Monthly Make

June 2025: Personalized Rubber Stamp

THE WORKSHOP

The **Epilog Laser** in The Workshop is capable of engraving a variety of materials like wood, glass, rubber, and acrylic. **This project uses the Epilog Laser to make a personalized rubber stamp in four steps: Design, Engrave Block, Engrave Rubber, Assemble.**

The design file you use to laser-engrave a stamp must be a **vector-based design**. This project uses Adobe Illustrator, a vector-based graphic design program. The design must be **black-and-white** with no greyscale or colors!

Items Provided

the laser engraver

wooden stamp block

Safety Note:
Not all rubbers are laser-safe. Some release chlorine gas when engraved: not safe for you or the laser!

laser-safe rubber

scissors or a craft knife

ink pad and paper

mounting tape

What is a vector-based design?

You may be familiar with raster images, which are made up of pixels (tiny dots containing color data). Vector images are made up of mathematically-defined lines and nodes instead of pixels. Raster images may become blurry when you zoom in or out, but vector images never do: the lines stay crisp and easy for the laser to "read". This is important when engraving a stamp.
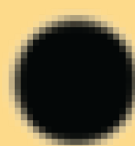
Raster
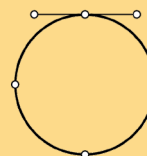
Vector

Safety Note:
When using the laser, always turn on the **ventilation fan** and the **air assist pump** before pressing "play".

PART 1: DESIGN

Make your design in Adobe Illustrator

1. Insert the USB flash drive into the laser computer and open the **Laser Engraved Stamp** folder. Inside are three files. One contains premade designs and elements that you can use while making your stamp. The other two are templates for a **1.75" Square** and a **1" x 2.75" Rectangle** stamp. Choose one of these two templates based on the shape of your design.

2. Using the **Selection Tool** (the black arrow in the toolbar in the upper-left corner of the screen), you can select elements to **Copy** and **Paste** into one of the blank templates. If you want to edit one of the premade designs, click to select it, then click **Ungroup** from the menu in the lower right.

3. You can edit the text and the fonts of the designs. Select the Type tool and double-click on a section of text to edit it. You may want to switch between the **Selection Tool** and the **Type Tool** as you edit your design.

Print your design to Epilog Dashboard

4. When you've finished designing, click **File** in the upper-left corner, then **Print**.

5. In the print window that pops up, make sure that the Printer is set to **Epilog Engraver**. Set the **Media Size** to **Custom**, then click Print in the lower right of the window.
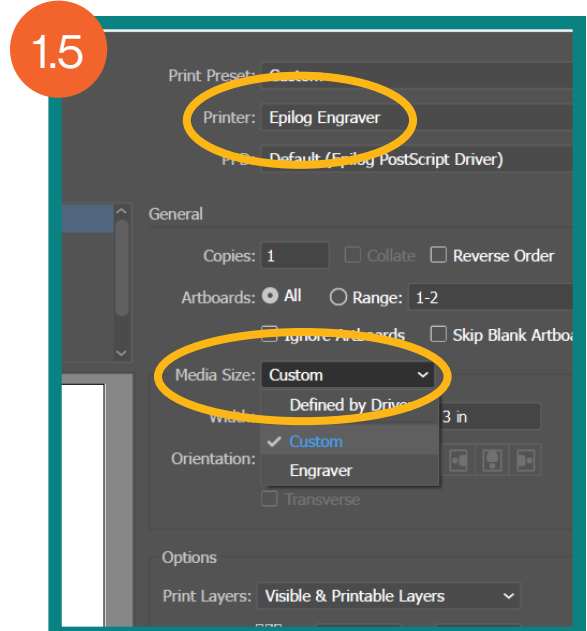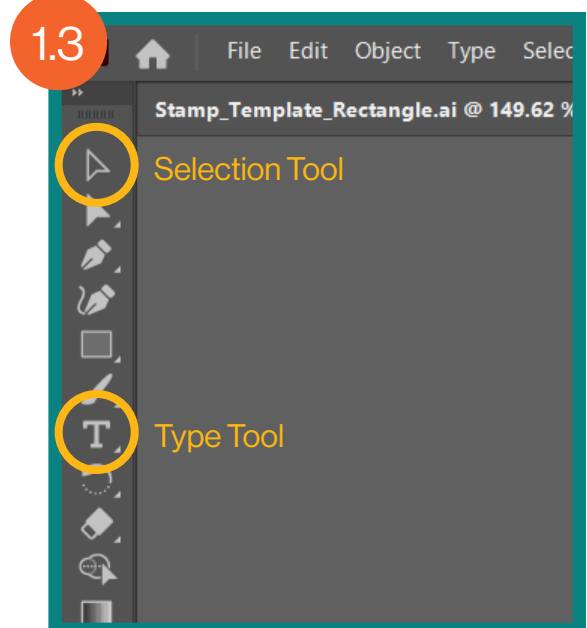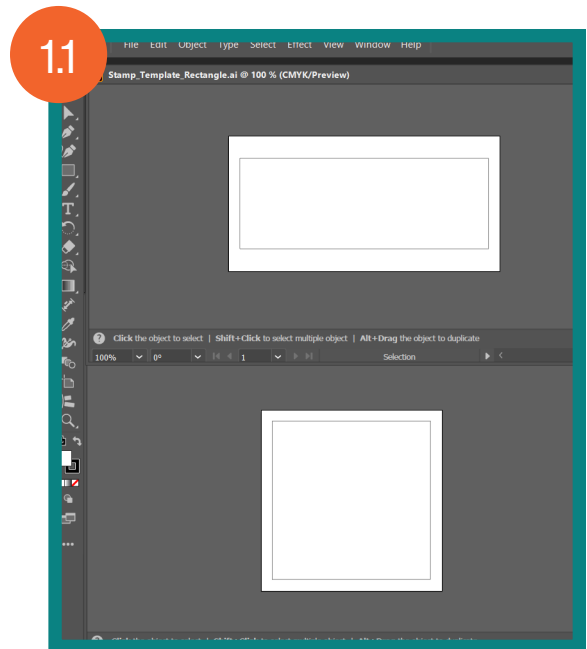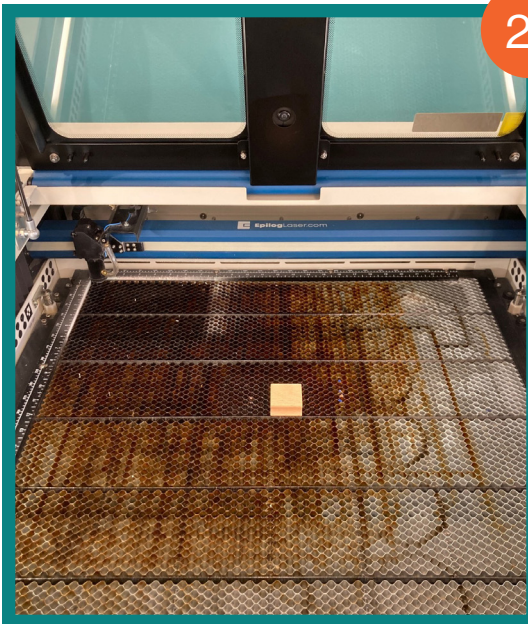
2.1

PART 2:
ENGRAVE THE STAMP BLOCK

### Focus the laser on the stamp block

1. Place a wooden block in the center of the laser bed.

2. On the laser's touchscreen, select **Focus**, then pull down on the joystick to lower the laser bed by about 1".

3. Select **Jog** on the touchscreen, then use the joystick to move the red indicator light over the wood.

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4. Select **Auto-Focus** on the touchscreen to focus the laser on the material. After the laser finishes focusing, select **Done**, then **Reset** to move the laser carriage back to the far corner of the machine.
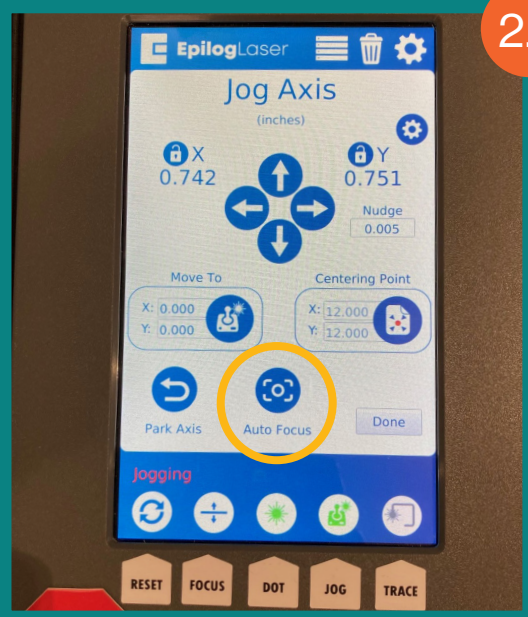
Adjust the engraving settings in Epilog Dashboard

5. If it hasn't automatically opened, double-click to open the **Epilog Dashboard** software on the computer.

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6. On the right side of the screen, click on the **Processes** box that contains your design. In the upper right corner of the box, click the icon to **Import Material Settings**. Scroll the list to find **Wood-Deep Engraving**, then select it and click **Import**.
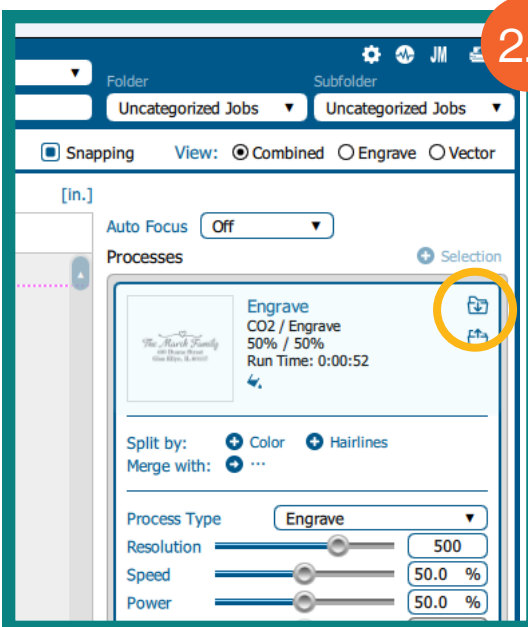
7. Change the **Dithering** to **Jarvis**.

8. Click on the **Processes** box containing the vector cut line. Change the **Process Type** from Vector to **Off**.

9. On the left side of the screen, click the checkbox next to **Video** to turn on the camera, if it hasn't automatically turned on.

10. Click and drag the design from the top left corner of the screen to position it over the wooden block.

11. In the lower right corner of the screen, click **Print** to send the job information to the laser.

Engrave the stamp block

12. On the laser's touchscreen, select the job from the **Job List** and select **Trace** to preview the area where the laser will be engraving.

13. Turn on the ventilation and the air assist pump. See the red box on page 1.

14. Press the glowing play/pause button to begin engraving.

15. When the laser beeps, you may open the lid. Remove the block from the laser bed.

PART 3: ENGRAVE THE RUBBER

## Focus the laser on the rubber

1. Place a piece of the rubber stamp material onto the bed of the laser.

2. Select **Jog** on the laser's touchscreen, then use the joystick to move the red indicator light over the stamp material.

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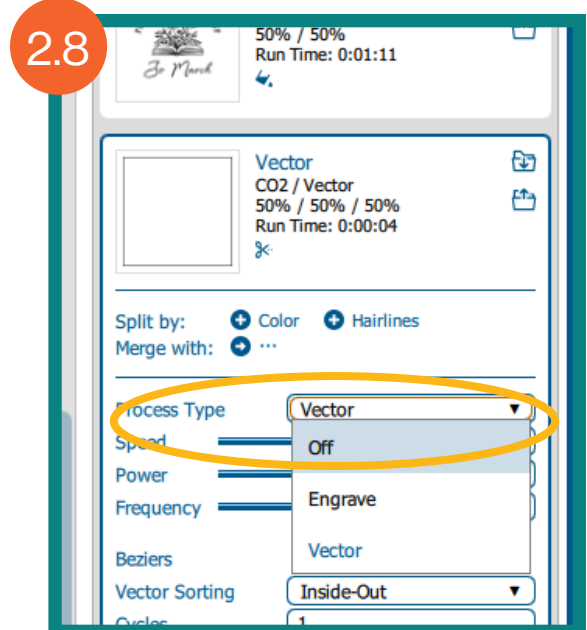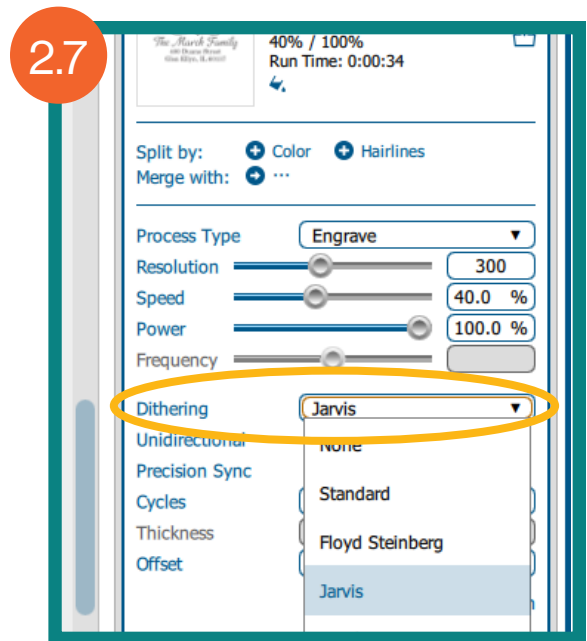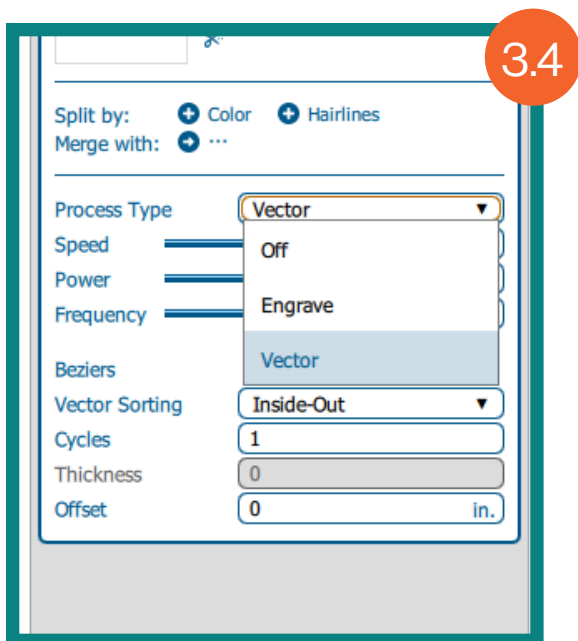
3. Select **Auto-Focus** on the touchscreen to focus the laser on the material. After the laser finishes focusing, select **Done**, then **Reset** to move the laser carriage back to the far corner of the machine.

Adjust the engraving settings in Epilog Dashboard
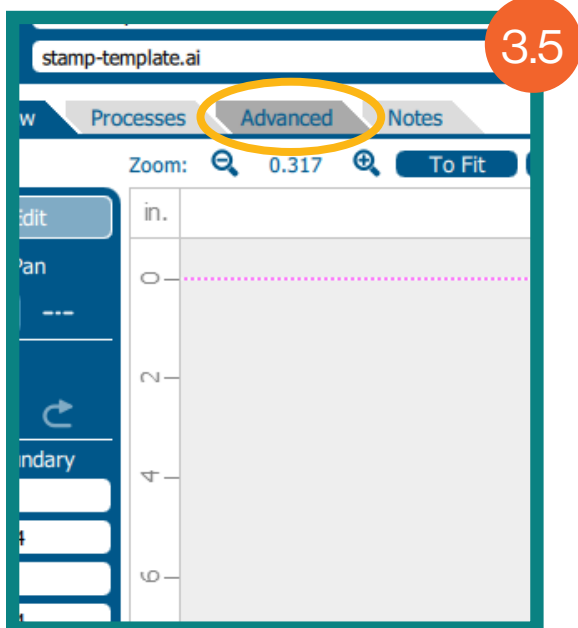
4. In Epilog Dashboard, open the **Processes** box containing the vector cut line. Change the **Process Type** from Off to **Vector**.

5. Click the **Advanced** tab along the top of the screen. Change **Engrave Type** to **Stamp**. Click back to the **Preview** tab.
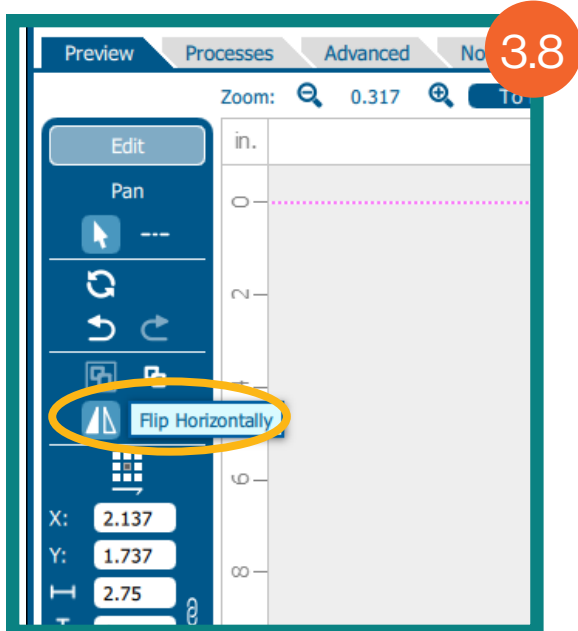
6. On the right side of the screen, find the **Processes** box containing your design. In the upper right corner of the box, click the icon to **Import Material Settings**. Scroll the list to find **Rubber Stamp**, then select it and click **Import**.

7. Click and drag the design from the top left corner of the screen to position it over the stamp material.

8. On the left side of the screen, click the triangles icon to **Flip Horizontally**. This will mirror your design—THIS IS AN IMPORTANT STEP!

9. In the lower right corner of the screen, click **Print** to send the job information to the laser.

Engrave the rubber

10. On the laser's touchscreen, select the job from the **Job List** and select **Trace** to preview the area where the laser will be engraving.

11. Turn on the ventilation and the air assist pump. See the Safety Note on page 1.

12. Press the play button to begin engraving.

13. When the laser beeps, you may open the lid. Gently brush off excess dust. Remove the engraved stamp material from the laser bed.
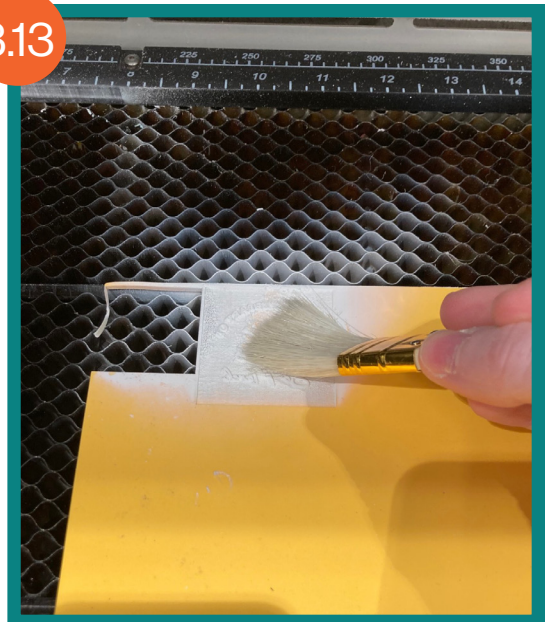
PART 4: ASSEMBLE

1. Use scissors or a craft knife to cut your stamp out of the material. Trim away as much excess material as you can.

2. Wash your stamp off in the sink using warm water and a little bit of soap, if needed. Dry it thoroughly.

3. Peel a piece of mounting tape and stick it to the back of the rubber stamp. Then stick the stamp to the underside of the wooden block. Make sure you align the two correctly!

4. Ta-da, your stamp is done! Test it out using an ink pad and paper.

3.13

4.1

4.4

Show off what you've made!

Send a picture of your project to makerspace@gepl.org.