Master Pot
Instructions

LEAD ALLOYS

Always use clean metal in the pot, but you must occasionally flux the metal to keep the pot clean. Standard paraffin or beeswax works well for this. Drop in a piece about the size of a .38 caliber bullet and stir vigorously. Use a large perforated spoon for stirring the molten lead mixture.
CAUTION: Fluxing can cause a flash fire, this is normal, but gauntlet type gloves should be worn during this operation. Once the ash and residue have risen to the top of the pot and has quit smoking, skim it off and discard properly.

VENTING

It is important in any casting operation that it be performed in a well-ventilated area. In the case of a stationary casting furnace such as the MASTER CASTER, an exhaust hood should be installed directly over the melting pot and have sufficient suction to remove smoke caused in the melting, fluxing and continued lead heating operation of the machine. No air should be flowing over the mold during the pour operation; this will cause unequal cooling of the lead streams and will cause casting problems.

Below 800 degrees lead expels no poisonous gases just smoke from whatever contaminates are in the lead. Lead poisoning is caused by improper hygiene after handling lead. Don’t eat or smoke before washing your hands.

THERMOSTAT ADJUSTMENT

The melting pot has a large band heater controlled by a thermostat. The thermostat is carefully calibrated in our plant. Field calibration is seldom necessary and should not be resorted to unless the thermostat is not maintaining desired temperature. A thermometer must be used to calibrate the thermostat - overheated lead expels poisonous gases.

Increase or decrease the temperature by the following:
First, loosen the small setscrew on the thermostat knob, then remove the knob. Using a small screwdriver, insert it in the hollow stem and engage the adjusting screw. Turning the screw to the left or counter-clockwise increases the temperature. Temperature adjustments should be made in small increments. Allow the temperature to rise or lower to the new setting before making further adjustments. MAKE ADJUSTMENTS SLOWLY IN SMALL INCREMENTS.
MASTERPOT PARTS

MC101  5/16" SAE Flat Washer
MC102  5/16 - 18 X 3/4" Bolt
MC109  #10 SAE Flat Washer
MC202  #8 - 32 Nut
MC300  Melting Pot Complete
MC301  Single Cavity Orifice Plate
MC302  Double Cavity Orifice Plate
MC303  #10 - 24 X 3/8" Socket Cap Screw
MC305  Melting Pot Casting
MC309  Electrical Box Assembly Complete
MC310  Thermocouple Toe Clamp
MC320  1/4 - 20 X 5/16" Thermocouple Toe Clamp S.H.C.S.
MC330  Heat Band 120V or 240V
MC341  Hi Temp Ground Wire
MC342  Hi Temp Black Wire
MC346  Hi Temp Quick Disconnect
MC347  Ring Connector 16 - 14 Ga. #10 Stud
MC360  Thermostat
MC370  #8 - 32 X 1" Thermostat Mounting Screw
MC379  Pointer Knob Tension Spring
MC380  Pointer Knob
MC390  3/8" Romex Connector
MC400  Pot Housing
MC401  Electrical Box
MC402  Temperature Label
MC403  #8 - 1/2" Sheet Metal Screw
MC450  1/4 - 20 X 3/8" Mounting Screw
MC458  Insulation (per square foot)
MC460  Valve Spring
MC470  3/16 X 1/2" Clevis Pin
MC480  Hair Pin Cotter
MC490  Valve Bracket
MC500  Valve Operating Handle
MC510  Valve Stem
Installation of Controller

Remove Pot Skin, remove old capillary tube and thermostat.

Weld a ¼-20 nut to the bottom of the pot where the control box was. Use one of your old ¼-20 socket head screws and clamp to clamp the TC to the pot.

Run your heat band wires, ground wire, and TC wire out the cover provided.

For 240 VAC hook one wire from each side together and insulate. Hook the remaining wire from one side to the Red wire and the remaining wire from the other side to the black wire.

The ground wire is hooked to the green wire.

All wires should be attached inside the sheath, not inside the pot cover, for heat protection.