

## Question:

I am trying to install TriplePlay on my guitar, but there is not enough room for the pickup, without it touching my strings, or raising the action higher than I prefer.

## Answer:

Generally, this would be more of an issue with a guitar that has a removeable neck, as the geometry created by these designs allows for less space between the strings and the pickguard or face of your guitar. The neck is held to the body with screws or bolts (often called a "bolt-on-neck"). These guitars can be adjusted, by changing the angle of the neck, to allow your preferred action height, with the necessary space beneath the strings to fit your new TriplePlay pickup. The tutorial below will walk you through the process of "shimming" your neck.

## Read Me First!

If your guitar needs this adjustment, and you're not comfortable doing it yourself, we strongly suggest bringing the guitar to a professional instrument repair technician.

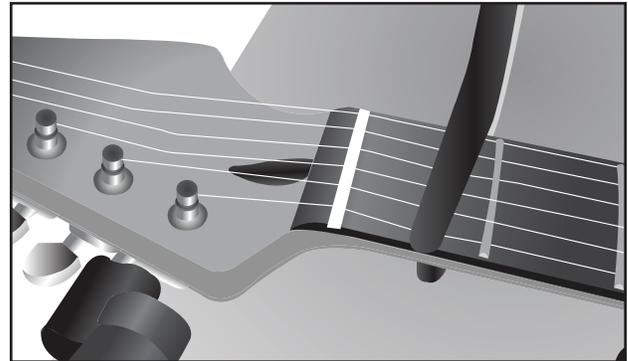
### Requirements

- Bolt-on-Neck Guitar
- Screwdriver (matching the screws or bolts holding your neck on the guitar)
- Shim material (commonly a playing or business card, or a pre-made shim available from your instrument manufacturer)
- Capo (optional)

## Step 1: Measure

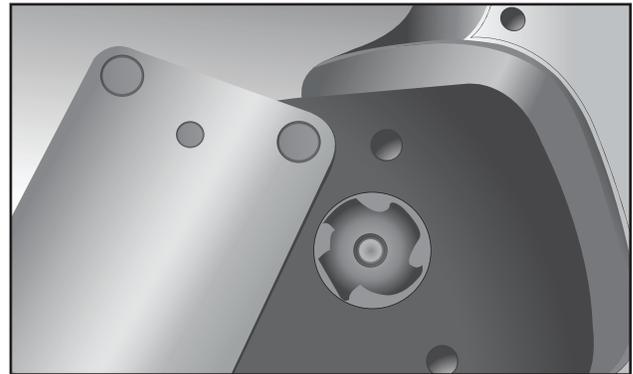
With your guitar tuned to pitch, determine how much extra clearance (in 32nds of an inch) you need to properly fit your pickup. You should feel comfortable over-estimating slightly, rather than under-estimating.

## Step 2: Loosen Your Strings



Place a capo on the first fret of your guitar (optional). This will secure the strings and keep them from coming off of your guitar when the strings are loosened. Loosen your strings until they are nearly detuned.

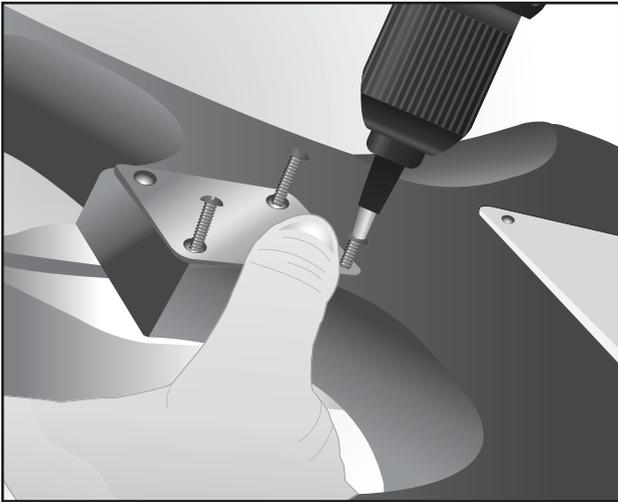
## Step 3: Tilt Adjustment?



Some necks have built in tilt adjustments, so you can change the neck angle without shims. This makes for a straightforward job. Look for a screw adjustment hole in your neck plate, on the side closest to the end of the neck pocket (rather than the side closest to the headstock). If your guitar does not have a tilt adjustment, please proceed to Step 4.

If your guitar has a neck tilt adjustment, determine the proper size tool (usually a hex wrench) by consulting your instrument manufacturer. One popular guitar brand uses a  $\frac{1}{8}$ " hex wrench for this application, for example. Loosen the two neck screws to the sides of the neck tilt adjustment. Turn the neck tilt adjustment screw clockwise to change the angle of your neck.  $\frac{1}{4}$  of a clockwise turn should allow you to create about  $\frac{1}{32}$ " of clearance for your TriplePlay pickup. Re-tighten the neck screws when the adjustment is complete. PROCEED TO STEP 7.

## Step 4: Remove Your Neck



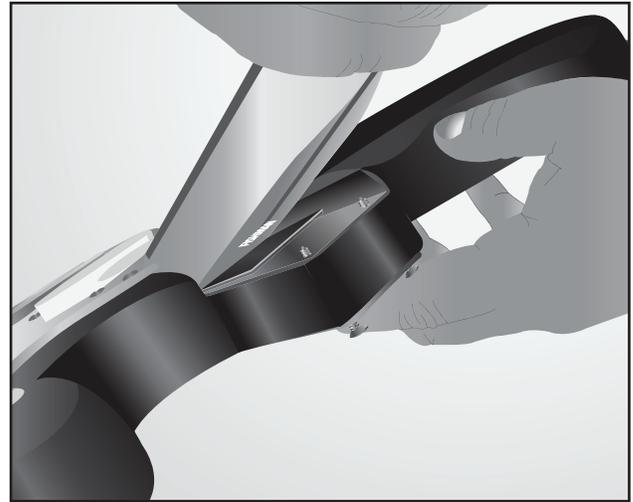
With your strings loosened, and a capo over the strings at the first fret, remove the neck to access the neck pocket. Loosen the bolts holding the neck to the body, while holding the neck to the body with your other hand. This will keep the neck from lurching forward, even under partial string tension.

## Step 5: Shimming



If your guitar does not have a tilt adjustment, you will need to shim the neck to change the angle. You will lay a shim in the end of the neck pocket beneath the butt end of your neck. A proper shim should be  $1\frac{3}{4}$  by  $\frac{3}{4}$  by .010" thick, to raise the strings from the guitar face by  $\frac{1}{32}$ ". Increase the thickness by .010" of your shim, incrementally, to increase the space for your pickup in  $\frac{1}{32}$ " increments. Use the thickness to achieve the difference specified in your measurement in Step 1.

## Step 6: Reattach Your Neck



Insert the neck into the pocket, but end first, over your shims, with the neck angle forward and the strings loose and far above the face of the instrument. Holding the neck butt in the pocket with one hand, push the neck angle back until the bottom of the neck is flush with the bottom of the pocket. Holding the neck in place with one hand, screw the first of your bolts through the neck plate into the end of the neck pocket closest to the headstock. Once this screw is tight, you can remove your hand, flip the guitar over, and complete the insertion of screws into the neck with the neck partially secured to the body.

## Step 7: Adjust Your Action

Your action height can now be raised until it is comfortable for your playing style. Traditional action height for bolt-on-neck guitars is  $\frac{5}{32}$  (Low E) to  $\frac{3}{32}$  (High E), measured from the top of your 12th fret to the bottom of the string. The heights are incrementally closer to the fretboard for the strings in between. Consider using these settings, if you don't have a known preference for action height settings on your instrument. Now that your action is comfortably set, with the new neck angle, you should have plenty of room to fit your new TriplePlay pickup to the face of your guitar or pickguard. If you need more room, add another shim!