# EauFlow

Purified clinical water on tap

TEC-SAFE



# EauFlow 505 (Hard Water 22L Tap Option)

Supplier code EY5505HW-22



# Installation Manual

Thank you for selecting an EauFlow Reverse Osmosis (RO) Machine. In order to fully optimise the use of your system, please read this instruction manual carefully before installation.

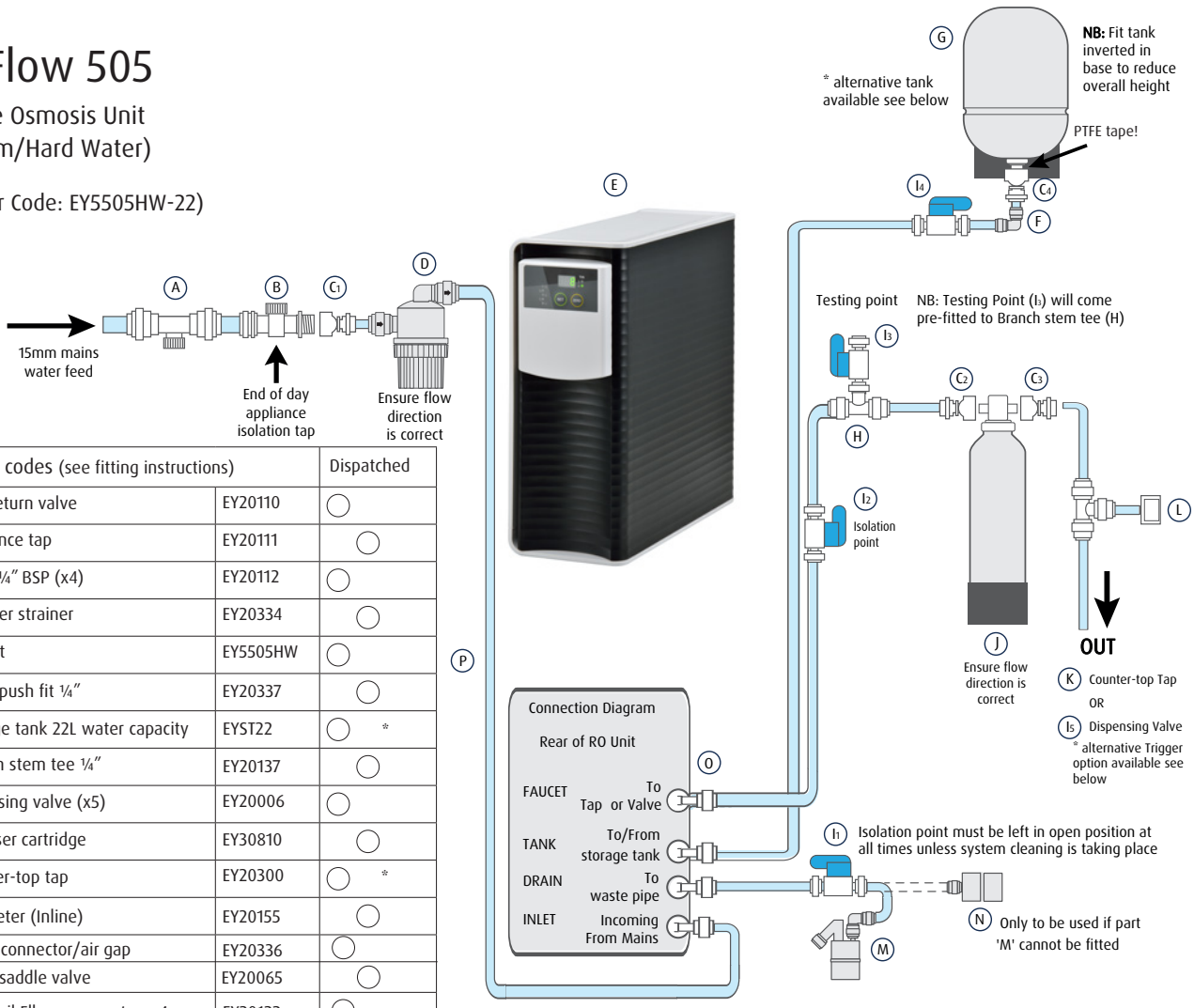
PP 201-5 v4 30/09/26

# Fitting Instructions

## EauFlow 505

Reverse Osmosis Unit
(Medium/Hard Water)

(Supplier Code: EY5505HW-22)




| Supplier codes (see fitting instructions) | | Dispatched |
|---|---|---|
| A) Non return valve | EY20110 | ◯ |
| B) Appliance tap | EY20111 | ◯ |
| C) ¾" to ¼" BSP (x4) | EY20112 | ◯ |
| D) RO filter strainer | EY20334 | ◯ |
| E) RO unit | EY5505HW | ◯ |
| F) Elbow push fit ¼" | EY20337 | ◯ |
| G) Storage tank 22L water capacity | EYST22 | ◯ * |
| H) Branch stem tee ¼" | EY20137 | ◯ |
| I) Dispensing valve (x5) | EY20006 | ◯ |
| J) Deioniser cartridge | EY30810 | ◯ |
| K) Counter-top tap | EY20300 | ◯ * |
| L) TDS meter (Inline) | EY20155 | ◯ |
| M) Drain connector/air gap | EY20336 | ◯ |
| N) Drain saddle valve | EY20065 | ◯ |
| O) Long tail Elbow connector x 4 | EY20122 | ◯ |
| P) ¼"(6.2mm) tube - 10m | EY20008 | ◯ |
| Total Components = 26 | | |

* A 12L capacity tank is available (supplier code EYST12). This smaller tank can be used as a replacement for the 22L tank or can be added as an additional secondary tank using a 'T' Piece connector (supplier code EY20123) to increase water capacity output.*Trigger Nozzle set (EY20367) can be fitted instead of Counter-top Tap or dispensing Valve.

Picking date: Picked by:

## Important Installation Details

2 Yr Extended Warranty only valid if the warranty card and a copy of this fitting sheet are returned to Tec-Safe offices by post and RO has been fitted by a Tec-Safe trained engineer

| | |
|---|---|
| Installation date: | Serial number: (back of unit) 20.....-EY505-.....HW |
| Engineers name and contact details: | |
| Practice name: | Has the 'Basic maintenance' training been explained to staff? (Details) |
| Practice phone: | |
| Practice email: | |
| CE | Purchase Order no (if applicable): |




FOR HELP & ADVICE, PLEASE EMAIL **technical@tec-safe.com** OR CALL 08443 511115

Tec-Safe Ltd, Unit 7 Woodford Centre, Lysander Way , Salisbury, Wilts. SP4 6BU

# Warning!

## Please observe the following recommendation:

If you are fitting an Eauflow Reverse Osmosis (RO) unit where the mains water feed:

1) Comes from a cold water 'storage' tank that is not routinely maintained

   OR

2) Has any plumbing deadlegs in the plumbing between the stop cock in the road and the RO unit plumbing point.

We recommend fitting a bacterial inline water filter and digital water flow meter before the RO



Further details on these can be found on page 6 under 'Additional RO equipment'.

Three sizes available

Failure to observe these conditions will result in bacterial contamination of your EauFlow RO system that could cause serious human health issues if left unchecked.

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CleanCert 2-in-1 dental waterline disinfectant (SUPPLIER CODE BFCEP50)

To help keep your dental waterlines clear of bacteria and biofilm, we recommend using CleanCert 2-in-1 Dental Waterline Disinfectant with 2 protocols in one bottle:

-Continuous dosing at 2%
(20ml in a 1L chair bottle topped up with 980ml fresh RO water)

-Periodic shock treatment
(typically 90% faster bacteria elimination contact time than competitors)

CleanCert is available from selected dental wholesalers or more information is available on our website by scanning here:

**NB: CleanCert should NOT be used in Autoclaves**

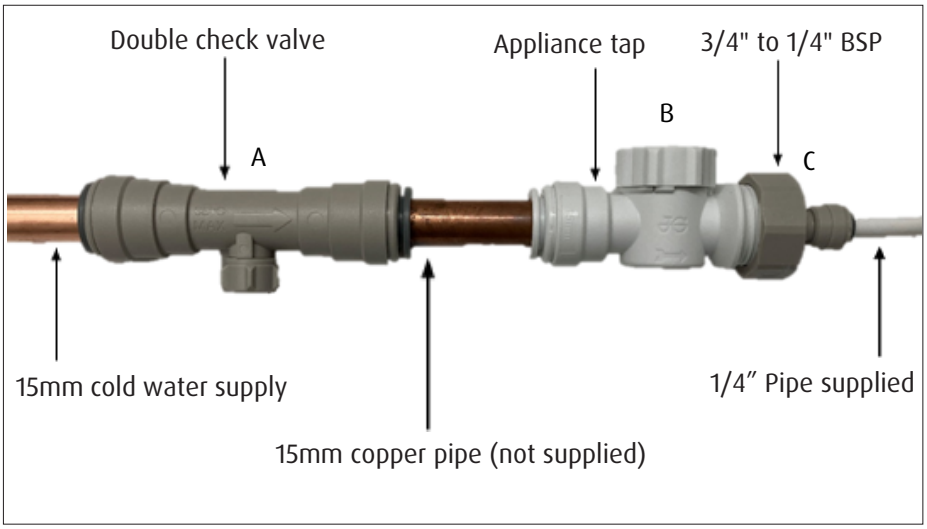


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# Installation

## Connection and filling of EauFlow RO system

Mains Connection Diagram




1. Connect all components as shown on the 'Fitting Instructions' sheet on page 1 (Items A, B and C from fitting sheet shown in above picture)
2. Ensure valve connected to storage tank is in 'off' position (90 degrees to tubing) and dispensing point (valve or counter-top tap) is 'open'
3. Connect the electricity and water supply to the RO and turn on
4. Allow water to flush through cartridges and run from dispensing point (valve or counter-top tap) for 5 minutes down the drain
5. Now close the dispensing point (valve or counter top tap) and open the valve connected to the storage tank (so it is in line with tubing)
6. Allow storage tank to fill
   (around 120-150 minutes for a 22L water capacity tank)
7. Do not use first tank of water - allow to run down drain by opening dispensing point (valve or counter-top tap)
8. Allow tank to refill - system is ready for use.

**NB:** A 12L capacity tank is available (supplier code EYST12). This smaller tank can be used as a replacement for the 22L supplied tank or can be added as an additional secondary tank using a 'T' Piece connector (supplier code EY20123) to increase water capacity output.

Tank technical details:
EYST22 22L water capacity, size 38 x 58 cm (full height in stand - tank to be fitted inverted to achieve this height), weight: 11kg empty 34kg full.

EYST12 12L water capacity, size 26 x 44 cm (including tank ball valve), weight: 4kg empty 15kg full.

# Maintenance

## Changing the Filter Cartridges

IMPORTANT! There are 5 filters in the machine to change,
3 after removal of the black side panel and 2 after removal of the white side panel

1



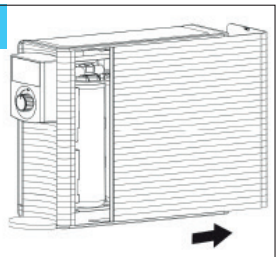
Turn off mains inlet water feed valve

2



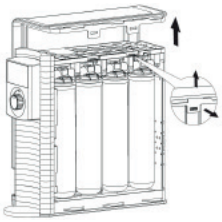
Close tank valve so blue top is 90 degrees to tubing

3



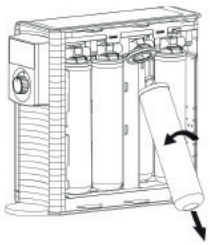
Open the black side door

4



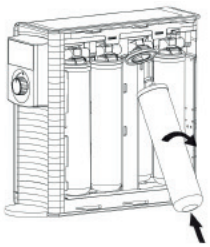
To remove white cover, unclip and pull up

5



Remove used filters

6



Install new filters

7



Turn on water source and flush for 5 minutes

8



Open tank valve so blue top is in line with tubing

9



Press the ZERO button for 2 seconds to reset computer

The following periodic maintenance is recommended so your system will provide an uninterrupted supply of purified water:

| Cartridge Filter | Service life |
|---|---|
| Green stage 1 - Pre-filter (Sediment) | Every 9-12 months |
| Blue stage 2 - Pre-filter (Activated Carbon) | Every 9-12 months |
| Red stage 3 - Pre-filter (Carbon block) | Every 9-12 months |
| Purple stage 4 - R/O membrane | Every 9-12 months |
| Yellow stage 5 - Deioniser Cartridge | Every 9-12 months |

HARD WATER AREA (greater than 250ppm CaCO3) - please ensure you add the post-RO large blue external deioniser cartridge, to ensure an uninterrupted supply of purified water for your practice.


FOR HELP & ADVICE, PLEASE EMAIL technical@tec-safe.com OR CALL 08443 511115
Tec-Safe, Unit 16b, Wyndham Business Place, Grosvenor Drive, Tisbury, Wilts. SP3 6GS

# Common Troubleshooting Issues

## Issues, reasons and resolutions

| ISSUE | REASON | RESOLUTION |
|---|---|---|
| 999 appears in display screen | Cartridge warning lights have been left flashing | To remove it:<br>a) Press 'Set' button for 3 seconds<br>b) Then Press 'Zero' button for 3 seconds<br>c) Unplug the RO unit within 1 second<br>d) Turn on again within 10 seconds.<br>The '999' should disappear. |
| RO Machine bleeping and number light flashing | Cartridge needs changing | a) Turn off water coming into RO and change all 5 cartridges.<br>b) Press zero button for 5 seconds until machine bleeps |
| '!' light flashing | TDS level in water too high | a) Valve to drain may have been turned off - turn on and flush 2 x tanks of water<br>b) If it has been over 9-12 months since last changing cartridges/installed machine then change all 5 cartridges<br>c) If it has been less than 9 months since you changed cartridges, then you need an additional blue Di cartridge EY30810 (plus inline TDS meter EY20155) between RO and dispensing valve/tap. Contact your rep for details. |
| 'Power' light flashing | Electricity fault | a) Change fuse in plug<br>Or<br>b) You need a new PCB board |
| 5 lights flashing red = leak detector alarm | Water detected in base of unit. Normally caused by not turning off water before changing cartridges, an internal leak or condensation of cold water entering filters | a) Turn off RO unit from the mains water and electric, then remove side panels (slide back black panel, undo white clips and lift up white panel)<br>b) Ensure filter cartridges are fully secured and not leaking<br>c) Mop up water in base of unit and ensure it is fully dry. You might also need to turn RO unit on its side to get rid of any excess water in the base. Have a cloth underneath for this purpose<br>d) Pull out black probe on front LHS (black wire connected to base), wipe with a cloth and replace. Ensure chamber is fully dry before replacing probe<br>e) Press zero for 2 seconds to reset the machine |
| SRC showing on display | No water input | a) Ensure mains water feed in pipe is connected correctly on the unit<br>b) Ensure valves and taps to mains input are turned to 'on' |
| FSH showing on display | System is flushing water through the filters | a) Wait for the system to finish the flushing process. This process removes air from newly installed filters |

# Additional RO Equipment

## RO Cleaning Kit



UK HTM01/05 - sec 6.50: 'Specialist items of equipment may require cleaning and decontamination processes that are purpose designed'.

Under normal working conditions, your EauFlow Reverse Osmosis (RO) water filter machine will not have any microbiological matter (bacteria) growing inside it. Unexpected extraneous conditions (eg. temporary local water treatment problems, static water due to lack of use, poor maintenance etc.) can result in bacteria growing inside your RO unit. Left unchecked, this bacteria can be detrimental to health in a clinical application and needs removing.

We recommend QUARTERLY testing of the water dispensed from your RO unit with a TVC (total viable count) dipslide (supplier code BFCDS10) to check whether bacteria has grown inside the RO unit.

In the unlikely event of your microbiological test detecting bacteria, we recommend firstly that you contact us to aid in the investigation of why the bacterial test has failed.

If cleaning is suggested by us after all other options have been investigated, a simple 'RO cleaning kit' (supplier code EY90200-ST) is available which contains components needed to clean the RO system. In addition to the kit, you will need a 5L bottle of CleanCert 2-in-1 dental waterline disinfectant (supplier code BFCEP50). Both are available from selected dental wholesalers.

Video instructions can be found on: **YouTube-CleanCert** (search for your RO model)

## Bacterial inline water filter



Recommended for mains water supplies where the decon room is situated above the first floor or where buildings are shared with other occupants creating a possible source of residual bacterial contamination.

Easily installed with quick-fit push fittings onto 6.2mm RO tubing and comes in three sizes depending on water usage:

- 3000 Litre capacity for 1-2 chair practices (EY30220)
- 13000 Litre capacity for 3-5 chair practices (EY30221)
- 56000 Litre capacity for 6+ chair practices (EY30222)




It is also a requirement to fit a digital water flow meter (EY20117) with the water filter on first installation so that it is known when the filter capacity is reached.

For further enquiries please contact:

Tec-Safe
Unit 7 Woodford Centre, Lysander Way , Salisbury,
Wilts. SP4 6BU

Email: **technical@tec-safe.com**
Phone: 08443 511115

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## BASIC MAINTENANCE

# Reverse Osmosis Water System

| |
|---|
| Installation Date: |
| Serial Number: |

*You will have been issued with a flow diagram with this maintenance guide to be affixed to a suitable location near the RO system which will help in the day-to-day maintenance ensuring an uninterrupted supply of purified water. Please refer to this for basic maintenance solutions. For further maintenance guidance please view the steps below.*

## 1) DAILY

**Start of the day:**

- Run waterline for 2 minutes to purge stale water from tubing
- Check the RO unit for any flashing lights or beeping from the digital display
- Check your RO unit for any water leaks – report to manager immediately

**End of the day:**

- Turn OFF mains water feed to the RO – this will prevent any unexpected leaks when surgery is empty



## 2) QUARTERLY

Test your water quality for bacterial contamination ('organic' reading) with TVC dipslides

- Run the RO water for 2 minutes (dispensing valve or tap)
- Using a TVC dipslide, remove cap, dip in water for 10 seconds, replace cap and allow to incubate for 1 week
- Fill in the log sheet
- If a dipslide shows any red dots, report to your manager or contact: **technical@tec-safe.com**

## 3) ANNUALLY

Under normal circumstances, we recommend changing all cartridges once per annum

- Change all 5 filter cartridges on the RO unit
- Change large blue DI cartridge (Hard water model only)

## 4) HOW TO CHANGE THE 5 RO FILTER CARTRIDGES





This process can be easily completed without tools.

a) Turn off mains water coming into the RO on the appliance tap (as you would at the end of the day)

b) Turn off valve on top of RO storage tank, so it's 90 degrees to tubing

c) Open dispensing point (valve or tap) to release any water in the system

d) Now open RO unit by sliding back black plastic panel and then release white panel with 2 clips at the top on the same side

e) Have a piece of cloth on hand to mop up up any residual water in the RO

f) Remove the old filters from the RO unit by simply twisting the filter anti-clockwise, taking note of which number cartridge goes in each slot – it is important not to mix them up!
(green = 1 sediment, blue = 2 carbon, red = 3 carbon, purple = 4 membrane, yellow = 5 Di)

g) Unwrap the new filter, remove the black lid and insert the new cartridge by simply twisting clockwise onto the unit

h) Ensure RO storage tank valve is still closed

i) Turn the mains water on

j) Flush through the cartridges for 1 minute

k) Open tank valve and let the tank fill up (typically 120–150mins for a 22L tank)

## 5) HOW TO CHANGE BLUE DI CARTRIDGE (EY30810)

1) Turn off storage tank valve

2) Turn off mains water coming into RO unit

3) Open tap and empty RO and Di of any residual water

4) Finally disconnect push-fittings on blue Di tank (by pushing collar in and pulling pipe out at the same time)

5) Replace with new cartridge. Ensure tubing is pushed in tightly and flow direction is correct by checking water flows in direction of arrows on top of Blue DI. **IMPORTANT - Do not remove red clips!**

## 6) HOW TO RESET ANY FLASHING LIGHTS ON THE TDS DISPLAY

Press Zero button for 2 seconds

## 7) IF YOU HAVE A POSTIVE DIPSLIDE RESULT

1) Take a photo of your dipslide

2) Contact technical@tec-safe.com for further investigation

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## WATER MONITORING LOG

Reverse Osmosis (RO) System

*Thank-you for buying an Eauflow RO system.*

Date of installation:

We recommend you carry out ongoing simple monitoring on your RO system, to provide you with an uninterrupted supply of purified water for autoclaves and dental chairs.

Water supply issues that arise in your RO output water fall into 2 categories: 'organic' (bacteria mainly) and 'inorganic' (limescale and nitrates mainly).

# MONTHLY WATER MONITORING LOG SHEET

## Monitoring 'Inorganic' levels - Total Dissolved Solids (TDS)

Record the number in the digital display on your TDS meter; this reading should remain below 10ppm to stop your autoclave rejecting the water. Inorganic materials are 'non live' impurities found in all potable (tap) water. Please use the following log to keep a record of your TDS readings:

### Instructions

Let water run for 2 minutes before taking the reading on the TDS display:

- Soft water model (EY505) - on the **built-in TDS display** on the RO unit
- Hard water model (EY5505) - reading on the **inline TDS meter** after the blue cartridge

| Year: | TDS Meter Reading | Filters Replaced? | Completed By |
|---|---|---|---|
| January | | | |
| February | | | |
| March | | | |
| April | | | |
| May | | | |
| June | | | |
| July | | | |
| August | | | |
| September | | | |
| October | | | |
| November | | | |
| December | | | |

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# QUARTERLY WATER MONITORING LOG SHEET

## Monitoring 'Organic' levels - (bacteria)

*We recommend using a TVC dipslide to proactively monitor bacteria in your RO unit.*

### Instructions:

- Allow RO water to run for 2 minutes
- Remove cap and insert dipslide in water for 10 seconds. Replace cap
- Incubate for 1 week to get an accurate reading
- Repeat quarterly

| Date | Test Carried Out on waterline or RO? | Dipslide Batch No. | Result | Action To Follow? |
|---|---|---|---|---|
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |

### If you have a positive reading on your dipslide:

1. Empty RO tank completely and allow to fill up. Then retake dipslide test
2. Ensure the water feeding your RO system is not coming from a cold water storage tank in the loft, or has any plumbing 'dead legs' on it
3. Contact technical@tec-safe.com for assistance, sending images of your dipslide readings

If you have any further questions please contact the technical team on:

08443 511115 or email **technical@tec-safe.com**

**www.tec-safe.com**

Tec-Safe Ltd, Unit 7 Woodford Centre, Lysander Way , Salisbury, Wilts. SP4 6BU

# Have you explored our infection control products?

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## OraWize+

The Powerful dental rinse for the complete dental journey, before, after and during treatment

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For further product information please contact:
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