3D-PT

Electric Guitar Template Collection



3-D Printable Tools for Making Electric Guitars

Volume 1. T-Style Body

Volume 2. S-Style Body

Vol 3. Pickups

V. 1.0

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Introduction

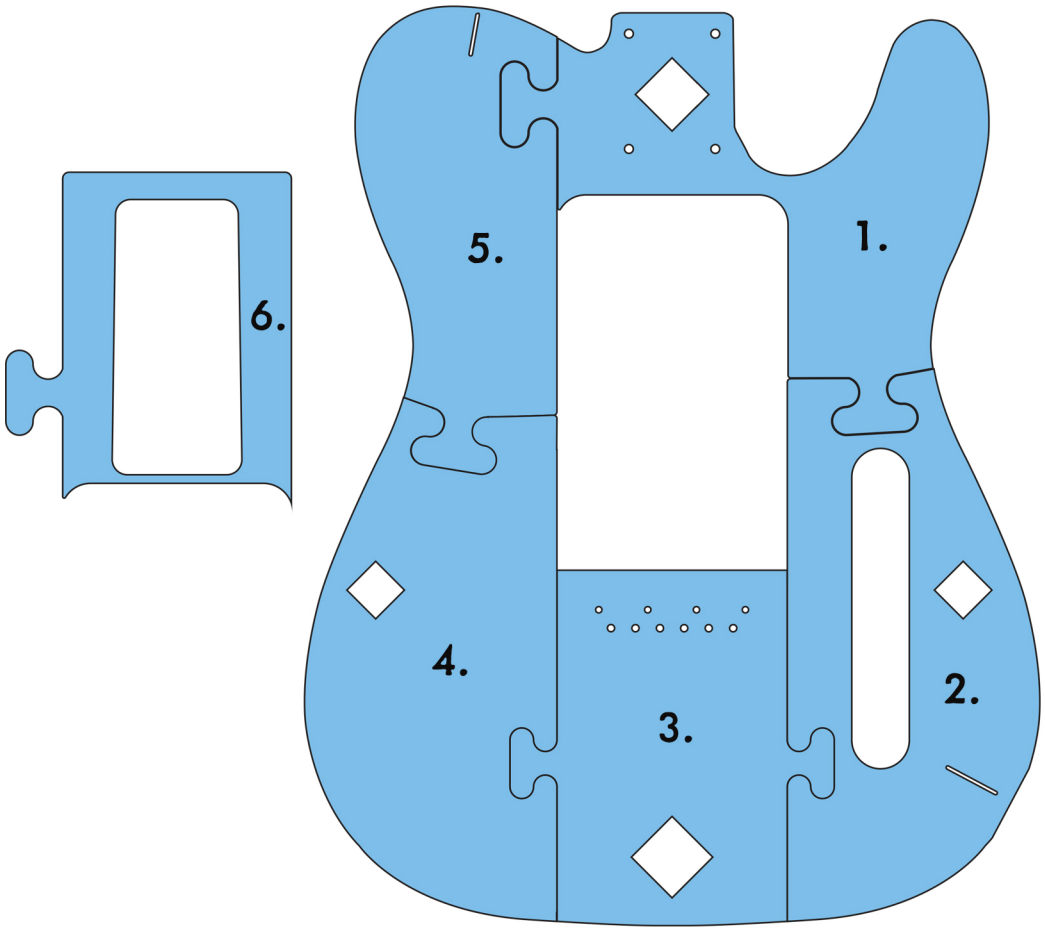
These templates were born out of my own wants and needs as a guitar builder. What started as a prototype eventually grew into a collection of modular templates, pickup inserts, and accessories designed to make building electric guitar bodies a little easier.

The intersection of cottage guitar builders and 3D printer owners might be small, but I suspect that number will grow as more builders discover the utility of having a machine in their shop that can reliably produce useful parts and jigs while they focus on the more important (and fun) part of making sawdust.

Whether you're building a familiar T-style or S-style guitar, experimenting with pickup configurations, or just looking for a way to make your next project a little easier, I hope these files prove useful in your shop.

License & Copyright Notice: End Users of these files agree to use these files for their own personal use and not to duplicate the digital files or redistribute them. By all means, make some guitars (or at least some bodies) and sell those. I am not even opposed to the idea of these being used as the basis for making non-printable templates (such as MDF, plywood) for sale. However, you may not try to sell the files and claim them as your original work. Copyright 2026, John Everett Morton.

Vol. 1 T-Style Guitar Body Template Parts



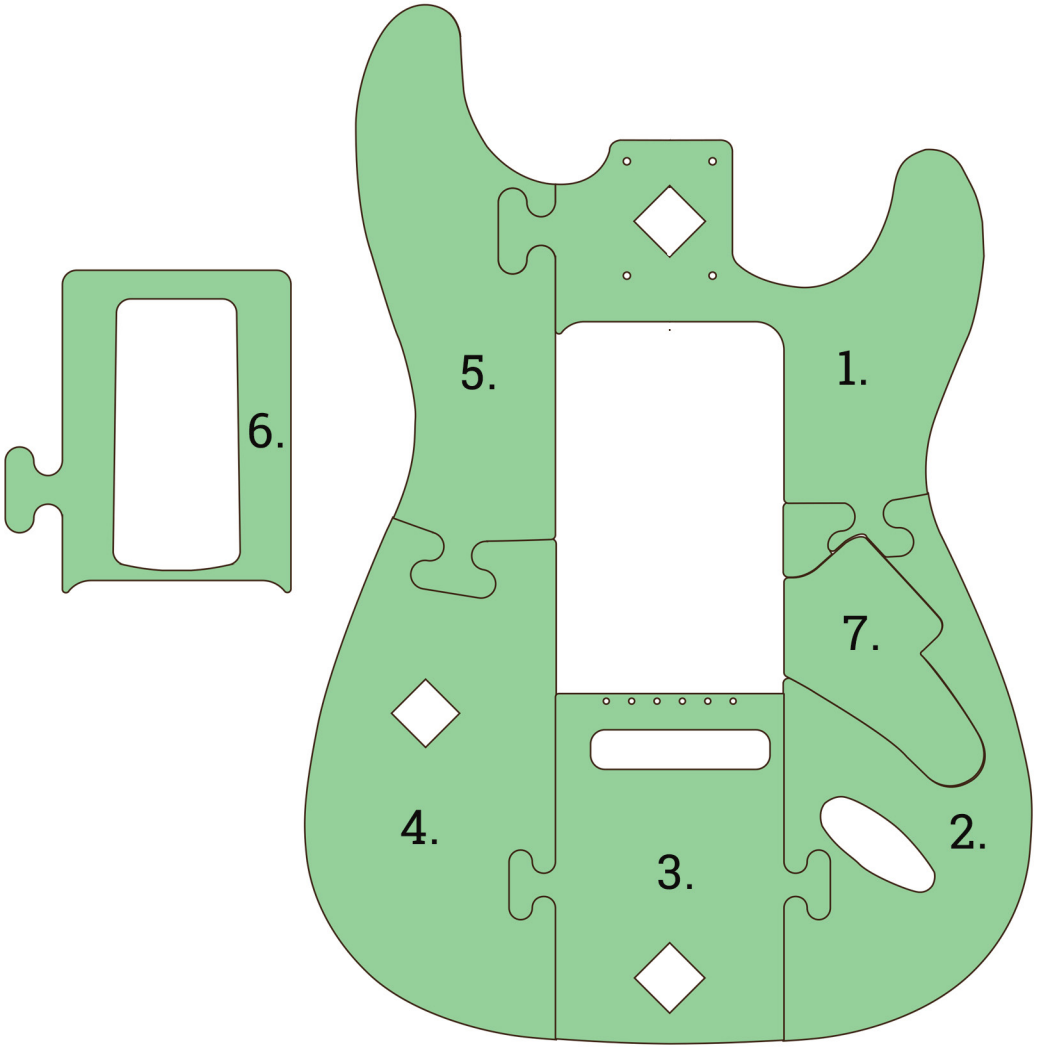
1. [T-001] Neck/Lower Horn Section
2. [T-002] Lower Right Section
3. [T-003] Bridge Section
4. [T-004] Lower Left Section
5. [T-005] Upper Left Section
6. [T-006] Neck Pocket Attachment

NOTES

The diamond cutouts in Sections 1 and 3 help locate the centerline.

The diamond cutouts in Sections 2 and 4 help locate the scale line, which should be approximately 25.5” from the nut of the neck.

Vol. 2 S-Style Guitar Body Template Parts



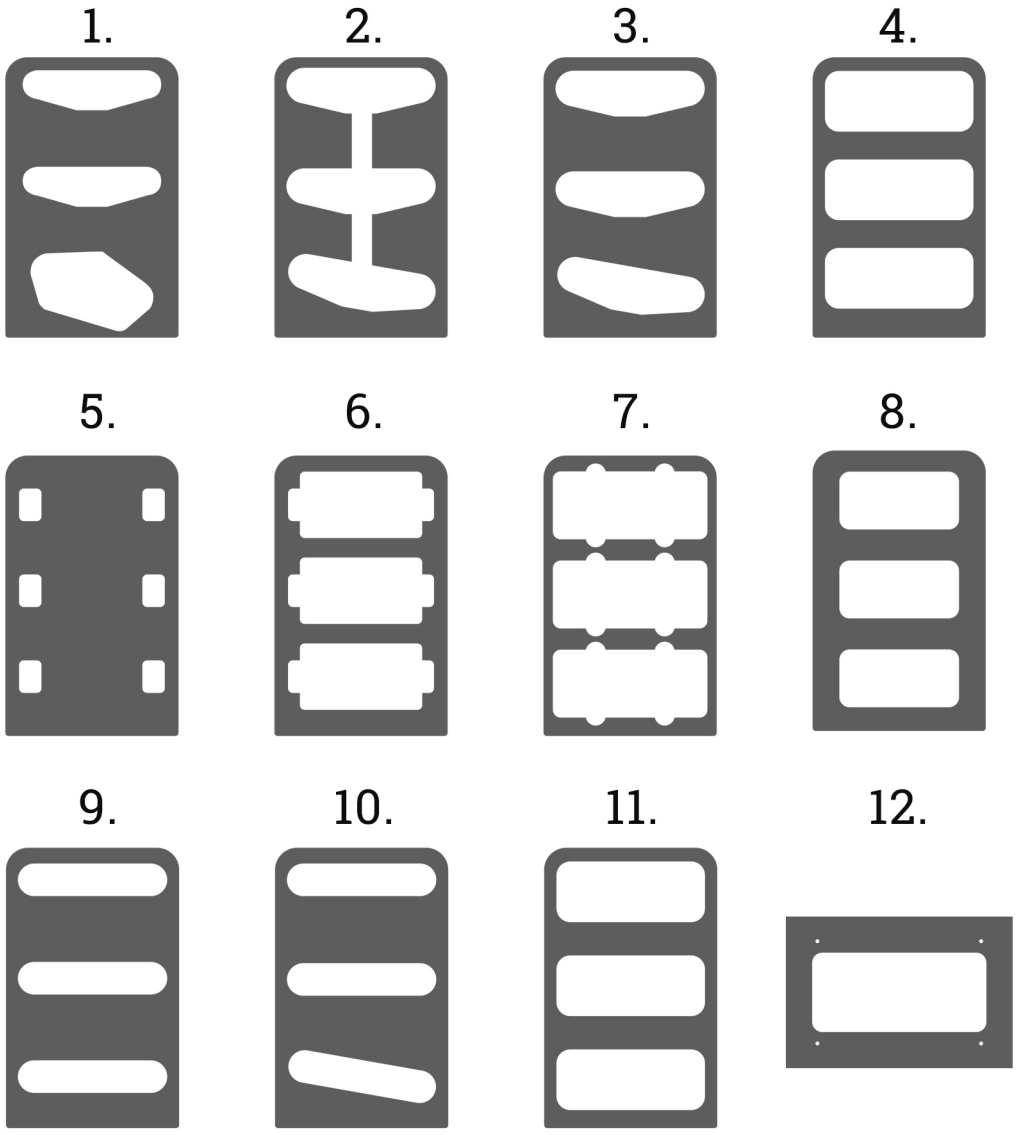
1. [S-101] Neck/Lower Horn Section
2. [S-102] Lower Right
3. [S-103] Bridge Section
4. [S-104] Lower Left Section
5. [S-105] Upper Left Section
6. [S-106] Neck Pocket Attachment
7. [S-107] Control cavity fill piece (optional)

NOTES:
The center diamond cutouts in Sections 1 and 3 locate the centerline.
The diamond cutout in section 4 helps locate the scale line (Approx 25.5” from nut)

Section 2. (Lower Right) will include a small piece in the upper left of the section, which is not strictly necessary. It could be permanently affixed to Section 1, or it could be held captive by the optional section 7 and a pickup insert.

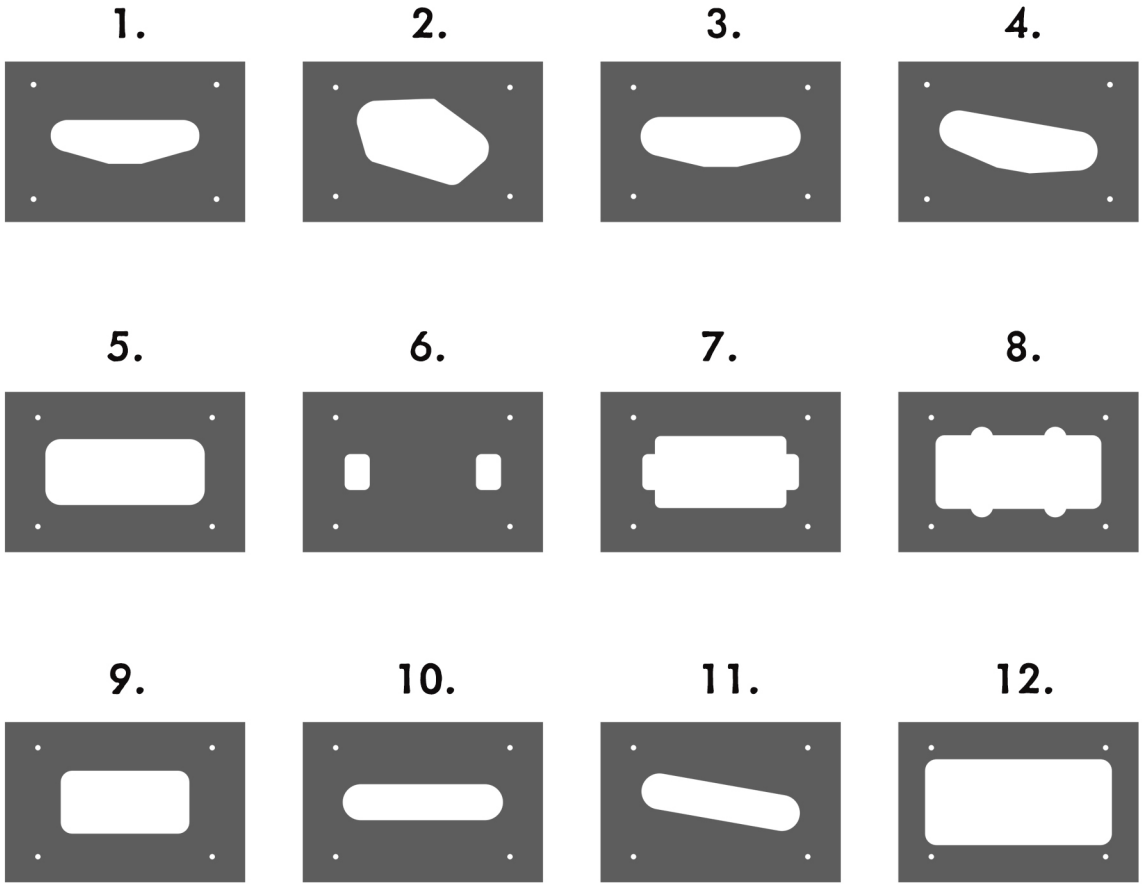
Guitar Pickup Inserts

Included in Vol. 1 & 2



1. [P-201] Telecaster Neck (Neck & Middle), Telecaster Bridge
2. [P-202] Single coil for top routing
3. [P-203] Single coil for rear routing
4. [P-204] P90 (Optimal spacing)
5. [P-205] Humbuckers (Part 1, use for increased mounting ear depth)
6. [P-206] Humbuckers
7. [P-207] Jazzmaster style
8. [P-208] Gretsch style
9. [P-209] Jaguar size single coils
10. [P-210] Jaguar size single coils with angled bridge
11. [P-211] P90s wide spacing (less preferred)
12. [P-312] Wide Range Humbucker

Vol. 3 Standalone Pickup Router Templates



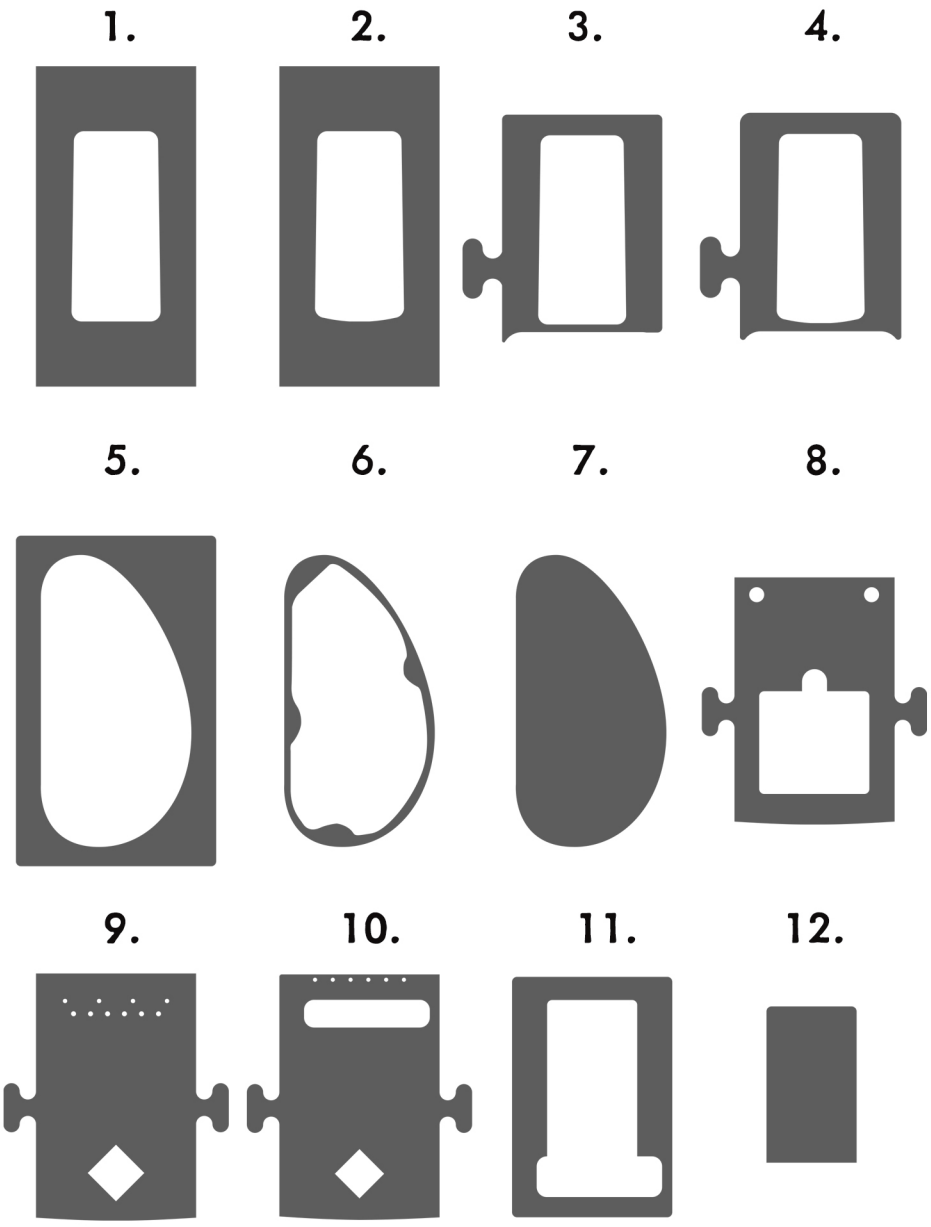
1. [P-301] Telecaster Neck
2. [P-302] Telecaster Bridge
3. [P-303] Single Coil
4. [P-304] Single Coil Angled (primarily for use in bridge position)
5. [P-305] P90
6. [P-306] Humbuckers (Part 1, use for increased mounting ear depth)
7. [P-307] Humbuckers
8. [P-308] Jazzmaster style
9. [P-309] Gretsch style (without mounting ears)
10. [P-310] Jaguar size single coils
11. [P-311] Jaguar size single coils with angled bridge
12. [P-312] Wide Range Humbucker

NOTES
Notably absent are Mini Humbuckers. Traditionally they have used the same routing cavity size as P90s with the extra width being covered by a pickup ring or pickguard.

The corner holes are 4 inches on center horizontally and align with the outside of the body template cavities.

Accessories

Included in Vol. 1 & 2



1. [A-401] T-Style Neck Pocket Template
2. [A-402] S-Style Neck Pocket Template
3. [T-006] T-Style Neck Pocket Attachment
4. [S-106] S-Style Neck Pocket Attachment
5. [A-403] Rear Control Cavity Template Part 1
6. [A-404] Rear Control Cavity Template Part 2
7. [A-405] Control Cavity Plate
8. [A-406] Jazzmaster Style Vibrato Template
9. [T-003] Vintage T-Style 4-point Bridge Section
10. [S-103] Vintage S-Style 6-point Bridge Section
11. [S-108] S-Style Tremolo Routing Template
12. [S-109] S-Style Tremolo Filler Piece

Before You Start

- Check printed parts for fit and compatibility with the hardware and parts you plan to install.
- Use a double sided woodworking tape for attaching templates to wood.
- Do NOT use double sided carpet tape. Do NOT use double sided mounting tape. It will not remove well.
- If you are still new to using a router you should consider practicing first on some scrap.

SAFETY FIRST

- Secure the workpiece firmly before routing.
- Ensure the template is securely attached and cannot shift during routing.
- Inspect printed parts for cracks, delamination, warping, or other defects before use.
- Make sure the router bit's bearing has adequate contact with the template throughout the operation.
- Wear appropriate eye and hearing protection and dust protection.

I know I ain't your mama, but you have one body and one life, so take care of it

Printing Tips

Be sure that your 3D printer is up to date on maintenance and the print bed has been leveled.

Use a quality filament that has been calibrated with your slicer program. I've used PLA with default "Strength" settings and had good results with minimal warping [Infill: 20%, Wall Loops: 6]. The only reason to use something other than PLA is if you plan to store these parts somewhere that will get uncomfortably warm. PETG may be another good option.

Scaling

Most (if not all) of these 3D models have a default height of 6mm (just under 1/4 inch). You can increase or decrease this height by simply scaling the Z-value (height) in your slicer. You may want to print smaller sacrificial parts to test compatibility with your hardware. You may also find that you would like a thicker and more robust final template piece

If you find a pickup template is too large or small for your pickups, but is still the same general shape, you could consider scaling it in either X, Y, or X and Y axis. However, these models are not parametric yet, so you'll have to figure out the appropriate scaling yourself.

Assembly

Final parts should have a snug fit. Some post processing may be necessary on the corner edges. I like a metal ruler for scraping the edges clean. You could also try sandpaper, small blades, or a rotary tool.

It should not be necessary to glue the pieces of the body template together, but that is always an option. If you wanted a thicker template without using more filament and time, you might consider gluing the primary template pieces to another substrate (plywood, hardboard, MDF).

Neck Pockets

The proper fitting of a neck pocket is one of the most crucial aspects of guitar assembly. I would not recommend using the included neck pocket templates without first testing how they fit your neck. This may mean printing a sacrificial template at a height of 5/8 inches, cutting off the top of the template, and actually fitting your neck inside. I have tested the fit of my printed parts with a Musikraft neck and found the fit to be tight. A too tight fit is better than a loose fit as you can slowly remove material with sandpaper, but cannot put it back on (although you could add increasing layers of finish to the neck and body).

Whether you use the snap-in neck pocket template or the stand alone version, make sure the end is supported sufficiently. The support should be the same thickness as your body, so it is smart to keep some of the offcuts around.

Pickup Inserts

Rather than design hundreds of possible combinations, each insert includes like pickup shapes within, but it is still easy enough to mix and match.

Example: If you wanted a Telecaster Neck pickup and P90 bridge pickup, you would print both inserts and switch one out after the first one is routed.

The inserts are held captive by the guitar template. The top of the insert cavity features a corner radius that prevents you from putting the insert in upside down.

The humbucker template consists of two cavities. The first is so that you can rout two holes for the mounting ears. These holes typically go about 1 inch deep, but check your pickup manufacturer recommendations. You will want to do this part first so that your router bit bearing has something to make contact with during the entire operation.

There are two versions of the P90 insert. The first [**P-204**] follows the 4-inch on center vertical spacing recommended for humbuckers. It is generally recommended that humbuckers not be too close to the bridge. The second version [**P-211**] has a wider spacing that corresponds to Jazzmaster pickup spacing, and is said to be less preferred.

The Wide Range Humbucker comes in a stand alone format only, as the increased width of the routing cavity would make for a fragile insert. This is a trade off from making the inserts a reasonably small size to cut back on filament use.

Standalone Router Pickup Templates

Not much for notes here. If it isn't obvious, turn the angled ones upside down for a left handed guitar or to get that Jimi Voodoo sound.

Accessories

Rear Control Cavity Template Part 2 [**A-404**] will nest right inside of
Rear Control Cavity Template Part 1 [**A-403**] for routing the inside cavity that the cover plate will rest on.

Control Cavity Plate [**A-405**] is the only part so far that could be a part in and of itself. If you decide to print this part, I recommend a high infill as you'll have to drill holes for the screws. I would also mirror the part and effectively print it "upside down" so that you get the smooth (or slightly textured) finish of the printer plate facing the outside.

[**A-406**] **Jazzmaster Style Vibrato Template** is technically considered **EXPERIMENTAL** until someone goes ahead and proves that it works. The reason for the disclaimer: The distance between the vibrato routing and the bridge posts is shortened from that on a stock Jazzmaster by about 3/8". This because a Jazzmaster body has much more body mass between the vibrato rout and the strap button. If it is not moved forward towards the bridge on a T or S-style body, the screw for the strap button will intrude on this cavity. Although I don't anticipate this adjustment affecting the vibrato's function, I haven't personally verified it, so I'm considering this template experimental.

The included bridge sections [**T-003 & S-103**] are redundant from their respective body templates. Both are included in the Accessories collection for those who only have one or the other guitar body template. DO NOT attempt to use the holes in either as a guide for your drill. I've recessed these areas to help prevent people from doing that and use it instead as a marking guide for your pencil.

[**S-109**] **S-Style Tremolo Filler Piece** is a great example of how sometimes when we start using a tool (or designing it), we put blinders on and forget that there are quicker and easier ways to achieve this. This is a piece that works with [**S-108**] **S-Style Tremolo Routing Template** so that the lower portion can be first routed to a greater depth for the tremolo block and the larger part can then be routed at a shallower depth for the tremolo springs. But really, you could stick a rectangular piece of something in there and tape it down and not wait 90 minutes to print a plastic rectangle. The key would be printing the main template [**S-108**] to a thickness that matches some stock you have.

Questions or Feedback

E-mail me directly at jeverettmorton@pm.me or visit my website at johnworksitout.com.

Additionally, you can bug me more frequently at the "We Can Work It Out" Discord server.
I stay up late and I'm on the computer too often.

Next Steps

If this project is halfway successful, I have something more ambitious in the works that I'll try to develop.

I'm working on a 3-in-1 jig that will work with a router to:

- Use custom cams to carve the back profile of a guitar neck to your desired shape (Modern C, V, SRV, etc)
- Use separate cams to carve straight AND compound radius fretboards
- Assist in creating the truss rod channel

A rough working prototype has been created, but there are some things I could improve and considerations to make. Should it be long enough to also do bass guitar necks? What material should I use? Etc.

Stay tuned.

About The Author

My name is John Everett Morton. I'm an artist, designer, and maker of things sharing my work under the umbrella of John Works It Out.

In addition to nerding out about guitar things, I draw, paint, write, and operate a screen printing studio in my basement. My professional background is about as varied as my interests, including stints as a licensed Realtor, office worker, manufacturing supervisor, logistics training lead, CNC operator, landscaper, handyman, and user experience designer.

John Works It Out is my attempt to bring all of these interests together while making a living doing the things I enjoy.

Purchasing these files helps support an independent maker and gives me more time to develop new ideas and projects. I genuinely appreciate your support, and I hope these templates help you make something you're proud to share with others.