

INSTALLATION INSTRUCTIONS

Heavy Duty Water Filtration System—GNWH38S

SAFETY PRECAUTIONS

Check with your state and local public works department for plumbing and sanitation codes. You must follow these guidelines as you install the Heavy Duty Water Filtration System. Using a qualified installer is recommended.

Be sure the water supply conforms with the *Performance Data*. If the water supply conditions are unknown, contact your municipal water company.

⚠ WARNING: Do not use with water that is microbiologically unsafe or of unknown quality without adequate disinfection before or after the system.

It is highly recommended that a water shut-off valve be placed directly upstream of your household filter.

PROPER INSTALLATION

This Heavy Duty Water Filtration System must be properly installed and located in accordance with the Installation Instructions before it is used.

Check with your local public works department for plumbing codes. You must follow their guides as you install the Heavy Duty Water Filtration System.

Use the Heavy Duty Water Filtration System on a potable, safe-to-drink, home COLD water supply only. The filter cartridge will not purify water or make unsafe water safe to drink. DO NOT use on HOT water (100°F max).

Protect the Heavy Duty Water Filtration System and piping from freezing. Water freezing in the system will damage it.

Your Heavy Duty Water Filtration System will withstand up to 100 psi water pressure. If your house water supply pressure is higher than 100 psi during the day (it may reach higher levels at night), install a pressure reducing valve before the system is installed.

Do not install on **HOT WATER**. The temperature of the water supply to the Heavy Duty Water Filtration System must be between the minimum of 40°F and the maximum of 100°F. See the *Filter Cartridge Life* section.

Do not install the Heavy Duty Water Filtration System using copper solder fittings. The heat from the soldering process will damage the unit.

If making a soldered copper installation, do all sweat soldering before connecting pipes to the system. Torch heat will damage plastic parts.

⚠ WARNING: Discard all unused parts and packaging material after installation. Small parts remaining after installation could be a choke hazard.

Do not install filter in an outside location or anywhere it will be exposed to sunlight.

REQUIRED TOOLS AND ACCESSORIES FOR INSTALLATION

- 2 Adjustable wrenches
- Pipe cutter
- Ruler or tape measure
- Cordless drill
- File
- Emery paper
- Screwdriver
- 2 sets of fittings, ferrule and nut to connect 1" female NPTF threads on filter housing to 3/4" copper plumbing
- 2 UL-certified grounding clamps and a #6 AWG grounding wire
- White sealing tape

Optional accessories are available (Visa, MasterCard or Discover cards accepted) by visiting our Website at ge.com or from Parts and Accessories, call 800.626.2002 (U.S.) or 800.663.6060 (Canada).

CONTENTS INCLUDED WITH PRODUCT

- Filter system (filter, head and canister)
- Product literature
- Canister wrench
- Timer and batteries
- Mounting bracket
- Four 5/16" Hex-head screws and four 5/16" Hex washer-head screws
- FXHTC Chlorine: Taste and Odor filter cartridge



GNWH38S is tested and certified by NSF International against NSF/ANSI Standard 42 with cartridge FXHTC for the reduction of Chlorine: Taste and Odor.

CARTRIDGE SPECIFICATIONS

Performance Data

This system has been tested according to NSF/ANSI 42 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 or equal to the permissible limit for water leaving the system, as specified in NSF/ANSI 42.

FXHTC Cartridge

Substance	Influent Challenge Concentration	Reduction Requirements	Average Reduction
Standard 42			
Chlorine: Taste and Odor	2.0 mg/L \pm 10%	\geq 50%	80%

Test Conditions

Flow Rate: 4 gpm (18.2 Lpm)
pH: 7.5 \pm 1
Inlet Pressure: 60 PSI (4.1 bar)
Temperature: 68°F \pm 5°F (19.8°C \pm 2.5°C)

Operating Requirements

Pressure: 30–125 psi (2.1–6.9 bar)
Turbidity: 5 NTU Max.
Temperature: 40°F–100°F (4.4°C–37.7°C)
Capacity: 30,000 gallons (113,562.4 L)

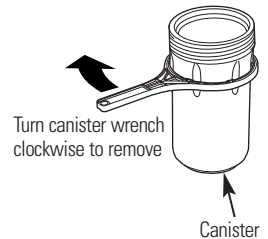
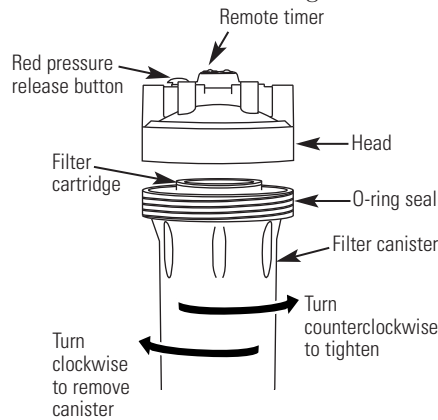
Testing was performed under standard laboratory conditions, actual performance may vary.

Filter Cartridge Replacement

You should change your filter when the water flow is noticeably reduced or at least every 3 months.

- 1 Turn off water to filter. Water must be shut off from an upstream valve.
- 2 Press the red pressure release button to release pressure.
- 3 Unscrew the filter canister and discard used filter. Wash the filter canister with mild soap and water. **Do not** use harsh cleaners or hot water.
- 4 Inspect the filter canister O-ring. Make sure it is lightly lubricated with clean food grade silicone grease (silicone grease is available through GE Parts and Service: 1.800.626.2002, part number WS60X10005). Be sure the o-ring is seated in the groove. It is recommended that you replace the O-ring if it is damaged.
- 5 Place a new filter cartridge into the canister, making sure it is centered and completely seated on the bottom seal.
- 6 Reinstall the filter canister to the unit. Use the canister wrench to tighten the canister. **DO NOT OVERTIGHTEN.**

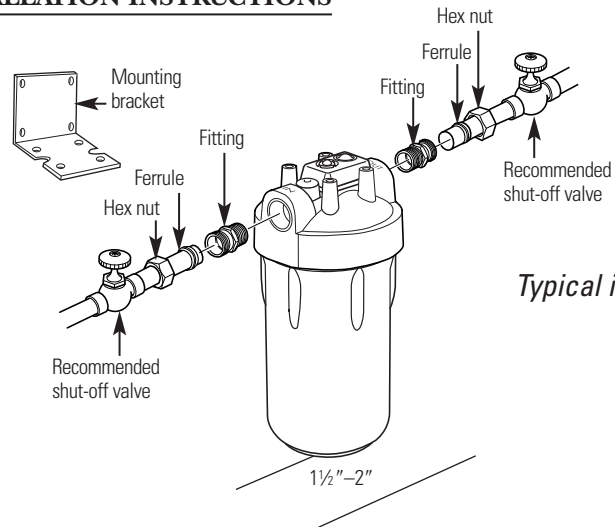
- 7 Slowly turn on water to the filter by using the upstream shut-off valve.
- 8 Press the red pressure release button to remove trapped air.
- 9 After installation, flush the cartridge for 10 minutes, wait one hour, then flush again for 10 minutes before using the water.



STEP-BY-STEP INSTALLATION INSTRUCTIONS

Installation Overview

NOTE: Be sure to allow a minimum space of 1½"–2" under the filter for removing the sump to change the cartridge.



Typical installation

STEP-BY-STEP INSTALLATION INSTRUCTIONS (cont.)

Select Location

Select a location for the filter that is:
protected from freezing.

not exposed to direct sunlight.

It is recommended that a shut-off valve be placed on both sides of the filter.

It is recommended that a mounting bracket be used.

Cut Water Line

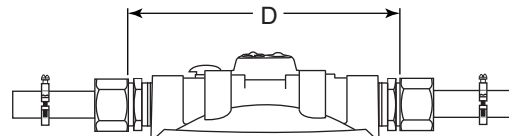
⚠ WARNING: A copper or galvanized cold water pipe may be used to ground electrical outlets in the home. Failure to maintain this ground path may result in an electric shock hazard. If the cold water pipe is used to ground electrical outlets, please refer to the *Installing the Ground Wire* section before cutting the pipe.

- 1 Turn off the water supply and open a nearby faucet to drain the water out of pipes.
- 2 Using a tape measure or ruler, measure the distance “D” as shown.

NOTE: It is recommended that the shut-off valve be placed before and after the filter as shown in the *Installation Overview* illustration.

Select a secure location surface to install filter and mounting bracket. The location should align the filter system with inlet and outlet pipe and should not cause the pipes to bend or damage. Mark the distance “D” on the pipe. D is about 7¾”.

- 3 Using a pipe cutter, cut pipe. Sand (file) cut ends of pipe to assure that they are square and smooth.

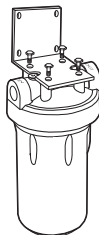


NOTE: Have a bucket and towel available to collect excess water.

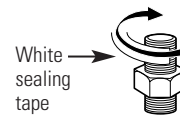
Install Mounting Bracket and Fittings

Instructions are for installing fittings onto 3/4” copper plumbing. If the unit is to be installed on any other type of tubing (plastic, PVC, galvanized), consult a qualified plumber for additional hardware.

- 1 Attach heavy duty mounting bracket to head assembly with four hex-head screws as shown in illustration. Failure to use the bracket may result in a leak over time. The bracket can be used as a template for marking the location of the mounting screws.

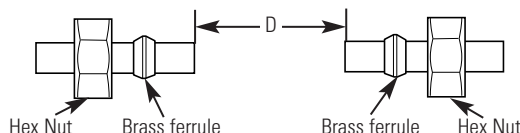


- 2 Apply 4 or 5 wraps of white sealing tape, in a clockwise direction, to the pipe threads of each fitting. **DO NOT** use joint compound on any parts connecting to filter system.
- 3 Assemble fitting to the inlet and outlet of the head. Start each fitting by hand to make sure they don't cross thread. Use an adjustable wrench to tighten fittings. **DO NOT OVERTIGHTEN.** About 1–2 thread(s) should remain visible.
- 4 Use four hex washer-head screws to mount bracket to the wall firmly. Use proper anchors on wall. Anchors are **NOT** included.



Attach Fittings to Water Line

- 1 Slip a compression nut onto each pipe.
- 2 Next, slip the brass ferrule onto each pipe.



Installing the Unit

- 1 Align filter assembly with pipe ends making certain that the **incoming** water supply is going into the filter opening marked “IN.” It may be necessary to spread the pipe ends apart to install filter assembly.
- 2 Using two adjustable wrenches, hold incoming fitting securely with one wrench and tighten nut with second wrench. Repeat this procedure for outgoing fitting.

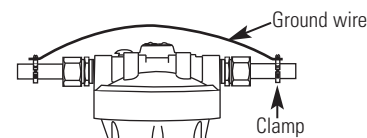
- 3 If mounting bracket is not used, support the water pipe on either side of the filter unit.
- 4 Install a filter and tighten canister to seal (see filter cartridge replacement section).

Installing the Ground Wire

NOTE: If your house plumbing is plastic, it would not be used as a grounding path, and this step should be skipped.

IMPORTANT: A copper or galvanized house cold water pipe is often used to ground electrical outlets in the home. **Grounding protects you from electrical shock.** The water filter system may have broken this ground path. To restore the connection, install a 6-gauge copper wire across the filter, tightly clamped, using UL-certified 1/2”–1” bronze grounding clamps at both ends as shown.

- 1 Clean copper pipe and ends of wire with emery paper.
- 2 Attach bronze clamps to pipe. Tighten screws.
- 3 Attach wire to clamps as shown. Tighten screws firmly to the stripped end of the copper wire.

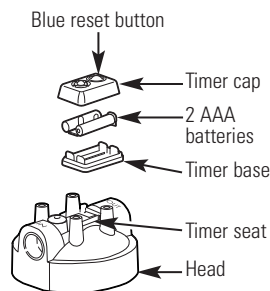


Final Check

- 1 Install filter, if not already done (see *Filter Cartridge Replacement* Section).
- 2 Slowly turn on water supply.
- 3 Check entire system for leaks.

- 4 If leaking from fittings, shut off water flow and tighten or reseal fittings. If leaking from the canister, tighten canister with a wrench.
- 5 After installation, flush the cartridge for 10 minutes, wait one hour, then flush again for 10 minutes before using the water.

Timer Installation and Reset Instructions



Timer battery installation and change

Insert coin or screw driver in the slot between timer cap and base. Gently pry them open and separate time base from cap. Install or change 2 new AAA batteries. After having the batteries in place, line up the base and cap and snap them back together.

It is recommended to change the batteries at least every 2 filter changes (6 months).

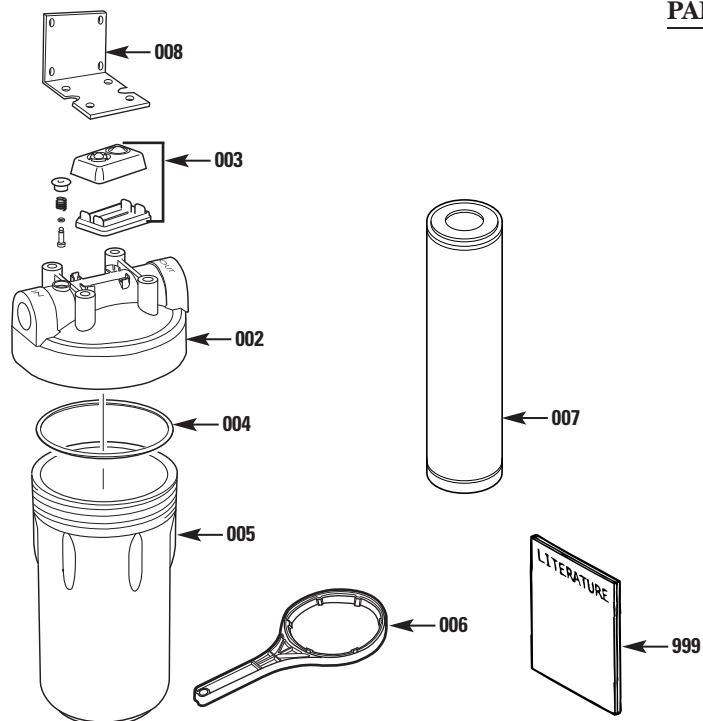
Installation of timer

Hold the timer body in the center and gently push timer to its seat at the top of the head. Or use the magnetic timer body to attach it in a remote location for easy viewing.

Timer reset and application

After new batteries are installed or filter is changed, push and hold the timer blue reset button for approximately 5 seconds. Release the reset button after the light flashes 5 times. The light will flash again in 90 days to remind you that it is time to change the filter.

PARTS LIST



Ref. No.	Part No.	Part Description	
002	HDCAP	Head	1
003	WHTIMER	Timer	1
004	HDRING	O-Ring	1
005	HDSMP	Canister	1
006	HDWRNCH	Canister Wrench	1
007	FXHTC	Filter Element—Carbon Filter	1
	FXHSC	Filter Element—Pleated	1
008	HDBRKT	Mounting Bracket	1
999	49-50203-1	PM Installation Instructions	1

To obtain replacement parts, call toll-free 800.626.2002 (U.S.), 800.663.6060 (Canada—English), 800.361.3869 (Canada—French).

BEFORE YOU CALL FOR SERVICE...



*Troubleshooting Tips
Save time and money! Review the chart below
first and you may not need to call for service.*

Problem	Possible Causes	What To Do
Water contains tiny black particles	New filter cartridges contain activated carbon, which is a harmless black powder.	<ul style="list-style-type: none"> • Turn on a water faucet and allow these harmless carbon particles to purge from the cartridge. Turn off the faucet when the water is clear.
Water has air bubbles and is cloudy	Air in system after installation.	<ul style="list-style-type: none"> • Will go away after water runs for a while.
Indicator light on the timer is flashing	Three months usage has occurred. This is the maximum life of the filter cartridges.	<ul style="list-style-type: none"> • Replace filter cartridge and batteries in the timer. • Reset timer by holding down the reset button for 5 seconds.
Indicator light on the timer is not working	Timer operating normally.	<ul style="list-style-type: none"> • Light flashed 5 times when reset. It will not flash again until 3 months have passed. • No action required.
	Batteries may need to be replaced or they may have been installed incorrectly.	<ul style="list-style-type: none"> • Observe orientation markings on the holder and install correctly. Replace batteries if they are old.
Timer not reset	Reset button has built-in time delay.	<ul style="list-style-type: none"> • Reset timer by holding down reset button for 5 seconds.
Chlorine taste and /or odor in the product water	The filter cartridge is no longer removing chlorine from the water supply.	<ul style="list-style-type: none"> • Replace FXHTC filter cartridge.
	FXHSC Filter (pleated paper) is installed, which does not remove chlorine.	<ul style="list-style-type: none"> • If chlorine reduction is desired, change to FXHTC filter cartridge.
Fittings are leaking between fitting and head	Not enough sealing tape on fittings.	<ul style="list-style-type: none"> • Unscrew fitting from head and remove old sealing tape. Add new sealing tape to the fitting.
	Fitting has become loose.	<ul style="list-style-type: none"> • Install mounting bracket if not used. • Tighten fittings with wrench.
Water dispenses very slowly	The filter has been installed for too long.	<ul style="list-style-type: none"> • A three-month change-out period is recommended. Replace filter cartridge.
	The filter cartridge has become clogged.	<ul style="list-style-type: none"> • High sediment levels can cause premature clogging. Replace filter cartridge.
Fittings are leaking between fitting and pipe	Piping system is not 3/4" copper pipe.	<ul style="list-style-type: none"> • This fitting is designed for 3/4" copper pipe only. Consult a licensed plumber if other piping is used.
	Compression nut has become loose.	<ul style="list-style-type: none"> • Tighten the compression nut with wrench while holding other half of fitting with second wrench.
Canister is difficult to remove	Inlet water supply still on.	<ul style="list-style-type: none"> • Shut off inlet water and push red pressure relief button.
	Internal water pressure has not been relieved.	<ul style="list-style-type: none"> • Push red pressure relief button.
Leaking between canister and head	Seal O-ring is missing or damaged.	<ul style="list-style-type: none"> • Replace O-ring (Part #HDRING)
	Canister is loose.	<ul style="list-style-type: none"> • Turn off water supply. • Press red pressure relief button. • Tighten canister with canister wrench.

GE Water Filtration System Warranty.



All warranty service provided by our SmartWater™ Authorized Servicer Network. To schedule service, call us at 800.952.5039 in the U.S., or toll-free 866.777.7627 in Canada. Please have serial and model numbers available when calling for service.

Staple your receipt here.
Proof of the original purchase date
is needed to obtain service under
the warranty.

For The Period Of: **GE Will Replace:**

One Year

From the date of the
original purchase

Any part of the Water Filtration System (excluding filters) which fails due to a defect in materials in workmanship. During this **limited one-year warranty**, GE will also provide, **free of charge**, all labor and related service to replace the defective part.

What GE Will Not Cover:

Service trips to your home to teach you how to use the product.

Improper installation, delivery or maintenance.

Failure of the product if it is abused, misused, altered, used commercially or used for other than the intended purpose.

Use of this product where water is microbiologically unsafe or of unknown quality, without adequate disinfection before or after the system. Systems certified for cyst reduction may be used on disinfected water that may contain filterable cysts.

Filter cartridges and batteries after 30 days from the date of purchase.

Damage to the product caused by accident, fire, floods or acts of God.

Incidental or consequential damage caused by possible defects with this appliance.

EXCLUSION OF IMPLIED WARRANTIES—Your sole and exclusive remedy is product repair as provided in this Limited Warranty. Any implied warranties, including the implied warranties of merchantability or fitness for a particular purpose, are limited to one year or the shortest period allowed by law.

This warranty is extended to the original purchaser and any succeeding owner for products purchased for home use within the USA. If the product is located in an area where service by a GE Authorized Servicer is not available, you may be responsible for a trip charge or you may be required to bring the product to an Authorized GE Service location for service. In Alaska, the warranty excludes the cost of shipping or service calls to your home.

Some states do not allow the 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. To know what your legal rights are, consult your local or state consumer affairs office or your state's Attorney General.

Warrantor: General Electric Company, Louisville, KY 40225

NOTES

Consumer Support.

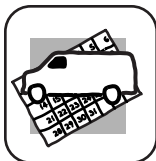


GE Appliances Website

In the U.S.: **GEAppliances.com**

Have a question or need assistance with your appliance? Try the GE Appliances Website 24 hours a day, any day of the year! For greater convenience and faster service, you can now download Owner's Manuals, order parts or even schedule service on-line.

In Canada: www.GEAppliances.ca



Schedule Service

In the U.S.: **GEAppliances.com**

Expert GE repair service is only one step away from your door. Schedule your service at your convenience by calling 800.GE.CARES (800.432.2737) during normal business hours.

In Canada, call 1.800.561.3344



Real Life Design Studio

In the U.S.: **GEAppliances.com**

GE supports the Universal Design concept—products, services and environments that can be used by people of all ages, sizes and capabilities. We recognize the need to design for a wide range of physical and mental abilities and impairments. For details of GE's Universal Design applications, including kitchen design ideas for people with disabilities, check out our Website today. For the hearing impaired, please call 800.TDD.GEAC (800.833.4322).

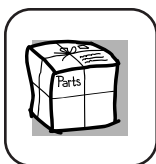
In Canada, contact: Manager, Consumer Relations, Mabe Canada Inc.
Suite 310, 1 Factory Lane
Moncton, N.B. E1C 9M3



Extended Warranties

In the U.S.: **GEAppliances.com**

Purchase a GE extended warranty and learn about special discounts that are available while your warranty is still in effect. You can purchase it on-line anytime, or call 800.626.2224 during normal business hours. GE Consumer Home Services will still be there after your warranty expires. **In Canada,** call 1.888.261.2133



Parts and Accessories

In the U.S.: **GEAppliances.com**

Individuals qualified to service their own appliances can have parts or accessories sent directly to their homes (VISA, MasterCard and Discover cards are accepted). Order on-line today, 24 hours every day or by phone at 800.626.2002 during normal business hours.

Instructions contained in this manual cover procedures to be performed by any user. Other servicing generally should be referred to qualified service personnel. Caution must be exercised, since improper servicing may cause unsafe operation.

Customers **in Canada** should consult the yellow pages for the nearest Mabe service center, or call 1.800.661.1616.



Contact Us

In the U.S.: **GEAppliances.com**

If you are not satisfied with the service you receive from GE, contact us on our Website with all the details including your phone number, or write to:

General Manager, Customer Relations
GE Appliances, Appliance Park
Louisville, KY 40225

In Canada: www.GEAppliances.ca, or write to: Director, Consumer Relations, Mabe Canada Inc.
Suite 310, 1 Factory Lane
Moncton, N.B. E1C 9M3



Register Your Appliance

In the U.S.: **GEAppliances.com**

Register your new appliance on-line—at your convenience! Timely product registration will allow for enhanced communication and prompt service under the terms of your warranty, should the need arise. You may also mail in the pre-printed registration card included in the packing material, or detach and use the form in this Owner's Manual.

In Canada: www.GEAppliances.ca