
Supporting narrated video (NV) demonstrations, high-speed video (HSV) clips, technical proofs (TP), and all past articles are available online at billiards.colostate.edu. Reference numbers used in the articles help you locate the resources on the website.

Recently, I posted online video [NV J.69](#) demonstrating how to replace a cue tip, with no special tools required. Obviously, if you have convenient access to a reliable and trusted cue mechanic, that is the best option; but if you ever find yourself in a bind or need something fast, it is nice to also be able to do it yourself. All you need is what is shown in **Image 1**: a block of wood, printer/copy paper, sandpaper sheets, super glue gel, a towel, Scotch Magic tape, a utility knife, and a new tip. You will also need lots of patience to take your time and be careful if you want to go a good job. The procedure consists of the 10 steps described below.



Image 1 Things required

1. Remove Old Tip

Throughout much of the procedure, the cue is supported on the towel and block as shown in **Image 2**. If you want a softer surface to protect the shaft when cutting off the tip, you can use a leather or cork pad, but a clean block of wood is fine. As shown in **Image 3**, carefully position the blade close to the ferrule, but make sure you leave a small amount of material behind. You do not want to risk cutting into or damaging the ferrule. Roll the shaft back and forth and use a sawing motion as you cut to make it a little easier.



Image 2 Shaft support



Image 3 Removing the old tip

2. Scrape Ferrule

Now carefully trim off the remainder of the tip, taking your time to remove only a thin sliver at a time. Be sure to keep the blade as flush as possible with the ferrule. As you get closer to the ferrule, the knife should mostly be scraping instead of cutting. Be careful to hold the knife and shaft in a way that you will not cut yourself. On the final scraping passes, you can have the knife perpendicular to the ferrule. To remove the remainder of the tip and glue residue, you can lightly sand the ferrule end by holding sandpaper with a centered finger while turning the shaft, being careful to not sand the outer shoulder of the ferrule. Use a paper towel or clean rag to remove any remaining dust. When you are done, the ferrule end should look clean.

3. Prepare Tip and Ferrule

Now sand the back of the new tip so it will more easily absorb glue and be flat. It is best to use a circular sanding motion, rotating the tip and shifting on the sandpaper frequently. The new tip should have a larger diameter than the ferrule. Wipe the sanded tip on a paper towel to remove any remaining dust. Test the fit of the tip on the ferrule to make sure it is oversized and fits flat with no wobble while turning and sliding.

4. Tape Ferrule

Now tape around the ferrule to build up the diameter to the size of the new tip to make it easier to center the tip when gluing it on, and to keep the glue off the ferrule. Make sure the tape does not protrude beyond the ferrule, but get it as close to the end as possible.

5. Glue New Tip On

Now uniformly spread glue on the back of the tip and place a small drop in the center so the glue will squeeze out evenly without any bubbles or voids. Center the tip on the tape-wrapped ferrule with gentle turns and shifts. Gently press down on the tip to get the glue to squeeze out uniformly, being careful to keep the tip centered. Now firmly apply and keep pressure on the tip. You can do this by hand by pushing the shaft tip-down onto the table. As shown in **Image 4**, you can also wedge the shaft under a table with the tip down on a board. Either way, make sure the pressure on the tip is uniform with the shaft vertical. Wait a minute or so for the glue to totally set. When you are done, the tip will be centered and bonded to the tape-wrapped ferrule.



Image 4 Shaft wedged under table

6. Remove Tape

Now remove the tape by peeling toward the tip. When necessary, you can scrape with your fingernail or the utility knife to help separate the corners and edges of the tape. When you are done, the tip should extend beyond the ferrule in all directions.

7. Trim Tip

As shown in **Image 5**, now trim away the glue residue and some of the excess tip material. Hold the blade flush against the ferrule, and start with the blade angled, with the board and tip close to the edge of the table. Trim only a little at a time with a sawing motion, being careful to not apply too much force. The tip should be beveled out some when you are done. Do not try to remove too much material. The sanding steps to follow will remove the excess.



Image 5 Trimming the tip

8. Sand Tip

The next step is to sand the tip down to the final diameter. First apply a layer of tape to ferrule. As shown in **Image 6**, put down a sheet of the rough sandpaper and place the block over half. Then tape down two pieces of cover paper across the sandpaper. Now position the block so only a tip-height-width strip of sandpaper is exposed with the tip against the block. Only the tip should be touching the sandpaper.



Image 6 Tip sanding setup

The joint end of the shaft is supported on the towel to keep the shaft above the table and to help angle the tip into the sandpaper slightly. Holding the shaft near the ferrule, and with the other hand on the block to keep everything in place, rub the tip back and forth to sand it down, turning the shaft frequently. Move to a different part of the sandpaper and blow and wipe the debris away periodically. After the tip gets close to the final diameter, switch to fine-grain sandpaper and continue. You can also fold over the towel to allow an even closer final sand. Check the paper thickness periodically to make sure the surface is smooth and thick enough to prevent the ferrule from being scratched, especially when using the rough sandpaper. When you are done, the tip diameter will match the ferrule diameter.

9. Clean Up Tip and Ferrule

You can fine sand the ferrule-and tip to help smooth things out even more. This will also clean up the ferrule. Wrap fine sandpaper around the tip and ferrule, keeping it as flush as possible, and turn the shaft, applying light sanding pressure with your fingers. Then change to an even finer grit. Finish it off with ultra-fine sandpaper or emery paper. Now support the shaft on the unfolded towel and burnish the tip by wetting the sides and then rubbing on the paper, turning the shaft frequently. If you want an even shinier finish, buff the tip and ferrule on a piece of leather. When you are done, the tip will look professionally installed.

10. Shape and Chalk Tip

All that remains is shaping and chalking the tip. You can use rough sandpaper curled in your hand while turning the shaft. But if you have a tip-shaping tool, that is much easier. Regardless, it is good to smooth the surface a little with fine-grit sandpaper when you are done; although, this is not necessary. Now thoroughly chalk the tip and it is ready for play.

I want to thank Bob Jewett for coming up with many parts of the procedure and for giving me lots of good advice and guidance as I planned the video. Thanks Bob! If you want a detailed list of all steps used in this video along with additional advice, see the “[replacing a tip](#)” FAQ page at billiards.colostate.edu. Hopefully, in the future, if you do not have convenient access to a fast-turn-around cue mechanic when you need one, you will be able to change a tip on your own. But be sure to study online video [NV J.69](#) first and practice on other cues so you will be ready.

Good luck from Dr. Dave!



normal video

[NV J.69](#) – HOW TO REPLACE A CUE TIP ... No Special Tools Required

PS:

- I know other authors and I tend to use lots of terminology, and I know not all readers are totally familiar with these terms. If you ever come across a word or phrase you do not fully understand, please refer to the [online glossary](#) at billiards.colostate.edu.

Dr. Dave is a PBI Advanced Instructor, Dean of the Billiard University, and author of the book: [The Illustrated Principles of Pool and Billiards](#) and numerous instructional DVD series, all available at: DrDaveBilliards.com.