

CPU Initialization / Auto-Z Calibration

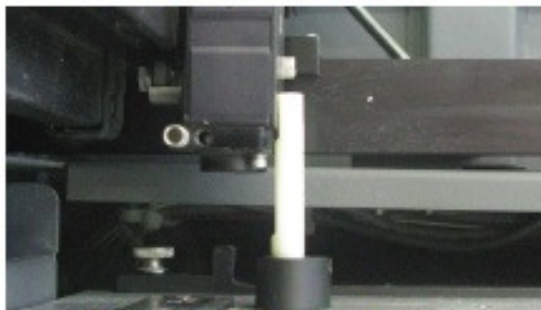
NOTE: This procedure must be performed with the aluminum Engraving Table installed. Do not use the honeycomb Cutting Table for this procedure. Make sure that there are no accessories, materials, or pieces of material on the table when doing the calibration.

Power up both the computer and the VLS. Home the Z-Axis by clicking the HOME Z button on the VIEWER tab of the UCP.

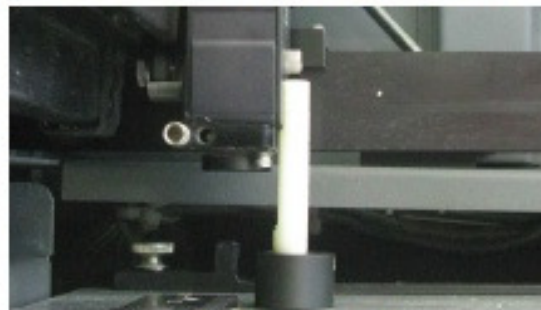
- Using the UP and DOWN arrow buttons, either on the machine (on the front keypad) or in the UCP, bring the Z-axis table up.



- Using the appropriate Focus Tool for the lens installed, focus directly on the surface of the table.



Out of Focus: The table is too low.



Correct Focal Height

NOTE: If you are unable to focus to the surface of the Engraving Table due to the system preventing you from raising the table. You may be able to address this in the calibrate window. Use the UP or DOWN arrows to move the table as needed.

- In the UCP, click the **System** tab and choose the appropriate lens size from the **Lens Size** list.
- On the **System** tab, under **Lens Size**, click **Calibrate**. The following window appears:



- Click Save to accept the new Z Position, then click Yes when asked if you are sure you want to override the value.
- The Lens is now calibrated.

NOTE: if you have purchased additional Focusing Lens Assemblies, calibrate the Focusing Lens Assembly according to steps 1 through 4. Be sure to select the proper lens size from the list before calibrating.

- Calibration of the Lens Size and the Auto Z feature is now complete on the standard engraving table.

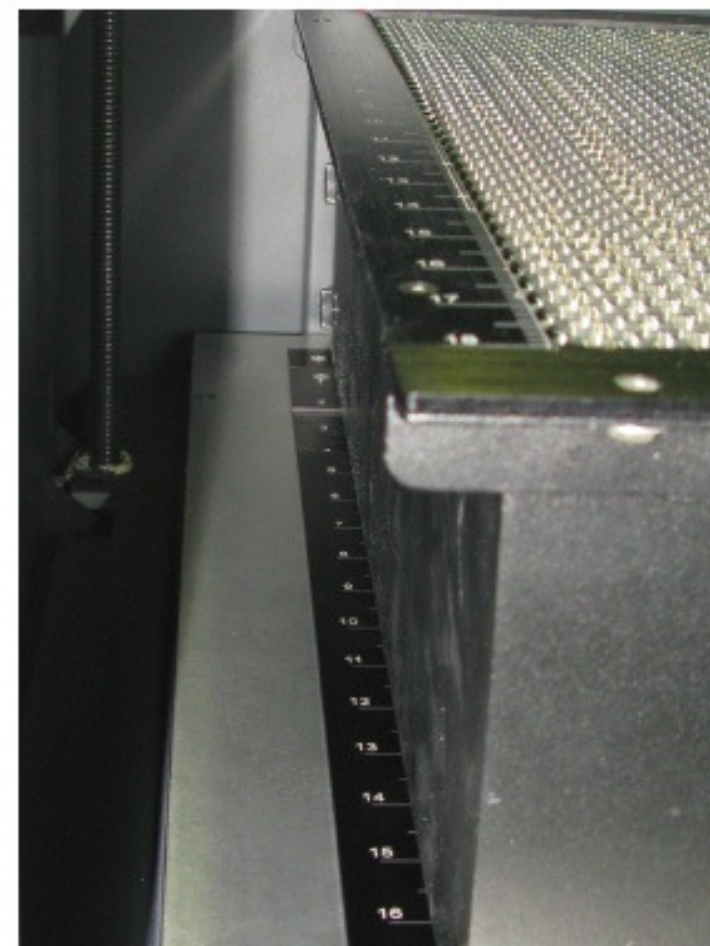
Flow-through Cutting Table Calibration

NOTE: Even with multiple Focusing Lens Assemblies, calibration on the Flow-through Cutting Table is only required for one of them; the calculation will be done automatically for all other optics sizes as long as they have been calibrated properly to the engraving table.

1. Turn the VLS ON and lower the engraving table all the way down by using the **Home Z** feature.
2. Open the front door of the laser system and carefully slide the Flow-through Cutting Table into the laser system so that its rear feet are squarely pushed up against the engraving table rulers on the top and left side of the table.

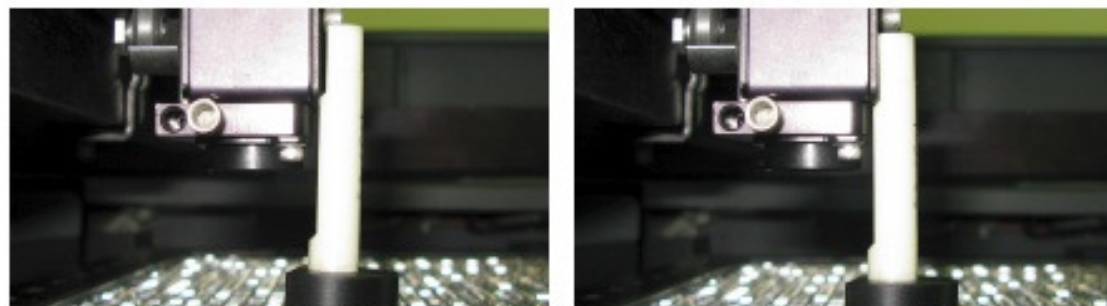


3. The rulers of the Flow-through Cutting Table should overlap the rulers on the engraving table.



NOTE: The front left foot of the Flow-through Cutting Table is offset. If you try to press both the front and rear left feet against the Y-Axis ruler, the Flow-through Cutting Table will not be square to the engraving table.

4. Manually focus the lens to the Flow-through Cutting Table surface using the appropriate focus tool. Bring the table up using either the UCP or the arrows on the keypad.



Out of Focus: The table is too high.

Correct Focal High

5. Go to the **System Tab**. Notice that the red CALIBRATE button for the **Cutting Table** box is activated.
6. Click CALIBRATE. The **Calibrate** dialog box will appear.



7. Accept the new Z-height by clicking SAVE, then click YES when asked if you are sure you want to override the value.



8. Calibration of the Z-height for engraving or cutting on the Flow-through Cutting Table is complete for this lens.