

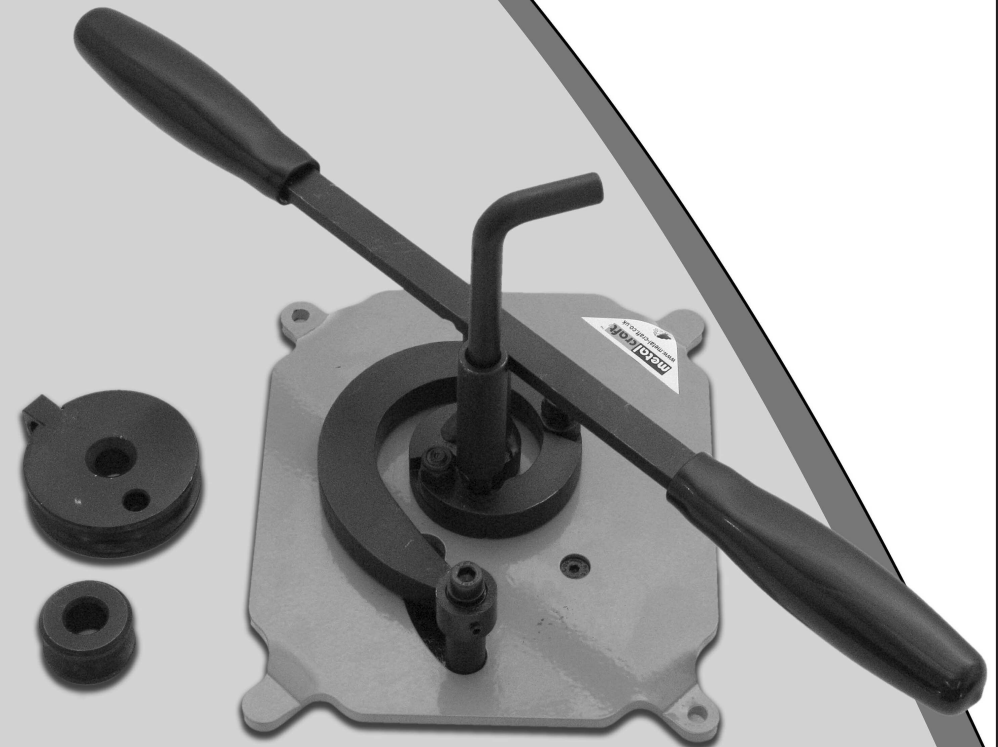
O P E R A T I N G   I N S T R U C T I O N S

**metalcraft™**

MARK 2 / SERIES 3

# SCROLL FORMER

PLUS OPTIONAL EXTRA  
TUBE BENDING COMPONENTS



**J & C R WOOD**

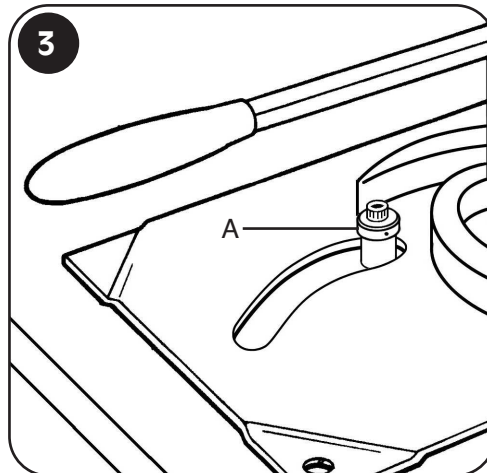
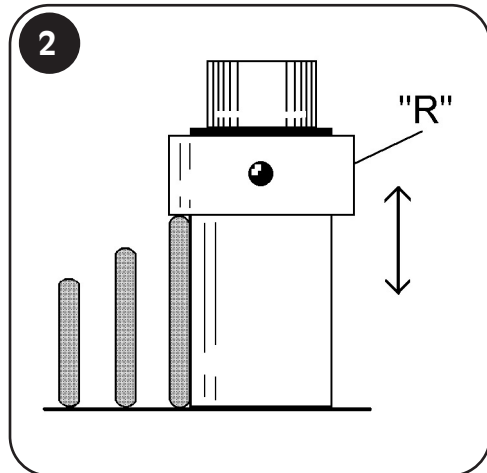
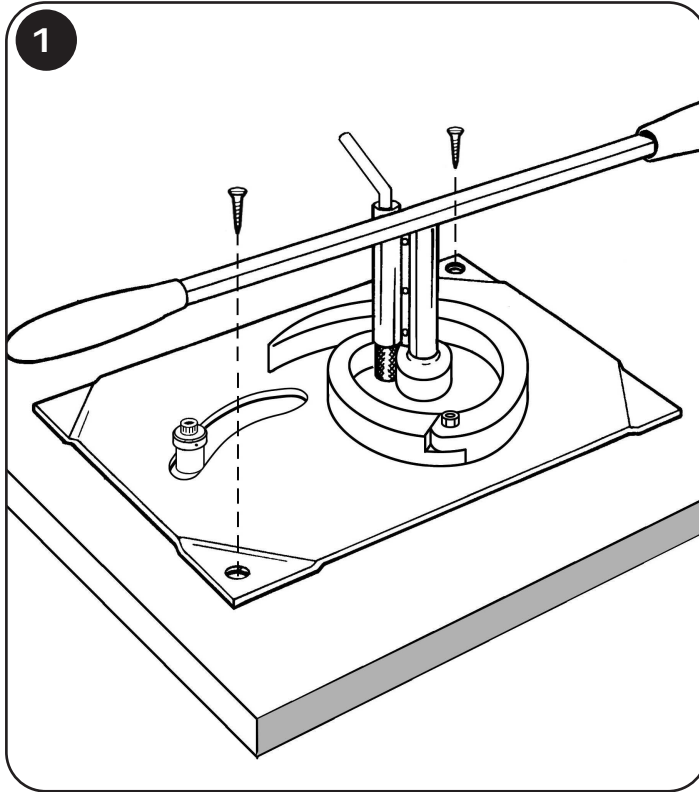
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# MARK 2 / SERIES 3 SCROLL FORMER

Please keep these instructions in a safe place for any future reference to the parts diagrams.

**IMPORTANT** - Ensure all moving parts are regularly lubricated and all bolts kept tightened.

- 1** Fix the Scroll Former firmly to a work bench with screws.
- 2** Adjust the height of the pressure roller ring "R" to suit the width of the bar to be formed.
- 3** For all material sizes, slide pressure roller to inner-most position 'A'.
- 4** Open out the segments and push the steel into the centre segment (ensure that the bar is flat on the base plate). Clamp the end of the bar by rotating the locking bar clockwise.

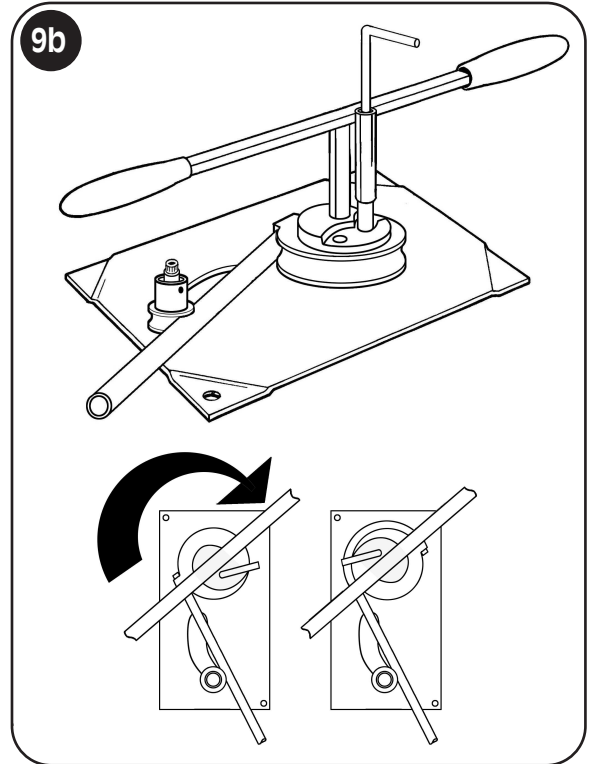
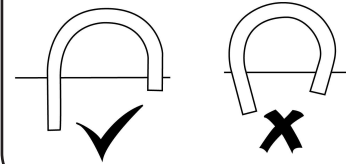


## 9b INSERTING AND BENDING THE TUBE

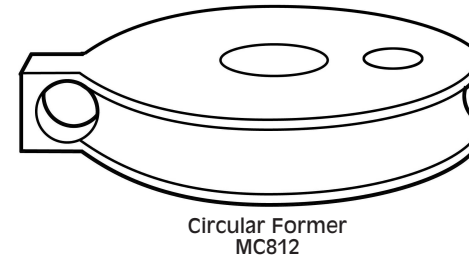
Locate end of tube into aperture of Tube Bending segment and with pressure roller lever released align with concave pressure roller as shown here.

Rotate three main handles in clockwise direction to draw tube into machine and create bend as required. When complete lock pressure roller lever and release tube.

**IMPORTANT NOTE** - Ensure bend does not go beyond 180° to avoid problems releasing material after the tube is bent



## 9c TUBE BENDING COMPONENTS TO FIT THE MK2/3 SCROLL FORMER



**IMPORTANT** - components are available as optional extras and not necessarily supplied as standard with each Mk 2/3 Scroll Former

### SPECIFICATIONS: TUBE BENDING COMPONENTS - Mk. 2/3 Scroll Former

Maximum Tube Dimensions	10mm O/D
Recommended Wall Thickness	1.2mm
Diameter of Tube Bending Segment (inner diameter of formed tube)	49.7mm

*The information shown is for guidance only and is based upon the use of ERW Mild Steel Tube to the dimensions shown - should materials of a different specification or dimension be chosen by the user then we strongly recommend that a test bend is carried out prior to commencing the project proper as we cannot guarantee or be held responsible for the outcome.*

**9a TO FIT OPTIONAL TUBE BENDING COMPONENTS**

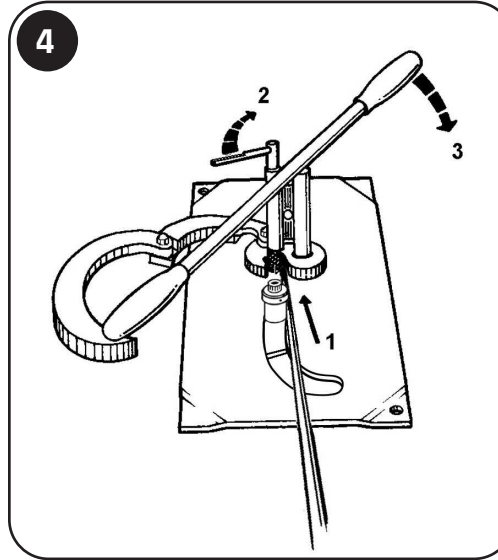
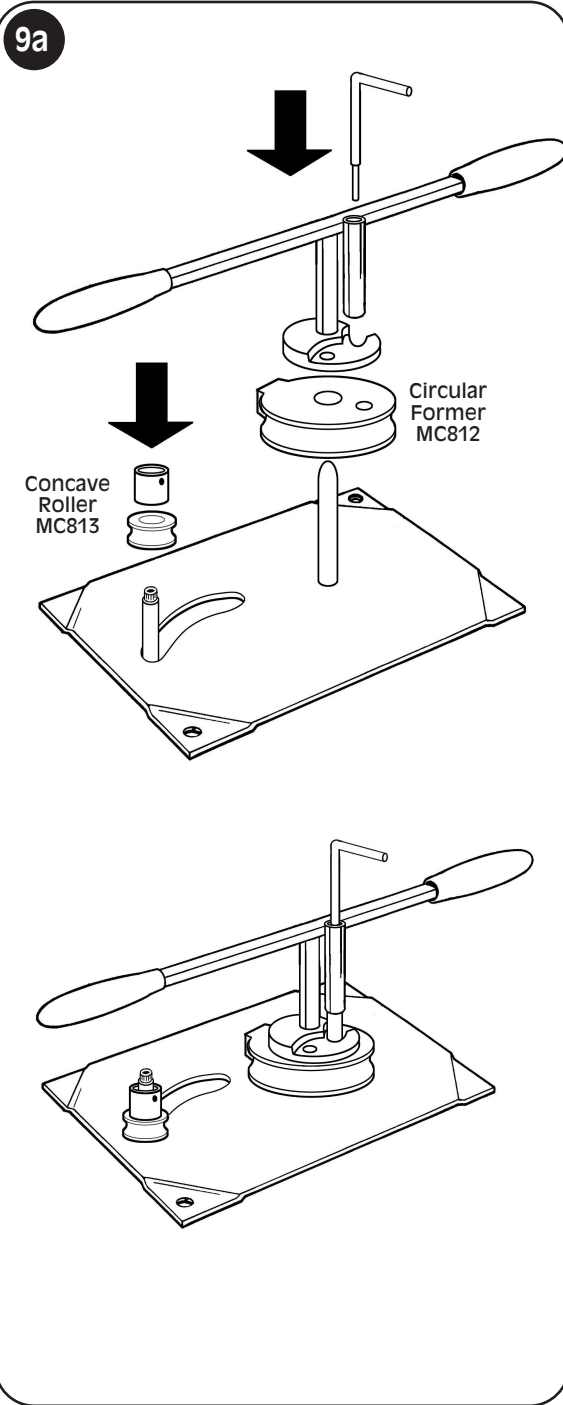
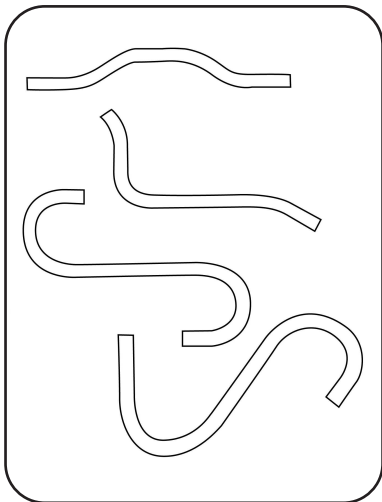
First remove central handle and scroll segment assembly from the Scroll Former base and remove all pivoted scroll forming segments.

Drop Tube Bending Segment over Pivot Pin on Scroll Former base. Note – the hole in the segment which the pivot pin goes through is countersunk on one side. This countersunk side should be on the bottom face of the segment with the plain hole facing upwards.

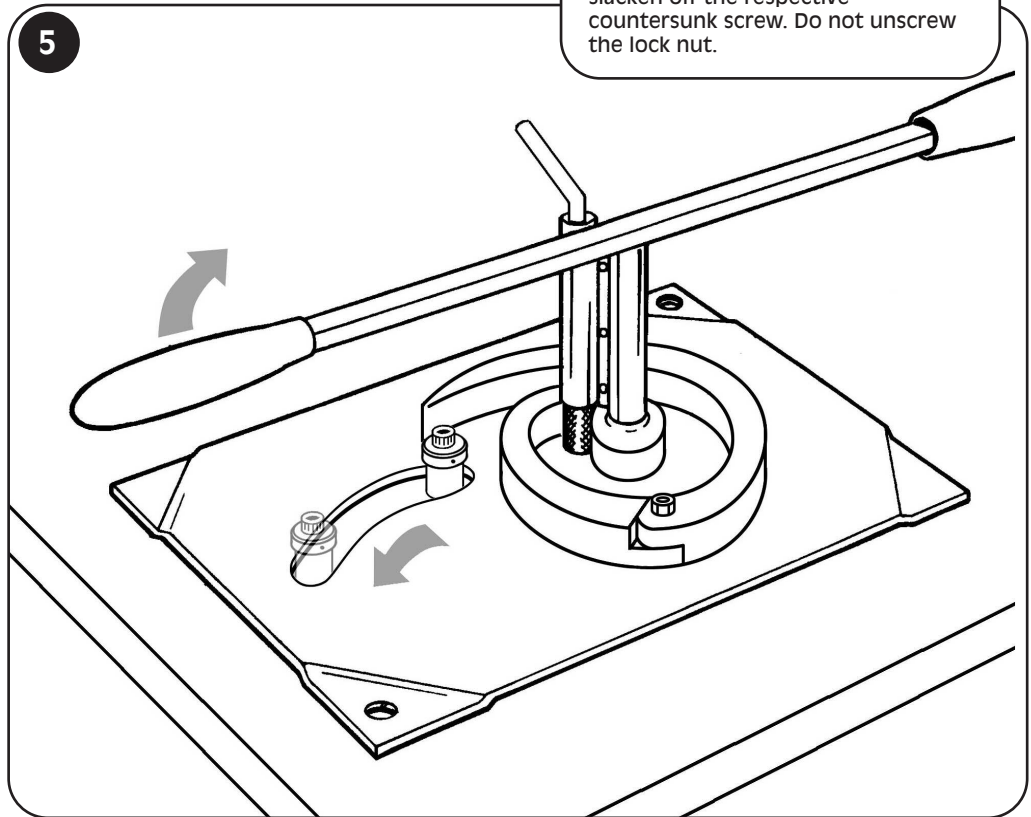
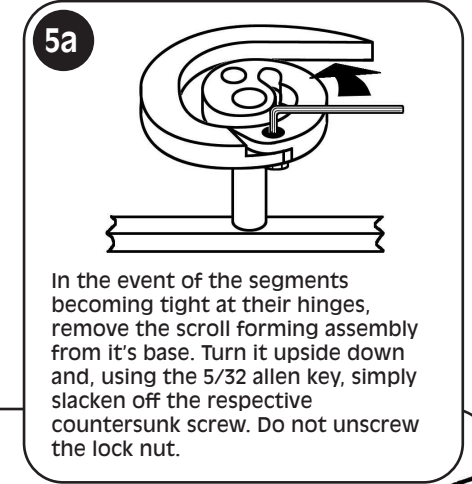
Then remove handle from the slotted locking bar used for gripping square and round bars and place this in the other hole in the Tube Bending segment. Carefully lower the central handle and scroll segment assembly carefully aligning its centre cut out and locking bar sleeve with the locking bar located in the Tube Bending segment.

Finally, remove spacer rings from the pressure roller post and replace with the concave roller and secure in position using the spacer ring with the grub screw.

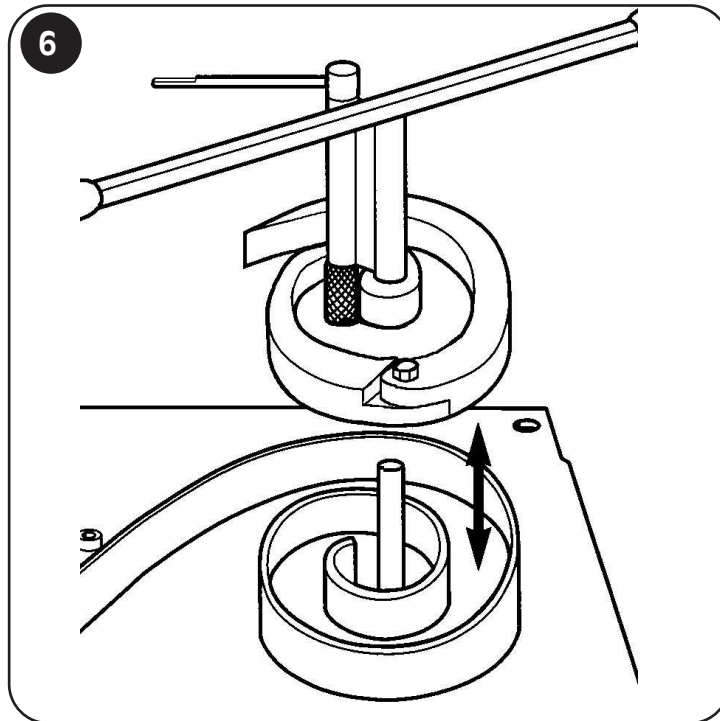
The tool is now ready to bend tube to a variety of profiles as shown in the examples below.



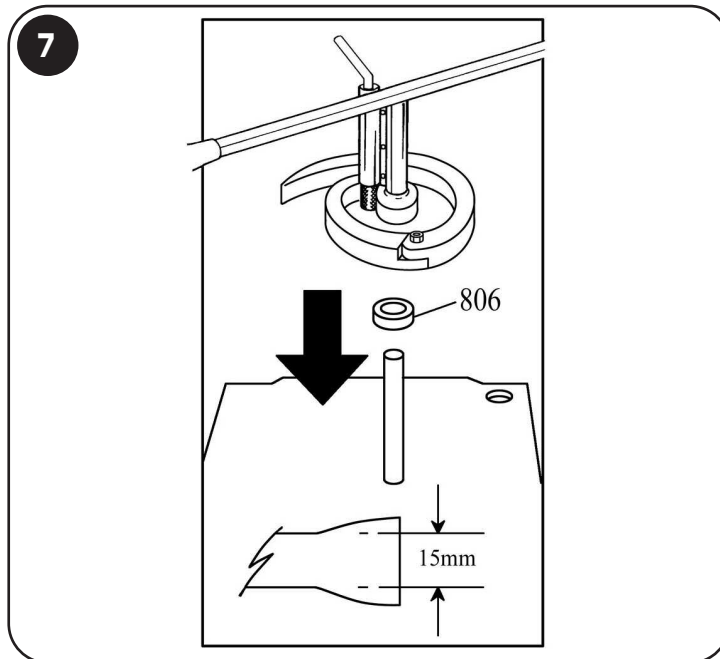
**5** Rotate the "T" Bar handle in a clockwise direction to form a scroll. The pressure roller will move and find its own optimum position to maintain correct pressure during the forming of a scroll.



**6** After forming the desired size of scroll, unclamp the end of the steel and lift the segments from the base to release the scroll.



**7** Use part No.806 to increase the height of the segments when forming 'fish tail' sections in excess of 15mm.



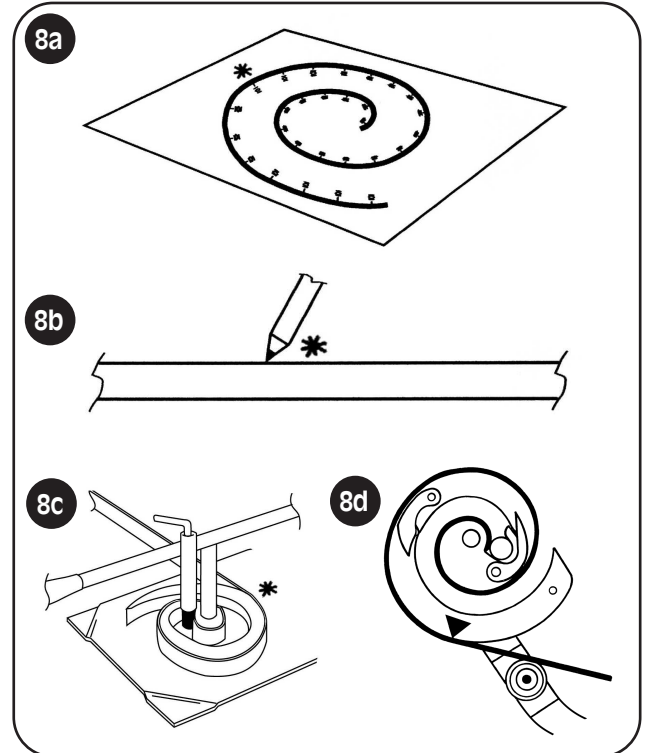
**8** CALCULATING THE LENGTH OF MATERIAL REQUIRED TO MAKE A SCROLL OF A CERTAIN SIZE

**8a** Use Scroll Former Outlines Guide supplied to identify preferred scroll size and corresponding material length required. Sizes are approximate due to varying temper (springiness) of material used.




**8b** Measure required bar length and mark bar accordingly.

**8c** Form scroll carefully until mark on bar touches the edge of a segment to achieve required scroll size.

**8d** Use triangular magnetic marker on scroll former segments to identify end of scroll for consistently repeatable scrolls (remembering to grip the end of bar in the machine with the locking bar at the same point each time)



### SPECIFICATION TABLE

MAX. SIZE MATERIAL	MAX. SCROLL SIZE	LENGTH OF MATERIAL FOR MAXIMUM SCROLL SIZE
 20 x 3mm	 5" 126mm	 470mm

### NOTE

- 1) These sizes are for Hot Rolled Black Mild Steel Bar & Annealed Bright Mild Steel Bar.
- 2) Working beyond the capacities stated above or with materials of greater strength or hardness will reduce the operational life of the machine.
- 3) The maximum scroll size may vary due to the temper (spring) of the steel.