

Lazy Dog Guitars

# DIY Guitar Kit

## Table of Contents

<b>Intro &amp; Disclaimer .....</b>	<b>3</b>
<b>Before You Begin – Safety Checklist .....</b>	<b>5</b>
📖 Read First .....	5
🔧 Workspace .....	5
🔧 Tools .....	5
🛡️ Personal Protective Equipment .....	5
👉 Materials & Components .....	5
🎸 Strings & Tension .....	5
⚡ Electronics (If Included) .....	5
🚫 Know Your Limits .....	5
✅ Final Check .....	5
<b>Preparing the Components.....</b>	<b>6</b>
<b>Sanding.....</b>	<b>7</b>
Choosing the Right Sandpaper Grade .....	7
<b>Build Your Guitar !.....</b>	<b>8</b>
<b>Preparing the neck.....</b>	<b>8</b>
1. Drill the Tuner Holes.....	8
2. Prepare the Body Section of the Neck.....	8
3. Cut the Neck to Length.....	9
4. Cut the Fretboard.....	9
5. Glue the Fretboard to the Neck (Diagram D) .....	9
6. Shape the Body .....	10
7. Drill for the Piezo (Piezo Instruments Only).....	10
8. Create a Back Angle (Optional Step for Lower String Action).....	11
9. Shape the Neck Section.....	12
10. Shape and Fit the String Guide (Fretted Instruments Only) .....	13
11. Fitting the Nut (Fretless Instruments Only) .....	13
<b>Prepare the box .....</b>	<b>15</b>
12. Glue the Box (Flat-Packed DIY Kits Only) .....	15
13. Glue the Supports.....	15
14. Drill for the Jack.....	15
15. Mark and Cut the Neck Pocket .....	15
16. Cut the Box Lid for the Pickup (Pickup Instruments Only).....	17
17. Applying Finish .....	17
<b>Assembly .....</b>	<b>18</b>
18. Pre-Assemble the Neck .....	18
19. Assemble the Neck to the Box.....	18
20. Add the Strings .....	19
21. Move the Bridge into Position.....	19
<b>Tune Your Instrument.....</b>	<b>20</b>
<b>Go Play ! .....</b>	<b>21</b>

# Intro & Disclaimer

All products sold by **Lazy Dog Guitars** are supplied as **DIY (Do-It-Yourself) guitar kits** intended for home assembly by the purchaser.

By purchasing, assembling, or using this product, you acknowledge and agree that:

Assembly of this guitar kit is carried out entirely at your own risk. You are responsible for ensuring the instrument is assembled correctly, safely, and in accordance with any instructions or guidance provided.

Assembly may require the use of hand tools and/or power tools, including but not limited to drills, saws, soldering irons, screwdrivers, files, clamps, sanders, and cutting tools.

You acknowledge that:

- The use of hand tools and power tools carries inherent risks, including serious injury.
- You are solely responsible for the safe operation of any tools used.
- You must ensure tools are properly maintained and suitable for the task.
- Appropriate safety precautions must be taken, including the use of suitable personal protective equipment (PPE) such as eye protection, hearing protection, gloves, and dust masks where required.
- Lazy Dog Guitars and Andrew Rose accept no liability for injury, loss, or damage resulting from the use or misuse of tools during assembly.

Guitar kits may include sharp components, small parts, electronic components, unfinished wood, adhesives, finishes, and strings under tension. Improper handling may result in injury or damage.

Lazy Dog Guitars and Andrew Rose accept no liability for injury, loss, or damage to persons or property arising from:

- Assembly or incorrect assembly
- Modification or customisation
- Improper setup
- Misuse of tools
- Improper handling of materials
- Use of the completed instrument

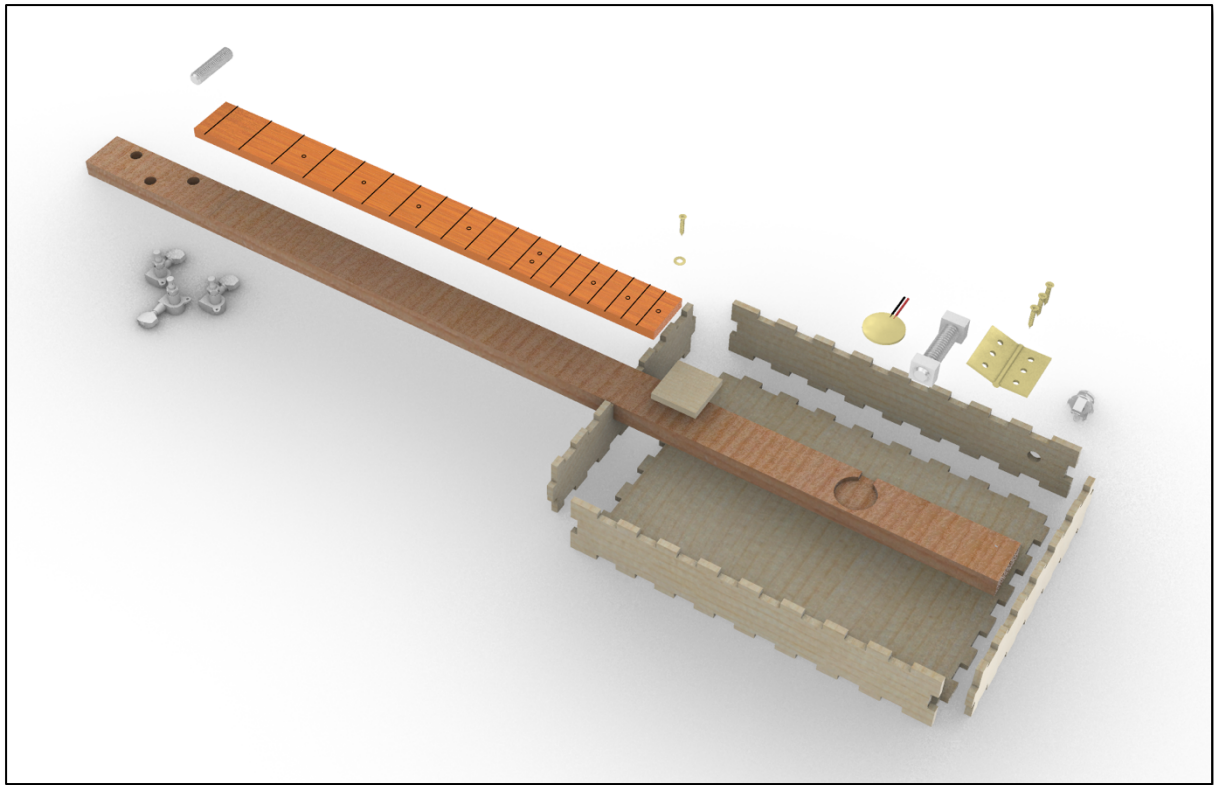
Once supplied, responsibility for safe assembly and use rests entirely with the purchaser.

If you are unsure about any aspect of assembly, setup, wiring, finishing, or safe tool use, you should seek assistance from a qualified guitar technician or appropriately skilled professional before proceeding.

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Nothing in this disclaimer excludes or limits liability where it cannot legally be excluded under UK law or applicable international consumer protection legislation. Your statutory rights are not affected.

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Thank you for purchasing your **Lazy Dog Guitars DIY Guitar Kit** — and welcome to the wonderfully addictive world of building your own instrument.

This kit has been designed and prepared with care to give you a unique, hands-on experience and a guitar that you can truly call your own. Whether this is your first build or you're already a seasoned tinkerer, we hope you enjoy every stage of the process — from the smell of the wood and the first screw turned, right through to that magical moment when you play the first note.

Building a guitar is not a race. Take your time, read through the instructions before you begin, and don't be afraid to pause, adjust, or ask for help if you need it. Small imperfections are part of the charm, and every finished instrument has its own personality.

If you have any questions during your build, we're always happy to help where we can. Most of all, enjoy the journey — and have fun making something with your own hands.

Happy building, and happy playing.

**Andrew Rose**

*Lazy Dog Guitars* 🐕🎸

# Before You Begin – Safety Checklist

Please read this page fully before starting your Lazy Dog Guitars DIY Guitar Kit.

## Read First

- Read the **entire instruction manual** before starting.
- Make sure you understand each step before moving on.

## Workspace

- Work in a clean, stable, well-lit, and well-ventilated area.
- Use a solid work surface large enough to support the guitar body and neck.
- Keep the area free of clutter, liquids, children, and pets.

## Tools

- Use appropriate hand tools and power tools for each task.
- Ensure all tools are in good working condition before use.
- Never use damaged, worn, or unsuitable tools.

## Personal Protective Equipment

- Wear eye protection when drilling, sanding, cutting, or fitting strings.
- Use a dust mask or respirator when sanding wood or applying finishes.
- Wear hearing protection when using power tools.
- Tie back long hair and avoid loose clothing or jewellery.

## Materials & Components

- Some components may have sharp edges — handle with care.
- Wood dust, glues, finishes, and chemicals can be hazardous if misused.
- Always follow manufacturer safety instructions for any products used.

## Strings & Tension

- Guitar strings are under high tension and can cause injury if they snap.
- Wear eye protection when fitting and tuning strings.
- Keep your face and hands clear while tuning.

## Electronics (If Included)

- Work in a well-ventilated area when soldering.
- Never leave a hot soldering iron unattended.
- Allow tools to cool fully before storage.

## Know Your Limits

- If you are unsure about any step, stop and seek advice from a qualified guitar technician or skilled professional.
- Take your time — rushing increases the risk of mistakes and injury.

## Final Check

Building safely makes the process more enjoyable and helps ensure the best possible result.

# Preparing the Components

Before final assembly begins, some of the wooden components in your Lazy Dog Guitars kit will need to be **prepared and finished**. This stage is an important part of the build and helps ensure your finished instrument is strong, comfortable to play, and looks its best.

Unlike factory-built instruments, DIY kits often require a small amount of **gluing, sanding, drilling, and general preparation**. This allows you to achieve a better fit between parts and gives you the freedom to personalise your guitar along the way.

During this stage you may need to:

- **Glue wooden parts** where specified, ensuring joints are tight, square, and fully cured before moving on.
- **Sand wooden surfaces** to remove rough edges, tool marks, or splinters, and to prepare the wood for finishing.
- **Drill pilot holes** for screws and fittings to prevent splitting and to ensure accurate alignment.
- **Test-fit components** before final fixing to check alignment and make adjustments if required.

Take your time with this stage. Careful preparation now will make the later assembly steps easier and will greatly improve the strength, playability, and appearance of your completed guitar.

Remember: measure twice, drill once — and if something doesn't feel right, stop and check before continuing.

# Sanding

Sanding is one of the most important stages of preparing your guitar. Done properly, it improves the feel, appearance, and finish of the instrument. Done poorly, it can round edges, remove too much material, or leave visible scratches that show through the final finish.

Take your time — sanding is about **control, not speed**.

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## Choosing the Right Sandpaper Grade

Sandpaper is measured in **grit**. Lower numbers are coarser (rougher), higher numbers are finer (smoother). Always work **from coarse to fine**, never the other way around.

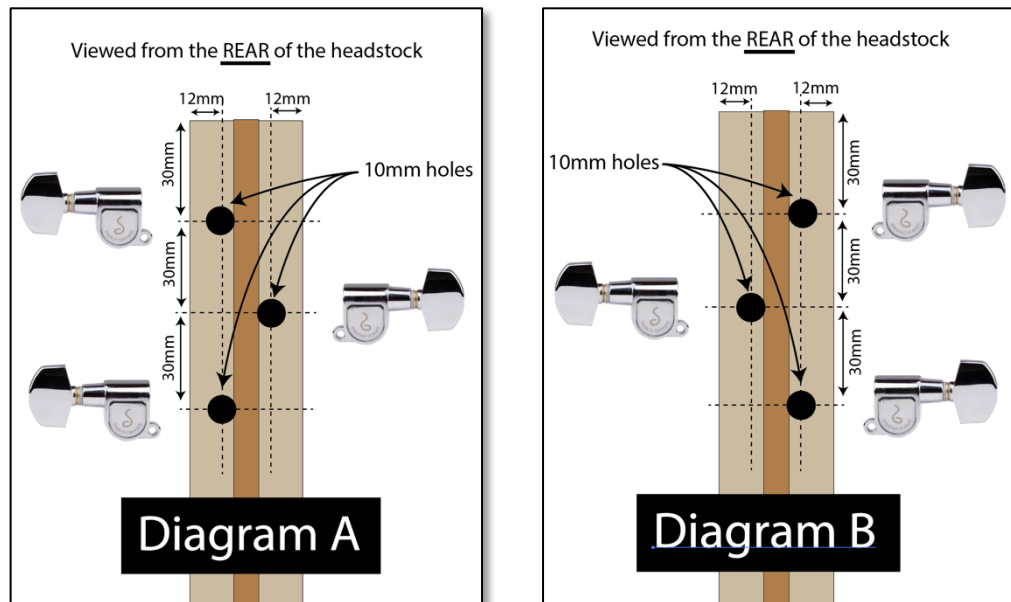
- **80–120 grit**  
For heavy shaping, removing rough saw marks, glue residue, or uneven joints. Use carefully — this grit removes material quickly.
- **150–180 grit**  
For general smoothing and refining shapes after coarse sanding. This is often the first grit used on kit parts.
- **220–240 grit**  
For final smoothing before assembly or finishing. Most wooden components should feel smooth to the touch at this stage.
- **320–400 grit**  
For light sanding between coats of finish or for final touch-ups. Not usually needed on bare wood before assembly.

# Build Your Guitar !

## Preparing the neck

### 1. Drill the Tuner Holes

The kits that we provide come with three machine tuners. These are specifically left- or right-handed designs and, to work correctly, must be installed on the correct side of the instrument. Establish which tuners you have by orientating them as shown in Diagrams A and B below. Using the diagram, mark the positions of the tuner pegs for your setup. (The measurements are approximate guides and may be altered if you want a slightly different headstock layout.)

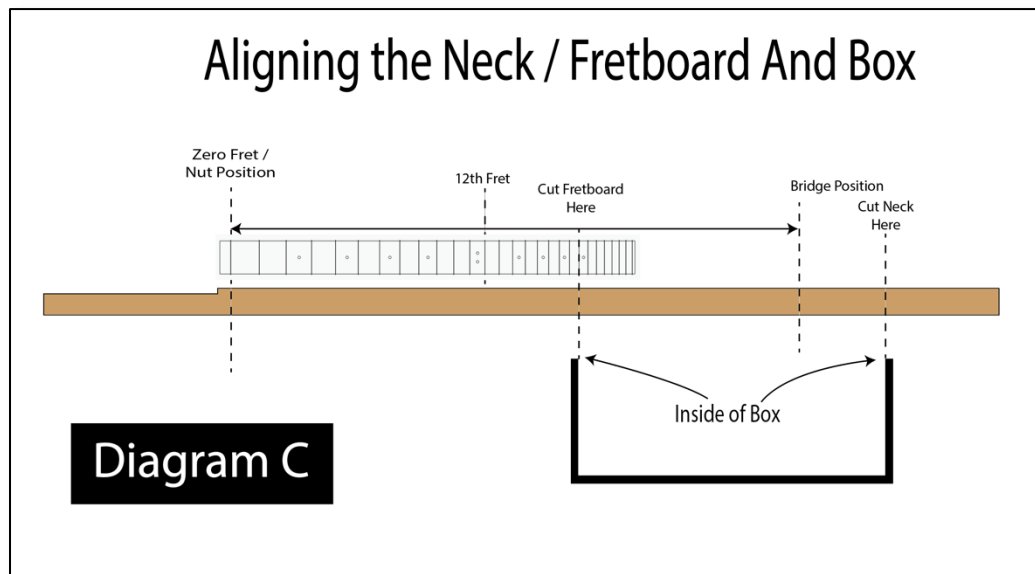


### 2. Prepare the Body Section of the Neck

To align the body, neck, and fretboard correctly, lay them all out and make some measurements to ensure that the bridge aligns correctly with the body.

Firstly, check the measurement of your fretboard to ascertain the scale length of the instrument (we usually write the scale length in inches on the back of the fretboard – however, do check the measurement yourself too!).

To obtain the scale length of the instrument, measure from the zero fret/nut mark to the 12th fret (see Diagram C), then double this value. This is the scale length and is the required distance from the zero fret/nut mark to the bridge position.



### 3. Cut the Neck to Length

Following the diagram above, mark the position where the neck is to be cut to length. Cut the neck, ensuring the end is square and sanded smooth.

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### 4. Cut the Fretboard

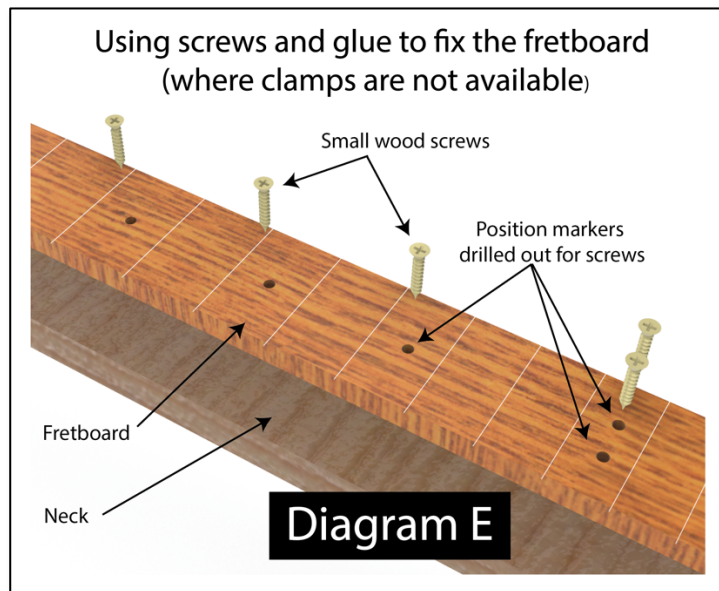
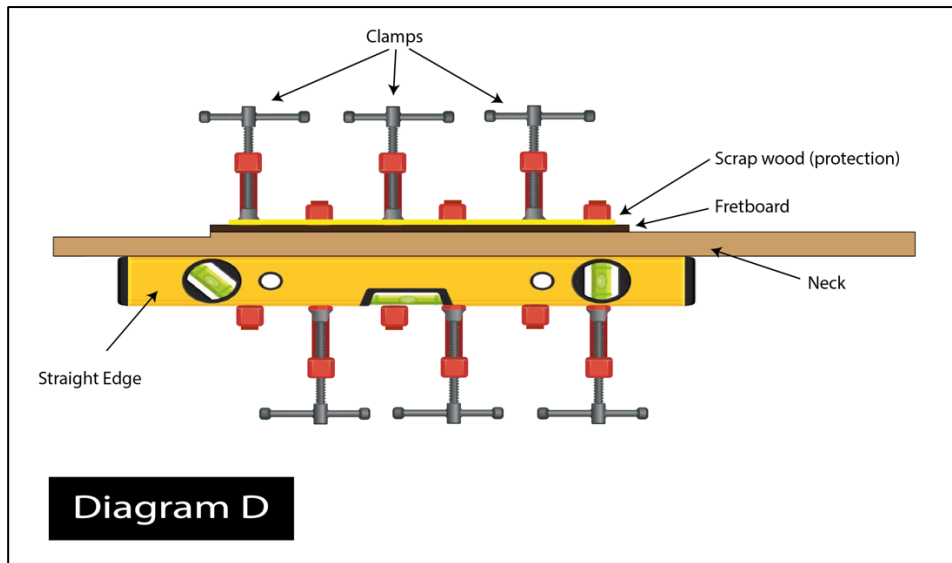
Following the diagram above, mark the position where the fretboard is to be cut to length. Cut the fretboard, ensuring the end is square and sanded smooth.

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### 5. Glue the Fretboard to the Neck (Diagram D)

Using a good wood glue, attach the fretboard to the neck, preferably using multiple clamps and a straight edge (spirit level) to clamp the neck and fretboard straight and true. Add scrap wood to protect the fretboard when clamping.

**Alternative Method** – If you do not have enough clamps, it is possible to use screws as fret markers on the neck. By utilising the fret marker positions as screw holes (once drilled out), you can simply glue and screw the fretboard down. This works especially well for fretless necks. The screws can be left in place as fret position markers in true ‘use what you have’ cigar box building style!

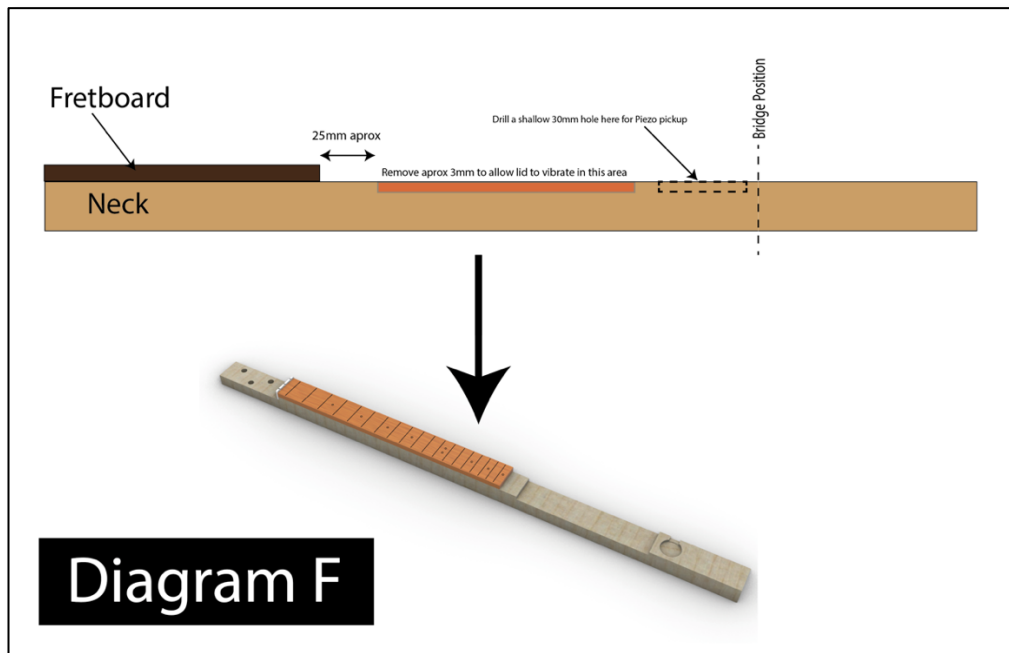


## 6. Shape the Body

Although not essential, for best acoustic volume the lid of the box should be able to vibrate. To help achieve this, we can remove some material from the neck as shown in Diagram F. The removal of this section (shown in orange in the diagram) using a rasp allows the lid to vibrate more freely and produces a louder instrument.

## 7. Drill for the Piezo (Piezo Instruments Only)

This step is not essential, as the piezo can simply be glued to the underside of the lid (see Step 18). However, for best performance, drilling a shallow 30 mm hole using a Forstner bit (or optionally filing a small section of the neck) and recessing the piezo into it is recommended. This should be near the position of the bridge (see Diagram F).

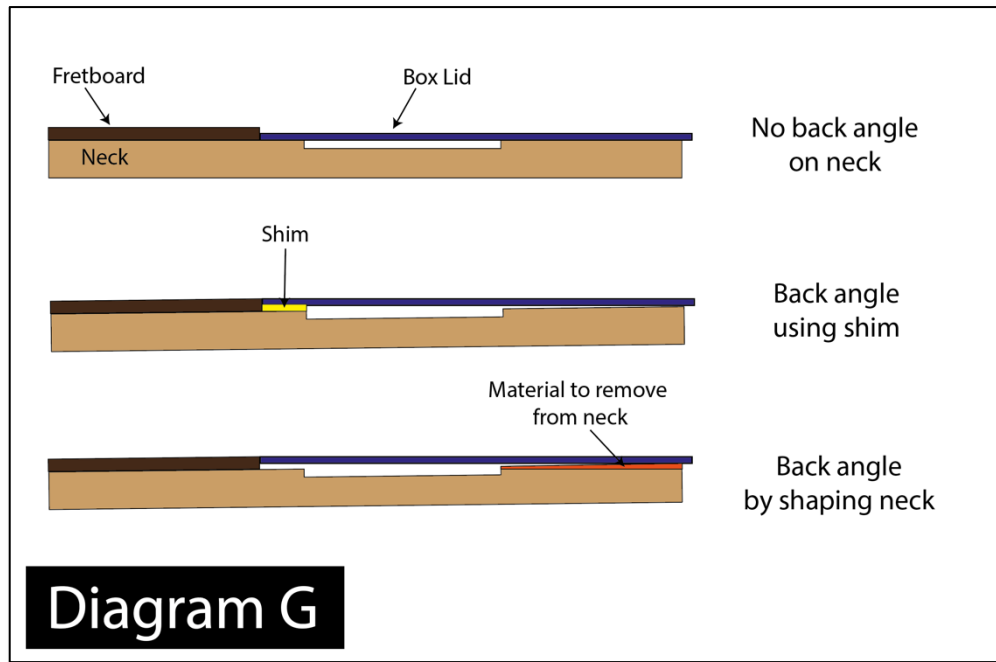


## 8. Create a Back Angle (Optional Step for Lower String Action)

To create an instrument with low string action (not essential for fretless instruments but desirable for fretted instruments), a neck angle is required between the neck and the body of the instrument. This can be achieved in two ways, as shown in Diagram G.

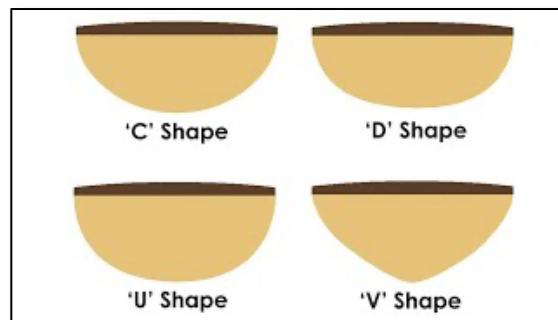
Firstly, a small shim (supplied in the kit) can be fitted at one end between the neck and the box lid (shown in yellow in diagram G). This is best fitted at the assembly stage and does not require any extra work at this stage (it is held in place with an assembly screw).

The second method involves removing a small amount of material from the neck at the opposite end of where the box fits (shown in orange in diagram G). This should be rasped away at a shallow angle, as shown in the diagram, to allow the lid to sit at an angle on the neck.



### 9. Shape the Neck Section

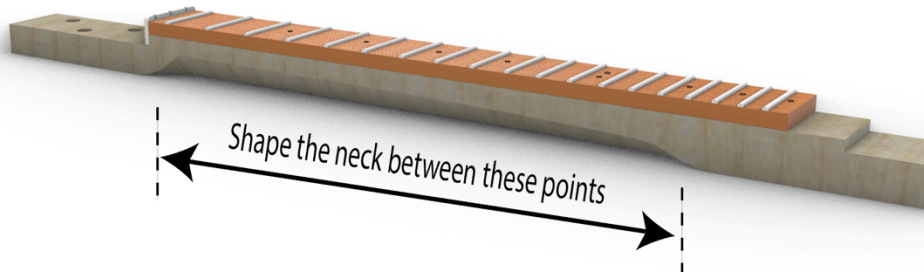
For comfort, it is desirable to shape the back section of the neck into one of the profile shapes shown below.



This can be achieved in various ways, including using a router bit (round-over bit) or filing along the neck within the areas shown to create a comfortable playing profile. Finish by sanding with sandpaper to a smooth finish.

## Shaping of the neck

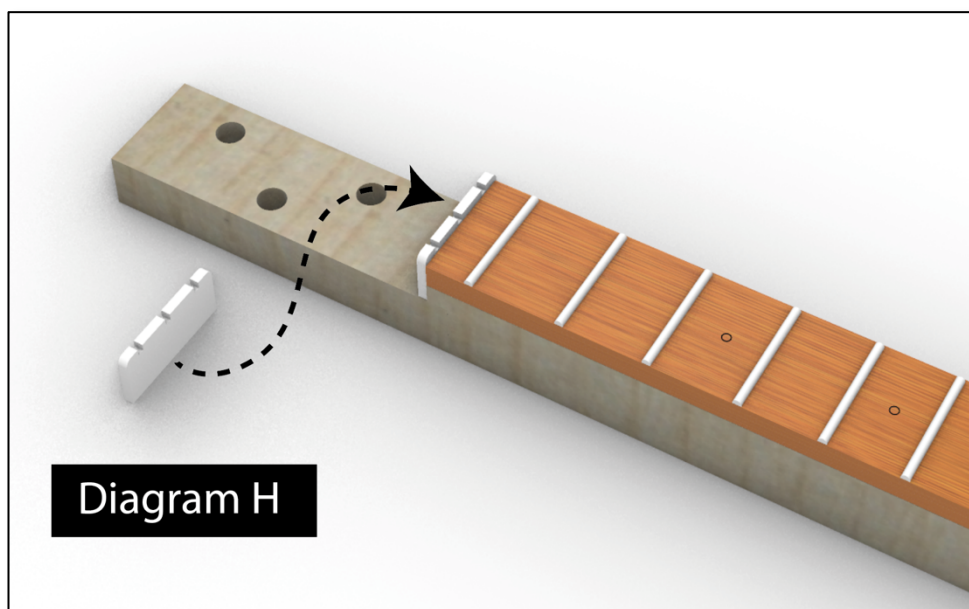
Diagram M



### 10. Shape and Fit the String Guide (Fretted Instruments Only)

For fretted instruments, a string guide is fitted to keep the strings in the correct position on the zero fret. This is similar to a conventional nut on a guitar.

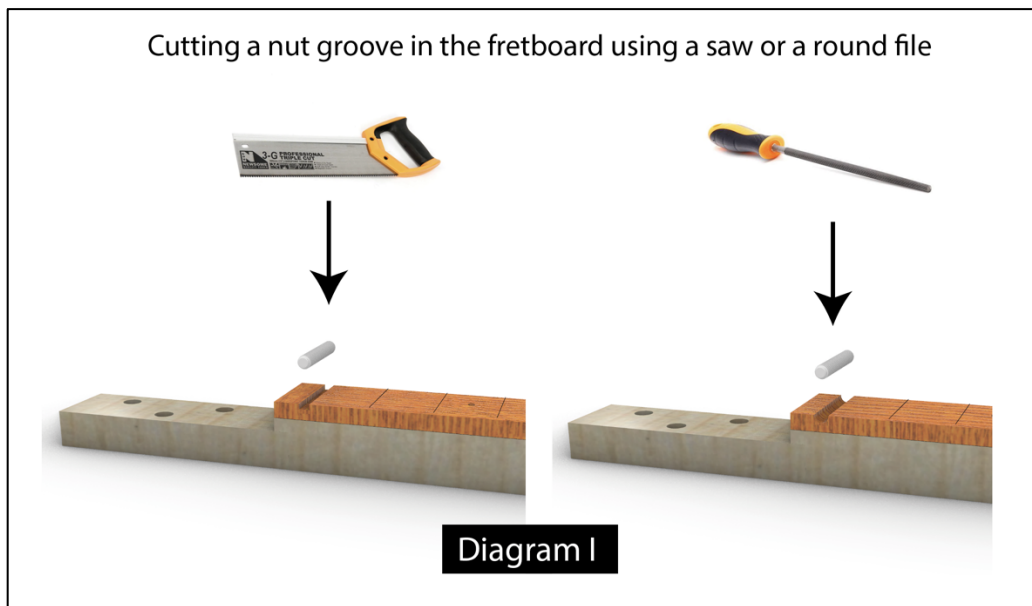
In your kit, you will find a small piece of hardwood to allow you to shape a string guide using rasps and sandpaper. A wood saw can be used to cut the grooves to create the guides. This should be glued in place at the end of the fretboard near the zero fret, as shown.



### 11. Fitting the Nut (Fretless Instruments Only)

For fretless instruments, a nut slot is required to hold the threaded bar (provided) in place to act as a nut. This can be achieved by cutting shallow slots using a saw into the position of the zero fret, wide enough for the threaded bar to sit proud of the fretboard by around 3–4 mm.

When the strings are attached, it will be held securely in the slot by them. Alternatively, a round file can be used to achieve the same groove.



## Prepare the box

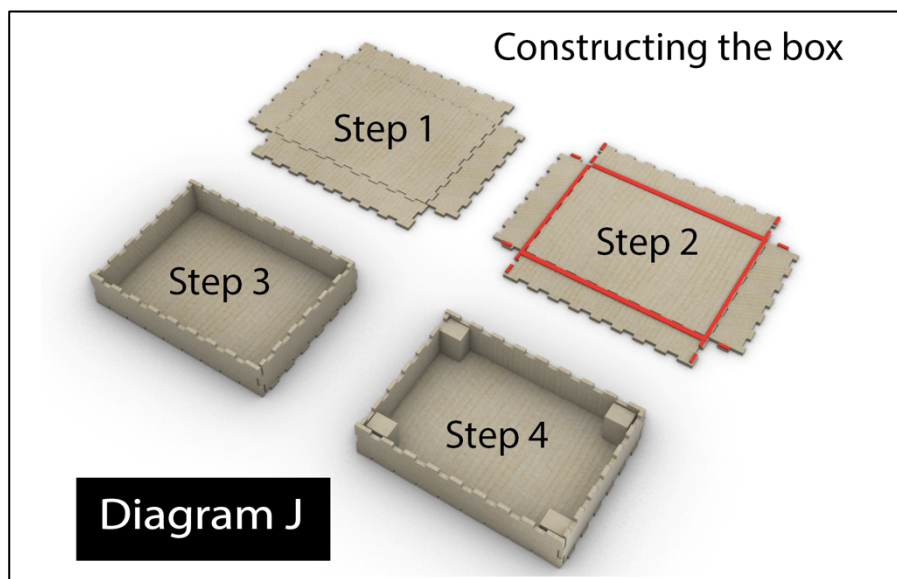
### 12. Glue the Box (Flat-Packed DIY Kits Only)

For those who have purchased a flat-packed DIY kit, you must first glue the box together. Lay out the parts as shown in Step 1 and apply a small bead of glue to the areas shown in Step 2 in red (along all the joints – including the ends of the sides). Then raise all four sides to create a box shape and clamp in position. Allow this to dry fully before moving on to the next step.

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### 13. Glue the Supports

Apply glue to the inside corners (including the inside face of the back of the box) and fit the four corner supports. Clamp in place and allow to dry fully.



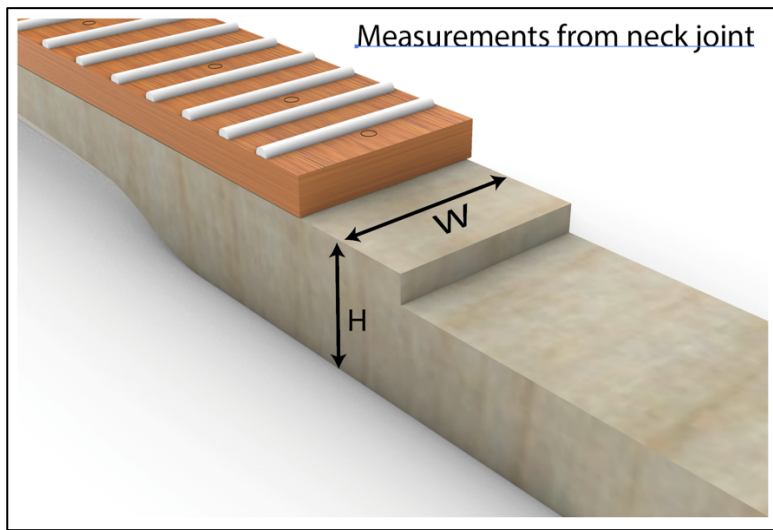
### 14. Drill for the Jack

The output jack for the instrument's pickup can be fitted into either the box lid or the side of the box. This requires a 10 mm drilled hole. The best results are achieved using a step drill to create a neat, clean hole.

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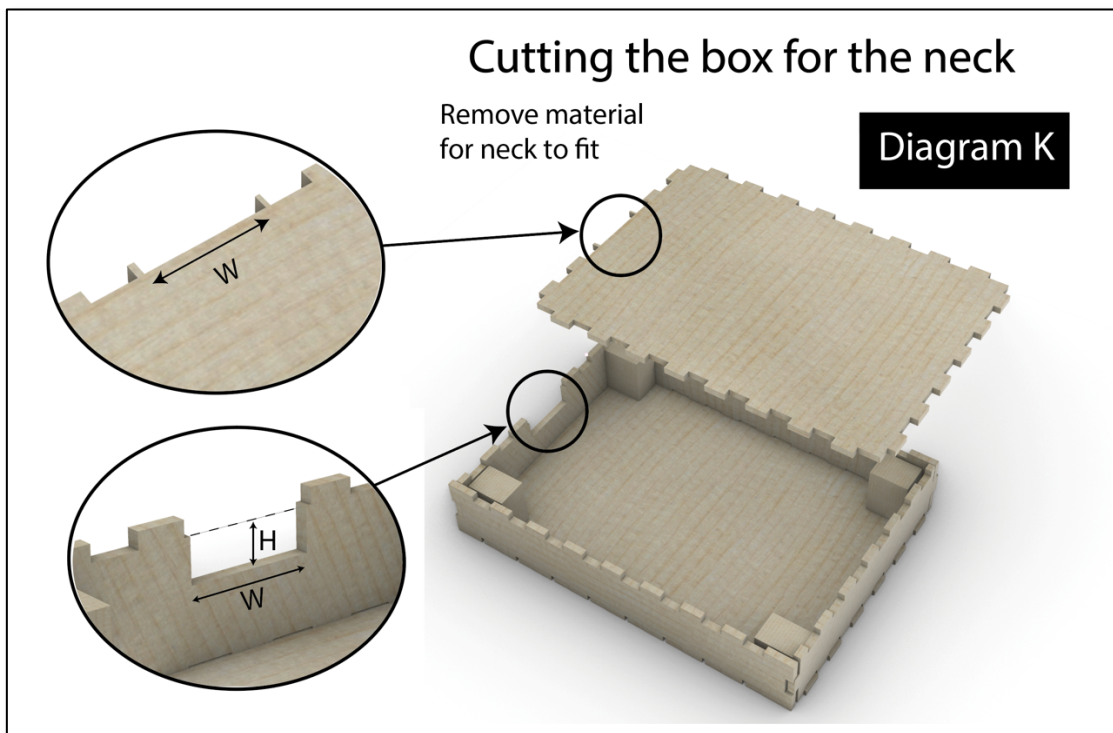
### 15. Mark and Cut the Neck Pocket

For the neck to be fitted inside the box, the box must be cut to fit your specific neck. Firstly, take accurate measurements for H and W from your neck (see diagram).



Next, mark the centre line on your box (use masking tape to avoid drawing directly on the box). Then mark the cutting lines as shown in the diagram.

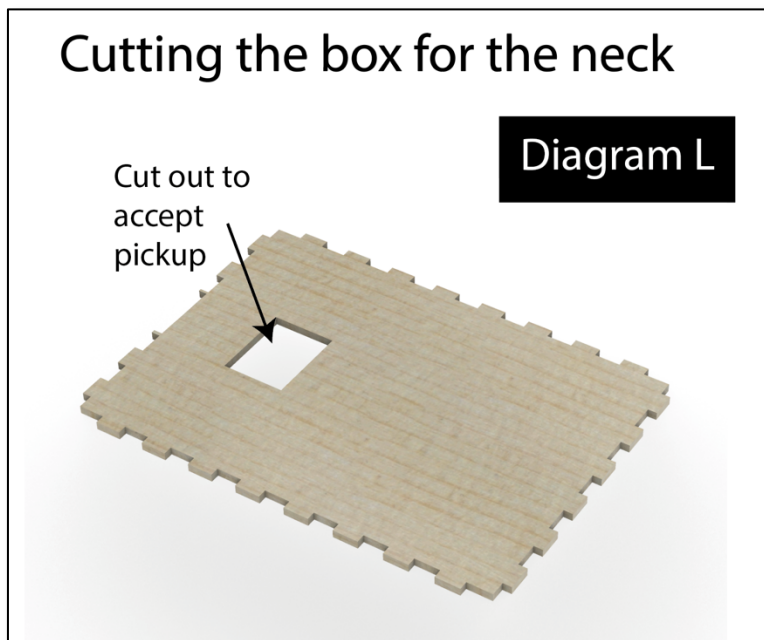
Cut the box using a fine-blade wood saw or coping saw, then finish with a file and sandpaper to create a snug fit for the neck.



## 16. Cut the Box Lid for the Pickup (Pickup Instruments Only)

For those fitting optional pickups, first measure the dimensions of the pickup and mark the box lid as shown.

Drill one corner of the section to be removed to allow a coping saw blade to be inserted, then carefully cut out the opening. Finish with a file and sandpaper for a neat fit.



## 17. Applying Finish

A variety of finishes can be used on your instrument, including painting (watercolour or spray paint), staining, and varnishing. This allows you to truly personalise your instrument with your own creative touches.

# Assembly

## 18. Pre-Assemble the Neck

Before inserting the neck into the box, assemble the tuners into the headstock.

Insert the tuners in the correct orientation from the rear of the headstock (Diagram A) and add the washers and nuts to the front. Tighten the nuts and ensure the tuner heads are positioned correctly.

Drill a small 2 mm pilot hole through the screw hole on the rear of each tuner into the neck, then screw in the retaining screws provided.

### ATTENTION

These screws are very delicate. Do not use excessive force when installing them. Ensure the pilot hole has been drilled and use a good-quality, correctly fitting screwdriver.

At this stage, you may also glue the piezo pickup (or flat-pup style pickup) into position on the neck using hot glue. The piezo should be fitted on the neck (if you followed Step 7) or directly to the underside of the lid, ensuring it does not interfere with any further assembly.

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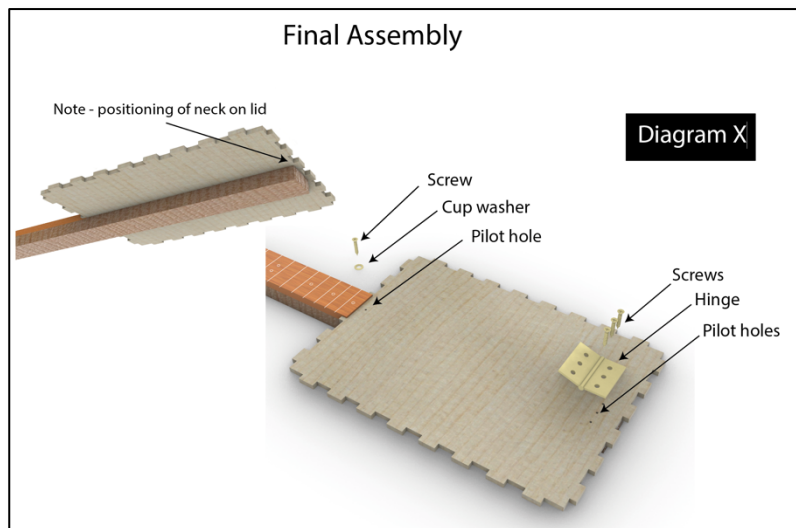
## 19. Assemble the Neck to the Box

**a.** Drill a pilot hole in the box lid adjacent to where the neck meets the lid (Diagram X). Insert a screw (with optional cup washer) to secure the lid to the neck at this point.

**b.** Ensure the neck runs centrally through the lid. Position the hinge as shown in the diagram and drill three pilot holes for the screws. Fix the hinge, lid, and neck together by inserting and tightening these screws.

**c.** Insert the jack through the hole drilled in Step 14 and tighten it into position.

**d.** Fit the lid/neck assembly onto the box and drill pilot holes in the four corners of the lid through into the corner supports (added in Step 13). Insert four screws (with optional cup washers) to complete the assembly of the box, neck, and lid.



## 20. Add the Strings

Attach the strings through the hinge and onto the machine tuners (see the section on string gauges for your required tunings). Then slide the threaded rod, complete with two nuts, under the strings to form a bridge on the instrument.

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## 21. Move the Bridge into Position

Measure from the zero fret (fretted version) or the threaded nut (fretless version) and move the bridge to the scale length calculated in Step 2.

# Tune Your Instrument

The most common three-string tuning is **GDG** (from lowest to highest pitch). This is called an "open G" tuning because when you strum all three strings without pressing any down, you hear a G major chord. This tuning is perfect for slide playing and traditional blues.

To achieve GDG tuning:

- The thickest string (closest to your face when you hold the guitar) should be tuned to G (the same G as the 3rd fret of the low E string on a standard guitar). To achieve this use an A string (5<sup>th</sup>) from a standard set of guitar strings tuned down to G.
- The middle string should be tuned to D (one octave higher than the open D string on a standard guitar). To achieve this use a D string (4<sup>th</sup>) from a standard set of guitar strings tuned normally.
- The thinnest string should be tuned to G (the same G as the open G string on a standard guitar, or one octave higher than the lowest string). To achieve this use a G string (3<sup>rd</sup>) from a standard set of guitar strings tuned normally.

**DAD** is another excellent three-string tuning, giving you an open D major chord. It's slightly lower and darker than GDG.

It is similarly tuned to the above except

- The thickest is an E string (6<sup>th</sup>) from a standard set of guitar strings tuned down to D
- The middle is an A string (5<sup>th</sup>) from a standard set of guitar strings tuned normally to A
- The thinnest is a D string (4<sup>th</sup>) from a standard set of guitar strings tuned normally to D

If you do not own a guitar tuner at the moment then you can use apps on your phone to tune to correct pitch.

# Go Play !

So here you are. At the end of the book, holding something that, not so long ago, was just a box, a stick of wood, a few bits of metal, and an idea that may or may not have felt sensible at the time. And yet — somehow — you turned it into a working instrument. That's no small thing. In a world where most people buy their guitars sealed in plastic and foam, you decided to make one. With your hands. Possibly with a bit of head-scratching, a few choice words during stringing, and at least one moment where you stared at it and thought, "Well... that'll do."

And that's exactly the point.

It might not be perfect. The finish may carry the faint memory of a fingerprint. A screw might lean ever so slightly with personality. The box might have a tiny scar from where you learned something important about drill bits. But that's not a flaw — that's character. Every mark on that instrument is proof that it didn't roll off a conveyor belt. It came off your bench. It has a story, and that story is yours.

You've sanded, glued, drilled, measured (hopefully twice), and tightened strings with that cautious half-flinch we all do the first time. Then you played that first note — and whether it was bluesy, buzzy, glorious, or slightly alarming — it was yours. There's a particular kind of satisfaction that comes from making sound with something you built yourself. It feels a bit rebellious. A bit clever. A bit like you've joined a secret society of practical dreamers.

And here's the truth no one tells you: building one cigar box guitar is rarely the end of it. You'll start wondering what would happen if you made a four-string. Or used a different box. Or added a pickup. Or tried a wild tuning. This is how it starts. One box turns into two. Two turn into a workshop corner you swear you'll tidy later.

So play it. Play it loudly. Play it badly. Play it brilliantly. Slide across those strings like you're calling up a dusty freight train from another century. When someone asks where you bought it, enjoy the moment before you say, as casually as possible, "Oh, this? I built it."

Thank you for sticking with it. Thank you for making something with your own hands. And most of all, thank you for keeping the rough-edged, joyful spirit of handmade music alive.

Now go make some noise.

**Andrew Rose**

*Lazy Dog Guitars* 🐕🎸