

Clarke®

METALWORKER



BEAD ROLLER
MODEL NO: CBRM1

PART NO: 7627907

USER INSTRUCTIONS

ORIGINAL INSTRUCTIONS

GC 0724

INTRODUCTION

Thank you for purchasing this CLARKE Bead Roller.

The bead roller is excellent for producing strengthening ribs in panels used in creating replacement floor pans, bulkhead panels, inner wing panels etc. The gear-driven design of the steel bead roller machine delivers maximum forming power while requiring minimal handle force for the greatest accuracy.

The sheet metal roller comes with 6 sets of dies in total, as listed in the specification below.

Before attempting to use the bead roller it is essential that you read this manual thoroughly and carefully follow all instructions given. In doing so you will ensure the safety of yourself and that of others around you and you can also look forward to the product giving you long and satisfactory service.

SPECIFICATIONS

Capacity	Bead & Flange	1.2mm (1/8")
(mm/gauge)	Shear	1.2mm (1/8")
Bead mandrel sizes (mm//in)		6.35mm (1/4"), 9mm(3/8"), 12.7mm (1/2")
Flange mandrels sizes		1.6mm (1/16"), 3mm (1/8"), 6.35mm (1/4")

SAFETY PRECAUTIONS

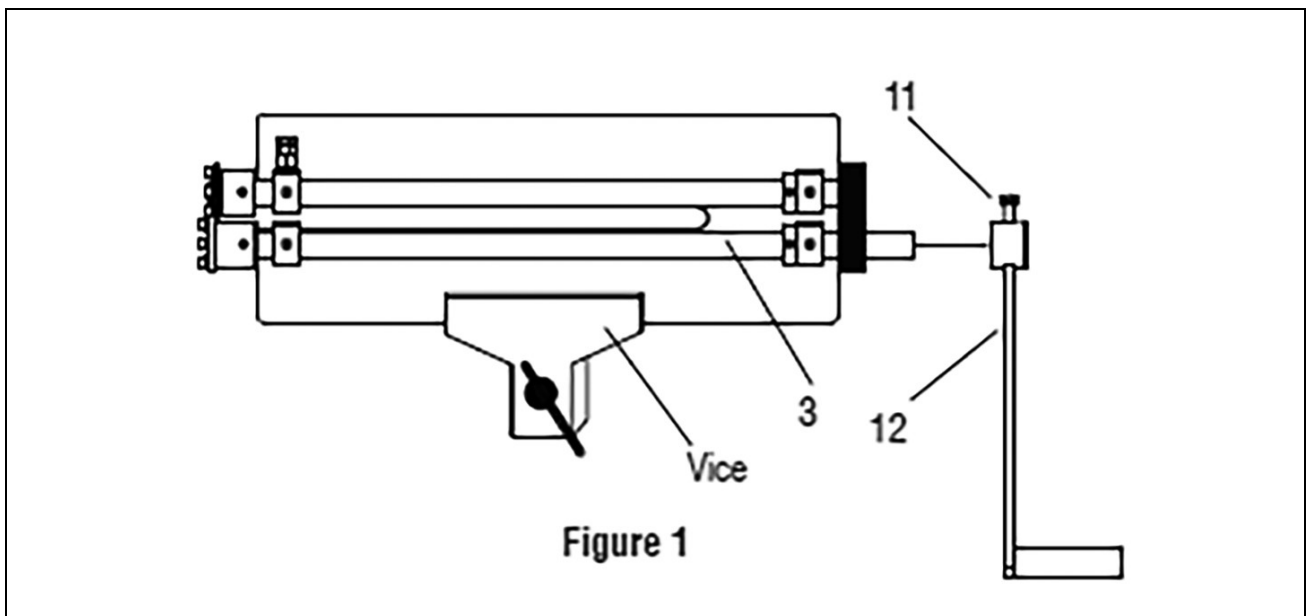
- **ALWAYS** operate on a suitably strong bench with adequate light.
- **ALWAYS** check for signs of cracked welds or any other structural damage before starting work. **DO NOT** operate if any of these conditions exist. Have repairs made only by a CLARKE service centre.
- The components of this bead roller are designed to withstand the rated capacity. **DO NOT** substitute any other components or exceed the rated capacity.
- **ALWAYS** ensure the workpiece is secure before applying pressure.
- **DO NOT** allow anyone who is unfamiliar with this tool to use the bead roller unless they are under direct supervision.
- **ALWAYS** ensure the work piece is properly positioned.
- **ALWAYS** keep hands and fingers away from parts that may pinch or shift.
- **NEVER** use extension tubes to increase the length of the handle. Excessive effort can cause damage and/or accidents.

UNPACKING & ASSEMBLY

Ensure the product suffered no damage during transit and that all items are present. Should any loss or damage become apparent, please contact your CLARKE dealer immediately.

The numbers in the diagrams refer to the component parts on pages 7 & 8.

1. Place the Bead Roller in a vice as shown in Figure 1 and tighten securely to hold the machine.
2. Slide the handle (12) onto the Driving Shaft (3).
3. Using an open ended wrench, tighten the bolt (11) securely. Ensure the bolt is positioned over the flat surface on the Driving Shaft (3).



OPERATION

ALIGNMENT

The Bead Roller usually needs no alignment by the operator. However, poor alignment will affect the quality of metal forming and the ability of the machine to cut sheet metal.

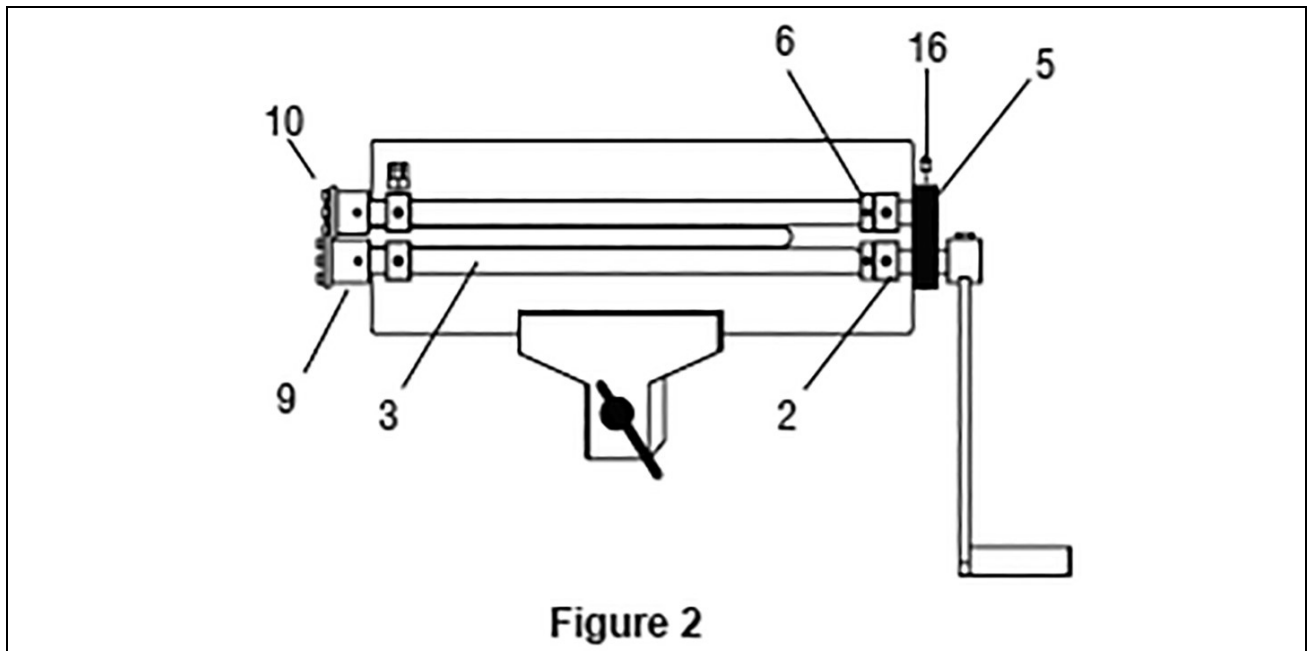
If you experience either of these problems, perform the following alignment steps.

1. Set up the Bead Roller with Cutting Dies (10-01,10-02) and Cutting Plates (9) as shown in Figure 2.

2. Inspect the Cutting Plates (9) as shown in Figure 2. When the Bead Roller is properly aligned, the edges of the Cutting Plates (9) should be touching (or almost touching). If they are not, perform the following steps.

NOTE: If the edges are touching and the machine does not cut material properly, adjust the roller tension as discussed in the section titled: Adjusting Roller Tension.

3. Using the Hex Key (27), loosen the screws (16) that secure the Gear (5) and Collar (6) to the Driving Shaft (3).



4. Slide the Driving Shaft (3) until the edges of the Cutting Plates (9) are touching.
5. By hand, move the Collar (6) on the Driving Shaft (3), so its edge is touching the Roller Block (2) and tighten it's screws (16).
6. Move the gear (5) so it's side is touching the Collar (6) on the Driving Shaft (3) and tighten it's screws (16).

CHANGING ROLLERS

The Bead Roller Kit comes with a variety of bead and flange dies, as well as the cutting dies & plates that are assembled to the machine before shipping. Use the following instructions when you change dies.

1. Using a wrench, loosen the bolt (15). See Figure 3.
2. Using a hex wrench, remove the eight screws (18) and spring washers (25), securing the Cutting Plates (9) to the Cutting Dies (10-01,10-02). See Figure 3.
3. Remove the Cutting Plates (9).

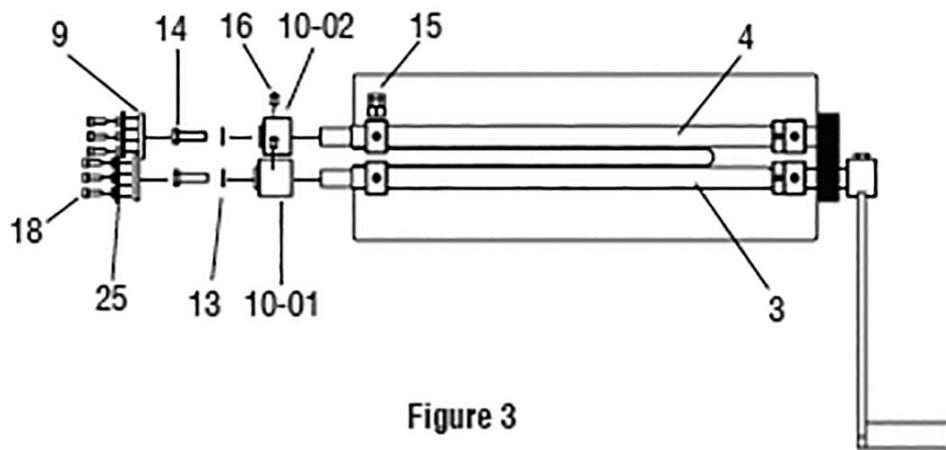


Figure 3

4. Using a wrench, remove the two bolts (14) securing the Cutting Dies (10-01 and 10-02) to the Driving Shaft (3) and Driving Shaft (4). Remove the washers (13).
5. Using a hex key (27), loosen the screws (16) that lock the Cutting Dies (10-01 and 10-02) onto the rollers. See Figure 3.
6. Remove the Cutting Dies (10-01 and 10-02).

INSTALLING BEAD AND FLANGE DIES

1. Select the correct bead or flange dies for the job you are going to do.
2. Slide both dies onto the Driving Shaft (3) and Driving Shaft (4) at the same time (see Figure 4). Ensure that the screws (16) are positioned over the flat surface on the Driving Shaft (3) and Driving Shaft (4).
3. By hand, install the two bolts (14) and washers (13). Tighten the bolts (14) with a wrench.
4. Tighten the two screws (16).

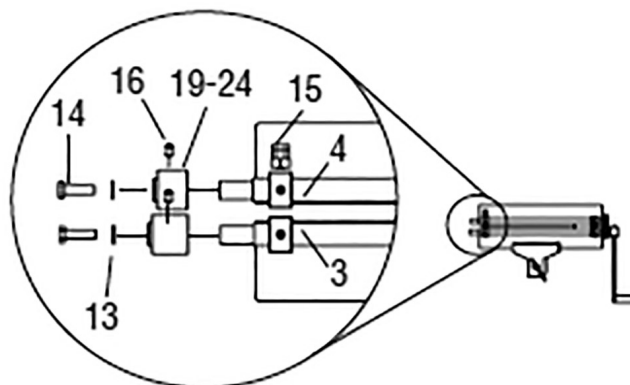


Figure 4

ADJUSTING ROLLER TENSION

1. Adjust the bolt (15) finger tight.
2. Using a wrench, tighten 1 to 3 turns, depending on desired results.

IN USE

It may be helpful if two people operate the Bead Roller depending on the size of the workpiece. One person should guide the metal along the roller while a second person cranks the handle.

Metal forming is an art requires good communication between the person cranking and the one guiding the metal, particularly on corners.

1. Mark your rib, flange pattern, or cut-line on the material.
2. Insert and guide the metal through the dies while cranking the handle (see Figure 5).

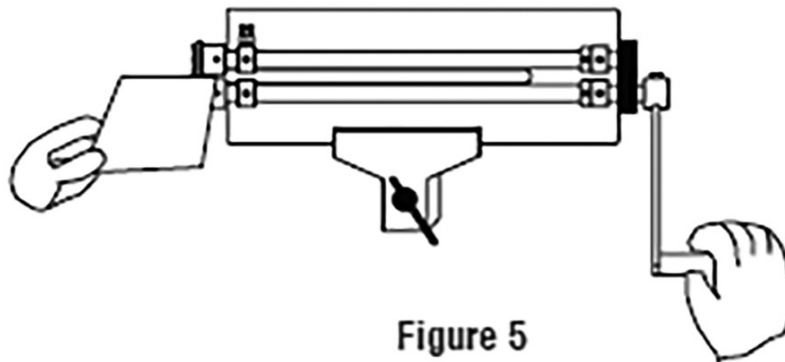
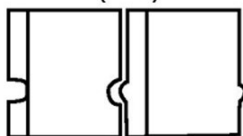


Figure 5

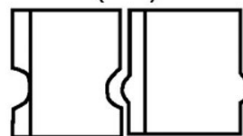
DIES SELECTION GUIDE

Note: Dies are larger than shown in this illustration

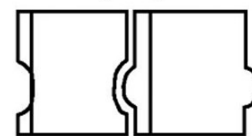
1/4" Half-Round Die
(21)



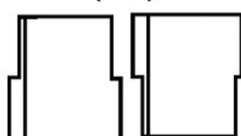
3/8" Half-Round Die
(20)



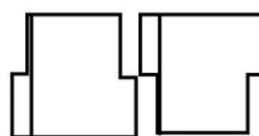
1/2" Half-Round Die
(19)



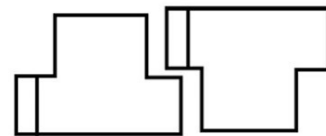
1/16" Flange Die
(24)



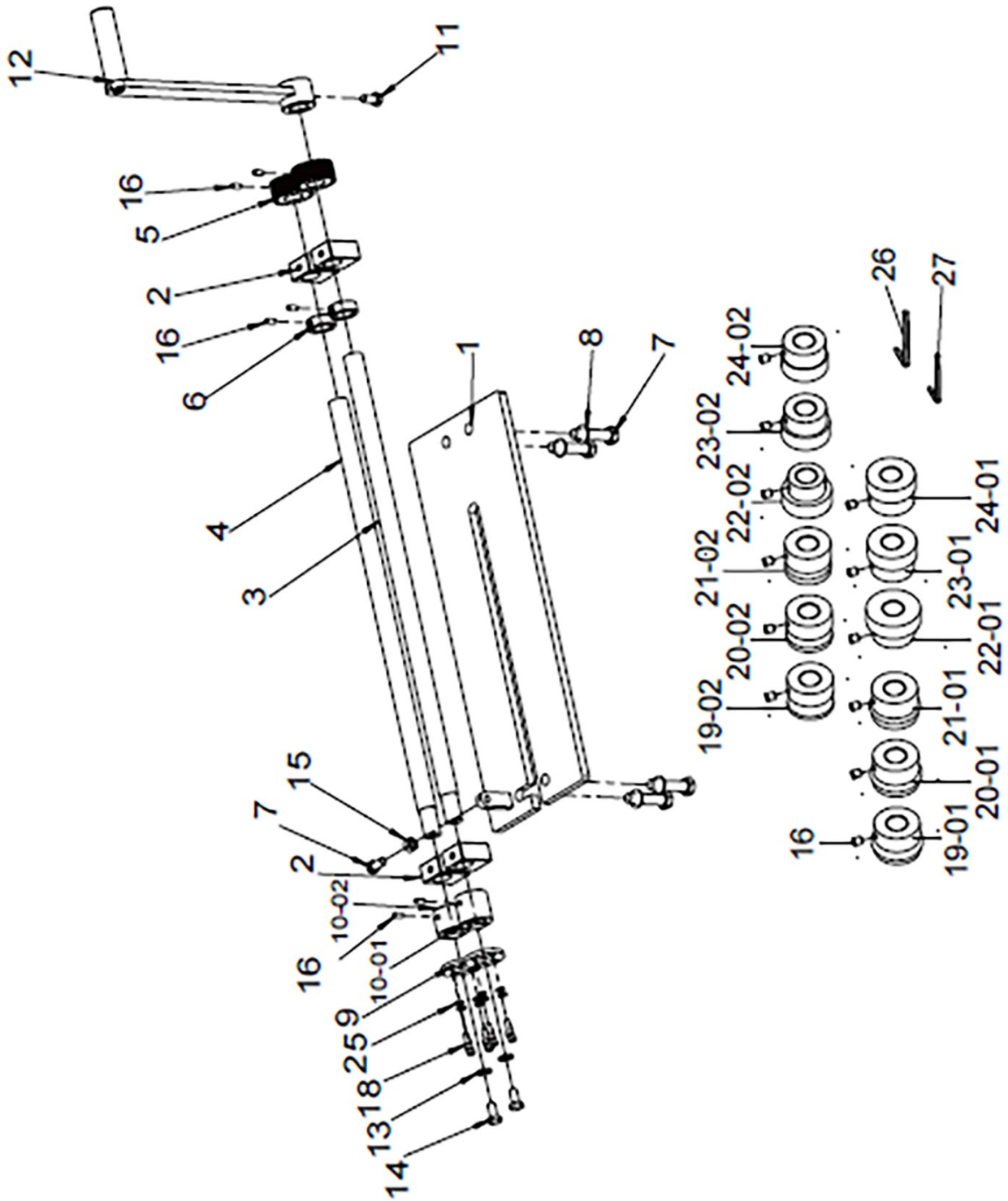
1/8" Flange Die
(23)



1/4" Flange Die
(22)



COMPONENT PARTS



COMPONENT PARTS LIST

1	Base
2	Roller block
3	Driving shaft
4	Driving shaft
5	Gear
6	Collar
7	Bolt M14 x 30
8	Washer 14mm
9	Cutting plate
10-1	Long cutting die
10-2	Short cutting die
11	Bolt M10 x 20
12	Handle
13	Washer 10mm
14	Bolt M10 x 20
15	Bolt M10 x 35
16	Screw M8 x 10

17	Nut M10
18	Screw M6 x 16
19-1	1/2" Half Round Die (Convex)
19-2	1/2" Half Round Die (Concave)
20-1	3/8" Half Round Die (Convex)
20-2	3/8" Half Round Die (Concave)
21-1	1/4" Half Round Die (Convex)
21-2	1/4" Half Round Die (Concave)
22-1	1/4" Flange Die
22-2	1/4" Flange Die
23-1	1/8" Flange Die
23-2	1/8" Flange Die
24-1	1/16" Flange Die
24-2	1/16" Flange Die
25	Spring washer 6mm
26	Hex key 5mm
27	Hex key 4mm

GUARANTEE

This CLARKE product is guaranteed against faulty manufacture for a period of 12 months from the date of purchase. Please keep your receipt as proof of purchase. This guarantee is invalid if the product is found to have been abused or tampered with in any way, or not used for the purpose for which it was intended. Faulty goods should be returned to their place of purchase, no product can be returned to us without prior permission. This guarantee does not effect your statutory rights.

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