MM-309H



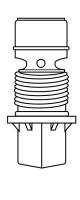
# Replacement Cartridge and Strainer Kit

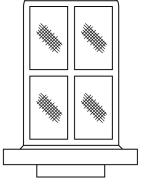
For Series:

47, 51, 101-A

247, 551S, 847, 851,

Water Feeders with Hex Port Valves





Cartridge

**Strainer Assembly** 

# **WARNING**



- Before using this product read and understand instructions.
- My
- Save these instructions for future reference.
- All work must be performed by qualified personnel trained in the proper application, installation, and maintenance of plumbing, steam, and electrical equipment and/or systems in accordance with all applicable codes and ordinances.



Failure to follow this warning could cause property damage, personal injury or death.

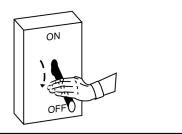
## **INSTALLATION –**

#### **TOOLS NEEDED:**

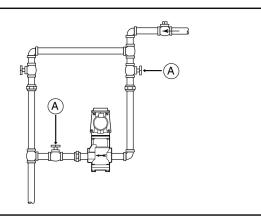
One (1) 13/16" (21mm) socket wrench and one (1) 1/2" (13mm) wrench.

# **STEP 1 - Preparation**

**a.** Turn off the power to the boiler.



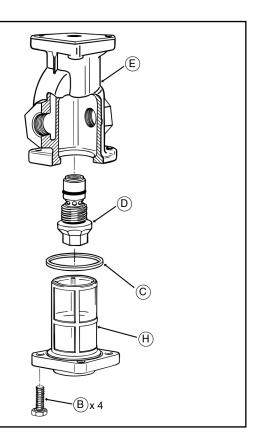
**b.** Allow the boiler to cool to 80°F (27°C) and close the two (2) gate valves (A) in the system piping.



# STEP 2 - Remove the Original Cartridge and Strainer

- a. Using the 1/2" (13mm) wrench, unscrew and remove the four (4) hex-head screws (B) that secure the strainer. Discard the strainer (H) and the gasket (C).
- **b.** Using a 13/16" (21mm) socket wrench, unscrew the old cartridge (D) from the valve body (E) and discard it.

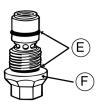
NOTE: The cartridge (D) will either be black (Series 101-A, 47, 247 and 847) or gray (Series 51, 851 and 551-S) and should be replaced with a similarly colored replacement cartridge.



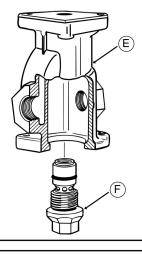
## **STEP 3 - Install the New Cartridge and Strainer**

**a.** Apply lubricant (provided) to the two (2) O-rings (E) on the new cartridge (F).

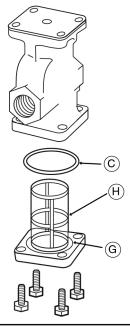
**NOTE:** Use the silicone grease provided in red capsule. The use of other lubricants may cause premature cartridge failure.



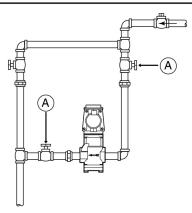
b. Using the 13/16" (21mm) socket wrench, screw the new cartridge (F) into the valve body (E). Tighten to approximately 2 ft•lb (2.6 N•m). DO NOT OVER TIGHTEN.



c. Place the gasket (C) in the groove on the strainer assembly (G) and insert the strainer (H). Using a socket wrench, tighten the four (4) bolts to 8 ft•lb (11 N•m).



**d.** Open the gate valves (A) by turning the handles counter-clockwise.



#### MAINTENANCE

### **SCHEDULE:**

- Disassemble and inspect the strainer screen annually. Thoroughly clean the strainer screen or replace.
- Remove and inspect cartridge annually. Thoroughly clean by rinsing with clear water or replace.

#### **COMMERCIAL WARRANTY**

Warranty. For goods sold to commercial buyers, Seller warrants the goods sold to Buyer hereunder (with the exception of membranes, seals, gaskets, elastomer materials, coatings and other "wear parts" or consumables all of which are not warranted except as otherwise provided in the quotation or sales form) will be (i) be built in accordance with the specifications referred to in the quotation or sales form, if such specifications are expressly made a part of this Agreement, and (ii) free from defects in material and workmanship for a period of one (1) year from the date of installation or two (2) years from the date of manufacture, whichever shall occur first, unless a longer period is specified in the product documentation (the "Warranty").

Except as otherwise required by law, Seller shall, at its option and at no cost to Buyer, either repair or replace any product which fails to conform with the Warranty provided Buyer gives written notice to Seller of any defects in material or workmanship within ten (10) days of the date when any defects or non-conformance are first manifest. Under either repair or replacement option, Seller shall not be obligated to remove or pay for the removal of the defective product or install or pay for the installation of the replaced or repaired product and Buyer shall be responsible for all other costs, including, but not limited to, service costs, shipping fees and expenses. Seller shall have sole discretion as to the method or means of repair or replacement. Buyer's failure to comply with Seller's repair or replacement directions shall terminate Seller's obligations under this Warranty and render the Warranty void. Any parts repaired or replaced under the Warranty are warranted only for the balance of the warranty period on the parts that were repaired or replaced. Seller shall have no warranty obligations to Buyer with respect to any product or parts of a product that have been: (a) repaired by third parties other than Seller or without Seller's written approval; (b) subject to misuse, misapplication, neglect, alteration, accident, or physical damage; (c) used in a manner contrary to Seller's instructions for installation, operation and maintenance; (d) damaged from ordinary wear and tear, corrosion, or chemical attack; (e) damaged due to abnormal conditions, vibration, failure to properly prime, or operation without flow; (f) damaged due to a defective power supply or improper electrical protection; or (g) damaged resulting from the use of accessory equipment not sold or approved by Seller. In any case of products not manufactured by Seller, there is no warranty from Seller; however, Seller will extend to Buyer any warranty received from Seller's supplier of such products.

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Except as otherwise required by law, Seller shall, at its option and at no cost to Buyer, either repair or replace any product which fails to conform with the Warranty provided Buyer gives written notice to Seller of any defects in material or workmanship within ten (10) days of the date when any defects or non-conformance are first manifest. Under either repair or replacement option, Seller shall not be obligated to remove or pay for the removal of the defective product or install or pay for the installation of the replaced or repaired product and Buyer shall be responsible for all other costs, including, but not limited to, service costs, shipping fees and expenses. Seller shall have sole discretion as to the method or means of repair or replacement. Buyer's failure to comply with Seller's repair or replacement directions shall terminate Seller's obligations under this Warranty and render this Warranty void. Any parts repaired or replaced under the Warranty are warranted only for the balance of the warranty period on the parts that were repaired or replaced. The Warranty is conditioned on Buyer giving written notice to Seller of any defects in material or workmanship of warranted goods within ten (10) days of the date when any defects are first manifest.

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Some states do not allow limitations on how long an implied warranty lasts, so the above limitation may not apply to you. Some states do not allow the exclusion or limitation of incidental or consequential damages, so the above exclusions may not apply to you. This warranty gives you specific legal rights, and you may also have other rights which may vary from state to state.

To make a warranty claim, check first with the dealer from whom you purchased the product or call +1-847-966-3700 for the name and location of the nearest dealer providing warranty service.



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