

Ion Chamber - Desiccant Replacement Instructions

Introduction



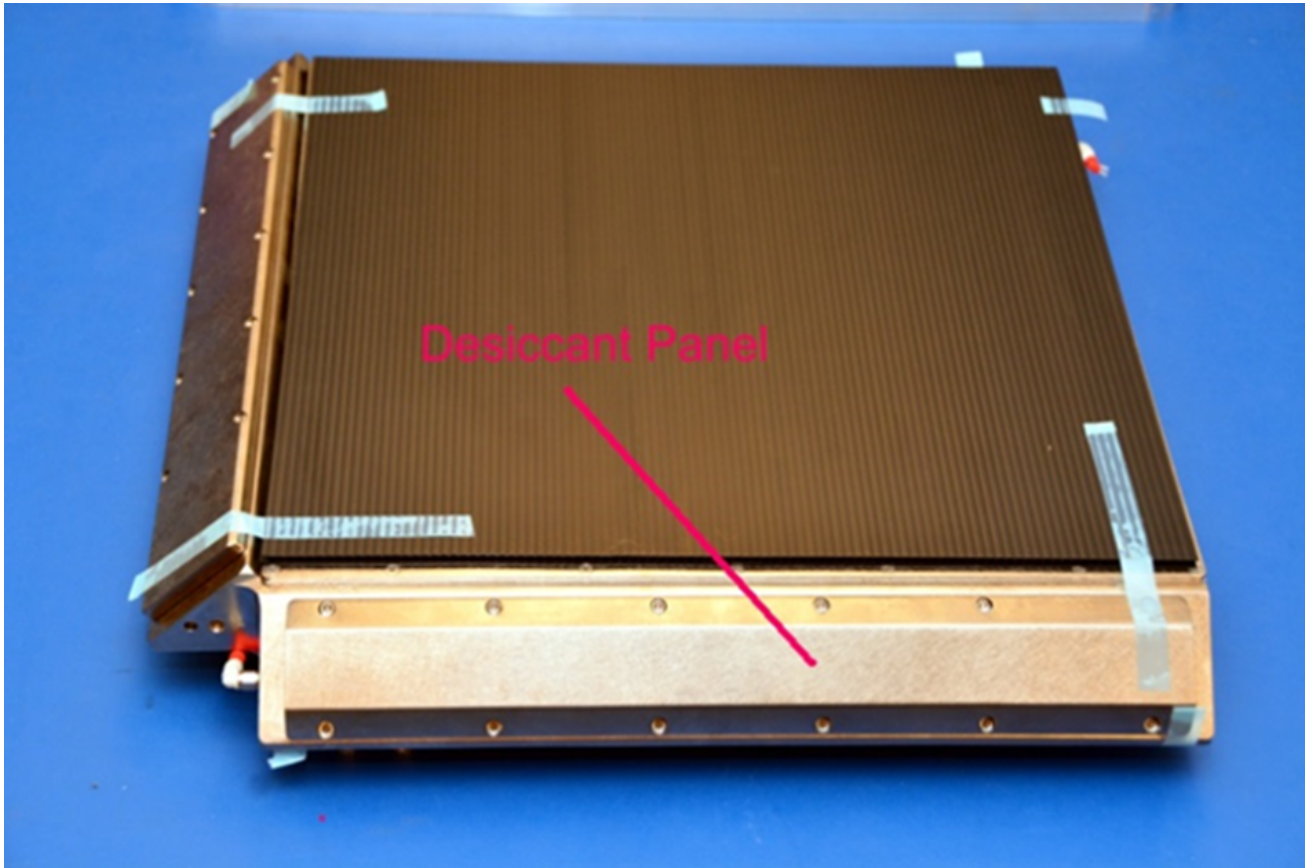
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Purpose	Describe proper replacement instructions for desiccant packs.
Scope	Pyramid ion chamber desiccant replacement for existing users.
Intended Audience	Owners of ion chamber devices with user serviceable desiccant.

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Desiccant Replacement

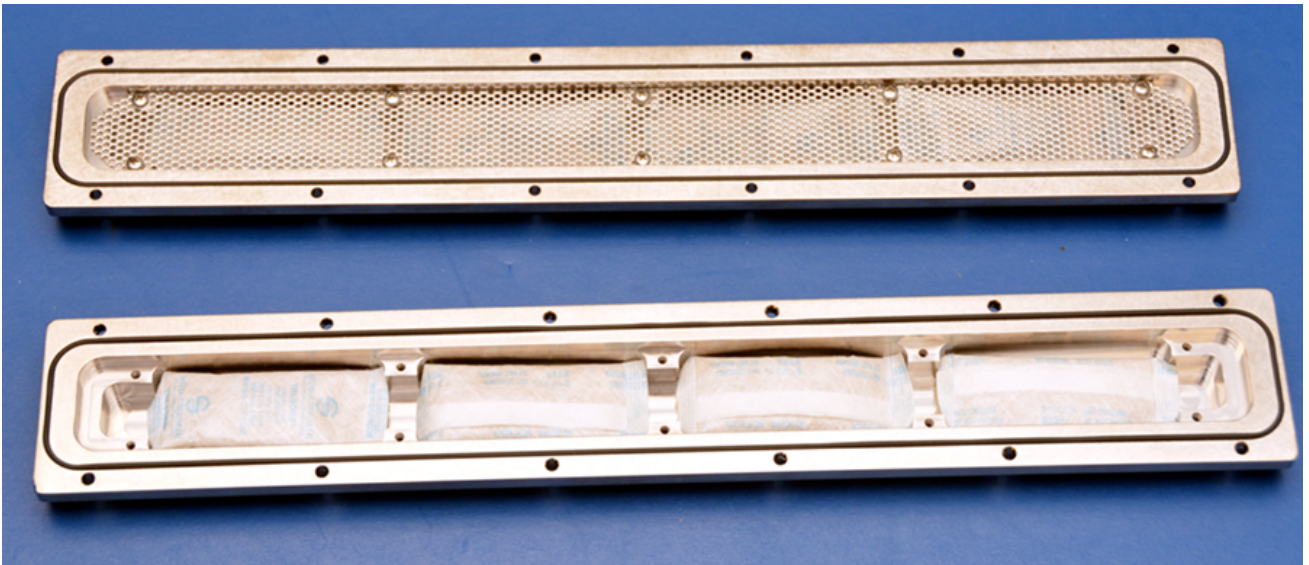
1. Disconnect and dismount the ion chamber from the beamline and carefully place it connector-side down on a clean, soft surface. Cover the windows with protective paper or cardboard to prevent unintentionally puncturing them.



Location of desiccant panel cover.

2. Prepare the replacement parts:
 - a. If you are replacing the desiccant packet, remove the packets from the outer packaging. The outer packaging will contain desiccant packets for shipping purposes. Discard these. Do not open the inner packaging until step (6).
 - b. If you have received a fully mounted panel, remove the outer packaging. Do not open the inner packaging until step (9).
3. The desiccant is in the thicker of the two panels. Remove the panel using a 2.5 mm Allen key. Start by slightly loosening each screw M3x8 screw in a rotary pattern, then keep working around the pattern until the screws are loose. Remove the screws and retain.

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Desiccant cover with and without protective mesh.

4. Carefully remove the panel. Place it on the table with the desiccant facing up.
If you are replacing the entire pre-mounted panel, remove it from its packaging and skip to step (9).
5. Remove the cover mesh, retaining the screws and lock washers.
6. Remove the old desiccant packets and discard. Replace with the new packets.
7. Make sure that the packets are clear of the mounting surface and replace the cover mesh. Replace the screws and lock washers, tightening securely.
8. Wipe the “O”-ring and “O”-ring mating surface with a clean lintless wipe.
9. Replace the panel on the IC. The panel does not have a particular orientation.
10. Replace the mounting screws, and lightly tighten. In a rotary pattern, gradually tighten the screws until secure.
11. Monitor environmental conditions and do not run beam or turn on high voltage until internal humidity is below 10%.

✓ DESICCANT REPLACEMENT COMPLETE

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Document Control

This document has been reviewed and approved as follows.



Document Control

Current document version: v.1

No reviewers assigned.

Signatures

for most recent document version

Friday, Dec 15, 2023, 05:58 PM UTC

[Matthew Nichols](#) signed with meaning **Review**

Version	Description	Saved by	Saved on	Status
v2	Minor corrections to the wording of instructions.	Matthew Nichols	Dec 15, 2023 5:56 PM	APPROVED
v1	Initial release	Harvey Jules Nett	Sep 5, 2023 5:43 PM	APPROVED