



Installation Instructions & Owner's Manual

ONE™

Cartridge Tank Filters



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Your ONE™ cartridge tank filters are precision built, high quality products. These units will deliver filtered water for many years to come, when installed and operated properly. Please study this manual carefully and understand the cautions and notes before installing. This manual should be kept for future reference. If you have any questions regarding your water filter, contact your local dealer, or the manufacturer at the following:

1900 Prospect Court • Appleton, WI 54914
Phone: 920-739-9401 • Fax: 920-739-9406

PREINSTALLATION INSTRUCTIONS:

The manufacturer has preassembled the cartridge filter tank. The actual cartridge filter is shipped separately and will need to be installed into the tank to complete assembly.

The dealer should read this complete guide to familiarize the installer with assembly, installation and operation of the cartridge filter system.

The site selection for the ONE™ Filtration System may vary depending on the purpose it will serve. This versatile filter may be used as pre- or post-filtration in a water treatment system. Depending on the application, this system can also be utilized as a single tank system.

Regardless of application, provisions should be made so that the system is located close to a drain. An optional bottom drain is available for these cartridge filter systems to allow rinsing of the cartridge. When replacing the cartridge, water may spill from the housing; therefore, precautions should be taken to prevent any damage due to water while rinsing or replacing the cartridge.

For the owner, please read operating and cartridge replacement change out instructions.

BYPASS INSTALLATION FOR EF-835-1:

The bypass valve is typically used to isolate the filter from the plumbing system's water pressure in order to perform repairs or maintenance. The 1" full flow bypass valve incorporates four positions, including a diagnostic position that allows a service technician to have pressure to test a system while still providing untreated water to the building. Be sure to install bypass valve onto the head assembly before beginning plumbing. Or, make provisions in the plumbing system for a bypass. The bypass body and rotors are glass-filled Noryl® and the nuts and caps are glass-filled polypropylene. All seals are self-lubricating EPDM to help prevent valve seizing after long periods of non-use. Internal O-rings can easily be replaced if service is required.

The bypass consists of two interchangeable plug valves that are operated independently by red arrow shaped handles. The handles identify the direction of flow. The plug valves enable the bypass valve to operate in four positions.

1. **NORMAL OPERATION POSITION:** The inlet and outlet handles point in the direction of flow, indicated by the engraved arrows on the control valve (**Fig. 1, page 4**).
2. **BYPASS POSITION:** The inlet and outlet handles point to the center of the bypass. The system is isolated from the water pressure in the plumbing system. Untreated water is supplied to the building (**Fig. 2, page 4**).
3. **DIAGNOSTIC POSITION:** The inlet handle points toward the control valve and the outlet handle points to the center of bypass valve. Untreated supply water is allowed to flow to the system and to the building, while not allowing water to exit from the system to the building (**Fig. 3, page 4**).

4. **SHUT OFF POSITION:** The inlet handle points to the center of the bypass valve and the outlet handle points away from the control valve. The water is shut off to the building. The water treatment system will depressurize upon opening a tap in the building. If water is available on the outlet side of the filter, it is an indication of water bypassing the system (**Fig. 4**) (i.e. a plumbing cross-connection somewhere in the building).

NORMAL OPERATION POSITION

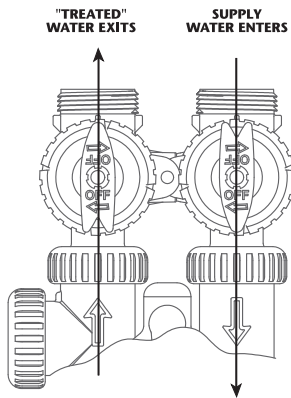


Figure 1

BYPASS POSITION

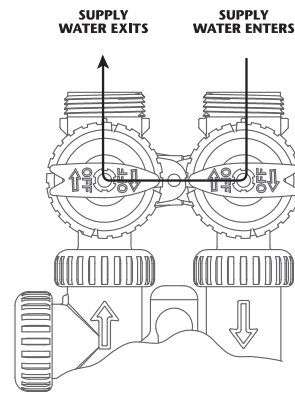


Figure 2

DIAGNOSTIC POSITION

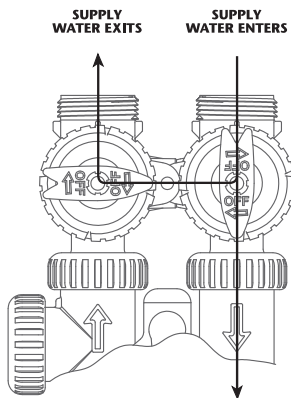


Figure 3

SHUT OFF POSITION

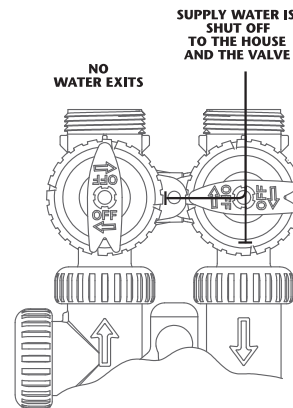
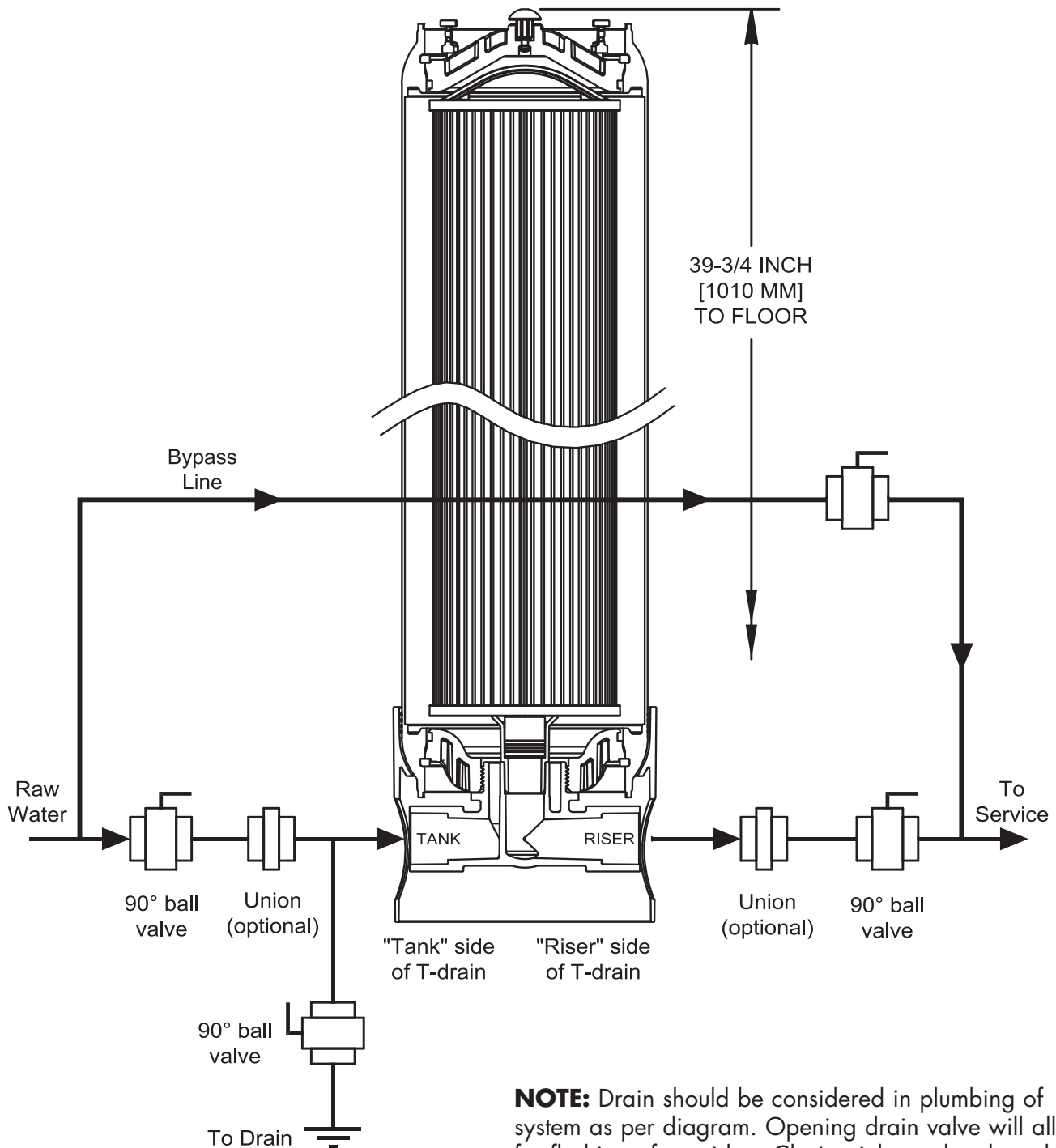


Figure 4

BYPASS INSTALLATION FOR EF-835-2:

Provisions should be made to install three bypass valves around the EF-835-2 cartridge filter tank. Because of the pipe size, this will need to be created on the job site. Any piping materials may be used; however, be sure to observe local plumbing codes. These bypass valves should allow for water to be turned off to the filter tank for future cartridge replacement, and allow for system bypassing should other service be required.



NOTE: Drain should be considered in plumbing of system as per diagram. Opening drain valve will allow for flushing of cartridge. Closing inlet and outlet valve and opening drain will relieve pressure on filter tank for cartridge replacement.

INSTALLATION INSTRUCTIONS FOR EF-835-1:

GENERAL INSTALLATION & SERVICE WARNINGS

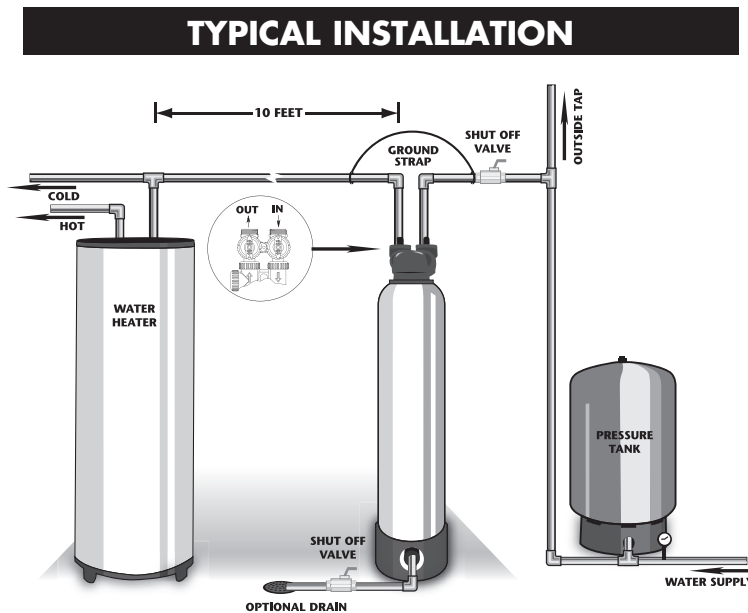
The control valve, fittings and/or bypass are designed to accommodate minor plumbing misalignments. There is a small amount of "give" to properly connect the piping, but the filter is not designed to support the weight of the plumbing.

Do not use Vaseline, oils, other hydrocarbon lubricants or spray silicone anywhere. A silicone lubricant may be used on black O-rings, but is not necessary. *Avoid any type of lubricants, including silicone, on red or clear lip seals.*

Do not use pipe dope or other sealants on threads. Teflon® tape must be used on the threads of the 1" NPT inlet and outlet, the brine line connection at the control valve, and on the threads for the drain line connection. Teflon® tape is not used on the nut connections or caps because O-ring seals are used. The nuts and caps are designed to be unscrewed or tightened by hand or with the special plastic Service Wrench, #CV3193-02. If necessary, pliers can be used to unscrew the nut or cap. Do not use a pipe wrench to tighten nuts or caps. *Do not place screwdriver in slots on caps and/or tap with a hammer.*

SITE REQUIREMENTS

- water pressure – 25-100 psi
- water temperature – 33-100°F (0.5-37.7°C)
- the tank should be on a firm level surface



1. This unit is equipped with a 1.25" CPVC connection at the bottom of the tank. This connection is for an optional drain. It may be desirable to rinse the cartridge filter periodically. If this is installed, location of the tank to the actual drain should be as close as possible.
2. Do not install any water filter with less than 10 feet of piping between its outlet and the inlet of a water heater.
3. Do not locate unit where it or its connections (including the drain) will ever be subjected to room temperatures under 33°F.
4. Do not subject the tank to any vacuum, as this may cause an "implosion" and could result in leaking. If there is a possibility a vacuum could occur, please make provision for a vacuum breaker in the installation.

5. **INLET/OUTLET PLUMBING:** Be sure to install bypass valve onto main control valve before beginning plumbing. Make provisions to bypass any outside hydrant at this time. Install an inlet shutoff valve and plumb to the unit's bypass valve inlet located at the right rear as you face the unit. There are a variety of installation fittings available. They are listed under Installation Fitting Assemblies, pages 13-14. When assembling the installation fitting package (inlet and outlet), connect the fitting to the plumbing system first and then attach the nut, split ring and O-ring. Heat from soldering or solvent cements may damage the nut, split ring or O-ring. Solder joints should be cool and solvent cements should be set before installing the nut, split ring and O-ring. Avoid getting solder flux, primer, and solvent cement on any part of the O-ring, split rings, bypass valve or control valve. If the building's electrical system is grounded to the plumbing, install a copper grounding strap from the inlet to the outlet pipe. Plumbing must be done in accordance with all applicable local codes.

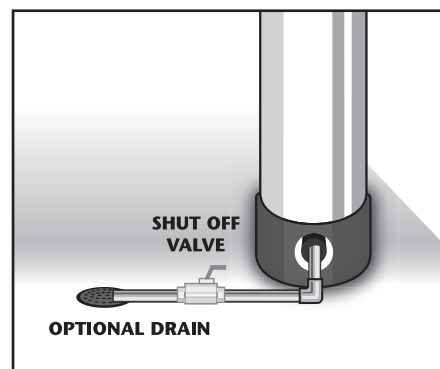
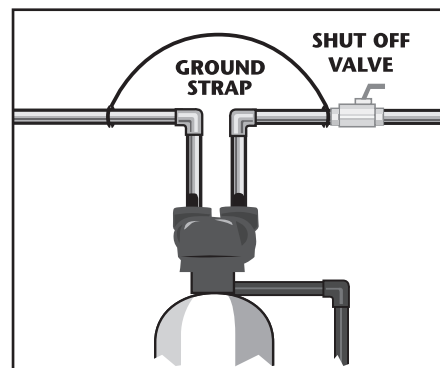
6. **INSTALLING GROUND:** To maintain an electrical ground in metal plumbing of a home's cold water piping (such as a copper plumbing system), install a ground clamp or jumper wiring.

NOTE: If replacing an existing filter, also replace the ground clamps/wire.

7. **DRAIN LINE:** First, be sure that the drain can handle the rinse rate of the system. At the bottom of the tank is a 1.25" CPVC socket to accommodate a drain. The manufacturer does not provide the fittings for this. The purpose of the drain is to manually (or automatically, if desired) rinse the filter tank and cartridge of any debris. This can prolong the life of the cartridge.



CAUTION: *If a drain is not used or the installation makes this unavailable, the 1.25" hole must be plugged or water will flow from this outlet.*

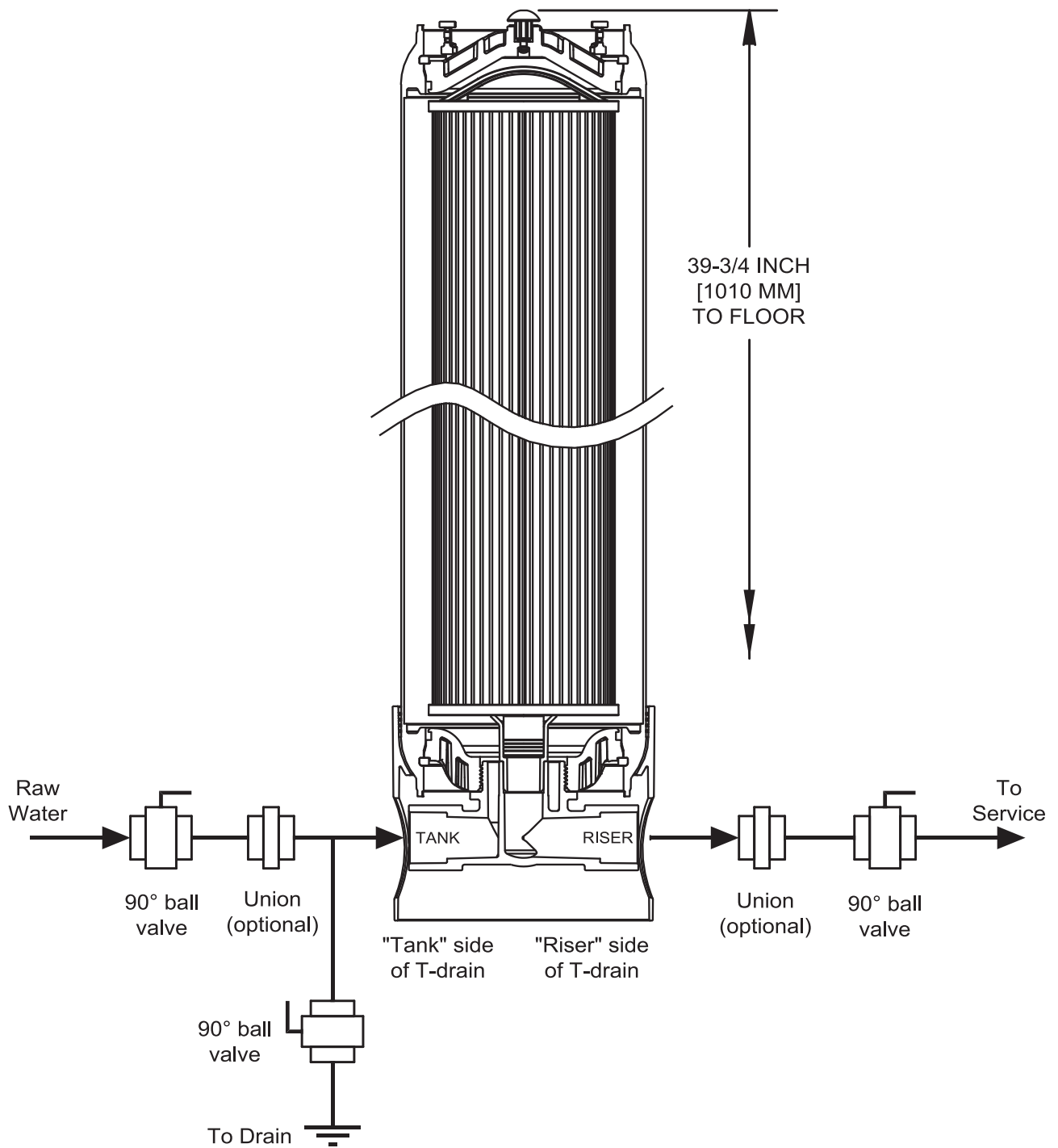


INSTALLATION INSTRUCTIONS FOR EF-835-2:

For installation of the EF-835-2, please plumb according to the diagram on the following page.

If the cartridge tank is rinsed periodically (*see bypass instructions on page 5*), it is important to locate the cartridge tank as close to the drain as possible. This rinsing can prolong the life of the cartridge. The drain port can also be used to relieve pressure and drain water from the tank during cartridge filter replacement.

Be sure to observe local and applicable plumbing codes.



CARTRIDGE REPLACEMENT INSTRUCTIONS FOR EF-835-1:

1. Turn off water supply to vessel using bypass inlet and outlet lines. **See page 4 for bypass diagrams.**
2. Release pressure on system by opening bottom drain for a moment, then close. If bottom drain is not installed, turn off water to inlet side of filter and open an outlet line to the filter.
3. Disconnect bypass from valve assembly using the nuts at the inlet and outlet head assembly. Be careful not to disconnect the nuts at the plumbing lines as these are under pressure.

NOTE: This unit is equipped with an adapter, attached to the underside of the head assembly, which accepts the O-rings of the cartridge. If the adapter is not in place, check in bottom of filter tank assembly as shipping may have dislodged this. Reattach to underside of valve housing, if necessary. *This should only be required upon initial install.*

4. Remove retaining ring which holds top cap in place (**see photo to right**). Push down on top cap equally to unseat the ring. To remove, pull on retaining ring handle by pulling inward and then upward. This will release ring from grooved seal.



5. Remove top cap by pulling upward on head assembly.

6. Carefully remove old cartridge from system (**see photo to right**). The cartridge will contain water and will splash or drip. Place used cartridge into a 5 gallon bucket to protect area from water damage.



7. Remove new cartridge filter from box and remove plastic covering. Locate product description tag and keep for future use.

8. Lubricate O-ring on adaptor to ensure proper sealing. *Do not use pipe dope, Vaseline, oils or other unacceptable lubricants on O-rings.* Food grade silicone lubricant is recommended.

9. Place cartridge into filter housing with adaptor "stub" at the top of the tank.

10. Place top adaptor piece onto cartridge "stub" (**see photo to right**). Carefully replace top cap assembly making sure that the adaptor slips into the top cap assembly. Push down on cap assembly. This will make room for replacement of ring assembly (**see photo to right**).



11. Attach product description tag to retaining ring for future reference (**see photo to right**). Insert retaining ring into ring groove, starting at the end opposite of the handle. Gently push retaining ring into groove until the entire ring is in place and both ends meet in the groove section. To ensure proper engagement, hold retaining ring by handle and slightly rotate around the inner diameter of the cartridge tank.



12. Reconnect cartridge tank to bypass valve by securing nuts.
13. Open a treated water line and turn bypass valve to the service position (**Fig. 1, page 4**) and allow water to fill tank slowly. Once water is flowing to treated water faucet, observe tank for any leaks.
14. Shut treated water line off to check for leaks and ensure system integrity.

CARTRIDGE REPLACEMENT INSTRUCTIONS FOR EF-835-2:

INSTALLATION OF NEW CARTRIDGE

1. Remove cap from cartridge tank (**see Removal of Cartridge, steps 1-3**) and then push top cap down equally with both hands to unseat retaining ring. Remove ring from groove by carefully grasping handle and pulling inward then upward. Ring will slide completely out of groove.
2. Remove top of cap from system by lifting up on top handles (**see photo to right**).
3. Remove plastic covering surrounding filter cartridge and discard.
4. Lubricate O-rings on cartridge to ensure proper sealing. *Do not use pipe dope, Vaseline, oils or other unacceptable lubricants on O-rings.* Food grade silicone lubricant is recommended.
5. Insert cartridge into bottom center of tank, assuring proper seal and alignment by pushing down gently until fully seated (**see photo to right**).
6. Attach product description tag to retaining ring handle for future reference (**see photo to right**).
NOTE: This tag is found on the new cartridge handle.
7. Replace top cap of tank using top handles.
8. Push top cap down to make room for placement of retaining ring in ring groove.
9. Insert retaining ring into ring groove, starting at the end opposite of the handle. Using only hands, gently push retaining ring into groove until entire ring is in place and both ends meet in groove section (**see photo to right**).
10. To ensure proper engagement, hold retaining ring by handle and slightly rotate around inner diameter of vessel.
11. Slowly turn water supply on to system by first opening inlet valve and pressing red depressurization valve to completely vent tank of trapped air; when water leaks out of depressurization valve, stop pushing and open outlet valve.
12. Check system for leaks and ensure system integrity.

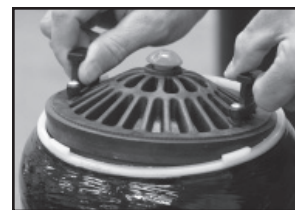


REMOVAL OF OLD CARTRIDGE

1. Turn off water supply to system by shutting off inlet and outlet valves.
2. Properly depressurize system by pushing red depressurization button on top cap of system. Keep button pushed until all air or water pressure is completely released.
3. Push top cap down equally with both hands to unseat retaining ring. Remove ring from groove by carefully grasping handles and pulling inward then upward. Ring will slide completely out of groove (**see photos to right**).



4. Remove top cap of system by lifting up on top handles (**see photo to right**).
5. Remove replacement cartridge carefully from bag. Retain bag for disposal of used cartridge.
6. Remove used cartridge from system by grasping handle and pulling upward while holding the tank down (**see photo to right**). Place in bag and dispose of in accordance with local, state and federal laws and regulations.
7. If necessary, open drain and flush system further with a bucket of water to remove final sediment and particles. Once flushed, close drain line.



TROUBLESHOOTING GUIDE:

PROBLEM	CAUSE	CORRECTION
<i>Lack of pressure from system</i>	A. Cartridge fouled out	A. Replace cartridge
	B. Exceeded flow rate of cartridge	B. Substitute cartridge for higher flowing unit
	C. Inlet to tank is plugged	C. Clean inlet of debris
<i>Cartridge life too short</i>	A. Too small micron rating	A. Choose different size or use multiple tanks
	B. Very heavy loading	B. Check raw water for particles
	C. Excessive water flow through cartridge	C. Check gallons consumed
<i>Plugged drain</i>	A. Not flushed often enough	A. Flush more frequently
<i>Water leak at depressurization button (EF-835-2 only)</i>	A. O-ring leak	A. Replace depressurization button

REPLACEMENT CARTRIDGES:

EF-835-1 REPLACEMENT CARTRIDGES		
Part No.	Description	Qty.
CT-1005	10 x 5 Micron Double Pleated	1
CT-2010	20 x 10 Micron Double Pleated	1
CT-5020	50 x 20 Micron Double Pleated	1
CT-2005-SWMB	20 x 5 Micron String Wound/Meltblown	1
CT-5020-SWMB	50 x 20 Micron String Wound/Meltblown	1
CT-03-CB	3 Micron Carbon Block	1
CT-20-CB	20 Micron Carbon Block	1

EF-835-2 REPLACEMENT CARTRIDGES		
Part No.	Description	Qty.
CT-P1A	1 Micron Absolute Pleated Polypropylene	1
CT-P05	5 Micron Pleated Polypropylene	1
CT-P20	20 Micron Pleated Polypropylene	1
CT-ACP	Pleated Activated Carbon Polypropylene	1
CT-D05	5 Micron Meltblown Polypropylene	1
CT-D20	20 Micron Meltblown Polypropylene	1

REPLACEMENT PARTS:

EF-835-1



EF-835-1 REPLACEMENT PARTS

Item No.	Part No.	Description	Qty.
1	CV3006	WS1 bypass valve assembly	1
2	CD1400-03	1190 in/out head 1.32mm	1
3	CT-WRADAPTER	Adapter for EF filter tank	1
4	CT-RETAINGRING	Retaining ring for top and bottom	2
5	CT-2.5LID	Filter plug for 2.5" drain	2
6	R-ORING LID	O-ring replacement for all lids/caps	2
7	Z008840XBK00	8" x 40" vessel shell w/base	1
8	CT-2.5ADAPTER	Adapter tee for 2.5" opening	1

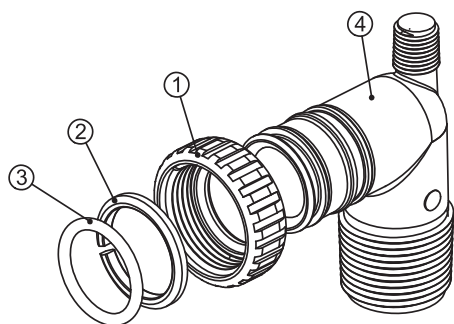
EF-835-2



EF-835-2 REPLACEMENT PARTS

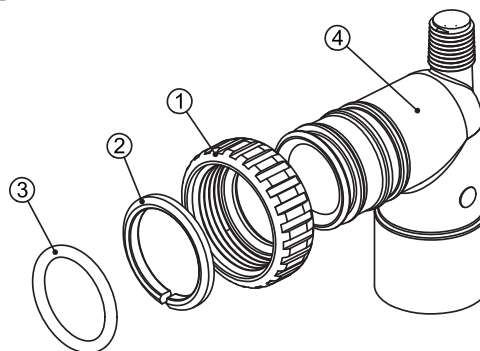
Item No.	Part No.	Description	Qty.
1	CT-RETAINGRING	Retaining ring for top and bottom	2
2	CT-1/4NPTLID	Top cap with pressure release	1
3	R-ORING LID	O-ring replacement for all lids/caps	2
4	Z008840XBK00	8" x 40" vessel shell w/base	1
5	CT-4.5LID	Threaded top and bottom commercial cap	1
6	CT-4.5ADAPTER	Filter adapter	1
7	CT-4.5DRAIN	Filter tee for commercial filter	1

INSTALLATION FITTING ASSEMBLIES:



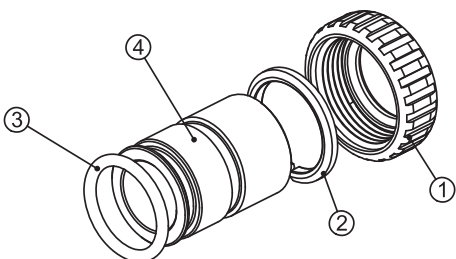
1" PVC MALE NPT ELBOW

Item No.	Part No.	Description	Qty.
	CV3007	1" PVC male NPT elbow assembly	2
1	CV3151	Nut, 1" quick connect	2
2	CV3150	Split ring	2
3	CV3105	O-ring 215	2
4	CV3149	Fitting	2



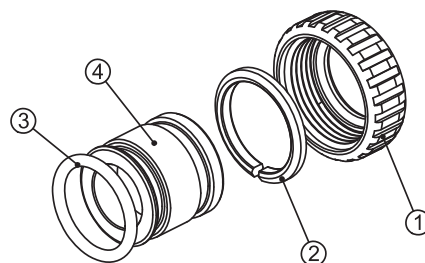
3/4" & 1" PVC SOLVENT ELBOW

Item No.	Part No.	Description	Qty.
	CV3007-01	3/4" & 1" PVC solvent elbow assembly	2
1	CV3151	Nut, 1" quick connect	2
2	CV3150	Split ring	2
3	CV3105	O-ring 215	2
4	CV3189	Fitting	2



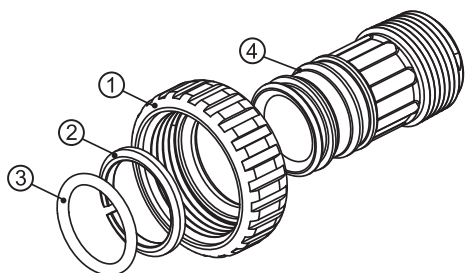
1" BRASS SWEAT

Item No.	Part No.	Description	Qty.
	CV3007-02	1" brass sweat assembly	2
1	CV3151	Nut, 1" quick connect	2
2	CV3150	Split ring	2
3	CV3105	O-ring 215	2
4	CV3188	Fitting	2



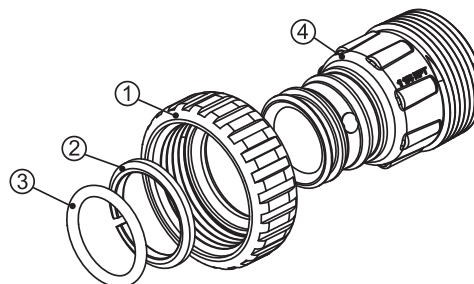
3/4" BRASS SWEAT

Item No.	Part No.	Description	Qty.
	CV3007-03	3/4" brass sweat assembly	2
1	CV3151	Nut, 1" quick connect	2
2	CV3150	Split ring	2
3	CV3105	O-ring 215	2
4	CV3188-01	Fitting	2



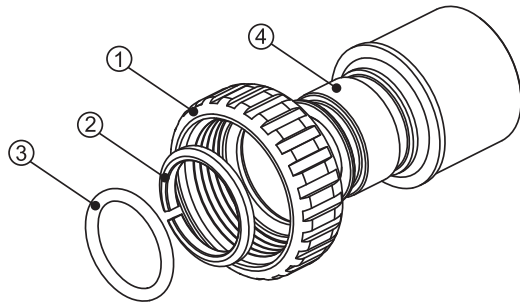
1" PLASTIC MALE NPT

Item No.	Part No.	Description	Qty.
	CV3007-04	1" plastic male NPT assembly	2
1	CV3151	Nut, 1" quick connect	2
2	CV3150	Split ring	2
3	CV3105	O-ring 215	2
4	CV3164	Fitting	2

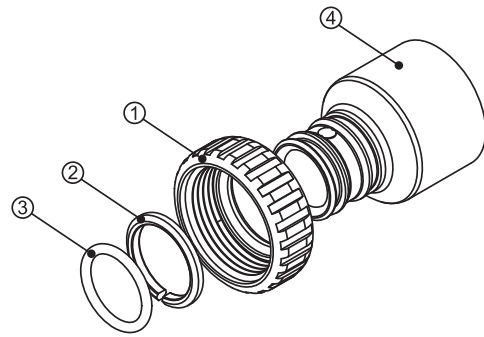


1-1/4" PLASTIC MALE

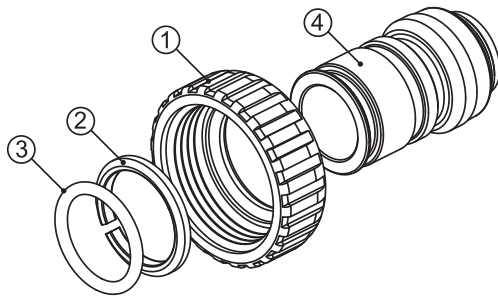
Item No.	Part No.	Description	Qty.
	CV3007-05	1-1/4" plastic male assembly	2
1	CV3151	Nut, 1" quick connect	2
2	CV3150	Split ring	2
3	CV3105	O-ring 215	2
4	CV3317	Fitting	2



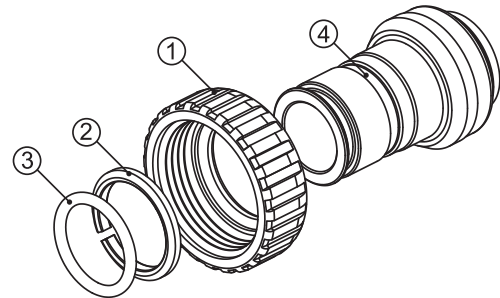
1-1/4" & 1-1/2" BRASS SWEAT			
Item No.	Part No.	Description	Qty.
	CV3007-09	1-1/4" & 1-1/2" brass sweat assembly	2
1	CV3151	Nut, 1" quick connect	2
2	CV3150	Split ring	2
3	CV3105	O-ring 215	2
4	CV3375	Fitting	2



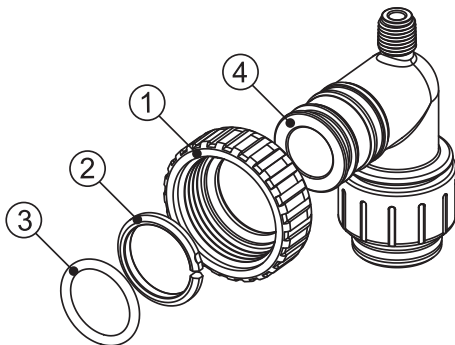
1-1/4" & 1-1/2" PVC SOLVENT			
Item No.	Part No.	Description	Qty.
	CV3007-07	1-1/4" & 1-1/2" PVC solvent assembly	2
1	CV3151	Nut, 1" quick connect	2
2	CV3150	Split ring	2
3	CV3105	O-ring 215	2
4	CV3352	Fitting	2



3/4" BRASS SHARK BITE			
Item No.	Part No.	Description	Qty.
	CV3007-12	3/4" brass Shark Bite assembly	2
1	CV3151	Nut, 1" quick connect	2
2	CV3150	Split ring	2
3	CV3105	O-ring 215	2
4	CV3628	Fitting	2



1" BRASS SHARK BITE			
Item No.	Part No.	Description	Qty.
	CV3007-13	1" brass Shark Bite assembly	2
1	CV3151	Nut, 1" quick connect	2
2	CV3150	Split ring	2
3	CV3105	O-ring 215	2
4	CV3629	Fitting	2



3/4" JOHN GUEST ELBOW			
Item No.	Part No.	Description	Qty.
	CV3007-15	3/4" John Guest elbow assembly	2
1	CV3151	Nut, 1" quick connect	2
2	CV3150	Split ring	2
3	CV3105	O-ring 215	2
4	CV3790	Fitting	2

Water-Right, Inc. & Enpress LLC

ONE Filtration Simplified™

Limited Warranty

1. WATER-RIGHT and ENPRESS LLC warrants its line of ENPRESS ONE Filtration Simplified™ (ONE) products, (including Cartridge Tank™ and Filter solutions), to be free of defects in material and workmanship for a period of one year from the date of purchase.
2. This warranty does not cover any equipment purchased for use in applications in which the product is not suited. It is the responsibility of the buyer to determine if a product is suitable for a particular application.
3. Our obligations under this warranty are limited to the repair or replacement (at ENPRESS's sole discretion) of the failed parts of the water treatment unit manufactured by ENPRESS, and we assume no liability whatsoever for direct, indirect, incidental, consequential, special, general or other damages.
4. We assume no liability for the determination of the proper equipment necessary to meet your requirements, and we do not authorize others to assume such obligations for us.
5. We assume no liability and extend no warranties, expressed or implied, for the use of this product with a non-potable water source or a water source which does not meet the conditions for use described in the owner's guide or performance data sheet for the product.
6. The warranty provided herein applies, only when used within the product specifications and service life, from the date of installation, beyond which ENPRESS LLC is absolved of any and all liability for any use of the product. There are no other warranties, either of merchantability or fitness, either expressed or implied.
7. This warranty gives you specific legal rights and you may also have other rights which vary from state to state.
8. This warranty is not in effect until installer performs (product specific) ENPRESS LLC Product Protocol, when required, for testing, record-keeping and certification of the ONE product prior to installation.

9. THIS WARRANTY EXCLUDES THE FOLLOWING:

- a. Damage caused by improper installation, operation or care.
 - b. Damage caused by chemical attack, environment, accident, fire, flood, freezing, Act of God, misuse, misapplication, neglect, oxidizing agents (such as chlorine, ozone, chloramines and other related components), alteration, installation or operation contrary to the printed instructions, or by the use of accessories or components which do not meet ENPRESS's specifications, including the use of a replacement element not manufactured or supplied by ENPRESS LLC. Refer to the specifications section in the Installation and Operating manual for approved application parameters.
 - c. Modification or alteration by other than ENPRESS LLC employees.
 - d. Rubber type parts and normal wear items i.e. "O" rings, etc...
 - e. Any costs of labor or expenses expended in the removal and/or installation of unit, or any surrounding device.
 - f. Altering or removing the ENPRESS LLC information label.
 - g. Use of non ENPRESS LLC approved cartridges, filters, or replacement parts with the appropriate systems or vessels.
 - h. Non-use of supported piping for plumbing connections to In/Out connections.
10. Service under this warranty is to be provided by the distributor/installer who sold the unit to the user. If the distributor is unable to provide warranty service, contact:

Water-Right/WaterCare
1900 Prospect Court • Appleton, WI 54914
Toll Free: 800-777-1426 • Fax: 920-739-9406

A Returned Goods Authorization (RGA) number must be received from the above office and placed on all shipments to and correspondence with ENPRESS LLC. **Please be prepared with the following information:**

1. Model number and serial number.
2. Date of installation.
3. Name of installer
4. Nature of problem.
5. Your address and contact information.

Manufactured for:
1900 Prospect Court • Appleton, WI 54914
Phone: 920-739-9401 • Fax: 920-739-9406