

QC7I SERIES WATER FILTRATION SYSTEMS INSTALLATION, OPERATION & MAINTENANCE GUIDE



INTRODUCTION

The new Pentair[®] Everpure[®] QC7I Series water filtration systems are designed to provide optimum water characteristics for fountain beverage applications. These systems can help reduce equipment maintenance, extend equipment life, and help improve the quality and consistency of your beverages. Proper system installation and routine filter changes can ensure years of trouble-free operation and performance.

NOTES

Do not discard. Give this guide to the owner/operator after installation.

- Installation must conform to all local plumbing codes and regulations.
- Do not use with water that 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 waters that may contain filterable cysts.
- Proprietary Micro-Pure II filtration media effectively inhibits the growth of bacteria on the filter media that can decrease product life.
- NSF/ANSI Standard 53 certified to reduce cysts such as Cryptosporidium and Giardia by mechanical means.
- Connect system to cold water supply only. Water temperature must not exceed 100°F (38°C).
- Do not solder plumbing connections attached to the assembly. High temperature will damage these components.
- Do not mount the system behind equipment. The unit must be easily accessible for filter replacement.
- Do not install system where it may interfere with moving equipment, carts, mops or any other item that may cause damage.
- · Not for residential use. For foodservice applications only.

- The term "bacteriostatic" indicates that the system limits the passage or growth of bacteria that may already exist in the incoming water. It does not mean that the water leaving the system is safer to drink than the water entering the system.
- The compounds certified under NSF/ANSI 401 have been deemed as 'incidental contaminants / emerging compounds'. Incidental contaminants are those compounds that have been detected in drinking water supplies at trace levels. While occurring at only trace levels, these compounds' can affect the public acceptance/ perception of drinking water guality.

WARNING: FOR CORRECT OPERATION OF THIS APPLIANCE IT IS ESSENTIAL TO OBSERVE THE MANUFACTURER'S INSTRUCTIONS.

USE OF THIS SYSTEM MAY INCREASE THE BACTERIAL CONTENT OF THE WATER UNLESS A SUPPLEMENTARY TREATMENT IS PROVIDED.

EPA Est. No. 002623-IL-002

OPERATING SPECIFICATIONS

For use on cold water only.

Pressure 10 - 125 psi, non-shock Requirements: (0.7 - 8.6 bar), non-shock Temperature: 35 -100°F (2 - 38°C) Refer to this manual for general installation, operation, and maintenance requirements.

MOUNTING AND CONNECTION CONSIDERATIONS

Give consideration to the following when selecting a suitable mounting location for the system. Filtration system configurations correspond to system model names listed below.

- Height and width dimensions.
- Inlet/outlet connection size and direction of flow.
- Operating weight (when filled with water).
- Be near a drain for flushing the system after installation and when replacing the cartridge(s).
- Allow a minimum clearance of 21/2" (6.4 cm) under the cartridge(s) to allow for filter removal and replacement.
- Additional mounting and floor space for the separate Everpure SR-X Feeder and surge/storage tank.
- If used in conjunction with the Pentair Everpure SR-X Feeder, the SR-X should be mounted after the QC7I Series filter and as near the
 equipment as possible. If possible, keep at least six (6) inches (15.2 cm) available to the left and the right of the QC7I system in the event
 poor quality water conditions require the installation of the optional Everpure E-Series prefilter.

WARNING: Do not use the MH² cartridge or the 7CB5 cartridge with the SRX.



MOUNTING AND CONNECTION CONSIDERATIONS (continued)



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INSTALLATION PRECAUTIONS

- Feed water supply pressure must not exceed 125 psi (non-shock). When pressure exceeds 85 psi, a pressure reducing valve is recommended.
- If water hammer is evident, install a water hammer arrestor before the Pentair Everpure system.

INSTALLATION PROCEDURE

IMPORTANT: Confirm with the manager, and or owner/operator that equipment to be fed by the filtration system is turned off or not in use. The water supply to equipment will be shut off during installation

NOTE: For installations in Australia and New Zealand product must be installed with a backflow prevention device in accordance with AS/NZS 3500 and AS/NZS 2845.1.

1. Locate the feed water supply shut-off valve and turn off.

NOTE: If not available, we recommend installing a full-flow ball valve to the supply line and connecting that to the Everpure system. This step will allow service to the system without shutting off the main water supply. (It will not be necessary to use this valve when replacing filters).

- 2. Use the predrilled mounting holes in the manifold bracket as a guide to mark and drill anchor holes. Mount the system securely using fasteners suitable to support the operating weight of the system.
- Connect outlet port of QC7I unit to equipment served. Always use an NSF-approved pipe dope or plumber's tape at all connections. Use a backup wrench on all fittings while connecting to avoid excessive stress on the system components.
- 4. Connect the feed water supply line from the full-flow ball valve to the inlet connection of the Everpure system. Use a minimum 3/8" water line to inlet side of QC7I Single. Use a minimum 1/2" water line for QC7I Twin, QC7I Triple, and QC7I Quad models.
- 5. Connect tubing (supplied) to flush valve located at the bottom of the system outlet fitting and route to drain.
 - NOTE: Some municipal plumbing codes and good sanitary practices require an air gap at the drain termination point.



- Do not use liquid pipe compounds for fitting connections.
- Use two (2) or three (3) wraps of PTFE thread sealant tape.
- Do not over-tighten fitting connections. Always back-up valves and fittings with a wrench to avoid excessive stress on system components.
- 6. Shut off the system inlet valve located on the inlet of the prefilter head.
- 7. Check to be sure the O-ring on the prefilter housing is sufficiently lubricated. Use a high-grade silicone lubricant, if needed. Insert the prefilter cartridge (EC110 for 10" prefilter and EC210 for 20" prefilter) into the sump. Then thread the bowl into the head by hand. Hand-tighten to snug the bowl onto the head.
- Install the primary filter cartridge(s) into the filter head(s) following the directions included with the cartridge or as shown in the Cartridge Change instructions (page 7).
- 9. Turn on inlet water to the filter system and check for leaks.
- 10. Slowly open the system inlet valve and allow water to flow through the flush valve for five (5) minutes to purge air and flush the filter media.
- 11. After flushing, close the flushing valve and check for leaks. The system is ready for operation.
- 12. Inform the manager and or owner/operator that the equipment serviced can now be turned on and checked for normal operation.

Leave this installation, operation, and maintenance manual with the establishment for future reference.

PERFORMANCE SPECIFICATIONS

NSF Listed Systems	Replacement Cartridges	Flow Rate	Capacity	
QC7I Single				QC7
QC7I Single - MC ²	MC ²	1.67 gpm (6.3 Lpm)	9,000 gal (34,068 L)	QC7I
QC7I Single - MH ²	MH ²	1.67 gpm (6.3 Lpm)	9,000 gal (34,068 L)	QC7I
QC7I Single - XC²	XC ²	1.67 gpm (6.3 Lpm)	12,000 gal (45,424 L)	QC7I
QC7I Single - 7CB5	7CB5	2.5 gpm (9.4 Lpm)	10,000 gal (37,854 L)	QC7I
QC7I Single - 7CB5-K	7CB5-K	2.5 gpm (9.4 Lpm)	10,000 gal (37,854 L)	QC7I
QC7I Single - 4FC	4FC	2.5 gpm (9.46 lpm)	15,000 gal (56,781 L)	QC7I
QC7I Single - 7FC	7FC	2.5 gpm (9.46 lpm)	25,000 gal (94,635 L)	QC7I
QC7I Single – 4FC5	4FC5	2.5 gpm (9.46 lpm)	15,000 gal (56,781 L)	QC7I
QC7I Single – 7FC5	7FC5	2.5 gpm (9.46 lpm)	25,000 gal (94,635 L)	QC7I
QC7I Single - 7CB5-S	7CB5-S	2.5 gpm (9.4 Lpm	10,000 gal (37,854 L)	QC7I
QC7I Twin				QC7I
QC7I Twin - MC ²	MC ²	3.3 gpm (12.4 Lpm)	18,000 gal (68,137 L)	QC7
QC7I Twin - MH²	MH ²	3.3 gpm (12.4 Lpm)	18,000 gal (68,137 L)	QC7I
QC7I Twin - XC ²	XC ²	3.3 gpm (12.4 Lpm)	24,000 gal (90,849 L)	QC7I
QC7I Twin - 7CB5	7CB5	5.0 gpm (18.9 Lpm)	20,000 gal (75,708 L)	QC7I
QC7I Twin - 7CB5-K	7CB5-K	5.0 gpm (18.9 Lpm)	20,000 gal (75,708 L)	QC7I
QC7I Twin - 7CB5-S	7CB5-S	5.0 gpm (18.9 Lpm)	20,000 gal (75,708 L)	QC7I
QC7I Twin - 4FC	4FC	5.0 gpm (18.92 lpm)	30,000 gal (113,562 L)	QC7I
QC7I Twin - 7FC	7FC	5.0 gpm (18.92 lpm)	50,000 gal (189,270 L)	QC7I
QC7I Twin – 4FC5	4FC5	5.0 gpm (18.92 lpm)	30,000 gal (113,562 L)	QC7I
QC7I Twin – 7FC5	7FC5	5.0 gpm (18.92 lpm)	50,000 gal (189,270 L)	QC7I
QC7I Twin - 7CB5-S	7CB5-S	5.0 gpm (18.9 Lpm)	20,000 gal (75,708 L)	QC7I

NSF Listed Systems	Replacement Cartridges	Flow Rate	Capacity				
QC7l Triple							
QC7I Triple - MC²	MC ²	5.0 gpm (18.9 Lpm)	27,000 gal (102,206 L)				
QC7I Triple - MH²	MH ²	5.0 gpm (18.9 Lpm)	27,000 gal (102,206 L)				
QC7I Triple - XC ²	XC ²	5.0 gpm (18.9 Lpm)	36,000 gal (136,274 L)				
QC7I Triple - 7CB5	7CB5	7.5 gpm (28.3 Lpm)	30,000 gal (113,562 L)				
QC7I Triple - 7CB5-K	7CB5-K	7.5 gpm (28.3 Lpm)	30,000 gal (113,562 L)				
QC7I Triple - 7CB5-S	7CB5-S	7.5 gpm (28.3 Lpm)	30,000 gal (113,562 L)				
QC7I Triple- 4FC	4FC	7.5 gpm (28.39 lpm)	45,000 gal (170,343 L)				
QC7I Triple - 7FC	7FC	7.5 gpm (28.39 lpm	75,000 gal (283,905 L)				
QC7I Triple- 4FC5	4FC5	7.5 gpm (28.39 lpm)	45,000 gal (170,343 L)				
QC7I Triple – 7FC5	7FC5	7.5 gpm (28.39 lpm)	75,000 gal (283,905 L)				
QC7l Triple - 7CB5-S	7CB5-S	7.5 gpm (28.3 Lpm)	30,000 gal (113,562 L)				
QC7I Quad							
QC7I Quad - MC ²	MC ²	6.6 gpm (24.9 Lpm)	36,000 gal (136,274 L)				
QC7I Quad - MH ²	MH ²	6.6 gpm (24.9 Lpm)	36,000 gal (136,274 L)				
QC7I Quad - XC ²	XC ²	6.6 gpm (24.9 Lpm)	48,000 gal (181,699 L)				
QC7I Quad - 7CB5	7CB5	10.0 gpm (37.8 Lpm)	40,000 gal (151,416 L)				
QC7I Quad - 7CB5-K	7CB5-K	10.0 gpm (37.8 Lpm)	40,000 gal (151,416 L)				
QC7I Quad - 7CB5-S	7CB5-S	10.0 gpm (37.8 Lpm)	40,000 gal (151,416 L)				
QC7l Quad - 4FC	4FC	10.0 gpm (37.85 lpm)	60,000 gal (227,124 L)				
QC7l Quad - 7FC	7FC	10.0 gpm (37.85 lpm)	100,000 gal (378,541 L)				
QC7I Quad - 4FC5	4FC5	10.0 gpm (37.85 lpm)	60,000 gal (227,124 L)				
QC7I Quad - 7FC5	7FC5	10.0 gpm (37.85 lpm)	100,000 gal (378,541 L)				
QC7I Quad - 7CB5-S	7CB5-S	10.0 gpm (37.8 Lpm)	40,000 gal (151,416 L)				



System Tested and Certified by NSF International against NSF/ANSI Standard 42 the reduction of:



Bacteriostatic Effects Chemical Reduction Taste & Odor Chlorine

Mechanical Filtration Nominal Particulate Class III

QC7I 4FC & 7FC systems are Tested and Certified by NSF International against NSF/ANSI Standards 42, 53, and 401 for the reduction of:

Cyst



AESTHETIC EFFECTS Bacteriostatic Effects Chemical Reduction Taste & Odor Chlorine

Mechanical Filtration Nominal Particulate Class I

STANDARD NO. 53 -HEALTH EFFECTS Mechanical Filtration Turbidity

STANDARD NO. 401-EMERGING COMPOUNDS-INCIDENTAL CONTAMINANTS Mechanical Filtration Microplastics

AESTHETIC EFFECTS

Taste & Odor Chlorine Mechanical Filtration Nominal Particulate Class I (MC², MH², XC² only)

STANDARD NO. 42 -

Bacteriostatic Effects (MC², MH², XC² only)

Chemical Reduction

System Tested and Certified by NSF International against NSF/ ANSI Standard 42, 53, and 401 for the reduction of: STANDARD NO. 53 -HEALTH EFFECTS Mechanical Filtration Asbestos

(MC², MH², XC² only) Cyst (MC², MH², XC² only)

STANDARD NO. 401 – EMERGING COMPOUNDS-INCIDENTAL CONTAMINANTS Mechanical Filtration Microplastics (MC², MH², XC² only)





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SYSTEM OPERATION

With adequate pressure, normal operation of the system is completely automatic. Dependable operation involves only monitoring of the outlet pressure, periodic filter changes and service documentation. Filter changes are necessary for optimum performance of your foodservice equipment.

Pressure Gauge Monitoring

Periodically monitor the pressure gauge on the system. When connected equipment is not using water (no water flowing through the filtration system) the pressure on the gauge indicates the static "available water pressure" supplied to the system. When connected equipment is in operation and water is flowing through the system, the outlet pressure gauge indicates the dynamic" service water pressure".

The service water pressure may become lower as sediment accumulates in the filter cartridge(s) restricting flow. If "service water pressure" is observed to be below the "available water pressure" and gets near or enters the red zone, it is an indication that the filters are becoming clogged and should be replaced. Monitoring the service water pressure can help ensure that pressure loss through the filter is not interfering with normal equipment operation.

MAINTENANCE

The only routine maintenance your Pentair Everpure system should ever require is periodic filter cartridge changes. Filter changes are necessary for optimum performance of your foodservice equipment.

Contact your Pentair Everpure dealer for replacement cartridges and system replacement parts.

FLUSHING

For maximum life, all carbon filter cartridges must be flushed for five minutes at full flow before use. FLUSH ALL CARTRIDGES AFTER EACH CARTRIDGE CHANGE.

If the new cartridges have been adequately flushed and the pressure gauge needle registers inadequate pressure; you may be

FILTER CHANGE DETERMINATION

- It is recommended that all filter cartridges be replaced every six (6) months on a regular scheduled program. All primary quick-change cartridges on multiple cartridge systems must be changed at the same time.
- The Everpure Pressure Gauge or Everguard[™] Low Pressure Alarm (LPA) provides a quick and simple means of determining when the filter cartridge(s) should be changed. Installed on the outlet port of the filter, the gauge or Everguard LPA can be used to measure both dynamic (flowing) and static (line) pressure.
- The cartridge(s) should be changed when the pressure gauge needle is in the red area while equipment is in operation, and yet the needle shows adequate line pressure between cycles.

experiencing insufficient water pressure or some restriction may exist in the inlet water line. In either case, the water pressure needs to be improved to achieve optimum filter life.

If the system is switched off for more than 48 hours, flush for at least two (2) minutes.

- Observe the needle during the next equipment on cycle. If the needle registers adequate pressure, it can be assumed that the temporary low-pressure condition was caused by a brief power failure or other incoming pressure disruption.
- When water pressure or flow to equipment becomes inadequate. This may be due to excessive sediment accumulating in the filter cartridge(s) causing flow restriction. If this occurs and the filtration system includes a prefilter, replace the prefilter cartridge first. If the water pressure and flow to equipment is not corrected, replace the primary quick-change filter cartridge(s).

CARTRIDGE REPLACEMENT

IMPORTANT: Confirm that equipment fed by the filtration system is turned off or not in use. Water supply to equipment will be shut off when replacing filter cartridges.



REPLACEMENT PARTS

Pentair Everpure filtration systems are designed, tested, and certified with exclusive Everpure filter cartridges with proven performance, size and, operating capacities. Use of replacement cartridges other than those specified will void warranties and certifications and may compromise equipment serviced.

Description	Part Number
Outlet pressure gauge	EV3114-09
Inlet pressure gauge (Quad only)	EV3114-09
Inlet Valve (single only)	EV3102-01
Inlet valve (Twin, Triple, Quad)	EV3114-07
Flush valve (QC7I Single)	EV3102-01
Flush valve (QC7I Twin, Triple, Quad)	EV3114-07
MC ² replacement cartridge 1PK	EV9612-56
XC ² replacement cartridge 1PK	EV9613-10
MH ² replacement cartridge 1PK	EV9613-21
7CB5-K replacement cartridge 1PK	EV9617-76
7CB5 replacement cartridge 1PK	EV9618-11
7CB5-S replacement cartridge 1PK	EV9618-21
4FC replacement cartridge 1PK	EV9692-21
7FC replacement cartridge 1PK	EV9692-61
4FC5 replacement cartridge 1PK	EV9693-21
7FC5 replacement cartridge 1PK	EV9693-61

For Pentair Everpure Product Warranties visit: http://pentair.com/assets/foodservice-warranty



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