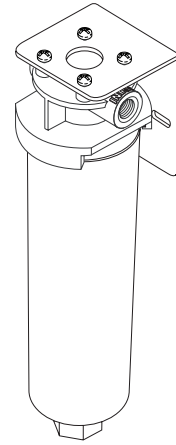


3M™ Water Filtration Products

CS-400 Series Water Filtration Systems Installation and Instruction Manual



Read, understand, and follow all safety information contained in these instructions prior to installation and use of the 3M™ Water Filtration Products Model CS-400 Series. Retain these instructions for future reference.

Intended use:

The 3M™ Water Filtration Products Model CS-400 Series is intended for use in filtering potable water for food service equipment and has not been evaluated for other uses. The system is intended for indoor installations and must be installed by qualified professional installer according to these installation instructions.

EXPLANATION OF SIGNAL WORD CONSEQUENCES

⚠ WARNING	Indicates a potentially hazardous situation, which, if not avoided, could result in death or serious injury and/or property damage.
CAUTION	Indicates a potentially hazardous situation, which, if not avoided, may result in property damage.

⚠ WARNING

To reduce the risk associated with ingestion of contaminants.

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

CAUTION

To reduce the risk associated with property damage due to water leakage:

- Protect filter from freezing. Drain filter when room temperature drops below 40° F (4.4° C);
- Do not install if water pressure exceeds 120 psi (827 kPa). If your water pressure exceeds 120 psi (827 kPa) you must install a pressure limiting valve. Contact a plumbing professional if you are uncertain how to check your water pressure;
- Do not install on hot water supply lines. Install on cold water lines only. Installed on cold water lines only, maximum temperature 100° F (37.8° C);
- Do not install where water hammer conditions may occur. If water hammer conditions exist, you must install a water hammer arrester. Contact a plumbing professional if you are uncertain how to check for this condition;
- Do not install on hot water supply lines. The maximum operating water temperature of this system is 100° F (37.7° C)
- Read and follow use instructions before installation and use of this system;
- The disposable filter cartridge must be replaced every six months or at the specified service cycle.
- Read and follow Use Instructions before installation and use of this system.

IMPORTANT

- Failure to follow instructions may void warranty;
- Allow minimum of 2 in (5.1 cm) clear space under [the assembly] to facilitate cartridge changes;
- Install with the inlet and outlet ports as labeled. Make sure not to reverse connections.
- Do not use acid base sealers or wicking on plastic filter head.
- Do not use torches or other heat sources near plastic plumbing, as damage may occur;
- Take care when using pliers or pipe wrenches to tighten plastic fittings, as damage may occur;
- On plastic fittings, use thread sealing tape only. Never use pipe sealant or pipe dope on plastic fittings, as damage may occur;
- Do not install this system in direct sunlight.

Installer: Please leave this manual with owner/operator.

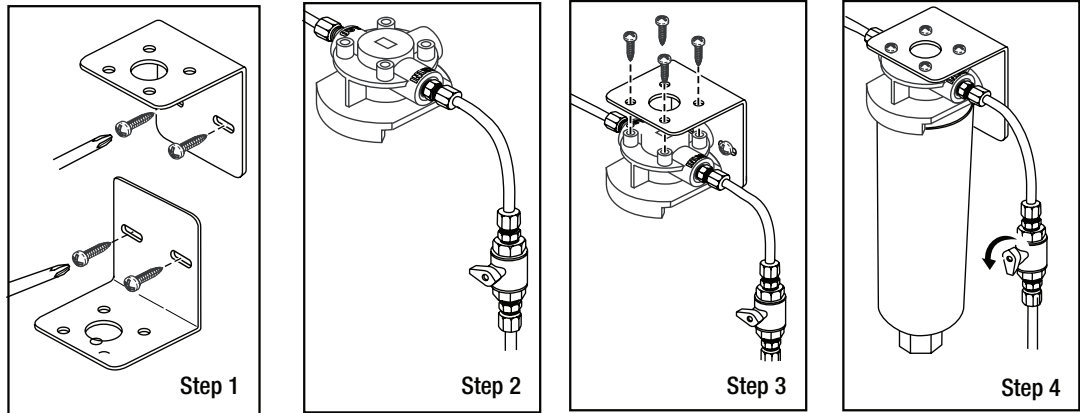
End User: Please retain for operation and future maintenance instructions.



3M™ Water Filtration Products

Procedure for Installing CS-400 Series Water Filtration Systems

Before starting, close shut-off valve on cold water line.



WARNING

To reduce the risk associated with hazardous voltage:

- Do not install near electric wiring or piping which may be in path of a drilling tool when selecting the position to mount the filter bracket.

IMPORTANT NOTES

- Note adjacent equipment which may interfere with system fastening screws.

Step 1. The Mounting Bracket may be installed with the back of the bracket in the up or down position. Screws may be used to attach the bracket to the desired surface or the industrial double-sided tape strip can be cut in half and used to mount the bracket. (Be sure that both the surface of the bracket and the mounting surface are clean. Be sure to allow at least 2" (5 cm) of clearance below the unit.)

Step 2. The filter must be installed with inlet and outlet ports as labeled. Make sure not to reverse the connections. **IMPORTANT:** ON TOP OF THE FILTER HEAD you will see the numbers 1, 2, and 3 molded into the plastic head.
Port 3 is labeled inlet.
Port 1 is labeled outlet.
Port 2 is not an option and is not threaded for fittings.
The shut off valve should be located in line somewhere between the incoming water line and the inlet fitting.

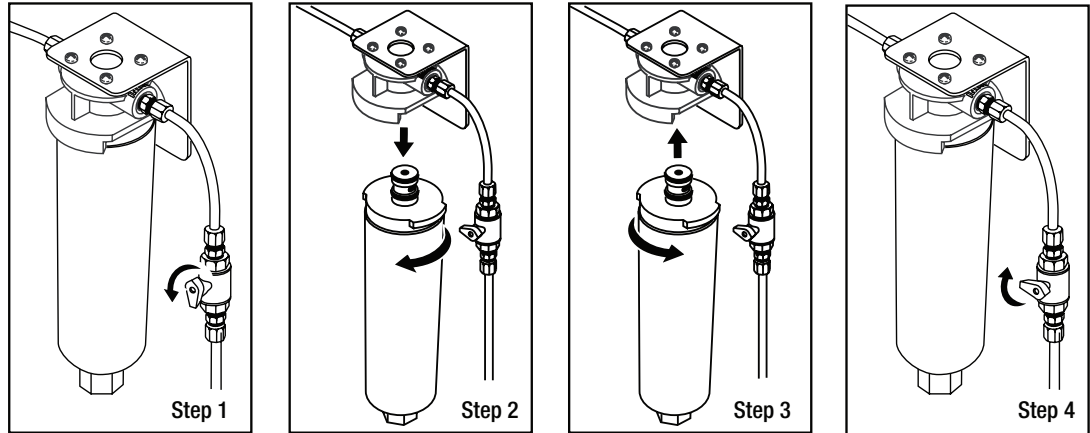
Step 3. Attach the head to the bracket with the screws provided. All four screws can be used, or two can be used to mount the bracket to the desired surface.

Step 4. Install cartridge, (see Cartridge Change instructions on next page and follow Steps 3 and 4) and make any required connections. Pressurize the system and check for leaks. Flush system in accordance with Performance Data Sheet. Water may run cloudy but will quickly clear.

3M™ Water Filtration Products

Replacement Cartridge Change Instructions

CAUTION: The disposable filter cartridge must be replaced every six months or sooner if there is a decrease in water pressure. Always have spare cartridges on hand.



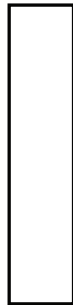
Step 1. Close shut off valves before (inlet) and after (outlet) filter head. Depressurize filter.

Step 2. Grasp head and cartridge securely, and turn used cartridge slowly to the left. If water line has not been properly depressurized, a small discharge of water may occur. Gently pull cartridge straight out and discard.

Step 3. Align tabs of new cartridge with head and insert new cartridge into head. Turn cartridge to the right until the filter stops.

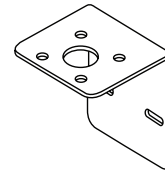
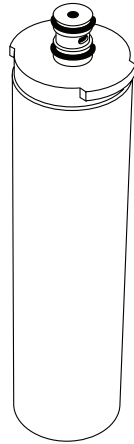
Step 4. Place the inlet shutoff valves in regular working position. Due to air and carbon fines water may initially run cloudy but will clear. Flush system in accordance with Performance Data Sheet.

You Should Have These Parts With Your Filter



Double Sided Tape

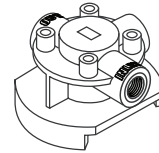
Cartridge



Mounting Bracket



Bracket Attachment Screws (4)



Head Assembly

Model No.	Connection Size	Dimensions		Max. Flow Rate	Chlorine Reduction Capacity	Water Temp.	Water Pressure	Replacement Ctg. No.	Replacement Ctg. Qty.
		Height	Width						
CS-451	1/4" NPT	9.5 in (24.1 cm)	2.5 in (6.4 cm)	0.5 gpm (1.9 lpm)	1,500 gals (5,678 L)	40-100° F (4.4-38° C)	25-125 psi (172-862 kPa)	CS-51	1
CS-452	1/4" NPT	9.5 in (24.1 cm)	2.5 in (6.4 cm)	0.5 gpm (1.9 lpm)	1,500 gals (5,678 L)	40-100° F (4.4-38° C)	25-125 psi (172-862 kPa)	CS-52	1
CS-453	1/48" NPT	9.5 in (24.1 cm)	2.5 in (6.4 cm)	0.5 gpm (1.9 lpm)	N/A	40-100° F (4.4-38° C)	25-125 psi (172-862 kPa)	CS-53	1

Limited Warranty

Seller warrants its equipment against defects in workmanship and material (excluding disposable filter cartridge(s)) for a period of 2 years from date of shipment from the factory under normal use and service and otherwise when such equipment is used in accordance with instructions furnished by Seller and for purposes disclosed in writing at the time of purchase, if any. The disposable filter cartridge is warranted from defects in material and workmanship for a period of one (1) year from the date of purchase. Any unauthorized alteration or modification of the equipment by Buyer will void this warranty. Seller's liability under this warranty shall be limited to the replacement or repair, F.O.B. point of manufacture, of any defective equipment or part which, having been returned to the factory, transportation charges prepaid, has been inspected and determined by the Seller to be defective. THIS WARRANTY IS IN LIEU OF ANY OTHER WARRANTY, EITHER EXPRESSED OR IMPLIED, AS TO DESCRIPTION, QUALITY, MERCHANTABILITY, FITNESS FOR ANY PARTICULAR PURPOSE OR USE, OR ANY OTHER MATTER. Under no circumstances shall Seller be liable to Buyer or any third party for any loss of profits or other direct or indirect costs, expenses, losses or consequential damages arising out of or as a result of any defects in or failure of its products or any part or parts thereof or arising out of or as a result of parts or components incorporated in Seller's equipment but not supplied by the Seller.



**CUNO Incorporated
a 3M Company**

400 Research Parkway
Meriden, CT 06450, USA
Toll Free: 1-888-218-CUNO
Worldwide: 203-237-5541
Fax: 203-238-8701
www.cunofoodservice.com

3M is a trademark of 3M Company.
CUNO is a trademark of 3M Company used under license.
© 2009 3M Company. All rights reserved.
INSTRCS400 0609