# **Owner's Manual & Safety Instructions**

**Save This Manual** Keep this manual for the safety warnings and precautions, assembly, operating, inspection, maintenance and cleaning procedures. Write the product's serial number in the back of the manual near the assembly diagram (or month and year of purchase if product has no number). Keep this manual and the receipt in a safe and dry place for future reference.



No portion of this manual or any artwork contained herein may be reproduced in any shape or form without the express written consent of Harbor Freight Tools. Diagrams within this manual may not be drawn proportionally. Due to continuing improvements, actual product may differ slightly from the product described herein. Tools required for assembly and service may not be included. Read this material before using this product. Failure to do so can result in serious injury. SAVE THIS MANUAL.

Bending Capacity (Gauge x Width)	Up to 12 Gauge Sheet Metal at 18" Up to 16 Gauge Sheet Metal at 36" Up to 16 Gauge Mild Steel at 18" Up to 20 Gauge Mild Steel at 36" Up to 22 Gauge Stainless Steel
Bend Angles	0 to 120°
Max. Box Depth	3"
Max. Beam Lift	7/8"

# **IMPORTANT SAFETY INFORMATION**

### **Assembly Precautions**

- 1. Assemble only according to these instructions. Improper assembly can create hazards.
- 2. Wear ANSI-approved safety goggles and heavy-duty work gloves during assembly.
- 3. Keep assembly area clean and well lit.
- 4. Place only on a flat, stable surface able to support weight of Metal Brake, item being bent, and the bending force.

### **Use Precautions**

- 1. This product is not a toy. Do not allow children to play with or near this item.
- 2. Use as intended only.
- 3. Inspect before every use; do not use if parts are loose or damaged.
- 4. Keep fingers clear of the Frame (19) and Upper Press Plate (10).

- 5. Verify that installation surface has no hidden utility lines before drilling the holes.
- 6. Keep bystanders out of the area during assembly.
- 7. Do not assemble when tired or when under the influence of alcohol, drugs or medication.
- 8. Weight capacity and other product capabilities apply to properly and completely assembled product only.
- Do not exceed the maximum bending capacities of 18" wide stock (for 12 gauge steel) or 36" wide stock (for 16 gauge steel.)
- Do not exceed listed weight capacity.
  Be aware of dynamic loading!
  Sudden load movement may briefly create excess load causing product failure.
- Maintain product labels and nameplates. These carry important safety information. If unreadable or missing, contact Harbor Freight Tools for a replacement.



#### Assembly Instructions

Read the <u>ENTIRE</u> IMPORTANT SAFETY INFORMATION section at the beginning of this document including all text under subheadings therein before set up or use of this product.

**WARNING!** The excessive weight of the Brake and Stand requires two people to assist in the assembly and installation.

1. Place the Legs (29) on top of the Feet (28), taking care to line up the two holes in the Legs with the middle two holes in the Feet, as shown in Figure A.

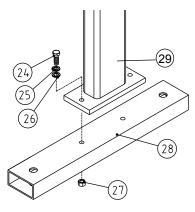
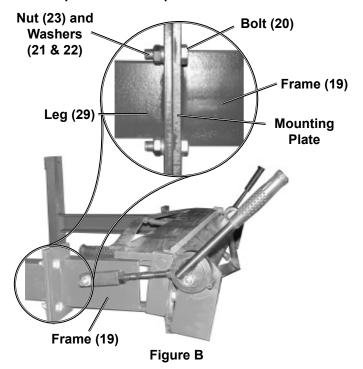


Figure A

- 2. Assemble with Bolt (24), Washers (25 & 26), and Nut (27). Tighten.
- 3. Lay the Metal Brake on the floor.
- 4. Place the Legs (29) against the mounting plates of the Frame (19).
- 5. Assemble with Bolt (20), Washers (21 & 22), and Nut (23) as shown in Figure B. Tighten.



- 6. Stand the Brake upright.
- 7. Position the Brake in the intended mounting place. Draw guide marks through the 1/2 inch holes in the Feet (28) onto the floor.

**<u>CAUTION!</u>** Before drilling mounting holes, verify installation surface has no hidden utility lines or water pipes.

 Drill four mounting holes into the floor and secure the Brake with four bolts\*, lock washers, and nuts (not supplied). \*For concrete floors, use expansion anchor bolts. For wooden floors, use lag bolts. Use metal shims (not included) to keep the brake even and level.



#### **Operating Instructions**

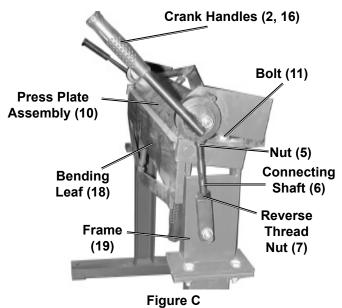
Read the <u>ENTIRE</u> IMPORTANT SAFETY INFORMATION section at the beginning of this manual including all text under subheadings therein before set up or use of this product.

# Adjustments

It may become necessary to adjust the position of the Upper Press Plate to accommodate a thicker or thinner piece of sheet metal, or to align it to the Frame.

#### Adjusting for Thickness of Sheet Metal

1. Lift both Crank Handles (2, 16) all the way up.



- Align the Upper Press Plate In or Out
- 1. Lift both Crank Handles all the way up.
- 2. Loosen Bolts (11) on each side of the Brake.
- 3. Nudge each side of the Upper Press Plate in or out. This adjustment will determine the roundness of the bend. The farther back the Upper Press Plate, the rounder the bend. A typical setting should be between 1/16 to 1/8 inch behind the inner edge of the Bending Leaf (18). The thickness of the sheet metal may also necessitate an adjustment here.

### Workpiece and Work Area Set Up

Designate a work area that is clean and well-lit. The work area must not allow access by children or pets to prevent distraction and injury.

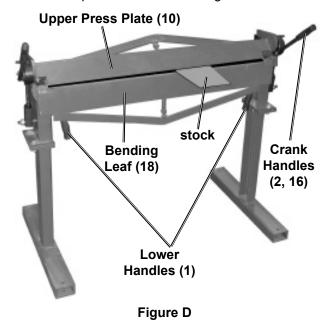
- 2. Loosen Nuts (7 and 5) to enable the Connecting Shaft (6) to move up or down. See Figure C.
- 3. Using an open-end wrench, turn the Connecting Shaft clockwise to lower the Upper Press Plate, or counterclockwise to raise it up (to accommodate larger stock). Count the number of turns.
- Adjust the Connecting Shafts on both sides of the Frame (19) with an equal number of turns. The Upper Press Plate (10) must be flush with the Frame when closed. If one side is not flush, readjust that side.

- 4. Check that the Upper Press Plate is parallel to the inner edge of the Frame.
- 5. Retighten both Bolts.

# **General Operating Instructions**

**CAUTION!** Do not attempt to bend stock that is thicker than 12 gauge sheet metal, as doing so may damage the Brake. If you are not sure of the stock thickness, try bending a small piece of scrap stock. If it does not easily bend, either the stock is too thick, or the Brake needs adjustment.

- 1. Make sure the Crank Handles (2, 16) are all the way down before opening the upper Upper Press Plate (10).
- 2. On the stock, draw a straight line with a pencil to indicate the intended bending point.
- Slide sheet metal to be bent between the Bending Leaf (18) and the Upper Press Plate (10).
   Align the drawn bending line on the stock with the inner lip of the Frame. See Figure D.



Maintenance and Servicing



Procedures not specifically explained in this manual must be performed only by a qualified technician.

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TO PREVENT SERIOUS INJURY FROM TOOL FAILURE: Do not use damaged equipment. If abnormal noise occurs, have the problem corrected before further use.

## Cleaning, Maintenance, and Lubrication

- 1. **BEFORE EACH USE,** inspect the general condition of the tool. Check for:
  - · loose hardware,
  - misalignment or binding of moving parts,
  - · cracked or broken parts, and
  - any other condition that may affect its safe operation.

4. Lift both Crank Handles into the locked position. This will cause the upper Upper Press Plate to clamp down on the stock. If the Handle does not come down all the way and lock, either the stock is greater than 12 gauge or the Brake needs to be adjusted to allow for a thicker stock. If so, refer to the Adjustments section above.

**<u>CAUTION!</u>** Keep spectators clear of the work area during use.

- 5. Using both hands on the Bending Leaf's Lower Handles, lift the Bending Leaf until the desired angle is reached on the stock. Once bend is complete, return Lower Handles to their starting position.
- 6. Lift the Crank Handles all the way up and remove the stock.

**<u>CAUTION!</u>** During bending, keep both hands on the Lower Handles.

- 2. **AFTER USE**, wipe external surfaces of the tool with clean cloth.
- 3. Periodically lubricate all moving parts and surface with a light oil.
- 4. Cover the Metal Brake when not in use.

### PLEASE READ THE FOLLOWING CAREFULLY

THE MANUFACTURER AND/OR DISTRIBUTOR HAS PROVIDED THE PARTS LIST AND ASSEMBLY DIAGRAM IN THIS DOCUMENT AS A REFERENCE TOOL ONLY. NEITHER THE MANUFACTURER OR DISTRIBUTOR MAKES ANY REPRESENTATION OR WARRANTY OF ANY KIND TO THE BUYER THAT HE OR SHE IS QUALIFIED TO MAKE ANY REPAIRS TO THE PRODUCT, OR THAT HE OR SHE IS QUALIFIED TO REPLACE ANY PARTS OF THE PRODUCT. IN FACT, THE MANUFACTURER AND/OR DISTRIBUTOR EXPRESSLY STATES THAT ALL REPAIRS AND PARTS REPLACEMENTS SHOULD BE UNDERTAKEN BY CERTIFIED AND LICENSED TECHNICIANS, AND NOT BY THE BUYER. THE BUYER ASSUMES ALL RISK AND LIABILITY ARISING OUT OF HIS OR HER REPAIRS TO THE ORIGINAL PRODUCT OR REPLACEMENT PARTS THERETO, OR ARISING OUT OF HIS OR HER INSTALLATION OF REPLACEMENT PARTS THERETO.

### Parts List

Part	Description	Qty
1	Hand Cover	4
2	Left Crank Handle	1
3	Left Bracket Plate	1
4	Left Eccentric Bushing	1
5	Nut M14	2
6	Connecting Shaft	2
7	Nut M14- Reverse Thread	2
8	Lock Nut M14	2
9	Square Steel Holder	2
10	Upper Press Plate	1
11	Bolt M12x35	2
12	Spring Washer 12	2
13	Washer 12	2
14	Right Bracket Plate	1
15	Right Eccentric Bushing	1

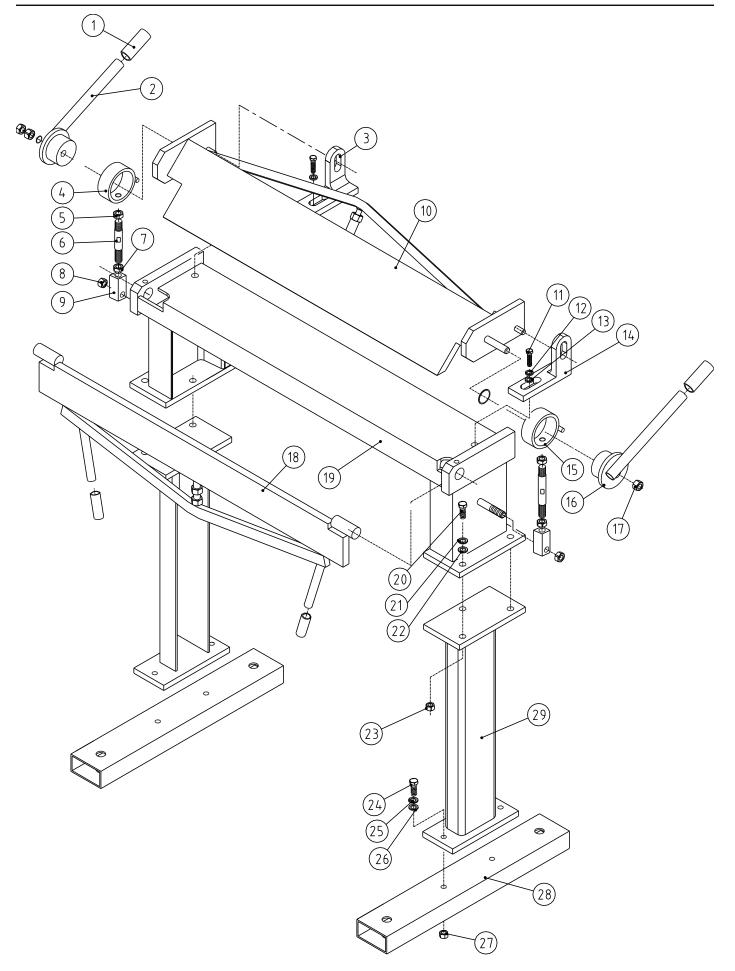
Part	Description	Qty
16	Right Crank Handle	1
17	Lock Nut M12	2
18	Bending Leaf	1
19	Frame	1
20	Bolt M10x30	6
21	Spring Washer 10	6
22	Washer 10	6
23	Nut M10	6
24	Bolt M10x30	4
25	Spring Washer 10	4
26	Washer 10	4
27	Nut M10	4
28	Foot	2
29	Leg	2

#### **Record Serial Number Here:**

<u>Note:</u> If product has no serial number, record month and year of purchase instead.

**Note:** Some parts are listed and shown for illustration purposes only, and are not available individually as replacement parts.

# Assembly Diagram



#### Limited 90 Day Warranty

Harbor Freight Tools Co. makes every effort to assure that its products meet high quality and durability standards, and warrants to the original purchaser that this product is free from defects in materials and workmanship for the period of 90 days from the date of purchase. This warranty does not apply to damage due directly or indirectly, to misuse, abuse, negligence or accidents, repairs or alterations outside our facilities, criminal activity, improper installation, normal wear and tear, or to lack of maintenance. 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 product. Some states do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation of exclusion may not apply to you. THIS WARRANTY IS EXPRESSLY IN LIEU OF ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING THE WARRANTIES OF MERCHANTABILITY AND FITNESS.

To take advantage of this warranty, the product or part must be returned to us with transportation charges prepaid. Proof of purchase date and an explanation of the complaint must accompany the merchandise. If our inspection verifies the defect, we will either repair or replace the product at our election or we may elect to refund the purchase price if we cannot readily and quickly provide you with a replacement. We will return repaired products at our expense, but if we determine there is no defect, or that the defect resulted from causes not within the scope of our warranty, then you must bear the cost of returning the product.

This warranty gives you specific legal rights and you may also have other rights which vary from state to state.



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