
New Folder Name 40m Vacuum Checklist

40m Vacuum System Backfill Checklist MEZ, 2/28/91

- Shut Down HV Electronics, Put TM & BS Orientation Systems on LOCAL
 - Rack V0
 - * Bin D2; Switch RF Power Amplifiers # 1 and # 2 →OFF
 - Rack V1
 - * Kepco BHK High Voltage Supply, bottom; switch DC →OFF
 - Rack V2
 - * Schroff Bin 1, middle two modules; switch HN, LN →LOCAL
 - * Schroff Bin 2, right two modules; switch Huey, Louie →LOCAL (red LED's glowing)
 - * Bin D5, left of center; Pitch, Yaw, Position Control module for beamsplitter, switch POS. and POINT. →LOCAL (both red LED's glowing)
 - * Bin D7, far right side; switch both 300V DC SUPPLY modules →OFF (wirepushing high voltage)
- Shut Down Ion Gauges, Seal Off Vacuum Pumps
 - Granville-Phillips 270 controller near Cryo (middle of East arm); toggle FILAMENT →OFF (pull switch up to toggle state if needed; red LED should be off, filament on gauge should not be glowing)
 - Granville-Phillips 307 controller (top of Rack V2); IG1 and IG2 →OFF (neither green LED glowing, no filaments glowing)
 - Close Cryo Gate Valve (middle of East arm); rocker switch on tube support tower near cryo →CLOSED, unplug interlock cable from top of switch box for safety
 - Close Turbo Gate Valve (middle of South arm); locking toggle switch on aluminum switch box near turbo →CLOSED (middle switch in UP position)
 - Confirm both gate valves are fully closed and locked; protruding pin on end of pneumatic actuator cylinder should disappear inside housing

- Backfill System

- Check that N_2 regulators show at least 1,000 PSI before opening
- Check that valve on regulator output is **OFF**, then open cylinder valve and adjust regulator to give between 5 and 10 PSI (**NO MORE THAN TEN PSI**)
- Check connection to ping-pong ball overpressure relief valve, open regulator output to purge line
- Check connection to system backfill valve; open valve slowly
- Monitor cylinder pressure periodically during backfill; **NEVER** let cylinder go below 200 PSI (if it gets low, close all valves and change cylinder for full one immediately; re-purge line to remove air)
- When ping-pong ball is floating, check if bell jar will tilt easily (be careful). If not, reduce N_2 regulator pressure and continue backfill
- Close **ALL** backfill valves for safety after backfill is complete