flagler

Designers and Manufacturers of Sheet Metal Roll Forming Machinery

Flagler Button Lock Auxilliary Rolls

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INSTRUCTIONS FOR MOUNTING AUXILIARY ROLLS
(20 GAGE BUTTON LOCK)

Machine auxiliary shafts are designed to accommodate auxiliary rolls. To install these rolls, proceed as follows:

1. Remove the section of the table top side plate on the side of the machine which the rolls are to be mounted.

2. If auxiliary rolls are now on the machine, remove the retaining bolts and washers. Remove all parts not pertaining to the set to be used.

3. Place all Woodruff Keys in proper location.

4. Select the first pair of rolls which are marked "T-1" and "B-1" and place them on the shaft at the entrance end of the machine. Place the "T-1" roll on the upper shaft and the "B-1" roll on the lower. Repeat procedure through all roll stations.

   All rolls marked "T" should be mounted on the top shaft and the "B" rolls mounted on the bottom shaft in numerical order. NUMBERED SIDE OF ROLLS MUST FACE OUTWARDS.

5. After the rolls are installed, fasten the rolls with retaining screws and washers.

6. Mount entrance and exit gauges to the stand, using the slotted holes provided in the table top. Set entrance gauges by placing a straight edge along the outer edge of the auxiliary rolls, measure to the required amounts in from the straight edge to the extreme ends of the entrance gauge.

OPERATION MALE LOCK

Male Lock mounted on auxiliary shafts, right side of machine (opposite of pulley side). Roll capacity 20 gauge, cold rolled, mild steel.

ENTRANCE GAUGE SETTING - MALE LOCK

Entrance gauge is set from a straight edge placed along the outer face of the auxiliary rolls. Measure 1" from straight edge to end of entrance gauge nearest No. 1 roll, and 1" to the end of the entrance gauge bar furthest from the No. 1 roll. This feed gauge is to be kept parallel unless severe run-out conditions are noted. If these conditions are noted, a 1/32" taper in the entrance gauge setting will assist in eliminating the run-out. Note the above settings are approximate and may vary slightly to meet your requirements. Run a test piece of material through the machine and note the results. If a longer leg is required, increase the 1" dimension accordingly or if a shorter leg is required decrease the gage setting.

We advise that when assembling the rolls at the #2 station on the male lock it is important that the spacing between the shear roll (outside top roll) and the buttons on the bottom roll have a minimum clearance of .010.

Enclosed you will find some .005 shims to assemble on the shafts with the rolls to assure the proper clearance.

INSTRUCTIONS FOR MOUNTING AUXILIARY ROLLS
(20 GAGE BUTTON LOCK)

OPERATION FEMALE LOCK

Female Lock mounted on auxiliary shafts, left side of machine (pulley side). Roll capacity - 20 gauge, cold rolled, mild steel.

ENTRANCE GAUGE SETTING - FEMALE LOCK

Entrance angle gauge is set by placing a straight edge along the outer face of the auxiliary rolls. Measure 2-9/16" from straight edge to end of gauge nearest the No. 1 roll, and 2-5/8" from straight edge to end of gauge furthest from No. 1 roll. These measurements will leave a 1/16" taper in the entrance gauge setting which is necessary to hold the material to the gauge. Note the above settings are approximate and may be slightly increased or decreased to meet your particular requirements. Run a piece of test material through the machine and note the results. If the results are satisfactory, the machine is ready for production running. If not, to increase the size of the small hem, add whatever is required to the gage setting. To decrease the size of the small hem, subtract whatever is required from the gage setting. Upward or downward bow. Should material have an excessive upward bow, adjust the straightening roll on the exit end of the machine to compensate for the excessive bow.

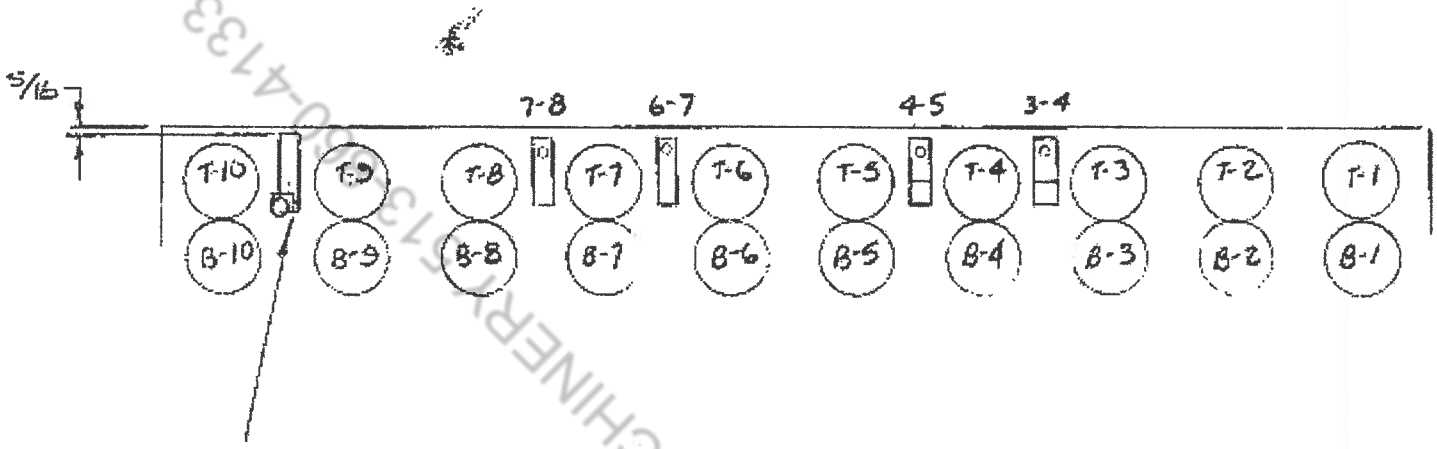
EXIT GAUGE

Exit angle iron should be set about 1/32" away from the material. After a satisfactory setting is obtained on all planes, lock all entrance gauge studs, exit angle iron, etc. firmly into position for production running.

Part no.	Description	Size	Quantity
62-023	Too 1 1/2 Fem Btn Lock Roll	2.750rd.x2.750 CRS	1
62-024	Too 2 1/2 Fem Btn Lock Roll	3.00rd.x2.750 CRS	1
62-025	Too 3 1/2 Fem Btn Lock Roll	3.500rd.x2.750 CRS	1
62-026	Too 4 1/2 Fem Btn Lock Roll	2.500rd.x2.750 CRS	1
62-027	Too 5 1/2 Fem Btn Lock Roll	2.500rd.x2.750 CRS	1
62-028	Too 6 1/2 Fem Btn Lock Roll	2.500rd.x2.750 CRS	1
62-029	Too 7 1/2 Fem Btn Lock Roll	2.500rd.x2.750 CRS	1
62-030	Too 8 1/2 Fem Btn Lock Roll	2.500rd.x2.750 CRS	1
62-031	Too 9 1/2 Fem Btn Lock Roll	3.500rd.x2.750 CRS	1
62-032	Too 10 BL Roll 20/22 Gauge	2.500rd.x2.750 CRS	1
62-145	Too 10 BL Roll 24/26 Gauge	2.500rd.x2.750 CRS	1
62-146	Too 10 BL Roll 28/30 Gauge	2.500rd.x2.750 CRS	1
62-033	Btm 1 1/2 Fem Btn Lock Roll	3.00rd.x2.750 CRS	1
62-034	Btm 2 1/2 Fem Btn Lock Roll	3.250rd.x2.750 CRS	1
62-035	Btm 3 1/2 Fem Btn Lock Roll	3.500rd.x2.750 CRS	1
62-036	Btm 4 1/2 Fem Btn Lock Roll	3.750rd.x2.750 CRS	1
62-037	Btm 5 1/2 Fem Btn Lock Roll	3.750rd.x2.750 CRS	1
62-038	Btm 6 1/2 Fem Btn Lock Roll	3.750rd.x2.750 CRS	1
62-039	Btm 7 1/2 Fem Btn Lock Roll	3.750rd.x2.750 CRS	1
62-040	Btm 8 1/2 Fem Btn Lock Roll	3.750rd.x2.750 CRS	1
62-041	Btm 9 1/2 Fem Btn Lock Roll	2.500rd.x2.750 CRS	1
62-042	Btm 10 1/2 Fem Btn Lk Roll	3.500rd.x2.750 CRS	1
62-102	Helper Station 3 & 4	.500x.750x3.375 CRS	1
62-103	Helper Station 4 & 5	.750x1.00x3.375 CRS	1
62-104	Helper Block Sta. 6 & 7	1.00x1.125x3.375 CRS	1
62-105	Helper Block Sta. 7 & 8	1.00x1.250x3.375 CRS	1
54-050	Feed Gage	.500x1.00x18.00 CRS	1
30-014	Take-Off Guide	1.50x1.50x.188x11.125 AI	1
30-102	Cam Follower	CF-3/4-B	1
30-073	Too 1 Male Btn. Lock Roll	2.500rd.x2 1/16 CRS	1
30-074-1	Spacer Roll	2.500rd.x1.021 CRS	1
30-074-2	Shearing Roll	2.500rd.x.201 HY-TEN	1
30-075	Too 3 Male Btn. Lock Roll	2.500rd.x2 1/16 CRS	1
30-076	Too 4 Male Btn. Lock Roll	2.500rd.x2 1/16 CRS	1
30-077	Too 5 Male Btn. Lock Roll	2.500rd.x2 1/16 CRS	1
30-078	Too 6 Male Btn. Lock Roll	2.500rd.x2 1/16 CRS	1
30-079	Too 7 Male Btn. Lock Roll	2.500rd.x2 1/16 CRS	1
30-080	Too 8 Male Btn. Lock Roll	2.500rd.x2 1/16 CRS	1
30-081	Too 9 MBL w/Cam Follower	2.500rd.x.375 CRS	1
30-092	-I-9 M. Idle Roll Hldr Assy-	----	1
30-094	Idler Roll Holder	5.00x3.00x.500x5.125 AI	1
30-095	Tab	.625x.750x1.125 CRS	1
30-102	Cam Follower	CF-3/4-B	1
30-062	Too 10 Male Btn. Lock Roll	2.500rd.x2 1/16 CRS	1
30-083	Btm 1 Male Btn. Lock Roll	2.500rd.x2 1/16 CRS	1
30-084-1	Notching Roll	2.500rd.x1.261 CRS	1

Part no.	Description	Size	Quantity
30-084-2	Notching Roll (for cutters)	2.500rd.x1.051 CRS	1
30-085	Btm 3 Male Btn. Lock Roll	2.750rd.x2 1/16 CRS	1
30-086	Btm 4 Male Btn. Lock Roll	3.00rd.x2 1/16 CRS	1
30-087	Btm 5 Male Btn. Lock Roll	3.125rd.x2 1/16 CRS	1
30-088	Btm 6 Male Btn. Lock Roll	3.375rd.x2 1/16 CRS	1
30-089	Btm 7 Male Btn. Lock Roll	3.375rd.x2 1/16 CRS	1
30-090	Btm 8 Male Btn. Lock Roll	3.375rd.x2 1/16 CRS	1
30-091	Btm 9 Male Btn. Lock Roll	3.375rd.x2 1/16 CRS	1
30-092	Btm 10 Male Btn. Lock Roll	3.375rd.x2 1/16 CRS	1
30-101	Tool Bit	.250sqr.x.625 Tool Steel	6
17-048	Feed Gage	2.00x1.500x.188x18.375 Al	1
17-049	Take-Off Gage	2.00x1.500x.188x10.375 Al	1

HELPER BLOCKS FOR
1/2" FEMALE BUTTON LOCK ROLLS
LEFT SIDE OF MACHING



STRAIGHTENER INSTALLED & ADJUSTED TO 5/16 DIMENSION - THIS IS A STARTING POINT AND MAY NEED FURTHER ADJUSTMENT AS NECESSARY.

THE FLAGLER CORP.
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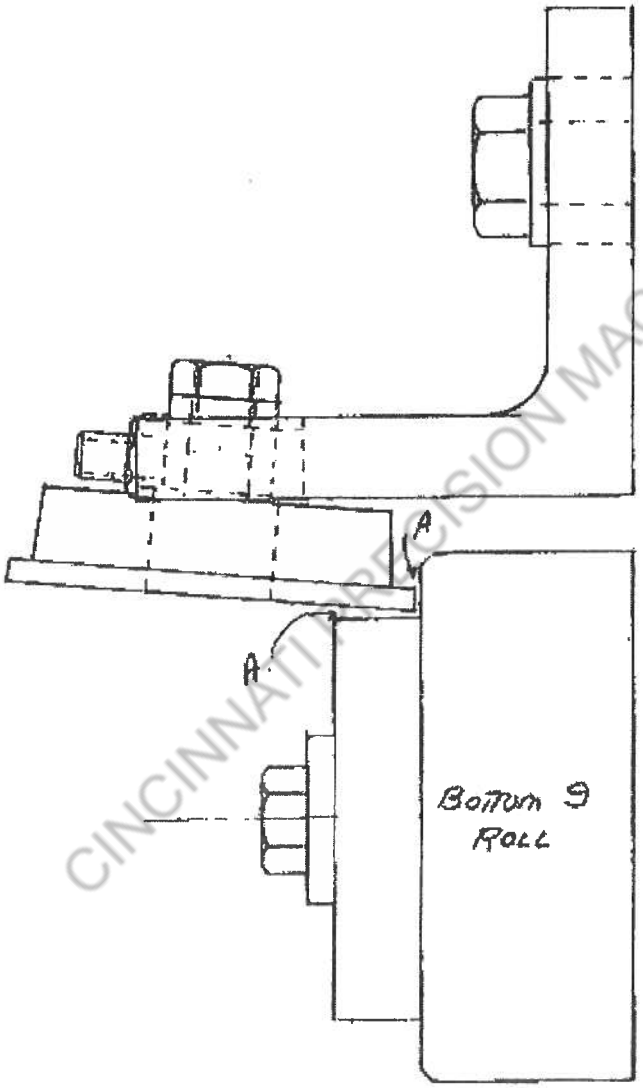
SCALE ——	DATE	TOLERANCES
DRAWN H.J.E.	7-14-65	FRACTIONAL
CHECKED		DECIMAL
APPROVED		ANGLES
PART NAME		PART NO.

MATERIAL THICKNESS CLEARANCE SHOULD BE IN THE CORNER BETWEEN THE TOP IDLER ROLL & THE BOTTOM #9 ROLL (AREA A)

MALE BUTTON LOCK #9 STATION



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