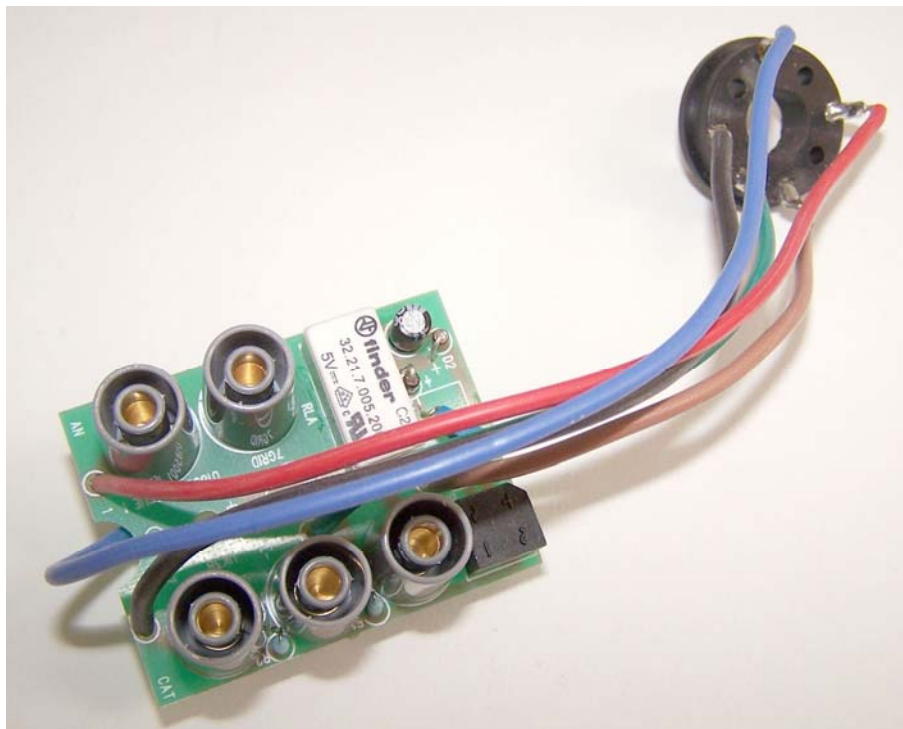


Replacement Circuit Board for Tube Holder S 4008573

09/13 ALF

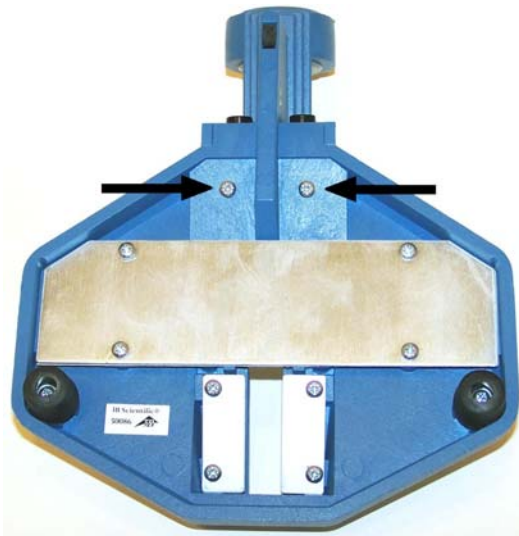


The quality of the electron beam in electron deflection tube S (1013889) is affected by the resistance between sockets C5 (cathode) and F4 (heating filament) on the tube. For optimum results, the resistance R_{C5F4} needs to be 390 k Ω . Tube holder S (1014525) is accordingly designed such that this resistance is present.

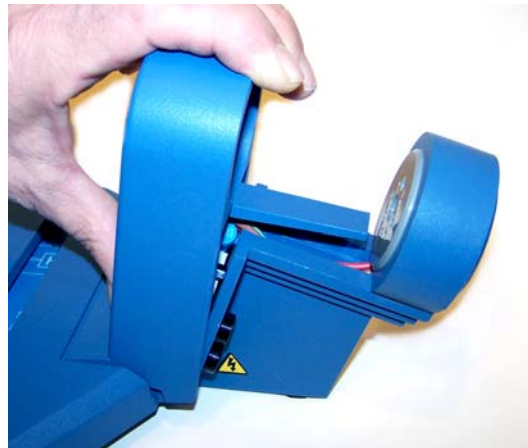
Older designs, sold under numbers 1000610, U185001 and U18500, feature a much smaller resistance. In order to operate the new S model electron deflection tube (1013889), these old tube holders need to be modified. The preferred option for this is to swap out the whole circuit board in the tube holder for a replacement board (4008573).

The following equipment is needed to carry out the replacement:

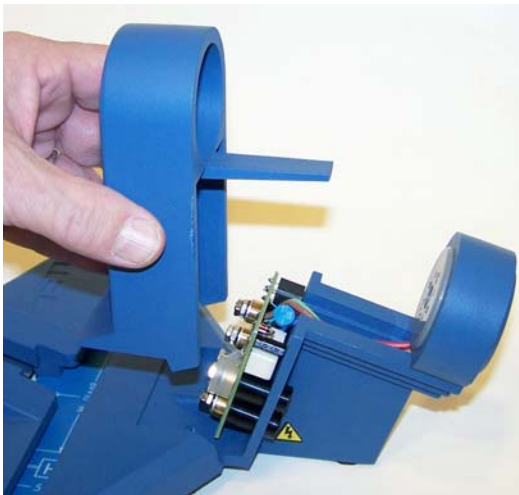
- 1 Replacement circuit board (4008573)
- 1 Cross-head screwdriver
- 1 Flat-blade screwdriver
- 1 Allen key 2.5x112



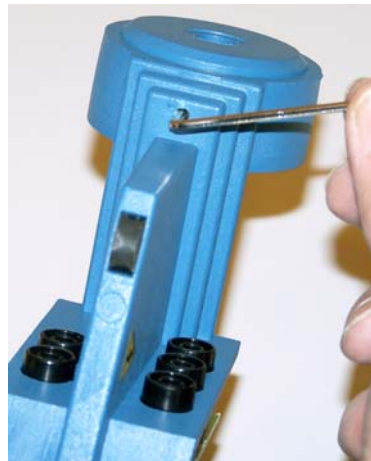
1) Turn the tube holder over and undo all the screws.



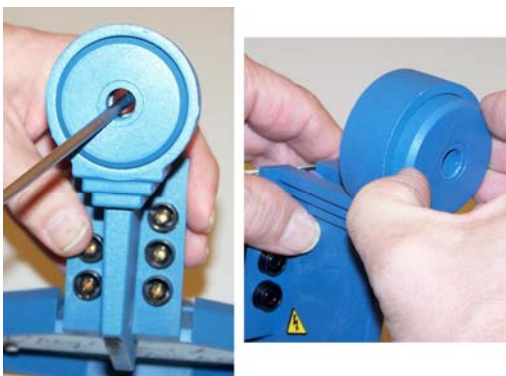
2) Place your thumb under the guide pillar at the bottom, using this as a fulcrum. Gently pull the bar to lever the base out of the tube holder.



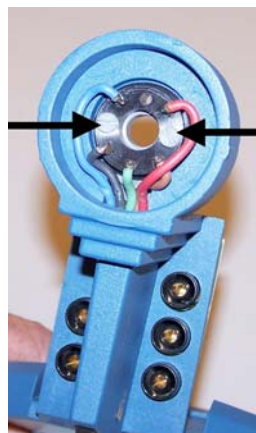
3) Carefully pull the guide pillar up at an angle, making sure that the LED is not damaged.



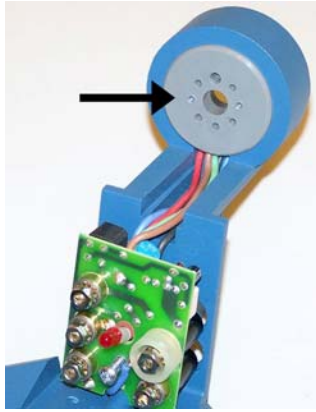
4) Use the hex key to undo the hex screw on the base of the tube holder.



5) Carefully lever the cap out a little way using a screwdriver and then take it out the rest of the way with your hand.



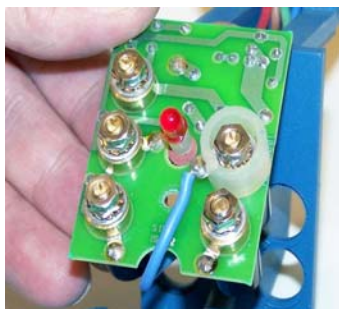
6) Undo the screws for the contact ring.



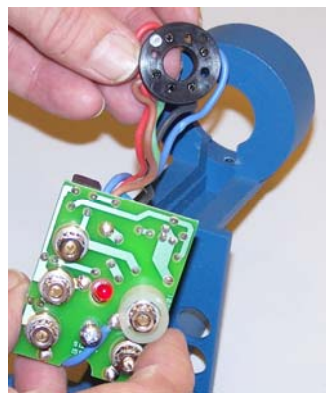
7) Pull off the cover.



8) Undo the screws holding the printed circuit board. Be careful, because the screw is inside a spacer ring, which you must not lose.



9) Carefully pull the board forwards and lift the terminal sockets out of their guides.



10) Remove the complete printed circuit board unit.

11) Put the replacement circuit board in place and secure it with the screw. First push the screw through the hole and slip the spacer over the screw before tightening.

12) Insert the contact ring and screw the grey cover back on. Make sure both the ring and the cover are correctly positioned.

13) Insert the cap and secure it with the screw.

14) Be especially careful when inserting the guide pillar again to make sure that the LED does not get bent over. You should get the base in place first and check the positioning of the LED, then press the bar down and snap it into place.

15) Use the screws to secure the guide pillar from below.

