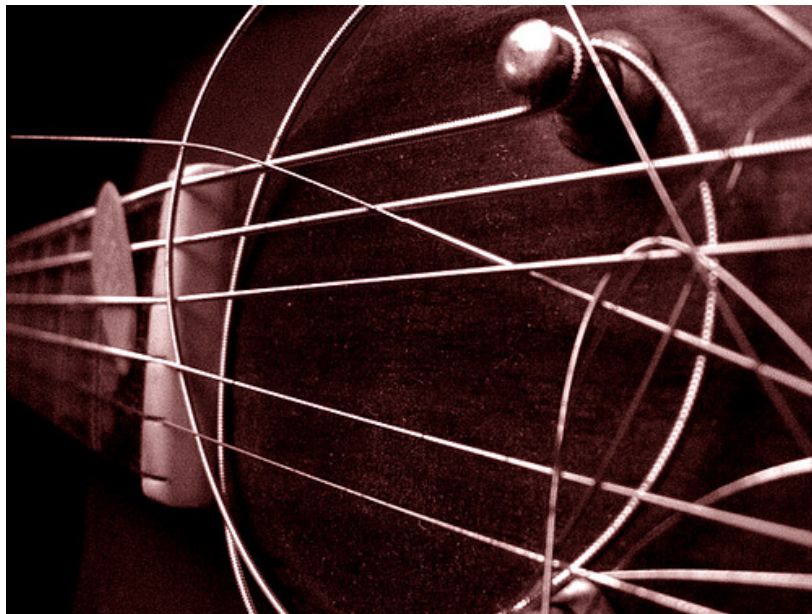


# A Beginner's Guide to Changing Guitar Strings

Written by Joshua Kukorlo

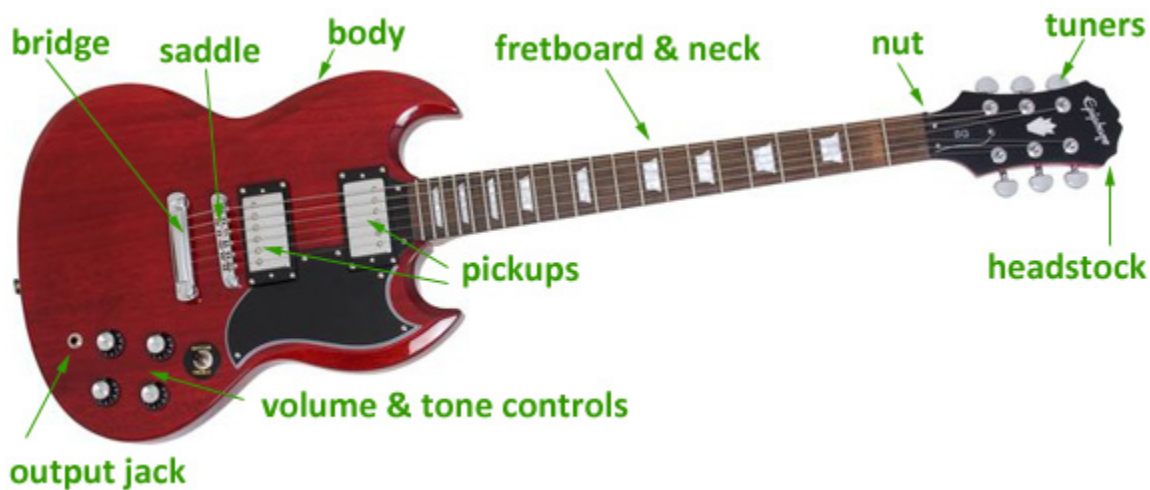


SNAP! Your B string just broke and you begin to freak out. Now what? If you've never changed the strings on your guitar before this may seem like a big step. Keep calm because it's a simple process that may take only a few minutes if done correctly. This document is intended to teach inexperienced guitar players how to remove old strings and add a new set. It guides through the process for a typical six string electric guitar that uses standard tuning (EADGBE).

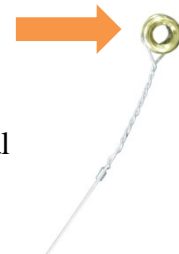
## Materials Needed

- New set of ball-end guitar strings
- Wire cutters

## Basic Information



Guitar strings are normally sold in a complete set. They can vary in size and material, but the choice is purely up to you. Typical guitar strings have a free end and a ball end (see right) that is used to secure the string. Consult your local guitar shop or look online to find a set of strings that appeal to you.



To change strings the most important components of the guitar are the bridge and tuning pegs. On modern electric guitars tuning pegs are very similar; however, bridges can vary. It is important to know the characteristics of your guitar before you begin.

Bridges come in many different styles but the important thing to know is how to attach the guitar strings to them. For the guitar to the above left the strings simply slide through the holes on the back of the bridge. For the guitar to the right the strings are fed through the back of the guitar and then pulled in front until the ball end is seated in the correct spot. If you have a bridge different than these consult a guitar shop or search online for the appropriate way to attach strings.



There is not a correct order in which strings should be changed. This document proceeds with a one string at a time approach. Some musicians prefer to change all of the strings at once so that maintenance of the guitar can be performed. Feel free to go in whatever order you are most comfortable with to change your guitar strings.

## **Safety**

Use extreme caution when performing the following steps. Guitar strings are made out of metal wire and can be harmful. The sharp ends can cut and poke through skin and eyes as well as damage the guitar or other materials nearby. Also, practice caution when using wire cutters. They are sharp and capable of harming the user. It is dangerous to cut wire that is in high tension because of whiplash. Always relieve the tension in a guitar string before attempting to cut it.

## Instructions

### Step 1: Preparation

Find an open area to lay the guitar down. A spot on the floor will work fine, but since the process will take several minutes a table or work bench may be more comfortable. Gather the new set of guitar strings as well as the wire cutters.

### Step 2: Loosen the guitar string

**CAUTION:** A guitar string breaking in tension can result in a violent whiplash. The sharp end of a guitar string can cause harm by cutting/poking a nearby person and may also damage the guitar.

Relieve tension from the string you wish to remove by turning the tuner. Pluck the string as you turn to make sure the pitch is lowering. If done incorrectly the pitch of the string will get higher and may eventually break.



### Step 3: Cut the loose guitar string

**CAUTION:** Cutting a guitar string in tension can result in a violent whiplash. The sharp end of a guitar string can cause harm by cutting/poking a nearby person and may also damage the guitar.

Once the guitar string no longer holds tension from the bridge or tuning peg, use wire cutters to cut the string a few inches from the peg. Beware of cutting a string that is still in tension.



#### Step 4: Remove the old guitar string

**CAUTION:** Not properly discarding of an old string can result in harm or injury. The sharp end of a guitar string can cause harm by cutting/poking a nearby person and may also damage the guitar.

At the bridge, simply slide the guitar string out of its specific hole (see basic information section about guitar bridges) and discard it. Tedious work may be required to remove the string from the tuner depending on how many times the string was wound. Slowly unwind what is left from the guitar string off of the tuner peg and dispose of it immediately. The thin wire is hard to see and can easily be lost or stepped on leading to injury.



#### Step 5: Remove the new string from the pack

**CAUTION:** Unraveling a new guitar string can result in a wild motion of the string which could lead to harm.

A set of guitar strings typically contains six individual packs with one string in each. Be sure to check that you have the correct guitar string for the note you are replacing. From the thickest to the skinniest string the notes are E, A, D, G, B, and E. Carefully unwind the new guitar string.



#### Step 6: Slide the open end of the guitar string through the bridge

When moving the string through the bridge the open end should easily slide through while the ball end acts as an anchor. See 'Basic Information' section for information on different bridges if you are having difficulty.

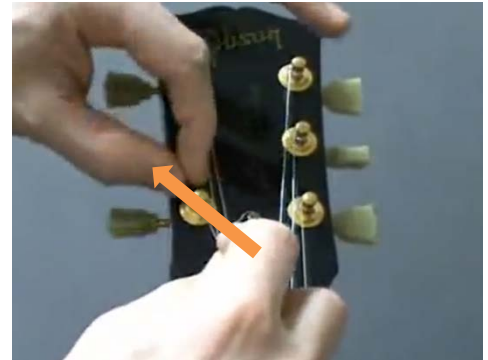


### Step 7: Align the tuning peg

Turn the corresponding tuning peg so that the through hole direction is generally in line with the direction of the guitar string. Be sure one side of the hole is facing inward and towards the string. Reference the picture in Step 8 to see how the hole was aligned.

### Step 8: Slide the guitar string into the tuning peg

The guitar string should always run from the center of the headstock through the tuner hole and then stick out the side of the headstock. Determining how much slack to give before tightening the tuner is the most difficult part of the process. Too much slack results in too many turns around the peg and not enough slack would reduce the strength of the string to be supported properly.



Pulling the string tightly through the tuning peg and then measuring four inches beyond is a reasonable estimate. Pull that point back to the tuning peg and hold the guitar string tight to the headstock below the tuning peg. Now make a bend in the wire at the tuning peg by taking the loose end of the string and pulling it tightly toward the center of the headstock.



### Step 9: Secure the loose end of the guitar string

After making the initial bend in the string take the loose end and run it in that same direction around the tuning peg. Slide it underneath the part of the string that goes to the bridge and then tightly pull it out on the other side.

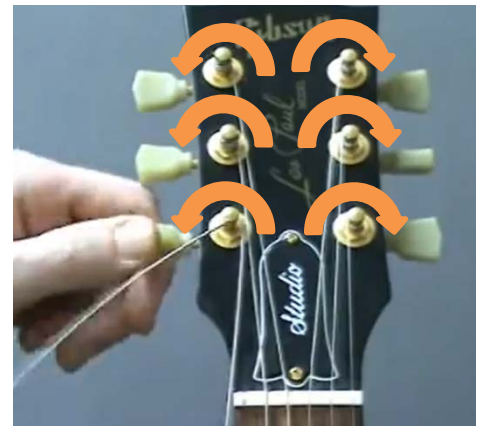


Then, pull the string straight up and away from the headstock. Now, when the tuner is tightened the guitar string will pinch and secure itself to the tuning peg.



### Step 10: Tighten the guitar string

Begin to tighten the guitar string by rotating the tuner. Hold the guitar string (on the bridge side) down on the headstock to create tension at first. This will make the first wraps tight until the tension in the actual string begins to build. It also forces the wraps to move down the peg as they accumulate. It is imperative that the tuning peg on the headstock rotates so that the string is being pulled up the inside of the headstock and then wraps around the peg. This means that the tuning pegs on the left of the headstock should rotate counterclockwise while the tuning pegs on the right should rotate clockwise. Do not tune the guitar string to the desired pitch. Tighten it until it holds itself in place with the nut and saddle but leave it at a lower pitch with low tension.



### Step 11: Remove the excess guitar string

Use the wire cutters to cut the excess guitar wire that is flailing from the tuning peg. It is best to cut this as close as possible to the peg so that the sharp end is not exposed.



**Step 12: Repeat Step 1 through Step 11 for the other five guitar strings**

Be sure to follow each step closely and make note of the changes that occur when you switch sides of the headstock.

**Step 13: Tune the guitar to the correct pitch**

Once every string has been replaced the guitar can now be set in tune. Be aware that new strings will stretch and result in being out of tune. Retuning multiple times after changing guitar strings is typically necessary.