

**BAX 250** 

PART MANUAL - 26376 Rev. "A"

### BAX 250 PART NUMBER 55200



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#### **BAX 250**

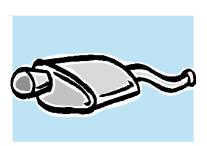
This manual is furnished with each new **CRAFCO BAX 250**. This manual will help your machine operators learn to run the applicator properly and understand its mechanical functions for trouble-free operation.

Your **CRAFCO BAX 250** is designed to give excellent service and save maintenance expense. However, as with all specially engineered equipment, you can get best results at minimum costs if:

- 1. You operate your machine as instructed in this manual.
- 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, hard soled shoes and heat resistant 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.
- Avoid bodily contact with hot sealant material, 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 melter and engine prior to refilling LPG 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.
- Follow operating instructions for starting and shut-down of burner. Instructions are mounted on control box.
- Calibrate temperature control prior to initial operation and each 50 hours of operation.

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

- •Precaution is the best insurance against accidents.
- The BAX 250 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.

#### 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, applicator valves, and electrical components for a period of (1) one year from date of delivery. Crafco, Inc., shall not be liable for parts that have been damaged by accident, alteration, abuse, improper lubrication/maintenance, normal wear, or other cause beyond our control.

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

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

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



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

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

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

### **SPECIFICATIONS**

Vat Capacity	250 Lbs.
Melt Capacity	150 Lbs./Hr.
Tank Construction	Direct Fired
Maximum Heat Input	75,000 Btu/Hr
Burner and Temperature Control	Automatic - Fail Safe
Generac Generator	Generac Air-cooled vehicle generator-power system. 4500 watts of power, 37.5 AC amperes, 60 hertz
Mixer	Full Sweep, Electronically Controlled
Dry Weight	1,000 lbs.
Propane Bottle (qty. 1)	30 lbs. bottle

#### **BAX 250 MELTER**

#### INTRODUCTION

The **CRAFCO BAX 250** machine was developed to melt CRAFCO Brand Sealant. However, it will work equally well with all road asphalt and federal specification crack or joint sealant.

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

- 1. Fill propane tank.
- 2. Check Generac Power System crankcase oil level (refer to <u>Generac Operator's Manual</u>).
- 3. Check fluid levels on the air compressor (refer to air compressor manual).
- 3. All toggle switches should be turned "**OFF**" and both temperature control dials at minimum settings.
- 5. Remember that safe operation of this equipment is the operator's responsibility.



#### **CAUTION:**

Extreme care must be used when operating this equipment. Safety is the result of being careful and paying attention to details. Certain exposed parts of this machine, when operating reach 500° F.; the sealant as high as 400° F. Always wear protective clothing, hard soled 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

#### STARTING THE GENERAC POWER SYSTEM, AND AIR COM-PRESSOR

- 1. Turn propane bottle on by rotating valve fully counter clockwise.
- 2. Pull air safety valve ring to release any air in the compressed air system. This vents the system to atmosphere and makes the motor turn over freely.
- 3. Turn off electrical loads. (ref. main line circuit breaker). Electric load circuits will be turned ON after the generator has started, stabilized and warmed up.
- 4. Press the Fuel Primer switch and hold it for about 30 seconds to prime fuel system. (However, if the engine is warm, skip step no. 4.)
- 5. Hold the engine Start/Stop Switch and START to crank engine. Release the switch when the engine starts. (NOTE: Holding the switch for longer than 15 seconds can damage the starter motor).
- 6. Let the engine run at no-load for a few minutes to stabilize and warm up.
- 7. Turn ON electrical loads, using whatever means provided.
- 8. Prior to initially starting the compressor make sure the crackcase is filled to the designated level (within the notched area on the dipstick) do not use a detergent oil.
- 9. The compressor should be started and stopped with the on/off switch only.
- 10. To increase pressure setting out of storage tank, simply lift up on outside of regulator (yellow adjusting knob) and turn clockwise until desired working pressure is reached. Push outside of knob back down to lock adjustment in place.

# STOPPING THE GENERAC POWER SYSTEM, AND AIR COMPRESSOR

- 1. Turn OFF electrical loads, using whatever means provided.
- 2. Let unit run a few minutes to stabilize temperature.
- 3. Hold the Start/Stop switch in its Stop position until engine comes to a complete stop.
- 4. The compressor should be stopped with the on/off switch only.

#### LIGHTING THE MELTER

Be sure system is supplied with 110 volts AC. Adjust temperature control knob to the desired temperature. (Note! The temperature setting must be above the ambient and the material temperature for burner to ignite.) If system has been previously lighted and has gone into "lockout", turn switch to the "OFF" position and wait 30 seconds before attempting to re-light. This allows any residual gas to exit the combustion chamber.

Open valve on the propane supply tank and turn ignition switch to the "ON" position. The "lockout" and burner "ON" lamp will light, then the system will try for ignition. System should ignite immediately. When system lights, the red "burner on" lamp will light. This light will be lit only when there is a flame present in the combustion chamber.

If system does not ignite, the "lockout" lamp will come on. This indicates that the system has "locked out". If system "locks out", turn the switch to the "OFF" position to reset ignition module and repeat steps 1 and 2. If system still does not ignite, consult manual for trouble-shooting.

When system is ignited, the temperature control will automatically cycle on and off at the desired set temperature. The "burner on" lamp will cycle on and off with the burner.

If the flame is extinguished for any reason, the system will automatically try and re-light one time and then will go into a "lock out" condition. If this happens, the red warning lamp will come on. Follow steps 1 and 2 to re-light system.

#### ADDING MATERIAL TO THE MELTER

HOT MELT MATERIALS CAN CAUSE SEVERE BURNS. PROTECTIVE CLOTHING SHOULD BE WORN AT ALL TIMES WHEN FILLING OR OPERATING THIS EQUIPMENT. READ ENTIRE MANUAL BEFORE OPERATING.

Material may be added to the melter when hot or cold. The agitator should be turned "OFF" when adding material to tank.

Use marker adhesive boxed in the appropriate size for the BAX 250.

Turn off agitator, lift lid of melter and slowly add material to the desired level. **DO NOT OVERFILL. DO NOT FILL MORE THAN 6 INCHES FROM THE TOP EDGE.** Important!! Care should be taken to avoid getting foreign particles such as road gravel, dirt and debris in the material. Debris of this nature can clog or damage the output line and pumping system.

Materials should be added a small amount at a time when in operation rather than in large quantities. This will prevent the material temperature from dropping excessively. Adding material on a continuous basis in small quantities is recommended.

#### ADJUSTING THE AGITATOR SPEED

The agitator is powered by gear reduced electric motor which can be run continuously to prevent settling of the filler in the material. The agitator speed can be varied by adjusting a speed control knob that is mounted in the control box. When the material is solid, more power is required to start the agitator turning. The proper start-up procedure follows.

When material temperature reaches approximately 300 degrees Fahrenheit, turn the agitator switch "ON" adjust flow control knob to a slow speed. If agitator does not start, then turn agitator switch "OFF" and allow material to melt longer.

As the material continues to melt, the agitator speed may be increased. When the material is ready to dispense, the agitator speed should be set at approximately 3/4 of the full speed during operation.

### **HEATED HOSE, WAND AND CONTROLLER**

The heated hose supplied with the machine is Teflon lined with a stainless steel overbraid. It has a heating element which runs down the hose to heat the material within the hose. The hose is insulated with ceramic fiberglass insulation and is covered with a durable rubber outer covering. The wand has an aluminum tube to protect both the wand and the operator. The pistol grip is equipped with a electric switch which when depressed sends a signal to the 3-way air valve to actuate the pump. At the end of the wand a high temperature elastomeric output valve is attached. The valve is pressure actuated and opens automatically when fluid pressure is applied.

**NOTE!!** The hose must be up to temperature before dispensing can take place.

#### IMPORTANT!!

Do not twist or kink hose.

Avoid sharp bends and continuous twisting.

Maintain minimum 10" bend radius.

Do not exceed 400 degrees!!

Do not move or bend hose when cold. Damage may result.

Proper start-up procedure follows.

- 1. Verify all control switches are in the "OFF" position and control knobs are at the lowest setting.
- 2. Check oil level in the generator engine. Add oil if necessary. Refer to the generator manual for information on appropriate grade of oil.
- 3. Start generator and compressor per "Starting the Generator, and Air compressor" on pg. 11.
- 4. Let engine run at no load for a few minutes to stabilize and warm up,
- 5. Turn burner toggle switch "ON". Set material temperature dial to manufacturers recomended temperature.



CAUTION: If burner does not ignite the first time, turn toggle switch "OFF". Turn toggle switch "ON". Burner should ignite. If burner still does not ignite, determine the cause of malfunction (See Trouble Shooting Guide pg. 24).

- 6. When material in the kettle reaches a liquid state, engage the agitator by turning the agitator toggle switch "ON". If the agitator does not move, allow material to heat longer. Jamming of the mixer can cause damage to the machine.
- 7. When material in the kettle reaches approximately 300 degrees, but no sooner than 30 minutes before dispensing, turn the Hose switch "ON". Set hose temperature dial to the desired setting (manufacturers recommended temperature). The hose will come up to temperature in approximately 35 minutes. A little experimentation will determine the optimum temperature. It is advisable to run the hose at the lowest temperature setting possible.
- 8. Turn compressor switch "ON" when machine is ready to dispense material.





NOTE: PROTECTIVE CLOTHING, GLOVES, HARD SOLED SHOES, AND FACE SHIELD OR SAFETY GLASSES SHOULD BE WORN WHEN OPERATING OR FILLING THIS EQUIPMENT. READ ENTIRE MANUAL BEFORE OPERATING.

Now you are ready to dispense material. Remove hose from the hose hanger, turning the wand while removing will prevent the wires from being wrapped around the hose and damaged. Place hose in boom, place wand tip under lid (<u>Do not place wand tip in the material</u>) this will warm any cold material in the tip valve.

Adjust the shot size by loosening T-Handle bolt at air cylinder and moving the switch assembly up to decrease the shot size or down to increase the shot size. The hose <u>MUST</u> <u>BE UP TO 350°MIN</u> (heated approximately 30 to 45 min.) before dispensing. Depress and hold trigger or switch, material will dispense up to a full shot (4 ounces), and return to the top of stroke. If trigger is still depressed another shot will be dispensed.



NEVER POINT THE WAND AT ANY PART OF THE BODY OR AT ANY OTHER PERSON. HOT MATERIALS CAN CAUSE SEVERE BURNS. WEAR PROTECTIVE EQUIPMENT WHEN FILLING OR OPERATING THE EQUIPMENT. READ MANUAL BEFORE OPERATING EQUIPMENT.









#### LOADING THE MACHINE

To load, turn agitator "OFF", lift the lid, place the material on the lid and close lid. Following this procedure will prevent the hot material from splashing and causing serious burns to personnel.

For best results keep the tank level at 1/2 to 3/4 full. 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

When shutting down the machine for the day, Crafco recommends leaving the BAX 250 about half full. This will give a fairly rapid heat up rate in the morning, but will allow enough material to start dispensing right away when the material becomes molten. Also it is advisable to allow the agitator to run after turning off the heater until the material starts to thicken to prevent the filler from settling to the bottom of the kettle. The shut down procedure is as follows:

- 1. Turn material switch to the "**OFF**" position.
- 2. Turn hose controller to the "**OFF**" position.
- 3. Store hose in the hose hanger and secure with the chain. Important!! Do not kink or twist hose as permanent damage will result.
- 4. Keep agitator running until material begins to thicken (about 30 minutes).
- 5. Turn compressor switch "OFF".
- 5. Depress start/stop switch in the stop position and hold until generator engine comes to a complete stop.

#### STORING MACHINE

The BAX 250 should be stored in an area where moisture cannot enter machine heating system, such as material, controls, etc. The heated hose must be stored on the hose hanger and secured with the chain before traveling. Do not travel with the melter running.

#### INSTRUCTIONS 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:

- Part Number.
- 2. Machine Model.
- Serial Number.

#### Write, telephone, or fax:

CRAFCO, INCORPORATED
235 SOUTH HIBBERT DRIVE
MESA, AZ. 85210
Phone: 480-655-8333
Fax: 480-655-1712

Fax: 480-655-1712 Toll Free: 1-800-528-8242



### **ELECTRIC HOSE CARE AND CAUTIONS**



Twisting and kinking of the electric hose (used on LF, BAX, SS60, and SS125 Melter) is the number one cause of hose failure.

When this happens, the electric heating wires are shorted out to the metal hose cover and the hose stops heating.

#### This type of failure is not covered under the Crafco warranty.

To help prevent twisting and kinking and the resulting hose damage, the operator should:

- a. Not move or use hose unless it has been turned on a least 35 minutes and set at a minimum temperature of 300° F.
- b. Make sure hose swivel between hose and wand moves freely.
- c. Limit the hose bending to a radius of 10 inches.
- d. Avoid bending the hose over sharp edges such as the edge of the frame or tank.
- e. Avoid twisting.
- f. Do not exceed 400° F. on the hose controller or material temperature.
- g. Follow all instructions of the melter as well as those in the instruction manual.
- h. Avoid pulling hose beyond it's limits.

#### **HOSE TRANSPORT INSTRUCTIONS**

- 1. Remove hose from jib support and rotate jib support towards front of machine until it locks into position.
- 2. Wrap hose on hose hanger (Approximately 20 inch diameter).
- 3. Store wand in support hook.

# CAUTION:



Hose damage will occur if:

- Hose is bent or moved when cold.
- b. Hose is twisted or bent at less than a 10 inch radius.
- c. Hose is moved prior to being turned on at least 35 minutes and set at 380° F.
- d. Operator crosses over or under hose causing hose to twist or wires between hose and wand connection to twist or wrap up.
- e. Swivel is cold and not free to move allowing hose to twist.
- f. Hose to wand wiring is pulled, stressed, or used to support the wand.

#### MAINTENANCE INSTRUCTIONS AND CHART

#### **GENERATOR**

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

Change oil filter after the first 25 hours of operation and every 100 hours thereafter.

See generator owners manual for additional operating and maintenance instructions.

#### **MIXER BEARINGS**

Lubricate every 50 hours of operation with good quality high temperature grease.



			НО	JRS	
LOCATION	PROCEDURE	8	50	250	500
Check Generator oil level	See generator instruction manual.	*			
Other generator See generator operating and maintenance instructions.					
Battery	Check water level weekly.		*		

### **RECOMMENDED FLUIDS AND LUBRICANTS**

APPLICATION	RECOMMENDED	FULL POINT
Generac engine oil Refer to Generac owners manual.		1.5 U.S. qts. crankcase and filter
LPG	Propane	30 Lbs.
Air Compressor	Refer to compressor manual.	See compressor manual.

#### **MAINTENANCE**

# DAILY MAINTENANCE (OR EVERY 4 HOURS WHICHEVER IS LESS)

Check generator oil. Fill as required.

Check air compressor oil level. Fill as required.

Inspect machine carefully for loose nuts and bolts, damaged hoses, duckbill etc.

#### PERIODIC MAINTENANCE

#### Agitator bearings (Lubriplate AR Shield Heavy)

Grease monthly.

#### Air Compressor (30W- non-detergent oil only) (Recommended straight weight)

Replace the oil after the first 50 hours of use.

Check oil daily and drain the moisture from the tank.

Change oil every 100 hours. Check vibration pads.

Clean intake filter every 100 hours or sooner if needed.

#### Generac Power System (10W-30 detergent oil only)

Check oil every 8 hours of running time, minimum.

Change oil after the first 25 hours of operation.

Change oil every 50 hours of running time or sooner.

Change oil filter every 100 hours of operation.

Change air cleaners every 25 hours of running time or sooner.

Replace air filter every 100 hours of operation or sooner.

Clean the air intake screen every 100 hours of operation or sooner.

Clean spark plug and set gap every 100 hours of opeation or sooner.

See Generac Power System manufacturers manual for other specific maintenance items.

Once a week inspect the battery post and cables for tightness, corrosion. Clean and/or tighten as needed. Also check battery fluid level, and, if necessary, fill with distilled water only.

#### **CONTROL BOX**

Remove the front panel and blow dry compressed air to remove dirt and dust as needed. See "SPEED CONTROL MODULES" section pg. 22 for information on the speed control module adjustments.

#### **GEARMOTOR**

Refer to Gearmotor Maintenance manual for instructions on the gearmotor.

### **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.
- 3. Watch for leaks. Tighten fitting or repair as necessary.
- 4. Clean machine externally periodically. Check with sealant manufacturer for recommendation.
- 5. Follow recommended maintenance procedures on maintenance chart.

#### SPEED CONTROL MODULE

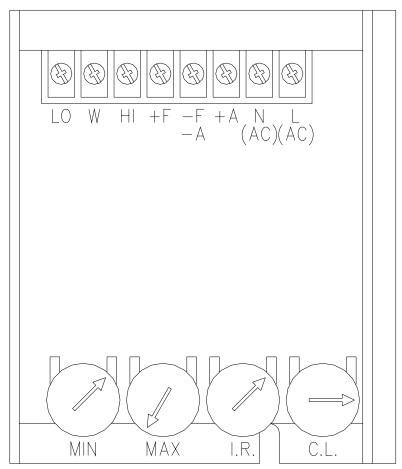


Fig. 1

MODULE	MINIMUM VOLTAGE, VDC	MAXIMUM VOLTAGE, VDC	I.R. COMP	CURRENT LIMITER AMP. DC
Agitator	0.0	90.0	N/A	1.2

The BAX-250 is equipped with a speed control module, which allows the operator to control the speed of the agitator gearmotor. It also protects the gearmotor from being overloaded by limiting the maximum current through the motor. The module is located inside the control box. If there is a necessity to replace the module, the following installation procedure must be followed. The service of the modules should be performed by qualified personnel only, and appropriate safety precautions must be observed.

Melter power must be shut off and propane valves must be closed. Open the control box door and remove the front panel. Secure the front panel outside the enclosure with plastic ties. Record the wire arrangement on the module, disconnect the wires, and remove the module.

On the new module, adjust the thumbwheel dials to the following positions (see figure 1):

MIN 2:00 O'clock positionMAX 7:00 O'clock positionI.R. 2:00 O'clock positionC.L. 3:00 O'clock position

Install the new module and attach wires.

Remove chain guards from gearmotor bracket. Disconnect the chain to unload the motor.

Remove the junction box cover on top of the gearmotor and attach DC voltmeter leads to the wire nut connections. Set the voltmeter to measure at least 130 volts DC.

Start the generator as described in the start up section of this manual. Set all temperature and speed controls to the lowest setting.

Turn burner switch "ON", then turn agitator switch "ON".

Slowly turn MIN. thumbwheel dial in the clockwise direction until the gearmotor starts to rotate, then turn the thumbwheel in the counter-clockwise direction until the rotation stops.

Turn agitator speed control knob to "10". Adjust the MAX thumbwheel dial until the voltmeter reads 90 volts DC.

Check the rotation direction. The agitator motor turns counter-clockwise looking from the top of the motor. If rotation is incorrect, turn power off and switch red and black gearmotor lead wires to reverse the rotation.

Set all speed control knob to zero, turn all switches "OFF", and shut down the generator. Remove the voltmeter leads and install the junction box cover.

Jam the gearmotor shaft with a small pipe wrench so the motor will not turn when power is applied.

Attach a clamp-on ammeter around the wire that leads to the "L(AC)" terminal on the the speed control module (white-green wire). Set ammeter to measure at least five amps AC.

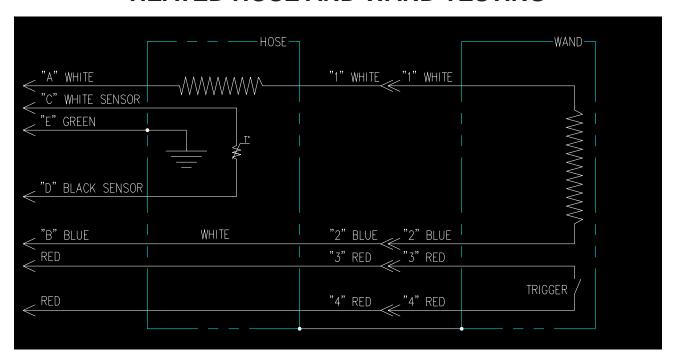
Start the generator as descibed in the start up section of this manual. Set all temperature and speed controls to the lowest settings.

Turn burner switch "ON", then turn agitator switch "ON".

Slowly turn gearmotor speed control knob to "10". Turn C.L. thumbwheel dial to adjust the current to 1.2 amps. this is the maximum allowable gearmotor current.

Set all speed control knob to zero, turn all switches "OFF", and shut down the generator. Install chain and chain guards. Remove the ammeter leads and install the front cover.

### **HEATED HOSE AND WAND TESTING**



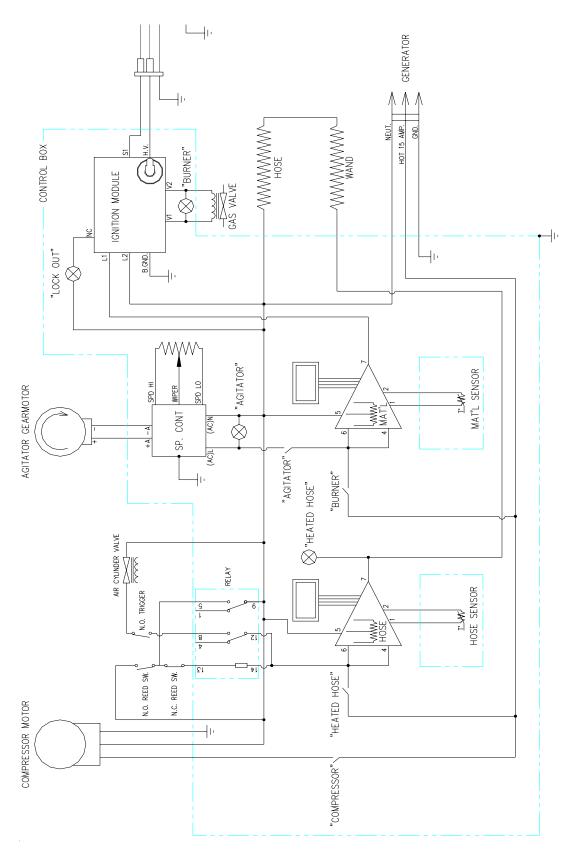
### 15' HEATED HOSE RESISTANCE AND CONTINUITY

Check Points	Resistance/Continuity	Note
A to #1	Continuity	
B to #2	Continuity	
C to D	1.08 Kohms	@ 70°F
E To Ground	Continuity	
B To #1	20 Ohms	
Red to #3	Continuity	
Red to #4	Continuity	
A or B To Ground	No Continuity	

### 24" WAND RESISTANCE AND CONTINUITY

Check Points	Resistance/Continuity	Note
#1 To #2	5 Ohms	
#3 To #4	No Continuity	Trigger released
#3 To E#4	Continuity	Trigger Squeezed
#1 or #2 To Ground	No Continuity	

# **ELECTRICAL SCHEMATIC**



#### **BURNER TROUBLE SHOOTING**

#### **BURNER WILL NOT IGNITE**

**Step 1:** Check for 110 volts at toggle switch.

**No:** Then toggle switch is "OFF" Generator Circuit Breaker "OFF"

Broken wire

Yes: Then go to Step 2.

**Step 2:** Check for 110 volts at terminal #7 on material temperature thermostat.

**No:** Then material temperature thermostat is bad.

Yes: Then go to Step 3.

**Step 3:** Check for 110 volts at power terminal of spark control module.

No: Then there is a bad connection or a broken wire.

**Yes:** Then there is a faulty spark control module

Faulty ignitor or ignitor wire

Reposition ignitor

Check for clogged burner orifice Inadequate gas flow or pressure

Faulty "ASCO" gas valve

#### **BURNER LIGHTS BUT SHUTS DOWN IN 3.5 SECONDS**

Faulty ignitor

Broken or loose flame sensor wire

Faulty spark control module

#### **BURNER LIGHTS BUT WILL NOT RELIGHT**

Calibrate thermostat

Circuit breaker blown

Faulty spark control module

Faulty sensor

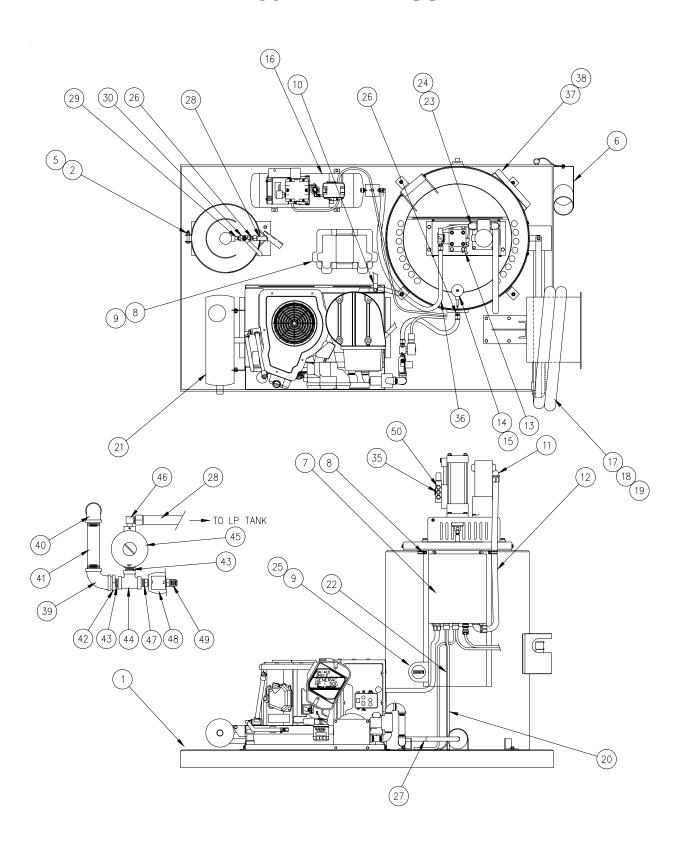
#### **BURNER WILL NOT SHUT OFF @ TEMPERATURE SETTING**

Calibrate thermostat Dirt in "ASCO" valve

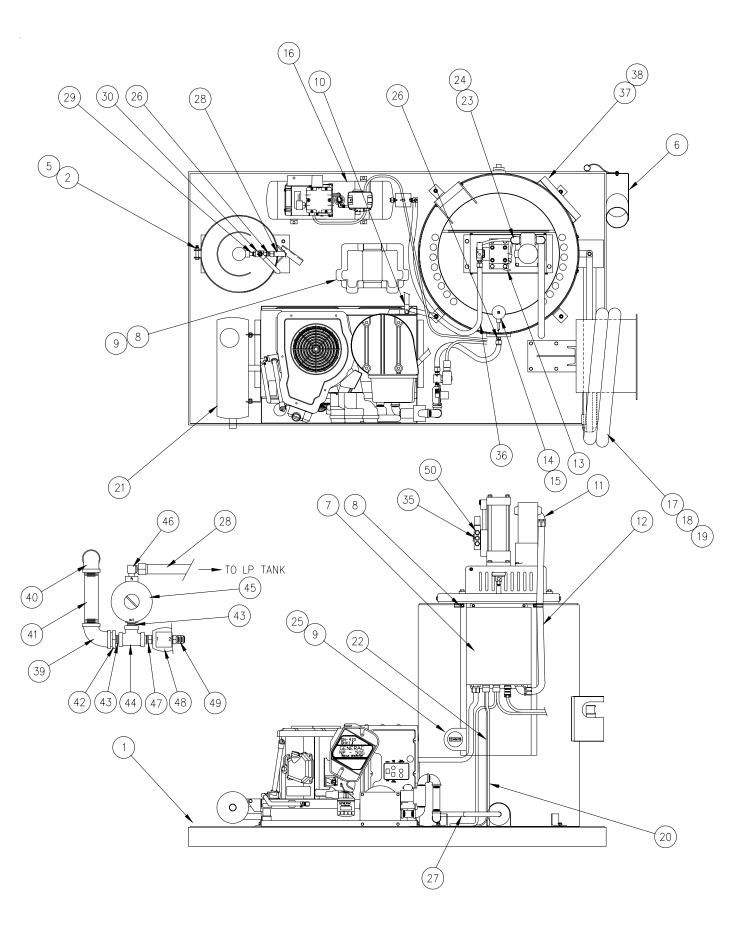
Faulty sensors

# **PUMP TROUBLE SHOOTING**

PROBLEM	CAUSE	REMEDY
Pump will not actuate. No movement at all.	Material not up to temperature. No air pressure. No voltage to valve. Bad switch in hand gun. Defective air valve. Defective cylinder. Obstruction in pump line.	Continue to heat material. Check compressor. Check trigger. Replace switch. Replace air valve. Replace or rebuild cylinder. Remove obstruction.
Pump moves but does not make complete stroke. No material is dispensed.	Material not up to temperature. Hose not up to temperature. Duckbill valve obstructed. Hose plugged or obstructed. Hose twisted or kinked.	Continue heating material. Continue heating hose. Heat in tank. Continue heating hose. Replace hose.
Pump actuates and goes full stroke. No material is discharged.	Not enough material in melter. Hose not up to temperature. Material too hot and "gassing off." Pump rod disconnected from drive cylinder. Piston and or pump plate worn and will not seal.	Add more material. Continue heating hose. Allow material to cool to operating temperature. Connect pump rod to drive cylinder. Replace piston and/or pump plate.
Machine pumps, but dispensing is too slow.	Material not up to temperature. Hose not up to temperature. Hose temperature setting too low. Air pressure too low.	Continue to heat material. Allow to heat longer. Increase hose temperature. Increase air temperature.
Agitator does not turn, or turns sporadically.	Material not molten yet. Defective gearmotor. Defective speed control module. Material block jamming agitator. Defective agitator bearings.	Continue to heat material. Remove and replace. Remove and replace. Allow to heat longer. Remove and replace.

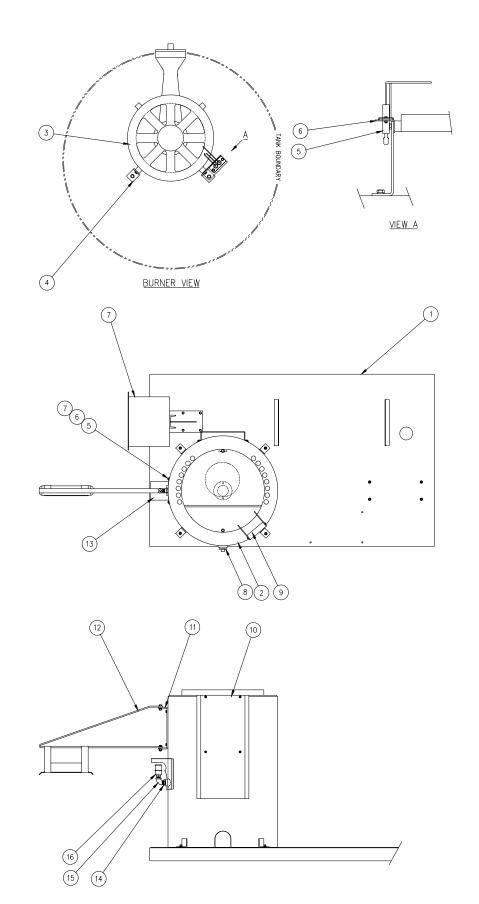


BAX 250 MELIER ASSEMBLY			
NUMBER	PART NUMBER	QTY	DESCRIPTION
1	55201	1	TANK AND FRAME ASSEMBLY
2	50095	1	LP TANK BRACKET
3	42964	1	LP TANK
4	37620	1	12V BATTERY
5	24003	1	BATTERY BOX
6	55040	1	DRIP PAN ASSY.
7	55220	1	CONTROL BOX ASSY.
8	32018	2	1" COVERED CLAMP
9	24077	1	BRACKET, HOURMETER
10	37038	1	NEGATIVE BATTERY CABLE
11	40445	1	ELBOW CONDUIT CONNECTOR
12	40433	5.5'	1/2" FLEX. CONDUIT
13	55117	1	T-HANDLE SCREW
14	43465	1	RTD SENSOR
15	51065	1	CORD GRIP
16	55219	1	3/4 HP AIR COMPRESSOR
17	51702	1	10' HEATED HOSE ASSEMBLY
18	50036	1	24" HEATED WAND ASSEMBLY
19	50811	1	WAND HANDLE ASSEMBLY
20	55221	1	IGNITION CABLE ASSEMBLY
21	55010	1	110V PROPANE GENERATOR
22	55222	1	GAS VALVE CABLE ASSEMBLY
23	28342	1	3/8 X 1/4 REDUCER BUSHING
24	51655	1	1/2" ELB. CORD CONNECTOR
25	24076	1	HOURMETER



DAX 230 WELLER ASSEMBLE			
NUMBER	PART NUMBER	QTY	DESCRIPTION
26	29839	2	3/8 TUBE X 1/4 NPT ADAPTOR
27	LP6-18	1	LP HOSE ASSEMBLY, 3/8 X 18"
28	LP6-44	1	LP HOSE ASSEMBLY, 3/8 X 44"
29	25123	1	LP TANK SPUD
30	29195	1	1/4 BALL VALVE
31	55223	1	AIR VALVE CABLE ASSEMBLY
32	55113	1	AIR FILTER
33	28012	1	1/4 X 1-1/2 NIPPLE
34	29859	1	3/8 TUBE X 3/8 NPT ELBOW
35	29840	1	3/8 TUBE X 3/8 NPT ADAPTOR
36	LP6-60	1	LP HOSE ASSEMBLY, 3/8 X 60"
37	25289	1	RECORD BOX
38	25290	1	RECORD BOX BRACKET
39	28209	1	3/4" NPT ELBOW
40	28239	1	3/4" NPT STREET ELBOW
41	28027	1	3/4" X 3" NIPPLE
42	28347	1	3/8 X 3/4 REDUCING BUSHING
43	28002	2	3/8 CLOSE
44	28252	1	3/8 PIPE TEE
45	25087	1	PRESSURE REGULATOR
46	29871	1	3/8 TUBE X 1/4 NPT ADAPTOR
47	51402	1	1/4 X 3/8 PIPE HEX NIPPLE
48	55049	1	110V GAS VALVE
49	29839	3	3/8 TUBE X 1/4 NPT ADAPTOR
50	50163	2	AIR MUFFLER

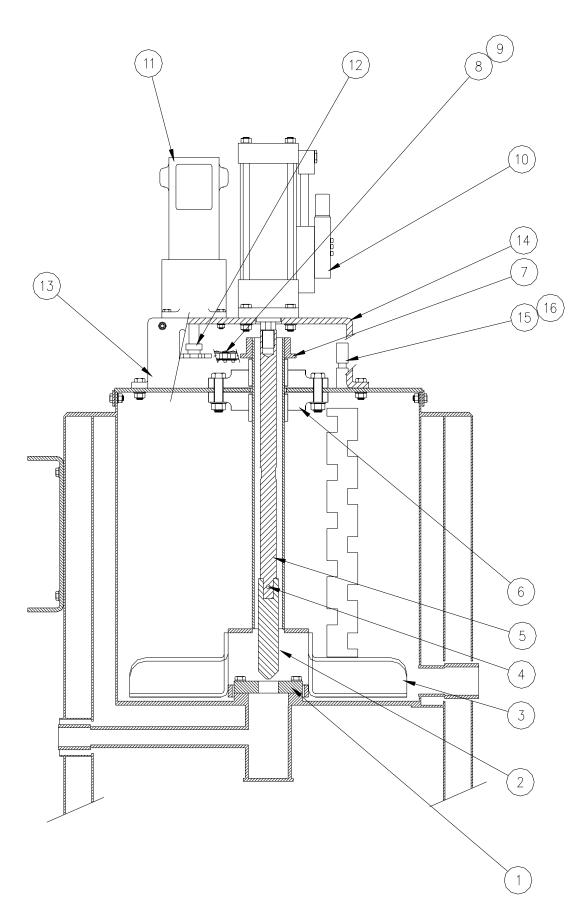
### **BAX 250 TANK AND FRAME ASSEMBLY**



### **BAX 250 TANK AND FRAME ASSEMBLY**

NUMBER	PART NUMBER	QTY	DESCRIPTION
1	55205	1	SKID ASSEMBLY, BAX-250
2	55225	1	MELTING TANK ASSEMBLY
3	50078	1	PROPANE BURNER
4	50079	2	BURNER MOUNT. BRACKET
5	50070	1	ELECTRODE
6	50071	1	ELECTRODE BRACKET
7	55030	1	HOSE HANGER ASSEMBLY
8	21099	1	1-1/2" PIPE PLUG
9	55126	1	LID ASSEMBLY
10	55024	1	CONTROL BOX MOUNT. PLATE
11	55012	1	BOOM SUPPORT BRACKET
12	55022	1	HOSE BOOM ASSY.
13	55011	1	HEAT GUARD
14	55116	2	CHAIN GUARD
15	28001	1	1/4" CLOSE NIPPLE
16	28176	1	1/4" PIPE COUPLING

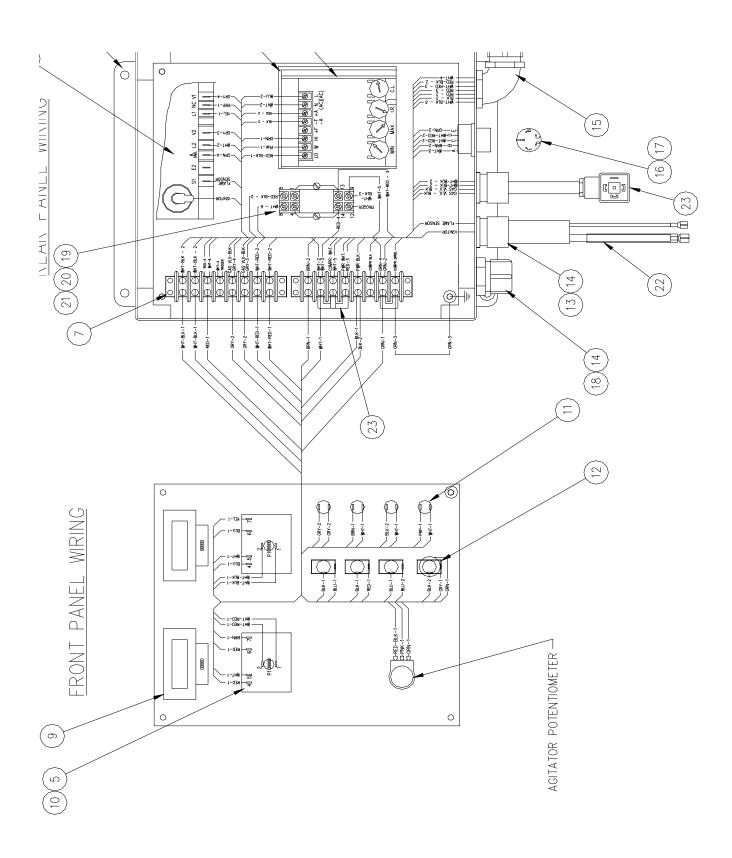
### **BAX 250 TANK ASSEMBLY**



### **BAX 250 TANK ASSEMBLY**

NUMBER	PART NUMBER	QTY	DESCRIPTION
1	50007	1	MATERIAL PUMP RING
2	50008	1	PUMP PLUNGER
3	55245	1	AGITATOR ASSEMBLY
4	29007	1	1/4 X 1 1/4 ROLL PIN
5	55247	1	PLUNGER SHAFT
6	50012	1	2" FLANGE BEARING
7	55111	1	20 TOOTH SPROCKET
8	50015	1	#40 DRIVE CHAIN
9	50436	1	#40 CONNECTING LINK
10	55104	1	AIR CYLINDER
11	55039	1	GEARMOTOR
12	55112	1	12 TOOTH DRIVEN SPROCKET
13	55116	2	CHAIN GUARD
14	55115	1	MOUNTING BRIDGE
15	28001	1	1/4 CLOSE NIPPLE
16	28176	1	1/4 PIPE COUPLING

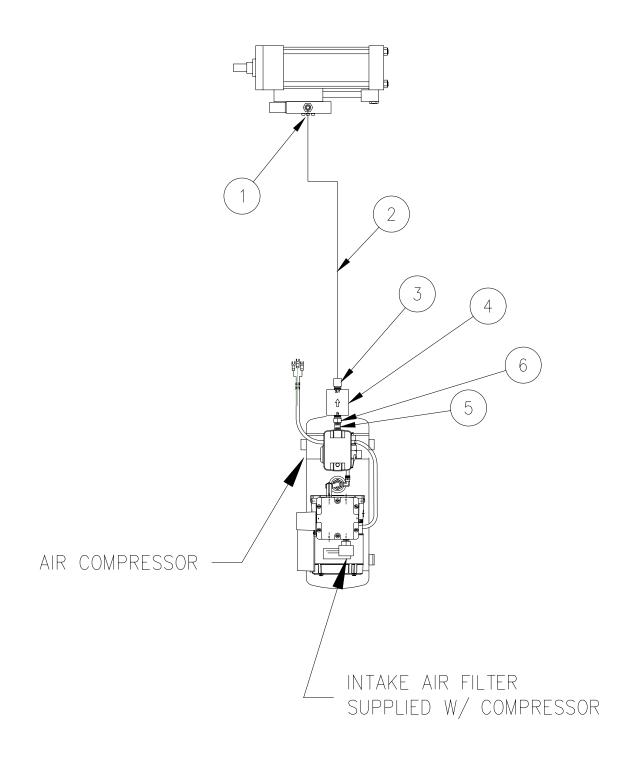
### **BAX 250 CONTROL BOX ASSEMBLY**



# **BAX 250CONTROL BOX ASSEMBLY**

NUMBER	PART NUMBER	QTY	DESCRIPTION
1	43665	1	ENCLOSURE
2	55021	1	MOUNTING BRACKET
3	50234	1	SPEED CONTROL MODULE
4	55015	1	GAS IGNITION MODULE
5	50593	2	CONTROL KNOB
6	25402	1	CONTROL BOX DECAL
7	50250	2	TERMINAL STRIP
8	50238	3	JUMPER
9	50251	2	LCD READOUT W/CABLE
10	50253	2	TEMPERATURE CONTROL
11	51658	4	PILOT LIGHT, 120VAC
12	50719	4	SPST TOGGLE SWITCH
13	24021	2	CORD CONNECTOR "BLUE"
14	50280	3	1/2" CONDUIT NUT
15	40445	1	1/2" ELBOW CONNECTOR
16	50215	1	5 PIN RECEPTACLE
17	50344	1	GASKET
18	40449	1	1/2" CONDUIT CONNECTOR
19	51663	1	HOLD DOWN SPRING
20	51669	1	RELAY, 110 VAC
21	51662	1	SOCKET,RELAY
22	55221	1	IGNITION/SENSE CABLE
23	5522	1	GAS VALVE CABLE

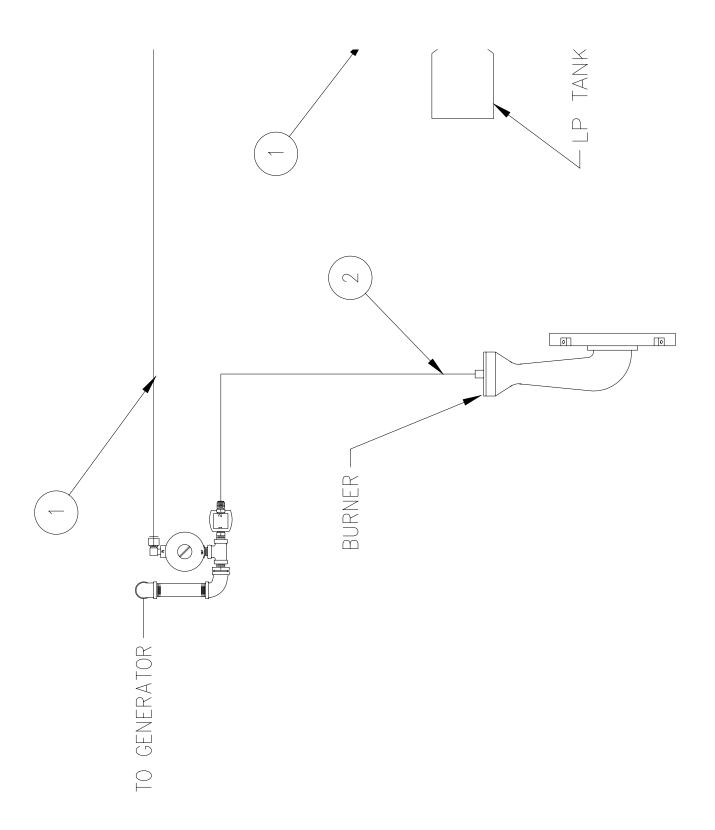
### **BAX 250 AIR PIPING DIAGRAM**



### **BAX 250 AIR PIPING DIAGRAM**

NUMBER	PART NUMBER	QTY	DESCRIPTION
1	29840	1	3/8 NPT X 3/8 TUBE ADAPTOR
2	LP6-60	1	LP HOSE ASSEMBLY, 3/8 X 60"
3	29859	1	3/8 NPT X 3/8 TUBE ELBOW
4	55113	1	AIR FILTER
5	28012	1	1/4 X 1 1/2 PIPE NIPPLE
6	28342	1	3/8 X 1/4 REDUCER BUSHING

# **BAX 250 LPG DIAGRAM**



### **BAX 250 LPG DIAGRAM**

1. LP TANK TO MANIFOLD				
1	25123	TANK SPUD		
1	29195	1/4 BALL VALVE		
1	29839	1/4 NPT X 3/8 TUBE ADAPTOR		
1	25131	LP HOSE ASSY., 3/8 X 60"		
1	29839	1/4 NPT X 3/8 TUBE ADAPTOR		
2 MANIFOLD TO BURNER				
1	29839	1/4 NPT X 3/8 TUBE ADAPTOR		
1	LP6-18	LP HOSE ASSEMBLY, 3/8 X 18"		
1	29839	1/4 NPT X 3/8 TUBE ADAPTOR		

Pioneering Leadership and Innovation in Quality Pavement Maintenance Materials.



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