Before Beam up to Gate

Gun & High Voltage

Inspect HV cable, tighten connections, and grease R28 connectors Verify HV ramp rate/controls OK to blue tank first and record leakage First HV to gun w/ dummy or no puck and monitor HVPS current, gun vacuum, anode current Heat/activate photocathode, install to gun and QE scan

Laser

RF on/stable w/ good power levels 3-lasers ON and good/stable power levels Verify vl/pulsed/cw modes Laser alignment to gun, good retroreflection QE scan and x/y stepper range good Basic Pockels cell alignment PSS shutters in place

Vacuum

Verify ion pumps in various regions are ON and reasonable value Verify EPICS accurate and recorded in archiver Verify valves actuate OK, no leak Address/hi-pot high/unstable readings

LCW

Verify good flow at PCUP, FC1, FC2, 0D/1D, 2D Verify chopper water skid good Verify capture water skid good Check for any leaks

Apertures/Cups

Verify positions of A1/A2 Verify actuation of A3/A4 and Faraday cup Lubricate chopping apertures/threads Verify current readbacks tested OK

Magnets

Verify magnets make current, hyst. cycle OK

RF Verify chopper, buncher, pre-buncher ON ok Verify capture/0L02 ON ok Monitor vacuum while warm RF comes on

After Beam up to Gate

Polarized Source Beamline at 130keV (1 beam + 1 fix)

- Restore 130kV like May 2012 all-save
- Recover and lens center beam on viewers, verify magnets functional
- Recover chopper RF, verify 3-beams, test prebuncher, reach 0105
- Verify BPM's, aperture and cups with pulsed beam
- PSS Certification
- Iterate pulsed beam setup to FC1

Chopper Setup at 130keV (2 beam + 1 fix)

• Not written

Buncher/Capture/0L02 Setup at 6.2 MeV(2 beam + 2 fix)

• Not written

Beam Momentum Measurements (1 beam)

• Not written

Beam Polarization Measurements (2 beam)

• Not written

Test/Verify/Fix Software associated with EPICS upgrade (2 beam)

• Not written