

E-Z POUR 100 DIESEL MELTER WITH PUMP/APPLICATOR PERKINS ENGINE

PART MANUAL - 26367 REV. C

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E-Z POUR 100 DIESEL MELTER



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E-Z POUR 100 DIESEL MELTER

WITH PUMP/APPLICATOR PERKINS ENGINE

This manual is furnished with each new **CRAFCO E-Z POUR 100 DIESEL MELTER**. The manual will help your machine operators learn to run the melter properly and understand its mechanical functions for trouble-free operation.

Your **CRAFCO E-Z POUR 100 DIESEL MELTER** is designed to give excellent service and save maintenance expense. However, as with all specifically 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.

SAFETY PRECAUTIONS

- High operating temperatures of sealant and machine require protective clothing and gloves be worn by operator.
- Always wear eye protection.
- Observe all **CAUTION AND WARNING** signs posted on machine.

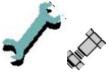




- Avoid the entrance of water into any part of the machine. Water will displace heat transfer oil or sealant, which could be hazardous to personnel surrounding the machine when it reaches operating temperatures.
- Avoid bodily contact with hot sealant material or heat transfer oil, serious burns may 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 and engine prior to refilling diesel tank.
- 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.

SAFETY PRECAUTIONS

- Replace any hoses which show signs of wear, fraying, or splitting. Be sure all fittings and joints are tight and leak-proof.
- •Precaution is the best insurance against accidents.
- •The E-Z Pour 100 Diesel 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 100 DIESEL 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 Mesa, 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.

CrafcoTM, 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.

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 CrafcoTM, 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, INCORPORATED 235 SOUTH HIBBERT DRIVE MESA, AZ. 85210 480-655-8333 Toll Free 1-800-528-8242

SPECIFICATIONS

Vat Capacity	100 Gallons
Melt Capacity	. 80 Gallons/Hour
Heat Transfer Oil Required	. 27 Gallons at 70°F
Tank Construction	Double Boiler Type
Tank Opening Size	.14" X 18"
Maximum Heat Input	Diesel, Forced Air 250,000 BTU
Burner and Temperature Control	. Thermostatic Control
Engine - Perkins	Twin Cylinder 13.8 HP @ 3000 rpm
Drive Mechanism	. All Hydraulic with infinite speed forward & reverse action
Mixer	. Full Sweep Mixer with 2 horizontal paddles
Axle	. Single - 3,500 lbs.capacity
Tires (2)	. 205/75R-14- 8 ply rating (1850 lbs. capacity each)
Dry Weight	Approximately 2,600 lbs.
Diesel Tank Capacity	26 Gallons

E-Z POUR 100 DIESEL MELTER OPERATING INSTRUCTIONS

INTRODUCTION

The CRAFCO™ E-Z Pour 100 Diesel Melter was developed to melt CRAFCO™ Brand Sealants. However, it will work equally well with all road asphalt and federal specification crack or joint sealants.

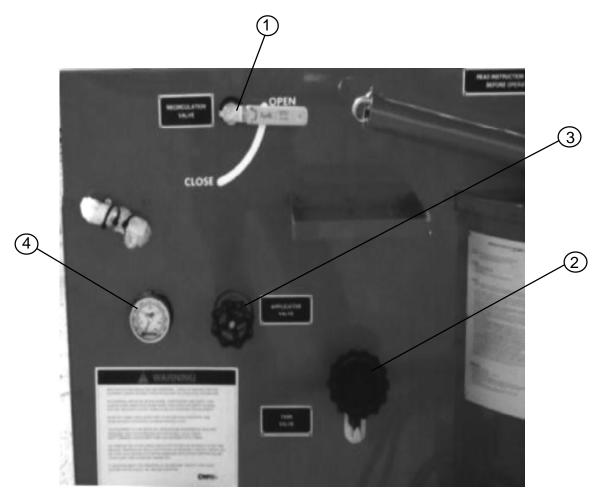
DO NOT operate machine without reading operator's manual and being thoroughly familiar with controls:

- 1. Fill engine fuel tank with diesel fuel (use #1 in cold weather, #2 in warm weather).
- 2. Check engine crankcase oil (refer to Engine Operator Manual).
- 3. Check hydraulic fluid level, at ambient temperature. Add fluid if necessary to bring fluid to correct level.
- 4. Check heat transfer oil level. 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.
- 5. All valves should be in closed position and temperature control box set at "**OFF**".
- 6. 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.
- 7. Check temperature control calibration.

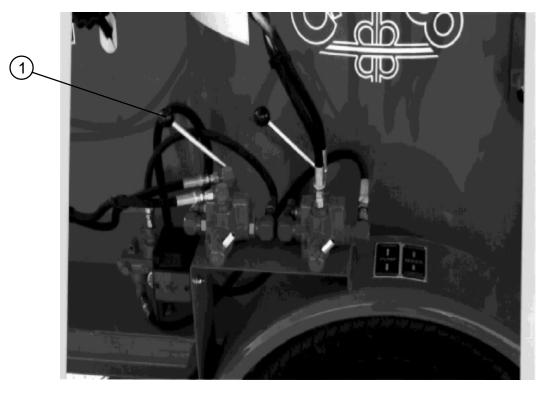


CAUTION:

Extreme care must be used when operating this equipment. Safety is the result of being careful and paying attention to details. Remember the diesel flame is about 2,200°F. Certain exposed parts of this machine, when operating reach 500°F; the sealant as high as 400°F and the hydraulic fluid may reach 200°F. Always wear protective clothing, hard sole shoes, and eye protection. 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 250 hours.



RECIRCULATION VALVE - FIGURE A



HYDRAULIC CONTROL VALVE - FIGURE B

MACHINE START UP

TO START BURNER

- 1. Fully open the damper vent.
- 2. Set temperature dial to "OFF".
- 3. Start engine.
- 4. 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 <u>Trouble Shooting Guide</u>).

- 5. Allow the heating oil to continue to heat. When sealant material reaches a liquid state, engage the agitator by moving the agitator level either forward or backward. If agitator does not move, allow material to heat longer. Jamming of mixer shaft causes hydraulic oil to over heat and machine damage could occur.
- 6. When sealant reaches correct application temperature, open main tank valve Fig. A (2), open recirculation valve Fig. A (1) and close applicator valve Fig. A(3). Put sealant pump in reverse (Suction) mode Fig. B (1). When pump turns freely, reverse sealant pump flow (Discharge) Fig. B(1). This circulates sealant back into tank.
- 7. Check the sealant temperature at material pump Fig. A (4). This indicates the temperature of sealant flowing through lines.
- 8. 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 operating, with the hand wand valve in the **ON** position.
- 9. Open applicator valve Fig A(3).
- 10. Close the recirculation valve Fig. A(1). 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.
- 11. Extreme care should be taken when changing or installing applicator tips. If the material is hot the material pump <u>must</u> be put in the "SUCTION" mode. This will insure against hot material pumped from wand. Sealant material is hot and can cause skin burns.
- 12. 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.
- 13. 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.

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 periodically. (Each 50 hours of operation is recommended.) The gauge registers the actual temperature of the heat transfer oil and it should coincide with the temperature control knob.

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 knob down until a click is heard and/or the burner shuts off. If the temperature control 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 control 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 diesel 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.

LOADING THE 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 material 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 the temperature dial to "**OFF**".
- 2. Move mixer control valve to "**OFF**" position.
- 3. Close recirculation valve.
- 4. Put material pump in suction mode. With hand applicator valve open, disconnect wand and return hose to heat chamber. Close applicator valve. Open recirculation valve. Close main tank valve.
- 5. Return material pump control valve to "**OFF**" position.
- 6. Turn off engine.
- 7. Return wand to heat chamber.

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.

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
- Machine Model
- 3. Serial Number from Name Plate

Write or telephone:

CRAFCO, INC. 235 SOUTH HIBBERT MESA, AZ 85210 480-655-8333

Toll Free: 1-800-528-8242

MAINTENANCE INSTRUCTIONS

ENGINE

See Engine Owner Manual for operating and maintenance instructions.

HYDRAULIC SYSTEM

Check hydraulic fluid daily. Change hydraulic filter every 250 hours of operation. Change hydraulic fluid every 500 hours of operation.

HEAT TRANSFER OIL

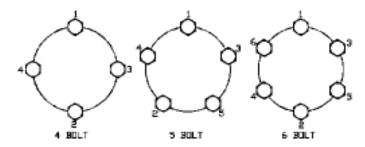
Check oil level every 8 hours of operation. Change oil every 500 hours of operation.

WHEEL BEARINGS

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

LUG NUTS

Wheel nuts/bolts should be torqued before first road use and after each wheel removal. Check and retorque after the first 10 miles, 25 miles, and again at 50 miles. Check periodically thereafter. Torque in stages. 1st stage 20-25 ft.lbs., 2nd stage 50-60 ft.lbs., 3rd stage 90-120 ft.lbs.



TIGHTENING SEQUENCE

BRAKES

Check brakes daily. Refer to DEXTER AXLE Operation Maintenance Service Manual located in the manual box.

TONGUE JACK

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

SEALANT PUMP

Adjust pump packing periodically. A slight drippage (several drops per minute) should be allowed. Refer to <u>Pump Section</u> for details. See page 23.

MAINTENANCE CHART

LOCATION	PROCEDURE			НОІ	JRS		
		8	50	100	400	500	600
Engine check oil level. Check coolant level. Check alt. drive belt. Check engine for leaks or damage - correct if necessary	See Perkins Intruction Manual	* * *					
Other Engine Maintenance	See Perkins Instruction Manual						
Drain water from fuel filter				*			
Change fuel filter (200 hrs.) Check alt. belt for wear					*		
Change alt. belt							*
Clean air cleaner element (earlier check may be necessary).				*			
Replace air cleaner element.					*		
Change coolant							*
See Perkins Operating Instructions for additional engine service.							
Battery	Check water level weekly.						
Pump Packing	Tighten as required. Drip should be several drops per minute.		*				

MAINTENANCE CHART

LOCATION	PROCEDURE	HOURS					
		8	50	100	400	500	600
Heat transfer oil	Check (every 8 hours).		*				
neat transfer off	Change		After	500 hou	rs or one	e year	
	First change-250hours						
Hydraulic oil return line filter.	Additional change-250hours or if indicator excessive back pressure.						
	Check oil (every 8 hours).	*					
	Change oil (every 500 hours).					*	
Hydraulic oil	For proper oil, see Recommended Fluids & Lubricants, page 19.						
	Check burner box insultation.					*	
D	Clean cad cell.					*	
Burner	Check electrodes.					*	
	Check nozzle pressure.					*	
Wheel bearings	Clean & repack using good grade of bearing grease.	Ev	ery 24,0	00 miles	or every	/ two yea	ars.
Tongue jack	Grease using good grade of bearing grease.			Once	a year.		

GENERAL MAINTENANCE ITEMS

RECOMMENDED QUANTITY	DESCRIPTION	PART NO.
1 Set	Packing, Sealant Pump	29990S
1	Sealant Hose 15"	27084
1	Engine Oil Filter	43082
1	Engine Fuel Filter	43080
1	Hydraulic Filter	44805
1	Air Fllter	43081

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 <u>General Maintenance Items</u>.
- 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.

RECOMMENDED FLUIDS & LUBRICANTS

APPLICATION	PLICATION RECOMMENDED	
Engine Oil	Refer to Perkins Owners Manual.	3 Qts.
Diesel	#1 Cold Climate #2 Warm Climate	26 Gal.
Hydraulic Oil	Tellus Plus 68	23 Gal.
Heat Transfer Oil	Turbo "T" Oil 68	27 Gal.

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

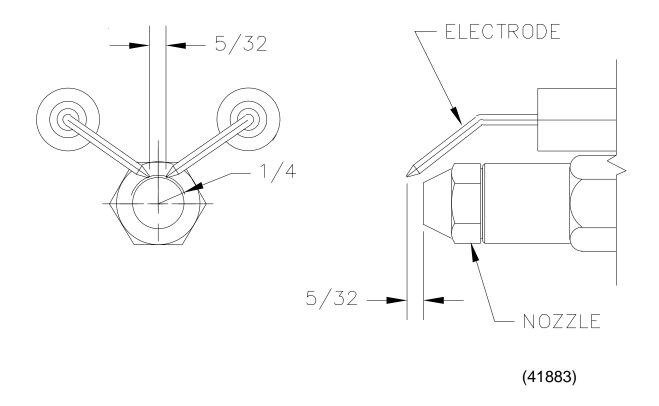
PRODUCER	PRODUCT NAME	PRODUCT NO.
Texaco	Regal	R&O 68
Gulf	Harmony	68
Shell	Turbo Oils T	68
Exxon	Teresstic	68
Phillips	Magnus	68
Chevron USA	Heat Transfer Oil #1	
Conoco	Dectol R&O	68
Union Oil	Turbine Oil	68



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 warranty to be void. All oils subjected to high temperatures deteriorate with time and lose many of their characteristics. Test 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.

DIESEL BURNER ELECTRODE ADJUSTMENTS



DIESEL BURNER SETTINGS

Air Shutter = 7 Air Band = 0 Fuel Pressure = 140 PSI Adjustment Plate = 3

TROUBLE SHOOTING GUIDE

PROBLEM	CAUSE	REMEDY
	Sealant temperature too low.	Continue to heat material.
Mixer will not rotate.	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 in tank not to operating temperature.	Continue heating material.
Material pump will not turn.	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.
	Material in tank not to correct temperature.	Continue heating material.
Sealant will not recirculate back into tank through	Drain valve closed.	Open valve.
recirculation valve.	Material still cold in suction line. Recirculation valve closed.	Make sure compartment temperature is adequate to melt material. Open valve.
Sealant material flows through	Application valve not open.	Open valve.
recirculation valve but will not flow through application hand	Recirculation valve still open or damaged internally.	Close valve or replace.
wand.	Hose/wand still cold.	Leave in chamber until hot.
	Hand applicator valve was left in off position too long.	Heat hose by placing in heat chamber to liquify sealant.
When applying sealant it stops flowing from applicator wand.	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.
	Material pump worn or damaged.	Replace/Repair.
	Pump rotating in wrong direction.	Reverse control lever.
Pump rotates, but will not pump material.	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.
	Block of sealant over drain.	Dislodge by reversing mixer and pump.
	Build up of coked or crystallized material on inside of material tank.	Allow machine to cool. Remove deposits and flush with solvent.
Slow heat up of sealant.	Burner not operating.	See Burner Trouble Shooting Guide page 22.
	Low heating oil level.	Make sure fluid level is correct.
	Low heating oil temperature.	Set at recommended temperature.

BURNER TROUBLE SHOOTING GUIDE

PROBLEM	CAUSE	SOLUTION
	Clogged fuel nozzle.	Clean/or replace.
	No fuel in tank, valve at tank shut off, clogged filter or jellied fuel.	Add fuel if necessary open valve, use fuel for anticipated weather.
	Ignitor wires loose, dirty electrodes, faulty transformer.	Check for loose wiring, clean and adjust electrodes, replace transformer if faulty.
	Faulty fuel solenoid, loose wire.	Replace solenoid if necessary tighten all connections.
Blower motor will not turn at	Fuel pump at burner needs bleeding.	Open bleeder until fuel runs clear, tighten.
correct speed or burner will not ignite.	Cad cell dirty, lens cracked or tape broken in lens.	Clean/Replace.
	Cad cell picking up light from outside of burner housing.	Adjust cad cell bracket to approximately 5° so that it faces downward and close transformer with ear tabs.
	10 amp fuse under DC controller is blown.	Replace.
	Cracked electrodes (ceramic) or not adjusted correctly.	Replace, adjust as per page 20.
	Coupler between fuel pump and blower motor worn, cracked.	Replace.
Excess black smoke in heat	Air vent incorrectly set.	Shutter=7 Band=0 Accept for this one.
compartment and stack.	Blower motor not running at correct speed.	Charge battery by starting engine.
Burner will ignite and run but will shut "off" and "on" with white smoke coming out of	Air in fuel line.	Check all fuel line fittings, cracks in hoses, and bleed fuel pump to burner.
stack.	Fuel pump pressure low.	Adjust to 140 psi.
Make sure engine is	running so battery is fully cha	arged (13V or better).
Burner lights but shuts down	Faulty cad cell, broken, loose cad cell wires, receptacle.	Replace, repair, and tighten all connections.
after 15 seconds.	Bad connection at key ignition switch to engine and at the circuit breaker near battery.	Replace electrical fittings and check for good connections.
Burner lights but will not relight after temperature drops 20 degrees.	Bad connection at battery, broken or loose wires, faulty manual reset switch, faulty temperature controller, low battery volts.	Clean and retighten, repair or replace, replace switch, recalibrate or replace, recharge battery, tighten belt, check/replace alternator if necessary.
	High limit switch.	Check or replace.
	Wires at temperature control box loose or broken.	Check connections or tighten, replace if necessary.
Burner blower runs but burner will not light.	Battery low, alternator belt loose, alternator failure.	Recharge battery, tighten belt, check/replace alternator if necessary.
	Loose/broken battery cable.	Tighten/replace.
	Engine not running.	Charge battery by starting engine.
	Thermostatic control faulty.	Replace.
Burner will not shut down at set temperature.	Thermostatic control faulty or needs recalibration.	Recalibrate or replace if necessary.

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 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 taped 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).

DETACHING MACHINE FROM VEHICLE AND SETTING UP POWER WHEEL (Attachment is optional.)

- 1. Lower jack and unhitch melter from towing vehicle.
- 2. Remove hitch receiver from hitch plate.
- 3. Remover quick release pin from both ends of restraining brace.

CAUTION: Use your legs and not your back or get help to lower the power wheel assembly.

- 4. After lowering power wheel unit use jack stand to adjust alignment of restraining brace release pin. Make sure all safety pins are installed.
- 5. After brace is installed, retract jack stand. Pivot jack stand.
- 6. Plug in control cord.
- 7. Make sure the Emergency Stop is pulled OUT at all times, even if the machine is parked. It will run the battery down. It should only be used if an emergency stop is needed.
- 8. Use flow divider at hydraulic pump to control the speed of the power wheel. (maximum setting on flow divider knob should be #3.)
- 9. Toggle switches on control box control the forward/reverse and left/right direction.

RAISING POWER WHEEL AND REATTACHING MACHINE TO VEHICLE

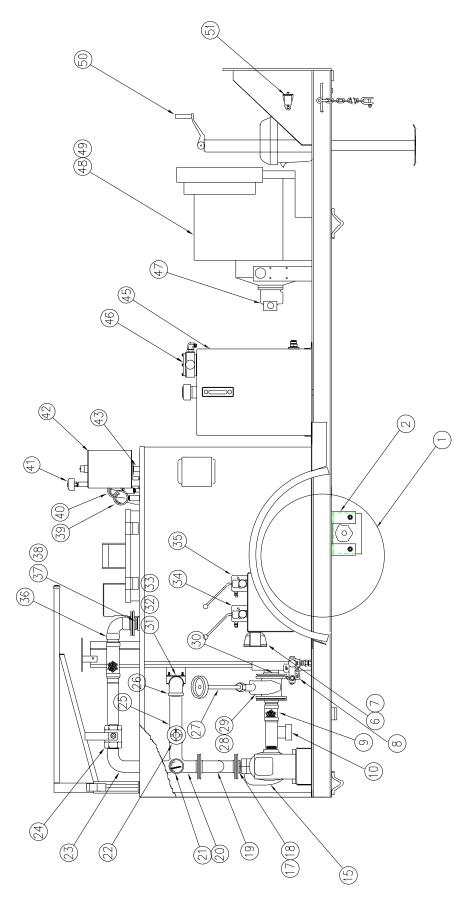
- 1. Unplug power cord.
- 2. Lower jack stand and raise machine to remove weight from power wheel unit. Remove quick pins from both ends of restraining brace.
- 3. Raise power wheel and install restraining brace on back side of power wheel arm. Reinstall all quick release pins.



CAUTION: Power wheel arm is heavy. Use your legs and not your back or get help in raising unit.

- 4. Install hitch receiver and lock with lock pin.
- 5. Attach machine to vehicle. Lower jack/pivot or remove.

E-Z 100 DIESEL MELTER - 42300PB



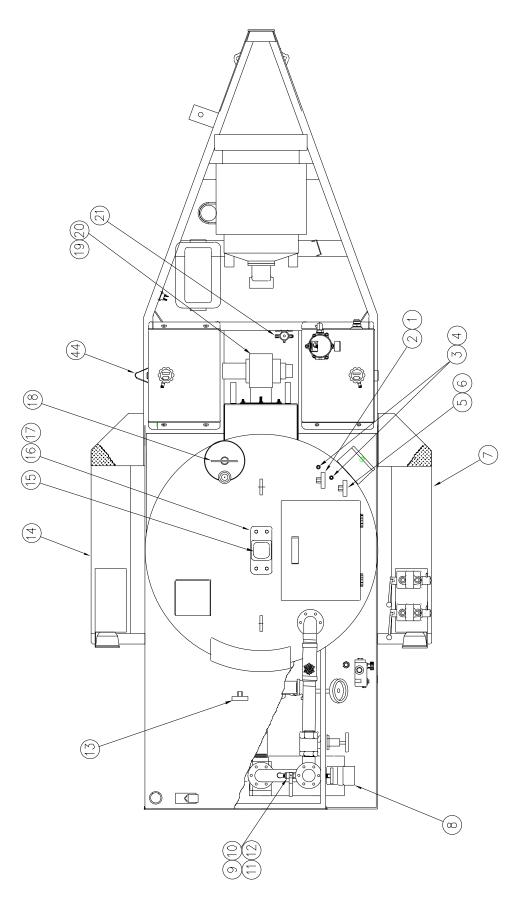
PARTS LIST FOR E-Z 100 DIESEL MELTER-42300PB - PERKINS ENGINE

NUMBER	PART NUMBER	QTY	DESCRIPTION
1	41743	2	TIRE AND WHEEL ASSEMBLY - 185-R14
2	43616	1	TORSIONAL AXLE - 3500 LB.
3	-	-	NOT SHOWN
4	-	-	NOT SHOWN
5	-	-	NOT SHOWN
6	24022	1	TAIL LIGHT - R.H.
7	24023	1	TAIL LIGHT - L. H.
8	41573	1	FLOW DIVIDER PRIORITY
9	41657	1	LOWER SUCTION TEE
10	28273	1	PIPE CAP 2" STANDARD BLACK
11	-	-	NOT SHOWN
12	-	-	NOT SHOWN
13	-	-	NOT SHOWN
14	-	-	NOT SHOWN
15	43145	1	2" SEALANT PUMP
16	-	-	NOT SHOWN
17	29050	4	2" FLANGE GASKET - 6 HOLE
18	22030	2	FLANGE NIPPLE ASSEMBLY
19	42351	1	DOUBLE ELBOW PIPE ASSEMBLY
20	42344	1	FLANGE TEE
21	25050	1	TEMP. GAUGE - 2-1/2" BACK MOUNT
22	29270	1	2" BRONZE GATE VALVE
23	42352	1	ELBOW - RECIRC. LINE
24	41246	1	RECIRCULATION VALVE
25	28110	1	2" X 8" PIPE NIPPLE

PARTS LIST FOR E-Z 100 DIESEL MELTER-42300PB - PERKINS ENGINE

NUMBER	PART NUMBER	QTY	DESCRIPTION
26	28213	2	2" PIPE ELBOW
27	41268	1	VALVE HANDLE EXTENSION
28	29060	2	GASKET 3" CIRC. FLANGE 8 HOLES
29	29292	1	FLANGED GATE VALVE - 3"
30	42345	1	MATERIAL DRAIN FLANGE
31	41291	1	CROSS FEED PIPE
32	41623	1	U BOLT PIPE HANGER
33	28358	1	2" X 1" REDUCING BUSHING
34	41092	1	MATERIAL PUMP CONT. VALVE
35	41093	1	MIXER CONT. VALVE
36	41680	1	PIPE ASSEMBLY - UPPER
37	22030	2	FLANGE NIPPLE ASSEMBLY
38	29050	4	2" FLANGE GASKET - 6 HOLE
39	41243	1	24" TEMPERATURE GAUGE BTM. MNT.
40	40078	1	12" TEMPERATURE GAUGE BTM. MNT.
41	26025	1	AIR BREATHER & ELEMENT
42	41553	1	OVERFLOW TANK
43	43763	1	AIR RELIEF TUBE ASSEMBLY
44	-	-	NOT USED.
45	43595	1	HYDRAULIC TANK
46	44805	1	HYDRAULIC FILTER (SERVICE ONLY)
47	41193	1	HYDRAULIC PUMP
48	43078	1	13 H.P. DIESEL ENGINE
49	41872	4	ISOMOUNT (DIESEL)
50	23097	1	TONGUE JACK, SIDE MOUNT
51	23117	1	BREAKAWAY SWITCH UNIT

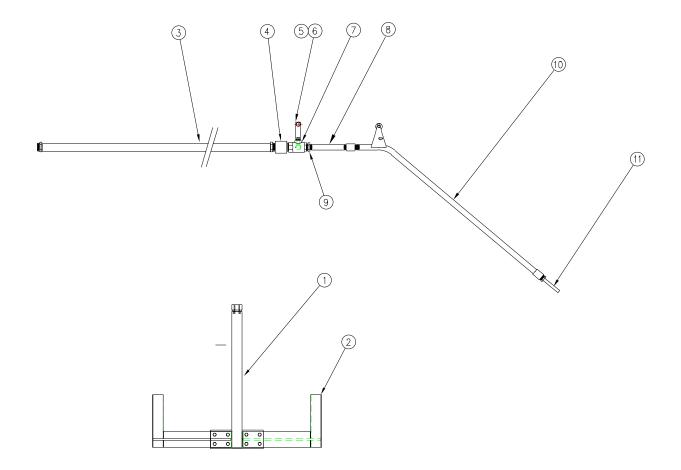
E-Z 100 DIESEL MELTER - 42300PB1



PARTS LIST FOR E-Z 100 DIESEL - PERKINS ENGINE

NUMBER	PART NUMBER	QTY	DESCRIPTION
1	28178	1	1/2 PIPE COUPLING
2	40078	1	12" TEMPERATURE GAUGE BTM. MNT.
3	25203	2	STUFFING BOX
4	28177	2	3/8 PIPE COUPLING
5	41243	1	24" TEMPERATURE GAUGE BTM. MNT.
6	28178	1	1/2 PIPE COUPLING
7	41575	1	FENDER - L.H. ASSEMBLY
8	22027	1	MATERIAL PUMP HYDRAULIC MOTOR
9	28237	1	3/8 X 90° ELBOW
10	28282	1	3/8 PIPE PLUG
11	28002	1	3/8 CLOSE NIPPLE
12	29202	1	3/8 BALL VALVE
13	25057	1	9" TEMPERATURE GAUGE BTM. MNT.
14	41576	1	FENDER - R.H. ASSEMBLY
15	22310	1	MIXER MOTOR
16	40029	1	MOUNTING PLATE
17	40030	4	PIPE SPACER
18	40136	1	DIPSTICK ASSEMBLY
19	41891	1	14 VOLT BURNER
20	41883	1	BURNER NOZZLE (1.5-80°B)
21	39602	1	SOLENOID
22	41697	1	3" ALUMINUM HAND WHEEL
23	43595	1	26 GAL. HYDRAULIC TANK

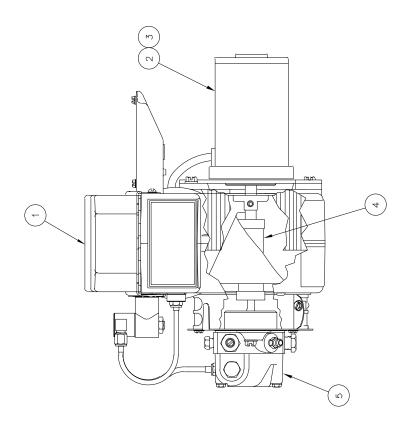
MATERIAL HOSE AND WAND ASSY/MIXER SHAFT AND PADDLE ASSY - 42300PB2

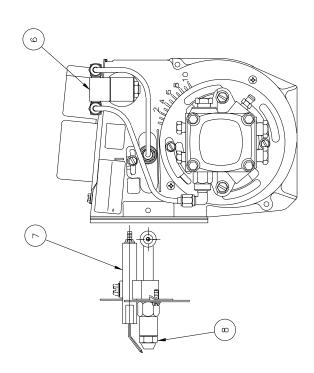


PARTS LIST FOR MATERIAL HOSE AND WAND ASSY/MIXER SHAFT AND PADDLE ASSY-42300PB2

NUMBER	PART NUMBER	QTY	DESCRIPTION
1	41690	1	AGITATOR SHAFT ASSEMBLY EZ100
2	41587	2	PADDLE ASSEMBLY
3	27084	1	SEALANT HOSE ASSEMBLY (15FT LONG)
4	27048	1	MALE FEMALE SWIVEL
5	41208	1	HANDLE ASSEMBLY WITH VALVE
6	27080	1	HANDLE ASSEMBLY
7	29240	1	1" BALL VALVE
8	28100	1	3/4 X 8 PIPE NIPPLE
9	28351	1	1 X 3/4 REDUCING BUSHING
10	41629	1	HAND WAND ASSEMBLY
11	27171	1	SEALING TIP - 1/2"

DIESEL BURNER

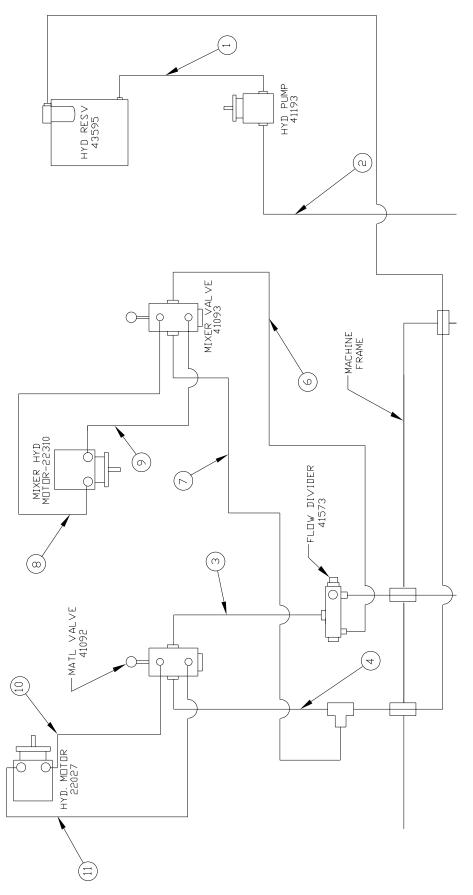




DIESEL BURNER

ITEM	PART NUMBER	QTY	DESCRIPTION
1	41949	1	IGNITION TRANSFORMER
2	41890	1	BLOWER MOTOR
3	41934	1	BRUSH KIT - MOTOR
4	41970	1	COUPLING - FUEL PUMP
5	41979	1	PUMP - FUEL
6	41888	1	SOLENOID - FUEL
7	41993	1 SET	ELECTRODE
8a	41883	1	NOZZLE (1.5 - 80°B)
8b	-	-	NOT SHOWN
8c	-	-	NOT SHOWN
9	41870	1	CAD EYE (NOT SHOWN)
10	42335	1	DC CONTROLLER (NOT SHOWN)

HYDRAULIC PIPING DIAGRAM E-Z 100 DIESEL MELTER WITH PUMP/APPLICATOR 26440PB

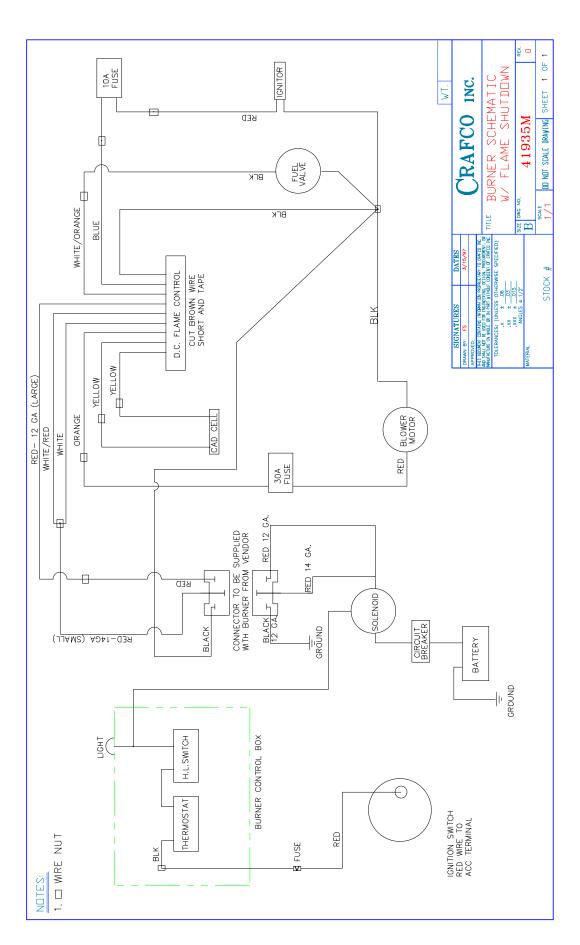


HYDRAULIC PIPING - 100 GAL. DIESEL MELTER

1.	. HYDRAULIC RESERVOIR TO HYDRAULIC PUMP (SUCTION)					
	1 C16-16FJ-16FJ91-18		HYDRAULIC HOSE ASSEMBLY			
	1 29824		ELBOW ADAPTOR			
2.	HYDR	HYDRAULIC PUMP (PRESSURE) TO FLOW DIVIDER VALVE ("IN" PORT)				
	1 29821		STRAIGHT ADAPTOR			
	1	AX8-10FJ-10FJ-48	HYDRAULIC HOSE ASSEMBLY			
	1	29805	BULKHEAD CONNECTOR			
	1	29807	LOCKNUT			
	1	41552	TUBE ASSEMBLY			
	1	29805	BULKHEAD CONNECTOR			
	1	29807	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	AX6-6FJ-6FJ-24	HYDRAULIC HOSE ASSEMBLY			
4.	MATER	MATERIAL VALVE ("OUT" PORT) TO HYDRAULIC FILTER ("IN" PORT)				
	1	AX8-10FJ-10FJ-26	HYDRAULIC HOSE ASSEMBLY			
	1	29811	SWIVEL NUT RUN TEE			
	1	29805	BULKHEAD CONNECTOR			
	1	29807	LOCKNUT			
	1	41552	TUBE ASSEMBLY			
	1	29805	BULKHEAD CONNECTOR			
	1	29807	LOCKNUT			
	1	AX8-10FJ-12FJ9-53	HYDRAULIC HOSE ASSEMBLY			
6.	5. FLOW DIVIDER VALVE ("REG" PORT) TO MIXER VALVE ("IN" PORT)					
	1	AX6-6FJ-6FJ-34	HYDRAULIC HOSE ASSEMBLY			
	1	29876	ELBOW ADAPTOR			
	1	28348	REDUCING BUSHING 3/4 X 1/2			

HYDRAULIC PIPING - 100 GAL. DIESEL MELTER

7.	MIXER VALVE ("OUT" PORT) TO TEE IN LINE 4				
	1	AX6-6FJ-6FJ-24	HYDRAULIC HOSE ASSEMBLY		
8.	MIXER VALVE ("INBOARD" PORT) TO HYD MOTOR FOR MIXER (L.H. PORT)				
	1	AX6-6FJ-6FJ-18	HYDRAULIC HOSE ASSEMBLY		
	1	29808	TUBE CONNECTOR		
	1	41550	TUBE ASSEMBLY		
	1	22029	STRAIGHT ADAPTOR "O" RING		
9.	MIXER VALVE ("OUTBOARD" PORT) TO HYD. MOTOR FOR MIXER (R.H. PORT)				
	1	AX6-6FJ-6FJ-18	HYDRAULIC HOSE ASSEMBLY		
	1	29808	TUBE CONNECTOR		
	1	41551	TUBE ASSEMBLY		
	1	22029	STRAIGHT ADAPTOR - "O" RING		
10.		MATERIAL VALVE ("INBOARD" PORT) TO HYD. MOTOR FOR MATERIAL PUMP (BOTTOM PORT)			
	1	AX6-6FJ-6FJ-34	HYDRAULIC HOSE ASSEMBLY		
	1	22029	STRAIGHT ADAPTOR - "O" RING		
11.	MATERIAL VALVE ("OUTBOARD" PORT) TO HYD. MOTOR FOR MATERIAL PUMP (TOP PORT)				
	1	AX6-6FJ-6FJ-34	HYDRAULIC HOSE ASSEMBLY		
	1	22029	STRAIGHT ADAPTOR - "O" RING		



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