

Installation Instructions Residential Drinking Water Models

ADWU-S, ADWU-D, ADWU-DM, ADWU-TM, ADWU-D-UV

Your Drinking Water System has been tested to ensure it will operate correctly. The following periodic maintenance is recommended so your system will provide years of trouble-free service:

Replacement parts	Replacement
Pre-filter (sediment)	Every 6 mos.
Post-filter (activated carbon)	Every 6-12* mos.
UV Lamp (ADWU-D-UV only)	Every 12 mos.

Components

The following components make up your Drinking Water System.

Pre-filter (s) (sediment) removes larger particles such as sand, silt, rust and scale.

Post-filter (activated carbon) removes chlorine, taste and odors in the feed water.

Filter housings hold pre and post filter cartridges. A **bracket** is provided so they may be mounted, typically below the sink.

Water Meter (optional) counts gallons filtered and automatically shuts the system off when capacity has been reached.

The dedicated **faucet** is used to dispense filtered water when needed.

Feed water saddle valve is connected to the cold water line to supply water to the system.

Tubing supplies feed and filtered water.

Fittings are used for necessary hose connections.

Tools

The following tools may be necessary, depending on each particular installation:

- 3/8" variable speed electric drill; 1/8" & 1/2" bits
- 1-1/4" porcelain hole cutter (if hole for second faucet is not provided).
- Center punch and hammer
- 1-1/4" wood bit
- Concrete drill bits
- Phillips head and flat blade screwdrivers
- Adjustable wrench
- Crescent wrench
- Teflon tape
- Plastic tube cutter

System location

Your drinking water system may be installed under a sink, in a basement or other location, depending on available space. Do not install unit where temperatures fall below freezing; otherwise, damage will result. Connection to an icemaker should also be considered for optimum performance.

Guidelines for component placement are as follows:

Faucet should be placed near the sink where drinking / cooking water is normally required. A 2" flat surface is required to mount the faucet if an existing hole for a second faucet is not available. The thickness of the mounting thickness should not exceed 1-1/4".

Feed water connection is accomplished with a self-piercing feed water saddle valve. Locate this assembly as close to the system as possible. Connect to a potable, cold water supply line only.

Note: Plumbing codes may require the use air gaps. Please check with your local municipality.

Site preparation

Installing dealers may want to speak with customers in advance and ask them to clean under the sink to save time. If a basement installation is advisable, check area to determine if extra fittings or hosing are required. Upon arrival, it is a good idea to check the condition of all plumbing for potential leaks and advise customer so there will be no misunderstandings in the event leaks occur.

Unit preparation

Open shipping carton, remove components and check that all parts are present.

Installation steps

Note: All plumbing must be completed in accordance with state and local plumbing codes. Some municipalities may require installation by a licensed plumber. Check local authority prior to installation.

1. Faucet installation

If the sink has a sprayer it may be disconnected for faucet installation. (Installing dealers should discuss this with customers.) A pipe cap or plug will be necessary to seal the sprayer connection.

To make the faucet mounting hole (if sprayer or second hole is not used), check below to make sure the drill does not interfere with anything below. Center punch a small indent at the desired faucet location. (2" flat surface is required, not exceeding 1-1/4" in thickness.) Drill the required pilot hole for the chassis punch and tighten nut to cut the desired hole size. Clean up sharp edges.

The faucet should be positioned so it empties into the sink and the spout swivels freely for convenience. If sink has a hole that can accommodate the faucet, no drilling is required. Proceed with mounting the faucet.

Porcelain, Enamel, Ceramic on Metal or Cast Iron:

Precautions must be taken to penetrate the porcelain through to the metal base and prevent it from chipping or scratching.

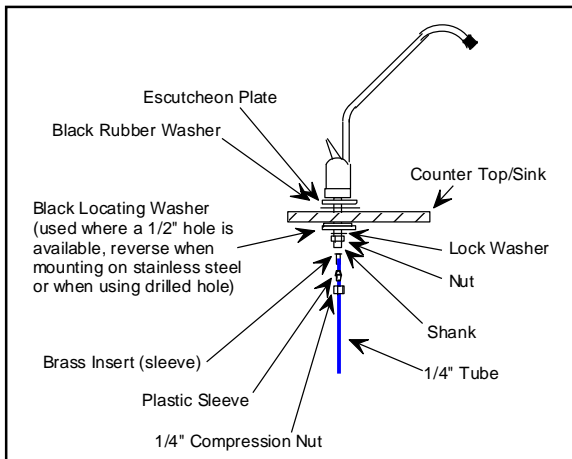
Tools required:

- Variable speed drill
- Relton porcelain cutter tool set (7/8" or alternative size, 9/16")
- Plumber's putty

Procedures:

1. Mark the center for the 7/8" hole.
2. Form shallow putty around hole area and fill with enough water to lubricate carbide drill bit.
3. Carefully drill pilot hole through all layers. (Use light pressure and slow speed.)
4. Insert pilot tip of spring-loaded porcelain cutter into pilot hole.
5. Drill porcelain / enamel using spring loaded porcelain cutter, making certain a complete ring has been cut through the porcelain / enamel to the metal base.
6. Cut away the inner porcelain / enamel disc down to the base metal. Make certain the cutter does not touch outer rim of the cut porcelain / enamel. Continue until the sink has been completely penetrated.

Note: Always use sharp cutter to eliminate chips.



Faucet installation without air gap

Installation procedures for stainless steel sinks

Recommended tools:

- Center punch
- Variable speed drill
- High speed drill bits
- Greenlee chassis punch 7/8" (or 9/16" for non air gap faucets)
- Protective gloves & eye protectors

Procedures:

- A. Center punch small indent for hole.
- B. Drill the required pilot hole.
- C. Set-up the chassis punch per instructions and tighten nut to cut the desired hole size.
- D. Clean up sharp edges with file.

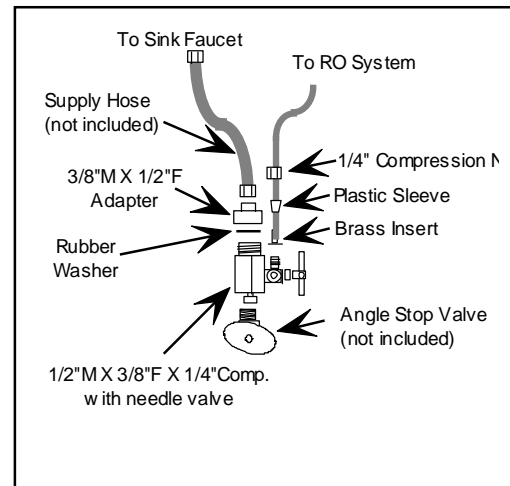
2. Mounting the faucet

Disassemble hardware from the threaded nipple, except for chrome base plates and rubber washers. (Rubber washers may be replaced with bead of plumber's putty for neater appearance.)

Feed the threaded nipple through sink or counter mounting hole and orient the faucet. From below sink or counter, assemble the white spacer flat washer and hex nut on threaded nipple and tighten by hand. (Open end up; open side toward air gap). After checking faucet orientation, tighten with a wrench until secure.

3. Feed water valve and tubing installation

The saddle tapping valve which is supplied is designed for use with 3/8" to 1/2" OD soft copper supply tubing (plain or chromed) and rigid metal pipe. Do not use with flexible ribbed supply tubing that is too thin and requires special hardware.



Self-taping feed water saddle valve installation

Installation procedures using soft copper tubing:

1. Turn off cold water valve from under sink or main water line valve for whole house.
2. Before installing saddle tapping valve, make sure piercing lance does not protrude beyond rubber gasket.
3. Assemble saddle valve on copper tubing.
4. Turn handle clockwise to pierce soft copper tube until valve is firmly seated. (Valve is closed in this position.)
5. Turn on water supply to pressure cold water line.
6. Snug nut/seal with wrench around valve stem.
7. Connect tubing to feed water valve using brass compression nut, insert and plastic sleeve.

Saddle valve installations with metal pipe:

1. Turn off cold water supply.
2. Drill 3/16" hole at desired location.
3. At this point, make sure piercing lance does not protrude beyond rubber gasket.
4. Assemble saddle on to pipe, aligning with hole.
5. Turn saddle valve handle clockwise to close valve.
6. Tighten nut/seal around valve stem with wrench.
7. Connect tubing to feed water valve using brass compression nut, insert and plastic sleeve.
8. Turn on cold water supply.
9. To open valve, turn handle counterclockwise and check for leaks.

4. Initial tubing connections

For convenience on under counter installations it may be advisable to complete under counter hose connections at this time.

5. Unit installation

To mount the drinking water unit, elevate it at least 2" off the floor, level it and mark the location of mounting holes needed. Drill holes for mounting screws and install screws, allowing the mounting bracket slots to slip over them.

Note: If the cabinet sidewalls are not solid, unit may sit on the floor with screws to keep it against the cabinet in a vertical position.

6. Final tubing connections

With all components in place, complete final tubing connections using these guidelines:

- ☉ Tubing should follow contour of the cabinets.
- ☉ Cut tubing to desired length using square cuts and proper cutting device.
- ☉ Make no sharp bends.
- ☉ Keep tubing from the unit to the faucet as short as practical for good flow.

Under sink installations following installation diagram and the following procedures:

1. Connect tubing from faucet to unit.
2. Connect tubing from supply valve to unit.

***Note:** ADWU-D-UV unit requires faucet tubing to be connected to UV fitting

Icemaker hookup (optional)

The drinking water device can be connected to any standard refrigerator icemaker or icemaker / water dispenser. (Do not connect to a commercial type bar icemaker.)

To complete this operation, connect a tee with shut-off valve into the faucet tubing and route tubing to the refrigerator. (Hooking up to an existing copper line is not recommended unless it is new installation.) Shut off icemaker by lifting lever prior to turning off the existing tap water supply line to the refrigerator.

System start-up

Prior to start-up:

1. Check all connections be sure they are secure.
2. Turn on feed water valve and check for leaks. (Turn off and correct leaks if leaks occur.)
3. Close faucet and wait five minutes to see if leaks result.

Note: When the system is first turned on, water may intermittently "spurt" from the air gap opening on the side of air gap faucets. This is common and should correct itself after an initial period of time.

Maintenance

Your drinking water system contains filter cartridges that must be replaced periodically for proper operation. (Please see page 1 for general change-out recommendations.)

Note: Change-out procedures may be amended, depending on source water conditions.

To change filter cartridges follow these procedures:

1. Close feed water valve by turning it clockwise.
2. Loosen and remove filter housings using wrench provided and discard cartridges.
4. Wash the inside of the housings using mild detergent and soft cloth. Thoroughly rinse all soap before reassembly.
5. Replace filter cartridges.

John Guest® brand fittings

Models ADWU-S, ADWU-D, ADWU-DM, ADWU-D-UV and ADWU-TM utilize John Guest® brand fittings. These user-friendly fittings provide superior performance and virtually eliminate the potential for leaks. Proper use of these *push-in* fittings is shown below. Along with these fittings, all tubing selected must be of high quality and must be cut with a plastic tube cutter or sharp razor with a clean, square cut.

Should a leak occur at a fitting, the cause is generally defective tubing. To fix a leak, relieve pressure, release tubing, cut off at least 1/4" from the end (square cut), reattach the tubing and confirm the connection is leak free. Each time a new connection is made, it is advisable to cut off 1/4" from the end of the tubing using these fittings.

Conventional fittings

If John Guest fittings are not used, it is essential to install *inserts* at the ends of all tube connections when conventional fittings are used.

Model ADWU-DM (with water meter)

This model includes a pre-filter housing, post-filter housing, faucet, feed water saddle valve, tubing, fittings and a water meter which will count gallons and automatically shut off the system once 1,800 gallons has been filtered. This special component indicates when cartridges should be replaced, and will help assure fresh, filtered water will be provided at all times. On this model the fitting located on the meter is the outlet of the system. Connect tubing from this fitting to the faucet.

Model ADWU-TM (Triple housings with meter)

This model consists of three filter housings, faucet, feed water saddle valve, tubing, fittings and water meter which will count gallons and automatically shut off the system once 1,800 gallons has been filtered. This special component indicates when cartridges should be replaced, and will help assure fresh, filtered water will be provided at all times. On this model the fitting located on the meter is the outlet of the system. Connect tubing from this fitting to the faucet.

Model ADWU-D-UV (Double housings with UV)

This model consists of two filter housings, sediment filter, carbon block cartridge, faucet, feed water saddle valve, tubing, UV System, ballast, and fittings. The UV system requires power to operate properly. To connect power to the UV unit: attach two-pronged wire lead from UV system to the two-pronged lead from the ballast. Plug ballast into an appropriate wall receptacle. The faucet connection fitting is located on the UV chamber on the outlet of the system. Connect tubing from this fitting to the faucet. When performing a filter change out be sure to disconnect power supply.

NOTE:

DO NOT LOOK DIRECTLY AT THE UV LAMP.

Ultra Violet light cannot be seen with the naked eye and could cause severe damage.