MODEL T20798
40" PAN AND BOX BRAKE
OWNER'S MANUAL

#CR11254 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, immediately call our technical support for updates or clarification.

For your convenience, we always keep current Grizzly manuals and most updates available on our website at **www.grizzly.com**. Any updates to your machine will be reflected in these documents as soon as they are complete. Visit our site often to check for the latest updates!

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

Functional Overview

This pan and box brake is designed to fold boxes, pans, or trays from one piece of sheet metal.

A number of fingers of different widths on the clamping leaf can be put together in a variety of combinations to make bends of varying widths. Moveable fingers also permit the sides of a box to be bent, without interfering with the sides that have previously been bent.

Identification

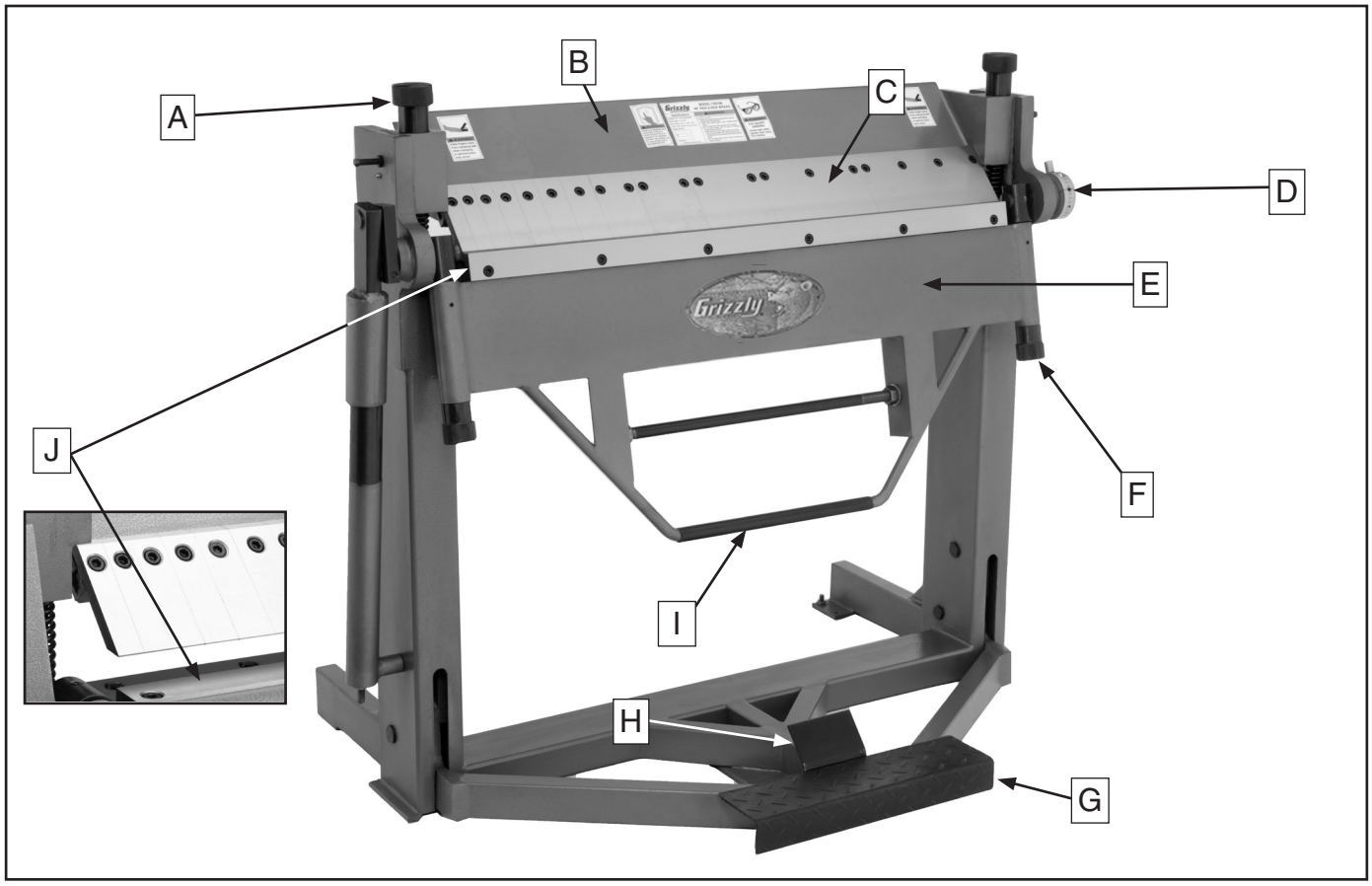


Figure 1. Common Pan and Box Brake components.

A. Clamping Pressure Knobs: Adjusts pressure on the workpiece, allowing for different thicknesses.

B. Clamping Leaf: Holds the fingers. Squeezes the workpiece against the clamping block.

C. Finger Blocks: Adjustable dies that the workpiece is bent against.

D. Stop Dial: Used to lock bending angle.

E. Bending Leaf: Swivels up to bend the workpiece.

F. Setback Knobs: Adjusts to the gauge of the workpiece and desired bend radius.

G. Foot Pedal: Raises and lowers fingers onto clamping block.

H. Foot Pedal Lock: Locks foot pedal.

I. Operating Handle: Used to raise and lower the bending leaf.

J. Clamping Block: Fixed block (or lower jaw) that the clamping leaf presses against.

MACHINE DATA SHEET

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

MODEL T20798
40" PAN & BOX BRAKE

Overall Dimensions

Overall Size (L x W x H)	37" x 54" x 45"
Net Weight	638 lbs.
Finger Sizes	1", 1⅛", 1¼", 1⅜", 1½", 1¾", 2", 3", 4", 5", 8", 10"
Foot Print (Length/Width)	45½" x 37"

Shipping Dimensions:

Type	Wood Crate
Content	Machine
Weight	704 lbs.
Length/Width/Height	40" x 58" x 50"

Capacities:

Brake Range	0°–135°
Maximum Width	40"
Maximum Height of Pan/Box sides	2½"
Mild Steel	14 gauge
Aluminum	8 gauge
Soft Brass	12 gauge
Annealed Phosphor Bronze	14 gauge
Soft Copper	12 gauge
Hard Copper	14 gauge

Construction:

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

Other Specifications

Country of Origin	China

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 which are 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 THROUGH THE ENTIRE MANUAL BEFORE STARTING MACHINERY.** Machinery presents serious injury hazards to untrained users.
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 AN ANSI APPROVED RESPIRATOR WHEN OPERATING MACHINERY THAT PRODUCES DUST.** Wood dust is a carcinogen and can cause cancer and severe respiratory illnesses.
4. **ALWAYS USE HEARING PROTECTION WHEN OPERATING MACHINERY.** Machinery noise can cause permanent hearing damage.
5. **WEAR PROPER APPAREL.** DO NOT wear loose clothing, gloves, neckties, rings, or jewelry which may get caught 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 AND VISITORS AWAY.** Keep all children and visitors a safe distance from the work area.

9. **MAKE WORKSHOP CHILD PROOF.** Use padlocks, master switches, and remove start switch keys.

10. **NEVER LEAVE WHEN MACHINE IS RUNNING.** Turn power *OFF* and allow all moving parts to come to a complete stop before leaving machine unattended.

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

12. **KEEP WORK AREA CLEAN AND WELL LIT.** Clutter and dark shadows may cause accidents.

13. **USE A GROUNDED EXTENSION CORD RATED FOR THE MACHINE AMPERAGE.** Undersized cords overheat and lose power. Replace extension cords if they become damaged. DO NOT use extension cords for 220V machinery.

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

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

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

17. **REMOVE ADJUSTING KEYS AND WRENCHES.** Make a habit of checking for keys and adjusting wrenches before turning machinery *ON*.

18. **CHECK FOR DAMAGED PARTS BEFORE USING MACHINERY.** Check for binding and alignment of parts, broken parts, part mounting, loose bolts, and any other conditions that may affect machine operation. Repair or replace damaged parts.

19. **USE RECOMMENDED ACCESSORIES.** Refer to the instruction manual for recommended accessories. The use of improper accessories may cause risk of injury.

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

21. **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.

22. **DO NOT OVERREACH.** Keep proper footing and balance at all times.

23. **MANY MACHINES WILL EJECT THE WORKPIECE TOWARD THE OPERATOR.** Know and avoid conditions that cause the workpiece to "kickback."

24. **ALWAYS LOCK MOBILE BASES BEFORE OPERATING MACHINERY**.

⚠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 4**.

2. **USAGE.** Do not use this pan and box brake as a press or a lever-operated crushing tool. Never use this machine without fully understanding its limitations.

3. **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.

4. **PINCHING.** Always keep hands away from the clamping leaf. This area presents a severe pinching hazard.

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

6. **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.

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

⚠WARNING

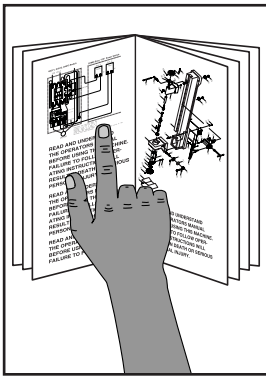
Like all machinery there is potential danger when operating this machine. Accidents are frequently caused by lack of familiarity or failure to pay attention. Use this machine with respect and caution to decrease the risk of operator injury. If normal safety precautions are overlooked or ignored, serious 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: SETUP

Setup Safety



⚠WARNING

This machine presents serious injury hazards to untrained users. Read through this entire manual to become familiar with the controls and operations before using the machine!

⚠WARNING

Wear safety glasses during the entire setup process!

⚠WARNING

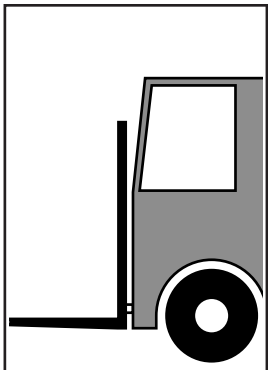
This machine and its components are very heavy. Get lifting help or use power lifting equipment such as a forklift to move heavy items.

Unpacking

The Model T20798 40" 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 T20798 is a heavy machine. Serious personal injury may occur if safe moving methods are not used. To be safe, get assistance and use power equipment to move the shipping crate and remove the machine 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 straps or chains that can hold at least 700 lbs. each.
- Make sure the body of the brake is bearing the load (**Figure 2**).

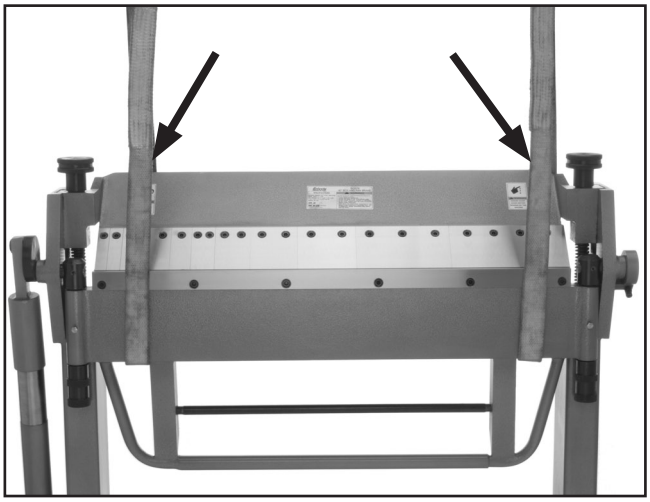


Figure 2. Typical view of a pan and box brake correctly supported evenly by two lifting straps.

Inventory

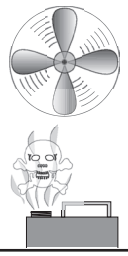
This machine comes pre-assembled from the factory. Other than the included 8mm hex wrench, of the all accessories are installed. However, some disassembly and clean up is mandatory to remove the storage grease and ensure smooth operation.

Clean Up

Cast iron surfaces are coated with a waxy grease to prevent corrosion during shipment. Remove this protective coating with a solvent cleaner or degreaser, such as shown in **Figure 3**.

⚠WARNING

Gasoline and petroleum products have low flash points and can explode or cause fire if used to clean machinery. DO NOT use these products to clean the machinery.



⚠CAUTION

Many cleaning solvents are toxic if inhaled. Minimize your risk by only using these products in a well ventilated area.

G2544—Solvent Cleaner & Degreaser
H9692—Orange Power Degreaser
Great products for removing shipping grease.

Figure 3. Cleaner/degreasers available from Grizzly.

Remove and thoroughly clean each finger block assembly. Before trying to remove fingers, raise the clamping leaf with the foot pedal (refer to **Using Foot Pedal** on **Page 13**) to make sure there is no pressure on the fingers.

To remove and clean the fingers:

1. Using an 8mm hex wrench, unscrew the cap screws shown in **Figure 4**, remove the finger, but leave the T-nut(s) in the front guide.

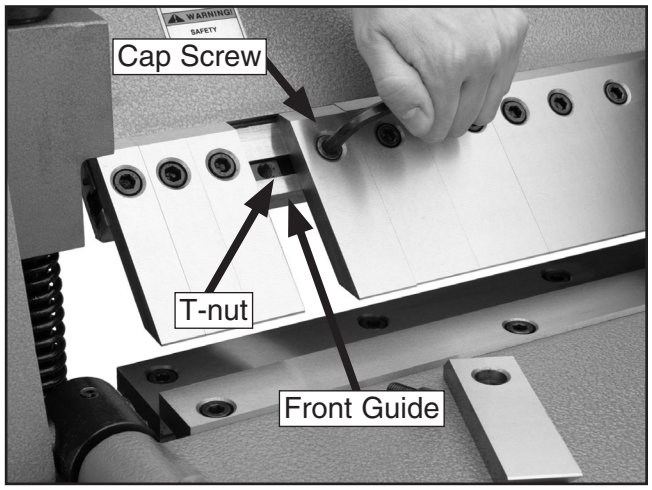


Figure 4. Removing finger blocks.

2. After the finger block assemblies have been cleaned, coat them liberally with any anti-rust product shown in **Figure 5** and reinstall.

3. Place the fingers over the clamping leaf front guide, align the cap screw holes and the T-nut holes, insert the cap screws into the T-nuts, and fasten them loosely. Follow the instructions on **Page 14** to re-align the fingers before tightening the cap screws completely.

G5562—SLIPIT® 1 Qt. Gel
G5563—SLIPIT® 12 oz Spray
G2871—Boeshield® T-9 12 oz Spray
G2870—Boeshield® T-9 4 oz Spray
H3789—G96® Gun Treatment 4.5 oz Spray
Great products for preventing rust.

Figure 5. Cast-iron/steel anti-rust products.

Site Considerations

Floor Load

Refer to the **Machine Data Sheet** for the weight and footprint specifications of your machine. Some residential floors may require additional reinforcement to support both the machine and operator.

Placement Location

Consider existing and anticipated needs, size of material to be processed through each machine, and space for auxiliary stands, work tables or other machinery when establishing a location for your new machine. See **Figure 6** for the minimum working clearances.

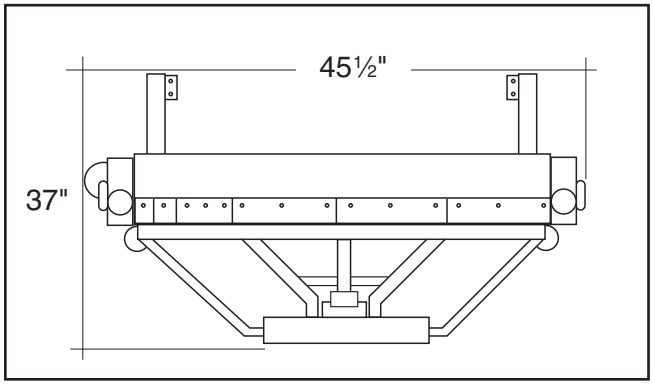
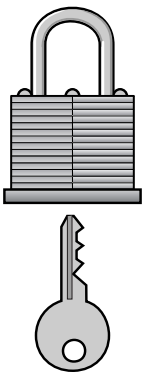


Figure 6. Minimum working clearance.



⚠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 Floor

Bolting to Concrete Floors

Lag shield anchors with lag bolts and anchor studs (**Figure 7**) are two popular methods for anchoring an object to a concrete floor.

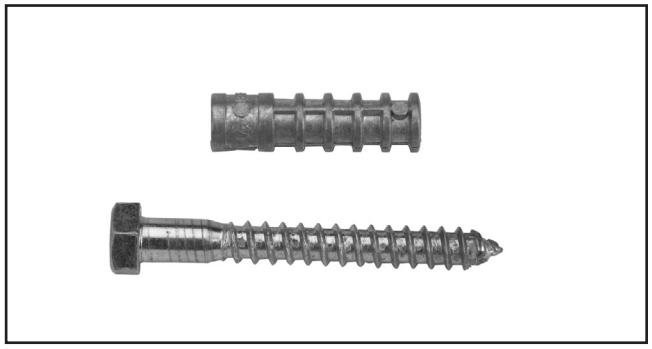


Figure 7. Typical fasteners for mounting to concrete floors.

Research the many options and methods for mounting your machine and choose the best that fits your specific application. Use the holes shown in **Figure 8** to mount your machine to the floor.

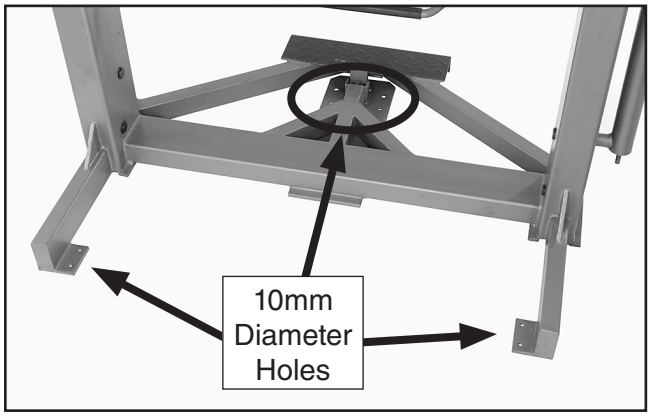
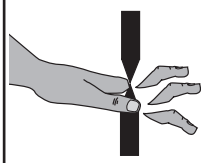


Figure 8. Floor mounting holes.

SECTION 3: OPERATIONS

Operation Safety



⚠WARNING

CRUSHING AND SEVERING HAZARD!

Keep hands and fingers away from the clamping areas when using this machine or serious injury will occur!

⚠WARNING

Bodily injury could result from using this machine. To protect yourself always wear safety goggles, leather work boots, and heavy duty leather work gloves when operating this machine or whenever handling sheet metal.

NOTICE

If you have never used this type of machine or equipment before, WE STRONGLY RECOMMEND that you read books, trade magazines, or get formal training before beginning any projects. Regardless of the content in this section, Grizzly Industrial will not be held liable for accidents caused by lack of training.

General Operation

The Model T20798 40" Pan and Box Brake is a floor-mounted unit that bends sheet metal up to 16 gauge thick and 40" wide.

A crease is formed in a sheet metal workpiece by clamping the workpiece securely between two flat plates. A third plate is hinged and bends the workpiece along a straight edge when the plate is swung upward. Removable fingers allow four sides of a box to be bent upward to form a box.

To create a bend, the user positions the clamping leaf to the workpiece thickness with clamping pressure adjusting nuts located at each end of the machine. The setback knobs are positioned to adjust for varying bend radius requirements. The fingers are added or removed depending on the width of the box side required. The user clamps the workpiece by pushing on the foot pedal, clamps the fingers down on the workpiece. Then the user lifts the bending leaf until the desired crease angle is created. For repeated bends at a particular angle, this machine is equipped with an adjustable stop.

To remove the workpiece, the user lowers the clamping leaf handle, removes his foot from the foot brake pedal, and slides the workpiece out from the front of the machine.

Using Foot Pedal

The foot pedal is used to lower the clamping leaf fingers over the clamping block and place pressure on the workpiece. You have two foot pedal usage options:

- First, for light gauge workpieces, you can lower the fingers onto the workpiece without locking the foot pedal. However, you will have to keep the foot pedal depressed while moving the bending wing during bending operations.

- Second, for heavy gauge workpieces, you should use the foot pedal lock for better control and consistent clamping. When repositioning yourself to get maximum leverage on tougher bends, shifting your weight may cause the workpiece to slip during a bend.

To use the foot pedal:

Push down on the foot pedal to lower the fingers. The foot pedal lock will automatically engage when the pedal is fully depressed, as shown in **Figure 9**.

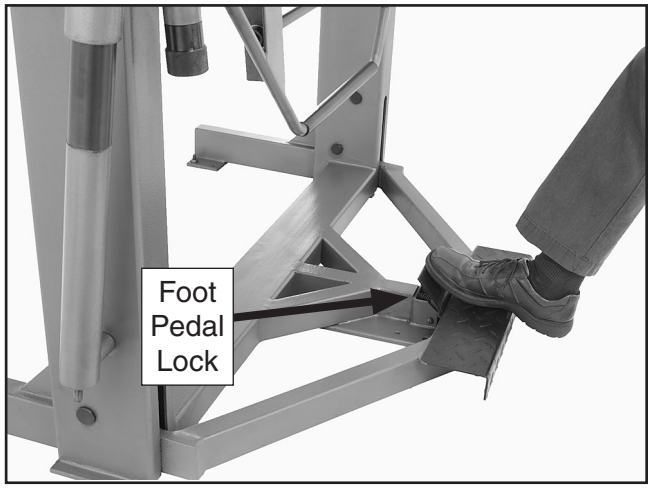


Figure 9. Foot pedal lock engaged.

To release the foot pedal lock:

Press the foot pedal lock down to release the foot pedal. The pedal will raise back to its original position (**Figure 10**).

Figure 10. Foot pedal disengaged.

Aligning Fingers

Tools Needed: **Qty**
Hex Wrench 8mm..... 1

To align a finger:

1. Disengage the foot pedal, and lower the bending leaf.

2. Loosen the cap screw(s) on a finger enough to move it up or down without resistance.

3. Push the finger firmly up against the lower edge of the clamping leaf and tighten the cap screw(s), as shown in **Figure 11**.

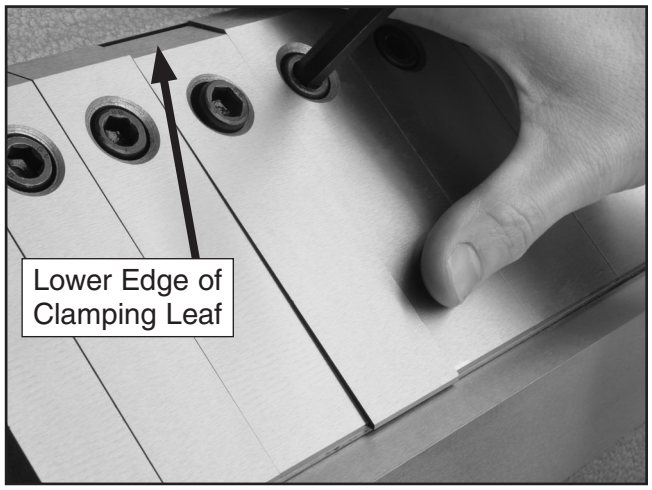


Figure 11. Tightening cap screw on finger.

4. Check the front edge of the fingers to see if they are aligned, as shown in **Figure 12**. Adjust if required.

Figure 12. Finger edges aligned.

Adjusting Clamping Pressure

The correct clamping pressure depends on the workpiece thickness. The ideal pressure will have medium/hard resistance but will lock the workpiece into position easily at the bottom of the foot pedal stroke—much like a pair of Vice Grip. This pressure is adjusted by evenly turning the clamping pressure knobs, shown in **Figure 13**, located on both sides of the pan and box brake.

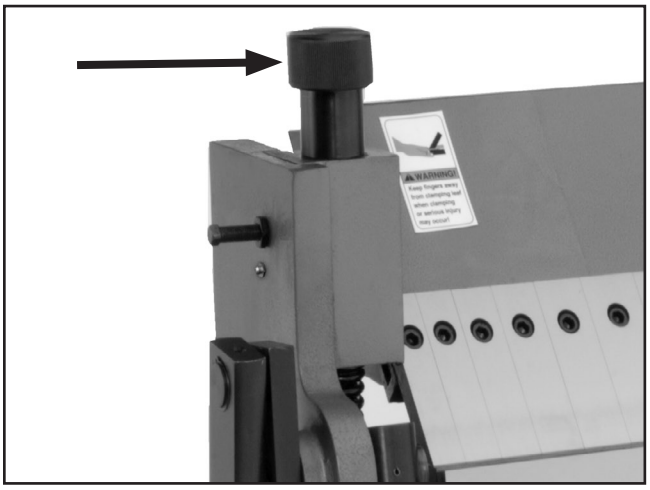


Figure 13. Clamping pressure knob (left side).

To adjust the clamping pressure:

1. Lower the bending leaf.

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

3. Push the foot pedal down and lock it in place.

   —If the foot pedal will not lock in place, loosen the clamping pressure knobs by turning in even increments and re-clamp until it locks.

   —If the foot pedal locks in place but the workpiece is not clamped snug, tighten the clamping pressure.

Adjusting Setback

The setback is the distance from the forward edge of the fingers to the edge of the bending leaf, as shown in **Figure 14**. The setback distance is determined by the gauge of the workpiece and the desired radius of the bend.

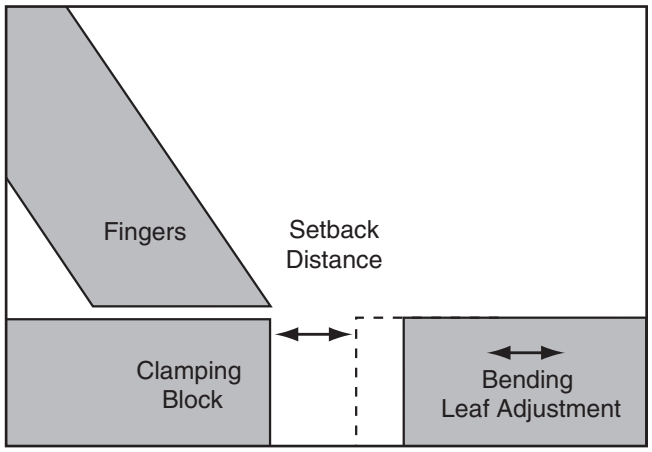


Figure 14. Setback distance.

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, consider the differences of sheet metal gauges when trying to achieve either sharp or rounded edges, and allow for differences by adjusting the setback.

Normally, setback is adjusted to 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 4**.)

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

To adjust the setback:

1. Evenly rotate both setback knobs clockwise, as shown in **Figure 15,** to move the front edge of the bending leaf toward the clamping block and the fingers.

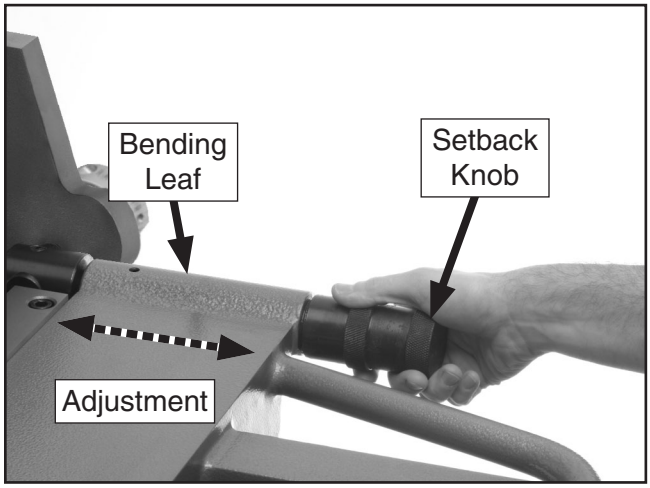


Figure 15. Rotating setback knob.

2. To move the bending leaf away from the fingers, evenly rotate the setback knobs counterclockwise several turns.

3. Firmly grasp the operating handle and pull the bending leaf toward you until it rests against the setback knobs.

   —If the setback distance is too much, repeat **Step 1**. Continue with the above adjustments until you obtain the proper setback distance.

   —If an individual finger sticks out beyond the other fingers, loosen the cap screw(s), wiggle the finger up or down to line it up with the others, retighten and check finger alignment.

4. Repeat **Steps 3** and **4** to align additional fingers.

Spacing Fingers

After the first bend is made when making boxes, the resulting flange will prevent the workpiece from being rotated 90° as it will contact the adjacent unused finger. This is why your pan and box brake has fingers that can be moved out of the way or spaced apart to prevent interference with a previously bent flange. As a result, all four sides or flanges of a box can be made.

Tools Needed: **Qty**
Hex Wrench 8mm..... 1

To space the fingers apart:

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

2. Pull the fingers off the front guide, as shown in **Figure 16**, and set them aside. You can also mix and match finger widths to equal the size of your workpiece.

   Note: *For best results, match the combined finger widths as close as possible to the width of the box side you are bending.*

Figure 16. Fingers removed to provide space for matching fingers with box or pan widths.

3. Align the remaining fingers and tighten the cap screws. (Refer to **Page 14** for alignment instructions).

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 can be found in metalworking handbooks or in the chart in **Figure 17**.

Typical 90° Bend Allowances

Mild Steel, Half-Hard Aluminum, Brass, and Copper.

Gauge	Inch	1-Bend	2-Bends	3-Bends
16	0.06	0.093	0.187	0.281
18	0.48	0.075	0.150	0.225
20	0.36	0.056	0.112	0.168
22	0.30	0.046	0.092	0.138
24	0.24	0.037	0.074	0.111
26	0.18	0.028	0.056	0.084
28	0.15	0.023	0.046	0.069
30	0.12	0.018	0.036	0.054

Figure 17. Bend allowance chart.

Setting Adjustable Stop

The Model T20798 features an adjustable stop (**Figure 18**), so you can make repeated bends at the same angle.

To set the adjustable stop:

1. Using a 6mm hex wrench, loosen the stop collar cap screw, and rotate the stop collar to the desired angle as indicated by the pointer.

2. Tighten the adjustable stop cap screw.

3. While watching the stop, lift the bending leaf handle to the desired bending angle as indicated by the pointer.

4. To select and lock a different bending angle, repeat **Steps 1-3**.

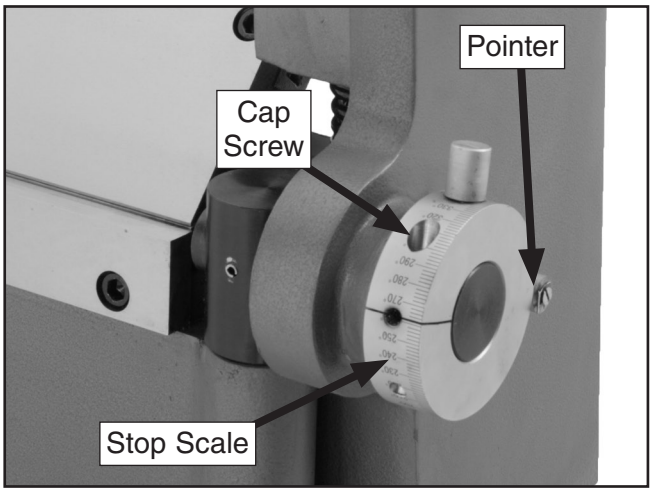


Figure 18. Adjustable stop.

Basic Bending

⚠WARNING

Do not operate the Model T20798 unless it has been securely clamped in place or mounted to the floor, 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.

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.*

To perform a basic bending operation:

1. Open the clamping leaf.

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

3. Align the fingers to the bend mark on the workpiece, and clamp it in place.

   Note: *If the foot pedal does not lock when you lower the fingers over the workpiece, the clamping pressure may need to be loosened (refer to* ***Adjusting Clamping Pressure*** *on* ***Page 14****).*

4. Lift the bending leaf until the workpiece has reached the desired bend angle.

5. Without letting the workpiece fall from the haws, raise the clamping leaf and remove the bent workpiece.

SECTION 4: ACCESSORIES

G8781—4½" Suction Cup
Handle plate glass, glass mirrors and sheet metal with safety and security. Simple hand lever action provides tremendous gripping power on any flat, smooth material. Buy two Suction Cups for two-handed control!

Figure 19. Model G8781 4½" Suction Cup.

H5958—Sheet Metal Pliers
For bending and forming sheet metal. Jaws are 3½" wide. Rubber grips. Overall length is 8". Ideal for HVAC Installers.

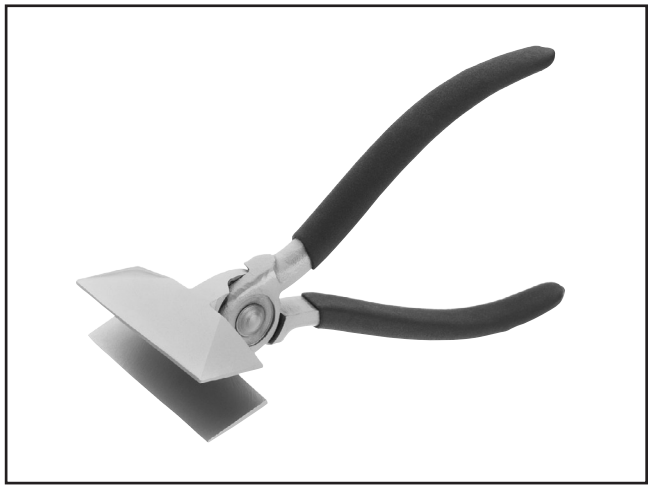


Figure 20. Model H5958 Sheet Metal Pliers.

H5614—Wire Gauge US Standard
Calibrated for sheet metal sized from 0 to 30 gauge. The front is marked with gauge sizes, the back is marked with actual inch measurements.

Figure 21. H5614 Wire Gauge.

G4956—Super Nibbler
The super nibbler is just the ticket for cutting sheet metal up to 3/64" thick. Extremely narrow headed design allows cuts in hard-to-reach areas, yet still features a safety guard to prevent flying splinters. 10¼" overall.

Figure 22. Model G4956 Super Nibbler.

SECTION 5: MAINTENANCE

Schedule

For optimum performance from your machine, follow this maintenance schedule.

Daily Check:
- Loose bolts, cracked welds, castings, or fingers.
- Worn or damaged pins.
- Any other unsafe condition.

Unpainted Cast Iron

To prevent rust, all unpainted cast iron surfaces on the Model T20798 should be regularly maintained with a surface protectant like G96® Gun Treatment (Model H3788) or Boeshield® T-9 (Model G2871).

Lubrication

Three main areas need to be lubricated: 1) The bending leaf hinge, 2) clamping leaf grease fittings, and 3) the setback knob threads.

Clamping Leaf

Once a week, lubricate the two grease fittings on the clamping leaf (**Figure 23**). Grease twice-weekly if your machine is under heavy, continuous use.

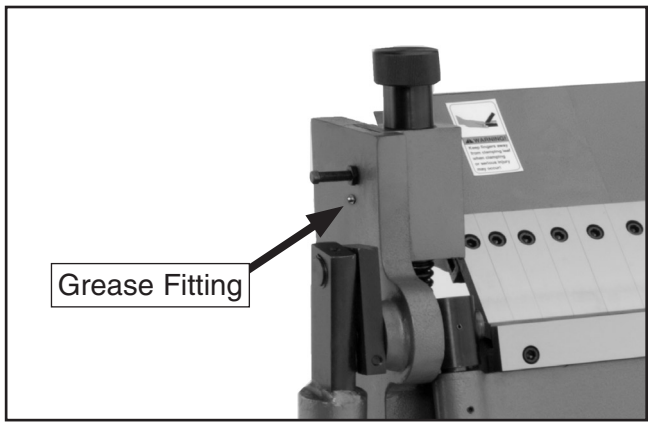


Figure 23. Grease fittings (left side shown).

Bending Leaf

Weekly place a dab of white lithium grease on the bending leaf hinge (**Figure 24**).

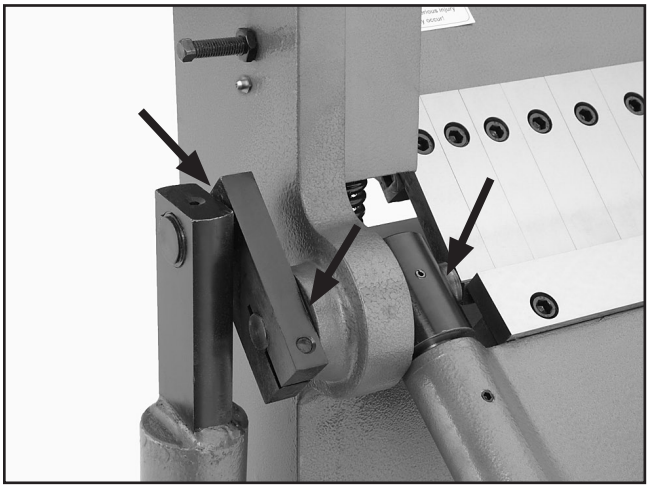


Figure 24. Location to lubricate hinge.

Setback Knob Threads

Once a month, apply white lithium grease on the threads on the setback knobs (**Figure 25**). The threads are easiest to reach if the setback is moved all the way forward or all the way backward. For even coverage, move the setback all the way back and forth one time after applying the grease.

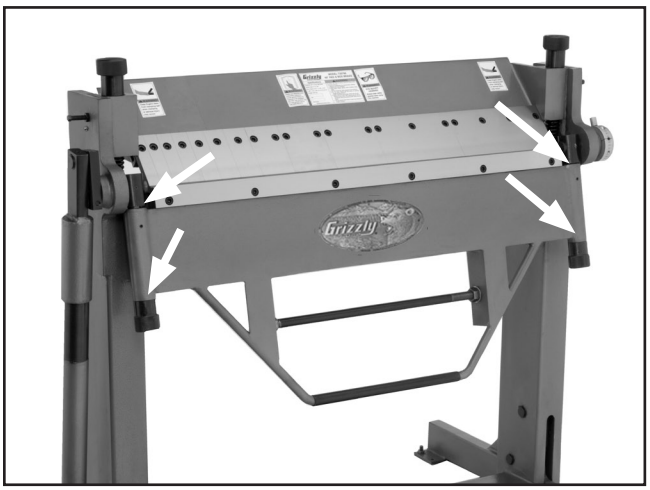
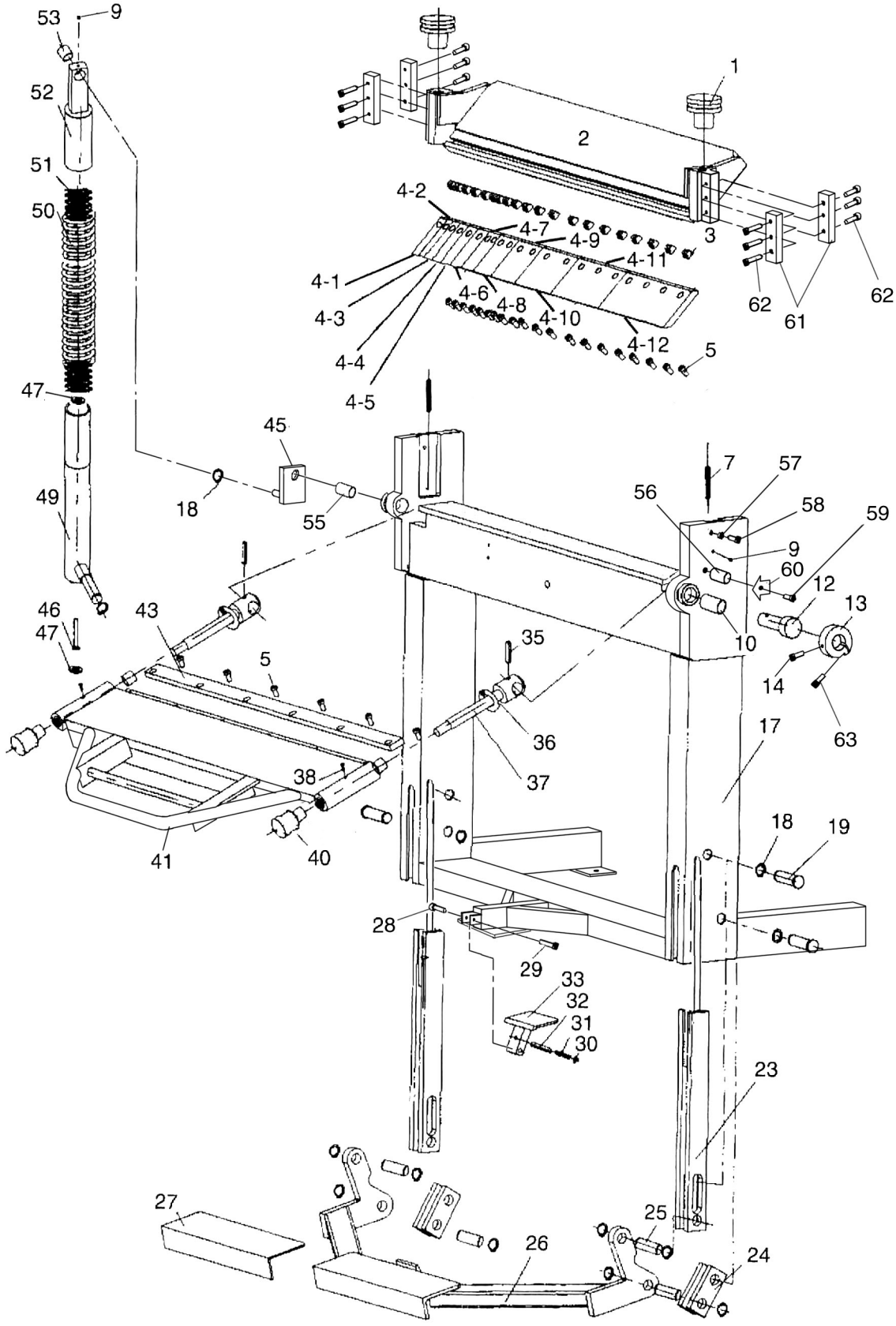


Figure 25. Location to lubricate setback threads.

SECTION 6: PARTS

Parts Breakdown

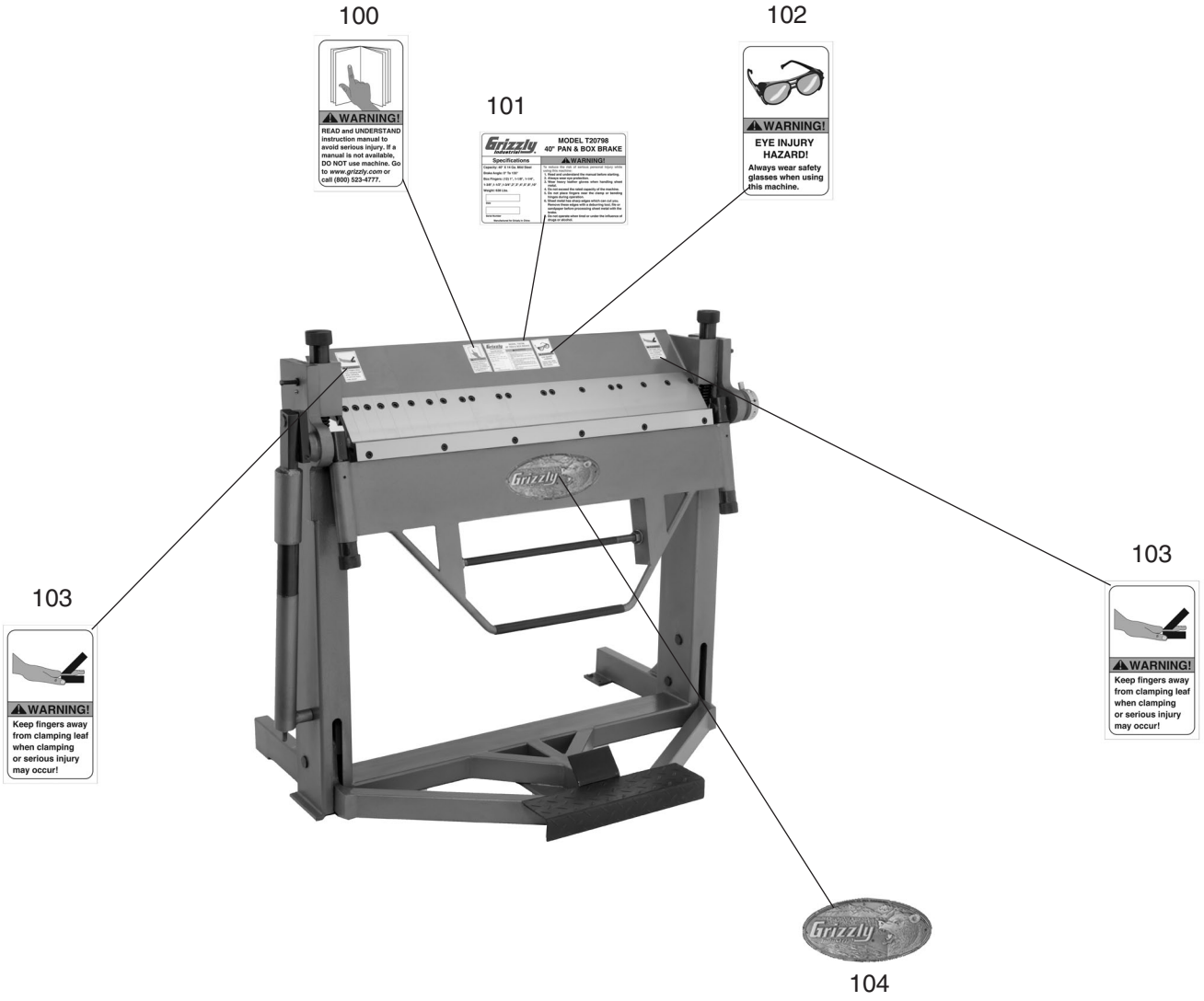


Parts List

REF	PART #	DESCRIPTION
1	PT20798001	ADJUSTING NUT
2	PT20798002	CLAMPING LEAF
3	PT20798003	T-NUT M10-1.5
4-1	PT20798004-1	FINGER 1"
4-2	PT20798004-2	FINGER 1-1/8"
4-3	PT20798004-3	FINGER 1-1/4"
4-5	PT20798004-5	FINGER 1-1/2"
4-6	PT20798004-6	FINGER 1-3/4"
4-7	PT20798004-7	FINGER 2"
4-8	PT20798004-8	FINGER 3"
4-9	PT20798004-9	FINGER 4"
4-10	PT20798004-10	FINGER 5"
4-11	PT20798004-11	FINGER 8"
4-12	PT20798004-12	FINGER 10"
5	PSB130M	CAP SCREW M10-1.5 X 16
7	PT20798007	COMPRESSION SPRING
9	PT20798009	GREASE FITTING M10
10	PT20798010	BUSHING
12	PT20798012	FOLDING LEAF PIN
13	PT20798013	STOP DIAL
14	PSB129M	CAP SCREW M12-1.75 X 20
17	PT20798017	LEG
18	PR11M	EXT RETAINING RING 25MM
19	PT20798019	LEG PIN
23	PT20798023	ROD
24	PT20798024	FOOT PEDAL LEVER
25	PT20798025	LEVER PIN
26	PT20798026	FOOT PEDAL
27	PT20798027	TREAD PLATE RUBBER
28	PB02M	HEX BOLT M6-1 X 12

REF	PART #	DESCRIPTION
29	PT20798029	PIN
30	PW01M	FLAT WASHER 8MM
31	PT20798031	PEDAL LOCK SPRING
32	PRP79M	ROLL PIN 8 X 50
33	PT20798033	FOOT PEDAL LOCK
35	PRP33M	ROLL PIN 6 X 50
36	PT20798036	O-RING 33 X 25
37	PT20798037	SETBACK HANDLE
38	PB06M	HEX BOLT M8-1.25 X 12
39	PT20798039	SETBACK KNOB
40	PT20798040	ADJUSTING NUT
41	PT20798041	BENDING LEAF
43	PT20798043	BENDING LEAF BLADE
45	PT20798045	CRANK
46	PT20798046	HEX BOLT M12-1.75 X 190
47	PTLW12M	EXT TOOTH WASHER 12MM
49	PT20798049	BOTTOM TELESCOPING STRUT
50	PT20798050	EXTENSION SPRING
51	PT20798051	SPIRAL BLOCK
52	PT20798052	TOP TELESCOPING STRUT
53	PT20798053	BUSHING
55	PT20798055	PIN
56	PB33M	HEX BOLT M12-1.75 X 50
57	PN02M	HEX NUT M10-1.5
58	PT20798058	SPECIAL BOLT M10-1.5 X 50
59	PSB17M	CAP SCREW M4-.7 X 10
60	PT20798060	POINTER
61	PT20798061	BOSS
62	PT20798062	SPECIAL CAP SCREW M6-1 X 16
63	PB31M	HEX BOLT M10-1.5 X 40

Labels Breakdown and List



REF	PART #	DESCRIPTION
100	PLABEL-12A	READ MANUAL LABEL
101	PT20798101	DATA LABEL
102	PLABEL-11A	SAFETY GLASSES LABEL

REF	PART #	DESCRIPTION
103	PT20798103	AMPUTATION LABEL
104	G0588	GRIZZLY LOGO PLATE

⚠WARNING

Safety labels warn about machine hazards and ways to prevent injury. The owner of this machine MUST maintain the original location and readability of the labels on the machine. If any label is removed or becomes unreadable, REPLACE that label before using the machine again. Contact Grizzly at (800) 523-4777 or www.grizzly.com to order new labels.

Grizzly Industrial, Inc. WARRANTY CARD

Name _____

Street _____

City _____ State _____ Zip _____

Phone # _____ Email _____ Invoice # _____

Model # _____ Order # _____ Serial # _____

The following information is given on a voluntary basis. It will be used for marketing purposes to help us develop better products and services. ***Of course, all information is strictly confidential.***

1. How did you learn about us?

____ Advertisement	____ Friend	____ Catalog
____ Card Deck	____ Website	____ Other:

2. Which of the following magazines do you subscribe to?

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

3. What is your annual household income?

____ $20,000-$29,000	____ $30,000-$39,000	____ $40,000-$49,000
____ $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?

____ 0-2 Years ____ 2-8 Years ____ 8-20 Years ____ 20+ Years

6. How many of your machines or tools are Grizzly?

____ 0-2 ____ 3-5 ____ 6-9 ____ 10+

7. Do you think your machine represents a good value? _____ Yes _____ No

8. Would you recommend Grizzly Industrial to a friend? _____ Yes _____ No

9. Would you allow us to use your name as a reference for Grizzly customers in your area?
Note: *We never use names more than 3 times.* _____ Yes _____ No

10. Comments: _____

_____

_____

_____

CUT ALONG DOTTED LINE

FOLD ALONG DOTTED LINE

Place
Stamp
Here

GRIZZLY INDUSTRIAL, INC.
P.O. BOX 2069
BELLINGHAM, WA 98227-2069

FOLD ALONG DOTTED LINE

Send a Grizzly Catalog to a friend:

Name_____

Street_____

City_____State_____Zip_____

TAPE ALONG EDGES--PLEASE DO NOT STAPLE

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.

We shall in no event be liable for death, injuries to persons or property or for incidental, contingent, special, or consequential damages arising from the use of our products.

To take advantage of this warranty, contact us by mail or phone and give us all the details. We will then issue you a "Return Number," which must be clearly posted on the outside as well as the inside of the carton. We will not accept any item back without this number. Proof of purchase must accompany the merchandise.

The manufacturers reserve the right to change specifications at any time because they constantly strive to achieve better quality equipment. We make every effort to ensure that our products meet high quality and durability standards and we hope you never need to use this warranty.

Please feel free to write or call us if you have any questions about the machine or the manual.

Thank you again for your business and continued support. We hope to serve you again soon.