A Guide to the Glowforge 3D Laser Printer
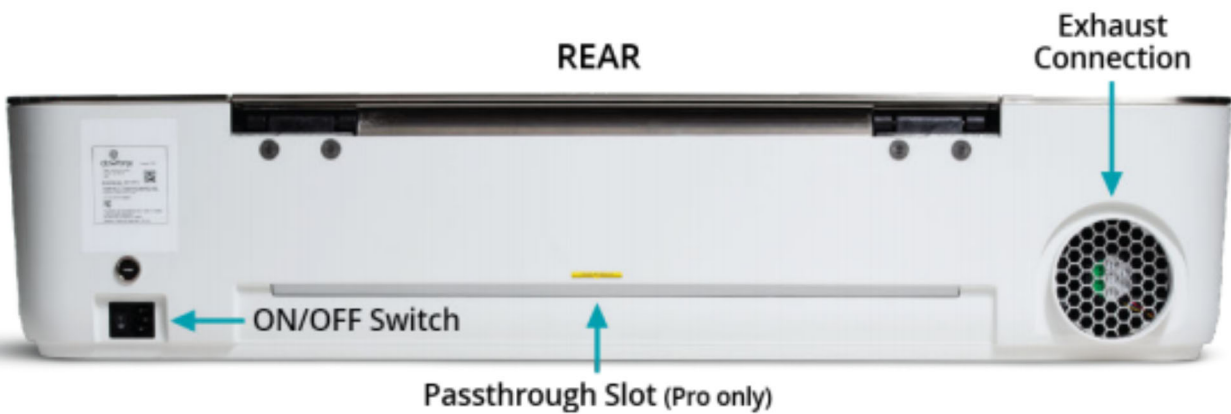
GETTING ACQUAINTED

Quick tour of parts you'll need to know:

FRONT

Lid
Lid Camera
Laser Tube
Laser Arm
Printer Head
Button
Rail
Crumb Tray
Front Door
Passthrough Slot (Pro only)

REAR

Exhaust Connection
ON/OFF Switch
Passthrough Slot (Pro only)

YOUR FIRST PRINTS

There are three ways to start printing:

1) Open a design that's already there - Try the two test projects:

      -Gift of Good Measure

      -A Snap & Store Box with Your Personal Touch

2) Trace a sketch to turn it into a digital design that you can print.

3) Start with a digital design, like a digital photo or a file made in Inkscape or Adobe Illustrator.

NOTE: Glowforge is compatible with JPG, PNG, SVG, PDF, and other file formats. You can create Glowforge–compatible files from a variety of different software platforms like Adobe Illustrator, Inkscape, CorelDraw, Adobe Photoshop, GIMP, Autodesk 360, & Sketchup. To print a file, just drag–and–drop it directly on our app, which appears as a web page in your browser. Alternately, you can copy the contents of the file and paste it into the Glowforge dashboard. There, it will automatically interpret the information and show you a preview of the results. You can drag the images around on your material to position them where you want them.

① TEST PROJECT 1: Gift of Good Measure

Here is a precise tool to put on your keychain or hand out to friends. Make it in metric or imperial!
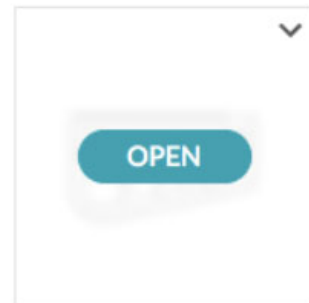
1 Sign In

Go to **https://app.glowforge.com** and sign in.

2 Hover over the design titled "Gift of Good Measure Keychain" and click "Open".
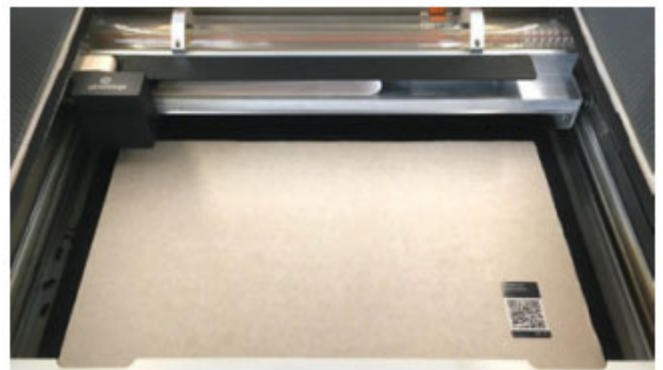
OPEN

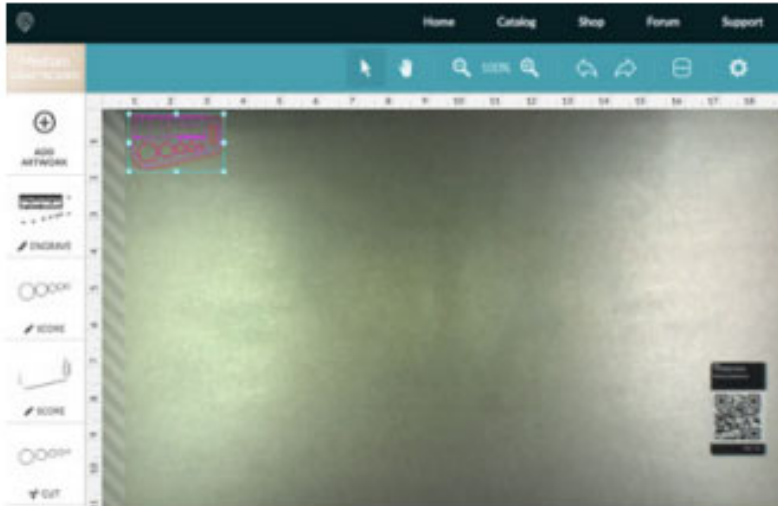(Medium Draftboard) Gift of Good Measure Keychain

3 Place Your Material

Open the lid of the Glowforge. Choose a piece of medium Proofgrade™ Draftboard and place it in the center of the bed. Make sure the barcode is clearly visible on the material. Close the lid completely.

4 **Drag Your Design**

An image of the material will show in the Workspace. Click and drag the design onto the piece of Draftboard where you want the image to print.
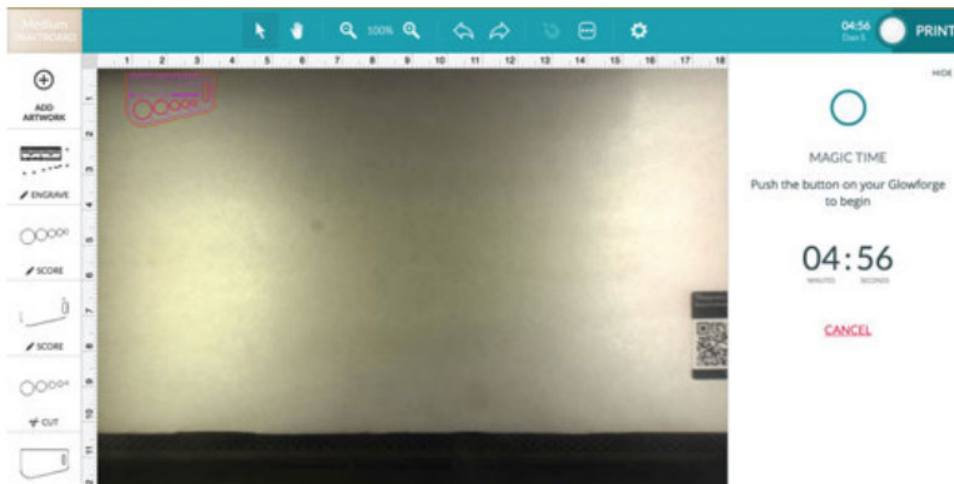

Note: A flame-up is more likely when you cut along the edge of the material, so don't put it right on the edge.

5 **Time to Print**

Once the design is in the desired location, click "Print" in the upper right-hand corner of the Workspace. The printer head will scan the material for a precise laser focus and the Print Window will open. You'll see the time your design will take to print, and the button on your Glowforge will begin blinking.

6 **Laser!** Press the blinking button on the Glowforge. It's important that you keep watch on your Glowforge while it is printing.

7 **Need to Walk Away?**

Press the white button to pause any time a print is happening. To resume, just press the button again and the print will continue. Opening the lid or clicking "Cancel" will cancel the print (so it cannot be restarted).

04:56
MINUTES SECONDS

CANCEL

8 **Reveal your Gift of Good Measure**

When the laser finishes, wait for the fans to stop, then remove your print. Peel away the protective layer (duct tape can make this easier!) to reveal the engraved material underneath. Put your keychain through the hole and never lack for measurement again!

2 TEST PROJECT 2: A Snap & Store Box with Your Personal Touch

It's time to customize a print with your very own artwork. The idea is simple: you'll draw something on paper, and the camera in the lid of your Glowforge will convert your drawing to a digital file. You'll then add your drawing to a design we've provided to create a box that's uniquely yours.
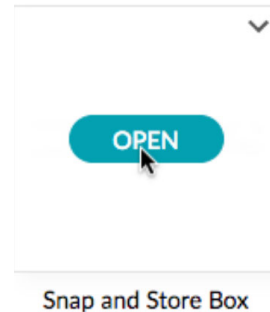
1 **Sign In**

Go to **https://app.glowforge.com** and sign in.

2 Hover over the design titled "Snap and Store Box" and click "Open".

OPEN

Snap and Store Box

3 **Create your art**

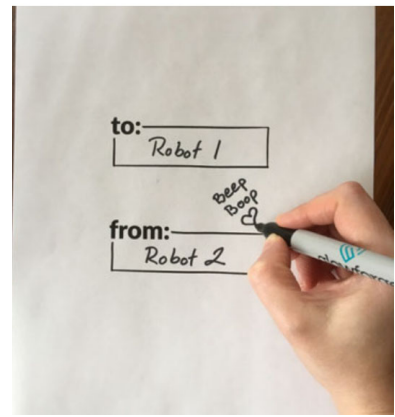Select an option below:

Option 1: The Artist

Draw a picture with a black marker on a white piece of paper. Stay away from the edges so there's some white on every side of your drawing. Tip: Leave room for the handle in the middle of your drawing.

Option 2: The Poet

Using a black marker, write a favorite quote or song lyric, or sign your name on a blank white piece of paper.

Option 3: The Good Friend

Print this [template] out (see next page) on an inkjet printer (not your Glowforge!) and use a black marker to fill in the blanks.
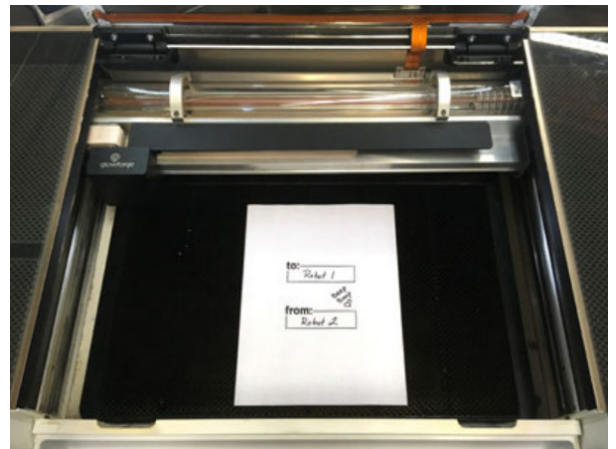
Option 4: The Shadow Master

Grab something nearby: a shoe, a leaf, a doll, your other hand - and plunk it on a blank white piece of paper. Trace around the edges with a black marker.

4 **Put Your Art in Your Glowforge**

Lift the lid of your Glowforge, place your artwork in the center of the bed, and close the lid.
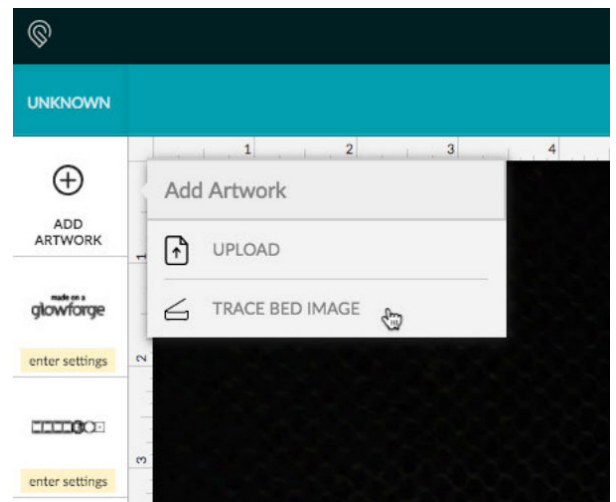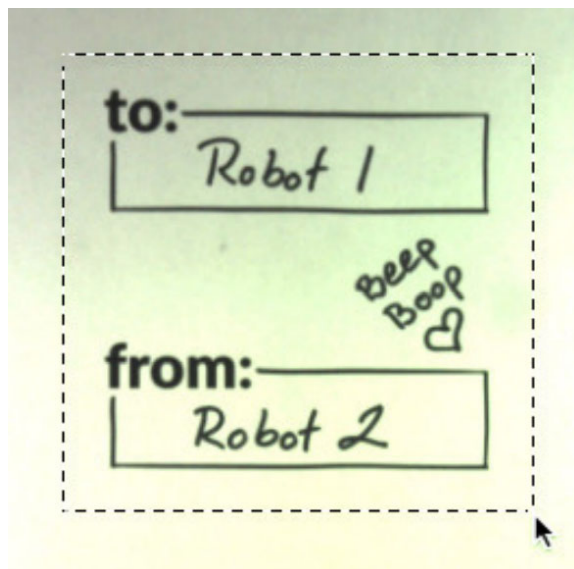
5 **Add Artwork**

Look at the app. When the Workspace loads, you'll see the box design and a picture of the bed of your Glowforge, including your drawing.

Click "Add Artwork" in the upper left corner, then choose "Trace Bed Image."

6 **Select Your Artwork** The app will load an image of your drawing. Click and drag a square around the artwork that you want to trace. You'll see a preview of what your Glowforge will engrave. Anything in black will be engraved, and nothing else will be. If you're not happy with your selection, click the "Back" button in the app and try again.

7 **Get the Details You Want (Keyboard Shortcuts)**

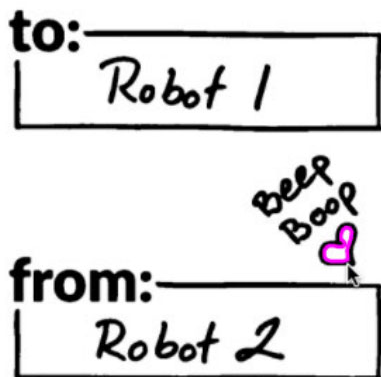**To darken**, use Control-Up Arrow (Windows) or Command-Up Arrow (Mac). **To lighten**, use Control-Down Arrow (Windows) or Command-Down Arrow (Mac).

To remove small details like dirt and noise, use Control-Shift-Up Arrow (Windows) or Command-Shift-Up Arrow (Mac). To restore small details, use Control-Shift-Down Arrow (Windows) or Command-Shift-Down Arrow (Mac).
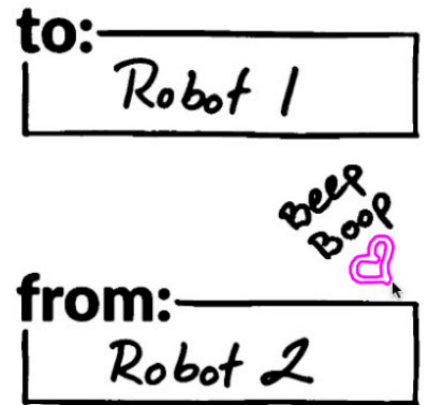
8 **Choose What to Cut**

If you drew a closed shape, you can click it to cut it out. In this image, we clicked the center of the heart so that the inside will be removed.

9 Don't Click Lines to Cut

It's a subtle difference, but if you click the black line around your shape instead of the white inside the shape, it will cut out the black line that you clicked on - probably not what you intended!
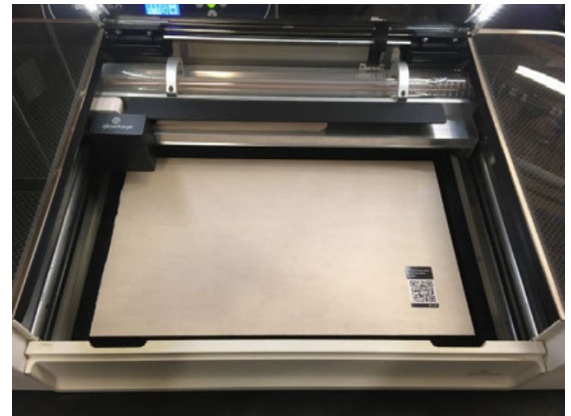

10 When Your Trace Looks Ready...

Click "Place Artwork" in the upper right-hand side. This will bring you back to the Workspace with your newly digitized artwork sitting on top of your piece of paper.

11 Remove Drawing, Insert Proofgrade™

Remove your drawing and place a piece of medium Proofgrade plywood on the center of the bed (it is very important you choose Plywood). Close the lid.

12 Size Your Artwork and Place it in the Design

In the app, the Workspace shows both design and artwork above your material.

Drag the box design where you'd like it printed - somewhere like the top edge to save material.

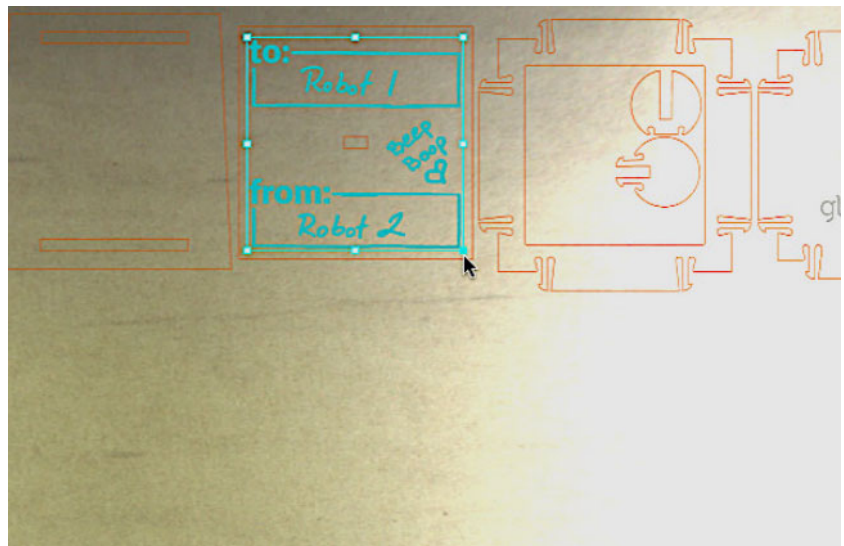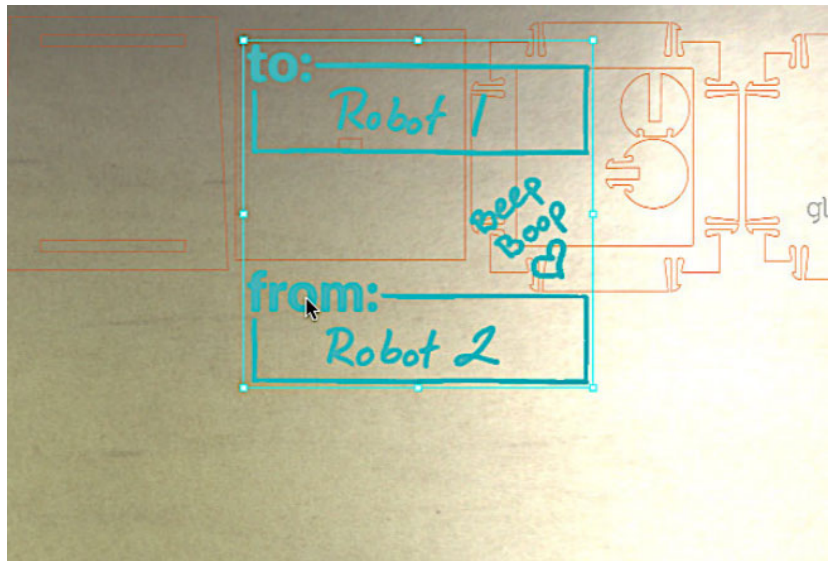Place your artwork within the design.

In this case, we've dragged the artwork onto the box lid.

Shrink your artwork to fit by clicking and dragging a corner.

This works for any part of the print, but don't resize the box design or assembly won't work!

The outer lines of the box design will be cut, so any artwork outside those lines won't be part of your final product.

To fine-tune placement, nudge selected objects using your arrow keys. Holding shift while using the arrow keys gives you bigger nudges.
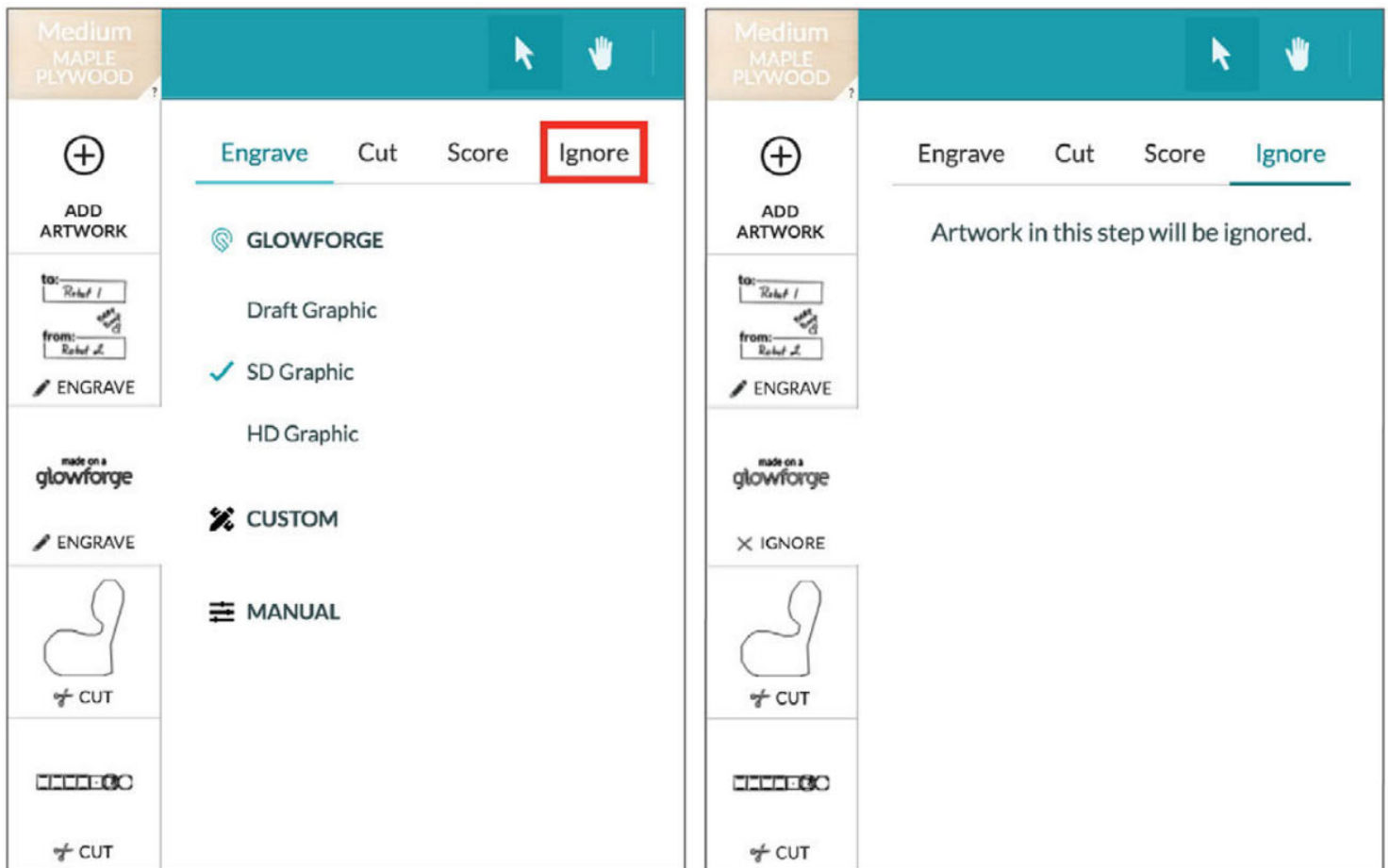

Note: It's not just the lid! You can place artwork on any of the box's surfaces. Just note that two of the sides are cut out upside down to save material, so make sure your artwork is the right way up for the surface it's on. Any selection that can be rotated will have a rotation handle at the top.

13 Ignore or Re-Order Steps

Different elements of your print are broken out into different actions called print steps. If you were designing this file yourself, each color would be a different print step.

If you would like to change what happens during a step, for example if you would like to skip a step, start by clicking on it. Then, click on the word "Ignore" in the top navigation bar. If you want steps to occur in a different order than the default, just drag and drop print steps into the order you want

14

Print!

Click the "Print" button in your browser window, then press the button on your Glowforge printer when it starts glowing. Watch your Glowforge (always!) while it's printing. When the button stops glowing and the fans stop, remove your print, peel off the protective layer, and get ready to assemble.

15

Put it together

We've made you step-by-step instructions to turn that beautiful collection of box pieces into an actual Snap and Store Box. Go back to your workspace where you were printing the box (if you don't have the box open on screen - open it again), and click on the icon in your toolbar that has three little dots. When you do this, instructions will slide in from the right. You can view them in place or pop them open in a new window. Now, all you need to do is follow the steps. Your finished box is minutes away!

FINDING COMMUNITY & SUPPORT

Having trouble? Want to do something new? We'll do our best to help you succeed!

Community Forum

Most Glowforge owners have registered at the Glowforge Community Forum , where hundreds of Glowforge owners post each day. You'll find some incredibly talented (and helpful) folks who can provide assistance, suggestions, and ideas to help you make the most of your Glowforge.

Here's an easy way to start:

● If you've got a specific question or idea (like you want to make a new band for your watch), try searching to see what folks have written on the topic.

● If you just want to browse the forum, we recommend starting with our Made on a Glowforge topic, where you can find hundreds of laser projects that our community either has made or wants to make.

● Once you've read a bit to get an idea of how it works, post pictures of what you make. People will love it!

Support Online

Go to https://glowforge.com/support to find guidance any time of day or night. The Learn By Doing area includes tutorials to get you started with your Glowforge, and you'll also find Troubleshooters in case anything doesn't go according to plan.

Support by Email

We are here for you! Email support@glowforge.com with your questions, challenges, feedback, and even your stories of perfect prints. Our goal is to reply within hours on weekdays, and always within three days.

We provide the best support when we fully understand what you're facing. Please send:

● A description of the steps you took, what happened and what you expected

● The date and time of the issue

● The name of your file, if there was a file involved

● The name of your Internet browser and Operating System

● A screenshot or photo of what happened