MODEL T23113
COMPACT BENDER
INSTRUCTIONS

Introduction

The Model T23113 Compact Bender is designed to efficiently make 1"-3" diameter bends in round or square bar stock up to 5/8" thick, or in flat stock up to 5/16" thick x 2" wide.

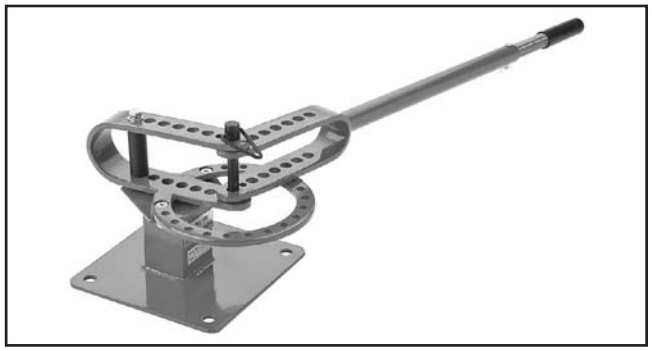

Figure 1. Model T23113 Compact Bender.

Inventory

The following is a description of the main components shipped with your machine. Lay the components out to inventory them.

Main Components (Figure 2)	Qty
A. Base	1
B. Yoke Arm	1
C. Handle	1
D. Bending Bracket	1
E. Bending Dies 1", 1 1/4", 1 1/2", 1 3/4", 2", 2 1/2", 3"	1 Each
F. Stop Pin M10 X 16	1
G. Block Support Pin M9 X 11	1
H. Stop Block	1
I. Long Spacer M10 x 69	1
J. Angle Bending Block	1

If you need help with your new compact bender, call our Tech Support at: (570) 546-9663.

Hardware (Not Shown)	Qty
• Hex Bolt M10-1.5 x 120	1
• Flat Head Screws M10-1.5 x 35	2
• Lock Washers 10mm	3
• Flat Washers 10mm	3
• Hex Nuts M10-1.5	3
• Clevis Pin	1
• Spring Cotter Pin	1
• Long Hinge Pin M15 x 100	2
• Short Hinge Pin M15 x 75	1
• Short Spacers M11 x 6	3

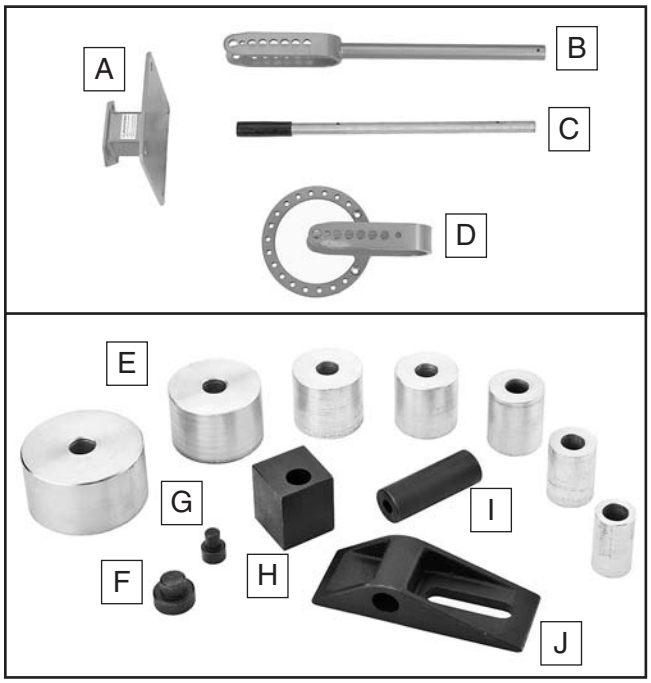

Figure 2. Main component shipping inventory.

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Assembly

1. Attach the bending bracket to the base using the fasteners and components shown in **Figure 3**.

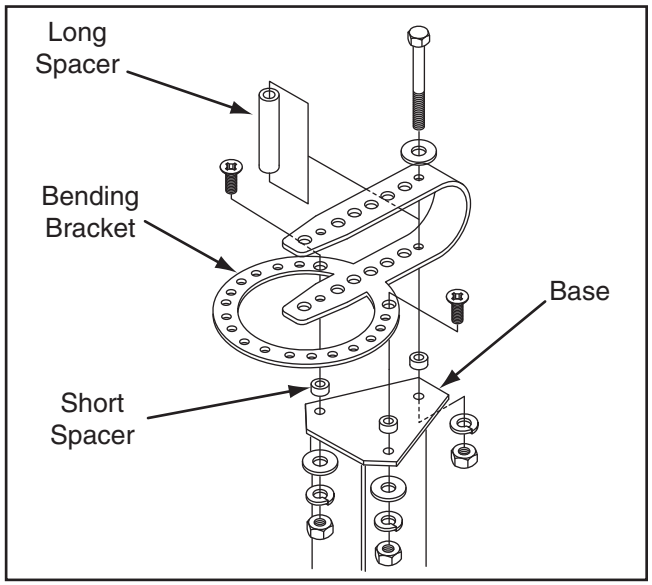


Figure 3. Attaching bending bracket to the base schematic.

2. Attach the yoke arm to the bending bracket with one of the long hinge pins (see the parts diagram on **Page 4** for assembly reference).

3. Connect the handle to the yoke arm with the clevis pin and the spring cotter pin.

4. Securely bolt the bender assembly to a workbench or table that is capable of supporting the weight and dynamic forces when operating the bender.

⚠CAUTION

If the bender assembly should unexpectedly slip under the forces of a bending operation, serious personal injury could result. Always make sure the bender assembly is firmly secured to a flat surface that can support the weight and forces during operation.

⚠WARNING

Wear safety glasses when using the compact bender to prevent eye injury from potential flying metal parts.

Basic Bending Operations

The Model T23113 is capable of many bending operations that are beyond the scope of this instruction sheet. If you have never used this type of machine or equipment before, we strongly recommend that you read books, review industry trade magazines, or get formal training before beginning any projects.

To perform basic radius bending:

1. Select the bending die that most closely matches the radius you wish to bend, then install it as the center die on the hinge pin that attaches the yoke arm to the bending bracket (see the illustration in **Figure 4**).

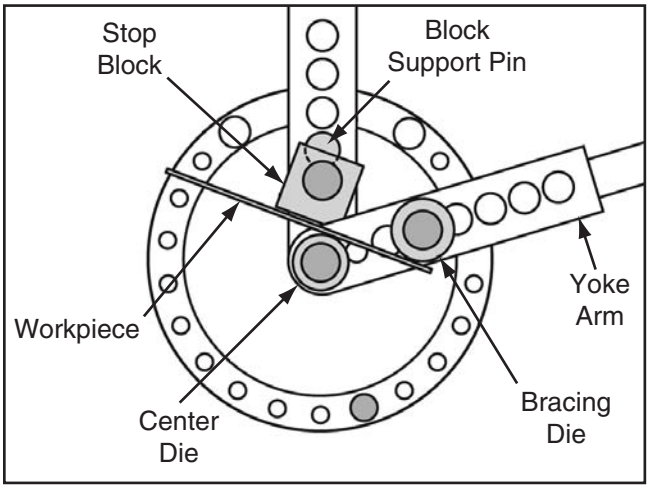


Figure 4. Basic radius bending setup.

2. Mount the block support pin and the stop block with the remaining long hinge pin.

Note: *Make sure the offset hole of the stop block is farthest from the center die to ensure that the block does not turn during the bending operation.*

3. Select a bending die that will secure the workpiece against the center die without the workpiece slipping, then install it as the bracing die with the short hinge pin. Make sure the bracing die is as close to the workpiece as possible.

4. Insert the workpiece between the dies and stop block, as illustrated in **Figure 4**.

5. To limit the bending range, install the stop pin in the appropriate hole in the outer ring of the bending bracket, as illustrated in **Figure 5**.

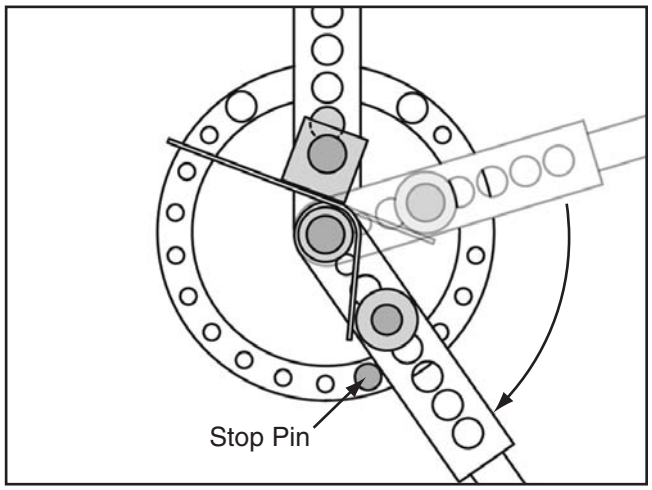


Figure 5. Making the basic radius bend.

6. Bend the workpiece by pulling the handle towards you, as illustrated in **Figure 5**.

To perform a basic angle bend:

1. Mount the block support pin and the angle bending block onto the bending bracket, as illustrated in **Figure 6**.

   Make sure the block support pin is mounted as close to the angle bending block as possible.

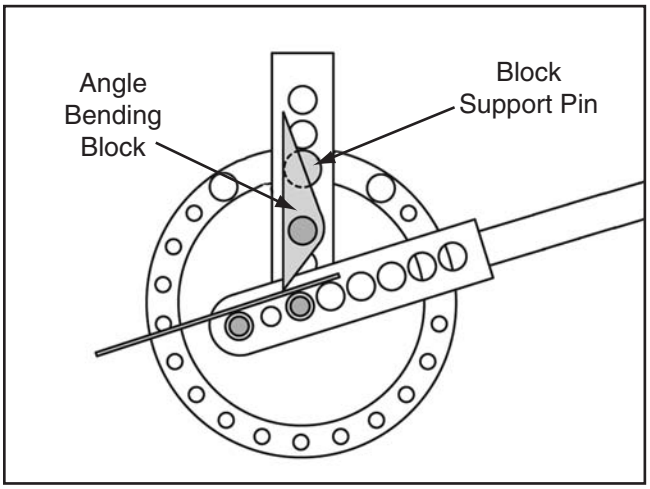


Figure 6. Basic angle bending setup.

2. Depending upon the desired angle and the relationship between the angle bending block and the yoke arm, select two dies that will properly brace the workpiece against the angle bending block, then install them, as illustrated in **Figure 7**.

   Note: *The bracing die and the hinge pin that secures the yoke arm must be inserted at least in the third hole of the yoke arm. Otherwise, you will not be able to get enough leverage to properly make the angle bend.*

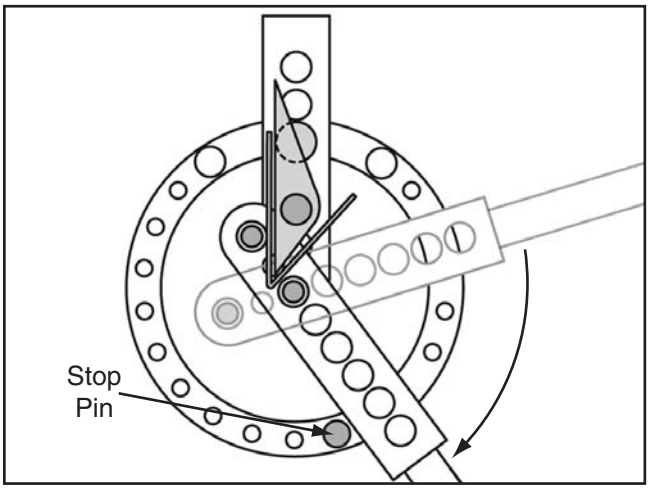
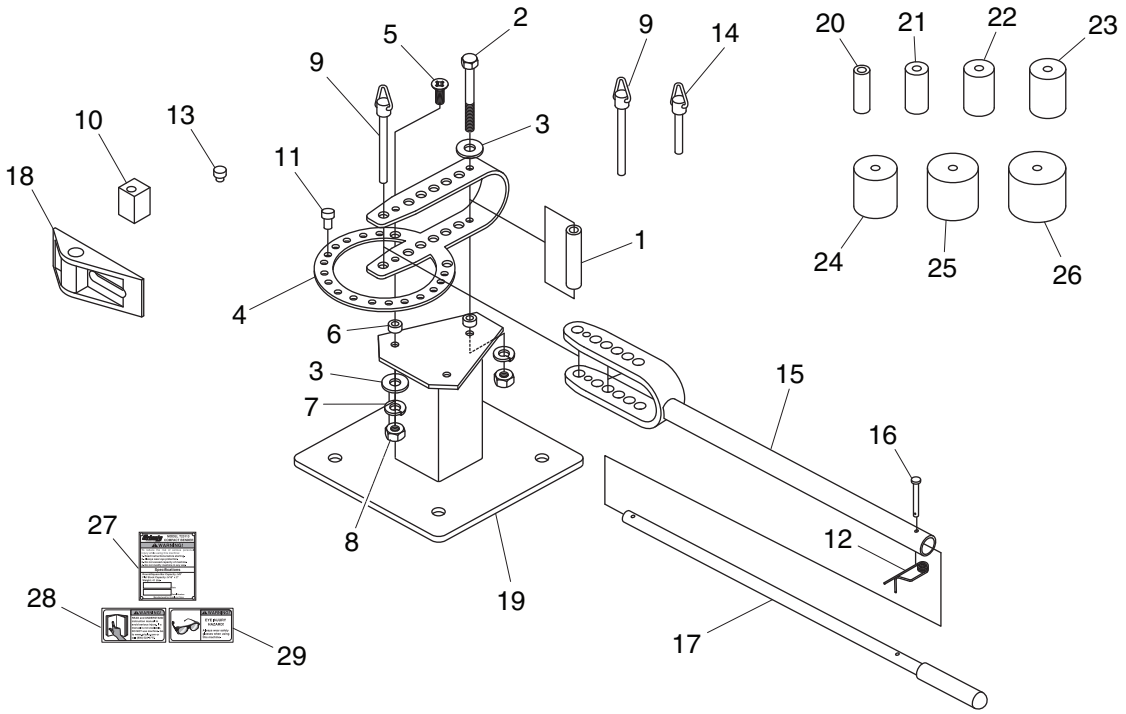


Figure 7. Making the basic angle bend.

3. To limit the bending range, install the stop pin in the appropriate hole in the outer ring of the bending bracket, as illustrated in **Figure 7**.

4. Pull the handle toward you to make the bend.

Parts



REF	PART #	DESCRIPTION
1	PT23113001	LONG SPACER M10 X 69
2	PB111M	HEX BOLT M10-1.5 X 120
3	PW04M	FLAT WASHER 10MM
4	PT23113004	BENDING BRACKET
5	PFH24M	FLAT HD SCR M10-1.5 X 35
6	PT23113006	SHORT SPACER M11 X 6
7	PLW06M	LOCK WASHER 10MM
8	PN02M	HEX NUT M10-1.5
9	PT23113009	LONG HINGE PIN M15 X 100
10	PT23113010	STOP BLOCK
11	PT23113011	STOP PIN M10 X 16
12	PT23113012	SPRING COTTER PIN
13	PT23113013	STOP BLOCK SUPPORT PIN M9 X 11
14	PT23113014	SHORT HINGE PIN M15 X 75
15	PT23113015	YOKE ARM

REF	PART #	DESCRIPTION
16	PT23113016	CLEVIS PIN
17	PT23113017	HANDLE
18	PT23113018	ANGLE BENDING BLOCK
19	PT23113019	BASE
20	PT23113020	BENDING DIE 1"
21	PT23113021	BENDING DIE 1-1/4"
22	PT23113022	BENDING DIE 1-1/2"
23	PT23113023	BENDING DIE 1-3/4"
24	PT23113024	BENDING DIE 2"
25	PT23113025	BENDING DIE 2-1/2"
26	PT23113026	BENDING DIE 3"
27	PT23113027	MACHINE ID LABEL
28	PLABEL-12D	READ MANUAL LABEL
29	PLABEL-11D	EYE INJURY HAZARD LABEL