TIN KNOCKER

TK 2236 MANUAL ROLLS

INSTRUCTIONS & PARTS DIAGRAMS

Sheet Metal Equipment Sales Inc.
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TIN KNOCKER
SAFETY RULES
TK 2236 MANUAL ROLLS

1. Never use a machine or tool for anything other than its intended purpose. Use the proper tool and equipment for the task.

2. Do not remove, paint over, alter, or deface any machine-mounted warning and instruction plates and signs.

3. Do not operate the machine in excess of its rated capacity 36" X 22 gauge.

4. Beware of protruding machine elements or assemblies. Avoid any pinch-points created by the movement of the machine's components.

WARRANTY

All new SME machines are sold with a one-year limited warranty, on factory defective parts. The warranty is limited to the original user. SME at its option, will repair, replace or refund the purchase price of any part, tool or machine that fails during the warranty period. SME will pay normal shipping charges for replacement parts. After 90 days from date of purchase, all express or overnight delivery charges are the responsibility of the customer. Purchaser must contact SME, at the address below, any written claim, with proof of original purchase. Replacement parts will be invoiced to purchaser and credit issued when the failed part is delivered to SME. Removal, reinstallation or replacement parts shall be at purchasers' / user's expense. Failure due to improper use of the machine voids the warranty.

NOTE: This machine has been tested and adjusted prior to shipment, but can and often does require readjustment due to vibration and bouncing during transport. Readjustment can easily be done by following the procedures described within. These are procedures with which you, as a user, should be familiar, as you will use them repeatedly over the life use of the machine. If you have difficulty in performing these procedures, we are here to support you.

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We disclaim any responsibility whatsoever to the customer or to any other person for injury to person, or damage to or loss of property or value, caused by any product which has been subjected to misuse, negligence, or accident; or misapplied; or modified or repaired by unauthorized persons; or improperly installed. We shall in no event be liable for any consequential damage, loss or expense arising from the use of, or inability to use, our product.

Tin Knocker 2236 Rolls

Forming Machines, or Slip Roll Formers, are intended for rolling sheet metal or forming cylinders of various diameters.

The two pinch rolls feed the sheet against the rear roll, curving the sheet and forming the cylinder. The rear or forming roll can be adjusted by screws on the rear of left and right end housings, varying the diameter of the required cylinder. Pinch rolls can be adjusted for stock thickness by screws on front of end housings.

The capacity ratings of Tin Knocker forming machines are based on forming mild steel, fully annealed, the full length of the rolls and are considered as standard by the sheet metal trade for forming rolls of a specified diameter and length. Definite capacities, however, depend upon the diameter and length of cylinder to be formed and the number of passes through the rolls to obtain a given diameter. Stiffness of material and uniformity desired are also factors. When a forming machine is overloaded, the immediate result will be deflection in the center of the rolls, resulting in cylinders bulged in the center.

In order to reduce the number of rear roll adjustments when sheets are of light gauge, proceed as follows:

1) Insert the sheet between two pinch rolls.
2) Bend the sheet upwards and slightly around the top roll.
3) Continue to pass the sheet through the machine.

This will also reduce the flat spot on the leading edge of the sheet.

The right-hand housing is provided with a hinged journal cap and lifting latch. After the cylinder is formed, the latch is lifted and the lever is pressed down. This raises the top roll and the cylinder can be slipped off the roll without distortion.

Forming machines are provided with grooves in the right end of the lower and rear rolls to allow for forming cylinders with a wired edge.

WARNING: Before operating, machines must be bolted to work bench. If floor stand has been provided, machine must be bolted to floor stand with bolts provided. Stand must be securely lagged to floor.

INSTRUCTIONS

CAUTION: Be sure that the machine is securely bolted onto pedestal or to customer supplied bench. Pedestal or workbench should be bolted to floor.

1. Adjust Lower Roll (11) to grip the metal firmly and evenly but without straining the machine. Lower Roll (11) is adjusted up or down with the two lower Adjusting Screws (29).

2. Adjust Rear Roll (12) to form the metal up as it travels through the rollers. Rear Roll (12) is adjusted up or down with the two rear Adjusting Screws (22). Be sure Rear Roll (12) is parallel with Lower Roll (11). If rolls are not parallel, the formed metal will be conical in shape instead of cylindrical.

3. Feed the stock to the rolls only from the front.

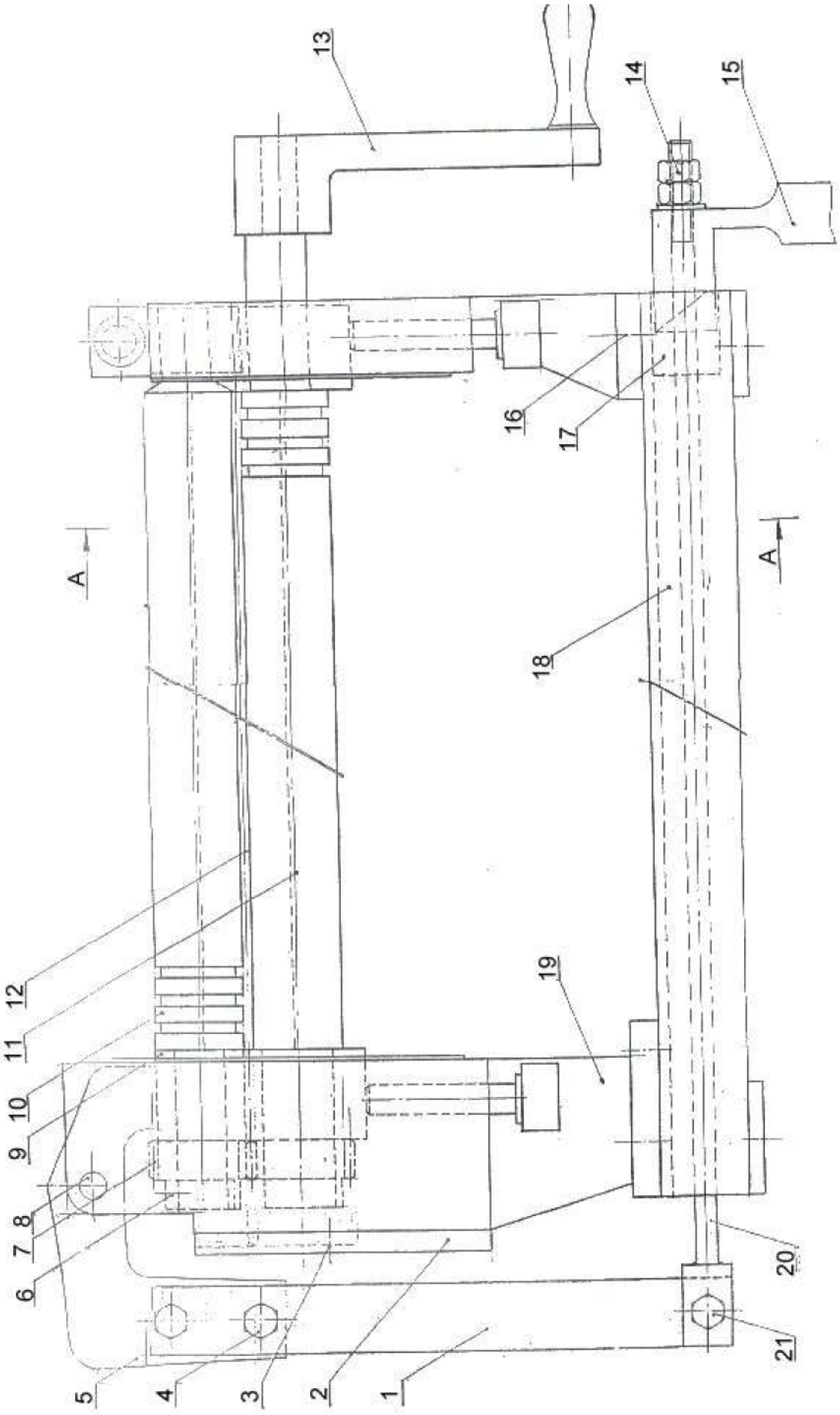
4. As the front rolls grip the stock, lift the rear end of the metal upward. This will help reduce the flat spot on the leading edge of the sheet and will also cause the leading edge to pass over the rear roll readily.

5. The diameter of the formed cylinder is determined by the position of the Rear Roll (12). To increase the diameter of a cylinder, lower Rear Roll (12) by turning the two-rear Adjusting Screws (22) counter clockwise. To reduce the diameter of a formed cylinder, raise Rear Roll (12) by turning the two rear Adjusting Screws (22) clockwise. The two rear Adjusting Screws (22) should be turned an equal number of turns in order to keep the Rear Roll (12) parallel with the front gripping rolls.

6. To remove a cylindrical piece without distorting it, lift up Locking Handle (27), raise Right Hand Housing Cap (1/2) and turn Cam Handle (15) down. This raises the outboard end of the Upper Roll (10) and allows the formed cylinder to be slipped off of the Upper Roll (10).

7. The Lower Roll (11) and the Rear Roll (12) have grooves of varying widths in one end. These are for the purpose of accommodating a wired edge when forming a shape or when forming wire into a ring.

8. "X" points should be lubricated daily with a good grade machine oil. "Y" points should be greased weekly with Alemite #33 or equal.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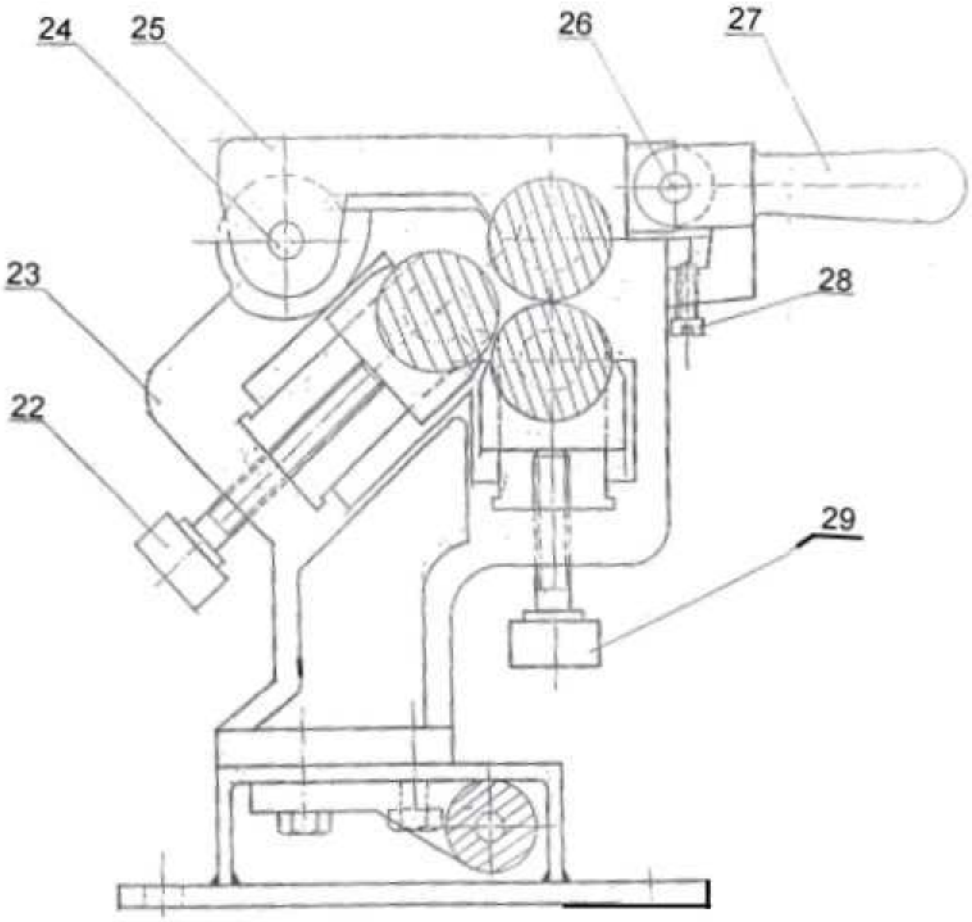

VIEW A-A

PARTS LIST TK 2236 ROLLS

Find No.	Part No.	Description	No. Req.
1	TKROLL001	Lift Lever	1
2	TKROLL002	Cover Plate	1
3	TKROLL003	Bolt M8 x 25	2
4	TKROLL004	Bolt M10 x 40	2
5	TKROLL005	Rocking Box	1
6	TKROLL006	Set Screw M6 x 25	3
7	TKROLL007	Roll Gears	2
8	TKROLL008	Rocking Box Pin	1
9	TKROLL009	Box	4
10	TKROLL010	Upper Front Roll	1
11	TKROLL011	Lower Front Roll	1
12	TKROLL012	Rear Roll	1
13	TKROLL013	Crank Assembly Handle	1
14	TKROLL014	Jam Nut	2
15	TKROLL015	Cam Handle	1
16	TKROLL016	Bolts M12 x 40	5
17	TKROLL017	Cam	1
18	TKROLL018	Machine Base Assembly	1
19	TKROLL019	Left Hand Housing	1
20	TKROLL020	Cam Rod	1
21	TKROLL021	Bolt M10 x 30	1
22	TKROLL022	Adjusting Screw Long	2
23	TKROLL023	Right Hand Housing	1
24	TKROLL024	Pin 16	1
25	TKROLL025	Cap Right Hand Housing	1
26	TKROLL026	Pin 12	1
27	TKROLL027	Locking Handle	1
28	TKROLL028	Locking Handle Screw	1
29	TKROLL029	Adjusting Screw Short	2