

# TRUArt® 60W Pyrography Kit User Manual

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# for purchasing our

# **TRUArt Wood Burner Bundle!**

We stand behind all our products and if you are not 100% satisfied, simply email us at hello@truart.co and we will make it right for you!

WE WILL ALWAYS TAKE THE ITEM BACK FOR A REFUND
EVEN IF THE RETURN PERIOD WINDOW HAS ELAPSED

This manual contains VERY IMPORTANT information about your wood burning kit. Please read it carefully.

# **Warranty Information**

Your TRUArt pyrography tool is guaranteed to operate properly for a period of three (3) years on the power supply, six (6) months on handpiece/s, and ninety (90) days on all interchangeable tips/nibs. This warranty provides for repair or replacement, at the manufacturer's option, of any defective components. This warranty is limited to the actual cost of repairs and will not cover shipping costs or any consequential damages resulting from failure of the unit or its components to perform as stated. All warranty work must be done by the manufacturer. The manufacturer will not cover the costs of repairs done elsewhere.

Warranty will be voided if unit has been tampered with, altered, or repaired by unauthorized persons or companies. If your burner or handpiece should need service, our average repair turnaround time is only one day in the shop. To receive in- or out-of-warranty servicing, please reach out to us at hello@truart.co.

# **TRUArt Pyrography Kit**

Register your purchase at https://truart.co/register to get access to complimentary tutorials, stencils, and updates.

# Symbols used in this manual



Wear eye protection



Wear protective gloves



Read the manual



# Operation Safety for your Pyrography Kit

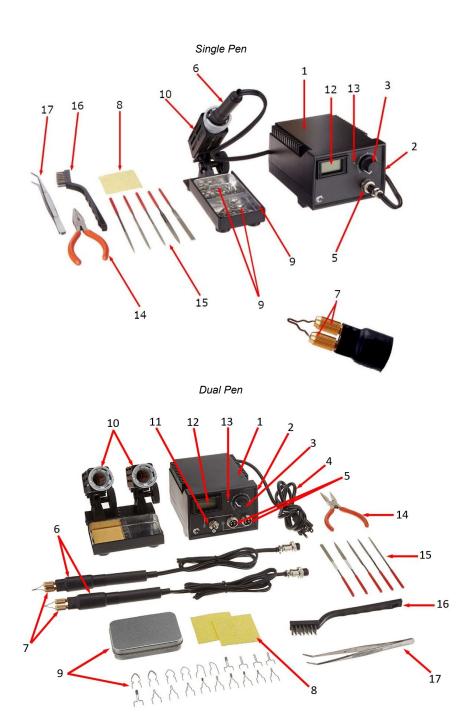
- 1. Do not use excessive pressure when wood burning. Learn to adjust the heat setting to make it work you for instead of stressing the pen and tip.
- 2. Never touch metal objects with a tip this can destroy the unit due to electrical shortcut.
- 3. Use care and common sense in how you clean and/or re-sharpen the tips. Use a leather strop or bugging wheel with fine polishing rouge and learn to work at the lowest temperature necessary to achieve the result you want.
- 4. Always keep the unit out of the reach and away from children. Tips are sharp and very hot and will burn skin and flesh easier than wood.
- 5. Whenever you burn, assume a comfortable and relaxed position, with respect given to arm, head, body, and leg position. For example, if you begin to feel stress in the back of your neck, change the angle you are holding the work, or adjust the height of your seat to relieve any strain.
- 6. Always work with sufficient quantity and quality of light. Use a shadow light (a strong light to the left of the work if you are right-handed) that creates a shadow with each stroke, making it easier to place strokes.
- 7. Turn the unit OFF whenever you leave it, not only will you avoid a fire hazard, but you will prolong the life of the burning tip. Most burning units will heat the tip to

- operational temperature in less than thirty seconds time well spent when considering the possible alternatives that could occur by not turning the unit off.
- 8. If the handpiece begins to make noise and stops heating, turn it off and re-tighten the tip holder using pliers. If that does not help, turn off the tool and replace tip. If the handpiece still does not work with the replacement tip, it might be defective. Please contact us to arrange for repair and/or replacement.
- 9. If a unit begins to make noise or buzz, follow Step 8. Usually, an occurrence such as this is indicative of a shorted pen. If you have another pen, change pens. If the noise continues with a new pen, you should contact us to further ascertain the cause of the problem and/or make arrangements to return the unit.
- 10. Keep wood scraps available to check heat settings and to practice strokes. To maintain uniformity, the test piece should be the same type of wood as the work piece you will be working on.

# **Features**

- 1. Power supply
- 2. On/Off Switch
- 3. Voltage Adjustment Knob
- 4. Power Cord
- 5. Terminal/s
- 6. Handpiece/s
- 7. Tip Holder/s
- 8. Sponge/s
- 9. Wire Tips and Box for Tips

- 10. Handpiece Holder (Dual Pen
- model shown)
- 11. Handpiece Switch (no switch
- for Single Pen model)
- 12. Voltage Display
- 13. Voltage Fine Tuning Pot
- 14. Pliers
- 15. Cleaning files
- 16. Small steel brush
- 17. Tweezers



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# **Using your Pyrography Kit**

- 1. Plug the Power Cord (#4) into an electric outlet and turn on the On/Off Switch (#2) on the side to heat up. It usually takes less than a minute for the tool to become hot.
- 2. Set the round Voltage Adjustment Knob (#3) to the desired voltage.
- 3. Voltage Display (#12) will show currently selected voltage. Depending on the tip used, different voltages will produce different temperatures. Make sure to burn-test on a piece of wood to confirm correct voltage setting.
- 4. If necessary, use the Voltage Fine Tuning Pot (#13) to fine tune or calibrate the voltage regulator—with the help of a small flat-head screwdriver—for optimal use with your mains electricity. A typical case requiring fine-tuning is when voltage is too high on the lowest setting or too low on highest. When fine tuning, you should try to achieve around 20V on lowest setting and 110V on max setting (please refer to the Fine-Tuning section).
- 5. For Dual Pen models, use the Handpiece Switch (**#11**) to select Handpiece I or Handpiece II (**#6**).
- 6. Always place the handpiece/s into the Handpiece Holder/s (**#10**) so the tips do not touch other objects when not in use.
- 7. Hold the handpiece/s as you would a large pencil or marker.
- 8. Always practice a new technique on a sample piece before starting a new project.
- 9. The tool comes with various tips (**#9**). Some tips are duplicates or triplicates as they are most often used and serve as replacements.
- 10. To clean the tips during use, use the wet Sponge (#8). To wet the sponge, pour some water on it making sure it is sufficiently wet but not swampy.
- 11. Use a pair of pliers to tighten the tips in the Tip Holders (#7). If you try to tighten the tip holder by hand, there is a chance you do not tighten it well enough, and the tool will not work or might emit a buzzing sound. In such events, re-tighten the tip holder with a pair of pliers. Avoid contact with the tip holder or tips while tool is hot to prevent any accidental burns.

Most burning can be done at lower temperatures, there is no reason for a lot of smoke (or fire!) to come off your work. About 700 °F (very faint red glow on the tip) will give a nice "toast" to your work. In some cases, if you burn too hot, paint adhesion can be a problem as the pores in the wood are sealed shut. Burning at a lower cooler temperature will also help avoid residue buildup on your tips.

However, there may be situations where you will need extra heat (power) to undercut or to relief a carving detail and may require as much as 1500 °F or more. If you plan to do feather

inserts for instance, the unit must deliver the extra power necessary to accomplish the deep slotted cuts required to accept the pre-shaped feather inserts.



# **Fine-Tuning or Calibration**

Fine-tuning or calibrating your power supply is usually performed when the unit is new. Normally, this would only need to be performed once. There are rare cases where you would have to do it again especially after some time of using the tool. Below are some of the indications your tool does that will require you to re-calibrate it.

#### Indications:

- Voltage is too low (below 10 V) at the lowest setting
- Voltage is too high (above 35 V) at the lowest setting
- Voltage does not change until about halfway or a third up on the adjustment knob
- Voltage is not at maximum (110 V) at the highest setting

In essence, any abnormal voltage reading will require re-calibration, which should get your tool back to normal and optimal working condition.

Below is an example of an abnormal reading on the voltage display. Note that the unit used here is for a single pen, but the process applies to the dual pen tool as well.



As the voltage displayed is too low at the lowest setting, we used a small screwdriver to turn the fine-tuning pot (indicated by the red arrow) clockwise until we get to around 20 V.





Our tool is now optimized and ready for use.





# Cleaning Tips

One method used to clean and restore tips is by using a cleaning pad that has a very fine abrasive grit (600/800) bonded to both sides of a foam core pad. This is fine enough to clean your tip without removing metal and is still enough to redress a dulled tip.

Another method is by using a leather strop to sharpen and buff out an edge. The strop can be treated with a bit of Neatsfoot oil, a very small amount of polishing paste or extremely fine honing compound. Use care - too little is better than too much when it comes to these tips. Work the tip cold and on its side. Use gentle draw strokes with a finger lying over the upper side of the tip to support it. The stropping also gives it a nice polish.

Additional information on cleaning tips can be found under Accessories (Page 12).









# Annealing of the Tip Before First Use

Annealing is a simple and quick process of heating metal or glass and allowing it to cool slowly in order to remove internal stresses and toughen it. Here is how you can do it:

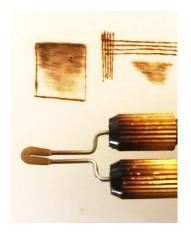
- 1. Put a pen with the installed tip into the holder.
- 2. Turn on the power and set the voltage adjustment to the maximum.
- 3. Let the tip reach red-hot temperature and then turn the power off.
- 4. Let it cool down naturally until cold to the touch (this will take few minutes)
- 5. Repeat it 2-3 times.

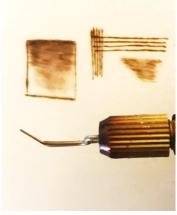
When done properly, this will help with removing extra metal stress in the tip.



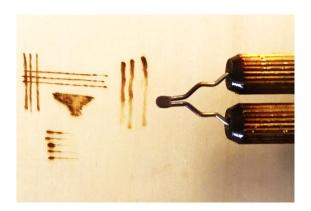
# **Tips and Their Uses**

Your new TRUArt pyrography kit comes with a variety of burning tips. To get the most from your kit, you can use the following guide prepared by Andrea of Pate's Pyrography to get an idea of what they are for.

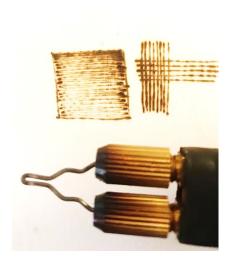




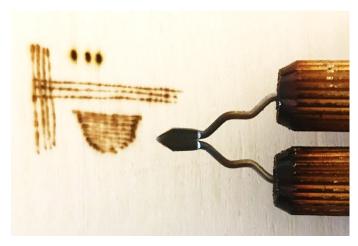
**Flat tip** - flat tip that has a slight bend at the neck of the tip. This tip can be used to create sharp lines if using the top portion with the bend facing down towards your burning. Flip the tip to the flat side and it works great to burn a nice, blended shade.



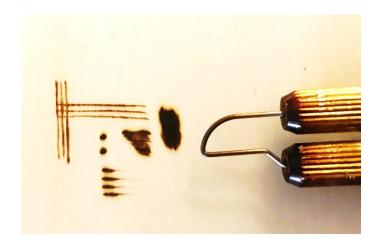
**Small flat tip** - this tip has a curved head and a flat backing. There is a slight bend at the neck of this tip. Much like sample 1, this is a good tip to use for shading. This works well for creating short fine lines for doing hair detail as well.



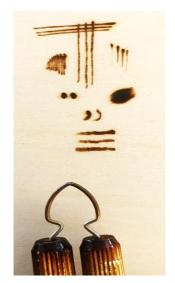
**Rounded tip** – This is a "generic" or universal tip. This can be used to create sharp lines and shade well using the appropriate pressure and temperature.



**Point / small skew tip** – This has a very pointy edge and works great when you need to make very fine lines. The tip is very sharp, so you need to be cautious of the amount of pressure you use. This is suitable for any shading or solid burns.



**Curve tip** – This has a curve on one side of the tip. When using the pointy side, you can achieve fine lines. If you use the backside of the tip where the curve straightens, you can achieve a good dark solid burn that works well for darkening a background. If you use the curved side of the tip, you can create more of a shaded burn. The curve also makes it easy to make lines along unfinished or rough surfaces since it does not snag on the surface.



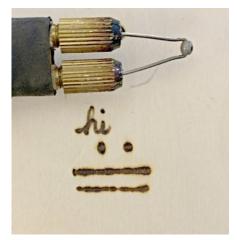
**Scale or Horseshoe tip** – somewhat similar to the Curve tip, the curves are great for shading and creating solid backgrounds. The top portion can also create fine lined details. With some practice and correct temperature and control, this can also be used as a stamp to create scales.

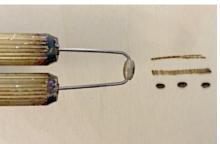
The following are some of the special tips available on our website or upon request.

The ball tip is excellent for making nice stippling patterns. It also works great for creating smooth writing.

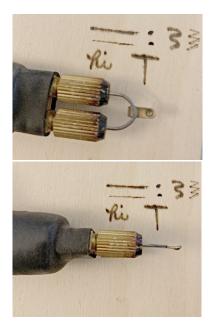


These tips work great for creating smooth lines and are also ideal for script works. Since these roll, they're ideal for working on thin (gold) foils





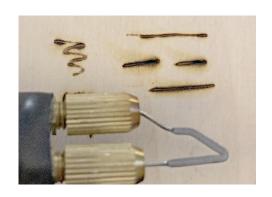
The spoon shaped tip works wonders to create a smooth burn. It also works great for shading and even script work and the top part of the tip creates a fine line. This is a great tip for multiple functions.



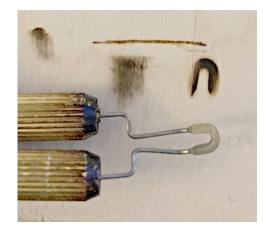
This tip works well to create sharp solid lines. Using the side of the tip creates smaller fine lines.

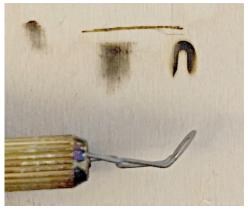


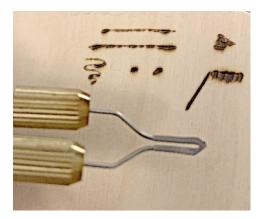
This tip is perfect for creating sharp fine lines. This would be for hair detail for creating thin fine edges.



This horseshoe-shaped tip Is ideal for shading. This allows you to create a soft even burn and allows you to add shadows and depth to your work with a consistent shade throughout. You can create a very thin line using the top portion of the tip to add fine details. You can also use the tip as a stamp and create layers of scales.







This tip Is great for making sharp fine lines.



# **Common Issues**

We have been selling this product for several years and customers love it. So far, there are only three (3) main issues that other customers have brought to our attention. Please read below on how you can avoid the same issues.

# Swapping tips into a different burning pen

Some customers contact us after bending a tip to its breaking point because they want to fit it into another brand of wood burning pen. Although it may be possible to swap your tips into another wood burning brand, it might take a lot of dexterity and precision bending to do so—not to mention effort—and there is no guarantee that they would work well if they eventually fit.

The tips provided with your set performs best when used with the TRUArt brand but if you already own another brand of wood burning pen and would like to use the TRUArt tips on your old burning pen, it is strongly suggested that you create your own tips from scratch using Nichrome wire. We may be able to help you acquire some if you would contact us through email.

There are many videos online that teach how to make your own pyrography tips from Nichrome wire.

# **Sporadic heating**

Although very rare (if ever), the tip does not heat up properly (i.e., slow heat up at maximum voltage setting). If this happens, check if the tip is not broken or has a minute crack. Also check that the tip holders are screwed in tight on the tip and that all power cables are connected properly. Nothing should be loose.

If this still does not fix the problem, please contact us at hello@truart.co.

# No heat

Very few have reported that the pen does not heat up. Please perform the checks previously mentioned and if it is still the same, it might be that you received a defective burning pen. Please contact us at hello@truart.co as soon as possible about it.



# **Extension Cords/Cables**

Extension cables are commonly used with our wood burners. Ideally though, you would not want to use any. However, if you must, make sure it is:

- 1) As short as possible.
- 2) At least 16 GA (wire gauge)
- 3) Has three conductors (see image below)



On a technical side, the pyrography tool itself will draw just under 1 ampere in normal operation mode and has an internal protection against short circuit. In the unlikely event it fails, the extension cord needs to be able to handle more than 1 ampere. We strongly advise that you get one with a capacity of at least 10 amperes.

Ampere rating of the extension cord changes with the length of the run, so two 10 amps cords used together will have less than 10 amps capability.



# **Accessories**

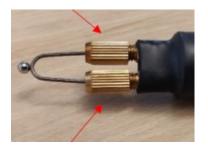
#### **Files**

The various shaped files are mainly for cleaning and refurbishing the wire tips. It helps clear out carbon deposits on the tip. These carbon deposits occur naturally when burning on wood.



### **Pliers**

The pair of pliers are used mainly for tightening and loosening the pen's 2 nuts over the collets that hold the wire tip (see arrows on image below).





# Sponge

Placed into special slots in the pen holder (see arrow on sample image below), water is added to make it damp. During work, tips are occasionally wiped on them to get rid of burned materials.





NOTE: Images shown are for the Dual Pen model

#### **Tweezers**





# **Adjusting Collets to fit Larger Tips**

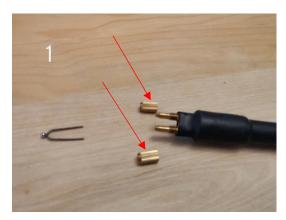
This guide shows how to adjust your TRUArt Stage 2 60W pyrography pen's collets to fit **larger (thicker) or smaller (thinner)** wire tips. Universal wood burning wire tips generally come in three sizes and can be thicker, thinner, wider, and/or longer than standard tips:

- 16 Gauge (GA) 1.29 mm
- 18 GA 1.02 mm
- 20 GA
- 0.81 mm
- Thick (Needs initial collet adjustment)
- Perfect fit (No need for any adjustments)
- Thin/Fine wire (Needs extra tightening)

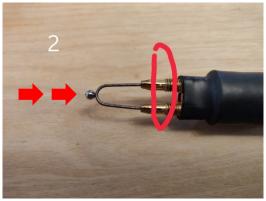
# Fitting thicker wire tips into your wood burner collets

The thicker 16 GA tips last longer and are best for prolonged usage as they do not wear out easily after countless cleaning. However, you will need to initially adjust your pyrography pen's collet to fit them. You would only need to do this once after which it becomes much easier to switch between the different types of wire tips.

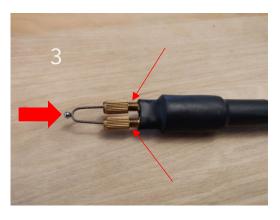
Step 1
Unscrew the locking nuts (arrows) from the collets.



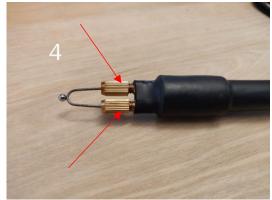
Step 2
Push the universal tip into the collets (red circle) making sure that they are aligned straight into the collets as much as possible. Some force may be required to do that.



Step 3
Pull out the tip, screw in the locking nut onto the collets leaving it loose (thin arrows) and insert the tip back in again (big arrow).



Step 4
Tighten the locking nuts and your pen is ready for some serious wood burning.



# Fitting thinner wire tips how into your wood burner collets:

You can expect the thin wire tips (20 GA) to be slightly loose in the pen. This is especially more pronounced if you have adjusted your pen to fit larger tips already (See **Fitting thicker wire tips into your wood burner collets**)

If tips are too loose or are not properly inserted, you will hear a *buzzing/vibrating* sound coming from your pen. This can also short out your pen.

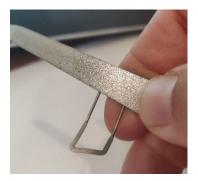
To avoid this, follow these easy steps using the tools already provided in your TRUArt pyrography kit.

With the provided pair of pliers, cut a short length of the end of the tips to equal lengths and to remove any minute factory blemishes on them.

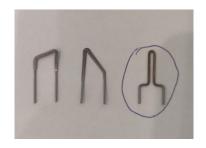




Next, with the file provided in your kit, file off the ends of the tips to smoothen out any irregularities that might snag when inserting the tip into the pen's collets. Once inserted in the pen, be sure to tighten the collets with the pair of pliers for proper contact.



Universal tips are designed to go into several models of wire tip burners. With these tips, it is advisable to make sure that the tips resemble the original form as much as possible. You can file/cut/adjust those tips in any way necessary, but the main goal is to avoid any buzzing noise emitted by the pen.



# **Going About Your First Project**









Ready to begin your first project?

Here's an easy Beginner's Tutorial by Andrea from Pate's Pyrography to get you started in the right direction.

If you are looking for a way to create a very beautiful and professional looking burning, here are some tips to help you along the way.

## What you will need:

- 1. TRUArt pyrography kit
- 2. Wood of your choice
- 3. Colored ballpoint pen
- 4. Carbon tracing paper
- 5. Tape
- 6. Image/design to burn
- 7. Magic eraser
- 8. Sandpaper
- 9. Stain
- 10. Varnish

Take the time to find the right image to burn. Make sure the size of the image works well with the piece of wood you choose. Be mindful of the type of wood you choose. Try sticking to a soft wood such as birch wood, basswood or even a simple plywood. Sand your wood surface down prior to use to ensure that the image you use will burn evenly. Do not burn on treated or painted wood. This can be harmful to your health if the fumes are inhaled.



Get some tape, carbon transfer paper and a colored pen. Find the center of your wood and place your image on the desired location. Tape the top of your image onto the wood to prevent it from shifting. Slide the carbon paper underneath your image (glossy side down).

Take out your pen and trace the image. I like using a pen because I feel like I do not have to add as much pressure while I'm tracing the image. It is useful to use a colored pen so that you can see the area that was already traced.





Once the image has been completely transferred, gently lift the bottom portion of the design to ensure that you have traced the whole image onto the wood. If so, remove the paper.

When burning the image, start at a lower heat and slowly increase the temperature as needed. If you start too hot, you will get an uneven burn and possible burn marks outside your design. Do not press down hard while burning. If you feel the need to push down hard on the wood with the pen to get the desired darkness/shade, your temperature is too low and needs to be increased.









Once you have completed the burning, you may have some marks left on your wood from where you traced your design. These markings cannot simply be erased with a regular eraser. Get a magic eraser. Add only a little water to the eraser and gently rub in a circular motion evenly across the wood. If you do not, you will have splotchy marks on your wood when you stain. If that happens, simply sand the wood down on those areas. If the image smears with the eraser, you may be rubbing too hard. Gently rub the eraser on the smudges until they are gone. Let the wood completely dry.

To give the wood a finished look, add a little stain on it. Be sure not to add too much stain or too dark of a stain or the image will fade into the wood. To protect the image from darkening over time, varnish the wood with polyurethane or resin.

Now, all you have to do is enjoy all your hard work. Keep practicing and be patient with yourself. Hang in there, you will get it. I wish you the best of luck and I will see you next time on truart.co with some more tips to help you along the way.



You can find more works by Pate's Pyrography at

https://patespyrography.weebly.com/

# For more inspiration and woodburning ideas, visit our Instagram and our Facebook page

https://www.instagram.com/truarthq/

https://web.facebook.com/truarthq/



# **Stencils**

We have added a few original stencils in this manual as a kick starter for you. They do not require any advanced skills such as shading and texturing but feel free to feel adventurous with them. These are mainly for you to get used to using your new TRUArt pyrography kit and different tips yet still serve as nice little decors or mementos.

# How to use these stencils

There are two ways to applying these stencils on your work surface.

- 1. Using carbon transfer tracing paper
- 2. Photocopying

# **Using Carbon Transfer Tracing Paper**

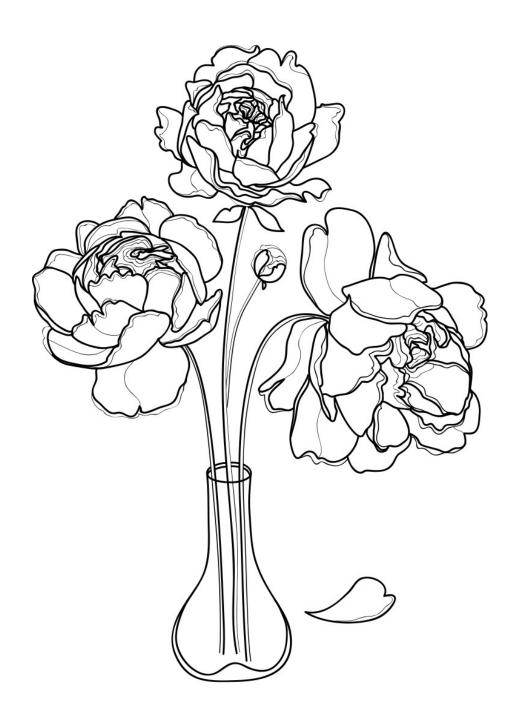
- 1. Simply place a carbon transfer tracing paper, with the carbon facing down, on your workpiece (wood, gourd, or leather)
- 2. Place your chosen stencil carefully on top of the carbon paper. DO NOT apply any pressure when positioning the tracing paper and this manual. You may want to secure the tracing paper and the stencil unto the work surface with strips of adhesive tape.
- 3. With a ball point pen, start tracing the outline of your chosen stencil being careful to ONLY APPLY MINIMAL PRESSURE on the pen, since carbon trace is hard to remove from the wood surface later. It is better to have very fine lines to cover with your burning rather than thick ones.
- 4. Once the tracing is complete, carefully lift the tracing stencil and transfer paper off the workpiece.
- 5. With your TRUArt pyrography kit, start burning the transferred outline on your work piece.

# **Photocopying**

Photocopying a stencil allows you resize it using the "Enlarge" feature on the photocopying machine.

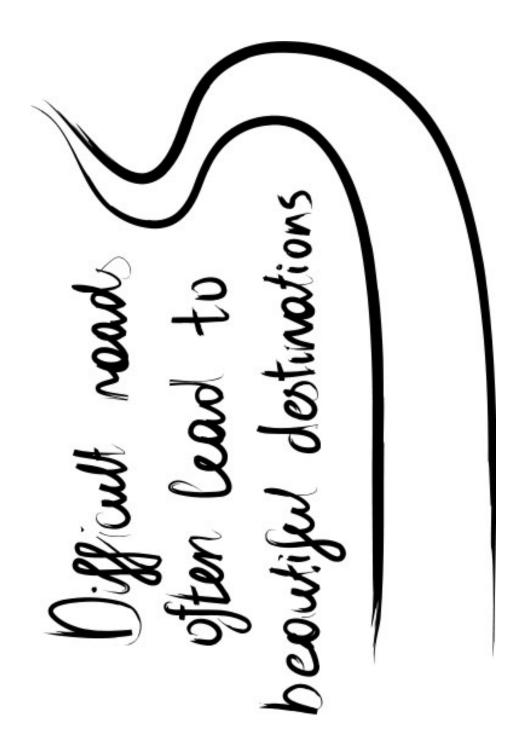
Once you have your photocopy of the stencil, simply follow steps 1 to 5 of **Using Carbon Transfer Tracing Paper**.





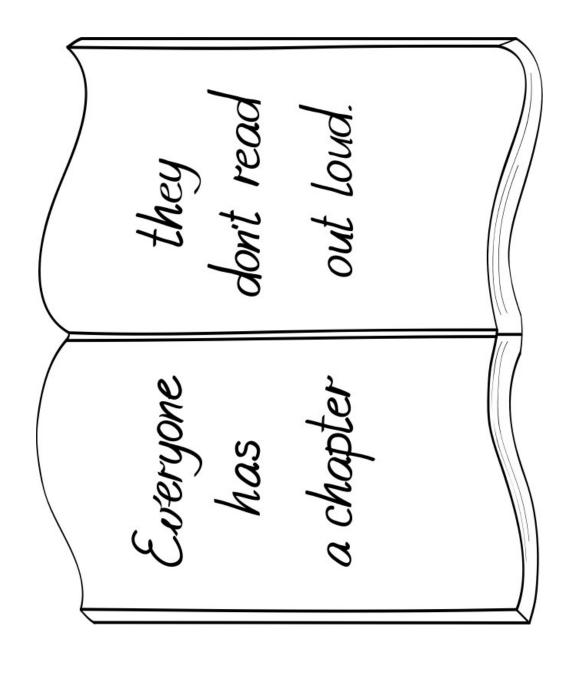


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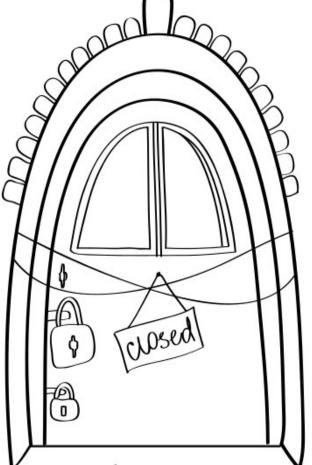


Live your life



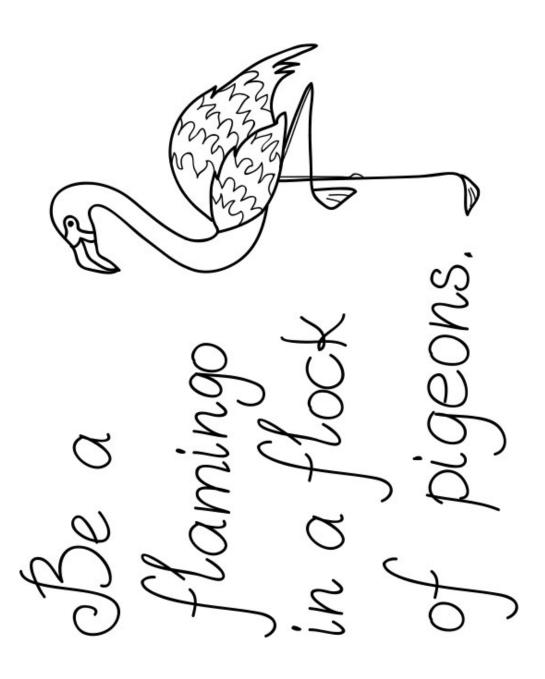
AWESOME yesterday 

If it doesn't open...



it's not your door.

Do small o > things = great love



These exclusive TRUArt stencils, and more, are all available for download for **free** on our website so you can scale, modify, and print them at your convenience.

https://truart.co/stencils

We hope this guide will help you have the best woodburning experience possible. If you have any questions or issues, please do not hesitate to reach out to us through email at <a href="mailto:hello@truart.co">hello@truart.co</a>. We will always be here to help you out.