



## FLETCHING INSTRUCTIONS

### Preparation

Check your work area (table, area and hands) for possible adhesion contaminants: oil, food, silicones, grease, dust, WD-40 or other aerosol lubricants, etc. Assuming you are using a used clamp and jig, clean by letting the clamp soak for a couple of hours in acetone (you may leave it overnight if more convenient). This will soften the dried glue and allow you to wipe it off easily. Numbering your clamps will allow you to identify potential issues with some of them in the future. After you have cleaned your jig, make clean-up simple by using Clamp Release Tape on the clamps. Clamp Release Tape prevents adhesive build up on your jig and ensures you do not glue your clamp to the arrow shaft in the fletching process if too much glue is used. Do not let the glue set on your jig; wipe it off with a paper towel between each use.

- 1) a. **For new shafts:** Cut shaft to proper length.  
b. **For used shafts (re-fletching):** Remove old vanes, wraps and glue with "The Stripper" by Bohning. To remove sticky residue, spray Bohning Limoxyl on shaft and wipe with lint free towel until all residue is removed.
- 2) **Carbon and Aluminum shafts:** Clean shaft with Bohning SSR and scrub with Scotch-Brite® pad. Rinse under HOT running water and let air dry.  
**Wooden shafts:** Sand the shaft with coarse grit sand paper, then buff the surface smooth with a fine grit sand paper. Use a tack cloth to remove sawdust. To seal the wood, we recommend dipping entire shaft in a water-based Acry-Lac Gloss, or solvent-based Fletch-Lac Clear, Fletch-Lac Blue Clear, Fletch-Lac Supercoat or Stain.
- 3) If using inserts, install with one of Bohning's adhesives: Ferr-I-tite®, Ferr-I-tite® Cool Flex, Insert Iron, Instant Gel or Blazer® Bond (see table on page 5).

**Do Not Clean Bohning Vanes:** All Bohning vanes are primed for optimal adhesion. Do NOT remove the primer by sanding or rubbing with solvents. Bohning primer is compatible with all known archery adhesives. It is OK (although not necessary) to apply a primer on the vanes if your instant glue comes with one.

## Wrap or Dip

**Wraps:** Bohning Wraps help personalize your arrows and provide a convenient and effective surface allowing for great adhesion. All wraps are not equal. There are multiple grades of materials that are sold as arrow wraps.

If a manufacturer has not obtained the correct surface coating and thickness, adhesion problems may arise. The material used by the Bohning Company has been tested and verified for adhesion strength and durability.

### APPLYING ARROW WRAPS:

- 1) Remove wrap from backing. Place adhesive side up on semi-soft surface (mouse pad).
- 2) Align shaft with edge of wrap and roll with steady motion and downward pressure.
- 3) Place index fletching over the wrap seam to help secure the wrap.



**Dipping:** Dipping your arrows will improve adhesion bonding in high humidity. You can use Fletch-Lac as is or you can dilute it with Fletch-Lac thinner (60% paint, 40% thinner) and apply two to three coats. This is our preferred method as it creates a thin and lightweight coat.

Fletch-Lac Super Coat	Very high gloss with a very hard and strong finish. It prevents dents, chips, or general damage done to the shaft
Fletch-Lac Clear Coat	Softer finish with very high gloss
Fletch-Lac Blue Clear	Very high gloss with a blue tint, allowing colors to show up more visibly. Great for tracking an arrow in low light.
Acry-Lac Coffee Stain	Dark wood stain giving the arrow a more traditional look.
Acry-Lac White Gloss (water based)	Glossy, softer finish with low odor
Acry-Lac Clear Gloss (water based)	Glossy, softer finish with low odor

## Glue

When choosing a glue there are many factors which will affect your decision. Some of them include:

**Application:** different glues should be chosen for fletching vs. applying inserts, etc. Shaft type will also be a determining factor

**Environment:** some glues are best in high humidity vs. low humidity

**Viscosity** (resistance to flow): personal preference will determine the thickness of the glue each user prefers to use

**Time:** the amount of time before shooting is recommended

	Applications	Shaft Types	Clamp Time	Cure Time [before using arrows]	Useful Information
<b>FLETCH-TITE PLATINUM®</b>	Vanes Feathers Tapered nocks	Carbon Cedar Aluminum Fiberglass Wraps Painted	5 Minutes	48 Hours	Flexible (non brittle) bond - Absorbs shock when shooting into a target repeatedly Use this glue to tip vanes or feathers Easy clean up Best for low humidity application Two years expiration
<b>INSTANT GEL*</b>	Vanes Feathers Points Inserts Tapered nocks	Carbon Cedar Aluminum Fiberglass Wraps Painted	2 Minutes	4 Hours	Instant, rigid-bonding glue in a gel form (high viscosity) Complete formula-does not require accelerator Cures on contact One year expiration
<b>BLAZER® BOND*</b>	Vanes Feathers Points Inserts Tapered nocks	Carbon Cedar Aluminum Fiberglass Wraps Painted	15 Seconds	2 Hours	Fastest cure Instant, rigid-bonding glue in liquid form (medium viscosity) Complete formula- does not require accelerator Cures on contact One year expiration
<b>FERR-L-TITE®</b>	Points Inserts	Carbon Cedar Aluminum		As soon as it has reached room temperature	Hot melt adhesive Heat reversible -flame required No expiration
<b>FERR-L-TITE® COOL FLEX™</b>	Points Inserts	Carbon Cedar Aluminum Fiberglass		As soon as it has reached room temperature	Hot melt adhesive (low melt temperature) Heat reversible- no flame required (use hot water to soften) No expiration
<b>INSERT IRON</b>	Points Inserts	Carbon Cedar Aluminum Fiberglass		48 Hours (72 Hours if air is dry)	Strongest glue Cures with moisture One year expiration
<b>FEATHER FLETCHING TAPE</b>	Feathers Mylar vanes	All		Immediate	Pressure sensitive adhesive No expiration

\* All Cyanoacrylate (CA) glues are toxic when inhaled or on the skin. Carefully use acetone to wipe this off. See disclaimer when using tapes & oils.  
CA glues are not recommended to glue in pre-drilled nocks because it will make the material brittle.



## Choosing Your Vane

There are many factors which help archers determine which vane is the best for his or her setup. The first thing to consider is the type of shooting being done. The chart below shows all available Bohning vanes and the recommended uses for each one.

	Indoor	Outdoor			Hunting		
		Indoor Spots	Outdoor Field	Outdoor FITA	Outdoor 3-D	Fixed Blade	Mechanical
Blazer®	✓	✓	✓	✓	✓	✓	✓
Blazer® X2		✓	✓	✓			
Mini Blazer®		✓	✓	✓			
Micro Blazer®		✓	✓	✓			
Killer	✓				✓	✓	
Ice		✓	✓	✓			
Impulse™ 3" and 4"		✓	✓	✓			
Impulse™ Deux		✓	✓	✓			
Impulse™ First Flight	✓						
X Vane® - Parabolic	✓						
X Vane® - Shield Cut		✓	✓	✓			
Blazer® Stretch Fletch™					✓	✓	
Blazer® QuikFletch®					✓	✓	

## Fletching

Fletch arrows using one of the Bohning Fletching Jigs: Tower®, Blazer® Helix, Straight (STR8) or Pro Class Jig. Bohning jigs are designed to apply the correct amount of pressure along the entire vane or feather. Results may vary if other jig brands are used.

For optimum results we recommend fletching Blazer® vanes at a 3° helical. Read all jig instructions first for best results.

### TO HELP YOU CHOOSE A JIG:

**Tower® Jig** - Fast! Fletch 3 vanes at once (some assembly is required).

**Blazer® Jig** - Simple! Fletch 1 vane at a time. Easy setup and operation.

**Pro Class Jig** - Most economical! Numerous configuration options with magnetic "snap" clamp. Fletch 1 vane or feather at a time, any length.

Some competitor jigs use magnets on the clamp ends for fletching. We find that these do not apply enough downward pressure for good adhesion.

Make sure your jig is properly set up so that the base of the vane is completely flush with the shaft. Test this by putting a vane and shaft in the jig WITHOUT any glue and adjust it as needed.

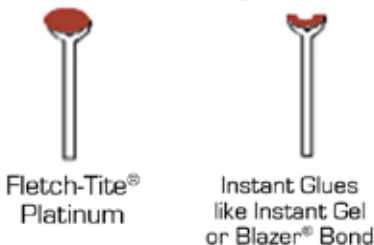
### BASIC FLETCHING INSTRUCTIONS:

- 1) Seat vane securely to the bottom of clamp slot/clip. Apply thin bead of Bohning glue to vane base.
- 2) Follow jig instructions for specific arrow shaft insertion, etc. Allow proper clamp time in the jig according to glue instructions.
- 3) Carefully remove arrow from jig, dot tip and tail of vane with a small

amount of glue (for added security) and allow proper cure time according to glue instructions before use.

How much glue do you need? For solvent based glues like Fletch-Tite Platinum®, fill the base of the vane. Instant glues (CA glues) only require a thin bead of glue that coats the entire vane base.

### How much glue?





## Removal

**Vanes:** Use “The Stripper” by Bohning to strip the vanes and glue off the shaft. The curved shape of the blade fits arrow shaft and ensures no unintentional damage is caused.

**FOR ALUMINUM ARROWS:** Remove nock. Plug arrow using Bohning Dip’N Plugz. Soak the end in acetone or denatured alcohol for a couple of hours or overnight to remove traces of adhesives.

**FOR CARBON ARROWS:** Completely scrape adhesive residue off using “The Stripper.” Wipe with acetone or denatured alcohol. Do not soak.

**Wraps:** There are 3 ways to remove wraps that we recommend.

A) Use “The Stripper” to remove the wrap.

B) Use a hair dryer to soften the adhesive and peel the wrap.

C) Soak the wrapped shaft in hot water and peel off the wrap.

Use Limoxyl to remove vinyl residue from the shaft.

**Paint:** Soak in acetone or lacquer thinner overnight, then scrub the paint off. Proceed to shaft preparation explained on page 3.

**For all:** After removal process is complete, proceed to shaft preparation (as shown on page 3).



## Adhesion Trouble Shooting

Sometimes problems can arise while fletching. Listed below are recommendations to help determine a solution to some common problems.

### BASIC TIPS TO PREVENT PROBLEMS:

- Proper shaft prep is very important for strong adhesion.
- Follow all instructions and allow time for proper clamp and cure time for adhesives.
- For best results with Fletch-Tite Platinum®: fletch arrows and allow to cure in a controlled climate with low humidity (30-50% relative humidity). If humidity is too high (especially above 70% relative humidity) we recommend fletching with an instant adhesive such as Blazer® Bond or Instant Gel.
- It is important to make sure none of these items are in your fletching area: Silicone based aerosols, oils/chemicals, excess dust/pet hair, food/beverage
- Use a substantial amount of glue on vane base. It is ok if the glue beads up slightly around the vane base when fletched (see page 7 for details).
- Clean jig clamps/arms frequently with acetone and use Bohning's clamp release tape to prevent adhesive build up (which impedes downward pressure).
- Discard glue after 2 years and purchase new to ensure best adhesion properties.

### HOW TO IDENTIFY OTHER PROBLEMS:

**Glue is on the shaft:** usually indicates a problem with vanes. Some vanes are manufactured using release agent and need to be cleaned prior to fletching. This is not the case with Bohning vanes.

**Glue is on the vanes, arrow shaft is clean:** usually indicates a problem with the arrow shaft. Repeat the cleaning procedure and try again. Some shafts need more abrasion. Sometimes the best solution to this is to use a wrap or dip the arrow shaft.

**Glue is on both vane and arrow shaft:** could indicate a jig not properly set-up, a damaged clamp (if you have numbered them, look for a pattern in the failure), glue has not been allowed to dry for recommended amount of time or a contaminant on parts of the shaft or vanes.

The Bohning Company offers many vane styles. The chart to the right helps archers determine which vane is best based on intended use. See the Bohning catalog or website ([www.bohning.com](http://www.bohning.com)) for more information on individual vanes.