

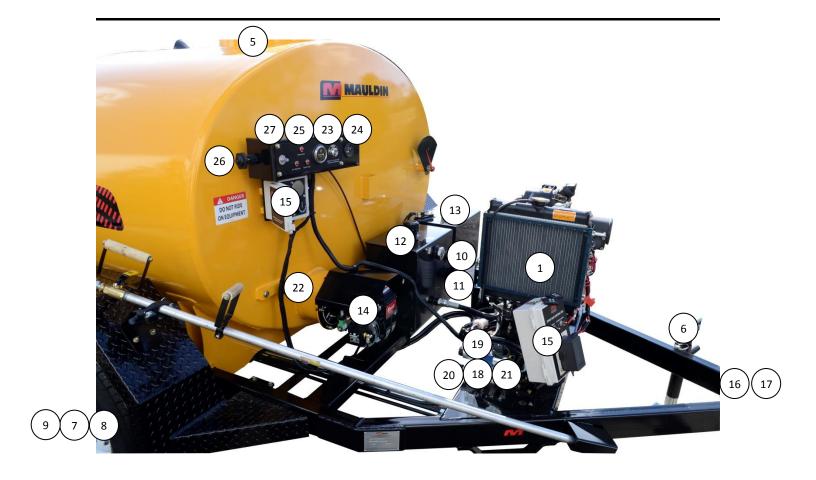
### PARTS MANUAL MODEL MU-600

**Covers Serial Number Range:** 

254-I-P6-GS-Y-\*-02254
Through \_\_\_\_\_\_

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### **Engine drive system**



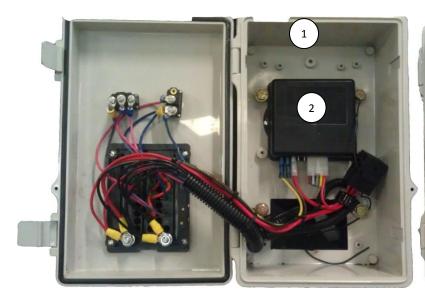
1.	Engine Diesel Kubota Z602	010-0450TT
	Fuel Filter	021-0080
	Oil Filter	021-0211
	Air Filter Primary	021-0236
	Air Filter Safety	021-0237
2.	Engine mount rubber isolator (x4) (not shown)	050-0260
3.	Engine mount rubber isolator bushing (4x) (not shown)	093-200158
4.	Pintle eye hitch (not shown)	050-0248
5.	Man hole cover	123305
6.	Trailer jack	050-0728
7.	Trailer axle w/ brake (front)	050-0773
8.	Trailer axle w/o brake (rear)	050-0773B
9.	Rim and tires	050-0773A
10.	Hydraulic filter Head	021-0192
11.	Hydraulic filter	021-0169
12.	Hydraulic tank	122-212070
13.	Diesel tank	121-212090
14.	Diesel Burner	130320
15.	Control box	(see page #4)
16.	Safety chain hook	030-0384

### Model: MU-600 Serial # 258-D-69TKS8Y2-03258 through current

### Engine drive system

17.	Safety hook rubber keeper	030-0385
18.	Hydraulic Manifold block	017-0269
19.	Hydraulic Valve Electric	017-0206
20.	Hydraulic Valve Dial Adjustable	017-0221
21.	Hydraulic Pressure reducing Valve	017-0220
22.	Pencil Thermometer	123480
23.	Key switch	020-0156
24.	Hour Meter Gauge	020-0173
25.	Fuel Level Gauge	020-0170
26.	Throttle Cable	050-0187
27	Light indicator	020-0140

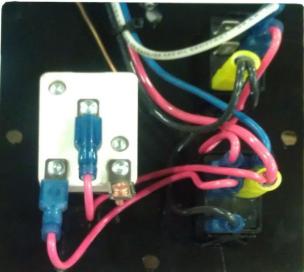
### **Control boxes**





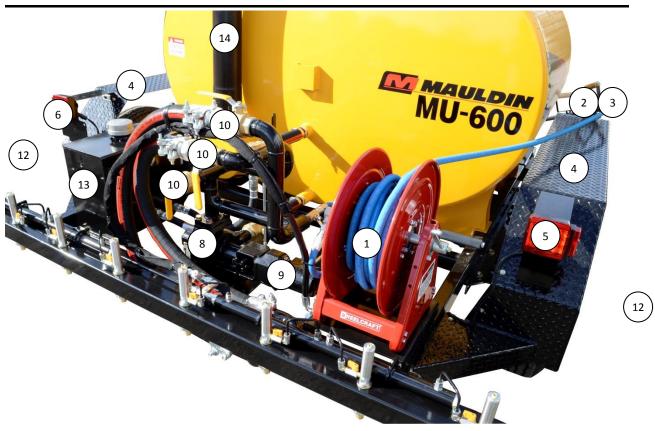
1.	Enclosure box	123712-В
	Computer	
	a. Extra key fob (not shown)	130313A
3.	Fuse and Relay Box	020-0476
4.	Toggle switch Manual/Auto	020-0405
5.	Toggle switch Fwd/Rev	020-0356
6.	20 amp breaker	020-0480
	Relav	

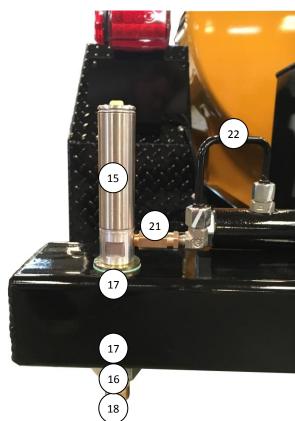




1.	Rocker switch	124428
2.	Thermostat	123715
2	Poy enclosure	120112

### **MU 600**





1.	Hose reel	.050-0723
2.	Hand wand assembly	. 123250
	Wooden handle	. 123-308310
3.	Hand wand latch pin (x2)	.030-0153
4.	Fender RH	. 122-212560
	• LH	. 122-212561
5.	Brake light (w/o tag light)	.020-0243A
6.	Brake light (w/ tag light)	.020-0243
7.	Main asphalt valve (3 way valve)(x2)	. 130312
8.	Main asphalt pump	.011-0252
9.	Asphalt pump hydraulic motor	.013-0100
10.	Ball valve (x3)	.017-0043
11.	2.0" asphalt hose (specify ft.) (x2)	. 123564
	• Clamp	. 123566
12.	Rim and tires	.050-0773A
13.	Wash down Tank	. 122-212080
14.	Exhaust stack	.010-0694
15.	Air Cylinder	. 124400
16.	Washer	. 123492
17.	Gasket	. 123494
18.	Nut	. 123555
19.	Nozzle sleeve (not shown)	. 123581
20.	Poppet (not shown)	. 123582
21.	¼ ball valve (8x)	.050-0154
22.	Hydraulic hard line (8x)	014-312210

### **Nozzle Chart**

Size	Stamped	Gallon per	GAL/SQ	Part #
	Marking	min**	YD	
00	15/95	1.2	.0308	123484-1
0	30/95	3	.0520	123484-0
1	50/95	4	.1030	123484
1.5	60/95	6	.1540	123484-15
2	80/95	8.5	.2555	123484-2



### """OPERATION MANUAL "

.....MU600

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### IMPORTANT SAFETY INFORMATION

Most accidents involving construction maintenance are caused by failure to observe basic safety rules or precautions. An accident can often be avoided by recognizing potentially hazardous situations before an accident occurs.

Read and understand all safety precautions and warnings, before operating or performing lubrication and maintenance on this machine.

WARNING: IMPROPER OPERATION, LUBRICATION OR MAINTENANCE OF THIS MACHINE

CAN BE DANGEROUS AND COULD RESULT IN INJURY OR DEATH.

**WARNING**: DO NOT OPERATE THIS MACHINE UNTIL YOU READ AND UNDERSTAND THE

INSTRUCTIONS IN THE OPERATION SECTION OF THIS MANUAL.

**WARNING**: DO NOT PERFORM ANY LUBRICATION AND MAINTENANCE ON THIS MACHINE

UNTIL YOU READ AND UNDERSTAND THE INSTRUCTIONS IN THE MAINTENANCE

SECTION OF THIS MANUAL.

### **SERVICE WARNING**

### General Machine Safety

- a. Have first aid kit ready and available.
- b. Proper clothing should be worn at all times. Long sleeved shirts and pants are recommended. Always use safety glasses and proper gloves when performing functions on the machine.
- c. A clean work station is a safe work station. This also aids in proper visual inspection of the machine daily, and ensures proper daily maintenance.
- d. Operator shall bear the responsibility that when maintenance is complete proper safety guards, and decals have been returned to the machine.
- e. Operating personnel must perform service checks regularly to be sure systems are in good operating condition. If abnormal conditions are detected, inform maintenance personnel immediately
- f. Operator shall obey all laws.

### Hot Material Safety

- a. Operator shall always wear protective gear for face, hands, feet, eyes, and body while working with hot bituminous products
- b. Operator shall always have proper knowledge and carry in truck proper MSDS of material on board.

Page 8

c. When hot asphalt touches the skin, flush area completely according to MSDS. Remember if you are not using emulsions, cool water may not be the best solution. Get medical attention.

### Fire and Burst Explosion Safety

- a. Operator shall keep machine clear of sparks, open flames and incandescent material. Some bitumen fumes are flammable and can explode.
- b. Operator shall never load machine when water is present in the bottom of the tank. Hot material can cause the water to steam and burst the tank.
- c. Operator shall never mix material in the tank of the distributor. Not all asphalt products mix and problems will occur. Always contact material handler before changing tank products to ensure compatibility or arrange for offload of material first.
- d. DO NOT SMOKE

### **Burner Safety**

- a. Operator shall never operate the burner assemblies while truck is in motion or being loaded.
- b. Operator shall be present during entire heating cycle.
- c. Operator shall be sure burner tubes are covered by a minimum of 8" of material before burner operation. Uncovered tubes can cause explosion in tank.
- d. Operator is responsible for safe heating temperatures of the material and not exceeding the "flash point".
- e. Operator shall begin tank circulation of material as soon as possible for safe heating of product.

### Refueling Safety

- a. Operator is responsible to keep the hose, or nozzle in contact with the tank fill tube to prevent spark.
- b. Do not overfill.
- c. DO NOT SMOKE

Page 9

\*\*WARNING\*\* To avoid possibly injury or death do NOT load tank with hot material when condensation or water is present in tank. Hot material and water will have a violent reaction producing steam and pressure resulting product damage and potential injury or death may occur. Never exceed the recommended temperature for the specific material being used. If the required temperature is not known, please contact the material manufacturer.

### **OPERATION INSTRUCTIONS**

MU-600

### **Heating instruction**

*MU-600* 

### **Diesel Burner**

- The burner control box is located at the rear street side of the machine, attached to the tank.
- Voltage is provided to the thermostat first so the thermostat must be set to your desired temperature. (See recommended material temps addendum "A" of this manual)
- After desired temperature is set turn the burner blower switch to on position. (You will here the blower fan turn on.)
- To light the burner turn the fuel switch to the on position. (The burner should light and you will hear it and see fumes emitting from the exhaust stacks.)
- When material the reaches the desired temperature the burner will shut off automatically. It also turns on automatically if material falls below the desired temperature.
- After using the burners leave the blowers going with the fuel off for @ 5 minutes. This will allow the heating tubes to cool at a steady speed so that the life of the tubes can be extended.
- The machine should not be left un-attended while burners are running! If the thermostat would fail you are responsible to turn them off when desired temperature is achieved.

### **Bar Recirculate**

- With the engine at a low speed setting, open the Bar Recirculate valve located at the rear of the machine.
- At the front of the machine turn the pump selector toggle to "Forward", and the mode toggle to "Auto."
- Material will circulated from the pump through the bar and back into the tank, this will circulate fluid and warm the spray valves and bar.

### **Hand Spray Instruction**

*M*U-600

- At the front of the unit (with engine at idle) select "Auto" on the pump direction selection switch.
- At the back of machine open hand spray valve and use your hand spray "wand valve" on the wand to regulate flow.
- When finished spraying, turn hand spray "wand valve" off and replace it to the holder to return to tank.
- Close the hand spray tank valve.

### **Spray bar Instructions**

*M*U-300/*M*U-600

- At the front of the machine (with the engine @ idle) put the pump direction switch to the "Auto" position and the manual/auto switch in auto.
- To spray Position the trailer to the area you wish to spray, press the "1" button
  on the key fob and the spray bar will began to spray, to end the spray push the "2"
  button and the bar will shut off. (you should try to maintain a vehicle speed of 2-3
  MPH while spraying.)
  - If you desire to test or manually turn the spray bar on there is a switch located on the front of the trailer on the counsel to turn spray on/off.

### **Clean Out Instruction**

MU-600

- At the front of the machine (with the engine @ high idle) put the pump direction switch to the "Reverse" position.
- Open your hand spray wand "valve" until you hear air sucking through the end.
   Close and open the hand spray wand a few times to ensure as much material is removed as possible.
- With the Hand Spray Wand still closed, at the front of the machine turn the spray switch to "Manual." This will suck air in the bar, and put material back into the tank. Do this a few times also to ensure as much material is removed as possible.
- At the front of the machine put pump direction selector switch to "Auto". (RETURN ENGINE THROTTLE TO IDLE)
- At the rear of the machine, assure the hand spray wand selector valve is off, pull "tank/cleanout valve" to cleanout position.
- At the front of the machine put the pump direction switch to the "forward position. You will now be circulating clean out solvent through the bar and returning it to the cleanout tank. (you may quickly turn the spray on/off to purge the nozzles.) You should let the bar circulate for 2-3 minutes.
- Next open hand spray wand until clean out solvent spays through nozzle, close wand.
- Leave the "Clean Out" lever in the clean out direction, to assure tack does not gravity feed into the pump.

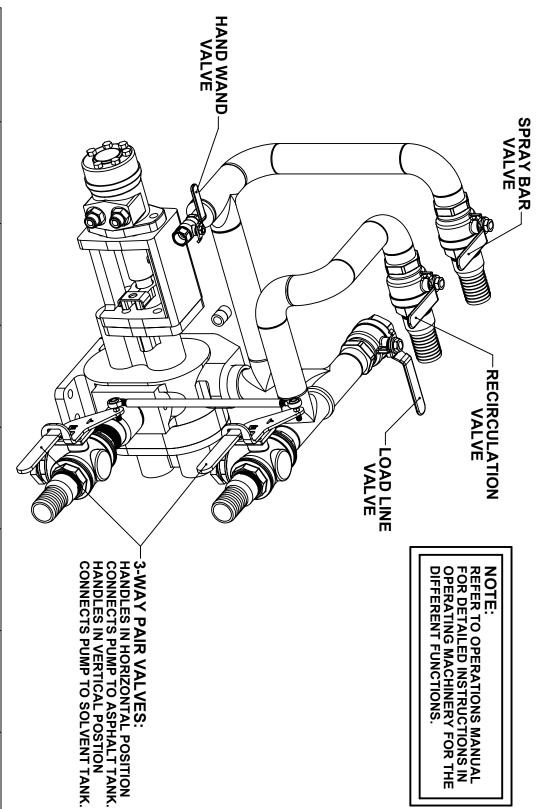
• Turn the pump direction switch to "Auto" and your machine is ready for overnight or long term storage.

### **Purging and clean out tank Instruction**

*M*U-600

- After using clean out material 5 to 10 times it is recommended to drain solids from the bottom of the cleanout tank. This should be done in prior to using the machine while all materials are cold.
- Open the valve in the bottom of the tank and let the thick material drain out into a pan or bucket, until the clean out solvent starts to run free, than close the plug.

For any further questions please contact your Dealer or Mauldin representative



OPEN	CLOSED	CLOSED	CLOSED	CLOSED	CLOSED	CLOSED	LOAD LINE
CLOSED	CLOSED	OPEN	OPEN	CLOSED	CLOSED	CLOSED	HAND WAND
CLOSED	OPEN	OPEN	CLOSED	OPEN	OPEN	CLOSED	SPRAY BAR
CLOSED	OPEN	CLOSED	CLOSED	CLOSED	OPEN	CLOSED	RECIRCULATION
LOAD LINE TRANSFER	SOLVENT	REVERSE SUCTION	HAND WAND OPERATION	SPRAY BAR OPERATION	RECIRC. HEATING	PARKED TRAVEL	VALVE

ADDENDUM "A"

### **Guideline Temperatures for common liquid Asphalts**

Type & Grade	<b>Spraying Temperature</b>		- · · · · · · · · · · · · · · · · · · ·		Spraying Ter	nperature
<b>Asphalt Cements</b>	Deg. C	Deg. F	<b>Cutback Asphalts</b>	Deg. C	Deg. F	
AC-2.5	130	270	MC-30	30	80	
AC-5	140	280	MC-70	50	120	
AC-10	140	280	MC-250	75	165	
AC-20	145	295	MC-800	95	200	
AC-40	150	300	MC-3000	110	230	
AR-1000	135	275	RC-70	50	120	
AR-2000	140	285	RC-250	75	195	
AR-4000	145	290	RC-800	95	200	
AR-8000	145	290	RC-3000	110	230	
			SC-70	50	120	
PEN 40-50	150	300	SC-250	75	160	
PEN 60-70	145	295	SC-800	95	200	
PEN 85-100	140	280	SC-3000	110	230	
PEN 120-150	130	270				
PEN 200-300	130	270				

### **Emulsified Asphalts**

20-60	70-140
50-85	125-185
50-85	125-185
20-70	70-160
20-70	70-160
20-70	70-160
20-70	70-160
20-70	70-160
20-70	70-160
20-70	70-160
20-70	70-160
20-70	70-160
50-85	125-185
50-85	125-185
20-70	70-160
20-70	70-160
20-70	70-160
20-70	70-160
	50-85 50-85 20-70 20-70 20-70 20-70 20-70 20-70 20-70 20-70 50-85 50-85 20-70 20-70 20-70

These recommendations are provided by "The Asphalt Institute" and advise the minimum spray temperatures for safety.

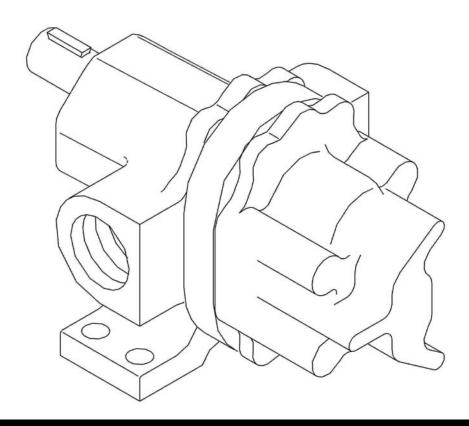
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### AM, AP & AL SERIES PUMPS OWNERS MANUAL



### SAFETY INSTRUCTIONS

This is an industrial component. Only a qualified systems integrator should be allowed to design it into a system. The integrator must determine proper plumbing, mounting, driveline and guard components.

Improper installation or use could lead to a serious, even fatal, accident. The system integrator must communicate all safe operation procedures to the end user(s).

Before operation, fully understand and follow the instructions shown in this manual and any instructions communicated by the system integrator. No one should be allowed to operate or maintain this pump who has not been fully trained to work safely according to the configuration of the pump system and in accordance with all applicable government and industry regulations.

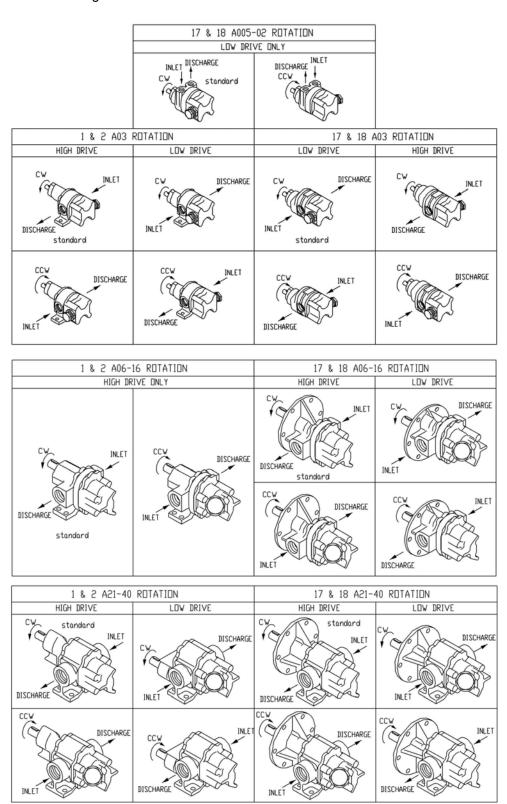
Roper Pump Company P.O. Box 269 Commerce, GA 30529 USA

Telephone: (706) 335-5551
TeleFAX: (706) 335-5490
Email: sales@roperpumps.com
www.roperpumps.com

### **INSTALLATION**

### **Check Ports Versus Rotation:**

Make sure the inlet and outlet ports have been correctly plumbed corresponding to the direction of rotation. See figure below for various configurations.



### **Good Practice**

NOTE: These are general guidelines and do not cover all possible situations.

It is the responsibility of the system integrator to apply this product properly.

### Plumbing

- 1. The inlet pipe should be as short and straight as possible to minimize suction pressure losses. Excessive restrictions at the inlet can cause cavitation resulting in poor performance, noise, vibration, or pump damage.
- 2. Slope the inlet plumbing appropriately to avoid air pockets.
- 3. Plumbing weight, misalignment with the ports or thermal expansion can exert excessive force on the pump. Plumbing must be properly supported and aligned with expansion joints, if required, to minimize these forces.
- To prevent over pressure situations, install a relief valve as close to the pump outlet as possible. Install the relief valve before any shut-off valves.

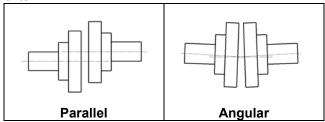
### **Separate Pump and Drive Assemblies**

### **Driveline Guards**

- 1. Assure adequate guards have been installed to prevent personnel contacting moving components.
- 2. Follow all OSHA, Federal, state and local codes.

### **Check Alignment of Pump to Driveline**

Excessive misalignment can overload the pump input shaft and cause premature failure. The figures below show parallel and angular misalignments.



### **Mounting Base**

- 1. Mount the unit on a rigid, heavy base to provide support and absorb shock. Bases should be designed for high rigidity, not just strength.
- 2. The pump feet were not designed for mounting to concrete and do not have enough contact area to prevent concrete from failing. When mounting to cement or concrete, use a steel base plate (supplied by others) to distribute the mounting stress over an area large enough to prevent the cement from failing. The base plate should be at least as thick as the pump feet. Grout it in place.

### **Roper Pumps' Close Coupled Drives**

Units where the drive mounts directly to the pump

- Exposed drivelines require guards.
- Alignment between pump and drive line is maintained by the assembly.
- Because the assembly absorbs reaction forces of the driveline, the mounting base does not need to be as robust. The level of rigidity and strength is determined by the piping stresses from the system.



Over-pressure may burst pump or system components. Always include a relief valve in installation. Do not over pressurize pump or block discharge line while running.



Operating without guards could result in serious injury or death. Machinery in operation can grab, crush, cut, mangle and dismember. Do not operate without adequate guards in place.

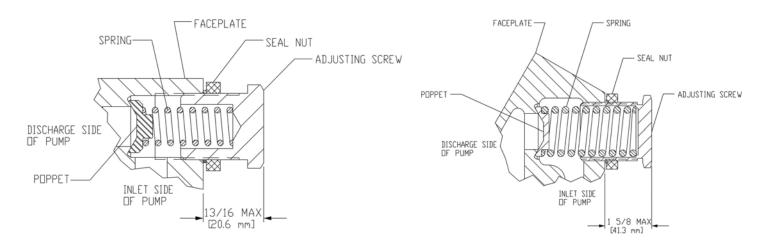
### **PUMP RATINGS**

	Maximum Ratings					
Pump Size	Flow Rate GPM	Pressure PSI	Temperature <sup>0</sup> F	Input Speed RPM		
005	1.8	300	212	3600		
01	3.6	300	212	3600		
02	7.6	300	212	3600		
03	11.6	300	212	3600		
06	11.2	150	212	1800		
08	16.3	150	212	1800		
12	23.5	150	212	1800		
16	30.8	150	212	1800		
21	40.2	150	212	1800		
27	49.8	150	212	1800		
32	59.1	150	212	1800		
40	75.6	150	212	1800		

### **RELIEF VALVE**

### SIZES 005 thru 03

### SIZES 06 thru 40



The relief valve must be positioned as shown in instructions for direction of rotation – otherwise the valve is inoperable, discharge pressure will not be working against the relief valve.

If the built-in relief valve is used, it is mandatory that the relief valve be set BY THE USER, since maximum relief valve pressure depends upon the viscosity and specific gravity of the liquid, the flow rate (pump RPM), and also the initial relief valve setting.

**NOTE:** The fact that the pump has the correct rotation and discharges liquid thru the desired port does NOT insure that the relief valve is installed in the correct position, or that it has the correct setting for the application.

### V 1.0 Page 19

### TO ADJUST RELIEF VALVE

Warning: Take precautions necessary to prevent personal injury or physical damage that could be caused by any loss of the product being pumped while adjusting relief valve.

DO NOT adjust relief valve without all guards in place.

Relief valve must be adjusted under conditions identical to the operating conditions (Viscosity, RPM, etc.)

- 1. Connect a pressure gauge near the pump in the discharge line between the pump and the point where the discharge line will be closed. (Some pumps have tapped and plugged holes in the case near the outlet which may be used for this connection.)
- 2. Loosen the sealing nut on the adjusting screw.
- 3. Back the adjusting screw out to the point where the end of the adjusting screw will be as shown on the Relief Valve drawing.
- 4. Start pump and close discharge line slowly. Do not exceed pressure rating of pump or other equipment between pump and discharge line valve. If this pressure is reached while closing the discharge valve, do not close any further. (This might occur with very high viscosity liquids.) It would then be necessary to install a separate relief valve in the system for protection. Do not run pump with closed discharge line for more than two minutes at a time.
- 5. With discharge valve closed, turn adjusting screw clockwise in ½ turn increments until the pressure gauge shows the desired pressure setting.
- 6. Tighten sealing nut.
- 7. Open discharge line, and turn pump off.

Relief valve is now set.

To replace spring and/or poppet, shut pump off, decrease the pressure on the spring and remove the plug cap by unscrewing it from the faceplate. After inspecting parts and replacing those required, reassemble the parts in reverse order to which they were removed, making sure the spring is centered on poppet and guide. Replace gasket and screw the plug cap into position and adjust pressure to desired setting. Tighten sealing nut.

A built-in relief valve should not be used on applications where the discharge must be closed for more than a few minutes. Prolonged operation with the relief valve fully by-passing will cause heating of the liquid circulating thru the valve, thus resulting in possible damage.

### **MECHANICAL SEAL (AM) PUMPS**

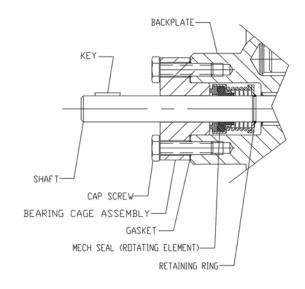
Mechanical seals do not require adjustment. Leakage developed at the seal may be due to one of the following conditions: worn, marred, or cracked rotating or stationary seal face, or bellows that have become hard, soft, cracked, expanded or extruded.

When replacing or servicing a mechanical seal, take particular care not to mar or scratch the sealing surfaces or injure the bellows. If the seal has been used, do not put it back into service unless both sealing surfaces are perfectly flat and smooth or else replaced.

To replace the mechanical seal, remove the key, cap screws, and bearing cage assembly (AM005 thru AM03) or seal retainer (AM06 thru AM40). Remove burrs and sharp edges from the end of shaft and keyway and clean the shaft. Next, the seal rotating parts may be removed from the shaft.

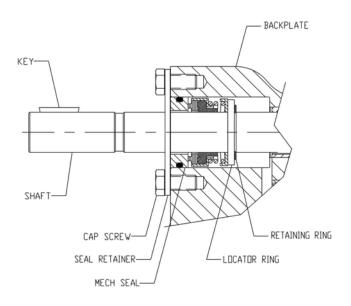
### AM005-AM03

To reassemble the mechanical seal on pump sizes AM005 thru AM03, lubricate with light machine oil the section of the shaft over which the seal is to be mounted. Slide the rotating element onto the shaft. Be sure it is properly positioned against the retaining ring. After checking the bearing cage and replacing, if required, coat the sealing surfaces with light machine oil. Install bearing cage and gasket and secure with cap screws.



### AM06-AM40

To reassemble the mechanical seal on pump sizes AM06 thru AM40, lubricate with light machine oil the section of the shaft over which the seal is to be mounted. Slide the locator ring over the shaft and back against the retaining ring. Slide the rotating element onto the shaft. Be sure it is properly positioned against the locator ring. After checking the stationary seal face and o-ring and replacing, if required, coat the sealing surface with light machine oil. Install stationary seal face and retainer plate and secure with cap screws.



### CHANGING FROM PACKED BOX TO MECHANICAL SEAL

When it is desirable to change from packed box to mechanical seal, remove the key, cap screws, packing plate, packing gland, packing rings and washer (AM06-AM40 only). The exposed surface of the shaft should be free from burrs and sharp edges. Clean the shaft and apply a film of light machine oil. Install the retaining ring. Refer above to install the seal.

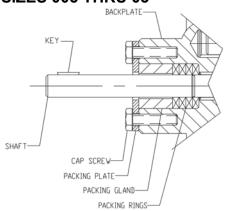
### LIP SEAL (AL) PUMPS

AL pumps with lip seals must be run in the clockwise direction of rotation only. Maximum discharge pressure is 100 PSIG (6.9 BAR) and maximum inlet pressure is 5 PSIG (3 BAR). For a pump equipped with a lip seal, follow these instructions. Leaking lip seals should be replaced. Note the direction of the lip on the old seal. Carefully pry the defective seal from the bore, making certain that the bore is not scored or damaged. Clean the shaft and bore. Inspect the shaft for wear. If worn or scored, replace. The exposed surface of the shaft should be free from burrs and sharp edges. Lightly oil shaft and bore into which the lip seal is to be fitted. Be careful not to damage the sealing lip and be certain that the lip on the new seal is turned the same direction as the old seal. Slide the seal onto the shaft and press into the bore.

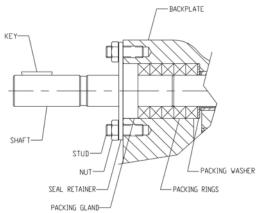
### PACKED BOX (AP) PUMPS

Operate the pump under normal conditions and, after a short run-in period, examine the packing for leakage. If leakage is excessive, stop the pump and follow the procedure described below. A slight leakage is a necessary and normal condition for packing and allows for expansion and proper seating.

### **SIZES 005 THRU 03**



### SIZES 06 THRU 40



To replace packing, remove the key, cap screws or nuts, packing plate, packing gland, and packing rings. (Packing hooks are commercially available to assist in removing the packing rings.)

Clean the shaft and adjacent parts. Examine the shaft. If it is excessively worn or scored, replace shaft and gear assembly. It is generally not recommended to reuse old packing rings. When installing packing, use formed packing rings. DO NOT use a one-piece spiral wrap of packing. Before installing packing, carefully clean the stuffing box and shaft.

Packing rings should be installed one ring at a time, with the joints of adjacent rings staggered approximately 180°. Each ring should be seated firmly before the next ring is installed.

The packing gland cap screws or nuts should first be evenly tightened with a wrench to seat the packing firmly in the stuffing box and against the shaft. DO NOT over-tighten the packing. The gland cap screws or nuts should then be backed off until finger-tight. After the pump is started, visually examine the stuffing box for excessive leakage. If the packing leakage exceeds ten drops per minute, stop the pump and adjust the gland nuts. The gland cap screws or nuts should be adjusted evenly in 1/6 to 1/3 turn (1 to 2 flats on the nut) increments. Start the pump and allow it to operate for several minutes. Again, visually examine the stuffing box for excessive leakage. Repeat the above procedure until the stuffing box leakage is between five to ten drops per minute.

DO NOT over-tighten the packing. Slight leakage is a necessary requirement for proper packing operation. Leakage of five to ten drops per minute when the pump is operating is desirable, as it will preserve the packing and avoid scoring of the shaft. Over-tight packing may score shafts, increase torque requirements of the pump, damage couplings and drives, and generate excessive heat.

The packing gland should be adjusted whenever leakage exceeds ten drops per minute. The condition of the packing should be checked at regular intervals, the frequency depending on the type of service. Experience will dictate how frequently the inspections should be made.

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### CALDER BROTHERS CORPORATION

### (LIMITED) PRODUCT WARRANTY

Calder Brothers Corporation warrants that the Paver, Roller, Tank or Grader under this program will be free from defects in material and workmanship for a period of(12) twelve months from the date of installation. Written notice of any claimed defect must be given to Calder Brothers Corporation within the warranty period and within (30) thirty days after such defect is discovered. Liability under this warranty is limited to replacing or repairing at Calder Brothers Corporation election, any part or parts deemed defective after examination by Calder Brothers Corporation or an Authorized Service Representative via prepaid transportation for which is found to be defective, will be repaired or replaced and returned to the customer via prepaid surface transportation within the United States. Should any part be found not defective, inspection and handling may be charged to the customer by Mauldin or an Authorized Service Representative.

### **EXCLUSIONS:**

This warranty does not apply to routine wearable parts of the Mauldin machine such as seals, points, plugs, hoses or similar items. This warranty does not extend to any machine or part replaced or repaired under this warranty. This warranty does not cover any repair or replacement labor or any part of parts found defective after examination by Mauldin or an Authorized Service Representative. This warranty does not apply to defects caused by casualty or unreasonable use, including faulty repairs by others and failure to provide reasonable and necessary maintenance.

THIS WARRANTY SET FORTH HEREIN IS IN LIEU OF AND EXCLUDES ANY AND ALL OTHER WARRANTIES, EXPRESSED OR IMPLIED, ARISING BY OPERATION OF LAW OR OTHERWISE, INCLUDING, BUT NOT LIMITED TO, ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, AND CUSTOMER WAIVES ANY OBLIGATION OF LIABILITY OF MAULDIN ARISING IN TORT OR STRICT LIABILITY IN TORT, OR FOR LOSS OR USE, REVENUE OR PROFIT WITH RESPECT TO MAULDIN MACHINE AND/OR PARTS FOR ANY LIABILITY OF CUSTOMER TO ANY THIRD PARTY, OR FOR OTHER DIRECT, INCIDENTAL OR CONSEQUENTIAL DAMAGES.

I have read and fully understand the war	ranty policy above.	
Customer	Witness	_
Customer	Witness	
CALDER BROTHERS CORPORATION		



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