



## ○ Daily/Every Print

- Laser Window, inspect and clean if needed
  - Laser Window Assembly O-Rings
    - consumable replace as needed
    - PM replace (1yr)
- Black Body, inspect and clean if needed
- Chamber door seal, clean as needed
- Chamber window, clean as needed
- Chamber interior, clean as needed
- Chamber lights, clean as needed
- Check chiller flow (at least 7 lpm) and temperature (20C)
- Check Laser window N2 flow
- Check N2 and air regulator settings (note: N2 regulator pressure will drop if purge is on)
  - N2 – used for purge, overflow transfer, laser window flow, Clean Sweep IR
  - Air used for Return Piston motion, Blackbody motion, Feed bar motion

## ○ Weekly

- Overflow cleanout, inspect and clean as needed
- Blackbody – Inspect, clean as needed
- IR sensor – Inspect, clean as needed
- Roller, clean as needed
- Chamber door seal , inspect and clean as needed
  - consumable replace as needed
  - PM replace (1yr),
- Sock Filters (ProX500 AND MQC), inspect, empty as needed
- Inspect compressed air condensation/oil trap, empty if needed

### **Note: Safety interlocks are located on:**

- Overflow cleanout cover
- Blackbody inspections
- Inner Print Chamber door
- Outer Print Chamber door
- Rear Filter box
- Access to Laser/scanner box (should not be accessed by user)

All power is off when all interlocks are not made. If any interlock is broken while moving the piston or roller, then they will need to be homed before continuing.





- **Monthly**
  - Part Piston Cylinder wall, inspect
  - N2 Exhaust Box – Inspect port to chamber, clean if needed
  - N2 Exhaust Box – Clean Box interior
  - Sock and Hepa filters, clean
  - Chiller air filter - clean
- **Every 3 months**
  - Electrical enclosure filters(2) – replace
- **Every 6 months**
  - Part Piston Cylinder wall – lubricate
  - Sock and Hepa Filters – replace
  - Chiller coolant filter – replace
  - Chiller air filter - replace
  - N2 Exhaust Filters – replace
- **AS NEEDED**
  - Offline IR calibration
  - Reboot application computer
  - Exit Sinter/Kill Sinter



- **MQC – User Maintenance**

- Inspect compressed air condensation/oil trap, empty if needed
- Wipe surfaces, sift, discard unusable powder, as needed
- Disposal container
  - Inspect weekly, empty as needed
- Sifter screen
  - Vacuum after every use
- Sock filter
  - Inspect weekly, clean monthly, replace at 6 months

- **3D Preventative Maintenance – Annual**

- Replace laser window assembly o-rings
- Replace Chamber door seal
- Replace chamber lights (if needed)
- Replace all filters
- Check and recalibrate laser/scanner