

PLD Thermionics Reset Instructions: For power outages only!

1. Check the pressure on the KJL multigauge. If it is still low ($<10^{-4}$ Torr), close the Main Chamber gate valve (the pencil sharpener looking crank). If you were outside of the building when the power loss occurred, the pressure is likely too high to bother.
2. Check all three pressure gauges. If the pressure is $>10^{-5}$ Torr and rising, press EMIS on the ion gauge until it reads OFF, and switch off the Cold Cathode Gauge (MKS).

IMPORTANT!!!!!! If either of these pressures is above stated i.e. $>10^{-3}$ Torr, do not continue further, but instead pump the chamber down as if it had been vented → Pump Down Instructions.

Otherwise , continue.

3. Flip the Main Power Switch on the silver panel (Power Distribution Box) down then up to restore power. Press the red Reset button on the right side of the main panel (to open the RP to the TP). Then press the red Reset button on the LL panel.
4. The roughing pumps (RP) should start and the turbo controllers will power up. The Main turbo pump (TP) is connected to the UPS so should start automatically. Let the Main TP get close to normal speed (near 35000 rpm, at least 30000 rpm), then start up the Load Lock (LL) TP by pressing start.
5. Check the pressure again on KJL multigauge to make sure the pressure is dropping. (If you turned it off, press EMIS again until it reads a pressure again.)
6. Re-open the Main Chamber gate valve again (if applicable)
7. Check that the pressure lowers into 10^{-9} Torr range.

PUMP DOWN INSTRUCTIONS:

Do 3, then 5 from above to let RPs lower pressure before turning on the turbo pumps. If the UPS does not turn on when you Flip the Main Power Switch, turn it on when the pressure reaches the milli Torr range to start up the Main TP.