

GUITAR STAND

Tools Required to Make this Design:

Scrolling: Mk 3/3 Former
 Cutting: Master Punch/Shear (or XL5+ Power Bender)
 Punching: Master Punch/Shear (or XL5+ Power Bender fitted with 5mm punch block & pin)
 Riveting: Master RBR (or XL5+ Power Bender)
 Bending: Master RBR (or XL5+ Power Bender)
 Rolling: Master RBR (or XL5+ Power Bender)

SPECIAL NOTE – If you only have Practical Tools you can still make a similar looking item to this using 20mm x 3mm steel instead. The scroll will need to be produced on the MK2/3 or Mk2/2H scroll former and this may a slight adjustment to the dimensions accordingly. The rolling and bending can be done on the Practical RBR and the cutting and punching on the Practical Punch/Shear.

1 Main Sides 1310mm (x 2)

COMPONENT 1

NOTE – The dimension of 1310 for this component is for a deep bodied guitar (max 120mm deep) so if your guitar is a little deeper/or less deep than this add or subtract the appropriate length to/from the dimension between S1 and B1 on the drawing of Component 1 and add or take it away from the overall length of 1310mm before cutting.

It is recommended with all steel lengths, you first remove any excess oil, grease or scale with a cloth or abrasive paper.

So start by taking two lengths of 1524mm (5 foot) lengths of 25 x 5mm steel, cut down to 1310mm (or preferred size to suit depth of body of guitar) and trim all the corners then, using a fine tip marker or pencil, mark at all points as shown overleaf for Component 1 taking into account the preferred adjustment between marks S1 and B1. hen marking bend points B2, B3, B4 and B5 mark these on the back of the bar to help you remember which way the required bend is required. Start by placing the steel bar in the 3/3 Former and scroll the first 200mm from one end up to point S1 and then repeat this on the second length.

Next, set the Master RBR to bend a 90 degree bend at points B1 and B2 using Template No. 1 for guidance and remembering to flip the bar over to bend on the reverse side at B2. Then set the RBR to bend a 130° angle to produce bends B3, B4, B5 again using Template 1 for guidance.

When you are happy that the bends are correct, repeat this on the second length and make sure both components are identical when you offer them up to each other and make any final adjustments before moving on to the next components.

2 In-Fill Scrolls 762mm (x 2)

COMPONENT 2

Take one 1524mm (5 foot) length of 25 x 5mm steel and cut in half (approx 762mm) and trim all corners. Next mark out all the scroll and bend points on Component 2 as shown on the design sheet overleaf. Then place one length in the 3/3 Former and scroll up to S2 and then on the opposite end scroll again up to the S3 thus creating a 'C' scroll.

Next, set the Master RBR to bend a 130 degree angle at points B6 and B7 using Template No. 2 as a guide to setting the angles correctly. Then repeat this with the other length.

Place each In-fill Scroll inside the formed Main Sides as shown in Diagram 1 and mark the two punch points (on both pieces of steel) in the approximate positions shown.

Next, use the Master Punch & Shear to punch a 5mm hole in the centre of the steel at these two points marked on both the Main Side and the in fill scroll. When you are happy that everything is aligned, use the nut and bolts provided to hold these two components together temporarily prior to riveting during the Assembly process. Repeat this with the other Main Side and In-fill Scroll.

3 Back Straps 225mm (x 2)

COMPONENT 3

Take one 1524mm (5 foot) length of 25 x 5mm steel, cut two strips of 225mm and trim all corners.

Next, mark out all the three punch points and the two bend points on Component 3 as shown on the design sheet overleaf.

Next place in the Master R/B/R and, using just the inner side rollers with out the drop on side roller sleeves roll a shallow curve as shown in Template No. 3. Then bend at points B8 & B9 a shallow angle of approximately 165 degree as shown in Template No. 3.

Finally, punch 5mm holes at the three points marked.

4 Neck Scroll 900mm (x 1)

COMPONENT 4

Using the off cut of steel from the Back Straps, cut down this down to 900mm and trim all corners. Measure and mark the Rolling Point R1 points as shown on Component 4 on the Design Sheet overleaf.

Firstly, bend a 130 degree bend at B10 using the same Template 1 (Bend 4) to match the bend you made at B4 on the Main Sides (Template No. 1).

Next using the Mk 3/3 Scroll Former, make a scroll up to the S4 mark, making sure you scroll the right way round (see Diagram 2 as a guide).

Then using the Master R/B/R, roll an arc between B10 and R1 using Template No.4 as guidance for the radius. Then flip the bar over and roll a similar curve between R1 and the scroll start point S4 to start with. Note – during the assembly process when you have Nut & Bolted the components together you can check if this curve is enough to hold your guitar in the right position or whether you need to roll it a bit more between R1 and S4.

5 Guitar Neck Support 150mm (x 1)

COMPONENT 5

Using an offcut from one of the Main Sides, cut this down to 150mm and trim all corners. Mark at H2 in the dead centre as shown on component No.5 on the Design Sheet overleaf.

Then roll to match Template No. 5 and finally punch a 5mm hole at H2.

6 Assembly

Take all the components formed and firstly place a 'Back Strap' at the back of an already nut & bolted Main Side section between bends B4 and B5. Mark on the Main Side where the punched hole on the Back Strap meets it and punch a 5mm hole. Repeat on the other Main Side. Nut & bolt the bottom Back Strap together as shown in Diagram 1 with the curved sections of the Back Strap facing inwards.

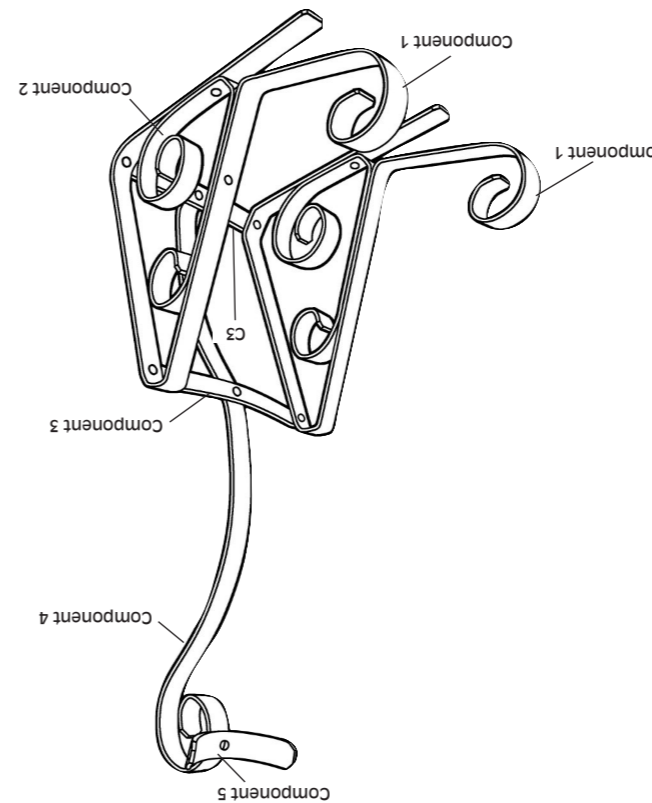
Next place the Neck Scroll behind the bottom Back Strap and mark on bottom of Neck Scroll to align with middle punched hole on the bottom Back Strap then punch a 5mm hole and nut & bolt together. Next, take the other Back Strap and hold it carefully in place just below B3 on the Main Sides and mark on the Main Sides where the punched holes of the Back Strap will align. Then punch a 5mm hole and nut & bolt together.

At this point, the Neck Scroll should meet or be close to meeting with the centre hole on the Top Back Strap. If this is not the case, undo the bottom Nut & Bolt holding the Neck Scroll to the bottom Back Strap and, once again place in the Master R/B/R and roll it until it will touch the Top Back Strap and also ensure the guitar will sit properly in the stand. When this is resolved, mark on the Neck Scroll where the centre hole of the Top Back Strap will align and punch a 5mm hole and nut & bolt together.

Now take the 'Guitar Neck Support' and place on the front of the 'Neck Scroll', mark at preferred point then punch a 5mm hole and nut/bolt together (please note, since riveting this joint may prove difficult this can stay nut & bolted).

Finally, once you are happy that everything fits to your satisfaction, remove each nut & bolt and replace with a rivet and use the Master RBR to rivet all components together. We suggest starting with the one in the middle of the Top Back Strap (please note, you will need to rotate the steel to fit into the Master R/B/R prior to riveting, then twist back into place once riveted). The rest of the Guitar Stand can then be riveted in any order. (You may benefit from getting someone to hold the Guitar Stand while you rivet it altogether).

Once you have coated, painted or sprayed your Guitar Stand (see back page for finishing tips) attach the rubber bumper feet supplied to the bottom of the Stand to prevent scratches to the floor and also at "contact points" on the areas where the guitar will rest against the stand.



metalcraft™

Design Pack GUITAR STAND

DIFFICULTY RATING:

EASY

STRAIGHTFORWARD

MORE COMPLEX



Design Pack: GUITAR STAND - DESIGN SHEET 1 - DIAGRAMS

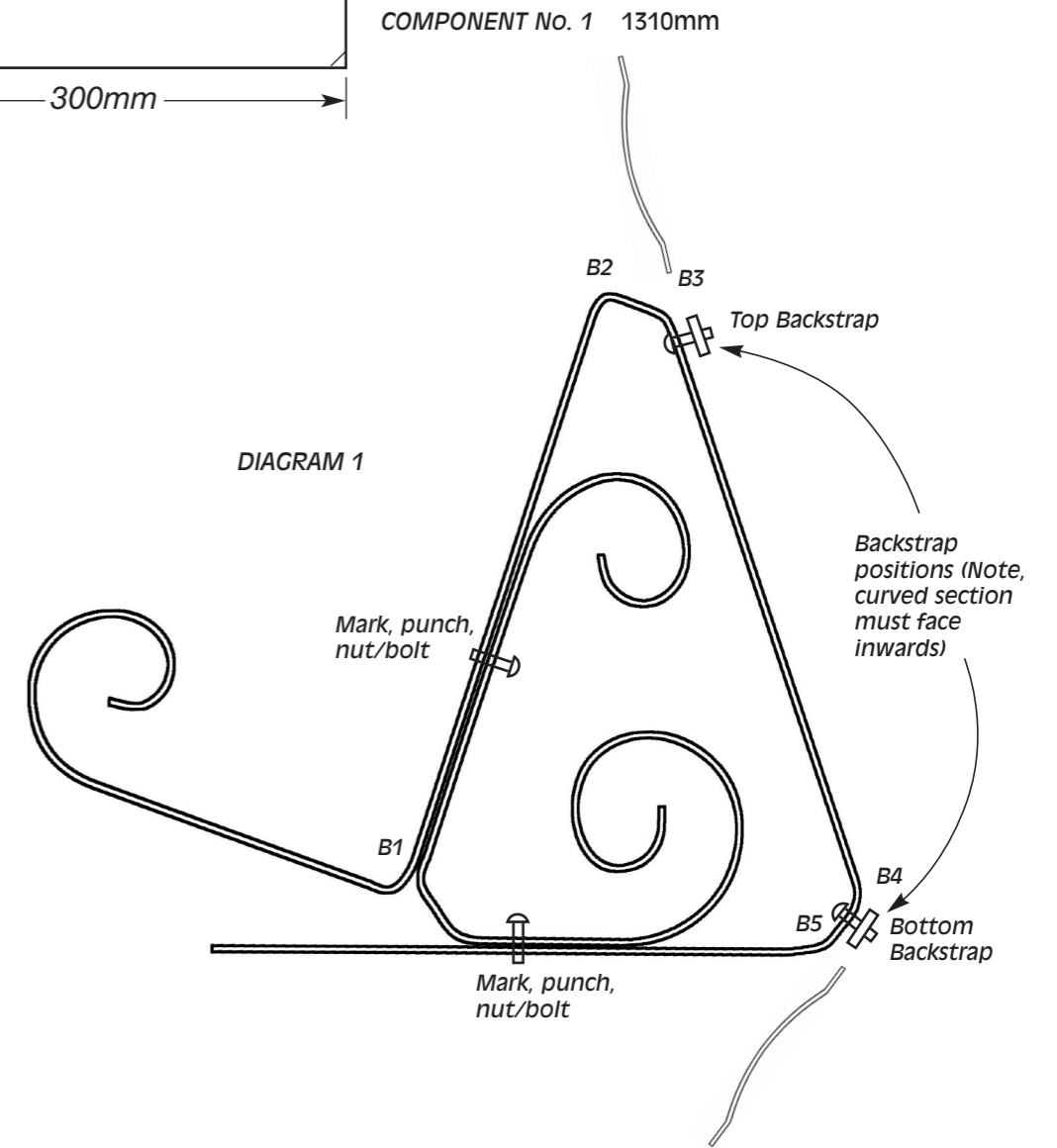
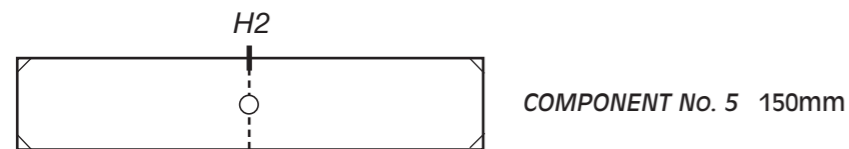
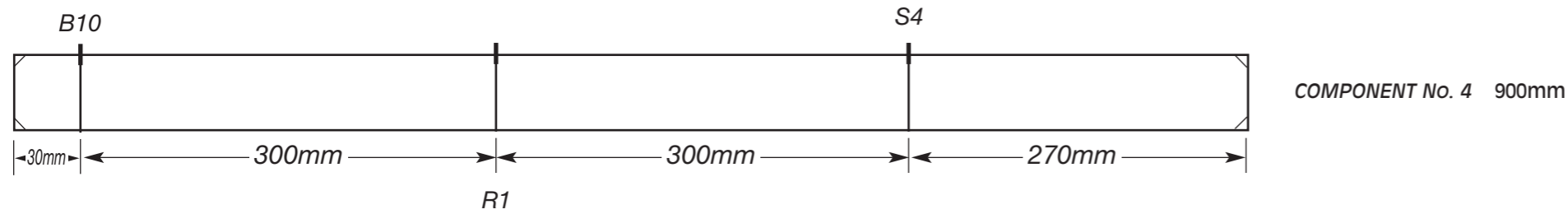
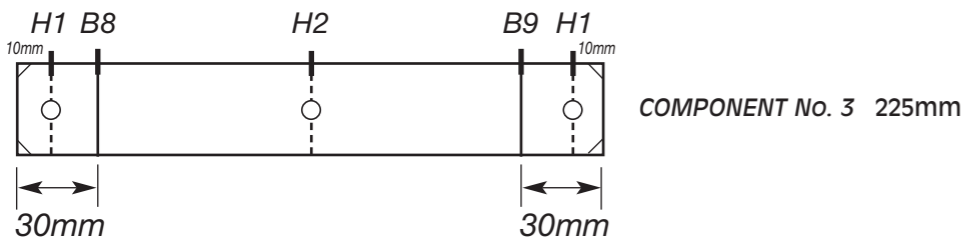
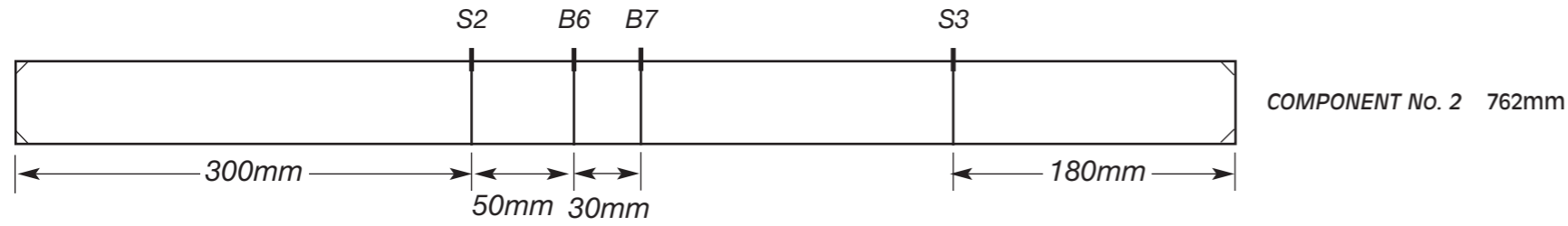
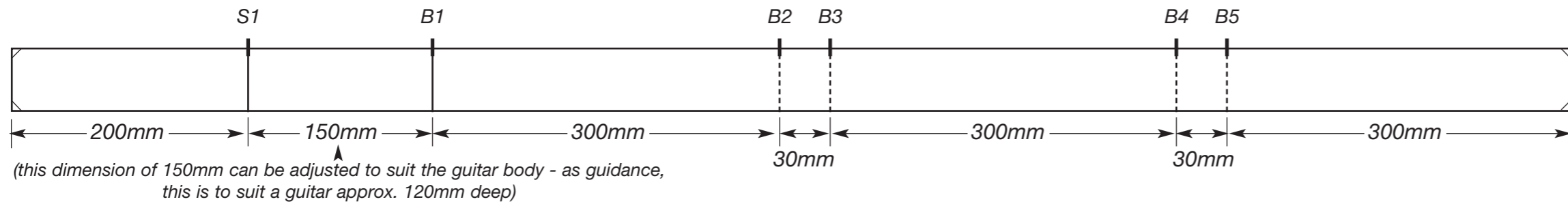
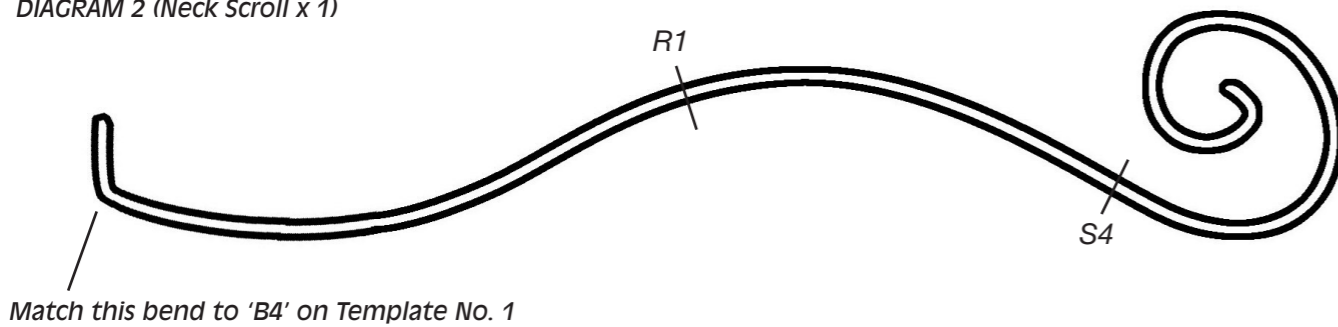


DIAGRAM 2 (Neck Scroll x 1)



List of Materials Required:

- 4 x 1524mm (5ft) Lengths of 25mm x 5mm Steel Strip [Re-Order Ref: MC040]
- 12mm x 5mm Rivets [Re-Order Ref: MC054L]
- 16mm x 5mm Nuts & Bolts [Re-Order Ref: MC063]
- Large Rubber Bumper Feet [Re-Order Ref: MC1275]

Design Pack: GUITAR STAND - DESIGN SHEET 2 - TEMPLATES

