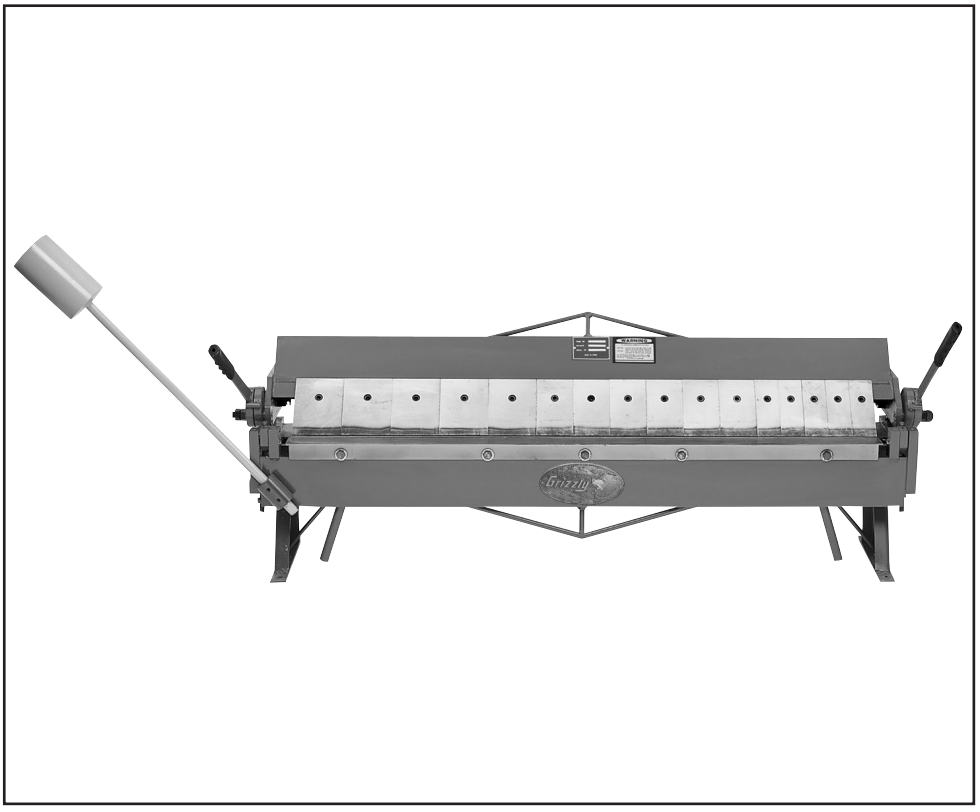
MODEL G5769
48" PAN AND BOX BRAKE
OWNER'S MANUAL



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(FOR MODELS MANUFACTURED SINCE 10/04) #DD7060 PRINTED IN CHINA

⚠ WARNING!

This manual provides critical safety instructions on the proper setup, operation, maintenance and service of this machine/equipment.

Failure to read, understand and follow the instructions given in this manual may result in serious personal injury, including amputation, electrocution or death.

The owner of this machine/equipment is solely responsible for its safe use. This responsibility includes but is not limited to proper installation in a safe environment, personnel training and usage authorization, proper inspection and maintenance, manual availability and comprehension, application of safety devices, blade/cutter integrity, and the usage of personal protective equipment.

The manufacturer will not be held liable for injury or property damage from negligence, improper training, machine modifications or misuse.

⚠ WARNING!

Some dust created by power sanding, sawing, grinding, drilling, and other construction activities contains chemicals known to the State of California to cause cancer, birth defects or other reproductive harm. Some examples of these chemicals are:

- **Lead from lead-based paints.**
- **Crystalline silica from bricks, cement and other masonry products.**
- **Arsenic and chromium from chemically-treated lumber.**

Your risk from these exposures varies, depending on how often you do this type of work. To reduce your exposure to these chemicals: Work in a well ventilated area, and work with approved safety equipment, such as those dust masks that are specially designed to filter out microscopic particles.

Table of Contents

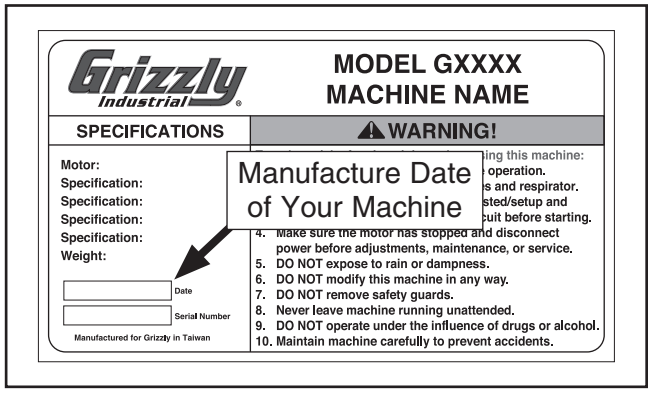
INTRODUCTION

Manual Accuracy

We are proud to offer this manual with your new machine! We've made every effort to be exact with the instructions, specifications, drawings, and photographs of the machine we used when writing this manual. However, sometimes errors do happen and we apologize for them.

Also, owing to our policy of continuous improvement, **your machine may not exactly match the manual**. If you find this to be the case, and the difference between the manual and machine leaves you in doubt, check our website for the latest manual update or call technical support for help.

Before calling, find the manufacture date of your machine by looking at the date stamped into the machine ID label (see below). This will help us determine if the manual version you received matches the manufacture date of your machine.



For your convenience, we post all available manuals and manual updates for free on our website at **www.grizzly.com**. Any updates to your model of machine will be reflected in these documents as soon as they are complete.

Contact Info

We stand behind our machines. If you have any service questions, parts requests or general questions about the machine, please call or write us at the location listed below.

Grizzly Industrial, Inc.
1203 Lycoming Mall Circle
Muncy, PA 17756
Phone: (570) 546-9663
Fax: (800) 438-5901
E-Mail: techsupport@grizzly.com

If you have any comments regarding this manual, please write to us at the address below:

Grizzly Industrial, Inc.
C/O Technical Documentation Manager
P.O. Box 2069
Bellingham, WA 98227-2069
Email: manuals@grizzly.com

Identification

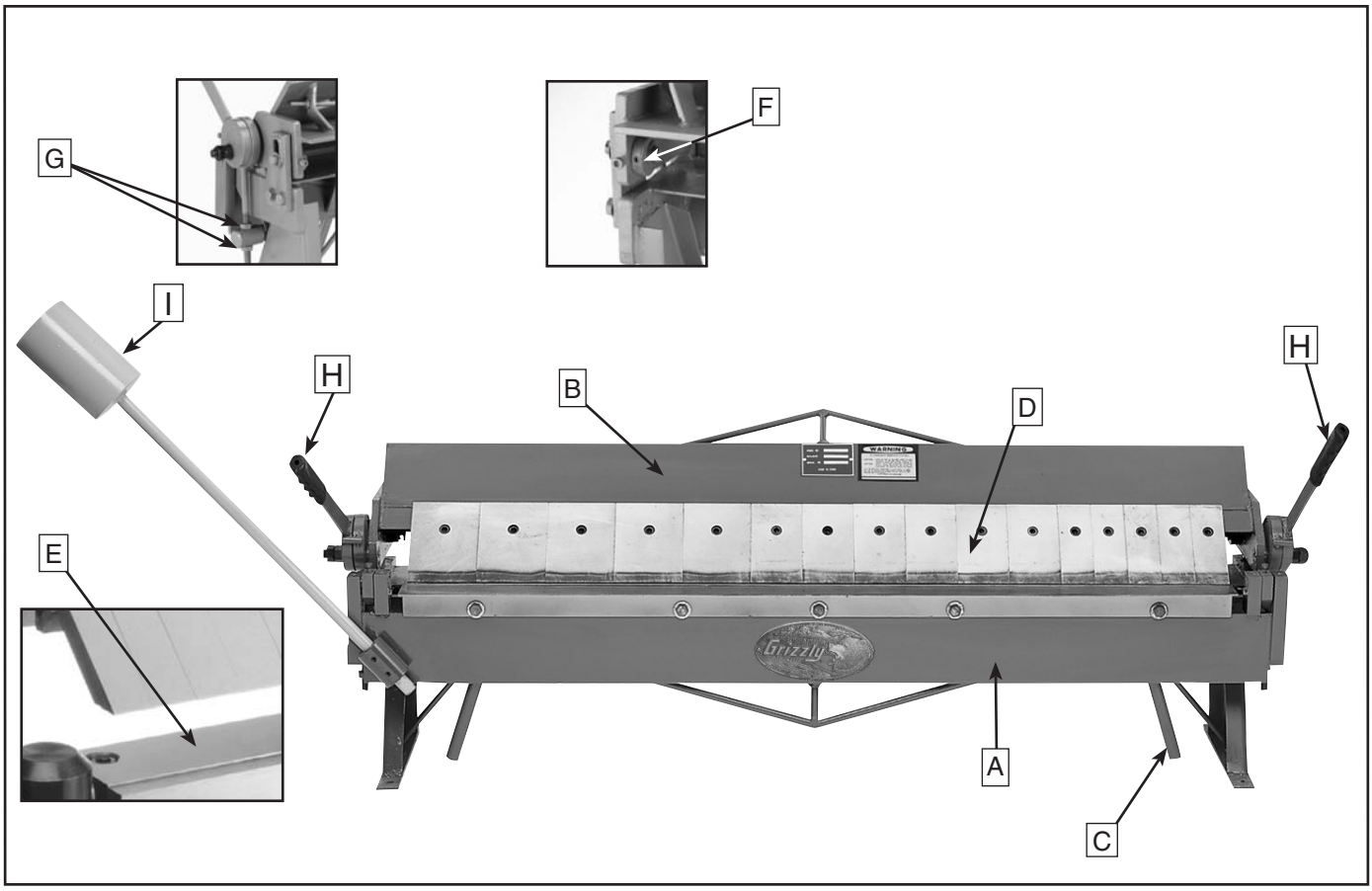


Figure 1. Common Pan and Box Brake components.

A. Bending Leaf—Swivels up to bend the workpiece.
B. Clamping Leaf—Holds the fingers. Squeezes the workpiece against the clamping block.
C. Operating Handle—Used to raise and lower the bending leaf.
D. Finger Blocks—Adjustable dies that the workpiece is bent against.
E. Clamping Block—Fixed block (or lower jaw) that the clamping leaf presses against.
F. Setback Wheels—Adjusts clamping leaf forward and backward.
G. Clamping Pressure Adjusting Nuts—Adjusts pressure on the workpiece, allowing for different gauges.
H. Clamping Handles—Raise and lower fingers onto clamping block.
I. Counterweight—Offsets some of the pressure needed to bend the workpiece.

MACHINE DATA SHEET

Customer Service #: (570) 546-9663 • To Order Call: (800) 523-4777 • Fax #: (800) 438-5901

MODEL G5769
48" PAN AND BOX BRAKE

Design Type ..... Bench Top Model

Overall Dimensions:

Height ..... 25"
Finger Sizes (Quantity) ..... 2"(5), 3"(6), 4"(5)
Shipping Weight ..... 365 lbs.
Footprint ..... 52" x 12"
Crate Size ..... 62½" L x 15¼" W x 23½" H

Capacities:

Brake Range ..... 0° - 135°
Maximum Width ..... 48"
Maximum Height of Pan/Box Sides ..... 3"
Mild Steel ..... 16 gauge @ Half Width, 18 gauge @ Full Width
Aluminum ..... 11 gauge
Soft Brass ..... 14 gauge
Annealed Phosphor Bronze ..... 15 gauge
Soft Copper ..... 14 gauge
Hard Copper ..... 15 gauge

Construction:

Fingers ..... Precision Ground Steel, Hardened Edge
Base ..... Steel
Bending Leaf ..... Steel
Clamping Leaf ..... Steel

SECTION 1: SAFETY

⚠WARNING

For Your Own Safety, Read Instruction Manual Before Operating this Machine

The purpose of safety symbols is to attract your attention to possible hazardous conditions. This manual uses a series of symbols and signal words intended to convey the level of importance of the safety messages. The progression of symbols is described below. Remember that safety messages by themselves do not eliminate danger and are not a substitute for proper accident prevention measures.

⚠DANGER **Indicates an imminently hazardous situation which, if not avoided, WILL result in death or serious injury.**

⚠WARNING **Indicates a potentially hazardous situation which, if not avoided, COULD result in death or serious injury.**

⚠CAUTION **Indicates a potentially hazardous situation which, if not avoided, MAY result in minor or moderate injury. It may also be used to alert against unsafe practices.**

NOTICE **This symbol is used to alert the user to useful information about proper operation of the machine.**

⚠WARNING
Safety Instructions for Machinery

1. **READ ENTIRE MANUAL BEFORE STARTING.** Operating machine before reading the manual greatly increases the risk of injury.
2. **ALWAYS USE ANSI APPROVED SAFETY GLASSES WHEN OPERATING MACHINERY.** Everyday eyeglasses only have impact resistant lenses—they are NOT safety glasses.
3. **ALWAYS WEAR A NIOSH APPROVED RESPIRATOR WHEN OPERATING MACHINERY THAT PRODUCES DUST.** Most types of dust (wood, metal, etc.) can cause severe respiratory illnesses.
4. **ALWAYS USE HEARING PROTECTION WHEN OPERATING MACHINERY.** Machinery noise can cause permanent hearing loss.
5. **WEAR PROPER APPAREL.** DO NOT wear loose clothing, gloves, neckties, rings, or jewelry that can catch in moving parts. Wear protective hair covering to contain long hair and wear non-slip footwear.
6. **NEVER OPERATE MACHINERY WHEN TIRED OR UNDER THE INFLUENCE OF DRUGS OR ALCOHOL.** Be mentally alert at all times when running machinery.

⚠WARNING
Safety Instructions for Machinery

7. **ONLY ALLOW TRAINED AND PROPERLY SUPERVISED PERSONNEL TO OPERATE MACHINERY.** Make sure operation instructions are safe and clearly understood.

8. **KEEP CHILDREN/VISITORS AWAY.** Keep all children and visitors away from machinery. When machine is not in use, disconnect it from power, lock it out, or disable the switch to make it difficult for unauthorized people to start the machine.

9. **UNATTENDED OPERATION.** Leaving machine unattended while its running greatly increases the risk of an accident or property damage. Turn machine ***OFF*** and allow all moving parts to come to a complete stop before walking away.

10. **DO NOT USE IN DANGEROUS ENVIRONMENTS.** DO NOT use machinery in damp, wet locations, or where any flammable or noxious fumes may exist.

11. **KEEP WORK AREA CLEAN AND WELL LIGHTED.** Clutter and dark shadows may cause accidents.

12. **USE A GROUNDED POWER SUPPLY RATED FOR THE MACHINE AMPERAGE.** Grounded cords minimize shock hazards. Operating machine on an incorrect size of circuit increases risk of fire.

13. **ALWAYS DISCONNECT FROM POWER SOURCE BEFORE SERVICING MACHINERY**. Make sure switch is in OFF position before reconnecting.

14. **MAINTAIN MACHINERY WITH CARE.** Keep blades sharp and clean for best and safest performance. Follow instructions for lubricating and changing accessories.

15. **MAKE SURE GUARDS ARE IN PLACE AND WORK CORRECTLY BEFORE USING MACHINERY.**

16. **REMOVE CHUCK KEYS OR ADJUSTING TOOLS.** Make a habit of never leaving chuck keys or other adjustment tools in/on the machine—especially near spindles!

17. **DAMAGED MACHINERY.** Check for binding or misaligned parts, broken parts, loose bolts, other conditions that may impair machine operation. Always repair or replace damaged parts before operation.

18. **DO NOT FORCE MACHINERY.** Work at the speed for which the machine or accessory was designed.

19. **SECURE WORKPIECE.** Use clamps or a vise to hold the workpiece when practical. A secured workpiece protects your hands and frees both hands to operate the machine.

20. **DO NOT OVERREACH.** Maintain stability and balance at all times when operating machine.

21. **MANY MACHINES CAN EJECT WORKPIECES TOWARD OPERATOR.** Know and avoid conditions that cause the workpiece to "kickback."

22. **STABLE MACHINE.** Machines that move during operations greatly increase the risk of injury and loss of control. Verify machines are stable/secure and mobile bases (if used) are locked before starting.

23. **CERTAIN DUST MAY BE HAZARDOUS** to the respiratory systems of people and animals, especially fine dust. Be aware of the type of dust you are exposed to and always wear a respirator designed to filter that type of dust.

24. **EXPERIENCING DIFFICULTIES.** If at any time you are experiencing difficulties performing the intended operation, stop using the machine! Contact our Technical Support Department at (570) 546-9663.

⚠WARNING
Additional Safety Instructions for Pan and Box Brakes

1. **OVERLOADING PAN AND BOX BRAKE.** Overloading this tool can cause injury from flying parts. Do not exceed the capacities specified on **Page 3**.

2. **SECURING PAN AND BOX BRAKE.** Secure pan and box brake to a sturdy bench before using. Tipping may occur during use and the machine could fall on you causing injury.

3. **USING TORCHES.** Heating metal with a torch while the metal is in the pan and box brake will weaken the fingers.

4. **METAL EDGES**. Always chamfer and deburr sharp sheet metal edges before bending in the pan and box brake. Sharp edges on sheet metal can cut your fingers to the bone.

5. **PINCHING.** Lower the fingers when not in use to prevent pinching hazards.

6. **GLOVES AND GLASSES**. Always wear leather gloves and approved safety glasses when using this tool.

7. **EXPERIENCING DIFFICULTIES**. If at any time you are experiencing difficulties performing the intended operation, STOP using the tool and contact our Technical Support at (570) 546-9663, or ask a qualified expert how the operation should be performed.

8. **TOOLS IN POOR CONDITION**. Inspect the pan and box brake for any cracked linkage, levers, or loose fasteners. Correct any problems before use.

⚠WARNING

Like all machines there is danger associated with the Model G5769. Accidents are frequently caused by lack of familiarity or failure to pay attention. Use this machine with respect and caution to lessen the possibility of operator injury. If normal safety precautions are overlooked or ignored, serious personal injury may occur.

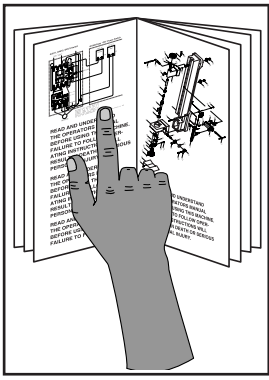
⚠CAUTION

No list of safety guidelines can be complete. Every shop environment is different. Always consider safety first, as it applies to your individual working conditions. Use this and other machinery with caution and respect. Failure to do so could result in serious personal injury, damage to equipment, or poor work results.

SECTION 2: SET UP

About this Section

The purpose of this section is to guide you through the required steps to get your equipment out of its packaging and into operating condition.



⚠WARNING

This equipment presents serious injury hazards to untrained users. Read through this entire manual to become familiar with the operating procedures before using this equipment!

⚠WARNING

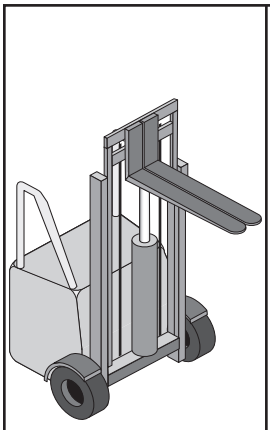
Wear safety glasses during the entire setup process!

Unpacking

The Model G5769 48" Pan and Box Brake was carefully packed when it left our warehouse. If you discover the equipment is damaged after you have signed for delivery, *please immediately call Customer Service at (570) 546-9663 for advice.*

Save the containers and all packing materials for possible inspection by the carrier or its agent. *Otherwise, filing a freight claim can be difficult.*

When you are completely satisfied with the condition of your shipment, you should inventory the parts.



⚠WARNING

The Model G5769 is a heavy machine that weighs approximately 335 lbs. Serious personal injury may occur if safe moving methods are not followed. To be safe, you will need assistance and power equipment when moving the shipping crate and removing the equipment from the crate.

Lifting:

- If you are unsure of how to lift this equipment safely, consult a qualified professional.
- When lifting the pan and box brake, make sure the weight is supported evenly with two or more lifting devices.
- Make sure the bending leaf stays in the down position by clamping a 2x4 piece of lumber between the clamping leaf and clamping block as in **Figure 2**.

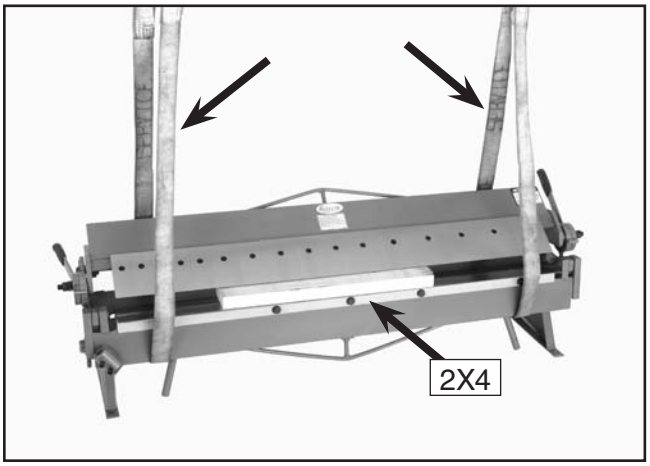


Figure 2. Pan and box brake supported by lifting straps and 2x4 to stablize bending leaf.

Inventory

After all the parts have been removed from the shipping crate, you should have the following items:

Box Contents (**Figure 3**)	**Qty**
A. Pan and Box Brake Main Body	1
B. Counterweight	1
C. Hex Wrenches 6 and 10mm	1 ea
D. Wrench 17 X 19mm	1

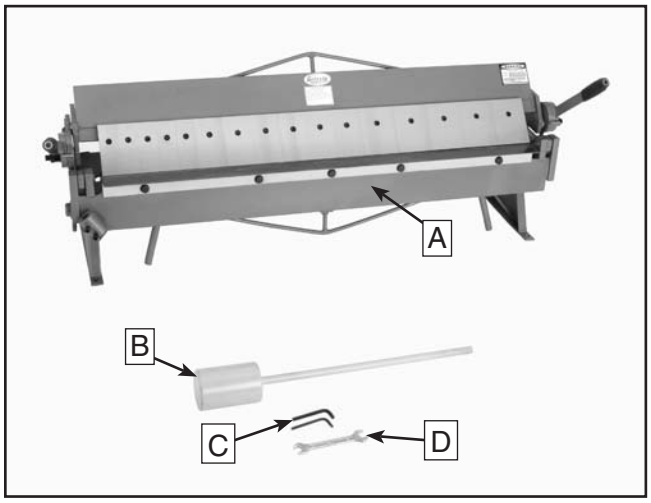
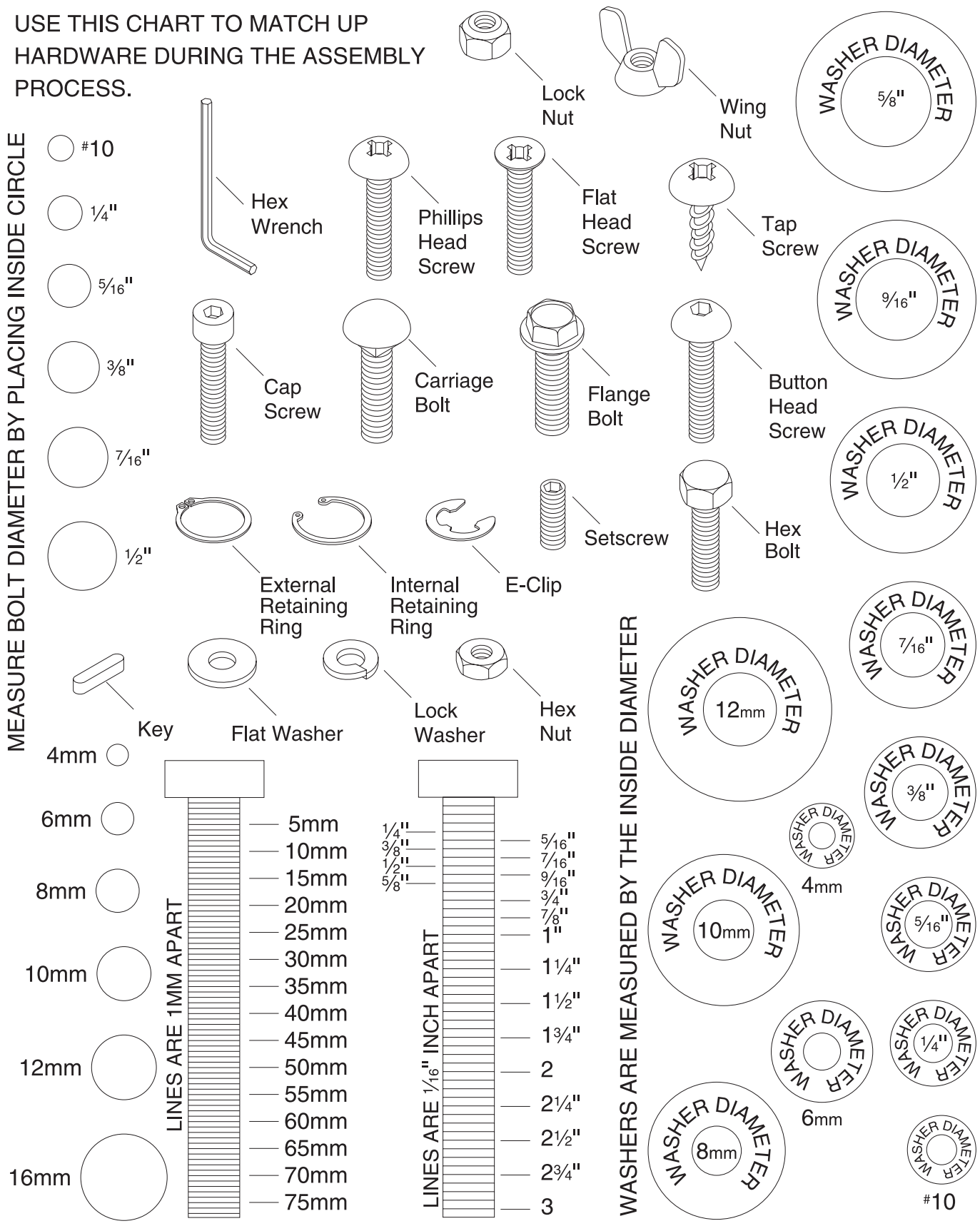


Figure 3. Pan and box brake removed from shipping crate.

Hardware Recognition Chart

USE THIS CHART TO MATCH UP HARDWARE DURING THE ASSEMBLY PROCESS.



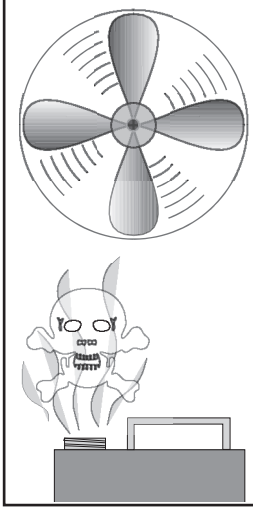
Clean Up

The unpainted surfaces are coated with a waxy oil to protect them from corrosion during shipment. Remove this protective coating with a solvent cleaner or citrus-based degreaser such as Grizzly's G7895 Degreaser or with liberal amounts of WD-40®.

Remove and thoroughly clean each finger block assembly. To remove single fingers, raise the clamping leaf with the clamp handles, by rotating them towards the back of the machine, to make sure there is no pressure on the fingers. Unscrew the cap screw(s) as shown in **Figure 5** and remove the finger and toe clamp.

⚠WARNING

Do not clean with gasoline or other petroleum-based solvents. They have low flash points which make them extremely flammable. A risk of explosion and burning exists if these products are used.



⚠CAUTION

Many of the solvents commonly used to clean machinery can be toxic when inhaled or ingested. Always work in well-ventilated areas far from potential ignition sources when dealing with solvents. Use care when disposing of waste rags and towels to be sure they do not create fire or environmental hazards.

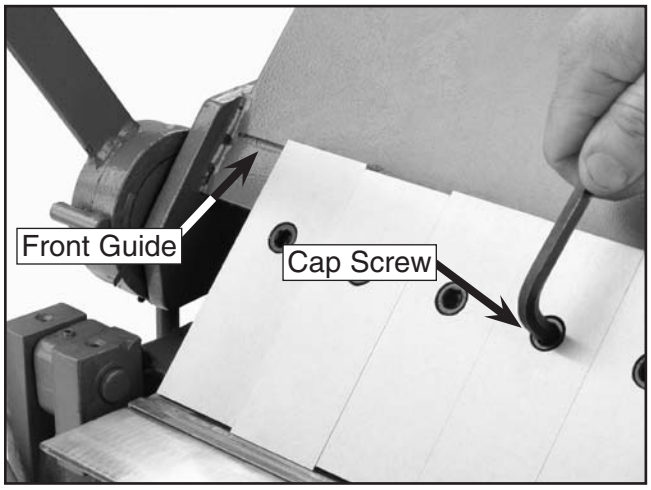


Figure 4. Removing finger blocks.

After all of the finger block assemblies have been cleaned, coat them liberally with a metal protectant, and clean the mounting surface on the clamping leaf.

Place the fingers over the clamping leaf front guide edge, align the toe clamp to catch the bottom of the clamping leaf, and tighten the cap screw enough so the fingers will not fall off. *Follow the instructions on **Page 18** to re-align the fingers before operating your brake!*

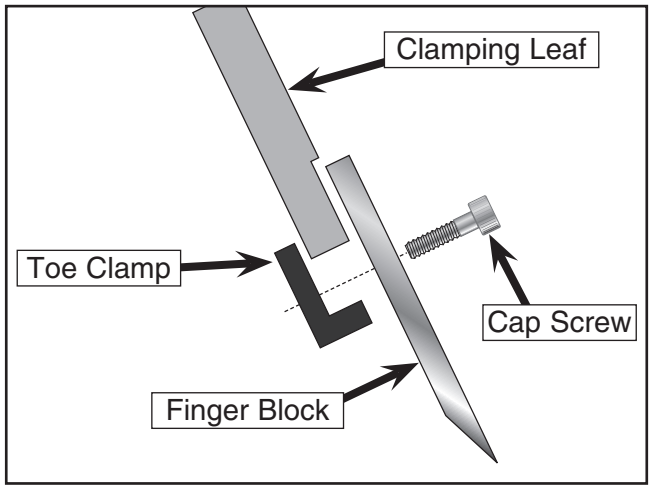


Figure 5. Finger block and clamp layout.

For metal protectants, we recommend using G96® GUN TREATMENT (Model H3788) or BOESHIELD® T-9 (Model G2871). *Check with the current Grizzly catalog for pricing and a variety of other quality metal protectants.*

Site Considerations

Floor Load

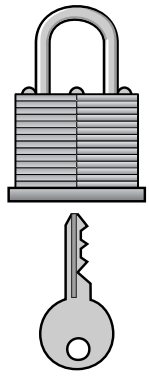
Your Model G5769 weighs approximately 335 lbs. and has a footprint of 52" x 12". *BEFORE* moving the brake onto a workbench, inspect the bench carefully to determine if it will be sufficient to carry the load of the machine, and handle the stress and pressure of operation. If you question the strength of your bench, you should consider purchasing a heavy-duty bench such as the H2612 Workbench Leg System. Combined with a G9914 Maple Workbench Top, you would have a robust workbench along with the weight needed to safely operate the brake without lifting/tipping the workbench.

Working Clearances

Working clearances is the distance between a machine and obstacles which allow for safe operation. Consider existing and anticipated machine needs, size of material to be processed through each machine, and the space for auxiliary stands or work tables. Also consider the relative position of each machine to one another for efficient material handling.

Lighting

Lighting should be bright enough to eliminate shadows and prevent eye strain.



⚠CAUTION

Children and inexperienced users can be easily injured by this equipment. Ensure that your workplace is inaccessible to children and inexperienced users by closing and locking all entrances when you are away.

Mounting to Bench

In order to safely operate your new pan and box brake, it must be secured to a heavy workbench. Use the holes in the base brackets, shown in **Figure 6**, as a guide for drilling.

To ensure accurate operation results, make sure your workbench is as level and flat as possible and that you provide adequate work room all around the pan and box brake.

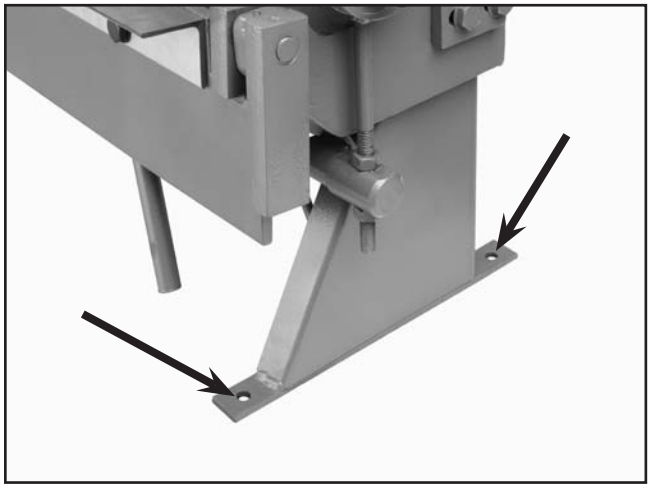


Figure 6. Mounting holes.

Continued on next page ⟶

Bolting to Workbench

Lag bolts or hex bolts with nuts (**Figure 7**) are two methods for anchoring the machine to a workbench. We suggest you look closely at the work bench to help decide which option will work best for mounting your pan and box brake. Look for these specific things:

- Are there any studs under the top of the bench that would require/allow the use of lag bolts?
- Are you using a plywood top that is too thin to adequately secure the pan and box brake using lag bolts?
- Will you need a combination of lag and hex bolts?
- We recommend fastening the pan and box brake using hex bolts with large fender washers when the plywood is thin. Mounting the pan and box brake to a plywood table top that is thinner than ½" is not recommended.

Figure 7. Through-bolt, nut, washers and lag bolt.

Mounting the Counterweight

Tools Needed: **Qty**
10mm Hex Wrench.....1

The counterweight is mounted to the sleeve on the left hand end of the bending leaf as shown in **Figure 8**. Slide the stem into the sleeve 3" or 4", and secure with the two cap screws.

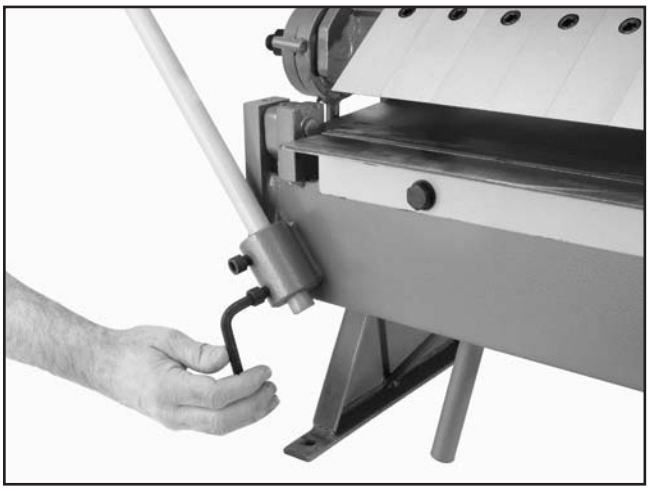


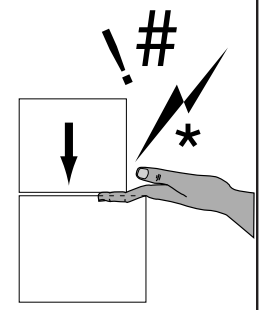
Figure 8. Mounting the counterweight.

SECTION 3: OPERATIONS

Operation Safety

If you have never used this type of equipment before, WE STRONGLY RECOMMEND that you read books, trade magazines, or get formal training before beginning any projects.

Your safety is important! Please follow the warnings below:

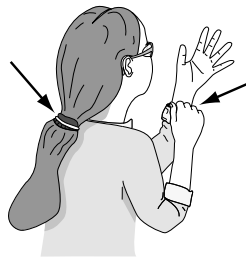


⚠WARNING

Watch for pinch points on this equipment. This equipment has many moving parts which may cause serious injury to yourself or others around the equipment.

⚠WARNING

Wear safety glasses during all operations!



⚠WARNING

Loose hair and clothing could get caught in equipment and cause serious personal injury. Keep loose clothing rolled up and long hair tied up and away from moving equipment.

Capability

This pan and box brake is designed to fold sheet metal into boxes, pans, or trays. It can bend 16 gauge mild steel at half width and 18 gauge mild steel at full width.

Three sizes of fingers are included and mounted on the clamping leaf. They can be put together in a variety of combinations to make bends of varying widths. Arrangements can be made to permit sides to be formed between the opposite sides on a workpiece that have been previously bent.

Positioning Counterweight

Tools Needed: **Qty**
10mm Hex Wrench.....1

Loosen the two cap screws that secure the counterweight to the bending leaf. Slide the counterweight up or down as needed. Tighten the cap screws.

Adjusting Setback

NOTICE

You must include the thickness of folded edges or joints when determining the proper setback, or the brake may be damaged.

Before you begin any bending operation, please consider the differences of sheet metal gauges when trying to achieve either sharp or rounded bends, and allow for the differences by adjusting the setback.

The setback is the distance from the forward edge of the fingers to the edge of the bending leaf, as shown in **Figure 9**. The setback distance is determined by the gauge size of the workpiece and the desired radius of the bend.

Normally, setback is adjusted at least 1½–2 times the thickness of the workpiece. (Thicker or tempered workpieces will need a larger setback. Refer to material gauge capacities on the **Machine Data Sheet** on **Page 3**.)

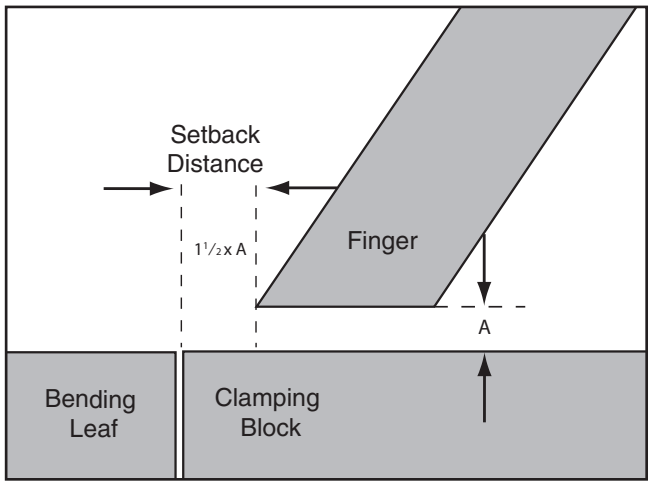


Figure 9. Setback distance.

To adjust the setback:

1. Raise the clamping leaf about an inch off of the clamping block.

2. Loosen the cap screw shown in **Figure 10.**

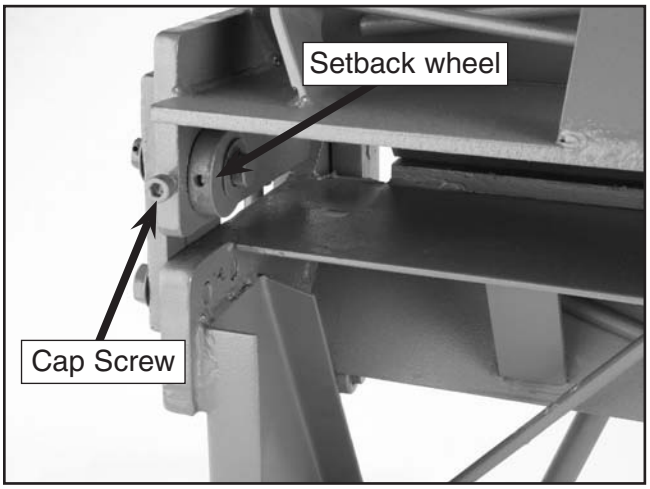


Figure 10. Cap screw and setback wheel.

3. Rotate the two setback adjusting wheels. Turning the wheels one way will cause the clamping leaf to move forward. Turning it the other will cause it to move backward. (Because the adjusting mechanism is an eccentric, turning the adjusting wheels a full turn will only bring the clamping leaf to its original position.)

   Note—*If you find it hard to turn the wheel with your fingers, insert a screwdriver into a hole on the edge of the wheel to gain leverage.*

4. Reposition the clamping leaf over the clamping block and check for setback position.

5. Repeat **Steps 1—4** until the desired setback is achieved.

   Note—*After performing these adjustments, make sure the bending leaf is parallel with the clamping block, or your bend will be distorted.*

Spacing Fingers

The fingers can be spaced apart for clearance when making pans or boxes. This requires removing one or more of the fingers, so that you can space the others to match the width of your pan or box.

Tools Needed: **Qty**
10mm Hex Wrench..... 1

To space the fingers apart:

1. Loosen the cap screws from each of the fingers you decide to remove.

2. Pull the fingers off of the front guide, as shown in **Figure 11**, and set them aside.

   Note—*You may need to mix and match finger widths to equal the size of your workpiece.*

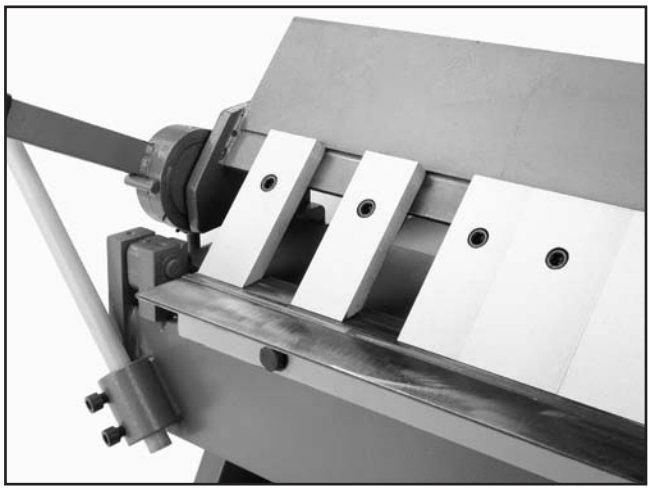


Figure 11. Fingers removed to provide space for matching fingers with box or pan widths.

3. Align the remaining fingers and tighten the cap screws.

Aligning Fingers

Finger alignment is critical for accurate results.

Tools Needed: **Qty**
10mm Hex Wrench..... 1

To align a finger:

1. Lower the clamping leaf with the two clamping handles until the fingers appear to touch the clamping block as evenly as possible.

2. Look closely along the edge of each finger to determine if any are out of adjustment as shown in **Figure 12**.

3. Loosen the cap screw on the misaligned finger enough to move it up or down.

4. Adjust the finger and tighten the cap screw.

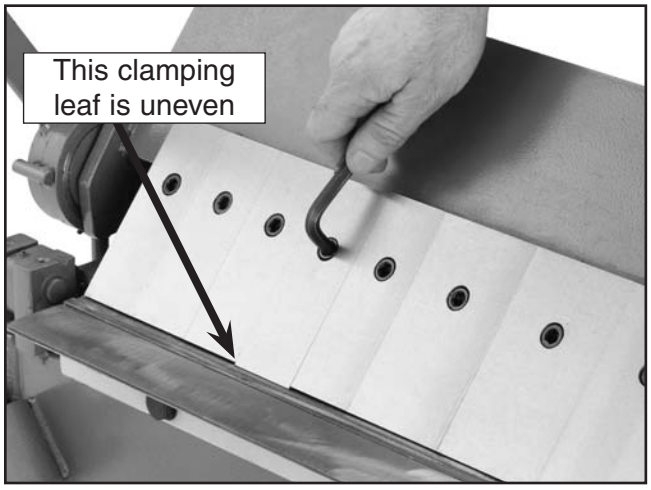


Figure 12. Look closely along the edges of all the clamping leafs.

Adjusting Clamping Pressure

The clamping pressure must be adjusted for different workpiece thicknesses. The ideal pressure will have medium resistance at the clamp handles, and will lock the workpiece into position easily—much like a pair of Vice-Grips®. This pressure is adjusted by turning the clamping pressure adjusting nuts, shown in **Figure 16**. These are located on both ends of the pan and box brake.

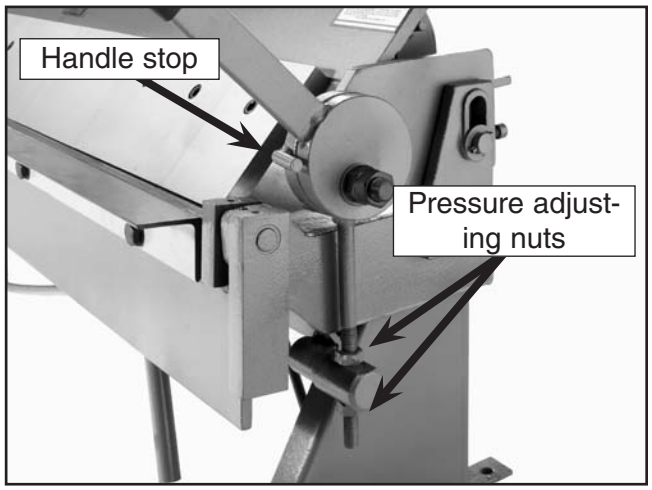


Figure 13. Clamping pressure adjusting nuts and handle stop (right end shown).

To adjust the clamping pressure:

1. Lower the bending leaf onto the workpiece. It is best if the workpiece is the same width as the pan and box brake. If it is not, place two pieces of metal the same thickness as the workpiece, on each end.

2. When the fingers are just touching the workpiece, the clamping handle on the left end of the machine should be at the 2 o'clock position (when viewed from that end). The clamping handle at the other end should be in the same relative position, or about the 10 o'clock position (when viewed from that end).

3. Loosen the upper and lower nuts shown in **Figure 13**, and adjust both up or down until the clamp handles are in the 2:00 and 10:00 position when the clamping leaf just touches the workpiece.

4. Tighten the upper nut to ensure that position is maintained.

5. Make sure the clamping pressure is even on both ends of the machine.

   Note—To test this, raise one end and test the clamping action of the other end. The clamping action should be the same on either end regardless of the state of its opposite.

6. Make adjustments as needed, repeating **Steps 1—5**.

   Note—The clamping pressure is in proper adjustment when the clamping handle "snaps" (or locks) into position against the handle stop shown in **Figure 13.**

Basic Bending

⚠WARNING

Do not operate the Model G5769 unless it has been securely mounted to a workbench, or it could tip over on you, causing a severe injury!

Bending operations require the fingers to be parallel with the edge of the clamping block and require the setback and clamping pressure to be correctly adjusted for the thickness of the workpiece.

To perform a basic bending operation:

1. Raise the clamping leaf.

2. Insert the workpiece between the fingers and the clamping block.

3. Align the bend mark(s) on the workpiece to the fingers and clamp it in place using the clamping handles.

   Note—*If the handle does not lock when you lower the fingers over the workpiece, the clamping pressure may need to be tightened.* (See **Adjusting Clamping Pressure, Page 19***).*

4. Raise or lower the counterweight depending on the width and gauge of the workpiece. The height can only be determined with practice. But, as a rule of thumb, wider, thicker and harder materials require that the counterweight be set higher.

5. Lift the bending leaf until the workpiece has reached the desired bend angle. If it takes a lot of effort to make the bend, set the counterweight higher along the stem.

   Note —Be mindful that light or delicate workpieces may be easily over-bent if the counterweight is positioned too far out along the stem.

6. Raise the clamping leaf and remove the bent workpiece.

⚠CAUTION

Hold onto the workpiece so it does not drop and hit you when it is released!

Note—*If a pan or box bend is desired, choose a finger or a selection of fingers that are as close as possible to the length of the pan or box side lengths.*

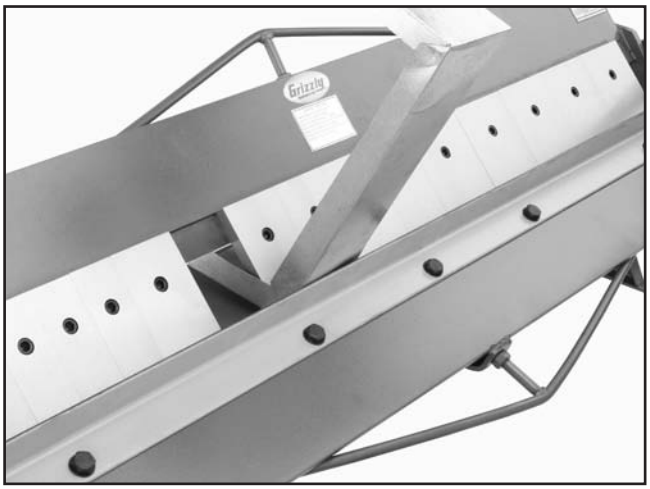


Figure 14. Making the second bend on a tray.

Bending Allowance

To bend metal objects accurately, you need to consider the total length of each bend, especially when more than one bend is required. This is called bend allowance.

Subtract bend allowance from the sum of the workpiece outside dimensions to obtain the overall length and width of the blank needed to make a particular part.

Exact allowances can only be obtained by trial due to differences in sheet metal hardness, whether the bend is with or across the grain, and difficulties in making an exact bend radius. Bend allowances accurate enough for average use may be found in metalworking handbooks.

SECTION 4: MAINTENANCE

Lubrication

There are four main areas to keep lubricated on the Model G5769 Pan and Box Brake: 1) The unpainted cast iron surfaces, 2) the bending leaf hinge, 3) clamping leaf ports, and 4) the clamping leaf guide pins.

Steel Surfaces

To prevent rust, all unpainted cast iron surfaces on the Model G5769 should be regularly maintained with a surface protectant like G96® GUN TREATMENT (Model H3788) or BOESHIELD® T-9 (Model G2871).

Note—*Check with the current Grizzly catalog for current pricing and a variety of other quality metal protectants.*

Clamping Leaf

Each end of the clamping leaf has an oil port which should be oiled daily (see **Figure 15**). During heavy use, lubricate once a shift (every 8 hour work period).

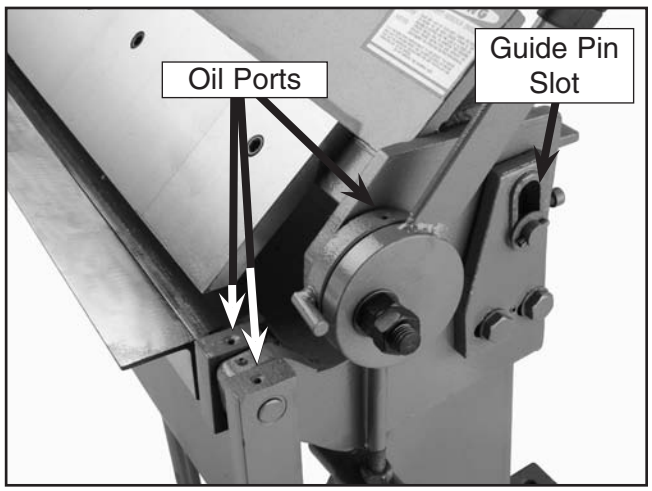


Figure 15. Lubrication points on one end of the pan and box brake.

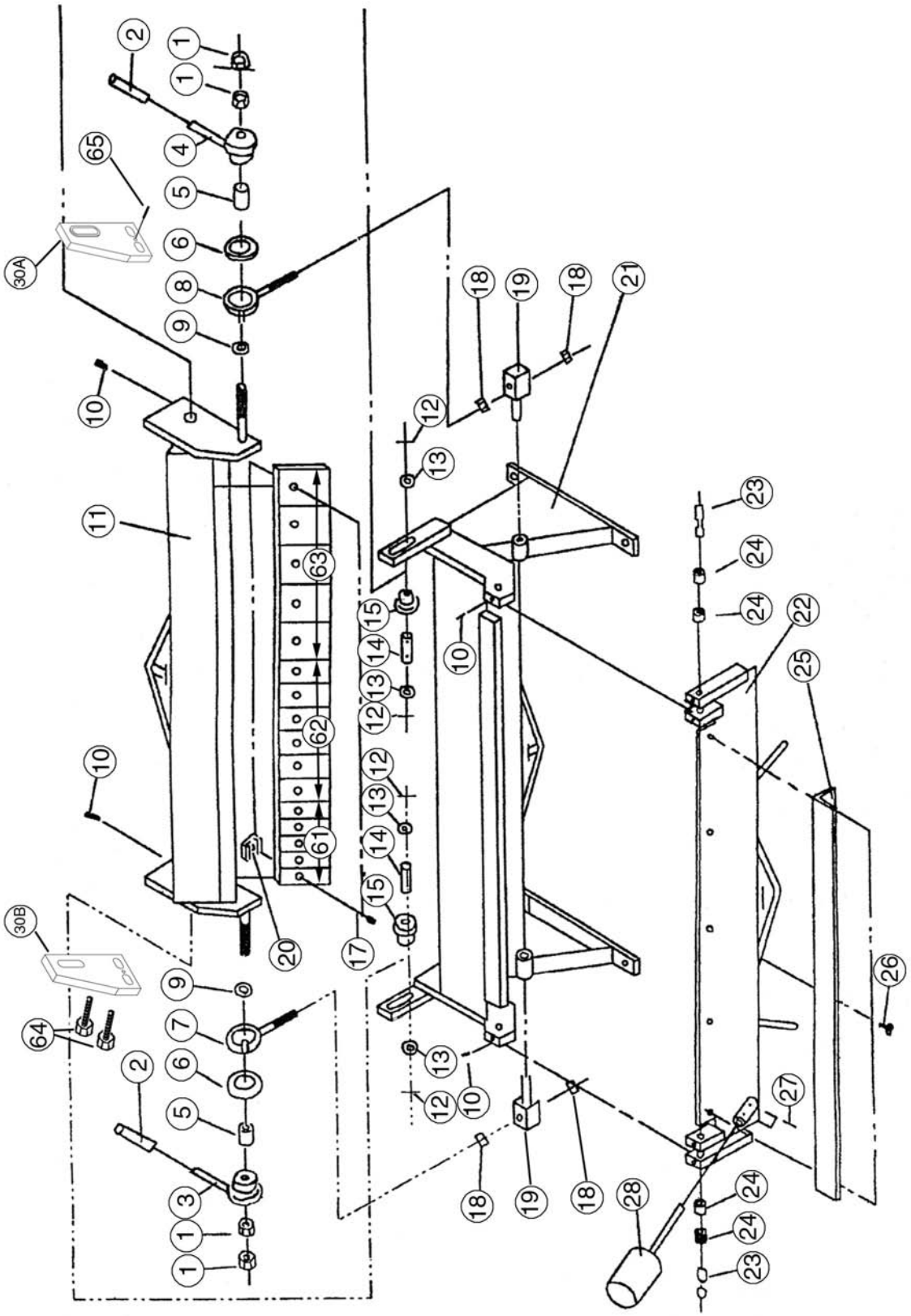
Bending Leaf

Apply a few drops of oil in the bending leaf hinge oil ports. They should be oiled daily. During heavy use, lubricate once a shift (every 8 hour work period).

Clamping Leaf Guide Pins

Apply a small dab of lithium grease to the guide pin slots (see **Figure 15**) once a week. If the machine is used continuously, you may need to lubricate this more often.

G5769 Parts Breakdown



G5769 Parts List

Ref.	PART	DESCRIPTION
001	PN05M	HEX NUT M16-1.5
002	P5769002	HANDLE COVER
003	P5769003	LEFT HANDLE
004	P5769004	RIGHT HANDLE
005	P5769005	BUSHING
006	P5769006	SHAFT SLEEVE
007	P5769007	SWIVEL LEFT
008	P5769008	SWIVEL RIGHT
009	PW08M	FLAT WASHER 16MM
010	PSB14M	CAP SCR M8-1.25 X 20
011	P5769011	BREAK SUPPORT
012	PRP49M	ROLL PIN 5 X 25
013	PW08M	FLAT WASHER 16MM
014	P5769014	SHAFT
015	P5769015	ECCENTRIC
016	P5769016	FORMING FINGER SET
016D	P5769016D	BENDING BLADE SET
017	PSB44M	CAP SCR M10-1.25 X 28
018	PN09M	HEX NUT M12-1.75
019	P5769019	KNOB BLOCK
020	P5769020	CLAMP
021	P5769021	STAND
022	P5769022	BENDING LEAF
023	P5769023	SHAFT
024	P5769024	BUSHING
025	P5769025	ANGLE BAR
026	P5769026	SCREW M12 X 15
027	PSB64M	CAP SCR M10-1.5 X 25
028	P5769028	COUNTERWEIGHT
029	P5769029	LABEL
030A	P5769030A	RIGHT END PLATE
030B	P5769030B	LEFT END PLATE
061	P5769061	FORMING FINGER 2"
062	P5769062	FORMING FINGER 3"
063	P5769063	FORMING FINGER 4"
064	PB68M	HEX BOLT M12-1.75 X 30
065	PRP05M	ROLL PIN 5 X 30

WARRANTY AND RETURNS

Grizzly Industrial, Inc. warrants every product it sells for a period of **1 year** to the original purchaser from the date of purchase. This warranty does not apply to defects due directly or indirectly to misuse, abuse, negligence, accidents, repairs or alterations or lack of maintenance. This is Grizzly's sole written warranty and any and all warranties that may be implied by law, including any merchantability or fitness, for any particular purpose, are hereby limited to the duration of this written warranty. We do not warrant or represent that the merchandise complies with the provisions of any law or acts unless the manufacturer so warrants. In no event shall Grizzly's liability under this warranty exceed the purchase price paid for the product and any legal actions brought against Grizzly shall be tried in the State of Washington, County of Whatcom.

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____ Card Deck ____ Website ____ Other:

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____ Hand Loader
____ Handy
____ Home Shop Machinist
____ Journal of Light Cont.
____ Live Steam
____ Model Airplane News
____ Old House Journal
____ Popular Mechanics
____ Popular Science
____ Popular Woodworking
____ Precision Shooter
____ Projects in Metal
____ RC Modeler
____ Rifle
____ Shop Notes
____ Shotgun News
____ Today's Homeowner
____ Wood
____ Wooden Boat
____ Woodshop News
____ Woodsmith
____ Woodwork
____ Woodworker West
____ Woodworker's Journal
____ Other:

3. What is your annual household income?

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____ $50,000-$59,000 ____ $60,000-$69,000 ____ $70,000+

4. What is your age group?

____ 20-29 ____ 30-39 ____ 40-49
____ 50-59 ____ 60-69 ____ 70+

5. How long have you been a woodworker/metalworker?

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