

PRODUCT AND INSTALLATION MANUAL

Heater Guard

MODEL NUMBERS:

5 micron pre-sediment filtration and poly-phosphate protection for all water heaters

EWS-HEATER-GUARD-3/4, EWS-HEATER-GUARD-1.5



ENVIRONMENTAL WATER SYSTEMS®
Quality Water Filtration Crafted in the USA Since 1987.

WWW.EWSWATER.COM

Retain this Product & Installation Manual
for Helpful Information

Please Register Your System

Revised 10/1/2025



EWS-HEATER-GUARD-3/4 - Exploded View and Parts

EWS-HEATER-GUARD-3/4



Exploded View of 3/4" filter with Poly-Phosphate Spheres

INSTALLATION BOTH SYSTEMS - 7 SIMPLE STEPS

1. Unpack and check the HEATER GUARD. Unit comes completely assembled with the following:
5 micron pre-sediment filter with poly-phosphate spheres, housing with cap and mounting bracket, pressure differential gauge, spanner wrench (other mounting bracket included with all HEATER GUARD-3/4)

NOTE: Filters contain Poly-Phosphate Spheres which will roll and rattle within the filter.
The sound is normal and nothing is broken.

HEATER GUARD CAN BE REVERSED FOR FLOW DIRECTION FOR ANY INSTALLATION.

HEATER GUARD-3/4:

Flow direction is from left to right. If installation calls for the reverse direction use the other mounting bracket provided, turn Heater Guard-3/4 around and install using the other mounting bracket so flow direction can be from right to left.

HEATER GUARD-1.5:

Flow direction is from left to right. If installation calls for the reverse direction remove the 4 screws from bracket and turn bracket around and reconnect so flow direction will be from right to left.

IF APPLICABLE: Turn gauge 1/2 turn clockwise only in order to read.

WARNING: Do not loosen the gauge during this procedure.

NOTE:

Whether you use the standard flow direction from left to right or you reverse the installation for the flow direction from right to left - the inlet side is always designated by a flow direction arrow on the filter cap.

2. Location: Identify an appropriate mounting location adjacent to the water heater. The HEATER GUARD can be mounted in both indoor and outdoor locations.

WARNING: Never allow unit to freeze. Avoid temperatures above 120°F or attic locations
If outdoors, unit must be protected from direct sun and heat.

EWS-HEATER-GUARD-1.5 - Exploded View and Parts

EWS-HEATER-GUARD-1.5



INSTALLATION BOTH SYSTEMS - continued

3. Turn off the water supply. Route the cold water supply into the inlet side of the HEATER GUARD.

HIGHLY RECOMMENDED:

Install a bypass with shut-off valves for maintenance convenience (see pictures on next page).

NOTE ABOUT GROUND CONTINUITY:

Installed bypass with copper piping maintains electric continuity for the proper ground of plumbing system. If bypass is not installed, a jumper is needed (copper wire clamped) between any metal piping before and after the unit to maintain the proper ground.

4. Connect the outlet side of the HEATER GUARD into the cold inlet of the water heater.
Refer to water heater instructions for more information on specific water heater connections and water heater start-up procedures.

WARNING: Use of teflon tape is the only sealant to be used on threaded connections.
NO pipe dope.
Do not cross-thread, strip threads or over-tighten

5. Turn on the water supply slowly to allow housing to fill with water.
6. Depress the RED pressure release button on top of filter cap to release trapped air from the filter.
7. Check for leaks before leaving installation.

**SEE FOLLOWING PAGES FOR INSTALLATION PICTURES
AND IMPORTANT WARNINGS AND NOTES**

EXAMPLE OF PROPER INSTALLATION

EWS-HEATER-GUARD-3/4 IS PICTURED FOR ILLUSTRATION PURPOSES

STANDARD INSTALLATION

Flow direction from
left to right.

direction of flow →



REVERSE INSTALLATION

Flow direction from
right to left.

← direction of flow

Use other
mounting
bracket

NOTE:
meter on 3/4" unit
can be viewed
from either side

For 1 1/2" unit
reverse bracket
and turn gauge 1/2
turn clockwise to
view



Tankless

Pictured:
HEATER-GUARD-3/4

installed with bypass
at the inlet to a typical
tankless water heater



Tank Type Heater

Pictured:
HEATER-GUARD-3/4

installed with bypass
at the inlet to a typical
water heater

* Pictures represent proper installations. Gauge was discontinued as of 10/1/2025.

HEATER GUARD INSTALL WARNINGS & NOTES

WARNING:

- Maximum water pressure - 75psi. Control pressure and do not allow to spike or surge above 75psi
- Cold water inlet, supply or usage only

WARNING:

- Use of teflon tape is the only sealant to be used on threaded connections.
- Use of pipe dope, any grease, or solvents on the threads will void warranty
- Do not overtighten, cross-thread or strip any connections into the inlet or outlet of the cap assembly.
- Do not overtighten the housing into the cap assembly and make sure the housing O-Ring is clean and in the proper position
- Do not remove the meter or gauge.

WARNING:

- Do not allow to freeze.
- Avoid temperatures above 120°F or attic locations
- Avoid or protect from direct sunlight or heat.
- Prevent any thermal expansion or hot water flow into HEATER GUARD from water heater.

**FILTER SERVICE LIFE IS BASED ON LOCAL WATER CONDITIONS
AND USAGE AND SHOULD BE REPLACED AS NEEDED,
NOT TO EXCEED ONE YEAR.**

*A NOTE REGARDING THE GAUGE WHICH WAS DISCONTINUED AS OF 10/1/2025:

The gauge was based on pressure differential. It could only be observed while water is flowing through the system and therefore was useless for most applications and was subject to being clogged or restricted.
Simply replace the filter up to once a year or as needed but not to exceed one year.

REPLACING THE FILTER

1. Turn off water supply to filter.
2. Depress the RED pressure release button to relieve pressure in filter housing.
3. Unscrew blue housing using spanner wrench.

CAUTION:

Do not lose O-Ring that is in blue housing. When opening housing to change cartridge, it is common for the O-Ring to lift out of blue housing or stick to black cap.

4. Remove used cartridge and discard. Rinse out blue housing and fill about 1/3 full with water. Add about 2 to 3 tablespoons of bleach and scrub thoroughly with a brush or sponge. Rinse thoroughly.
5. Remove O-Ring from blue housing and wipe groove and O-Ring clean. Lubricate O-Ring with a coating of clean silicone grease. (Do not use Vaseline or other petroleum-based lubricants.) Place O-Ring back in place and press O-Ring down into the groove with two fingers. Make sure the O-Ring is seated level in the groove.

CAUTION:

If O-Ring appears damaged or crimped it should be replaced at this time. See your local dealer for replacement parts.

6. Insert the new HEATER GUARD replacement filter cartridge into the blue housing making sure that it slides down over the stem found at the bottom of the housing.

CAUTION: The filter must be properly inserted over the stem located at the bottom of the housing before you go to Step # 7.

WARNING: Misplacement of the filter can cause damage to the housing.

7. Place the top of the filter under the stem found in the base of the black cap, make sure the O-Ring is in the correct position and twist the blue housing onto the black cap and hand tighten. DO NOT OVER-TIGHTEN.

CAUTION: Make sure the top of the filter is properly inserted over the stem found at the base of the black cap before completely hand tightening.

WARNING: Misplacement of the filter can cause damage to the housing.

8. Turn on the water supply slowly to allow housing to fill with water.
9. Depress the RED pressure release button to release trapped air from the unit
10. Check the installation for any leaks.

ORDERING FILTER REPLACEMENTS AND PARTS



Item #: BB-Guard-Filter-3/4

Replacement filter for
EWS-HEATER-GUARD-3/4

NOTE:

Filters contain Poly-Phosphate Spheres which will roll and rattle within the filter. The sound is normal and nothing is broken.

Item #: BB-Guard-Filter-1.5

Replacement filter for
EWS-HEATER-GUARD-1.5



There are a few ways to order filter replacements for your unit.

1. Contact your builder, plumbing contractor and/or your installer that provided the product.
2. Contact the showroom or retailer where you purchased the product.
3. Contact an EWS authorized online distributor - Do not accept non-EWS replacements.

If you need assistance, visit our Corporate Site @ www.ewswater.com
or contact EWS Customer Service and we can direct you to someone who may assist you.

www.ewswater.com **O:** 702.256.8182; M-F 8:00am-4:30pm PST **E:** customerservice@ewswater.com

FIND THE RIGHT PRODUCT FOR YOU

Whether your water is hard or soft, treated with chlorine or chloramine*, Environmental Water Systems has the right appliance to protect you, your family, and your home. Just a few simple questions will help you determine which appliance is best for you.

DO YOU HAVE HARD WATER?

YES

Some of us have harder water than others, and EWS generally considers 6 grains (102 ppm or mg/l) of hardness to be on the lower end of hard water. Select **YES** if you have hard water issues such as excessive spotting or mineral build-up in pipes, faucets and water heaters.

NO

EWS SERIES
Whole Home Filtration
with Hard Water Conditioning
(no-salt alternative to softening)



MADE IN USA

CWL SERIES
Whole Home Water
Filtration Only
(for those without hard water)

POTENTIAL WATER USAGE DETERMINES WHAT SYSTEM SIZE IS RIGHT FOR YOU.

EWS SPECTRUM-V2 (Standard)

Our most popular EWS System and #1 seller since 1987.

13" x 54" tank with 2.5 cubic feet (87 lbs.) of filtration media for up to 2.5 million gallons of filtration or up to 10 years before media replacement. Also includes our adaptive digital valve that accommodates 3/4" - 1 1/2" water lines up to 37 gpm**.

Select this system if you have the following:

- up to 4 full bathrooms
- and up to 4 people

CWL SPECTRUM-V2 (Standard)

Our most popular CWL System.

EWS-1465-V2 (Larger)

Formerly Model #: EWS-CC-1465

14" x 65" tank with 3 cubic feet (105 lbs.) of filtration media for up to 3 million gallons of filtration or up to 10 years before media replacement for larger families and greater water usage. Also includes our adaptive digital valve that accommodates 3/4" - 1 1/2" water lines up to 37 gpm**.

Select this system if you have the following:

- 4 or more full bathrooms
- and 4 or more people

CWL-1465-V2 (Larger)

Formerly Model #: CWL-CC-1465

EWS-1665-V2-1.5 (Estate)

Replaces Model #: EWS-CC-1865

16" x 65" tank with 4 cubic feet (140 lbs.) of filtration media for up to 4 million gallons of filtration or up to 10 years before media replacement and includes an upgraded 60 gpm 1-1/2" valve standard*** for much larger families and/or estate sized residences based on potential water usage.

Select this system if you have one or more of the following:

- 6 or more full bathrooms
- and 6 or more people

CWL-1665-V2-1.5 (Estate)

Replaces Model #: CWL-CC-1865

All whole home systems automatically self-clean to provide consistent and high quality filtration and filter longevity up to 10 years.

**LARGER VALVE OPTIONS ARE AVAILABLE FOR LARGER MAIN LINE SIZES AND/OR A NEED FOR GREATER FLOW RATES:

Spectrum & 1465 Systems: 1-1/2" valves up to 60 gpm for 1-1/2" main water lines.
1665 Estate Systems: 2" valve up to 100 gpm for 2" main water lines.

Model #'s EWS/CWL-SpectrumV2-1.5 or EWS/CWL-1465-V2-1.5
Model #'s EWS/CWL-1665-V2-2.0

Smaller condo sized systems (EWS-1035-V2 & CWL-1035-V2) and larger valves and ginormous commercial or multi-tank systems are also available.

Need Help? Call Us for Friendly & Helpful Assistance.

Please call 702-256-8182 (Monday-Friday, 8:00am - 4:30pm, Pacific Time) or email us at customerservice@ewswater.com

* Chloramine is a corrosive combination of chlorine and ammonia and requires a specialized filtration media for effective removal. EWS has designed and engineered all our systems to filter for both chlorine and chloramine (and all their associated by-products and chemical pollutants) so you no longer need to worry about which chemicals your municipal water district uses to disinfect your water.

STOP

ARE YOU ON WELL WATER?

If you are on private or community well water, you need information to determine any water issues and their solutions. Well water requires complete and independent testing. Call EWS Customer Service at 702.256.8182 or visit EWSWATER.COM (Well Water tab) for more information.

Warranty Notification - As Published and Available Online

Notification:

This warranty is referenced by EWS, Inc. in all literature, addressed in General Terms and Standard Conditions of Sale, and is published in its entirety in all EWS, Inc. product manuals, websites, and in all service guides supplied with all product.

Limited Warranty:

EWS, Inc., a Nevada corporation, hereby warrants all products to the original consumer purchaser to be free from defects in material and workmanship as stated in the following paragraphs:

- All residential point of use: countertop filtration, in-line filtration, undercounter drinking water filtration, shower filtration, residential reverse osmosis, and canister and filter cartridge point of entry pre-sediment and/or filtration units or systems for one year from date of purchase.
- All residential point of entry: pH decreasing and softener (resin and ion-exchange) systems, Environmental (EWS) Water Systems, Iron Removal units, CWL whole-home (filtration media) systems, pH increasing reagent (sacrificial media) units for 10 years on the tank and riser, 10 years on the ICN conditioner(s) (if applicable) and 5 years on the valve body and electronics from date of purchase.
- All commercial systems: Dependent on specification and application, please consult with EWS, Inc. upon specification.
- All filtration medias, resins, cartridges, uv lamps, and/or membranes are not covered by any warranty. Filter media, resin, cartridge, uv lamp, and/or membrane replacement or maintenance schedule will vary and must be replaced, as necessary, as determined by usage and local water conditions.
- Any wear and tear parts or any parts damaged in shipping, installation or application are not covered under warranty.

Product performance may vary based on local water conditions, proper product specification and application, proper plumbing application, setup, installation, startup, maintenance and/or usage. To ensure proper operation, follow all setup, installation, start-up and maintenance procedures as detailed in all service guides.

Not intended for use where water is microbiologically unsafe or with water of unknown quality without adequate disinfection before or after unit(s). The contaminants or other substances removed or reduced by these and any other water filtration or treatment devices are not necessarily in your water. To confirm the presence of any primary and secondary contaminants, have your water supply completely analyzed by an independent and approved facility or if applicable, contact your local water utility for information.

Aesthetic, non-health related, or constituents without set federal standards may be part of water testing but are insufficient to determine proper application of any water filtration or treatment device.

EWS, Inc. will replace, free of charge, during the warranty period, any part which proves defective in material and/or workmanship under proper product and plumbing specification and application, normal and proper installation, use, service and proper care as published in detail in all service guides included with product. Wear and tear parts such as pistons, spacers & seals are not covered under warranty. Labor charges are excluded from any warranty service or repair and are not the responsibility of EWS, Inc. Shipping charges may apply to delivered replacement parts or materials. Charges may also apply for the cost of any replacement media, resin, cartridges, uv lamp and/or membrane from any warranty service or repair. Information can be obtained at any time through a local dealer, distributor, representative or direct from EWS, Inc. and/or on-line at: www.ewswater.com. Replacement parts can be obtained from your local dealer, distributor, online or contractor.

This warranty is the exclusive warranty granted by EWS, Inc. and is in lieu of all other warranties of merchantability and fitness for a particular purpose and is further limited to defective parts replacement only. Labor charges and/or damage incurred in setup, installation, and startup, or repair, or replacement, as well as, incidental and consequential damages connected therewith, are excluded, and are not the responsibility of, and will not be paid by EWS, Inc.

This warranty is void for any damages due to improper product and/or plumbing specification and/or application, misuse, abuse, neglect, accident, acts of nature, action of any military or civil authorities, improper handling and transportation, or improper setup, installation, and/or startup, or any violation of instructions furnished by EWS, Inc., or any replacement parts other than genuine parts or replacements supplied by EWS, Inc.

This warranty is not a warranty of merchantability, fitness, taste, aesthetics, and/or performance that may be subject to improper product and/or plumbing specification and/or application, misuse, abuse, neglect, accident, acts of nature, action of any military or civil authorities, improper handling and transportation, or improper setup, installation, and/or startup, or any violation of instructions furnished by EWS, Inc.

This warranty is not a warranty of merchantability, fitness, taste, aesthetics, and/or performance that may be personal and of subjective opinion and that does not relate to the performance of any system.

Warranty Information and the Purchaser's Responsibility

Keep a record of the purchase receipt and/or installation receipt. Purchaser is required fill out warranty registration form(s) on applicable product(s) and register all product by either online @ www.ewswater.com, telephone, postal delivery, fax, e-mail (either register@ewswater.com or information provided to customerservice@ewswater.com). **Failure to do so voids the warranty unless restricted by state regulations.**

Privacy: EWS, Inc. does not sell, show or make available any information on any consumer in our database. This database is to ensure, if needed, proper warranty service, and good customer service for years to come. Please see our privacy policy published in our website at www.ewswater.com.

Know Your Water:

- If on a municipal system, large or small, it is your right as a consumer to have access to the most recent test results and to expect adherence to federal guidelines, as well as any state or local requirements. Any problems should be reported to the appropriate agencies. Please acquire those municipal test results to become an informed consumer.

- If on an individual well, have your water completely and independently tested. Local code may require a simple test for coliform bacteria to approve a well, however you may be unaware of potential problems for you and/or your home. A local water salesman is looking to close a sale and is going to test for hardness minerals and a few simple and obvious issues, which may or may not be contamination problems. Their solution is almost always the same and yet may provide no resolution to any true problems. Obtain our "Guide for the Private Well Owner" on our website; www.ewswater.com. Review our section on well water testing and applications in our complete catalog with your local distributor, dealer, or our representative or visit our website.

• WARNING:

Some restrictions apply to the use of softeners. Contact your local municipal water district or Gov't Agency. Brine discharge is already restricted on, or may be a problem for, septic applications and waste water treatment facilities. Since some states have already restricted softeners to metered valves to prevent excessive brine discharge, EWS, Inc. only provides metered valving in its line of softeners.

Restrictions or an outright ban may also apply to hot-side only, salt-exchange tanks or services. Local water dealers and other organizations do not inform consumers of these issues and believe these rules are unenforceable. The consumer is ultimately responsible.

Softeners may also provide warranty issues with pools and spas, certain other products and finishes. Softened water should not be used for drinking, cooking, pets or plants and is usually bypassed or "looped away" from the cold side of the kitchen sink. Reverse osmosis, which also has its drawbacks and issues with other products and materials, may be used to remove the salt from the water that the softener put in at the kitchen sink, yet may be misapplied for the actual local water conditions.

Any problems of water quality, or the fitness of any EWS, Inc. product that is associated with any mechanical, construction, application, installation, and/or environmental issue(s) (ie: flow rates, line pressure, piping materials, broken supply lines, changing water conditions; well or municipal water quality, et. al.), known or unknown, of the home or facility will not be considered by EWS, Inc. until such issue(s) have been resolved.

Responsibility for the proper product and/or plumbing specification, application and/or installation of any device manufactured by EWS, Inc. lies with the consumer, their builder contractor, plumbing sub-contractor and any other installer of choice. Items do not specify and/or install themselves. EWS, Inc. has provided many sources to acquire information on the proper application of systems and their installation prior to any purchase. EWS, Inc. manufactures a complete product line of point of use water filtration systems and point of entry filtration, softening and/or conditioning systems and/or appliances.

EWS, Inc. and the distributors of EWS, Inc. will stand behind the warranties of materials and workmanship. However, EWS, Inc. and the distributors of EWS, Inc. and the Environmental Water Systems Product Line do not bear any responsibility for improper applications of product and/or improper installation. It is for this reason that EWS, Inc. provides complete information on all product for your understanding, specification, application and selection, and proper plumbing application and installation.

To obtain warranty service support, contact your local dealer or contractor from whom you obtained the product or contact EWS, Inc., Customer Service, via phone, fax, or email.

The EWS, Inc./Environmental Water System Product available through:

Authorized Kitchen & Bath Showrooms, Appliance Showrooms, Building & Plumbing Wholesale Supply Locations and their building, plumbing, HVAC and service contractors, and Authorized Online Distributors.

EWS is a Proud Contributor and Sponsor of Organizations Dedicated to Improving Health, Well-Being and the Environment

- Heart • Lung & Respiratory • Allergy & Asthma • Dermatology & Skin • Digestive: Crohn's & Colitis •
- Oceans • Inland Water Ways • Wetlands • Forestry • Soil • Air •



ALL FILTRATION PRODUCT PROUDLY MADE & ASSEMBLED IN THE USA



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WWW.EWSWATER.COM

Customer Service Monday–Friday 8:00am–4:30pm PST
Office: 702-256-8182 Fax: 702-256-3744
customerservice@ewswater.com

EWS, Inc. Corporate Offices
5542 S. Ft. Apache Rd, Suite 110
Las Vegas, NV 89148