

*Harley Benton*

Electric Guitar Kit ST Style  
electric guitar kit



Musikhaus Thomann  
Thomann GmbH  
Hans-Thomann-Strasse 1  
96138 Burgebrach  
Germany  
Telephone: +49 (0) 9546 9223-0  
E-mail: [info@thomann.de](mailto:info@thomann.de)  
Internet: [www.thomann.de](http://www.thomann.de)

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## 1 Safety instructions



### **DANGER!**

#### **Danger for children**

Ensure that plastic bags, packaging, etc. are properly disposed of and are not in the reach of babies and young children. Choking hazard!

Ensure that children do not detach any small parts (e.g. knobs or the like) from the product. They could swallow the pieces and choke!

Never let children play unattended with the product.

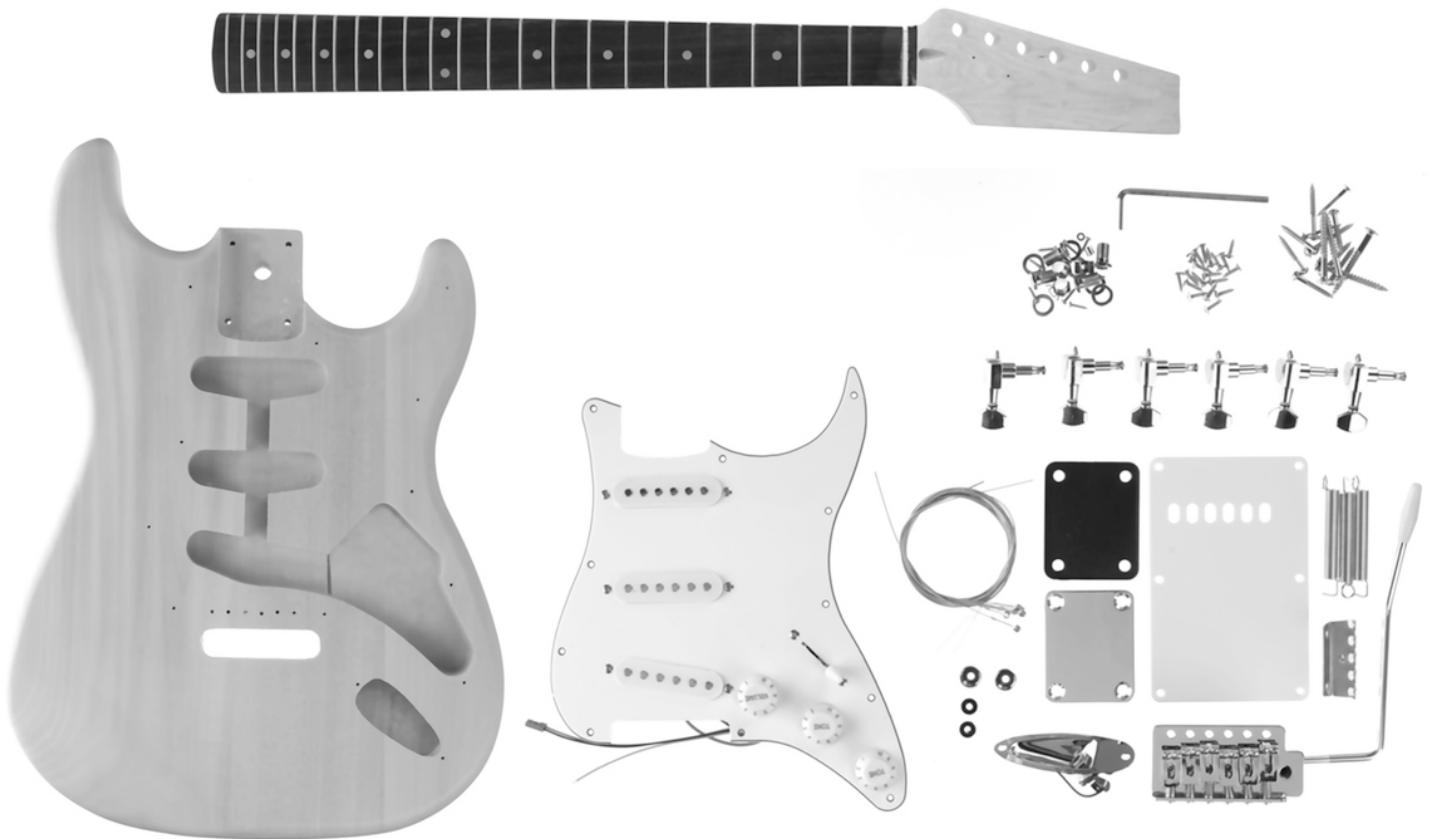


### **CAUTION!**

#### **Danger of cuts on the hands**

While assembling and joining individual parts together with screws pay attention to sharp edges on tools, screws and components.

The picture below shows the individual items included in the delivery.



The assembly is described in detail in the following sections.

## 3 Assembly instructions

### Useful tools and materials

Provide the following tools and materials for the assembly of the guitar:

- Phillips screwdriver
- Rubber mallet
- Ring spanner
- Pliers
- Paint and accessories
- Sandpaper



*It is important to paint the body and neck before assembly.*

*Always wear a dust mask when applying spray paint.*

### 3.1 Cut the headstock to size

Cut the headstock to your desired shape using a suitable saw. Ensure you leave sufficient space between the cutting edge and the holes for the tuners to maintain stability. The tuners' retaining rings should be used as a reference here.

After cutting, smooth the cutting edge with sandpaper or a suitable file.

## 3.2 Painting the body and neck

### Painting the body

The solid wood body of the guitar is sealed and prepared for various types of lacquer coating. A wide variety of finishes can be procured from DIY, timber and automotive outlets in aerosol cans making finishing straightforward without requiring specialist skills.

The first step is to check the fit of the body to the neck joint. These components are machined from high-grade tonewoods to ensure optimum alignment. Since wood is a natural material, however, its shape changes slightly over time. If the fit is too tight, you can adjust it using a sharp chisel or sandpaper. Please remember that the additional lacquer coat will make the neck fit a little more tightly into the cutout.

Before coating the body, ensure that all surfaces are clean and free of dirt and dust. Carry out all painting operations in a well-ventilated, dust-free environment. Considered and careful working are key factors for a qualitatively satisfactory result. We explicitly recommend that you first try out the colour and technique on another piece of wood.

Paint the body edges first and let them dry. If the edges are dry, go on with front and back side. By layered, successive application you can achieve a uniform coating structure. If you notice surface irregularities, wait until the paint has dried completely and correct them with fine sandpaper (e.g. 800+) before proceeding to paint. For full coverage apply three or more layers.

Insert a wire or hook into the cutout for the guitar neck and hang the painted guitar body to dry in a dry, dust-free area away from direct sunlight.

Wait another two to three days until the paint is fully cured. Polish or burnish the body until it meets your expectations. Take care not to buff too vigorously as this may remove the finish.

### Neck finish

The neck of the guitar is sealed at the factory with a thin layer of matt lacquer and is already ready to use. However, if you would still like to treat the neck with paint or clear lacquer, follow the instructions below.

Carefully mask off the fingerboard and all frets before you start painting. Make sure that all surfaces are free of dust and dirt. Carry out all painting operations in a well-ventilated, dust-free environment.

Use a clear or lightly coloured wood lacquer of high quality for the neck. Start on the front and the edges of the headstock. Apply a thin layer evenly, allow it to dry and repeat this two or three times. If you notice surface irregularities, wait until the paint has dried completely and correct them with fine sandpaper (e.g. 800+) before proceeding to paint.

Once the headstock has dried, place the neck on the fingerboard and paint the back of the neck as described.

Wait another two to three days until the paint is fully cured. Polish or burnish the neck until it meets your expectations. Take care not to buff too vigorously as this may remove the finish.

### 3.3 Mounting the tuners

From the rear side of the headstock, insert the tuners into the holes provided. Align the tuners so that the tuning pins are vertical to the upper edge of the headstock.

Fasten the tuners in this position as shown in the picture, initially fastening them only finger-tight with the screws provided.



Turn the neck and fasten all the machine heads finger-tight to the front of the headstock with the washers and nuts provided.





Tighten the nuts on the front with an appropriate spanner, then tighten the screws on the back firmly to fasten the tuners.



### 3.4 Mounting the string retainers

Affix the two string retainers to the front of the head plate in the holes provided next to the tuners. The string retainer with the larger spacer must be inserted into the hole that is closer to the saddle.

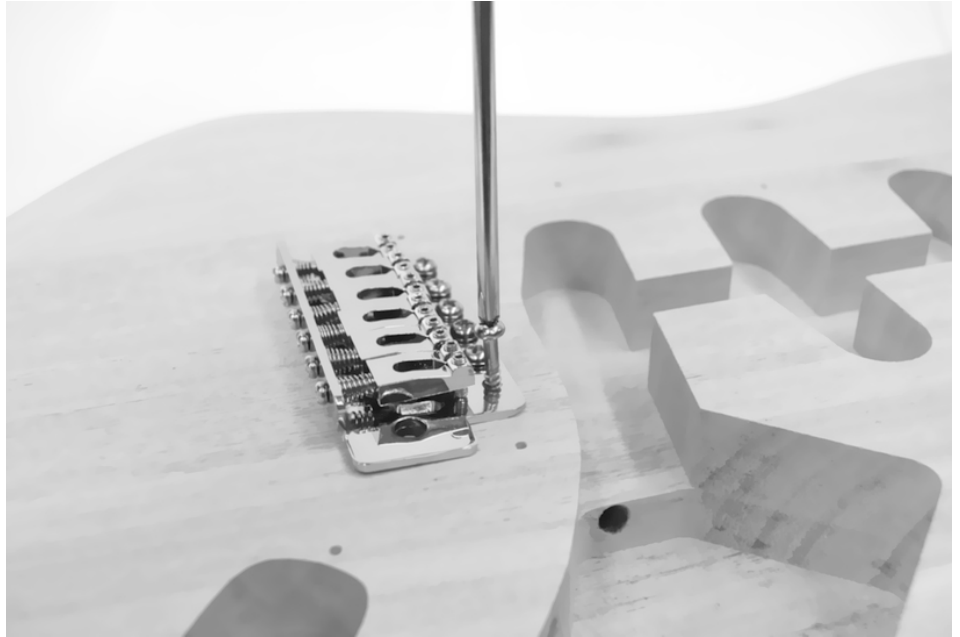
Ensure the string retainers can still move freely. They will be secured by the tension of the strings.



### 3.5 Mounting the bridge

Place the body on a suitable working surface. Use a soft pad in order to avoid damage to the surface. Place the bridge in the cutout on the body as shown, and guide the sustain block into the hole through the body.

Ensure the bridge sits in the centre of the hole and is aligned with the pre-drilled screw holes. Attach the bridge using the supplied screws.



Next, turn the body around and screw the spring claw by hand into the pre-drilled screw holes in the cutout on the body's back.



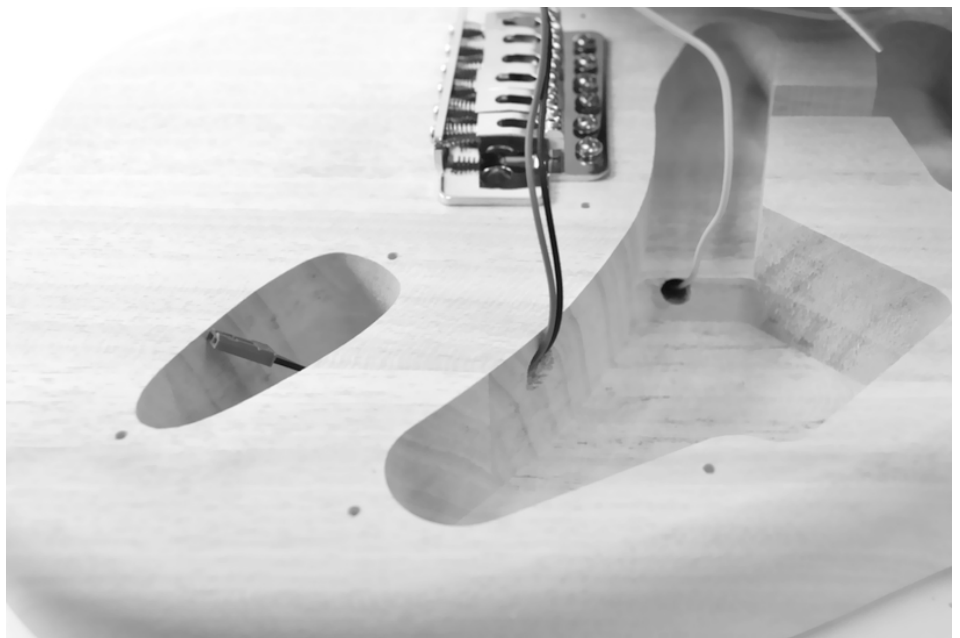
Attach the loops of the three springs to the spring claw and guide the other ends into the small holes in the sustain block. Continue to tighten the spring claw towards the neck until some tension is applied to the bridge.



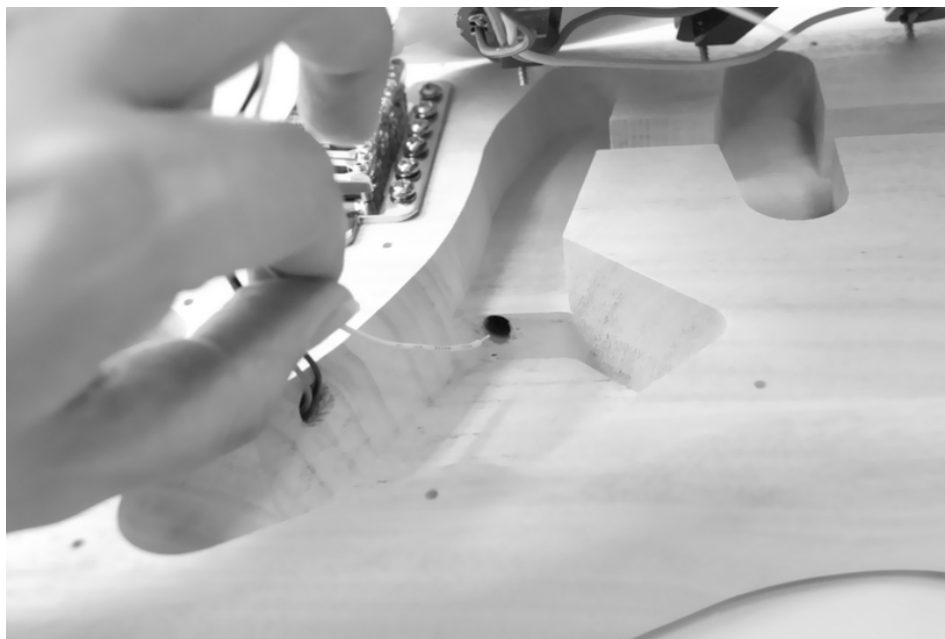
### 3.6 Wiring the potentiometers, pickups and switches

The potentiometers, pickups and switches are pre-assembled on the pickguard and simply need to be connected to the output jack socket and earth. The pickups, potentiometer and jack socket are wired to the output jack socket by means of connectors.

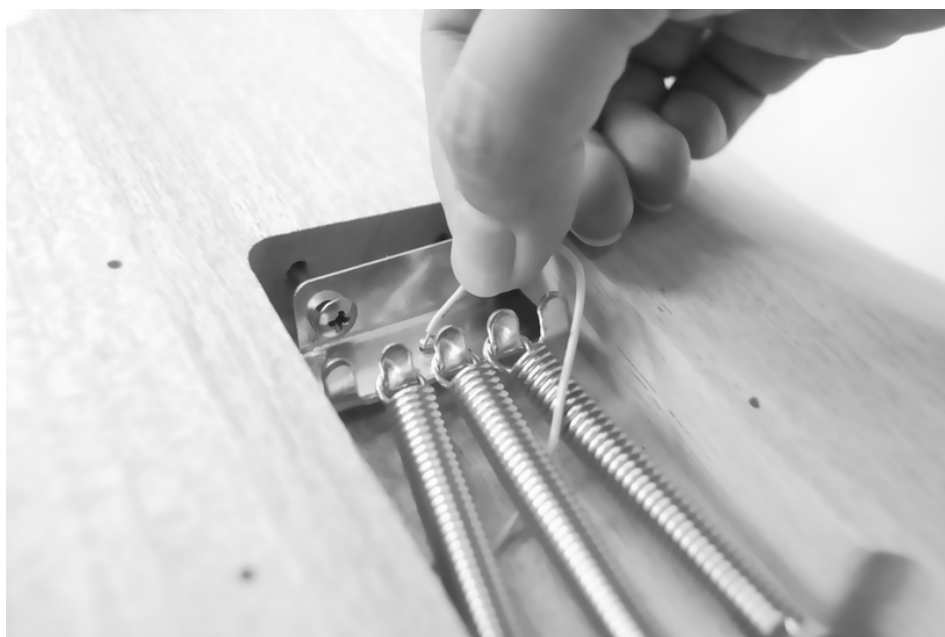
As illustrated, run the cable connector into the cable channel via the recess as far as the recess for the output jack socket.



Thread the cable for the string earthing (after stripping the insulation, and without the connector) to the spring claw through the recess in the opening on the back.



Hook the grounding cable onto the spring claw. Ensure there is sufficient contact between the stripped end of the earthing wire and the spring claw.

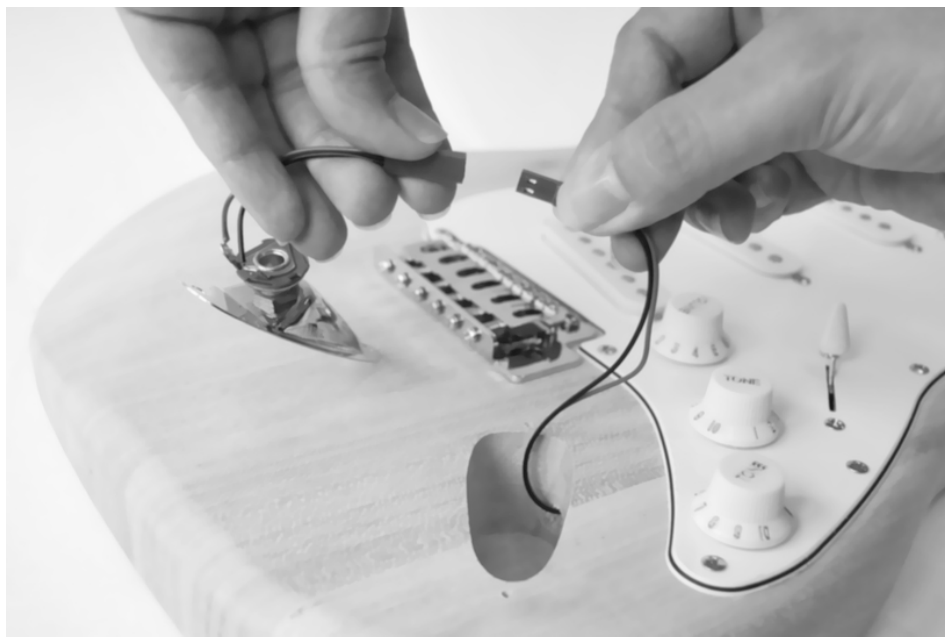


### 3.7 Mounting the pickguard and output jack socket

Position the pickguard over the front of the body so that the pickups and all the wires are seated in the correct recesses. Screw the pickguard onto the body using the screws provided as shown in the picture below.

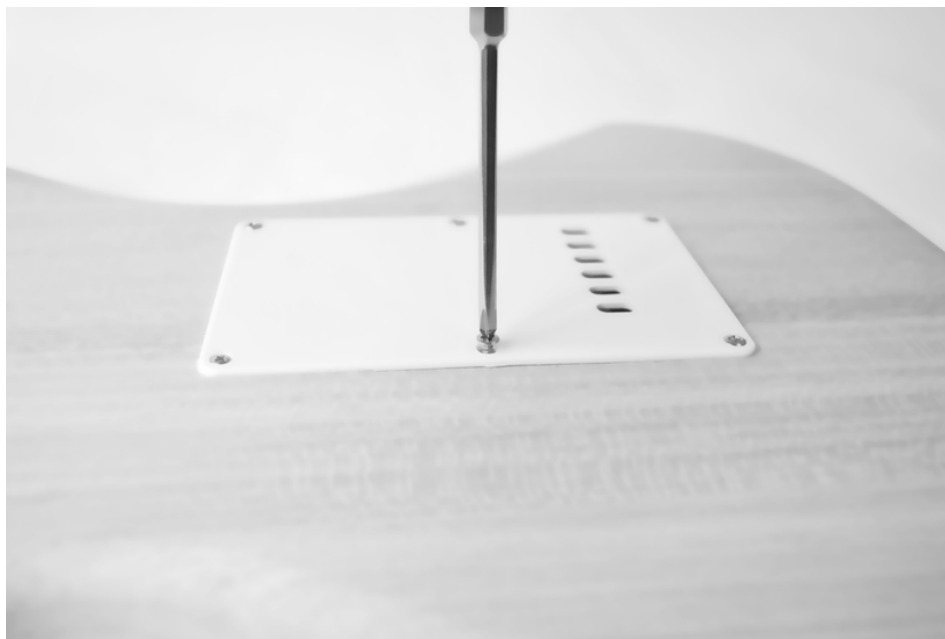


Now connect the connector for the output jack socket to the connector for the pickup and the potentiometers. Insert the output jack socket into the hole provided on the body's front side and screw it in place using the screws provided.





Then screw the plastic plate which covers the recess for the sustain block into place by inserting the screws provided into the pre-drilled holes on the back of the body.

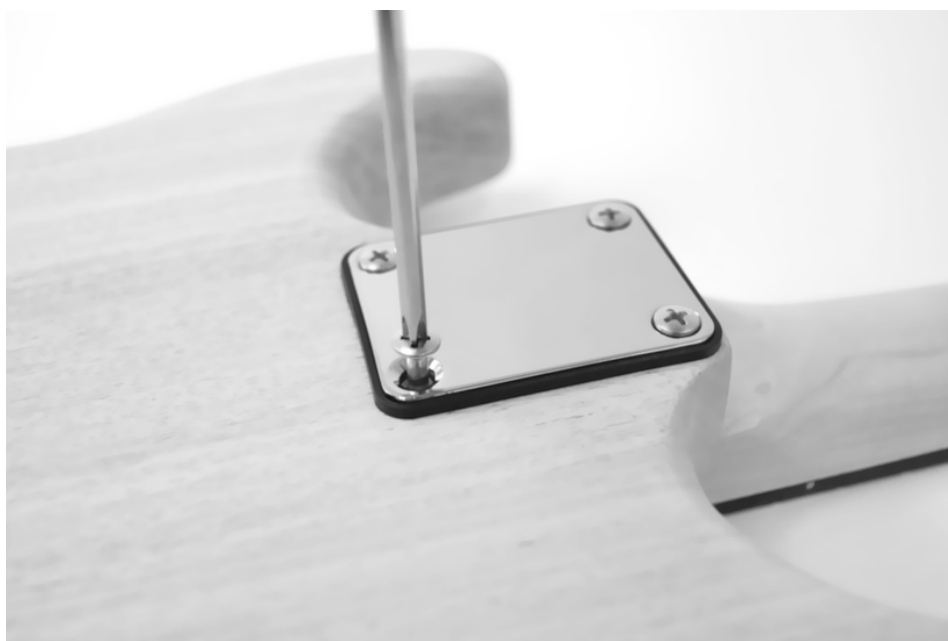


## 3.8 Mounting the neck of the guitar

Place the body on a suitable working surface. Use a soft pad in order to avoid damage to the surface. Insert the neck into the neck cutout. If necessary, use a sharp chisel or sandpaper to adjust it. Be very careful when removing material. The neck should be firmly seated and under no circumstances should there be too much play in the cutout!



Turn the guitar over and position the neck plate over the four bolt holes at the rear of the body, then screw the four wood screws provided through the neck plate, body and pilot holes in the neck until everything fits tightly.



### 3.9 Mounting the strap buttons

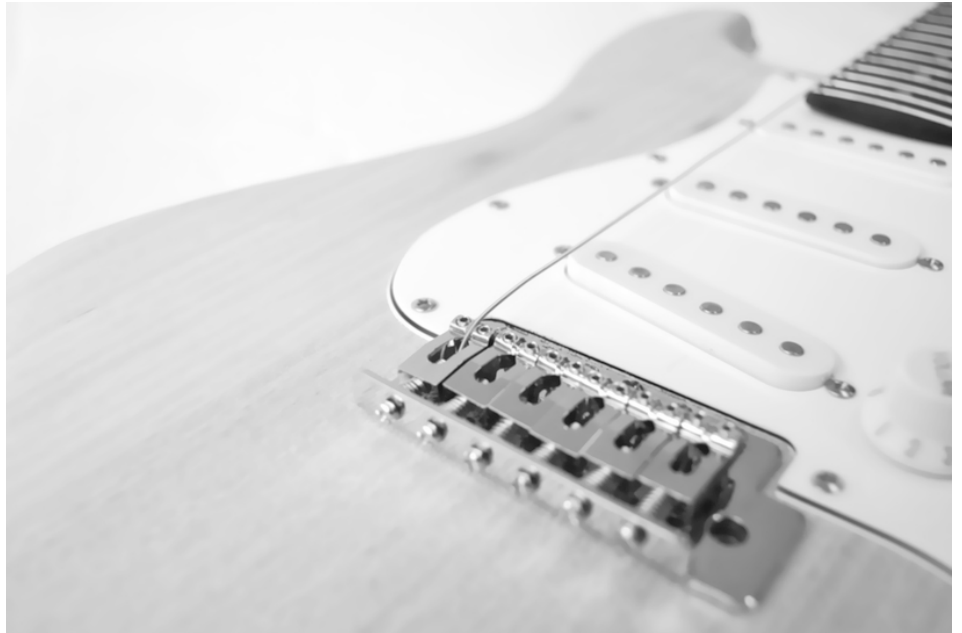
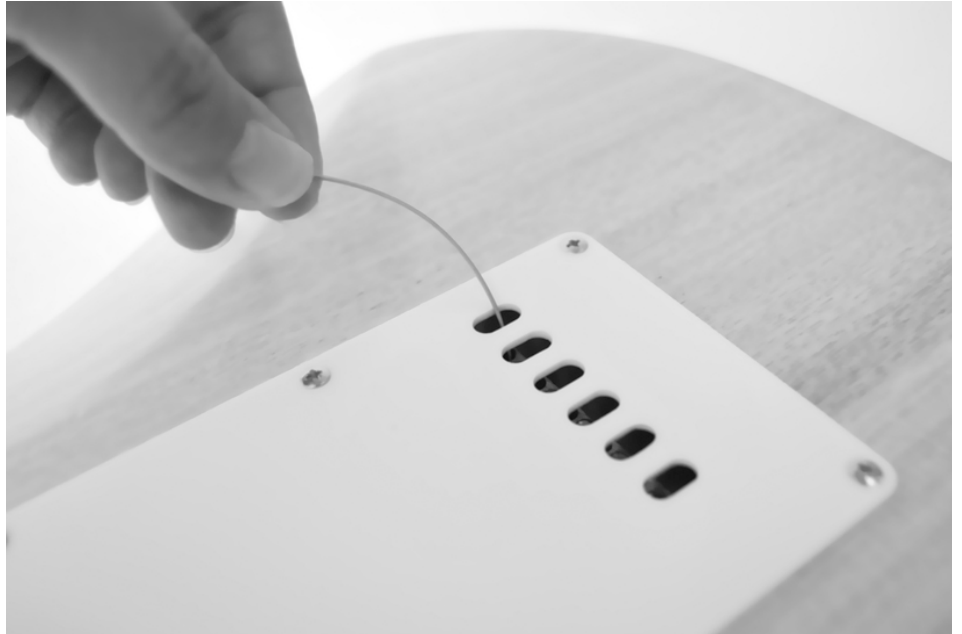
Screw the strap buttons into the pre-drilled holes in the body as shown.

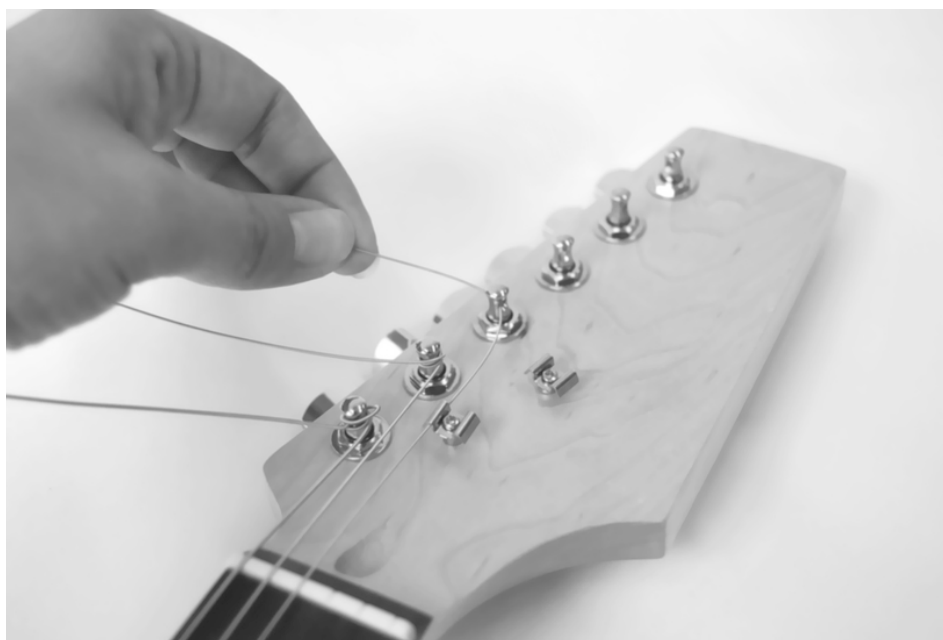


### 3.10 Strings, neck relief, string height and pickups

#### Stringing the guitar

Fitting strings to the guitar is achieved by threading them through the sustain block from the rear to the front via the corresponding saddle. Wrap the string end around the tuner several times and pull each string hand-tight at first. Be sure that each string is in the correct position on the saddle and in the correct string retainer.





Then tune each string in turn to the correct pitch. You can use a tuner or a pitch pipe as a reference. Please note that the string tension will still drift and the guitar will need to be retuned a few times before the strings are played in.

### Adjusting the neck relief

The neck is equipped with a steel truss rod that can be used to adjust the relief to your preferences.

After tuning the strings, check the relief by pressing on the low E string at the first and twelfth fret. The closer the string is to the fingerboard at the sixth fret, the more noise (buzz) will be audible when the guitar is played.

Adjust the neck relief using an appropriate Allen key as follows:

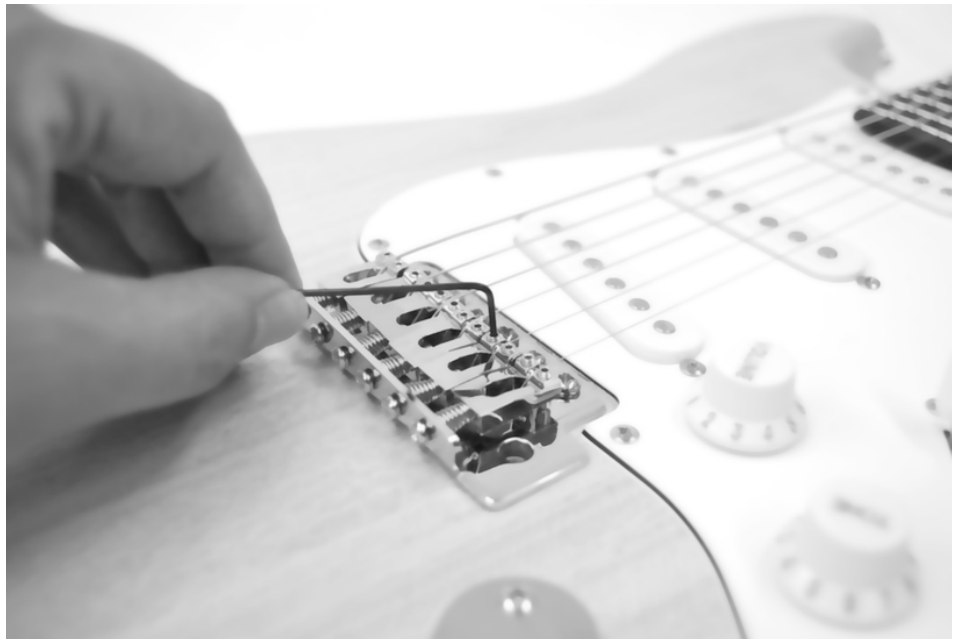
- Turn the truss bar clockwise to increase tension. The neck will become straighter, even convex in extreme cases. The string will be closer to the fingerboard, is easier to fret, but will buzz more during playing.
- Turn the truss bar counterclockwise to decrease tension. The neck will respond more to the string tension and become correspondingly more concave. The string will be farther from the fingerboard, be somewhat harder to fret, but will cause less or no noise during playing.

Adjust the truss bar only by about a quarter turn per setting, then retune all the strings to the correct pitch and check the neck relief again after a short time. Repeat this process until the desired neck relief is reached.



### Adjusting the position of the strings

Once the neck has the desired relief, you can use the screws for each saddle to adjust the string position to suit your taste. Here, too, the lower the strings, the easier they are to fret, but they will buzz more easily when the guitar is played.



After adjusting string position, you can check the octaves of the guitar and readjust if necessary. Tune all the strings to the correct pitch, gently touch the first string right above the twelfth fret and then pick the string. The harmonic you hear (at the 12th fret) must be the same pitch as the picked string at the 12th fret). If the pitch of the two notes differs, adjust the saddle for this string back (tone too high) or forth (tone too low) on the bridge. Listen carefully and adjust gently until the two notes match. Alternatively, you can also adjust the octaves with a tuner. In this case, the pitch of the tone at the 12th fret must be the same as the unfretted string, but one octave higher.



### Attaching the whammy bar

Once all strings have been tuned to the correct pitch, screw the whammy bar into its screw hole on the bridge. Ensure the whammy bar can still move freely.

Adjust the initial tension of the whammy bar via the springs in the recess on the back of the body. The initial tension is dependent on the positioning of the springs; the shorter the distance between the two fastening points of each spring, the lower the tension and thus the force required to operate the whammy bar.



### Adjusting the pickups

The pickups should be set so that all the strings sound equally loud when played. Adjust the height of each pickup by using the two lateral adjustment screws and listening to the sound. The minimum distance between each string and its pickup is two millimetres. The greater the distance between the string and pickup, the quieter the string will sound.



## 4 Protecting the environment

### Disposal of the packaging material



For the transport and protective packaging, environmentally friendly materials have been chosen that can be supplied to normal recycling.

Ensure that plastic bags, packaging, etc. are properly disposed of.

Do not just dispose of these materials with your normal household waste, but make sure that they are collected for recycling. Please follow the notes and markings on the packaging.

### Disposal of your old device



This product is subject to the European Waste Electrical and Electronic Equipment Directive (WEEE) in its currently valid version. Do not dispose with your normal household waste.

Dispose of this device through an approved waste disposal firm or through your local waste facility. When discarding the device, comply with the rules and regulations that apply in your country. If in doubt, consult your local waste disposal facility.





