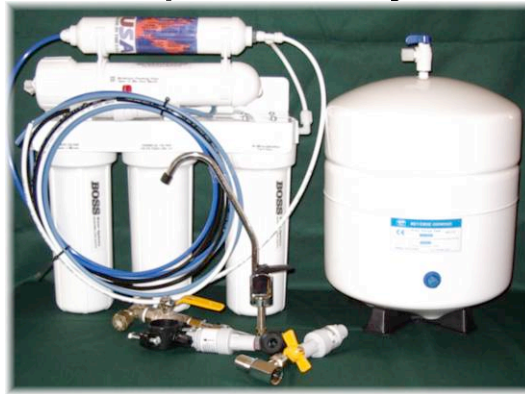


The Coffee Professor

Reverse Osmosis System

Model – Genesis Cafe

Congratulations on your purchase of the most advanced water purifier system available!



Installation and Service Guide

**PLEASE READ THIS MANUAL CAREFULLY BEFORE
ATTEMPTING INSTALLATION**

REVERSE OSMOSIS WATER PURIFIERS

Of all methods that purify drinking water for domestic use, the process of REVERSE OSMOSIS is the most advanced, economical and effective. REVERSE OSMOSIS has the ability, unlike conventional filters, to remove contaminants such as dissolved solids and all other impurities.

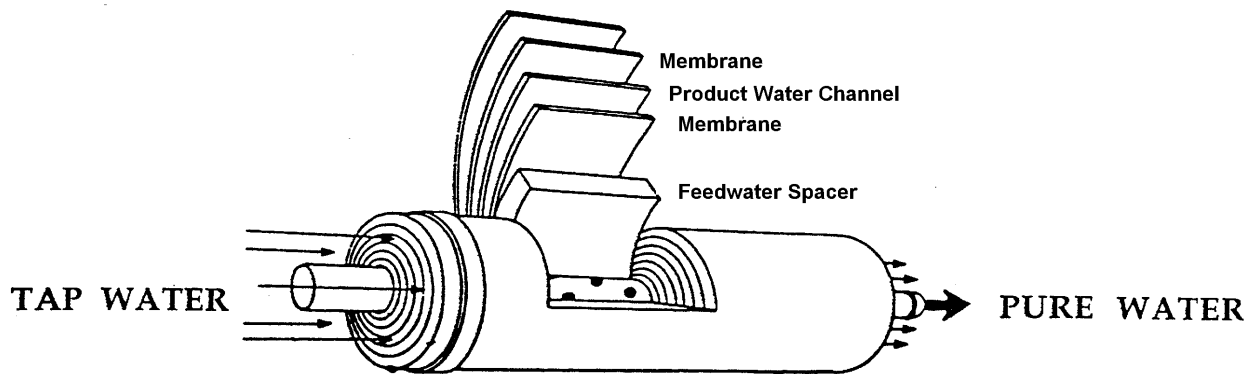
The REVERSE OSMOSIS (RO) process works by forcing water under pressure through a special TFC Membrane. The membrane has the astounding quality of attracting water molecules and repelling dissolved impurities, even those smaller than the water molecules themselves.

The REVERSE OSMOSIS (RO) purifiers remove all the contaminants of concern to the consumer such as bacteria, viruses, parasites, heavy metals, inorganic chemicals, pesticides and algae.

RO purifiers flush the impurities down the drain rather than collecting them in the filters, as is the case with ordinary systems, preventing any build up within the system.

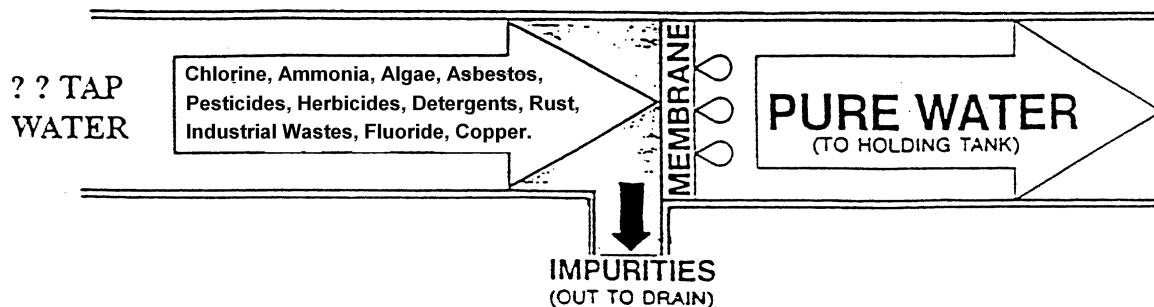
Also RO systems oxygenate the water giving it a lively fresh taste, unlike distilled water, which may have a flat dead taste.

With REVERSE OSMOSIS, you can be rest assured your drinking water is of the highest quality possible and the best possible investment for your families' health.



HOW DOES IT WORK?

Polluted water is forced by mains water pressure against a semi-permeable membrane. Purified water molecules easily pass through the membrane while pollutants, typically being larger than the pores (.0005 of a micron in size), cannot pass through and are washed away.



**Please read this entire service guide
before beginning installation**

This Reverse Osmosis Drinking Water System has been designed for simple installation and maintenance. By carefully reading this instruction manual and following the operational guidelines you will ensure a successful installation and reliable operation. Routine maintenance is essential to the longevity and performance of the system. Filters should be changed as per service intervals indicated on page 4.

CONDITIONS FOR OPERATION

Source Water Supply – TFC	
System Pressure	40 - 90 PSI (300 - 620 kpa)
Temperature	2° - 40° C (36° - 104° F)
pH Range	3.0 - 11.0
Maximum Supply TDS Level	500 mg/L
Turbidity	<1.0 Net Turbidity (NTU)

CAUTION

DO NOT USE THIS SYSTEM WHERE THE WATER IS MICROBIOLOGICALLY UNSAFE OR OF UNKNOWN QUALITY WITHOUT FIRST CHECKING WITH YOUR DISTRIBUTOR. THIS SYSTEM IS DESIGNED FOR USE ON POTABLE WATER WITHIN THE ABOVE CONDITIONS FOR OPERATION.

ROCAFE Reverse Osmosis Purifier

The ROCAFE drinking water purifier represents the very latest in design and ultimately has become the standard for the drinking water industry. The ROCAFE model remains unequalled in quality, reliability and overall performance.

Years of engineering experience, field-testing and continued design refinement combines to make the ROCAFE the best in its class.

STAGE 1 SEDIMENT PRE-FILTER

For Mechanical Filtration

Protects and extends the life of the membrane. Removes sediment particles – grit, dust, rust, mud, algae etc.

STAGE 2 CARBON PRE-FILTER

For Membrane Protection

A special high-grade carbon cartridge pre-filter is added to protect the TFC Membrane from chlorine degradation.

Specially designed to remove – pesticides and other organic pollutants e.g. chlorine, THM, TCE etc. Contains special acid washed, dedusted carbon with excellent absorbent qualities.

STAGE 3 ULTRAFINE RO MEMBRANE

Screens out the most minute microparticles. Pore size less than .0005 micron (1 micron = one thousand of a Millimetre)

Effectively repels: heavy metal complexes including aluminium, lead, mercury etc, microorganisms and colloidal matter.

STAGE 4 CARBON POLISHING POST-FILTER

Provides final polish resulting in superb tasting water.

STAGE 5 CALCITE RE-MINERALISER

CARTRIDGE REPLACEMENT

Sediment Pre-Filter	Up to 12 months
Carbon Pre-Filter	Up to 12 months
TFC RO Membrane	3 – 5 years
Carbon Post-Filter	12 to 24 months
Post Calcite Re-Mineraliser	24 to 48 month

INSTALLATION

Preparation

Check the following list of components to ensure that all parts are packed with your system

- 1 – Storage Tank
- 1 – RO System
- 1 – RO Water Faucet
- 1 – Installation Kit

Determine the location for the installation of the RO system. Avoid locations where the system might come in contact with hot water pipes or other hazards, taking into consideration ease of maintenance.

Determine the location for the faucet. Check to see that drilling the faucet hole will not damage pipes or wires running underneath the sink.

Determine the location for the storage tank. A maximum distance from tank to faucet of 4 metres (12 feet) is possible. The system will produce a faster flow at the faucet with the shortest tubing run from tank to faucet.

All tubing is colour coded for ease of installation.

1/4" Blue – Connects the feed water valve to the RO pre-filter.

1/4" Yellow – Connects the RO membrane product port to the storage tank.

1/4" Black – Connects the membrane brine port to the drain connector.

1/4" White – Connects the post-filter to the faucet.

Fittings and Tubing

Hose Quick Fit Connect fittings are used throughout the system. To ensure an optimal seal, tubing should be cut with the end square. An angled cut or distortion of the tubing may not provide an efficient seal and could cause leaks.

To install, push tubing into Quick Fit Connector until it bottoms out (approx 5mm). Pull tube back 2 mm and the collet will slide out with the tube, then push firmly a second time until tube stops.

NOTE: To disconnect, push collet against body of Quick Fit Connector, then slide tube out of fitting.

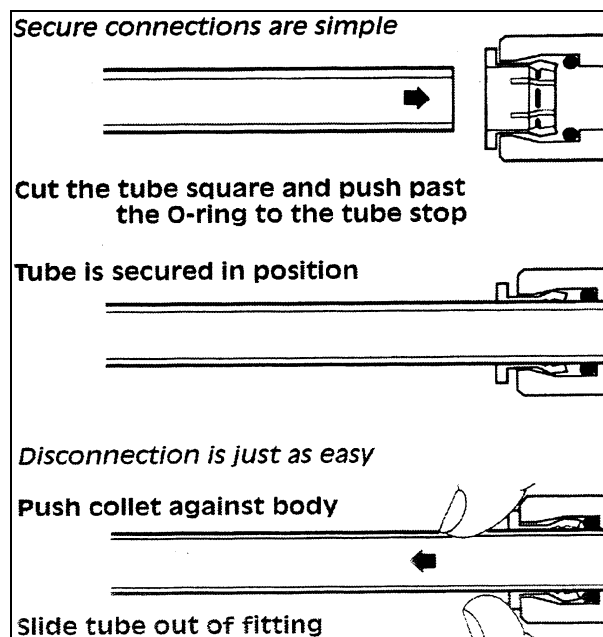


Fig 1

Important: Use Cold Water Only!

1. Installing Your Filter

Find a convenient location for the filter under the bench. Take into consideration ease of maintenance [e.g. cartridge replacement & best use of cupboard space]. Attach the filter to the cupboard wall, allowing height for changing cartridges. The system will operate without problems laying on it's back.

2. Shut off the Water

Locate the water shut-off valve for the cold water feed line you have selected for your water supply. Accidentally hooking up the system to the hot water supply line will permanently damage the membrane. To assure you are using the cold water line, turn on both the hot and cold-water faucets. After the water is warm to the touch, feel the pipes under the sink. It will be easy to identify the hot and cold pipes.

Close the cold water shut off valve. Turn on the cold-water tap only to assure that the line is completely shut off and drained. If there is no cold water shut off valve located under the sink, then turn off the main water supply at the entry to the house.

3. Attach Plumbing Kit Assembly

The mains connection best suited to your installation will have been selected at the time of ordering, Separate instructions are supplied with the kit.

USE THREAD TAPE SUPPLIED ON JOINTS

Important: Use Cold Water Only!

Continued



4. Installing the Drain Outlet Clamp Assembly

Select a location for the drain clamp **above** the 'S' Trap but not more than 40mm above the normal water level or the best location is on the transfer pipe between twin bowl sinks if you have one. Position the drain outlet clamp on the drain pipe. Allow adequate space for drilling. Tighten Clamp with "Tightening Screw"

Using the opening in the drain outlet clamp, drill a ¼" hole in the drain pipe. Clean debris from the clamp. Reattach tube Connector.

NOTE: Locate the drain connection away from the garbage disposal to prevent potential contamination and system fouling.



Important: Use Cold Water Only!

5. RO Water Faucet

The RO water faucet may be installed on any flat surface at up to 50 mm [2"] in diameter. Check the underside of the location for interference.

Faucet Installation

Determine desired location for the faucet on your sink surface.

- A. Place a piece of masking tape or duct tape on location where the hole is to be drilled. Mark the centre of the hole on the tape.
- B. Using a variable speed drill on the slowest speed, drill a 1/8" (3 mm) pilot hole at the centre of the desired location. Use lubricating oil or liquid soap to keep the drill bit cool while drilling.
- C. Enlarge the hole to 1/4" (6 mm). Keep the drill speed on the slowest speed and use lubricating oil or liquid soap to keep the drill bit cool.
- D. Enlarge the hole to 7/16th to 1/2" (11 to 13 mm) Keep the drill speed on the slowest speed and use lubricating oil or liquid soap to keep the drill bit cool.
- E. Pass the Escutcheon plate (chrome washer) and large black washer over the threaded mounting tube at the base of the faucet.
- F. From top of sink, slide the threaded mounting tube through the hole drilled in the sink. Align the faucet body.
- G. From under the sink, slide the smaller rubber washer on the threaded part of the faucet first, then the plastic washer, locking washer and then the thin threaded nut, Tighten with a spanner. Holding the tube from the filter system, place the brass cup nut on first, then the nylon olive and then insert the nylon thimble into the end of the tube as far as it will go. Insert the tube into the base of the threaded part of the faucet, push it in firmly (about 1/4") and slide nut up to thread and tighten firmly, do not over tighten.

6. Storage Tank

Place storage tank in a convenient position. Tank can be placed on its stand, either upright or on its side.

7. Activating the System for the First Time

IF CONNECTING SYSTEM TO ESPRESSO MACHINE: Do not connect White Supply line to machine until after system is purged. Allow water from White line to go down sink or into bucket.

Slowly turn Feed Water Valve counter clockwise until fully open. Check plumbing kit assembly for leakage.

Make sure all water supply/drain lines are secure and free from leakage.

Turn storage tank valve one quarter turn counter clockwise to open the valve [the handle should be in line with the tubing as it enters the connection]

Open the membrane flushing valve until water is freely flowing down drain then close

Open the RO water faucet and let the water flow until all the air has been expelled from the system. Water will be slightly discoloured [non-toxic carbon fines] and have some aeration.

Once air has purged turn off system and connect system to Espresso Machine.

Turn system back on, Close the RO water faucet. In 15 minutes, check the connections for leaks and correct if necessary.

8. Connecting the System to Espresso Machine

It is best to use the brass ½” Male to ½” Male half union adaptor supplied as this makes the best seal on the ¼” pipe to thread (On end of White pipe) This Plastic pipe to thread adaptor has an “O” ring in it and if leaking tighten slightly.

Connect machine to brass adaptor on end of white hose.

Purge water through machine to remove air bubbles trapped in system.

Do Not Use the First Reservoir of Water

Allow the reservoir to fill for 1 to 2 hours. Dispense this water to sink. This process removes the factory installed sanitising solution from the entire system and sends it to the drain. Repeat this process one more time. Allow the tank to fill for 1 to 2 hours and dispense this water to the drain.

Allow to refill for 1 hour and system is ready to use.

Code	Component	Colour of Tubing	Description
A	RO Faucet	White ¼”	Pure Water to RO Faucet
B	Feed Water Valve	Blue ¼”	Feed Water to RO System
C	Storage Tank Ball Valve	Yellow ¼”	Pure Water to Storage Tank
D	Drain Clamp	Black ¼”	Waste Water to Drain

TROUBLE SHOOTING

PROBLEM	POSSIBLE REASON	REMEDY
Water has a taste and/or odour	Carbon Post-Filter is depleted	Drain storage tank and replace Post-Filter
Water has a taste and/or odour	Sediment/Pre-Carbon filters are depleted	Replace filters
Water has an offensive taste and/or odour	Membrane depleted or fouled	Drain storage tank, replace Membrane & Post-Filter
Not enough product water pressure	Storage tank air pressure charge is low	Empty storage tank and set pressure to 5 – 7 PSI
Not enough water	Storage tank tap switched off	Switch storage tank tap on [handle should be in line with tubing as it enters the connection]
Not enough water	Low water pressure	If line pressure is below 40 PSI add a booster pump
Not enough water	Water supply is blocked	Clear restriction, rotate valve on feed water valve
Not enough water	Storage tank is depleted	Consider an increase in tank size or membrane capacity
Not enough water	Clogged cartridges	Replace Sediment & Carbon (stage 1 & 2) cartridge and drain tank
No drain water	Clogged flow restrictor	Replace Flow restrictor
No water	Water supply is turned off	Turn water on
Under sink is wet	Leak from RO System or Plumbing Fittings	Dry everything with towels to isolate leak, identify, and fix

If problem persists, call your local service distributor

Maintenance – Imperative to follow the sequence as outlined

- 1) Open RO water faucet and let the water run until empty.
- 2) Turn Feed Water Valve Off.
- 3) Turn off Storage Tank Tap. [on top of tank]
- 4) Remove the Sediment cartridge. Simply turn the Sediment cartridge housing tub clockwise and remove the filter from within.
- 5) Remove the Pre-Carbon cartridge. Simply turn the Pre-Carbon cartridge housing clockwise and remove the filter from within.
- 6) **THIS STAGE ONLY TO BE DONE EACH 3 – 5 YEARS. DISREGARD AT OTHER SERVICE INTERVALS.**

The membrane is contained within the horizontal tube clipped to the mounting bracket with 3 tubes attached. Remove the tube from the end with the single tube and undo the large cap nut from the end. Prise membrane out without damaging the membrane housing, insert new membrane and re-assemble, be sure to push the membrane firmly into it's housing.
- 7) Remove the Post-Carbon cartridge. Omnipure CL10RO-T40, remove the John Guest fittings and install these into the new cartridge with a small amount of plumbers thread tape.
- 8) Install the sediment pre-filter by installing the cartridge into the housing tub and threading the housing tub back onto its housing head the by turning anti-clockwise, do not over tighten.
- 9) Install the carbon (chemical) pre-filter by installing the cartridge into the housing tub and threading the housing tub back onto its housing head the by turning anti-clockwise, do not over tighten.
- 10) Turn Feed Water Valve ON with the faucet open, run system for 15 minutes, water will run very slowly. Water will be slightly discoloured [non-toxic carbon fines] and have some aeration.
- 11) Close RO water faucet and open Storage Tank Tap.
- 12) Flush 1 litre of water through prior to using system.

When away for extended periods, turn water off

This unit is fitted with a membrane-flushing valve and is normally closed. About once a month turn the small red stop valve at the front of the unit to the open position and leave it on for about 10 minutes to clear any possible build-up of particles, failure to do this will shorten membrane life. This flush valve needs to be operated when the tank is filling, if you open the valve and nothing happens the system is in shut down mode, release some water from the faucet to start the unit filling again and open the flushing valve again. Drain the tank as part of the membrane flushing process.

This unit is fitted with a re-mineralizing cartridge, its weight when new is 1200 grams and when exhausted will weigh around 300 grams. If you detect a change in the taste of the water remove this cartridge and weigh it, it is also a good idea when changing the sediment and carbon cartridges to weigh it then. The life of this cartridge is determined by the PH level of the water exiting the membrane and will vary from location to location.

1. BOSS Water Systems Australia ("The Warrantor") makes no claims or offers no warranties other than those detailed herein. The benefits of this warranty are in addition to all other rights and remedies covering the product line under the Trade Practices Act (CTH) 1974
2. This warranty is available only to original purchasers of new packaged water purifiers carrying our Boss Water Systems Australia brand name. It does not extend to the resale of second-hand or demonstration models, or to alternative brand or unbranded goods, or to any replacement parts, cartridges, or components, manufactured by and/or sold by BOSS Water Systems Australia.
3. This warranty applies for a period of 12 months from the date of purchase of our product, from an authorised dealer, against defect in material or workmanship.
4. The following damages and defects are excluded from this warranty to the extent that they are the result of acts of the purchaser, or persons other than the warrantor.
5. Repairs or modifications attempted by personnel not authorised by the warrantor.
6. Damage or impaired performance resulting from misuse, abuse, breakage or neglect
7. This warranty does not cover,
 - Disposable in-line filters or any cartridges
 - Loss, expense or damage caused by use on water supplies in excess of 40 degrees C
 - Loss, expense or damage caused by freezing.
 - Loss, expense or damage caused by failure to use a suitable pressure limiting/anti-hammer device.
 - Pressure limiting valves, connection systems, transformers and ballasts are 12 months warranty.

BOSS Water Systems Australia