



Melter/Applicator

Revision B

Fill in appropriate fields that apply to this machine
Machine S/N:
1 st Hose S/N:
2 nd Hose S/N:
1 st Pump S/N:
2 nd Pump S/N:
Engine S/N:
Compressor S/N:
Gear Box S/N (Patcher):
Blower S/N (Magnum):





Table of Contents

Conten 1.0 Abc	ts out This Manual1-1				
2.0 Safe	2.0 Safety Precautions				
2.1	General Safety 2-1				
2.2	Personal Safety				
2.3	Equipment or Operational Safety 2-1				
2.4	Safety Symbols and Notices2-2				
3.0 Lim	ited Warranty3-1				
3.1	Warranty Claim Instructions				
4.0 Mac	chine Specifications				
5.0 Sta	rting the Machine				
5.1	Introduction5-1				
5.2	Preparing the Machine for Start Up5-1				
5.3	Starting the Burner				
5.4	Dispensing the Material5-3				
5.5	Loading Material into the Machine5-3				
5.6	Shutting Down and Cleaning Out the Machine5-4				
5.7	Storing the Machine				
6.0 Pre	ventative Maintenance				
6.1	Hydraulic System				
6.2	Heat Transfer Oil				
6.3	Wheel Bearings				
6.4	Lug Nuts				
6.5	Brakes				
6.6	Tongue Jack				
6.7	Temperature Control Calibration				
6.8	Maintenance Chart				
6.9	Service Instructions				
6.10	Recommended Fluids and Lubricants6-3				
6.11	Applicable Brands of Heat Transfer Oil6-4				
6.12	Typical Heat Transfer Oil Specifications				
7.0 Bur	7.0 Burner Troubleshooting				
7.1	.1 Symptom: Pilot Will Not Light7-1				



Table of Contents

7.1	.2 Symptom: Burner Will Not Light7-1
7.2	Troubleshooting Sealant Flow7-1
7.2	.1 Symptom: Sealant Will Not Flow7-1
7.2	.2 Sealant Heating to Slow7-2
7.3	Troubleshooting Agitator7-2
7.3	.1 Symptom: Agitator will Not Rotate7-2
8.0 Abo	out the Illustrated Parts List8-1
8.1	Ordering Crafco Parts8-1
8.2	EZ50 Melter/Applicator8-2
8.3	Tank Assembly8-4
8.4	Gas Control Box8-5
8.5	Propane Burner Assembly8-6
8.6	Hydraulic Schematic
8.7	Propane Piping Schematic8-8
8.8	L.P. Regulator Assembly
8.9	Propane Torch Assembly8-10



Chapter 1 Introduction

1.0 About This Manual

This manual is supplied with each new Crafco E-Z Pour 50 Propane Melter. The manual assists your machine operators in the proper use of the melter applicator and provides information about the machine's mechanical functions

Your Crafco E-Z Pour 50 Propane Melter is specially made to give excellent service and save maintenance expense. However, as with all specially engineered equipment, you get best results at minimum cost if you:

Operate your machine as instructed in this manual.

Maintain your machine regularly as stated in tis manual.

WARNING

California Proposition 65 Warning

Engine exhaust and some of its constituents are known to the State of California to cause cancer, birth defects, and other reproductive harm. Always use care to avoid breathing engine exhaust. Failure to comply could result in death or serious injury.







Chapter 2 Safety

2.0 Safety Precautions

2.1 General Safety

- Crafco, Inc. assumes no liability for an accident or injury incurred through improper use of the machine.
- Read this manual thoroughly before operating the machine.
- Obey all CAUTION and WARNING signs posted on the machine.
- Make sure an operator fully knows how to operate the machine before using the machine.

2.2 Personal Safety

- The high operating temperatures of this machine and the sealant it contains requires that protective clothing, gloves, hard-soled shoes, and safety glasses or a face shield be worn at all times by operators of the machine.
- Prevent water from going into any part of the machine. If there is indication of water in the heat transfer oil system, warm heating oil to 250-300°F for 2 to 3 hours.
- Bodily contact with hot sealant or heat transfer oil can cause severe burns.
- If the mixer is not stopped before adding solid material, hot material can get on an operator's body and cause severe burns.
- Keep hands, feet, and clothing away from all moving parts.

2.3 Equipment or Operational Safety

- Do not operate the machine in buildings or work areas that do not have sufficient airflow.
- Shut-down the burner and the engine before refilling the gas tank.
- Stop the mixer before adding solid material to the sealant tank. Lift the lid, place the material on the lid and close the lid. Restart the mixer.
- Always keep a correctly maintained fire extinguisher near the machine and know how to use it.
- DO NOT heat transfer oil to a temperature of more than 525°F.
- DO NOT put too much heat transfer oil in the reservoir. The expansion of oil while it heats up can cause overflow. With the machine on level ground, check the oil each day before starting the burner. Add oil to the top mark on the dipstick if required (at 70°F). Use only recommended heat transfer oil. Change the oil after 500 hours of machine operation, or one year, whichever comes first.
- Follow the operating instructions for starting and shutting down the burner. Instructions are mounted on the control box on the machine.



Chapter 2 Safety

2.3 Equipment or Operational Safety Continued

- Calibrate the temperature control operation after each 50 hours of machine operation. Refer to Chapter 6, Maintenance Instructions.
- Replace any hoses which show signs of wear, fraying or splitting.
- Make sure all fittings and joints are tight and do not leak each time the machine is used.
- Do not leave the machine unattended while the burner is lit.
- Tighten all bolts and screws every 100 hours of machine operation.

2.4 Safety Symbols and Notices

Important safety symbols and notices are marked on the machine and in this manual. Failure to comply could result in equipment damage, operational malfunction, serious injury, or death. Please read and comply with all symbols and notices. The table below includes the most commonly used symbols and notices.

Symbol	Item	Remarks	
CAUTION Caution Severe Burn Hazard		Refers to possible bodily injury or death.	
		Refers to possible equipment damage or operational malfunction.	
		Hot material can cause severe burns.	
		Wear hard-soled work shoes.	
	Protective Gloves	Wear heat resistant gloves.	
•	Protective Face or Eye Wear	Wear face shield or safety glasses.	
	Body Crush Hazard	Do not stand between trailer and hitch when hooking melter to truck.	

Table 2-1 Safety Symbols and Notices



Chapter 2 Safety

Table 2-2 Safety Symbols and Notices Continued

Symbol	ltem	Remarks
	Crush Hazard	Keep feet and legs clear.
Pinch Hazard		Keep hands and feet clear.
R	Exhaust Hazard	Avoid breathing engine exhaust.
	Read Manual	Read and understand operator and safety manuals before operating machine



Chapter 3 Warranty Information

3.0 Limited Warranty

Crafco, Inc., through Crafco or one of its affiliated 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 one year from in-service date, but excludes engine or components, tires, and battery as these items are subject to warranties issued by their manufactures.

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

CAUTION

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



Chapter 3 Warranty Information

3.1 Warranty Claim Instructions

Crafco, Inc. warrants parts and machinery purchased through Crafco or one of its affiliated distributors for one year from purchased or in-service date**. If parts fail to function within the first year of purchase, a return authorization number (RA) must be obtained. If the part was purchased through Crafco, Inc., please contact Crafco returns department at <u>Returns@Crafco.com</u> for a RA number or if purchased through a Crafco distributor please contact your distributor. Note: if the part has a serial number associated with it, for example; a machine or electric hose or wand, this must be furnished when requesting the RA number. The customer will be emailed or faxed a RA form with all instructions to return the item to Crafco, Inc. See example. If the part is found to be within the one year warranty period and has not been abused or modified, a credit will be issued to the customer's account or credit card. The customer may request the part be replaced instead of a credit, if desired.

Wear items are not covered under Crafco, Inc. limited warranty. A wear item is defined as but not limited to: material pumps, sealing tips, tires, etc.

Note: All engine warranties are covered through the engine manufacture. If you need information for a distributor in your area please contact us and we will direct you to the closest engine distributor.

All parts returned are tested and evaluated. If the part has been modified in anyway without prior consent from Crafco, Inc. representative, warranty is void.

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

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.

On contacting the distributor, be prepared to identify the serial number, model number, engine number, engine manufacturer, and the date of purchase if available.

Should the cause of the malfunction be a defective part, the Distributor will advise you of the procedure to follow foe a replacement.

The warranty is valid only for parts, which have been supplied or recommended by Crafco, Inc.

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

For Warranty: Crafco, Inc. 25527 South Arizona Avenue, Chandler, AZ 85248 Phone: (480) 655-8333 or (800) 528-8242 Fax: (480) 655-1712

For all other inquires: Crafco, Inc. 420 North Roosevelt Avenue, Chandler, AZ 85226 Phone: (602) 276-0406 or (800) 528-8242 Fax: (480) 961-0513 CustomerService@crafco.com



Chapter 4 Machine Specifications

4.0 Machine Specifications

Table 4-1 Specifications				
Specification	PN 40900			
Vat capacity	50 gallons			
Melt Capacity	400 lbs. per hour			
Heat transfer oil required	18 gallons at 70°F			
Tank construction	Double boiler type			
Tank opening size	14 3/4" x 12 3/4"			
Maximum heat input	Vapor Burner 185,000 BTUs			
Burner and temperature	Automatic – Fail Safe			
control				
Engine Briggs & Stratton	Single cylinder 3 BHP @ 3600 RPM			
Drive Mechanism	All hydraulic with infinite forward and reverse action			
Mixer	Full sweep mixer with 2 blades			
Axle	2250lbs. Capacity			
Tires	ST 175/80 D13 (1,360lbs. Capacity each)			
Dry Weight	Approximately 1500lbs.			
Propane Bottle	100lbs.			



Chapter 5 **Operating Instructions**

5.0 Starting the Machine

5.1 Introduction

The Crafco E-Z Pour 50 Propane Melter was developed to melt Crafco sealants. However, it works well with most road asphalt and federal specification crack or joint sealants. **Note:** DO NOT attempt to operate the machine without using these and all other instructions.

5.2 Preparing the Machine for Start Up

Table 5-1 Preparing the Machine for Start Up Action Step 1 Fill the engine fuel tank with non-leaded gasoline. 2 Fill propane storage tank Check the oil level in the engine crankcase. (Refer to the manufacturer's 3 instruction for the engine.) Check the hydraulic fluid level while at a temperature of 70°F. Add fluid if 4 necessary. Oil level should be 1"-2" from top of tank. See Figure 5.3 With the machine on level surface, check the heat transfer oil level. Add oil to 5 the top mark on the dipstick if required (at 70°F). DO NOT overfill or spillage may occur when the oil is heated and expands. See Figure 5.2 Ensure that pour spout is in the closed position. See Figure 5.1 5 Warning The safe operation of this machine is the operator's responsibility. Use extreme care when operating this machine; safety is the result of being careful and paying attention to details. Remember the propane flame is approximately 2,200°F. Some exposed parts of the machine reach 500°F, the sealant 400°F, and the hydraulic fluid 200°F. Always put on protective clothing, gloves, hard-soled shoes, and safety glasses or a face shield. Be sure that all joints and fittings are tight and leak proof. Immediately replace any hose, which shows any signs of wear, fraying, or splitting. Tighten all bolts, nuts, and screws every 100 hours.



Figure 5.3



Figure 5.2



Figure 5.1



Chapter 5 Operating Instructions

5.3 Starting the Burner

Table 5-2 Starting the Burner

Step	Action					
1	Open LPG tank valve. See Figure 5.6					
2	Open in-line ball valve. See Figure 5.6					
3	Open propane burner access door. See Figure 5.5					
4	Open burner control box					
5	Turn temperature control "OFF"					
6	Turn pilot control to pilot. See Figure 5.4					
7	Push pilot control in and light pilot light using supplied torch. Pilot light is located inside propane burner access door. Hold pilot control until pilot remains lit when control knob is released. After pilot is burning, turn pilot control knob to "ON". See Figure 5.7					
8	Turn temperature dial to desired setting. Burner should ignite.					
9	Close access door					
	Important: The solid material in the tank melts first around the walls and bottom of the tank. The material temperature sensor is located by the wall, therefore, it is possible that at the beginning of the melt process the indicated temperature reaches operating value, but the material closer to the center of the tank is still solid. This is normal.					
10	Allow the heat transfer oil to continue to heat.					
11	When the sealant material reaches 275°F, engage the mixer. If the mixer does not move, allow the material to heat longer.					
	Caution					
12	Jamming the mixer can cause the hydraulic oil to overheat and damage the machine					



Figure 5.6



Figure 5.5



Figure 5.4



Figure 5.7



Chapter 5 Operating Instructions

5.4 Dispensing the Material

Table	5-3	Disne	nsina	the	Material
i ubio		Diopo	Tioning	u io	matorial

Step	Action					
	Warning					
	Put on protective clothing, gloves, hard-soled shoes, and face shield or safety glasses when operating or filling this machine. Read the entire manual before operating the machine. Hot materials can cause severe burns.					
1	Allow the material to reach 380°F or proper operating temperatures.					
2	Place pour pot under pour spout					
3	Open ball valve slowly					

5.5 Loading Material into the Machine

Table 5-4 Loading Material into Sealant Tank

Step	Action					
	Warning					
	Following this procedure prevents hot material from getting on operators and causing severe burns					
1	To load material into the sealant tank first open the lid					
2	Place the solid material on the lid then close the lid					
3	Continue adding solid blocks at intervals to allow the mixer to rotate without jamming. Note: If blocks of solid material are added too quickly, jamming results and slows down the melting process.					



Chapter 5 Operating Instructions

5.6 Shutting Down and Cleaning Out the Machine

Table 5-5 Shutting Down and Cleaning Out the Machine

Step	Action				
	Caution				
	When shutting down the machine for the day, Crafco recommends leaving the melter about half full with material. This will give a fairly rapid heat up rate in the morning, but allow enough material to start dispensing right away when the material becomes molten.				
1	Turn mixer "OFF"				
2	Turn pilot control knob to "OFF"				
3	Stop engine by turning the key to the "OFF" position.				

5.7 Storing the Machine

Store the machine in an area where moisture cannot enter the heating system sach as hot oil, controls, etc. Extended down time can cause moisture build up in the heating oil tank. If there is any evidence that moisture has collected in the heat transfer oil, warm the heat transfer oil to 300°F for two to three hours to evaporate the moisture.



Chapter 6 Maintenance Instructions

6.0 Preventative Maintenance

Refer to the manufacturer's operating and maintenance instructions for the engine.

6.1 Hydraulic System

- Check hydraulic fluid daily.
- Change hydraulic fluid every 500 hours of operation.
- Hydraulic fluid level should be kept 1-2 inches from the top of the tank.

6.2 Heat Transfer Oil

- Check the oil level at the start of every day.
- Change the oil every 500 hours of operation.

6.3 Wheel Bearings

Pack the wheel bearing every 24,000 miles or every 2 years, whichever comes first. Use a good grade of bearing grease.

6.4 Lug Nuts

• Torque all nuts/bolts before first road use and after each wheel removal. Check and torque after first 10 miles, 25 miles, and again at 50 miles. Check periodically thereafter.

- Torque in stages as follows:
- First stage 20-25 foot-pound (ft-lb)
- Second stage 50-60 foot-pound (ft-lb)
- Third stage 90-120 foot-pound (ft-lb)

Tighten bolts and nuts in the sequence shown in Figure 6.1

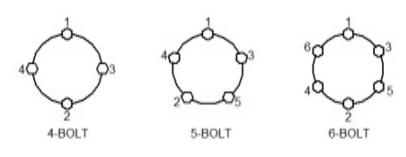


Figure 6.1



Chapter 6 Maintenance Instructions

6.5 Brakes

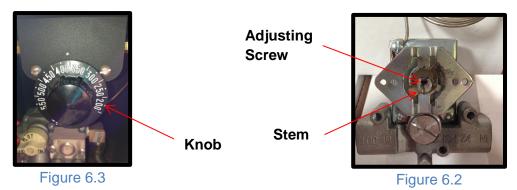
Check brakes daily.

6.6 Tongue Jack

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

6.7 Temperature Control Calibration

Check the control knob calibration weekly. Calibrate by setting temperature dial to 200°F. When the burner shuts off, indicated by the green light turning off, carefully pull the knob (See Figure 6.3) off the stem. Be careful not to move the stem during this operation. With a jeweler's screwdriver turn the adjusting screw (See Figure 6.2) inside the stem counterclockwise to increase temperature or clockwise to decrease temperature (1/8 turn will change the temperature 150°F – 200°F), carefully replace knob. Both the knob and the temperature gauge should now read approximately 200°F.



6.8 Maintenance Chart

T	abla	6-1	Maintenance	Chart
L	able	0- I	Maintenance	Chart

		Hours			
Possible Cause	Procedure	8	20	250	500
Engine check oil level	Refer to the manufacturer's instructions for the engine	Х			
Heat Transfer Oil	Check	Х			
Heat Marisler Oli	Change				Х
Hydraulic Oil	Check	Х			
Hydraulic Oli	Change				Х
Burner	Clean burner	Once a year			
Wheel Bearings	Clean and re-pack using a good grade of bearing grease	Every 24,000 miles or two years		or	
Tongue Jack	Grease using a good grade of bearing grease.	Once a year			



Chapter 6 Maintenance Instructions

6.9 Service Instructions

Table 6-2 Service Instructions

Step	Action
1	Do a general inspection of your machine at least once a week
	Replace all worn or damaged parts
2	Note: Keep regular replacement parts in stock for emergency repairs to prevent costly downtime.
3	Make any necessary adjustments and tighten all loose nuts or screws
4	Watch for leaks. Tighten fittings or repair as necessary.
5	Clean the external surfaces of the machine at regular intervals.
J	Note: Refer to the sealant manufacturer's instructions for recommendations.
6	Follow the recommended maintenance per Table 6-1 Maintenance Chart

6.10 Recommended Fluids and Lubricants

Table 6-3 Recommended Fluids and Lubricants

Application Recommended		Full Point
Engine Oil	Refer to engine manual	20 fl. oz.
Hydraulic Oil	Shell AW Hydraulic 46	2 Gal.
Heat Transfer Oil	Shell Turbo T 68 (Group II)	18 Gal.
Propane	Vapor Draw	100lb.



Chapter 6 Maintenance Instructions

6.11 Applicable Brands of Heat Transfer Oil

Table 6-4 Applicable Brands of Heat Transfer Oil

Manufacturer	Product Name	Crafco Heat Transfer Fluid		
Chevron	Heat Transfer Oil Grade 46	Shell Turbo T 68 (Group II)		
Citgo	Hytherm Oil 46	Shell Turbo T 68 (Group II)		
Conoco	Hydroclear Heat Transfer Oil	Shell Turbo T 68 (Group II)		
Fina	Vulcan Heat Transfer Oil 46	Shell Turbo T 68 (Group II)		
Lubrication Engineers	Heat Transfer Oil	Shell Turbo T 68 (Group II)		
Exxon Mobile	Caloria HT 43	Shell Turbo T 68 (Group II)		
Mobil	Mobiltherm 43	Shell Turbo T 68 (Group II)		
Mobil	Mobiltherm 603	Shell Turbo T 68 (Group II)		
Phillips 66	Heat Transfer Oil #3`	Shell Turbo T 68 (Group II)		
Phillips 66	Magnus Oil 68	Shell Turbo T 68 (Group II)		
Caution				

The heat transfer oil in this machine is a grade that has been tested and recommended by Crafco, Inc. Using a grade of oil not specifically recommended by Crafco, Inc., is cause for warranties to be voided.

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 machine operation or one (1) year, whichever occurs first.

6.12 Typical Heat Transfer Oil Specifications

Table 6-5 Typical Heat Transfer Oil Specifications

ISO	68
Flash Point, COC	445°F
Viscosity @ 100°F-SUS	325
Viscosity @ 210°F-SUS	50
Viscosity Index	95-100
Pour Point	0°F
Carbon residue	1%



Chapter 7 Troubleshooting

7.0 Burner Troubleshooting

7.1.1 Symptom: Pilot Will Not Light

Table	7-1	Pilot	will	not	Light	
-------	-----	-------	------	-----	-------	--

Step	Possible Cause	If
1	Low fuel pressure	Yes, Adjust pressure to 12" WC (.43 PSI)
		No, Go to Step 2
2	Orifice plugged	Yes, Clean orifice
		No, Go to Step 3
3	Thermopile dislocated/or faulty	Yes, Adjust so that 3/4" of tip is exposed to
		igniter flame. See Figure 7.1

7.1.2 Symptom: Burner Will Not Light

Table 7-2 Burner will not Light

Step	Possible Cause	lf
1	Low fuel pressure	Yes, Adjust pressure to 12" WC (.43 PSI) No, Go to Step 2
2	Pilot not lit	Yes, Light pilot No, Refer to Crafco Service Technician

7.2 Troubleshooting Sealant Flow

7.2.1 Symptom: Sealant Will Not Flow

Table 7-3 Sealant will not Flow

Step	Possible Cause	lf
1	Sealant Temperature too low	Yes, Allow material to heat longer
		No, Go to Step 2
2	Old material remains in pour spout	Yes, Heat pour spout to liquefy old material

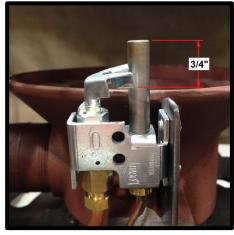


Figure 7.1



Chapter 7 Troubleshooting

7.2.2 Sealant Heating to Slow

Step	Sealant is Heating Slowly					
1	With the material level half or less, open the loading lid and inspect the inside					
	edge of the material tank. Check if there is a buildup of coked or crystallized					
	sealant along the top half of the material tank.					
2	If this is the case you will need to drain out (use up) the rest of the material inside					
	the tank. When the tank is empty, use an air chisel to remove this built up					
	material. Remove as much as possible all around the tank including the roof of					
	the material tank. Remove all the debris from the bottom of the material tank.					
	This should be done once a year or as needed.					
3	Check your level of the heat transfer oil, the mark on the dipstick is for 70°F.					
4	Check your records of the last service replacement of the heat transfer oil. If it has					
	been longer than 500 hours, or one year, you need to change the oil.					
5	Many of Crafco, Inc. service centers can perform these service steps for you if you					
	cannot. Call your local service center to find out if they can.					

7.3 Troubleshooting Agitator

7.3.1 Symptom: Agitator will Not Rotate

Step	Possible Cause	lf
1	Sealant Temperature too low.	Yes, Allow sealant to heat longer
		No, Go to Step 2
2	Too many block placed in	Yes, Continue heating and reverse mixer
	machine at one time	direction as needed
		No, Go to Step 3
3	Inadequate hydraulic pressure	Yes, Adjust pressure to 1000 PSI or
		Check oil level
		No, Call Crafco, Inc. for technical service



Chapter 8 Illustrated Parts List

8.0 About the Illustrated Parts List

The illustrated Parts List (IPL) is designed to help technical service or maintenance personnel correctly identify orderable replacement parts.

Illustrations are designed to show general shape and size of a part and the relationship that the parts has to other parts. Actual size and shape of parts or components may differ or vary from the actual part or component.

8.1 Ordering Crafco Parts

Crafco distributors and Crafco Pavement Preservation Supply Centers are strategically located throughout the United States. Parts can 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:

- Part Number
- Machine Model
- Serial Number

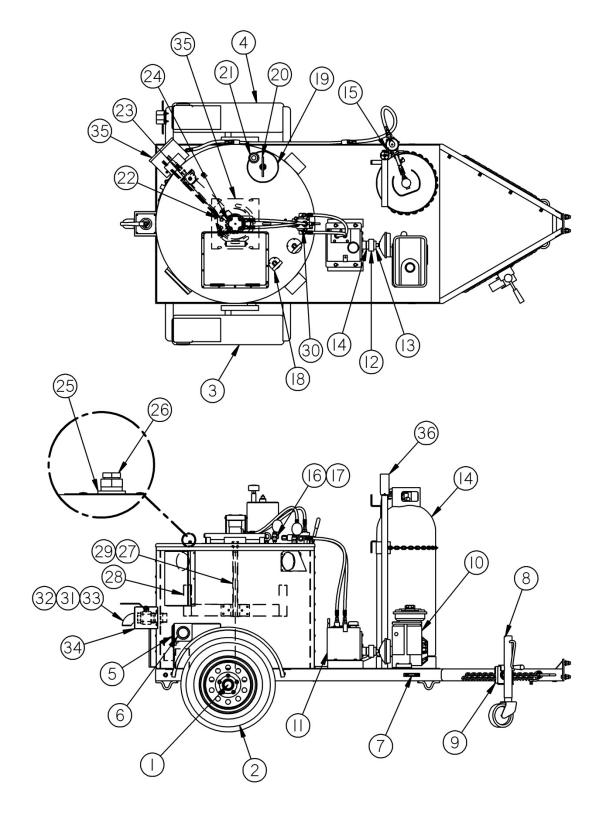
Write, call, or Fax Crafco, Inc. at the following: Crafco, Inc. Headquarters 420 N. Roosevelt Ave. Chandler, AZ 85226-2601 Phone: (602) 276-0406 Toll Free: (800) 528-8242 Fax: (480) 961-0513

Visit our website at www.crafco.com



Chapter 8 Illustrated Parts List

8.2 EZ50 Melter/Applicator





Chapter 8 Illustrated Parts List

Table 8-1 EZ50 Melter/Applicator

FIG.	ITEM	PART NO.	DESCRIPTION	QTY
8.1	1	43577	AXLE ASSEMBLY	1
	2	44340	TIRE and WHEEL ASSEMBLY	2
	3	44776	FENDER ASSEMBLY, DRIVER SIDE	1
	4	44777	FENDER ASSEMBLY, PASSENGER SIDE	1
	5	32363	STOP, TURN, TAIL LIGHT	2
	6	32364	SIDE MARKER LIGHT, RED	2
	7	32365	CLEARANCE MARKER, YELLOW	2
	8	40105	SWIVEL TONGUE JACK	1
	9	40106	JACK MOUNTING BRACKET	1
	10	40080	GAS ENGINE	1
	11	40082	HYDRAULIC PUMP AND RESERVOIR	1
	12	40081	COUPLING, DELRIN	1
	13	40085	SPROCKET, 16T	1
	14	26005	SPROCKET, 16T	1
	15	26032	KNOB	1
	16	28344	REDUCER BUSHING, 1/2" X 1/2"	1
	17	28178	COUPLING, 1/2" NPT	2
	18	40078	TEMPERATURE GAUGE, 12"	2
	19	43355	OVERFLOW TANK	1
	20	40136	DIPSTICK	1
	21	26025	BREATHER	1
	22	40030	SPACER	4
	23	40029	MOUNTING PLATE, HYD. MOTOR	1
	24	22027	HYDRAULIC MOTOR	1
	25	28177	PIPE COUPLING, 3/8"	1
	26	25203	STUFFING BOX	1
	27	40050	AGITATOR SHAFT	1
	28	40060	PADDLE ASSEMBLY	2
	29	32093	SPACER	1
	30	40083	CONTROL VALVE	1
	31	29281	BALL VALVE, 2"	1
	32	28046	NIPPLE, 2"NPT X 4" LONG	1
	33	28441	ELBOW, 2" 90° WELD	1
	34	40335	HEAT GUARD	1
	35	43125	BURNER ASSEMBLY	1
	36	40330	CONTROL BOX ASSEMBLY	1
	37	25118	TANK, 100# PROPANE	1
	38	25016	HAND TORCH ASSEMBLY	1



Chapter 8 Illustrated Parts List

8.3 Tank Assembly

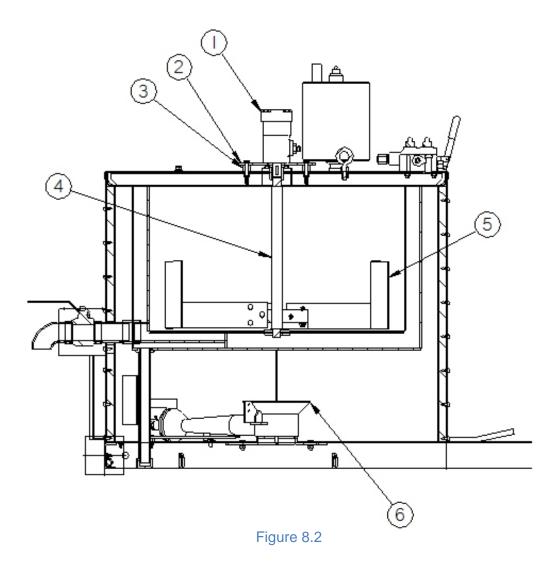


FIG.	ITEM	PART NO.	DESCRIPTION	QTY
8.2	1	22027	HYDRAULIC MOTOR	1
	2	40029	MOUNTING PLATE, HYDRAULIC MOTOR	1
	3	40030	SPACER	4
	4	40050	AGITATOR SHAFT	1
	5	40060	PADDLE ASSEMBLY	2
	6	43125	BURNER ASSEMBLY	1

Table 8-2 Tank Assembly

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Chapter 8 Illustrated Parts List

8.4 Gas Control Box

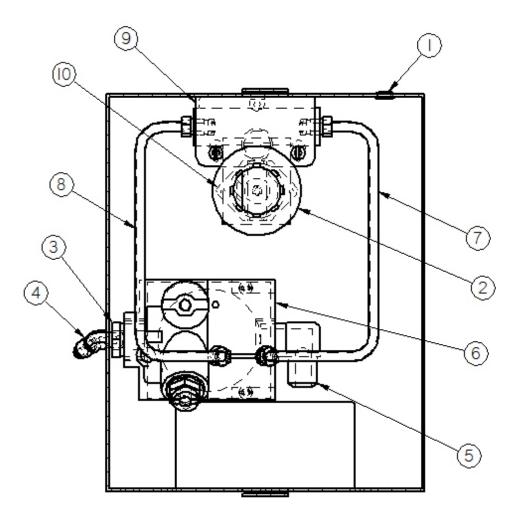


Table 8-3 Gas Control Box

FIG.	ITEM	PART NO.	DESCRIPTION	QTY
8.3	1	25217	GROMMET	1
	2	25220	DIAL, TEMPERATURE	1
	3	28344	BUSHING, 1/2" X 1/4" REDUCER	1
	4	29857	ELBOW, 1/4" NPT X 3/8" JIC 45°	1
	5	29823	ELBOW, 1/2" NPT X 1/2" 45° FLARE	1
	6	40096	GAS VALVE	1
	7	40333	CONTROL TUBE, R.H.	1
	8	40332	CONTROL TUBE, L.H.	1
	9	40331	CONTROLLER, TEMPERATURE	1

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Chapter 8 Illustrated Parts List

8.5 Propane Burner Assembly

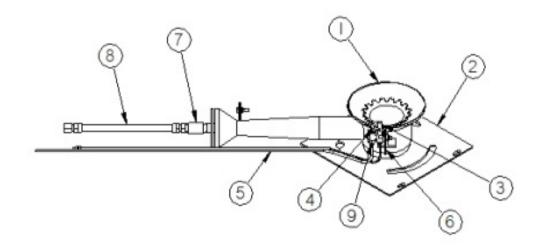


Figure 8.4

Table 8-4 Propane Burner Assembly

FIG.	ITEM	PART NO.	DESCRIPTION	QTY
8.4	1	41210	BURNER, PROPANE	1
	2	43118	MOUNTING PLATE, BURNER	1
	3	40097	THERMOPILE	1
	4	40091	PILOT	1
	5	40093	TUBE, PILOT FEED	1
	6	43120	PLATE, PILOT MOUNTING	1
	7	28178	COUPLING, 1/2" NPT	1
	8	40098	GAS LINE CONNECTOR	1
	9	29475	NUT, 7/16-20 FLARE	1



Chapter 8 Illustrated Parts List

8.6 Hydraulic Schematic

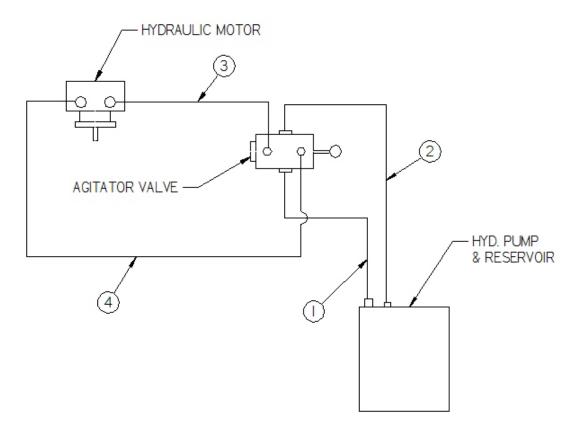


Figure 8.5

Table 8-5 Hydraulic Schematic

FIG.	ITEM	PART NO.	DESCRIPTION	QTY		
8.5	1	HYD. RESERVOIR (REA	AR PORT) TO AGITATOR VALVE (IN PORT)			
		29841	ADAPTER, 1/2" NPT X 6 JIC STR.	1		
		29603	HOSE, PRESSURE	1		
		29872	ADAPTER, 3/8" NPT X 3/8" JIC 90° ELBOW	1		
	2	AGITATOR VALVE (OU	T PORT) TO HYD. RESERVOIR (FRONT PORT)			
		29872	ADAPTER, 3/8" NPT X 3/8 JIC 90° ELBOW	1		
		29603	HOSE, PRESSURE	1		
		29841	ADAPTER, 1/2" NPT X 6 JIC STR.	1		
	3	AGITATOR VALVE (REAR PORT) TO HYD. MOTOR (L.H. PORT)				
		29834	ADAPTER, 3/8 NPT X 3/8 JIC STR.	1		
		29615	HOSE ASSEMBLY	1		
		22029	ADAPTER, 5/8 ORING X 3/8 JIC STR.	1		
	4	AGITATOR VALVE (FRONT PORT) TO HYD. MOTOR (R.H. PORT)				
		29834	ADAPTER, 3/8 NPT X 3/8 JIC STR.	1		
		29615	HOSE, ASSEMBLY	1		
		22029	ADAPTER, 5/8 ORING X 3/8 JIC STR.	1		

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Chapter 8 Illustrated Parts List

8.7 Propane Piping Schematic

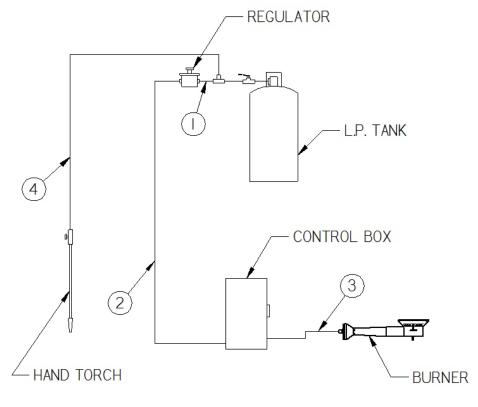


Figure 8.6

Table 8-6 Propane Piping Schematic

FIG.	ITEM	PART NO.	DESCRIPTION	QTY
8.6	1	L.P. TANK TO REGULATOR		
		40094	L.P. REGULATOR ASSEMBLY	1
	2	REGULATOR TO	CONTROL BOX	
		LP6-60	HOSE, PROPANE	1
		29832	ADAPTER, 1/2 NPT X 3/8 45º FLARE STR.	1
		40827	GAS LINE ASSEMBLY	REF
		29832	ADAPTER, 1/2 NPT X 3/8 45° FLARE STR.	1
		LP6-12	HOSE, PROPANE	1
		29857	ADAPTER, 1/4 NPT X 3/8 45° FLARE 90° ELBOW	REF
	3	CONTROL BOX TO PROPANE BURNER		
		29823	ADAPTER, 1/2 NPT X 1/2 45° FLARE 90° ELBOW	REF
		40098	GAS LINE	REF
	4	TEE IN LINE #1 TO HAND TORCH		
		29840	ADAPTER, 3/8 NPT X 3/8 45° FLARE 90° ELBOW	1
		25130	HOSE ASSEMBLY	1
		25016	HAND TORCH ASSEMBLY	1



Chapter 8 Illustrated Parts List

8.8 L.P. Regulator Assembly

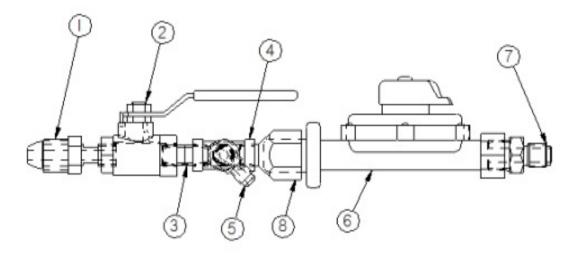


Figure 8.7

Table 8-7 L.P. Regulator Assembly

FIG.	ITEM	PART NO.	DESCRIPTION	QTY
8.7	1	25123	TANK SPUD	1
	2	29195	BALL VALVE, 1/4	1
	3	28001	NIPPLE, 1/4 CLOSE	1
	4	28251	TEE, 1/4 PIPE	1
	5	29870	ADAPTER, 1/2 NPT X 3/8 45° FLARE 90° ELBOW	1
	6	45594	GAS MANIFOLD	1
	7	29832	ADAPTER, 1/2 NPT X 3/8 45° FLARE STR.	1
	8	45598	FITTING, POL FEMALE X 1/4 NPT	1



Chapter 8 Illustrated Parts List

8.9 Propane Torch Assembly

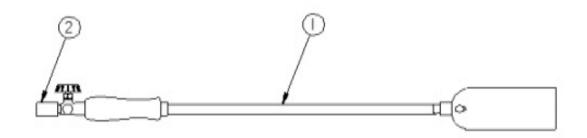


Figure 8.8

Table 8-8 Propane Torch Assembly

FIG.	ITEM	PART NO.	DESCRIPTION	QTY
8.8	1	25015	HAND TORCH ASSEMBLY	1
	2	28176	COUPLING 1/4 NPT	1
	3	LP4-4FJ-4MP-144	HOSE, PROPANE	1



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