

INSTRUCTIONS

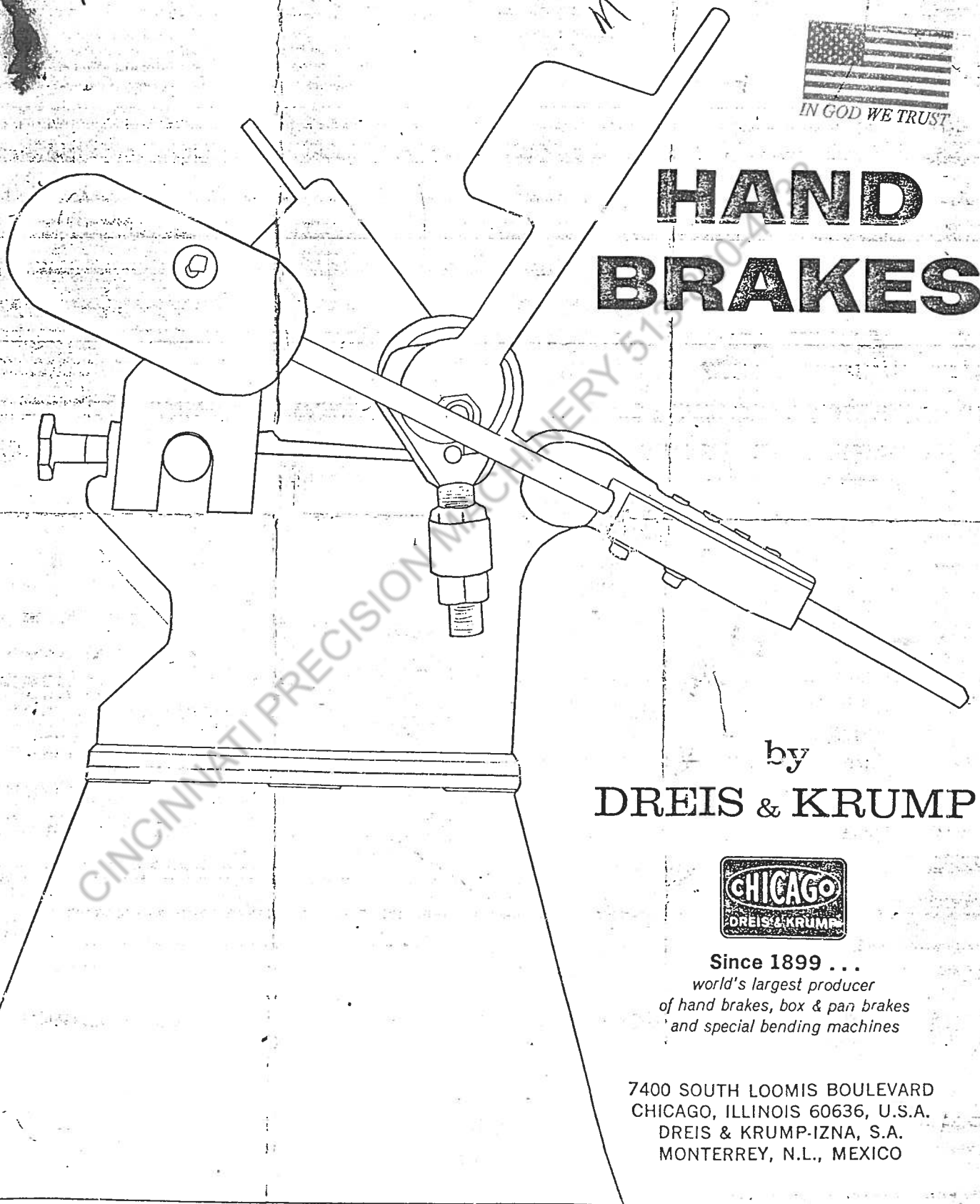
— STANDARD FLOOR MODELS —

(CLAMPED BENDING BARS)

sample SO-1012



HAND BRAKES



by

DREIS & KRUMP



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*world's largest producer
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'and special bending machines*

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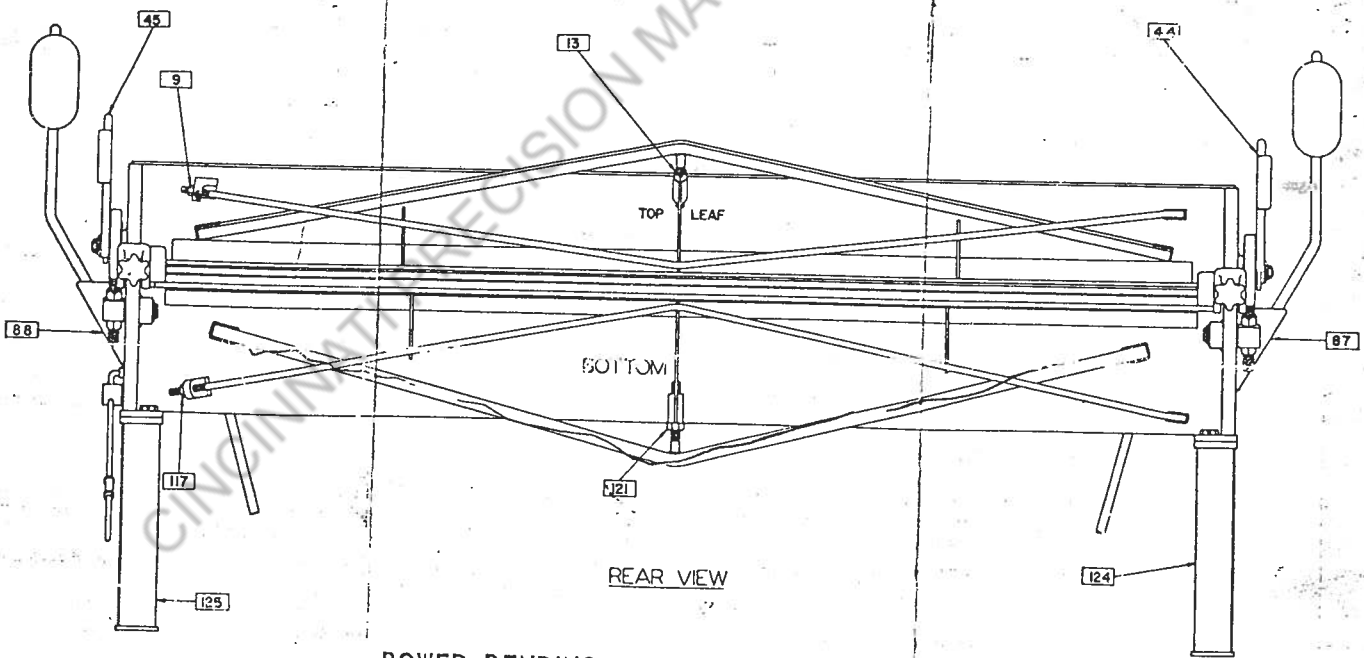
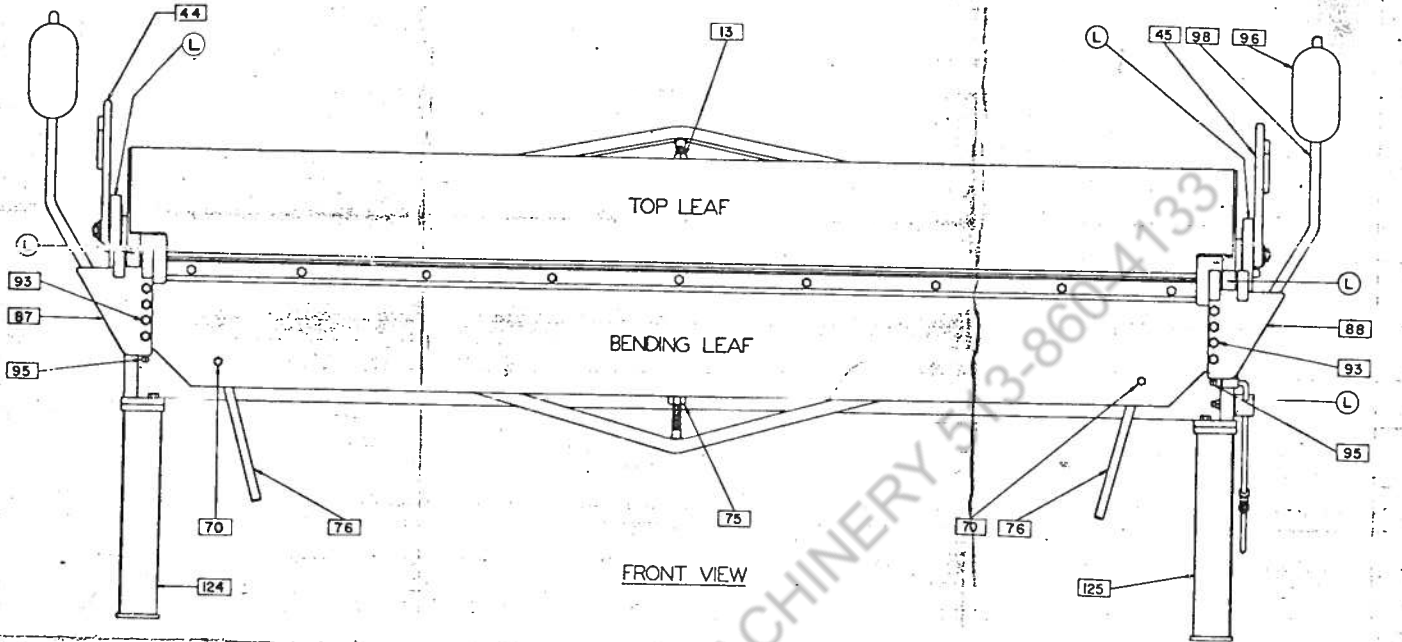
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BENDING EDGE ALIGNMENT

When Bending Leaf is in down position, edge of Bending Bar should be flush with edge of Bottom Bar (122).

To maintain this alignment, ensure brake sets level on floor:

1. Adjust Bending Leaf center with Truss Nut (75).
2. Adjust Bottom Center with Truss Nut (121).
3. Adjust Bending Leaf Ends with Hinge Adjustment Screws (95). Loosen Hinge Bolts (93) before and tighten again after adjustment.



BOWED BENDING LEAF ADJUSTMENT

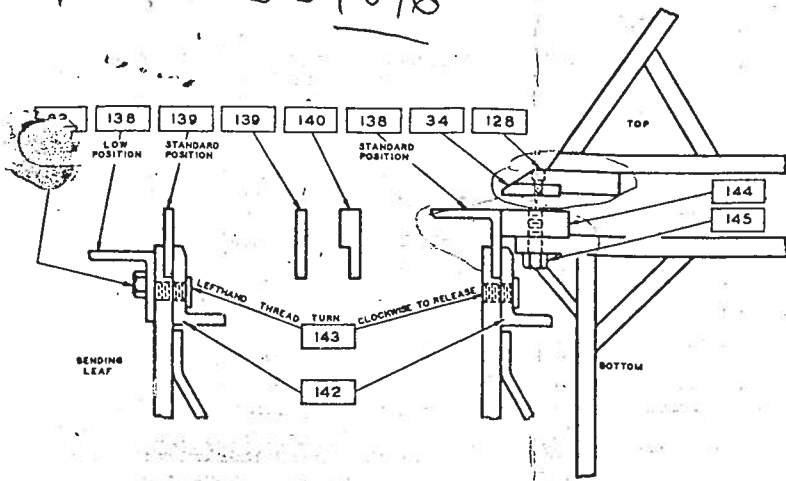
If Bending Leaf becomes bowed in center after use, tighten both Tension Bolts (70) until center is brought into a straight line.

LUBRICATION

Lubricate occasionally with SAE-30 oil (Government Specification MIL-O-6081B) where indicated by symbol (L) except for Top Adjustment Screws (22) and Nuts (31) which are lubricated by filling Saddle (28/29) cavities with grease (MIL-L-7870).



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VIEW SHOWING TOP AND BOTTOM CONSTRUCTION

ADJUSTING FOR METAL THICKNESS

Clearance for bends is obtained by moving Top Leaf back at bending edge. If material to be bent is within four gauges of capacity, move Top Leaf back twice the thickness of the material. With lighter material, move Top Leaf proportionately forward if sharper bends are desired:

1. Unclamp Handles (44/45) slightly.
2. Adjust Top Leaf with Top Adjustment Handles (23).

Clamping pressure of the Links (56/57) is changed by adjusting the Nuts (60).

DUPLICATE BENDS

Adjustable Stop Gauge (100) may be positioned at any point on Rod (104) by means of Lock Bolt (102) to limit the degree of bend.

COUNTERBALANCE

Counterweight (96) can be raised or lowered on Rod (98) to properly counterbalance the Bending Leaf.

OVERBENDING ADJUSTMENT

If sheet bends over further on one side than on the other, set the Top Leaf back on the end where sheet is overbending.

1. Unclamp Handles (44/45) slightly on side that is overbending.
2. Adjust Top Leaf with Top Adjustment Handle (23).
3. Reclamp Handle (44/45).

CREEPING TOP LEAF ADJUSTMENTS

Should Top Leaf creep forward when clamping material:

1. Check that brake sets level on floor.
2. Ensure that Top Adjustment Screw Collars (25) are locked into position so that the Screws (22) cannot move back and forth in Saddles (28/29) - front shoulder of Screws and face of Collars must be snug against Saddles with minimum clearance.
3. If still creeping, wedge under rear of Leg (124/125) at end that creeps until stopped. Replace wedge with permanent block of correct height.

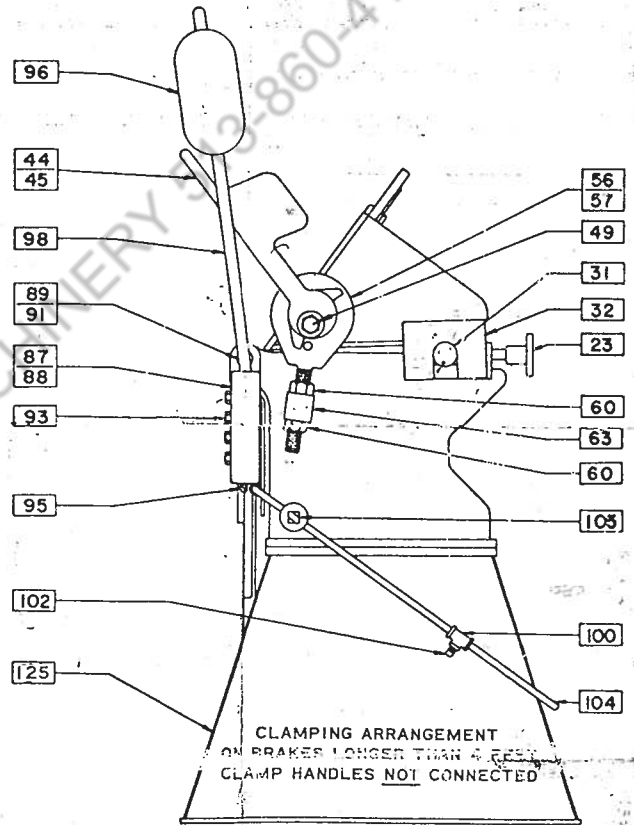
CAPACITY

The bending capacity of the brake is determined by the bending edge thickness provided by the Bending Leaf Bars (138/139/140) when mounted on Leaf.

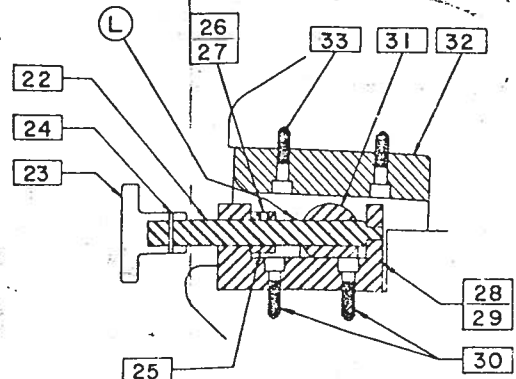
1. Angle Bar (138) allows the full rated 1" minimum flange on capacity material.
2. 1/2" Insert Bar (140) with Angle Bar in LOW position reduces capacity of brake four gauges.
3. 1/4" Insert Bar with Angle Bar in LOW position reduces capacity of brake seven gauges.

NARROW OFFSET BENDS

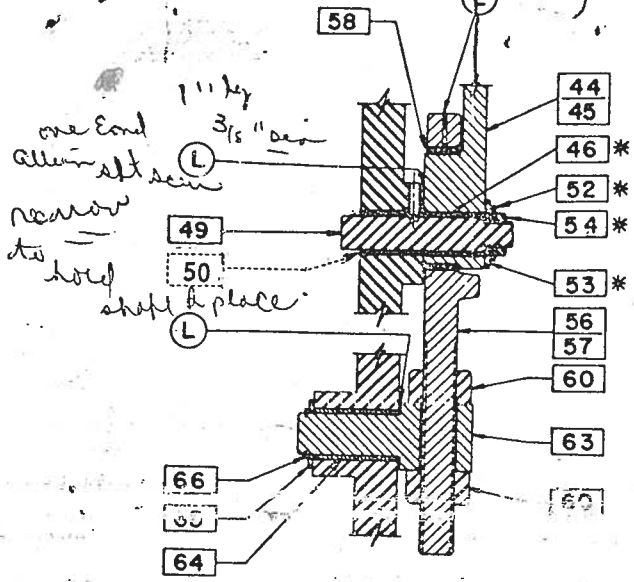
See Item (3) under CAPACITY.



RIGHT HAND END VIEW



CROSS SECTION THRU ADJUSTING MECHANISM



CROSS SECTION THRU LINK AND LINK PIVOT BLOCK

(CLAMP HANDLES NOT CONNECTED)

*THESE PARTS ARE ELIMINATED ON 4 FOOT BRAKE SINCE HANDLES ARE CONNECTED BY SET SCREWS TO A FULL LENGTH CLAMP SHAFT (49) WHICH TURNS IN BRGS (50)

FORMERS (Not Standard Equipment)

These Moulds or Formers (85) can be obtained in half round sizes of 5/8", 1", 1-5/8", 2-1/4" and 3".

Attach to brake by means of Former Clamps (86):

1. Place 1/2" clearance side of Former against Bending Leaf as shown in sketch.
2. Position Former Clamps and tap lightly with mallet. This creates enough friction to hold Formers.
3. To remove Former Clamps tap upward or turn.

Square bends can be made on a number of sheets and the curves bent afterwards on Formers. The wide opening of the Top permits these semi-formed sheets to pass over the Formers.

CAUTIONS

Bend short pieces of material in center of brake to equalize the strain.

Never bend against seams unless Links (56/57) are adjusted to clamp the full multiple thickness of seam; and, Top Leaf is set back for clearance of the same full multiple thickness.

Always have Angle Bar (138) in STANDARD position on Leaf when making capacity bends.

When forming sections of wide girth such as cornices, to equalize the buckles in the sheet:

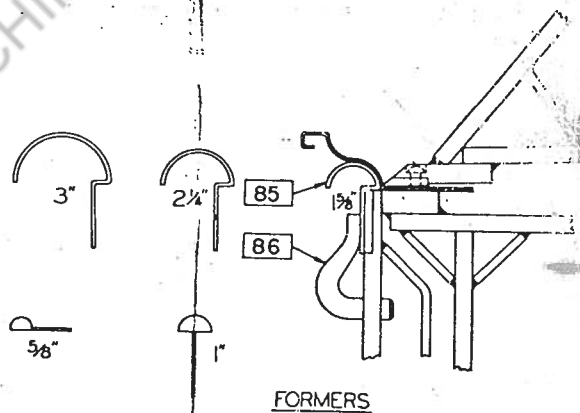
1. Start bend near the center of sheet, or,
2. Make a kink in the opposite end of sheet from the bend first made.

Sheets are not always perfectly flat and a buckle left in one end while the other is straightened by clamping in the brake, will throw the first bend out of line when it, in turn, is straightened.

Always use material with square-sheared edges - rolled-edges will cause material to bow.

Never use brake to bend rods - these will nick Nose Bar.

Always adjust for differences in gauges - especially never force-clamp the Top on material heavier than that for which the Links and Top are set by using pipe extensions on Clamp Handles for leverage.



PARTS LIST

22/23/24-SO Top Adj Screw/Handle/Pin	50-SO Clamp Shaft Brg	89/91-SO Hinge Pin/Brg
25/26/27-SO Top Adj Collar/Lock Screw/Rod	(For Connected Handles Only)	96/98-SO Counterweight/Rod
28/29/30-SO Top Adj Saddle L/R/Bolts	56/57-SO Link L/R	100/102-SO Stop Gauge/Lock Bolt
31-SO Top Adj Nut	58-SO Link Brg	104/105-SO Gauge Rod/Guide
32/33-SO Top Adj Slide/Bolts	60-SO Link Adj Nuts	128-SO Nose Bar Screw
34-SO Nose Bar-Sharp (Specify Length)	63/64/65/66-SO Pivot Shaft/Brg/Washer/Lock	138-SO Angle Bar
44/45-SO Clamp Handle L/R	82-SO Angle Bar Bolt	139-SO 1/4" Insert Bar
46-SO Clamp Handle Brg	85/86-SO Former/Clamp	140-SO 1/2" Insert Bar
49/52/53/54-SO Clamp Shaft/Spring/Washer/Nut	87/88/93/95-SO Hinge L/R/Bolt/Adj Screw	142/143-SO Insert Clamp Bar/Screw
		144/145-SO Removable Bottom Bar Screw

Note →

When ordering parts give model and serial number of machine. Also advise whether for right or left hand side facing the machine.