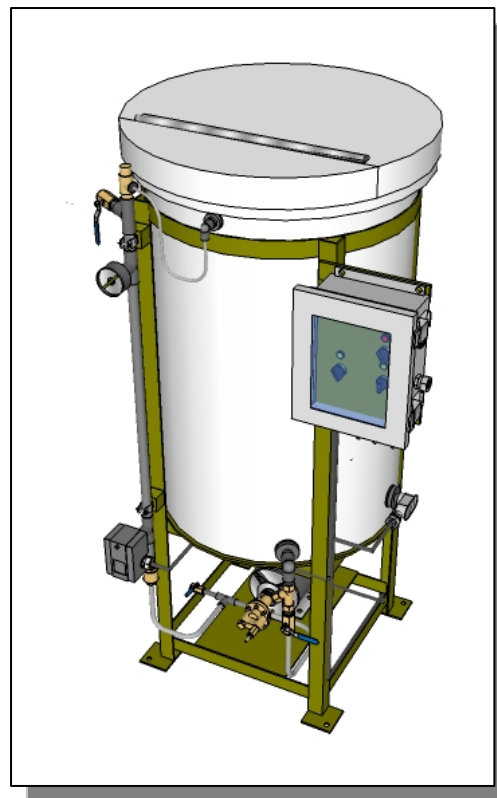
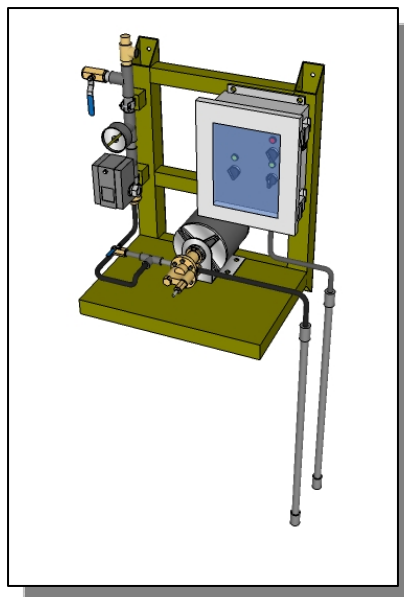




Industrial Gly-Pack Feed Systems Operations & Maintenance Manual



**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 *****

- ✪ ALL FASTENERS AND FITTING SHOULD BE PROPERLY INSPECTED AND SECURED BEFORE OPERATION AS THEY MAY BE LOOSENED IN TRANSIT
 - ✪ PERSONNEL SAFETY PRACTICES SHOULD APPLY AT ALL TIMES
 - ✪ SAFETY GLASSES OR FACE SHIELDS AND GLOVES SHOULD BE WORN
 - ✪ DO NOT SERVICE GLYCOL FEED PACKAGE WITH OUT DISCONNECTING POWER
- ✪ CLOSE ISOLATION VALVE AND RELEASE PRESSURE BEFORE SERVICING ANY COMPONENTS ON THE SYSTEM
 - ✪ ALL LIQUIDS IN SYSTEM SHOULD BE DRAINED BEFORE SERVICING

✪ **1.0 Introduction**

Thank you for choosing General Treatment Products Industrial “Gly-Pack” Glycol Feed Package. This industrial, automated package comes complete and ready to install. In this document we explain the basics for locating, installing, adjusting and operating this glycol fed system. For further information, please contact us at customerservice@gtpcompany.com or call us at the phone number on the cover.

✪ **2.0 Warranty**

General Treatment Products Gly-Pack Feed Systems are guaranteed for two years 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 system is inspected for damage and received in good condition, and store indoors until installing.

✧ 3.1 Order Verification

MODEL				
GP	55	-E1	-1	-HM
OPTIONS				
-HM	High Temperature Discharge Manifold			
-DGL	Digital Glycol Control Panel			
-SC	Surge Suppression Chamber			
-AL	Audible Alarm & Silence Switch			
-DC	Remote Dry Contact on Low Level			
-MX	Mixer & Control Switch			
-HL	High Level Indicator			
Note: See pricing for complete options list				
PRESSURE RANGE				
	CUT-IN	CUT-OUT	PSID	
1	10-45 (20*)	20-50 (40*)	10-30 (20*)	
2	40-80 (60*)	65-100 (90*)	20-40 (30*)	
3	3-10 (8*)	9-30 (15*)	6-20 (7*)	
CST	Custom (See back of manual and inside of pressure switch cover to verify).			
PUMP				
D	Dual Pump System			
E	Standard Model			
H	High Temp Model			
4	1.3GPM at 100PSI gear pump			
5	3.0GPM at 100PSI gear pump			
SIZE (GALLONS)				
15	15 gallon PE tank and hinged cover			
30	30 gallon PE tank and hinged cover			
55	55 gallon PE tank and hinged cover			
100	100 gallon PE tank and hinged cover			
BASE MODEL				
GP	Glycol industrial package, tank, hinge lid, stand, low level, pressure switch, pump, pressure gauge and pressure relief.			
GX	Glycol industrial wall mount package, low level wand, pressure switch, pump, surge tank, pressure gauge and pressure relief.			

Note: Not all options and sizes available on all systems. See pricing for standard models. (* Standard factory setting for pressure switch.)

✧ 4.0 LOCATION AND ENVIRONMENT

Although the control panel is rated for outdoor use the gear pump, pressure switch and power cord should not be exposed to direct elements. In most cases, there will not be a dry indoor location that is convenient to install the glycol feed system. Some shelter, awning or shed needs to be installed to validate warranty.

✧ 5.0 INSTALLATION

Once location is decided on, system need to be securely mounted to concrete base. **Be sure that mounting pad and anchoring bolts comply with local building codes.**

Glycol feed packages come standard with an 8FT power cord. Power supply with no less than 15 amps should be within 8FT of glycol feed package. **Extension cords should not be used at anytime.** Systems can be hardwired, if need. Have only an experienced electrician hardwire system. Wiring diagrams are provided in section 9.0.

✧ 5.1 CONNECTING TO SYSTEM

Glycol feed package should be installed within 10 to 30 feet of system. If system is to close, it is difficult to set low pressure systems. If system is to far, pump outputs will very based on pipe size, elbows and other fittings.

PRESSURE SET

This menu is used to set the on and off pressures for the pump (or pumps in the case of a dual system). From the run mode, press the Setup/Run key. Press the down arrow until the display reads PRESSURE SET (or P1 SET on dual systems). Press ENTER. The display will read CUT-IN XXX psi. Press CLEAR, and use the numerical keypad to key in the 3 digit psi value at which you want the pump to activate. Press ENTER to accept the new value. Use the down arrow to scroll to CUT-OUT XXX psi. Press ENTER. Press CLEAR and key in the 3 digit psi value for which you want the pump to shut off. Press ENTER to accept the new value.

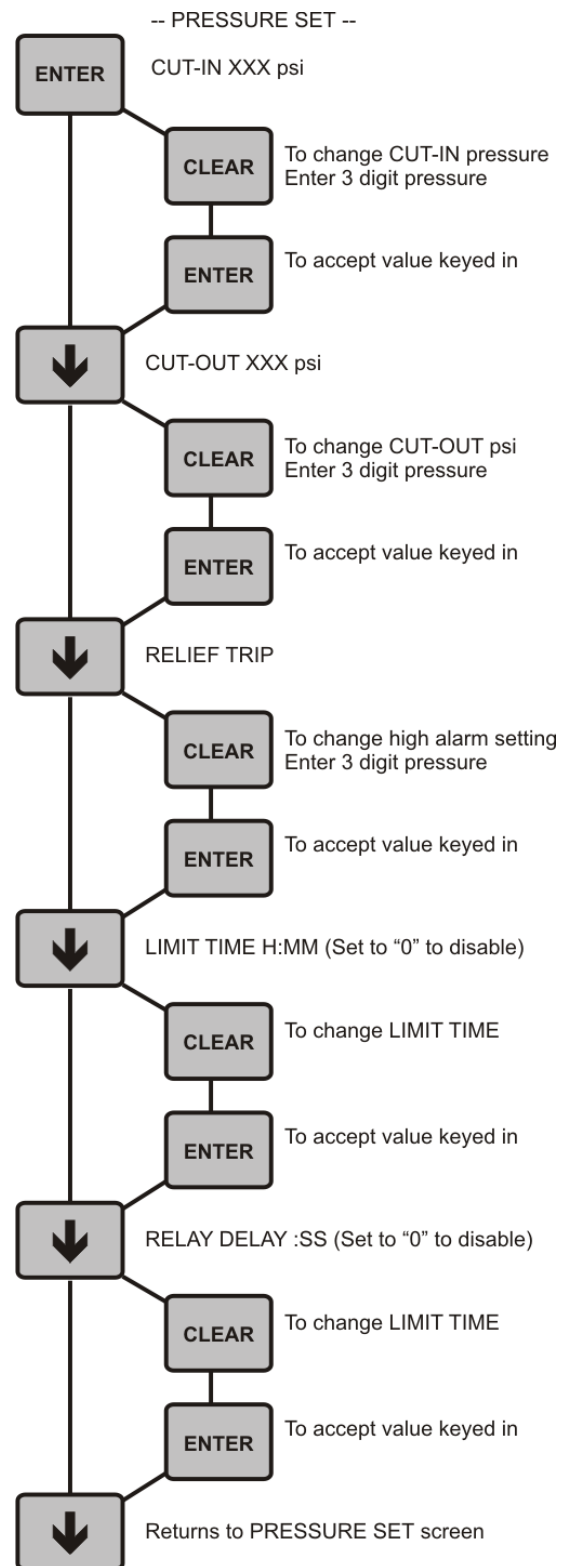
Notes: When setting values u must enter 3 digit valves, example 050 for 50 PSI. CUT-OUT pressure setting must be at least 5 psi greater than the CUT-IN pressure.

Press the down arrow, the display will read RELIEF TRIP XXX psi. If this is set to something other than "000", the controller will activate a relay when u exceed that valve. This over pressurization setting can be hooked to an alarm or safety valve. To set, press CLEAR and enter 3 digit value. The value "000" disables this feature.

Press the down arrow, the display will read LIMIT TIME X:XX. This is the valve, H:MM you wish to limit the pump run time. Press CLEAR and enter time. Press ENTER to accept. "0:00" disables this feature.

Press the down arrow, the display will read RELAY DELAY :XX. This feature is helpful on low pressure system where slight variations in system pressure make a big difference. This valve is set in :SS (seconds). Press CLEAR and enter time. Press ENTER to accept. ":00" disables this feature.

Note: Complete adjustment manual for digital glycol controller is available on line at www.gtpcompany.com.



✧ 6.0 PRESSURE AND TEMPERATURE LIMITATIONS

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	100°F/49°C	100PSI/6.9BAR
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 system once a month until a maintenance schedule can be determined. **All fasteners should be checked for proper operations.** Maintenance and care will depend upon the usage and environment in which the glycol feed package is subject to. The following is the suggested regular maintenance checks required to keep the glycol feed system operating properly.

✧ 7.1 TANK AND PLUMBING

Periodically check piping, hoses and tank fittings for leaks. Y-strainers and check valves need to be free from debris. Tank should be checked for signs of bulging and cracking.

✧ 7.2 GEAR PUMP

The pump should be inspected for proper operation and output. Unusual noises and leaks need to be corrected immediately. Pump assembly and disassembly should only be done by qualified personnel. Wear items, like seal, carbon bearings and gears need to be inspected and replaced when needed. Contact us for assembly and disassembly.

Carbon bearing pumps do not need lubrication. Check the motor for lubrication instructions. Our standard motor does not need lubrication, but some custom motors do. Be sure to check lubrication instructions in pump manual. **DO NOT OVER LUBRICATE.** Oil is conductive and can cause harm or electric shock.

✧ 7.3 PRESSURE SWITCH

The only wear item is the contacts. Make sure there are no shorts or wire connections problems.

✧ 7.4 PRESSURE RELIEF VALVES

Pressure relief valves need to be free from debris. Disassembling and checking the seating surface for tears and abrasion is all that needed. Improper seating of diaphragm and seal can cause valve leaks.

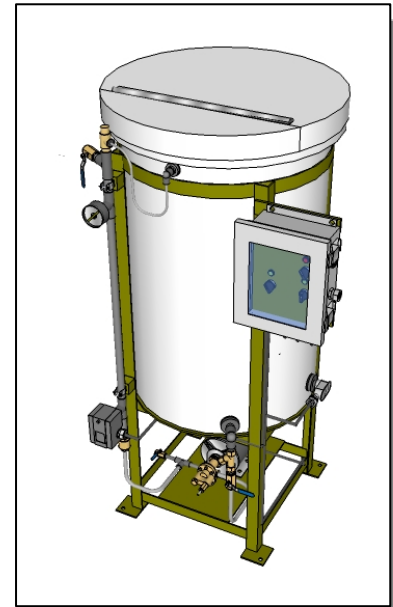
✧ 8.0 PARTS LISTING

In the following diagrams, the systems are shown with tables itemizing parts that may be replaced in the field. If further breakdown is needed, consult manufacturer's operations manual or call us for assistance.

✦ 8.1 GLYCOL SYSTEM OVERVIEW

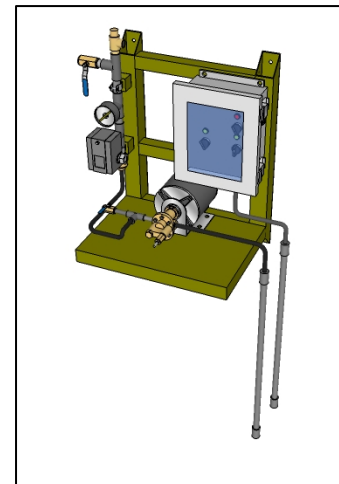
PART	GP_E	GH_H	30	55	100
TANK & COVER	P30C-H	C30C-H	X		
	P55C-H	C55C-H		X	
	P100C-H	C100C-H			X
STAND	TS30B	Included in tank above.	X		
	TS55B			X	
	TS100B				X
DISC. MANIFOLD	0122001	0122010	X		
	0122002	0122011		X	
	0122003	0122012			X
SUCT. MANIFOLD	0122020	0122025	X	X	X
PUMP, 1/3HP	GP1.3E		X	X	X
PUMP, 1/2HP	GP3.0E		X	X	X
SUCT. HOSE	0122030		X	X	X
DISC. HOSE	0122035		X	X	X
RELIEF HOSE	0122040		X	X	X
CONTROL PANEL	CPE		X	X	X
RELIEF ADAPTR	0122050	N/A	X	X	X
PRESSURE SWITCH	PS-1		X	X	X
	PS-2		X	X	X
	PS-3		X	X	X
BALL VALVE	BV05P	BV05B	X	X	X
Y-STRAINER	YS05B		X	X	X
CHECK VALVE	CV05C		X	X	X
RELIEF VALVE	RV05B		x	x	X

Dual models use similar items.



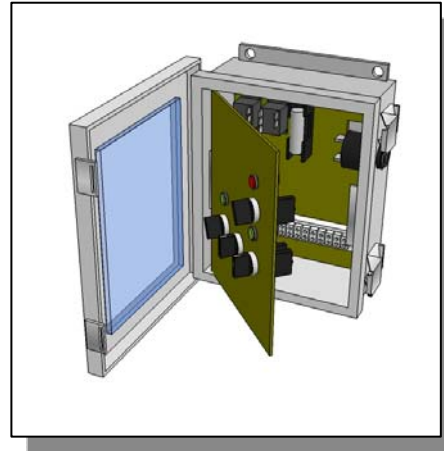
PART	GP_X
FRAME	MBGX
DISC. MANIFOLD	0122005
SUCT. MANIFOLD	0122021
PUMP, 1/3HP	GP1.3E
PUMP, 1/2HP	GP3.0E
CONTROL PANEL	CPE
RELIEF ADAPTR	0122050
PRESSURE SWITCH	PS-1
BALL VALVE	BV05P
Y-STRAINER	YS05B
CHECK VALVE	CV05B
RELIEF VALVE	RV05B

Dual models use similar items.



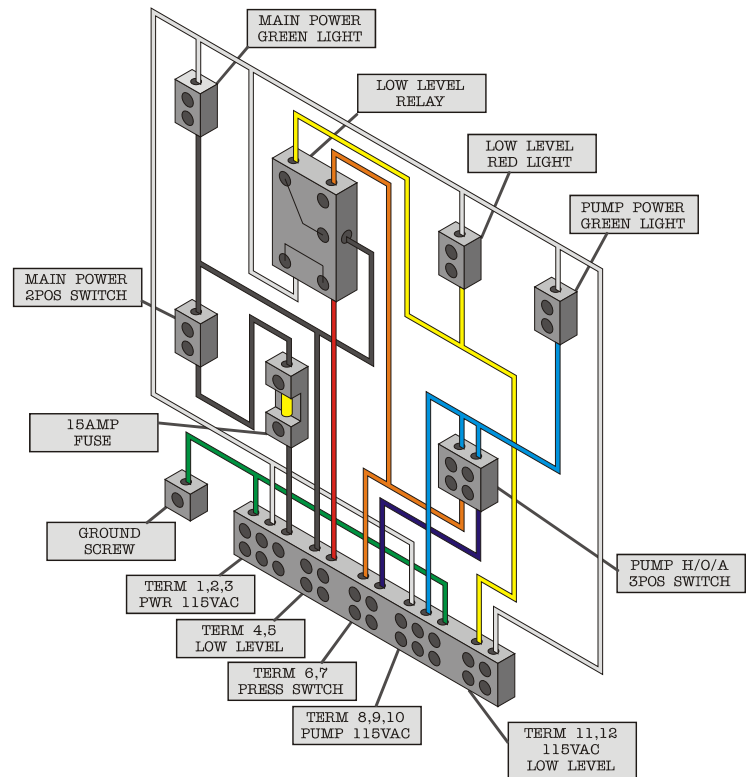
✦ 8.2 CONTROL PANELS

PART	INDUSTRIAL
ENCLOSURE	NE-P
POWER SWITCH	SW-2P
PUMP SWITCH	SW-3P
GREEN LIGHT	LGT-G
RED LIGHT	LGT-R
RELAY	RL-1
FUSE	FS-1



✦ 9.0 WIRING

The following wiring diagram is for standard the model. A specific electrical diagram including options is located inside the control panel. Custom model may follow similar diagrams, but can be different. See inside of control panel for custom model number, serial number, sales order number and wiring diagram. If you need assistance, contact us and have this information ready.



Note: All standard and optional feature diagrams are available through our website, www.gtpcompany.com or you can e-mail us at literature@gtpcompany.com.

★ **10.0 TROUBLE SHOOTING**

PROBLEM	POSSIBLE CAUSE / ACTION
Low flow rate	Piping / equipment is dirty or fouled
	Discharge is restricted or undersized
	Gears are worn
Pump runs, but no fluid	Suction piping is restricted or plugged
	Pump suction valve is closed
	Pump is rotating in the wrong direction
Pressure is low	Line is restricted
	Gears are worn
Excessive noise while pump is in operation	Pump head and gear may be misaligned
	Pump mounting hardware is loose
	System pressure is excessive
Pump does not shut off at low level	Float switch is faulty, defective or damaged
	Low level relay is faulty, defective or damaged
	Wiring is incorrect or shorted
System does not relieve pressure properly	Pressure relief valve is clogged
	Pressure relief valve is set improperly
Pump cycles on and off repetitively	Piping leak on discharge side
	Pressure settings are not adequate for system size pressure

If you are still having trouble, contact us at technical@gtpcompany.com, or you can call us at the number on the front of the Instruction manual.

★ **11.0 NOTES**

★ **12.0 PRODUCT LABEL**

Model:

Serial Number:
