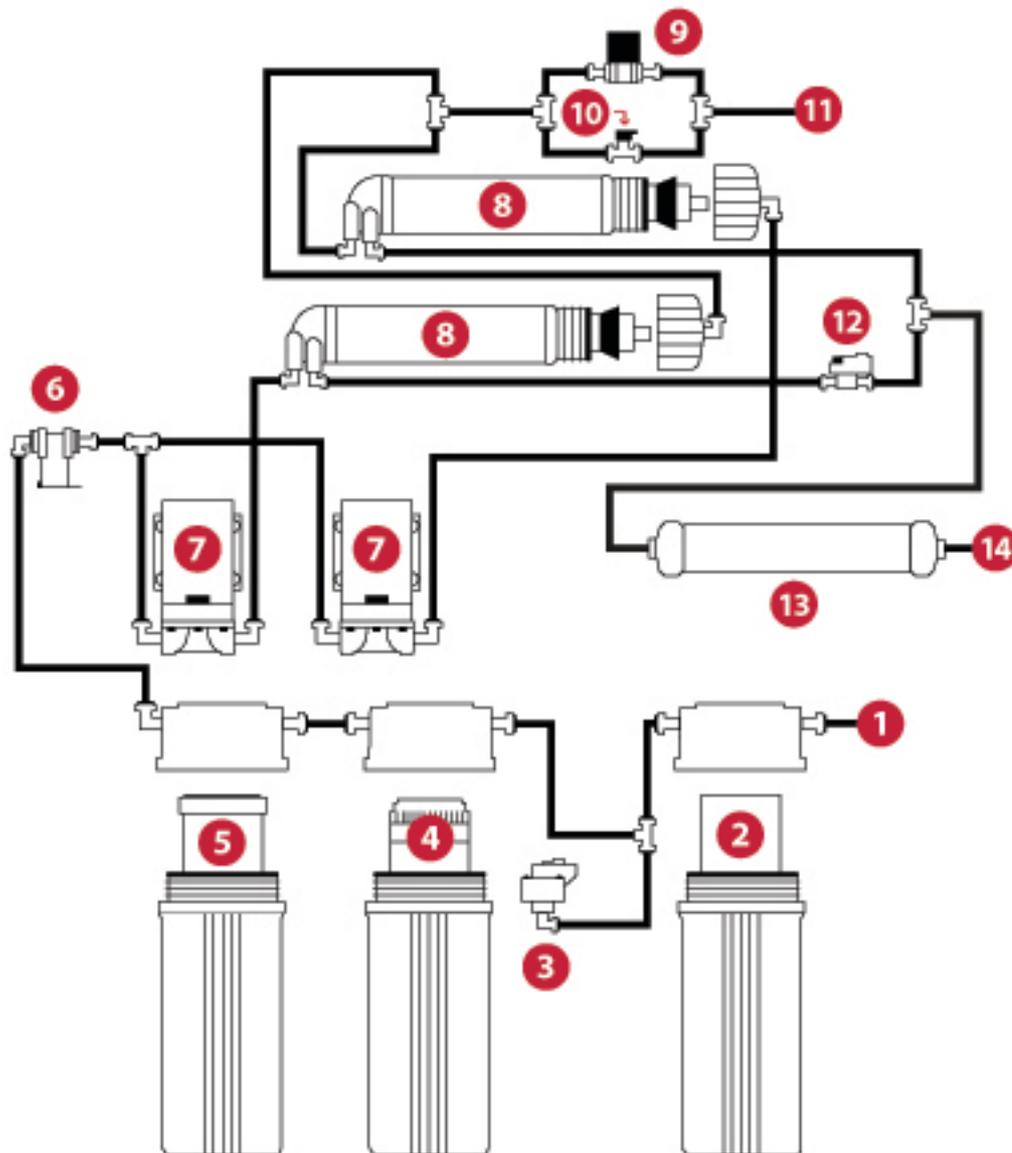


RO-400 Reverse Osmosis Unit Installation Instructions



- 1 Water inlet
- 2 5 micron particle sediment filter
- 3 Low pressure switch
- 4 GAC carbon filter
- 5 CTO carbon block filter
- 6 Water valve
- 7 Booster pump x 2
- 8 RO membrane x 2
- 9 Waste restrictor valve
- 10 Manual flush tap
- 11 Waste water outlet
- 12 High pressure switch
- 13 Post carbon filter
- 14 Pure water outlet



Installation Instructions

- 1 Remove all contents from the packaging
- 2 Use the smaller of the 2 white spanners to unscrew the 3 vertical pre-filter housings. (Parts 2,4 & 5 on the diagram).
- 3 Remove the pre-filter cartridges from the housings.
- 4 Remove the plastic wrapping from the 3 cartridges and replace them back into the housings
- 5 Re-install the housings back onto the system using the same spanner (being careful to re-install them in the correct order).
- 6 Disconnect the single pipe that enters into the lid of the 2 white horizontal RO membrane housings. (to confirm, you will need to only remove 1 pipe on both of the RO membrane housings. Do not touch the 2 outlet pipes on either of the 2 RO membrane housings). (Parts 8 on the diagram).
- 7 Unscrew the lid on both of the RO membrane housings with the included larger white spanner.
- 8 Remove the blue RO membranes from their wrappers (do not remove any of the blue material from the RO membranes).
- 9 Place a small amount of vaseline on all 3 seals that are installed onto the RO membrane (2 small seals at one end and a larger one at the other end).
- 10 Insert both of the ro membranes into the 2 RO membrane housings. Ensuring that the end with the 2 small rubber o-rings enters first.
- 11 When the RO membrane has been inserted, use a pair of pliers to grip the plastic central siggot (on the RO membrane) and give it approximately $\frac{1}{2}$ a turn. You should feel the RO membrane "click into place. (please repeat this step for both RO membranes).
- 12 Re-install the 2 lids (that were removed in step 7) onto the housing and tighten with the larger white spanner. (if you find that the ro membrane has to be pushed in with the lid, then it is not fully inserted. You would need to remove the ro membrane and repeat steps 10 & 11).
- 13 Do not re-install the pipes that were removed during step 6.
- 14 Make the connection to your water supply. (If you wish to use the included mains piercing fitting, please refer to the mains piercing fitting part of the instruction manual).
- 15 Make connection to your waste water outlet. If you wish to use the included drain saddle valve, please refer to the drain saddle valve part of the instruction manual. If you do not wish to connect the waste water outlet pipe onto the included drain saddle valve, please ensure that the pipe is installed somewhere where the waste water can drain freely.
- 16 Remove the clear/red plastic stopper and install a piece of pipe joining this fitting to your mains water supply (that was installed in step 14). (Part 1 on the diagram).
- 17 Remove the black plastic stopper and install a piece of pipe joining this to your waste water outlet (as installed in step 15) (part 11 on the diagram).



- 18 Remove the blue plastic stopper and install a piece of pipe joining this fitting to your pure water outlet/storage. (part 14 on the diagram).
- 19 Place the 2 pipes that are currently removed from the 2 RO membrane housing lids (as removed in step 6) into a bucket or suitable receptacle.
- 20 Plug the system into your power supply.
- 21 Turn the water supply to the system on. Water will now exit the 2 pipes.
- 22 Leave the water running until the water has run clear. Once the water has run clear, then turn the water supply and power supply to the RO unit off.
- 23 Re-install the 2 pipes back into the lid of the 2 RO membrane housings.
- 24 Open the manual flush valve (part 10 on the diagram), so that it is fully loosened.
- 25 Turn the power supply to the RO unit on.
- 26 Turn the water supply to the system on and leave the system for run for 30 minutes.
- 27 Once 30 minutes has passed, then fully tighten the manual flush valve down (part 10 on the diagram).
- 28 Once the pure water (exiting the RO unit via part 14 on the diagram) has run clear, the unit is then ready to use.
- 29 Do not install the concentrate (waste-water) outlet pipe at a positive incline as this practice commonly clogs the RO membrane.

How to use a Saddle Drain Valve

Important Information

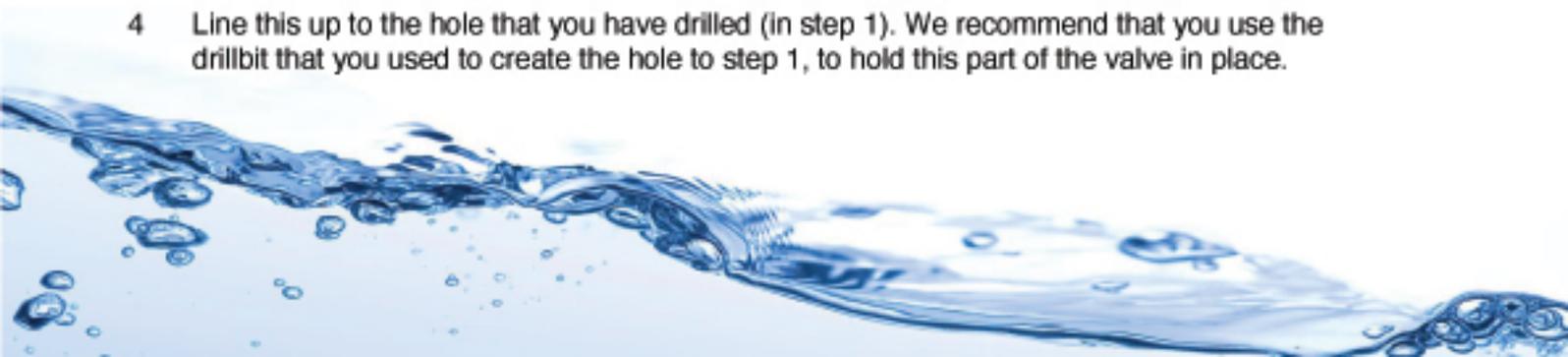
(Please note that this fitting can only be used with pipe that has a diameter of 32-40mm).

We strongly recommend that this is installed above the u-bend (if there is one installed on the pipe that you wish to connect onto).

If you are unable to install the drain saddle valve above the u-bend, it is critical that you install a none return/one way/check valve on the waste water pipe that enters the drain saddle valve

Installation process

- 1 Drill a ¼" hole in the pipe that you wish to connect the valve onto.
- 2 Dissamble the drain saddle valve.
- 3 Remove the strip from the self adhesive tab and place it onto the inside curved edge on the inlet side of the valve (making sure that the hole in the self adhesive tab lines up to the hole on the inside of the valve).
- 4 Line this up to the hole that you have drilled (in step 1). We recommend that you use the drillbit that you used to create the hole to step 1, to hold this part of the valve in place.



- 6 Connect the other part of the drain saddle valve around the pipe (ensure that the 2 nuts are present within their respective grooves)
 - 7 Tighten the 2 parts of the valve together with the 2 included screws.
 - 8 The valve will now be fully installed onto the sink/waste pipe.
 - 9 Remove the pre-installed ¼" blue locking clip from the valve
 - 10 Install the drain outlet pipe from your reverse osmosis system or water filtration system into the valve.
 - 11 Once the pipe is fully inserted, replace the ¼" blue locking clip (that was removed in
- The installation process is now complete.

How to use a Mains Piercing Fitting

Please note that this fitting can only be used on copper piping. If the pipe that you wish to connect onto is plastic, do not use this fitting.

- 1 Remove all parts from the packaging.
- 2 Remove the curved metal piece from the fitting.
- 3 Loosen the bottom brass bolt (that is attached onto the threaded bar) on the mains piercing fitting.
- 4 Slide the main fitting over your copper pipe and re-install the curved metal piece (that was removed during step 2) so that the copper pipe sits inside of the groove.
- 5 Re-tighten the bottom brass bolt so that it tightens the curved metal piece (that you have just re-installed) onto the copper pipe.
- 6 Remove the brass nut from the fitting.
- 7 Slide the nut over the pipe that you wish to connect onto the fitting.
- 8 Install the pipe olive onto the pipe (that you wish to connect onto the fitting)
- 9 Install the plastic pipe insert into the end of the pipe (that you wish to connect onto the fitting).
- 10 Slide the nut to the end of the pipe and re-install onto the thread that it was originally removed from (in step 6).
- 11 Turn the handle of the valve as far as it will go (the valve has now pierced into the copper piping).
- 12 When you are ready to activate the water supply to your filter/filtration system, simply turn the handle in the opposite direction as far as it will go. This will then activate the water supply.



Maintenance

We would recommend that the unit is ran with the manual flush valve fully open for the first 5-10 minutes of operation. This will help to preserve the lifespan of the RO membrane.

We recommend changing the 3 pre-filters every 6 months or after 16,000 litres of total usage (pure & waste water)

Each time that the pre-filters are replaced, please follow steps 2-6,19-23 and step 28.

We recommend replacing the RO membranes on average every 12 months.

Each time that the RO membranes are replaced, please follow steps 6-12 and 23-27.

