

# MODEL W-2418

# HAND BRAKE



## ASSEMBLY & OPERATING INSTRUCTION

## **SPECIFICATION**

<b>Model</b>	<b>Working length</b>	<b>Sheet thickness</b>	<b>Brake angle</b>
<b>W-2418</b>	<b>610mm (24")</b>	<b>1.2mm</b>	<b>0-135 degree</b>

## **SAVE THIS MANUAL**

You will need the manual for the safety warning and precautions, assembly instructions, operating and maintenance procedures, parts list and diagram. Put them in a safe and dry place for future reference.

## **IMPORTANT SAFETY WARNING & PRECAUTIONS**

**WARNING:** When using tool, basic safety precautions should always be followed to reduce the risk of personal injury and damage to equipment.

Read all instruction before using this tool!

1. Keep work area clean. Cluttered areas invite injuries.
2. Observe work area conditions, Don't use machine in damp or wet locations. Don't expose to rain. Keep work area well lighted.
3. Keep children away. Children must never be allowed in the work area. Don't let them handle machines, tools, or extension cords.
4. Store idle equipment. When not in use, tools must be stored in a dry location to inhibit rust. Always lock up tools and keep out of reach of children.
5. Don't force the machine or tool. It will do the job better

and more safely at the rate top which it was intended.

6. Use the right tool for the job. Don't force a small tool or attachment to do the work of a larger industrial tool. Don't use this tool for a purpose for which was not intended.

7. Dress properly. Don't wear loose clothing or jewelry as they can be caught in move parts. Protective, electrically non-conductive cloths and non-skid footwear are recommended when working. Wear protective hair covering to contain long hair, preventing it from getting catch in the machinery.

8. Use eye and ear protection. Always wear ISO approved impact safety goggles. Wear a full face shield if you are producing metal filings.

9. Don't over reach. Keep proper footing and balance at all times. Don't reach over or across running machines.

10. Maintain tools with care. Keep tools sharp and clean for better and safer performance. Follow instruction for lubricating and changing accessories. Keep handles dry, clean and free from oil and grease.

11. Check for damaged parts. Before using any tool, any part that appears damaged should be carefully checked to determine that it will operate properly and perform its intended function. Check for alignment and binding of moving parts; any broken parts or mounting fixtures; and any other condition that may affect proper operation. Any part that is damage should be properly repaired or replaced

by a qualified technician.

12. Stay alert. Watch what you are doing. Use common sense. Don't operate any tool when you are tired.

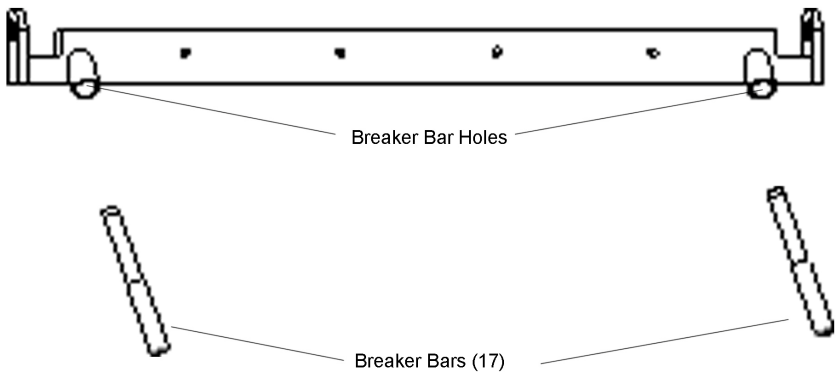
13. Check damaged parts. Before using any tools or any parts that damaged should be carefully checked to determine that will operate properly and perform its intended function. Check for alignment of moving parts and blinding of moving part, breakage of parts mounting and other conditions that may affect its operation. Any parts that damaged should be properly repaired or replaced by an authorized service center unless indicated elsewhere in the instruction manual.

14. Replacement parts and accessories. When servicing use only identical replacement parts. Only use accessories intended for use with this tool.

15. Don't operate tool if under the influence of alcohol or drug. Read warning labels on prescriptions to determine if you judgment or reflexes are impaired while taking drug. If there is any doubt, don't operate the machine.

## **ASSEMBLY**

Your new sheet metal bender comes completely assembled. All that need to be done is to screw the two bending levers(17) into the holes in the breaker bar(18). Refer to the diagram belows for detail.



## OPERATION

**WARNING!** Do not operate the sheet metal bender unless it has been either securely clamped in place or mounted on a bench.

## ANGLE BENDING

Note: see diagram below for details!

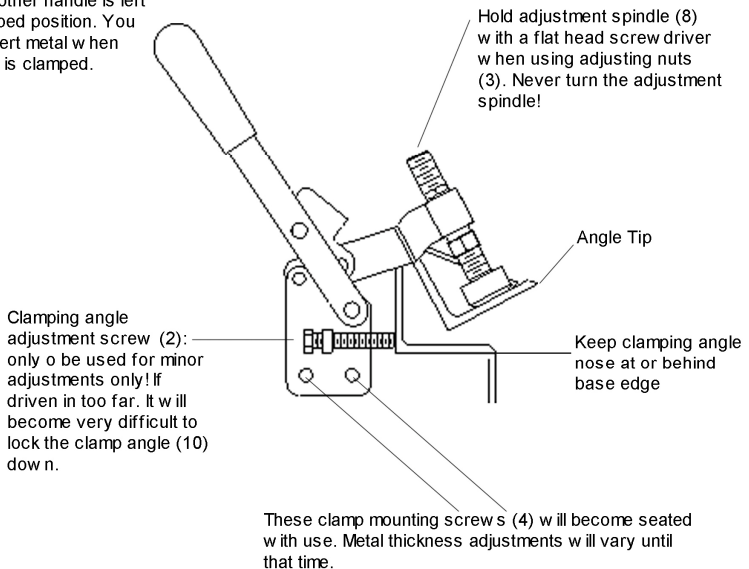
1. Open the clamps(1) and place your metal underneath the clamping angle(10). The metal will be bend at the tip of the angle. This means if you want your bend to be away from the edge of the material that amount should extend out from the angle's tip.

Notes: a. Place thicker material towards once clamp as opposed to centering them.

b. When inserting metal, you only need to open one clamp.

2. Pull clamp's levers forward until you feel them snap into place. If they do proceed with step 4. Otherwise go to step 3.
3. To adjust the clamps to allow them to snap into place. First release the clamp if still in closed position. Hold the adjustment spindle (8) with a flat-head driver. Screw the adjusting nuts (3) (but not the spindle) clockwise to adjust for thicker metals counter clockwise for thinner.
4. When material is properly clamped. Lift the bending levers(17) to form the angle you desire. Use a protractor or other measuring tool to ensure accuracy.

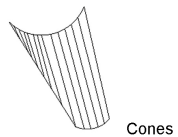
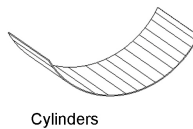
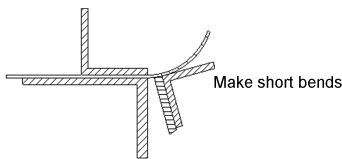
Note that the clamping handle (1) will not rock back when one or the other handle is left in the clamped position. You can still insert metal when one handle is clamped.



## RADIUS BENDING

Note: see figures below for detail

1. Radius bending is done by making a series of small. Closely spaced angles.
2. If you cannot get bends close enough together for your needs, remove the front breaker angle(18). This will allow very tight tolerances. But will decrease the bending capacity.
3. For cones, simply move one side of your stock out further than the other every time you bend.



## PAN FORMING

Notes: a. Keep lip under 1"

b. Use material lighter than 20 gauge

c. Do not engage in long production runs

1. Pre-measure and cut your material before bending. Notch corners according to the desired finish height(See figure 1 as below)
2. Insert, clamp and bend one side according to the angle bending instructions as above.

3. Rotate material counterclockwise. Allow your completed side to extend just beyond the clamping angle clearing it (see figure 2 as below) from side.
4. Repeat step 3 for third side
5. Rotate to final side and insert with one finished side clearing the clamping angle. (note: your formed sides will be on the outside of the bender.) Before bending tap one corner nearer to the middle of the machine(see figure 3 as below). This will allow the materials to clear the clamping angle when raised from side.
6. Use a low quality gauge block or a piece of wood tap material back into place.

Figure 1  
Notch  
Material.

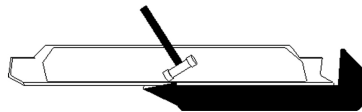


Figure 3  
Tap the corner

Figure 2  
Allow completed  
side to extend

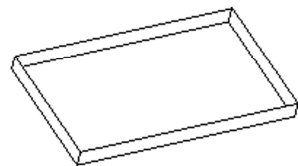


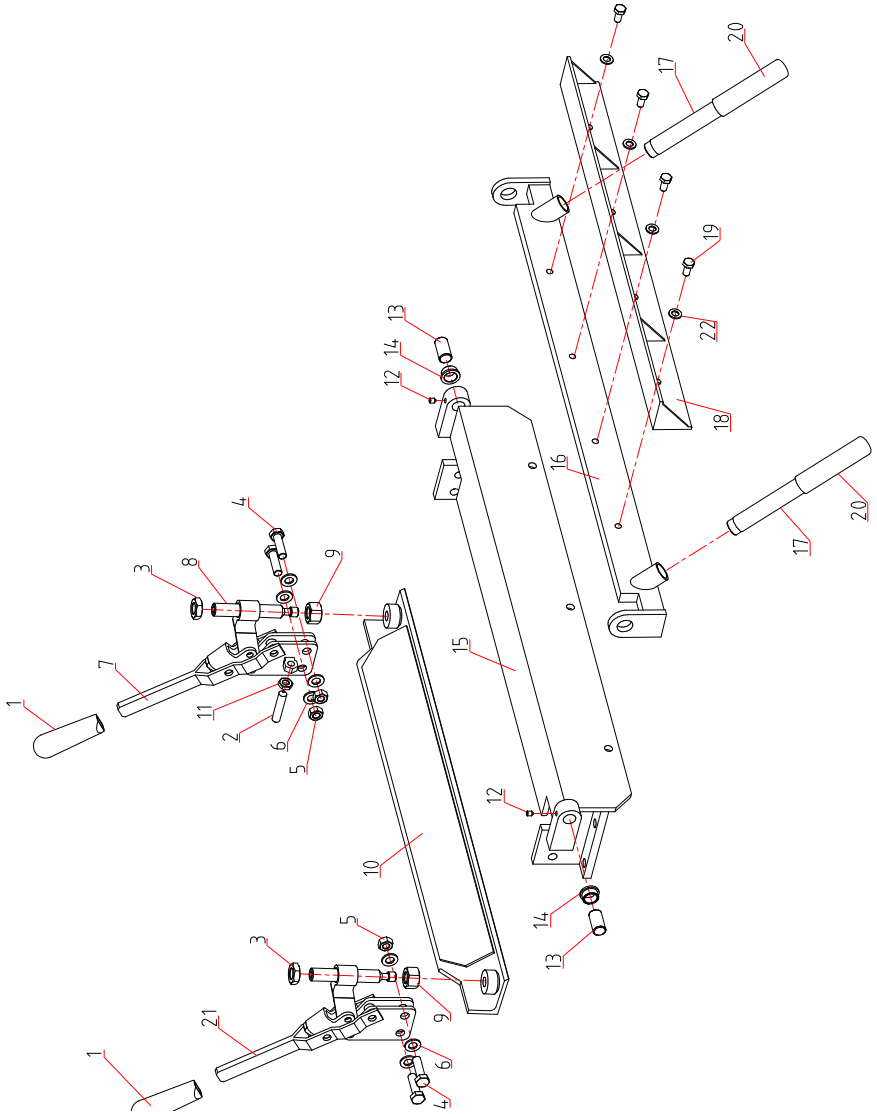
Figure 4  
Completed pan



## PARTS LIST

Item#	description	qty	Item#	description	qty
1	Handle Grip	2	12	Screw	2
2	Screw	2	13	Shaft	2
3	Nut	2	14	Bushing	2
4	Bolt	4	15	Body	1
5	Nut	4	16	Breaker Bar	1
6	Washer	8	17	Bending Levers	2
7	Right of the hold-down mechanism	1	18	Steel Angle	1
8	Bolt	2	19	Bolt	4
9	Nut	2	20	Handle Grip	2
10	Clamping Angle	1	21	Left of the hold-down mechanism	1
11	Nut	2	22	Wahser	4

# ASSEMBLY DRAWING



**Note :** This manual is only for your reference. Owing to the continuous improvement of the machines, changes may be made at any time without obligation on notice.