

Changing guitar strings is a very personal thing. It's dependent on a number of factors: Frequency of playing, moisture level of the player's hands, ambition and diligence and - at the very least - the amount of coinage in one's pocket.

Some players change their strings after every gig; others may wait months or years. One famed guitarist from a well-known 1960s rock band boasted that he hadn't changed the strings on his Gibson SG for more than seven years (it couldn't have been for lack of funds, as his band had numerous Number One hits.)

Why change them? The metallic compounds of guitar strings - containing stainless steel, bronze alloy, nickel, among others - are just as susceptible to the elements as any other material in nature. Over time - days, weeks, years - their quality tends to degrade. They fall victim to humidity in the air (and your hands,) temperature changes, dirt, dust, finger oils, and other physical factors.

Scientifically speaking (no, there will NOT be a quiz on this tomorrow,) the string's ability to vibrate at a certain pitch, with a certain tone, is not a forever thing. Exposure to the above-mentioned items can reduce their sonic fidelity (in layman's terms, your sound will start to suck.) Brightness and clarity, along with sustain, will suffer and, what was once a standout sound will start resembling strings wrapped with old rags. In other words: dull, lifeless, AND more difficult to keep in tune.

As far as tuning your new strings is concerned, see Chapter One.

No matter, there is a preferred method and technique to changing the strings on your axe. But first...

Assemble Your Tools

A few implements are helpful in changing the strings on your guitar:

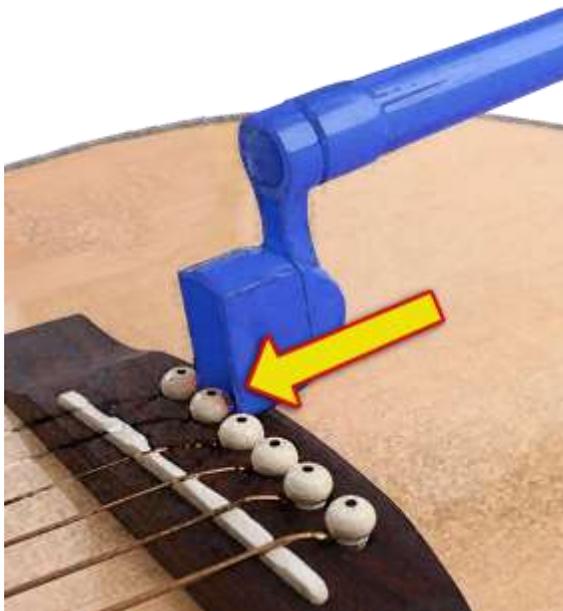
Wire cutters should be used – as a final step AFTER tuning, to trim the extra strings flopping around the headstock (unless you like that look.) Why after? What happens if you clip too short before you put the string on? (Other than say, “Oops.”)



A string winder is inexpensive and a good way to save time in winding the string up to pitch.



Also, for acoustic guitar guitars, many string winders have a small cutout to make removal of the bridge pins easy.



There are also string winder adapters for small drills or power screwdrivers, making the whole process quite simple.



Gauge

The thickness of the string is measured in thousandths of an inch, ranging anywhere from .008 (eight/one-thousandths – equal to the thickness of two human hairs) for ultra-light high E strings. At the other end, they can be as thick as .056 (fifty-six/one-thousandths - just short of one-sixteenth of an inch) for thick low E strings.

But, a slang expression of using an “eight” for the high E, or a “fifty-six” for that low E has become common. String manufacturers mix and match gauges in a wide variety for six-string, seven-string, twelve-string, and other guitars. Depending on the overall gauge of the set, they may call them “ultra-light,” “heavy,” and other descriptive labels.

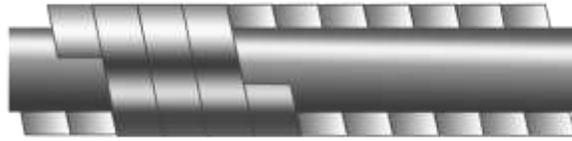
In general, these rules apply for strings (based on physics – which isn't up for discussion)

- The thinner the string, the lower the volume.
- The thinner the string, the less the sustain.
- The thinner the string, the easier the bending.
- The thinner the string, the more likely it is for breakage.

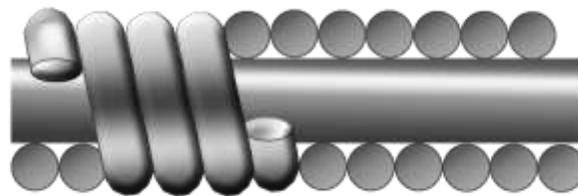
Flat Wound/Round Wound/Half-Wound

Thin, higher strings, such as some Gs, the Bs and high Es, are straight wire. Thicker strings start with a solid core and are then tightly wrapped with additional metal wire or tape to achieve the desired thickness.

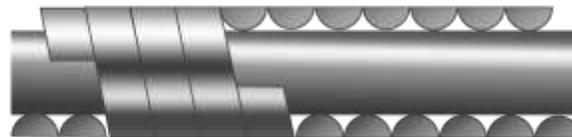
As the name suggests, flat wound strings use a flat metal tape around a round or hexagonal core.



Round wound strings use a round wire wrap.



Also as the name suggests, half-wounds are half round (toward the core,) and flat on the outside.



What kind of strings are best for you? That depends on what kind of guitar and what kind of music you're playing.

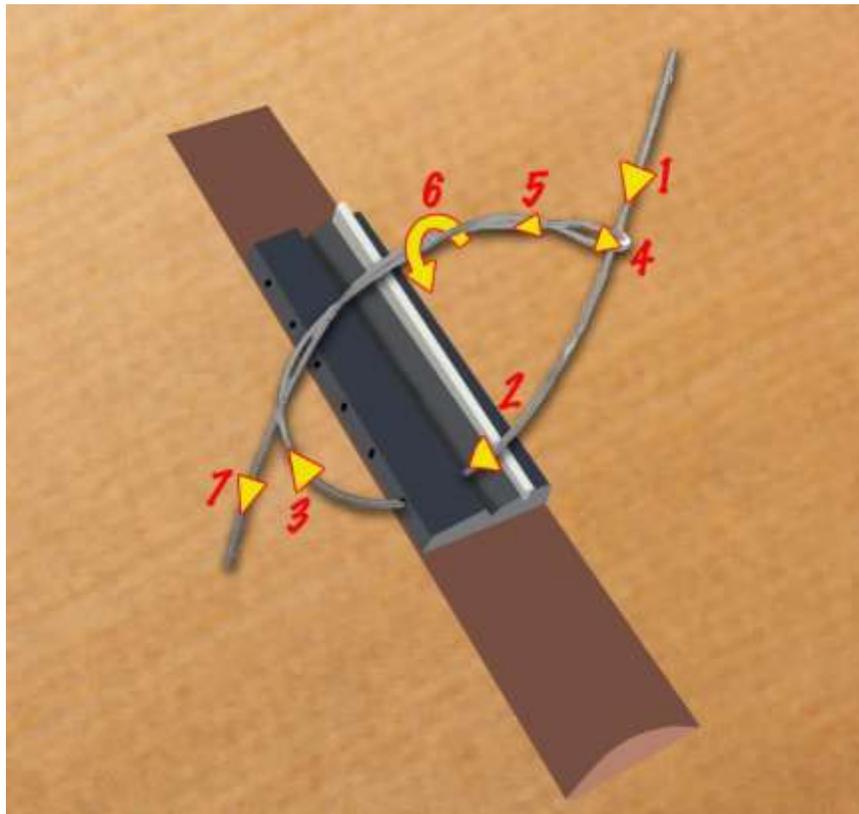
Acoustic Nylon String Guitar

The nylon string guitar – sometimes called a classical or Spanish guitar – uses clear nylon plastic for its strings. The E, A, and D strings may or may not be wound. Unlike the other kinds of guitar strings, nylon strings have no ball end – they are just plain. The string has to be threaded through the saddle and tied at the bridge end.

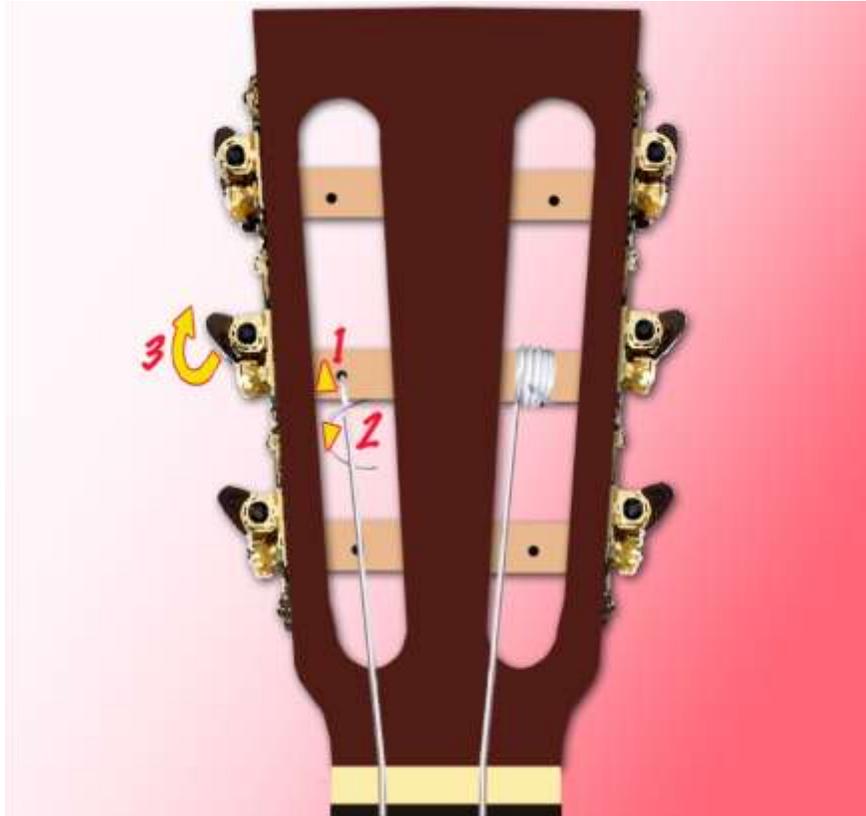
1 & 2 - Place the string thorough the saddle hole toward the end of the guitar body.

3 – Bring the string out from the other side

- 4 – Wrap it around itself and create a loop
- 5 – Thread it under the string and...
- 6 – Wrap it several times around the string
- 7 – When the string is tightened for tuning, it will cinch against itself at the back of the saddle.



- To attach the string at the headstock:
- 1 – Thread the string through the hole in the tuner.
 - 2 – Bring the string under the roller and wind it twice around the first part of the string.
 - 3 – As the tuner is tightened, pull the slack end and it will cinch under the string.



Repeat the process for all six strings. Trim any excess from the ends.

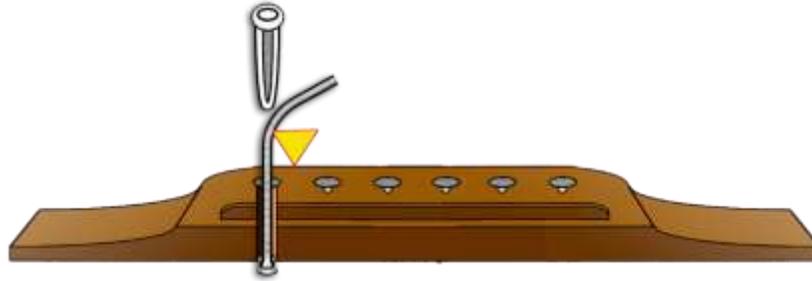
Acoustic Steel String Guitar

For volume and sustain, acoustic strings are usually heavier than those found on electrics. It would not be odd to find an acoustic string set with a high E string with a .012 gauge and a wound G string.

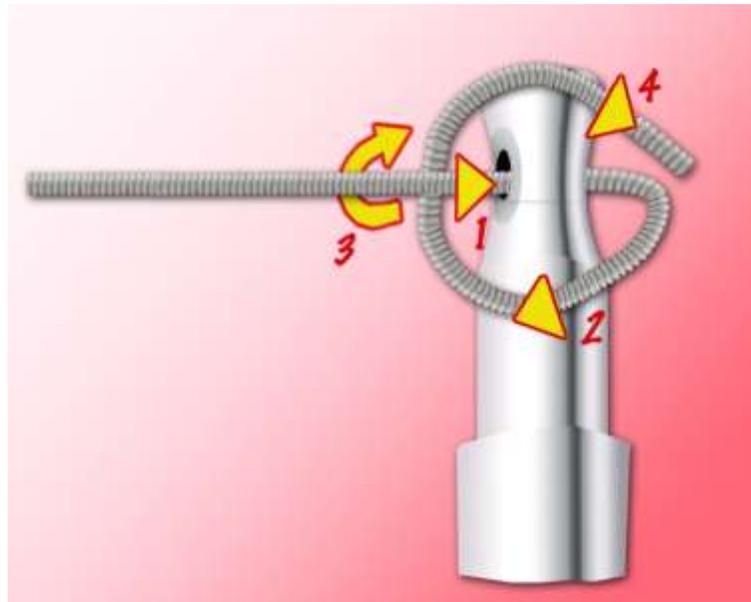
Bronze is one of the more popular materials for acoustic steel string guitars (sometimes called folk guitars.) Unlike nylon strings, acoustic guitar strings have ball ends – small, washer-like grommets with the string core securely wrapped around it.



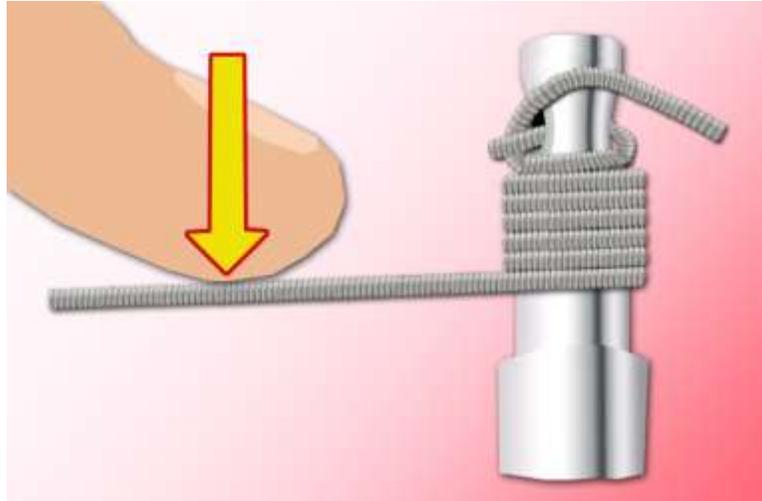
The ball end is placed in a hole in the saddle behind the bridge. Then a plastic or bone pin – called a bridge pin - is placed in the hole, firmly wedging the string in place.



- At the headstock,
- 1 - The string is placed through the hole of the tuner post.
 - 2 - It is brought out the other side and bent toward the nut – in the direction the post will be turning.
 - 3 - The string is brought under the first part of the string.
 - 4 - The end of the string should be pulled tight.



As the tuning machine is turned, the key is to get an even coil, without any overlapping (which can cause slipping and the tuning going in and out of proper pitch.) The best way is to place some tension on the string and use a finger to keep it as low to the post as possible while turning the tuning key.



Electric Guitar

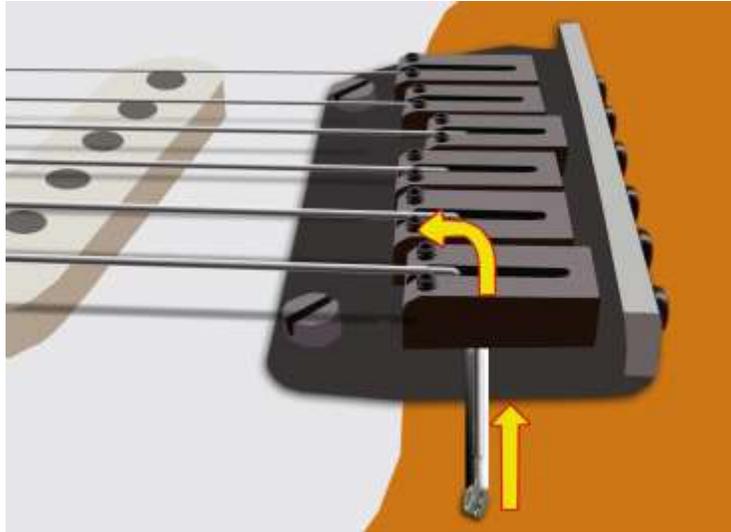
For electric guitars, the tuning machines at the headstock are the same as they are for acoustic guitars. In both cases, be sure the wind of the string goes around the top of the post.



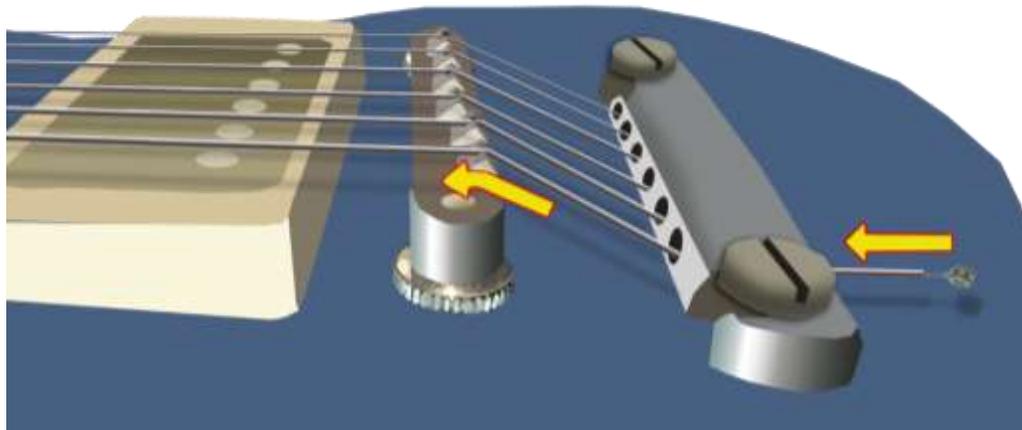
While the headstock tuners are basically the same for acoustic and electric guitars, the bridges are different.

Electric guitar strings – usually steel, chrome, nickel, or other metals – have ball ends like acoustic strings. But they are threaded through a tailpiece or through the body, depending on the guitar.

Some guitars – often equipped with a vibrato arm – thread their strings through holes in their back. The string travels through a channel, into a slot of the appropriate bridge saddle, then turns up – over the body and through the nut (but it's not Grandmother's house we're going to.)



Other guitars use what's known as a “stop tail piece” - a metal bracket through which the strings are threaded, over the bridge and to the headstock.



Opinions differ on how to remove old strings. Some use wire cutters to just cut them all at once. Others, citing the sudden change in stress on the guitar neck, prefer to remove one string at a time – by unwinding the tuner. The new string is then added, keeping a more even tension on the neck. Most guitar manufacturers believe in their products and feel there is no risk of damage if you take all the strings off at once (just don't call me if there's a problem.)