

# Operating Instructions and Parts Manual Box and Pan Brake

Model BB-4816



#### **Baileigh Industrial**

P.O. Box 531

Manitowoc, WI 54221-0531

Ph.: 920-684-4990 Fax: 920-684-3944

Baileigh-Sales@jpwindustries.com

## 1.0 Table of Contents

Sect	ion	P	age
1.0	Table of	Contents	2
2.0	Safety I	nstructions	3
3.0	About T	his Manual	4
4.0	Product	Identification	5
5.0	Specific	ations	6
5.	1 Desc	pription	6
6.0	Setup a	nd Assembly	7
6.	1 Unpa	acking and Checking Contents	7
6.	2 Clea	ning	7
6.	3 Tran	sporting and Lifting	7
6.	4 Insta	ıllation	8
6.	5 Asse	embly	8
7.0	Operation	on	11
7.	1 Bend	ding Sheet Metal	11
8.0	Bending	Allowance	12
9.0	Underst	anding Springback	12
10.0	Material	Selection	12
11.0	Mainten	ance	12
11	l.1 Oil F	Ports	12
12.0	Troubles	shooting	13
13.0	Replace	ment Parts	14
	13.1.1	Box and Pan Brake Assembly – Exploded View	14
	13.1.2	Box and Pan Brake Assembly – Parts list	15
	13.1.3	Floor Stand Assembly Optional - Exploded View	16
	13.1.4	Floor Stand Assembly Optional - Parts list	17
14.0	Warrant	y and Service	18



## 2.0 Safety Instructions

# Failure to follow these rules may result in serious personal injury

- FOR YOUR OWN SAFETY, READ INSTRUCTION MANUAL BEFORE OPERATING THE MACHINE. Learn the machine's application and limitations as well as the specific hazards.
- 2. Only trained and qualified personnel can operate this machine.
- 3. Make sure guards are in place and in proper working order before operating machinery.
- Remove any adjusting tools. Before operating the machine, make sure any adjusting tools have been removed.
- 5. Keep work area clean. Cluttered areas invite injuries.
- Overloading machine. By overloading the machine you may cause injury from flying parts.
   DO NOT exceed the specified machine capacities.
- 7. Dressing material edges. Always chamfer and deburr all sharp edges.
- Do not force tool. Your machine will do a better and safer job if used as intended. DO NOT use inappropriate attachments in an attempt to exceed the machines rated capacity.
- Use the right tool for the job. DO NOT attempt to force a small tool or attachment to do the work of a large industrial tool. DO NOT use a tool for a purpose for which it was not intended.

- 10. Dress appropriate. DO NOT wear loose fitting clothing or jewelry as they can be caught in moving machine parts. Protective clothing and steel toe shoes are recommended when using machinery. Wear a restrictive hair covering to contain long hair.
- Use eye and ear protection. Always wear ISO approved impact safety goggles. Wear a fullface shield if you are producing metal filings.
- Do not overreach. Maintain proper footing and balance at all times. DO NOT reach over or across a running machine.
- Stay alert. Watch what you are doing and use common sense. DO NOT operate any tool or machine when you are tired.
- 14. Check for damaged parts. Before using any tool or machine, carefully check any part that appears damaged. Check for alignment and binding of moving parts that may affect proper machine operation.
- Observe work area conditions. DO NOT use machines or power tools in damp or wet locations. Do not expose to rain. Keep work area well lighted.
- Keep children away. Children must never be allowed in the work area. DO NOT let them handle machines, tools, or extension cords.
- Store idle equipment. When not in use, tools must be stored in a dry location to inhibit rust. Always lock up tools and keep them out of reach of children.
- DO NOT operate machine if under the influence of alcohol or drugs. Read warning labels on prescriptions. If there is any doubt, DO NOT operate the machine.
- 19. Keep visitors a safe distance from the work area.

#### Familiarize yourself with the following safety notices used in this manual:

**ACAUTION** machine damage.

This means that if precautions are not heeded, it may result in minor injury and/or

**AWARNING** 

This means that if precautions are not heeded, it may result in serious injury or death.

**A** DANGER

This means that if precautions are not heeded, it will result in serious or fatal, injury.

#### Save the Instructions

### 3.0 About This Manual

This manual is provided by Baileigh Industrial, covering the safe operation and maintenance procedures for a Baileigh Model BB-4816 Box and Pan Brake. This manual contains instructions on installation, safety precautions, general operating procedures, maintenance instructions and parts breakdown. Your machine has been designed and constructed to provide consistent, long-term operation if used in accordance with the instructions as set forth in this document.

Technical Support handles questions on setup, operation, schematics, warranty issues, and individual parts needed. Our Technical Support department can be reached at 920-684-4990.

If there are questions or comments, please contact your local supplier or Baileigh Industrial. We can also be reached at our web site: www.baileigh.com.

Retain this manual for future reference. If the machine transfers ownership, the manual should accompany it.

**AWARNING** 

Read and understand the entire contents of this manual before attempting assembly or operation! Failure to comply may cause serious injury!

Register your product online -

https://baileigh.com/product-registration



## 4.0 Product Identification



Figure 4-1

Table 4-1

Item	Description	Function
Α	Counterweight	Used to assist in raising the bending leaf.
В	Clamping Handle	Used to raise, lower, and lock the clamp assembly.
С	Clamping Leaf	Holds the fingers and secures the material in position.
D	Finger Blocks	Movable dies that the material is bent against.
Е	Finger Offset Adjustment	Slide Block and adjustment bolts used to change finger setback adjustment.
F	Clamp Pressure Turnbuckle	Used to change clamping pressure for thickness variance.
G	Bending Leaf w/Handles	Raised by the operator to make the bend.
Н	Mounting Stand	Heavy duty stand to support the brake.

## 5.0 Specifications

Table 5-1

Model number BB-4816		
Stock number	BA9-1000460	
General Specifications		
Bend Length	48" (1219mm)	
Bend Material Thickness	16ga. (1.52mm) mild steel*	
Bend Material Thiothess	20ga. (0.912mm) stainless steel**	
Bend Angle	0 – 135 degrees	
Minimum Reverse Bend	.625" (16mm)	
Box Depth	4" (101.6mm)	
	5 @ 4" (102mm)	
Finger Size	6 @ 3" (76mm)	
	5 @ 2" (51mm)	
Weights and Dimensions		
Shipping Dimensions (L x W x H)	64" x 27" x 32" (1626 x 686 x 813mm)	
Shipping Weight	550 lbs. (250 kg)	
Based on a material tensile strength of *64000 PSI – mild steel		
**100000 PSI – stainless steel		

### 5.1 Description

The Baileigh Model BB-4816 Box and Pan Brake is hand operated and capable of bending up to 16ga. (1.52mm) mild steel and 20ga. (.912mm) stainless x 48" (1219mm) long. The machine has 16 removable fingers and a 4" (101.6mm) box depth allowing it to fabricate pans, boxes, channels, angles, and other shapes. Adjustable counterweights allow the operator to balance the bending leaf to correspond to material thickness. An adjustable stop gauge is included to allow the operator to perform repeat bends.

## **AWARNING**

Read and understand the entire contents of this manual before attempting assembly or operation. Failure to comply may cause serious injury.

## 6.0 Setup and Assembly

## 6.1 Unpacking and Checking Contents

Your Baileigh machine is shipped complete. Separate all parts from the packing material and check each item carefully. Make certain all items are accounted for before discarding any packing material.

## **AWARNING**

SUFFOCATION HAZARD! Immediately discard any plastic bags and packing materials to eliminate choking and suffocation hazards to children and animals.

### **AWARNING**

If any parts are missing, DO NOT place the machine into service until the missing parts are obtained and installed correctly.

#### 6.2 Cleaning

## WARNING

DO NOT USE gasoline or other petroleum products to clean the machine. They have low flash points and can explode or cause fire.

## **ACAUTION**

When using cleaning solvents work in a well-ventilated area. Many cleaning solvents are toxic if inhaled.

Your machine may be shipped with a rustproof waxy coating and/or grease on the exposed unpainted metal surfaces. Fully and completely remove this protective coating using a degreaser or solvent cleaner. Moving items will need to be moved along their travel path to allow for cleaning the entire surface. For a more thorough cleaning, some parts will occasionally have to be removed. DO NOT USE acetone or brake cleaner as they may damage painted surfaces.

Follow manufacturer's label instructions when using any type of cleaning product. After cleaning, wipe unpainted metal surfaces with a light coating of quality oil or grease for protection.

**IMPORTANT:** This waxy coating is NOT a lubricant and will cause the machine to stick and lose performance as the coating continues to dry.

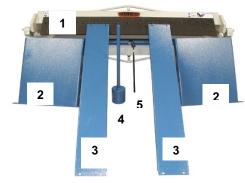


Figure 6-1

Table 6-1

Item	Description	Qty.
1	Brake Main Body	1
2	Support Stand Ends	2
3	Support Stand Braces	2
4	Counterweight	1
5	Stop Rod	1
	Hardware Bag	1
	Flat Washers saved from packaging	4

#### 6.3 Transporting and Lifting

### **NOTICE**

Lifting and carrying operations should be carried out by skilled workers, such as a truck operator, crane operator, etc. If a crane is used to lift the machine, attach the lifting chain carefully, making sure the machine is well balanced.

Follow these guidelines when lifting with truck or trolley:

- The lift truck must be able to lift at least 1.5 − 2 times the machines gross weight.
- Make sure the machine is balanced. While transporting, avoid rough or jerky motion, and maintain a safe clearance zone around the transport area.
- Use a forklift with sufficient lifting capacity and forks that are long enough to reach the complete width of the machine.
- Remove the securing bolts that attach the machine to the pallet.
- Approaching the machine from the side, lift the machine on the frame taking care that there are no cables or pipes in the area of the forks.
- Move the machine to the required position and lower gently to the floor.
- Level the machine so that all the supporting feet are taking the weight of the machine and no rocking is taking place.

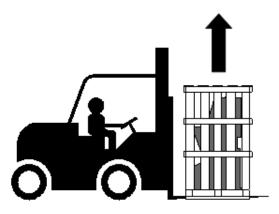


Figure 6-2

## Follow these guidelines when lifting crane or hoist:

- Always lift and carry the machine with the lifting holes provided at the top of the machine.
- Use lift equipment such as straps, chains, capable of lifting 1.5 to 2 times the weight of the machine.
- Take proper precautions for handling and lifting.
- Check if the load is properly balanced by lifting it an inch or two.
- Lift the machine, avoiding sudden accelerations or quick changes of direction.
- Locate the machine where it is to be installed, and lower slowly until it touches the floor.

#### 6.4 Installation

#### **IMPORTANT:**

Consider the following when looking for a suitable location to place the machine:

- Overall weight of the machine.
- · Weight of material being processed.
- Sizes of material to be processed through the machine.
- Space needed for auxiliary stands, work tables, or other machinery.
- Clearance from walls and other obstacles.
- Maintain an adequate working area around the machine for safety.
- Have the work area well illuminated with proper lighting.
- Keep the floor free of oil and make sure it is not slippery.
- Remove scrap and waste materials regularly, and make sure the work area is free from obstructing objects.
- If long lengths of material are to be fed into the machine, make sure that they will not extend into any aisles.
- LEVELING: The machine should be sited on a level, concrete floor. Provisions for securing it should be in position prior to placing the machine. The accuracy of any machine

- depends on the precise placement of it to the mounting surface.
- FLOOR: This tool distributes a large amount of weight over a small area. Make certain that the floor can support the weight of the machine, work stock, and the operator. The floor should also be a level surface. If the unit wobbles or rocks once in place, be sure to eliminate by using shims.
- WORKING CLEARANCES: Take into consideration the size of the material to be processed. Make sure that you allow enough space for you to operate the machine freely.

#### 6.4.1 Anchoring the Machine

- Once positioned, anchor the machine to the floor, as shown in the diagram. Use bolts and expansion plugs or sunken tie rods that connect through and are sized for the holes in the base of the stand.
- This machine requires a solid floor such as concrete at a minimum of 4" (102mm) thick. 6" (153mm) minimum is preferred.

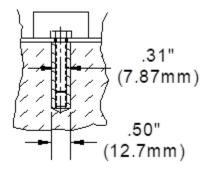


Figure 6-3

#### 6.5 Assembly

#### 6.5.1 Stand Assembly

- 1. Layout the stand ends and braces.
- Use the carriage bolts, flat washer, lock washer and nuts, finger tighten the nuts to hold the braces to the ends. The shoulders of the carriage bolts will create their own seats to help align the braces to the ends.
- Remove the bending fingers from the upper beam for cleaning and removal of the rust inhibitor and well as to provide a place to lift the brake body.
- Raise the main body from the pallet, avoiding sudden accelerations or quick changes of direction and carefully pull the pallet out of the way.
- 5. While the main body is being held securely by the fork lift, position the stand under the brake body aligning the mounting holes.

- Carefully lower the brake body onto the stands and install the four hex head bolts, flat washers, lock washers, and hex nuts.
- Square the stand to the brake body and fully tighten the four hex head bolts and eight carriage bolts.
- 8. Place the brake and stand assembly in its location and use the stand feet to mark and anchor the brake assembly to the floor.

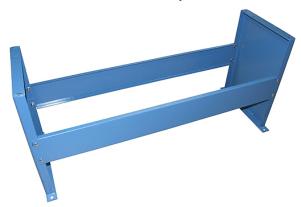


Figure 6-4

#### 6.5.2 Attaching the Counterweight

- 1. Have a helper hold the counterweight.
- 2. Back off the two socket head bolts and slide the counterweight rod into the receiver pipe.
- When the rod is flush with the bottom of the receiver, tighten the hex bolts. The rod may extend through the receiver pipe up to 6-7" (150-180mm).



Figure 6-5

**Note**: DO NOT use the counterweight handle to raise the bending leaf. You may damage the hinges or the bending leaf.

#### 6.5.3 Mounting and Setting the Stop Rod

- 1. Locate the stop rod (A) and remove the cotter pin and stop collar (B) from the rod.
- From the front of the brake, insert the stop rod

   (A) into the guide plate on the brake body and
   short end into the hole on the bending leaf
   bracket.
- 3. Insert and bend over the cotter pin to hold the stop rod into the bending leaf bracket.
- 4. Slide the stop collar (B) onto the stop rod and tighten the socket head screw enough to hold the collar onto the rod.

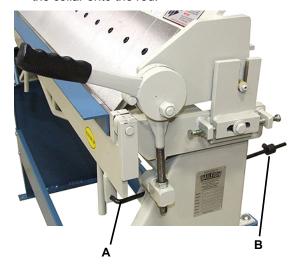


Figure 6-6

#### Positioning the Stop Collar

The stop collar is used for repeat bending when you want the bending leaf to stop at the same position each time.

- Loosen the stop collar (B) and make your bend, stopping at the top of the bend.
- 2. Slide the collar up to the stop plate and tighten the stop collar screw.
- 3. The bending angle can now be repeated until reset by the operator.

#### **Aligning the Fingers**

## **ACAUTION**

Always wear proper safety equipment. The fingers are heavy with sharp edges. Wear safety footwear and leather gloves to protect from burrs and sharp edges.

#### 6.5.4 Adjusting the Setback

Setback is the distance from the front edge of the finger to the front edge of the clamp block as shown. This distance is determined by the gauge (thickness) of the piece part and inside radius of the bend. The setback is typically 1-1/2-2 times the material thickness.

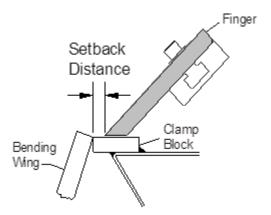


Figure 6-7

**Note:** Right end of the brake is shown. The adjustment must be completed on both ends of the brake.

**Note:** Always make sure the fingers are parallel with the edge of the clamp block to avoid any distortion of the bend.

**Note:** To avoid damaging the brake, include the thickness of folded edges when determining the setback distance.

- To adjust, make sure all the fingers are properly aligned to each other and the hold down assembly is not locked in the down position.
- 2. Loosen the bolt (A) securing the clamping leaf slide block to the brake body.

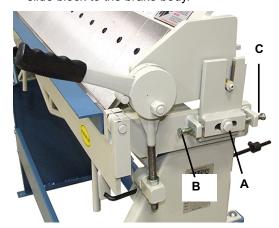


Figure 6-8

- 3. Loosen the front (B) and rear (C) adjustment holts
- Use the front adjustment bolt (B) to push the clamping block back to increase the setback distance. Use the back adjustment bolt (C) to

- push the clamping block forward to decrease the setback distance.
- 5. When the fingers are at the correct setback distance and parallel to the clamp block edge, tighten adjustment bolts (B and C) to the slide block so that the slide block will not move forward or backward. Tighten the jam nuts to hold the position.
- Recheck that the fingers are parallel with the edge of the clamp block to avoid any distortion of the bend.
- 7. Tighten to slide block clamping bolt (A) to secure the setback distance.

#### 6.5.5 Clamp Alignment (end to end)

Make a  $90^{\circ}$  test bend about  $2^{\circ}$  (50.8mm) in from each end of the machine. Stack the bent strips on top of each other and check that they are bent to the same degree.

If a strip is over bent, increase the setback distance on that side. If a strip is under bent, decrease the setback distance on that side. Again, move the setback adjustment past the desired set back point, and then forward to remove the slack.

#### 6.5.6 Adjusting the Clamping Pressure

## **ACAUTION**

- Excessive clamping pressure can "pre load" and permanently distort the brake.
- DO NOT bend material heavier than the rated capacity, even in shorter lengths.
- Use material with square-sheared edges. (a rolled edge will cause bowing).
- Bending a round object will warp or nick the clamp edge.
- Adjust the clamp pressure accordingly for different metal gauges.
- Do not use a pipe extension on the clamp bars to get more leverage.

The clamping pressure may have to be adjusted as the thickness of the piece part changes. A suitable pressure should have a medium resistance when pulling back on the hold down handle(s). At the end of the stroke there should be a definite locking of the piece part under the clamping leaf. To adjust the pressure, move the nuts on the threaded link shaft either up or down.

- To adjust the clamping pressure, tighten both sides of the clamping leaf with sample material in the brake.
  - a. If the clamping pressure seems light and the piece part is loose in the clamp, move the adjusting nuts UP.

- If the clamping pressure seems hard and you can't lock the handles, move the adjusting nuts DOWN.
- Once the pressure feels right, no further adjustments are necessary for this thickness piece part. (When changing thickness, it may become necessary to adjust again.)
- 2. Remove the piece part from under the clamping leaf, lock down the leaf with the handles, and loosen pressure on the top nut.
- 3. Unlock the clamping leaf and turn the bottom nut ½ turn in the desired direction.
- Lock the clamping leaf, re-tighten the top nut, and repeat Step 1 above until the desired pressure is reached.



Figure 6-9

#### 6.5.7 Top Leaf Adjustment

**IMPORTANT:** The top leaf and bending leaf adjustments were made at the factory based upon full capacity (length and thickness) mild steel. Additional adjustments are generally not needed. Different materials and material strength and hardness variation may require adjusting the leaf to obtain a satisfactory bend.

Normal bending should provide a consistent bend angle (A) over the entire length of the material.

If the angle remains open (B) in the middle of the material, the leaf may need to be adjusted to reduce bend angle variation.

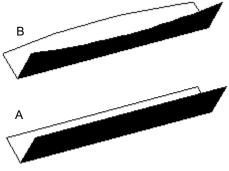


Figure 6-10

**Note:** The brake needs to be leveled and secured to the floor to provide consistent accurate results.

Crowning adjustment is made by tightening or loosening the center leaf nuts (C and D).

- 1. Move the clamp handles to the forward position.
- If the bend is open on the middle as in example (B), evenly tighten the top leaf center truss nut (C) and the lower leaf center truss nut (D) 1/2 turn each and test the bend angle.
- Repeat the test bend and continue to adjust until the bend is even over the entire length of the material.

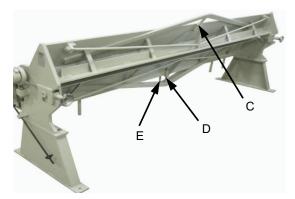


Figure 6-11

## 7.0 Operation

The maximum capacity of the machine is 16 gauge (.060") (1.5mm) mild steel or equivalent.

When performing basic bending operations, it is important that the fingers of the brake are parallel with the edge of the clamping block. Also make sure you have the proper setback and clamping pressure set for the thickness material being bent.

## **ACAUTION**

Always wear proper eye protection with side shields, safety footwear, and leather gloves to protect from burrs and sharp edges.

## **ACAUTION**

When handling large heavy material make sure they are properly supported.

## **ACAUTION**

Keep hands and fingers clear of the clamping beam. Stand off to the side of the machine to avoid getting hit with the bending apron as it comes up to bend.

#### 7.1 Bending Sheet Metal

- 1. Lift and rotate the clamping handle (cw) clockwise to raise the clamping assembly.
- 2. Insert the piece part between the clamp block and the brake fingers.

 Align the fingers of the hold down assembly to the scribed bend line of the piece part and clamp in place by pulling the clamp handle back.

**Note:** DO NOT force the clamping handle. The holding pressure only needs to be tight enough to hold the sheet metal from moving when bending.

- Pull up on the bending leaf handles until the piece part has reached the desired bend angle.
- 5. Lower the bending leaf, raise the hold down assembly, and remove the bent piece part.
- 6. If you are doing box and pan bending, choose fingers that closely match the dimensions of the finished piece.
- 7. The angle bar can be removed for operations such as reverse bending. However, the capacity of this brake is reduced to 18 gauge (.047") mild steel or equivalent. Mark sure angle bar is mounted to the bending leaf when using 16 gauge material on this machine.

## 8.0 Bending Allowance

To bend sheet metal accurately, you will need to consider the total length of each bend. This is referred to as bend allowance. Subtract the bend allowance from the sum of the outside dimensions of the piece part to obtain the actual overall length or width of the piece. Because of differences in sheet metal hardness, and whether the bend is made with the grain or against it, exact allowances must sometimes be made by trial and error. However, bend allowances for general use can be obtained from metal working books or from the Internet.

# 9.0 Understanding Springback

Springback, also known as elastic recovery, is the result of the metal wanting to return to its original shape after undergoing compression and stretch. After the bending leaf is removed from the metal and the load is released, the piece part relaxes, forcing the bent portion of the metal to return slightly to its original shape. The key to obtaining the correct bend angle is to over bend the metal a little and allow it to spring back to the desired angle. All metals exhibit a certain amount of spring back.

#### 10.0 Material Selection

## **ACAUTION**

It must be determined by the customer that materials being processed through the machine are NOT potentially hazardous to operator or personnel working nearby.

When selecting materials keep these instructions in mind:

- Material must be clean and dry. (without oil)
- Material should have a smooth surface so it processes easily.
- Dimensional properties of material must be consistent and not exceed the machine capacity values.
- Chemical structure of material must be consistent.
- Buy certificated steel from the same vendor when possible.

### 11.0 Maintenance

### **AWARNING**

Maintenance should be performed on a regular basis by qualified personnel.

### **A WARNING**

Always follow proper safety precautions when working on or around any machinery.

- Check daily for any unsafe conditions and fix immediately.
- Check that all nuts and bolts are properly tightened.
- On a weekly basis clean the machine and the area around it.
- Lubricate threaded components and sliding devices.
- Apply rust inhibitive lubricant to all non-painted surfaces.

#### 11.1 Oil Ports

Using an oil can with a good quality #30W oil, apply 5-6 drops into each of the ports on both ends of the machine. Repeat weekly or more often based upon usage. Wipe off any excess oil.



Figure 11-1

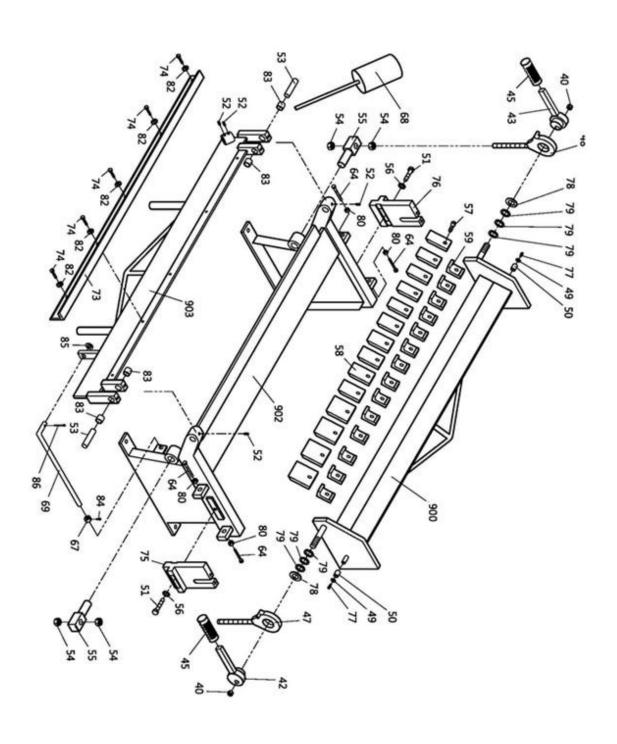
## 12.0 Troubleshooting

Table 12-1

Fault	Probable Cause	Remedy	
	Fingers are not aligned	Follow proper finger alignment procedure	
INACCURATE BENDS	Setback distance is not equal from one side to the other	Accurately measure distance and set accordingly	
	Clamping assembly is not holding piece part securely	Re-adjust the clamping pressure	
BENDING LEAF HARD TO	Exceeding the bending limits of the brake	Do not bend material thicker than the machine was designed for.	
LIFT AND BEND.	Counterweight is not on leaf	Attach the counterweight to lessen force needed to lift bending leaf	

## 13.0 Replacement Parts

## 13.1.1 Box and Pan Brake Assembly – Exploded View

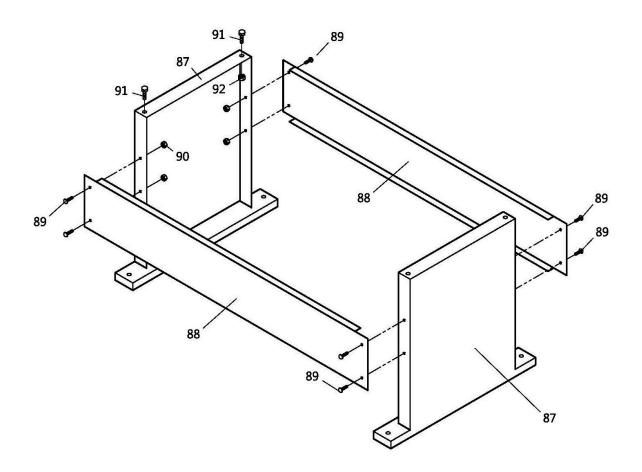


## 13.1.2 Box and Pan Brake Assembly – Parts list

Index No	Part No	Description	Size	Qty
900	**	Top Beam		1
902	**	Bottom Base		
903	**	Bending leaf		
40	BA9-1000462	Locknut		
42	BA9-1000463	Clamp Handle R.H		
43	BA9-1000464	Clamp Handle L.H		
45	**	Handgrip, Plastic		
47	BA9-1000470	Toggle Assy. R.H		
48	BA9-1000471	Toggle Assy. L.H		
49	**	Washer		
50	BA9-1231078	Bushing		
51	**	Hex. Screw		
52	BA9-1000461	Set Screw		
53	BA9-1000466	Hinge Pin		
54	**	Hex Nut, Toggle Adjust		
55	BA9-1000472	Swivel Pin		
56	**	Nut		
57	BA9-1226401	Hex. socket head screw		
58	BA9-1000473	Fingers		
59	**	Finger Clamp		
64	**	Hex. Screw		
67	BA9-BB4816-67	Connection Block With Screw		
68	BA9-1000474	Balance weight Assy.		
69	BA9-BB4816-69	Bending angle adj Rod.		
00	**	Pipe		
	**	Screw, Flat Head		
	**	Blade, Brake		
73	**	Angle bar		
74 74	BA9-1024435	Hex. Screw		
75	**	Step Bracket L		
76 76	**	Step Bracket R.		
77	**	Screw		
77 78	**	Washer		
79	**	Washer		
80	**	Nut		_
82	**	Washer		
83	**	Bushing		
84	**	Screw		
85	**	Washer		
86	**	Cotter Pin		
Stand Assy	BA9-1020766	Floor Stand Assy		
Stariu ASSY	DA3-1020100	1 1001 Statiu ASSY		1

<sup>\*\*</sup> These parts are shown for reference only and are not available for order individually. Non-proprietary parts, such as fasteners, can usually be found at local hardware stores.

## 13.1.3 Floor Stand Assembly Optional - Exploded View



## 13.1.4 Floor Stand Assembly Optional - Parts list

Index No	Part No	Description	Size	Qty
		. Stand		
88	BA1-10695	. Bridge Plate		2
89	**	. Carriage Bolt		8
90	**	. Nut		8
91	**	. Hex. Screw		4
92	**	. Nut		4

<sup>\*\*</sup> These parts are shown for reference only and are not available for order individually. Non-proprietary parts, such as fasteners, can usually be found at local hardware stores.

## 14.0 Warranty and Service

Thank you for your purchase of a machine from Baileigh Industrial. We hope that you find it productive and useful to you for a long time to come.

Inspection & Acceptance. Buyer shall inspect all Goods within ten (10) days after receipt thereof. Buyer's payment shall constitute final acceptance of the Goods and shall act as a waiver of the Buyer's rights to inspect or reject the Goods unless otherwise agreed. If Buyer rejects any merchandise, Buyer must first obtain a Returned Goods Authorization ("RGA") number before returning any Goods to Seller. Goods returned without an RGA will be refused. Seller will not be responsible for any freight costs, damages to Goods, or any other costs or liabilities pertaining to Goods returned without an RGA. Seller shall have the right to substitute a conforming tender. Buyer will be responsible for all freight costs to and from Buyer and repackaging costs, if any, if Buyer refuses to accept shipment. If Goods are returned in unsalable condition, Buyer shall be responsible for full value of the Goods. Buyer may not return any special-order Goods. Any Goods returned hereunder shall be subject to a restocking fee equal to 30% of the invoice price.

**Specifications.** Seller may, at its option, make changes in the designs, **specifications**, or components of the Goods to improve the safety of such Goods, or if in Seller's judgment, such changes will be beneficial to their operation or use. Buyer may not make any changes in the specifications for the Goods unless Seller approves of such changes in writing, in which event Seller may impose additional charges to implement such changes.

Limited Warranty. Seller warrants to the original end-user that the Goods manufactured or provided by Seller under this Agreement shall be free of defects in material or workmanship for a period of twelve (12) months from the date of purchase, provided that the Goods are installed, used, and maintained in accordance with any instruction manual or technical guidelines provided by the Seller or supplied with the Goods, if applicable. The original end-user must give written notice to Seller of any suspected defect in the Goods prior to the expiration of the warranty period. The original end-user must also obtain an RGA from Seller prior to returning any Goods to Seller for warranty service under this paragraph. Seller will not accept any responsibility for Goods returned without an RGA. The original end-user shall be responsible for all costs and expenses associated with returning the Goods to Seller for warranty service. In the event of a defect, Seller, at its sole option, shall repair or replace the defective Goods or refund to the original end-user the purchase price for such defective Goods. Goods are not eligible for replacement or return after a period of 10 days from date of receipt. The foregoing warranty is Seller's sole obligation, and the original end-user's exclusive remedy, with regard to any defective Goods. This limited warranty does not apply to: (a) die sets, tooling, and saw blades; (b) periodic or routine maintenance and setup, (c) repair or replacement of the Goods due to normal wear and tear, (d) defects or damage to the Goods resulting from misuse, abuse, neglect, or accidents, (f) defects or damage to the Goods resulting from improper or unauthorized alterations, modifications, or changes; and (f) any Goods that has not been installed and/or maintained in accordance with the instruction manual or technical guidelines provided by Seller.

**EXCLUSION OF OTHER WARRANTIES.** THE FOREGOING LIMITED WARRANTY IS IN LIEU OF ALL OTHER WARRANTIES, EXPRESS OR IMPLIED. ANY AND ALL OTHER EXPRESS, STATUTORY, OR IMPLIED WARRANTIES, INCLUDING BUT NOT LIMITED TO, ANY WARRANTY OF MERCHANTABILITY OR FITNESS FOR ANY PARTICULAR PURPOSE ARE EXPRESSLY DISCLAIMED. NO WARRANTY IS MADE WHICH EXTENDS BEYOND THAT WHICH IS EXPRESSLY CONTAINED HEREIN.

Limitation of Liability. IN NO EVENT SHALL SELLER BE LIABLE TO BUYER OR ANY OTHER PARTY FOR ANY INCIDENTIAL, CONSEQUENTIAL OR SPECIAL DAMAGES (INCLUDING, WITHOUT LIMITATION, LOST PROFITS OR DOWN TIME) ARISING FROM OR IN MANNER CONNECTED WITH THE GOODS, ANY BREACH BY SELLER OR ITS AGENTS OF THIS AGREEMENT, OR ANY OTHER CAUSE WHATSOEVER, WHETHER BASED ON CONTRACT, TORT OR ANY OTHER THEORY OF LIABILITY. BUYER'S REMEDY WITH RESPECT TO ANY CLAIM ARISING UNDER THIS AGREEMENT IS STRICTLY LIMITED TO NO MORE THAN THE AMOUNT PAID BY THE BUYER FOR THE GOODS.

**Force Majeure.** Seller shall not be responsible for any delay in the delivery of, or failure to deliver, Goods due to causes beyond Seller's reasonable control including, without limitation, acts of God, acts of war or terrorism, enemy actions, hostilities, strikes, labor difficulties, embargoes, non-delivery or late delivery of materials, parts and equipment or transportation delays not caused by the fault of Seller, delays caused by civil authorities, governmental regulations or orders, fire, lightning, natural disasters or any other cause beyond Seller's reasonable control. In the event of any such delay, performance will be postponed by such length of time as may be reasonably necessary to compensate for the delay.

**Installation.** If Buyer purchases any Goods that require installation, Buyer shall, at its expense, make all arrangements and connections necessary to install and operate the Goods. Buyer shall install the Goods in accordance with any Seller instructions and shall indemnify Seller against any and all damages, demands, suits, causes of action, claims and expenses (including actual attorneys' fees and costs) arising directly or indirectly out of Buyer's failure to properly install the Goods.

**Work By Others; Safety Devices.** Unless agreed to in writing by Seller, Seller has no responsibility for labor or work performed by Buyer or others, of any nature, relating to design, manufacture, fabrication, use, installation, or provision of Goods. Buyer is solely responsible for furnishing and requiring its employees and customers to use all safety devices, guards and safe operating procedures required by law and/or as set forth in manuals and instruction sheets furnished by Seller. Buyer is responsible for consulting all operator manuals, ANSI or comparable safety standards, OSHA regulations and other sources of safety standards and regulations applicable to the use and operation of the Goods.

**Remedies.** Each of the rights and remedies of Seller under this Agreement is cumulative and in addition to any other or further remedies provided under this Agreement or at law or equity.

Attorney's Fees. In the event legal action is necessary to recover monies due from Buyer or to enforce any provision of this Agreement, Buyer shall be liable to Seller for all costs and expenses associated therewith, including Seller's actual attorney fees and costs.

Governing Law/Venue. This Agreement shall be construed and governed under the laws of the State of Wisconsin, without application of conflict of law principles. Each party agrees that all actions or proceedings arising out of or in connection with this Agreement shall be commenced, tried, and litigated only in the state courts sitting in Manitowoc County, Wisconsin or the U.S. Federal Court for the Eastern District of Wisconsin. Each party waives any right it may have to assert the doctrine of "forum non conveniens" or to object to venue to the extent that any proceeding is brought in accordance with this section. Each party consents to and waives any objection to the exercise of personal jurisdiction over it by courts described in this section. Each party waives to the fullest extent permitted by applicable law the right to a trial by jury.

#### **Summary of Return Policy:**

- 10 Day acceptance period from date of delivery. Damage claims and order discrepancies will not be accepted after this time
- You must obtain a Baileigh Industrial issued RGA number PRIOR to returning any materials.
- · Returned materials must be received at Baileigh Industrial in new condition and in original packaging.
- · Altered items are not eligible for return.
- Buyer is responsible for all shipping charges.
- A 30% re-stocking fee applies to all returns.

Baileigh Industrial makes every effort to ensure that our posted specifications, images, pricing, and product availability are as correct and timely as possible. We apologize for any discrepancies that may occur. Baileigh Industrial reserves the right to make any and all changes deemed necessary in the course of business including but not limited to pricing, product specifications, quantities, and product availability.

#### For Customer Service & Technical Support:

Please contact one of our knowledgeable Sales and Service team members at: (920) 684-4990 or e-mail us at Baileigh-Service@jpwindustries.com



BAILEIGH INDUSTRIAL
1625 DUFEKDRIVEMANITOWOC, WI 54220

PHONE: 920.684.4990 FAX: 920.684.3944

www.baileigh.com