

[®]
Di-Acro

OPERATOR'S MANUAL & INSTRUCTIONS

Di-Acro 12 & 24 Slip Rollers



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CAUTION

TO PREVENT SERIOUS BODILY INJURY
AND DAMAGE TO THE MACHINE

BOLT THE MACHINE TO THE STAND
AND THE STAND TO THE FLOOR

To prevent injury, we at Di-Acro insist that the roller be secured to the stand and the stand be fastened to the floor. Even though the Di-Acro manual rollers are simple to operate, another word of caution is advised. Loose clothing can easily become entangled in the rolls if not guarded.

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HAND OPERATED ROLLERS

DI-ACRO ROLLERS	#12	#24
Max. Form. Width	12"	24"
Mat. Cap. - Steel	16 gauge	20gauge
Diameter or Rolls	2"	2"
Minimum Radius	1"	1"
Maximum Radius	No Limit	No Limit
Floor Space (On Stand)	15" x 18.5"	15" x 40"
Shipping Wt. Lbs.	115	170
Stand - Weight Lbs., Net	86	108

**#12 SLIP ROLLER
ASSEMBLY - 8422800-080**

**#24 SLIP ROLLER
ASSEMBLY - 8442800-080**

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. The left and right rear adjusting screws assist the opera-

tor in raising or lowering the idler roll 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.

FORMING CIRCLES

HOW TO FORM CIRCLES IN JUST TWO PASSES.

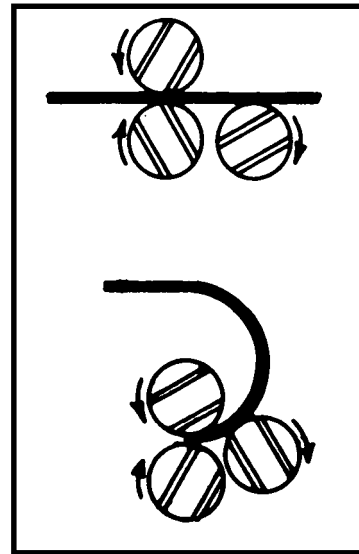
LENGTH OF MATERIAL-necessary to form the desired size circle is the first consideration in circle forming. To determine approximate length of material needed-use the formula $C = \pi D$. C is circumference. π EQUALS 3.1417. D is diameter. For example, to find the length of material needed (C or Circumference) 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 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.

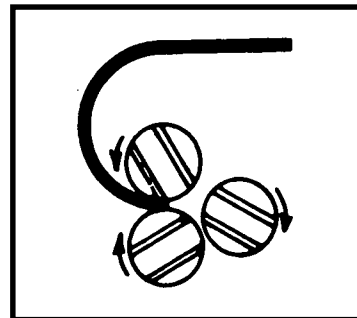
TO ADJUST THE ROLLER-for the diameter of circle to be formed; raise the idler roll by pulling the cam lever toward the operator until the idler roll seems to "fall into place". Loosen the thumb screws next to the rear adjusting screws on the back of the roller. Set the idler roll by turning the rear 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. 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.

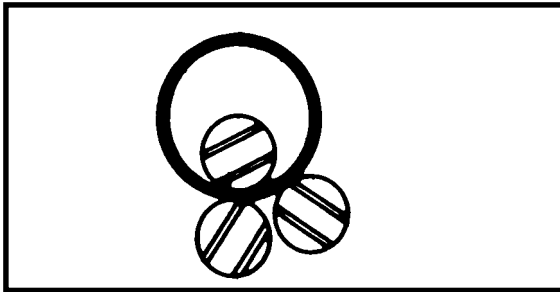


AFTER HALF CIRCLE-has been formed, reinsert the formed end of the material into the roller (as illustrated) and turn operating handle in a clockwise direction to form a complete circle.



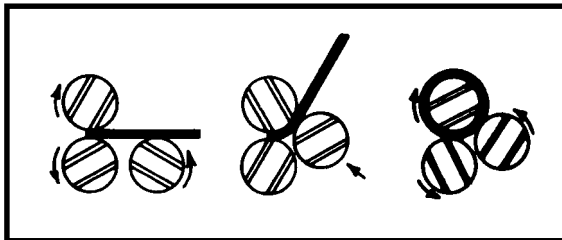
SHAPING METAL

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.



REVERSE ROLLING

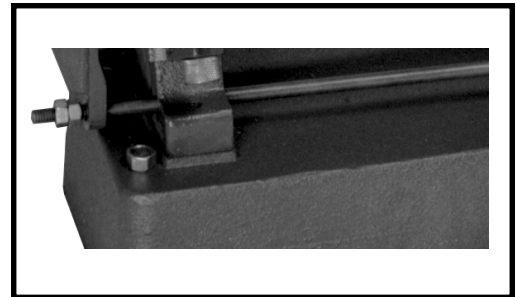
CIRCLES-the same diameter as the diameter of the rolls and slightly larger, can be formed with the Di-Acro Roller in just one pass. To make the adjustment for material thickness and to determine the length of material needed, see the instructions given under "How To Form Circles In Just Two Passes."

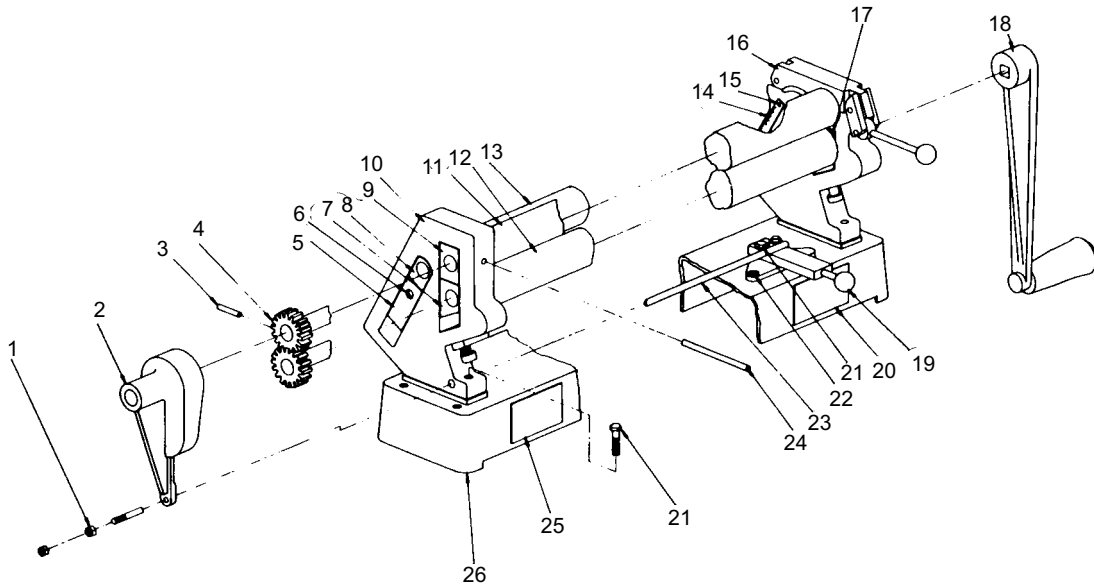


BENDS CAN BE LOCATED AT ANY POINT IN METAL

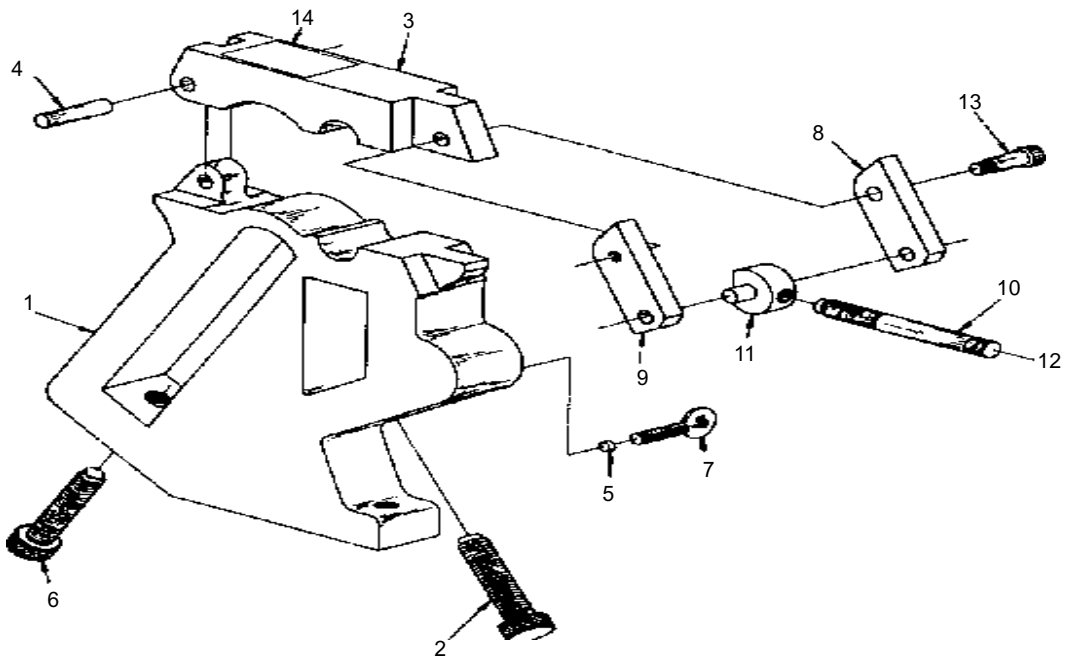
TO OPERATE-insert material to be formed from the rear of the machine. Material should be inserted in the machine so that the rolls just "nip" the end of the material. Then, place the idler roll into operating position and operate machine so that the upper pinch roll rotates in a clockwise direction. If adjustments are correct and the material is the right length, a perfect circle is formed.

FLAT MATERIAL- can be rolled part way through the rolls and bent by raising the idler roll using the cam lever. Disengaging the cam lever lowers the idler roll, and the material again passes through the rolls without being bent. It is possible to form a wide variety of shapes with the Di-Acro Roller.





ITEM	DESCRIPTION	PART NUMBER	QTY	
			12"	24"
1	NUT	31X0516C	2	2
2	GEAR CAP	8421110-602	1	1
3	PIN	18A0104X1102	2	2
4	GEARS	8421390-103	2	2
5	CAM BLOCK	8421120-201	2	2
6	SCREW	22D0104C0102	2	2
7	LOWER PINCH ROLL BOX	8100121-401	1	1
8	IDLER ROLL BOX	8000121-400	2	2
9	PIVOT BOX	8300121-401	1	1
10	SIDE FRAME ASSEMBLY (LEFT)	8000110-370	1	1
11	UPPER PINCH ROLL	8200121-401	1	0
	UPPER PINCH ROLL	8400121-401	0	1
12	LOWER PINCH ROLL	8421121-401	1	0
	LOWER PINCH ROLL	8440121-401	0	1
13	IDLER ROLL	8421121-400	1	0
	IDLER ROLL	8440121-400	0	1
14	SCALE	8410160-103	2	2
15	SCREW	29AXXX0X0108C	6	6
16	SIDE FRAME ASSEMBLY (RIGHT)	8421110-370	1	1
17	LOWER PINCH ROLL BOX	8000121-401	1	1
18	HANDLE ARM ASSEMBLY (LONG)	8421120-872	1	1
19	PINCH ROLL SUPPLE LE A	8421111-071	1	1
20	NAME PLATE	421-6501131	1	0
	NAME PLATE	440-6501133	0	1
21	SCREW	21A0308C1104	5	5
22	SCREW	22B0308C0508	1	1
23	ROD WELDMENT	8421111-004	1	0
	ROD WELDMENT	8440111-004	0	1
24	LOCKING PIN	8421120-301	1	1
25	CAUTION PLATE	030-6504001	1	1
26	BASE	421-1101001	1	0
	BASE	440-1101001	0	1
27	IDLER ROLL CAM (NOT SHOWN)	8421120-200	1	0
28	IDLER ROLL CAM (NOT SHOWN)	8441120-200	0	1



ITEM	DESCRIPTION	PART NUMBER	QTY
	SIDE FRAME ASSY (RIGHT)	8421110-370	
1	SIDE FRAME R	8421110-300	1
2	SCREW FRONT ADJ.	8410470-102	1
3	CLAMP	8421111-001	1
4	PIN	8203188-000	1
5	SPACER	8410110-803	2
6	SCREW REAR ADJ.	8000470-102	1
7	SCREW	28A0104C0102	2
8	CLAMP LOCK LINK R	8000110-303	1
9	CLAMP LOCK LINK L	8421110-303	1
10	CLAMP STUD	8421470-102	1
11	CLAMP LOCK CAM	8421120-203	1
12	KNOB	8120810-700	1
13	SCREW	25X0516X0304	1
14	INSTRUCTION PLATE	420-6503104	1