

# **MGL & GentleLASE Handpiece Lens Replacement Procedure**



**HANDPIECE LENS REPLACEMENT**

**NOTE:** Exercise extreme care. Cleanliness of optics is essential. Refer to Service Procedure 8503-01-0060 for optic cleanliness. Refer to drawing 7121-99-6980, 7121-99-7240, 7121-00-3350, or 7121-00-3351 for specific details.

1. Remove Fiber assembly from Delivery System and laser. Place on an open flat surface.
2. Remove the screw (or screws, some have 2) that secure the handpiece lens cap at the distal end of the fiber assembly. Pay attention to the component order when disassembling.
3. Remove both optics, o-rings and the one spacer from the handpiece lens cap:
  - Pry out first lens with an Exacto knife or turn barrel upside down and tap on a table to dislodge the lens.
  - Pry out the first o-ring.
  - Remove spacer.
  - Push out the second lens.
1. Inspect the o-rings. If cracked or defective, discard and replace. If o-rings need to be cleaned, use only Propanol, lens tissue, and/or cotton swabs. If possible, blow off with filtered compressed air / nitrogen.
2. Re assemble per drawing 7121-99-6980, 7121-99-7240, 7121-00-3350, or 7121-00-3351 - Fiber Assembly as follows:
3. Install the first o-ring **only** (the o-ring closest to the end without the holes) into the lens cap and fully seat the o-ring into the o-ring groove. Clean lenses if needed per procedure mentioned above. Also inspect and clean spacer, if needed, with propanol or methanol. When satisfied that the lenses and spacer are clean, blow off each item with filtered compressed air / nitrogen, if available.
4. Position the distal end of the fiber facing up. Carefully stack the two lenses with the spacer in between them onto the distal end of the fiber. Lens orientation is “belly-to-belly” per drawing 7121-99-6980, 7121-99-7240 or both flat sides toward fiber per drawing 7121-00-3350, and 7121-00-3351. Insert the lenses and spacer into the lens cap. Once the lenses are fully inside the cap, gently tap the side of the cap to properly set the lenses against the spacer. Continue inserting the lenses until they stop, which indicates the first lens has reached the first o-ring. Slowly push the cap against the distal end of the fiber to push the first lens passed the first o-ring. While holding the distal end of the fiber face up, carefully remove the cap from the fiber. **Be careful, the second lens and possibly the spacer may come out!!**
5. Re-install the spacer, if necessary, and install the second o-ring into the groove above the spacer. Position the second lens onto the distal end of the fiber (facing up, convex side up) and insert it into the cap, again pushing after it stops to push the

second lens past the second o-ring. Remove the cap to verify that the lens does not come out, indicating proper lens seating. When shaken, a lens cap with properly seated lenses will not rattle.

6. When satisfied that the lenses are installed properly, hold the lens cap vertically (fiber end facing up) and carefully blow any debris out from the lens barrel using filtered compressed air / nitrogen (at low pressure, if available). Visually inspect lenses for acceptability. Continue when satisfied.
7. Holding the lens cap assembly vertically, slide the distal end of the fiber assembly all the way into the lens cap until the fiber assembly butts up against the lens inside the lens cap. Make sure the gap between the end of the lens cap and the shoulder on the distal end of the fiber assembly is between .025" and .035".
8. Firmly, but gently, hold these parts together and secure with screw (or screws).

