Introduction

This method manual is designed to be read in conjunction with the 1:1 Complete Parts manual.

Diagrams in this Manual are <u>not</u> drawn to scale. Views are offered in 3d perspective to provide better orientation and small parts are enlarged with more detailed labels, measurements and suggestions for fabrication.

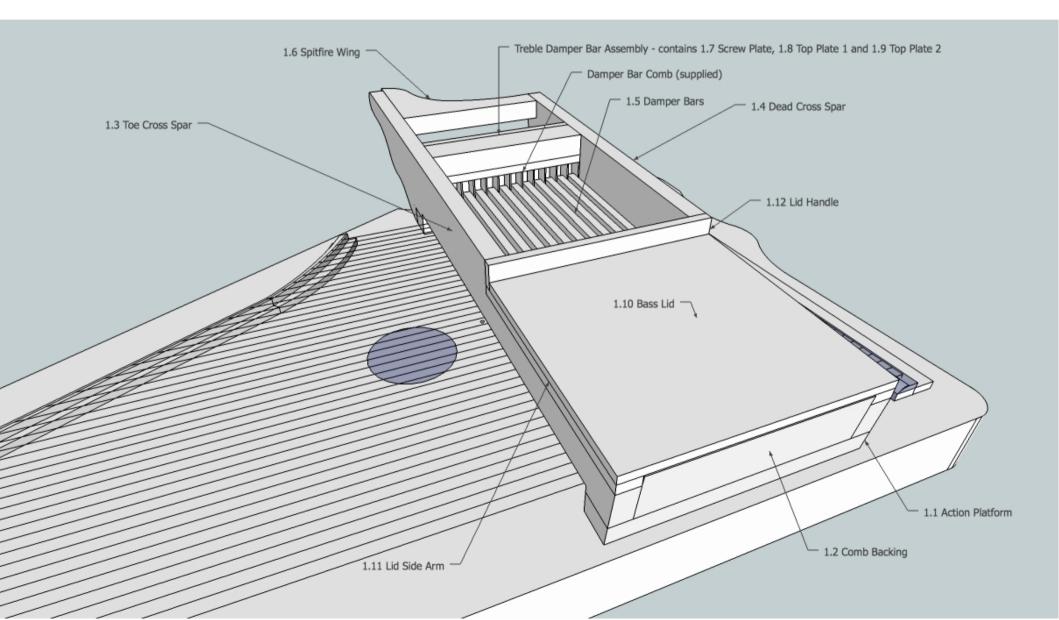
Diagrams in the 1:1 Complete Parts are printed to 1:1 scale in parallel perspective. Each part is provided with and without measurements. Diagrams without measurements can be cut out and directly used as templates.

Both manuals follow the order of parts listed on the next page. The Method Manual has subsequent assembly sections, which assumes all of the parts have been fabricated.

Lower Action – Parts List

1.1 Action Platform 1.2 Comb Backing 1.3 Toe Cross Spar 1.4 Dead Cross Spar 1.5 Damper Bar 1.6 Spitfire Wing **1.7 Screw Plate** 1.8 Top Plate 1 1.9 Top Plate 2 1.10 Bass Lid 1.11 Lid Side Arm 1.12 Lid Handle

Orientation

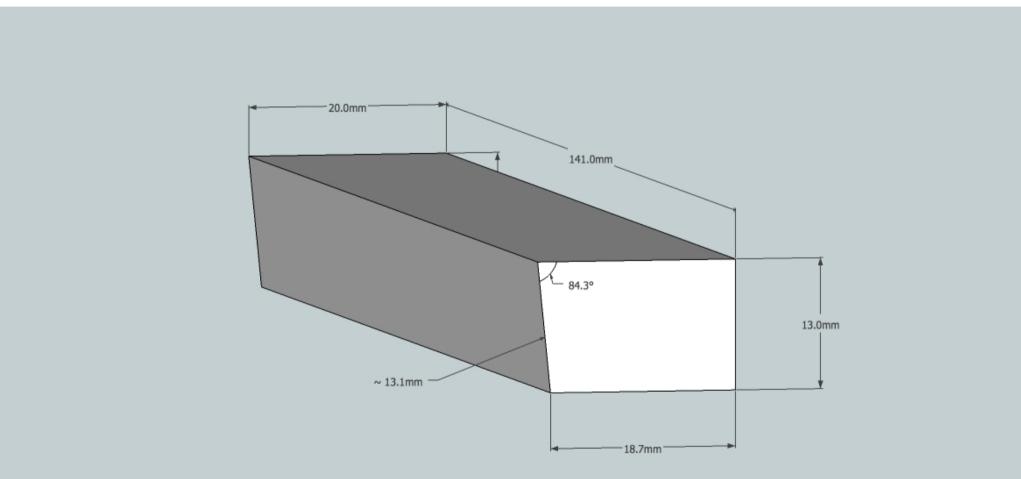


1.1 Action Platform

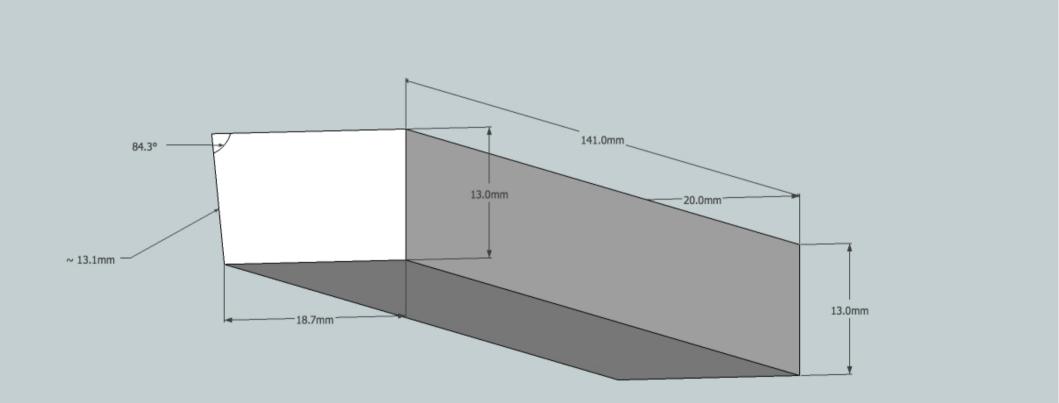
This part is a cuboid with a cutaway at the angle shown.

Two of these parts are needed.

This is the part which will be attached to the body of the harp.



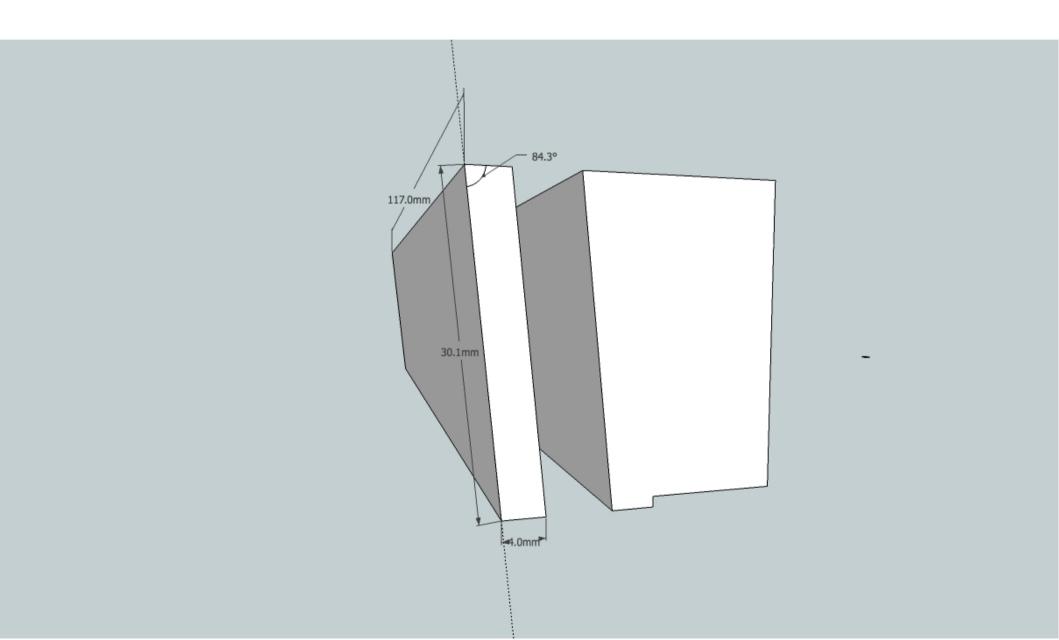
1.1 Action Platform Shown from a different angle.



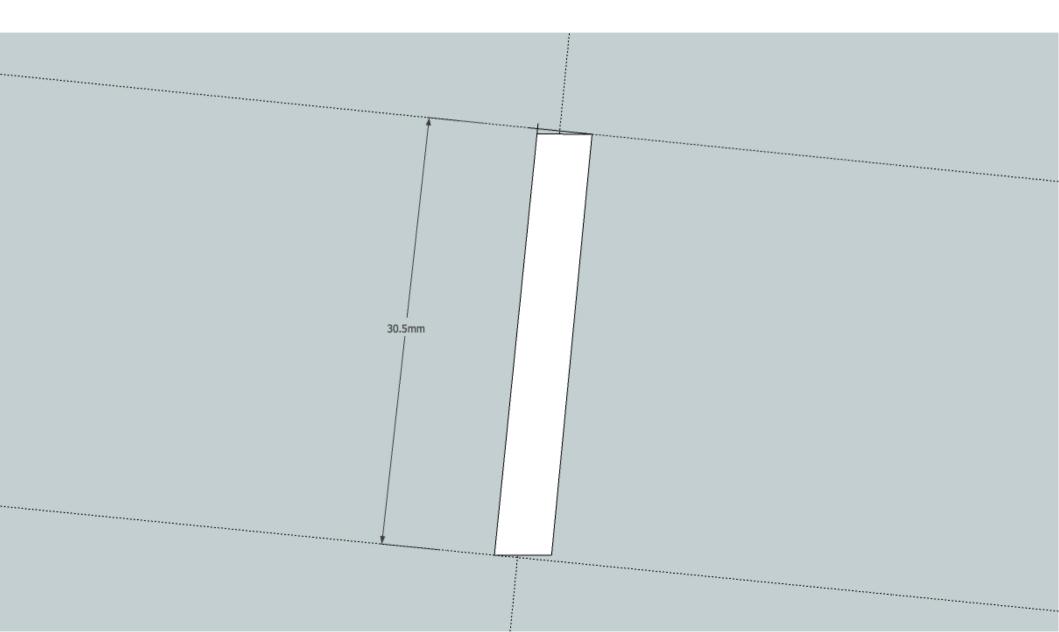
1.2 Comb Backing

Start with a cuboid 117x30.5x4mm.

A very slight cutaway provides the angle of 84.3 – the difference is to 30.1mm. I achieved this through filing a straight side oriented to the damper bar comb.



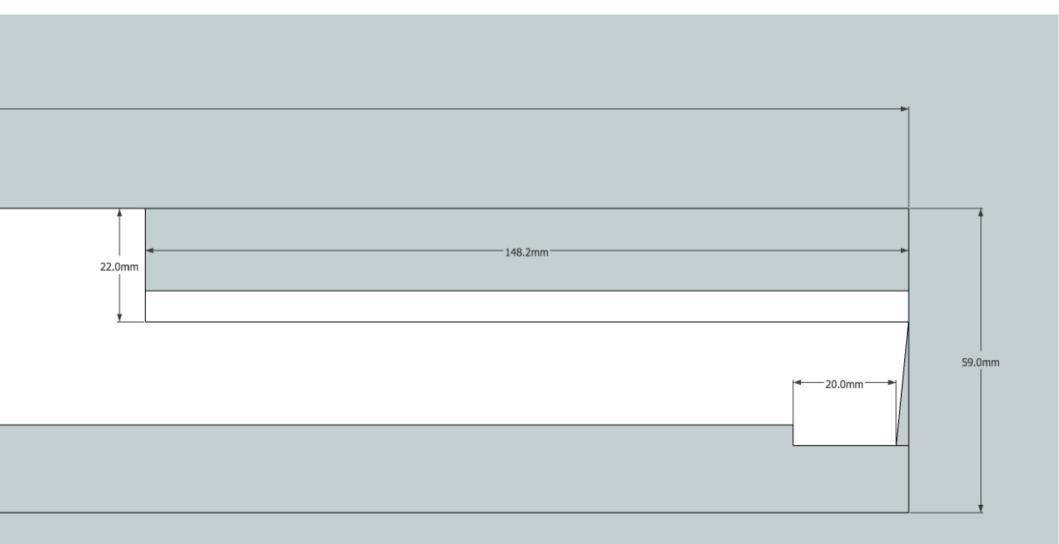
1.2 Comb Backing End enlarged from a 2d projection – shows the very slight cutaway needed.



The Toe Cross Spar is shown here with 1.11 Lid Side Arm. This is because both can be generated from the same block. I suggest a starting block which allows a slight cutting margin on 466x59x12mm.

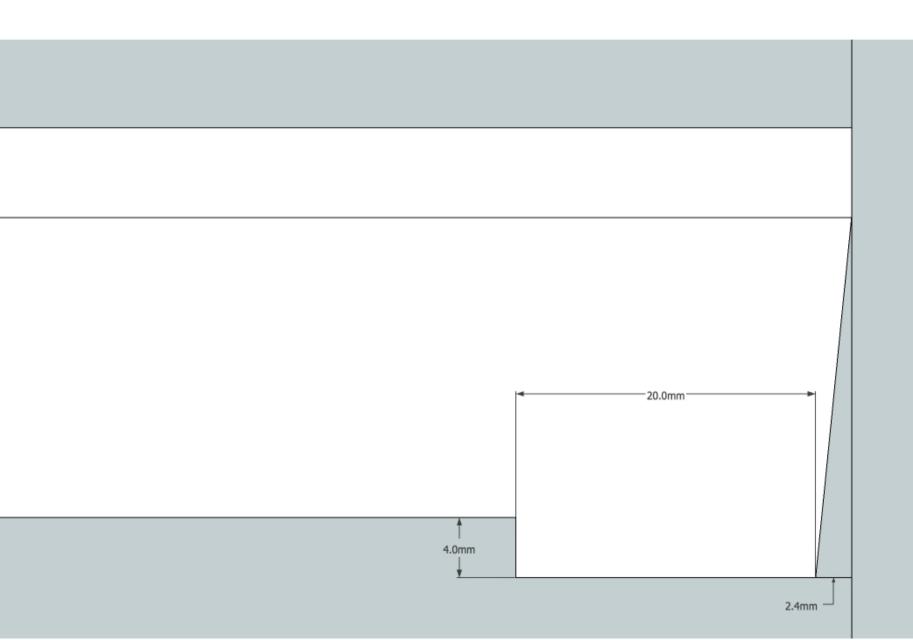


Execute the first cutaway at the top of the block, and put the smaller block aside to fabricate 1.11 Lid Side Arm.



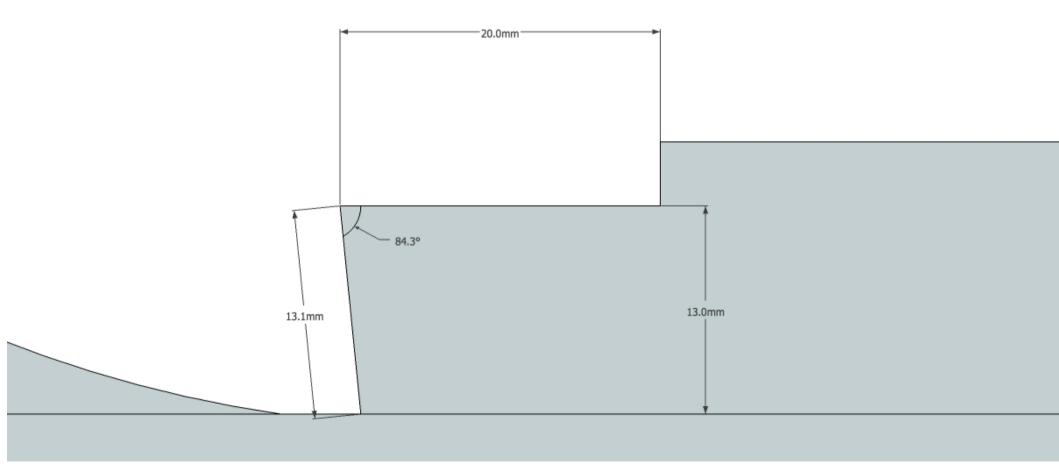
Shows the enlarged detailed measurements moving clockwise around the block The angle of cutaway is another 84.3°.

Note that 1.11 is shown as all 90° cuts – we will discuss the reason for this shortly.

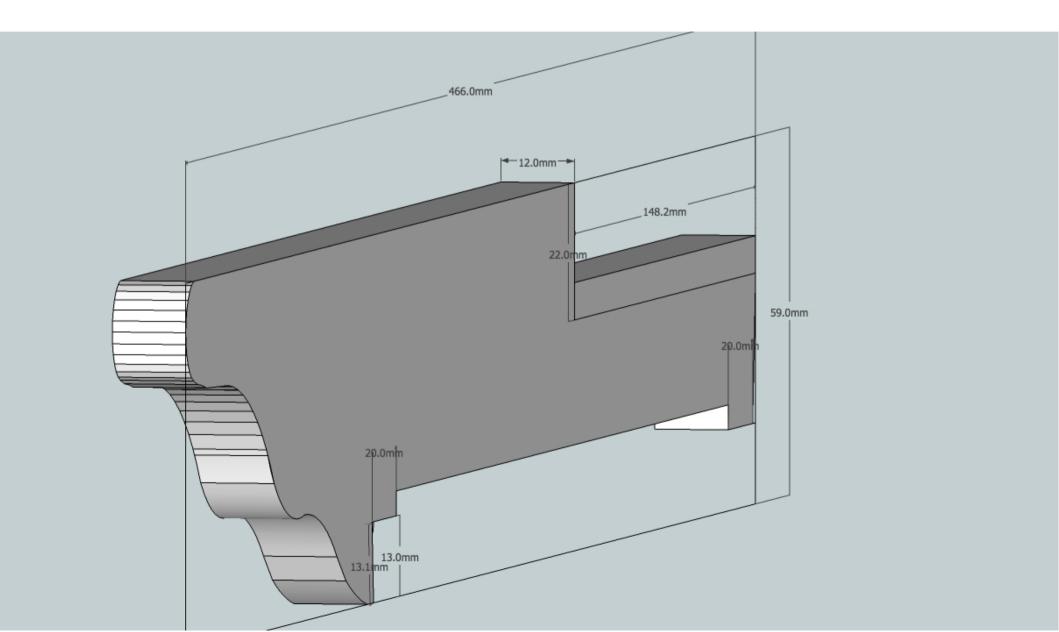


59.

Shows the detail of the cutaways at the treble side of the cross spar



A 3d projection showing the finished cross spar. Curved edges will be smoothed.



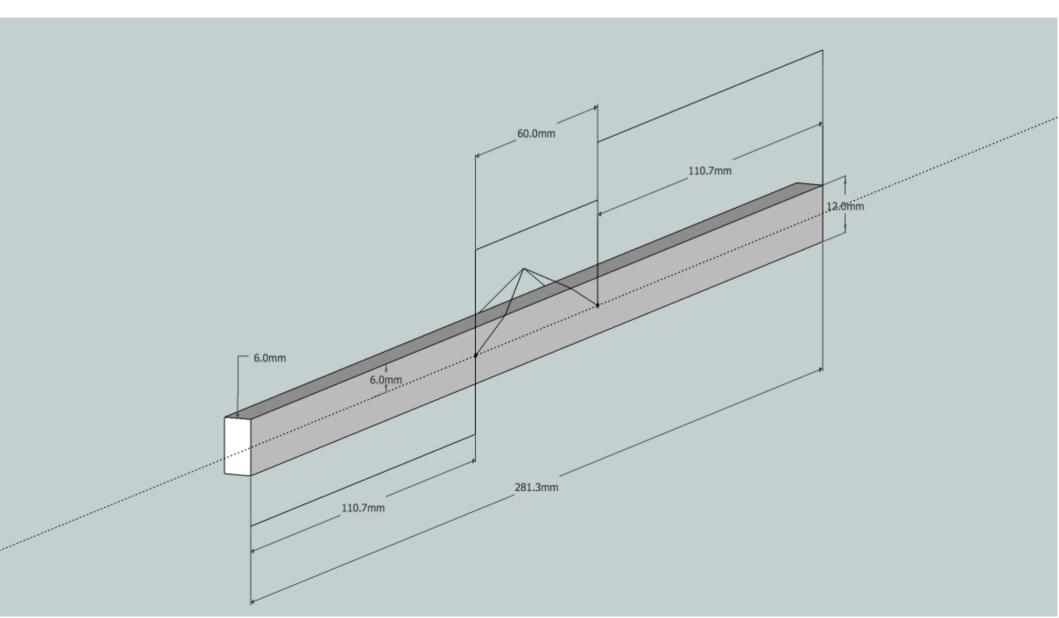
1.4 Dead Cross Spar

Dimensions for the Dead Cross Spar are similar in the key cuts – only the nature of the final curve is different to the Toe Cross Spar.

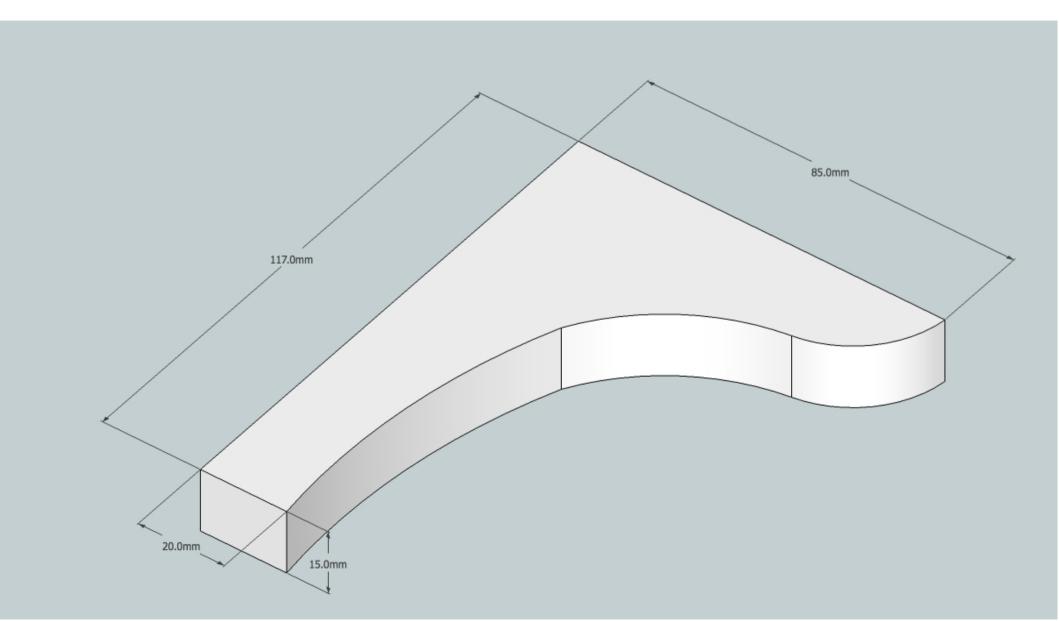
The suggested starting block is 401.2x59x12mm -leave a slight margin and put aside the first cutaway for 1.11 Lid Side Arm (with matched grain) as for the Toe Cross Spar.



1.5 Damper Bars x 12 A straight rectangular shape: 281.3x12x6mm. The holes are of 1mm diameter



1.6 Spitfire Wing Starting Block of 117x85x15mm. Edges of curve will be smoothed. Discussion to follow.



1.7 This is a larger version of 1.2 Comb Backing

