

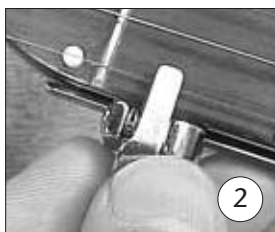
5th string capo INSTALLATION

as described by expert luthier Frank Ford

First, I hold the capo bar in position at the edge of the fingerboard with its lever arm lowered, to simulate the action of the mounted capo: (fig. 1)



Because the edges of banjo necks are rounded, and not all the same, it's a good idea to get a clear idea of how high to mount the bar at the edge of the fingerboard. Generally it works out to about 1/16" lower than the surface, but it's important to check and make sure. The idea is to have the bottom surface of the lever arm parallel to the surface of the fingerboard as the string is held against the fret, and to have the lever arm totally clear the string when disengaged (fig. 5).



Next, I'll figure out the lateral position. (fig 2). sure that the bar is close enough to the fifth fret so that the lever will be able to work easily at the sixth fret, which is the lowest fret position in which it will be used.

I'll also look closely at the position of the fifth string nut in relation to the edge of the fingerboard and the end of the capo lever. If it's too far *inboard* the string will slip right out from under the lever when it is lowered. If necessary, I'll remove the fifth nut, inlay a small piece of wood in the hole, and replace the nut with a *spike*.

At the other end of the bar, I make sure it will work at the highest logical fret. 3)



Notice the location of the capo mounting screw (fig. 4). I don't want it to land directly under the fifth nut or fifth fret, because it could raise either the nut or the fret when it's screwed in.



I'll check the fifth nut, to make sure that it's cut low enough for the string to bear down firmly against the fifth fret. If the nut isn't cut low enough, I take my smallest X-acto saw and cut it so the string bears well.

Once I establish the location of the bar, I drill a small pilot hole for the screw and screw it in. **(please see note regarding pilot holes.)* Then I drill and install the remaining screw(s) right through the hole(s) in the bar, so I don't have to worry about aligning the screw hole(s).

note: these instructions apply to both our regular (2 screws) and our long bar (3 screws) fifth string capos.

That's pretty much it. The capo is in position, and it should do its job well. Here's how it's used.

When disengaged, the capo is stored right at the end of the bar up near the fifth fret, with the lever raised to clear the string. (fig. 5)



To engage the capo you simply slide the clamp up behind the fret and tighten the screw to lower the lever and hold the string against the fret. (fig. 6)

The fifth string capo can be placed extremely close to the fret, and works better in that position. Right up against the back of the fret, the capo can clamp the string firmly without stretching the string. If you



plug the fifth string as you tighten the capo, it will be easy to get just enough pressure to hold the string down without straining the system. If you place the capo too far behind the fret and screw it down too tight, it'll stretch the string sharp.

Addition installation advice, by Rick Shubb

***Regarding pilot holes:** The ideal size pilot hole will depend on the density of the wood. And because of various neck shapes and fretboard thicknesses, on some banjos the screws are going into the neck wood, and on others, the fretboard. On some they end up right on the seam between the two, which is still OK. Just keep in mind: harder wood requires a slightly larger pilot hole.

- If the screws are going into softer neck wood, such as mahogany or maple, then start with a smaller drill bit: #55 to #53 (these are wire gauge sizes, so 55 is smaller than 53, etc.) Be sure it is drilled deep enough. If the screw begins to feel tight, or hard to turn, back it out and enlarge the pilot hole one size.
- If the screws are going into harder fretboard wood, ebony or rosewood, then begin with no smaller than a #53 bit. If the screw is at all hard to turn, then enlarge the hole using a 1/16" bit.

Banjoes vary greatly. The installer should rely on his or her own expertise in determining the best drill bit size, and with locating the hole placement to achieve the best installation on each individual instrument.