

Bromine Feeder Operations & Maintenance Manual



Record Your Model, Serial Number and Other Information on the back of this document.

Manufacturing: Bypass & Filter Feeders, Glycol Feed Packages, Separators & Separator Systems, Tanks, Tank Stands, Chemical Batch Mixers, Corrosion Coupon Racks, Packaged Feed Systems and Custom Systems

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*** WARNING - BEFORE YOU GET STARTED ***

- 1) All fasteners & fittings should be inspected and secured before operation as they may be loosened in transit
- 2) Personnel safety practices should apply at all times
- 3) Safety glasses or face shields and gloves should be worn
- 4) Close isolation valve and release pressure before servicing any components on the system
- 5) All liquids in system should be drained before servicing
- **1.0 INTRODUCTION** Thank you for choosing **General Treatment Products Bromine Feeders**. In this document we explain the basics for locating, installing, adjusting and operating bypass/ filter and bromine feeders. For further information, please visit www.gtpcompany.com or contact us for assistance.
- **2.0 WARRANTY General Treatment Products Bromine Feeder** are guaranteed for one year from date of shipment against manufacturing defects in material and workmanship that develop in the service for which they are designed. We will repair or replace a defective part of this system when returned to our factory with freight prepaid; providing that the part is found to be defective upon inspection. We assume no liability for labor and/or other expenses in making repairs or adjustments.
- **3.0 UNPACKING Upon receipt of order, inspect package thoroughly.** In the event there was damage incurred in transit you must notify the freight company within 3-5 days of receipt of order. Once feeder is inspected for damage and received in good condition, store indoors until installing.

3.1 ORDER VERIFICATION In order to verify receipt of correct product, use the following table and model number to identify the contents.

Brom	ine Mode	l Numbering		
BR	20	-HP/VPBR		
			Options	
			-HP	"HP" style, bolted closure (100PSI 85F)
			-VPBR	Valve Package for flat bottom feeders
			-ARP	1/4" PVC air release package
			-FCXXP	PVC Flow Control Valve (XX = Flow Rate GPM)
			-FI10	Flow Indicator, 0-10 GPM
			-TS80M	80 Mesh Polypropylene T-Strainer
			Capacity	
			20	20# Feeder Body with Filters, Union style lids
			40	40# Feeder Body with Filters, Union style lids
			60	60# Feeder Body with Filters, Union style lids
		80	80# Feeder Body with Filters, Union style lids	
			Base Model	
			BR	Bromine Feeder (70PSI 85F)

4.0 LOCATION AND ENVIROMENT Although there are no power requirements, bromine feeders should not be exposed to direct elements. In the case there is no dry location that is convenient to install the bromine feeder. A shelter, awning or shed should be installed to extend product life and validate warranty.

- **5.0 INSTALLATION** Once location is decided on, bromine feeder needs to be securely mounted. Be sure that feeders are bolted / strapped to secure surface and comply with local building codes. In accordance, outlet piping should be supported within 12 inches of feeder. System vibrations should be minimal.
- **5.1 CONNECTING TO THE SYSTEM Bromine Feeder flow rate (In GPM) shall not exceed volume of feeder (In Gallons).** Flow rates in excess of feeder volume, (one gallon feeder flow rate should be 1GPM) dramatically reduces feeder life. Flow control valves should be installed on inlet side of feeder. All GTP bromine feeders' pressure and temperature limitations are designated on product label. Be sure the feeder meets or exceeds your systems requirements. GTP suggests the installation of air release valve, if not already supplied.
- **5.2 VALVE PACKAGE AND FLOW DIRECTION** GTP Bromine Feeders are supplied with inlet and outlet labels. If your feeder does not have labels, please contact factory for assistance. Since the bromine feeder usually has concentrated bromine on the discharge to the system. Most plumbing and plumbing accessories are better served to be on the inlet side of the vessel, such as valves, flow indicators and flow controls.

Assembly and installation diagrams are available, visit us at www.qtpcompany.com or contact the factory for assistance.

5.3a LID REMOVAL/INSTALLATION (Bromine Feeder BR15 & BR25)

- 1) Isolate bromine feeder and relieve pressure before servicing. **DO NOT USE LID TO RELIEVE PRESSURE!**
- 2) Unscrew lid and inspect O-ring for wear and proper alignment in groove on bottom of feeder lid.
- 3) Inspect sealing edge of bromine body, be sure that it is free from defects. A smooth surface will ensure lid seal.
- 4) Screw lid down and turn until tight. Bromine lid seals at O-ring not at the threads. Do Not Over Tighten!
- 5) Do not use Teflon tape or plumber putty on feeder neck threads. This will cause thread damage.

5.3b LID REMOVAL/INSTALLATION (Bromine Feeder BR20, BR40, BR60 & BR80)

- 1) Isolate bromine feeder and relieve pressure before servicing. DO NOT USE LID TO RELIEVE PRESSURE!
- 2) Unscrew lid union with large strap wrench. In some cases, the bromine feeder lid may be hard to remove as residual bromine dries on the plastic to plastic threads. Gentle tapping with soft rubber mallet helps breaks the threads free.
- 3) Bromine feeder O-ring is secured to the domed lid, be careful not to lose the O-ring when removing lid. Inspect sealing surface and O-ring for debris or damage.
- 4) Do not use Teflon tape or plumbers' putty on union threads. This will cause thread damage.

5.3c LID REMOVAL/INSTALLATION (Bromine Feeders BR20-HP, BR40-HP, BR60-HP & BR80-HP)

- 1) Isolate bromine feeder and relieve pressure before servicing. DO NOT USE LID TO RELIEVE PRESSURE!
- 2) Loosen lid eye-bolt style fasteners in a crisscross order. Moving from opposing sides of the vessel. This is to make sure the lid stays flat and avoids warping.
- 3) Bromine feeder O-ring is secured to the under side of the domed lid, be careful not to lose the O-ring when removing the lid.
- 4) Inspect the sealing surface and O-ring for debris or damage.

6.0 PRESSURE AND TEMPERATURE LIMITATIONS: Bromine Feeders maximum operating perimeters are 100PSI @ 85F. Some optional fittings may change limitations, contact factory for assistance.

MATERIAL	MAXIMUM SHORT TERM TEMPERATURE	MAXIMUM OPERATING TEMPERATURE	MAXIMUM OPERATING PRESSURE
Polyethylene (PE)	160°F/69°C	85°F/36°C	N/A
Polyvinylchloride (PVC)	140°F/60°C	85°F/36°C	100PSI/6.9BAR
Chlorinated Polyvinylchloride (CPVC)	180°F/77°C	120°F/49°C	100PSI/6.9BAR
Polypropylene (PP)	180°F/77°C	120°F/49°C	100PSI/6.9BAR
Teflon (PTFE)	200°F/93°C	200°F/93°C	N/A
Carbon Steel (CS)	200°F/93°C	200°F/93°C	150PSI/10.3BAR
Cast Iron (CI)	200°F/93°C	200°F/93°C	150PSI/10.3BAR
Brass (BR)	200°F/93°C	200°F/93°C	150PSI/10.3BAR
Stainless Steel (SS)	200°F/93°C	200°F/93°C	150PSI/10.3BAR

Note: Minimum Fluid Temperature is 50°F/10°C.

7.0 ROUTINE MAINTENANCE Routine maintenance in this section is referred to as checking a feeder once a month until a maintenance schedule can be determined. All fasteners should be check for proper alignment & operations. Maintenance and care will depend upon the usage and environment in which the feeder is subject to.

8.0 PARTS LISTING The following tables itemize parts that may be replaced in the field. If further breakdown

is needed, consult manufacturer's operations manual or call us for assistance.

Part	Description	Feeder Model
BC4.0	Bromine feeder, PVC Machined closure	BR15, BR25
0160033	Bromine feeder replacement O-Ring	BR15, BR25
BC8.0	Bromine feeder lid, 8" body feeders, Union Style lid	BR20, BR40
BC8.0-HP	Bromine feeder lid, 8" body feeders, HP Style lid	BR20-HP BR40-HP
BHNG10	10" internal hanger assembly	BR20
BHNG20	20" internal hanger assembly	BR40 BR60 BR80
RPF20	20 micron pleated filter, 9 ¾" L	BR20
RPF20-20	20 micron pleated filter, 20" L	BR40 BR60 BR80
BRU150	1 ½" bromine feeder union fittings	BR20 BR40 BR60 BR80
ARP	PVC air release valve	All Models
VPFB	Valve package, flat bottom feeders	All Models

Note: Contact customer service for replacement parts not listed above.

9.0 TROUBLE SHOOTING

PROBLEM	POSSIBLE CAUSE / ACTION		
	Filters or strainers are dirty or fouled		
Low flow rate	Discharge piping is restricted or undersized		
	Inlet piping is restricted or undersized		
	Closure is not aligned properly		
Lid is leaking	Hardware is not tight		
	Gasket/O-ring is fouled or needs to be replaced		
Body is leaking	Chemical attack or crack, consult factory		
	Damaged in shipment, consult factory		

If you are still having trouble, visit us at www.gtpcompany.com or contact customer service.

10.0 PRODUCT LABEL

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Serial Number:		