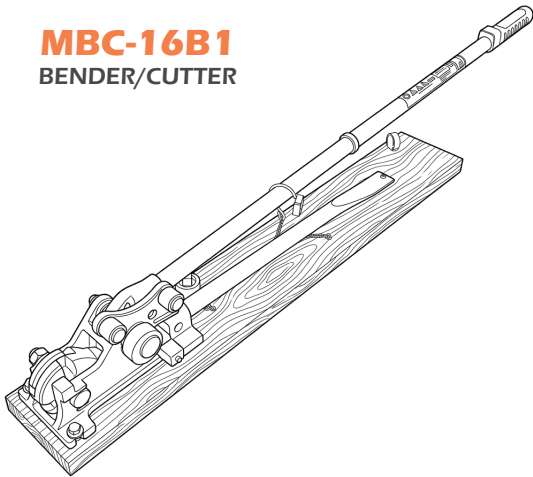


Manual Rebar Bender/Cutter
INSTRUCTION MANUAL

Bend AND Cut Steel Rebar Safely | Up to #5 (16 mm) Grade 60 Rebar

MBC-16B1
BENDER/CUTTER



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About this Product

The MBC-16B1 bender/cutter is a manual tool that enables essential rebar bends and cuts for Grade 60 bar up to #5 (5/8" - 16 mm). This combination tool includes a handle and cam mechanism that provides radial bends up to 90° in a single bend. 180° bends can be accomplished with a second bend, and refined to an exact angle with an optional precision roller for smaller rebar sizes.

Manual Rebar Bender/Cutter Specifications

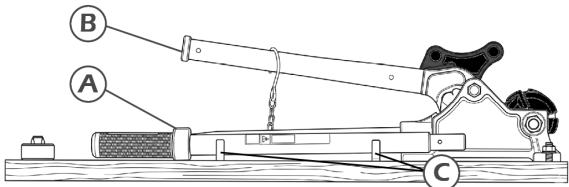
Model No.	MBC-16B1
Maximum Cutting Capacity	#5 (5/8") (16 mm) rebar grade 60
Maximum Bending Capacity	#5 (5/8") (16 mm) rebar grade 60
Bending Capability	0 - 90° (single bend); up to 180° (two steps)
Replacement Jaw Set	#MBC-16RJS - Weight: 7 lbs. (3.2 kg)
Shipping Weight	48.5 lbs. (22 kg) with wood board
Overall Dimensions	57" L x 7.5" W x 10" H (with handle)
Warranty	6 months (includes parts and labor)

Preparation for Use

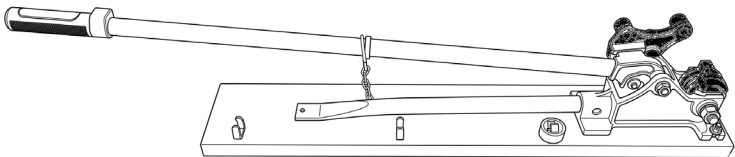
The MBC-16B1 ships fully assembled, and is mounted on a wooden board. The tool handle breaks down into two sections to allow the extended length of the handle to be removed and secured on the mounting board, for storage and transportation.

Attach Handle Extension

- Remove the Handle Extension (A) from the mounting clips (C) on the wooden board
 - Insert the Handle Extension into the the lower handle (B), aligning the spring-loaded lock button with the hole on the lower handle, so that it clicks and is locked into place
 - To remove, depress the lock button, and slide the Handle Extension (A) out of the lower handle arm (B), and place in the clips mounted on the wooden board (C) for transportation and storage



Storage



Ready-to-Use

MBC-16B1 Bending #3, #4, or #5 Grade 60 Rebar

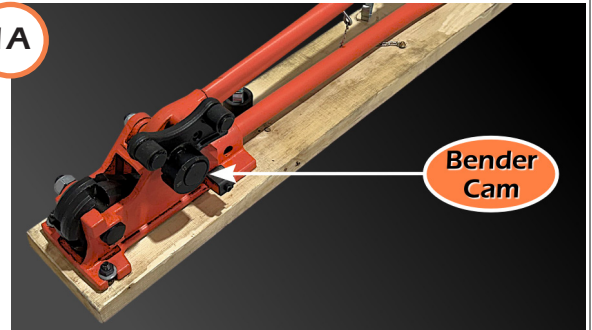
Step 1 Bender Cam (rebar diameter) Adjustment

The MBC-16B1 is designed for bending #3 (10 mm), #4 (13 mm), or #5 (16 mm) Grade 60 rebar. Make sure that the cam adjustment is set for the rebar diameter that you will be bending.

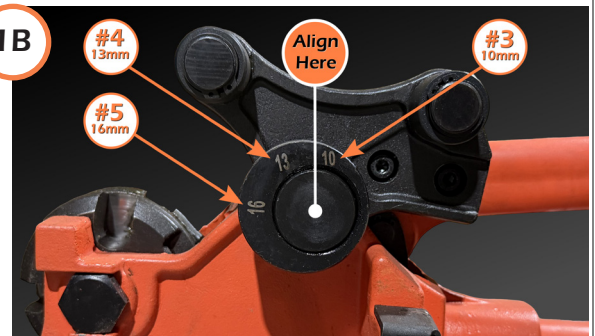
- A. Locate the Bender Cam for rebar size adjustment (figure 1A)
- B. Pull the cam outward to rotate the adjustment for the diameter you will be bending (shown in mm) is in the top, or 12 o'clock position (see figure 1B):

10	=	#3 (3/8" - 10 mm) rebar
13	=	#4 (1/2" - 13 mm) rebar
16	=	#5 (5/8" - 16 mm) rebar

1A



1B



Step 2 Bending Rebar (90° and 180° bends)

Once you've selected the proper Bending Cam diameter, raise the (assembled) tool handle into the upright or 180° position.

- A. Insert the rebar rod in the bending channel between the bending rollers, but below the Bender Cam, as shown.
- B. Apply pressure to the tool handle by pulling downward until the desired 90° bend is complete.

180° Bends

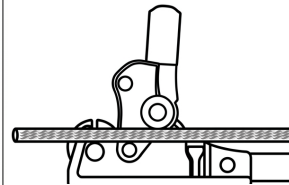
Making a 180° rebar bend requires two steps: 1) Bending the bar to 90°, then 2) Repositioning the 90° bent rod in the bending tool, and pulling the handle to complete the 180° bend.

- C. Reposition the 90° bar between the bending rollers and the bender cam as shown in figure 2C.
 - D. Apply pressure to the bender handle by pulling downward until the 180° bend is complete, with the longer lengths of the bar parallel to each other as shown in figure 2D.
- The bend diameter for a 180° bend using the manual bender/cutter is 2-1/2 inches, or 63.5 mm (see figure 2D).

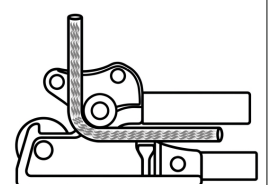
Optional - Completion of Steps 2A through 2D will yield an acceptable 180° bend for most rebar sizes. **A more precise bend may be achieved for #3 (10 mm) and #4 (13 mm) rebar by performing a third bending step:**

- Locate and remove the **Precision Roller** from the mounting board holder, and place it over the bending roller closest to the tool handle (Figure 2E). Repeat the last bend in step 2D to refine the 180° bend.
- The larger precision roller placed as shown in figure 2E will ensure a more precise 180° bend for #3 and #4 rebar.

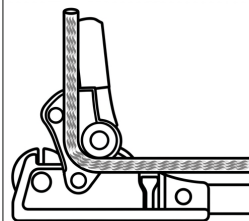
2A



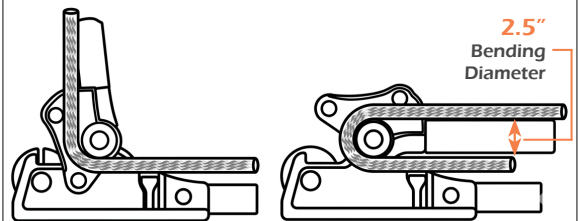
2B



2C



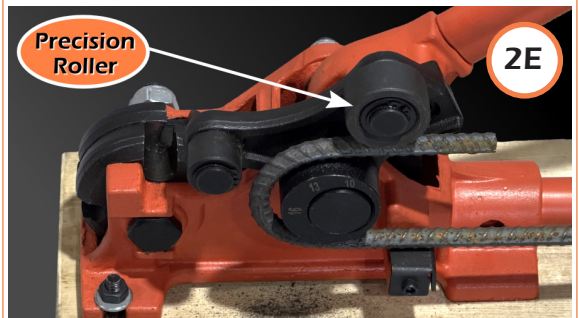
2D



Optional Step - Precision Roller Bend for #3 (10 mm) and #4 (13 mm) Rebar, when bending to 180°

Precision Roller

2E



MBC-16B1 Cutting #3, #4, or #5 Grade 60 Rebar

Step 1

Select proper cutting slot for Rebar size

The MBC-16B1 features two separate cutting “slots” for larger and smaller rebar sizes. Both slots can accommodate a #4 (13 mm) rebar diameter.

- A. Top Cutting Slot:** Larger Rebar - **#5 (16 mm) and #4 (13 mm)** - The top cutting slot is designed for these two sizes. Place the tool handle in the forward and upright position, and place the rebar in the top cutting slot. Ensure that the bar is seated fully into the cutting slot, with the opening in both blades aligned, as shown in figure **1A**.
- B. Lower Cutting Slot:** Smaller Rebar - **#3 (10 mm) and #4 (13 mm)** - The lower cutting slot is designed for these two sizes. Place the tool handle in the forward and upright position, and place the rebar in the lower cutting slot. Ensure that the bar is seated fully into the cutting slot, with the opening in both blades aligned, as shown in figure **1B**.



Avoid Personal Injury **Work Safely**

Bending and cutting with this tool requires coordination and moderate strength. Carefully position your feet to avoid falls or injury; use leverage from the large tool handle to aid in completing rebar bends and cuts.

Step 2

Cutting Motion

With the rebar length firmly placed in either the top or lower cutting slot, use a firm steady push to move the tool handle downward, in the position of the arrow, as shown in figure 2.

Be cautious of rebar pieces that could move when the cut is complete.



Cut Single Bars Only

This tool is not designed to cut more than a single bar at a time. Do **not** attempt to use both cutting slots simultaneously, as cutting would be extremely difficult, and may result in serious injury.



Safety Attire

Use work gloves and safety glasses at all times when using the **MBC-16B1** manual rebar Bender/Cutter.

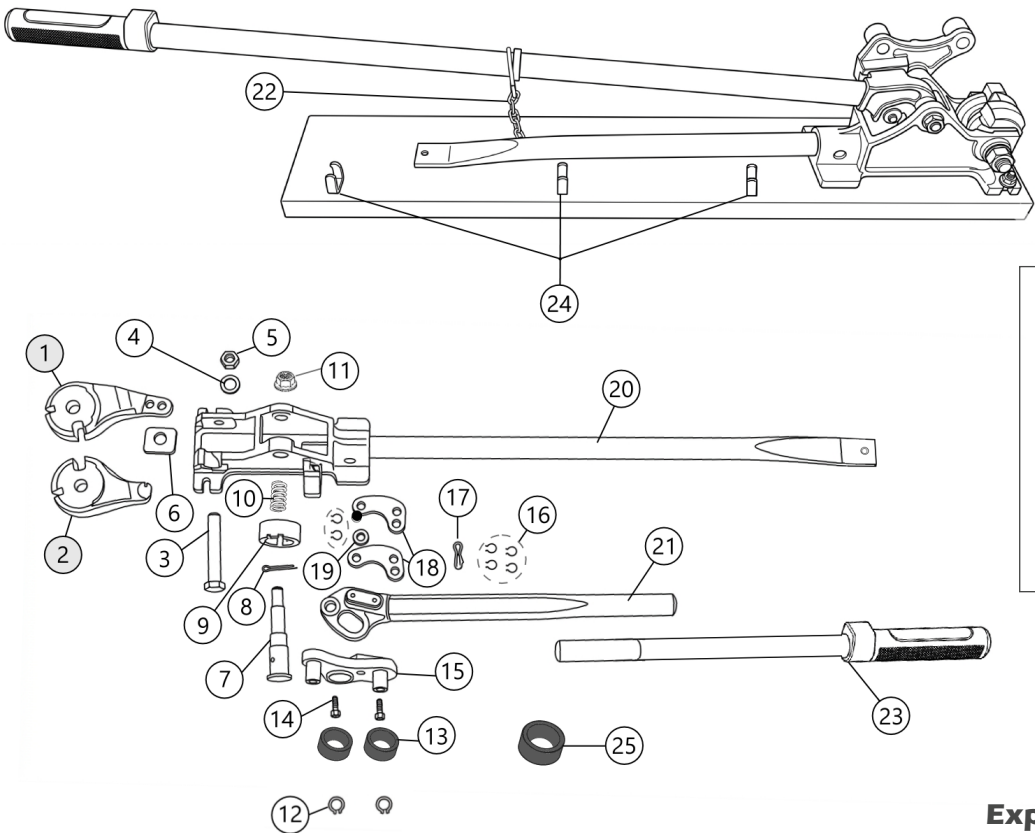
General Maintenance

Periodically lubricate all moving parts of the MBC-16B1 manual rebar bender/cutter. Keep the unit clean and free of debris and dust in moving parts to maintain safety and performance.

Cutting blades (#MBC16RJS) should be replaced immediately if cutting becomes noticeably more difficult after extended periods of regular use. Any broken or damaged parts should be immediately replaced; do not attempt to use the tool if parts are missing or broken.

Contact **Customer Service at (800) 992-3833** if parts are damaged or require replacement to ensure long lasting value and performance of this tool, the Parts Guide on Page 4 may be used as a reference when ordering.

MBC-16B1 Parts Guide



Expanded Parts View

Parts Listing

#	Part Number	Description	QTY	#	Part Number	Description	QTY
1	MBC16RJS	Movable Blade (R)	1 Pair (Replacement Blades)	14	MBC16-15	Hex Head Bolt	2
2		Movable Blade (L)		15	MBC16-16	Bender Bracket	1
3	MBC16-03	Blade Center Bolt	1	16	MBC16-17	Snap Ring - Inner Pin	6
4	MBC16-04	Center Bolt Washer	1	17	MBC16-18	Inner Pin	3
5	MBC16-05	Center Bolt Lock Nut	1	18	MBC16-19	Lever Plate	2
6	MBC16-06	Spacer Plate	1	19	MBC16-20	Inner Roller	1
7	MBC16-07	Bender Shaft	1	20	MBC16-21	Main Frame	1
8	MBC16-08	Roll Pin	1	21	MBC16B1P-22	Handle (lower)	1
9	MBC16-09	Bender Cam	1	22	MBC16-23	Chain & Ring	1
10	MBC16-10	Cam Spring	1	23	MBC16B1P-RH	Replacement Handle	1
11	MBC16-11	Bender Shaft Lock Nut	1	24	MBC16-27	Handle & Roller Clips	3
12	MBC16-12	Snap Ring - Roller Shaft	2	25	MBC16-28	Precision Roller	1
13	MBC16-13	Large Bending Rollers	2				



BN Products-USA™

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 (800) 992-3833 | www.BNProducts.com

More Details:

Detailed How-To video on the
 basic functions of the MBC-16B1
 Manual Rebar Bender / Cutter:

