



E-Z POUR 400 DIESEL MELTER  
WITH PUMP/APPLICATOR

PART MANUAL - 26219

Revised: 9/99

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WITH PUMP/APPLICATOR

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# E-Z POUR 400 DIESEL MELTER WITH PUMP/APPLICATOR

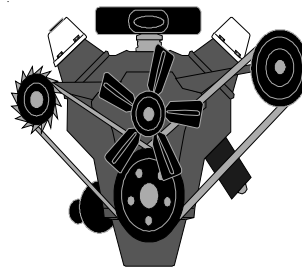
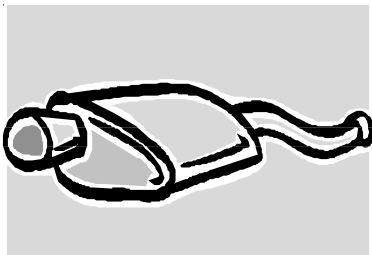
This manual is furnished with each new CRAFCO E-Z POUR 400 DIESEL MELTER WITH PUMP/APPLICATOR. The manual will help your machine operators learn to run the sealer properly and understand its mechanical functions for trouble-free operation.

Your CRAFCO E-Z POUR 400 DIESEL MELTER WITH PUMP/APPLICATOR 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.



**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.



## 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.

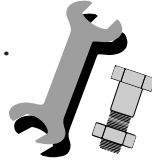
## SAFETY PRECAUTIONS

- 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 400 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 400 DIESEL MELTER WITH PUMP/APPLICATOR 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 borne by the purchaser.

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



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

## 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 Crafcó Distributor. If you do not know who your local distributor is, call a Crafcó 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 Crafcó, 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.....	400 Gallons
Melt Capacity .....	250 Gallons/Hour
Heat Transfer Oil Required.....	55 Gallons at 70° F
Tank Construction.....	Double Boiler Type
Tank Opening Size (2).....	16" X 24"
Maximum Heat Inpt.....	Diesel, Burner- 400,000 BTU
Burner and Temperature Control.....	Automatic
Engine - Isuzu.....	3 Cylinder 23 HP @ 3000 rpm
Drive Mechanism.....	All hydraulic with infinite speed forward & reverse action.
Mixer .....	Full sweep mixer with 2 blades
Axle (2).....	5,000 lbs.capacity each
Tires (4).....	H78-15 (2,300 lbs. capacity each) I
Dry Weight.....	Approximately 5,400 lbs.
Diesel Tank.....	30 Gallons

# OPERATING INSTRUCTIONS

## INTRODUCTION

The CRAFCO E-Z Pour 400 Diesel Melter with Pump/Applicator 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 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's 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.

## 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 Trouble Shooting Guide)

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 (Page , item E), open recirculation valve (Page 9, item B) and close applicator valve (Page 9, item C). Put sealant pump in reverse (Suction) mode. When pump turns freely, reverse sealant pump flow (Discharge) (Page 9, item D). This circulates sealant back into tank.
7. Check the sealant temperature at material pump. 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 opening, with the hand wand valve in the ON position.
9. Open applicator valve (Page 9, item C).
10. Close the recirculation valve (Page 9, item F). 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 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.
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 (Page 10, item A) registers the actual temperature of the heat transfer oil and it should coincide with the temperature control hand knob setting (Page 10, item B).

To check the calibration, first the machine must be level and the following procedure must be followed - check heat transfer oil level, using dipstick. Start up the burner. Set temperature control hand knob at about 250° F. Leave burners 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 to increase temperature or clockwise to decrease temperature (1/8 turn will change the temperature 15° F. to 20° F.), Carefully replace hand knob. Both the hand knob and the temperature gauge should now read approximately 200° F.



### 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 400D with Pump/Applicator should be stored in an area to prevent moisture from entering machine. Extended down time can cause moisture build up in heating oil tank.



### CAUTION:

If there is any suspicion that moisture is still present after draining, warm heat transfer oil to 300° F for 2 or 3 hours to evaporate any moisture.

## INSTRUCTION FOR ORDERING PARTS

Parts may be ordered from your local CRAFTCO distributor or directly from CRAFTCO, 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, telephone, or fax:

CRAFTCO, INC.  
235 SOUTH HIBBERT  
MESA, AZ 85210  
480-655-8333  
480-655-1712  
Toll Free: 1-800-528-8242

# MAINTENANCE INSTRUCTIONS

## ENGINE:

- Check engine oil daily. Change after the first 50 hours of operation and change every 100 hours thereafter.
- Change oil filter initially at 50 hours, every 150 hours thereafter.
- See engine owners manual for additional operating and maintenance instructions.



## HYDRAULIC SYSTEM:

Check hydraulic fluid daily. Change hydraulic filter after first 10 hours of operating and every 250 hours thereafter. Change hydraulic fluid every 500 hours of operation.

## 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.



# MAINTENANCE CHART

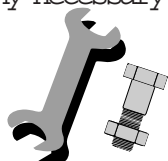
LOCATION	PROCEDURE	HOURS			
		8	50	100	500
Engine check oil level	See Engine Instruction Manual.	*			
Other Engine Maintenance	See Suzuki Operating and Maintenance Instructions.				
Battery	Check water level weekly.				
Pump Packing	Tighten as required. Drip should be several drops per minute.		*		
Pump Outboard Bearing	Lubricate using a good grade of bearing grease.		*		
Heat Transfer Oil	Check (every 8 hours)		*		
	Change	After 500 hours or 1 year.			
Hydraulic Oil Return Line Filter	First change (10 hours)	*			
	Subsequent changes (250 hours)			*	
Hydraulic Oil	Check oil (every 8 hours).	*			
	Change oil (every 500 hours).				*
	For proper oil, see recommended fluids & lubricants.				
Bumer	Check bumer box insulation.				*
	Clean cad cell.				*
	Check electrodes.				*
	Check bumer brushes.				*
	Check nozzle pressure.				*
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.			

## GENERAL MAINTENANCE ITEMS

RECOMMENDED QUANTITY	DESCRIPTION	PART NO .
1 Set	Packing, Sealant Pump	29990
1	Sealant Hose Assembly	27009
1	Engine Oil Filter	42327
1	Engine Fuel Filter	41867
1	Hydraulic Filter	22071
1	Air Filter	41868

## 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.
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	RECOMMENDED	FULL POINT
Engine Oil	Refer to Suzuki Engine Operating Manual	
Diesel	#1 Cold Climate #2 Warm Climate	30 Gal
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.

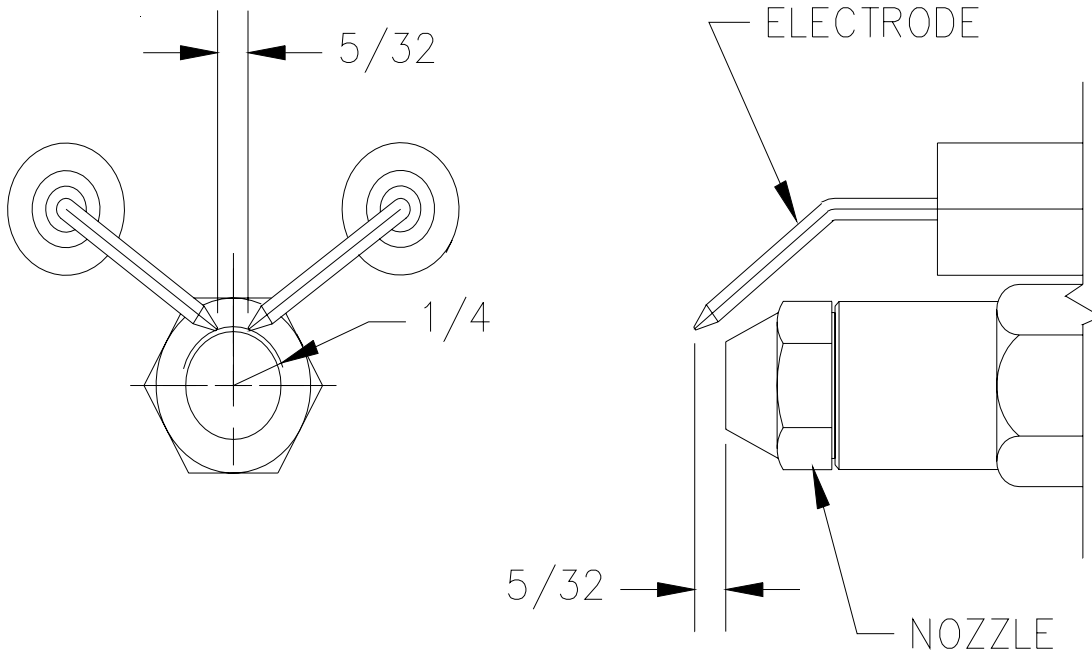
PRODUCER	PRODUCT NAME	PRODUCT NO .
Texaco	Regal	R&O 68
Gulf	Harmony	68
Shell	Them ia	"C "
Exxon	Teresstic	68
Phillips	Magnus	68
Chevron USA	Heat Transfer Oil #1	
Conoco	Dectol R&O	68
Union Oil	Turbine Oil	68



### WARNING:

The Heat Transfer Oil in this machine is a grade that has been tested and recommended by CRAFTCO, Inc. The addition of any grade of oil not specifically recommended by CRAFTCO, 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 CRAFTCO, 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

P R O B L E M	C A U S E	R E M E D Y
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.
	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 will not recirculate back into tank through recirculation valve.	Material in tank not to correct temperature.	Continue heating material.
	Drain valve closed.	Open 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 recirculation valve but will not flow through application hand wand.	Application 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.
	Block of sealant over drain.	Dislodge by reversing mixer and pump.
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.
	Bumer not operating.	See Bumer Trouble Shooting Guide.
	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
Blower motor will not turn at correct speed or burner will not ignite.	1. High limit switch.	1. Check or replace.
	2. Wires at temperature control box loose or broken.	2. Check connections or tighten, replace if necessary.
	3. Battery low, alternator belt loose, alternator failure.	3. Recharge battery, tighten belt, check/replace alternator if necessary.
	4. Loose/broken battery cable.	4. Tighten/replace.
	5. Engine not running.	5. Charge battery by starting engine.
	6. Thermostatic control faulty.	6. Replace.
Burner will not shut down at set temperature.	Thermostatic control faulty or needs recalibration.	Recalibrate or replace if necessary.
Make sure engine is running so battery is fully charged.		
Burner blower runs but burner will not light.	1. Clogged fuel nozzle.	1. Check or replace.
	2. No fuel in tank, valve at tank shutoff, clogged filter or gelled fuel.	2. Add fuel if necessary open valve, use fuel for anticipated weather.
	3. Ignitor wires loose, dirty ignitors, faulty transformer.	3. Check for loose wiring, clean and adjust ignitors, replace transformer if faulty.
	4. Faulty fuel solenoid, loose wire.	4. Replace solenoid if necessary tighten all connections.
	5. Fuel pump at burner needs bleeding.	5. Open bleeder until fuel runs clear, tighten.
Excess smoke in heat compartment.	1. Air vent incorrectly set.	1. Set at 5.
	2. Blower motor not running at correct speed.	2. Charge battery by starting engine.

## 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.



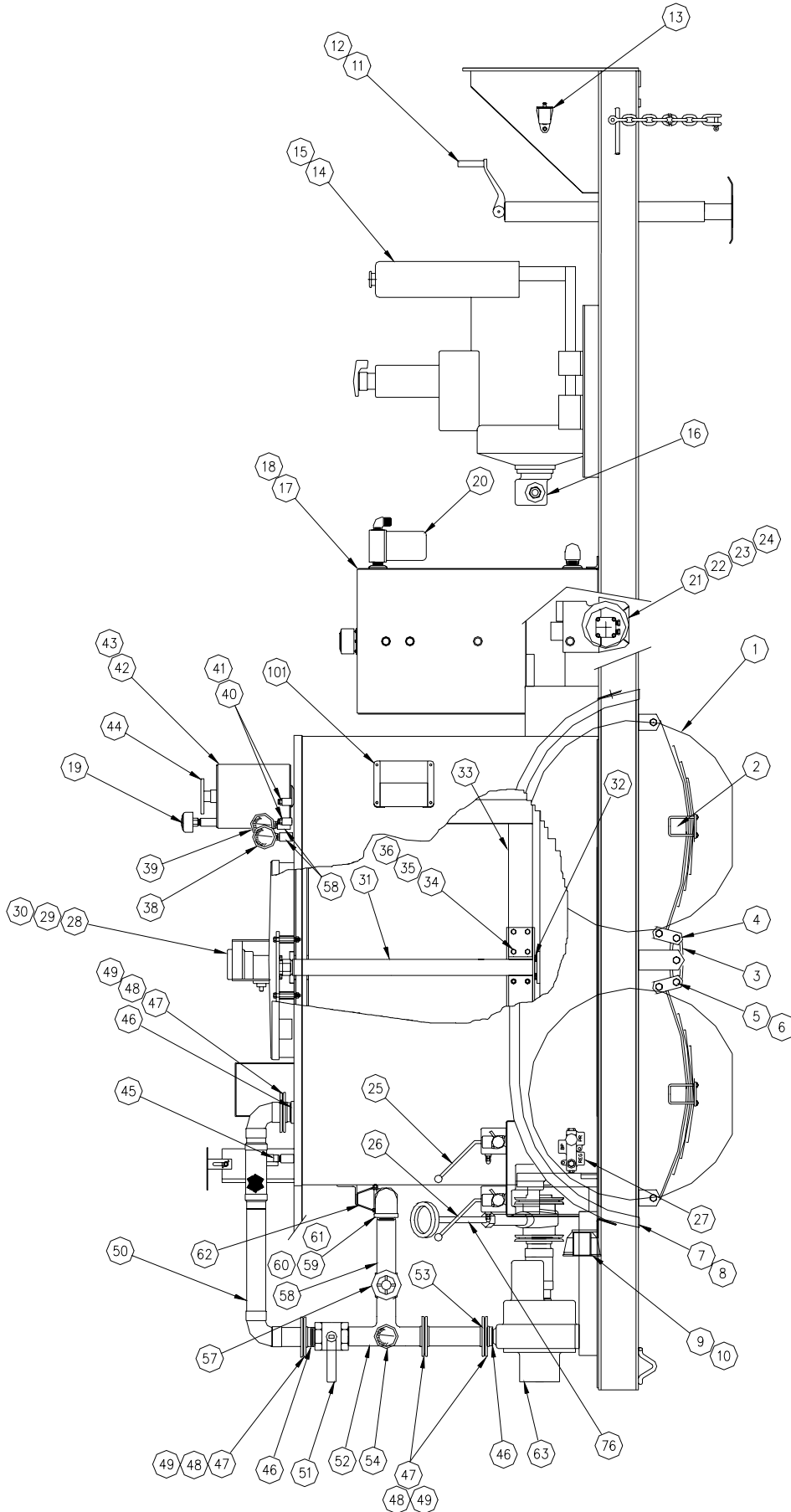
NOTE:

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.

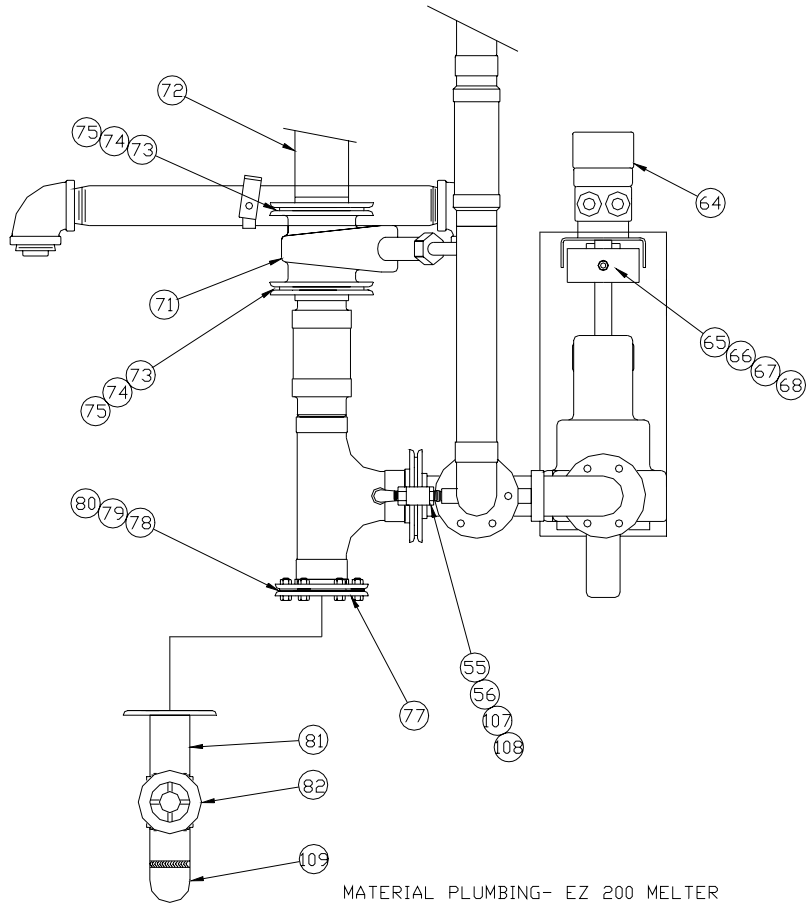
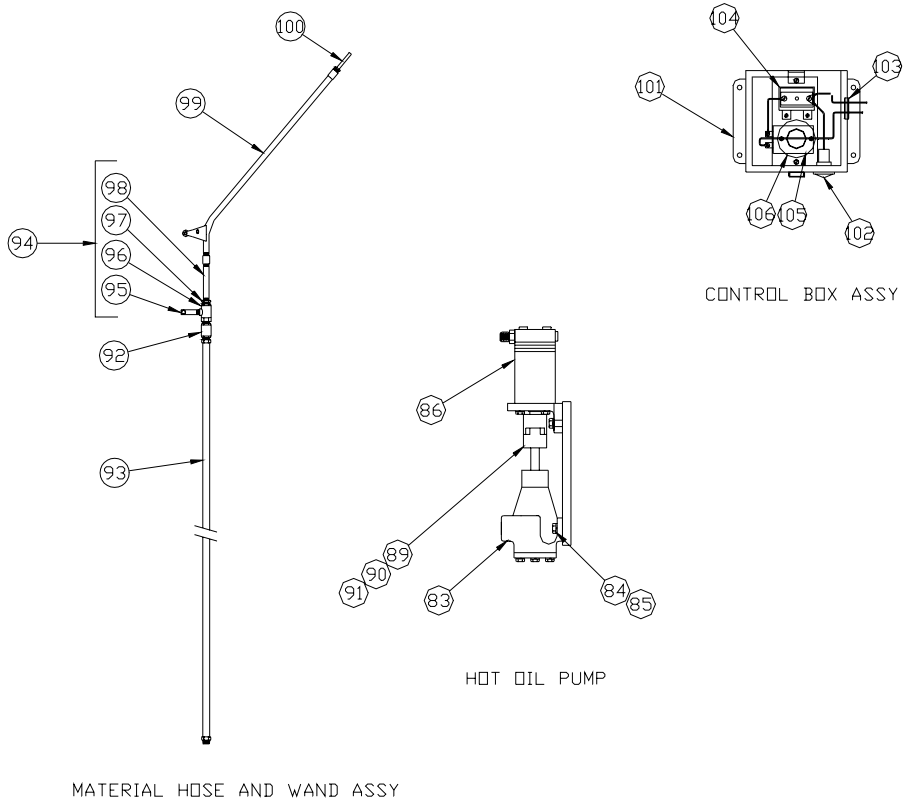
Insert packing rings, making sure the joints are staggered 180 degrees. Use split ring bushings to seat each ring before adding the next ring. The rings must not be taped or seated in place too tightly. When the packing box is sufficiently full to allow entry of the packing gland (about 1/4") reassemble 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).

E-Z 400 DIESEL MELTER W/PUMP APPLICATOR -





E-Z 400 DIESEL MELTER W/PUMP APPLICATOR -



MATERIAL PLUMBING- EZ 200 MELTER

## PARTS LIST FOR E-Z 400 DIESEL MELTER W/PUMP APPLICATOR-

NUMBER	PART NUMBER	QTY	DESCRIPTION
1	42515	4	TRE AND WHEEL ASSEMBLY
2	42516	2	AXLE ASSEMBLY WITH SPRINGS
3	23088	2	ROCKER ARM
4	23075	8	SHACKLE TIE PLATE
5	23100	14	SHACKLE BOLT
6	23105	14	SHACKLE NUT
7	42563	2	FENDER
8	28716	8	5/16 -18 X 1" BOLT
9	28681	8	FENDER WASHER
10	28525	8	5/16 -18 LOCKNUT
11	24022	1	TAIL LIGHT - R H.
12	24023	1	TAIL LIGHT - L H.
13	28670	4	1/4 FLAT WASHER
14	28645	4	1/4 LOCKWASHER
15	28500	4	1/4 -20 HEX NUT
16	23097	1	TONGUE JACK - SIDE MOUNT
17	23096	1	JACK SWIVEL BUSHING
18	23117	1	BREAKAWAY SWITCH UNIT
19	41860	1	23 H P. DIESEL ENGINE
20	41872	4	BOMOUNT
21	39602	1	SOLENOID
22	41193	1	HYDRAULIC PUMP
23	28761	2	1/2 -13 X 1-1/4 BOLT
24	28649	2	1/2 LOCKWASHER
25	41835	1	DIESEL STORAGE TANK

## PARTS LIST FOR E-Z 400 DIESEL MELTER W/PUMP APPLICATOR-

NUMBER	PART NUMBER	QTY	DESCRIPTION
26	41833	1	HYDRAULIC RESERVOIR
27	26025	3	AIR BREATHER
28	26035	1	FILLER CAP
29	41162	1	DISPENSER ASSEMBLY
30	22070	1	HYDRAULIC FILTER
31	28210	1	1 X 90° PPE ELBOW
32	28005	1	1" CLOSE NIPPLE
33	28240	1	1 X 90° STREET ELBOW
34	41891	1	14 VOLT BURNER
35	42559	1	BURNER NOZZLE
36	41890	1	BLOWER MOTOR
37	41888	1	FUEL SOLENOID
38	41093	1	AGITATOR CONTROL VALVE
39	41092	1	MATERIAL PUMP CONT. VALVE
40	28704	6	1/4 -20 X 1-1/2 BOLT
41	28645	6	1/4 LOCKWASHER
42	28500	6	1/4 -20 HEX NUT
43	41573	1	FLOW DIVIDER
44	42573	1	MOUNTING PLATE
45	40030	4	PPE SPACER
46	28736	4	3/8 -16 .2-1/2 BOLT
47	28647	4	3/8 LOCKWASHER
48	42574	1	AGITATOR MOTOR
49	28763	4	1/2 -13 X 1-3/4 BOLT
50	28649	4	1/2 LOCKWASHER

PARTS LIST FOR E-Z 400 DIESEL MELTER W/PUMP APPLICATOR-

NUMBER	PART NUMBER	QTY	DESCRIPTION
51	28504	4	1/2 -13 HEX NUT
52	42780	1	AGITATOR SHAFT ASSEMBLY
53	28682	2	1-5/8 FLAT WASHER
54	42545	2	PADDLE ASSEMBLY
55	28731	8	3/8 -16 X 1 BOLT
56	28647	8	3/8 LOCKWASHER
57	28526	8	3/8 -16 LOCK NUT
58	42570	2	SAFETY TREAD FENDER
59	28178	2	1/2 PPE COUPLNG
60	41243	1	24" TEMPERATURE GAGE
61	40078	1	12" TEMPERATURE GAGE
62	28177	2	3/8 PPE COUPLNG
63	25203	2	STUFFNG BOX
64	41153	2	FLANGE ASSEMBLY
65	41002	1	OVERFLOW TANK
66	29051	2	4 HOLE FLANGE GASKET
67	28731	8	3/8 -16 X 1 BOLT
68	28538	8	3/8 -16 LOCKNUT
69	41199	1	DPSTCK ASSEMBLY
70	25057	1	9" TEMPERATURE GAGE
71	22030	3	FLANGED NPPL ASSEMBLY
72	29050	4	FLANGE GASKET -6 HOLE
73	28731	24	3/8 -16 X 1 BOLT
74	28538	24	3/8 -16 LOCKNUT
75	41678	1	PPE ASSEMBLY -UPPER

## PARTS LIST FOR E-Z 400 DIESEL MELTER W/PUMP APPLICATOR-

NUMBER	PART NUMBER	QTY	DESCRIPTION
76	41246	1	RECIRCULATION VALVE
77	42785	1	FLANGE TEE
78	42555	1	DOUBLE ELBOW ASSEMBLY
79	25050	1	2-1/2" TEMPERATURE GAGE
80	28002	1	3/8 CLOSE NIPPLE
81	29202	1	3/8 BALL VALVE
82	28237	1	3/8 X 90° STREET ELBOW
83	28282	1	3/8 PPE PLUG
84	29270	1	2" GATE VALVE
85			
86	28213	1	2" X 90° PPE ELBOW
87			
88	28358	1	2 X 1 REDUCING BUSHING
89	41623	1	U BOLT PPE HANGER
90	41101	1	ROPER MATERIAL PUMP
91	28763	4	1/2 -13 X 1-3/4 BOLT
92	28649	4	1/2 LOCK WASHER
93	28674	4	1/2 FLAT WASHER
94	28504	4	1/2 -13 HEX NUT
95	22027	1	HYDRAULIC MOTOR
96	28730	4	3/8 -16 X 3/4 BOLT
97	28647	4	3/8 LOCK WASHER
98	26002	2	CHAIN SPROCKET
99	26016	1	DUAL SPROCKET CHAIN
100	26030	1	CONNECTING LINK

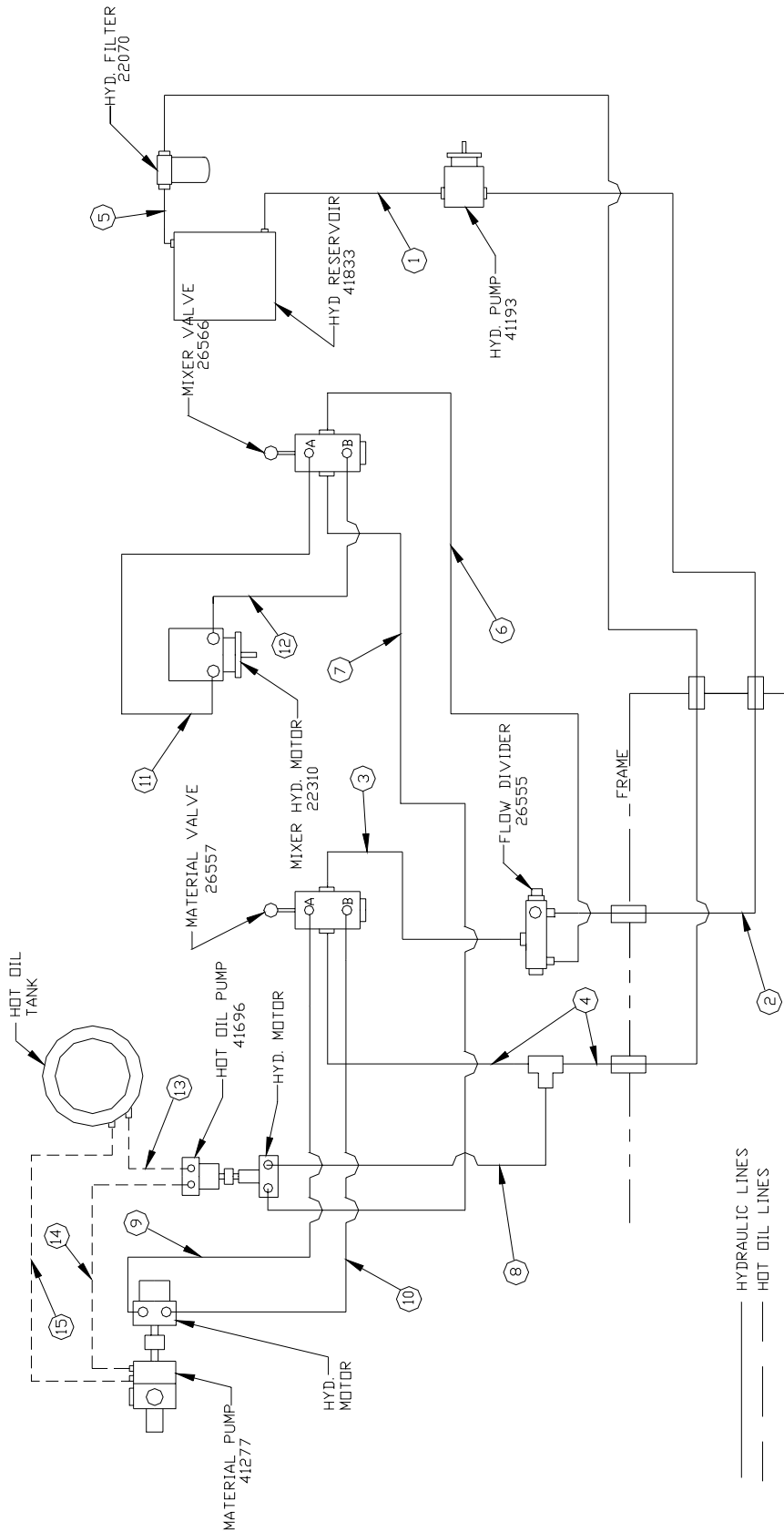
PARTS LIST FOR E-Z 400 DIESEL MELTER W/PUMP APPLICATOR-

NUMBER	PART NUMBER	QTY	DESCRIPTION
101	41140	1	CHAN GUARD
102	28646	1	5/16 LOCK WASHER
103	28501	1	5/16 -18 HEX NUT
104	42529	1	MATERIAL PUMP SUCTION
105	41131	1	PPE ASSEMBLY MATERIAL SUCTION
106	29292	1	3" FLANGED GATE VALVE
107	41039	1	DRAN PPE EXT.
108	29060	2	GASKET -8 HOLE
109	28731	16	3/8 -16 X 1 BOLT
110	28538	16	3/8 -16 LOCK NUT
111	41268	1	VALVE HANDLE EXTENSION
112	29161	1	BLND FLANGE
113	41043	2	2-1/2 FLANGE GASKET
114	28731	12	3/8 -16 X 1 BOLT
115	28538	12	3/8 -16 LOCK NUT
116	41279	1	FLANGE ASSEMBLY -POUR SPOUT
117	29280	1	2" O L GATE VALVE
118	41280	1	HOT O L CIRCULATING PUMP
119	28715	2	5/16 -18 X 3/4 BOLT
120	28646	2	5/16 -LOCK WASHER
121	22302	1	HYDRAULIC MOTOR
122	28850	3	1/4 -28 X 5/8 BOLT
123	28645	3	1/4 LOCK WASHER
124	41180	1	1/2" BORE COUPLING HALF
125	41695	1	5/8 BORE COUPLING HALF

PARTS LIST FOR E-Z 400 DIESEL MELTER W/PUMP APPLICATOR-

NUMBER	PART NUMBER	QTY	DESCRIPTION
126	41182	1	SPIDER FOR COUPLNG
127	27048	2	MALE FEMALE SW VEL
128	27009	1	SEALANT HOSE ASSEMBLY
129	41208	1	HANDLE ASSEMBLY W ITH VALVE
130	27080	1	HANDLE ASSEMBLY
131	29240	1	1" BALL VALVE
132	28351	1	1 X 3/4 REDUCNG BUSHNG
133	28100	1	3/4 X 8 PPE NPPLE
134	41629	1	HAND WAND ASSEMBLY
135	27171	1	SEALNG TP ASSEMBLY
136	25286	1	CONTROL BOX ASSEMBLY
137	24140	1	INDCATOR LGHT
138	26075	1	RUBBER GROMMET
139	25240	1	MANUAL RESET TEMPERATURE PROBE
140	28838	2	#6 -32 X 1/2 SCREW
141	28839	2	#6 -32 NUT
142	25276	1	ELECTRC THERMOSTAT 550°
143	28832	2	#6 X 3/8 LONG STL. THREAD FORMNG SCREW
144	25220	1	TEMPERATURE DIAL
<u>PARTS NOT ILLUSTRATED</u>			
	24002	1	BATTERY BOX COVER
	24054	1	BATTERY CABLE 20"
	31512	1	CRCUIT BREAKER
	32602	1	20" CRESCENT BATTERY CABLE
	24076	1	HOUR METER

HYDRAULIC PIPING DIAGRAM  
E-Z 400 DIESEL MELTER WITH PUMP/APPLICATOR





HYDRAULIC PIPING - E-Z POUR 400 GAL. DIESEL MELTER W/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	29824	90° ELBOW ADAPTOR - "O" RING
2. HYDRAULIC PUMP PRESSURE TO FLOW DIVIDER VALVE "N" PORT		
1	29821	STRAIGHT ADAPTOR - "O" RING
1	29594	HYDRAULIC HOSE ASSEMBLY 1/2 X 48" LONG
1	29805	BULKHEAD CONNECTOR
1	29807	BULKHEAD LOCKNUT
1	42519	TUBE ASSEMBLY
1	29805	BULKHEAD CONNECTOR
1	29807	BULKHEAD LOCKNUT
1	29815	TUBE TO PPE SWIVEL CONNECTOR
1	28348	REDUCING BUSHING 3/4 X 1/2
3. FLOW DIVIDER VALVE ("PB" PORT) TO MATERIAL VALVE ("N" PORT)		
1	28348	REDUCING BUSHING 3/4 X 1/2
1	29876	ELBOW 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
4. MATERIAL VALVE ("OUT" PORT) TO HYDRAULIC FILTER ("N" PORT) RETURN		
1	29813	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	42519	TUBE ASSEMBLY
1	29805	BULKHEAD CONNECTOR
1	29807	BULKHEAD LOCKNUT
1	29564	HYDRAULIC HOSE ASSEMBLY 1/2" X 57" LONG
1	40314	STRAIGHT ADAPTOR
1	28351	1 X 3/4 REDUCING BUSHING
1	28240	1 X 90° STREET ELBOW
5. HYDRAULIC FILTER ("OUT" PORT) TO HYDRAULIC RESERVOIR		
1	28240	1 X 90° STREET ELBOW
1	28005	1" CLOSE NIPPLE
1	28210	1 X 90° PPE ELBOW

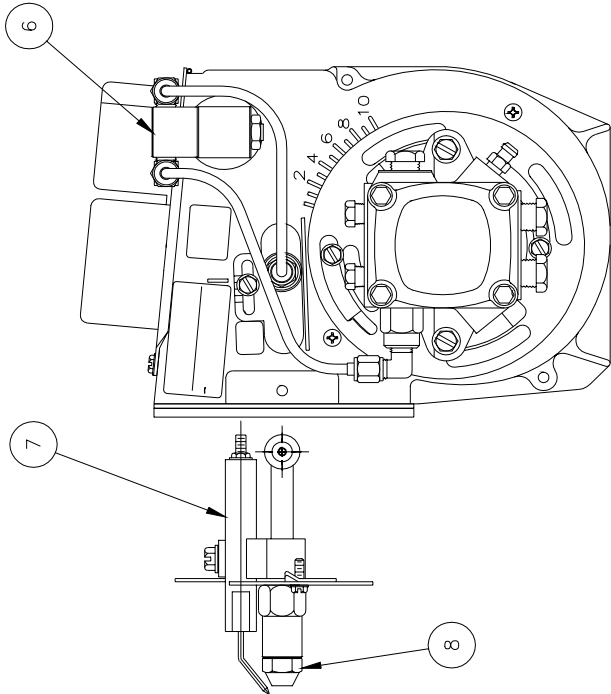
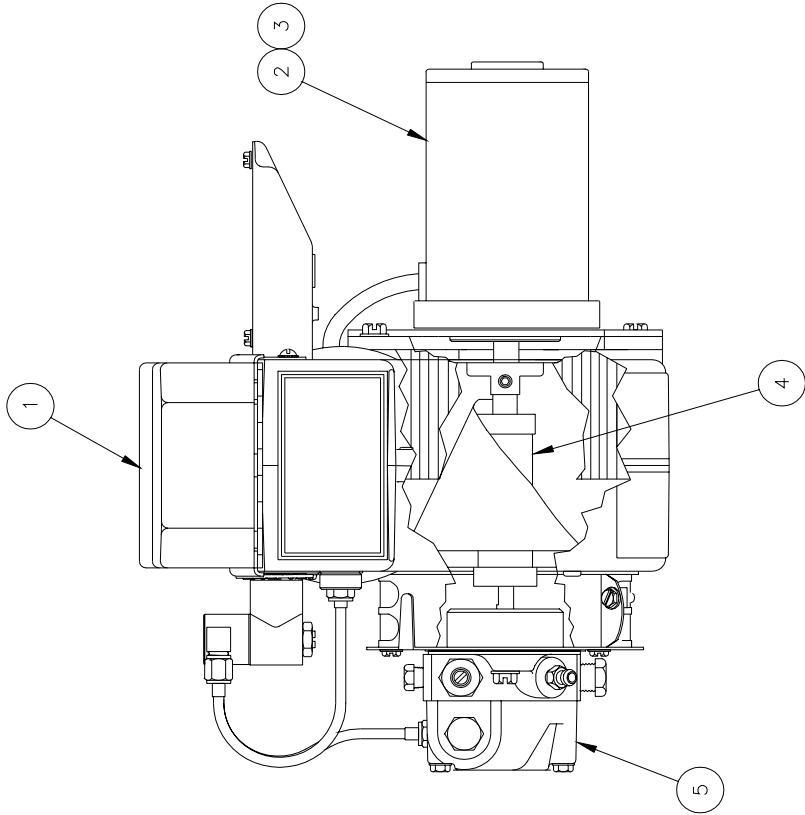
HYDRAULIC PIPING - E-Z POUR 400 GAL. DIESEL MELTER W/PUMP APPLICATOR

6. FLOW DIVIDER VALVE ("REG" PORT) TO MIXER VALVE ("IN" PORT)		
1	28347	REDUCING BUSHING 3/4 X 3/8
1	29872	90° ELBOW ADAPTOR
1	40187	HYDRAULIC HOSE ASSEMBLY 3/8 X 18" LONG
1	29872	90° ELBOW ADAPTOR
1	28347	REDUCING BUSHING 3/4 X 3/8
7. MIXER VALVE ("OUT" PORT) TO HYDRAULIC MOTOR FOR HOT OIL PUMP (REAR PORT)		
1	28347	REDUCING BUSHING 3/4 X 3/8
1	29872	90° ELBOW ADAPTOR
1	40187	HYDRAULIC HOSE ASSEMBLY 3/8 X 18" LONG
1	40311	STRAIGHT ADAPTOR "O" RING
8. HYDRAULIC MOTOR FOR HOT OIL PUMP (FRONT PORT) TO TEE IN LINE 4.		
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
9. MATERIAL VALVE ("INBOARD" PORT) TO HYDRAULIC MOTOR FOR MATERIAL PUMP ("INBOARD PORT")		
1	29841	STRAIGHT ADAPTOR
1	40012	HYDRAULIC HOSE ASSEMBLY 3/8 X 24" LONG
1	22029	STRAIGHT ADAPTOR - "O" RING
10. MATERIAL VALVE ("OUTBOARD" PORT) TO HYDRAULIC MOTOR FOR MATERIAL PUMP ("OUTBOARD" PORT)		
1	29841	STRAIGHT ADAPTOR
1	40012	HYDRAULIC HOSE ASSEMBLY 3/8 X 24" LONG
1	22029	STRAIGHT ADAPTOR - "O" RING
11. MIXER VALVE ("INBOARD" PORT) TO HYDRAULIC MOTOR FOR MIXER (L.H. PORT)		
1	29841	STRAIGHT ADAPTOR
1	40012	HYDRAULIC HOSE ASSEMBLY 3/8 X 24" LONG
1	29808	TUBE UNION
1	42550	TUBE ASSEMBLY
1	22029	STRAIGHT ADAPTOR - "O" RING
12. MIXER VALVE ("OUTBOARD" PORT) TO HYDRAULIC MOTOR FOR MIXER (R.H. PORT)		
1	29841	STRAIGHT ADAPTOR
1	40012	HYDRAULIC HOSE ASSEMBLY 3/8 X 24" LONG
1	29808	TUBE UNION
1	42551	TUBE ASSEMBLY
1	22029	STRAIGHT ADAPTOR - "O" RING

HYDRAULIC PIPING - E-Z POUR 400 GAL. DIESEL MELTER W/PUMP APPLICATOR  
HOT OIL PIPING

13. HOT OIL TANK (R H .PORT) TO HOT OIL PUMP (FRONT PORT) SUCTION		
1	41271	H O .SHUT OFF VALVE
1	29845	90° ELBOW ADAPTOR
1	41404	HOSE ASSEMBLY S S .COVER (1/2 X 22-1/2 LONG )
1	29844	STRAIGHT ADAPTOR
14. HOT OIL PUMP (REAR PORT) TO MATERIAL PUMP (TOP PORT)		
1	29844	STRAIGHT ADAPTOR
1	41404	HOSE ASSEMBLY S S .COVER (1/2 X 22-1/2 LONG )
1	40316	STRAIGHT ADAPTOR
15. MATERIAL PUMP (BOTTOM PORT) TO HOT OIL TANK (L H .PORT)		
1	40316	STRAIGHT ADAPTOR
1	41404	HOSE ASSEMBLY S S .COVER (1/2 X 22-1/2 LONG )
1	29844	STRAIGHT ADAPTOR
1	41271	H O .SHUT OFF VALVE

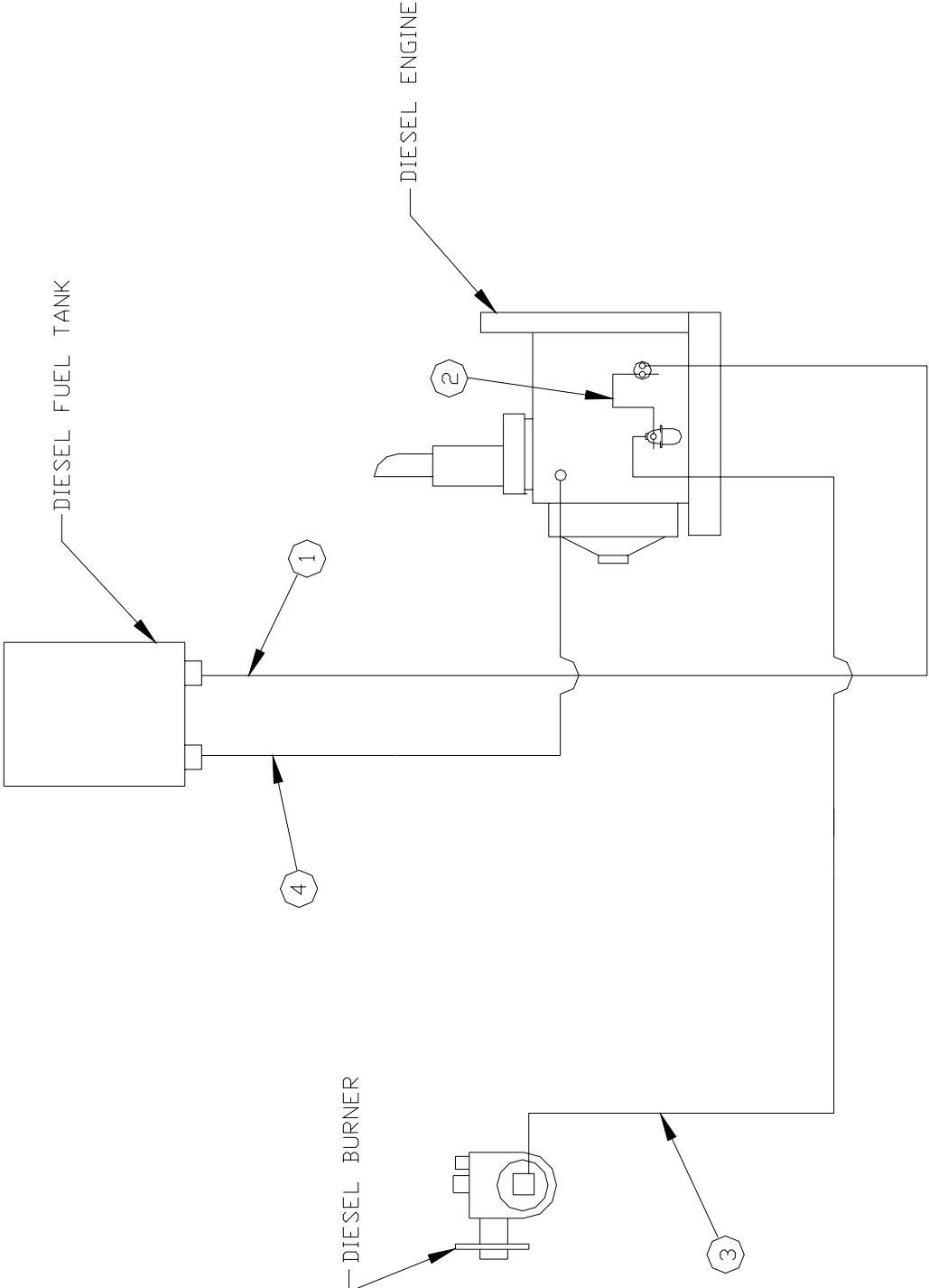
# DIESEL BURNER



DIESEL BURNER

ITEM	PART NUMBER	QTY	DESCRIPTION
1	41949	-	IGNITION TRANSFORMER
2	41890	-	BLOWER MOTOR
3	41934	-	BRUSH KIT -MOTOR
4	41970	-	COUPLNG -FUEL PUMP
5	41979	-	PUMP -FUEL
6	41888	-	SOLENOID -FUEL
7	41993	-	ELECTRODE
8	41881	-	NOZZLE
9	41870	-	CAD EYE
10	42335	-	DC CONTROLLER

DIESEL PIPING DIAGRAM  
E-Z 400 DIESEL MELTER WITH PUMP/APPLICATOR

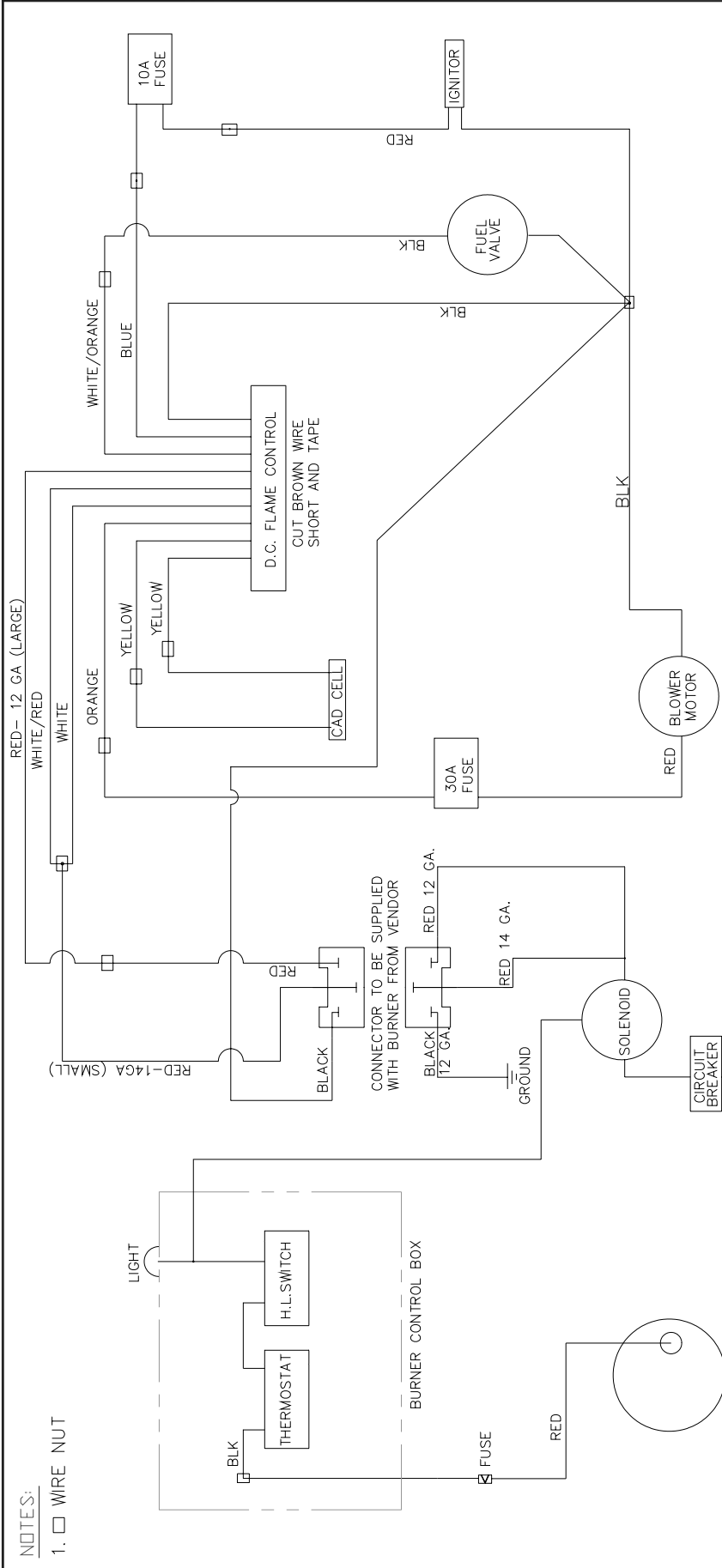


DIESEL PIPING - E-Z POUR 400 GAL. DIESEL MELTER WITH PUMP APPLICATOR

1. DIESEL FUEL TANK TO DIESEL FUEL PUMP		
1	28340	REDUC NG BUSHNG 1/4 X 1/8
1	32118	FUEL VALVE WITH SCREEN
1	29590	FUEL HOSE 1/4 X 80" LONG
2	26080	GEAR CLAMP
2. DIESEL FUEL PUMP TO FUEL FILTER		
1	29591	FUEL HOSE 1/4 X 65" LONG
2	26080	GEAR CLAMP
1	29831	TUBE ADAPTOR
1	29870	90° ELBOW ADAPTOR
3. FUEL FILTER TO DIESEL BURNER		
1	29591	FUEL HOSE 1/4 X 65" LONG
2	26080	GEAR CLAMP
1	29831	TUBE ADAPTOR
1	29870	90° ELBOW ADAPTOR
4. DIESEL ENGINE TO TANK (RETURN)		
1	29592	FUEL HOSE 3/16 X 80" LONG
2	26080	GEAR CLAMP
1	26790	1/8" STRAIGHT NV. FLARE PUSH-ON
1	29870	90° ELBOW ADAPTOR

NOTES:

- 1. □ WIRE NUT



ITEM	PART NO.	QTY.	DESCRIPTION
<b>CRAFCO INC.</b> AN ERBORN COMPANY			
TITLE: BURNER SCHEMATIC W/ FLAME SHUTDOWN			
SIZE: DWG NO. 41935M			REV. 0
MATERIAL: B			SCALE: 1/1
STOCK #			JOB NOT SCALE DRAWING
W.T.			SHEET 1 OF 1

SIGNATURES	DATES
ES	3/15/97

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TOLERANCES: (UNLESS OTHERWISE SPECIFIED)  
 .XX ± .03  
 .XXX ± .015  
 .X ± .06  
 ANGLES ± 1/2°



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