

# E-Z POUR 200 MELTER

(PROPANE)

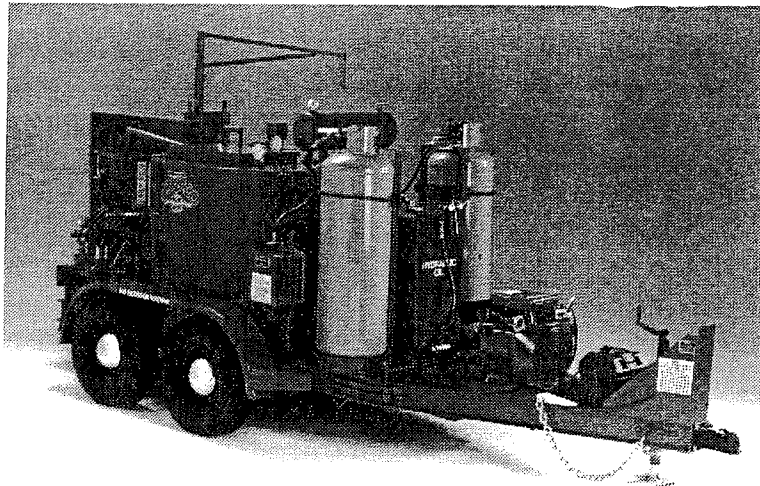
## WITH PUMP/APPLICATOR

This manual is furnished with each new CRAFCO E-Z POUR 200 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 200 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:

*Manual - 210212*

- (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.

4/1997

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## SAFETY PRECAUTIONS

- \*High operating temperatures of Sealant & 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 sealant 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 may 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. **DO NOT** refuel when burner is lit.
  - \*When adding solid material to Sealant tank, stop mixer, lift lid, place material onto lid and close lid before restarting mixer. Hot material could splash and cause serious burns if this 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. Expansion of oil during heat up could cause overflow. With machine in level position, check oil each day before starting burner, add oil to top mark on dipstick if required (at 70° F.). 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. Instructions are mounted on control box.
  - \*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 200 Melter should not be left unattended with burner lit.
  - \*Tighten all bolts and screws after every 100 hours of operation.
- CRAFCO, INC. assumes no Liability for an accident or injury incurred through improper use of the machine.

## **E-Z POUR 200 MELTER 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 herein 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 nulifies 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.  
6975 WEST CRAFCO WAY  
CHANDLER, AZ 85226  
(602) 276-0406  
Toll Free 1-800-528-8242

# SPECIFICATIONS

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Vat Capacity	200 Gallons
Melt Capacity	150 Gallons/Hour
Heat Transfer Oil Required	27 Gallons at 70° F.
Tank Construction	Double Boiler Type
Tank Opening Size	16" x 24"
Maximum Heat Input	Vapor Burner 250,000 BTU's
Burner & Temperature Control	Automatic - Fail Safe
Engine - Onan Model P-220	2 Cylinder 20 HP @ 3600 rpm
Drive Mechanism	All Hydraulic with infinite speed forward & reverse action
Mixer	Full sweep mixer with 2 blades
Axle (2)	3,500 lbs. Capacity each
Tires (4)	185R-14 1,850 lbs. @ 65 PSI
Dry Weight	Approximately 4,000 lbs.
Propane Bottles (2)	100 lbs. each

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# E-Z POUR 200 MELTER OPERATING INSTRUCTIONS

## INTRODUCTION

The CRAFCO E-Z Pour 200 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.

**DO NOT** operate machine without following these instructions:

1. Fill engine fuel tank with non-leaded gasoline.
2. Fill propane storage tanks.
3. Check engine crankcase oil (refer to Engine Operator's Manual).
4. Check hydraulic fluid level, at ambient temperature. Add fluid if necessary to bring fluid to correct level.
5. Check heat transfer oil supply. Check level at ambient temperature, machine level. At 70° F., oil should be at the top mark. DO NOT overfill, or spillage may occur when machine reaches operating temperature.
6. All valves should be in closed position and temperature control box set at "OFF".
7. Applicator hose can be kept warm and ready for use by storing in heating chamber before using machine. Close heating doors after hose and wand have been coiled in chamber.
8. Check temperature control calibration.

# OPERATION OF CRAFCO E-Z POUR 200 PROPANE MELTER MACHINE START UP

## TO START

1. Fully open the Damper Vent Fig. A(1), Page 9.
2. Set Temperature Dial to "OFF".
3. Open valves on propane bottles, line valves Fig A(2) (3) page 9.
4. Start engine.
5. Turn Temperature Dial to desired temperature setting.

## CAUTION:

If Burner does not ignite the first time, turn temperature dial to off. Turn temperature dial to desired setting. Burner should ignite. If burner still does not ignite, determine cause of malfunction (see Trouble Shooting Guide).

6. Allow the heating oil to continue to heat. When sealant material reaches a liquid state, engage the agitator by moving the agitator lever either forward or backward. If agitator does not move, allow material to heat longer. Jamming of agitator shaft causes hydraulic oil to over heat and machine damage could occur.
7. When sealant reaches correct application temperature Fig. A(11) page 9, open main tank valve, open recirculation valve Fig. C(8) and close applicator valve Fig. C(9). Put sealant pump in reverse (Suction) mode. When pump turns freely, reverse sealant pump flow (Discharge) Fig. C(10). This circulates sealant back into tank.
8. Check the sealant temperature at material pump. This indicates the temperature of sealant flowing through lines.
9. When application of sealant is desired, remove the hose from the rear of machine. Attach hose to hand applicator. Be sure to hand tighten only. Place applicator in rear tank opening Fig. D(15), with the hand wand valve in the **ON** position Fig. D(16).
10. Open applicator valve Fig C(9).
11. Close the recirculation valve Fig. C(8). **IMPORTANT:** Adjust the valve to get the desired amount of flow from the applicator wand given your applicator needs. You do not need to close the valve all the way for application. If material does not flow from wand, the hose may need to be warmed. Heat hose by placing in heating chamber to liquify sealant in hose, then repeat procedure.
12. Extreme care should be taken when changing or installing applicator tips. If the material is hot the material pump **must** be put in the "Suction" mode. This will insure against hot material pumped from wand. ***Sealant material is hot and can cause skin burns.***
13. To apply sealant to joint, remove hand applicator from rear tank opening. **Make sure** the hand wand valve is closed. When applicator wand is over joint, open hand valve and apply sealant.
14. To prevent hose from cooling, place the applicator wand in the rear tank opening when not to be used for 2 minutes or more. Always close hand wand prior to inserting wand in tank opening. Open hand valve to recirculate back into tank and keep hose warm.



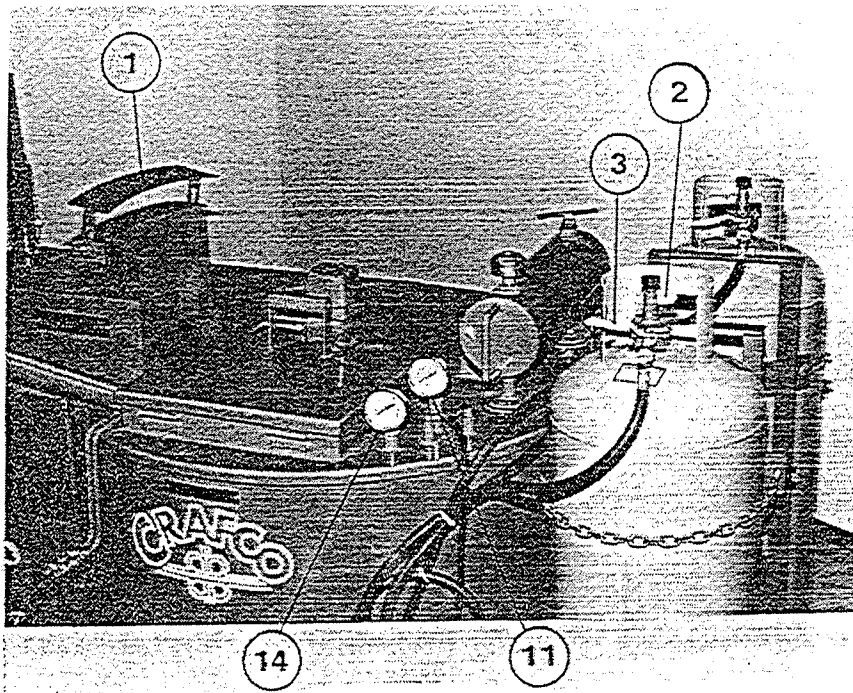


FIGURE A

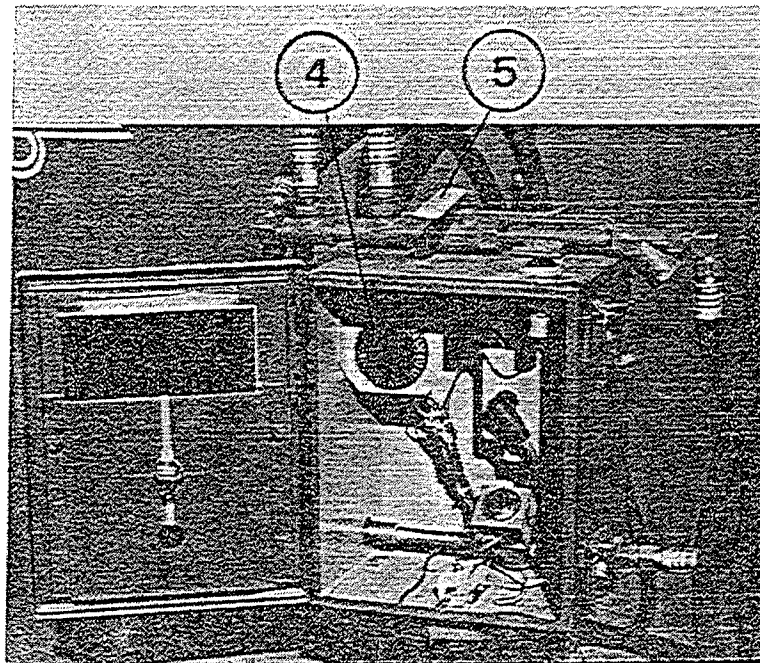


FIGURE B

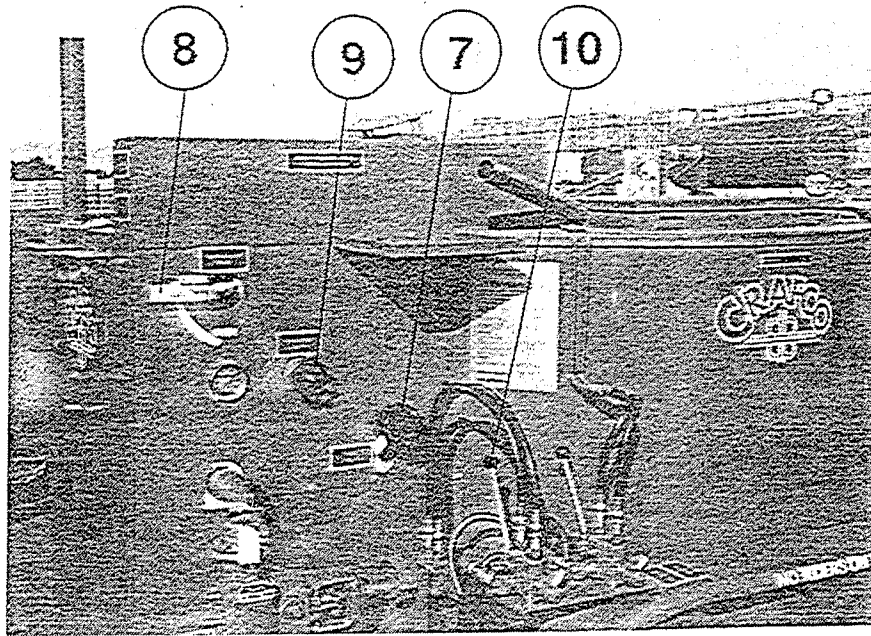


FIGURE C

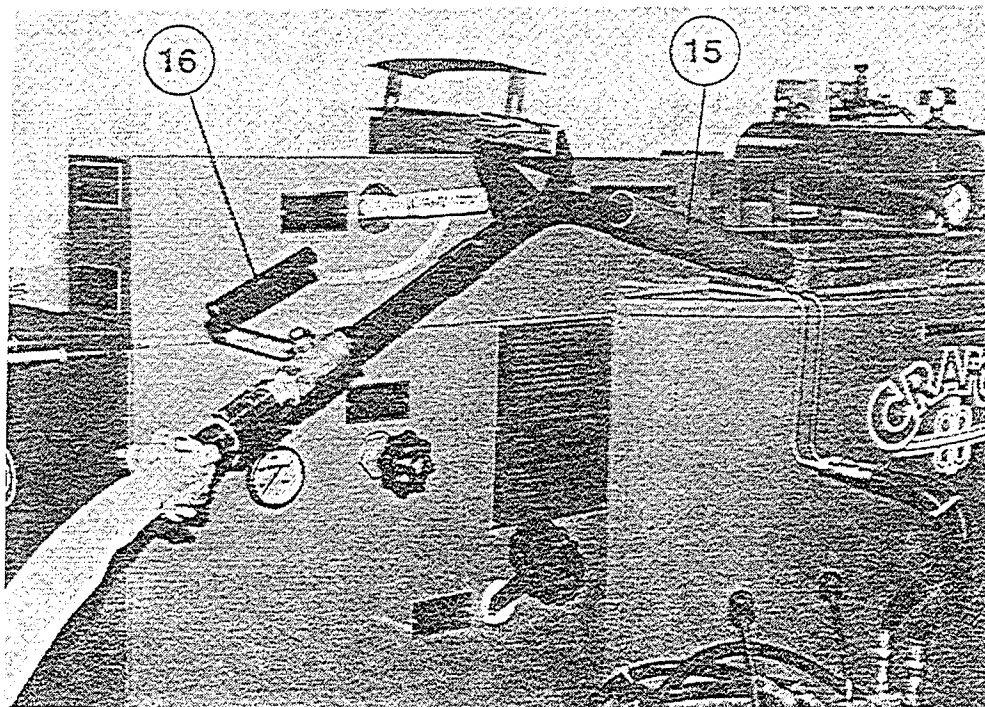


FIGURE D

## 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 (Fig. A(14), Page 9), registers the actual temperature of the heat transfer oil and it should coincide with the temperature control hand knob setting (Fig. B(4), Page 9).

To check the calibration, first the machine must be level and the following procedure must be followed - check heat transfer oil level (at 70° F.) 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.

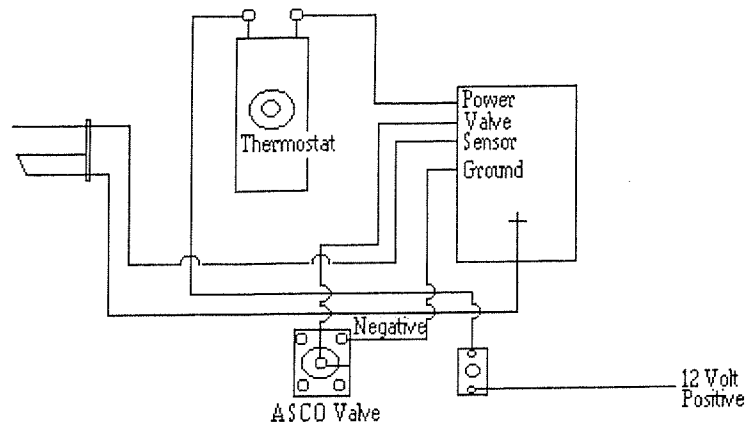
## RECALIBRATING THE TEMPERATURE CONTROLS

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* no more than 1/8 turn to start the burner, to increase the temperature (1/8 turn will raise the temperature 15° F. to 20° F.), continue turning the screw each time the burner cuts out until the gauge reads 200° F. Carefully replace hand knob. Both the hand knob and the temperature gauge should now read approximately 200° F.

## 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 400° 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. Tighten all bolts on all flanges after 100 hours. Tighten ALL bolts, nuts and screws every 250 hours.

## BURNER CONTROL WIRING DIAGRAM



## LOADING MACHINE

When loading solid material into the sealant tank, the mixer must be momentarily stopped, the lid lifted, the material placed on the lid 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.

## SHUTDOWN AND CLEAN-OUT PROCEDURE

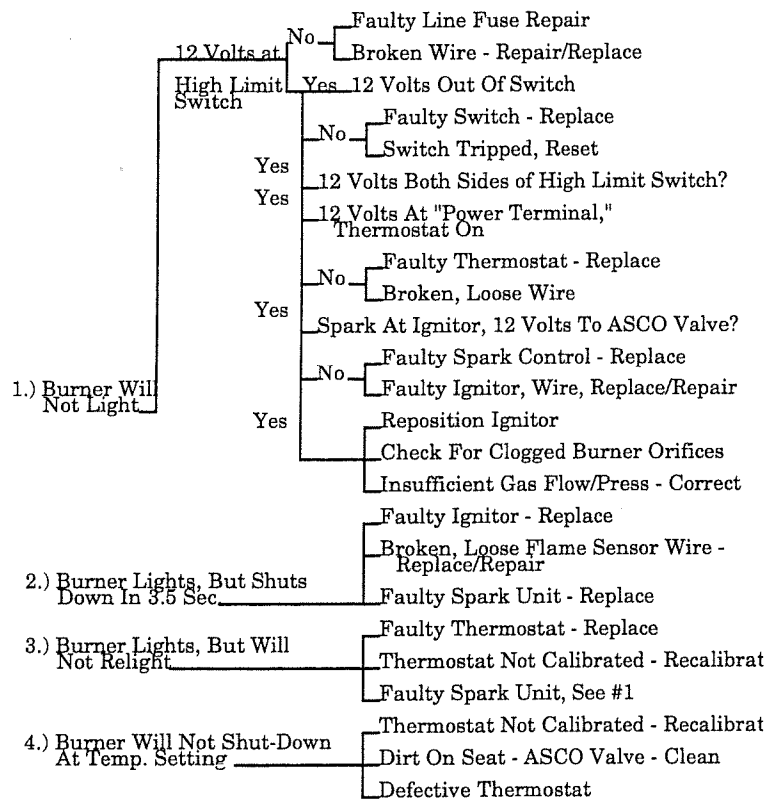
1. Turn temperature dial to off.
2. Return mixer to off position.
3. Close recirculation valves.
4. Put material pump in suction mode. With hand applicator valve open, disconnect wand and return hose to heat chamber. Leave pump in suction mode for approximately 3 min. Close main tank valve.
5. Return pump to off position.
6. Turn off engine.
7. Return wand to heat chamber.
8. Close applicator valve/open recirculation valve.
9. Close LPG Line Ball Valves. Close LPG Cylinder Valves.

# STORING MACHINE

The E-Z Pour 100 should be stored in an area to prevent moisture from entering machine. Extended down time can cause moisture build up in heating oil tank.

Follow procedure below if there is any suspicion that moisture is present: Warm heat transfer oil to 300° F. for 2 to 3 hours to evaporate any moisture.

## BURNER TROUBLE SHOOTING GUIDE



## TROUBLE SHOOTING CHART

PROBLEM	CAUSE	REMEDY
Mixer will not rotate.	Sealant temperature too low.	Continue to heat material.
	Too many blocks placed at one time.	Continue to heat material & try reversing mixer.
	Inadequate hydraulic flow/pressure.	Check hydraulic fluid level. Reset pressure/ check flow if necessary.
Material pump will not turn.	Material in tank not to operating temperature.	Continue heating material.
	Hot oil not hot enough to melt material in pump.	Continue heating material.
	Inadequate hydraulic, flow/pressure.	Check hydraulic fluid level. Reset pressure/ check flow as necessary.
	Material pump damaged or foreign object lodged in pump.	Replace/Remove.
Sealant material flows through recirculation valve but will not flow through application hand wand.	Applicator valve not open.	Open valve.
	Recirculation valve still open or damaged internally.	Close valve or replace.
	Hose/wand still cold.	Leave in chamber until hot.
When applying sealant it stops flowing from applicator wand.	Hand applicator valve was left in off position too long.	Heat hose by placing in heat chamber to liquify sealant.
	Too many blocks of material added to tank. Cold material entered pump & stopped flow.	Heat hose by placing in heating chamber to liquify sealant.
	Tank fluid level too low for material to flow into pump.	Continue heating material until more liquid material is available.
Pump rotates, but will not pump material.	Material pump worn or damaged.	Replace/Repair
	Pump rotating in wrong direction.	Reverse control lever.
	Foreign object lodged in inlet line to pump.	Dislodge by reversing pump or disassemble inlet line.
	Material cold, inlet still solid.	Continue to heat material.
Slow heat up of sealant.	Build up of coked or crystallized material on inside of material tank.	Allow machine to cool. Remove deposits and flush with solvent.
	Burner not operating/low LPG pressure.	Repair/Adjust.
	Low heating oil level.	Check level of Heat Transfer oil.
	Low heating oil temperature	Set at recommended temperature

## SERVICE 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. Refer to general maintenance items, page 19.
3. Watch for leaks - tighten packing on pumps as necessary.
4. Clean machine externally periodically. Check with sealant manufacturer for recommendation.
5. Follow recommended maintenance procedures on maintenance chart.

## MAINTENANCE INSTRUCTIONS

### ENGINE:

Check oil every 8 hours of operation. Change after the first 25 hours of operation and change every 50 hours thereafter.

Change oil filter after every 100 hours. See engine maintenance manual for other maintenance.

### HYDRAULIC SYSTEM:

Change oil after every 500 hours of operation. Change return filter after first 10 hours of operation. Every 250 hours thereafter. Check oil level every 8 hours.

### WHEEL BEARINGS:

Repack wheel bearings every 24,000 miles or every two years, using a good grade of bearing grease.

### TONGUE JACK:

Lubricate tongue jack, using a good grade of bearing grease.

### SEALANT PUMP:

Lubricate outboard bearings using a good grade of bearing grease. Adjust pump packing periodically. A slight drippage (several drops per minute) should be allowed. Refer to Pump Section for details. See page 17.

### INTERNAL VALVES:

Check bolts which clamp recirculation valve and sealant valves in place. Proper torque is 20-25 ft.-lbs. Check after the first 8 hours of operation and again after every 500 hours of use. Watch for leaks. Replace gaskets if tightening does not stop leaks.

## MAINTENANCE CHART

LOCATION	PROCEDURE	HOURS			
		8	50	100	500
Engine Check Oil Level	See Engine Instruction Manual.	*			
Other Engine Maintenance	See Engine Operating and Maintenance Instructions.				
Engine Oil Filter	See Onan Operating and Maintenance Instructions.			*	
Battery	Maintenance Free.				
Pump Packing	Tighten as required. Drip should be several drops/per minute.		*		
Pump Outboard Bearing	Lubricate using a good grade of bearing grease.		*		
Heat Transfer Oil	Check		*		
	Change	after 500 hours or 1 year.			
Hydraulic Oil Return line filter	First change.	*			
	Subsequent changes.			*	
Hydraulic Oil	Check Oil	*			
	Change Oil				*
	For proper oil, see recommended fluids & lubricants, page 18.				
Wheel Bearings	Clean & repack - using good grade of bearing grease.	Every 24,000 miles or every two Years.			
Tongue Jack	Grease, using good grade of bearing grease.	Once a Year.			
Applicator Hose	Replace	After 100 hours or as needed.			



## **PUMP SECTION PACKING INSTRUCTIONS**

Operate the pump under normal conditions and, after a short run-in period, examine packing for leakage. If leakage is excessive tighten locknuts evenly until there is only slight leakage from the packing rings. This slight leakage is a necessary and normal condition for packing and allows for expansion and proper seating.

**NOTE: WHERE LIQUID IS BEING HANDLED THAT IS HAZARDOUS OR VOLATILE, FULL PRECAUTIONS SHOULD BE TAKEN DURING THE RUN-UP PERIOD.**

To replace packing remove key, two nuts and clips, 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, replacement of shaft or pump may be necessary.

Insert packing rings, making sure the joints are staggered 180 degrees. Use split ring bushings to seat each ring before adding the next ring. The rings must not be tamped or seated in place too tightly. When the packing box is sufficiently full to allow entry of the packing gland (about 1/4") reassemble the packing gland, clips and nuts, Draw up evenly on the packing gland to assure proper seating of the packing, and then loosen nuts about 1/2 turn. Do not cock the packing gland. (This could cause binding or heating of the shaft).

## RECOMMENDED FLUIDS & LUBRICANTS

APPLICATION	RECOMMENDED	FULL POINT
Engine Oil	Refer to Onan Engine Operating Manual.	
LPG	Propane	200 Lbs.
Hydraulic Oil	RONDO OIL-HD-68 Texaco	28 Gal.
Heat Transfer Oil		

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

<u>Producer</u>	<u>Product Name</u>	<u>Product No.</u>
Texaco	Regal	R&O 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.

## GENERAL MAINTENANCE ITEMS

RECOMMENDED QUANTITY	DESCRIPTION	PART NO.
1 Set	Packing, Sealant Pump	29990
1	Sealant Hose Assembly	27009
1	Engine Oil Filter	32122
1	Ignitor	25277
1	Engine Fuel Filter	22073
1	Hydraulic Filter	22071
1	Air Filter	32096
1	Air Filter Pre-Cleaner	32128

## INSTRUCTION FOR ORDERING PARTS

Parts may be ordered from your local CRAFCO distributor or directly from CRAFCO, Inc. if a distributor is not available in your area. When ordering parts, give the following information:

1. Part Number
2. Machine Model
3. Serial Number from Name Plate

Write or telephone:

CRAFCO, INC.  
6975 WEST CRAFCO WAY  
CHANDLER, AZ 85226  
(602) 276-0406  
Toll Free: 1-800-528-8242

## PARTS LIST FOR E-Z 200

ITEM NO.	DESCRIPTION	QTY.	PART NO.
1.	Tire & Wheel Assembly	4	41743
2.	Axle Assembly with Springs	2	41085
3.	Rocker Arm	2	23088
4.	Shackle Tie Plate	8	23075
5.	Shackle Bolt	14	23100
6.	Shackle Nut	14	23105
7.	Fender - L.H. Assembly	1	41170
8.	Fender - R.H. Assembly	1	41171
9.	5/16 - 18 x 1 Bolt	8	28716
10.	Fender Washer	8	28681
11.	5/16 - 18 Lock Nut	8	28525
12.	Tail Light R.H.	1	24022
13.	Tail Light L.H.	1	24023
14.	¼ Flat Washer	4	28670
15.	¼ Lock Washer	4	28645
16.	¼ - 20 Hex Nut	4	28500
17.	Tongue Jack, Side Mount	1	23097
18.	Jack Swivel Bushing	1	23096
19.	Breakaway Switch Unit	1	23117
20.	20 H.P. L.P. Engine	1	22218
21.	3/8 - 16 x 1 Bolt	4	28731
22.	3/8 Flat Washer	4	28672
23.	3/8 - 16 Lock Nut	4	28526
24.	Hydraulic Pump	1	41193
25.	½ - 13 x 1¼ Bolt	2	28761
26.	½ Lockwasher	2	28649
27.	LPG Storage Tank	2	25118
28.	Knob - Black	2	26032
29.	Hydraulic Reservoir <i>Tank</i>	1	<del>41045</del> 43590
30.	Air Breather	2	26025
31.	Dipstick Assembly	1	<del>41162</del> 44141
32.	Hydraulic Filter	1	22070
33.	1 x 90° Pipe Elbow	1	28210
34.	1" Close Nipple	1	28005
35.	1 x 90° Street Elbow	1	28240
36.	Burner Assembly	1	41210
37.	Igniter Assembly	1	41687
38.	Flow Divider	1	41573
39.	Agitator Control Valve	1	41093
40.	Material Pump Control Valve	1	41092
41.	¼ - 20 x 1½ Bolt	6	28704
42.	¼ Lock Washer	6	28645
43.	¼ - 20 Hex Nut	6	28500
44.	Mounting Plate	1	40029
45.	Pipe Spacer	4	40030
46.	3/8 - 16 x 2½ Bolt	4	28736

ITEM NO.	DESCRIPTION	QTY.	PART NO.
47.	3/8 Lock Washer	4	28647
48.	Agitator Motor	1	22310
49.	3/8 - 16 x 1 Bolt	4	28731
50.	3/8 Lock Washer	4	28647
51.	Agitator Shaft Assembly	1	41190
52.	1-5/8 Flat Washer	2	28682
53.	Paddle Assembly	22	41070
54.	3/8 - 16 x 1 Bolt	8	28731
55.	3/8 Lock Washer	8	28647
56.	3/8 Lock Nut	8	28538
57.	1/2 Pipe Coupling	2	28178
58.	24" Temperature Gauge	1	41243
59.	12" Temperature Gauge	1	40078
60.	3/8 Pipe Coupling	2	28177
61.	Stuffing Box	2	25203
62.	Flange Assembly	2	41153
63.	Overflow Tank	1	41002-
64.	4 Hole Flange Gasket	2	29051
65.	3/8 - 16 x 1 Bolt	8	28731
66.	3/8 - 16 Lock Nut	8	28538
67.	Dip Stick Assembly	1	41199
68.	9" Temperature Gauge	1	25057
69.	Flanged Nipple Assembly	3	22030
70.	Flange Gasket - 6 Hole	4	29050
71.	3/8 - 16 x 1 Bolt	24	28731
72.	3/8 - 16 Lock Nut	24	28538
73.	Pipe Assembly - Upper	1	41678
74.	Recirculation Valve	1	41246
75.	Flange Tee	1	41677
76.	Double Elbow Assembly	1	41134
77.	2 1/2" Temperature Gauge	1	25050
78.	3/8 Close Nipple	1	28002
79.	3/8 Ball Valve	1	29202
80.	3/8 x 90° Street Elbow	1	28237
81.	3/8 Pipe Plug	1	28282
82.	2" Gate Valve	1	29270
83.	2" x 8" Long Pipe Nipple	1	28110
84.	2" x 90° Pipe Elbow	2	28213
85.	Cross Feed Pipe	1	41291
86.	2 x 1 Reducing Bushing	1	28358
87.	2" Clevis Hanger	1	26078
88.	Roper Material Pump	1	41101
89.	1/2 - 13 x 1 3/4 Bolt	4	28763
90.	1/2 Lock Washer	4	28649
91.	1/2 - 13 Hex Nut	4	28504
92.	1/2 Flat Washer	4	28674
93.	Hydraulic Motor	1	22027
94.	3/8 - 16 x 3/4 Bolt	4	28730

43355

ITEM NO.	DESCRIPTION	QTY.	PART NO.
95.	3/8 Lock Washer	4	28647
96.	Chain Sprocket	2	26002
97.	Dual Sprocket Chain	1	26016
98.	Connecting Link	1	26030
99.	Chain Guard	1	41140
100.	5/16 Lock Washer	1	28646
101.	5/16 - 18 Hex Nut	1	28501
102.	Material Pump Suction Line	1	41133
103.	Pipe Assembly - Material Suction	1	41131
104.	3" Flanged Gate Valve	1	29292
105.	Drain Pipe Extension	1	41039
106.	Gasket - 8 Hole	2	29060
107.	3/8 - 16 x 1 Bolt	16	28731
108.	3/8 - 16 Lock Nut	16	28538
109.	Valve Handle Extension	1	41268
110.	Blind Flange	1	29161
111.	2½ Flange Gasket	2	41043
112.	3/8 - 16 x 1 Bolt	12	28731
113.	3/8 - 16 Lock Nut	12	28538
114.	Flange Assembly - Pour Spout	1	41279
115.	2" Oil Gate Valve	1	29280
116.	Hot Oil Circulating Pump	1	41280
117.	5/16 - 18 x 3/4 Bolt	2	28715
118.	5/16 Lock Washer	2	28646
119.	Hydraulic Motor	1	22302
120.	1/4 - 28 x 5/8 Bolt	3	28850
121.	¼ Lock Washer	3	28645
122.	½" Bore Coupling Half	1	41180
123.	5/8" Bore Coupling Half	1	41695
124.	Spider For Coupling	1	41182
125.	Male - Female Swivel	2	27048
126.	Sealant Hose Assembly	1	27009
127.	Handle Assembly and Valve	1	41208
128.	1" Ball Valve	1	29240
129.	Handle Assembly	1	27080
130.	1 x ¾ Reducing Bushing	1	28351
131.	¾ x 8 Long Pipe Nipple	1	28100
132.	Hand Wand Assembly	1	41629
133.	Sealing Tip Assembly	1	27171
134.	Control Box Assembly	1	41698
135.	Clamp - Control Box	2	25268
136.	Electric Thermostat 550°	1	25276
137.	#6 x 3/8 Long Stl. Thrd. Frm. Screw	2	28832
138.	Temperature Dial	1	25220
139.	Spark Control Module	1	25278
140.	#8 - 32 x 1" Long Bolt	4	28833
141.	#8 - 32 Hex-Nut	4	28835
142.	Manual Reset	1	25240

41097 handwheel

bes -  
41060  
41061  
Hings -  
29844

ITEM NO.	DESCRIPTION	QTY.	PART NO.
143.	#6 - 32 x 1/2 Screw	2	28838
144.	#6 - 32 Hex-Nut	2	28839
145.	90° Elbow Adaptor	3	29871
146.	1/4 Pipe Coupling	1	28176
147.	1/4 x 4" Long Pipe Nipple	2	28035
148.	Burner Servo Control Valve	1	25236
149.	1/4 x 2" Long Pipe Nipple	1	28043
150.	Bulkhead Coupling	1	29830
151.	Straight Adaptor	3	29839
152.	LPG Hose - 12" Long	1	25137
153.	Strainer	1	25208
154.	1/4 Ball Valve	1	29195
155.	1/4 x 1 1/2 Long Pipe Nipple	2	28012
156.	1/4 Pipe Tee	2	28251
157.	Indicator Light	1	24140
<b>PARTS NOT ILLUSTRATED</b>			
	Wiring Harness (Control Box)	1	25272
	Wiring Harness (Ignitor)	1	<del>41641</del>
	Battery Cable 12"	1	24010
	Battery Hot Cable 38"	1	24015
	Hour Meter	1	24076

41600  
control box  
to burner

## HYDRAULIC PIPING SEQUENCE - E-Z POUR 200 MELTER (PROPANE) WITH PUMP APPLICATOR

1. HYDRAULIC RESERVOIR TO HYDRAULIC PUMP (SUCTION)		
1	29814	90° Elbow Adaptor
1	29572	Hydraulic Hose Assembly 5/8 x 36" Long
1	29820	Straight Adaptor - "O" Ring

2. HYDRAULIC PUMP TO FLOW DIVIDER VALVE ("IN" PORT)		
1	29821	Straight Adaptor - "O" Ring
1	22110	Hydraulic Hose Assembly 1/2 x 27" Long
1	29806	Bulkhead Elbow
1	29807	Bulkhead Locknut
1	41123	Tube Assembly
1	29805	Bulkhead Connector
1	29807	Bulkhead Locknut
1	29815	Pipe Swivel Connector
1	28348	Reducing Bushing 3/4 x 1/2

3. FLOW DIVIDER VALVE ("PB" PORT) TO MATERIAL VALVE ("IN" PORT)		
1	28348	Reducing Bushing 3/4 x 1/2
1	29841	Straight Adaptor
1	40187	Hydraulic Hose Assembly 3/8 x 18" Long
1	29876	90° Elbow Adaptor
1	28348	Reducing Bushing 3/4 x 1/2

<b>4. MATERIAL VALVE ("OUT" PORT) TO HYDRAULIC FILTER (RETURN)</b>		
1	29813	90° Elbow Adaptor
1	29566	Hydraulic Hose Assembly 1/2 x 19" Long
1	29811	Swivel Run Tee
1	29805	Bulkhead Connector
1	29807	Bulkhead Locknut
1	41090	Tube Assembly (Return
1	29806	Bulkhead Elbow
1	29807	Bulkhead Locknut
1	29567	Hydraulic Hose Assembly 1/2 x 41" Long
1	40314	Straight Adaptor
1	28351	Reducing Bushing 1 x 3/4
1	28240	1 x 90° Street Elbow

<b>5. HYDRAULIC FILTER ("OUT" PORT) TO HYDRAULIC RESERVOIR</b>		
1	28240	1 x 90° Street Elbow
1	28005	1" Close Nipple
1	28210	1" x 90° Pipe Elbow

<b>6. FLOW DIVIDER VALVE ("REG." PORT) TO MIXER VALVE ("IN" PORT)</b>		
1	28347	Reducing Bushing 3/4 x 3/8
1	29872	90° Elbow Adaptor
1	40012	Hydraulic Hose Assembly 3/8 x 24" Long
1	29872	90° Elbow Adaptor
1	28347	Reducing Bushing 3/4 x 3/8

<b>7. MIXER VALVE ("OUT" PORT) TO HYDRAULIC MOTOR FOR H.O. PUMP (REAR PORT)</b>		
1	28347	Reducing Bushing 3/4 x 3/8
1	29872	90° Elbow Adaptor
1	40012	Hydraulic Hose Assembly 3/8 x 24" Long
1	40311	Straight Adaptor - "O" Ring

<b>8. HYDRAULIC MOTOR FOR H.O. PUMP (FRONT PORT) TO TEE IN LINE 4.</b>		
1	40311	Straight Adaptor - "O" Ring
1	40187	Hydraulic Hose Assembly 3/8 x 18" Long
1	29809	Reducer 5/8 to 3/8 Tube
1	29810	Tube Nut

<b>9. MATERIAL VALVE ("INBOARD" PORT) TO HYDRAULIC MOTOR FOR MATERIAL PUMP ("INBOARD" PORT)</b>		
1	29841	Straight Adaptor
1	29570	Hydraulic Hose Assembly 3/8 x 34" Long
1	22029	Straight Adaptor



**10. MATERIAL VALVE ("OUTBOARD" PORT) TO HYDRAULIC MOTOR FOR MATERIAL PUMP ("OUTBOARD" PORT)**

1	29841	Straight Adaptor
1	29570	Hydraulic Hose Assembly 3/8 x 34" Long
1	22029	Straight Adaptor

**11. MIXER VALVE ("INBOARD" PORT) TO HYDRAULIC MOTOR FOR MIXER (L.H. PORT)**

1	29841	Straight Adaptor
1	40187	Hydraulic Hose Assembly 3/8 x 18" Long
1	29808	Tube Union
1	41155	Tube Assembly - L.H.
1	22029	Straight Adaptor - "O" Ring

**LPG PIPING SEQUENCE E-Z POUR 200 MELTER**

**1. L.H. L.P.G. TANK TO STRAINER ON CONTROL BOX**

1	25073	L.P.G. Regulator Assembly - Consists of: 25123 Tank Spud 25066 Press. Regulator 28001 1/4 Close Nipple 29195 1/4 Ball Valve 29857 45° Elbow Adaptor
1	25141	L.P.G. Hose 3/8 x 44" Long
1	29839	Straight Adaptor (On Control Box)
1	28251	1/4 Pipe Tee (#1) (On Control Box)
1	28012	1/4 x 1 1/2 Pipe Nipple (On Control Box)
1	28251	1/4 Pipe Tee (#2) (On Control Box)
1	28012	1/4 x 1 1/2 Pipe Nipple (On Control Box)
1	29195	1/4 Ball Valve (On Control Box)
1	28035	1/4 x 4 Pipe Nipple (On Control Box)
1	25208	Strainer (On Control Box)

**2. R.H. L.P.G. TANK TO TEE #2 IN LINE 1.**

1	25073	L.P.G. Regulator Assembly - Consists of: 25123 Tank Spud 25066 Press. Regulator 28001 1/4 Close Nipple 25195 1/4 Ball Valve 29857 45° Elbow Adaptor
1	25142	L.P.G. Hose 3/8 x 31" Long
1	29839	Straight Adaptor (On Control Box)

**3. STAINER ON CONTROL BOX TO CONTROL BOX (IN)**

1	29871	Elbow Adaptor (On Control Box)
1	25137	L.P.G. Hose 3/8 x 12" Long (On Control Box)
1	29839	Straight Adaptor (On Control Box)

<b>4. CONTROL BOX (OUT) TO REGULATOR</b>		
1	29871	Elbow Adaptor (On Control Box)
1	25137	L.P.G. Hose 3/8 x 12" Long
1	29832	Straight Adaptor
1	41082	L.P.G. Regulator

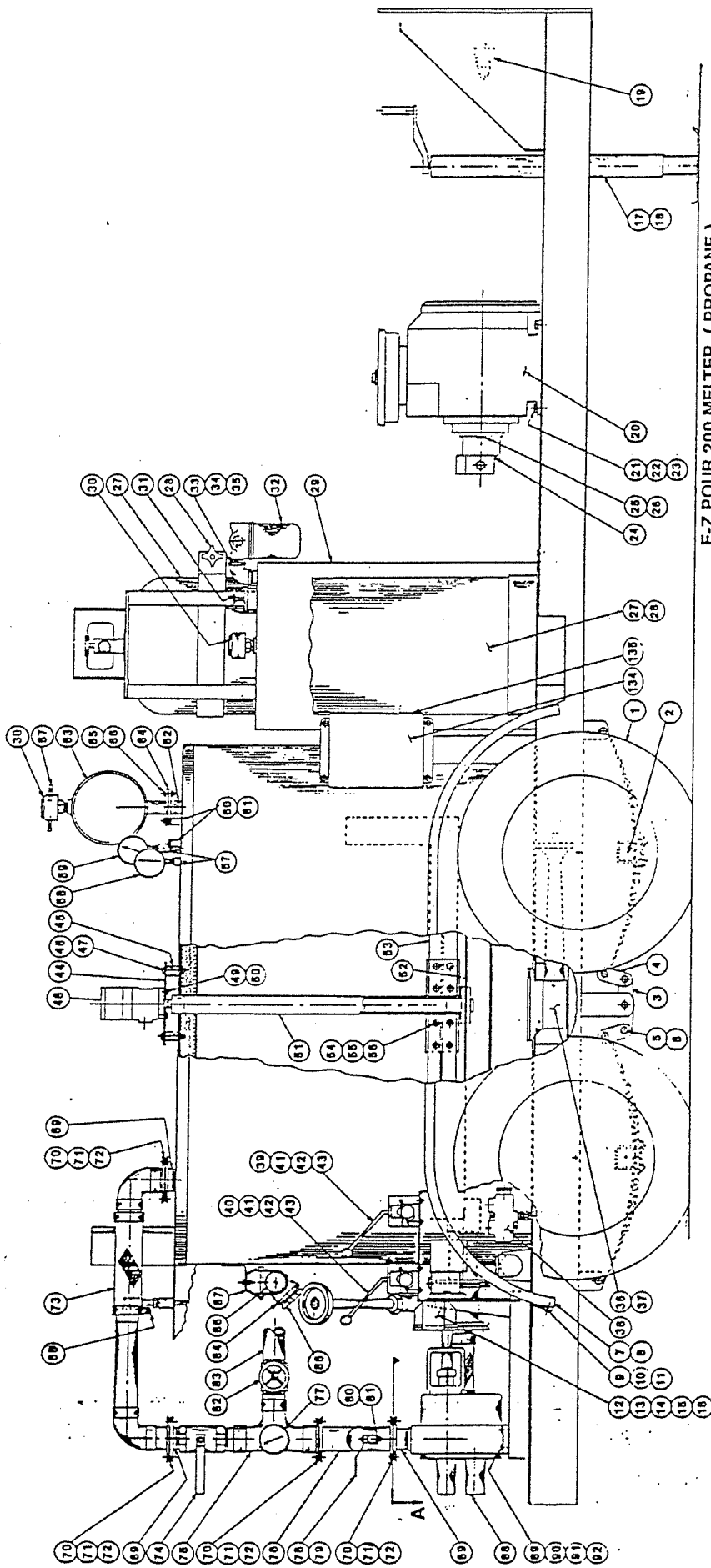
<b>5. L.P.G. REGULATOR TO BURNER</b>		
1	28026	1/2 x 3" Long Pipe Nipple (On Frame)
1	28263	1/2 x 1/2 x 3/8 Pipe Tee
1	29840	Straight Adaptor
1	25146	L.P.G. Hose 3/8 x 23" Long
1	29832	Straight Adaptor
1	28178	1/2 Coupling

<b>6. TEE IN LINE 5.</b>		
1	28283	1/2 Pipe Plug

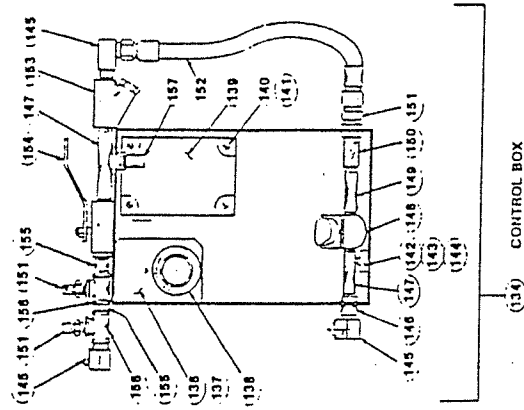
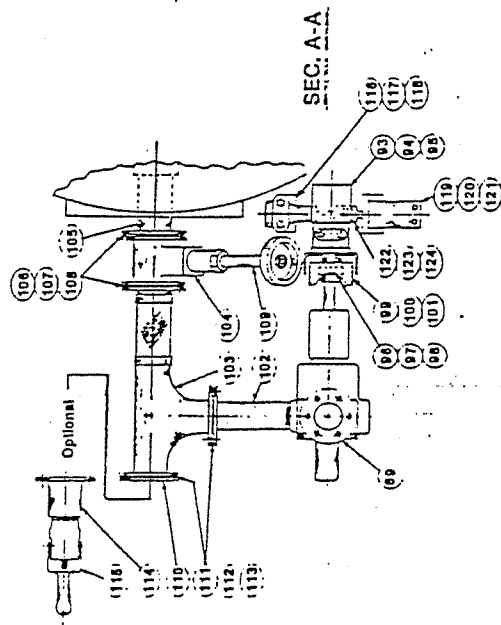
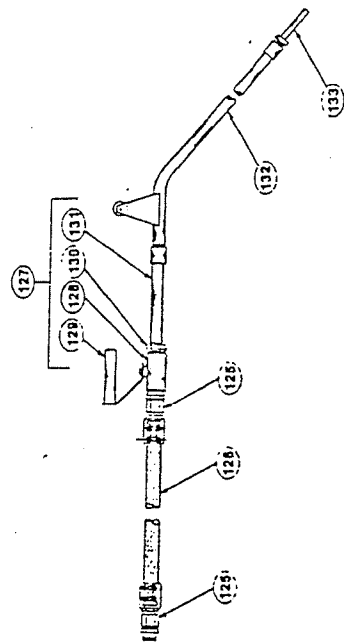
<b>7. TEE #1 IN LINE 1. TO SOLENOID VALVE</b>		
1	29871	Elbow Adaptor
1	25146	L.P.G. Hose 3/8 x 23" Long
1	29839	Straight Adaptor

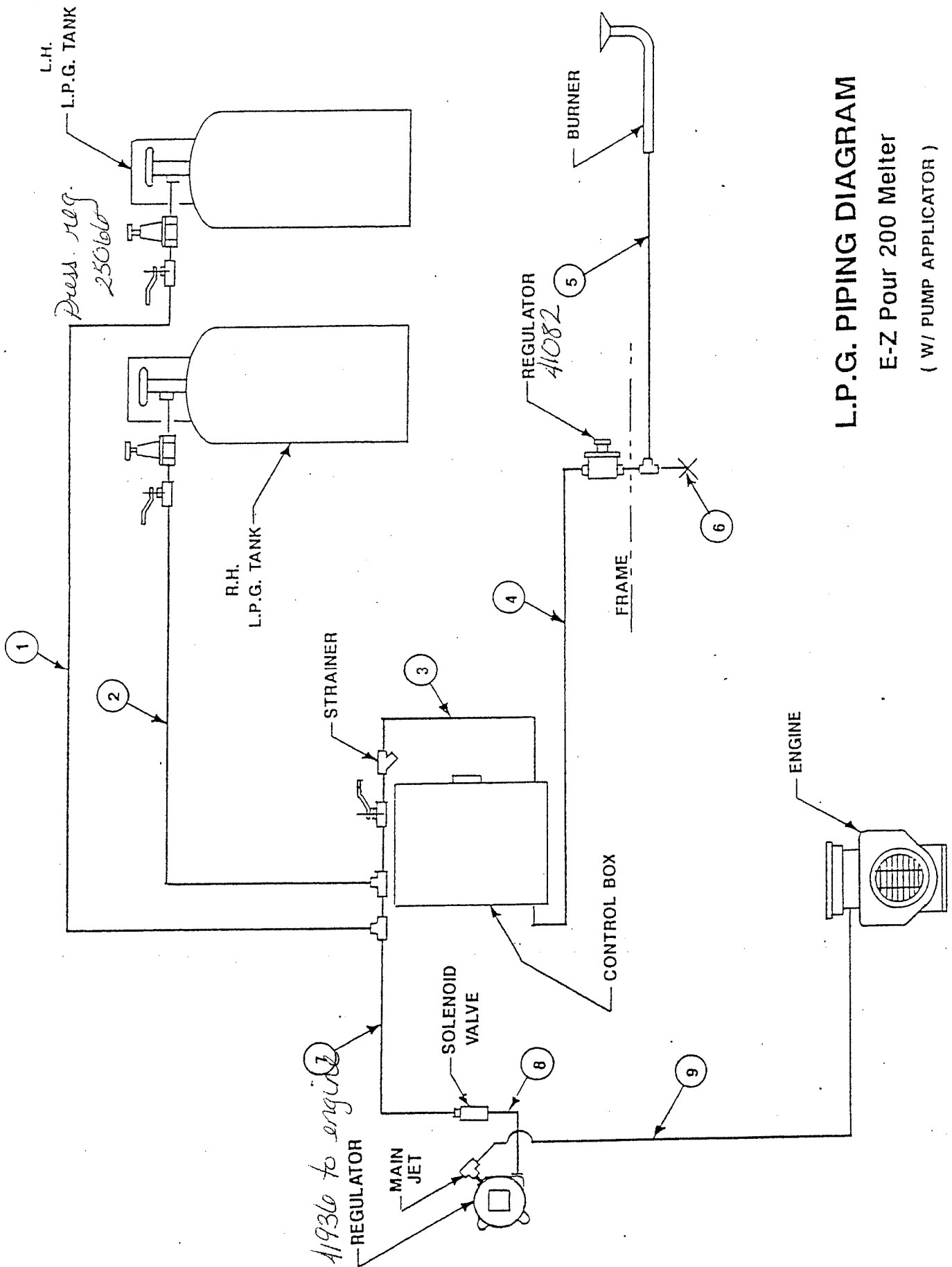
<b>8. SOLENOID VALVE TO L.P.G. REGULATOR</b>		
1	28204	1/4 x 90° Brass Street Elbow
1	22187	L.P.G. Regulator Kit: includes: Solenoid Valve Gas Regulator

<b>9 L.P.G. REGULATOR TO ENGINE</b>		
1	22190	Jet Elbow
1	29583	L.P.G. Fuel Line 1/2 x 70" Long
2	26079	Gear Clamp

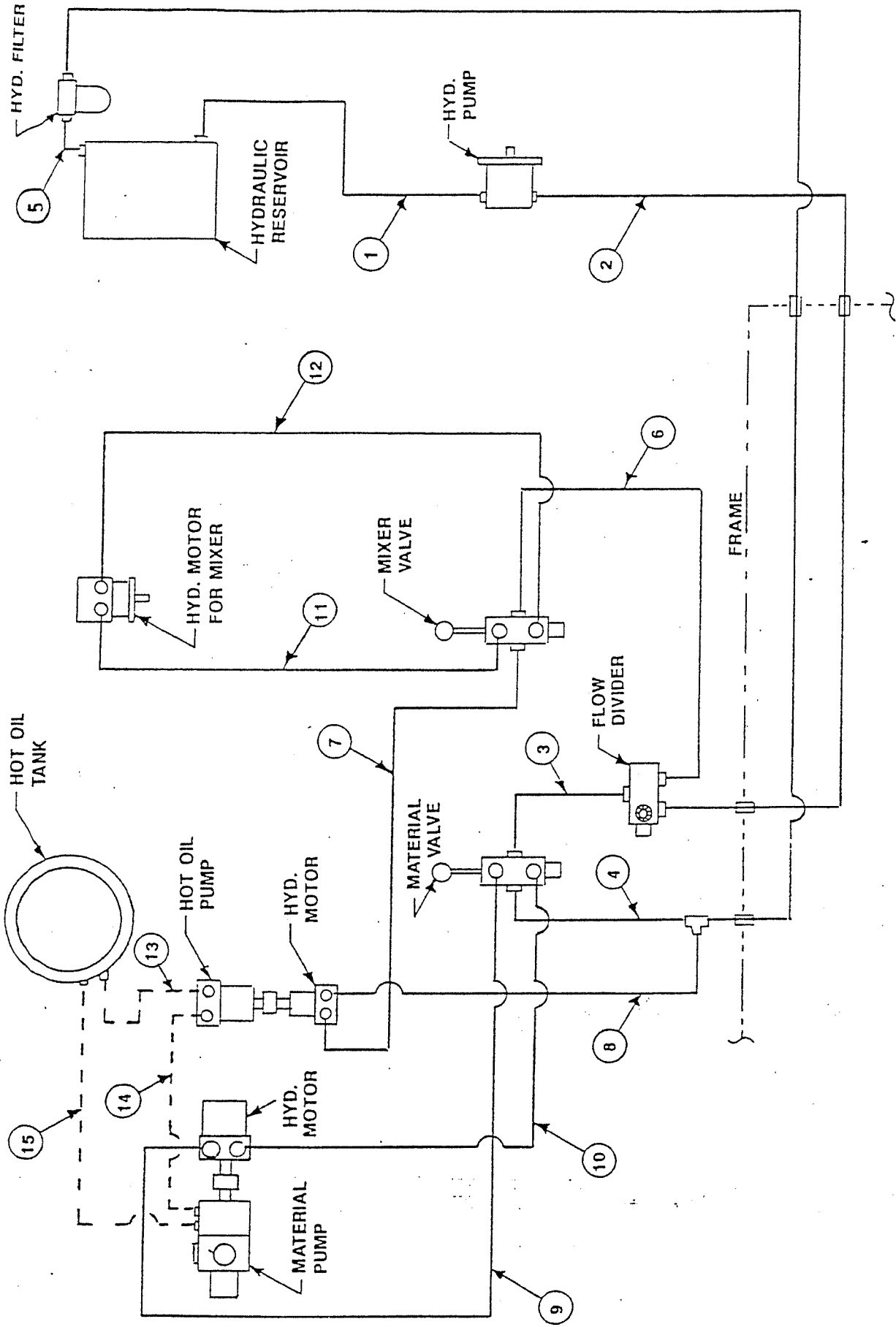


E-Z POUR 200 MELTER ( PROPANE )  
W/ PUMP APPLICATOR



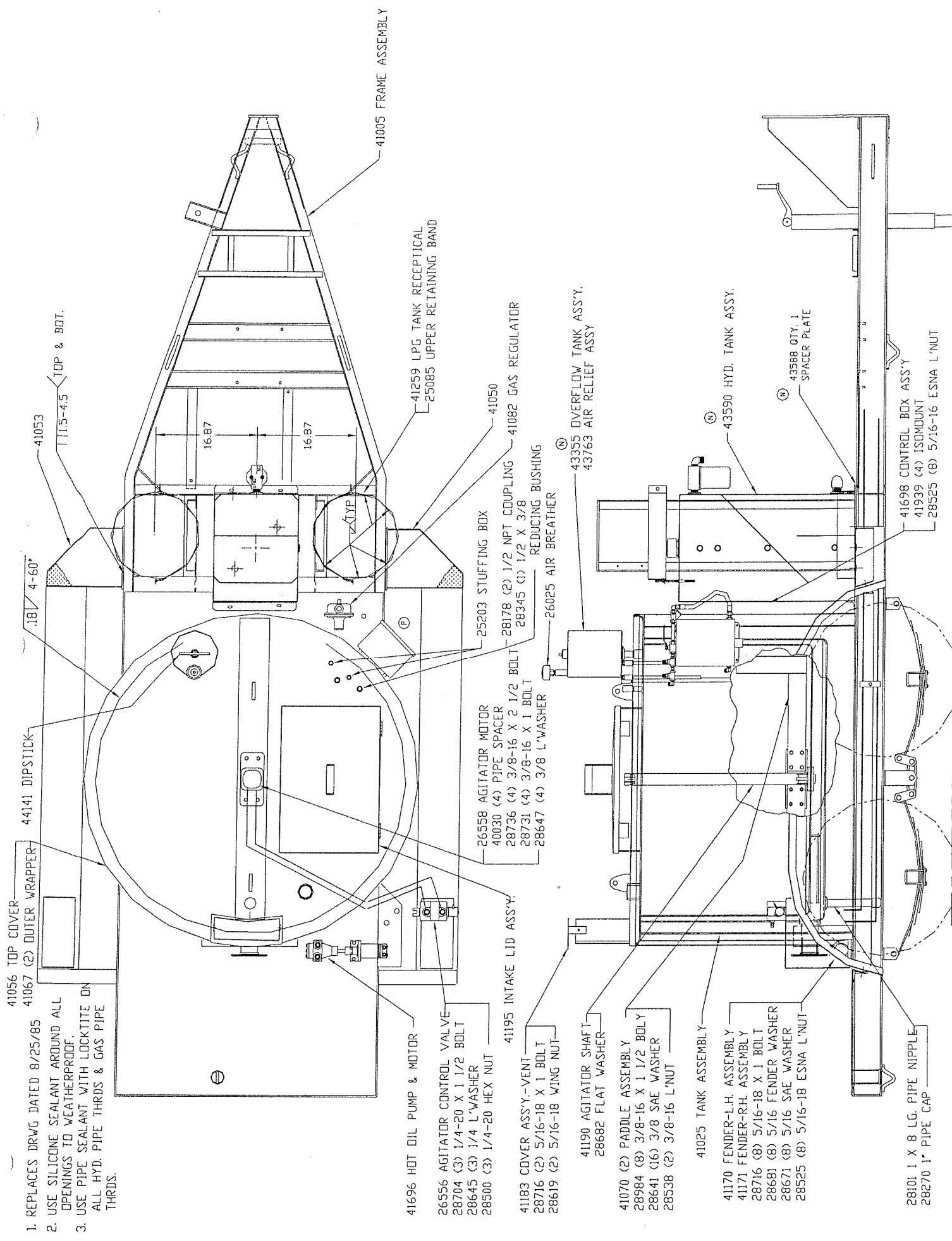


**L.P.G. PIPING DIAGRAM**  
**E-Z Pour 200 Melter**  
**( W/ PUMP APPLICATOR )**



**HYDRAULIC PIPING DIAGRAM**  
**E-Z Pour 200 Melter (Propane)**  
 (W/ PUMP APPLICATOR /

— HYDRAULIC LINES  
 - - - HOT OIL LINES



1. REPLACES DRWG DATED 8/25/85
2. USE SILICONE SEALANT AROUND ALL OPENINGS TO WEATHERPROOF.
3. USE PIPE SEALANT WITH LOCKTITE ON ALL HYD. PIPE THRDS & GAS PIPE THRDS.

41056 TOP COVER  
 41067 (2) OUTER WRAPPER  
 44141 DIPSTICK  
 41053  
 1115-4.5 TOP & BOT.  
 16.87  
 16.87  
 41005 FRAME ASSEMBLY  
 41259 LPG TANK RECEPTICAL  
 25085 UPPER RETAINING BAND  
 41050  
 41082 GAS REGULATOR  
 25203 STUFFING BOX  
 28178 (2) 1/2 NPT COUPLING  
 28345 (1) 1/2 X 3/8 REDUCING BUSHING  
 26025 AIR BREATHER  
 43355 OVERFLOW TANK ASS'Y.  
 43763 AIR RELIEF ASSY  
 43590 HYD. TANK ASSY.  
 43588 QTY. 1 SPACER PLATE  
 41698 CONTROL BOX ASSY  
 41939 (4) ISOMOUNT  
 28525 (8) 5/16-16 ESNA L'NUT  
 26558 AGITATOR MOTOR  
 40030 (4) PIPE SPACER  
 28736 (4) 3/8-16 X 2 1/2 BOLT  
 28731 (4) 3/8-16 X 1 BOLT  
 28647 (4) 3/8 L'WASHER  
 41195 INTAKE LID ASS'Y.  
 41183 COVER ASSY.-VENT  
 28716 (2) 5/16-18 X 1 BOLT  
 28619 (2) 5/16-18 WING NUT  
 41190 AGITATOR SHAFT  
 28682 FLAT WASHER  
 41070 (2) PADDLE ASSEMBLY  
 28984 (8) 3/8-16 X 1 1/2 BOLT  
 28641 (16) 3/8 SAE WASHER  
 28538 (2) 3/8-16 L'NUT  
 41025 TANK ASSEMBLY  
 41170 FENDER-L.H. ASSEMBLY  
 41171 FENDER-R.H. ASSEMBLY  
 28716 (8) 5/16-18 X 1 BOLT  
 28681 (8) 5/16 FENDER WASHER  
 28671 (8) 5/16 SAE WASHER  
 28525 (8) 5/16-18 ESNA L'NUT  
 41056 TOP COVER  
 41067 (2) OUTER WRAPPER  
 44141 DIPSTICK  
 41053  
 1115-4.5 TOP & BOT.  
 16.87  
 16.87  
 41005 FRAME ASSEMBLY  
 41259 LPG TANK RECEPTICAL  
 25085 UPPER RETAINING BAND  
 41050  
 41082 GAS REGULATOR  
 25203 STUFFING BOX  
 28178 (2) 1/2 NPT COUPLING  
 28345 (1) 1/2 X 3/8 REDUCING BUSHING  
 26025 AIR BREATHER  
 43355 OVERFLOW TANK ASS'Y.  
 43763 AIR RELIEF ASSY  
 43590 HYD. TANK ASSY.  
 43588 QTY. 1 SPACER PLATE  
 41698 CONTROL BOX ASSY  
 41939 (4) ISOMOUNT  
 28525 (8) 5/16-16 ESNA L'NUT  
 26558 AGITATOR MOTOR  
 40030 (4) PIPE SPACER  
 28736 (4) 3/8-16 X 2 1/2 BOLT  
 28731 (4) 3/8-16 X 1 BOLT  
 28647 (4) 3/8 L'WASHER  
 41195 INTAKE LID ASS'Y.  
 41183 COVER ASSY.-VENT  
 28716 (2) 5/16-18 X 1 BOLT  
 28619 (2) 5/16-18 WING NUT  
 41190 AGITATOR SHAFT  
 28682 FLAT WASHER  
 41070 (2) PADDLE ASSEMBLY  
 28984 (8) 3/8-16 X 1 1/2 BOLT  
 28641 (16) 3/8 SAE WASHER  
 28538 (2) 3/8-16 L'NUT  
 41025 TANK ASSEMBLY  
 41170 FENDER-L.H. ASSEMBLY  
 41171 FENDER-R.H. ASSEMBLY  
 28716 (8) 5/16-18 X 1 BOLT  
 28681 (8) 5/16 FENDER WASHER  
 28671 (8) 5/16 SAE WASHER  
 28525 (8) 5/16-18 ESNA L'NUT  
 28101 X 8 LG. PIPE NIPPLE  
 28270 1" PIPE CAP