Schnaittach-Hormersdorf, den 07.02.2017

## how to insert X-ray tube in housing

## Caution:

- 1. X-ray tube is fragile. Handle with care. do not drop.
- 2. X-ray tube has to withstand high voltage. Keep thoroughly clean. Make sure that there are no residuals of dust, grease, and other contamination on the tube body.
- 3. In case of contamination of tube surface, clean it with soft paper and alcohole (ethanole or isopropanole)
- 4. Be aware of the Be-windows (s. also tube brochure). Do not touch or incorporate Be particles or Be oxide from the window surface. This may be harmful to the health.
- 5. The Be windows are very thin and mechanically sensitive. To not touch the Be windows by hand or with tools or other hard components. The Be windows might break which is a fatal tube failure.

Bewindows

Orientation of tube and tube housing before inserting the tube:



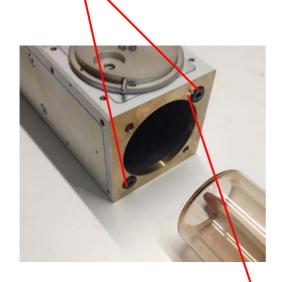
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in case of a new X-ray tube: remove plastic protection caps from the two cooling water bores

make sure that the small O-ring sealings are properly in place.





when inserting the tube: make sure that the positioning pin of the tube housing meets the positioning hole of the tube head

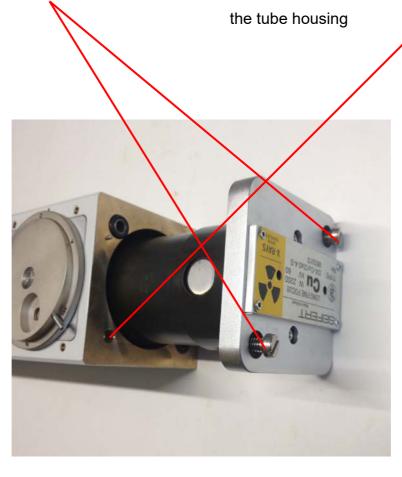
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- 1. carefully move tube into housing
- 2. do not apply force
- 3. you will feel the force of the spring of the high voltage contact when approaching the end position of the tube

4. insert the screws into the tube head and screw them into the tapped holes of



- 5. fasten the two screws stepwise alternating between the two screws until you feel the elastic force from squeezing the O-rings
- 6. tighten the two screws finally until you feel that the O-rings are queezed and the tube head is sitting on the housing
- 7. do not apply more torque than necessary to feel the tube sitting closely on the housing