

Application Note 3002 Cleaning the 7B2 and 7E Cold Cathode Vacuum Sensors

Description

This document explains the process for cleaning the Televac 7B2 and 7E cold cathode vacuum sensors.

Instructions

- 1. Remove the sensor from the vacuum chamber.
- 2. Unscrew the cap to expose the anode assembly (to remove, rotate the cap counter clockwise).
- 3. Gently lift the anode assembly upwards to separate if from the body.
- 4. Remove the "O" ring from the body, being careful not to scratch the "O" ring seat. Wipe it off with a lint free tissue making sure that it is still intact (no cracks or tears). It should be round and not flattened.
- 5. Blast the entire anode assembly at 30 psi using 70-140 mesh glass bead abrasive, being careful not to damage the glass feedthrough. (If any rainbow effect is noticed on the glass bead, a crack in the feedthrough may exist and the anode assembly should be replaced (PN 2-6200-37 for the 7B2 and PN 2-7900-51 for the 7E).
- 6. Blast the body with glass beads concentrating on the pole piece and "O" ring areas. Clean the remaining internal parts. If the threaded end of the tube needs cleaning, it can be bead blasted as well.
- 7. After cleaning, blow out any residual glass beads or dust with dry air. See that all metal particles are removed from the pole piece areas.
- 8. Re-grease the "O" ring with Apiezon L or M Grease (a vacuum approved grease). DO NOT APPLY EXCESS GREASE, "O" ring should be shiny.
- 9. Install "O" ring in body.
- 10. Replace the anode assembly in the body after the "O" ring has been installed. Observe the keyway location.
- 11. Screw on the cap and hand tighten.
- 12. Reinstall in the vacuum chamber.
- 13. Allow several hours for tube to degas when pumped down to high vacuum.
- 14. If properly cleaned and assembled, the gauge tube is ready for use without re-calibration unless NIST traceable calibration is required.

Contact Us

If you have any questions, please feel free to contact us:

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