

IMPORTANT PLEASE READ BEFORE COMMENCING INSTALLATION

This Fitting Guide is designed to assist in the Installation of your Reverse Osmosis System.

Some of the parts that are supplied with each system may differ from those indicated in the instruction guide. Waste Kits, Membrane Spanners, Tube Inserts and Olives are not needed or Supplied on all machines

All reverse Osmosis have the same basic installation rule.

Water inlet is on the right hand pod as you look at the machine face on.
The highest rating sediment filter normally fits in the right hand filter pod.
The Carbon filter is the centre pod and the 1 micron sediment filter is on the left.

There is only ONE tube that supplies the tank.

The valve, prior to the final filter stage, dictates that if there is a demand for water from the tap the water will come from the tank. As soon as the demand stops water will then revert to refill the tank.

The tank valve is normally located on the top of the tank. A connection valve with isolation will normally be supplied, you may need to apply PTFE tape during installation.

There is a pressure valve on the side of the tank, you can use a tyre pressure gauge to check the tank pressure.

The tube connection to the drinking water tap will always be after the final stage of filtration.

Fitting the Membrane

The Membrane lives in a horizontal casing, with a screw cap end, above the vertical pods. The membrane is normally supplied in a sealed package. It is necessary to remove the packaging before installing the membrane. The larger rubber washer/bung/o ring end of the membrane is at the open screw end cap side of the membrane housing.

Waste supply

ALL RO units produce waste water. The waste water can go to any drainage pipe. It is often installed by drilling a small hole in the drainage pipe i.e. sink waste etc inserting the supplied ¼ tube into the hole drilled and securing using silicon.

RO Units have the following Connections

Water IN (normally supplied with a self cutting divert valve)

Tank Connection (normally from a T fitting between the membrane and horizontal carbon filter)

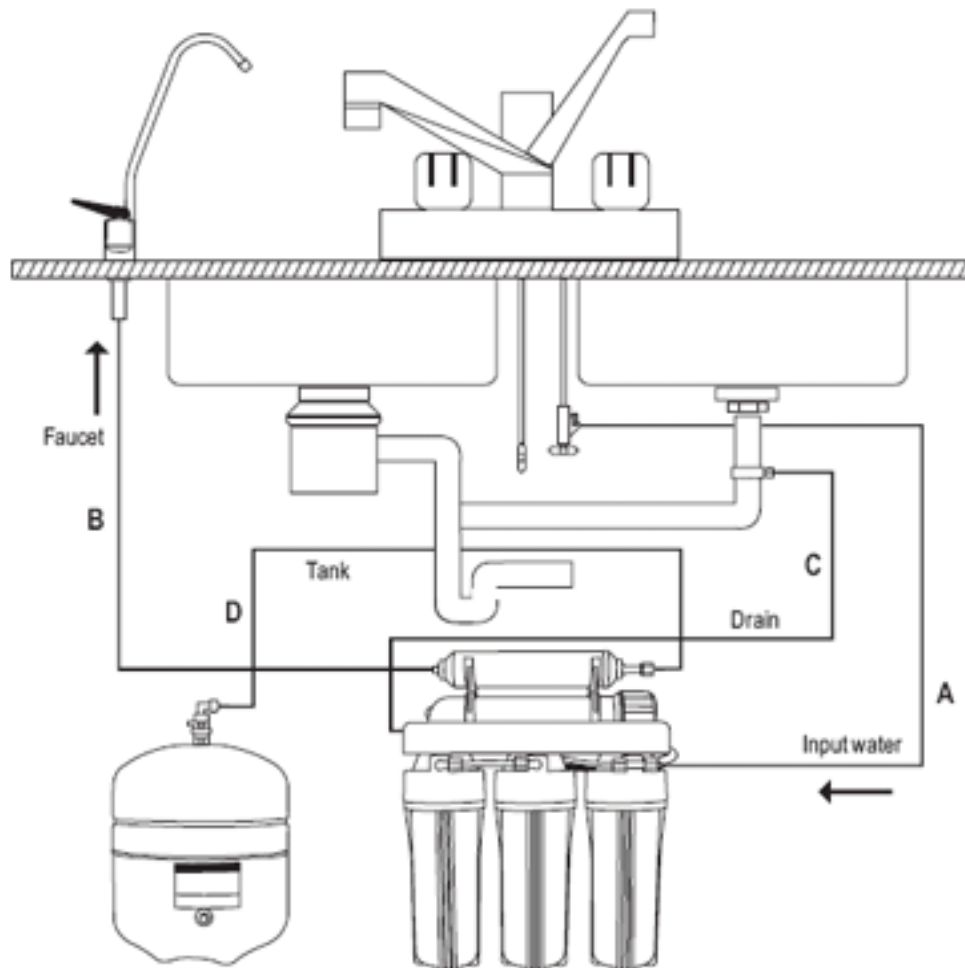
Waste Connection From Reverse Osmosis System

Tap connection (from the final filter)

All other tube connections are pre installed on the unit

Before commencing Installation of your Reverse Osmosis system ensure that you have access to a cold water pipe, waste pipe and an electrical connection if required

Installation Overview



Connecting to the water supply via Saddle Valve or European Diverter Valve

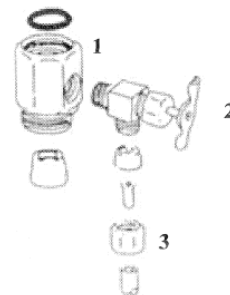
Tube attached saddle valve

Locate cold water pipe under the sink
Insert the detachable collar into the valve using either 15mm or 10mm side
Turn the brass screw until the valve is tight onto the cold water pipe.
Turn the chrome handle on the valve all the way until it punctures the cold water pipe.

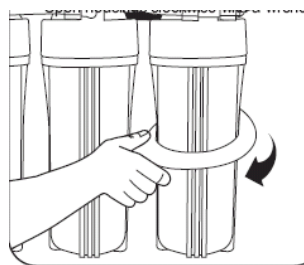


European Water Diverter

Locate the connection between the flexible tap hose and the ridged cold water pipe. Having first turned off your water supply, disconnect the flexible hose from the ridged pipe. Attach the valve marked 1 on the diagram, to the ridged pipe using a compression fitting. Attach the flexible tap hose to the opposite end of the valve. Valve part 2, screw this fitting into valve 1 and fully tighten. Unscrew the nut marked 3 and slide it together with the olive over a length of 1/4" tube provided, push the tube into the valve and secure using the nut

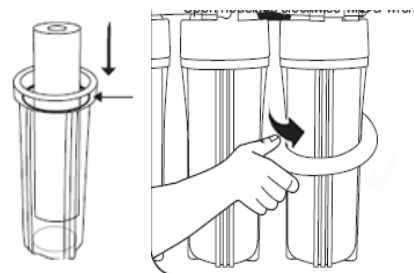


Fitting The Filters



The Unit is supplied with 3 pre filters To install, use the wrench provided to unscrew the housing. Remove any protective wrapping that may be on the filters and fit from right (water inlet) to left in the following order,

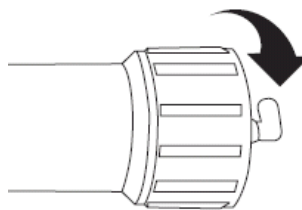
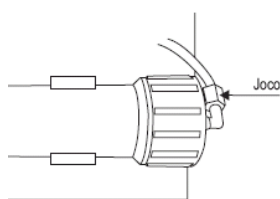
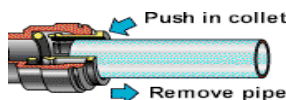
5 micron Sediment filter, Carbon filter, 1 micron sediment filter.
Before fully tightening with the wrench, check that any o-rings are sited correctly



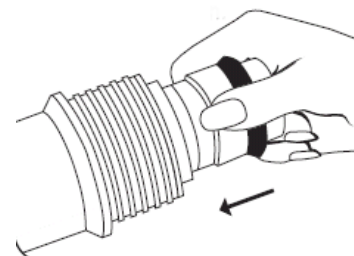
Fitting The Membrane

The membrane housing is located on the top part of the system and is horizontal with a screw cap end to the right. We advise that the tubing connected to the housing cap is disconnected prior to removing the cap. Most of the units are fitted with a “Jaco” compression fitting. Simply unscrew the nut and pull out the tubing. Some units may be supplied with a push fit type connector. To remove simply push down the collet and at the same time pull the tube out of the fitting. Once you have removed the tube unscrew the end cap from the membrane housing.

Remove the shrink-wrap from the membrane and then push into the housing. The large bung should be at the cap end of the housing. Replace the screw cap and tighten, finally replace the tube and retighten the “Jaco” nut if fitted



- 1.Remove the membrane housing cap.
- 2.Replace the membrane.



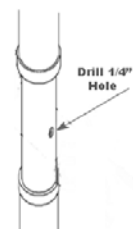
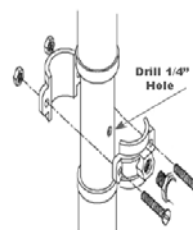
Waste Connection

If you purchased a waste clamp

Separate the two parts of the clamp by unscrewing the two bolts at the front of the clamp. Having located a suitable drainage point (under-sink waste etc) attach the foam pad to the waste pipe. Place the front and back part of the clamp around the waste pipe. Secure into position using the nuts and bolts provided. Remove the “Jaco” nut on the front of the clamp and using the threaded hole on the clamp as a guide drill a 1/4” hole into the waste pipe. Thread the “Jaco” nut over a length of 1/4” tube, feed several inches of the tube into the waste pipe and secure into position by re attaching the “Jaco” nut.

Without a waste clamp

Having located a suitable drainage point (under-sink waste etc) drill a 1/4” hole into the waste pipe. Feed several inches of the tube into the waste pipe and secure into position using a silicone adhesive.



Fitting the Tap

Find a suitable location on the worktop or sink to position the tap. Remember to check for obstruction underneath the desired location. Using a suitable drill bit drill a hole large enough for the tap shank approximately 10mm. The washers are then fitted in the following order

Above the sink

Chrome base plate, Large flexible base plate washer

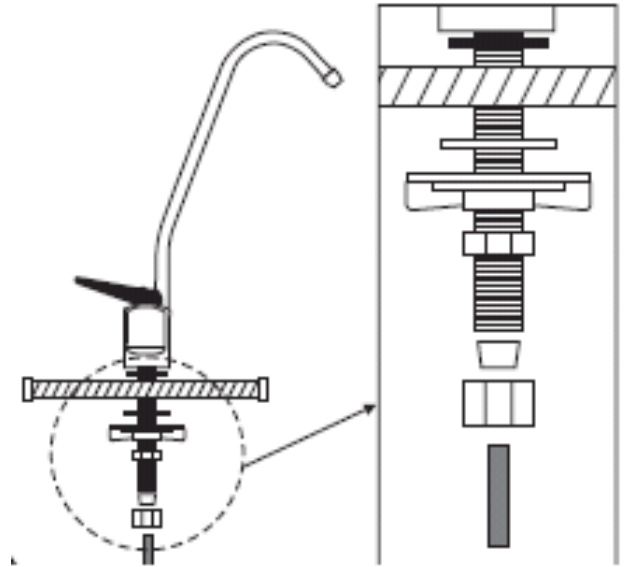
Under sink

small flexible rubber washer, Large ridged washer
Star lock nut, Nut to secure tap into position

Securing the tube

Push the semi closed nut and olive over the ¼ tube (optional insert the tube strengthener into the tube end.) Push the tube into the tap shank and secure using the nut.

If your tap is supplied with a push fitting simply screw the fitting onto the tap shank and push the tube into the fitting



Connecting to the Reverse osmosis

Connect to the water inlet

Connect the tube from the saddle valve to the water inlet of the Reverse osmosis unit dependant upon the unit this will be either a “jaco” or push fit connection.

Tap connection

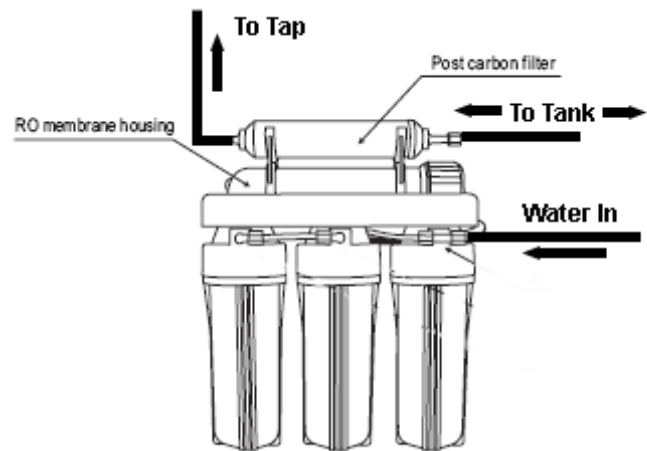
The tap connection is always from the final stage filter on the reverse osmosis system, on a standard 5 stage this will be the post carbon (taste odour filter). If you have ordered any additional filters that are pre installed you should connect to the unconnected fitting on that filter the fitting will be either Jaco or push fit type.

Tank Connection

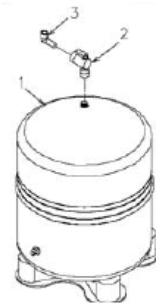
The connection to the tank from the reverse osmosis unit is located to the right of the post carbon filter. This connection forms a T shape, water in from the membrane then in/out to tank and in to post carbon filter. This T valve will allow water to either enter or exit the tank dependant upon the demand. Again this connection will be either Jaco or push fit.

On the Tank

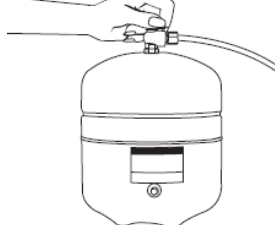
The inlet/outlet is normally located on the top of the tank. The valve located to the side of the tank is to test the pressure of the tank and top up using a suitable air line if required. The tank is supplied with an on of valve that needs to be attached to the tank. To ensure a water tight seal it may be necessary to apply some PTFE type tape to the thread of the tank. Once you have fitted the valve to the tank you can then attach the tube. Initially leave the tank in the off position, lever position at 90 degree angle to incoming tube.



Hand tighten plastic shut-off valve to tank. Then connect tubing.

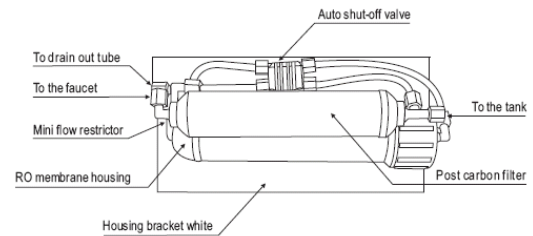


Switch off water tank.



Connecting the Waste Supply

If you have completed all other connections you should have one connection remaining on the RO unit without tube attached. This final connection is for the waste. The connection is usually located to the right of the system near the membrane housing cap. Connect the opposite end of the tubing that you previously attached to your waste pipe to this connection. Some units may be supplied with a fast flush valve this is a visible on/off valve located on the waste tube. Turn this to the on position initially.



System start up

Ensure that any electrical connections that are required (Pumped RO, Ultra Violet systems etc) have been completed and that the power supply is currently off to these items.



Putting into service

Turn the tube attached saddle valve or European water diverter to the fully open position. It is advisable at this point to check that any connections that you have made are water tight.



Turn the tank valve to the on position. (Lever parallel to the incoming tube.) If the system was fitted with a fast flush valve leave for 2 – 3 minutes then turn the flush valve off



Switch on any electrical apparatus that are connected to the unit Pump Ultra violet etc .



Your reverse Osmosis System has begun the process of creating pure water. During the water making process it is normal for water to run to waste. Dependant upon the quality, pressure and temperature of the incoming water supply, this process may take several hours. Once the tank is completely full the waste water will stop.

When the system is no longer running to waste you will need to empty the tank. This is only required on initial start up and will ensure that any impurities that could have entered the tank during the installation process are removed.

In order to empty the tank, simply turn the tap installed on the work surface or sink and also connected to the reverse osmosis system to the fully open position. As soon as the flow ceases on the tap, turn back to the closed position.

The Reverse Osmosis will begin to refill the tank. After a few minutes you will be able to enjoy your first glass of pure refreshing water.

Note.

The tank will replenish any water removed from the tank as soon as the demand ceases. Every time you have a glass of water the system starts to refill the tank.

It is normal for the Reverse osmosis system to create 3-4 litres of waste water for every litre of pure water.

The Membrane also requires time to saturate this may take several days and can effect TDS readings during this period

Filter Change

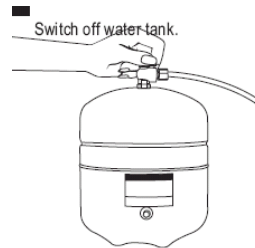
For optimum filtration under domestic use we recommend that the filters are changed at the following intervals.

Stage 1	5 Micron sediment Filter	6 Months
Stage 2	Carbon Block filter	6 Months
Stage 3	1 Micron sediment Filter	6 Months
Stage 4	Reverse Osmosis Membrane	18 Months
Stage 5	Post Carbon Filter	6 Months

Additional Filters

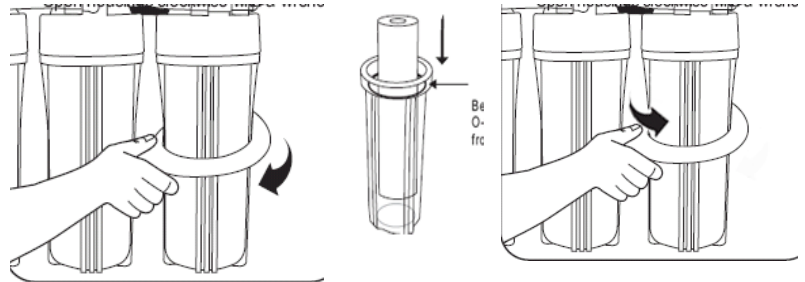
Ultra Violet Lamp	12 Months
Mineral Filter	12 Months
Alkaline Filter	12 Months
Infra Ray Filter	12 Months
De ionisation filter	12 Months

Before changing any of the filters on the system it is important that you take the Reverse Osmosis out of service mode. Turn off any electrical apparatus connected to the system. Switch the tank valve to the off position and fully close the diverter valve connected to the cold water supply. You must open the tap connected to the system to relieve any pressure build up.



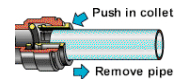
Replacing stage 1, 2 and 3 filters (6 Months)

Use the wrench provided to unscrew the housing. Remove the existing filter from the housing unit. Before fitting the new filter Remove any protective wrapping from the filters and fit from right (water inlet) to left in the following order, 5-micron filter, Carbon filter, 1-micron filter. Before fully tightening with the wrench check that any o-rings are sited correctly



Replacing the Post Carbon Filter (6 Months)

The replacement post carbon filter provided is supplied as a generic filter and can be used with either push or jaco fittings. You will first need to remove the tubes attached to the fittings on the installed filter. For jaco fittings simply unscrew the Jaco nut and pull out the tube. For push fittings, push the collet into the fitting and whilst the collet is depressed pull out the tube. Once you have removed the tubing unclip the filter from the RO system. Unscrew the fittings from the filter and screw into the new filter. Then simply clip the filter back onto the RO unit and replace the tube. For push fittings simply push the tube into the fitting. For Jaco style push the tube into the fitting and secure using the jaco nut



Replacing the Membrane (18 Months)

Follow the fitting the membrane guide on page 3 of these instructions, a pair of long nose pliers may be required to remove the membrane currently installed.

Putting Back into Service

Ensure that all connections are fully watertight. Fully open the water diverter valve located on the cold water pipe. Switch any electrical apparatus connected to the Reverse Osmosis system back to on. Allow the water to run for several minutes before turning the tap connected to the RO unit off and turning the tank valve back to the on position after a few minutes you will be able to enjoy refreshing reverse osmosis water