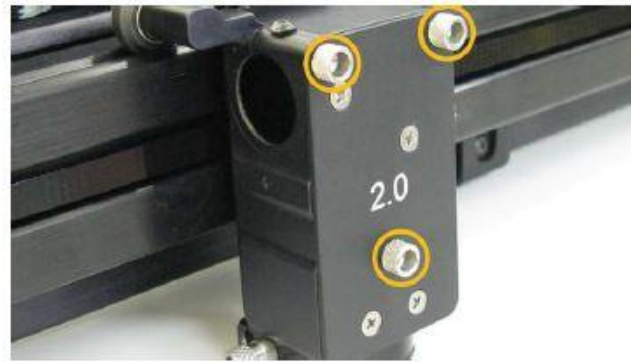




Replacing a final focusing lens in a Universal Laser Systems VLS/PLS and MVX models involves a series of careful steps. Here's a step-by-step guide to help you through the process:

1. **Safety First:** Ensure that the VLS is powered off and unplugged.
2. **Access the Lens Area:** Open the top door of the VLS. Once open, carefully move the X-axis arm forward.
3. **Locate the Focus Carriage:** Identify the focus carriage within the machine. The focus carriage is located on the X-axis arm assembly.
4. **Remove the Thumbscrews:** Find the three thumbscrews on the focus carriage. These screws are hand-tightened and can be removed without the use of tools. Carefully unscrew and set them aside.



5. **Slide Out the Lens Kit:** Gently slide the lens kit out of the focus carriage. Handle it with care to avoid any damage to the lens or the #3 mirror.



6. **Place Lens on a Safe Surface:** Set the lens kit down on a non-abrasive cloth. This is to prevent scratches or other damage to the lens.
7. **Remove the Old Focusing Lens:** Locate the two screws attaching the focusing lens to the front cover plate. Remove these screws and then gently lift the optic (old focusing lens) out of its position.



8. **Install the New Focusing Lens:** Take your new focusing lens and attach it to the front cover plate. Ensure it's aligned properly before screwing it in place.
9. **Clean the #3 Mirror and Lens if Necessary:** Before reinstalling the lens kit, it's a good practice to clean the #3 mirror and the new focusing lens. Use appropriate cleaning tools and solutions for optical components to avoid scratching or damaging them.
10. **Reinstall the Lens Kit:** Carefully slide the lens kit back into the focus carriage. Ensure it sits properly and securely in its designated position.
11. **Secure with Thumbscrews:** Reattach the three thumbscrews to the focus carriage, securing the lens kit in place. Make sure these are tight enough to hold the lens kit securely but avoid over-tightening, which could cause damage.

12. Tighten the Focusing Lens Screws: Finally, tighten the phillips screws that secure the focusing lens to the front cover plate. Again, ensure these are snug but not overly tight.

Remember, throughout this process, handle all components with care to avoid any damage.

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