

CHICAGO STEEL UNIVERSAL HAND BOX AND PAN BRAKE

Instruction Sheet and Parts List

While we take extraordinary precautions to have adjustments on our Brakes set properly for regular work, sometimes after handling and transportation, they require some adjustment.

See that the Brake sets level on the floor, so that top leaf does not creep forward when clamping. If the top leaf does creep forward when clamping, first, check the tightness of set screw (P) and cap screw (O). If this does not remedy the creeping, place a wedge under the rear of the leg at point (8), on side that creeps. Bring the wedge in until this creeping is eliminated, then replace the wedge with a permanent block of the correct height.

Check the bending leaf and see that the edge is (1/64") below the bed edge when the bending leaf is in the down position. This edge should be (1/64") below the bed edge on the ends and (1/32") lower in the center. The bending leaf ends can be lowered by tightening set screw (J). To raise ends of bending leaf, tighten set screw (H). To lower the bending leaf in center, tighten truss rod bolt (7). To raise bending leaf in center, tighten truss rod bolt (2).

If sheet bends over further on one end than the other, set the upper jaw back on end where sheet is bending over too far. This is done by loosening cap screw (O), and setting adjustment with set screws (P) and (M).

Bending leaf may become bowed in center after use. This can be straightened out quickly by tightening both bolts (10) until center is brought to a straight line.

Adjustment for clamping different thicknesses of metal is made by loosening set screw (BB) which holds link block (EE), then adjust set screw (FF) until the desired pressure is obtained, when clamping on the thickness of metal to be bent. When this adjustment is made, tighten set screw (BB).

Set the top leaf back at finger bending edge twice the thickness of the metal for bending within four gauges of capacity. Move forward proportionately on lighter material if sharper bends are desired. This adjustment is made by loosening cap screw (O) and adjusting set screws (M) and (P), as required. It is important that cap screw (O) be tightened after the upper jaw is set to its correct point.

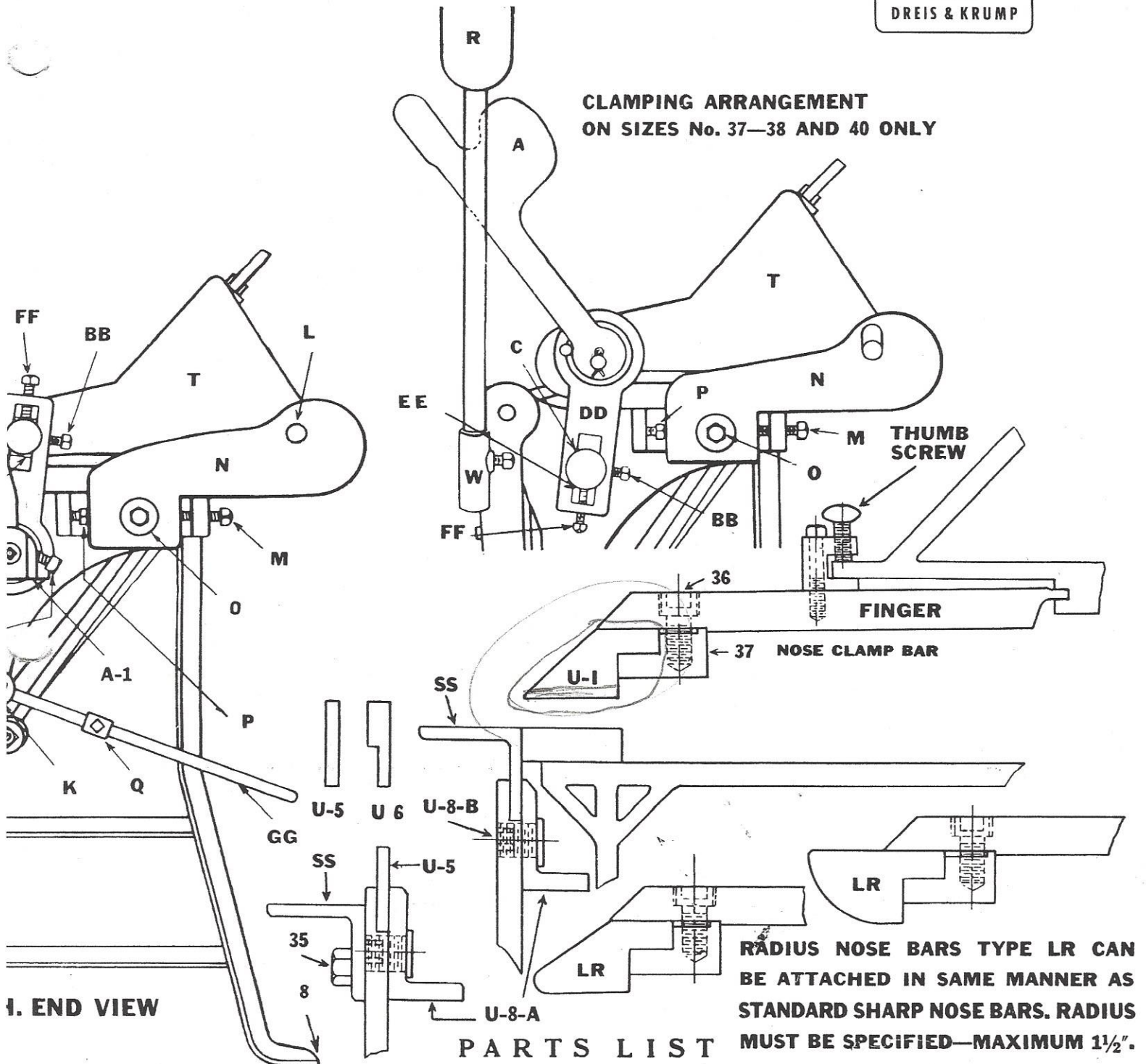
ALL BRAKES ARE RATED FOR (1") MINIMUM FLANGE ON CAPACITY MATERIAL. MACHINE CAN BE USED FOR CAPACITY BENDING ONLY WHEN ANGLE BAR (SS) IS IN PLACE IN THE STANDARD POSITION.

(Continued on Back Page)

HAND BOX and PAN BRAKES



CLAMPING ARRANGEMENT
ON SIZES No. 37—38 AND 40 ONLY



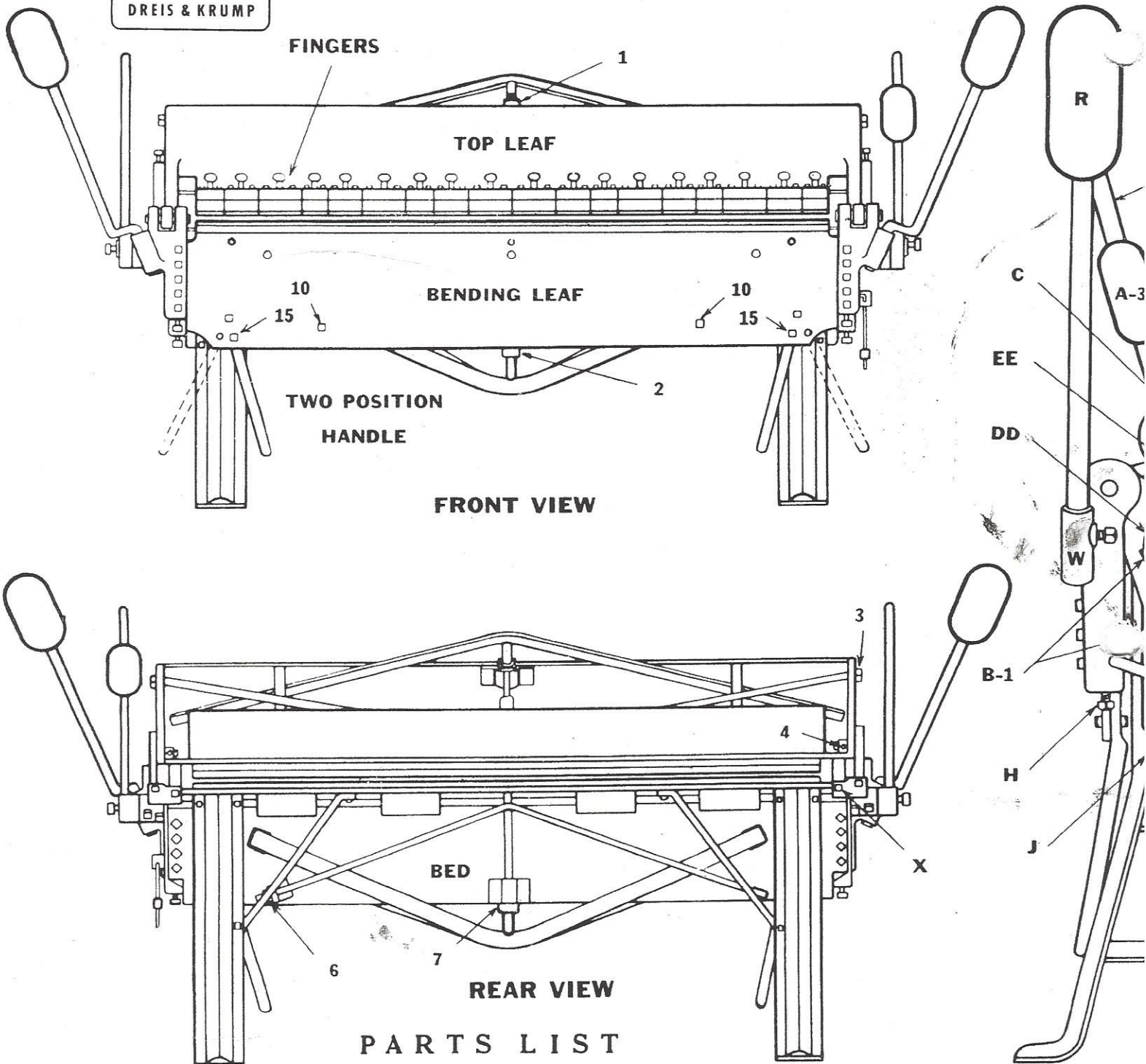
E
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ide racing

- N—Slot Casting
- O—Set Screw
- P—Set Screw
- Q—Adjustable Stop
- R—Balance Weight
- SS—Removable Angle Bar
- T—Top Leaf Casting
- U-1—Standard Nose Bar
- U-5—1/4" Bending Leaf Bar

- U-6—1/2" Bending Leaf Bar
- U-8-A—Bending Leaf Bar Holder
- U-8-B—Flanged Hd. Screw
- W—Bending Leaf Casting
- X—Set Screw
- 35—Cap Screw for (SS)
- 36—Socket Hd. Cap Screw
- 37—Nose Clamp Bar
- Fingers—3", 4", 5" Widths



CHICAGO STEEL UNIVERSAL



- A-1—Clamp Handle Casting
- A-2—Clamp Handle Rod
- A-3—Clamp Handle Counterweight
- A—Clamping Handle (Sizes #37-38-40) only
- BB) Set Screw
- B-1) Set Screw
- C—Flanged Shaft
- DD—Link

- EE—Block
- FF—Set Screw
- GG—Stop Gauge Rod
- H—Set Screw
- J—Set Screw
- K—Stop Gauge Casting
- L—Slot Casting Pin
- M—Set Screw

N

When ordering, give size and number of machines advised or let the machine.

When Bar (U-6) $\frac{1}{2}$ " bending edge is in place, the capacity of the machine is reduced four gauges. When this No. U-6 bar is used, the angle bar must be set in the low position. When Bar (U-5) $\frac{1}{4}$ " bending edge is in use, the capacity of the Brake is reduced seven gauges and the angle bar (SS) should be in the low position. Holes are provided in bending leaf and in angle bar for attaching this angle bar in the low position for making narrow offset bends. (U-5) $\frac{1}{4}$ " bar should not be used for anything other than to bend narrow reverse flanges on material not heavier than seven gauges less than the capacity of the machine.

DO NOT BEND HEAVIER MATERIAL THAN RATED CAPACITY EVEN IN SHORT LENGTHS.

NEVER BEND AGAINST SEAMS UNLESS MACHINE IS SET TO CLAMP THE FULL MULTIPLE THICKNESS OF THE SEAM AND THE TOP LEAF IS SET BACK FOR CLEARANCE OF THE FULL MULTIPLE THICKNESS.

Balance weights (R) can be raised or lowered to properly counterbalance the bending leaf.

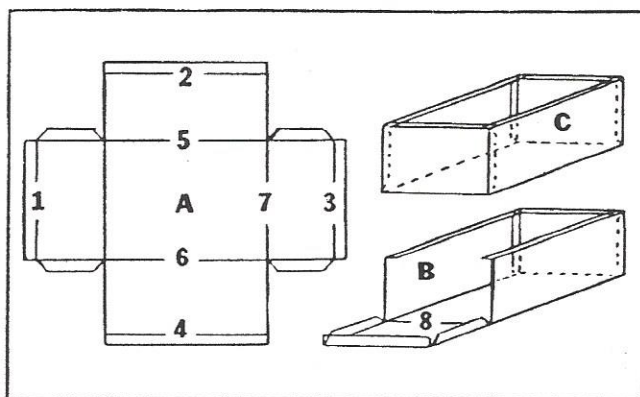
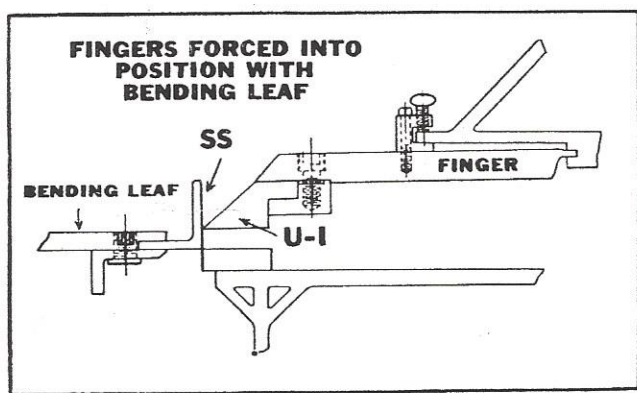
The adjustable stop gauge (GG) can be used to regulate the angle of the bend when duplicate work is made. This adjustment is made with the stop marked (Q).

Bending leaf handle can be used in two positions. Standard position is shown on front view. By removing bolt (15,) handle can be moved over to an outside position so that when forming wide sheets, the sheet is not in the operator's way.

Oil all working parts occasionally.

Below we show a method of lining up the fingers. Set the fingers in the machine as shown with the thumb screws loose. Then bring the bending leaf up to the position shown and straighten the line of the fingers with the pressure of the bending leaf. When the fingers have been pushed into position, tighten them up with the thumb screws and then proceed to use the machine in the regular manner.

We also show sketch showing the sequence of operations in forming box shape with inside flanges.



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