

To do list for laser maintenance 8.28-8.30

1. Clean the turning box and compressor chamber, remove all broken glass piece on bread board and mirror mount.
2. Test chamber leakage, check all flanges and o-rings and windows.
3. Check all optics in turning box and compressor chamber, replace all optics with damage spots on it, measure the reflectivity of compressor.
4. Check focal spot quality and pulse duration at full power.
5. Training of using of fully amplified laser beam, adjusting compressor grating pair and operating the autocorrelator.
6. Training of handling vacuum system.
7. Add independent motor electric feedthrough for controlling 870 steering mirror and pulse duration.
8. Shift the booster amplifier crystal and use a good spot on it for amplification.
9. Add one more camera to check the beam pointing after booster amplifier.
10. Re-organize BNC cable under optical tables, remove all the unused hardware into equipment room and make space for laser control computer rack.