

Harley Benton

Electric Guitar Kit DC 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
Internet: www.thomann.de

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Table of contents

1	Safety instructions.....	4
2	Scope of delivery.....	5
3	Assembly instructions.....	6
3.1	Painting the body and neck.....	6
3.2	Mounting the tuners.....	7
3.3	Mounting the neck of the guitar.....	9
3.4	Wiring the potentiometers, pickups and switches.....	11
3.5	Mounting the pickguard.....	18
3.6	Mounting the tailpiece and bridge.....	19
3.7	Mounting the potentiometer knobs and strap buttons.....	20
3.8	Strings, neck relief and the position of the strings.....	22
4	Protecting the environment.....	26

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.

2 Scope of delivery

Thank you for buying this guitar kit. All the wood, hardware and electrical components of the guitar are contained in this package.

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 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.

Wait another two to three days to dry 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.

Remove the fingerboard and all the frets cleanly 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 to dry 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.

3.2 Mounting the tuners

Insert the four machine heads from the rear side of the headstock 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 head-stock 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.



3.3 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!



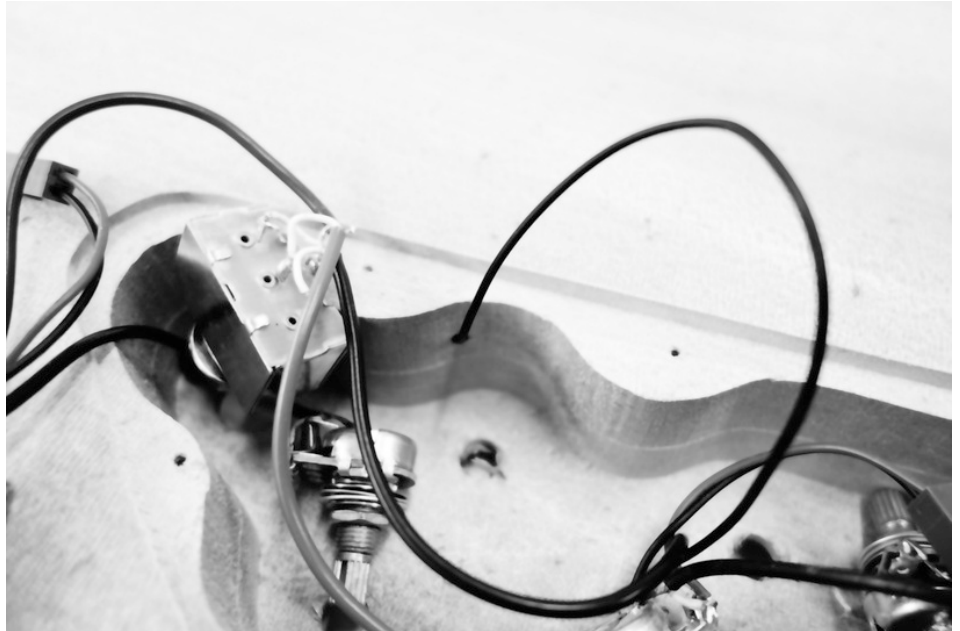
Turn the guitar over and position the neck plate over the four bolt holes at the rear of the body, then screw the four wood screws provided through the neck plate, body and pilot holes in the neck until everything fits tightly.



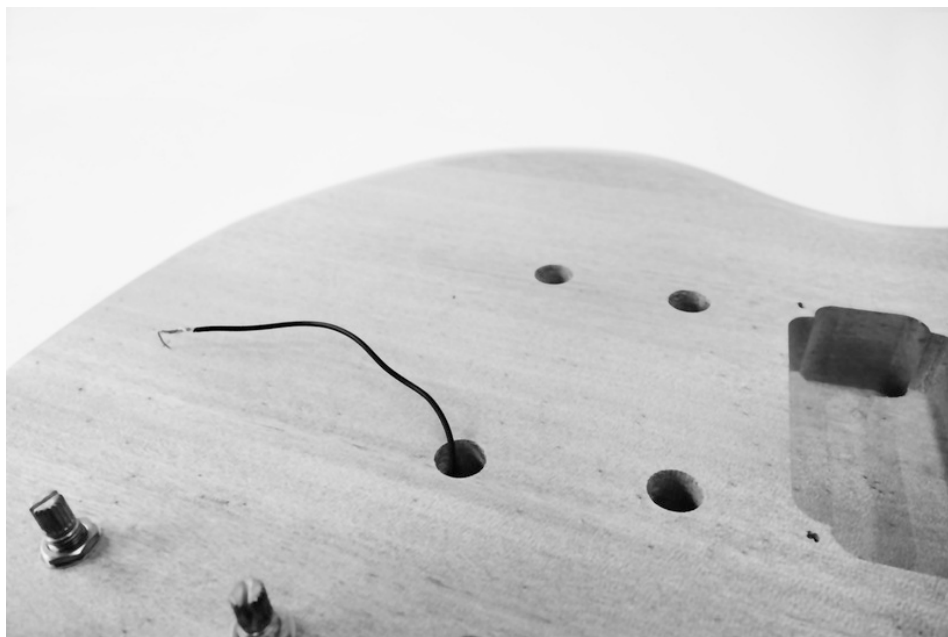
3.4 Wiring the potentiometers, pickups and switches

The pickups, potentiometer and jack socket are wired using connectors.

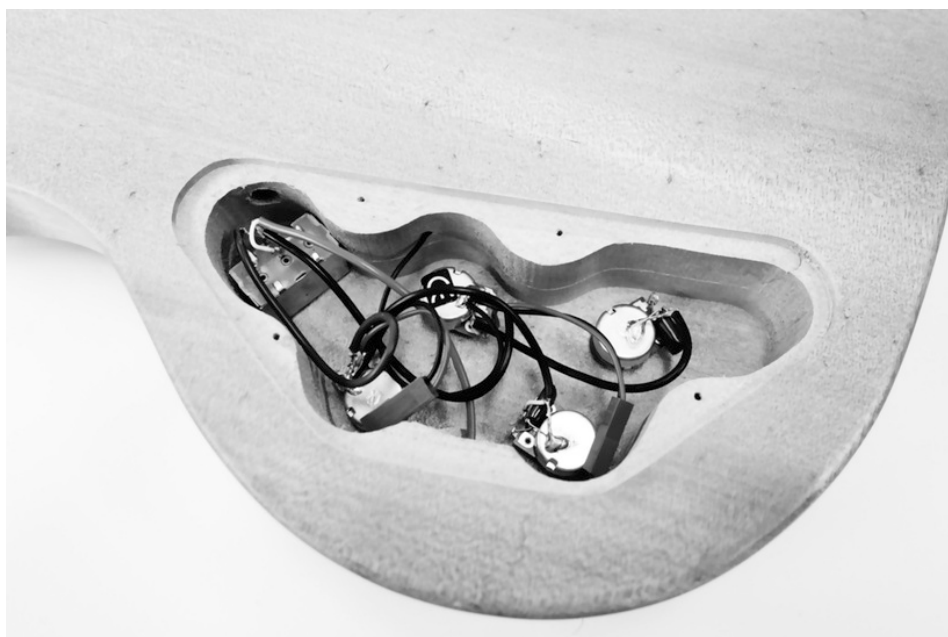
Thread the cable for the string earthing (after stripping the insulation, and without the connector) through the channel from the opening in the back into the hole to fasten the tailpiece.



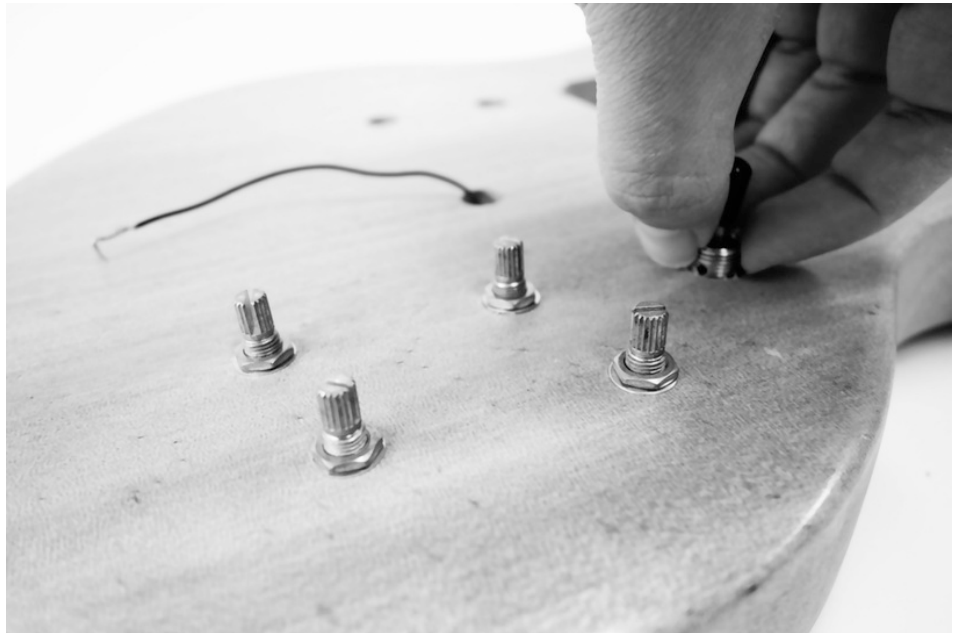
Pull the cable far enough out of the hole that there will be sufficient contact with the metallic surface when the tailpiece is installed. Earthing the strings reduces noise (humming).



Then insert the potentiometers into the opening in the back as shown and wire the potentiometers to the switch. Guide the switch from the back of the body completely into the opening provided for it.



Screw the potentiometers finger-tight to the body surface with a washer and a hex nut each.



Screw the switch to the body surface with the plastic cover provided, a washer and a hex nut. The neck pickup is generally activated with the switch in the upper position, and the bridge pickup in the lower position. This configuration can be changed at any time simply by swapping the two connectors.



Tighten the hex nuts of the potentiometers onto the body surface using an appropriate ring spanner until the potentiometer housings can no longer be turned.



Insert the output jack into the hole provided on the edge of the body. Guide the connector cable through the channel into the opening in the back for the electronic and plug in both connectors.



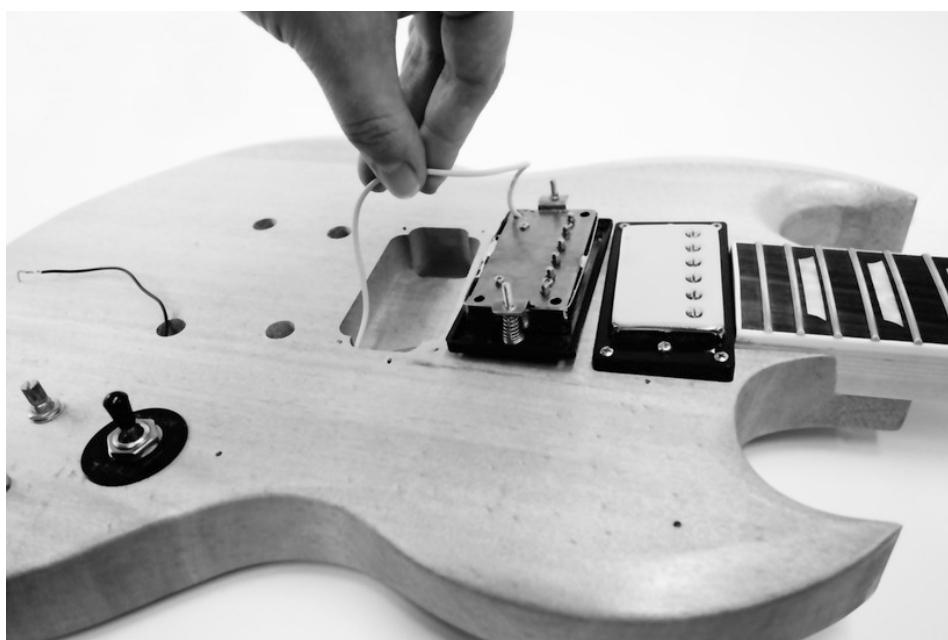
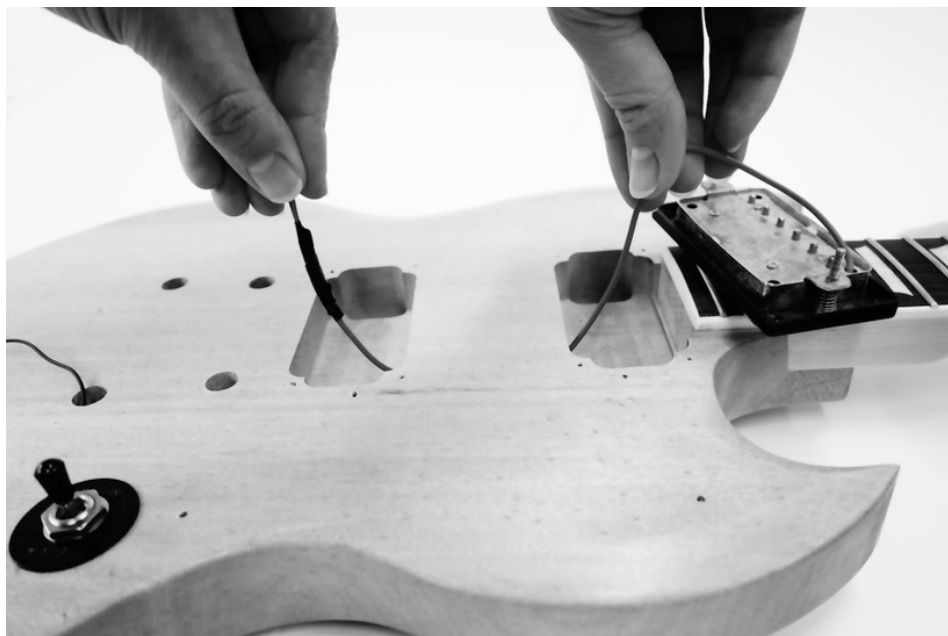
Set the holder for the output jack in place and check whether the jack protrudes. It should stick out over the holder enough that it can be screwed firmly in place with the nut provided, but no further than necessary. Correct the position if necessary by turning the counter nut inside appropriately.

Then screw the output jack holder onto the body.



Thread the pickup cables through the channels from the front opening into the back opening. The neck pickup is somewhat flatter and is inserted into the opening nearer the neck of the guitar. Insert the somewhat taller bridge pickup into the opening closer to the bridge.

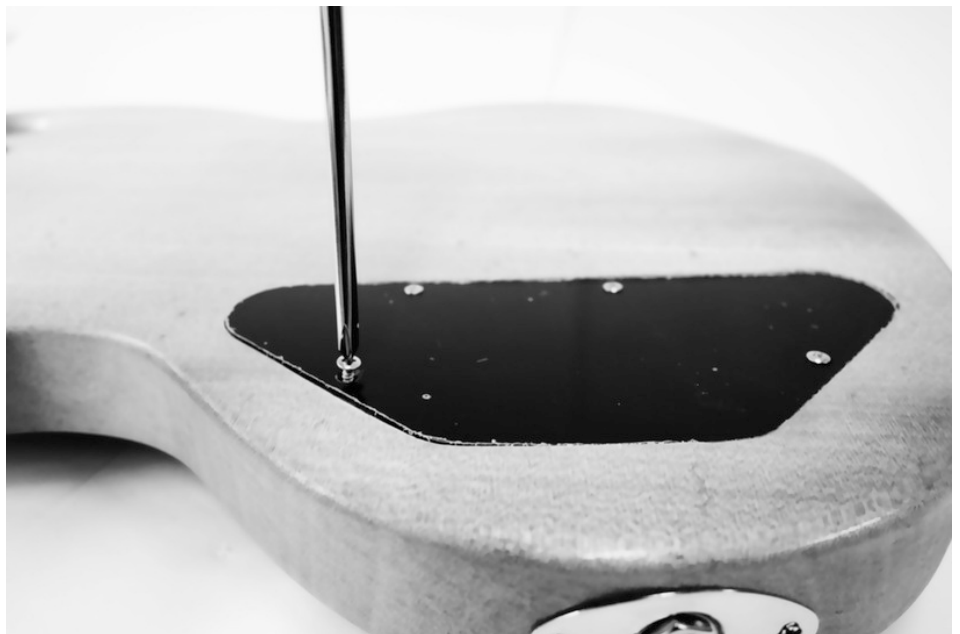
Fasten both pickups into their openings using the screws provided.



Connect the plugs to the potentiometers: The upper tone and volume potentiometers are generally connected to the neck pickup, and the lower tone and volume potentiometers to the bridge pickup.



Then screw the plastic cover for the regulator and switch openings into place by inserting the screws provided into the pre-drilled holes on the back of the body.



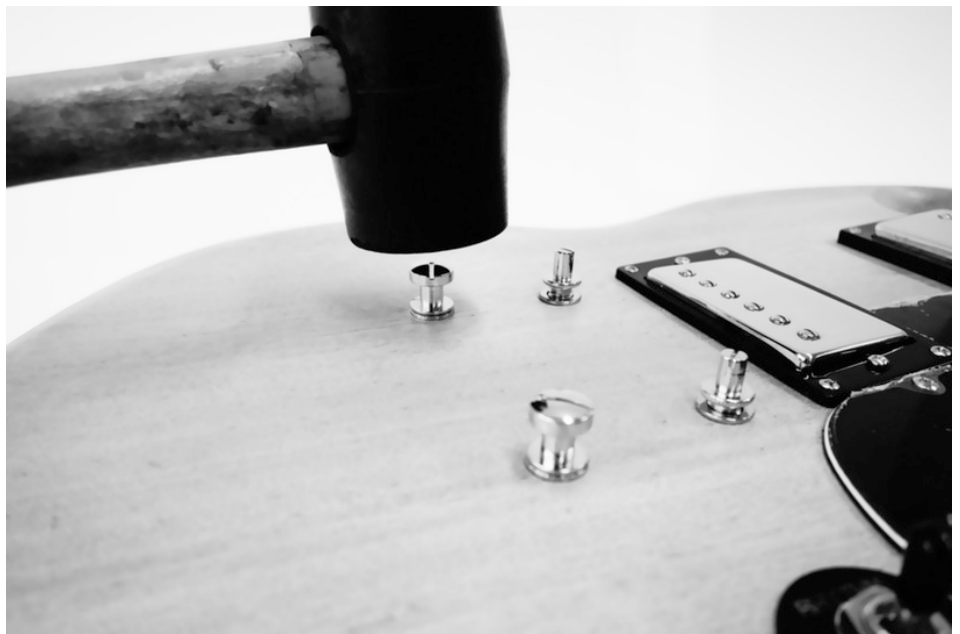
3.5 Mounting the pickguard

Screw the pickguard onto the body using the screws provided as shown in the picture below.



3.6 Mounting the tailpiece and bridge

Use a rubber mallet to drive the bolt fasteners for the tailpiece and bridge into the body as shown. Be sure there is sufficient contact between the stripped end of the earthing wire and the bolt for the tailpiece.



Place the tailpiece and the bridge on the fastening bolts. These two components are still loose, and will only be fastened when you string the guitar.



3.7 Mounting the potentiometer knobs and strap buttons

Push the knobs onto the shafts of the individual potentiometers.



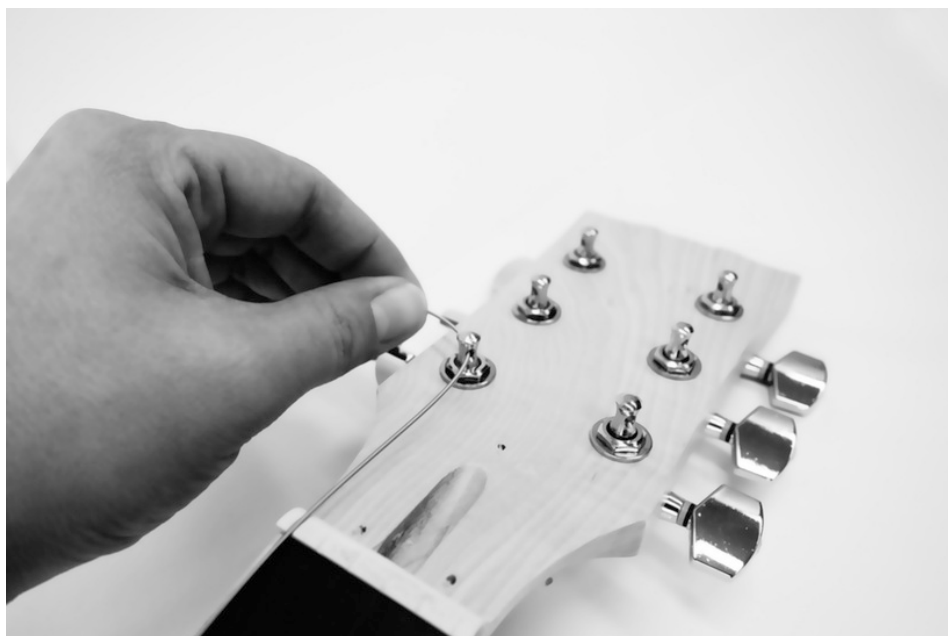
Screw the strap buttons into the pre-drilled holes in the body as shown.



3.8 Strings, neck relief and the position of the strings

Stringing the guitar

Thread the strings through the tailpiece, then over the bridge and saddle. Thread the strings into the holes in the tuners, wind the end of each string around the tuner a few times and then tighten each string finger-tight initially. Be sure the individual strings are in the right position on the saddle.



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.



Screw the cover for the truss bar onto the header headstock.



Adjusting the position of the strings

Once the neck has the desired relief, you can use the screws to the right and left of the bridge 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.

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.

