Harley Benton

Electric Guitar Kit Extreme-76

Electric Guitar Kit

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1 General information

This document contains important instructions for the safe operation of the product. Read and follow the safety instructions and all other instructions. Keep the document for future reference. Make sure that it is available to all those using the product. If you sell the product to another user, be sure that they also receive this document.

Our products and documentation are subject to a process of continuous development. They are therefore subject to change. Please refer to the latest version of the documentation, which is ready for download under <u>www.thomann.de</u>.

1.1 Symbols and signal words

In this section you will find an overview of the meaning of symbols and signal words that are used in this document.

Signal word	Meaning
DANGER!	This combination of symbol and signal word indicates an immediate dangerous situation that will result in death or serious injury if it is not avoided.
CAUTION!	This combination of symbol and signal word indicates a possible dangerous situation that can result in minor injury if it is not avoided.
Warning signs	Type of danger
	Warning – danger zone.

2 Safety instructions



DANGER! Risk of injury and choking hazard for children!

Children can suffocate on packaging material and small parts. Children can injure themselves when handling the product.

Never allow children to play with the packaging material and the product.

Always store packaging material out of the reach of babies and small children. Always dispose of packaging material properly when it is not in use.

Never allow children to use the product without supervision.

Keep small parts away from children and make sure that the product does not shed any small parts that children could play with.



CAUTION!

Risk of cuts to the hands from sharp edges during assembly!

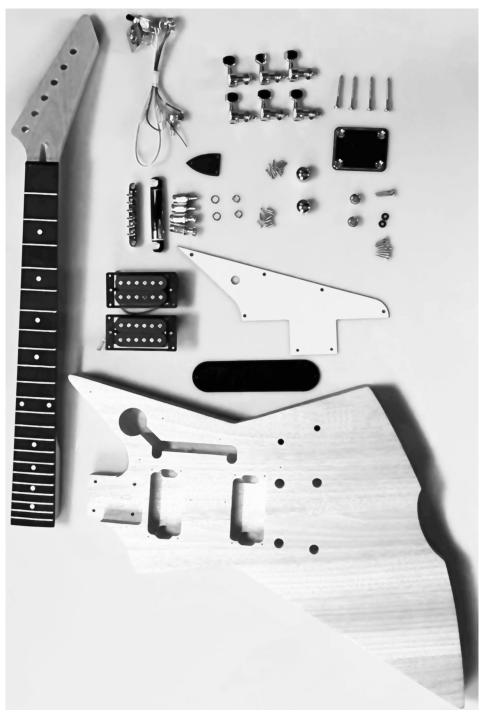
Tools, screws and components can have sharp edges that can cause cuts during assembly.

Pay attention to sharp edges when assembling and screwing the individual parts. Wear protective gloves if necessary.

3 Scope of delivery

Thank you for buying this electric guitar kit. All wooden parts, hardware and electrical components are contained in this package.

The following figure shows the individual components of the delivery.



The assembly is described in detail in the following sections.

4 Assembly instructions

Useful tools and materials

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

- Phillips screwdriver
- Rubber mallet
- Ring wrench
- Pliers
- Varnish and accessories
- Needle files
- Sandpaper

It is essential that the body and neck are painted before assembly. You must wear a dust mask when applying spray lacquer or paint.

4.1 Cutting out the headstock

Use a suitable saw to trim the headstock to form your desired shape. For reasons of stability, make sure there is sufficient clearance between the cut edge and the peg holes for the machine heads. The retaining rings of the machine heads serve as a reference here.

Finally, deburr the cut edge with sandpaper or a suitable file.

4.2 Painting the body and neck

Painting the body

The solid wood of the guitar body 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 neck joint. These parts are machined from high-grade tone woods to ensure optimum alignment. However, wood is a natural material that changes its shape slightly over time. If the neck is too tight in the cutout on the body, you can rework the fit with a sharp chisel or sandpaper. Please keep in mind that the coating of lacquer 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 work in a well-ventilated, dust-free environment. Considered and careful working is the key factor for ensuring a satisfactory result. It is highly recommended that you first try out the colour and technique on a different piece of wood.

Paint the body edges first and let them dry. If the edges are dry, continue with the front and back. 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.

Hang the painted body to dry in a dry, dust-free and preferably sunlight-protected area using a wire or hook in the recess for the guitar neck.

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.

Painting the neck

The guitar neck is sealed with a thin layer of matt lacquer before delivery and is ready to use. If you still want to treat the neck with coloured or clear lacquer, proceed as described below.

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

For the neck, use a clear or slightly tinted wood paint of good quality. Start on the front and at the edges of the headstock. Apply a thin layer evenly, let it dry and repeat the process 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.

4.3 Mounting the machine heads

Insert the four machine heads from the rear side of the headstock into the bores. Align the machine heads so that the tuning pegs are perpendicular to the top of the headstock.

Fix the machine heads as shown in the figure in this position hand-tight with the supplied screws.





Turn the neck over and fix all machine heads hand-tight with the supplied washers and nuts on the front of the headstock.

Tighten the nuts on the front with a suitable wrench, and then tighten the screws to secure the machine heads on the rear side.



4.4 Mounting the guitar neck

Place the body on a suitable work surface. Use a soft pad to avoid damaging the surface. Fit the neck into the neck cutout. If necessary, use a sharp chisel or sandpaper for reworking. Be very careful when removing material. The neck should be tight and never have too much clearance in the cutout!



Turn the guitar over, position the mounting plate over the four screw holes on the back of the body and screw the four supplied long wood screws through the holes in the mounting plate into the body and neck until the connection is firm.



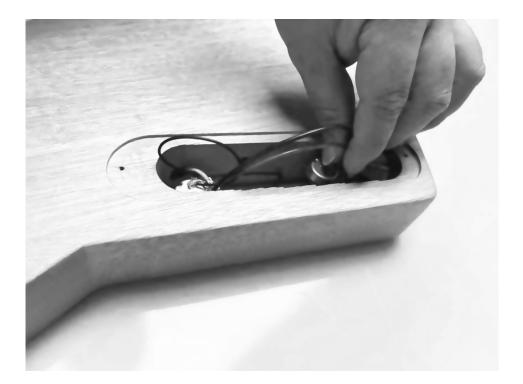
4.5 Wiring pots, pick-ups and switch

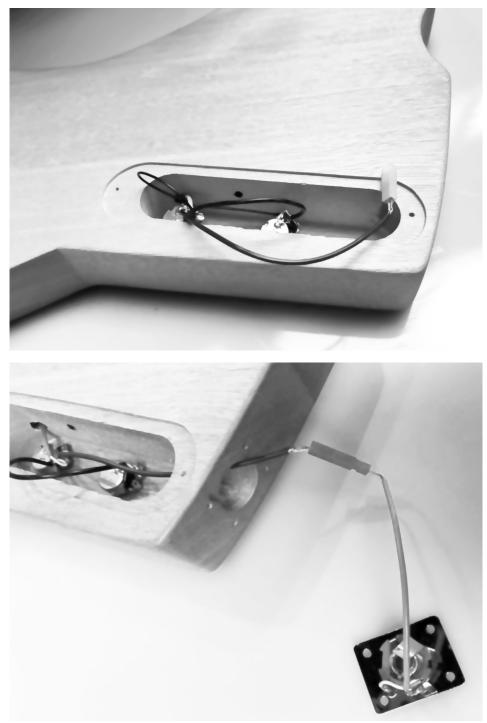
The wiring of the pick-ups, the pots and the jack socket is made via plug connectors.

Put the pots into the opening in the back as shown in the following picture.

Route the cable of the cable harness into the upper cable channel via the opening on the back, then to the opening for the bridge pickup, and from there into the opening for the switch, as shown in the illustrations.







Insert the jack bush into the hole provided on the base of the body for this purpose, and connect the two plug connectors.



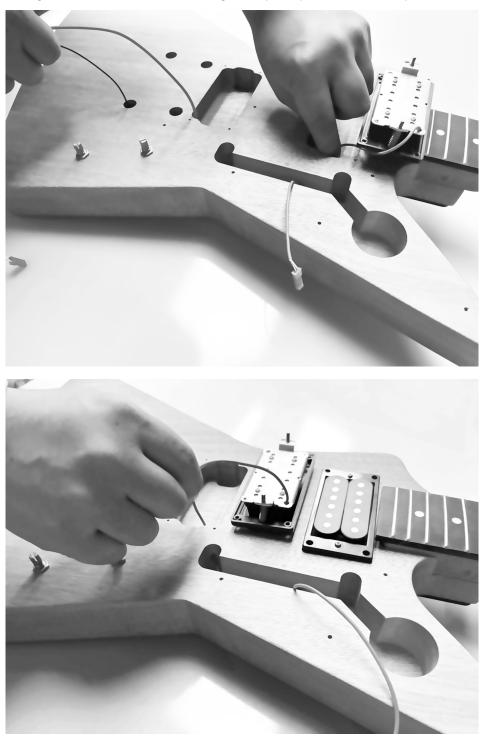
Route the string-earthing cable through the lower cable channel and to the hole for fastening the tailpiece.

Insert the holder for the jack bush and check the projection of the jack. This must protrude so far over the bracket to the outside that it can be sufficiently tightened with the supplied nut and then protrudes only slightly. If necessary, correct the protrusion by turning the counter nut inside accordingly. Then screw the output jack holder onto the body.



Then screw down the plastic plate to cover the recess for the pots with the screws provided in the pre-drilled holes on the back of the body.



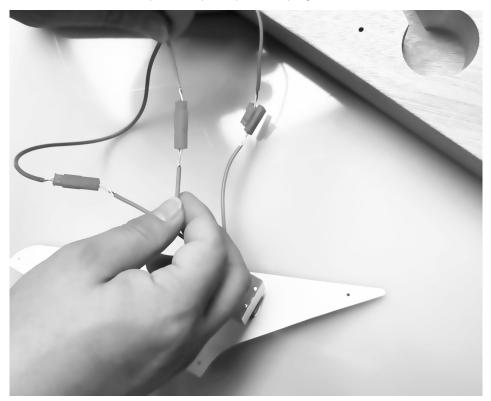


The pick-ups, pots and jack are connected to a cable harness with click-on plugs. Prepare the neck pick-up and the bridge pick-up for installation by routing the cables through the recesses and then screwing in the pick-ups as shown in the photo.



Route the switch from the back of the pickguard into the designated hole and screw it in so it is hand-tight.

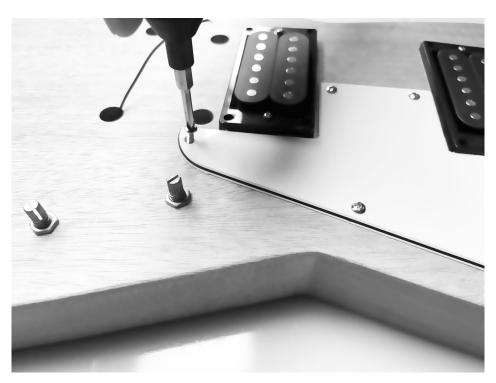
Now connect the switch, pots and pick-ups to the plug connectors as shown.



Ensure the pickups sit in the centres of the holes on the front and are aligned with the pre-drilled screw holes.

Screw the pick-ups and pickguard down using the screws provided.





To attach the tailpiece, lead the earthing cable out of the hole so that sufficient contact with the metal surface can be achieved when fitting the tailpiece. Earthing the strings reduces noise interference.

Using a suitable spanner, tighten the nut for the switch on the front face of pickguard until it is firm.



4.6 Mounting the tailpiece and bridge

Place the body on a suitable work surface. Use a soft pad to avoid damaging the surface.

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

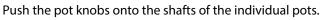
Screw in the inserts and screws for the bridge and tailpiece as shown in the figure.



Attach the tailpiece using the screws provided. If necessary, adjust the position of the earthing wire so that the tailpiece can be mounted flat on the guitar body using the fastening screws.



4.7 Mounting the pot knobs and strap buttons





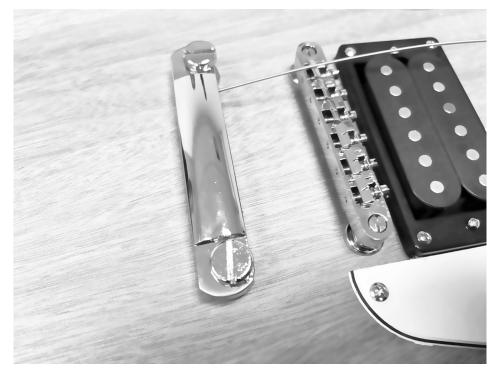


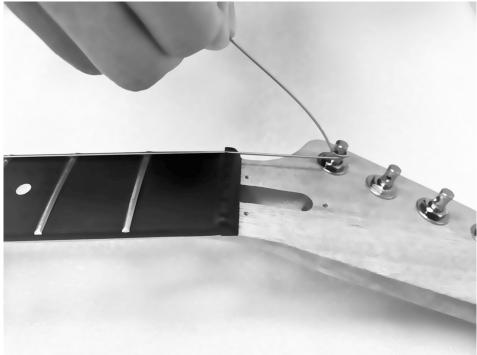
Screw the strap pins into the pre-drilled holes in the body as shown.

4.8 Adjusting strings, neck relief, string action and pick-ups

Stringing

The strings are threaded from the bridge towards the neck over the corresponding saddle. Wrap the end of the string around the machine heads a few times and then hand-tighten each string. Make sure that the individual strings are in the correct saddle position as well as in the corresponding string retainer.





Then tune all the strings in sequence to the correct pitch. You can use a tuner or a pitch pipe as a reference. Note that the string tension will drop a little and the guitar needs to be retuned several times until the strings stay in tune.

Adjusting the neck relief

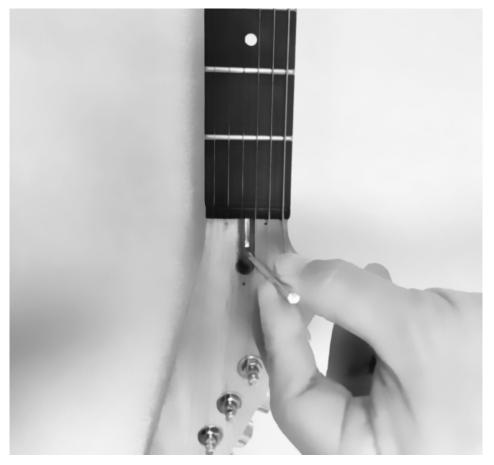
The neck is equipped with a steel truss rod, with which the neck relief can be adjusted individually to the playing habits.

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

Adjust the neck relief with a suitable Allen key as follows:

- Turn the truss rod clockwise to increase the tension. The neck becomes straighter, in extreme cases convex. The string is closer to the fingerboard, easier to grip but causes more background noise when playing.
- Turn the truss rod counter-clockwise to decrease the tension in the neck. The neck yields more to the string tension and accordingly curves concave. The string moves away from the fingerboard, is a bit harder to grip, but causes less to no background noise when playing.

Adjust the truss rod by about a quarter turn per setting, tune all strings to the correct pitch after each adjustment, and check the neck relief again after some time. Repeat the process until the desired neck relief is achieved.



Screw the truss rod cover onto the headstock.



Adjusting the string action

Once the neck has the desired relief, you can use the screws for each saddle to adjust the string position to suit your playing habits. Again, the lower the string action, the easier the strings are to grip, but cause slight background noise when playing the guitar.



After setting the string action, you can check the octave intonation of the guitar and readjust if necessary. Tune all strings to the correct pitch, touch the first string just above the twelfth fret, and hit it. The resulting overtone (harmonic in the 12th fret) must have the same pitch as the string in the 12th fret. If the pitch of the two notes is different, move the bridge piece forward for this string (tone too low) or back (tone too high). Listen to the pitch of the two notes and make incremental changes until the two notes match. Alternatively, you can also adjust the octave clarity with an instrument tuner. The pitch of the note in the 12th fret must be the same as the open string, but one octave higher.

Adjusting the pick-ups

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

5 Protecting the environment

Disposal of the packing material





Disposal of your old device



Environmentally friendly materials have been chosen for the packaging. These materials can be sent for normal recycling. Ensure that plastic bags, packaging, etc. are disposed of in the proper manner.

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

Observe the disposal note regarding documentation in France.

This product is subject to the European Waste Electrical and Electronic Equipment Directive (WEEE) as amended.

Do not dispose of your old device with your normal household waste; instead, deliver it for controlled disposal by an approved waste disposal firm or through your local waste facility. If in doubt, consult your local waste management facility. You can also return the device to a retailer if they offer to take the device back for free or if they are legally obliged to do so. When disposing of the device, comply with the rules and regulations that apply in your country. You can also return your old device to Thomann GmbH at no charge. Check the current conditions on <u>www.thomann.de</u>.

Proper disposal protects the environment as well as the health of your fellow human beings. This is because the proper handling of old devices negates the potential negative effects of hazardous substances, and because it conserves resources by recycling them.

Also note that waste avoidance is a valuable contribution to environmental protection. Repairing a device or passing it on to another user is an ecologically valuable alternative to disposal.

If your old device contains personal data, delete those data before disposing of it.

Notes