

#### ONE STENCIL. MULTIPLE USES. ENDLESS POSSIBILITIES™

#### **USER MANUAL**

Due to continuing improvements, actual product may differ slightly from the product described herein.

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Covers use for all 3.5", 6" and XL Wood Burning Stencils

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#### ABOUT YOUR PRODUCT

Thank you for purchasing our Wood Burning Stencils!

Lumberjack engineers and our craftsmen have designed the safest, easiest way to burn images on wood. Combining old-world skills with 3D CAD modeling and laser manufacturing, we have created the ideal method to burn images on flat wood surfaces: clear images, precision burning, and long stencil life.

A Wood Burning Stencil creates burned images in half the time of a branding iron. Time is saved by burning wood directly instead of heating a piece of metal to burn wood. The stencils are laser cut from 304 Stainless Steel; this retains more detail in the design and will never corrode under normal working conditions.



If you have any questions or concerns about your product, please contact customer service at Lumberjack Tools.

- Phone: 715-514-0319
- Email: info@burnstencil.com
- Hours: Monday-Friday 8:00 am 4:00 pm CST

# SAFETY

Before beginning any project, carefully read and follow ALL safety and operational instructions for any tools or devices you use. Failure to do so may cause physical harm to you, yourself, or those around you. If you feel uncomfortable using our wood burning stencils or any other tool, STOP immediately. Lumberjack Tools assumes no responsibility for injury caused to the operator, bystander, or tools in conjunction with using or misusing our wood burning stencils.

$\overline{\mathbf{v}}$	HANDLE THE BUTANE TORCH WITH EXTREME CARE. FAILURE TO DO SO MAY RESULT IN SERIOUS INJURY OR PROPERTY DAMAGE.
$\overline{\mathbf{v}}$	WEAR FLAME RESISTANT GLOVES, SAFETY GLASSES, AND OTHER PERSONAL PROTECTION ITEMS AS NEEDED.
	THE STENCIL MUST BE IN PLACE BEFORE BURNING WOOD. FAILURE TO DO SO MAY RESULT IN INJURY.
	DO NOT USE NEAR FLAMMABLE/COMBUSTIBLE MATERIAL.
	FOLLOW ANY AND ALL SAFETY WARNINGS INCLUDED WITH YOUR TORCH.
	NEVER PLACE ANY BODY PART ABOVE THE FLAME. THE HEAT RISING FROM THE FLAME MAY CAUSE SERIOUS INJURY.
	NEVER RUN HAND OR BODY PART ON INSIDE EDGES OF STENCIL. <u>DOING SO MAY</u> RESULT IN SERIOUS INJURY.
	NEVER OPERATE BUTANE TORCH UNDER THE INFLUENCE OF DRUGS, ALCOHOL OR ANY MEDICATIONS.
	KEEP ANY HAIR, JEWELRY AND CLOTHING OUT OF WAY WHILE USING BUTANE TORCH.
	NEVER ATTEMPT TO ADJUST THE STENCIL WHILE THE BUTANE TORCH IS ON OR WHILE THE STENCIL IS HOT.
	NEVER POINT THE BUTANE TORCH IN ANY DIRECTION OTHER THAN THE SURFACE TO BE BURNED.
	NEVER PICK UP STENCIL AFTER BURNING. USE NEEDLE-NOSE PLIERS TO HANDLE STENCIL.
$\overline{\mathbf{N}}$	ALWAYS HAVE A FIRE EXTINGUISHER NEARBY IN CASE OF ACCIDENTAL FIRE OUTBREAK.
	DO NO BURN ANY PRODUCT WITH PAINT, STAIN, OR ANY OTHER FINISH ON THE SURFACE.
	NEVER HANDLE STENCILS WITHOUT WEARING GLOVES. DOING SO MAY RESULT IN SERIOUS INJURY.

## PREPARE THE BURN SURFACE

For the best burning results the material needs to be very smooth and flat, *Fig. 1* is an example of a smooth surface compared to a rough surface.

- Use a planer, hand planer, sander or sand by hand to achieve an even surface.
- Clear surface of sawdust and debris.

Conduct a flatness test to ensure the surface is prepared for burning.

- Place the stencil on the prepared surface.
- Press on opposite corners of the stencil with your fingers, if the stencils wobbles or flexes, the surface is not flat.
- If flatness test fails, repeat process of evening surface as described.



For the most clear results, burn on the *face grain* of wood. *End grain* and *edge grain* will result in a segmented image.



## PRACTICE BURNING

Before you start burning a project, it's VERY IMPORTANT to practice. Read the instructions included with the butane torch to learn how to use the tool properly. Grab your stencil, a few pieces of flat scrap wood, and burn the surface with a butane torch. Once you can easily control burning the surface and feel comfortable handling the torch, you're ready to burn your project piece.

#### 🔅 TIP

If stencil warps/flexes as the wood is burned, counteract by applying pressure onto stencil with screwdriver or other hand tool. **DO NOT** apply pressure with bare hand.

### **INCORRECT TECHNIQUES**



### HOW TO BURN CORRECTLY



• For the best results, hold the tip of the flame approximately 1/2" away from the surface of the wood.



#### Standard Operation

Start the torch with the flame pointed down. Hold the torch so that the flame cone is about 1/2" away from the wood surface.

• The wood will turn black in less than one second when held at the correct height.



Burn in a pattern from left to right (*Fig. 2*) or top to bottom (*Fig. 3*). Never linger on a single section for more than two seconds.

• Move the torch in a steady, controlled manner. DO NOT fan the torch back and forth quickly (this puts out the flame).



If stencil warps/flexes as the wood is burned, counteract by applying pressure onto stencil with screwdriver or other hand tool. In some cases a clamp may be required hold the stencil in place. **DO NOT** apply pressure with bare hand.



When burning is complete shut off and place the torch on a level surface. Slide the stencil away using a screwdriver and pliers and place the hot stencil on a non-flammable surface.

• NEVER attempt to grab the stencil with bare hands until at least 30 minutes after burning is complete.



## HOW TO BURN TEXT

## Lay Out Your Design

Laying out your design helps to center your burn text and ensure enough room. This way, you don't waste a finished piece of wood because the word wasn't measured. Use a pencil or another nonpermanent writing utensil to trace out or mark the individual letters' four edges. This will also be helpful to keep all letters even on the same line.



- In *Fig 4* the text has been traced out and is centered on the piece for burning.
- Small marks can be made in the corner of each letter if you do not want to trace out entire letters.
- Another option is to stencil your design on paper first. Lay the paper on your wood/project surface to easily center your design.

• In *Fig 5* the text has been burned off center and out of frame because the letters were burned without laying out the design first.



WRONG Letters burned off-center



## HOW TO BURN TEXT

#### **Even Spacing Between Letters**

An alignment slot is attached to the left of each letter on the text stencils. Using the alignment slot to aid in the burning of the text makes it very easy to achieve even spacing between letters. Review the figures below to learn how the alignment slot is used.



- In this example a word has been partially burned.
- *Fig.* 6 below shows correct use of the alignment slot to burn the next letter.
- *Fig.* 7 below shows wrong use of the alignment slot to burn the next letter.

#### 🕸 TIP

Clamp a straight strip of wood or scribe lines on your work piece to align the stencil as you move it side to side.

- In Fig. 6 the "E" is aligned correctly.
- Notice how the previous letter "K" is fully aligned horizontally with the far right edge of the letter in the slot.
- Also notice how the previous letter is aligned vertically within the slot.



Note: Most of text stencil hidden for clarity.

- In Fig. 7 the "E" is aligned wrong.
- Notice how the previous letter "K" is NOT fully aligned horizontally with the far right edge of the letter in the slot.
- Also notice how the previous letter is NOT aligned vertically within the slot.



## HOW TO BURN TEXT

## **Final Product**



- When the letter is aligned, place the square shield around the letter.
- The shield allows only the selected letter to be cleanly burned and reduces the risk of accidentally burning an adjacent letter.

Note: On wide letters such as "w" the shield may need to be moved with a pliers to burn the entire letter.

#### **IMPORTANT:** No Shield Used For 3" Text Stencils

- Burn the letter in a sweeping pattern from <u>top to bottom</u> or <u>left to right</u> for best results.
- It is best to work as quickly as possible (without putting out the flame). Do not linger on a section for more than one second.
- Fig. 8 shows the completed word after the letter is burned.



Fig. 8

#### 🌾 TIP

Allow the stencil to cool between letters. A hot stencil can cause the burn to be "cloudy" or "smudged."

### HOW TO BURN SYMBOLS

### Lay Out Your Design

Like burning text, laying out your design before burning symbols is essential. Use a pencil or another non-permanent writing utensil to trace around or mark several edges on an individual symbol. This will be helpful to keep symbols even on the same line.



- Place the stencil on a flat surface.
- Visually line up the stencil where desired on a given design.
- Trace or mark edges of symbol to save stencil positioning.
- For best results, burn the symbol in a sweeping pattern from either top to bottom or left to right.
- It is best to work as quickly as possible (without putting out the flame). Do not linger on a section for more than one second.
- *Fig.* 9 shows the completed symbol after it is burned.



#### TIP

Use another stencil or piece of scrap wood to avoid burning adjacent symbols or over-burning.

## ADDITIONAL FEATURES: EMBOSS



# ADDITIONAL FEATURES: PAINT

The stencils may also be used for painting. Simply apply paint to a brush, and make a stabbing motion to fill the design with paint. Wipe down your stencils with solvents to remove excess paint.

#### Required Items:

- Stencil
- Paint
- Paint brush
- Material to paint on



- 1. Place the stencil over the material you've selected to paint.
- 2. With paint on the brush, use a stabbing/ dab motion to fill the design.
  - Avoid brush strokes or the design will not turn out well.



 Continue dabbing the design with paint until you only see paint inside the design.



- 4. Remove the stencil to reveal the design.
  - DO NOT slide the stencil off or paint will be smeared.



- 5. Allow the paint to dry before handling the piece.
  - Clean the stencil of paint before burning future projects.

#### ADDITIONAL FEATURES: WRITING UTENSILS



### APPLYING FINISH

Once a design has been burned, painted, or traced, it's essential to cover the piece with a sealant to protect it and increase longevity. For the best results, Lumberjack Tools recommends using a spray finish.

- Only use a spray finish. Do not use a brush to apply the finish. Using a brush will spread carbon/charcoal created from burning.
- Spray finish does not spread carbon/charcoal.

#### ALWAYS APPLY FINISH AFTER BURNING IS COMPLETE. DO NOT BURN MATERIAL THAT ALREADY HAS FINISH APPLIED!

Spray finishing equipment is optional for most cases. Spray finish may be purchased in aerosol cans at local hardware stores. Types of spray finish include but are not limited to:

- Polyurethane
- Lacquer
- Shellac
- Varnish

## **MAINTENANCE**

After burning, painting, or tracing, the stencils will become dirty. The stencils should be cleaned to increase their longevity of the stencil.

- Clear stencil of any debris build up with a rag.
- Rub with fine-grit sandpaper or a Scotch-Brite pad if build up does not easily come off.
- Wipe down stencil with solvent such as mineral spirits and let dry.
- **NEVER** rapidly cool a stencil in water or other media. Rapid cooling could cause the stencil to warp and become unusable.

### **TROUBLESHOOTING**

PROBLEM	CAUSE	SOLUTION
Torch not	<ul> <li>Work environment too windy</li> </ul>	<ul> <li>Move to a work space that is less windy</li> </ul>
igniting	<ul> <li>Torch out of butane fuel</li> </ul>	Refill torch using butane fuel can
	<ul> <li>Not using correct ignition buttons</li> </ul>	<ul> <li>Read torch instructions on how to ignite</li> </ul>
<ul> <li>Torch flame burns out</li> </ul>	<ul> <li>Work environment too windy</li> </ul>	<ul> <li>Move to a work space that is less windy</li> </ul>
during use	<ul> <li>Moving torch too quickly</li> </ul>	<ul> <li>Slow down your movement while burning</li> </ul>
Wood surface	<ul> <li>Holding torch too close to wood surface</li> </ul>	• Hold so flame is 1/2" away from surface
not burning	<ul> <li>Holding torch too far from wood surface</li> </ul>	
	<ul> <li>Burning wood surface for too long</li> </ul>	<ul> <li>Increase your movement to avoid over burning the wood surface</li> </ul>
<ul> <li>Image/text not</li> </ul>	<ul> <li>Burning wood surface too quickly</li> </ul>	<ul> <li>Slow down your movement to allow the wood surface to thoroughly burn</li> </ul>
clear after burning	<ul> <li>Burning end grain of wood</li> </ul>	<ul> <li>Burn face grain and edge grain of wood for best results</li> </ul>
	Stencil too hot	<ul> <li>Allow the stencil to cool for 5-10 minutes before using again</li> </ul>
	<ul> <li>Wood surface is not flat</li> </ul>	• Use a planer, hand planer, sander or sand by hand to achieve an even surface
<ul> <li>Wood not burning in</li> </ul>	<ul> <li>Using too big of torch</li> </ul>	<ul> <li>We recommend using a small butane torch</li> </ul>
small details of stencil	<ul> <li>Holding torch too far from wood surface</li> </ul>	• Hold so flame is 1/2" away from surface
Stencil design	<ul> <li>Not pressing hard enough with emboss tool</li> </ul>	<ul> <li>Press emboss tool harder against material</li> </ul>
not embossing	<ul> <li>Not embossing over soft pad</li> </ul>	• Place the stencil and material over foam, cardboard, or notepad so material can flex
<ul> <li>Emboss tool punching through material</li> </ul>	<ul> <li>Pressing too hard with emboss tool</li> </ul>	<ul> <li>Lighten the amount of pressure but maintain enough so material still flexes</li> </ul>
Design not	<ul> <li>Stencil is moving out of position</li> </ul>	<ul> <li>Check that tape is secure and add more if necessary</li> </ul>
painting well	<ul> <li>Not using brush correctly</li> </ul>	<ul> <li>Paint with a dabbing motion, do not use a brushing motion</li> </ul>
Design not tracing well	<ul> <li>Stencil is moving out of position</li> </ul>	Check that tape is secure and add more if necessary

3210 Hogarth St., Eau Claire, WI 54703 • 715-514-0319 • www.burnstencil.com