PIONEER™

Pb FILTER CARTRIDGE

YOUR WHOLE-HOUSE LEAD & CYST REMOVAL SOLUTION

Available in the ONE E3-M system

POWERED BY ENPRESS LLC
Where Innovation Flows™

LEAD IN WATER SYSTEMS

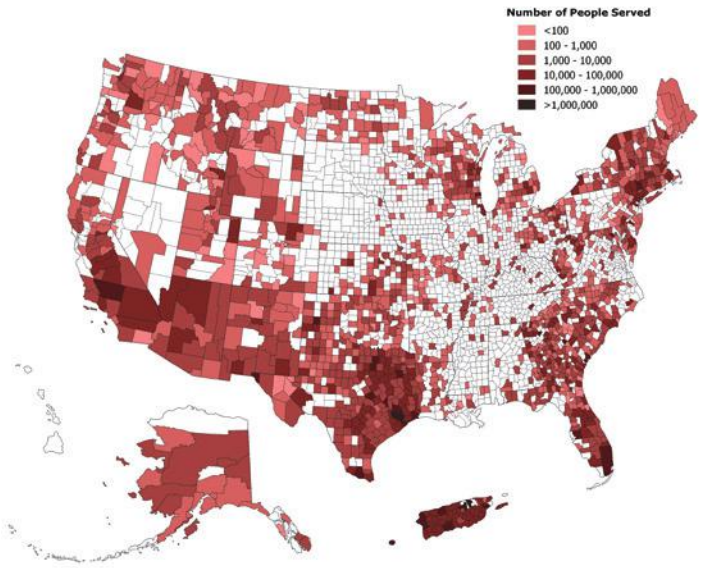
Eighteen million Americans live in communities where the water systems are in violation of the law. Moreover, the federal agency in charge of making sure those systems are safe not only knows the issues exist, but it's done very little to stop them, according to a new report and information provided to CNN by multiple sources and water experts.

The American Academy of Pediatrics states that there are no effective medical treatments for lead poisoning and that prevention of exposure is needed.

The Drinking Water Action level for lead in water is set at 15 parts per billion (ppb), but in 1994 the FDA set the maximum amount of lead allowed in bottled water at 5 ppb.

Children with lead poisoning can have learning and behavior problems, hyper activity, slow growth, and hearing loss. Symptoms like tiredness, head and stomach aches, and low iron deficiencies are often mistaken for other illnesses. The only way to find lead poisoning is through a blood test.

MAP SHOWING LEAD IN COMMUNITY WATER SUPPLIES



SOURCE: *cnn.com/2016/06/28/us/epa-lead-in-u-s-water-systems/index.html*

According to the U.S. Council Of Environmental Quality, the risk of developing cancer is 93% higher in people who drink or are otherwise exposed to chlorinated water. Chlorine is a potential health hazard to both children and adults.

PIONEER™ Pb REMOVES LEAD

Not only does PI**ONE**ER Pb remove heavy metals such as lead, it also removes and/or reduces chlorine, chloramine and other harmful contaminants in your water, including >99.95% of cysts.

Microbial cysts like Giardia and cryptosporidium can survive in cold water for several months, and can be resistant to disinfection, like chlorine, so they must be filtered out of the water supply. Because Giardia can lead to dehydration, its symptoms include diarrhea, nausea and stomach cramps. It has no long term effects.

Point-of-Use VERSUS Point-of-Entry: It's a no-brainer!

POU	POE (PIONEER Pb)
One filter capability per housing	Whole house cartridge filter
Short filter life	Long filter life for up to 100,000 gallons or 1 year
Limited coverage in the home	Removes lead, >99.95% of cysts, chlorine, chloramine, taste and odor
Typically for drinking water only	Eliminates bottle water purchases
Creates tremendous waste	Best whole house flow rate production
Lower flow rate (servicing one faucet)	Metered so homeowner knows when the filter needs to be changed, increasing safety

WHY REMOVE LEAD

The History of Lead Usage: Until it was banned in new home construction in 1986, more than 70% of cities in the US were using lead-based products for conveying water, because it was less expensive and more durable than iron. Lead pipe could be easily bent, allowing pipes to be shaped to conform to the contours of existing buildings or other structures.

NUMBER OF CITIES USING LEAD UNTIL 1986

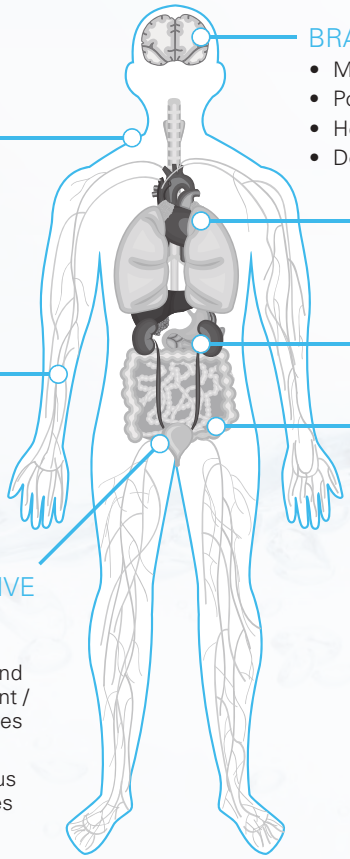
How Lead Gets into Drinking Water: Lead can enter drinking water when service lines that contain lead corrode, especially where the water has high acidity or low mineral content that corrodes pipes and fixtures. This most often happens in the pipes that carry water from the water treatment plant to water mains under the street supplying homes. Lead release is heavily influenced by the chemistry of the water delivered by the water system and by physical disturbances, such as road construction or water main replacements.

HEALTH EFFECTS OF LEAD

How Lead Affects Adults: Keep in mind that there is no safe level of lead for the human body and unlike other metals, it has no useful biological function. Even low concentrations of lead in water can cause a significant increase in blood lead levels and any damage is irreversible.

The Affects on Children: Lead is a potent neurotoxin which has significant effects on childhood health and development. According to the Centers for Disease Control and Prevention, lead exposure can affect nearly every system in a child's body, inhibiting the development of both physical and mental abilities.

The health effects information on this page is not intended to catalog all possible health effects for lead. Rather, it is intended to let you know about the most significant and probable health effects associated with lead in drinking water.



BRAIN
- Memory Loss
- Poor Concentration
- Headaches
- Depression

BODY
- Fatigue
- Joint Pain
- Muscle Pain

CARDIOVASCULAR
- High Blood Pressure

KIDNEYS
- Abnormal Function / Damage

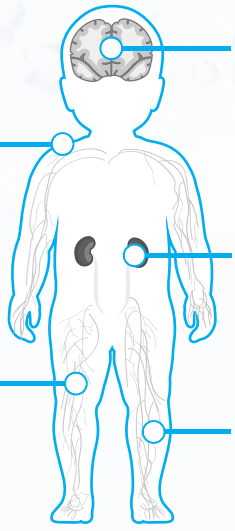
NERVOUS SYSTEM
- Damage
- Numbness and Pain in Extremities

DIGESTIVE SYSTEM
- Constipation
- Nausea
- Poor Appetite

REPRODUCTIVE SYSTEM

Decreased Sex Drive and Sperm Count / Abnormalities

Spontaneous Miscarriages



BRAIN
- Behavior Problems
- Lower IQ
- Hearing Loss
- Learning Disabilities

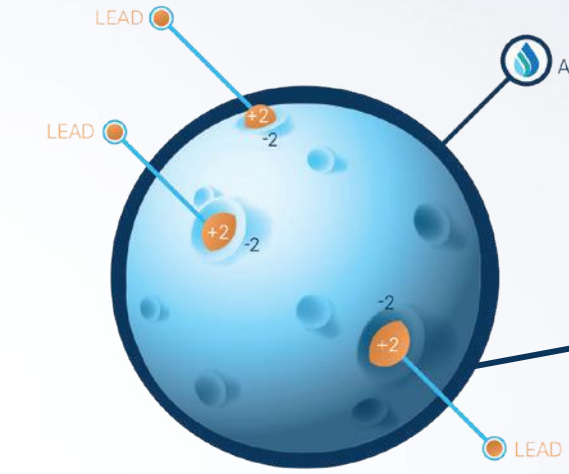
BODY
- Decreased bone and muscle growth

KIDNEYS
- Damage

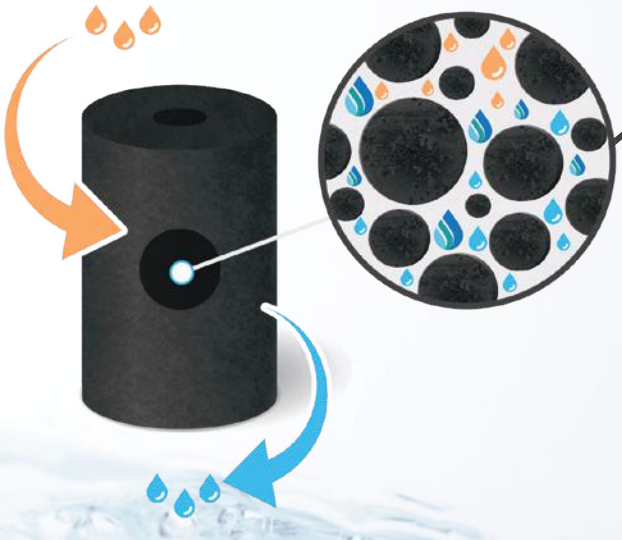
NERVOUS SYSTEM
- Damage

BLOOD
- Anemia

HOW PIONEER™ Pb REMOVES LEAD



$H_2O + Pb(NO_3)_2 > H_2O + Pb^{2+} + (NO_3)^{2-} > H_2O$



FILTRATION EVERYWHERE TECHNOLOGY®

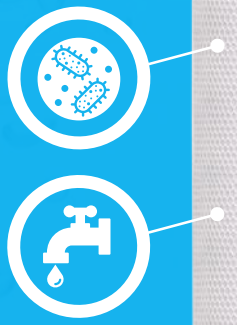
PI**ONE**ER Pb provides the best filtration solutions, starting at the source and giving peace-of-mind throughout the entire home.

OTHER HARMFUL ELEMENTS PIONEER Pb REMOVES FROM YOUR WATER

PI**ONE**ER Pb removes lead, which is a colorless, odorless and tasteless metal. In addition to lead, the patented E3-M filtration system removes >99.95% of Giardia and Crypto, as well as chlorine and chloramine*.

Giardia and Crypto: Waterborne parasite that causes diarrheal disease; very resistant to chlorine-based disinfectants and is common in drinking and recreational waters.

Chlorine and chloramine: Water disinfectants added to municipal water that have negative health effects. The most harmful exposure is through inhalation and skin adsorption of steam in a shower.



PIONEER Pb POE filters have been tested for use at standard and peak flow rates for **both forms of lead. The Water Quality Platinum Seal and UPC shield demonstrate the certification by IAPMO R&T.*

PIONEER® Pb

PI**ONE**ER Pb is specifically designed at a 0.5-micron nominal filtration level to remove both particulate and soluble lead from your drinking water. Soluble lead is invisible, odorless, tasteless, and needs to be chemically removed from water. Particulate lead is like a tiny grain of sand that needs to be physically removed from water. The PI**ONE**ER Pb POE filter is strategically designed to remove **both** forms of lead contamination from the whole house in a single filter.

Soluble/Ionic lead: PI**ONE**ER Pb absorbents are designed to chemically react with soluble lead to create an ionic bond, kinetically removing lead from the water. Ionic bonding is a chemical bond that involves the electrostatic attraction between oppositely charged ions, and is the primary interaction occurring in ionic compounds. Ionic bonds form when a nonmetal (binder/adsorbent) and a metal (lead) exchange electrons, as they do in PI**ONE**ER Pb.

Particulate lead: PI**ONE**ER Pb filter is specifically engineered to physically remove and filter lead particles from water, which is often found as a result of corroded lead pipes.

BUILT WITH HOMEOWNER EASE-OF-USE IN MIND

EASY TO UNDERSTAND LED REPLACEMENT NOTIFICATIONS

The Real-time Dynamic LED System monitors water and flow rate and provides a visual color-coded notification to the homeowner, letting them know when to replace their filter.

GREEN: FILTER GOOD

YELLOW: CHANGE SOON

(10% OF FILTER LIFE REMAINING)

RED: CHANGE NOW

EASY FILTER REPLACEMENTS WITH NO TOOLS REQUIRED

E3-M uses state-of-the-art snap-ring technology to eliminate the need for cumbersome tools. Homeowners can easily replace the filter in their E3-M system by following a few simple steps.

1. PRESS THE RED PRESSURE RELIEF VALVE TO UNSEAT THE RING

2. REMOVE SNAP RING

3. LIFT TOP CAP

NOTES

- Meter preset at 100,000 gallons; see Installation Manual for resetting when the cartridge is replaced.
- Three AAA batteries not included for battery back-up. Change annually with filter change-out.
- Refer to Installation Manual for proper installation and product service guidelines.

TESTING PIONEER™ Pb

The NSF/ANSI 53 Drinking Water Treatment Units Health Effects standard, accredited by the American National Standards Institute (ANSI), is used to test and evaluate the effectiveness of water treatment equipment used in homes for the reduction of chemicals that may be present in drinking water, such as lead. The NSF/ANSI 53 standard contains four primary sections and is tested and certified by an accredited 3rd party certification body for Material Safety, Structural Integrity, Product Literature, and:

Section 1: Material Safety Testing: ensures that the water filter that has been designed to reduce lead from the drinking water will not add (leach) harmful contaminants to the water.

Section 2: Structural Integrity Testing: prevents water damage by ensuring that the filter is built to handle water pressure and water hammer typically found in homes. This test helps ensure products will not leak, break or crack during normal use.

Section 3: Evaluates the performance of the filter to reduce water contaminants such as lead. The lead performance test created in the NSF/ANSI 53 standard is extremely rigorous. The US EPA's action level for lead in drinking water is 15 ppb. The influent lead level for NSF/ANSI 53 testing is 150 ppb or **10 times** the allowed level. NSF/ANSI 53 also requires testing at high and low pH levels to ensure the filter can remove lead in its ionic form and particulate form. For the duration of the testing the filter must reduce the influent lead concentration below 0.005 mg/L, Enpress targeted levels below 5 ppb.

Section 4: Requires the manufacturer to include specific performance information in the product's Instruction Manual, data plate and a performance data sheet that lists the contaminants that have been tested.

This system has been tested according to NSF/ANSI 53 for reduction of lead and cyst. The concentration of lead in water entering the system (0.15 mg/L +/- 10%) was reduced to a concentration less than or equal to permissible limit (0.010 mg/L) for water leaving the system, as specified in NSF/ANSI 53.

SPECIFICATIONS

ONE E3-M Name and Part Number	Size and Micron Rating	Rated Capacity and Flow Rate	Peak Flow and % Reduction of Lead and PFOA/PFOS	Chlorine/chloramine Taste and Odor Reduction Capacity*	Pressure Drop Spec
ONE E3-M System and PIONEER Pb Filter					
ONE E3-M System *CTA0840BBBKP5-06L00*	8" x 40" / 0.5 Microns	Lead Reduction and PFOA/PFOS 100,000 gallons @ 4.51 GPM (378,541 Liters @ 17.1 lpm) @ 99.62% lead reduction @ 97.9% PFOA/PFOS reduction	8 GPM *(30.2 lpm)* @ 99.62% lead reduction @ 97.9% PFOA/PFOS reduction >88,000 gallons at 8 GPM* *(333,116 Liters @ 30.2 lpm)*	>300,000 gallons @ 15 GPM *(1,135,533 Liters @ 56.8 lpm)* with greater than 90% reduction, estimated capacity using 2 ppm of free chlorine >150,000 gallons @ 8 GPM (567,812 Liters @ 30.3 lpm) with greater than 85% reduction, estimated using 3 ppm of chloramine	9 psid @ 4.51 GPM

Replacement Cartridge Filters Are Listed as PIONEER Pb—0.5 Micron High Capacity Carbon Block // PART NUMBER: CT-05-CB-AMYCL

**Claims are not performance tested by IAPMO or NSF. Performance claims are based on independent laboratory and manufacturer's internal test data. Actual performance is dependent on influent water quality, flow rates, system design and application. Results may vary.*

IMPORTANT

DO NOT USE extra lubricants, unapproved sealants and tools to tighten hand-tighten only parts. Use of tools other than hand-tighten only parts voids warranty. Testing was performed under standard laboratory conditions; actual performance may vary. Flush the system and change the filter as suggested. The contaminants or other substances removed or reduced by this water filter are not necessarily in all users' water.

PERFORMANCE

Performance claims are based on independent lab results and manufacturer's internal test data*. Actual performance is dependent on influent water quality, flow rates, system design and applications. Your results may vary. Performance claims are based on a complete system, including a filter, housing, and connection to a pressurized water source. This filter must be operated according to the system's specifications in order to deliver the claimed performance. It is essential to follow operational, maintenance, and filter replacement requirements as directed for each application for this filter and system to perform correctly. Read the Manufacturer's Performance Data Sheet accompanying the system and change the filter as suggested. The contaminants or other substances removed or reduced by this water filter are not necessarily in all users' water.

WARRANTY

LIMITED LIABILITY: ENPRESS LLC makes no warranties of any kind, expressed or implied, statutory or otherwise, and expressly disclaims all warranties of every kind, concerning the product, including, without limitation, warranties of merchantability and fitness for a particular purpose, except that this product should be capable of performing as described in this product's data sheet. ENPRESS LLC's obligation shall be limited solely to the refund of the purchase price or replacement of the product proven defective, in ENPRESS LLC's sole discretion. Determination of suitability of this product for uses and applications contemplated by Buyer shall be the sole responsibility of Buyer. Use of this product constitutes Buyer's acceptance of this Limited Liability.

If you have any questions regarding your water filter, contact your local dealer, OEM, or the manufacturer at the following:

This system has been tested for the reduction of the substances listed below. The concentration of the indicated substances in water entering the system was reduced to a concentration less than equal to the permissible limit for water leaving the system, as specified in NSF/ANSI 53. Minimum substance reductions are as follows:

Substance	Influent Challenge Concentration (MG/L)	Maximum Permissible Product Water Concentration (MG/L)	NSF/ANSI Standard
Lead	0.15 +/- 10%	0.005	53
Cyst	Minimum 50,000/L	99.95%	53
PFOA/ PFOS	1.5 +/- 10%	0.07	53

Minimum Operating Temperature: 34 °F / 1 °C
Maximum Operating Temperature: 120 °F / 50 °C
Minimum Operating Pressure: 20 psig / 1.38 bar
Maximum Operating Pressure: 125 psig / 8.6 bar
Electrical Requirements: Grounded and unswitched 115 V outlet and 3-AAA Batteries

Filter Replacement Operating Instructions: New cartridges must be flushed for a minimum of 10 minutes prior to use. System and installation to comply with state and local laws and regulations. Do not use with water that is microbiologically unsafe or unknown quality without adequate disinfection before or after the system. Systems certified for cyst reduction may be used on disinfected waters that may contain filterable cysts. Manufactured from NSF/ANSI standard 61 and California Prop 65 Compliant certified coconut shell carbon and raw materials.

MANUFACTURED BY

POWERED BY ENPRESS LLC
Where Innovation Flows™

GNC Water Filtration Simplified™

For more information, visit enpress.com or onefiltration.com

ENPRESS, LLC. *// 34899 Curtis Blvd., Eastlake Ohio 44095 //*
Phone: 866.859.9274 // Fax: 440.510.0202 // info@enpress.com

CERTIFICATIONS

UPC

IAPMO R&T WATER QUALITY PLATINUM SEAL IAPMO RESEARCH AND TESTING

The ENPRESS CTA0838BBxxP5-06Lyyy, CTA0840BBxxP5-06Lyyy and CTA0842BBxxP5-06Lyyy are certified by IAPMO R&T to NSF/ANSI 53 for Material Safety, Structural Integrity, and for the reduction of claims specified on the Performance Data Sheet.

DISTRIBUTED BY

EPA Est. 092577-OH-001

GNE™ E3-M

Water Filtration Simplified™

INSTALLATION AND OPERATION MANUAL

FOR METERED ENPRESS BYPASS SOLUTIONS

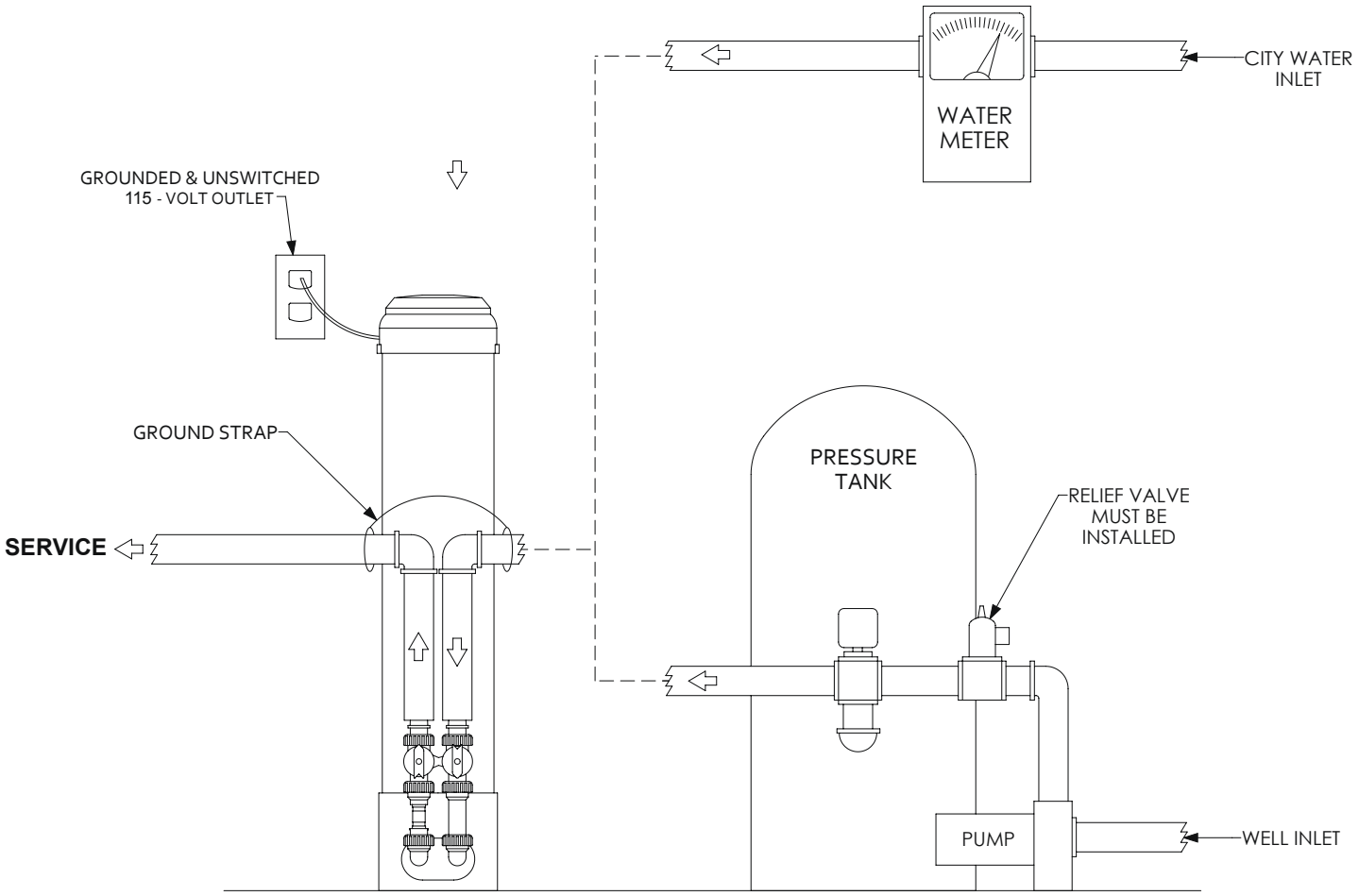
This manual should be kept for future reference. If you have any questions regarding your water filter, contact your local dealer, OEM, or the manufacturer at the following:

ENPRESS, LLC. // 34899 Curtis Blvd., Eastlake Ohio 44095 // Phone: 866.859.9274
// Fax: 440.510.0202 // info@enpress.com

EPA Est. 092577-OH-001

GNE E3-M Water Filtration Simplified™

WHERE TO INSTALL



NOTES

- Select a proper location for installation. The unit must be installed before the main water line connects to the water heater, near where it connects to your home.
- Please allow 3 feet of open space above the system for replacement cartridges.
- Before installing, turn off the main source of water. Turn on a faucet inside of your home to relieve water pressure by draining it from lines.
- 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.
- Plumbing the filtration system assembly: the inlet and outlet of the filtration housing are 1" threaded MNPT connections.
- No use of extra lubricants, unapproved sealants, and use of tools. Use of tools other than hand tighten only parts voids warranty.
- System to be supplied only with cold water.
- 3-AAA batteries not included.
- Meter assembly preset to 100,000 gallons.

The system and installation must comply with state and local laws and regulations.

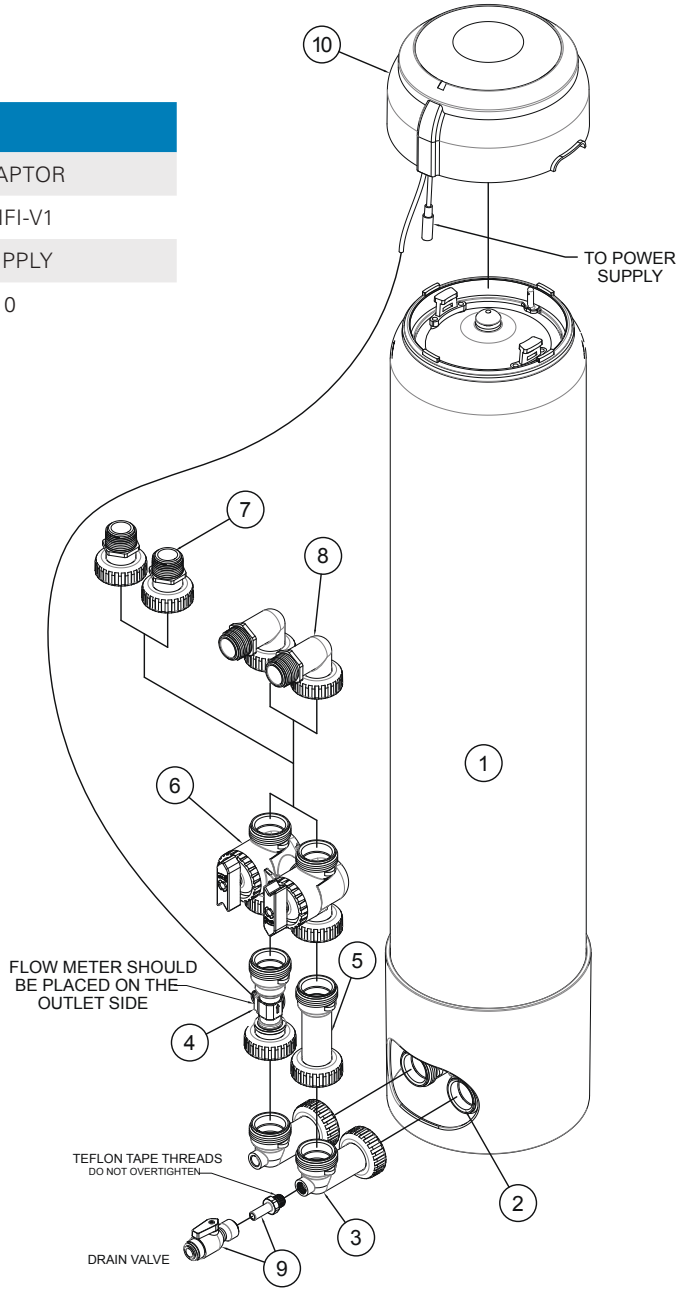
PARTS DIAGRAM

SHOWN IN DIAGRAM

PART IDENTIFICATION	PART NUMBER
1. ONE-E3-M Filtration System / Housing	CTA0840BBBKP5-06L00
2. In/Out Head for 1.050" Riser Pipe	CT-IOHMBK-INOUT1050
3. 90 Degree Vertical Elbow With/without Machined Drain Port	CT-ELBOW-90DRAIN
4. Flow Meter Assembly With Cord	CT-METERASSY
5. Meter Spacer Assembly	CT-METERSPACER
6. Bypass Manifold	CT-IOHMBK-BYPASSMANIFOLD-GR
7. 1" MNPT Straight Connector	CT-1MNPTSTRAIGHT
8. 1" MNPT 90 Degree Elbow Connector	CT-1MNPTELBOW
9. 3/8" PEX Drain Valve Kit Assembly With Shut-off	CT-38DRAINVALVEKIT-P
10. PCB Umbrella With Electronics Non-WIFI, Version 1	CT-PCBUMBRELLA-NONWIFI-V1

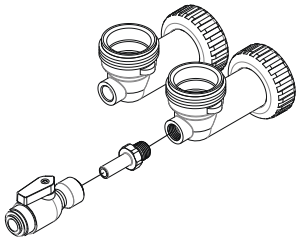
NOT SHOWN IN DIAGRAM

PART IDENTIFICATION	PART NUMBER
Head and Filter Adapter	CT-IOHMBK-FILTERADAPTOR
PCB Electronics Board Only Non-WIFI, Version 1	CT-PCBBOARD-NONWIFI-V1
ONE-E3-M Power Supply	CT-PIONEERPOWERSUPPLY
ONE-E3-M 10' Power Extender	CT-POWEREXTENDER10



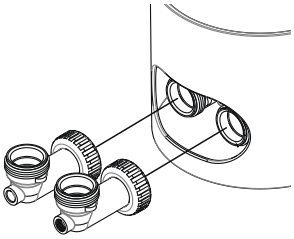
ASSEMBLY INSTRUCTIONS

STEP 1: TANK ASSEMBLY (SEE DIAGRAM ON PREVIOUS PAGE)



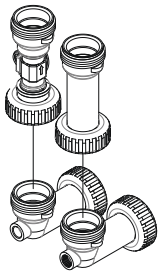
STEP 1A

Wrap #9 (Drain Valve Assembly) with three clockwise wraps of Teflon® tape. Install/thread #9 (Drain Valve Assembly) into #3. **HAND TIGHTEN ONLY.**



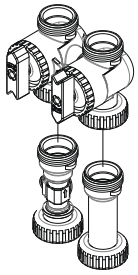
STEP 1B

Connect #3 to #2 on the bottom of Filter Housing #1. The threaded Drain Valve Assembly should be on the inlet side (right side) at the bottom of the tank. **HAND TIGHTEN ONLY.**



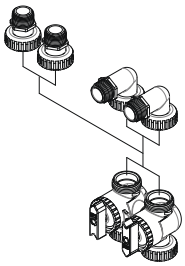
STEP 1C

Connect #4 to #3; Flow Meter Assembly should be placed on the Outlet Side (left side) at the bottom of the tank. Connect #5 Bypass to #3. **HAND TIGHTEN ONLY.**



STEP 1D

Connect #6 to #4 and #5. **HAND TIGHTEN ONLY.**



STEP 1E

Use either part #7 or #8 for connecting your plumbing to the system. **HAND TIGHTEN ONLY.**

STEP 1F

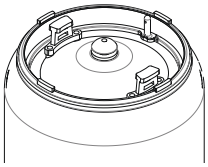
Connect 3/8" PEX plumbing to Drain Valve Assembly #9 **(NOT PROVIDED).**

STEP 1G

Install 3-AAA batteries in umbrella cap; connect to power supply.

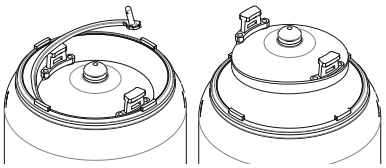
INSTALLING THE CARTRIDGE

STEP 2: REMOVING THE TOP CAP



STEP 2A

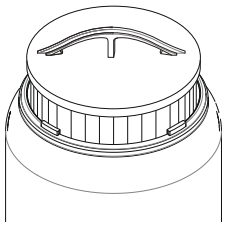
Unseat the snap ring by pushing down on the top cap with both hands. Remove the ring by taking the handle and pulling inward, then upward; the ring should slide completely out.



STEP 2B

Remove the snap ring on the top of the tank, then remove the top cap from the housing assembly. Lift up on the handles to pull the cap out of the top of the tank.

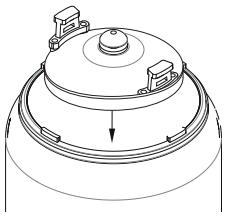
STEP 3: FILTER PREPARATION



STEP 3A

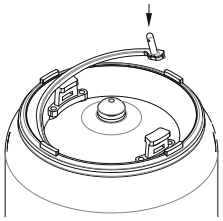
Remove the filter cartridge from the packaging, then place it into the tank with the O-ring down. Align the cartridge to the bottom center opening. *(Note: There's a small opening in the bottom center of the tank to help you align the cartridge.)* Press down on the filter cartridge so the O-ring moves down into place.

STEP 4: REATTACH THE TOP CAP



STEP 4A

Place the top cap back into its original location.



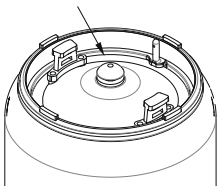
STEP 4B

Reattach the snap ring, then pull up on the cap to lock in the O-rings.

STEP 5: FINAL CHECK

STEP 5A

Allow enough time for glue to dry, if PVC glue fittings are used on initial system install, according to instructions provided by the manufacturer.



STEP 5B

Slowly turn the water back on. Press down on the red button located in the middle of the cap. This depressurizes the system and relieves it of air. Keep the button pressed down as the water comes back on. DO NOT stop pushing the button until all air pressure is released and water comes out of the depressurization button.

STEP 5C

Release the button, then check the system for leaks. Run water for 10 minutes through the system to make sure it's fully flushed out.

REPLACING THE CARTRIDGE

1. Turn off the water supply to the system by shutting off the inlet and outlet valves on the bypass.
2. *(Optional)* Install a 3/8" PEX tubing hose to the provided fitting and shut-off that connects to the inlet side of the filtration system. Run the hose to a floor drain or bucket, and use to drain sediment or to aid in filter removal during change-out.
3. Remove umbrella cap on the top of the vessel. Replace the 3-AAA batteries with new batteries. Push and hold the reset button on the metered board for 3 seconds to reset the totalizer. When the totalizer is reset, the LED lights will flash green 3 times to confirm that it is reset.
4. Depressurize the system by pushing down on the red depressurization button on the top cap of the system. Keep the button pushed down until all the air or water pressure is completely released.
5. Push down the top cap with both hands to unseat the retaining ring.
6. Remove the retaining ring by carefully grasping the handle and pulling inward, then upward. The retaining ring should slide completely out of the groove.
7. Remove the top cap of the system by lifting up on the top handles and remove the old filter. *(NOTE that filter adapter (yellow/white in color) may come loose from bottom connection when removing filter, and should be reinstalled into the bottom connection for proper installation of filter.)*
8. Open the fitting and shut-off, and then flush out the bottom of the system.
9. Look down into the tank assembly and locate the small opening centered in the bottom of the tank.
10. Remove packaging from the new filter and place the new cartridge into the tank with the double O-ring facing down.
11. Position the cartridge so that it is aligned with the bottom center opening.
12. Press down on the cartridge so that the double O-ring seal moves into place within the bottom center opening.
13. Reposition the top cap into its original location.
14. Reattach the top tank snap ring, then pull up on the top cap to seat O-rings.
15. *(If Step 2 was completed, do this step; if not, skip to 16.)* Close the fitting and shut-off.
16. Turn the water supply on and open the inlet and outlet valves on the bypass.
17. Relieve the system of air in the tank as the system fills with water by pushing down on the red depressurization button on the top cap of the system. Keep the button pushed down until all the air pressure is completely released, and water comes out of the red depressurization button.
18. Release the red depressurization button.
19. Return the umbrella cap to the top of the system.
20. Check for leaks.
21. Flush the new cartridge per its installation instructions.
22. During flush, confirm green LED lights are flashing with flowing water. If lights are not flashing green, go back to step 3.

UMBRELLA CAP AND LED LIGHTS

LED REPLACEMENT NOTIFICATIONS

EASY TO UNDERSTAND LED REPLACEMENT NOTIFICATIONS

The Real-time Dynamic LED System monitors water and flow rate and provides a visual color-coded notification to the homeowner, letting them know when to replace their filter.

GREEN: FILTER GOOD

YELLOW: CHANGE SOON

(10% OF FILTER LIFE REMAINING)

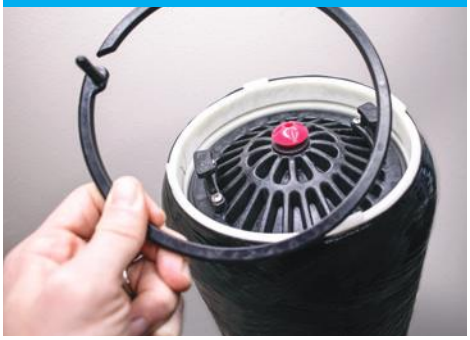
RED: CHANGE NOW

EASY FILTER REPLACEMENTS WITH NO TOOLS REQUIRED

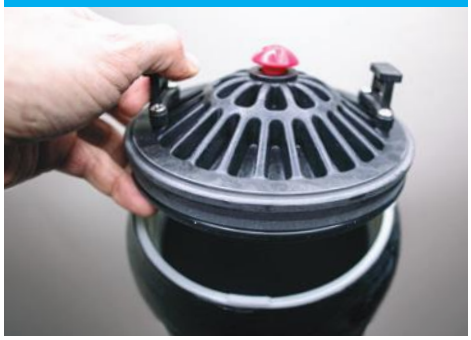
E3-M uses state-of-the-art snap-ring technology to eliminate the need for cumbersome tools. Homeowners can easily replace the filter in their E3-M system by following a few simple steps.

1. PRESS THE RED PRESSURE RELIEF VALVE TO UNSEAT THE RING

2. REMOVE SNAP RING



3. LIFT TOP CAP



NOTES

- Meter preset at 100,000 gallons; see page 6 for adjusting presets.
- Three AAA batteries not included for battery back-up. Change annually with filter change-out.

To see a video demonstration, scan the QR code above or visit ***enpress.com/replacements.***

CONTENTS OF BOX

Straight Connector

90 Degree Elbow Connectors (2)

Umbrella Cap

Filter Cap

Bypass Manifold

Flow Meter Assembly

Filter Housing

Vertical Elbows (2)

In/Out Head w/ Filter Adapter

Drain Valve Assembly

2.5" Inlet Cap

Contents of the box you receive will vary depending on your order. If you have questions or concerns, please contact Enpress, LLC at ***866.859.9274.***

SPECIFICATIONS

ONE E3-M Name and Part Number	Size and Micron Rating	Rated Capacity and Flow Rate	Peak Flow and % Reduction of Lead and PFOA/PFOS	Chlorine/chloramine Taste and Odor Reduction Capacity*	Pressure Drop Spec
ONE E3-M System and PIONEER Pb Filter					
ONE E3-M System *CTA0840BBBKP5-06L00*	8" x 40" / 0.5 Microns	Lead Reduction and PFOA/PFOS 100,000 gallons @ 4.51 GPM (378,541 Liters @ 17.1 lpm) @ 99.62% lead reduction @ 97.9% PFOA/PFOS reduction	8 GPM *(30.2 lpm)* @ 99.62% lead reduction @ 97.9% PFOA/PFOS reduction >88,000 gallons at 8 GPM* *(333,116 Liters @ 30.2 lpm)*	>300,000 gallons @ 15 GPM *(1,135,533 Liters @ 56.8 lpm)* with greater than 90% reduction, estimated capacity using 2 ppm of free chlorine >150,000 gallons @ 8 GPM (567,812 Liters @ 30.3 lpm) with greater than 85% reduction, estimated using 3 ppm of chloramine	9 psid @ 4.51 GPM

Replacement Cartridge Filters Are Listed as PIONEER Pb—0.5 Micron High Capacity Carbon Block // PART NUMBER: CT-05-CB-AMYCL

OTHER SPECIFICATIONS

Minimum Operating Temperature: 34 °F / 1 °C
Maximum Operating Temperature: 120 °F / 50 °C
Minimum Operating Pressure: 20 psig / 1.38 bar
Maximum Operating Pressure: 125 psig / 8.6 bar
Electrical Requirements: Grounded and unswitched 115 V outlet and 3-AAA Batteries

Filter Replacement Operating Instructions: New cartridges must be flushed for a minimum of 10 minutes prior to use. System and installation to comply with state and local laws and regulations. **Do not** use with water that is microbiologically unsafe or unknown quality without adequate disinfection before or after the system. Systems certified for cyst reduction may be used on disinfected waters that may contain filterable cysts. Manufactured from NSF/ANSI standard 61 and California Prop 65 Compliant certified coconut shell carbon and raw materials.

Substance	Influent Challenge Concentration (MG/L)	Maximum Permissible Product Water Concentration (MG/L)	NSF/ANSI Standard
Lead	0.15 +/- 10%	0.005	53
Cyst	Minimum 50,000/L	99.95%	53
PFOA/PFOS	1.5 +/- 10%	0.07	53

WARNINGS

If this or any other system is installed in a metal (conductive) plumbing system, i.e. copper or galvanized metal, the plastic components of the system will interrupt the continuity of the plumbing system. As a result any errant electricity from improperly grounded appliances downstream or potential galvanic activity in the plumbing system can no longer ground through contiguous metal plumbing. Some homes may have been built in accordance with building codes, which actually encouraged the grounding of electrical appliances through the plumbing system. Consequently, the installation of a bypass consisting of the same material as the existing plumbing, or a grounded "jumper wire" bridging the equipment and reestablishing the contiguous conductive nature of the plumbing system must be installed prior to your systems use.

DO NOT USE extra lubricants, unapproved sealants and tools to tighten hand tightened only parts. Use of tools other than hand tighten only parts voids warranty. Testing was performed under standard laboratory conditions; actual performance may vary. Flush the system and change the filter as suggested. The contaminants or other substances removed or reduced by this water filter are not necessarily in all users' water.

PERFORMANCE

This system conforms to NSF/ANSI 53 for the specific performance claims verified and substantiated by test data. Performance claims are based on independent lab results and manufacturer's internal test data*. Actual performance is dependent on influent water quality, flow rates, system design and applications. Your results may vary. Performance claims are based on a complete system, including a filter, housing, and connection to a pressurized water source. This filter must be operated according to the system's specifications in order to deliver the claimed performance. It is essential to follow operational, maintenance, and filter replacement requirements, as directed for each application, for this filter and system to perform correctly. Read the Manufacturer's Performance Data Sheet accompanying the system and change the filter as suggested. The contaminants or other substances removed or reduced by this water filter are not necessarily in all users' water.

**Claims are not performance tested by IAPMO or NSF. Performance claims are based on independent laboratory and manufacturer's internal test data. Actual performance is dependent on influent water quality, flow rates, system design and application. Results may vary.*

WATER TOTALIZER NOTIFIER

The overall purpose of this device is to receive a water meter input and totalize the amount of water that passes through the meter. When there is flow through the water meter, the lights flash at a rate that increases with the water flow rate. When the total amount of water flowed reaches within 10% of a pre-selected amount the totalizer turns yellow. When the total amount reaches the pre-selected amount the totalizer turns red.

POWER

This unit is to be powered using +12VDC. The power input is a wire tail with a 2.5 mm center positive barrel jack.

The totalizer has a battery backup. The battery backup uses 3 AAA size batteries. The battery holder is a part of the PCB assembly and can be accessed by removing the lid to the cartridge filter. Battery life will vary based on water flow when running on battery mode and type of batteries used. With high continuous flow, the batteries are expected to last approximately less than 7 days. With no flow the batteries are expected to last approximately 6 months.

OPERATION

Water Meter

The totalizer keeps track of the gallons using a water meter. The water meter is a turbine style meter with a magnetic pickup that sends a pulse to the electronics for every revolution of the meter turbine. The meter turbine is removable for inspection and cleaning. Make sure water is bypassed or turned off when removing the meter for maintenance. The meter has a three pin plug that connects to the electronic board.

LEDs

Normal colors for the LEDs are green, yellow and red, which are dependent on the totalizer value.

- **Green:** 0–90% of the programmed totalizer maximum
- **Yellow:** 90–100% of the programmed totalizer maximum
- **Red:** Greater than 100% of the programmed totalizer maximum

If there is flow the LEDs should alternately turn off in the following pattern: 1-2-3-2 (repeat). The frequency that they turn off is linearly correspondent to the flow rate being received from the water meter. For every 1 revolution from the meter, the LED pattern should be incremented to turn off the next LED. If there are no pulse edges for 2 seconds, all the LEDs will turn on solid.

If the battery is determined to be low, the middle LED (#2) will turn blue. The battery is checked only once an hour to minimize the battery drain from checking the voltage.

Pushbutton

The pushbutton allows for the totalizator to be reset as well as the maximum value to be programmed.

To reset the totalizator, the user should flip the umbrella cover over to see the logo/sticker. While looking at the top, the user should press and hold the button on the electronics board for three seconds. When the totalizator is reset, the LEDs should flash green three times to confirm that it is reset. “GREEN” colored LEDs (LED1) represent 100,000s and “BLUE” colored LEDs (LED2) represent 10,000s.

The push button allows the unit to be programmed for the total gallons limit. It can be programmed between the range of 10,000 gals.–990,000 gals.

To program the maximum value using the push button: press and hold the button while powering up the board (either battery power or 12VDC power). Once the board is powered LED 1 (right LED) will represent 100,000’s place and should be green. LED 2 (middle LED) will represent 10,000’s place and should be blue. Both LEDs will be flashing at 1 Hz, the number of flashes that corresponds to the current setting for that digit placeholder. To indicate the start of the flash sequence both LEDs should flash white for 1 second, then flash the appropriate number of times. Once both are done wait 2 seconds and repeat. Refer to the figures below for an example.

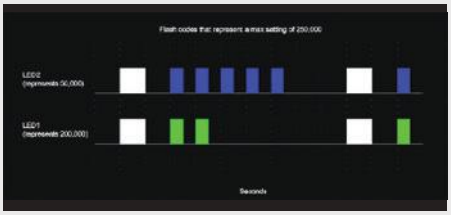


FIGURE 1
To change the maximum gallons setting, press and hold the button for 1 second. LED 1 should turn solid green, LED 2 should turn off and LED 3 should flash green the number of times that corresponds to the current setting. Pressing the button for less than 1 second would increment the value, rolling over from 9 to 0. Figure 2 is an example of the LEDs in this mode.

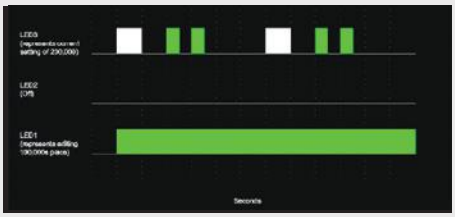


FIGURE 2
To save the setting for the 100,000s place and begin editing the 10,000s place press and hold the button for greater than 1 second. LED 1 should turn off, LED 2 should turn solid blue, and LED 3 should flash blue the number of times that corresponds to the current setting. Again, pressing the button for less than 1 second would increment the value, rolling over from 9 to 0. Figure 3 is an example of the LEDs in this mode.

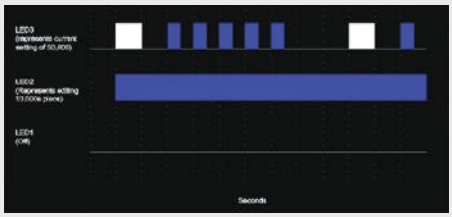


FIGURE 3
To save the setting for the 10,000s place, exit editing mode and return to the mode in Figure 1 press and hold the button for greater than 1 second. This will also save the current setting into internal EEPROM memory.

Power Monitoring and Battery Mode

The board monitors the 12Vdc power and the battery power. If there is a power failure and no batteries are installed, the current totalizer value will be saved to non-volatile memory. When power is resumed, the totalizer count will resume from when it had previously lost power.

The LEDs should shut off during battery mode. If the totalizer is to the yellow or red state or if the battery voltage gets low, the right LED will flash on in the appropriate colors for 0.125 seconds every 30 seconds.

WARRANTY

ENPRESS LLC E3-M System and PIONEER™ Pb Filter—Limited Warranty

- ENPRESS LLC warrants its line of ENPRESS E3-M filtration systems to be free of defects in material and workmanship for a period of one year, and replacement PIONEER™ filters for a limited thirty-day warranty, from the date of purchase. This warranty is extended to original purchaser by authorized OEM customers. Use of this product constitutes buyer's acceptance of this Limited Liability.
- 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.
- 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.
- 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.
- 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.
- 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. Some states do not allow exclusion or limitation of incidental or consequential damages. This warranty gives you specific legal rights, and you may also have other rights which vary from state to state, or country to country. To know what your legal rights are, consult your local or state consumer affairs office, your state's Attorney General, or your national equivalent for international users.

THIS WARRANTY EXCLUDES THE FOLLOWING:

- Damage caused by improper installation, operation or care.
- 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 Operation manual for approved application parameters.
- Modification or alteration by other than ENPRESS LLC employees.
- Rubber type parts and normal wear items, e.g. O-rings, etc.
- Any costs of labor or expenses expended in the removal and/or installation of unit, or any surrounding device.
- Altering or removing the ENPRESS LLC information label.
- Use of non-ENPRESS LLC approved cartridges, filters, or replacement parts with the appropriate systems or vessels.
- Non-use of supported piping for plumbing connections to in/out connections.
- Service trips to installation site to train user on how to use product.
- Improper installation.
- Failure of product if it is abused, misused, or used for other than the intended purpose.
- Replacement of water filter cartridge due to water pressure that is outside the specified operating range or due to excessive sediment in water supply; or replacement with non-authorized replacement cartridge.
- Damage to product cause by accident, fire, floods or act of God.
- Incidental or consequential damage caused by possible defects with any other equipment not covered by this warranty.

SPECIAL NOTICES:

- Do not use water that is microbiologically unsafe or of unknown quality without adequate disinfection before or after installing filter or system.
- Systems certified for cyst reduction may be used on disinfected water that may contain filterable cysts.
- Any system this filter is installed in must be maintained according to manufacturer's instructions, including replacement of filter cartridges.
- Contaminants or other substances removed or reduced by this water filter cartridge are not necessarily in your water.
- Note that while testing was performed under standard laboratory conditions, actual performance may vary. Systems using these filters must be installed and operated in accordance with manufacturer's recommended procedures and guidelines.

LIMITED LIABILITY: ENPRESS LLC makes no warranties of any kind, expressed or implied, statutory or otherwise, and expressly disclaims all warranties of every kind, concerning the product, including, without limitation, warranties of merchantability and fitness for a particular purpose, except that this product should be capable of performing as described in this product's data sheet. ENPRESS LLC's obligation shall be limited solely to the refund of the purchase price or replacement of the product proven defective, in ENPRESS LLC's sole discretion. Determination of suitability of this product for uses and applications contemplated by Buyer shall be the sole responsibility of Buyer. Use of this product constitutes Buyer's acceptance of this Limited Liability.

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:

ENPRESS, LLC. *// 34899 Curtis Blvd., Eastlake Ohio 44095 // Phone: 866.859.9274 // Fax: 440.510.0202 // info@enpress.com*

A Returned Goods Authorization (RGA) number must be received from the above office and placed on all shipments to and in correspondence with ENPRESS LLC.

Please be prepared with the following information:

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

NOTES

FOR PURCHASES MADE IN IOWA

This form must be signed and dated by the buyer and seller prior to the consummation of this sale. This form should be retained on file by the seller for a minimum of two years.

Buyer's Name (printed)	Buyer's Signature	Date
Seller's Name (printed)	Seller's Signature	Date

MANUFACTURED BY

POWERED BY ENPRESS LLC
Where Innovation Flows™

ONE™
Water Filtration Simplified™

For more information, visit enpress.com or onefiltration.com

CERTIFICATIONS

UPC

IAPMO R&T WATER QUALITY PLATINUM SEAL
IAPMO RESEARCH AND TESTING

The ENPRESS CTA0838BBxxP5-06Lyyy, CTA0840BBxxP5-06Lyyy and CTA0842BBxxP5-06Lyyy are certified by IAPMO R&T to NSF/ANSI 53 for Material Safety, Structural Integrity, and for the reduction of claims specified on the Performance Data Sheet.