



## UNITED STATES ENVIRONMENTAL PROTECTION AGENCY WASHINGTON, DC 20460

APR - 8 2008

OFFICE OF PREVENTION, PESTICIDE: AND TOXIC SUBSTANCES

Jeff Jones, Agent for Pentair Filtration, Inc. c/o Delta Analytical Corporation 12510 Prosperity Drive, Suite 160 Silver Spring, MD. 20904

Subject:

**Everpure Brominating Cartridge** 

**EPA Registration Number 73450-6** 

Application Dates: January 22, 2008 and March 10, 2008

Dear Mr. Jones:

The Agency has reviewed your submission in accordance with continuing registration under the Federal Insecticide Fungicide and Rodenticide Act (FIFRA), as amended, and determined the revised labeling and 6 technical bulletins are accepted with comments. In summary, the following change must be made:

Under **Pesticide Disposal** add "Nonrefillable container. Do not reuse or refill this container."

A copy of your stamped label is enclosed. Please submit a revised finished label for our files.

Should you have any questions or comments concerning this letter, please contact Tom Luminello at (703) 308-8075.

Sincerely,

Emily H. Mitchell
Product Manager 32

Regulatory Management Branch II Antimicrobials Division (7510 P)

**Enclosure** 



### **BROMINATING CARTRIDGE**

255340-401 (1-pack) 255340-406 (6-pack) (Replaces P/N EV954006) 255340-480 (80-pack) 255340-416 (160-pack) (Replaces P/N EV954001)

For use in EVERPURE® Brominating Feeders in the Treatment of Potable Water Solely for use aboard ship or in oil and gas drilling and production platforms by trained personnel.

### NOT FOR HOME USE

ACTIVE INGREDIENT:	
Bromine*	30.0%
Other Ingredients:	70.0%
TOTAL	100.0%
* from Trimethylbenzylammonium resin polybromide form	

ACCEPTED
with COMMENTS
In EPA Letter Dated:

# KEEP OUT OF REACH OF CHILDREN WARNING

EPA Reg. No.: 73450-6 2008 EPA Est. No.: 73450-WI-1 Net Weight: 23/4 lbs. (1.25 kg) Net Volume: 60 cu in (983 mL)

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### PRECAUTIONARY STATEMENTS

HAZARDS TO HUMANS AND DOMESTIC ANIMALS

734 50-6 WARNING

Irritating vapors may be harmful if swallowed or inhaled. Causes eye irritation or skin redness. Do not get in eyes, on skin or on clothing. Avoid breathing vapors, especially when opening container. Wash thoroughly with soap and water after handling. Remove contaminated clothing and wash before reuse.

•	FIRST Al trol center or doctor for treatment advice. Have the product going for treatment.	_	pel with you when calling a poison control
IF SWALLOWED	<ul> <li>Have person sip a glass of water if able to swallow.</li> <li>Do not induce vomiting unless told to do so by the poison control center or doctor.</li> <li>Do not give anything by mouth to an unconscious person.</li> </ul>	IF IN EYES	<ul> <li>Hold eye open and rinse slowly and gently with water for 15-20 minutes.</li> <li>Remove contact lenses, if present after 5 minutes, then continue rinsing eye.</li> </ul>
IF INHALED	Move person to fresh air.     If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth, if possible.	IF ON SKIN OR CLOTHING	Take off contaminated clothing.  Rinse skin immediately with plenty of water for 15-20 minutes.

### PHYSICAL OR CHEMICAL HAZARDS:

Do not use or store near heat or open flame. Do not open package in confined area. Ingredients are permanently sealed inside cartridge. Do not puncture or attempt to open cartridge. If fumes are noticed, ventilate area.

### **DIRECTIONS FOR USE**

It is in violation of federal law to use this product in a manner inconsistent with its labeling.

Treated water must be maintained at 0.2 to 1.0 ppm available Bromine as determined with test kit provided with system. For operating instructions and further direction, use technical bulletin provided with the Brominating Feeders.

Manufactured By:
Pentair Filtration, Inc.
502 Indiana Avenue • P.O. Box 1047 • Sheboygan, WI 53082-1047
Technical Support: Toll Free 1-866-300-5186 • (920) 451-9301
productsupport@everpure.com • www.everpure.com

### STORAGE AND DISPOSAL

Do not contaminate water, food, feed by storage or disposal. **PESTICIDE STORAGE:** Store in a cool, dry place, above 45° F. Store in original container out of reach of skilldren, preferably in a locked storage area.

PESTICIDE DISPOSAL: Expended cartridge should contain only inert resin, void of bromine and can be discarded safely in a routine manner on site or at an approved waste disposal facility. Do not incinerate expended container

Nonrefillable container. Do not reuse o refill this container.

> ©2008 Pentair Filtration, Inc. Manufactured in USA Patents: USA 4594361, Canada 1231615, Great Britain 2167761 Other foreign patents pending

# OPERATING INSTRUCTIONS Everpure® Recirculating Bromine Feeder Model SSFM-100BC Series (Type I, Class 2)

In cases where the initial bromine treatment level may be lower than the recommended target level of 0.2 to 1.0 ppm, recirculation is required. In these instances, it is recommended that the final treated water should not be put into service until the target bromine level is maintained to between 0.2 and 1.0 ppm.

**Note:** The "initial bromine treatment level" is that level of bromine initially added to the water when determining the halogen (bromine) demand. Depending on the source water, it may be necessary to initially add up to 2.0 to 2.7 ppm to satisfy the halogen demand. Follow the instructions below or in the system manual (Section 2) to verify that halogen (bromine) demand free water is produced. Test the final treated water (after 30 minutes contact time) from a faucet nearest to the tank to assure that the bromine level does not exceed 1 ppm and also at a faucet distant from the tank to assure that a detectable level of bromine is present.

### **System Operation**

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- 1. Select tank to be tested using tank selector valve (1).
- 2. If installed, energize priming pump and flood suction side of recirculating pump.
- 3. Start recirculating pump and allow to operate for 5 minutes.
- 4. Lift test tap valve (2) handle and allow water to run for about one minute before taking water sample.
- 5. Test for bromine residual (see Testing for Bromine Residuals below).
- 6. If testing a newly filled tank, assure bromine residual is at least 0.2 to 2.0 ppm depending on requirements. If testing a previously qualified tank, ensure a trace amount of bromine residual is available in the tank before placing the tank into service. Target concentration of bromine (after 30 minutes contact time) at a faucet nearest the tank is 1 ppm and at a faucet distant from the tank is a "detectable level" 0.1-0.2 ppm.
- 7. If measured bromine residual is below limits in step 6, tank must be treated (see Tank Treatment below).

### **Tank Treatment**

- 1. Note water temperature from water temperature gauge (3).
- 2. Determine volume (gallons) of water in tank.
- Select proper temperature line on Bromine Feed Chart. Using tank volume, find feed time. For tanks over 20,000 gallons, refer to Bromine Feed Chart in the technical manual.

### Example

WATER TEMPERATURE = 80°F TANK VOLUME = 20,000 GALLONS FEED TIME (FROM CHART) = 125 MINUTES

- 4. Set feed timer (4) to proper value as selected from chart. Press **FEEDER ON** push-button switch (5). Each tank treatment cycle raises the bromine residual a maximum of 0.5 ppm.
- 5. Repeat bromine residual test 30 minutes after feed timer stops. If residual is at least 0.2 ppm (non-contaminated seawater intake) or 2.0 ppm (contaminated seawater intake), tank can be placed into service. Target concentration of bromine (after 30 minutes contact time) at a faucet nearest the tank is 1 ppm and at a faucet distant from the tank is a "detectable level" 0.1-0.2 ppm.
- 6. If bromine residual is less than limit in step 5, repeat steps 3 thru 5 above.
  - Note: If bromine residual is less than limits in step 5, bromine feeder cartridge in feeder shell (6) may be exhausted. Cartridge change indicator (7) will light when bromine feeder cartridge requires replacement (every six hours of feed time). See **Cartridge Change** below or on the control panel door.
- 7. Shut off recirculating pump and priming pump if installed.

### Cartridge Change

- 1. Shut off recirculating pump and priming pump if installed.
- 2. Lift test tap valve (2) handle to allow feeder assembly to drain.
- 3. Loosen T-nut, remove V-band assembly (8) and feeder top (9). Do not damage coating.

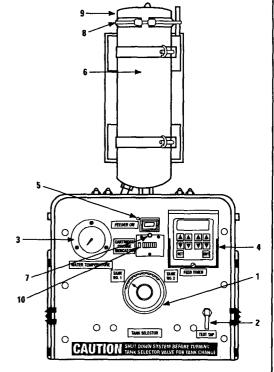
### **A WARNING**

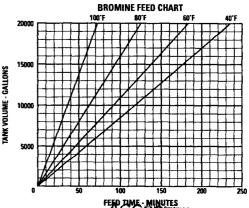
### Drainage is slightly corrosive. Wash off skin and wipe up spillage.

- 4. Remove bromine feeder cartridge by unscrewing counterclockwise and replace with a new bromine feeder cartridge (screw in clockwise finger tight). Drain old cartridge and place in shipping tube. Dispose of cartridge in accordance with instructions for plastic material disposal. DO NOT INCINERATE.
- 5. Use new gasket provided with new bromine feeder cartridge. Be sure gasket is properly seated on feeder shell lip.
- 6. Reinstell feeder top (9) and secure V-band assembly (8). Tighten T-nut firmly.
- 7. Close test tap valve (2)
- Reset cartridge change indicator by pressing indicator push-button (10) to 6 hour setting. System is now ready for operation.

### **Testing for Bromine Residuals**

Use a bromine analyzer/test kit to determine the bromine content of the water. Directions for use are provided with the instructions supplied with the bromine analyzer/test kit.





With COMMENTS to EPA Letter Dated:

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CV3057-55 SI 146066 MR08

# OPERATING INSTRUCTIONS Everpure® Recirculating Bromine Feeder Model SSFM-100CC Series (Type I, Class 3)

In cases where the initial bromine treatment level may be lower than the recommended target level of 0.2 to 1.0 ppm, recirculation is required. In these instances, it is recommended that the final treated water should not be put into service until the target bromine level is maintained to between 0.2 and 1.0 ppm.

**Note:** The "initial bromine treatment level" is that level of bromine initially added to the water when determining the halogen (bromine) demand. Depending on the source water, it may be necessary to initially add up to 2.0 to 2.7 ppm to satisfy the halogen demand. Follow the instructions below or in the system manual (Section 2) to verify that halogen (bromine) demand free water is produced. Test the final treated water (after 30 minutes contact time) from a faucet nearest to the tank to assure that the bromine level does not exceed 1 ppm and also at a faucet distant from the tank to assure that a detectable level of bromine is present.

### **System Operation**

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- 1. Select tank to be tested using tank selector valve (1).
- 2. If installed, energize priming pump and flood suction side of recirculating pump.
- 3. Start recirculating pump and allow to operate for 5 minutes.
- 4. Lift test tap valve (2) handle and allow water to run for about one minute before taking water sample.
- 5. Test for bromine residual (see Testing for Bromine Residuals below).
- 6. If testing a newly filled tank, assure bromine residual is at least 0.2 to 2.0 ppm depending on requirements. If testing a previously qualified tank, ensure a trace amount of bromine residual is available in the tank before placing the tank into service. Target concentration of bromine (after 30 minutes contact time) at a faucet nearest the tank is 1 ppm and at a faucet distant from the tank is a "detectable level" 0.1-0.2 ppm.
- 7. If measured bromine residual is below limits in step 6, tank must be treated (see Tank Treatment below).

### **Tank Treatment**

- 1. Note water temperature from water temperature gauge (3).
- 2. Determine volume (gallons) of water in tank.
- Select proper temperature line on Bromine Feed Chart. Using tank volume, find feed time. For tanks over 20,000 gallons, refer to Bromine Feed Chart in the technical manual or on the control panel door.

### Example

WATER TEMPERATURE = 80°F
TANK VOLUME = 20,000 GALLONS
FEED TIME (FROM CHART) = 125 MINUTES

- Set feed timer (4) to proper value as selected from chart. Press feeder on push-button switch (5). Each tank treatment cycle raises the bromine residual a maximum of 0.5 ppm.
- 5. Repeat bromine residual test 30 minutes after feed timer stops. If residual is at least 0.2 ppm (non-contaminated seawater intake) or 2.0 ppm (contaminated seawater intake), tank can be placed into service. Target concentration of bromine (after 30 minutes contact time) at a faucet nearest the tank is 1 ppm and at a faucet distant from the tank is a "detectable level" 0.1-0.2 ppm.
- 6. If bromine residual is less than limit in step 5, repeat steps 3 thru 5 above.
  - Note: If bromine residual is less than limits in step 5, bromine feeder cartridge in feeder shell (6) may be exhausted. Cartridge change indicator (7) will light when bromine feeder cartridge requires replacement (every six hours of feed time). See **Cartridge Change** below.
- 7. Shut off recirculating pump and priming pump if installed.

### Cartridge Change

- 1. Shut off recirculating pump and priming pump if installed.
- 2. While depressing pressure relief boot (10), lift test tap valve (2) handle to allow feeder assembly to drain.
- 3. Loosen T-nut, remove V-band assembly (8) and feeder top (9). Do not damage coating.

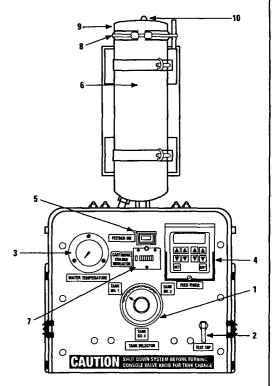
### **A WARNING**

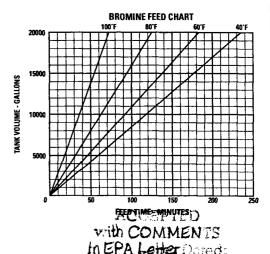
### Drainage is slightly corrosive. Wash off skin and wipe up spillage.

- 4. Remove bromine feeder cartridge by unscrewing counterclockwise and replace with a new bromine feeder cartridge (screw in clockwise finger tight). Drain old cartridge and place in shipping tube. Dispose of cartridge in accordance with instructions for plastic material disposal. DO NOT INCINERATE.
- 5. Use new gasket provided with new bromine feeder cartridge. Be sure gasket is properly seated on feeder shell lip.
- 6. Reinstall feeder top (9) and secure V-band assembly (8). Tighten T-nut firmly.
- 7. Close test tap valve (2).
- Reset (press indicator push-button) cartridge change indicator (7) to 6 hour setting. System is now ready for operation.

### **Testing for Bromine Residuals**

Use a bromine analyzer/test kit to determine the bromine content of the water. Directions for use are provided with the instructions supplied with the bromine analyzer/test kit.





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# OPERATING INSTRUCTIONS Everpure® Recirculating Bromine Feeder Model SSFM-100DC Series (Type I, Class 4)

In cases where the initial bromine treatment level may be lower than the recommended target level of 0.2 to 1.0 ppm, recirculation is required. In these instances, it is recommended that the final treated water should not be put into service until the target bromine level is maintained to between 0.2 and 1.0 ppm.

**Note:** The "initial bromine treatment level" is that level of bromine initially added to the water when determining the halogen (bromine) demand. Depending on the source water, it may be necessary to initially add up to 2.0 to 2.7 ppm to satisfy the halogen demand. Follow the instructions below or in the system manual (Section 2) to verify that halogen (bromine) demand free water is produced. Test the final treated water (after 30 minutes contact time) from a faucet nearest to the tank to assure that the bromine level does not exceed 1 ppm and also at a faucet distant from the tank to assure that a detectable level of bromine is present.

### **System Operation**

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- 1. Select tank to be tested using tank selector valve (1).
- 2. If installed, energize priming pump and flood suction side of recirculating pump.
- 3. Start recirculating pump and allow to operate for 5 minutes.
- 4. Lift test tap valve (2) handle and allow water to run for about one minute before taking water sample.
- 5. Test for bromine residual (see Testing for Bromine Residuals below).
- 6. If testing a newly filled tank, assure bromine residual is at least 0.2 to 2.0 ppm depending on requirements. If testing a previously qualified tank, ensure a trace amount of bromine residual is available in the tank before placing the tank into service. Target concentration of bromine (after 30 minutes contact time) at a faucet nearest the tank is 1 ppm and at a faucet distant from the tank is a "detectable level" 0.1-0.2 ppm.
- 7. If measured bromine residual is below limits in step 6, tank must be treated (see **Tank Treatment** below).

#### **Tank Treatment**

- 1. Note water temperature from water temperature gauge (3).
- 2. Determine volume (gallons) of water in tank.
- Select proper temperature line on Bromine Feed Chart. Using tank volume, find feed time. For tanks over 20,000 gallons, refer to Bromine Feed Chart in the technical manual or on the control panel door.

### Example

WATER TEMPERATURE = 80°F TANK VOLUME = 20,000 GALLONS FEED TIME (FROM CHART) = 125 MINUTES

- Set feed timer (4) to proper value as selected from chart. Press feeder on push-button switch (5). Each tank treatment cycle raises the bromine residual a maximum of 0.5 ppm.
- 5. Repeat bromine residual test 30 minutes after feed timer stops. If residual is at least 0.2 ppm (non-contaminated seawater intake) or 2.0 ppm (contaminated seawater intake), tank can be placed into service. Target concentration of bromine (after 30 minutes contact time) at a faucet nearest the tank is 1 ppm and at a faucet distant from the tank is a "detectable level" 0.1-0.2 ppm.
- 6. If bromine residual is less than limit in step 5, repeat steps 3 thru 5 above.

Note: If bromine residual is less than limits in step 5, bromine feeder cartridge in feeder shell (6) may be exhausted. Cartridge change indicator (7) will light when bromine feeder cartridge requires replacement (every six hours of feed time). See **Cartridge Change** below.

7. Shut off recirculating pump and priming pump if installed.

### **Cartridge Change**

- 1. Shut off recirculating pump and priming pump if installed.
- 2. Lift test tap valve (2) handle to allow feeder assembly to drain.
- 3. Loosen T-nut, remove V-band assembly (8) and feeder top (9). Do not damage coating.

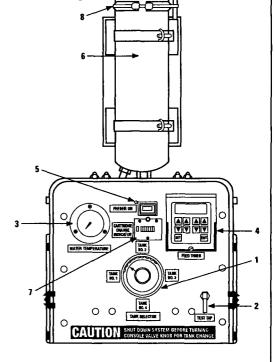
### **A WARNING**

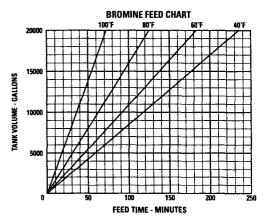
### Drainage is slightly corrosive. Wash off skin and wipe up spillage.

- 4. Remove bromine feeder cartridge by unscrewing counterclockwise and replace with a new bromine feeder cartridge (screw in clockwise finger tight). Drain old cartridge and place in shipping tube. Dispose of cartridge in accordance with instructions for plastic material disposal. DO NOT INCINERATE.
- 5. Use new gasket provided with new bromine feeder cartridge. Be sure gasket is properly seated on feeder shell lip.
- 6. Reinstall feeder top (9) and secure V-band assembly (8). Tighten T-nut firmly.
- 7. Close test tap valve (2).
- Reset (press indicator push-button) cartridge change indicator (7) to 6 hour setting. System is now ready for operation.

### **Testing for Bromine Residuals**

Use a bromine analyzer/test kit to determine the bromine content of the water. Directions for use are provided with the instructions supplied with the bromine analyzer/test kit.





ACCEPTED
with COMMENTS
to EPA Letter Dated:

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**OPERATING INSTRUCTIONS** 

Everpure® Dual Feed
Proportioning Bromine Feeder
Model SSFM-50AC Series (Type II, Class 1)

Non-Contaminated Seawater or Known Fresh Water Quality Source/Input

(Storage tank filled directly from potable fresh water or municipally treated source) LOW BROMINE FEED

• Turn dual feed valve (3) to LOW position.

Contaminated Seawater or Unknown or Potentially Contaminated Water Source/Input

(Storage tank filled directly from a secondary carrier, tanker or other fresh water source of unknown quality) HIGH BROMINE FEED

• Turn dual feed valve (3) to HIGH position.

In cases where the initial bromine treatment level may be lower than the recommended target level of 0.2 to 1.0 ppm, increased feed levels are required. In these instances, it is recommended that the final treated water should not be put into service until the target bromine level is maintained to between 0.2 and 1.0 ppm.

Note: The "initial bromine treatment level" is that level of bromine initially added to the water when determining the halogen (bromine) demand. Depending on the source water, it may be necessary to initially add up to 2.0 to 2.7 ppm to satisfy the halogen demand. Follow the instructions below or in the system manual (Section 2) to verify that halogen (bromine) demand free water is produced. Test the final treated water (after 30 minutes contact time) from a faucet nearest to the tank to assure that the bromine level does not exceed 1 ppm and also at a faucet distant from the tank to assure that a detectable level of bromine is present.

### **System Operation**

Flow from the water maker enters bypass header (1) on its way to the potable water tank. A controlled split flow occurs at point (2) through the dual feed valve (3) and water meter (4) entering feeder at point (5). Water meter (4) provides a numerical indication of the quantity of the water that has passed through the bromine feeder cartridge. Brominated water exits the feeder at point (6) and re-enters bypass header (1) at point (7) joining the main water stream. Water samples may be drawn from the test tap valve (8) to test for the presence of bromine. A bypass loop (buyer supplied) circumvents bypass header (1) during bromine feeder cartridge change out or system maintenance.

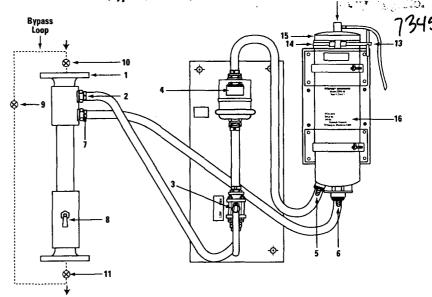
### **Cartridge Change**

Note: Cartridge replacement is indicated by a numerical increase of 10 units (black digits on water meter register) over the previous reading noted when the current cartridge was installed. Enter this new number at the bottom of these operating instructions as a reminder of when the next cartridge change is required.

- Bypass the proportioning bromine feeder by means of the bypass loop; open the bypass valve (9) and close valves (10 and 11).
- 2. Lift test tap valve (8) handle to allow feeder assembly to drain.
- 3. Loosen T-nut (13), remove V-band assembly (14) and feeder top (15). Do not damage coating.



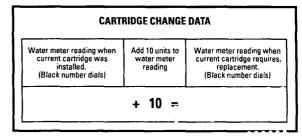
Drainage is slightly corrosive. Wash off skin and wipe up spillage.



- 4. Remove bromine feeder cartridge by unscrewing counterclockwise and replace with new bromine feeder cartridge (screw in clockwise finger tight). Drain old cartridge and place in shipping tube. Dispose of cartridge in accordance with instructions for plastic material disposal. DO NOT INCINERATE.
- Use new gasket provided with new bromine feeder cartridge. Be sure gasket is properly seated on feeder shell lip.
- Reinstall feeder top (15) and secure with V-band assembly (14). Tighten T-nut (13) firmly.
- 7. Close test tap valve (8).
- 8. Open upstream valve (10), open downstream valve (11) and close bypass valve (9).
- Depress air relief button (12) until a steady stream of water (no bubbles) is discharged from tubing connected to feeder top (15); then release air relief button.

### **Testing for Bromine Content**

Use a bromine analyzer/test kit to determine the bromine content of the final treated water. Directions for use are provided with the instructions supplied with the bromine analyzer/test kit. Target concentration of bromine (after 30 minutes contact time) at a faucet nearest the tank is 1 ppm and at a faucet distant from the tank is a "detectable level" - 0.1 - 0.2 ppm.





Pentair Filtration Sheboygun, Wisconsin U.S.A.

# OPERATING INSTRUCTIONS Everpure® Dual Feed Proportioning Bromine Feeder Model SSFM-50BC Series (Type II, Class 2)

Non-Contaminated Seawater or Known Fresh Water Quality Source/Input

(Storage tank filled directly from potable fresh water or municipally treated source) LOW BROMINE FEED

. Turn dual feed valve (3) to LOW position.

### Contaminated Seawater or Unknown or Potentially Contaminated Water Source/Input

(Storage tank filled directly from a secondary carrier, tanker or other fresh water source of unknown quality) HIGH BROMINE FEED

• Turn dual feed valve (3) to HIGH position.

In cases where the initial bromine treatment level may be lower than the recommended target level of 0.2 to 1.0 ppm, increased feed levels are required. In these instances, it is recommended that the final treated water should not be put into service until the target bromine level is maintained to between 0.2 and 1.0 ppm.

Note: The "initial bromine treatment level" is that level of bromine initially added to the water when determining the halogen (bromine) demand. Depending on the source water, it may be necessary to initially add up to 2.0 to 2.7 ppm to satisfy the halogen demand. Follow the instructions below or in the system manual (Section 2) to verify that halogen (bromine) demand free water is produced. Test the final treated water (after 30 minutes contact time) from a faucet nearest to the tank to assure that the bromine level does not exceed 1 ppm and also at a faucet distant from the tank to assure that a detectable level of bromine is present.

### **System Operation**

Flow from the water maker enters bypass header (1) on its way to the potable water tank. A controlled split flow occurs at point (2) through the dual feed valve (3) and water meter (4) entering feeder at point (5). Water meter (4) provides a numerical indication of the quantity of the water that has passed through the bromine feeder cartridge. Brominated water exits the feeder at point (6) and re-enters bypass header (1) at point (7) joining the main water stream. Water samples may be drawn from the test tap valve (8) to test for the presence of bromine. A bypass loop (buyer supplied) circumvents bypass header (1) during bromine feeder cartridge change out or system maintenance.

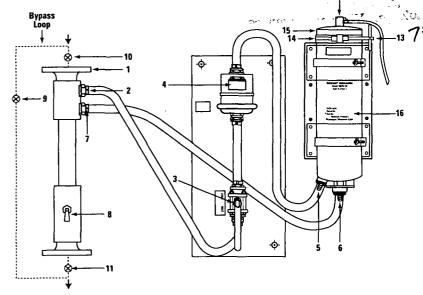
### **Cartridge Change**

Note: Cartridge replacement is indicated by a numerical increase of 10 units (black digits on water meter register) over the previous reading noted when the current cartridge was installed. Enter this new number at the bottom of these operating instructions as a reminder of when the next cartridge change is required.

- Bypass the proportioning bromine feeder by means of the bypass loop; open the bypass valve (9) and close valves (10 and 11).
- 2. Lift test tap valve (8) handle to allow feeder assembly to drain.
- 3. Loosen T-nut (13), remove V-band assembly (14) and feeder top (15). Do not damage coating.

### **A WARNING**

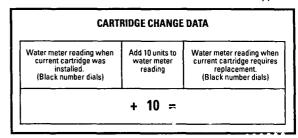
Drainage is slightly corrosive. Wash off skin and wipe up spillage.



- 4. Remove bromine feeder cartridge by unscrewing counterclockwise and replace with new bromine feeder cartridge (screw in clockwise finger tight). Drain old cartridge and place in shipping tube. Dispose of cartridge in accordance with instructions for plastic material disposal. DO NOT INCINERATE.
- 5. Use new gasket provided with new bromine feeder cartridge. Be sure gasket is properly seated on feeder shell lip.
- 6. Reinstall feeder top (15) and secure with V-band assembly (14). Tighten T-nut (13) firmly.
- 7. Close test tap valve (8).
- 8. Open upstream valve (10), open downstream valve (11) and close bypass valve (9).
- Depress air relief button (12) until a steady stream of water (no bubbles) is discharged from tubing connected to feeder top (15); then release air relief button.

### **Testing for Bromine Content**

Use a bromine analyzer/test kit to determine the bromine content of the final treated water. Directions for use are provided with the instructions supplied with the bromine analyzer/test kit. Target concentration of bromine (after 30 minutes contact time) at a faucet nearest the tank is 1 ppm and at a faucet distant from the tank is a "detectable level" - 0.1 - 0.2 ppm.





Pentair Filtration Sheboygan, Wisconsin U.S.A.

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OPERATING INSTRUCTIONS
Everpure® Dual Feed

Proportioning Bromine Feeder
Model SSFM-50CC Series (Type II, Class 3)

AFR - 8 2008

Non-Contaminated Seawater or Known Fresh Water Quality Source/Input

(Storage tank filled directly from potable fresh water or municipally treated source) LOW BROMINE FEED

• Turn dual feed valve (3) to LOW position.

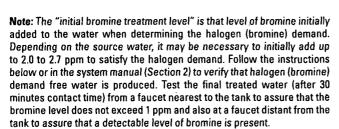
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Contaminated Seawater or Unknown or Potentially Contaminated Water Source/Input

(Storage tank filled directly from a secondary carrier, tanker or other fresh water source of unknown quality) HIGH BROMINE FEED

• Turn dual feed valve (3) to HIGH position.

In cases where the initial bromine treatment level may be lower than the recommended target level of 0.2 to 1.0 ppm, increased feed levels are required. In these instances, it is recommended that the final treated water should not be put into service until the target bromine level is maintained to between 0.2 and 1.0 ppm.



### System Operation

Flow from the water maker enters bypass header (1) on its way to the potable water tank. A controlled split flow occurs at point (2) through the dual feed valve (3) and water meter (4) entering feeder at point (5). Water meter (4) provides a numerical indication of the quantity of the water that has passed through the bromine feeder cartridge. Brominated water exits the feeder at point (6) and re-enters bypass header (1) at point (7) joining the main water stream. Water samples may be drawn from the test tap valve (8) to test for the presence of bromine. A bypass loop (buyer supplied) circumvents bypass header (1) during bromine feeder cartridge change out or system maintenance.

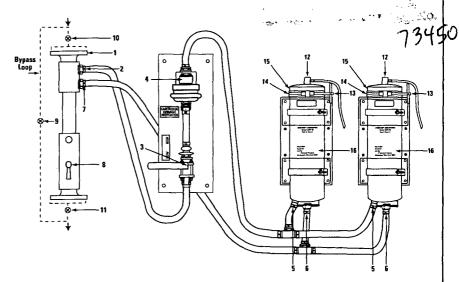
### **Cartridge Change**

Note: Cartridge replacement is indicated by a numerical increase of 10 units (black digits on water meter register) over the previous reading noted when the current cartridge was installed. Enter this new number at the bottom of these operating instructions as a reminder of when the next cartridge change is required.

- 1. Bypass the proportioning bromine feeder by means of the bypass loop; open the bypass valve (9) and close valves (10 and 11).
- 2. Lift test tap valve (8) handle to allow feeder assembly to drain.
- 3. Loosen T-nut (13), remove V-band assembly (14) and feeder top (15). Do not damage coating.

### **A WARNING**

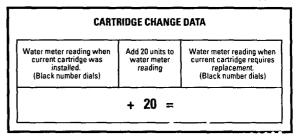
Drainage is slightly corrosive. Wash off skin and wipe up spillage.



- 4. Remove bromine feeder cartridge by unscrewing counterclockwise and replace with new bromine feeder cartridge (screw in clockwise finger tight). Drain old cartridge and place in shipping tube. Dispose of cartridge in accordance with instructions for plastic material disposal. DO NOT INCINERATE.
- Use new gasket provided with new bromine feeder cartridge. Be sure gasket is properly seated on feeder shell lip.
- Reinstall feeder top (15) and secure with V-band assembly (14). Tighten T-nut (13) firmly.
- 7. Close test tap valve (8).
- 8. Open upstream valve (10), open downstream valve (11) and close bypass valve (9).
- Depress air relief button (12) until a steady stream of water (no bubbles) is discharged from tubing connected to feeder top (15); then release air relief button.

### **Testing for Bromine Content**

Use a bromine analyzer/test kit to determine the bromine content of the final treated water. Directions for use are provided with the instructions supplied with the bromine analyzer/test kit. Target concentration of bromine (after 30 minutes contact time) at a faucet nearest the tank is 1 ppm and at a faucet distant from the tank is a "detectable level" - 0.1 - 0.2 ppm.





Pentair Filtration Sheboygun, Wisconsin U.S.A.