

Procedure for NHC shielding window gasket change

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- 1. Setup work table, supplies, and leak detector in cold side area**
Required: Table, rubber stripping to support glass, wypalls, leak detector w/ sniffing attachments, helium supply with regulator, gauge, fittings, etc
- 2. Ground the window assembly by clamping a grounding wire to the bare metal of the window drain valve and a nearby un-painted electrical conduit**
Requires: grounding cable with clamps
- 3. Drain window overnight into 55 gallon drum (Hot Cell Services drawing #96173-100 calls for 50 US gallons)**
Requires: empty drum or pails, fittings and hose to attach to drain
- 4. Leak check the window: purge window with helium, then pressurize with 12-13 in WC of helium (~0.45psi). Observe pressure drop over 2 hours (known small leak in pressure gauge). Sniff for helium release around window edges, fittings, etc. Record results.**
- 5. Change the cold side window gaskets following Section 4.2 from Hot Cell Services procedure HC-MF-107.**
Requires: 0-50ftlb and 0-120inlb torque wrenches, guide pins, socket wrench and sockets, replacement gaskets, gasket adhesive, glass cleaner, vacuum cups (4 total)
- 6. Repeat the leak check procedure from Step 4, sniffing for helium only on the cold side. Record results.**
- 7. Change the hot side window gasket using the same procedure as in Step 5.**
- 8. Repeat the leak check using the procedure in Step 4. Record results.**
- 9. Lift the new drum of oil above the height of the window and syphon new oil directly into the window using the ¼" Swagelok fitting at the top of the window frame**
- 10. Reconnect the expansion tank and add oil to the tank until it is approximately 3/4 full**
- 11. Monitor the window for drop in oil level and any signs of leakage**