

Eliminator™ RODI

Reverse Osmosis Water Purification System (Single and Dual Membrane Models)



ELIM-RODI-90-MF & ELIM-RODI-150-MF



ELIM-RODI-300-MF

INSTALLATION AND OPERATING MANUAL

WARNING

Please read carefully before proceeding with installation. Failure to follow any attached instructions or operating parameters may lead to the product's failure and possible damage to property.

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SYSTEM FEATURES

The Eliminator™ RODI Systems come complete with:

- 90 or 150 gallon per day, high-rejection Spectrapure advanced thinfilm membrane
 (2x150 gallon per day membranes for the ELIM-RODI-300-MF)
- Long-life, high-efficiency 1 micron sediment filter
- High capacity 1 micron carbon block prefilter eliminates chlorine, herbicides and other organic pollutants
- SpectraPure® Enduro DI High Performance Cartridge (ELIM-RODI-300-MF includes SpectraPure® MaxCap® DI Cartridge and SpectraPure® SilicaBuster DI Cartridge
- Includes dual-probe inline TDS Meter
- Manual flush valve for longer membrane life
- Automatic ShutOff (ASO) Valve saves water
- Inline ball valve for manual system shutoff
- Float valve for unattended operation
- Clear filter housings
- Included pressure gauge indicates when to change prefilters
- Durable, no rust mounting bracket
- 6-foot feed, product and waste tubing included
- Housing wrench for easy filter removal
- Garden hose adapter for tap water hookup
- One-year warranty



SYSTEM SPECIFICATIONS:

Sediment Prefilter 1 micron sediment prefilter
Carbon Filter 1 micron carbon block prefilter
RO Membrane Type Thin-Film Composite (TFC)

DI Cartridge Enduro DI™

(ELIM-RODI-300-MF also includes MaxCap® DI

and SilicaBuster DI)

Rejection Rate 98% average

Input Water Pressure 60 psi (4.15 bar) line pressure*

Input Water Temp 77°F (25°C)
Typical Membrane Rejection 98%

Dimensions:

Elim RODI 90/150 15.5" H x 14" W x 6.5" D (One Membrane) Elim RODI 300 18" H x 14.5" W x 6.5" D (Two Membranes)

Permeate flow and TDS rejection is based on the following test conditions: 250 ppm softened tap water, 77° F (25° C), 15% recovery and 60 psi.

Higher TDS, harder tap water, higher temperature, greater recovery rate, or lower operating pressure may contribute to reduced permeate flow and/or lower salt rejection.

Reverse Osmosis Operating Limits:

Operating Pressure* 40 – 80 psi (2.75 – 5.5 bar)

pH Range 2 – 11
Maximum Temperature 113° F (45° C)
Maximum Turbidity 1.0 NTU

Maximum Silt Density Index 5.0 (based on 15 min. test time)

Free Chlorine Tolerance less than 0.1 ppm
Maximum Iron less than 0.1 ppm
Maximum Manganese less than 0.1 ppm

Maximum Hydrogen Sulfide 0 ppm

Langelier Saturation Index LSI must be negative

*Operating pressure less than 40 psi may require a booster pump:
Operating pressure greater than 80 psi may require a pressure regulator.

SpectraPure® Inc. Assumes no responsibility for water damage due to leaks. It is the user's responsibility to determine that the system is leak-free.

SYSTEM DESCRIPTION:

The incoming feed water from a cold water source is directed through BLACK tubing and is first passed through a 1 micron sediment prefilter. This filter is used to remove excessive turbidity, sand, dust, silt, etc., that would otherwise cause the carbon filter to plug up. The next stage of filtration is the 1 micron carbon block prefilter. This filter is used to remove organics and chlorine from the feed water that can damage the membrane.

Household water pressure is used to force tap water through the semipermeable RO membrane. The membrane only allows the purest of water molecules to pass through it while over 98% of most inorganic salts, all microorganisms and almost all high molecular weight organics in the water are rejected and automatically rinsed from the membrane and sent down the drain.

The product from the RO membrane is then fed into the Enduro DI™ cartridge, producing water at ultrapure levels (18.2 megohm) before dropping off when resins become depleted. The ELIM-RODI-300-MF will then feed into two additional DI stages- the SpectraPure® MaxCap® DI Cartridge and the SpectraPure® SilicaBuster DI Cartridge.

INCLUDED ITEMS



Garden Hose Adapter Use this to connect BLACK feed water line to garden hose. (optional)



Filter Wrench Use to unscrew filter housings from caps. DO NOT USE to tighten filter housings as damage may result.





Ball Valve

Install on feed water line to shut down water supply when system needs to be serviced. Alternatively, may be used before float valve to keep system from constantly turning on and off due to minor fluctuations in level of water in reservoir.

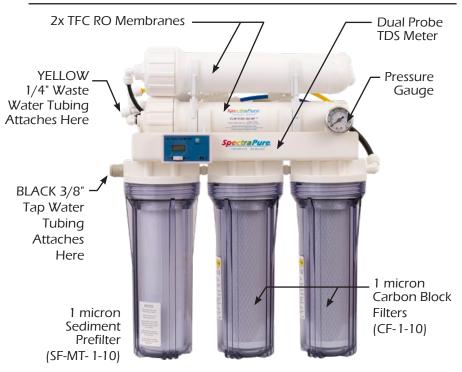
FRONT VIEW - 90/150 GPD



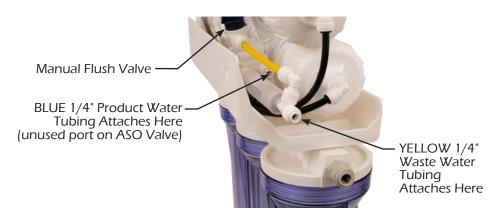
90/150 GPD — TUBING CONNECTIONS



FRONT VIEW - 300 GPD:



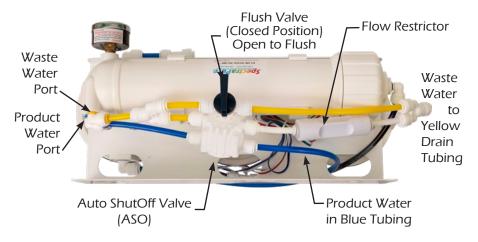
300 GPD — TUBING CONNECTIONS





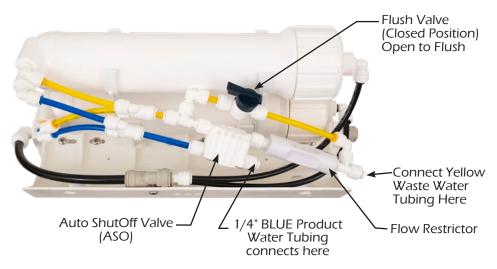
REAR VIEWS:

SINGLE MEMBRANE SYSTEM



NOTE: If Flush Valve is left OPEN, RO water production will be severely reduced.

DUAL MEMBRANE SYSTEM





WORKING WITH PUSH FITTINGS:

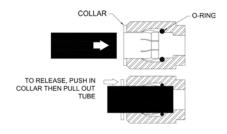
Push fittings are very reliable and convenient tubing connectors.

To remove the tubing from its push fitting:

- 1. Firmly depress and hold the push fitting collar down with your thumbnail.
- 2. While the push fitting collar is depressed, pull the tubing straight out of the push fitting. Once the tubing is removed, release the collar.

To reinsert the tubing into its push fitting:

- 1. Moisten the O-ring seal inside the push fitting by dripping a few drops of clean water into the fitting.
- 2. Grasp the tubing near the end, and insert the tubing into the push fitting.
- 3. Push the tubing into the fitting until resistance is felt, approximately 1/2 inch (12.7 mm). The tubing is now resting on the O-ring seal inside the fitting.
- 4. Firmly push the tubing approximately an additional 1/4 inch (6.35 mm) further into the fitting to completely seat the line into the fitting and past the O-ring seal.
- 5. Turn on the system water supply and check for leaks prior to further use or testing. If a leak is observed, you may not have pushed the tubing into the push fitting far enough to seal the tubing against the O-ring. Turn off the system water supply and reseat the tubing as described above.



A CAUTION

- Most of the components of this system are plastic and are subject to damage by ultraviolet light from the sun and other sources such as metal halide lighting.
- Avoid installing this unit in an area where it may be subjected to bright light or direct sunlight, as algae is more likely to thrive inside the clear filter housings when exposed to bright light.
- The unit must be kept out of areas that are subject to freezing temperatures.
- High temperatures greater than 113° F (45° C) must be avoided. If the unit is used outside, avoid putting the system in direct sunlight or connecting it to a garden hose that may be exposed to sunlight.

SYSTEM INSTALLATION & INITIALIZATION:

- 1. Attach the black tap water tubing to the fitting on the sediment filter housing. (See Pages 6-7.)
- 2. Attach the yellow drain line to the "Y"-connector at the rear of the system and run it to a permanent drain. (See Pages 6-7)
 - NOTE: If installing under a sink use a drain saddle (SpectraPure Part No. DS-4T) to tie the drain line into sink drain.
- 3. Attach the blue product line to the "T"-fitting coming off the DI cartridge housing. (see page 8).
- 4. Connect the black feed water line to a cold water source using the included garden hose adapter or an optional feed water adapter (SpectraPure Part No. VA-FD-4).
- 5. A provided ball valve can be located at a convenient place on the black tap water line. Cut the black tubing in two and reconnect the two cut ends with the ball valve.
- Place the yellow concentrate (waste) tubing and the blue purified (product) water tubing temporarily into a drain. Do not restrict flow from these lines.
- 7. Open the cold water supply valve. The pressure should not exceed 80 psi.

(continued on next page)

SYSTEM INSTALLATION & INITIALIZATION: (cont.)

CAUTION: Check the system to ensure that all fittings are tight and leak-free before leaving the system unattended. (If anything is leaking, contact SpectraPure for assistance.)

- 8. It is recommended that at least 5 gallons (19 liters) of purified water be discarded now before collecting purified water for use. If the unit is not used for several days, run the system for at least 10 minutes before collecting any water. This will flush out any stale water in the system.
- 9. Finish the installation by directing the yellow line to a drain.
 - NOTE: If installing under a sink use a drain saddle (SpectraPure Part No. DS-4T) to tie the drain line into sink drain.
- 10. Install the included Float Valve onto a collection reservoir.
- 11. Attach the blue line to the Float Valve.

NOTE: It may take several days of normal operation for the membrane to reach its full production rate.

INSTALL THE FLOAT VALVE:

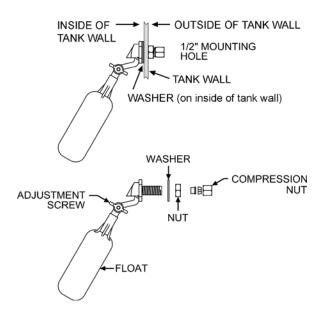
1. Drill a 1/2" hole near the top of your reservoir:

NOTE: If you are installing the Float Valve onto an acrylic tank we recommend using a new Fostner Bit to reduce the chance of cracking the acrylic.

- 2. (Refer to Diagram on next page) Remove the Compression Nut from the float body.
- 3. Insert the 1/4" Blue Tubing into the 1/2" Compression Nut with the threads towards the end of the tube.
- 4. Unscrew and remove the remaining nut from the float body.
- 5. Insert the float body and washer into the 1/2" hole and tighten the nut, which securely tightens the float to the tank wall.
- 6. Push the Compression Nut towards the end of the tubing and screw the Compression Nut back onto the float body.
- 7. To tighten, use one 1/2" wrench on the flats of the plastic threads and another 1/2" wrench on the Compression Nut.



FLOAT VALVE ILLUSTRATION:



HOW THE FLOAT SYSTEM WORKS:

The increasing water level raises the Float Valve in the reservoir and stops the flow of water. Pressure builds up in the product line and ASO Valve until the ASO Valve shuts off the flow of waste water to drain. Now that BOTH the waste and product lines are blocked off, this "OFF" condition will be maintained until the reservoir needs more water and the Float Valve drops, relieving the pressure on the ASO Valve and allowing both product and waste water to flow again.

NOTE: This configuration maintains tap water pressure in the prefilters, membrane, and pressure gauge when in the "OFF" condition. Also, this system WILL NOT WORK with any kind of "bladder tank" attached to the product line.

An optional float kit may be used for filling an additional sump or reservoir. Our Float Kit (ELIM-SPFK) includes a Float Valve and 1/4" Union Tee.

SEDIMENT PREFILTER REPLACEMENT:

A Sediment Filter will usually last approx. 4-6 months, depending on the quality of the tap water and quantity of water being produced. (The life span of the filter is determined by the turbidity, iron content, organics, and total particulate volume in your water source). The best way to determine when your Sediment Prefilter needs to be replaced is to monitor the Pressure Gauge. When you have a drop in pressure of 15-20% below your normal gauge pressure, replace the filter. To verify this, run water through the system without the filter in its housing. If the pressure returns to your normal house pressure without the filter, you will know the filter you just took out was plugged up and causing the pressure drop.

**NOTE: A drop in the system's production is, in most cases, an indication that the sediment filter has become saturated with contaminants and will need to be replaced. If you remove the sediment and the pressure does not return to normal, the carbon filter may be plugged. If your water contains a great deal of sedimen or chlorine, the prefilters may require more frequent changes to maintain adequate production rate and extended membrane life.

Sediment Prefilter Replacement

Materials Required: 1 micron Sediment Filter

(SF-MT-1-10),

Filter Wrench (WR-UNIV)

Procedure:

1. Turn off water supply to the system.

- 2. Using the provided filter housing wrench, remove the first housing on the left. Unscrew it clockwise as viewed from the top.
- Remove the old filter and discard.
- 4. Thoroughly wash the housing with a mixture of hot soapy water and a few teaspoons of household bleach. Rinse well with clean hot water.
- 5. Insert the new prefilter into the housing, Screw the housing back onto the assembly and hand-tighten **only**.

NOTE: Do not use filter wrench to tighten housings. Over-tightening will damage housings and void your warranty.

6. Proceed with carbon block filter replacement.





CARBON BLOCK FILTER REPLACEMENT:

A Carbon Filter will usually last 4-6 months, depending on the chlorine (or chloramine) content of your tap water and quantity of water being produced. The best way to determine when your Carbon Block Prefilter needs replacement is to use a chlorine test kit.

Any chlorine level above 0.1 ppm will cause damage to the membrane and indicates that the carbon block filter must be changed. To test for chlorine breakthrough, collect a 10 ml sample of the concentrate from the yellow tubing and test the chlorine concentration using test kit TK-CL-10-KIT. If the chlorine concentration is above 0.1ppm, replace the carbon prefilter.

**NOTE: A drop in the system's production is, in most cases, an indication that the sediment filter has become saturated with contaminants, but a carbon filter can also decrease production if it's covered with extremely fine sediment. If the carbon becomes plugged with sediment, it will no longer be able to remove chlorine.

Carbon Block Filter Replacement

Materials Required: 1 micron Carbon Block Filter (CF-1-10),

Filter Wrench, Chlorine Test Kit (TK-CL-10-KIT)

Procedure:

- 1. Turn off water supply to the system.
- 2. Using the provided filter housing wrench, remove the second housing from the left. Unscrew it clockwise as viewed from the top.
- Remove the old filter and discard.
- 4. Thoroughly wash the housing with a mixture of hot soapy water and a few teaspoons of household bleach. Rinse well with clean hot water.
- 5. Insert the new carbon block filter into the housing, Screw the housing back onto the assembly and hand-tighten **only**.

NOTE: Do not use filter wrench to tighten housings. Over-tightening will damage housings and void your warranty.

6. Turn on system water supply and check for leaks.

RO MEMBRANE REPLACEMENT:

- 1. Turn off the water supply to the RO system. Place the system where the membrane housing(s) can be easily accessed.
- 2. Remove the black tubing from the membrane feed push fitting by depressing the collar on the fitting with your thumb and pulling the tubing from the push fitting. You should not have to remove the blue and yellow tubes.
- 3. Lift the membrane housing from the retention clips and unscrew the membrane housing cap. This may require two people.
- 4. Use a pair of pliers to grasp the membrane stem and pull the membrane from the housing.
- 5. Remove the black housing O-ring. Wash the empty housing with soapy water. Rinse thoroughly with hot, clean water.
- 6. Insert the new membrane into the housing, with the double o-ring end first. The O-rings and tube must fit into the recess at the bottom of the membrane housing. When the membrane is aligned with the recess, firmly push the membrane into the recess until it bottoms out.
- 7. Place the black housing O-ring on the housing rim and carefully screw the lid back on to the base. Hand-tighten.
- 8. Reconnect the black tubing to the membrane feed push fitting.
- 9. If you have a dual-membrane system, perform steps 2 thru 8 on the second membrane.
- 10. Open the Flush Valve and allow the system to flush for several minutes to remove any particles.
- 11. Close the Flush Valve and turn on the water supply to the system.
- Check for leaks.



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DEIONIZATION CARTRIDGE REPLACEMENT:

(located in rightmost housing)

The condition of the DI cartridge should be judged by observing the "OUT" probe on the TDS monitor.

Turn on the system and allow water to flow past the monitor probe for at least 20 minutes before attempting to use the monitor. When the reading on the TDS monitor (set to "OUT") displays "001", it is time to replace the DI cartridge.

Materials Required: One DI-ENDI-10 Deionization cartridge, filter wrench.

Procedure:

- 1. Remove the filter housing from its cap by rotating it to the left.
- 2. Remove and discard the old cartridge from the housing.
- 3. Thoroughly wash out the housings with hot soapy water to which a few teaspoons of household bleach have been added. Rinse well with clean hot water.
- 4. Install the new deionization cartridge. Make sure the cartridge is installed in the correct direction as marked on the filter housing and that the top seal is securely attached to the top of the cartridge.
- 5. Reinstall the bottom housing onto the cap by rotating it to the right and hand tighten only.

NOTE: Do not use filter wrench to tighten housings. Over-tightening will damage housings and void your warranty.

SANITIZING THE SYSTEM:

(It is recommended that you sanitize the system once a year.)

- 1. Turn tap water source off and remove all filters from the system, including the RO membrane.
- 2. Mix together hot water, soap and a little bleach.
- 3. Scrub filter housings and rinse with clean tap water to remove soap and bleach.
- 4. Place filters back into housings and reconnect lines.

TIPS FOR LONG MEMBRANE LIFE:

- Replacement of sediment filter at least once every 6 months. This will
 prevent membrane fouling due to silt or sediment depositing on the
 membrane.
- Replacement of carbon block filter at least once every 6 months or when chlorine breakthrough occurs. This will ensure good membrane life and protect the membrane from chlorine damage.
- 3. Membrane should not be operated at lower than the minimum 2:1 concentrate to purified water ratio.
- 4. Operating reverse osmosis systems on softened feed water greatly reduces the chances of membrane fouling.
- 5. Use the flush valve **after each use** of the system to extend membrane life. It can be operated even when the system has been turned off. This is especially useful in hard water conditions.

STORAGE

- 1. It is recommended that you store your RO System in a cool and dark place when not being used.
- 2. Your RO System must always be protected from freezing or temperatures above 113° F (45°C)

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THE MANUAL FLUSH VALVE:

The Manual Flush Valve is located in parallel with the flow restrictor and, when opened, provides a high flow bypass of waste water used to purge concentrated brine from the membrane housing and rapidly flush any particulates from the membrane surface. This is especially useful in hard water conditions. The valve should be turned ON for 30 seconds at the start of a fill cycle and at the end of a fill cycle. BE SURE to turn the Flush Valve OFF before making product water.

NORMAL USE

The handle on the flush valve needs to be perpendicular to the yellow tubing to produce purified water. In this configuration, the waste water is forced through the opposite side of the "Y" fitting and through the flow restrictor (blue arrows). This creates a backpressure in the membrane housing which forces the water through the membrane and out the pure water port (red arrows).





FLUSH POSITION

When the handle on the flush valve is parallel to the yellow tubing, the water bypasses the flow restrictor and the membrane is being flushed. We recommend that you flush the membrane for 30 seconds before and after using your RO system.

NOTE: Due to resistance in the waste water tubing, a small amount of product water will still be produced when flushing the system.





USING THE PRESSURE GAUGE:

The pressure gauge is used to monitor the condition of the Sediment and Carbon Prefilters. With the Sediment and Carbon filters removed, the gauge will indicate the "actual" tap water input pressure. When the prefilters are "new", the pressure shown on the gauge will be slightly less than the actual tap water pressure and as the filters age, the pressure will drop due to the sediment that will collect in the prefilters. When the pressure on the gauge drops below 40 PSI or as the filters collect particulates and the pressure drop is greater than 15% to 20% of the normal water pressure, the prefilters are in need of replacement.

NOTE: When the pressure on the pressure gauge drops below the normal readings; do not assume that the sediment filter is the only cause. In some geographical areas where the input water contains a high percentage of very small micron particulates, the carbon filter may become clogged before the sediment filter. (The filters may look "new" but still cause the water pressure to drop). Do not judge the condition of the prefilters by their color, always use the pressure gauge to determine the condition of the prefilters.



TESTING THE QUALITY OF THE MEMBRANE:

The performance of a RO membrane is measured by its ability to reject salts or TDS (Total Dissolved Solids). Use the TDS Meter located on your system for this procedure.

General Procedure:

- 1. Slide the switch on the TDS meter all the way to the left (IN). Measure the tap water TDS. (Call it X)
- 2. Run the system for 15-20 minutes.
- 3. Slide the switch on the TDS meter to the right (OUT). Measure RO product water TDS. (Call it Y).
- 4. Subtract RO water TDS from tap water TDS. (X Y)
- 5. Divide this quantity by tap water TDS. (X Y) ÷ X
- 6. Rejection = $[(X Y) \div X] \times 100$

Important: Test the quality of the membrane once every 6 months.



Meter shown with switch set to "IN" position. Slide switch to right for "OUT" position.

Rejection of the RO Membrane Calculation Example

- 1. Tap water TDS = 150 ppm(X)
- 2. RO water TDS = 15 ppm (Y)
- 3. X Y = 135 ppm
- 4. $(X Y) \div X = 135 \div 150 = 0.90$
- 5. Rejection = $[(X Y) \div X] \times 100 = 0.90 \times 100 = 90\%$

NOTE: Rejection rates less than 95% may indicate that the membrane should be replaced.



MEMBRANE PRODUCTION CALCULATION:

Membranes produce the rated gallons per day (GPD) at 60 psi (4.1 bars) operating pressure, 77°F (25°C) operating temperature and with no more than 500 ppm total dissolved solids.

Membrane output gallons per day (GPD) depends on operating pressure, water temperature and the TDS in the feed water.

Expected GPD = Rated GPD × PCF × TCF

PCF is the pressure correction factor

TCF is the temperature correction factor

Calculation of Pressure Correction Factor (PCF): The output (GPD) from the membrane is directly proportional to the applied pressure.

NOTE: The membrane is rated to produce the rated GPD at 60 psi. For any pressure other than 60 psi the output GPD is multiplied by the PCF.

PCF = Line Pressure (in psi) \div 60

Calculation of Temperature Correction Factor (TCF): The output (GPD) decreases with a decrease in temperature. This is due to water viscosity increasing with a decrease in water temperature.

Temperature Correction Factor Table (TCF)

°F/°C	TCF	°F /°C	TCF	°F/°C	TCF
41.0/5	0.521	59.0/15	0.730	77.0 / 25	1.000
42.8 /6	0.540	60.8/16	0.754	78.8 / 26	1.031
44.6 /7	0.560	62.6/17	0.779	80.6 /27	1.063
46.4/8	0.578	64.4/18	0.804	82.4 / 28	1.094
48.2/9	0.598	66.2/19	0.830	84.2 / 29	1.127
50.0/10	0.620	68.0 /20	0.857	86.0 / 30	1.161
51.8/11	0.640	69.8/21	0.884	87.8/31	1.196
53.6/12	0.661	71.6/22	0.912	89.6 /32	1.232
55.4/13	0.684	73.4 /23	0.941	91.4/33	1.267
57.2/14	0.707	75.2 / 24	0.970	93.2/34	1.304

(See "Membrane Output Calculation Example" on next page.)



MEMBRANE OUTPUT CALCULATION EXAMPLE

What is the expected GPD from a 100 GPD System at 40 psi pressure and 60°F water temperature?

 $PCF = 40 \div 60 = 0.666$

TCF = 0.754 (from Table above)

Expected GPD = $100 \times 0.666 \times 0.754 = 50.2 \text{ GPD} \pm 15\%$

50.2 GPD would be the Actual Production Rate

TROUBLESHOOTING GUIDE:

Product Water - Low Production Rate

Cause	Corrective Action
Plugged prefilters	Replace prefilters
Low water temperature	Use higher GPD membrane
Low water pressure	Use booster pump or use higher GPD membrane
Fouled membrane	Replace membrane
No production	Flush Valve may be open Preflilters may be plugged Missing flow restrictor



ONE YEAR LIMITED WARRANTY:

SpectraPure, Inc.® warrants the product to the original owner only to be free of defects in material and workmanship for a period of one year from the date of receipt. SpectraPure's liability under this warranty shall be limited to repairing or replacing at SpectraPure's option, without charge, F.O.B. SpectraPure's factory, any product of SpectraPure's manufacture. SpectraPure will not be liable for any cost of removal, installation, transportation or any other charges which may arise in connection with a warranty claim. Products which are sold but not manufactured by SpectraPure are subject to the warranty provided by the manufacturer of said products and not by SpectraPure's warranty. SpectraPure will not be liable for damage or wear to products caused by abnormal operating conditions, accident, abuse, misuse, unauthorized alteration or repair or, if the product was not installed in accordance with SpectraPure's or other manufacture's printed installation and operating conditions, or damage caused by hot water, freezing, flood, fire or acts of God.

SpectraPure will not be responsible for any consequential damages arising from installation or use of the product, including any water or mold damage due to flooding which may occur due to malfunction or faulty installation, including, but not limited to failure by installer to over- or under-tighten fittings, housings, and/or push-style fittings, or improper installation of push-style fittings. Consumable items such as prefilters and membranes are not covered under the one year warranty.

To obtain service under this warranty, the defective system or components must be returned to SpectraPure with proof of purchase, installation date, failure date and supporting installation data. Any defective product to be returned to the factory must be sent freight prepaid. Documentation supporting the warranty claim and a Return Merchandise Authorization (RMA) number must be included. SpectraPure will not be liable for shipping damages due to the improper packaging of the returned equipment and all returned goods must also have adequate insurance coverage and a tracking number.

SpectraPure will not pay for loss or damage caused directly or indirectly by the presence, growth, proliferation, spread or any activity of "fungus", wet or dry rot or bacteria. Such loss or damage is excluded regardless of any other cause or event that contributes concurrently or in any sequence to the loss. We will not pay for loss or damage caused by or resulting from continuous or repeated seepage or leakage of water, or the presence or condensation of humidity, moisture or vapor, that occurs over a period of 14 days or more. "Fungus" and "fungi" mean any type or form of fungus or Mycota or any byproduct or type of infestation produced by such fungus or Mycota, including but not limited to, mold, mildew, mycotoxins, spores, scents or any biogenic aerosols.

SpectraPure will not be liable for any incidental or consequential damages, losses or expenses arising from installation, use, or any other causes. There are no expressed or implied warranties, including merchantability or fitness for a particular purpose, which extend beyond those warranties described or referred to above.

* The one year limited warranty does not apply to consumable items, including but not limited to, filters and cartridges unless specifically stated above.

TERMS AND CONDITIONS:

- Shipping charges on units or parts submitted to our facility for repair or replacement must be borne by the registered purchaser. After repair or replacement, the factory will return the unit or part freight prepaid to the customer.
- We assume no warranty liability in connection with our equipment other than as herein specified.
- This warranty is in lieu of all other warranties expressed or implied, including warranties of fitness for a particular purpose.
- 4. We do not authorize any person or representative to assume for us any other obligation on the sale of our equipment. This is the exclusive remedy and liability for consequential damages under any and all warranties which are excluded to the extent exclusion is permitted by law.
- 5. Proof of original purchase date must accompany all warranty claims.
- SpectraPure, Inc. Reserves the right to change prices without notice when necessary. All prices in the catalog are quoted in US dollars.
- Claims for error in quantity or condition must be made within 10 days of receipt of material. SpectraPure, Inc. will
 not be responsible for any claimed shortages not reported within 10 days. Returns other than warranty claims may
 be subject to 20% restocking fee.
- SpectraPure, Inc. cannot be held liable for damage or loss to a shipment by a freight carrier. Check shipment for damage before acceptance or note on freight bill subject to inspection for concealed damage. Consignee must file claim. SpectraPure, Inc. will offer as much assistance as possible.
- A complete credit check is required prior to shipping on a Net 30 basis. In the interim period during which credit references are being evaluated, all orders must be prepaid until approved.
- 10. All returned checks (due to insufficient funds or closed accounts) will be subjected to a \$35 penalty charge.
- 11. Invoices on Net 30 accounts not paid within 30 days of shipment will be considered delinquent and will accrue Finance charges at the rate of 1.5% per month (18% per annum).

OPTIONAL ACCESSORIES:

CLONE MASTER DI (ELIM-DI-CMCI-KIT)- Delicate plant cloning requires some of the purest water on the planet, even beyond that produced by traditional RO systems. By adding the SpectraPure CloneMaster DI™ stage to your existing Eliminator™ RO system you can produce the ultra-purified water necessary for these delicate growth challenges.

BOOSTER PUMP KIT (BPHF-MF-115) - SpectraPure® Booster Pump Kits are ideal for use on water sources with pressures below 40 psi such as private wells, gravity feed water systems and high-rise apartments. A pressure gauge is necessary to monitor the booster pump pressure.

REPLACEMENT PARTS:

Part Number	<u>Description</u>
SF-MT-1-10 CF-1-10	micron Sediment Prefilter micron Carbon Block Prefilter
MEM-0090 or	90 or 150 gpd TFC Membrane
MEM-0150	(300 gpd system uses 2 membranes)
DI-ENDI-10	SpectraPure® Enduro DI™ Cartridge
DI-MB-10	SpectraPure® MaxCap® DI Cartridge
DI-SB-10	SpectraPure® SilicaBuster DI Cartridge
FR-800	Standard Flow Restrictor for 90 gpd System
FR-1200	Standard Flow Restrictor for 150 gpd System
FR-2400	Standard Flow Restrictor for 300 gpd System

ACCESSORIES:

Part Number	<u>Description</u>
MTR-PH80	Handheld pH Meter
MTR-EC/TDS-C100	Handheld EC/TDS Meter
TK-CL-10-KIT	Total Chlorine Test Kit
TK-CL-10TABS	10 Replacement Tabs for Chlorine Test Kit
BPHF-MF-115	Booster Pump Kit for 150 & 300 gpd Systems