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S249 PB-24

**HAND OPERATED
BENDING BRAKE**

OPERATION & PARTS MANUAL

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S249 PANBRAKE PB-24 CHINA

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MODEL W1x305B(12")

MODEL W1x610B(24")

HAND BENDING BRAKE

ASSEMBLY & OPERATING
INSTRUCTION

1 SAVE THIS MANUAL

You will need the manual for the safety warnings and precautions, assembly instructions, operating and maintenance procedures, parts list and diagram.

2 USAGE

This machine is suitable for processing carbon steel plate with thickness no more than 1mm, with width no more than 305mm(12") or 610mm(24") and other plate materials, such as non-ferrous metal, etc. with similar thickness.

3 MAIN TECHNICAL SPECIFICATION

- 3.1 Steel capacity: 1mm (20 Gauge) sheet metal
- 3.2 Width capacity: 305 mm (12"), 610 mm (24")
- 3.3 Working height : 230 mm (9")
- 3.4 Overall dimensions: Model 12": 475x280x365mm($18\frac{11}{16}$ "x11"x $14\frac{3}{8}$ ")
Model 24": 780x280x365mm($30\frac{11}{16}$ "x11"x $14\frac{3}{8}$ ")
- 3.5 Weight: Model 12": 27 kgs (70 lbs)
Model 24": 42 kgs (110 lbs)

4 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!

- 4.1 Keep work area clean. Cluttered areas invite injuries.
- 4.2 Observe work area conditions. Do not use machine in damp or wet locations. Don't expose to rain. Keep work area well lighted.
- 4.3 Keep children away. Children must never be allowed in the work area. Don't let them handle machines, tools, or extension cords.
- 4.4 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.
- 4.5 Do not force tool. It will do the job better and more safely at the rate for which it was intended. Do not use inappropriate attachments in an attempt to exceed the tool capacity.
- 4.6 Use the right tool for the job. Do not attempt to do the work of a larger industrial tool. There are certain applications for which this tool was designed. Do not modify this tool and do not use this tool for a purpose for which it was not intended.
- 4.7 Dress properly. Do not wear loose clothing or jewelry as they can be caught in moving parts. Protective, electrically non-conductive clothes and non-skid footwear are recommended when working. Wear restrictive hair covering to contain

long hair.

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

4.9 Do not overreach. Keep proper footing and balance at all times. Do not reach over or across running machines.

4.10 Maintain tools with care. Keep tools sharp and clean for better and safer performance. Follow instruction for lubricating and changing accessories.

Inspect tool cord periodically and, if damaged, have them repaired by an authorized technician.

4.11 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 parts that is damaged should be properly repaired or replaced by a qualified technician.

4.12 Do not operate tool if under the influence of alcohol or drugs. Read warning labels on prescriptions to determine if your judgment or reflexes are impaired while taking drugs. If there is any doubt, do not operate the tool.

Warning: The warnings, cautions, and instructions discussed in this instruction manual can't cover all possible conditions and situations that may occur. It must be understood by the operator that common sense and caution are factors which can't be built into this product, but must be supplied by the operator.

5 -INSTALLATION

5.1 Place the bending brake on a workbench which can support the weight of the unit and the stock being bent.

5.2 Using a pencil, mark through the holes in the body (#3) feet onto the workbench.

5.3 Drill 8 mm (5/16") holes into the workbench for mounting bolts.

5.4 Secure the bending brake with 4 bolts, lock washers, and nuts (not supplied).

6 OPERATION

Caution: Do not attempt to bend stock which is thicker than 1 mm (20 gauge). Damage could occur to bending brake. If you are not sure of the stock thickness, try bending the stock. If it does not easily bend, either the stock is too thick, or the bending brake needs adjustment.

6.1 Lift handle jacket (#15) all the way to open the upper press assembly.

6.2 Insert the sheet metal to be bent over the stock under the upper press assembly (#4). Slide the sheet metal in and align the bend mark on the stock with the inner lip of the bending assembly (#1). In general, leave a 3mm (1/8") gap to make the bend clean. This gap will increase when bending thicker materials.

6.3 Press the handle jacket (#15) to the locked position.

This action causes the upper press assembly to clamp down on the stock. If the handle jacket does not come down all the way and lock, either the stock is greater than 1 mm (20 gauge), or the bending brake needs to be adjusted.

Caution: When bending, keep spectators clear of the work area.

6.4 Using both hands, lift up on the bending assembly (#1) with the handles until the desired angle is reached on the stock.

6.5 Lift the handle jacket (#15) all the way up and remove the sheet metal.

6.6 If you want to bend a box or a pan, you must choose a die or some dies assembly which length close to the pan or box side length.

7 ADJUSTMENTS

It may become necessary to adjust the position of the upper press assembly (#4) or the eccentric shaft (#5) to accommodate a thicker or thinner piece of sheet metal.

7.1 Adjust for thickness of sheet metal

7.1.1 Lift handle jacket (#15) all the way.

7.1.2 Loosen nuts (#9 and #11) to enable bolt (#10) to move up or down.

7.1.3 Turn bolt (#10) clockwise to move the upper press assembly (#4) down, or counterclockwise to move it up (for large stock). Count the number of turns.

7.1.4 Tighten nuts (#9 and #11) to secure bolt (#10) in place.

7.1.5 On the opposite side of the bending brake, repeat step 7.1.1 through 7.1.4.

Adjust bolt (#10) with the same number of turns. The upper press assembly (#4) must be flush with the bending assembly (#1) when closed.

7.1.6 Turn the eccentric shaft (#5) to move the upper press assembly forward or backward slightly. Do this equally to both sides.

Maintenance: Lubricate all moving parts and surfaces weekly with a light oil. This will keep the parts moving freely, and prevent rusting.

8 PARTS LIST

Item #	Description	Qty	Item #	Description	Qty
1	Bending Assembly	1	14	Screw Rod	1
2	Shaft	1	15	Handle Jacket	1
3	Body	1	16	Pin Shaft	2
4	Upper Press Assembly	1	17	Split Pin	2
5	Eccentric Shaft	2	18	Screw	4
6	Connecting Block	2	19	Flat Key	2
7	Washer	4	20	Bushing	4
8	Screw	4	21	Small Shaft	2
9	Nut	2	22	Left Eccentric Shaft	1
10	Bolt	2	23	Clamp Cake	6
11	Nut	2	24	Bending Die	6
12	Bushing	2	25	Screw	6
13	Right Eccentric shaft	1			

Note: The parts number for Model 12": #23 7pcs, #24 5pcs, #25 7pcs.

ASSEMBLY DRAWING

