



## Pump Installation and Service Instructions

### Pump Info

Pump max pressure: 870psi(60bar) Relief valve setting: 217-870psi(15-60bar)

#### Rotation:

Red lead to - positive Pressure to A port

Black lead to positive Pressure to B port

**Mounting Location** Excessive temperature and or vibration can drastically reduce motor brush life.

Mounting the unit on a flimsy surface or sheet metal can transmit and amplify pump noise. Try sheet rubber etc. under pump base.

As in common with other electrical equipment, contact with water, excessive humidity, and heat must be avoided if possible.

Keep the cable and pipe work runs as short as practically possible.

Any attitude of mounting may be used but, flat or 'motor up' is recommended.

This unit should not be positioned in a confined area where there are flammable gases.

### Hydraulic Connections

#### **G1/4 (BSPP) Parallel**

**A = ram port**

**B = ram port**

**R = reservoir port**

The 'A' and 'B' ports are **G1/4(BSPP)** parallel threaded.

Use only bonded rubber/metal washers to seal the fittings. DO NOT use tapered adapters, sealing compound or P.T.F.E. tape. The 'R' port uses a 1/4 NPT plastic or brass barb hose fitting. PTFE pipe tape is required on this fitting.

Ports marked A and B are the service line connections to the ram, the pipe work and connections must be suitable for a 1450psi (100bar) working pressure minimum rating.

The port marked 'R' is the reservoir and must be connected.

**DO NOT** plug this port--damage and failure could result.

Ensure that no dirt enters the system during the installation, be certain that all pipes and fittings are cleaned before connecting up.

### Hose Specs

HOSE DASH SIZE	HOSE ID IN.	HOSE OD IN.	MAX OPERATING PRESSURE PSI	MIN. BEND RADIUS IN.	WEIGHT PER FOOT	VACUUM SERVICE IN/HG
-04	.19	.30	3,000	2.00	.06	28

### Hydraulic Fluid

Good quality 10 to 40 est hydraulic mineral oil is recommended. Power steering or Automatic transmission fluid can be used. **The pump must not be run without oil.**

### Trouble Shooting

#### 1) Motor does not run

:check electrical connections

:check fuse/trip rating

:check motor brushes

#### 3) Excessive Noise

:check for air in the system

:Check pump mounting

:Check motor/pump for damage

#### 2) Motor runs, but no ram movement

:check for air in system.

:check for incorrect hydraulic connections.

:check there is sufficient fluid in the system.

:check that the relief is set correctly if fitted.

:check the drive coupling between pump and motor.

### Lift Cylinder/Ram Connections

The lift cylinders have two 1/8NPT ports. One port will be plugged and one port will have a 90deg FBM5031 fitting, doesn't matter which port you use for either. PTFE pipe/fitting tape or sealant is required on these fittings. Fittings must be tight, if leaks are present try tightening further as they are tapered fittings and require decent torque to seal.

### Service

With a minimum of moving parts and top quality precision engineering the pump will give many year of trouble free service. Should service replacement seals be required, a kit is available from your nearest dealer under the following part code PR-sk

During disassembly carefully note the order of the components and keep everything scrupulously clean, especially the pump faces with the plastic shim gasket or o-ring. When re-assembling, lubricate the check valve piston and gears with hydraulic fluid and ensure that all parts move freely. A smear of grease on the o-rings will aid assembly without damage.

Evenly torque tighten the four MG pump socket head cap screws to 10 lbs/ft (13.SNm). The gears must turn easily at this stage.

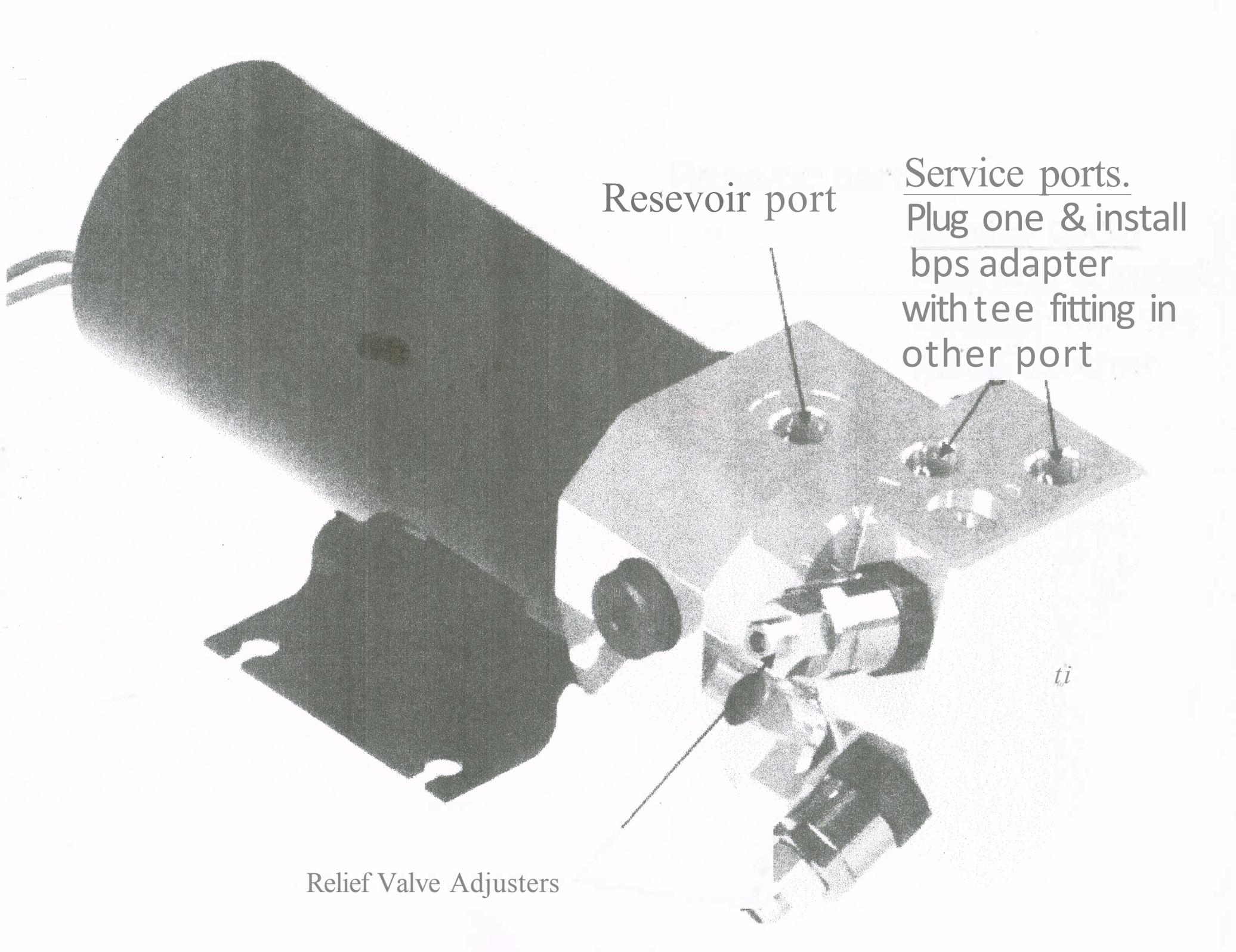
### Brushes

Pump motor brushes are designed to provide long service life but do wear. Inspect the motor brushes every 500 hours of operation for wear or if excessive arcing is heard. Replacement motor brushes are available from your dealer. State the serial number of your unit when ordering. Be sure to clean out all loose carbon before fitting new brushes. If fluid has entered the motor, degrease the brush gear and commutator before running the unit, otherwise arcing will reduce brush life.

**Ramliftpro**

**281-923-3470**





Reservoir port

Service ports.  
Plug one & install  
bps adapter  
with tee fitting in  
other port

Relief Valve Adjusters

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