

TEA LIGHT TREE

Tools Required To Make this Design:

Punching: Practical Punch/Shear (or Master Punch/Shear or XL5+ Power Bender fitted with 3mm Punch Block & Pins)
 Cutting: Practical Punch/Shear (or Master Punch/Shear or XL5+ Power Bender)
 Riveting: Practical RBR
 Bending: Practical RBR
 Rolling : Practical RBR
 Scrolling: Mk 1/2 Scroll Former

We recommend that before starting you wipe all steel bars down so that they are free of grease, scale or dirt. After cutting any component, we also recommend that you trim the corners for a neater finish, if preferred, unless these instructions tell you otherwise. Use a fine tip marker pen, pencil or scribe for marking hole, bend, scroll, roll points on the bars.

Component 1	Lower Trunk 10mm x 1.6mm x 900mm (1)
From 1 length of 10 x 1.6 x 914mm steel strip, using the Practical Punch/Shear Tool (PPS), cut 1 strip 900mm long. Chamfer all corners using the PPS. Mark hole positions H1+H2, bend positions B1+B2 and scroll positions S1 + S2, roll positions R1+R2. Using the Mk1/2 Scroll Former, scroll each end onto S1 and S2 respectively. Using the Practical Riveting, Bending & Rolling Tool (PRBR), roll the strip between R1 and R2 using Fig 1 on Component sheet as guide. Using the PRBR form bends at B1 and B2. Once bends are created over bend these by hand to fit component 1 Fig 2. Using the PPS punch all marked holes. See Component 1 on Template Sheet 1 for profile.	
Component 2	Upper Trunk & Top Branch 10mm x 1.6mm x 600mm (2)
From 2 lengths of 10 x 1.6 x 914mm steel strip, cut 2 strips, each 600mm long. Set surplus steel strips aside for Component 6. Chamfer all corners. On each strip, mark hole positions H3-H9, Scroll position S3 and Roll positions R3,R4+R5. Scroll non punched end up to S3. Using component 2 on the Template sheet as a guide, roll the strip between R3 and R4 and Then on the reverse side of the length roll between R4 to R5. Punch hole positions H3-H9.	
Component 3	Bottom Branch 10mm x 1.6mm x 450mm (2)
From 1 length of 10 x 1.6 x 914mm steel strip, cut 2 strips each 450mm long. Chamfer all corners. Mark hole position H10 and scroll position S4. Scroll non punched end to S4 and roll the remainder of the strip to the end. Punch hole H10. See Component 3 Template Sheet 2 for profile.	
Component 4	Bottom Branch 10mm x 1.6mm x 400mm (2)
From 1 length of 10 x 1.6 x 914mm steel strip, cut 2 strips each 400mm long. Chamfer all corners. Mark hole position H11 scroll position S5. Scroll non punched end to S5 and roll the remainder of the strip to the end. Punch hole H11. See Component 4 Template Sheet 2 for profile.	
Component 5	Middle Branch 10mm x 1.6mm x 350mm (2)
From 1 length of 10 x 1.6 x 914mm steel strip, cut 2 strips each 350mm long. Chamfer all corners. Mark hole positions H12 and scroll position S6. Scroll non punched end to S6 and roll the remainder of the strip to the end. Punch hole H12. See Component 5 Template Sheet 2 for profile.	

Component 6	Mid/Upper Branch 10mm x 1.6mm x 300mm (2)
From left over steel from component 2, cut 2 strips each 300mm long. Chamfer all corners. Mark hole position H13 and scroll position S7. Scroll non punched end to S7 and roll the remainder of the strip to the end. Punch hole H13. See Component 6 Template Sheet 2 for profile.	
Component 7	Upper Branch 10mm x 1.6mm x 250mm (2)
From 1 length of 10 x 1.6 x 914mm steel strip, cut 2 strips each 250mm long. Set remainder of strip aside for Component 10. Chamfer all corners. Mark hole position H14 and scroll position S8. Scroll non punched end to S8 and roll the remainder of the strip to the end. Punch hole H14. See Component 7 Template Sheet 2 for profile.	
Component 8	Inner Branch 10mm x 1.6mm x 200mm (3)
From 1 length of 10 x 1.6 x 914mm steel strip, cut 3 strips each 200mm long. Chamfer all corners. Mark hole position H15 and scroll position S9. Scroll non punched end to S9 and roll the remainder of the strip to the end. Punch hole H15. See Component 8 Template Sheet 2 for profile.	
Component 9	Tea Light holder Bracket 10mm x 1.6mm x 160mm (6)
From left over steel strip from Component 8 and 1 length of 10 x 1.6 x 914mm steel strip, cut 6 strips each 160mm long. Chamfer all corners. Mark hole position H16-H17 and scroll position S10. Scroll non punched end to S10. Punch holes H16-H17. See Component 9 Template Sheet 2 for profile.	
Component 10	Leaf 10mm x 1.6mm x 120mm (17)
From left over steel strip from Component 7 and 2 lengths of 10 x 1.6 x 914mm steel strip, cut 17 strips each 120mm long. Chamfer all corners. Mark hole position H18 and bend position B3. Roll strip and then bed at B3.Punch hole H18. See Component 10 Template Sheet 2 for profiles.	



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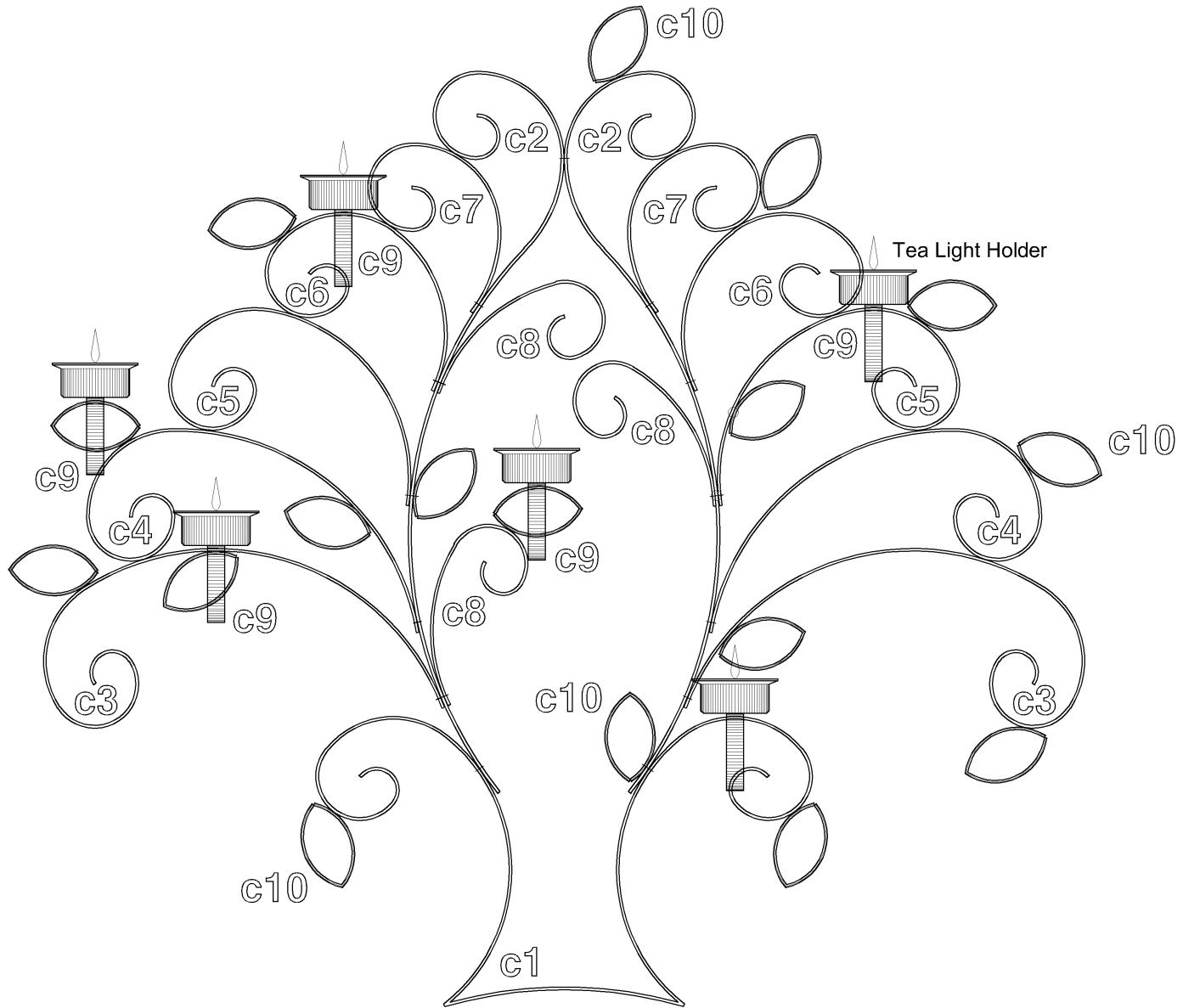
Design Pack

Tea Light Tree

Difficulty Rating:	
Easy	
Straightforward	✓
More complex	

Assembly Instructions	
(1) Using the Assembly Sheet 1 as a guide, arrange Components 1-8 on a flat surface and assemble using the 10X3mm nuts and bolts provided. If required, make any necessary adjustments to individual components to achieve the desired appearance.	
(2) Either using the Assembly Sheet as a guide or choosing alternative locations, distribute the Tea Light holder Brackets (component 9) and the Leaves (component 10) across the assembled tree to suit and marking the main relevant components clearly. Before punching the required fixing holes, make sure these can be reached using the PPS. Once Holes have been punched, assemble using the 10 X 3mm nuts and bolts provided.	
(3) Remove each nut and bolt in turn and using the PRBR tool, rivet the relevant components together. Use large 6 X 3mm rivets for 2 and for 3 or more strips of steel use 8 x 3mm rivets.	
(4) Finally using the nuts and bolts provided fasten the Tea Light Holders onto the brackets and ensure they are tight and secure.	

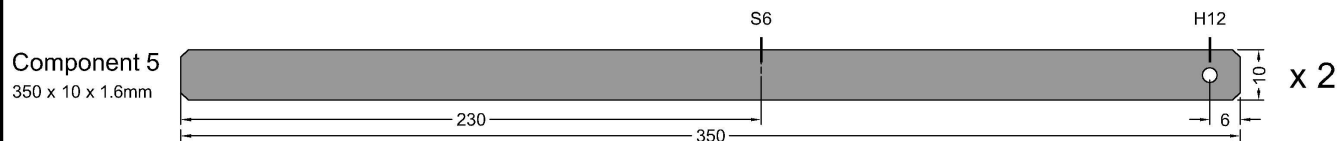
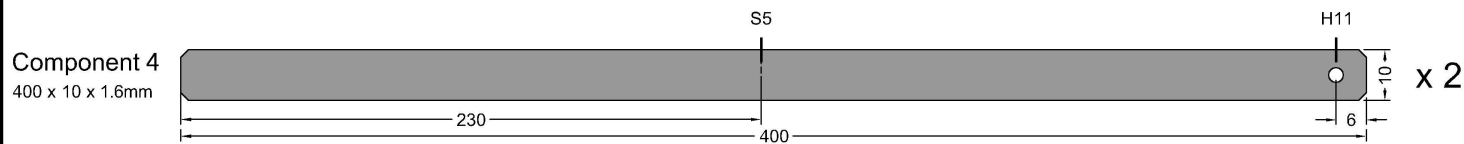
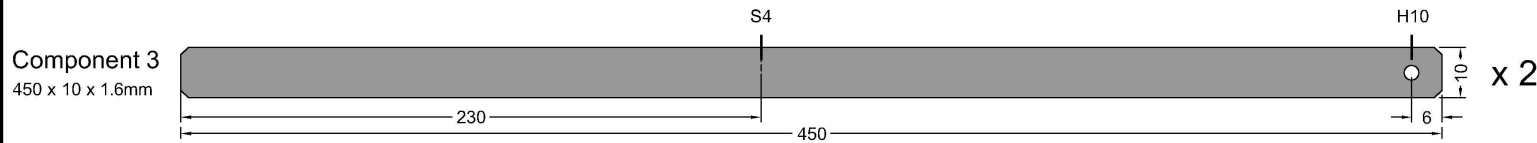
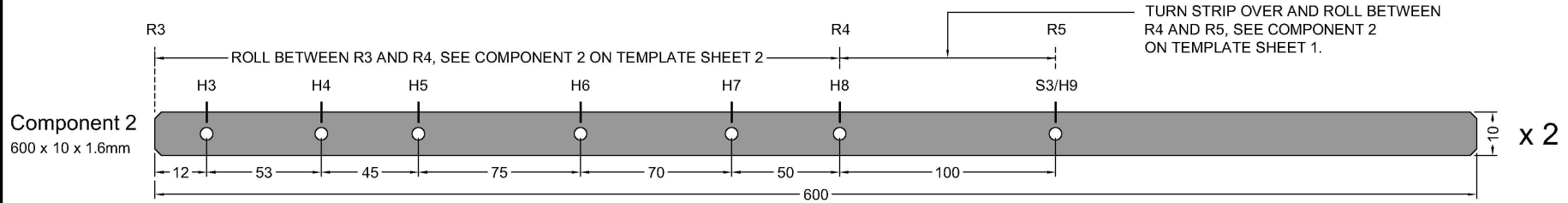
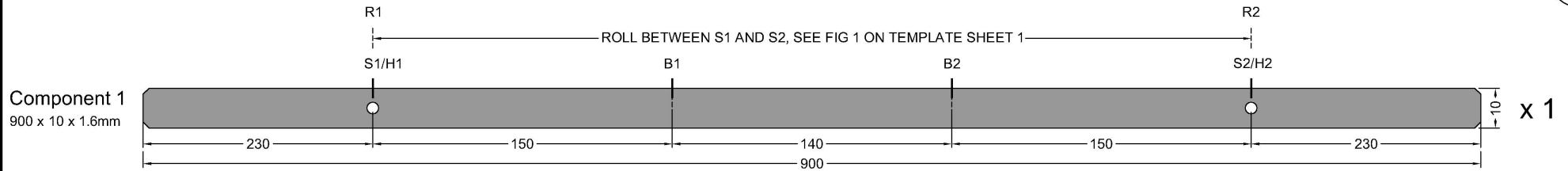




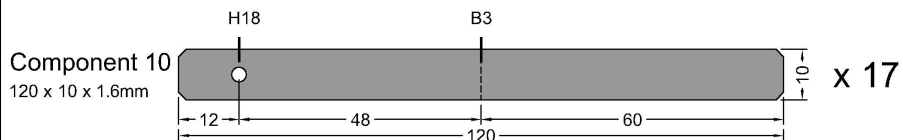
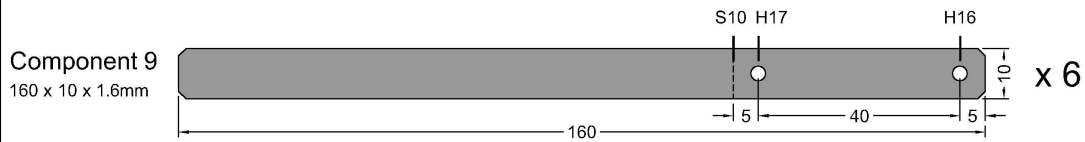
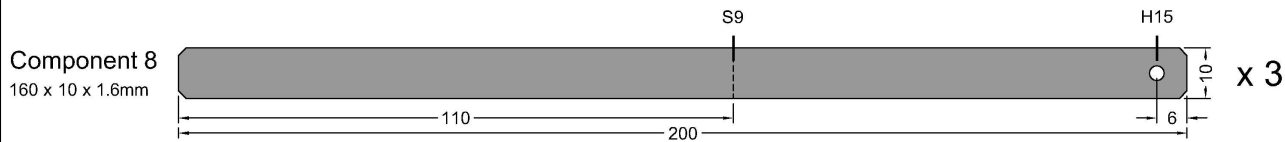
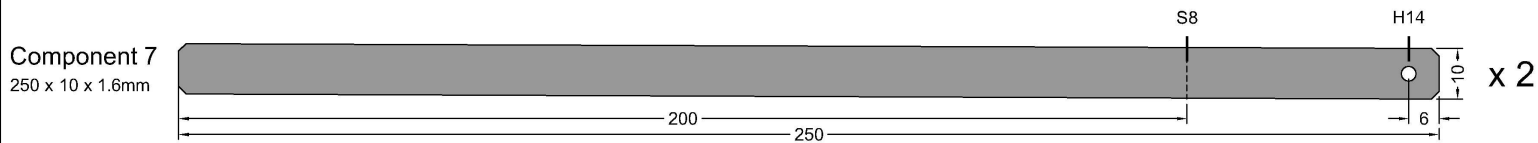
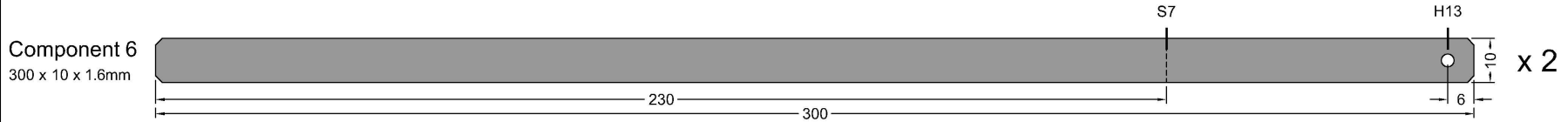
DESIGN PACK: TEA LIGHT TREE

COMPONENT-SHEET

1



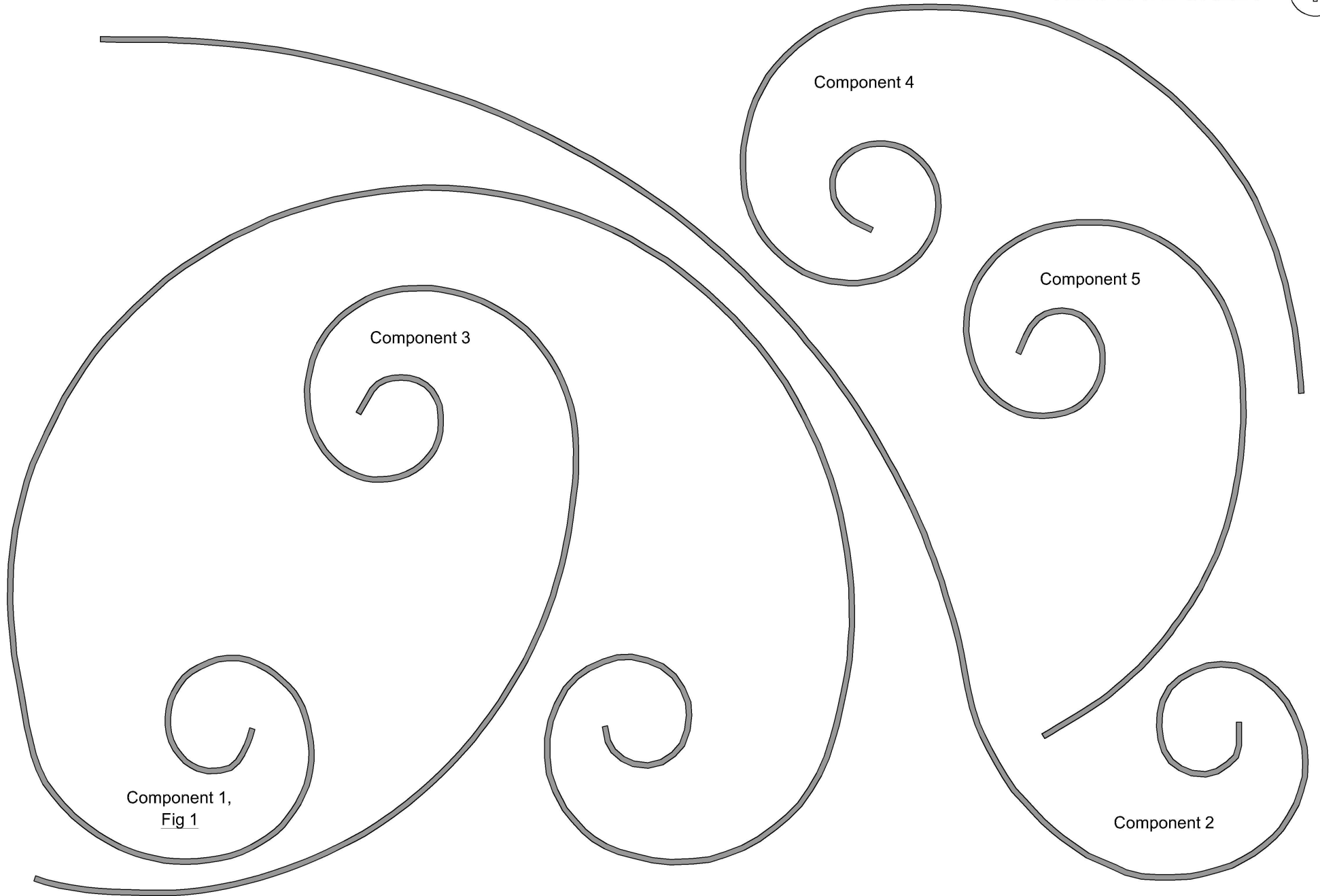
NOT TO SCALE



List of Materials Required:

- 11 X 914mm (3ft) Lengths of 10mm x 1.6mm Steel strip (Re-Order Ref: MC031)
- 6 x 8mm x 3mm Nuts & Bolts (Re-Order Ref: MC059L)
- 33 x 10mm x 3mm Nuts & Bolts (Re-Order Ref: MC060L)
- 27 x 6mm x 3mm Rivets (Re-Order Ref: MC050L)
- 6 x 8mm x 3mm Rivets (Re-Order Ref: MC051L)
- 6 x E1 Tea Light Holder (Re-Order Ref: MC1200P)

NOT TO SCALE



Component 1,
Fig 1

Component 3

Component 4

Component 5

Component 2

