



## BOX & PAN BRAKE OPERATION MANUAL

PBB1020/2.5

PBB1270/2.0



 **WARNING**

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

1. 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. This machine can be used to bend mild steel and other sheet metals of equal yield strength. This pan and box brake is designed to fold sheet metal into boxes, pans, or trays.  
 Setback and clamping pressure are easily adjusted for different workpiece requirements, and the adjustable bending stop is used to make repetitive bends of the same angle.  
 The fingers and blocks can be spaced in any configuration necessary to permit the sides of a box to be bent without interfering with previously bent sides.

## 2. Main technical specification

Model	PBB-1020/2.5	PBB-1270/2
Max. Working Length	40"	50"
	1020mm	1270mm
Max. Sheet Metal Thickness	12 Gauge	14 Gauge
	2.5mm	2mm
Max. Clamping Beam Lift	1-27/32"	1-27/32"
	47mm	47mm
Folding Angle	0-135°	0-135°
Finger Width	1", 1-1/8", 1-3/8", 1-1/2", 1-3/4", 2", 3", 4", 6", 7-3/4", 10-5/8"	1", 1-1/8", 1-3/8", 1-1/2", 1-3/4", 2", 3", 4", 6", 7-3/4", 10", 10-5/8"
Packing Size (L × W × H)	57-1/2" × 24-3/8" × 50"	66-15/16" × 28" × 50"
	1460 × 620 × 1270mm	1700 × 710 × 1270mm
Weight	705.6 lbs.	793.8 lbs.
	320 kg	360 kg

## 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 The support legs of the machine (back of the machine) are enclosed. These must be mounted on the machine in order for the machine to stand on the floor to make use of the good quality and the precision of the machine, it must be mounted on an even and stable floor, where it can be bolted to the floor through the bolt holes in the legs.
- 3.1.3 Please leave plenty room around the machine for your easy operating, in order to avoid injury.
- 3.1.4 Please remove the anti-rust grease on processing surfaces and some parts included kerosene.

### 3.2 Caution

- 3.2.1 Please read the manual before operation and make yourself understand its structure and principle completely.
- 3.2.2 Please don't operate the material width and thickness than table list max. Range.
- 3.2.3 Always wear industrial standard approved eye protection, using safety equipment such as dust mask, non-skid safety shoes, a helmet and hearing protection will reduce the chances of serious injuries.

- 3.2.4 Do not expose the device to the rain or wet conditions.
- 3.2.5 Dress appropriately do not wear loose clothing or jewelry. Keep your hair, clothing and gloves away from the moving parts to avoid getting caught in the moving parts. Failure to pay attention could cause serious injury or even death.
- 3.2.6 It is forbidden to use the extending case to cover the handle for the purpose of lever function.

## 4. Operation

- 4.1 Before use, folding stop #7 must be loosened. The clamping pressure is from the factory adjusted to zero in sheet thickness. The required clamping pressure can be adjusted by using the adjusting screws #6 until the foot pedal #1 can be locked at the locking pedal. The folding beam #4 can be adjusted to the required sheet thickness by using the handles #8. Lower the folding beam to minimum sheet thickness. Check the distance between sharp noses blade/segments by placing the folding beam in 90° if bend above 90° is required the folding beam must be lowered 25% additionally. Crowning of the folding beam is carried out by means of the two bolts at the adjusting bolt #5.
- 4.2 Folding stop #7 can be adjusted for the required angle. Make a folding best and adjust the folding stop.

## 5. Maintenance

Lubricate the rotating parts of the machine. (#32 lubricating-oil)

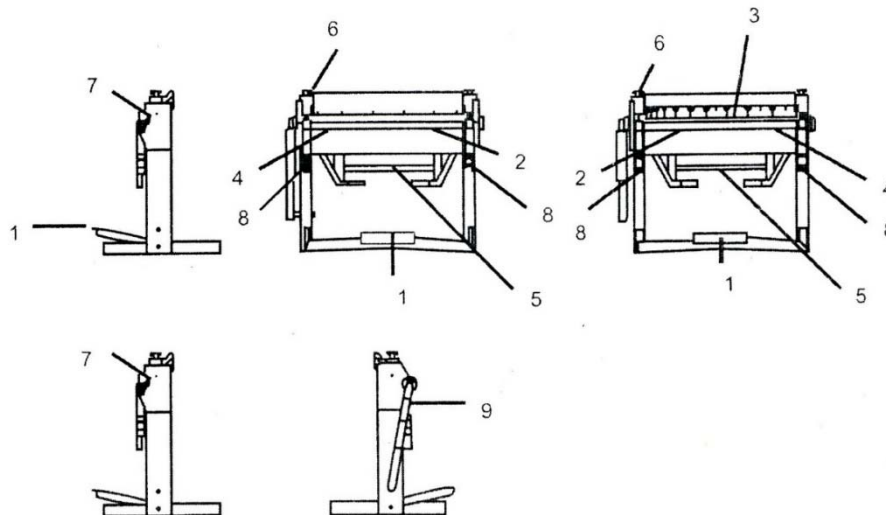
Daily cleaning, and every one hundred working hours all blades and guide ways must be cleaned and suitably lubricated.

## 6. ACCESSORIES

Back gauge, radius nosed blade (for models without segments), angle segments, flat blade (10mm, 15mm and 20 mm) and special lower blade for radius blades.

## 7. Structure

NO	Name	NO	Name
1	Foot pedal with locking device	6	Hand lever for clamping beam pressure
2	Bed beam	7	Bending stop
3	Segments for clamping beam	8	Handle for adjustment of the folding beam to the correct sheet thickness
4	Folding beam	9	Counter balance arm
5	Crowning adjustment on the folding beam		



## 8. Carry & Assembly

You have to hold the top the machine while mounting the support legs.

## 9. Part lists

Part#	Description	Q'ty	Part#	Description	Q'ty
1	ADJUSTING NUT	2	27	TRED PLATE RUBBER	1
2	CLAMPING LEAF	1	28	ROLLPIN	2
3	T-NUT M10-1.5	20	29	EXT RETAINING RING 10MM	1
4	UPPER FINGERS	11	30	FOOT PEDAL LOCK	1
5	CAP SCREW M10-1.5×20	38	31	SPRING PIN 8×50	1
6	CLAMING BLOOK	1	32	FLAT WASHER 8MM	1
7	ADJUSTING NUT SPRING	2	33	PRDAL LOCK SPRING	1
8	FLAT WASHER 20MM	6	34	SPRING PIN 6×50	2
9	GREASE FITTING 8MM	2	35	SPRING PIN 10×50	2
10	BUSHING	2	36	O-RING 33×25	2
11	FLAT WASHER 30MM	2	37	SETBACK KNOB	2
12	FOLDING LEAF PIN	1	38	HEX BOLT M8-125×25	2
13	CAPSCREW M10-1.5×35	1	39	HEX NUT M20-2.5	2
14	STOP COLLAR	1	40	SETBACK KNOB	2
15	HEX NUT 10-1.5	1	41	BENDING LEAF	1
16	CAP SCREW M10-1.5×40	1	42	OPERATING HANDLE	2
17	LEG	1	43	HEX BOLTM12-1.75×150	1
18	EXT RETAINING RING 25MM	13	44	STAR WASHER M12	2
19	LEG PIN	3	45	BOTTOM TELESCOPING STRUT	1
20	CAP SCREW M10-1.5×30	4	46	SPIRAL BLOCK	1
21	EXTENSION BRACKET	2	47	SPRING	1
22	DISC SPRING 40×20×1×2.4	4	48	TOP TELESCOPING STRUT	1

23	ROD	2	49	BUSHING	1
24	FOOT PEDAL LEVER	4	50	SHIM RING	1
25	LEVER PIN	4	51	CRANK	2
26	FOOT PEDAL	1	52	BENDING LEAF BLADE	1

10. Assembly diagram

