

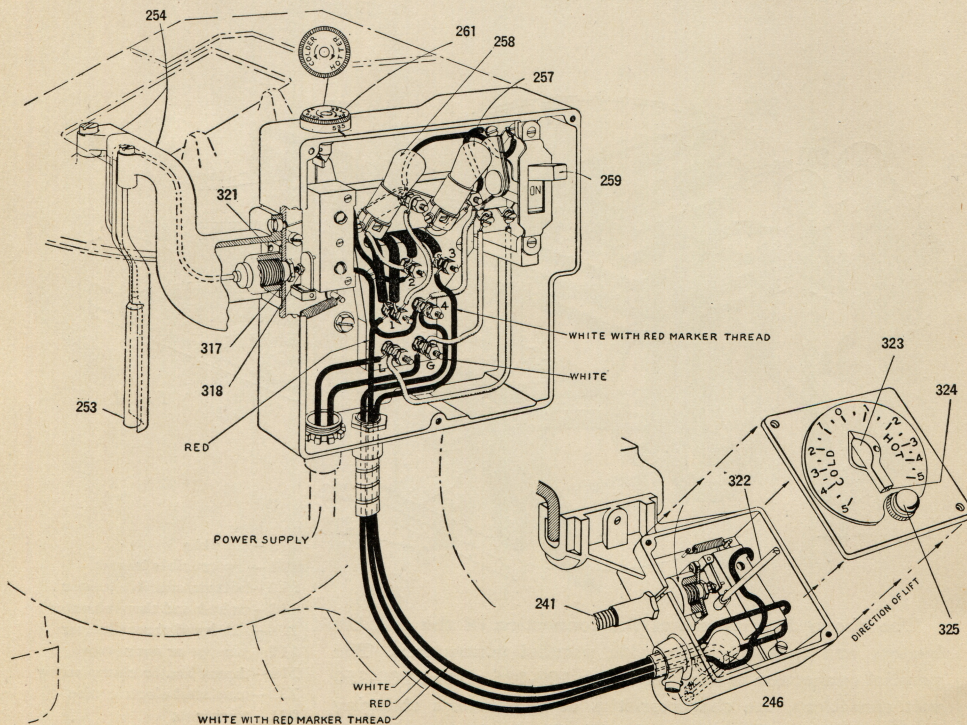
# ELECTRIC POT MICRO-THERM CONTROL

When electrical connections have been completed and the crucible is ready for operation, turn switch 259 to "on" position.

Lamps 257, 258, and 246 will light and lamp 257 will remain lighted as long as current is "on." Lamp 258 will remain lighted only as long as current flows to the crucible heaters and 246 will remain lighted only as long as current flows to the mouthpiece heaters.

After the metal has melted, insert a glass rod thermometer. When it registers 535° F.

lamp 258 should go out. If it does not, turn the dial 261 toward "Colder" until the lamp does go out. At this point, the 535° marking on the dial should coincide with the line on the box. If it does not, loosen the two set screws which fasten the dial to the adjusting shaft and turn the dial so that the markings agree. Then tighten the two set screws. The crucible temperature control is now adjusted for 535° F. To increase the temperature, turn dial toward "Hotter"; to decrease the temperature turn dial toward "Colder"



Wiring Diagram for 110 Volts A.C.



To adjust mouthpiece control, set pointer 323 to 0 on dial, remove jewel 325 by unscrewing from cover and loosen pointer set screw 324. To increase temperature turn adjusting shaft 322 clockwise toward "Hot" on the dial, or to decrease temperature turn adjusting shaft 322 counter-clockwise toward "Cold" on the dial. When the adjustment is satisfactory, set the pointer 323 to 0, tighten pointer set screw and re-assemble the jewel 325.

If necessary to remove the mouthpiece control box cover, set pointer 323 to 0, remove jewel 325 and loosen pointer set screw 324. After removing pointer 323, loosen cover holding screws and remove cover.

To replace a damaged expansion tube and bulb assembly 253 move switch 259 to "off" position, then remove expansion tube and bulb guard 254, four round-head screws 321, lift old bulb 253 from pot and remove ad-

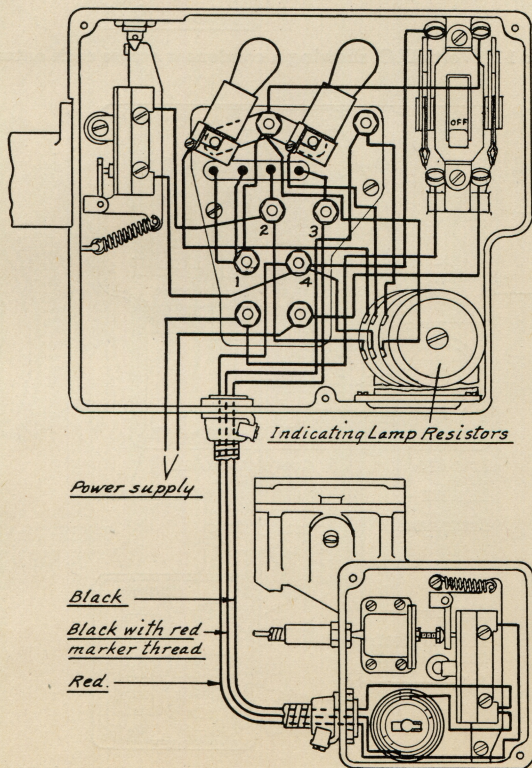
justing screw 318 with plunger, spring and lock nut 317. Place new bulb in pot and re-assemble.

Mouthpiece control expansion tube and bulb assembly 241 is replaced in similar manner.

**CAUTION**—Expansion tube and bulb assemblies **MUST NOT** be inserted into the pot until they have been exposed to room temperature (70° F.) for at least one hour. Make sure that bulb 253 is 1/2 inch from crucible heaters.

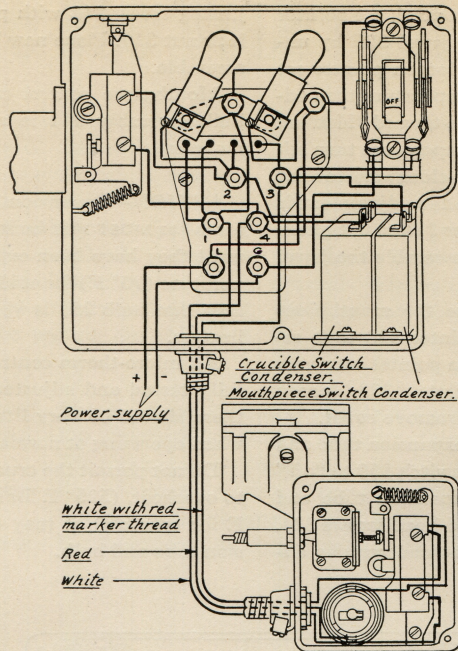
All micro-therm controls have been carefully tested and adjusted at the factory, so there should be very little need to readjust when operating at normal temperature.

Do not permit the crucible or mouthpiece to overheat, (525° F. for mouthpiece), (600° F. for crucible), it may damage the expansion tube and bulb.

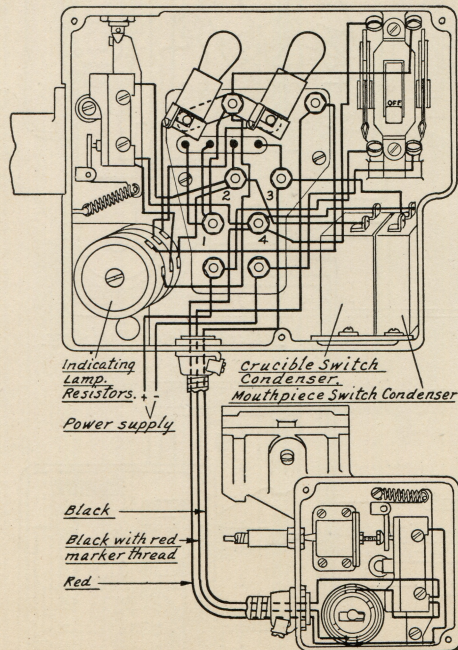


Wiring Diagram for 220 Volts A.C. One resistor is in series with each 110 volt indicating lamp





Wiring Diagram for 110 Volts D.C. showing a condenser across each automatic switch



Wiring Diagram for 220 Volts D.C. One resistor is in series with each 110 volt indicating lamp and a condenser is across each automatic switch