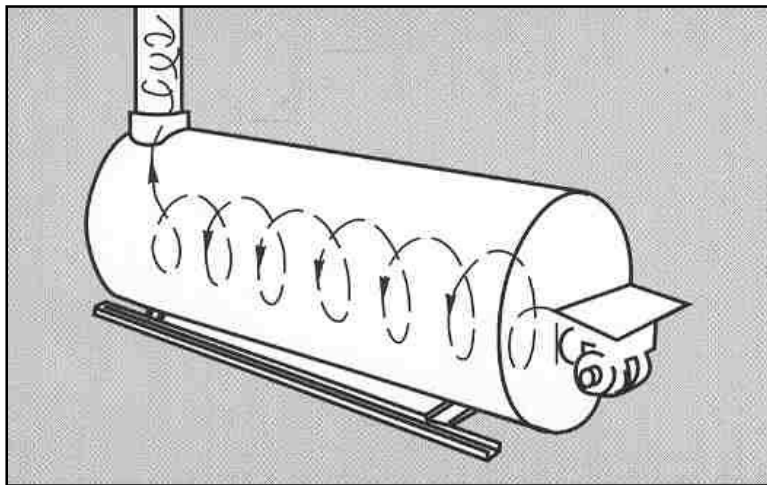




CREMATOR INSTRUCTIONS





CREMATOR INSTRUCTIONS

INSTALLATION INSTRUCTIONS

STEP 1

- Place cremator on a solid base, concrete or gravel.
- Keep this site free of all vegetation.
- Combustibles should not be closer than 6 feet to the main chamber at any time.

STEP 2

- All components are shipped inside the unit. Remove contents from inside the cremator.

STEP 3

- Elevate stack end 1-2 inches.

STEP 4

- Mount exhaust stack, or secondary burner, on to the main chamber.
- If secondary burner unit is being installed, place the support rod into the bracket before mounting secondary burner on the main chamber.
 - A. Set secondary burner at a right angle to the main chamber.
 - B. Bolt together the flanges using 1/14 bolt and nuts.
 - C. Adjust the support rod so that secondary burner is level, tighten bolts.



CREMATOR INSTRUCTIONS

MOUNTING BURNER UNIT

STEP 5

- Find the main burner unit. (This is the burner with the yellow probe wire)
- Remove the nuts and washer from the cremator.
- Mount the main burner unit onto the four studs than protrude from the unit. (Please note than the flange is welded at an angle, this is correct)
- When the burner is correctly mounted, the flame is directed downward slightly.
- Tighten bolts.

STEP 6

- Remove the “O” ring on the heat probe. This was placed there to keep the fitting on the probe during shipment.
- Then place the heat probe into the pipe fitting (above the burner). Insert probe into the burning chamber 2-3 inches (look inside burning chamber).
- Tighten compression fitting, but do not overtighten.

STEP 7

- If unit is oil fired, set the fuel tank a minimum of 8 feet away from unit. The maximum distance is 25 feet.
- If necessary consult local code.
- If your application calls for a distance farther than 25 feet, call the factory. You will need to install an oil filter (owner must supply).

STEP 8

- You will find a plastic bag on the fuel pump. Remove this bag.
- Inside you will find a 1/16” pipe thread by-pass plug.
- Remove and discard the “Return” port plug from the fuel pump.
- Using a 5/32 inch allen wrench, place allen screw into the return port.



CREMATOR INSTRUCTIONS

STEP 8 (continued)

- Plumb the return line (3/8 copper) from this port back to the top of the fuel tank.
- Do not block or restrict the port once the allen screw is inserted. If restricted the pump will fail.
- We are using a 2-pipe system, see the blue sheet the allen screw was with.

STEP 9

- Plumb a fuel feed line (input) from tank to the “input” port on the fuel unit.
- Place the line into the inlet port of the pump.
- We recommend using a 3/8 copper line for the feed line and the return line.

STEP 10

- Plug in the power cord to the proper voltage.
- A 20-amp service is recommended. (12 gauge wire)

STEP 11

- Turn on the timer, the unit should fire after the fuel line is primed. This will self prime if the return line is installed.

STEP 12

- Check unit for leaks.

STEP 13

- Install the rain shield and bolt the shield to the square flange between the chamber and burner transformer.



CREMATOR INSTRUCTIONS

SECONDARY BURNER UNIT

To install the secondary burner, repeat Step 5 and Steps 7 thru 12.

LOADING & BURNING INSTRUCTIONS

- Load crematory with carcass.
 - Do not over load (no more than $\frac{3}{4}$ full).
 - Do not place carcass within 12 inches of the burner head.
- Set auto timer for 1 hour per 100 pounds plus an extra $\frac{1}{2}$ hour.
- Start burner units.
- After unit starts, close the charge door.
- Make sure burner is firing before leaving unit.
- Never open charge door with unit burning.
- Never recharge a hot unit.
- Clean out ash after burning or before reloading unit. Too much ash will affect the performance of the unit. A high ash level can result in main burner damage.
- If using secondary burner unit, always start secondary burner before starting main burner unit (some states require 20 minutes). Secondary burner unit must run when main chamber is running. Always run secondary burner unit for an additional 30 minutes.
- For example, run time of 2 hours for main burner = 2 hours 30 minutes run time for secondary burner.

IMPORTANT!

NEVER TOUCH ANY PART OF THIS UNIT WHILE IN OPERATION! SOME METAL PARTS CAN HAVE TEMPERATURES EXCEEDING 1500 DEGREES F. SERIOUS BURNS CAN RESULT IF UNPROTECTED SKIN COMES IN CONTACT WITH THESE PARTS. PLEASE BE SAFE.



CREMATOR INSTRUCTIONS

TROUBLESHOOTING CONTROLLER

PUSH BUTTON TIMER

- Temperature Adjustment is factory set.

HEAT PROBE

- If temperature inside crematory is not correct, the probe may be bad. A bad probe will read 1400 degrees when temperature is 100 degrees.
- If you get a “probe fail” error message on read-out, the probe or probe wire could be defective.
- If you get a “wiring of the probe” message, check wire connections. Red wire must be on the negative terminal, yellow must be on the positive.

FUEL VALVE

- Turn off power (unplug from power source).
- Find the orange wire from the fuel valve (top wire on the terminal strip) and wire it to the black motor connection on the terminal strip (bottom terminal). Replace timer cover. Plug in and turn on timer. Cremator should fire, if not control board has failed.
- If fuel does not spray inside cremator, remove fuel valve from pump. It is fastened with a 3/8-inch bolt (there is a sealing washer between valve and pump; do not loosen this washer).
- Turn on burner. Fuel should spray out of this port where you removed the fuel valve. If you have fuel out of this port the fuel valve is defective.
- If no fuel discharges from the port, check your fuel tank.
- Check drive coupler that runs from motor shaft to pump shaft. If it is loose, tighten it with a 5/32 allen wrench. If you have fuel in the tank and the drive coupler is tight and connected to the motor shaft, then the fuel pump is defective.



CREMATOR INSTRUCTIONS

MAINTENANCE & TROUBLESHOOTING

PROBLEM

WHAT TO CHECK

UNIT WON'T RUN

- Be sure the unit is plugged in.
 - Check the fuse or circuit breaker.
 - Check the fuse or circuit breaker.
 - Check for blocked blower fan.
-

UNIT WON'T FIRE

- Check fuel quantity.
 - Check for air leaks in fuel line.
 - Fuel nozzle obstructed by carcass.
 - Ignition points are dirty, broke or needs adjustment.
 - Transformer is bad, or points need cleaned. To check transformer, place a plastic handle screwdriver on one of the two contact points. Lower the shaft of the screwdriver till it is ¼ inch of the other point. If the transformer will not “jump” a ¼ air gap the transformer needs to be replaced.
 - Extremely cold ambient temperatures cause a “cold start”, may momentarily block part of the air intake until the unit fires.
 - Check the set screws in the coupling between the fan and the fuel pump, be sure the pump turns.
-

UNIT SMOKES

- Adjust air band to achieve smoke-free burning. (Adjust the air band while the unit is firing.)
- Bad or improper nozzle pattern.



CREMATOR INSTRUCTIONS

MAINTENANCE & TROUBLESHOOTING (CONTINUED)

PROBLEM	WHAT TO CHECK
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BURNER UNIT VIBRATES

- Check for ice or snow on fan.
 - Check for rodents in fan.
 - Check for bent fan.
-

BURNER NOT CYCLING

- Bad heat probe.
 - Bad controller or bad fuel valve (see page 5).
-

These units are very dependable. There is no regular maintenance required to keep them operating well. To keep these units running for years, **ALWAYS USE CLEAN #1 OR #2 DIESEL FUEL THAT IS FILTERED.** Never overload the unit. Keep nozzle unobstructed.

If you have any technical question that cannot be solved using these instructions, please call Val-Co for assistance. Phone 419-678-8731 or toll free 800-998-2526.