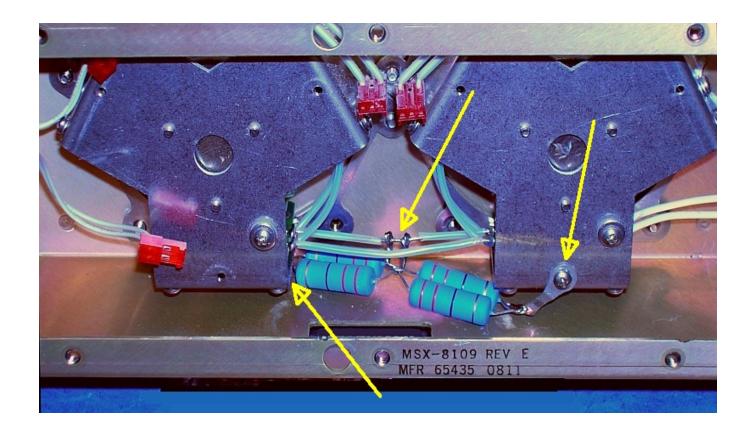
Alpha 8410 Cathode Resistor Installation.

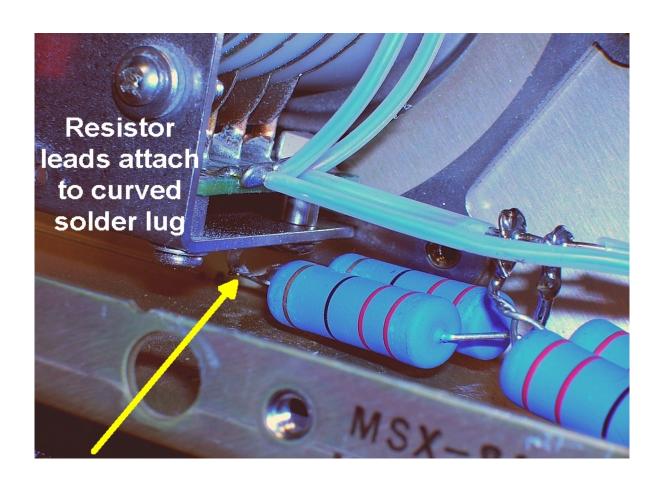
Instructions for replacing original 3 cathode resistors with 4 resistors. Do not simply add one resistor in parallel with the original 3, they may have been stressed and changed in value. Remove all 3 and replace with two pairs of new resistors. They are the same parts but parallel resistance is less, total wattage is more, increasing gain of amp slightly (less drive required for same output power).

- 1) Unplug amp from AC power, remove cover and remove transformer.
- 2) Stand amp up on the LEFT side (tubedeck will be low on the table) and remove 4 screws that secure the plate under the tubedeck (one screw on each side of the plate).
- 3) Label the 4 FASTON connectors in the lower right-hand corner with marks from a marker pen, the connectors are marked on the circuit board 1, 2, 3, and 5.
- 4) Unplug all connectors from the circuit board, it works well to tape the coax with red RCA plug up and out of the way on the chassis bottom. Use a needle-nose pliers to pull the 4 Faston connectors to the right off the lugs.
- 5) Remove the four #4 screws with lock washers that secure the circuit board to the tube socket frames, remove the circuit board from the tubedeck.
- 6) Remove the 3 blue resistors from the wire between the two sockets and also from the curved solder lug fastened to the side of the socket. Be very gentle when moving the leads from the solder lug, you do not want to loosen the lug and the screw!!
- 7) Temporarily install the new solder lug on the socket frame with the supplied short #4 screw



- 8) Twist the leads of each new pair of resistors together and install one pair where the original resistors were located. The second pair goes from the same wire between the sockets to the new lug that is temporarily mounted on the other socket.
- 9) Once the new resistors have been soldered to the new lug, remove the temporary short #4 screw and install the tubedeck board. One of the metal standoffs in the board will sit on top of the solder lug and the original (long) screw will hold it in place.





- 10) When installing the tubedeck board, the first connectors are the two red 2-pin plugs at the top of the tubedeck opening. They plug onto the two sets of pins along the top edge of the tubedeck board.
- 11) Once the circuit board is secured with the four #4 screws, plug the 4 Faston connectors onto the lugs, using pliers to push them all the way on. Plug the remaining connectors onto the board.
- 12) Check the resistance of the 4 newly installed cathode resistors. Measuring resistance from chassis to each of the 4 Faston connectors, it should be about 5.8 ohms.
- 13) Install plate on bottom of the chassis, lower amp back to horizontal position on table and install transformer and amplifier cover.