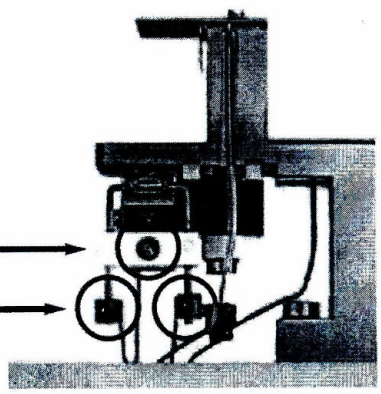
Analyzer cell maintenance

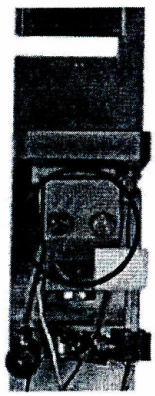
Removing the filament

Remove the filament by unscrewing the retaining screw and loosening the 2 connection screws.



Removing the electron collector

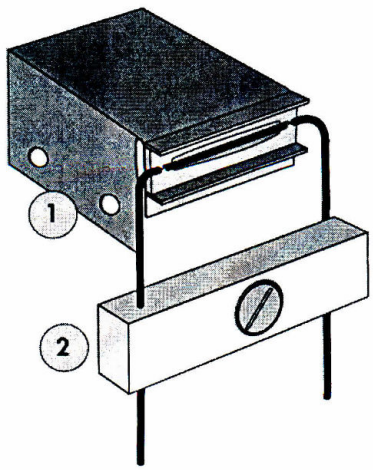
Remove the retaining screws.



Replacing the filament and the electron collector

Install the electron collector (**1**) on the ionization chamber by partially tightening the two screws.

Install a new filament (**2**) by inserting the two wires into the connectors (do not tighten the latter)



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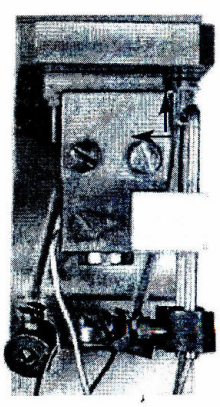
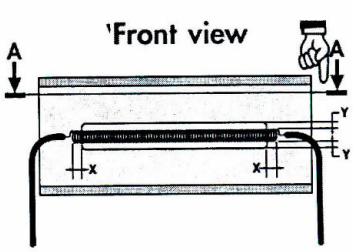
Analyzer cell maintenance

The correct condition and adjustment of these components are determining factors in maintaining the specifications of the detector.

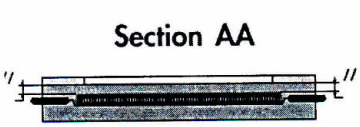
Adjusting the components



The insulator is perfectly seated on the two faces of the support.
The filament is centered in the electron collector (the same number of turns on each side of the collector opening - the **X** dimension in the front view diagram).
Continue to adjust the collector so that the filament is vertically centered in the collector opening and is parallel to the opening (the **Y** dimension in the front view diagram).
Tighten the 2 collector retaining screws completely.



If necessary, fine adjust the parallelism between the axis of the filament and the axis of the collector oblong opening by adjusting the squareness of the collector (Work on the area marked ☞ in the diagram).



Check that the filament is correctly aligned on the axis indicated by the section **AA** in the diagram. If necessary, adjust one of the branches of the filament's two conductors located above the insulator to correct this alignment.

Tighten the filament electrical connections.

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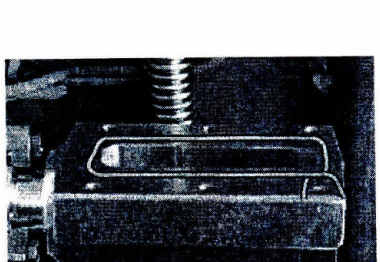
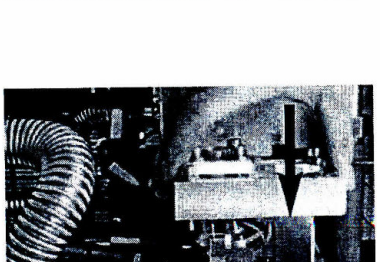
Analyzer cell maintenance

Installing the cell's metal seal

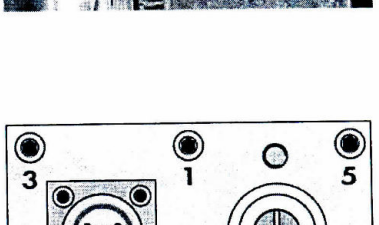
Place the metal seal in the cell body seal seat.
Check that the point where the 2 ends of the seal cross is located near a retaining screw, whith one end on either side (or use an elastomer seal)

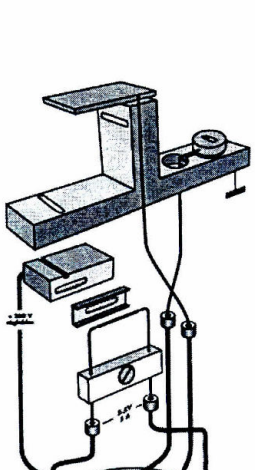


Check that no electrical conductor is located outside the area delimited by the guide piece. Install the cell, taking care to lower it into the duct without touching the sides. Install the 6 screws with their respective washers.



Tighten the 6 screws, in the sequence shown at right to a torque of **0.8 m.daN**.





Electrical connections JAEGER connector

1 Filament
2 Triode electrode
3 Braking electrode
4 Ionisation chamber
5 Filament
6 Ground

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