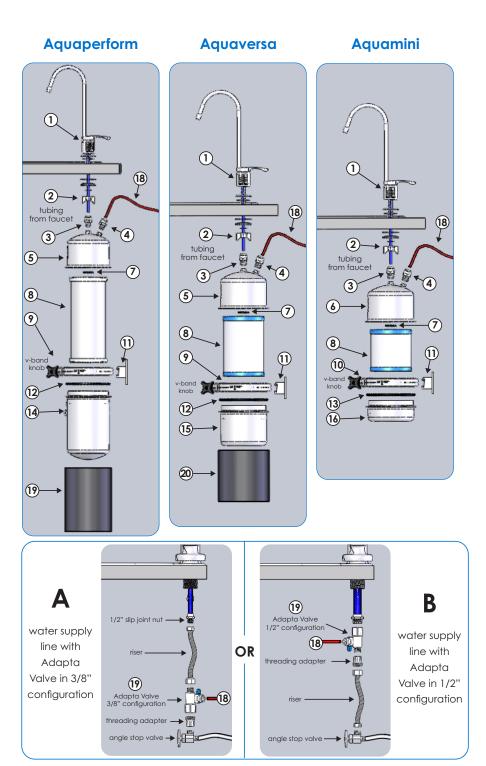
Please read this manual before proceeding with the installation and use of your system. Installation, operation, and maintenance requirements are essential to the performance of your system – failure to follow any instructions or operating parameters contained herein may lead to product damage or product failure.

- Replacement filters can be purchased directly from Multipure. For the latest prices, please visit our website at www.multipure.com/store.
- Check for compliance with any state or local laws and regulations before use.
- If you are installing with a Below Sink Kit, proceed to section **Below Sink** Installation (Pg 2).
- If you are installing with a Countertop Kit, proceed to section **Countertop** Installation (Pg 12).
- If you are installing the system inline with existing plumbing, proceed to section Inline Installation (Pg 16).

### Below Sink Installation (Below Sink Kit Required)

Item #	Part #	Part Description
1	MC653	Faucet assembly with blue tubing attached
2	MC780	Wing nut
3	MC720-BLU	1/4" Outlet fitting: connects to blue tubing attached to faucet
4	MC730-RED	3/8" Inlet fitting: connects to red tubing
5	MCL500	Housing top (Aquaperform/Aquaversa)
6	940-50-3011	Housing top (Aquamini)
7	MC252S	Black rubber cushion (inside housing top)
8	CB11As/CB6/	Carbon Block Filter cartridge
	CBMINI	
9	MC253	V-band with knob (Aquaperform/Aquaversa)
10	NL50263	V-band with knob (Aquamini)
11	MC173	Bracket
12	MC351S	O-ring (Aquaperform/Aquaversa)
13	NL423S	O-ring (Aquamini)
14	MCB880R	Housing bottom (Aquaperform)
15	MCB500	Housing bottom (Aquaversa)
16	MCBMINI	Housing bottom (Aquamini)
17	MC232-RED	3/8" red tubing: connects Inlet fitting to plumbing
18	MC923LF	3/8" John Guest Adapta Valve
19	MC840	Tall acrylic base* (Aquaperform)
20	MC240N	Tall acrylic base* (Aquaversa)

\*The acrylic base (Item #20/21) is an optional part available for purchase.



#### **Below Sink Kit Components**

Included with the Below Sink Kit are the following components:

- Adapta Valve (MC923LF): Used to connect the DWS to the cold water line below the sink. The 3/8" red tubing connects the Adapta Valve to the 3/8" Inlet fitting on the DWS housing.
- Faucet (MC653): The faucet installs on top of the sink or counter. The 1/4" blue tubing connects the faucet to the 1/4" Outlet fitting on the DWS housing.

#### **Recommended Installation Tools**

NOTE: Included with each install kit are the fixtures and accessories needed to install the system. If you determine that your particular plumbing configuration requires fixtures different from those included with your shipment, please contact Multipure's Customer Service Department at 800.622.9206, ext. 175.

The following tools are recommended to install your DWS for below-sink use:

- 1. Installing the faucet on a ceramic/porcelain sink:
  - 3/8" reversible electric drill
  - 7/16" high speed steel drill bit
  - 1/2" masonry drill bit
  - hammer
  - center punch
  - 8" adjustable wrench
  - pliers/locking pliers
- 2. Installing the faucet on a stainless steel sink:
  - Everything from list #1, plus 1/8" high speed drill bit
- 3. Installing the faucet on a granite countertop:
  - everything from list #1, plus the following:
    - a. hammer
    - b. center punch
    - c. plumbers putty
    - d. 1/2" diamond drill bit for granite
- 4. Installing the Adapta Valve:
  - 8" Adjustable wrench
  - Wire cutter or knife

#### Drill the Faucet Hole (if necessary)

The faucet can be installed through a standard faucet hole or spray hose hole in your sink, if one is available. If no hole is available, use the following instructions to drill a faucet hole. If a faucet hole is already available, skip to section **Connect the Faucet (pg 6)**.

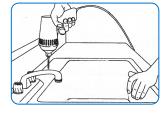
- 1. Select and mark the faucet mounting spot on the sink.
  - a. Confirm that there are no reinforcing ribs under the desired faucet location.
  - b. If you have an extra hole in your sink for a spray hose, you may also choose to disconnect the spray hose and use that existing hole for the DWS faucet.
- 2. Use the hammer to gently tap the center punch on the sink location where the hole is to be drilled. This creates an indentation to mark the drilling location.
- 3. If you have a porcelain, ceramic, or cast acrylic sink:

CAUTION: Porcelain, ceramic, and cast acrylic surface materials are extremely hard and can easily crack or chip. Use extreme caution when drilling. Multipure is not responsible for any damages resulting from faucet installation.

- a. Use the 1/2" carbide-tipped masonry drill bit to grind away a small section of sink veneer down to the metal, clearing enough space to allow drilling without damaging the rest of the sink surface veneer
- b. Carefully use the 7/16" high-speed steel drill bit to completely drill a hole through the metal sink.

CAUTION: Do not allow the drill bit to "grab" the sink veneer, as this will damage the surface.

- 4. If you have a stainless steel or metal sink:
  - a. Use the 1/8" high-speed drill bit to drill a pilot hole.
  - b. Use the 7/16" high-speed drill bit to completely drill a hole through the metal sink.







carefully grind away porcelain 5. If you have a granite countertop:

CAUTION: Granite surface materials are extremely hard and can easily crack or chip. Use extreme caution when drilling. Multipure is not responsible for any damages resulting from faucet installation.

- a. Place a towel or basin under the sink, directly under the location of the intended faucet hole.
- b. Using a snake of plumbers putty, form a circular "dam" around the location of the intended faucet hole. Make the dam 5" in diameter and 3/4" tall.
- c. Fill the dam with cool tap water. The water will keep the drill bit from overheating.
- **d.** Use the 1/2" granite drill bit to drill the hole. Slowly grind away the granite material.

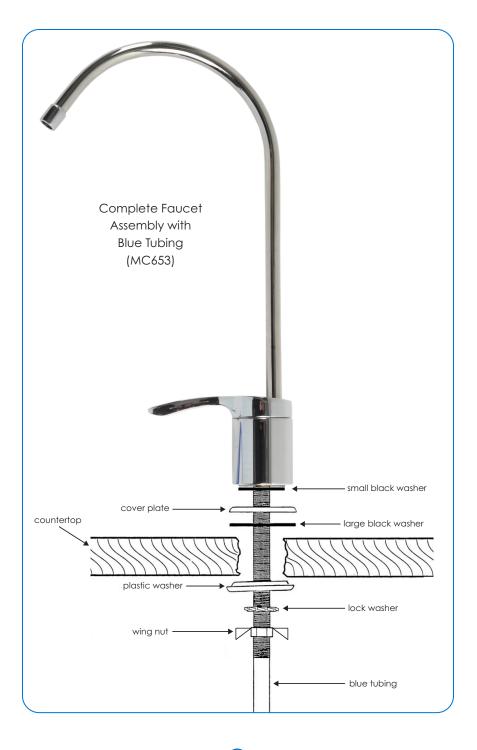
#### **Connect the Faucet**

Proceed to the instructions for your faucet type:

#### **Installing the Standard Faucet**

NOTE: The blue plastic tubing is attached to the faucet.

- 1. From the sink / countertop:
  - a. Place the larger soft black rubber washer over the faucet hole.
  - **b.** Place the cover plate on top of the large washer.
  - c. Place the smaller soft black rubber washer on top of the cover plate.
  - d. Place the faucet base over the smaller soft black rubber washer and atop the cover plate.
- 2. From under the sink:
  - a. Slide the hard plastic black washer (with the smaller side up) upward over the blue tubing.
  - **b.** Slide the lock washer upward, below the hard plastic washer.
  - c. Slide the wing nut upward, below the lock washer.
  - d. Hand-tighten the wing nut to secure the faucet.



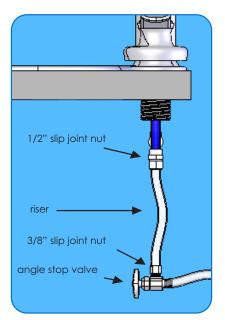
#### **Connect the Adapta Valve**

If your residence has a cold water supply line with a 3/8" or 1/2" slip joint connection, you may use the Adapta Valve included with your system to connect your DWS to the plumbing. The Adapta Valve assembly (MC923LF) includes both the valve and threading adapter.

When attaching the Adapta Valve to straight pipe threads, use Teflon tape on the threads. Wrap the tape around the pipe only once.

NOTE: The Adapta Valve must be installed on the **cold water line only**.

- 1. Using the 3/8" configuration:
  - a. The 3/8" configuration is used on a water supply line with a 3/8" slip joint.
  - **b.** The 3/8" configuration is typically installed at the bottom of the riser at the angle stop valve.
- 2. Using the 1/2" configuration:
  - a. The 1/2" configuration can be used at either the top of the riser at the faucet pipe or at the bottom of the riser at the angle stop valve.
  - b. Install the 1/2" configuration at the top of the riser on a water supply line that does not have a slip joint nut at the angle stop valve.
  - c. Install the 1/2" configuration at the angle stop valve if there is a 1/2" slip joint nut there.
- Shut off the cold water supply to the faucet by rotating the angle stop valve clockwise until the water flow is off. Place a catch basin or other container below the faucet to catch any residual water in the pipes.
- 4. Disconnect the cold water riser/supply line at the angle stop valve or cold water faucet pipe. Use an 8" adjustable wrench to rotate the slip joint nut counterclockwise until the riser/supply line and slip joint nut detach from either the angle stop valve or the faucet pipe.
- 5. Connect the Adapta Valve to the pipe from which you removed the slip joint nut.
  - a. Align the Adapta Valve to either the angle stop valve or cold water faucet pipe, making sure that the rubber washer is in place in the Adapta Valve.



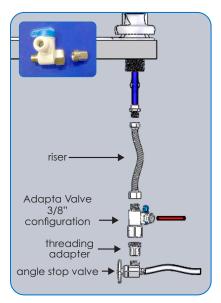
Water supply line before installation



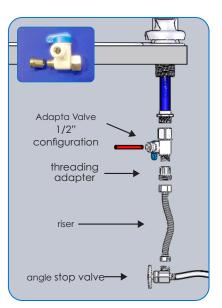
Adapta Valve



Threading Adapter



water supply line with Adapta Valve in 3/8" configuration



water supply line with Adapta Valve in 1/2" configuration

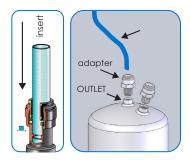
- **b.** Use an 8" adjustable wrench to rotate the connection clockwise until tight. DO NOT OVERTIGHTEN.
- 6. Connect the cold water riser/supply line with the slip joint nut to the Adapta Valve.
  - a. Align the slip joint nut to the Adapta Valve.
  - **b.** Use an 8" adjustable wrench to rotate the slip joint nut clockwise until tight. DO NOT OVERTIGHTEN.
  - c. Make sure that the supply line does not block the shutoff valve on the side of the Adapta Valve. If necessary, trim the supply line before reconnecting.
- 7. Confirm that the Unit Shutoff Valve attached to the Adapta Valve is in the OFF position by rotating the handle clockwise until it stops.

#### Connect the Fittings to the Housing

- 1. Connect the included Inlet fitting (MC730-RED) to the system housing's labeled Inlet port. Rotate the fitting clockwise, first by hand, then using a wrench, to tighten onto the system.
- 1. Connect the included Outlet fitting (MC720-BLU) to the system housing's labeled Outlet port. Rotate the fitting clockwise, first by hand, then using a wrench, to tighten onto the system.

#### **Connect Tubing to the Outlet Port**

- Using wire cutters or a knife, cut (square cut) the tip end off of the blue plastic tubing (either connected to the faucet or a separate piece of tubing included with the Capacity Monitor). Do not use scissors.
- Fully insert the tubing into the fitting on the Outlet port of the system housing; the tubing should be inserted 5/8" into the fitting.



NOTE: When pushing the tubing into the fitting, you will encounter some resistance. This does not mean that the tube is fully inserted. Continue to push firmly until the tubing is inserted as far as possible (roughly 5/8" into the fitting).

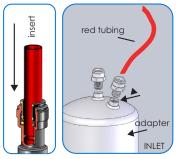


3. Pull on the tubing to make sure that it is securely connected.

#### **Connect Tubing to the Inlet Port**

- Using wire cutters or a knife, cut (square cut) the tip end off of the red plastic tubing connected to the Adapta Valve. Do not use scissors. Do not cut more than 1/2" off of the end of the red plastic tubing.
- Fully insert the tubing into the fitting on the Inlet port of the system housing; the tubing should be inserted 5/8" into the fitting.

NOTE: When pushing the tubing into the fitting, you will encounter some resistance. This does not mean that the tube is fully inserted. Continue to

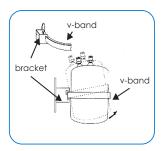


push firmly until the tubing is inserted as far as possible (roughly 5/8" into the fitting).

3. Pull on the tubing to make sure that it is securely connected.

#### Mount the System Under the Sink

- 1. Attach the bracket to the wall.
  - a. Use the included screws and a Phillips-head screwdriver to fasten the mounting bracket to the wall, ensuring it is oriented in an upright position. The bracket is in an upright position when the larger holes on each flat mounting plate on the sides of the bracket are at the top.



- 2. Attach the system to the bracket
  - a. Tilt the system toward the wall.
  - **b.** Slide the V-Band that runs along the center circumference of the system up and into the upper notch on the bracket.
  - c. Straighten the system upright and let the bottom of the V-Band settle into the lower notch on the bracket.

### Countertop Installation (Countertop Kit Required)

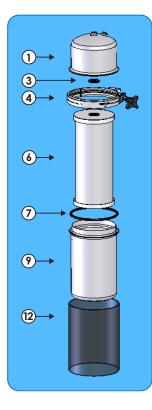
Item #	Part #	Part Description
1	MCL500	Housing top (Aquaperform/Aquaversa)
2	940-50-3011	Housing top (Aquamini)
3	MC252S	Black rubber cushion (inside housing top)
4	MC253	V-band with knob (Aquaperform/Aquaversa)
5	NL50263	V-band with knob (Aquamini)
6	CB11As/CB6/	Carbon Block Filter cartridge
	CBMINI	
7	MC351S	O-ring (Aquaperform/Aquaversa)
8	NL423S	O-ring (Aquamini)
9	MCB880R	Housing bottom (Aquaperform)
10	MCB500	Housing bottom (Aquaversa)
11	MCBMINI	Housing bottom (Aquamini)
12	MC840	Aquaperform tall acrylic base*
13	MC240N	Aquaversa short acrylic base*
14	MC6400ASBL	Dual-Hose Diverter Valve**
15	MC6009ASBL	Single-Hose Diverter Valve***
16	MC557	Stainless Steel Spout***
17	MC750	Spout Adapter*** (Not Shown)

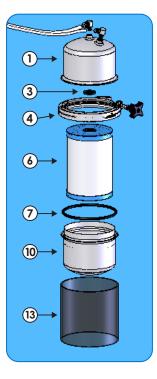
The size of the acrylic base is based on the system model; only one acrylic base is included with the kit. \*\*Dual-Hose Countertop Kit ONLY. \*\*\*Single-Hose Diverter Kit ONLY

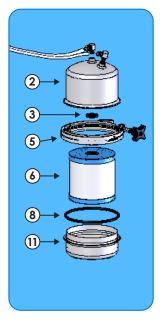
#### Aquaperform

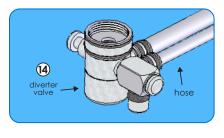
#### Aquaversa

#### Aquamini











(13)

#### **Countertop Kit Components**

Included with the Countertop Kit are the following components

- 1. Acrylic Base: Used to hold the Aquaperform or Aquaversa upright on the countertop.
- Diverter valve: Used to connect the dual-hose from the Aquaperform/ Aquaversa/Aquamini to the existing sink faucet. The diverter valve comes pre-attached to the dual-hose, and allows selection of filtered or unfiltered water from the faucet.
- 3. Dual-hose / Single-hose: Used to connect the diverter valve to the Aquaperform/Aquaversa/Aquamini.



Diverter Valve Attachment

Diverter Valve Attachment with adapter

\*MC700 Adapters Many installations do not require an adapter

#### **Connect the Diverter Valve**

- 1. Remove the aerator or screen (if present) from the end of the faucet. If facing the open end of the spout, rotate the aerator counter-clockwise to loosen and remove.
- Attach the diverter valve directly to the faucet spout. If the threads of the diverter valve do not match the threads of the faucet, use one of the included faucet adapters to connect the diverter valve and faucet. If facing the open end of the spout, rotate the diverter valve and/or adapter clockwise to tighten.

NOTE: When using a faucet adapter, the rubber washer in the adapter always faces up toward the faucet.

#### a. If Your Faucet Has an Outside Thread (male connector):

For many faucets with an outside thread, the diverter valve can attach directly to the faucet. If the diverter valve is too small to attach to the faucet, attach the inside thread (female connector) adapter, part# MC106, to the faucet, and then attach the diverter valve to the adapter.

#### b. If Your Faucet Has an Inside Thread (female connector):

The diverter valve cannot directly connect to a faucet with a female connector. Attach one of the outside thread (male connector) adapters, part# MC105 or part# MC108, to the faucet, and then attach the diverter valve to the adapter. MC105 is designed to fit larger faucets, and MC108 is designed to fit smaller faucets.

#### c. If Your Faucet Requires More Room for the Diverter Valve Connection: Some faucets, particularly sprayer hose faucets, require additional room for the diverter valve connection. If this applies, attach the long adapter, part# MC257, to the opening of the faucet spout/ sprayer, and then attach the diverter valve to the adapter. The DWS may need to be repositioned on the sink to allow enough room for sprayer faucet use.

#### d. If the Adapters Do Not Fit Your Faucet:

Although the adapters included with your DWS allow connections with many standard faucets, they do not cover every type of available faucet connection. If none of the adapters allow the diverter valve to connect to your faucet, please contact Multipure Customer Service at 1.800.622.9206, ext. 175, to request part# MC109 or part# MC719 as possible adapter solutions.

NOTE: When connected properly, the hose from the diverter valve should lead toward the back of the faucet and sink.

#### Installing the Dual-Hose Diverter Valve Kit

- 1. Locate the labeled Outlet tubing of the diverter valve. Insert the tubing connector into the labeled Outlet port of the system housing and rotate to tighten.
- 2. Locate the labeled Inlet tubing of the diverter valve. Insert the tubing adapter into the labeled Inlet port of the system housing and rotate to tighten.

- 3. Making sure that the tubing feeds through the openings in the acrylic base, place the system housing (with the ports and tubing facing down) onto the acrylic base.
- 4. The diverter valve features a bypass lever with a button on the left and right sides of the diverter valve. Press the left button to bypass the DWS and select the unfiltered water spout (larger opening). Turn on your faucet to let unfiltered water flow out of the diverter valve and to make sure that the diverter valve is properly connected.
- 5. Turn off the faucet.
- 6. Proceed to the section, Prepare Your Drinking Water System for Use.

#### Installing the Single-Hose Diverter Valve Kit

- Insert the spout adapter (MC750) into the labeled Outlet port of the system housing and rotate to tighten.
- 2. Connect the spout (MC577) to the system housing by pushing it gently into the spout adapter until both O-rings are not visible.
- Insert the diverter valve tubing adapter into the labeled Inlet port of the system housing and rotate to tighten.



Stainless Steel Spout

- 4. Place the system housing (with the ports and tubing facing up) onto the acrylic base.
- 5. The diverter valve features a bypass lever with a button on its side. Push the button to bypass the DWS and select the unfiltered faucet. Turn on your faucet to let unfiltered water flow and to make sure that the diverter valve is properly connected.
- 6. Turn off the faucet.
- 7. Proceed to the section, Prepare Your Drinking Water System for Use.

## Inline Installation

The Aquaperform can be used inline for connection to refrigerators, water coolers, or ice makers, so that all of the water from the cold water outlet or faucet is filtered. Multipure recommends that a professional plumber install the system for inline use.

### Prepare Your Drinking Water System for Use

- 1. Using a paper towel or cloth, dry off all connections and the system housing.
- 2. Make sure that all connections are tightly secured.
- 3. Flush the system before use.

#### a. On a below-sink configuration:

- i. Turn the water supply back on; rotate both the Adapta Valve shutoff valve and either the water supply Angle Stop Valve or water shutoff valve counter-clockwise to engage the flow of water through the pipes.
- ii. Turn the handle on the DWS faucet to start the flow of filtered water.
- iii. Allow water to flow through the DWS for 15 minutes. This purges any air and loose carbon from the system.
- iv. Adjust the Angle Stop Valve or water shutoff valve so that the water flow to the drinking water faucet does not exceed the flow rate. NOTE: It takes approximately 15-20 seconds to fill a quart of water at the DWS-specified flow rate.

#### b. On a dual-hose configuration:

- i. Press the right button on the diverter valve to select the filtered water spout. The water will flow through the DWS and emerge from the smaller opening on the diverter valve.
- ii. Allow water to flow through the DWS and filtered water spout for 15 minutes. This purges any air and loose carbon from the system.
- iii. Press the left button to select the unfiltered water spout, and then turn off the faucet.

#### c. On a single-hose configuration:

- i. Pull the button on the diverter valve to select the filtered water spout. The water will flow through the DWS and emerge from the spout on top of the system housing.
- ii. Allow water to flow through the DWS and filtered water spout for 15 minutes. This purges any air and loose carbon from the system.
- iii. Push the button to select the unfiltered faucet, and then turn off the faucet.
- 4. Check all connections to make sure that there are no leaks.
- 5. Congratulations! Your system is now ready for use!

### Warranty

**Multipure 90-Day Guarantee**: Multipure is confident in the performance of its Drinking water systems (DWS). If you should find this Drinking water system unsatisfactory, let us know within 90 days of purchase for a prompt exchange or refund.

Multipure Warranty: Multipure warrants to the original retail customer its DWS and components to be free of defects in material and workmanship for use under normal care, and will repair or replace any system at no charge (excluding transportation to Multipure Corporate Headquarters) to the customer during the warranty period. The DWS housing is warranted for a lifetime (provided the filter has been changed at least once per year); all exterior hoses and attachments to the DWS are also warranted for defects in material and workmanship for one (1) year.

Multipure solid Carbon Block Filters are warranted for defects in material and workmanship for use under normal care. The capacity of the filter cartridge depends upon the amount of impurities in the water to be processed.

Except as otherwise expressly provided above, Multipure makes no warranties, express or implied, arising by law or otherwise, including without limitation the implied warranties of merchantability and fitness for a particular purpose, to any person. This limited warranted may not be altered, varied, or extended except by a written instrument executed by Multipure. The remedy of repair or replacement as provided under this limited warranty is exclusive. In no event shall Multipure be liable for any consequential or incidental damages to any person whether occasioned by negligence of the manufacturer, including without limitation damages of loss of use, cost of substitution, property damage, or other monetary loss.

Warranty is valid only if the DWS is operated within conditions listed herein. The warranty begins from the date of purchase.

Faucets: Warranty: 12 Months Return Policy: 30 days Parts: Warranty: N/A Return Policy: 30 days

Hose and Diverter Valve: Warranty: 12 months Return Policy: N/A Replacement Filters: Warranty: 30 days Return policy: N/A Note: On the return policy, customer will receive refund minus the shipping and handling fees paid.

# Troubleshooting

#### Bypass lever – sticking (hard to move)

Minerals in the water can build up on the diverter valve, causing the bypass lever to stick and preventing the buttons from being pressed easily.

A sticking bypass lever can be solved by lubricating it or by dissolving the mineral deposits.

Lubrication – requires vegetable oil; because lubrication does not dissolve the mineral deposits, it may need to be performed periodically.

- 1. Unscrew the diverter valve and remove from the faucet.
- 2. Pour a small amount of vegetable oil in the inlet hole.
- 3. Push the left and right buttons on the diverter valve several times to lubricate it thoroughly.
- 4. Reconnect the diverter valve to the faucet.

Dissolving – requires vinegar; may cause discoloration to the metal.

- 1. Unscrew the diverter valve and remove from the faucet.
- 2. Soak the diverter valve in a bowl of vinegar for 10 minutes.
- 3. Rinse the diverter valve and reconnect to the faucet.

#### Bypass lever – stuck (cannot be pressed)

The bypass lever can occasionally become stuck due to the presence of air in the tubing. This can prevent the buttons from being pressed.

- 1. Unscrew the diverter valve and remove from the faucet.
- 2. Press the left and right buttons to test it. If they press in easily, then removing the diverter valve freed the air in the tubing.
- 3. Reconnect the diverter valve to the faucet.



# For Life. For You.

7251 Cathedral Rock Drive, Las Vegas, NV 89128 702.360.8880 • 800.622.9206 • www.multipure.com

600-60-6084 / 0322