

How-to Fletch Arrows

By Zack Walton

How many times have you pulled an arrow from the target and found a vane dangling from the shaft? This was one of the most frustrating things for me while preparing for the upcoming season. As many of you know, there is no way to reattach the vane in the exact place without stripping remaining vanes and starting over. And how do you fix it? Do you take it to a pro shop? Well, does that shop have the same type of jig to match your current fletching? Is it straight? Or right or left helical? How do you know? And do different fletching techniques affect arrow flight?

These were all questions I wondered when it came time to re-fletch my worn vanes.

It wasn't until a few years ago that I even questioned things like this. I always figured in the broad scheme of bowhunting, these "minor" details didn't matter. As I have matured as a bowhunter, and student of archery, I have come to the conclusion that all these "minor" details figure into a major equation. And "minor" issues can quickly add up to major problems.

The answer I came up with was to take total control of arrow preparation and do it myself. The following technique has evolved over several years of experimenting and conversations with other archers. While this system will not make your arrows impervious to fletching failure, following these steps will give you longer fletching life and more consistent performance.

Buy bare shafts

Although many mail-order companies offer built arrows, in a wide array of size and color options, I find it best to buy bare shafts. First, they are cheaper. Instead of paying someone else to fletch your arrows, save a few bucks and build it yourself. Second, once you have all the components, it is easier to duplicate your arrow setup and keep all arrows uniform.

Turn nocks

This step is not absolutely necessary, but if you are going to build you own arrow, you might as well make it as close to perfect as possible. I think to turn all the nocks, so that they face the same direction on the shaft. With all nocks positioned the same, checking consistent arrow flight it easier.

Prepare arrow shafts

With a piece of 220-grit (or more fine) sand paper, lightly rub completely around the top six inches of the shaft--just hard enough to scuff up the outer coating on the arrow. Next, take an old cotton cloth and dip it in a small amount of methyl ethyl ketone (MEK). Thoroughly clean the roughed portion of the arrow. Dust from the arrow should come off on the cloth. After cleaning, wrap cleaned portion of the shafts in a paper towel to ensure they stay clean until they are fletched.





Ready jig

Before you start to fletch arrows, make sure the jig is properly set. Take an arrow and place the nock into the jig. Next, take a fletching and place it into the clamp. Lay the clamp into place and check to see if the base of the vane is flush with the shaft throughout the entire length of the fletch. If it is not, adjust jig (refer to jig manual) until the fletching has perfect contact from top to bottom. Mark on the clamp where the bottom of the fletching is to ensure your fletchings will be uniformly placed around the arrow.

Prepare fletching

Load your fletch into the clamp. With a scouring pad (like you'd use to clean dishes), lightly scrub the base of your fletch. The same philosophy applies to this as did to scuffing the arrow shaft--just rough the surface. Reposition the fletch in the proper location in the clamp (Note: refer to the lines on the clamp to keep a consistent fletch position). Next, clean the base with MEK.



Apply glue

While applying glue, I like to make sure enough glue is on the fletching to ensure complete adhesion to the arrow shaft. If a little glue squeezes out the side of the fletch when it is pressed to the shaft, that is OK. You just don't want too much excess glue squirting all over your arrow. You will have to experiment with the proper amount on the first couple fletchings you adhere.



Adhere fletching

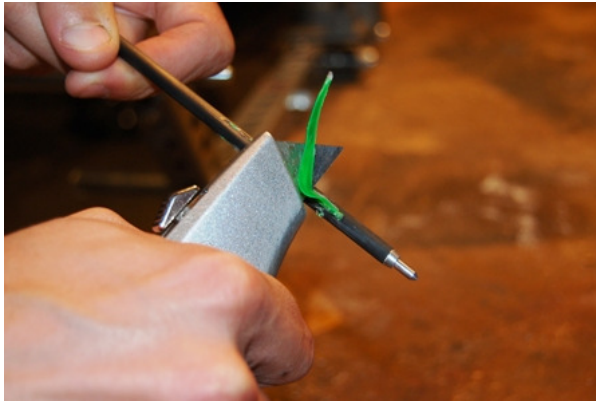
Take clamp and press to arrow shaft. Make sure the clamp is properly aligned with the jig. Next, slightly move clamp up and down on the shaft, only about 1/8", to ensure no air bubbles are trapped between fletching and arrow. Depending on the glue you are using, leave the fletching in this position for up to 30 minutes. Quick set glue obviously does not need this long.

Rotate

After proper drying time, remove clamp, rotate arrow to next fletching position, and repeat the steps above. After, all fletchings have been adhered, put a small dab of glue and the top and bottom of each vane. This will help keep fletching protected during pass-throughs on targets, or game.

Re-fletch

If you are re-fletching arrows, you must first strip the old fletchings. For this, use a sharp utility knife. Keep the blade at an angle nearly parallel to the arrow shaft. Do not use a steep angle and cut into the arrow. When all signs of old fletching and glue are gone, you have your bare shafts and start on the first step above.



My items of choice...

Bitzenburger Dial-o-Fletch: More expensive, but they are the highest quality, most consistent fletching jigs I've ever used. I like to use clamps with a lot of helical, especially when fletching arrows to be used with broadheads.

Fletch-Tite Glue: Lots of choices for glue, but this is the one with which I've had the most success. If you like fast-set glues, there are several options. Easton and AAE both make good fast-set options. Also, Goat-Tuff works well.



Fletch-Tite Glue



Bitzenburger Dial-o-Fletch