

# **MGL & GentleLASE *Flashlamp*** *Replacement Procedure*



## FLASHLAMP REPLACEMENT

**NOTE:** Exercise extreme care. Cleanliness of optics is essential. Refer to Service Procedure 8503-01-0060 for optic cleanliness.

For GL systems refer to drawings 7121-99-6700 and 7121-99-6780 for specific details.

For GL Plus, GL 18mm and GL LE systems refer to drawings 7121-99-6700 and 7121-99-9390 for specific details.

For GL systems refer to drawings 7121-99-6700 and 7122-99-3298 for specific details.

Appropriate optic handling precautions and techniques must be followed in order for the laser to operate for its maximum lifetime. Clean powderless finger cots or gloves must be worn when handling the GentleLASE flashlamps. The flashlamps are both fragile and expensive. Therefore, it is important to handle them carefully. Some additional suggestions are: keep these components in their containers until they will be installed into the assembly. Hold them over the bench, not over the floor. If they need to be put down, lay them on clean piece of lens tissue over a piece of foam such as in a typical optics container.

Avoid the need to clean the optics other than by gently blowing the dust off of them with filtered, compressed nitrogen or air. Lightly wipe with methanol, acetone, or propanol if necessary.

1. Remove the Laser Head per the Laser Head Replacement Procedure. Place on open flat surface.
2. There are two lamp o-ring retainer end cap plates for each flashlamp located at each end of the laser head. These retainers are what hold the flashlamps in place. Remove the two screws of each o-ring retainer end cap plate that secure the flashlamps. Pay attention to component order when disassembling.
3. Remove the flashlamps from the laser head.
4. Thoroughly clean the new flashlamps so that they are free of fingerprints. Also clean the flashlamp wires so that when the lamps are installed into the cavity channels, no contamination occurs.
5. Install the flashlamps in the proper orientation per drawing 7121-99-6700. Install new o-rings on each end of the flashlamps. Push the o-rings into the o-ring grooves. Make sure that the flashlamps are evenly positioned in the pump cavity.
6. Clean and then carefully place the lamp o-ring retainer end cap plates over each end of the lamps and fasten into place with screws.
7. Install the Laser Head on the Monolithic Laser Rail. Refer to 7121-99-6780, 7121-99-9390 or 7122-99-3298 drawing for specific details. Be sure to tighten the screws until the lock washers **just start to compress. Do not flatten lock washers.**

8. Perform an alignment verification; for GL systems refer to Service Procedure 8503-01-0610; for GL PLUS, GL 18mm and GL LE refer to Service Procedure 8503-01-0690; for MGL refer to Service Procedures 8503-01-0825 and 8503-01-0826.

