

# COMPACT BENDER OPERATION MANUAL





Read and understand all instructions before using this tool. The operator must follow basic precautions to reduce the risk of personal injury and/or damage to the equipment.

### **HAZARD DEFINITIONS**

Please familiarize yourself with the hazard notices found in this manual. A notice is an alert that there is a possibility of property damage, injury or loss of life if certain instructions are not followed.

DANGER! This notice indicates an immediate and specific hazard that will result in severe personal injury or loss of life if the proper precautions are not taken.

WARNING! This notice indicates a specific hazard or unsafe practice that could result in severe personal injury or loss of life if the proper precautions are not taken.

CAUTION! This notice indicates a potentially hazardous situation that may result in minor or moderate injury if proper practices are not taken.

NOTICE! This notice indicates that a specific hazard or unsafe practice will result in equipment or property damage, but not personal injury.



## **WORK AREA**

- Operate in a safe work environment, Keep your work area clean, well-lit and free of distractions. Place lights so you are not working in a shadow.
- 2. Keep anyone not wearing the appropriate safety equipment away from the work area.
- 3. Store unused tools properly in a safe and dry location to prevent rust or damage. Lock tools away and keep out of the reach of children.

## **Usage**

1. Your new Compact Bender is designed to make bends in flat, square or round solid metal. It may be used to create sign letters, anchor bolts, U bolts, pipe clamps, handles, and more. It is light enough to be used as a portable bender on trucks or trailers.

You will need this manual for the safety instructions, operating procedures.

Maintenance procedures, trouble shooting, parts list.



#### 2. Main technical specification

Model	YP-38	YP-9	
Capacity of Mild	5/16" × 1-1/4" & 1/4" × 2"	5/16" × 1-1/4" & 1/4" × 2"	
Steel	8mm × 32mm & 6mm × 50mm	8mm × 32mm & 6mm × 50mm	
Bending Angle	0-200°	0-200°	
Bending Dies	1", 1-1/4", 1-1/2", 1-3/4", 2", 2-1/2", 3"	1", 1-1/4", 1-1/2", 1-3/4", 2", 2-1/2", 3"	
	25, 32, 38, 45, 50, 63, 76mm	25, 32, 38, 45, 50, 63, 76mm	

#### 3. Installation and caution

#### 3.1 Installation

- 3.1.1 Please check whether the part of this machine are fully equipped and not damaged according to the parts list or part figure.
- 3.1.2 Please leave plenty room around the machine for your easy operating, in order to avoid injury.

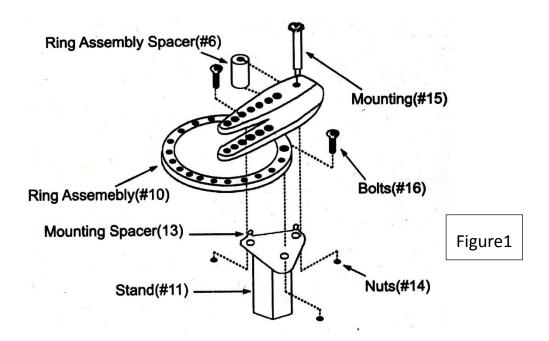
#### 3.2 Caution

- 3.2.1 Before packing this machine tool, antirusting agents are put on it, so when you are getting rid of the kind of rust inhibitor, you can unset the yellow coat with varnish diluent and paint flux for machine oil.
- 3.2.2 Please read the manual before operation and make yourself understand its structure and principle completely.
- 3.2.3 Safety goggles and the other safely devices should be worn when working on this machine. Do not wear loose fitting clothing.
- 3.2.4 Please don't operate the material width and thickness than table list max.

  Range.
- 3.2.5 When you move, install, clean and adjust the machine, you must keep away from the bender area.



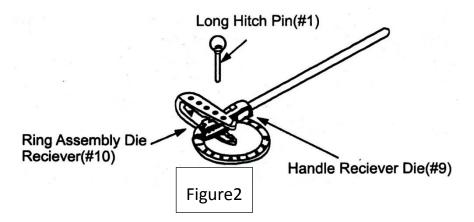
- 3.2.6 Keep your hands away from the die when you are working on it.
- 3.2.7 Focus your complete attention on the machine and do not operate when other people are near by the machine.
- 3.3 Assembly
- Step 1: Bolt the STAND (#11) to a stable surface.
- Step 2: Place the three mounting spacers (#13) over the three holes on the top of the STAND as shown in Figure 1
- Step 3: Place the RING ASSEMBLY/DIE RECEIVER (#10) over the three MOUNTING SPACERS and secure using the two BOLTS (#16) and two NUTS (#14)
- Step 4: Place the RING ASSEMBLY SPACER (#6) between the back two holes of the RING ASSEMBLY and secure the entire assembly to the STAND using the MOUNTING BOLT (#15) and remaining NUT (#14)



Step 5: Place the HANDLE DIE RECEIVER (#9) between the ASSEMBLY SPACER DIE

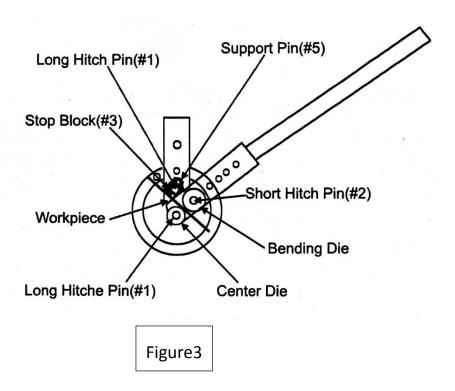


RECEIVER and secure in place using the LONG HITCH PIN (#1) as shown in Figure 2



#### 4. Operation

Step 1: The Stop Block (#3) holds the workpiece in place while the selected bending DIE (#17-#23) on the HANDLE (#9) bends it around the LONG HITCH OIN (#1) or selected center DIE as shown in Figure 3. The workpiece will bend in the shape of the bending DIE around the LONG HITCH PIN (or center DIE). See Figure 3.





- Step 2: The STOP BLOCK and center DIE are secured using two LONG HITCH PINS.

  The bending DIE is secured one SHORT HITCH PIN (#2). The center DIE is always secured in the outer most holes of both DIE RECEIVERS.
- Step 3: The SUPPORT BLOCK (#5) is used to raise the level of the STOP BLOCK so that it is even with the center DIE.
- Step 4: The STOP BLOCK must be positioned in one of four ways. See Figure 4.

  Always position the STOP BLOCK so that it is as close as possible to the center DIE, while still allowing for the thickness of the stock.

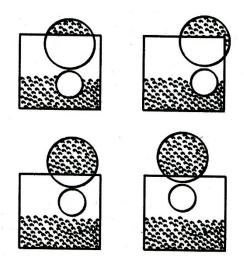


Figure 4 – Position of Stop Block

- Step 5: The stock must be positioned between the center DIE and both the bending DIE and a flat face of the STOP BLOCK.
- Step 6: The STOP BLOCK & SUPPORT PIN must be moved away from the center die to accommodate thicker materials, and closer for thinner stock.
- Step 7: The bending DIE is usually secured in the third bole in the of the HANDLE DIE RECEIVER, though this may depending upon the thickness of your stock.



The Right Angle Bending Attachment

Attach the RIGHT ANGLE BENDING ATTACHEMENT (#7) as shown in Figure 5.

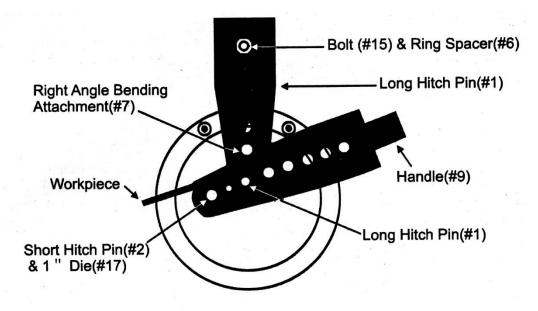


Figure 5 – Using Angle Bending

- 1. If the HANLE (#9) will hit the stock due to its length, position the stock to the left of the handle.
- 2. HANDLE is always pulled clockwise.
- 3. Draw Lines with chalk on your stock at every desired interval prior to bending.
- 4. If you are making two or more bends. On the same piece of stock, add an additional 1/8"accommodate distance lost due to the bending.
- 5. Position chalk line on the edge of the RIGHT ANGLE BENDING ATTACHMENT so that only 1/2 of the line is visible.
- 6. Bend to the desired angle. Use a protractor for precise measurements.
- 7. For complex operations, use cheaper stock as test material before using more expensive materials.



#### Adjustable Stop

Step 1: The ADJUSTABLE STOP (#4) is used when engaging in operation that require the angle to be bent repetitively.

Step 2: Set up the Bender as described above.

Step 3: Using a protractor, determine the desired bending angle.

Step 4: Install the ADJUSTABLE STOP in the required hole of the RING ASSEMBLY (#10) achieve the determined angle.

#### 5. Maintenance

Regular lubrication will help lengthen the life of the your bending brake.

#### 6. Parts list

Part#	Description	Quantity
1	Long Hitch Pin	2
2	Short Hitch Pin	1
3	Square Stop Block	1
4	Stop	1
5	Support pin	1
6	Ring Assembly Spacer	1
7	Right Angle bending Attachment	1
8	Inner handle	1
9	Outer Handle/Die Receiver	1
10	Ring Assembly/Die Receiver	1
11	Stand	1
12	Handle Pin and Hair Clip	1
13	Mounting Spacer	3
14	3/8"Nut	4
15	$3/8" \times 5-1/4"$ Mounting Bolt	1
16	$3/8" \times 7/8"$ Mounting Bolt	2
17	1"Die	1
18	1-1/4" Die	1
19	1-1/2" Die	2
20	1-3/4" Die	1
21	2" Die	1



22	2-1/2" Die	1
23	3" Die	1
24	3/8" Washer	2
25	3/8" × 1-3/8" Mounting Bolt	1

## 7. Assembly diagram

