

## Instructions for using the End Graft (Tail Wedge) Jig

Congratulations on acquiring a Armstrong Lutherie End Graft (Tail Wedge) Jig from Guitar Templates. This jig was designed by our in-house Master Luthier based on years of experience building guitars and guiding others through building their own guitars. It is a fairly simple jig designed to route a precise rebate for either a tail wedge or 12mm wide parallel tail graft.

This document provides written instruction on assembling the jig out of the box. A video presentation is in development and will be linked to the item on our website when released. An early video is currently available there.

## What's In the Box?

Included with the jig are the following components (see Image 1 below):

- Jig Body / Template Holder
- Alignment Insert
- Tail Wedge Template
- Straight Graft Template
- Hardware – 2 M4 screws, washers and threaded inserts
- Paper template to aide in positioning the threaded inserts in the wooden mounting block.

**NOTE: The wooden mounting block is not included. Make this from any suitable piece of scrap in your workshop.**

## Prepare the Mounting Block

The mounting block dimensions are not critical so long as it is sufficient mount the jig to the guitar body. It needs to be 150mm long to match the jig body and somewhere between 50 and 75mm wide and 25 and 35mm thick. In the example described here it is a scrap of 35x75 structural pine.

Two holes must be drilled for the threaded inserts on one edge. These need to be accurately located 120mm apart and on a line parallel to the front face of the block. We provide a simple paper template to aide with the positioning, but it is not so complicated that the template is necessary. See Image 2.

The paper template is taped down to the block once in position, centred on the block. Mark the location of the holes with an awl or position the drill bit accurately on the cross hairs on the template. See Image 3. A slight chamfer on the holes with a countersink bit will assist the threaded inserts to screw into the holes. Install the threaded inserts making sure to keep them vertical. See Image 4.

It is a good idea to pad the mounting block with some soft but firm material like cork to avoid damage to the surface of your guitar when the jig is in use. See Image 5. While not necessary, an additional refinement is to sand the cork to match the curvature of the top of your guitar.

## Installing the Jig

Hardware supplied include two M4 x15mm machine screws each with a white nylon washer and a flat steel washer. The steel washer goes on the screw first, so it sits under the head of the screw,

and the nylon washer follows so it provides some cushioning between the screw and the Jig Body. See Image 6.

Attach the Jig Body to the mounting block with the machine screws and leave them sufficiently loose that you can slide the jig back and forth. Fit the jig to the body of the guitar and install the Alignment Insert into the Jig Body being careful to align the centreline with the centreline of the guitar body where the body is touching the mounting block. See Image 7.

Once the jig is aligned left/right, align the centreline of the jig with the centreline of the guitar and snug up the two machine screws. See Image 8. The jig can be moved up and down to adjust the width of the tail wedge inlay to a limited extent. Check everything is aligned and everything is held firmly.

## Cutting the Recess

You are now ready to rout the recess for your end graft or tail wedge. The jig is designed to be used with a ¼" straight cut router bit in a plunge router fitted with a 3/8" guide bush. We supply two templates: a Tail Wedge Template and a Straight End Graft Template. The end graft template will cut a 12mm wide straight slot using the bit and guide bush recommended. We do not recommend using an invert flush trim router bit with a bearing.

We made a quick early video of the jig in action.

[https://www.youtube.com/watch?v=UbjD\\_Tc0GbQ](https://www.youtube.com/watch?v=UbjD_Tc0GbQ)

It does not cover making/installing the end wedge inlay or a straight end graft; only the set up of the jig as described here. In due course we will make a more complete demonstration video and this will be linked to on the GT website.

If you have any questions or require parts, please call or email:

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***The Guitar Templates Team***

Images Follow

# Images



Image 1 – What is in the box.

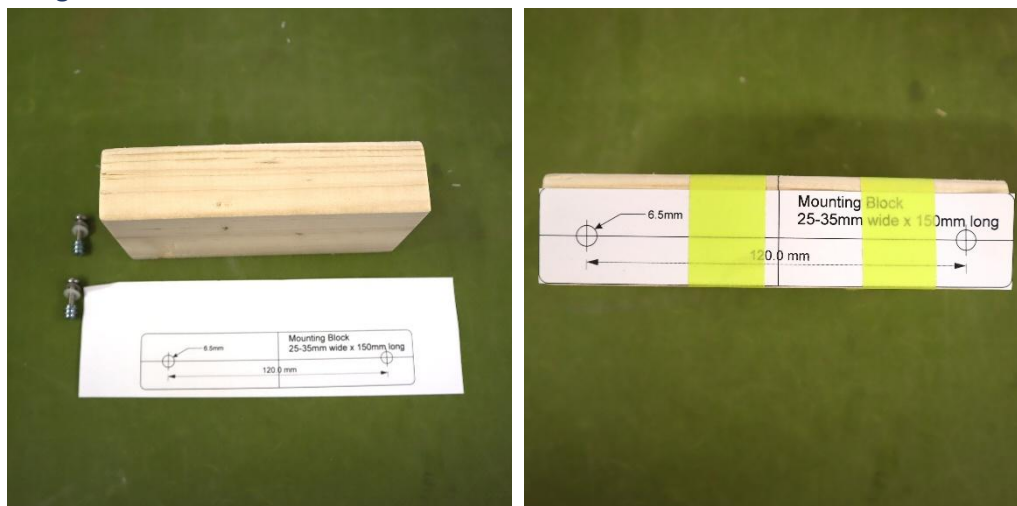


Image 2 – Mounting Block and Template.

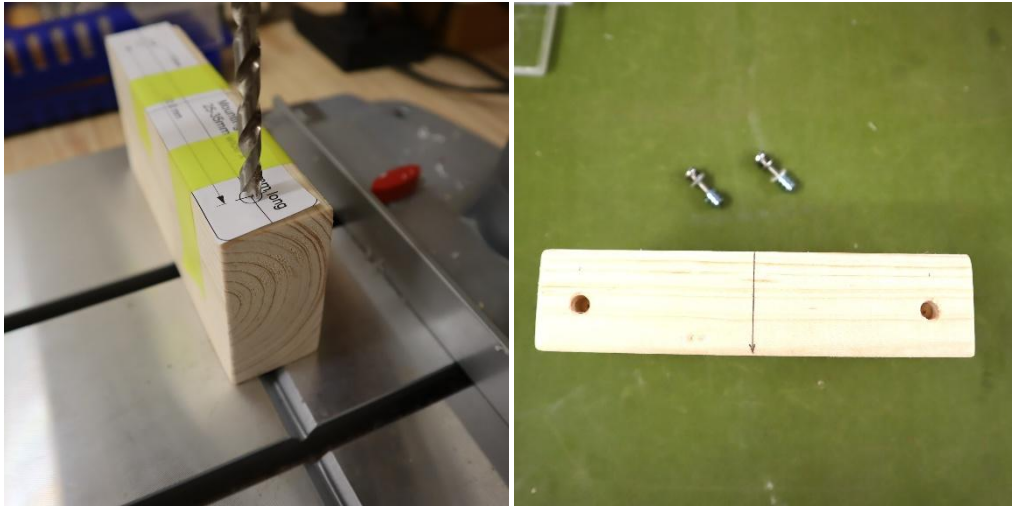


Image 3 – Drill 6.5mm holes for the threaded inserts.



Image 4 – Threaded Inserts Installed.

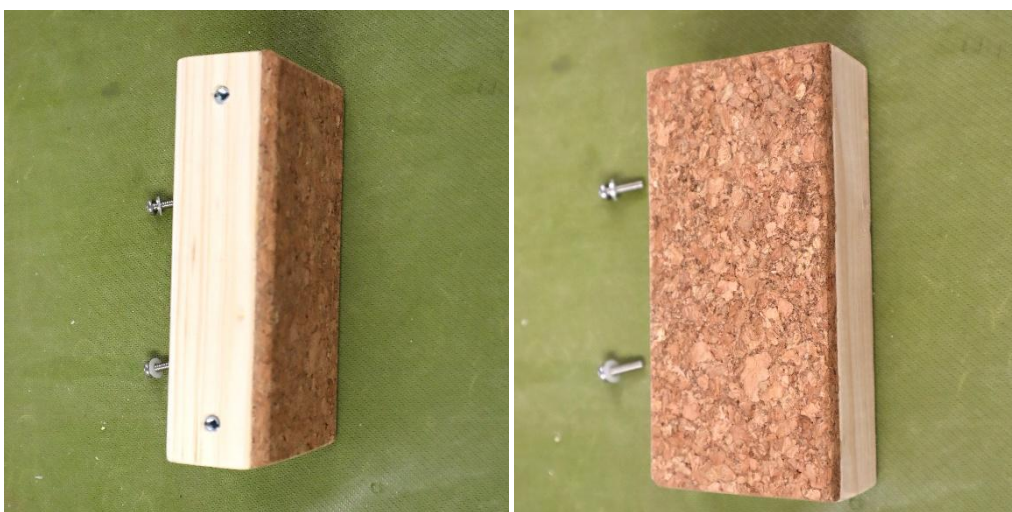


Image 5 – Mounting Block Padded with Cork.

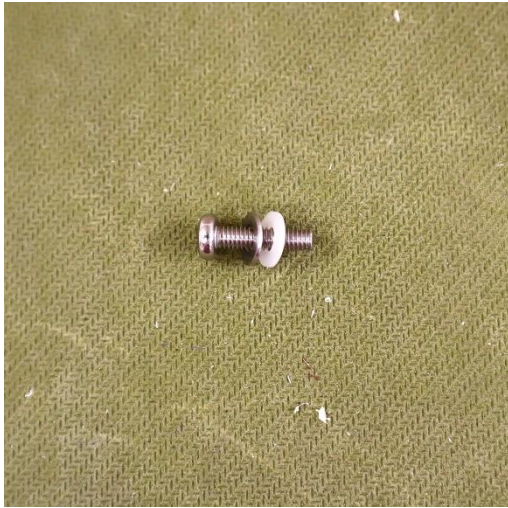


Image 6 – Mounting Screw and Washers.

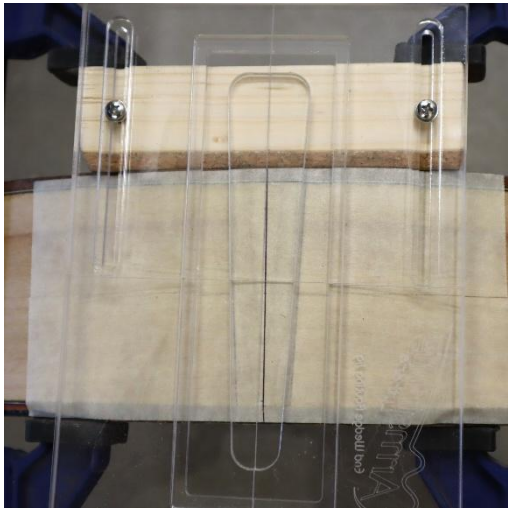


Image 7 – Align Jig Left/Right to Guitar Centreline at Top

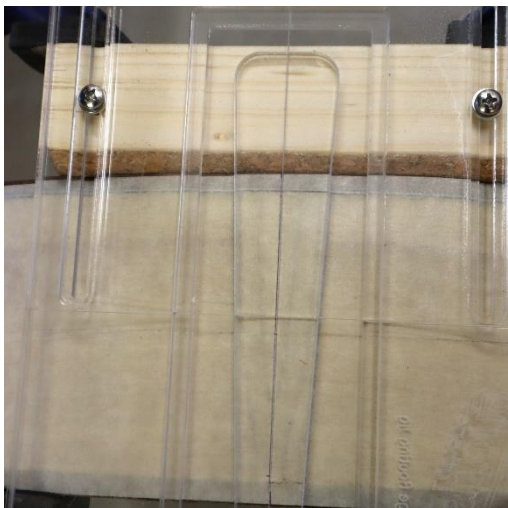


Image 8 – Align Jig CL to Guitar CL