SUBJECT APPLYING CONNECTOR COATING TO SECOND ANODE LEADS

Supersedes former 34-25-1

The herein described procedure for coating around second anode leads in bulb assemblies for cathode-ray tubes is standard.

1. MATERIALS: FB Bulb Assemblies containing second anode lead assemblies.

   Connector coating for 2nd anode lead as specified on FB assembly.
   Turpentine (U.S.P. Rectified) - for thinning 33-S-33 material.
   33-W-7E distilled water for thinning 33-G-24 material.

2. EQUIPMENT:

   a. Small Brush (camel hair)

   b. Bulb Inside Drying Apparatus - Such as revised Model No. 799-P Cathode-ray Inside Bulb Heater consisting of 3 gas heated 9" x 1 1/4" diam, nichrome tubes with separate inlets and outlets, the latter terminating in vertical jets made of aluminum or stainless steel tubing. The I.D. of the tubing should normally be about 3/8". Each jet should have a number of pairs of diametrically opposite holes, of approx. 1/8" diameter, along the sides at its upper end and should be baffled with a circular shield about 1/4" from the top end. The shield prevents air from the top of jet from blowing directly against fluorescent screen in a bulb supported over the jet. The vertical spacing between pairs of holes should be about 1" and the jet tube should contain holes down to a level corresponding to that of CD line of bulb when a bulb or bulb assembly is supported over a jet so that the inner bulb face is about 2" above jet shield. Holes should be staggered, this being done usually by drilling alternate pairs of holes at right angles to each other. Other items of equipment required in connection with the water area:

      Bulb holders and clamps and their supporting stands.
      Reflector type electric heaters (800W) suspended, face downward, on adjustable brackets on stands. A heater is required for each jet.
      Air filter - Such as an Allen filter, on a 60-65 lb. air line.
      NOTE: The Allen filter should be blown out daily and the alundum candle should be replaced at least after every 6 weeks of use or whenever it is found to be dirty.

   c. Gas fired oven with removable bottom.

3. PROCEDURE

   a. Using a suitable brush, paint a thin coat of paste on (1) lead wire, (2) bead glass, and (3) an area approx. 3/4" in dia. around lead.

* General Revision

3. PROCEDURE (Cont'd)

b1. For all cathode-ray tubes other than pick-up tubes. (Used initially on 912 & 914, high voltage types.)

Place bulb over jet of bulb inside drying device and swing reflection heater over bulb (distance from end of heating element to bulb face - approx. 2"). With heater turned on and with cold air flowing from jet into bulb, play a medium soft flame 6" long from a bunsen burner (end of burner about 6-8" away from bulb) on and around second anode lead seal for 4 min. During this time the organic material should burn out of silver paste and the silver become sintered to a matte metallic film. The metallic silver serves as a good base upon which black coating will deposit quite heavily. Care should be taken not to overheat glass.

b2. For pick-up tubes other than orthicons.

Place bulb over jet with hot air (about 90°C) flowing into bulb and dry for 10 min. Temperature is not a critical factor as assembly is baked in a subsequent operation.

b3. For orthicons.

Place bulb in movable bottom of gas fired oven and bake for 10 min. at about 450°C. Since this operation occurs after baking of conductive coating make sure that coating has been thoroly dried.

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