

MGentleLASE *Routine Preventative Maintenance Procedure*



This procedure covers the routine preventative maintenance (PM) required for the MGentleLASE laser system, which must be performed every twelve months or 500K pulses, whichever ever comes first. The purpose of this procedure is to replace the DI Water and Dust filters, HP Slider or Fiber window, inspect optics and verify system calibrations.

WARNING

DURING THIS PROCEDURE IT IS POSSIBLE THAT THE LASER MAY FIRE, EMITTING LASER RADIATION. THEREFORE SAFETY EYEWEAR MUST BE WORN. THE EYEWEAR MUST HAVE AN OPTICAL DENSITY OF AT LEAST 5.8 AT 745 - 765 NM.

THE ELECTRICAL AND LASER RADIATION HAZARDS PRESENT DURING SERVICING OF THE MGENTLELASE LASER SYSTEM CAN BE EXTREMELY DANGEROUS IF PROPER SAFETY PRECAUTIONS ARE NOT TAKEN. CONSEQUENTLY, THE LASER IS TO BE SERVICED ONLY BY THOSE QUALIFIED TECHNICIANS WHO HAVE RECEIVED APPROPRIATE TRAINING ON THE GENTLELASE LASER SYSTEM FROM CANDELA, AND WHO ARE FAMILIAR WITH THE SAFETY CONSIDERATIONS DISCUSSED IN THIS SECTION.

USE OF CONTROLS OR ADJUSTMENTS OR PERFORMANCE OF PROCEDURES OTHER THAN THOSE SPECIFIED HEREIN MAY RESULT IN HAZARDOUS RADIATION EXPOSURE.

PROCEDURE:

1. Record the "Before" test data sheet.
2. Turn off the laser and unplug the laser from the wall. Remove all skins.
3. Remove the dust filter attached to the front of the chassis. Apply the new dust filter to the front of the chassis.
4. Remove the two dust filters in the bottom of the fluid section. Apply the new dust filters to the bottom of the fluid section.
5. Drain the DI water using the drain valve in the fluid section near the heater manifold.
6. Fill the DI reservoir with distilled water only to within $\frac{1}{2}$ -1 inch of top. Turn the laser on.
7. Check for leaks. Fill the DI reservoir to the proper solution level.
8. Inspect, clean or replace beam splitter in Head detector assy.

9. Turn the laser off. Replace skins on the laser.
10. Turn laser on and wait until warm-up period is finished.
11. Replace the window on the distal end of the Slider or Fiber. This allows for a more accurate calibration and improved performance of the laser.
12. Complete the checklist below.
13. Perform the tests on the “After” test data sheet.

PROCEDURES/CALIBRATIONS

Note: All procedures are located in the Service section of the Service Manual

1. Check High Voltage calibration. Complete _____
2. Check Fluid Temperature calibrations. Complete _____
3. Check the DCD Pressure. Complete _____
4. Replace the window in the Fiber. Clean or replace
HP lens or lens cap. Complete _____
5. Clean or replace focusing lens (lens cell). Complete _____
6. Verify Head detector calibration. Complete _____
7. Verify aiming beam calibration. Complete _____
8. Verify the laser rail and fiber alignment. Complete _____
9. Calibrate Calport Detector.
Be sure all Sliders have a clean window. Complete _____
10. Verify the DCD Bubble circuit calibration. Complete _____
11. Calibrate all spot sizes of both fibers. Complete _____
12. Record the "After" test data sheet. Complete _____

