



**TYPE:** GLYCOL MAKE-UP PACKAGE **MODEL:** GMP SERIES

I &O Sheet No.: PL151

03/02

## **INSTALLATION:**

- 1. Install the make-up package base assembly (6) on a level and sturdy surface. 50 gal. unit weighs 533 lbs full of solution, 100 gal. unit weighs 955 lbs full of solution.
- 2. Make sure that the controls and the pressure gauge have the best orientation for ease of operation.

**SINCE 1908** 

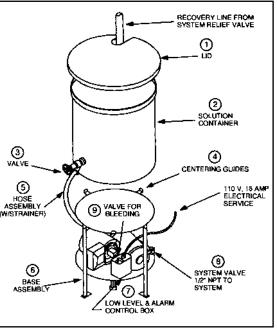
company

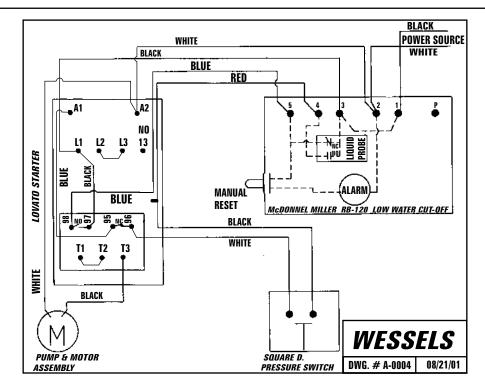
- 3. Screw the outlet valve (3) into the solution container (2) outlet fitting and set the container (2) between the three centering guides (4) on top of the base assembly (6) with outlet valve (3) to the left. Connect the hose assembly (5) with its strainer to the outlet valve (3).
- 4. Pipe-in the 1/2" NPT System valve (8) to the System or loop to be pressurized.
- 5. Fill the solution container (2) with glycol and water in the proportions specified and mix.
- 6. Open the outlet valve (3) and bleed the line to the pump suction using the Bleed valve (9) behind the low level control (7).
- 7. Connect the electrical service to the low level cut-off and alarm box (7) terminals 1 & 2, according to local codes. The pump motor (1/3 or 1/2H.P.) and the controls run on 110 volts, single phase, 60 cycles. Make sure that the electrical wire is of sufficient size to carry the full load. DO NOT RUN PUMP DRY! See paragraphs 5 and 6 above.
- 8. With the system isolation valve (8) turned "off", turn the power "on" and monitor the pump pressure: the pressure gauge should rise and the pump should stop after approximately 30 seconds. The gauge will indicate the factory PRV pressure setting. If necessary, reset the pressure reducing valve, as described on the reverse side of this form, so that this pressure is equal to the fill or minimum pressure required for the system to be pressurized. Check for leaks.
- 9. Fill the System with the specified solution by other means. Make sure that the System pressure is limited with an adequate system expansion tank and a relief valve in order to protect the closed circuit components. The relief valve outlet can be discharged through the lid (1) into the solution container for glycol recovery.
- 10. Open the System valve (8). The pump will cycle, as required, to maintain a positive pressure. It will not run on an empty solution container (2)! During the initial purge of the System, keep a close watch on the glycol solution supply so that the container is never empty.
- 11. An auxiliary solution container can be piped-in. If this is done, make sure that the liquid levels are compatible so as not to be a source of possible spillage.
- 12. A 110 V signal is available from the low level control box (7) for a distant alarm (terminal 2 & 5).

# **OPERATION:**

- 1. Once the System has been purged, the GMP will maintain the set make-up pressure automatically.
- 2. The GMP Series is designed to operate without the need of servicing or adjustment. Little or no lubrication is necessary; the pump is equipped with self-lubricating carbon bearings, and the motor is a life-time lubricated type for standby make-up applications. For other service, see nameplate. The pump has a seal type packing which does not require adjustment.
- **3.** Make sure that the glycol solution level in the translucent solution container (2) is adequate at all times. Should the solution container run dry, the pump will stop and the alarm will be activated. The audible part may be silenced: however, make sure it is turned back on after filling the tank and bleeding as in paragraphs 6 and 7 above. Always replace the lid (1) to keep the solution clean.

101 TANK ST. GREENWOOD, IN. tel.: (317) 888-9800 fax: (317) 888-9988 www.westank.com





### **! WARNING !**

Do NOT adjust the pressure switch settings. To change the GMP discharge pressure to the system, adjust only the Pressure Reducing Valve.

## PRESSURE REDUCING VALVE ADJUSTMENT

The Pressure Reducing Valve (PRV) is factory set for a unit discharge pressure of 12 psig. If a different discharge pressure is required, adjust the PRV as follows.

#### A. INCREASING THE PRV DISCHARGE PRESSURE.

- 1. With the GMP unit operating, close the GMP's isolation valve (3).
- 2. Loosen the lock nut on the PRV adjustment screw.
- 3. While observing the GMP's discharge pressure gauge, turn the PRV adjustment screw in a clockwise direction until the desired operating pressure is achieved.
- 4. While holding the PRV adjustment screw in it's new set position, tighten the lock nut.
- 5. Return the isolation valve to it's full open position.

### **B. DECREASING THE PRV DISCHARGE PRESSURE.**

- 1. Turn the GMP unit off.
- Open the system relief valve or drain fluid from the system until the GMP discharge gauge reads a little lower than the desired system pressure.
- 3. Loosen the lock nut on the PRV adjustment screw.
- 4. Turn the PRV's adjustment screw in a counter clockwise direction until it is free. (The PRV set pressure will then be at "0" psig though the GMP discharge pressure gauge will not change.)
- 5. Close the GMP's isolation valve (3).
- 6. Turn the GPM unit back on and allow it to run until the pump stops.
- 7. While observing the GMP's discharge pressure gauge, turn the PRV adjustment screw *slowly* in a clockwise direction until the desired operating pressure is achieved.
- 8. While holding the PRV adjustment screw in it's new set position, tighten the lock nut
- 9. Return the isolation valve to it's full open position.

## PARTS LIST

Part No. GMPVALVE1/8 GMPRB120 GMP-DEMAR-TM GMP-PRV GMPFYG2J25 Item Bleed Valve Low Water Cut-off Magnetic Starter Pressure Reducing Valve Pressure Switch Part No. GMP-HGT15 GMP-POMPEPROCON GMP-806 GMP-871 GMPTANK100 GMPTANK50 Item Pressure Tank Pump Only 1/3HP Motor 1/2HP Motor 100 Gal. Solution Tank 50 Gal. Solution Tank

101 TANK ST., GREENWOOD, IN. tel.: (317) 888-9800 fax: (317) 888-9988 www.westank.com