



Table  
to  
Telecaster





Thanks to all the volunteers and participants at ReSkilled  
who helped in making the guitar,  
involving patience, perseverance  
and bearing with the  
times when it has taken  
up our attention.

Thank you also to those who have advised us  
at just the right time.

It's been a fun journey!

**The gift of a table** - actually it began a long time before this! Almost 60 years ago, this piece of yew was chosen from a stack and purchased by the donor from his woodwork teacher for 25 shillings.

No longer needed, he passed it onto ReSkilled as everything we make is from old or donated wood. We considered making it into a dining table centre-piece or a clock before the suggestion of a guitar...

We found the telecaster shape and dimensions online and printed it. Surprisingly the piece of yew wasn't big enough! Fortunately we had also been donated a piece of maple and this could provide the additional width.



Cutting the blank shape was exciting - it was also a point of no return...

We had to choose the specific area of the wood that avoided loose knots, waney-edged gaps on the underside and most of the lighter sapwood.

Once both pieces were cut, we knew we were on our way.

The maple was much easier to cut!

We were just about able to get two pieces out of the length, enabling us to laminate them together to provide the required thickness for the guitar - it was close.



Cleaning up the yew was a long task, undertaken in stages by several members of ReSkilled.

First we scraped as much of the varnish off as possible, then we used the belt sander (see photo). Due to undulations in the wood, it took a while to achieve a level surface from which to then make the second side parallel to.

Meanwhile, we had taken advice on buying a neck for the guitar. There are many prices/qualities of new ones but it's hard to know what each is like. We were advised to buy a secondhand neck and restore it.

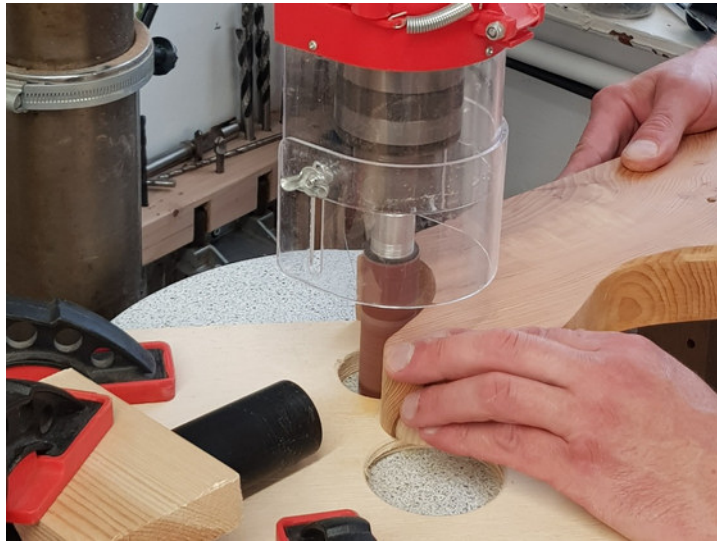




The sides of the guitar shape now needed a good sand. We discovered the different quality of finishes that could be achieved between the heartwood (orange colour) and the sapwood (whiteish) - see later photos.

Not all of the sanding was done by hand!

We also worked hard throughout the process to keep to the Telecaster shape as much as possible, allowing for the individuality of this beautiful piece of wood.



Once we had laminated the pieces of maple to make them the same thickness as the yew, we had to work out the exact height required for the neck to be at.

This meant adding an extra piece and we happened to have some rosewood available - this could then echo the maple and rosewood of the neck itself!

The neck needed a good sand to firstly remove the original lacquer, then to try and sand out any bumps that it had received in its former life without altering the shape and feel of the neck.



We were keen to show the yew off to its best, giving the individual feature to the guitar and therefore had planned to use a clear pickguard. This meant that we wouldn't be able to hide any of the pick-ups' wiring beneath the guard - they'd have to be threaded through internally!

This meant we couldn't assemble the body before starting to make the recesses for the pick-ups (that's why it's clamped together during the drilling).

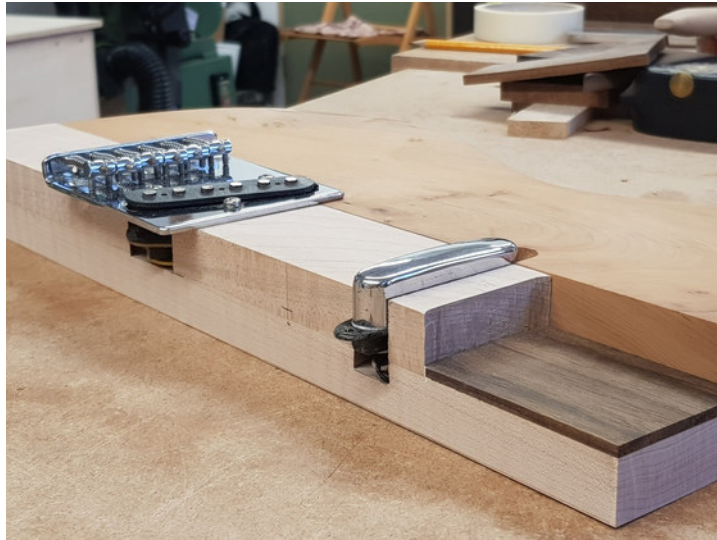
The channels for the wiring could very simply be drilled from the edges. This was so much easier than if the body had all been in one piece from the start.



Again, the recesses in the maple centre section were much easier to saw and chisel out than would otherwise have been the case. However, it was vital to sand the edges of all three pieces of the body perfectly flat before they could be joined!

We routed, drilled and chiseled slots and holes for loose tongues and dowels to ensure extra strong joints along the length of the body. We had to work around the shapes of the pick-up recesses.





At last - gluing the body together!

Now the body was in one piece, we could start sanding it flat again. The back could have some undulations and feature but we wanted the front to be perfectly flat (as far as our experience allowed).



Some of the sapwood (whiteish colour) had very loose grain. This meant that no matter how much we filled it or sanded it finely, we weren't going to achieve a beautifully smooth finish.

We therefore found an offcut from elsewhere on the table with some sapwood grain of the same shade. We planned to plane off the loose-grained section from the body and carefully replace it with this.

We planed and sanded a flat surface to add the new piece onto and then glued it in place, hoping for a good result...



...we achieved it, even revealing more of the spalted grain from within the added piece!

The contours of a Telecaster mean that the edge/top surface is only lightly sanded over, whilst the edge/back can be rounded over to sit more comfortably when played.

We kept this as even as possible.



Having made the recess in the body for the neck to sit in a snug fit, we then needed to drill the holes for the screws to fix it in place - this was a bit nerve-racking, requiring checking, double-checking....and going for it.

We carved a recess for the jack plate carefully into the end-grain of the body.





It was then time to try fitting each of the pick-ups in place before applying the finish to the body.

We were advised to check the exact position of the bridge pick-up, with regard to its distance from the nut, so as to achieve the harmonic at the 12th fret. We'd had this in mind from the outset but the reminder was gratefully received and we consequently moved the pick-up (by 3mm).

We could then start drilling all the holes for the clear pickguard.



It was surprising how many areas needed to align with the pickguard, e.g. neck pick-up, bridge pick-up, neck recess...

We had bought a new set of Fender machine heads and had to make new holes for them. Lining them up was a precision exercise.



We also bought new springs and screws for the neck pick-up's height adjustment.

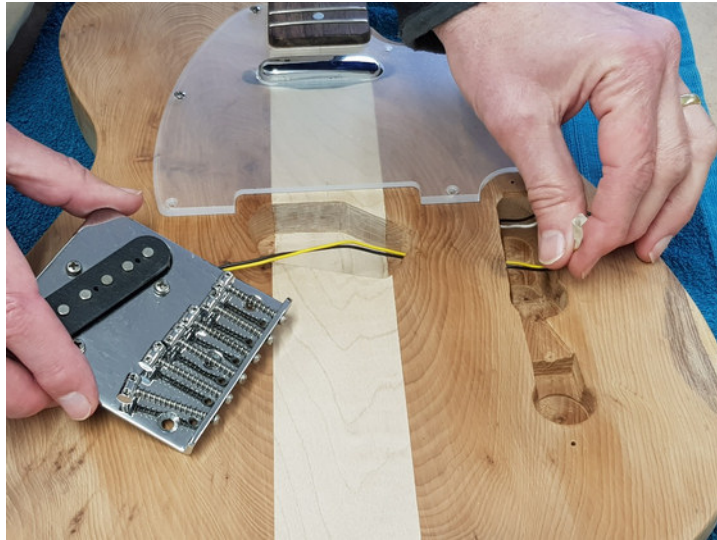
Screwing the neck onto the body was a simple task!



Threading the wires through the channels was satisfyingly straightforward (as hoped). It was all coming together.

Once we had assembled everything and were confident that it all fitted correctly, it was time to remove all of the fittings, ready for a final (!) sand all over.





The grain came up very well - yew is such a beautiful wood to look at (though not always easy to work with). We sanded everywhere to our finest 320 grit - it felt so smooth!

We continued all over the body - it even produced a reflection when looking across the newly sanded wood without any finish applied.



Meanwhile, we reamed the holes for the machine heads to get the necessary snug fit.

The finish: we had expected to use lacquer to finish the guitar... this wasn't to be.

We contacted several guitar shops but each was unwilling to lacquer a guitar due to the high risk of the resulting finish needing to be stripped back and recoated due to unforeseen imperfections.

However, we were advised to try Tru-Oil - a blend of oils and resin, making it simple to apply, with a durable finish.



The Tru-Oil really brought out the colour, details and features of the wood! This was very satisfying!!



Between coats, we knew to sand the finish back lightly.

Having only had 320 grit available up to this point, one of our volunteers lent us his excellent orbital sander - the type usually used to finish car bodywork!

He also obtained some 800, 1000 and 2000 grit - incredibly fine. This really helped with getting the smooth finish.





Having cleaned up the fretboard, it now needed to be oiled.  
For this we used the usual method of lem-oil.

Before...and after.



Having gently cut back the final coat of Tru-oil, we applied a hard wax to the body and the neck. This produced a high gloss finish.



It was now time to finally fit everything together. Although this would hopefully be the last time of doing so, it would only be when the guitar was assembled, complete with pick-ups and strings, that we could tell if any more work would be required.

First, the bridge pick-up...

...then the neck pick-up...



Fitting the pickguard - the protective film on the top would be removed once everything was complete.

Soldering the pickups, controller and jack socket.





The finished guitar - waiting (and wanting) to be tried out...



What a moment!

We've actually made a working, attractive, Telecaster-style guitar...from a donated table!





We took the finished guitar to an experienced luthier (MD Guitars - they're his own on display) to see what he thought of our creation. He said "I was most impressed by the playability and tone of the instrument. The finish on the body is particularly well executed as hand-finishing is not easy to achieve. All in all, a very nice, unique guitar!"



**By ReSkilled**

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