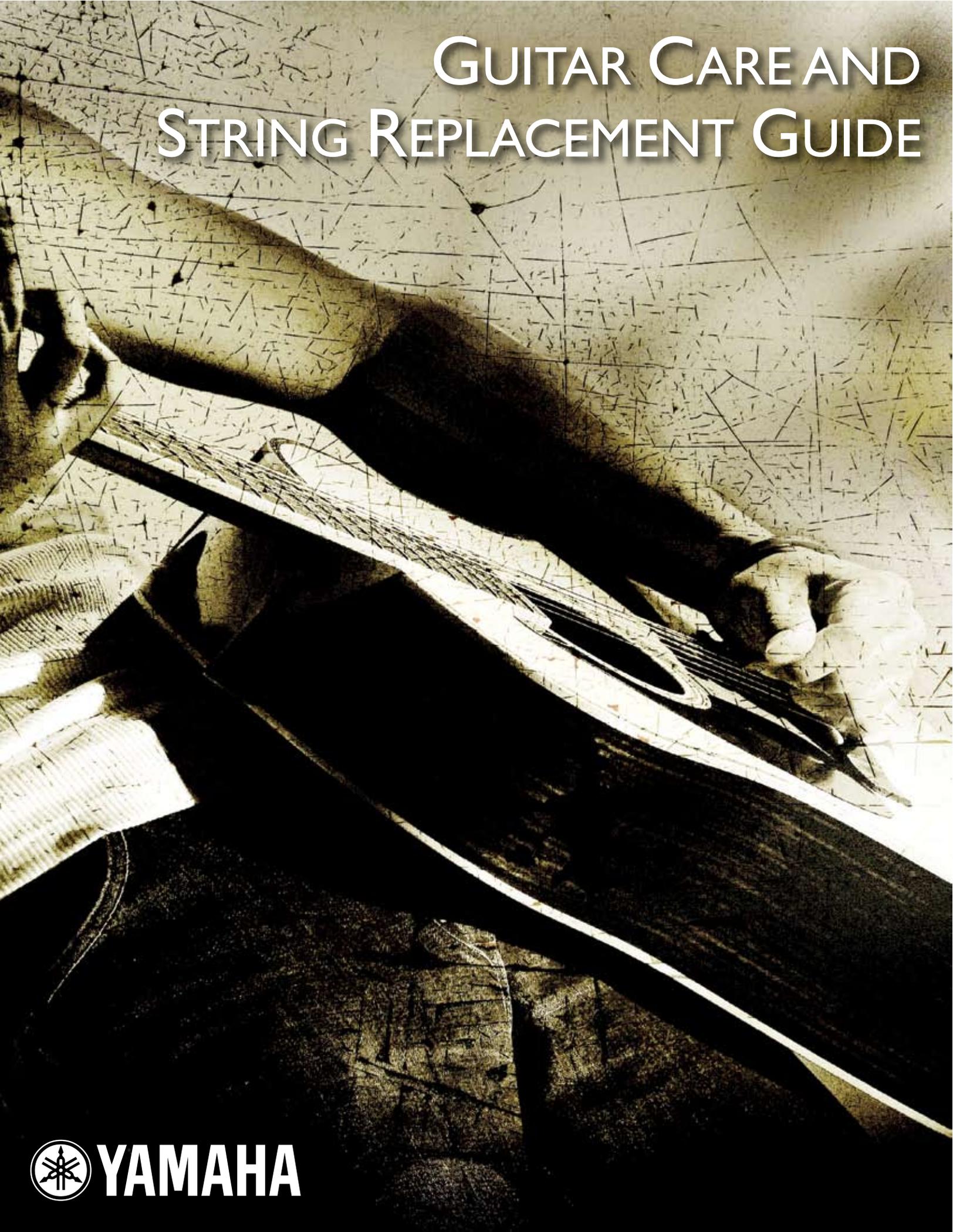


# GUITAR CARE AND STRING REPLACEMENT GUIDE



# Introduction

Thank you for choosing a Yamaha guitar! We know that your new instrument is going to provide you with years of musical enjoyment.

Your Yamaha guitar is built to be reliable and easy to maintain year after year. However there are also things the player must do to keep the guitar in top shape. These are outlined in this booklet.

## When to change strings?

All strings get old due to a number of factors: wear and tear from playing, hand sweat, dirt, and rust. When strings get old, they start to sound dull and their intonation becomes less reliable.

How often you change them is a personal decision. Professionals will often change them after every show! However, most normal players would find this an annoyance—not to mention expensive. An average player might change his/her strings every three to six months, depending on how much and how hard they play.

Changing strings is a fact of life for all guitar players. It is not difficult to do once you have done it a few times. Hopefully this booklet will help you to change your strings quickly, and make the job look professional.

## Clean your strings!

You can make your strings last longer by wiping them off after you play. Simply run a dry cloth along the length of each string. You can keep a cloth in your case for this purpose.

# String Replacement

## Steel-string Acoustic Guitars

Like the name says, these strings are made of steel or other metals, such as bronze. Steel strings gauges can vary widely, from extra-light tension to heavy tension.

Why the difference in gauges? It depends on the player and the style. Heavier strings will give a thicker, beefier sound. They will also be harder to play! Extra light gauge strings will be easier to bend, but will also have a lighter sound. It depends on the player and the style of music played.

Yamaha steel-string acoustics come strung with light gauge strings. This is the most popular tension, and strikes a good balance between playability and tone. A common set would range from a gauge of .012 for string 1 through to .53 for string 6.

Because of the high tension involved in steel strings, if you change the gauge of the strings you are using you may need to have some adjustments made to the guitar, including adjusting the neck, bridge or nut. If you decide to use a gauge that is different than the gauge the guitar came with, it might be a good idea to have these adjustments made by an experienced technician.

## Electric Guitars

This is where we find the most variety in string gauges. The strings are made of metal, although the alloys used are different than those designed for steel-string acoustics.

Once again, there is a trade-off: light strings are easier to bend and do vibrato, but have a thinner tone and are harder to keep in tune. Heavier strings sound thicker, but are tougher to bend. There are many different gauges available, including 'hybrid' sets that use light strings for 1 to 3, but heavy strings for 4 to 6. Most electric guitars today come with fairly light strings that can range from a .009 gauge on string 1, to a .42 gauge on string 6.

If this is too light, you could move to a range of .010 to .046 which is also very popular.

Again, if you decide on a string gauge different from that of the original set, you may need to have the guitar adjusted by a technician.

## Classical Guitars

Classical guitars use strings made of nylon. Strings 1 to 3 are made of plain nylon, while strings 4 to 6 have a nylon core with a steel winding. Classical strings are lower in tension than steel strings, which means less stress on the neck.

Classical guitar strings are classified not by gauges, but by tensions: low, medium and high. The difference between these tensions is relatively small, but players may find they prefer a certain tension. It's best to experiment to see which one is best suited for you.

## Cleaning the Guitar

Wipe your guitar down regularly with a clean, dry and soft cloth. It's not necessary to use polish every time, as this can lead to a buildup of wax or other materials. Occasionally, you can use guitar polish to bring the shine out of the finish.

Over time, the fingerboard may get a layer of build-up on it—sweat and dirt from your hands. Cleaning the fingerboard after you play will help to prevent this.

## Setting Action and Intonation

The “action” of a guitar is the distance between the strings and the fretboard. This can vary depending on the player's preference. A higher action may suit a player who plays hard, or who wants a clear, punchy sound. A lower action may make the guitar easier to play, but also increases the likelihood that there will be spots on the neck where the notes do not ring clearly.

The action is determined by a combination of a number of factors: the height of the bridge and nut, the curve of the neck controlled by the truss rod (not on classical), and the levelness of the frets. All of these factors must be adjusted, and depend on one another.

Your Yamaha guitar is designed to have good action right out of the box.

### *Action and Intonation, cont'd*

However, because guitars are made of wood, they can change shape slightly over time and according to environmental factors. This may result in the need for modification to the action and intonation. Also, frets get worn out and, over time, the fretboard itself may get worn down. This is one reason why guitars need periodic maintenance. It is best to have this work done by an experienced technician—especially truss rod adjustments and fret dressing.

But, again, this depends on your own needs. If you don't notice any problems with the way your guitar works, then it's probably fine! If, on the other hand, you are finding points where the strings are buzzing or the guitar is out of tune higher up the neck, then it may be time to bring it to a technician for adjustment. This is often called a **setup**.

## Storing the Guitar

If you are using your guitar regularly, store your guitar where you have easy access. The case is always a good idea. You can also put your guitar on a floor stand, or hang it from the wall. These hangers and stands are quite popular and are available at any music store.

If you are planning to leave the guitar for a long period of time, such as many months or years, then it is wise to loosen the strings a little before storage. This will ease the pressure on the neck and top.

## Humidifiers

Remember that guitars are usually made of wood, which will react to weather conditions. The cold, dry winters of Canada can be very hard on a guitar. For this reason, players will often put a humidifier in the case, or put a clip-on humidity controller in the soundhole of the guitar when it is in the case. This can help prevent cracking and other problems.

Yamaha guitars sold in Canada are made with wood especially designed for our climate. Most do not require humidity control, but it never hurts, especially with higher priced models.

# Changing Strings

Suggested tools:

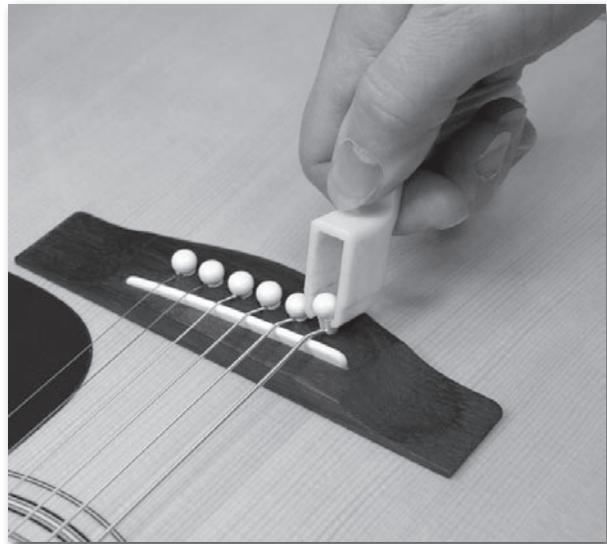


Note: change one string at a time to keep the tension even on the neck, unless you have a specific reason to remove all of the strings. It will also keep the bridge saddle, which is not glued in place, from sliding out of its slot. Do not cut the strings off—this will jolt the neck. If necessary they can be cut once the string has been loosened.

## Changing Strings on a Steel-string Acoustic

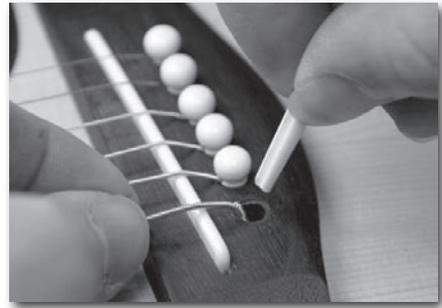
**Step 1:** Loosen the string to be replaced. Carefully pull the pin out of the bridge using the pin remover slot on the peg winder. You can make this easier by pushing down on the end of the string prior to pulling out the pin.

You can also use a set of pliers or wire cutters if necessary. Do this with care, as the pliers can scratch the guitar or mark the pin.

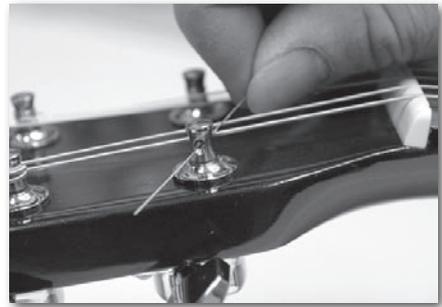


*Action and Intonation, cont'd*

**Step 2:** Put the ball end of the string in the hole. Push the pin in the hole, all the way down, with the groove in the pin facing the soundhole (look at the other pins to see how far to push in). With your finger holding the pin down, pull up on the string. This ensures that the ball of the string is pulled up tightly against the inside of the top of the guitar. If this hasn't been secured, the pin will lift up and pop out as you tighten the string and you'll have to start again.



**Step 3:** Pass the other end of the string through the appropriate tuning peg. Leave enough slack on the string so that it can be wrapped two or three times around the tuning peg.



**Step 4:** Tighten the string, either by hand or with a peg winder. You will need one hand to hold the string tight as you do this (to keep the windings in place as it wraps around the tuning peg). Do not let go or you will get a very curly string that will need to be wound again!



**Step 5:** Once you have tuned the string to the proper tension, cut off the excess string with the wire cutters.



## Changing Strings on an Electric Guitar

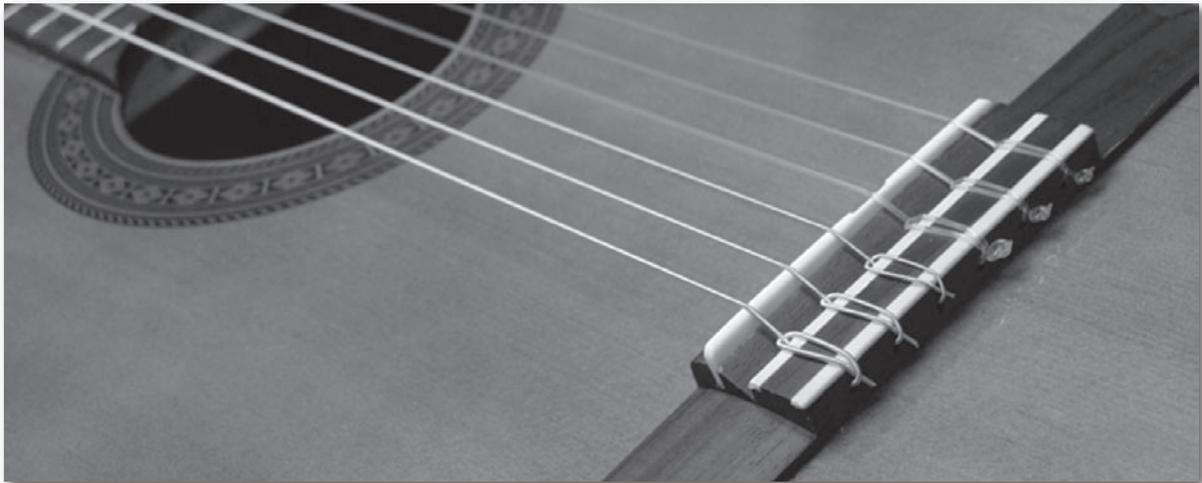
Changing strings on an electric guitar is much like changing strings on an acoustic guitar, except for the bridge. Instead of a set of bridge pins, the strings are usually passed through holes in the back of the guitar.

Look at the other strings to get an idea how they are fastened. It is best to change one string at a time.



## Changing Strings on a Classical (Nylon String) Guitar

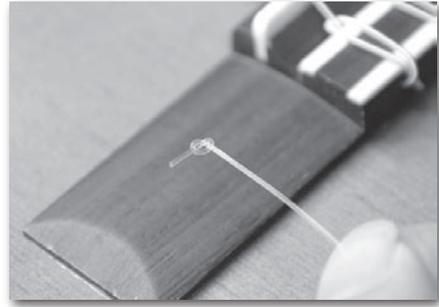
Classical guitar strings, in almost all cases, do not have a ball end on the string. This means that they must be tied to the bridge.



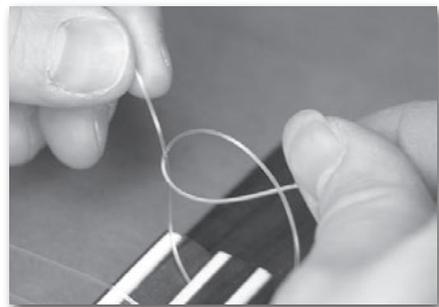
Note: The guitar comes with the strings neatly tied, as shown here; however, you can tie the strings to the bridge any way that you wish.

*Classical guitar restringing, cont'd*

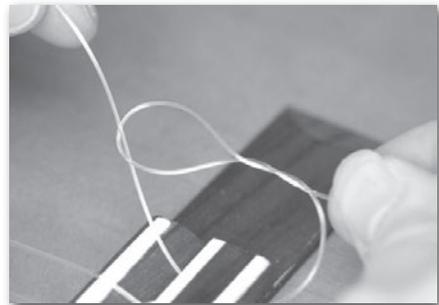
**Step 1:** Tie a knot on one end of the unwound strings.



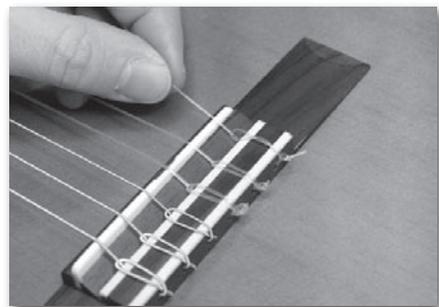
**Step 2:** Pass the unknotted end through the hole.



**Step 3:** Tie the end of the string as shown.



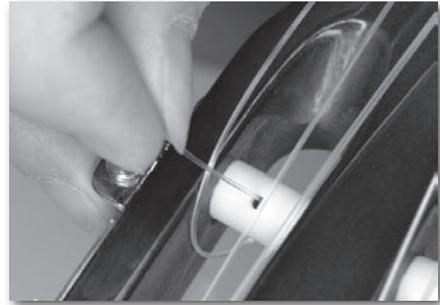
**Step 4:** Pull the string tight.



Now you are ready to pass the other end of the string through the tuning peg.

Note: The clear nylon strings have a tendency to slip out of the peg hole when you tighten them. To prevent this, follow steps 5, 6 and 7 below:

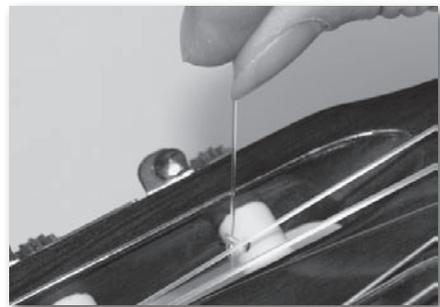
**Step 5:** Thread the string through the peg hole.



**Step 6:** Tie a knot in the string.



**Step 7:** Pull the knot tight and you are ready to wind the string.



Note: The strings on a classical guitar will stretch considerably. At first it may seem like they will never stay in tune! They will eventually stabilize. It is best not to pull them or stretch them, as this can make the intonation uneven.

Have a great time playing your Yamaha guitar! Special thanks to master guitar technician Ken Newfield for advice and photos.

From Janes Addiction to the Red Hot Chili Peppers, Dave Navarro has always been on the leading edge of rock. Dave's acoustic weapon of choice is the LLX6DN—his signature model.



Your Journey with Yamaha has just begun...

Welcome to the Family



Troy Van Leeuwen is a highly respected rock guitar player with great chops and an appreciation for semi-acoustic instruments. Catch him in his new band, Queens of the Stone Age, playing on his new signature model SA503TVL.

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