

SUBJECT MAIN SEAL WELDING OF CATHODE-
RAY TUBES

SUPERSEDED DATE

Initially used in sealing metal bulb to mount assembly such as FMT10A3-8 bulb assembly and 913 complete mount assembly with RH16-S41 header skirt.

1. EQUIPMENT AND MATERIAL

- a. Federal type 175 kva. single head welder.
- b. Cold rolled steel gauge used for aligning electrodes.
- c. Suitable abrasive stone for smoothing electrode surfaces.
- d. Onion skin paper for testing evenness of electrode contact.

2. PROCEDURE

a. Check alignment of electrode by inserting gauge into lower electrode and then adjusting top electrode until it will pass concentrically over gauge. Do this every other day before welding and always before welding if machine set up has been changed since last welds were made.

b. Adjust following settings for proper sealing:

Weld time	- 3 cycle
Stroke pressure	- 48-52 psi.
Heat adjustment on transfer-	7 (on top adjustment) and .5 (on lower adjustment.)

c. Throw on main switch and blower switch and turn on electrode cooling water from valve at side of welder. Use enough cooling water flowing through electrodes to keep surfaces at or slightly below room temperature but not so cool as to cause moisture to condense on surfaces.

Note: A 5 min. waiting period from preceding step is necessary for warming up machine. to proper welding heat.

- d. Place specified header skirt into circular slot in bottom electrode.
- e. Insert mount assembly into bulb assembly and then insert combined assemblies into top electrode until flange on stem is next to welding surface of top electrode.
- f. Turn on welding switch located on right side of machine and then press safety clips located under platform, one with each hand. Weld is made automatically.
- g. Remove assembly from top electrode when machine has returned to rest position
- h. Shutting down: Turn off welding switch, blower switch, cooling water and main switch, in order named.

PRECAUTIONS: 1. Do not operate machine unless glass safety shield is in proper place in front of electrodes.

2. Each time after electrodes are changed, use onion skin paper to test imprint of electrodes on contact. If imprints are uneven, stone electrodes for proper alignment.

STANDARDIZING SECTION
RESEARCH & ENGINEERING DEPT.