MAULDIN
PAVING PRODUCTS

OPERATIONS MANUAL
MODEL MT-500

Machine Serial Number: _____

Specification Number: _____

Engine Serial Number: _____

SOLD & SERVICED BY

SAFETY PRECAUTIONS

AS STATED IN OSHA, THE EMPLOYER SHALL PERMIT ONLY THOSE EMPLOYEES QUALIFIED BY TRAINING OR EXPERIENCE TO OPERATE EQUIPMENT AND MACHINERY.

THE EMPLOYER SHALL INSTRUCT EACH EMPLOYEE IN THE RECOGNITION AND AVOIDANCE OF UNSAFE CONDITIONS AND THE REGULATIONS APPLICABLE TO HIS WORK ENVIRONMENT TO CONTROL OR ELIMINATE ANY HAZARDS OR OTHER EXPOSURE TO ILLNESS OR INJURY.

REGULATIONS GOVERNING THE USE, SELECTION, AND MAINTENANCE OF PERSONAL PROTECTIVE AND LIFESAVING EQUIPMENT AS STATED IN OSHA REGULATIONS SHALL BE FOLLOWED.

CAUTION

USE YOUR MAULDIN BUILT EQUIPMENT SAFELY – REMEMBER

1. WEAR PROTECTIVE CLOTHING:

   Hardhats
   Long Sleeve Shirts with Button Cuffs
   Gloves with Elastic Tops (High temperature if handling hot asphalt hoses and bars)
   High Top Shoes with thick rubber or composition soles
   Cuff-less Long Pants

2. Material is hot and causes burns. Use care when handling.

3. Keep 2 working fire extinguishers of appropriate type and size on hand at all times. **NEVER** use water to put out an asphalt fire.

4. Follow all maintenance and safety instructions at all times.

5. Never leave burner, gas cylinder, fuel tanks, or heated tank unattended.

6. DO NOT attempt to start or use the equipment until the entire instructions furnished with the unit have been read carefully and understood.

7. Always check wheel bolts for tightness weekly. Check and retighten bolts after the first 50, 100 and 200 miles of operation.

MAULDIN TUBE-FIRED POWER SPRAYER
OPERATING INSTRUCTIONS

INTRODUCTION

Mauldin's power spraying system has been proven satisfactory for use with most liquid and emulsified asphalt's. In order to prevent clotting in the line, the system must be thoroughly cleaned immediately after the job is finished for the day. An inlet for cleaning solution is provided. The user is advised to check with the asphalt manufacturer for cleaning solution.

1. BEGIN

Check that all valves are closed.

2. TO FILL

Fill the tank through the 10" filler hole. Please oil the rubber gasket on the manhole cover after each fill-up to prevent the gasket from sticking to the metal.

3. PLEASE REFER TO PAGE 3 FOR BURNER INSTRUCTIONS.

4. SET THE RELIEF VALVE PRESSURE

a) Check the asphalt emulsion temperature to verify that it is at an acceptable pumping temperature. This temperature will vary for different grades of liquid asphalt's. Please check with your material supplier.
b) Open the Suction Valve #2.
c) Start the engine at fast idle and take the cap off the Relief Valve #4.
d) Loosen the jam nut.
e) Turn the screw in a clockwise direction to increase the pressure. When the engine starts to labor before stall, back off the screw (turning counter clockwise) to obtain the desired pressure and to let the engine turn freely.
F) Tighten the jam nut and replace the relief valve cap. **DO NOT LOSE THE RUBBER "O" RING.**

5. TO SPRAY WITH THE HAND WAND

a) Be sure to check the asphalt emulsion temperature to verify that is at an acceptable pumping temperature. This temperature will vary for different grades of liquid asphalts. Please check with you material supplier.
b) Open Suction Valve #2.
c) Make certain that all other valves are closed.
d) Start the engine at half throttle. This will give adequate flow for the spray wand.
e) Open the Hand Wand Valves #6 and #7 and dispose of any residue from the flushing cycle into a container. When pure asphalt emulsion is evident, spraying can commence.

MAULDIN TUBE-FIRED POWER SPRAYER
OPERATING INSTRUCTIONS

6. TO SPRAY WITH SPRAY BAR (**if equipped**)

a) Open Suction Valve #2
b) Start engine at ¾ throttle. This will give adequate flow for spray bar.
c) Open Spray Bar Valve #9.
d) If pressure is not high enough, increase the engine speed until the desired pressure is obtained or adjust the relief valve #4.

NOTE: Spraying pressure can be increased/decreased by adjusting the pressure Relief Valve #4.

7. TO CLEAN

a) Engine must be shut off.
b) Open Hand Wand Valves #6 and #7.
c) Open Cleaning Solvent Valve #5.
d) **WARNING: Make certain that all other valves are closed.**
e) Start engine and run at low speed, pointing the end of the spray wand into an empty drum or waste container. Run until lines are clear.
f) When the hose discharge appears relatively free of asphalt, close the Cleaning Solvent Valve #5.
g) Shut off the engine.
h) Close all valves.

TROUBLESHOOTING

1) If the flow of the material is inadequate check the "Y" Strainer #3 filter for blockage. Make sure to turn the engine off. Remove the large nut to access the filter screen and clean with solvent.
2) If pump does not rotate, improper flushing may have occurred. Call your dealer.

WARNING!

MISUSE OF THIS EQUIPMENT MAY RESULT IN INJURY OR DAMAGE. THE MANUFACTURER PROVIDES INSTRUCTIONS FOR THE SAFE USE OF THIS MACHINE AND RELIES ON THE PURCHASER TO GIVE THESE INSTRUCTIONS TO THE INDIVIDUAL(S) WHO WILL ACTUALLY BE OPERATING THE EQUIPMENT.

QUESTIONS? PLEASE CALL (864) 244-4800

VAPOUR PROPANE FIRED BURNERS - TPS
OPERATING INSTRUCTIONS

A. INTRODUCTION

This burner train is designed for use with a propane vapor withdrawal cylinder. The following instructions cover the proper operation of the standard burner system.

B. BURNER

Model:	Rexo-Therm
Type of Gas:	Vapor Propane
Gas Supply Pressure:	3 – 20 p.s.i.g.
Capacity:	50,000 to 500,000 BTU

C. OPERATION

Refer to diagram for item numbers. Ignore step #1 if heating system is not equipped with an automatic temperature control unit.

1. Set the automatic temperature control unit (6) to the desired material temperature. WARNING! DO NOT SET ABOVE 200°F.
2. Close the regulator (5) completely.
3. Open the propane cylinder valve.
4. Preset the regulator (5) at 3 - 20 p.s.i. using the pressure gauge.
5. Open the firing valve (3) slightly.
6. Light the burner with a torch or spark lighter.
7. Open the firing valve (3) completely.
8. Re-adjust the regulator (5) to 20 p.s.i.

D. SHUTDOWN

1. Close the cylinder valve and allow the burners to extinguish.
2. Close the shutoff valve (5) completely when all the gas has burner off.

ITEM	**DESCRIPTION**
1	Vapor Burner With Stand
2	¼" X 1" Brass Coupler
3	Firing/Shutoff Valve (lead burner)
4	¼" Tee Connector (lead burner)
5	¼" Brass Nipple (to/from "T" connector)
6	Firing/Shutoff Valve (trailing burner)
7	3/8" x 4 ft. LP Hose (propane bottle to burner)
8	3/8" x 3 ft. LP Hose (from 1st to 2nd burner)
9	Regulator c/w gauge
10	Automatic Temperature Control (if equipped)

PARTS LIST – WITHOUT SPRAY BAR

QTY	DESCRIPTION
1	5.5hp Honda Engine, GX160K1HX (refer to engine manual for parts)
1	Gear Pump, 10HB1131 (refer to pump parts list attached)
1	Relief Valve, VJ-3R-XS-SS (#4)
2	100,000btu Vapor Propane Burner c/w stand (refer to burner diagram for parts)
1	Vapor Propane Regulator c/w 0-30 gauge
1	2" Draincock
1	4" Material Thermometer, 50°F to 550°F
1	10" dia. Filler Lid Assembly
1	10" dia. Filler Lid Rubber Gasket
1	Hand Wand Complete Assembly
1	5030 Hand Wand Spray Nozzle
1	¾" Hand Wand Main Valve (#6)
1	¾" Hand Wand Valve (#7)
1	1-1/2" "Y" Strainer (#3)
1	Lovejoy Coupler, ¾" to engine
1	Rubber Insert for Coupler
1	Lovejoy Coupler, ¾" to pump
1	1-1/4" Suction Valve (#2)
1	¾" Cleaning Solvent Valve (#5)
1	Hose Reel, heavy duty
1	½" Hose Swivel

PLEASE FEEL FREE TO CALL IF YOU HAVE ANY QUESTIONS!

TEL: (864) 244-4800
FAX: (864) 244-5007

NOTICE

BE SURE TO OIL THE RUBBER GASKET ON THE 10” FILLER LID IN ORDER TO PREVENT STICKING OF THE GASKET TO THE RIM OF THE FILLING NECK.

MAULDIN™

CALDER BROTHERS CORPORATION

(LIMITED) PRODUCT WARRANTY

Calder Brothers Corporation warrants that the road machinery equipment 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.

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 LIABILTY 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 LIABILTY OF CUSTOMER TO ANY THIRD PARTY, OR FOR OTHER DIRECT, INCIDENTAL OR CONSEQUENTIAL DAMAGES.

WARRANTY EXCLUSION – NON REIMBURSABLE ITEMS:

1. Repairs required to correct failures caused by neglect, normal wear, or abuse. Mauldin covers defective workmanship and materials, only.
2. Parts and labor supplied by the user or any unauthorized repair facility unless a Repair Authorization Number is given prior to effecting repairs.
3. Normal maintenance, adjustments, or consumable items such as hydraulic oil, filters and hoses.
4. Parts and accessories not installed or supplied by Mauldin.
5. Rental of another machine or other related equipment while equipment repairs are in progress.
6. Telephone, telegraph expenses and/or related communications expenses.
7. Replacement and accessory parts not supplied by Mauldin and damages resulting from their installation.
8. Loss of revenue resulting from the failure.
9. Loss of damage to personal property.
10. Transportation charges accrued during transportation of failed parts or equipment.
11. Excessive time expended in the diagnosis of the equipment failure.
12. Damage in transit. These claims must be filed with the common carrier concerned.
13. Complete assembly's that have failed prematurely through warrantable condition, unless it is proven that such assembly cannot be placed in first class condition by replacement of parts or unless previously authorized by factory.
14. Normal service work over and above the repair or replacement of defective parts.
15. Repairs made to the engine, under warranty, that are covered only by Authorized Engine Dealers and Distributors, designated by engine manufacturer.
16. Heating system, hydraulic components, material pump and hoses, applicator valves, and electrical components.