

PROSEP FILTER SYSTEMS LTD

RO-*pro* SYSTEM

OPERATION & INSTALLATION INSTRUCTIONS



Model Shown: **RO-*pro*-625U**

RO-*pro*-325

3 Stage Reverse Osmosis System

PROSEP FILTER SYSTEMS LTD

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Thank you for choosing your **RO-*pro*** Reverse Osmosis Drinking Water System from **PROSEP Filter Systems Ltd**. With proper care your water filtration system will produce high quality drinking water for many years.

Read carefully and follow the instructions in this manual before proceeding with the actual installation. Pay particular attention to all warnings, cautions and notes. Failure to do so could result in personal injury or damage to equipment or other property. System and installation need to comply with local laws and regulations. If you have any questions, please contact us.

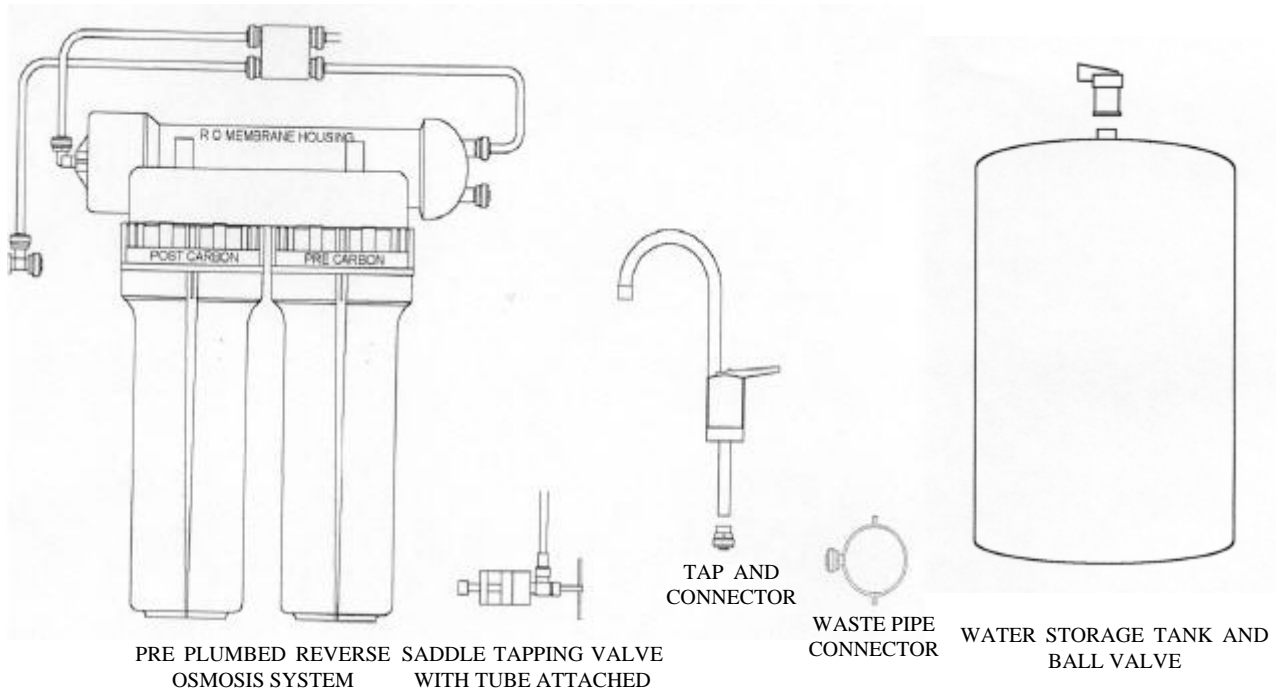
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PLEASE NOTE: PROSEP Filter Systems Ltd reserve the right to alter the specifications of this product without prior notice

CHECK LIST:

- 1) TGI Reverse Osmosis System.
- 2) Water Storage tank, (2.8 gallon @ 40psi).
- 3) Four coloured tubing (black, blue, red, yellow) 1/4" OD (some supplied 3/8" OD), 4' each colour.
- 4) Installation kit: tank ball valve, drain saddle tap valve, feed water valve, tap assembly.
- 5) Manual.



RECOMMENDED TOOLS LIST

- † Variable speed drill
- † 1/8" and 1/4" drill bits
- † 7/16" drill bit 1/2" and 9/16 open-end wrenches (or adjustable)
- † Phillips screwdriver
- † Utility knife
- † Teflon Tape

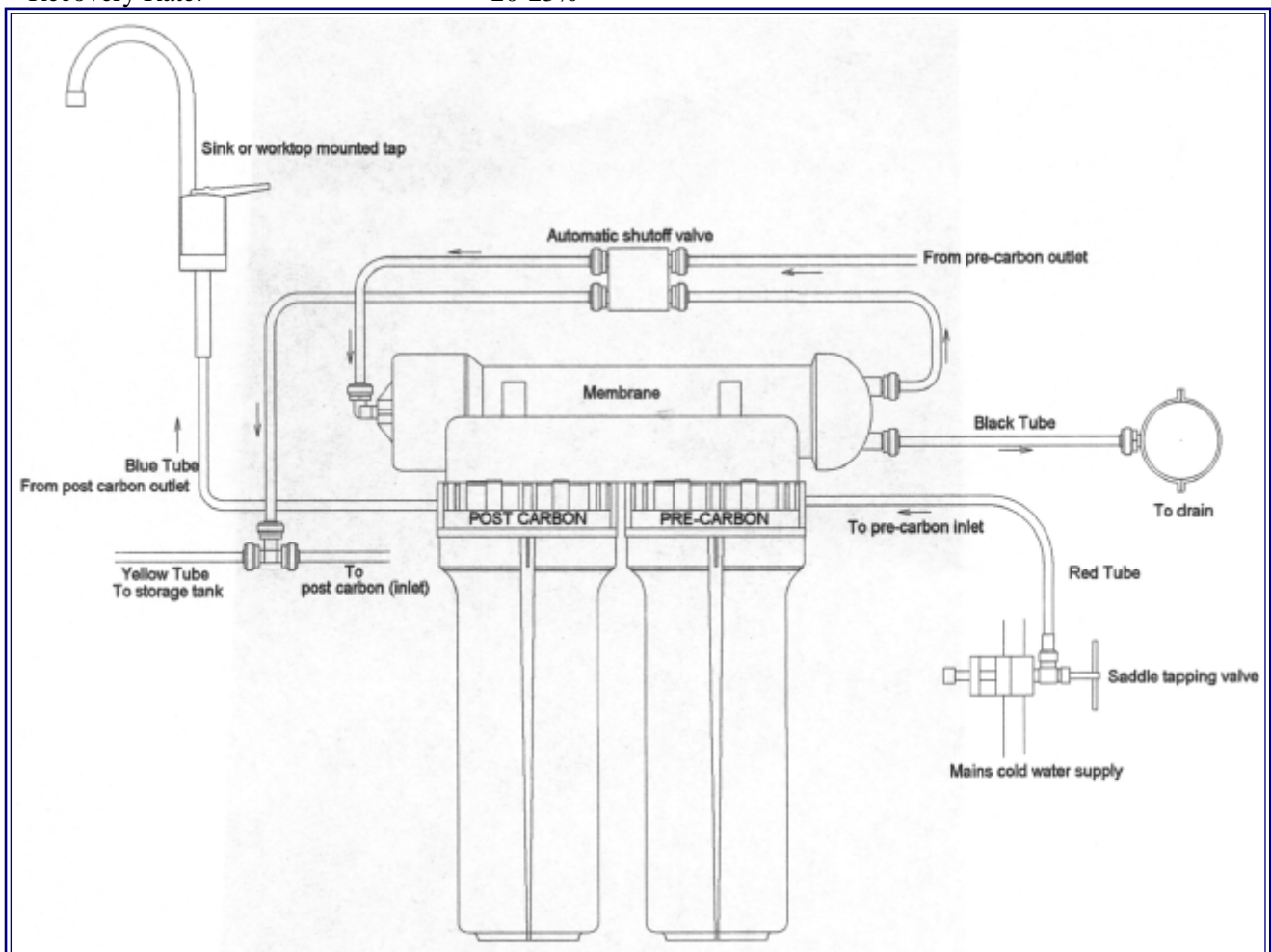
This Reverse Osmosis system contains a replaceable treatment component critical for effective reduction of total dissolved solids.

System Tested and Certified by NSF International against ANSI/NSF Standard 58 for the reduction of Barium, Cadmium, Copper, Cyst, Hexavalent Chromium, Lead, Radium 226/228, Selenium, TDS, Trivalent Chromium.

RO-*pro*-325 FILTRATION PROCESS

SPECIFICATIONS:

1st Stage:	Carbon Block Pre-Filter Cartridge
2nd Stage:	TFC Membrane 25 GPD
3rd Stage:	Granular Activated Carbon Post-Filter Cartridge
Auto shut off valve	
Operating Pressure:	40-120 PSI
Operating Temperature:	40 - 110 deg. F
Recovery Rate:	20-25%



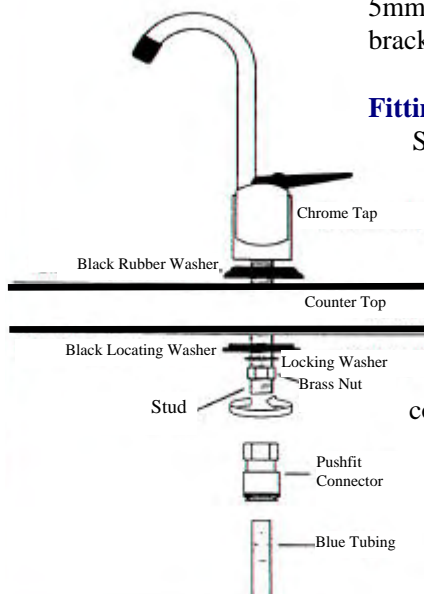
REPLACEMENT PARTS:

Product Code	Description	Service Life
PRODOM0104	10 micron, 10" CTO Carbon Block Cartridge	6 months
PRODOM0161	25 GPD TFC Membrane	24 - 36 months
PRODOM0100	20 micron, 10" GAC Cartridge	6 months

FITTING INSTRUCTIONS:

Fitting The Pre-Plumbed RO System

Use the bracket as a template to mark the position of the unit on a suitable wall or cupboard panel. Allow a minimum of 40mm clearance below the filter bowls to allow for filter change out. Drill and plug two holes and screw in 2 screws (not supplied) allowing the screw heads to protrude from the wall by approx. 5mm. Place the bracket over the screws and slide to left or right (as preferred) to lock bracket in position.



Fitting The Tap

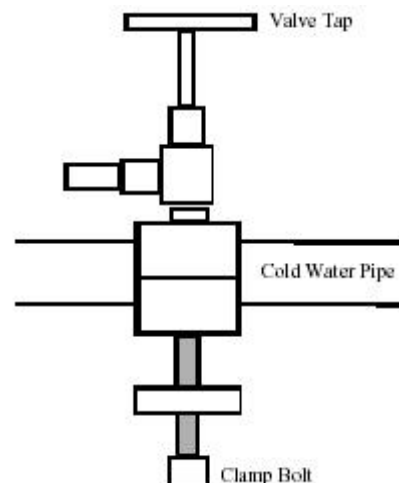
Select a suitable position on the work top or corner of the sink. Before drilling the hole, check there is nothing directly underneath that could be damaged i.e. water or waste pipes, cables etc. Also make sure that there is room for the locating washer and that you can physically reach the tap stud to connect the brass nut. Use a centre punch to mark the location of the hole to be drilled. Drill a 3mm pilot hole. Enlarge the hole to 11mm. If you are drilling through stainless steel, deburr and rough edges around the hole. Wipe clean with a soft cloth. Check that the tap stud fits easily through the hole. Secure the push fit connector and firmly push one end of the blue pipe into the collar within the push-fit connector. Push the other end of the blue tubing into the push fit connector fitted to the post carbon filter housing. **Note:** Some taps are supplied with the blue tubing already permanently fitted. The tap has two 'ON' positions. Lift the lever up for continuous flow. Press the lever down for flow that ceases when the lever is released.

Fitting The Saddle Tapping Valve

Although not essential, we recommend that you turn off the cold water stopcock and relieve the water pressure by opening cold water tap. If the stopcock is under the sink, fit the valve after the stopcock. The valve must be fitted on the cold water supply only, (if you are uncertain, run the hot tap for a minute and feel the pipes under the sink to distinguish the cold pipe).

Do not fit the valve on a bend, a join or where there is solder on the copper pipe. Attach the clamp around the pipe and tighten the clamp bolt to ensure a water tight seal. Do not over tighten the clamp bolt as this may distort the water pipe. Firmly push the open end of the red tubing attached to the saddle tapping valve into the collar on the front of the pre carbon filter housing.

Note: Later designs have the red tubing already permanently fitted to the valve. The saddle tapping valve supplied with the RO-Pro System is designed to comply with British plumbing codes. (See 'System Start Up' Section for further details regarding the saddle tapping valve.) **Note:** Later designs have the red tubing already permanently fitted to the valve. The saddle tapping valve supplied with the RO-Pro System is designed to comply with British plumbing codes.



Fitting The Tank Ball Valve

Remove the plastic cap on the top of the tank. Wrap the thread 3 or 4 times with plumbers tape (Teflon). Connect the ball valve to the thread and make sure it is tight but not over-tight. Connect the yellow tubing to the tank ball valve. Turn the tank ball valve off. **Note:** Do not tamper with the air valve on the low side of the storage tank. It has been preset at 8-10 psi by the manufacturers.

Mounting The Drain Clamp

Position the drain saddle in the desired location (please see notes below), mark spot through thread outlet, remove saddle. Drill 1/4" (6.3mm) hole into the drain pipe above the water line of the trap/U-bend. Fix self adhesive foam seal over the hole in the drain saddle ensuring that the holes line up. Align the hole drilled in the drain pipe with the drain saddle using a drill bit. Make sure to align drain saddle to drilled hole. Attach drain saddle to drain pipe and tighten the two screws evenly. Connect the black tubing to the drain clamp.

Note: The drain clamp will fit most standard drain pipe 1 1/2" diameter. It should be installed above the trap/u-bend and on the vertical or horizontal tailpiece. If a waste disposal unit is fitted, the drain clamp must not be fitted into the same waste pipe.

SYSTEM START UP:

Turn on the cold water supply at the stopcock and turn the cross piece on the saddle tap valve anti-clockwise to open. Close the tank ball valve. Open the tap for continuous flow (Lever Up). Check the system for leaks, tighten as necessary. After 10-30 minutes, water will start to drip out of the tap. Let it drip for about 10 minutes and then flip the tap handle to the closed position. **TURN ON THE TANK BALL VALVE NOW.** It may now take several hours for the storage tank to fill, depending on the local water pressure.

Note: DO NOT DRINK THE WATER FROM THE FIRST TANK PRODUCED BY YOUR NEWLY PURCHASED RO-PRO SYSTEM.

After the tank is full (you will hear the water stop), flush the system by placing the tap in the open position until all the water is completely discharged. Upon complete discharge of the storage tank, return the tap handle to the closed position and let the refilling process begin. This process could take 2-3 hours to complete. After the second tank is filled, you may enjoy the pure water. Check for leaks daily for the first week and periodically thereafter. You may notice that the water may be milky coloured during the first week. This is caused by air bubbles in the water released from the carbon filter, they will dissipate on allowing to stand. It is normal and safe.

NOTE:

DO NOT USE WITH WATER THAT IS MICRO BIOLOGICALLY UNSAFE OR OF UNKNOWN QUALITY WITHOUT ADEQUATE DISINFECTION BEFORE OR AFTER THE SYSTEM. SYSTEMS CERTIFIED FOR CYST REDUCTION MAY BE USED ON DISINFECTED WATER THAT MAY CONTAIN FILTERABLE CYSTS.

THIS REVERSE OSMOSIS SYSTEM CONTAINS A REPLACEABLE COMPONENT CRITICAL TO THE EFFICIENCY OF THE SYSTEM. REPLACEMENT OF THE REVERSE OSMOSIS COMPONENT SHOULD BE WITH ONE OF IDENTICAL SPECIFICATIONS, AS DEFINED BY THE MANUFACTURER, TO ASSURE THE SAME EFFICIENCY AND CONTAMINANT REDUCTION PERFORMANCE.

WARNING: DO NOT USE THIS RO-PRO SYSTEM TO PURIFY NON-DRINKABLE SOURCES OF WATER THAT ARE UNSAFE OR WITH WATER OF UNKNOWN QUALITY/

WARNING: NEVER USE HOT WATER OR ALLOW THE UNIT TO FREEZE.

WARNING: INCORRECT INSTALLATION WILL VOID THE WARRANTY.

FILTER MAINTENANCE AND CHANGE INSTRUCTIONS:

This recommendation is intended for maximum efficiency of RO water production by your system.

- 1, Filter Maintenance
 - a, It is OK to put pre & post filters of the shelf for several years.
 - b, Keep the sealed, non-opened filter in an air tight container to prevent it from absorbing contaminants from the air.

- 2, Membrane Maintenance
 - a, The dry packed membrane usually has a two-year shelf life. To prolong the shelf life, we recommend you keep the non-opened dry membrane in the refrigerator.
 - b, Once used, we recommend you run the RO system every day, at least 10-15 minutes (about 1 gallon or 4 litres drinking water.) This helps to maintain the membrane performance.
 - c, If the RO system is not used for a few weeks, drain the storage tank. To bring the unit into service fill the tank and drain it twice, to allow to refill. Your RO system will then be ready to reuse.

- 3, Filter & Membrane Change Procedures:
 - a, Shut off the water supply.
 - b, Turn off the tank ball valve by turning the handle through 90 degrees.
 - c, Open the tap fully for continuous flow.
 - d, Slide the housing wrench in (bowl spanner) over the filter bowl. Use one hand to hold the system and the other hand to turn the wrench clockwise to separate the head from the bowl.

NOTE: IF IT IS TOO TIGHT TO OPEN THE HOUSING YOU MAY TRY TO UNPLUG THE FITTING BETWEEN THE RED TUBING AND THE SYSTEMS IN ORDER TO REDUCE THE AIR AND WATER PRESSURE INSIDE THE HOUSING.

- e, After opening the housing, remove the used filter and put the new filter into the housing. The **Carbon Prefilter** can be installed either way up. The **blue GAC post filter** must be installed the correct way up with the white tapered cap to the top. Make sure the O-ring is in place and smear a little petroleum jelly on the O-ring. Replace the filter bowl and tighten by turning the bowl anti-clockwise.
- f, Repeat previous step for all other filter changes. (See separate instructions for membrane change below.)
- g, Turn on the water supply and make sure there are no leaks.
- h, Let the water drip from the tap for about 10 minutes. If the water flow is less than 1 cup (8 oz or 240 ml) per minute, it may be a signal to change the membrane.

- i, Membrane Change Procedure:

Shut off water supply.
Unscrew the cap of the membrane housing.
Slide out the used membrane and discard. (You may need thin nosed pliers to grip the membrane spigot.)
Insert the new membrane with the 2 O-rings into housing first with the black brine seal at the open end of the membrane housing.
Be sure it is fully seated into bottom end.
Screw cap back on to the membrane housing, make sure O-ring is still in place.
Turn on water supply & check for leaks.
It may take 10-20 minutes for new membrane to run to normal flow.

Carry out system start up procedure.

TROUBLE SHOOTING

Note: Turn off the system before servicing

PROBLEM	CAUSE	SOLUTIONS
Milky coloured water	Air in system	Air in the system is a normal occurrence with initial startup of the RO System. This milky look will disappear during normal use within 1 to 2 weeks.
Noise from tap	*Location of drain saddle *Restriction in drain line	*Relocate the drain to above water trap *Blockage sometimes caused by debris from garbage disposal or dishwasher
Small amount of water in storage tank	*System just starting up *Air pressure in storage tank is low	*Normally it takes 2-3 hours to fill the tank. Low water pressure and/or temperature can reduce production rate *Add pressure to storage tank. The pressure should be 8-10psi when the tank is empty
Slow production	*Low water pressure *Crimps in tubing *Clogged prefilters *Fouled membrane	*Add a booster pump * Make sure tubing is straight *Replace prefilters *Replace membrane
Water taste or smell offensive	*Post carbon is depleted *Fouled membrane *Sanitiser not flushed out	*Replace post carbon *Replace membrane *Drain storage tank and refill overnight
No drain water	*Clogged flow restrictor	*Replace flow restrictor
Leaks	*Fittings are not tightened *Twisted O-ring *Misalignment of hole in drain saddle	*Tighten fittings as necessary *Replace O-ring *Realign drain saddle