# **Bromine Feeder Operations & Maintenance Manual**



This "QUICK START" manual is supplied as a guideline for installation; please visit <a href="www.gtpcompany.com">www.gtpcompany.com</a> for complete instruction manual, assembly drawings and installation diagrams.

GENERAL INFORMATION								
MC	DEL:					SERIAL:		
POL	JNDS:	<u> </u>		40	☐ 60	□ 80		
FITT	INGS:	☐ 3/4"N	PT	☐ 1"NPT	-	☐ Other		
ACCESSO	RIES:	☐ Flow I	ndicator		Flow Cont	trol Valve	☐ Air Release	
		☐ Valve	Package		] "HP" High	Pressure		

#### \*\*\* 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 always apply
- 3) Safety glasses or face shields and gloves should be worn
- 4) Do not service glycol feed package without disconnecting power
- 5) Close isolation valve and release pressure before servicing any components on the system
- 6) 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 <a href="https://www.gtpcompany.com">www.gtpcompany.com</a> 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.
- **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 bypass/filter feeder. A shelter, awning or shed should to be installed to extend product life.
- **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 <a href="https://www.gtpcompany.com">www.gtpcompany.com</a> 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.

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#### 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 underside 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 70PSI @ 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** Contact customer service for assistance.

### 9.0 TROUBLE SHOOTING

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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 is fouled or needs to be replaced
Body is leaking	Chemical attack or crack, consult factory
body is leaking	Damaged in shipment, consult factory

If you are still having trouble, visit us at <a href="https://www.gtpcompany.com">www.gtpcompany.com</a> or contact customer service for assistance.

**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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