H2O International Installation Instructions

Contents

How to change the filter cartridge

Step 1.

Turn off the feed water valve to the R.O. system. Turn off valve on the storage tank. Open R.O. faucet and allow all pressure to bleed off. (allow a few minutes fro the system to drain completely).

Step 2.

Unscrew the filter housing and remove the used filter cartridge. (A special wrench is available from your dealer)

Step 3.

Carefully remove the O-ring seal from its groove and rinse out the housing. Be aware that the O-ring may lift out of the grooves or stick to the manifold.

Step 4.

Wipe the O-ring clean with a soft rag or towel and visually inspected for any nicks, cuts or abrasions. If damaged. Replace the O-ring.

Step 5.

Lubricate the O-ring lightly with a suitable O-ring lubricant. Replace the O-ring in the groove. This O-ring is important as it provides the watertight seal between the housing and manifold.

H2O INTERNATIONAL®

How to change the filter cartridge

Step 6.

Measure the new filter to be sure that it is the proper length. (9 ¾” +- 1/32”)

Step 7.

Place the new filter cartridge in the housing and carefully screw into place. HAND TIGHTEN ONLY!!!

Step 8.

Tighten all connections. (on pre filter replacement. Disconnect the re/orange feed line at element housing).

Open the water supply valve (on prefilter replacement only, allow water to run from the red/orange line until you get a steady stream of water. Reconnect line to housing) and inspect all connections for leaks.

Step 9.

Turn storage tank on. Allow water flow from R.O faucet until it runs clear. Close faucet. System is now ready to use.

Replacing the R.O element

Step 1.

Turn off the feed water valve to R.O system and turn valve on storage tank off. Open R.O faucet and allow all

pressure to bleed off. (allow a few moments for pressure to evacuate the complete system)

Step 2.

A-Disconnect red/orange line from element housing.

B – Unscrew housing and cap and remove element.

C – Inlet new element in housing (end with O-rings first) until it stops. Move elements in a slight circular motions to center elements tube (tube in center of elements with O rings) with orifice in center of top element housing cap.

Replacing the R.O element

You should feel the element slide into the housing about ½", this indicates that the element is properly seated in the housing. (if this step is not carefully followed you will get high flow of untreated water from the product line on the housing to the storage tank)

D. Replace housing cap. Reinstall red/orange line and tighten connection.

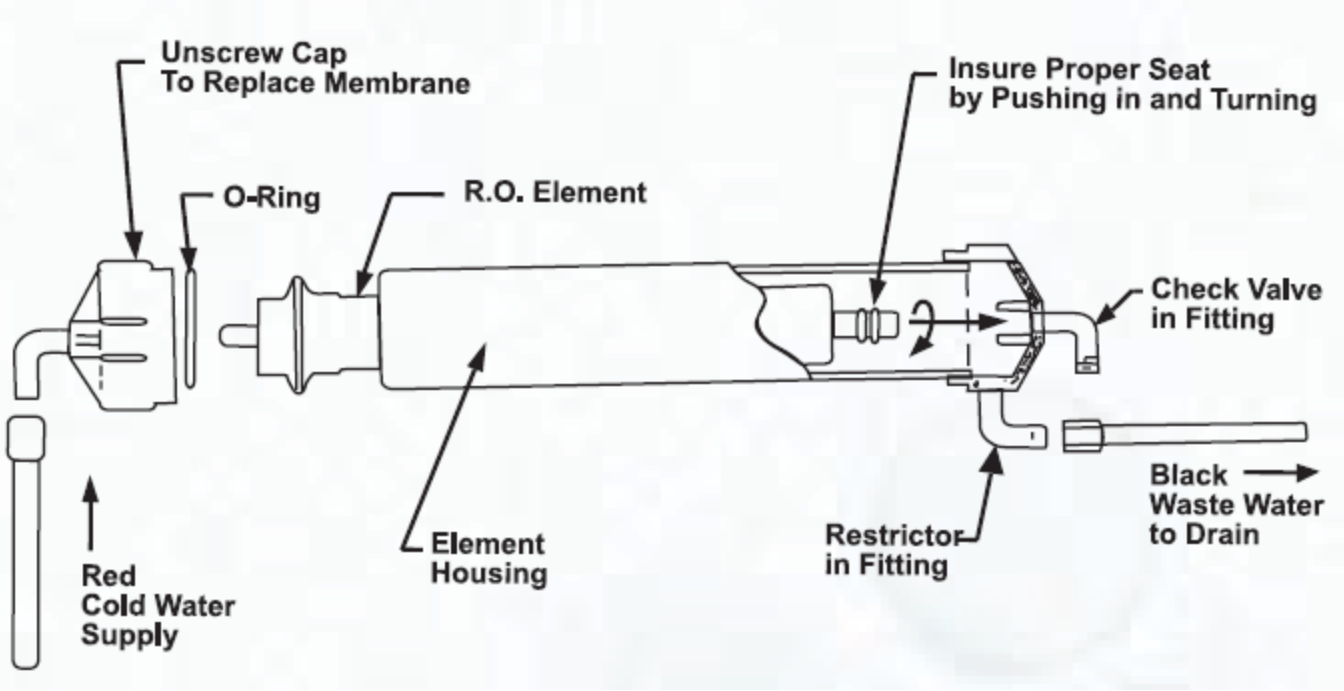
L. Turn feed water valve on until you can hear water entering the system. Check for leaks!!

F. Turn feed water valve all the way on. Allow to fill until a steady drip flows from the R.O. Faucet.

G. Close R.O Faucet

H. Open valve on storage tank. Check for leaks. System is now ready for operation.

R.O element diagram



R.O. installation instructions

Please read and become familiar with instructions, parts and procedures before proceeding with installations.

Step 1: Locating the water equipment

Make sure there is sufficient space under the counter for installation. Locate the “COLD” water shut off and drain pipe.

(Equipment requires about 6” x 12” x 18” of space and the tank is 11” in diameter by 22” high)

STEP 2: Shut off **“COLD”** water supply under the sink. If existing valve is inoperable, the water supply to the house will need to be shut off. After shut off, relieve line pressure by opening “COLD” faucet.

R.O. installation instructions

Step 3: Feed water connection

Step 1-1: (saddle valve)

Assemble saddle clamp on cold water feed tube. Turn pipe clamp adjustment plate to fit contour of pipe. (small radius for 3/8”

pipe – large radius for 7/16” through 5/8” pipe) Tighten bolt so saddle valve is firmly attached to feed water pipe.

Step 1-2 (E-Z adapter)

Assemble 90 degree needle valve into feed adapter. Use Teflon tape to prevent leaks

a. Flex line installation: Disconnect flex line at sink and install Feed Adapter.

b. Solid line instruction:

c. Disconnect line at sink, cut off approximately ¾”.

Install Feed Adapter.

R.O. installation instructions

Step 4: Drain line connection

Drill a 5/16” diameter hole through one side of the drain pipe approximately 6” above the trap.

CAUTION: If pipe is badly corroded, replace it. Attach drain clamp and make sure that the hole in the drain pipe and clamp are lined up. Use punch or drill bit to align holes while tightening clamp. Do not overtighten the clamp! Use ¼” compression nut with standard faucet and 3/8” barb connector with air gap faucet. (Note: on AQUEST air gap faucet both connections are ¼” fittings)

Step 5: Faucet hole in sink

The faucet MUST be positioned with aesthetic, function and convenience in mind.

An ample flat area is required for the faucet base in order to be drawn down tightly.

Conditions that may be prevent which could eliminate the need for drilling a hole in the sink.

R.O. installation instructions

A hole previously installed in the sink, covered by a chrome cover. Remove the cover and install the faucet.

A spray hose either not functioning or not desired. Remove the spray hose and the plug outlet under the main faucet. Be sure to check if the spray uses a diverter at the base of the spout. If so, remove it to avoid trouble later on. Spray diverter may pop up and shut off water to the main faucet.

Step 5: Cont.

If space is not available on the upper sink area, the faucet could be located in the counter top at the edge of the sink. Be careful to watch for obstructions below, i.e., drawers, cabinet walls; support braces, etc. If the counter top is ceramic tile, the method for drilling the hole would be the same as for porcelain sinks.

R.O. installation instructions

A carbide tipped drill and hole saw which will cut through the porcelain without producing the major chips. (your dealer offers a carbide drilling bit set specifically designed for drilling holes in porcelain sinks) For all drilling and grinding, a heavy duty variable speed drill is recommended,

For stainless steel sinks, a chassis punch can be used. (your dealer offers this special too as well) To center drill bit, (after locating the best position for the faucet placement) take the center punch and locate in the center of the hole to be drilled.

Tap lightly until an indentation is formed in the sink. This will insure that the drill bit does not drift.

To drill a hole in a stainless steel sink:

Drill a 3/8” clearance hole for the draw bolt of the chassis punch.

2. Place the male punch and the female die of the chassis punch on opposite sides of the sink. Draw the punch and die together with the draw bolt. (keep threads on the bolt well oiled, the punch will perform better) Lightly file or otherwise smooth the edge of the hole.

R.O. installation instructions

To drill a hole in a porcelain sink:

1. After center punching the center of the hole location, use the ¼" carbide tripped bit to drill a centering hole for the hole saws. (A light touch is required here to keep from breaking the sink)
2. Using the hole saw with springs on it, cut away the porcelain to the steel. (Use a light even pressure, DON'T strong-arm the drill!!!)
3. Using the other hole saw, drill hole all the way through the steel or cast sink.

CAUTION: Do not allow the metal chips to remain on porcelain sink surface for any length of time as stains will occur and be difficult to remove!!

R.O. installation instructions

Step 6: Faucet installation

Install Faucet. Apply plumbers putty between mounting surfaces and rubber seal. (When installing the AQUEST Smart faucet see separate instructions)

Connect blue line to faucet (if you want to feed other appliances, such as an icemaker, a tee should be installed in the blue line and feed line connected to the appliance at this time).

Step 7: System placement

Place the Reverse Osmosis unit and tank so that they are out of the way (if there is not enough space under the kitchen sink to locate the storage tank, it can be remotely installed elsewhere up to 20 feet from the system).

If the unit is to be hung on a wall, drill two 1/8” diameter holes approximately 14 ½” above the cabinet baseboard and 7” apart.

R.O. installation instructions

Step 8: System hook-up

A. Connect red/orange line to saddle valve or E Z Adapter. Discard brass ferrules provided with 90 degree angle valve use Delrin sleeves that are provided with the installation kit.

B. Connect black drain line direct to drain clamp with standard faucet. (If installing an air gap faucet, the black line is connected to the base of faucet. Black line to drain clamp is connect to other outlet on base of faucet).

C. Place tank in position and connect yellow line to tank. (Tank can be installed in a horizontal position it necessary, the position does not affect system performance.)

D. Connect blue line faucet. (As mentioned above).

- **Note:** Make sure ALL inserts, sleeves and ferrules provided in the installation kit are used. (brass insert used on faucet and feed water valve, plastic inserts are to be used on drain line and storage tank)

R.O. installation instructions

Step 9: Systems start-up

NOTE: It is recommended that you fill the storage tank with raw water at this time as it will allow you to pressure test the system

for leaks without waiting for the unit to automatically fill. Pressurize as follows: Take a piece of ¼" plastic tubing and connect it

to the feed water valve. Connect the other end to the storage tank, turn feed water on and allow storage tank to fill (about

3minutes). Shit off feed water valve, shut valve on tank and disconnect ¼" line from the feed valve and tank. Reconnect re/

orange lien to feed water and reconnect yellow line to feed water and reconnect yellow line to the storage tank.

Slowly, open needle valve allowing raw water to enter the system. CHECK FOR LEAKS!

Open R.O. faucet lever to the up position. (to allow for air to escape system) CHECK FOR LEAKS)

Drinking water installation manual trouble shooting guide

Symptom	Solution	Probable cause
No water		
1.	Set tank pressure 5 - 7 PSI	Tank improperly pressurized
2.	Water Supply turned off	Turn on
3.	Low water pressure (40 PSI Min)	Call factory for assistance
4.	Pre-filter clogged	Replace
5.	Module damage or clogged	Replace
6.	Product line crimped	Remove crimp
7.	Post – filter clogged	Replace
8.	Ball valve Closed on storage tank	Move valve to up position

Drinking water installation manual trouble shooting guide

Slow flow through faucet

1.	Post – filter clogged	Replace
2.	Low air pressure in holding tank	Raise pressure to 5-7 PSI
3.	Pre-filter clogged	Replace
4.	Low water pressure (40 PSI Min)	call factory for assistance

Drinking water installation manual trouble shooting guide

Leaking module housing

1.	Glue joint leaking	Replace housing
2.	Threaded end cap leak	Lube “O” ring and tighten
3.	Compression fitting leak	Tighten or Replace
4.	Leak at screw cap	Replace “O” ring if damaged

Drinking water installation manual trouble shooting guide

Leaking post-filter

1.	Leak at compression fitting	Tighten or Replace
2.	Leak at Post – filter seam	Replace “O” ring

Drinking water installation manual trouble shooting guide

Leaking faucet

1. Fitting Leak	Tighten or Replace
2. Leak at base of Brass barbs	Replace faucet
(air – gap faucet only)	Install faucet repair kit
3. Spigot drips	Shorten 3-8” line from
4. Overflow at air gap	Faucet to drain connection

Drinking water installation manual trouble shooting guide

Leaking From under black handle of faucet

1. Crimp in loop in drain line	Straighten
2. Drain line clogged	clear
3. Misalignment of drain clamp	Re- align

Drinking water installation manual trouble shooting guide

Bad taste

1.	Defective module	Replace
2.	Restriction in waste flow	Clear
3.	Carbon Post – filter	Replace
4.	Growth in tank	Sanitize
5.	Low water pressure (40 PSI Min)	Call factory fro assistance

Countertop units

What to do…

• Remove existing aerator from end of faucet.

• Connect diverter head to faucet. If an adaptor ring is needed, choose proper adapter and washer and install them to faucet.

Proceed to connect divert head to adapter ring. Diverter valve should be tightened by hand only. Do not use any tools.

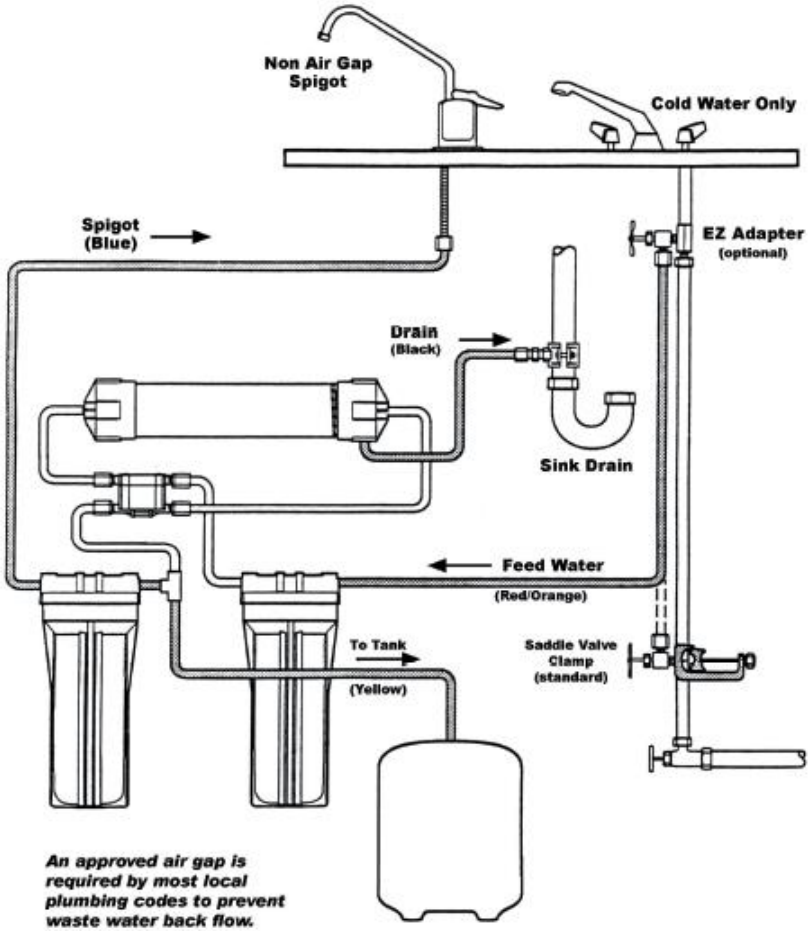
• Attach the free end of the tubing to the Water filter by pushing the hose into the “quick connection” fitting at the bottom of the unit.

(Make sure tubing is pushed in as far as it can go). If the unit is provided with a sediment prefilter attached the free end of the tubing to the inlet side of the sediment prefilter and then proceed to attach the prefilter to the unit.

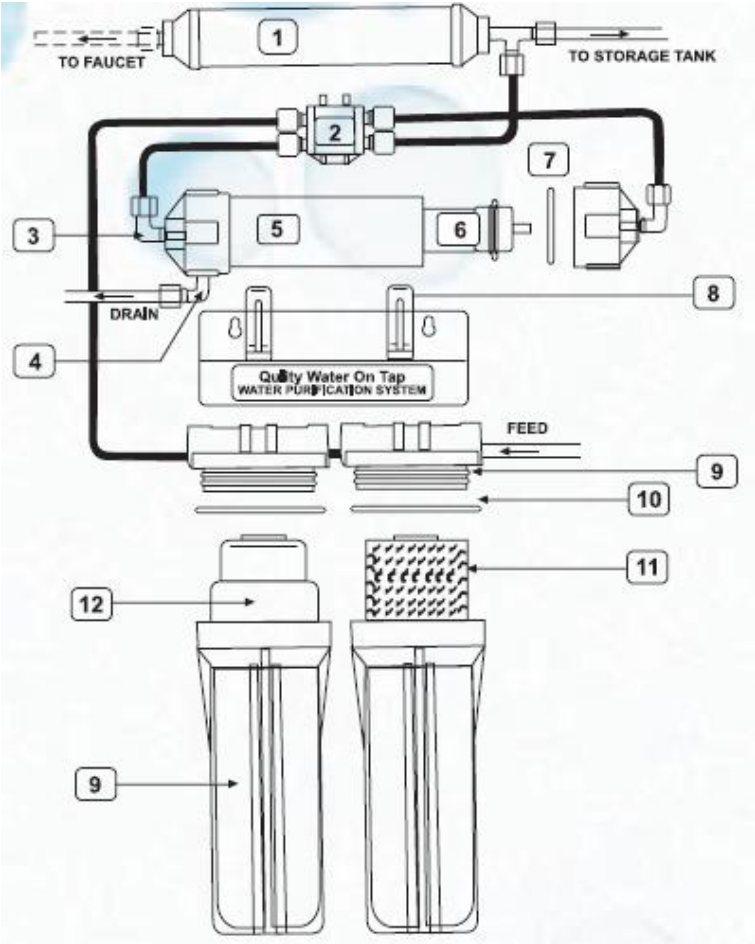
• Place unit so that the spout faces the sink. Turn on main faucet (COLD WATER ONLY).

• Diver the water flow by pulling the lever on the diverter body.

Installation diagram



The duchness: Replacement parts diagram

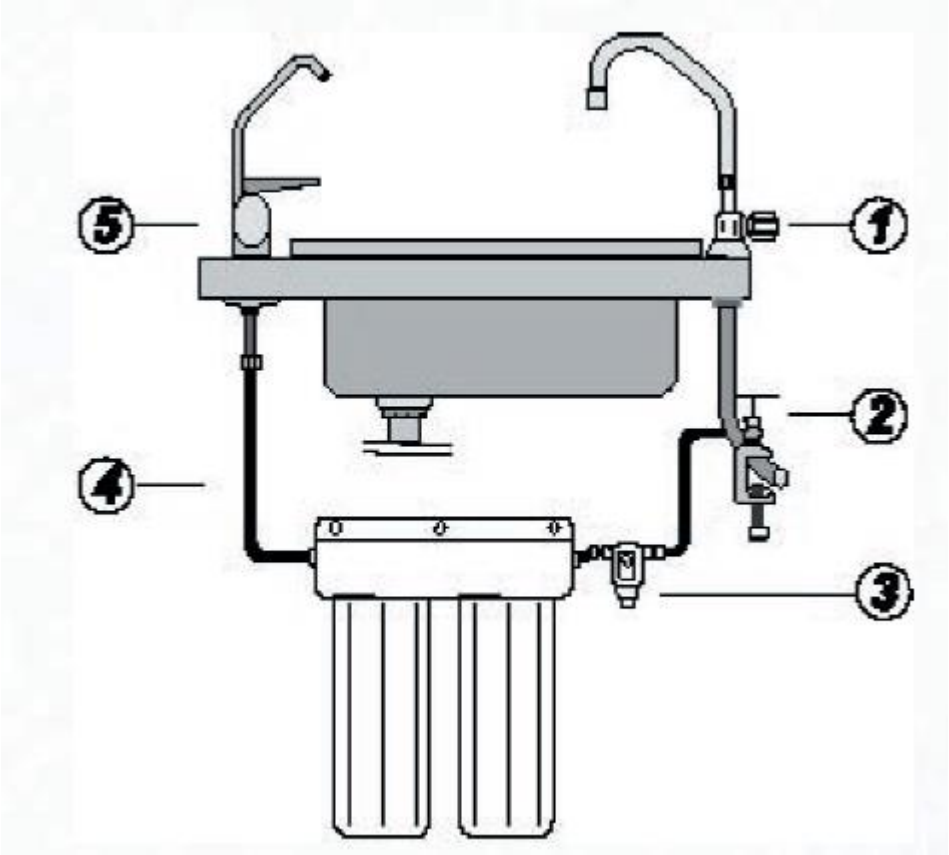


Replacement of sediment prefilter and replacement cartridge - undercover units

What to do....

- Shut off saddle clamp.
- Turn faucet on and let water out.
- Turn open the first and second housing with wrench provided.
- Remove dirty sediment filter and replace with new sediment filter and replace the KDF/ GAC cartridge with a new cartridge.
- Put the housings back and close.
- Turn open the saddle clamp.
- When replacing the KDF/GAC cartridge let the water run for 5-10 minutes. When water is clear then the unit is ready for use.

Replacement of sediment prefilter and replacement cartridge - undercover units



Replacement of sediment prefilter and replacement cartridge - undercover units

Key:

1. Existing faucet
2. Saddle clamps
3. Pressure Reducing Valve
4. Blue tubing
5. Supplied faucet

Parts List:

Faucet Kit

Pressure reducing valve

Tubing

Main purifying unit

Delrin sleeves

Black spanner

Saddle valve

Brass inserts

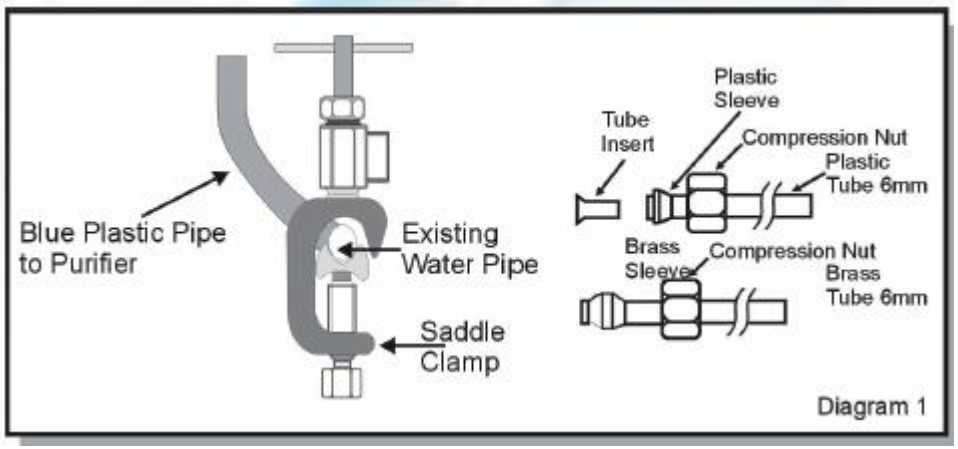
Instructions:

1. Turn off the main water supply valve (mains) and open the cold water tap to relieve the pressure.

2. Open and unpack the carton containing the purification system.

3. Check all parts against the parts list.

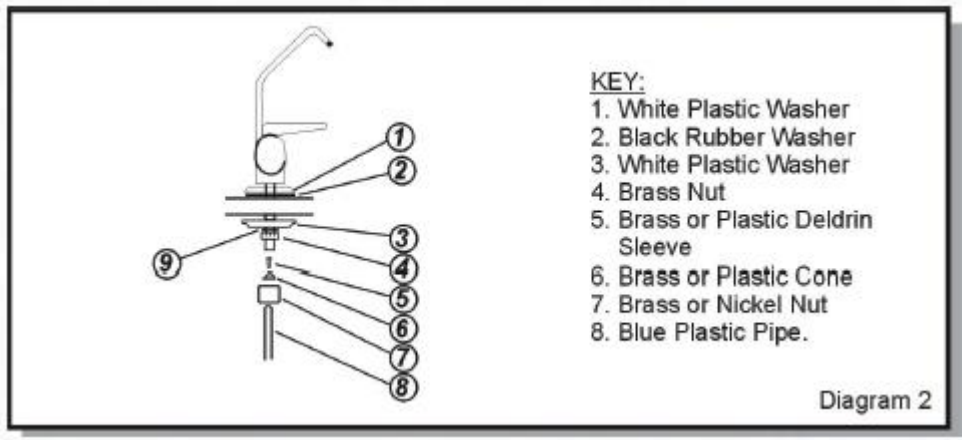
4. Clamp the saddle clamp to the cold water supply line as shown in diagram 1.



Instructions:

5. Choose the most convenient location for the provided faucet and install as shown in diagram 2 below. A 12 mm hole will have to be drilled in the sink or countertop.

6. Attach the blue plastic inlet tubing (6mm) as shown in diagram 2.

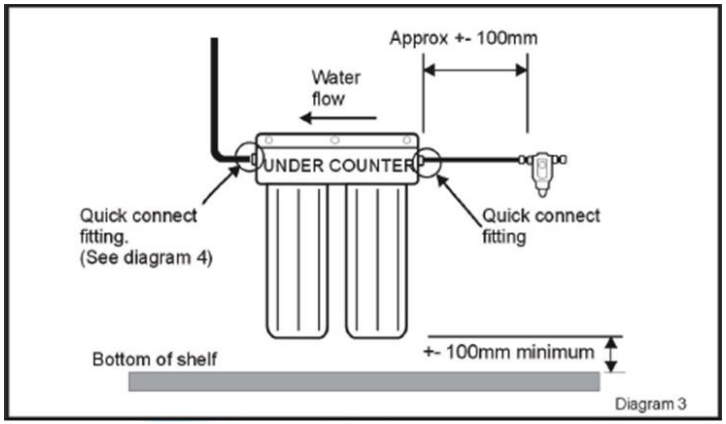


Instructions

7. Place the main purification under the counter in an accessible location. (between the saddle clamp and faucet), and leave approximately 100 mm space below the unit for disassembly (see (Diagram 3). Mount using supplied screws.

All fitting from tubes to parts is as indicated in diagram 4.

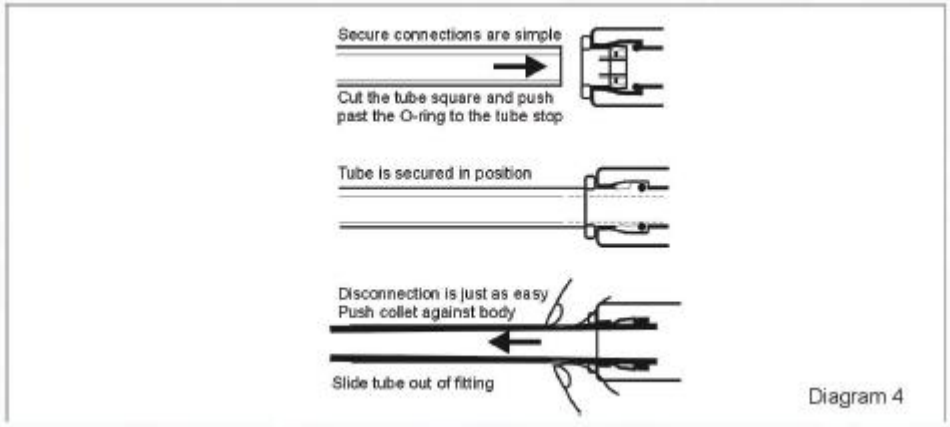
8. Cut approximately 100 mm of the blue tubing and insert into the inlet side of the main purification unit. Attach the pressure reducing valve to the tubing, observing the inlet and outlet ports of both unit. (See Diagram 3)



Instructions:

9. Cut the required length of blue tubing to connect the saddle clamp to inlet side of the pressure-reducing valve. Make sure that the tubing is long enough to allow the unit to be moved freely in the case of periodic maintenance.

10. Attach tubing between all fittings as per main illustration.



Instructions: Diagram 3

11. After all fittings and joints are securely fitted, open faucet and turn on mains water supply. Slowly turn the top of the saddle clamp until the copper pipe is pierced. Keep on turning the valve until it stops at the bottom. Then slowly start turning the valve anti-clockwise until water is running through the valve (This water can be heart and felt).

12. At this point all joints and fittings should be checked for leaks. If so tighten joints.

The water will take a short while to appear at the faucet. When it does the water is black and a lot of air will be expelled. This will pass after a few minutes (could be up to ten minutes) when all the air and the carbon fines have been washed out.

Maintenance of your H2O water purifier

This particular model does require periodic maintenance.

Generally a reduction in water flow will indicate that the sediment filter is almost expended and would require replacement shortly.

Other indicators are:

1. Change in colour of water
2. Change in odour of water
3. Change of taste of water

Please note: All H2O International water purifiers have a useful lifespan, which is usually quoted upon enquiry. The lifespan is dependent on the level of contaminants found in our water supply. These figures are however continuously changing and therefore the lifespan of your unit cannot be guaranteed

WHOLE-HOUSE PURIFICATION SYSTEMS

Installation instructions

Owners installation

Use old H2O's Filtration System

H2O's filtration system will rid your **municipal** water of contaminants through the use of a granular activated carbon (GAC) filter and KDF® [a patented media]. This ensures 100% pure safe drinking water

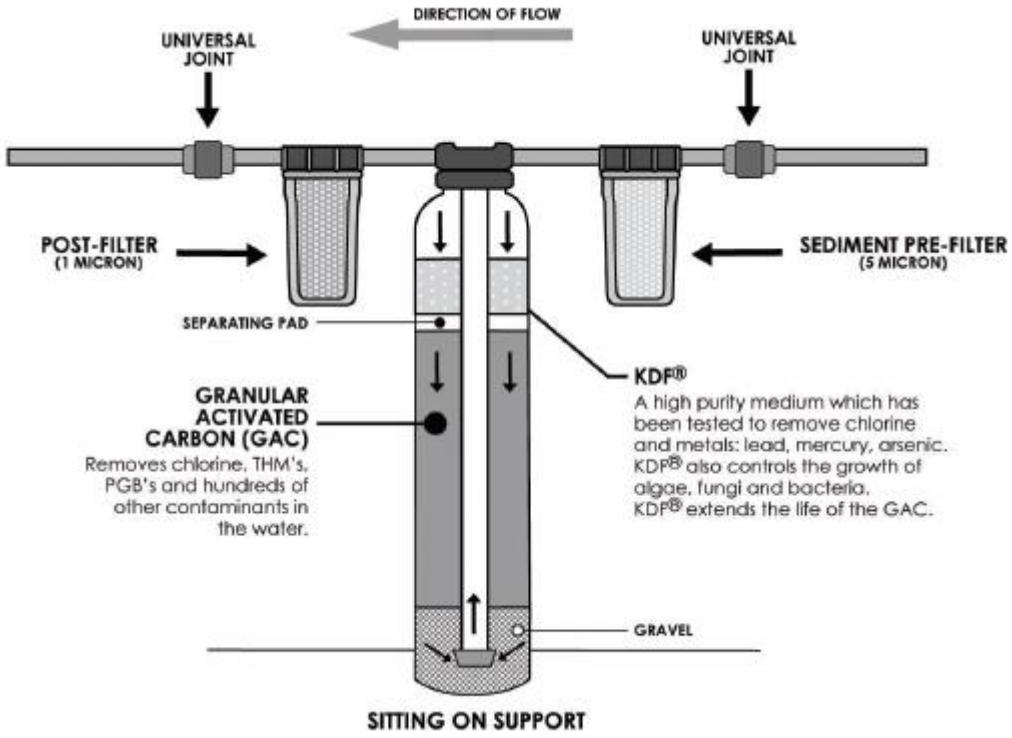
Granular Activated Carbon (GAC)

Today one the greatest threats to clean water arises from chemical compound GAC filter provide protection from chlorinated hydrocarbons ,which are found in pesticides ,herbiside and industrial solvents.

GAC has proved to be an effective media for the removal of these contaminants from water. GAC operates similar to a magnet to attracting iron fillings and absorbs cholorin and other chemical compounds and gases. GAC also fraps organic material eliminating bad taste, colour and odour.

GAC is the preferred method of protecting water from: trihalomethenes [THM's] PCEs,EDBs,PCBs,DBCPs,CHLORIN trichloroethylene,nitrobenzenes,radon,herbicides,iodine,silver,ethylene chl;oride,detegrants and numerous other compounds.

Installation instructions



WHOLE-HOUSE PURIFICATION SYSTEMS

KDF®

GAC is sufficient to correct the problems of 85% of today's households however there are sometimes problem that can't be effectively addressed by a carbon filter alone.

A patented media KDF® is added to complete the purification process.

Performance/life of media bed is water quality/type dependent, and testes shows that where PH is above 8.0 a water softener is recommended in fronts of the unit to prevent calcium build-up for non municipal water. a representative water sample must be tested before installing this unit. the correct pretreatment must be done to bring the water quality up to municipal quality standards before the water enters the IL unit.

WHOLE-HOUSE PURIFICATION SYSTEMS

The media®

REMOVES

- Lead, mercury, arsenic and other heavy metals
- Iron and sulphur up to 1 ppm
- Chlorine and volatile organic chemicals
- KDF® makes the unit bacteriastatic [KDF® **i**nbits the grown of bacteria, fungess and algae with the unit.]

WHOLE-HOUSE PURIFICATION SYSTEMS

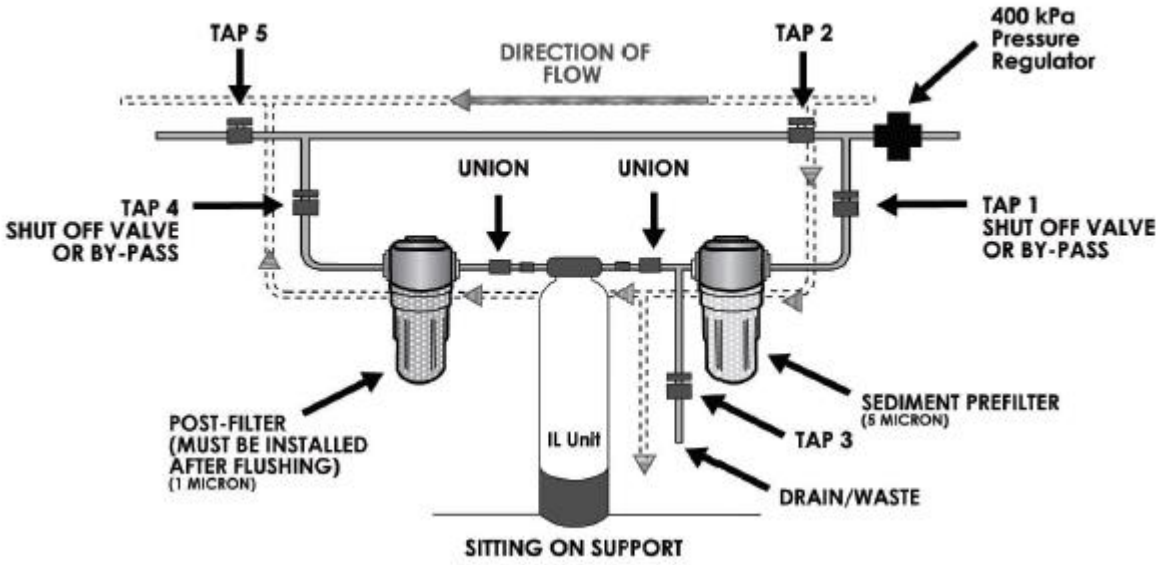
MODEL	PIPE SIZE	HT.	DIA.	WEIGHT	NORMAL FLOW (Depending on incoming pressure)	LIFE
IL6	3/4”	51 cm	16.5cm	11.35kg	+/- 15 l/m	757 000l
IL7	3/4”	117cm	19cm	22.7kg	+/- 20l/m	1 892 700l
IL9	3/4”	127cm	24cm	31.78kg	+/- 25l/m	2 839 000l
IL9	1”	127 cm	24cm	31.78kg	+/- 30l/m	2 839 000l

For more info call us on 0800 4 water (0800 4 92837)
more visit us @ www.h20.co.za

Installation

Instructions and recommendations

1. Prepare a solid foundation using concrete or a 300x300 paving slab.
2. Install a by-pass as per diagram.



Installation

Assembly instructions

1. Stand tank upright and unscrew the white cap.
2. Shake tank to level carbon bed.
3. Place the divider felt pad over the rises tube (fuzzy side of felt should face up) push into place evenly around center and edges. (use section of pipe supplied)
4. Pour KDF® into tank and level the bed.
5. Remove the orange cap on the riser tube.
6. Screw the head onto the tank until the o-ring touches the rim of the tank.

Installation

Initial flushing of the unit

1. shut taps 1,3 & 4 and open taps 2 & 5 .

2. Release the pressing by pressing the red buttons on pre & post-filters.

3. Remove the pre and post-filters and screw back the empty pre-filter housing to leaving the post-filter housing open {place large container under the open housing to catch the water}

4.slowly open tap 1 until the water running freely through the system, and is clear of carbon fines.

5.allow water to flow for about 5 minutes then close tap 1.

6.allow to stand for 5 minute then flash again for again for 1-2 minutes.

7.close tap 1 and insert the filters into the pre and post filters, close the housings.

8.close tap 2 and open taps 1, 4 & 5 to allow the purified water to flow into the house.

9.open as many taps as possible inside the house to clear air from the system.

Note: it will take up to 2 days for purified water to flow through the whole house.

Backwashing the system

Installation

Backwashing

1. In order to activate the by-pass option. shut down the down the system by closing taps 1,3 & 4 and opening taps 2 &5.
2. Release the pressing by pressing the red buttons on the pre & post-filters.
3. Unscrew the post –filter housing and remove the old filter.
4. Replace the empty housing and open taps 3 then 4 only a few turns to allow a gentle flow through the system. after a few minute the flow can be increased to about half the maximum flow. If the flow is too repaid it will mix the media beds damaging their efficiency.
5. Back flus with chlorinated water for about 5 minute or until the water is clear.
6. Close taps 3 & 4 and follow the steps above for flushing the system.
7. Open the pre and post-filter and replace the POE cartridges with new 5 micron pre-filter and a new 1 micron post-filter cartridge respectively.
8. Close top 2 and open taps 1 and 4 to restore water supply to the house.

Installation

Replacing Unit

1. Shut off water
2. Remove unit by unscrewing the unions on both sides.
3. Install a new unit as per above instructions.

Common Errors:

Installed without unions.

Installed backwards.

Unit is flushed too quickly, flow too rapid or sudden.

Unit installed in the celling, ideally it should be outside in the garage or anywhere where easy to maintain.

Installers have not read the instructions before installing the unit.

Water quality is not municipal standards

Repacking a wholehouse unit

1. Remove head from tank.

2. Break KDF Bed which should have solidified over time using a hammer & chisel. Use a long iron rod which has been grinded to a 5mm chisel face. Be careful not to puncture the holding cylinder.

3. Empty the unit.

4. To kill bacteria, fungus and algae. Wash head and tank using hydrogen peroxide cooler clean rinse.

5. Tape up or cork end of riser tube.

6. Place riser in place and pour gravel in until head is under gravel.

7. Replace the carbon bed with the right amount of carbon for that unit.

8. Shake the tank to level the carbon bed.

9. Place the separation pad over the riser tube (Fuzzy side of felt pad should face up).

Repacking a wholehouse unit

10. Using a short stick push pad into place so that it is even around the center and edges.

11. Pour the required amount of KDF into the tank and level the bed.

12. Remove tape or cork from end of riser tube.

13. Check o ring, replace if dried out.

14. Use Vaseline to remoisten it.

15. Screw head onto the tank until the o-ring touches the rim of the tank. Tighten the head an additional 1/8 to 1/4 turn

16. Note : Do not over tend do not try to unscrew head once it is in place.

17. Note: Points 8 to 15 should be done on site just before installation . What could happen is that in transporting the unit the unit could be placed on its side, thereby mixing the media bed . It is very important that the media bed is in even layers. Mixing the media bed will render the KDF ineffective.

18. Always keep the unit secured as they tend to fall over.

INSTALLATION: REVERSE OSMOSIS

INSTALLATION: REVERSE OSMOSIS

Shut off “Cold” water supply under the sink. After shut off, relieve the pressure by opening “cold water” faucet.

• Assemble saddle clamp on cold water feed tube. Turn pipe clamp adjustment plate to fit contour of pipe. Tighten bolt so saddle valve is firmly attached to feed water pipe.

• Drill a 13 mm hole on top of the counter / sink to install tap.

• Place the RO unit and tank so that they are out of the way.

• Connect red / orange line to saddle valve. Discard brass ferrules provided with 90 degree angle valve, use Delrin sleeves that pare provided with the installation kit.

• Connect black drain line direct to drain clamp with standard faucet. (If installing an air gap faucet the black drain line is connected to the base of faucet. Black line to drain clamp connected to other out let on the base of faucet).

INSTALLATION: REVERSE OSMOSIS

- Connect blue line to faucet.
- It is recommended that you fill the storage tank with raw water at this time as it will allow you to pressure test the system for leaks without waiting for the unit to automatically fill. Pressurize as follows:

Take a piece of 1/4” tubing and connect to the feed water valve. Connect the other end to the storage tank, turn feed water on and allow storage tank to fill (about 3 minutes). Shut off feed water valve, shut valve on tank and disconnect 1/4” line form the feed valve and tank. Reconnect the red / orange line to feed water and reconnect yellow line to the storage tank.

- Slowly, open needle valve allowing raw water to enter the system. CHECK FOR LEAKS!
- Open RO faucet leaver to the up position (to allow the air to escape system). CHECK FOR LEAKS!
- Allow system to run while cleaning work area.

INSTALLATION: REVERSE OSMOSIS

- Open valve on storage tank, leave faucet open until you get a solid stream of water, then close RO faucet. CHECK FOR LEAKS! After thoroughly checking the leaks, completely drain the storage tank.
- Allow the system to refill for approximately 4 hours. System should be ready for use if instructions were followed properly.

Maintenance and Care

- Qualified plumber to do maintenance or replacement of cartridges.
- Replacing the RO Element
- Turn off the feed water valve to RO system and turn valve on storage tank off. Open RO faucet and allow all pressure to bleed off.
- Disconnect red / orange line from element housing.
- Unscrew housing end cap and remove element.
- Insert new element in housing (end with O-rings first) until it stops. Move element in a slight circular motion to center element tube (tube in center of element with O-rings) with orifice in center of top element housing cap. You should feel the element slide into the housing about another ½. This indicates that the element is properly seated in the housing. If this step is not carefully followed you will get a high flow of untreated water from the product line on the housing to the storage tank.
- Replace housing cap and remove element.

Maintenance and Care

- Turn feed water valve on until you can hear water entering the system. CHECK FOR LEAKS!
- Turn feed water valve all the way on. Allow to fill until a steady drip flows from the RO faucet.
- Close RO faucet.
- Open valve on storage tank. CHECK FOR LEAKS! System is now ready for operation.

Maintenance and Care: diagram 4