AQUA FLO®

ULTRA 2 UNDER SINK FILTER INSTALLATION INSTRUCTIONS



Limited Warranty

- This warranty is valid for twelve months from date of purchase.
 If this product is found to be defective in the judgement of the manufacturer, a like or similar product will be provided at no charge.
- The manufacturer shall not be liable for damages or delays caused by defective material or workmanship or by failure due to normal wear.
- Retain for your records along with your proof of purchase.

Precautions

- This filter is designed to operate at water pressure up to 100 psi. Normal municipal water pressure is 40 60 psi.
- Plastic housing parts must not be subjected to freezing, excessive heat or direct sunlight. These conditions may cause failure.
- Install filter with a minimum of 3" clearance top, bottom and sides.
- Do not overtighten fittings when installing this unit.



Item #26117

Ultra 2 Parts include:

- 1 Two housing bracket c/w housing and cartridges
- 1 5 foot length 1/4" OD blue tubing (product water)
- 1 5 foot length 1/4" OD white tubing (feed water)

Package A

- 2 Phillips #10 x 3/4" stainless steel screws
- 2 1/4" plastic tubing inserts
- 2 Elbow, 1/4" x 1/4", QC x MNPT
- 1 Filter housing wrench
- 1 SV9 self tapping feed water saddle c/w quick connect tube fitting

Package B

1 Long reach faucet assembly c/w quick connect tube fitting

Replacement Cartridges

Carbon Filter #26006

- Replace a minimum of every six months or as required.
- Carbon filters require some rinsing to remove carbon fines before installation.

Post-filter #26118 - 0.5 Micron Carbon Briquette Cartridge

- Replace a minimum of every 12 months or if production or quality of water diminishes.

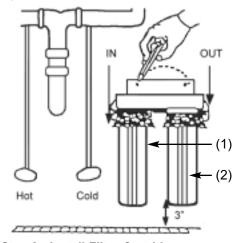


ULTRA 2 UNDER SINK FILTER INSTALLATION INSTRUCTIONS

This unit is not intended for use where water is microbiologically unsafe or with water of unknown quality without adequate disinfection before or after the unit.

Step 1 - Choose a Location

Position the filter housing bracket on wall of cabinet nearest cold water line beneath sink. Leave at least 3" clearance between the bottom of the filter housing and the floor. Mark bracket slots on the wall.



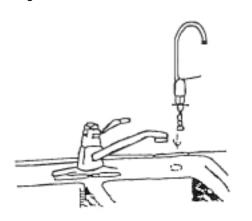
Step 2 - Install Filter CartridgesFor sanitization procedures, refer to
Instructions #1. Install the Carbon filter in
the (1) sump and 0.5 Micron Carbon

Briquette cartridge in the (2) sump.

Step 3 - Install Screws - Package A
Drill a 1/8" hole on each mark, then insert
the screws. Leave each screw
approximately 1/4" out from the wall for
mounting the head assembly later in the
installation.

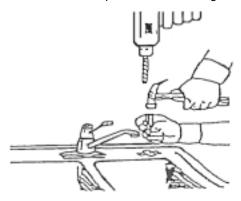
Step 4 - Installing the Ultra 2 Faucet

The faucet may be installed into the hole normally used for the sink sprayer. If you have a sink sprayer installed and plan to use it or do not have a hole, you will have to drill a hole for the faucet. The faucet will fit through a 7/16" hole or larger.



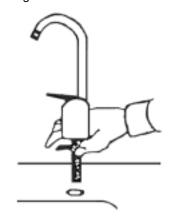
For drilling through a metal sink, first make a small indentation with a punch where you want to install the faucet. (Caution - Wear Eye Protection When Drilling)

For drilling through porcelain, place a piece of masking tape over the location, then score with a punch before drilling.



Step 5 - Insert the Faucet - Package B
Remove the hardware from the faucet
stem for later use. Slide the large chrome

stem for later use. Slide the large chrome plated washer onto the stem, then the large plastic washer. Place the faucet stem through the hole on the sink.



Step 6 - Secure the Faucet

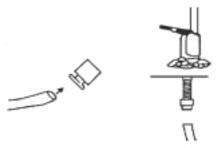
Slide the small rubber washer, then the large metal washer and lock nut onto the faucet stem. Tighten the lock nut to secure the faucet in place.

Step 7 - Install Faucet Connector

Apply NSF 61 grade tape over the threads of the faucet and install the faucet connector. *Do not overtighten.*

Step 8 - Connect the Product Water Tubing

Firmly push one end of the blue product water tubing into the quick connect fitting of faucet connector as shown below. For more details on quick connect fitting, see instruction #2.



Step 9 - Install Feed Water Saddle - Package A

Locate a suitable area on the cold line. Following the instructions #3 supplied, attach the self tapping feed water saddle to the cold water line.

Step 10 - Install Connector and the Feed Water Tubing

Install the connector (PACKAGE A) to the valve body of the saddle valve as shown in step 7 (If not using compression nut fittings). Firmly push the one end of the white tubing to the quick connect fitting of the connector as shown in Step 8.

Step 11 - Install White 90 Degree Elbows

Apply NSF 61 grade tape to the threads of the white 90 degree elbow fitting and install them in the filter inlet and outlet ports.

Step 12

Firmly push the other end of white tubing and the other end of the blue tubing into the quick connect fittings of elbow at the inlet and outlet side respectively. For more details on quick connect fittings, see instructions # 2.

Step 13 - Activating the System

Open feed water saddle and faucet. Flush unit for 2 - 3 minutes or until all the air has been expelled and the water appears clear at the faucet.

Instruction #1 - Cleaning, Sanitizing and Cartridge Replacement Procedure

- Mix mild cleaning solution of dish soap and clean potable water in plastic bowl.
- Relieve presure by closing feed water supply valve and open product water faucet.

<u>Icemaker:</u> Transfer ice cubes from bin/tray to clean freezer container for storage until procedure is done.

 CAUTION: Do not attempt to remove filter housings until water flow stops. This reduces pressure inside the system so housings may safely be removed.

CAUTION: Additional point-of-use devices (i.e., icemakers) may use filters along their supply line. Remove any filter or treatment device installed between module and device before proceeding.

Remove each filter/membrane housing by turning it counter-clockwise. Remove each filter cartridge as its housing is removed. Discard filters.

- CAUTION: Use sanitary rubber gloves for this procedure to avoid contaminating sanitizing solution, filters, or membrane. Wear gloves whenever cleaning/ sanitizing system components or handling new filter/membrane cartridges.
- Remove filter housing "O" rings and wash them with cleaning solution. Rinse them well with clean potable water. Inspect them for damage (i.e., nicks, scratches). Replace damaged "O" rings.
- Clean filter housings ports, inside and outside, with washcloth and cleaning solution. Do not use abrasive materials.
- 7. Rinse manifold/housings with clean potable water.
- 8. Inspect manifold and filter housing "O" ring groove area for damage (i.e., nicks or scratches). Replace damaged components.

 Place a small amount of "O" ring lubricant over surface of filter housing "O" ring. Install "O" ring into filter housing groove.

TO SANITIZE THE SYSTEM: Complete Steps 12-20.

TO INSTALL FILTERS: Complete Steps

WARNING: WEAR SAFETY GLASSES WHILE PERFORMING THIS PROCEDURE.

READ "WARNINGS" INFORMATION ON BLEACH CONTAINER BEFORE USING CONTENTS.

HANDLE SANITIZING SOLUTION CAREFULLY. AVOID CONTACT WITH UNPROTECTED AREAS.

10. CAUTION: Excessive concentrations of bleach will damage plastic and rubber components. Rinse all parts that contact bleach thoroughly with clean potable water.

Mix sanitizing solution of 1.5 ml (1/3 teaspoon) of household bleach and 3.8 L (1 gallon) of clean, potable water in the bucket. Mix solution well.

 CAUTION: Tighten filter housings by hand only. Do not use tools as they will over-tighten and damage housings. Take care not to cut or pinch o-rings.

Add 236 ml (one cup or 8 oz.) of sanitizing solution to each filter housing and install them onto the manifold (do not install filters or membrane at this time). Tighten each filter housing by hand only.

- 12. Slowly open source water supply valve.
- 13. Open product water faucet. Close faucet as soon as water begins to flow from spout.
- 14. Wait 5 minutes, then close source water supply valve.

- Wait 25 minutes, then open product water faucet and let water flow to drain.
- 16. CAUTION: Do not attempt to remove filter housings until water flow stops. This reduces pressure inside the system so housings may be removed safely.

Remove filter housings and dispose of water. Rinse filter housings and manifold ports thoroughly with clean potable water.

17. **CAUTION**: Do not remove protective plastic bag from replacement filter cartridges until so instructed.

Install "O" rings into filter housings. Open top of filter bag enough to expose filter cap and "O" ring grooves. Place a small amount of "O" ring lubricant on surface of each "O" ring.

18. CAUTION: TIGHTEN FILTER HOUSINGS BY HAND ONLY. Do not use tools as they will over-tighten and damage housings. Take care not to cut or pinch o-rings.

CAUTION: Refer to Installation Instructions for the location of each cartridge.

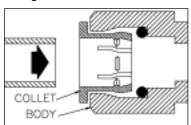
Install filter cartridges. Hold cartridge by its protective plastic bag and insert cartridge into manifold turning it 1/4 turn as it enters the port. Slide bag from cartridge and discard. Replace each filter housing as each cartridge is installed.

- 19. Turn feed water valve slowly to open position.
- Confirm system is producing water.
 Unit will be sending rinse water to drain.

Instruction #2 - Install Tubing to Quick Connect Fittings

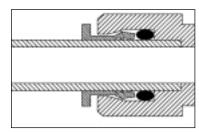
PLASTIC TUBING

- Cut tube ends square and straight.
 Do not deform tube (i.e., cause tube to compress its diameter so it is no longer round).
- Make sure outer surface of tube is clear of marks or scratches for a length equal to twice tube diameter. This allows "O" ring to seat properly against tube.



A. Push tube through Collet into Body.

 Avoid sharp changes in direction when routing tubing. Sharp turns cause tubing to flex and deform, which reduces its flow capacity and may increase lateral stress on the fittings, causing leakage.

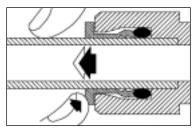


B. Tube must seat firmly at bottom of fitting.

QUICK-CONNECT FITTINGS

Fittings consist of two parts: a Body and a collet.

- To install a tube, push it through Collet until it seats firmly at bottom of fitting (Figure A and B.).
- To remove a tube, push and hold Collet against Body while pulling tube out (Figure C).



C. Push Collet against Body to release tube.

Instruction #3 - Saddle Tapping Valve Installation on Copper Tube

CAUTION: This saddle-tapping valve is not designed for installation on flex line tubing.

NOTE: State, provincial and local plumbing codes may prohibit use of saddle-tapping valves.

 CAUTION: If no shut off valve is installed under sink, close main water valve during this Installation.

Locate shut off valves on water lines under sink. To identify hot supply pipe and cold supply pipe, turn both faucets on and let water run. As water flows, hot water pipe becomes noticeably warmer.

2. **CAUTION:** Do not install feed water assembly on hot water line.

Turn off cold water supply by closing shut off valve. Drain line by opening sink faucet. Some mixing type faucets may require hot water supply be shut off as well.

NOTE: All instructions refer to components shown in Figure 1 unless otherwise noted.

 CAUTION: Do not turn valve handle before or while installing saddletapping valve. Make sure piercing lance does not protrude beyond rubber gasket before installing valve.

Assemble saddle-tapping valve assembly on tube.

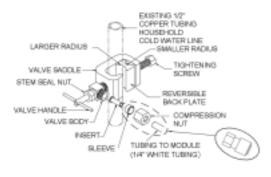
- a. Hold back plate against tube.
 - 3/8" copper tubing use back plate smaller radius.
 - 1/2" copper tubing, use back plate larger radius
- b. Hold valve saddle against tubing in a position directly opposite back plate.
- Tighten screw enough so valve saddle and back plate are held securely against tube.
- Rotate assembly so tubing connection is aligned toward RO Module feed port.
- e. Tighten screw firmly. Do not crush tube.
- 4A. Connect source water feed tubing to valve body using compression fitting.
 - a. Slide nut and sleeve onto tubing (in that order).
 - b. Install insert into plastic tubing.
 - c. Install tube with insert and sleeve into valve body.
 - d. Thread compression nut onto valve body, tighten.
- 4B. Connect source water feed tubing to valve body using connector.
 - Apply NSF 61 grade Teflon tape over the threads of valve body.
 - b. Install the connector (Do not overtighten)
 - Firmly push the white tubing into the quick connect fitting of connector.
- 5. Turn saddle-tapping valve handle clockwise until it is firmly seated and piercing lance is fully extended.

6. **CAUTION:** Supply line is pierced and valve is closed.

Do not open valve until system is activated.

Turn on cold water supply. Check saddle-tapping valve installation for leaks. Allow water to run from faucet for a few minutes to clear any debris in the line caused by installation.

NOTE: If flow from sink faucet is reduced, clean faucet aerator.



--- Compression — Connector Nut Fitting

Figure 1: Saddle-Tapping Valve Assembly P/N 92276 installed on 1/2" Copper Tubing

7. Trim ¼" white tube to desired length. Install ¼" white tube into ¼" white collet as shown in Figure 1.