

### E-Z POUR 50 MELTER GRAVITY FEED

### E-Z POUR 50 MELTER

This manual is furnished with each new CRAFCO E-Z POUR 50 MELTER. The manual will help your machine operators learn to run the sealer properly and understand its mechanical functions for trouble-free operation.

Your CRAFCO E-Z POUR 50 MELTER is designed to give excellent service and save maintenance expense. However, as with all specially engineered equipment, you can get best results at minimum costs if:

- (1) You operate your machine as instructed in this manual, and
- (2) Maintain your machine regularly as stated in this manual.



### WARNING:

The Engine Exhaust from this product contains chemicals known to the State of California to cause cancer, birth defects or other reproductive harm. Operate in well ventilated area only. Engine Exhaust is deadly.

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### **SAFETY PRECAUTIONS**

High operating temperatures of Adhesive & Machine require protective clothing and gloves be worn by operator.

Always wear eye protection.

Observe all CAUTION & WARNING signs posted on machine.

Avoid the entrance of water into any part of the machine. Water will displace heat transfer oil or adhesive which could be hazardous to personnel surrounding the machine when it reaches operating temperatures.

Avoid bodily contact with hot sealant material or heat transfer oil, serious burns my result.

Read Operator Manual thoroughly before operating machine.

Make sure operator is familiar with machine operation.

Do not operate in closed building or confined areas.

Shut-down Burner & Engine prior to refueling.

When adding solid material to Sealant tank, stop agitator, lift lid, lower material into tank and close lid before restarting agitator. Hot material could splash and cause serious burns if procedure is not followed.

Keep hands, feet and clothing away from all moving parts.

Always keep a fire extinguisher near the unit. Maintain extinguisher properly and be familiar with its use.

Do not exceed 525° F. for heat transfer oil temperature.

Do not overfill heat transfer oil level. Check oil each day *before* starting burner, add oil to touch dipstick if required. Use only recommended heat transfer oil and change after 500 hours of operation or one year, whichever occurs first.

Follow operating instructions for starting and shut-down of Burner and Pilot Light.

Calibrate temperature control prior to initial operation and each 50 hours of operation.

Replace any hoses which show signs of wear, fraying or splitting. Be sure all fittings and joints are tight and leakproof.

Precaution is the best insurance against accidents.

The E-Z Pour 50 Melter should not be left unattended with propane burner or pilot lit.

Tighten all Bolts & Screws after every 100 hours of operation.

CRAFCO, INC. assumes no Liability for an accident or injury incurred through improper use of the Machine.

### LIMITED WARRANTY

CRAFCO, Inc., through its authorized distributor, will replace for the original purchaser free of charge any parts found upon examination by the factory at Chandler, Arizona, to be defective in material or workmanship. This warranty is for a period within 60 days of purchase date, but excludes engine/or components, tires, and battery as these items are subject to warranties issued by their manufacturers.

After 60 days, Crafco, Inc. warrants structural parts, excluding heating system, hydraulic components, material pump and hoses, hot oil pump, applicator valves, and electrical components for a period of (1) one year from date of delivery. Crafco, Inc., shall not be liable for parts that have been damaged by accident, alteration abuse, improper lubrication/maintenance, normal wear, or other cause beyond our control.

The warranty provided extends only to the repair and/or replacement of those components on the equipment covered above and does not cover **labor** costs. The warranty does not extend to incidental or consequential damages incurred as a result of any defect covered by this warranty.

All transportation and labor costs incurred by the purchaser in submitting or repairing covered components must be bore by the purchaser.

Crafco, Inc., specifically disavows any other representation, warranty or liability related to the condition or use of the product.

Warning - Use of replacement parts other than genuine Crafco parts may impair the safety or reliability of your equipment and nullifies any warranty.

### CRAFCO, INC. WARRANTY CLAIM INSTRUCTIONS

Please follow the instructions stated below when calling in a Warranty Claim. Failure to follow these procedures may be cause to void the warranty.

- (1) Call your local Crafco Distributor. If you do not know who your local distributor is, call a Crafco Customer Service Representative, (Toll Free 1-800-528-8242) for name, location and telephone number).
- (2) On contacting the Distributor, be prepared to identify the machine type, model number and serial number, also the date of purchase if available.
- (3) Should the cause of the malfunction be a defective part, the Distributor will advise you of the procedure to follow for a replacement.
- (4) The warranty is valid only for parts which have been supplied or recommended by Crafco, Inc.

If you have any additional questions regarding warranty repairs and parts, please do not hesitate to call toll free 1-800-528-8242.

Crafco, Inc.
420 N. Roosevelt Avenue
Chandler, AZ 85226
(602) 276-0406
Toll Free 1-800-528-8242

### **SPECIFICATIONS**

Vat Capacity	50 Gallons
Melting Capacity	40 Gallons/Hour
Heat Transfer Oil Required	18 Gallons at 70° F.
Tank Construction	Double Boiler Type
Tank Opening Size	14¾ x 12¾
Maximum Heat Input	Vapor Burner - 185,000 BTU's
Burner & Temperature Control	Automatic - Fail Safe
Engine - Briggs & Stratton	Single Cylinder -3 Hp @ 3600 rpm
Drive Mechanism	All Hydraulic with infinite speed forward and reverse action
Mixer	Full sweep mixer with 2 blades
Axle	2250 lbs. Capacity
Tires (2)	20.5 x 8 x 10 1,005 lbs. Capacity each
Dry Weight	Approximately 1500 lbs.
Propane Bottle	100 lbs.

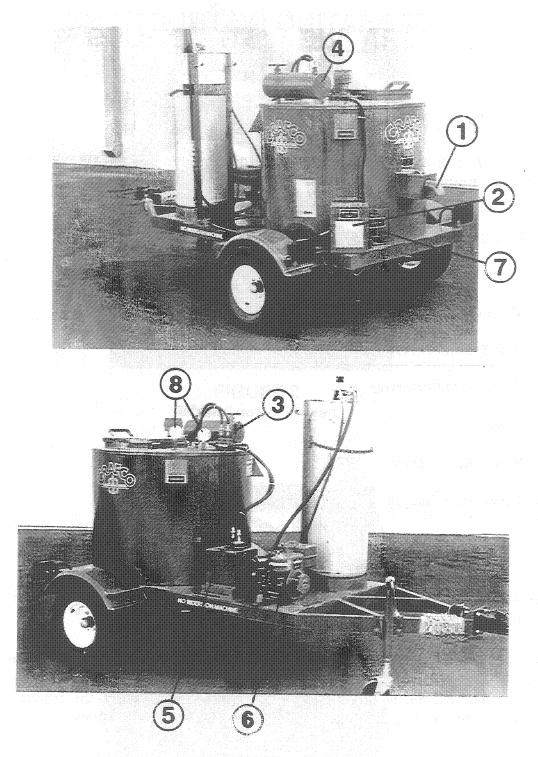


FIGURE 1

### **OPERATING INSTRUCTIONS**

### INTRODUCTION

The CRAFCO E-Z POUR 50 MELTER was developed to melt CRAFCO Brand Sealants. However, it will work equally well with all road asphalts and federal specification crack or joint sealants.

- 1. Pour Spout
- 2. Heat Control Box
- 3. Mixer Control Valve
- 4. Heat Transfer Oil Overflow Tank
- 5. Hydraulic Oil Reservoir
- 6. Engine
- 7. Burner Access Door
- 8. Temperature Gauges

**Mixer Control Valve** - Fig. 2, controls mixer rotation in either direction with off position in middle.

**Automatic Temperature Control** - regulates the temperature of the heat transfer oil. See Figure 3. The automatic temperature control may be set to any desired temperature, *but not to exceed 525° F*. It is necessary to check the calibration of the thermostat before using the machine initially, see page 11 for instructions.

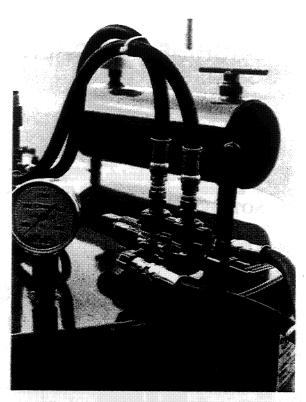


FIGURE 2
Mixer Control Valves

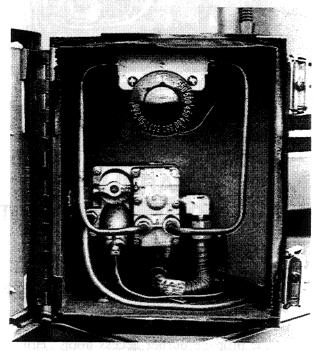


FIGURE 3
Automatic Temperature Control

### PREPARING MACHINE FOR OPERATION

DO NOT operate machine without following these instructions:

- 1. Fill engine fuel tank with non-leaded gasoline.
- 2. Fill propane storage tank.
- 3. Check engine crankcase oil, refer to Briggs & Stratton Engine manual for instructions.
- 4. Check hydraulic oil supply. Oil level should be 1" 2" from top of tank.
- 5. Check heat transfer oil level at ambient temperature with machine leveled. Oil should touch stick at 70° F. DO NOT OVERFILL or spillage will occur when machine reaches operating temperature.
- 6. Pour spout should be in closed position. See Figure 1.

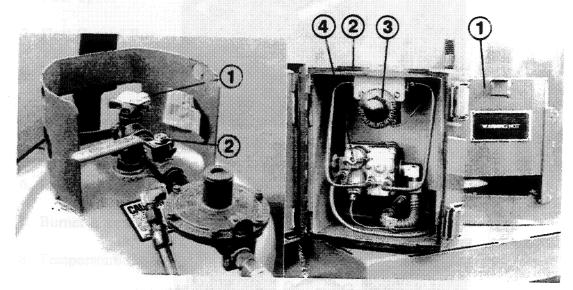


FIGURE 8

FIGURE 9

### **MACHINE START UP**

### TO START BURNERS

Open LPG tank valve (1) Figure 8. Open in line ball valve (2) Figure 8. Open propane burner access door (1) Figure 9. Open burner control box (2) Figure 9. Turn temperature control off (3) Figure 9. Turn pilot control to pilot (4) Figure 9, push pilot control in and light pilot light. Pilot light is inside propane burner access door. Hold pilot control until pilot remains lit when control knob is released. After pilot is burning, turn knob on gas regulator to **On.** Turn temperature dial (3) Figure 9, to desired setting. Burner should ignite. Close access door.

### SHUT DOWN PROCEDURE

Close LPG tank valve (1) Figure 8. Wait for burner to flame out. Close in line ball valve (2) Figure 8, and turn temperature control to off (3) Figure 9.

**WARNING:** Never leave machine unattended when burner control is in operation.

### CHECKING TEMPERATURE CONTROL CALIBRATION

The temperature control system is calibrated at the factory during testing; however, it is good practice to check the calibration when the machine is first put into operation. And also checked again periodically. (Each 50 hours of operation is recommended.) The gauge (shown in (1) Figure 10) registers the actual temperature of the heat transfer oil and it should coincide with the temperature control hand knob setting.

To check the calibration, the following procedure must be followed - check heat transfer oil level, it must be high enough to submerge the temperature gauge probe. Start up the burner. Set temperature control hand knob at about 250° F. Leave burner on until 200° F. registers on the temperature gauge. Slowly turn the temperature control hand knob down until a click is heard and/or the burner shuts off. If the temperature control hand knob, at this point, reads differently than the temperature gauge, recalibration is required.

### RECALIBRATING THE TEMPERATURE CONTROLS

(FIGURE 11)

To recalibrate the temperature control, set the temperature control knob to 200° F. When the burner shuts off, carefully pull the hand knob off the spindle. Be careful not to move the spindle during this operation. With a jeweler's screwdriver (or the flattened end of a paper clip) turn the adjusting screw inside the spindle *counterclockwise* to increase temperature, *clockwise* to lower temperature (1/8 turn will change the temperature 15° F. to 20° F.). Carefully replace hand knob. Both the hand knob and the temperature gauge should now read approximately 200° F.

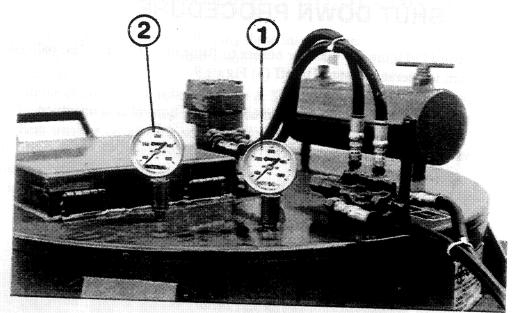


FIGURE 10
Heat Transfer Oil Temperature Gauge

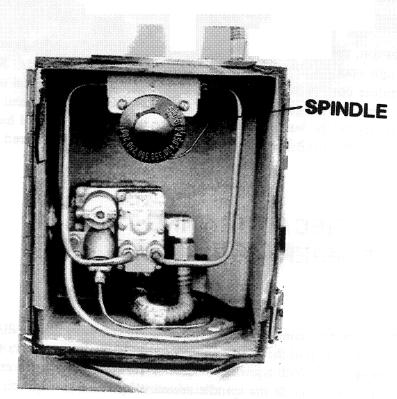


FIGURE 11
Calibration Of Temperature Control

### TO START ENGINE

**NOTE:** It is recommended that you read the Engine Manual before you start the engine.

- 1. Return mixer controls to "off" position. See Figure 12
- 2. Turn gasoline valve on (if so equipped).
- 3. Close choke, open throttle slightly and pull starter cord.

### **MIXER**

- 1. With engine running, start mixer by moving the mixer hydraulic control (1) for clockwise rotation (Figure 12). If mixer jams, control may be moved for counterclockwise rotation.
- 2. When sealant becomes liquid throughout, draw off may begin.
  - a. When sealant reaches application temperature (refer to sealant manufacturer's recommendation). Thermometer located on top of material tank indicates material temperature. See (2) Figure 10.
  - **b.** Quantities may now be drawn off as desired. Turn handle on pour spout, (1) Figure 1 to drain material into pour pot.

### **IMPORTANT:**

Be sure pour spout is completely closed after each draw off.

### **CAUTION:**

Extreme care must be used when operating this equipment. Safety is the result of being careful and paying attention to details. Remember the propane flame is about 2200° F. Certain exposed parts of this machine when operating, reach 500° F.; the sealant as high as 350° F. and the hydraulic oil may reach 200° F. Always wear protective clothing and eye protection. Be sure that all joints and fittings are tight and leakproof. Immediately replace any hose which shows any signs of wear, fraying or splitting.

OFF

**CLOCKWISE** 



FIGURE 12

COUNTERCLOCKWISE

### **LOADING MACHINE**

When loading solid material into the sealant tank, the mixer must be momentarily stopped, the lid lifted, the material lowered carefully into the tank and the lid closed again before the mixer is restarted. Following this procedure will prevent the hot material from splashing and causing serious burns to personnel.

The solid materials must be added at intervals which will allow the mixer to rotate without jamming. If blocks of material are fed in too quickly, jamming will result and slow down the melting process. Always try to maintain a melted material level at least 6" above the horizontal portions of the mixer.

### SHUTDOWN PROCEDURE

- 1. Turn Temperature Dial to off.
- 2. Close valves on LPG cylinders. Wait for Pilot Light to flame out. Close burner valve.
- 3. Stop agitator. Shut down engine.

### **STORING MACHINE**

The E-Z Pour 50 should be stored with the trailer tongue in an elevated position. This will allow moisture condensation to settle in the bottom rear of the heat transfer tank, above drain plug. After extended periods of time, the water can be drained by removing the cap and replacing it when all water is displaced.

**CAUTION:** If there is any suspicion that moisture is still present after draining, warm heat transfer oil to 250° F. to evaporate any moisture.

### TROUBLE SHOOTING CHART

PROBLEM.	CAUSE	REMEDY
Pilot will not light.	Low fuel pressure.	Check pressure.
	Orifice plugged.	Clean orifice. Adjust so that 3/4"
	Thermopyle dislocated/or	of tip is exposed to igniter
	faulty.	flame.
Burner will not light.	Low fuel pressure.	Check pressure.
	Pilot not lit.	See above.
Mixer will not rotate.	Sealant temperature too low.	Heat sealant to higher
		temperature before starting
		mixer rotation.
	Too many blocks placed in	Continue heating and reverse
	machine at one time.	mixer direction.
	Inadequate hydraulic pressure.	Check level of hydraulic fluid in
		pump.
Sealant material will not flow	Sealant temperature too low.	Heat pour spout to liquify old
through pour spout.		material.
	Old material remains in pour	Heat pour spout to liquify old
	spout.	material.
Slow heat up of sealant.	Build up of coked or crystallized	Allow machine to cool.
	material on inside of material	Remove deposits and flush with
	tank.	solvent.
	Heat transfer oil low.	Fill to proper level.

### SERVICE AND MAINTENANCE INSTRUCTIONS

### PREVENTIVE MAINTENANCE INSTRUCTIONS

- 1. Conduct a general inspection of your machine at least once a week. Replace all worn or damaged parts, make any necessary adjustments and tighten all loose nuts or screws.
- 2. Keep regular replacement items in stock for emergency repairs, to avoid costly "down" time.
- 3. Clean machine externally periodically.
- 4. Follow recommended maintenance procedures on maintenance chart.

### **MAINTENANCE INSTRUCTIONS**

### **ENGINE:**

Check oil every 8 hours of operation. Change after the first 5 hours of operation and change every 25 hours thereafter.

### HYDRAULIC SYSTEM:

Change oil after every 500 hours of operation. Check oil level weekly. Oil level should be kept 1 - 2 inches from top of tank.

### WHEEL BEARINGS:

Repack wheel bearings every 12,000 miles or every year, using a good grade of bearing grease.

### **MAINTENANCE CHART**

		HOURS			
LOCATION	PROCEDURE	8	50	100	500
Engine Check Oil level	See Briggs & Stratton Engine Instruction Manual.	*			
Heat Transfer Oil	Check		*		
	Change				*
Other Engine Maintenance	See Briggs & Stratton Operating and Maintenance Instructions.				
Hydraulic Oil	Check Oil	*			
	Change Oil				*
edic. Rapipos od worn Johns dute de etstwa.	For proper oil, see recommended fluids and lubricants page.			arung ba	
Wheel Bearings	Clean and repack - using good grade of bearing grease.	Every 12,000 miles or every year.			

### RECOMMENDED FLUIDS & LUBRICANTS

APPLICATION	RECOMMENDED	FULL POINT
Engine Oil	Refer to Briggs & Stratton	
	Engine Operating Manual.	
LPG	Propane	100 lbs.
Hydraulic Oil	RONDO OIL HD - 68	1 gal.
Heat Transfer Oil	Regal R & D 68	18 gals.

The following is a list of suitable Heat Transfer Oils to be used in Crafco equipment.

Producer	Product Name	Product No.
Техасо	Regal	<b>R&amp;O</b> 68
Gulf	Harmony	68
Shell	Thermia	"C"
Exxon	Teresstic	68
Phillips	Magnus	68
Chevron USA	Heat Transfer Oil #1	
Conoco	Dectol R&O	68
Union Oil	Turbine Oil	68

### WARNING

The Heat Transfer Oil in this machine is a grade that has been tested and recommended by CRAFCO, Inc. The addition of any grade of oil not specifically recommended by CRAFCO, Inc. shall be cause for the voidance of all warranties.

All oils subjected to high temperatures deteriorate with time and lose many of their characteristics. Tests conducted by CRAFCO, Inc. have determined that for best results and safety, the Heat Transfer Oil in this machine must be drained and replaced with CRAFCO, Inc. recommended oil after five hundred (500) hours of operation or one (1) year, whichever occurs first.

### PARTS LIST FOR E-Z 50 (GRAVITY)

ITEM NO.	DESCRIPTION	QTY.	PART NO.
1.	Axle Assembly with Springs		40100
2.	Shackle Tie Plate	4	23075
3.	Shackle Tie Bolt	6	23100
4.	Shackle Nut	6	23105
5.	Tire And Wheel	2	40111
6.	Fender Assembly	2	40120
7.	5/16 - 18 x 1 Bolt	8	28716
8.	5/16 Flat Washer	8	28671
9.	5/16 - 18 Locknut	8	28525
10.	Tail Light - Right Side	1	24022
11.	Tail Light - Left Side	1	24023
12.	½ Lockwasher	4	28645
13.	1/4 - 20 Hex Nut	4	28500
14.	Swivel Tongue Jack	1	40105
15.	Jack Mounting Bracket	1	40106
16.	½ - 13 x 1¼ Bolt	2	28761
17.	½ - 13 Locknut	2	28528
18.	3 HP Gas Engine	1	40080
19.	2 Piston Hydraulic Pump & Res.	i	40082
20.	16T Sprocket 3/4 Bore	1	40085
21.	3/16 Key - 7/8" Long		40084
22.	16T Sprocket - 1" Bore	-1 1	26002
23.	Delrin Coupling	1	40081
24.	LPG Storage Tank	1	25118
25.	½ - 13 Black Knob	1	26032
26.	½ Pipe Coupling	2	28178
27.	½ x ¼ Bushing	1	28344
28.	½ x 2½ Pipe Nipple		28033
29.	12" Temperature Gage	2	40078
30.	Overflow Tank Assembly	1	40070
31.	Dipstick Assembly	1	40075
32.	Air Breather & Element	1	26025
33.	Mounting Plate	1	40029
34.	Pipe Spacer		40030
35.	3/8 - 16 x 2½ Bolt		28736
36.	3/8 Lockwasher		28647
37.	3/8 - 16 Locknut		28526
38.	Hydraulic Motor		22027
39.	Hydraulic Motor 1  3/8 - 16 x 1" Long Bolt 4		28731
40.	Agitator Shaft	1	40050
41.	Verticle Paddle Assembly	2	40060
42.	3/8 - 16 x 1½ Bolt	6	28984
43.	3/8 Flat Washer	6	28641

ITEM			PART
NO.	DESCRIPTION		NO.
44.	3/8 - 16 Stover Nut	6	28538
45.	Control Valve	1	40083
46.	5/16 - 18 x 21/2 Long Bolt	3	28721
47.	5/16 Lockwasher	3	28646
48.	Spacer	2	32093
49.	2" x 4" Long Pipe Nipple	1	28046
50.	2" S.S. Ball Valve	1	29281
51.	Spout Assembly	1	40125
52.	3/8 Close Nipple	1	28002
53.	3/8 Pipe Coupling	1	28177
54.	Stuffing Box 1		25203
55.	Burner Assembly		40099
56.	#25 Orifice		40092
57.	Thermopyle		40097
58.	Pilot		40091
59.	Control Box Assembly 1		40330
60.	1/2 x 1/4 Bushing 1		28344
61.	45° Elbow Adaptor	1	29857
62.	Gas Valve 1		40096
63.	90° Elbow Adaptor		29823
64.	Temperature Controller 1		40087
65.	#10 - 32 x ¾ Rd. Hd. Screw 4		28844
66.	Temperature Indicator Dial 1		25220
67.	Grommet 1		25217
68.	L.H. Control Tube	1	40332
69.	R.H. Control Tube	1	40333

### **HYDRAULIC PIPING SEQUENCE - E-Z POUR 50 MELTER**

1. HYDRAULIC RESERVOIR ASSEMBLY (REAR PORT) TO MIXER VALVE ("IN" PORT)				
1	29841	Straight Adaptor		
1	40013	Hose Assembly 3/8 x 36" Long		
1	29872	Elbow Adaptor		

1	2. MIXER VALVE ("OUT" PORT) TO HYDRAULIC RESERVOIR (FRONT PORT) RETURN			
1	29872	Elbow Adaptor		
1	1 40013 Hose Assembly 3/8 x 36" Long			
1	29841	Straight Adaptor		

3. M	3. MIXER VALVE (REAR PORT) TO HYDRAULIC MOTOR FOR MIXER (L.H. PORT)				
1	29834	Straight Adaptor			
1	40012	Hose Assembly 3/8 x 24" Long			
1	22029	Straight Adaptor "O" Ring			

4. MIXER VALVE (FRONT PORT) TO HYDRAULIC MOTOR FOR MIXER (R.H. PORT)				
1	29834	Straight Adaptor		
1	40012	Hose Assembly 3/8 x 24" Long		
1	22029	Straight Adaptor "O" Ring		

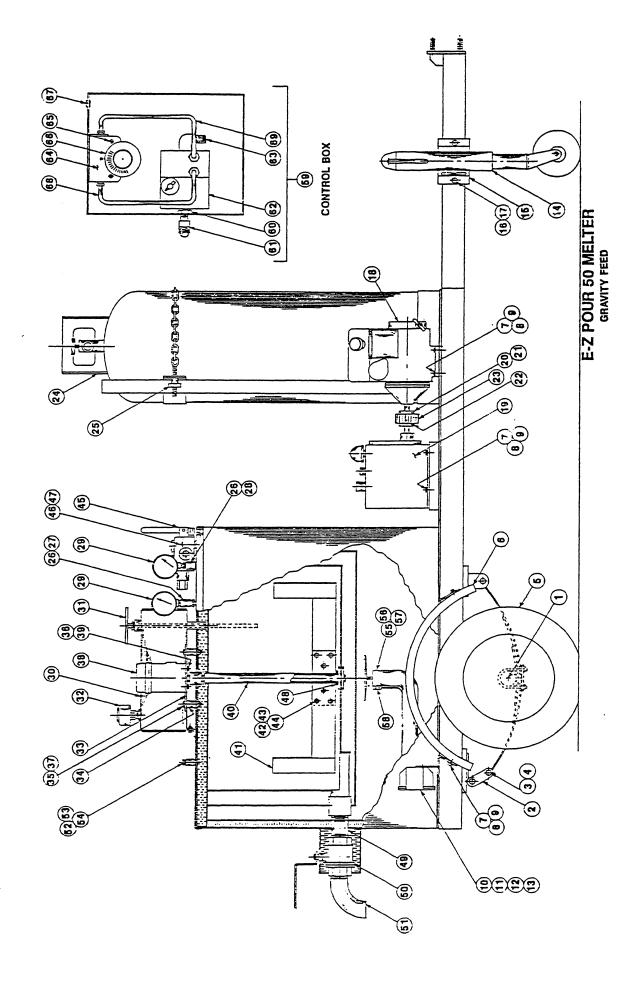
### L.P.G. PIPING SEQUENCE - E-Z POUR 50 MELTER

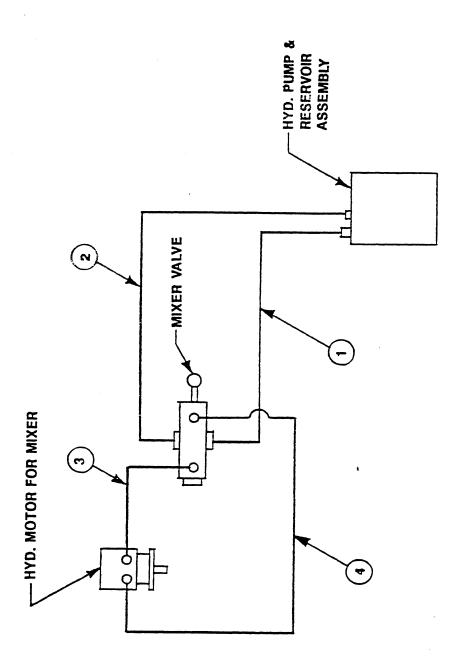
1. L.	1. L.P.G. TANK TO REGULATOR			
1	40084	L.P.G. Regulator Assembly - Consists of:		
		25123 Tank Spud		
29195 ¼ Ball Valve		29195 ¼ Ball Valve		
280		28001 <sup>1</sup> / <sub>4</sub> Close Nipple		
		28251 <sup>1</sup> / <sub>4</sub> Pipe Tee		
28001 1		28001 <sup>1</sup> / <sub>4</sub> Close Nipple		
		25218 Pilot Light		
		Regulator		
		29870 Elbow Adaptor		

2. REGULATOR TO CONTROL BOX			
1	25131	Propane Hose 3/8 x 60"	
1	29832	Straight Adaptor	
1	40827	Gas Line Assembly (On Frame)	
1	29832	Straight Adaptor	
1	25137	L.P.G. Hose 3/8 x 12"	
1	29857	45° Elbow Adaptor (On Control Box)	

3. C	3. CONTROL BOX TO PROPANE BURNER				
1	29823	90° Elbow Adaptor (In Control Box)			
1	40098	Gas Line			

4. TEE IN LINE 1. TO HAND TORCH					
1	29840	45° Elbow Adaptor			
1	25130	Propane hose 3/8 x 120"			
1	1 25016 Hand Torch Assembly Consists of:				
		29850 Female Adaptor			
		29199 <sup>1</sup> / <sub>4</sub> Shut Off Valve			
		25015 Hand Torch			

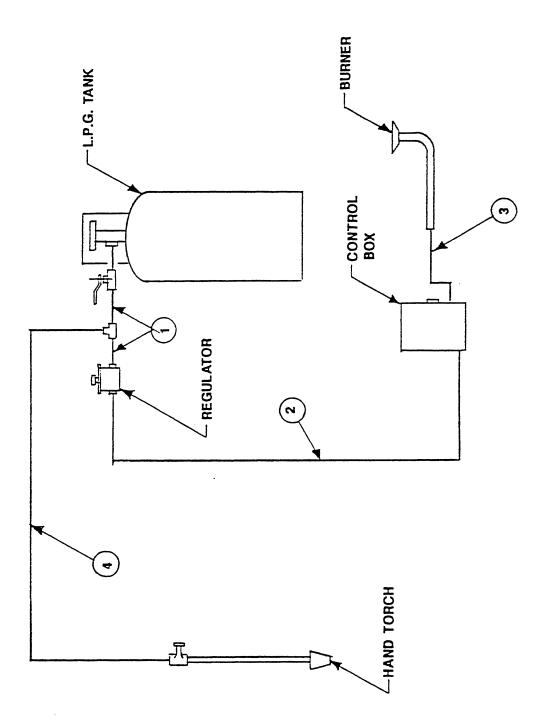




# HYDRAULIC PIPING DIAGRAM

### E-Z Pour 50 Melter

GRAVITY FEED



## L.P.G. PIPING DIAGRAM E-Z Pour 50 Melter GRAVITY FEED

Pioneering Leadership and Innovation in Quality Pavement Maintenance Products.



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