# TIN KNOCKER

# TK 816 LEAF BRAKE

# **INSTRUCTIONS & PARTS DIAGRAM**



#### TK 816 Leaf Brake

#### RECEIVING THE MACHINE

# Inspect before signing Bill of Lading.

Upon receipt closely examine the Leaf Brake for damage during shipment. Any loss or damage should be noted in detail on the delivery receipt and reported to your distributor immediately. Free replacement from TK International is dependant upon the notation and the Bill of Lading on delivery slip.

#### **INSTALLING THE MACHINE**

Locate the Leaf Brake in a well-lighted area on a solid, level floor. The Leaf Brake must be securely bolted to the floor. Be sure you have adequate room to swing both handles and Bending Leaf.

#### **PRECAUTIONS**

DO NOT use the Leaf Brake to bend rods, nails or wires. This will cause damage to the edge of the top blade. DO NOT exceed the capacity of the Leaf Brake.

# **OPERATING & ADJUSTMENT OF THE TK 816**

#### **Adjusting for Metal Thickness**

Clearance for bends is obtained by moving Top Leaf back at bending edge. If material is to be bent is within four gauges of capacity, move the 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 (H) slightly.
- 3. Loosen Top Adjustment Plate Bolt (N). Adjust Top Leaf with Top Adjustment Bolts (L). Tighten Locking Nuts and Top Adjustment Plate Bolt (N). Clamping pressure of the Links (K) is changed by adjusting the Nuts. (M)

#### **Duplicate Bends**

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

#### Counterbalance

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

#### **Overbending Adjustment**

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

- 1. Unclamp Handles (H) slightly on side that is over bending.
- 2. Adjust Top Leaf with Top Adjustment Bolts (L).
- 3. Reclamp Handle (H).

### **Creeping Top Leaf Adjustments**

Should Top Leaf creep forward when clamping material:

- 1. Check that brake sets level on floor.
- 2. Check Top Adjustment Plate (M) and Top Adjustment Bolts and Lock Nuts (L) to eliminate any movement of step bracket (15).
- 3. If still creeping, wedge under rear of Leg (A) 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 (U/V) when mounted on Leaf.

- 1. Insert Bar (U) with Angle Bar (V) allow the full rated 1" minimum flange on capacity material.
- 2. Insert Bar alone without Angle Bar reduces capacity of brake four gauges.
- 3. Removing both Insert Bar and Angle Bar reduces capacity of brake seven gauges. These Bars are removed only to make narrow offset bends.

#### **Narrow Offset Bends**

Remove Angle Bar (V) and Insert Bar (U) - use Bending Leaf only.

### **Cautions**

Bend short pieces of material in center of brake to equalize the strain. Never bend against seams unless Links (K) 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 both Angle Bar (V) and Insert Bar (U) mounted to Lead 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.

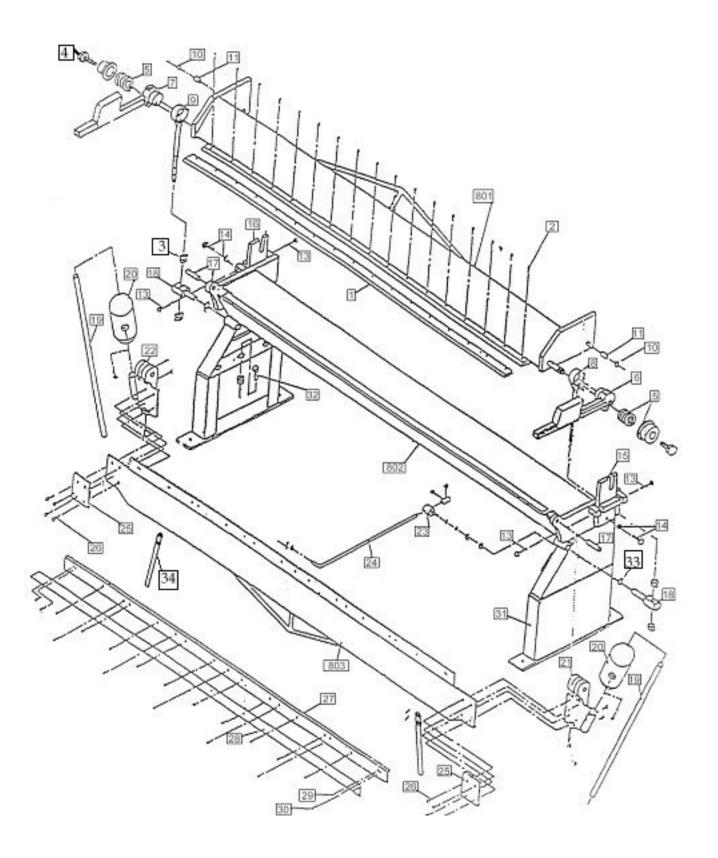
Sheets are not always perfectly flat and a buckle left in one end while the other is straightened by clamping in the brake will throw the first bend out of line when it, in turn, is straightened.

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 the metal gauges. *Never* force-clamp the material.

#### Lubrication

Lubricate occasionally with SAE-30 oil.



# Parts For 816 Leaf Brakes

Fine	Part	Description	No.
No.	No.		REQ"D.
801	816101	801 Holddown Assy.	1
1	816102	Top Blade	1
2	816103	Screw	17
3	816134	Toggle Assy. Nut	4
4	816104	Spring Cover Assy. Bolt	2
5	816105	Spring Cover Assy.	2
6	816106	Clamp Handle R.H.	1
7	816107	Clamp Handle L.H.	1
8	816108	Toggle Assy. R&L	1
9	816109	Toggle Assy. R&L	1
10	816110	C-Clip	2
11	816111	Bushing	2
802	816112	802 Base Assy.	1
13	816113	Screw	4
14	816114	Locknut & Washer	2
15	816115	Step Bracket Comp. R.H.	1
16	816116	Step Bracket Comp. L.H.	1
17	816117	Pin	2
18	816118	Swivel Pin Assy.	2
19	816119	Rod	2
20	816120	Counterweight	2
21	816121	Support, Apron Assy. R.H.	1
22	816122	Support, Apron Assy. L.H.	1
23	816123	Gauge Stop	1
24	816124	Gauge Rod	1
803	816125	803 Apron Assy.	1
25	816126	Plate, Fixing	2
26	816127	Screw, Fixing	8
27	816128	Insert Bar	1
28	816129	Angle Bar	1
29	816130	Flat Head Screw	12
30	816131	Screw	7
31	816132	Stand	2
32	816133	Screw Assy.	6
33	816135	Snap Ring	2
34	816136	Lifting Handle	2