

Nu-Plus CFS™ Filtration Systems Installation instructions

INTRODUCTION

The Nu-Plus CFS water filtration systems come in the following head configurations:

- Single Head with pressure gauge 4623-21.
- Twin Head in parallel (equal water flow through cartridges) and pressure gauge 4623-22.
- Twin Head in series flow (flow through one cartridge, then the other) with pressure gauge 4623-26.
- Triple Head in parallel flow with pressure gauge 4623-23.

Filter capabilities consist of the reduction of sediment particulate as well as chlorine and other objectionable taste and odors of the water which would adversely affect the taste of carbonated and non-carbonated beverages, coffee and ice. Also, a food-grade scale and corrosion inhibitor can be automatically fed into the water to inhibit the formation of scale in ice machines and coffee makers. Nu-Plus CFS filters have been tested by the manufacturer against ANSI/NSF Standard 53 for the reduction of chlorine taste and odor.

Available Nu-Plus CFS Filters

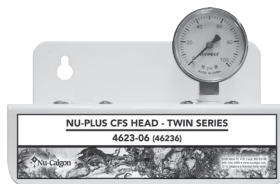
4623-10	NU-PLUS CFS - S	Sediment - 5 Micron	1.67 gpm (6.32 lpm) - Life up to 12 months
4623-11	NU-PLUS CFS - SS	Sediment - 5 Micron Scale Inhibitor	1.67 gpm (6.32 lpm) - Life 6 months
4623-12	NU-PLUS CFS - TOP	Taste & Odor - ½ Micron Particulate Reduction	1.67 gpm (6.32 lpm) - Life up to 12 months
4623-13	NU-PLUS CFS - STOP	Scale Inhibitor, Taste & Odor - ½ Micron Particulate Reduction	1.67 gpm (6.32 lpm) - Life 6 months

System Bracket Designs:

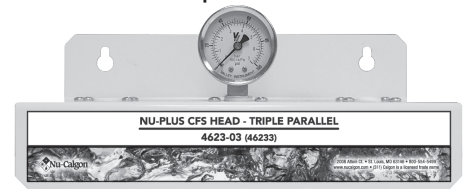
Single Head



Twin Head

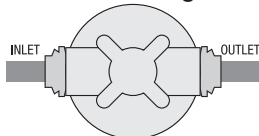


Triple Head

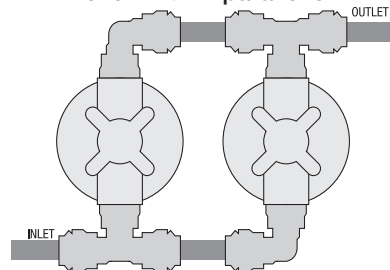


Flow Configurations:

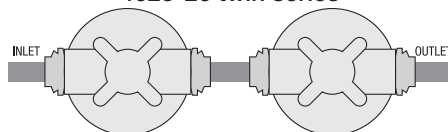
4623-21 single



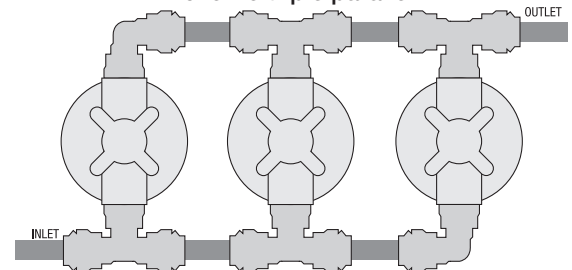
4623-22 twin parallel or



4623-26 twin series



4623-23 triple parallel



SAFETY

Always follow these safety precautions when installing and operating Nu-Plus CFS water filtration system:

- DO NOT use with water that is microbiologically unsafe or of unknown quality without adequate disinfection before or after the system.
- DO NOT use a torch or other high temperature source near filter or cartridge system.
- DO NOT install on lines with pressures above 100 psi (690 kPa). The system should be protected from water hammer.
- DO NOT install in direct sunlight or outdoors.
- DO NOT reverse connections. The system must be installed with the inlet and outlet as labeled.
- DO NOT install filter system in locations where it can be damaged by other freestanding equipment.
- Protect from freezing.

INSTALLATION must comply with existing state or local plumbing codes.

GENERAL GUIDELINES

Caution: Read instructions completely before attempting to install the filtration system.

The Nu-Plus CFS water filtration systems should be located on the incoming cold water line and preferably away from heavy traffic areas. The system should be mounted on a wall, support structure or the back of the equipment. In addition the following should be observed:

- Allow a minimum of 2" (5 cm) clearance space under the filter system to facilitate cartridge change-out.
- This product is designed for cold water use only (less than 100°F/38°C). Passing hot water through this product may seriously damage filter housing and/or cartridges.
- Nu-Plus CFS products may be used with metal or non-metallic piping systems.
- Any non-metallic fittings used in the installation must be of adequate rating for the line pressure.
- Nu-Plus CFS heads come with 3/8" Quick Connect fittings.
- Nu-Calgon recommends regularly scheduled maintenance and the replacement of the filter cartridge(s) in order for the product to perform as designed. The filter cartridge may need to be replaced every 6 months depending upon the application, local water conditions, and how the technology was applied. Nu-Calgon shall not be liable for system failures due to improper application or maintenance.

HEAD AND CARTRIDGE INSTALLATION INSTRUCTIONS

1. Shut off incoming cold water line.
2. Mount filter system to a wall or support structure using mounting bracket provided.
3. The installation of a shut-off on the water line before the filter head is recommended.
4. The filter head is equipped with 3/8" female connectors designed to receive 3/8" copper or plastic tubing. First apply a light coat of food-grade lubricant (provided) to the tubing. Then, simply insert the tube into the female connector until it seats. At that point it will have gone past the internal O-Ring that provides a watertight seal. Repeat for both inlet and outlet connections. If desired, install the enclosed flush valve into the outlet fitting first, and then install the outlet water line into the outlet of the flush valve.
5. Locate filter cartridge and remove plastic shrink wrap. Remove the black cap from the top of the filter covering the filter's O-Ring's.
6. Apply a light coat of food-grade lubricant to the O-Rings on the Nu-Plus CFS cartridge(s).
7. Prepare to insert cartridge(s) into filter head by holding cartridge with the label facing to the left. Insert cartridge and turn toward the right until a clicking sound is heard. Note: The clicking sound indicates that the cartridge is properly engaged, and label should be visible.
8. For twin or triple head installations repeat steps 5, 6, and 7 for each cartridge.

EQUIPMENT START-UP PROCEDURE

1. When using included flush valve, make sure ball valve is in closed position. Lube tubing with food grade lubricant, insert the tubing on the outlet side of the system until it seats.
2. Turn on incoming water to system.
3. Check for leaks.
4. Open flush valve if installed and run water through system for 5 minutes to a bucket or drain to remove entrapped air and carbon fines.
5. Close flush valve.
6. The system is now ready to operate.

CARTRIDGE CHANGE OUT INDICATORS

Pre-filter cartridges will need to be changed when:

- Low pressure is sensed. Check gauge for pressure below 20 psi (138 kPa).

The loss of flow to carbonators or improper fill at the ice machine or coffee maker is also an indicator that cartridges need to be replaced.

CARTRIDGE CHANGE OUT PROCEDURE

It is recommended that cartridges with scale inhibitor 4623-11 (SS) and 4623-13 (STOP) be replaced every 6 months. The 4623-10 (S) and 4623-12 (TOP) cartridges should be replaced when pressure drops below 20 psi, unpleasant taste/odors are noticed, or every 12 months whichever occurs first.

1. Shut-off inlet water to the system.
2. Depressurize system by opening the flush valve.
3. Lift red knob on the top of the head upward and hold.
4. With other hand, hold the cartridge securely and turn the cartridge to the left.
5. Gently pull cartridge straight down and discard.
6. Apply a light coat of food-grade lubricant to O-Rings on the Nu-Plus CFS cartridge(s).
7. Insert the cartridge into filter head by holding cartridge with the label facing to the left. Turn toward the right until a clicking sound is heard. Note: The clicking sound indicates that the cartridge is properly engaged. Repeat steps 3-7 for remaining Nu-Plus CFS cartridges.
8. Direct tubing on flush valve to drain or bucket to capture water.
9. Turn on the inlet water to the system.
10. Flush system for 5 minutes to remove entrapped air and carbon fines.

TROUBLESHOOTING GUIDE

Problem	Possible Issue	Solution
No water is available from the filter system	<p>Check incoming water to the filter system</p> <p>Check to see if inlet valve is open</p> <p>Check to see if water is passing through the filter</p>	<p>If water is not flowing to the filter system, locate and correct restriction point.</p> <p>If closed, turn the lever so that the water line is open.</p> <p>Turn off water to the filter system and disconnect the tubing from the equipment being serviced. Place tubing that is connected to the outlet side of the filter system into a drain or bucket. While holding the tubing secure, turn water on slowly to check to see if water is passing through the filter system. If water is not passing through the system, the cartridge needs to be changed. See installation instruction to change the filter or filters. See CARTRIDGE CHANGE OUT INSTRUCTIONS to change the cartridge(s).</p>
Water delivery is slow from the filter system to the equipment. Slow fill to ice machines, short brew at coffee machine, not enough water to post mix.	<p>Check incoming water to the filter system</p> <p>Check to see if the inlet water line valve is not opened all the way</p> <p>Check to see if the filter is clogged</p>	<p>If the water pressure is low or the flow to the filter is slow, locate and correct the restriction point.</p> <p>If not adequately opened or partially closed open valve.</p> <p>Turn off the incoming water on the inlet side of the filter system and disconnect the tubing on the outlet side of the filter system. Place tubing that is connected to the outlet side in a drain or bucket. While holding the tubing secure, turn the valve slowly to check to see if water is passing through the system. If water is not passing through the system, the cartridge needs to be changed. See CARTRIDGE CHANGE OUT INSTRUCTIONS to change the cartridge(s).</p>
Water leaks out between the filter and the filter head	<p>Check to see if the filter is turned completely to the right as far as it will go</p> <p>Check to see if the o-ring needs to be lubricated</p>	<p>Turn off the water at the inlet side of the filter system. Turn the filter to the right by gripping it with both hands and turning.</p> <p>Turn the water valve off on the inlet side of the filter system. Turn the cartridge to the left to remove. If the O-Rings are dry, add a thin layer of lubricant to the O-Ring and re-install as explained in the installation instructions.</p>
Short Filter Life	<p>Temporary dirty water</p> <p>Undersized system</p>	<p>Install or change pre-filter cartridge.</p> <p>Contact system supplier to obtain a system with greater capacity.</p>

Warranty

Nu-Calgon warrants that the products delivered will be free from any defects in workmanship or materials. Further the warranty provided herein applies, only when used within product(s) specifications and service life, from the date of installation, beyond which time or use Nu-Calgon is absolved of any and all liability for any use of the product. In the event of defect or non-conformity, buyer shall promptly notify Nu-Calgon in writing, supply proof of purchase, installation dates, and will protect and retain the products for investigation, or Nu-Calgon is absolved of any liability for any use of the product. There are no other warranties, either merchantability or fitness, either expressed or implied.