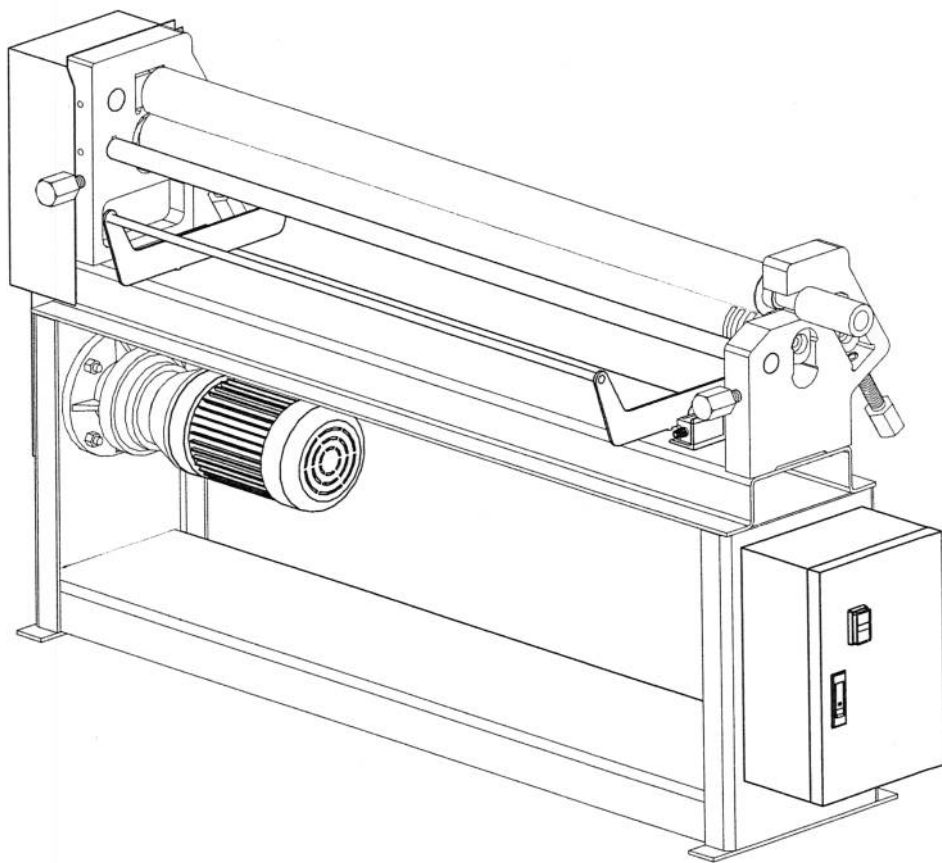


POWERED SLIP ROLL OPERATION MANUAL



X-5016E

INSTRUCTIONS

POWER ROLL

MODEL:

- * Don't exceed rated capacity on this slip roll. This slip roll has been tested to roll 16 Ga. X 50" (1.6mm x 1270mm) mild steel at the factory.
- * Three steel rolls are provided with the two front rollers placed vertically above the other. The lower and rear rolls are adjustable by means of screws, which are located on both ends of the side members.
- * The slip rolls have three 75 mm (3") carbon steel rolls. The two front rolls are clamping rolls, the rear roll is bending roll. The clamping rolls are adjustable for different material thickness by adjusting the screws. The bending roll is adjustable for the diameter to be rolled by adjusting screws.
- * Rolling of the slip rolls are enabled by means of the operating handle on the right side of the rolls. Which material passing through the gripping rolls will strike the rear roll, if adjusted properly, thereby forming a circle.
- * The top roll can be lifted for removal of work piece, by opening the roll cover on the right-side top of the roll. Shut the roll cover when the process is going on.
- * These rolls are not intended for bending rods. Bending rods will cause damage on the rolls.
- * Lubricate the moving parts of the machine with light grease or heavy oil. Lasting accuracy depends on proper lubrication.
- * Caution; this machine may be dangerous if not used properly.

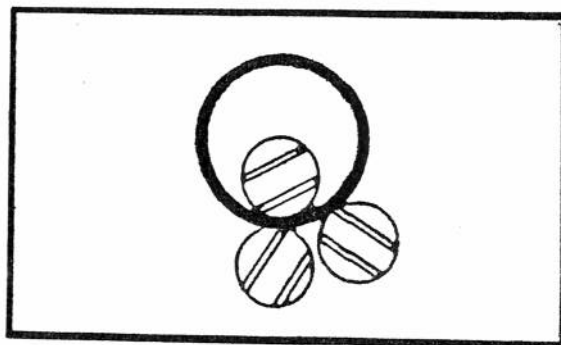
FRONT AND REAR ADJUSTMENT SCREWS

The four adjusting screws (two located in the front and two located in the rear) have been built into the left and right side frames.

The two front adjusting screws enable the operator to raise or lower the pinch roll, so that the correct gap between the upper and lower pinch roll may be obtained to feed the desired stock into the machine.

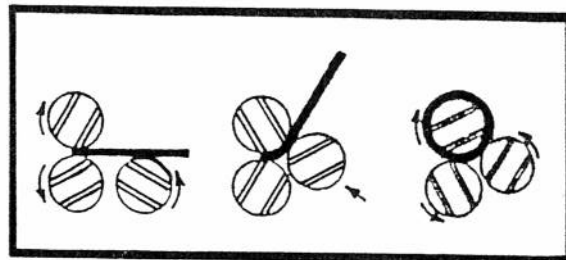
TO REMOVE THE FORMED PART – lift clamp handle and slide the support lever handle to the right. The upper pinch roll will rise. Slide the material off roll. If the material is not long enough or if the formed part is not the proper diameter, additional samples will have to be made. Thousands of identical parts can be precisely duplicated when proper adjustments of the roller have been made.

The left and right rear adjusting screws assist the operator in raising or lowering the idler rolls which determines the degree of bend in the stock that is being fed through the machine. The right and left side frames are each equipped with a scale to aid the operator in determining the correct angle of bend in the stock.



REVERSE ROLLING

CIRCLES – the same diameter as the diameter of the rolls and slightly larger, can be formed with the . Roller in just one pass. To make the adjustment for material thickness and to determine the length of material needed, see the instructions given under “How To Form Circles In Just Two Passes”.



HOW TO FORM CIRCLES IN JUST TWO PASSES.

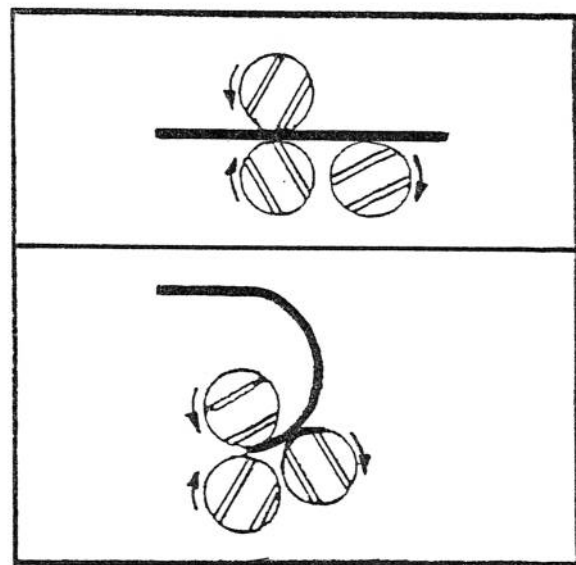
LENGTH OF MATERIAL – necessary to form the desired size circle is the first consideration in circle forming. To determine approximate length of material needed. Use the formula $C = ID$. ' C is Circumference. I equal 3.1417. D is diameter. For example, to find the length of material needed (C or Circumference) to form a circle 4" in diameter multiply 3.1417 by 4". Result 12.5667 is the circumference or approximate length of material needed. Cut a few pieces of material to this length for test forming. Material may have to be lengthened or shortened depending upon results of the test forming run.

TO ADJUST ROLLER – for material thickness loosen the thumb screw to the right of the adjusting screws. Turn the adjusting screws to raise or lower the lower pinch roll. Insert the material between the rolls from the front of the machine and set rolls so the material fits tightly. Retighten the thumb screws and remove the material from between the rolls.

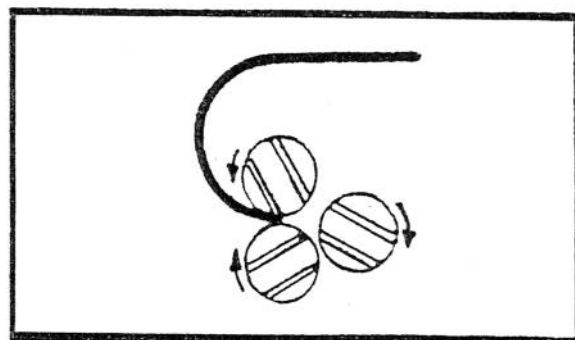
TO ADJUST THE ROLLER – for the diameter of circle to be formed: raise the idler roll by pulling the cam lever toward the operator until the idler roll seems to "fall into place". Loosen the thumb screws next to the rear adjusting screws on the back of the roller. Set the idler roll by turning the rear adjusting screws. After the idler roll has been set for the desired angle of bend tighten the thumb screws.

NO EXACT FORMULA – can be followed when making this adjustment because material "springback" varies with the kind of material being formed. Only by test forming several pieces can the correct adjustments be obtained. Rolls must be adjusted exactly parallel or the material will spiral during the rolling process.

TO OPERATE ROLLER – after diameter adjustments have been made. Insert material from front of roller and turn operating handle in a clockwise direction until about half of the material has passed through the rolls: if roller is power operated make sure that the upper pinch roll is rotating in a counter clockwise direction. Then, while feeding material, raise the idler roll. Continue turning until a half circle has been formed. It is important that you operate the roller while engaging the cam lever, for if the cam lever is engaged while the rolls are not turning, a noticeable flat spot or line will be formed across the width of the material.

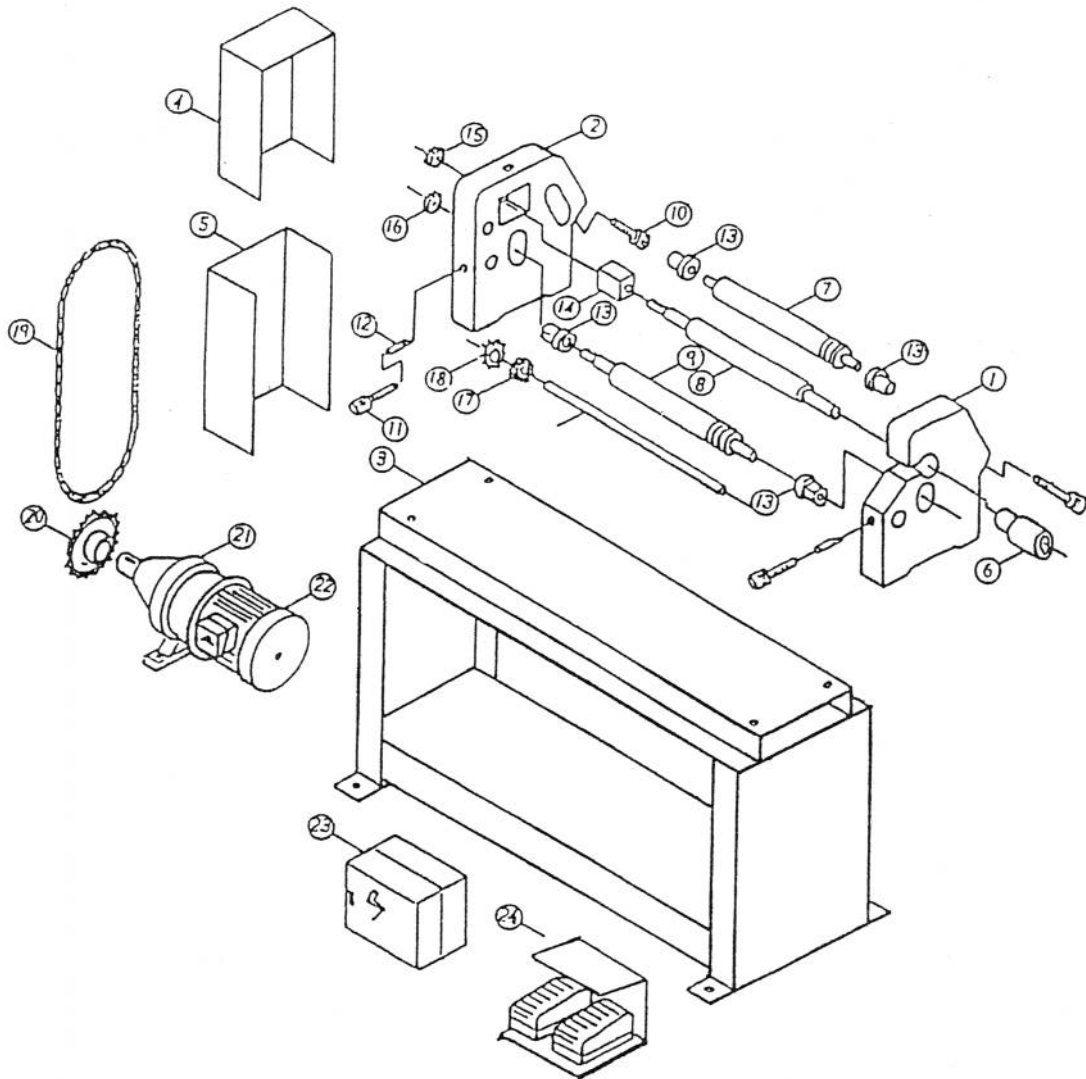


AFTER HALF CIRCLE – has been formed, reinsert the formed end of the material into the roller (as illustrated) and turn operating handle in a clockwise direction to form a complete circle. If roller is power operated turn switch in a position that allows the upper pinch roll to rotate in a counter clockwise direction.



Parts Drawing/Parts List - Power Slip Roller

Model X-5016E



No.	Part Name	Qty.	No.	Part Name	Qty.
1.	Side frame "R"	1	13.	Bottom roll set	2
2.	Side frame "L"	1	14.	Upper roll set	1
3.	Fixed base	1	15.	Gear M4 x 16T	2
4.	Top cover	1	16.	Gear M4 x 19T-1½	1
5.	Lower cover	1	17.	Gear M4 x 19T-1¼	1
6.	Clamp handle	1	18.	Chain sprocket	1
7.	Rear roll	1	19.	Chain	1
8.	Upper roll	1	20.	Chain sprocket	1
9.	Lower roll	1	21.	Gear reducer	1
10.	Screw. Adj.	2	22.	Motor	1
11.	Screw. Adj.	2	23.	Electric box	1
12.	Pin. Lower roll	2	24.	Foot switch	1