

Since 1987

PRODUCT AND INSTALLATION MANUAL

Heater Guards

Reversible Flow for Any Installation

Model Numbers:



EWS-HEATER-GUARD-3/4

EWS-HEATER-GUARD-1.5

ALL FILTRATION PRODUCT PROUDLY MADE & ASSEMBLED IN THE USA

EWS, Inc./Environmental Water Systems office. 702.256.8182 Monday - Friday, 8:30 am - 4:30 pm Pacific Standard Time fax. 702.256.3744 www.ewswater.com e-mail. customerservice@ewswater.com

Retain this Product & Installation Manual for Maintenance and Information Please Register this Product - It is a Requirement for Warranty

Revised 12/13

ENVIRONMENTAL WATER SYSTEMS[®] *The Leader in Whole Home Water Filtration Since 1987.*

HEATER GUARD Inline Filter Prolong the life of your water heater and prevent expensive repairs.

Reversible flow for any installation.

- World-class EWS quality and performance.
- Keeps your water heater clean and easy to maintain.
- 5 micron polyphosphate filter is safe and effective: colorless, tasteless, odorless, and 100% FDA-approved food-grade materials.
- Reduces sediment and inhibits scale formation on heating element surfaces.
- Comes completely assembled for quick and easy installation.
- Made in the USA, meets or exceeds all compliances.

The EWS HEATER GUARD is the best economical and direct approach to preventing sediment and scale issues associated with certain water conditions and water heaters. Plus, it will NOT void or limit any warranty issued by any water heater manufacturer.¹



NO MORE CLOGGING OR SCALE BUILD-UP IN YOUR HEATER.

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The **HEATER GUARD** installs easily at the inlet or supply of any water heater and works to keep dirt, rust, silt, sediment out of your water heater.



PERFECT FOR ALL HEATERS.

Whether you have a tankless water heater, traditional water heater, or more than one heater, use the **HEATER GUARD** to protect them from costly repairs, unplanned maintenance, and replacement.



PROTECTION FOR YOUR HEATER AND YOUR WALLET.

The **HEATER GUARD** is designed to allow your water heater to function properly at its peak performance. This saves energy, prevents wear and tear, and prevents unplanned maintenance, which all equate to saving you money on utilities and repair bills.



SAY GOODBYE TO COSTLY REPAIRS AND REPLACEMENTS.

The **HEATER GUARD** was designed with one purpose in mind: to reduce or eliminate the frequency of heater repairs and replacements. Sediment, scale, and corrosion spell the end of a heater's life – prevent the problem, and you prevent having to pay hefty repair bills or paying for a new heater.



FILTER ALL THE WATER IN YOUR HOME WITH ONE SYSTEM. Every sink, shower, and bath in your home could provide you with chlorine-free & pollutant-free water. No hassle, no maintenance, no salts or chemicals, and trusted by hospitals, health care centers, military, and private homes worldwide. For more information on EWS Central Water Filtration, visit us online at www.ewswater.com or call EWS customer service at 702.256.8182 (Mon.-Fri. 8.30 am - 4.30 pm Pacific Time).

TECHNICAL INFORMATION HEATER GUARD PRE-SEDIMENT AND SCALE PROTECTION FOR WATER HEATERS MODEL #s: EWS-HEATER-GUARD-3/4 and EWS-HEATER-GUARD-1.5 EITHER MODEL CAPABLE OF REVERSIBLE INSTALLATION

SYSTEM SPECIFICATIONS

OPERATION TEMPERATURE: Maximum 100° F (38° C) / Minimum 40° F (4° C) OPERATION PRESSURE: Standard working pressure maximum 75 psi / minimum 30 psi INLET/OUTLET FOR HEATER GUARD 3/4: 3/4" INLET/OUTLET FOR HEATER GUARD 1.5: 1 1/2"

DIMENSIONS OF HEATER GUARD 3/4: 25 3/4"x 5 1/4" DIMENSIONS OF HEATER GUARD 1.5: 29"x 7 1/2" Do not use with water that is microbiologically unsafe or of unknown guality without adequate disinfection before or after the system.

Replace your filter annually or as needed (do not exceed 1 year). Install in cold water applications only [installs inline prior to the water heater(s)]. Install in compliance with local and state regulations.

All installation instructions, service manuals, technical and product information is available online at www.EWSWATER.com

MODEL #	REPLACEMENT FILTER ITEM #	
EWS-HEATER-GUARD-3/4	BB-GUARD-FILTER-3/4	UP
EWS-HEATER-GUARD-1.5	BB-GUARD-FILTER-1.5	FILTE

SERVICE LIFE ON FILTERS: P TO 1 YEAR.* REPLACE YOUR ERS ANNUALLY OR AS NEEDED. DO NOT EXCEED 1 YEAR.

FILTER SPECIFICATIONS

ITEM #: BB-GUARD-FILTER-3/4

No-Lead Standards DESCRIPTION: 20" Pre-Sediment (5 Micron) for the Heater Guard 3/4" PURPOSE: Filters out rust, silt, and sediment and inhibits scale formation in water heaters. This filter element tested nd certified under ANSI/ NSF Standard 42 for FEATURES & BENEFITS: Enhances performance of water heaters, prevents costly repairs. CONSTRUCTION: 100% FDA-approved food-grade polyphosphate. Filter service life is based on local water conditions and usage and should be replaced as needed, not to exceed one year. SERVICE LIFE: 1 vear MAX. FLOW: 9.5 GPM / 36 LPM MAX. PRESSURE: 75 PSIG / 5.17 Bar TEMPERATURE RANGE: 40-100° F / 4-38° C

ITEM #: BB-GUARD-FILTER-1.5

DESCRIPTION: 20" Pre-Sediment (5 Micron) for the Heater Guard 1.5" PURPOSE: Filters out rust, silt, and sediment and inhibits scale formation in water heaters. FEATURES & BENEFITS: Enhances performance of water heaters, prevents costly repairs. CONSTRUCTION: 100% FDA-approved food-grade polyphosphate. Filter service life is based on local water conditions and usage and should be replaced as needed, not to exceed one year. SERVICE LIFE: 1 vear MAX. FLOW: 20 GPM / 75.7 LPM MAX. PRESSURE: 75 PSIG / 5.17 Bar **TEMPERATURE RANGE:** 40-100° F / 4-38° C

HEATER GUARD 3/4" SHIPPING DETAILS SHIPPING CARTON SIZE: 8" W x 8" D x 28" H SHIPPING CARTON WEIGHT: 7 lbs.

3 BEST WAYS TO PROTECT YOUR HEATER

- 1. EWS Series. Inhibits scale formation and protects the entire home and family from the health side-effects and corrosiveness of chlorine, chloramine, VOCs, THMs, and much more.
- 2. Heater Guard. Protects water heaters at the inlet. *Combined with an EWS system, it is the perfect* application for healthy, hassle-free water to the whole home.
- 3. **Softener**. Will inhibit scale formation, however, the water becomes aggressive and may have long-term corrosive effects on your water heater.

¹Under no circumstances does the EWS Heater Guard chanae or alter the proper application and/or routine maintenance required or recommended by the manufacturer of any product.

‡The filter gauge is based on a pressure differential. It can only be observed while water is flowing through the Heater Guard and will only move when filter cartridge has been prematurely clogged or restricted. The gauge is only a precaution to prevent problems. **Fully Compliant** with California

HEATER GUARD 1.5" SHIPPING DETAILS

SHIPPING CARTON SIZE: 9" W x 9" D x 31" H

SHIPPING CARTON WEIGHT: 14 lbs.

Pictured at Right: The HEATER GUARD 1.5.

Ideal for 1 1/2" plumbing line sizes. Select this model if the home's inlet to the heater has a 1 1/2" or greater line size, or requires greater flow rate. Mounting bracket and gauge are reversible.

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CALL EWS CUSTOMER SERVICE: 702.256.8182 (MONDAY-FRIDAY 8.30 AM-4.30 PM PACIFIC TIME) FAX: 702.256.3744 EMAIL: CUSTOMERSERVICE@EWSWATER.COM WWW.EWSWATER.COM





Installation

1. Unpack the HEATER GUARD. Unit comes complete 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)

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 (meter reads from either side) 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. Turn gauge 1/2 turn clockwise only in order to read. 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. Identify an appropriate mounting location adjacent to the water heater. The HEATER GUARD can be mounted in both indoor and outdoor locations.
- 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 below).

- **NOTE:** APPLICABLE FOR ALL METAL PIPING: Installed bypass maintains electric continuity for the proper ground of plumbing system. If 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.
- 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.

WARNING: Do not allow to freeze and avoid direct sunlight or heat. Prevent any thermal expansion or hot water back into HEATER GUARD from water heater.

WARNING: Do not overtighten or cross-thread any connections into the inlet or outlet of the cap assembly. Do not overtighten the housing into the cap assembly. Do not remove the meter or gauge.

Under no circumstances does the EWS Heater Guard change or alter the proper application and/or routine maintenance required or recommended by the manufacturer of any product.



- 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.

NOTE: This step is important to ensure proper seal. 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 housing stand-pipe found at the bottom of the housing.

CAUTION: The standpipe must insert properly into the bottom of the filter before you go to Step # 7

- 7. Twist the blue housing onto the black cap and hand tighten. DO NOT OVER-TIGHTEN.CAUTION: Make sure the standpipe found at the base of the black cap seats properly into the top of the filter.
- 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 and 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 Item #: BB-Guard-Filter-1.5 Replacement filter for EWS-HEATER-GUARD-1.5

Filter service life is based on local water conditions and usage and should be replaced as needed, not to exceed one year.

Please Note: The gauge is based on pressure differential. It can only be observed while water is flowing through HEATER GUARD and will only move when filter cartridge has been prematurely clogged or restricted. The gauge is only a precaution to prevent problems.

There are several 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 kitchen & bath showroom, distributor, and/or retailer where you purchased the product.

If you need assistance, visit our Corporate Site @ <u>www.ewswater.com</u> or contact EWS Customer Service and we can direct you to someone who may assist you. As a manufacturer, EWS, Inc. does not sell direct to consumers, only into distribution.

3. Use the internet to purchase the correct filters or parts for your unit. Visit an authorized web distributor such as www.waterontheweb.com

> Thank you and we hope we have been of assistance. EWS, Inc. and Environmental Water Systems – Customer Service

Warranty Notification

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 head 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.

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. 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.

EWS, Inc. warranty does not cover parts that have incurred an issue as a result of wear and tear or deterioration regardless of time in service. Any problems of fitness with any EWS, Inc. product based on wear and tear or deterioration that is associated with changing water conditions, debris from incoming pipes or water delivery systems, high pressure, pressure spikes or variances, or any mechanical, construction, application, installation, and/or environmental issue(s) are not considered defect in product or workmanship.

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 there with, 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.

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 "Cuide 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 unenforcable. 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 are not covered by any warranty and 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 SPECTRUM IS THE RIGHT PRODUCT FOR YOU, YOUR FAMILY & YOUR HOME.

SPECTRUM – THE PROFESSIONAL SERIES

Our most versatile systems, showcased by the National Association of Home Builders (NAHB) and New American Showcase Home. World-class EWS performance in a contractor-friendly install package. All Spectrum Series systems utilize our advanced, userfriendly digital valve head and adjustable bypass, which fits over 90% of homes in the United States and accommodates line sizes 3/4" to 1 1/2" without inhibiting flow rate or pressure. A Spectrum installation is a simple process, much like installing a water heater. Once installed, the self-cleaning Spectrum systems provide maintenance-free filtration for years, allowing you to enjoy the convenience, protection, and health benefits of the highest quality filtered water at every tap, every day.



Model #: EWS-CC-1865-7 Select this system if you have ANY of the following:** • 3+ bathrooms

- 4+ people
- 1+ water heater
- 2+ ppm chloramine

municipal water in the United States.

Model #: CWL-CC-1865-7 Select this system if you have ANY of the following:** • 3+ bathrooms

- 4+ people
- 1+ water heater
- 2+ ppm chloramine

**About 22% of people have tap water treated with chloramine (a corrosive combination of chlorine and ammonia), which requires more contact time (vs. chlorine) through a specialized filtration media to effectively filter it out of the water. EWS has designed four systems specifically for handling chloramine, which use our Pro Series valve that accommodates 3/4" - 1 1/2" main water lines up to 35 gpm. Not sure if you have chloramine? Call your water district or EWS Customer Service at 702.256.8182 for friendly assistance. Important Note: Our specialized chloramine removal media (CRM) is incredibly effective on chlorine as well, so when in doubt, err on the side of caution and select a Chloramine System.

ARE YOU ON WELL WATER? STOP

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 for more information.

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.



Contact Information:

EWS, INC. Environmental Water Systems

ewswater.com

- **O:** 702.256.8182 (M-F 8:30am-4:30pm PST)
- E: customerservice@ewswater.com
- **F:** 702.256.3744

Mailing Address:

9101 W. Sahara Ave., #105-J8, Las Vegas, NV. 89117

Got a Question..?

Seriously.... Give us a call. We're here to help.

ALL FILTRATION PRODUCT PROUDLY MADE & ASSEMBLED IN THE USA



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 •

