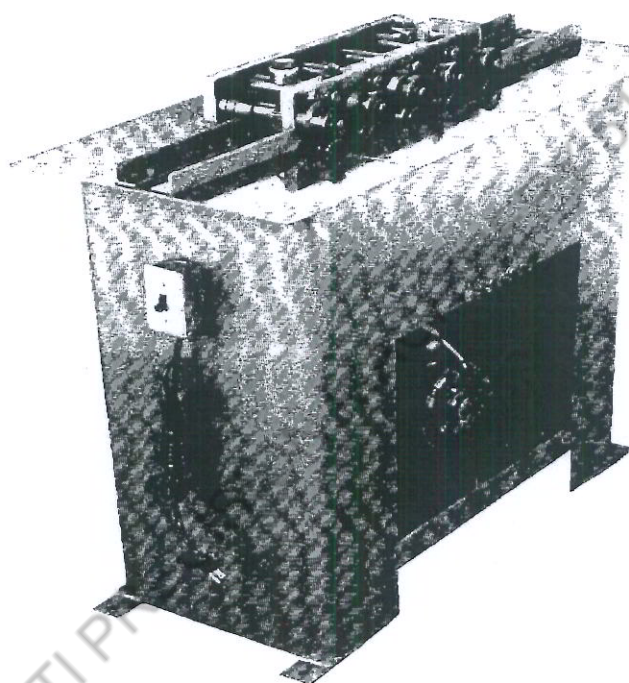




Designers and Manufacturers of Sheet Metal Roll Forming Machinery

20 Ga. Standard Pittsburgh Machine

Operating Instructions and Parts List



OUR NEW
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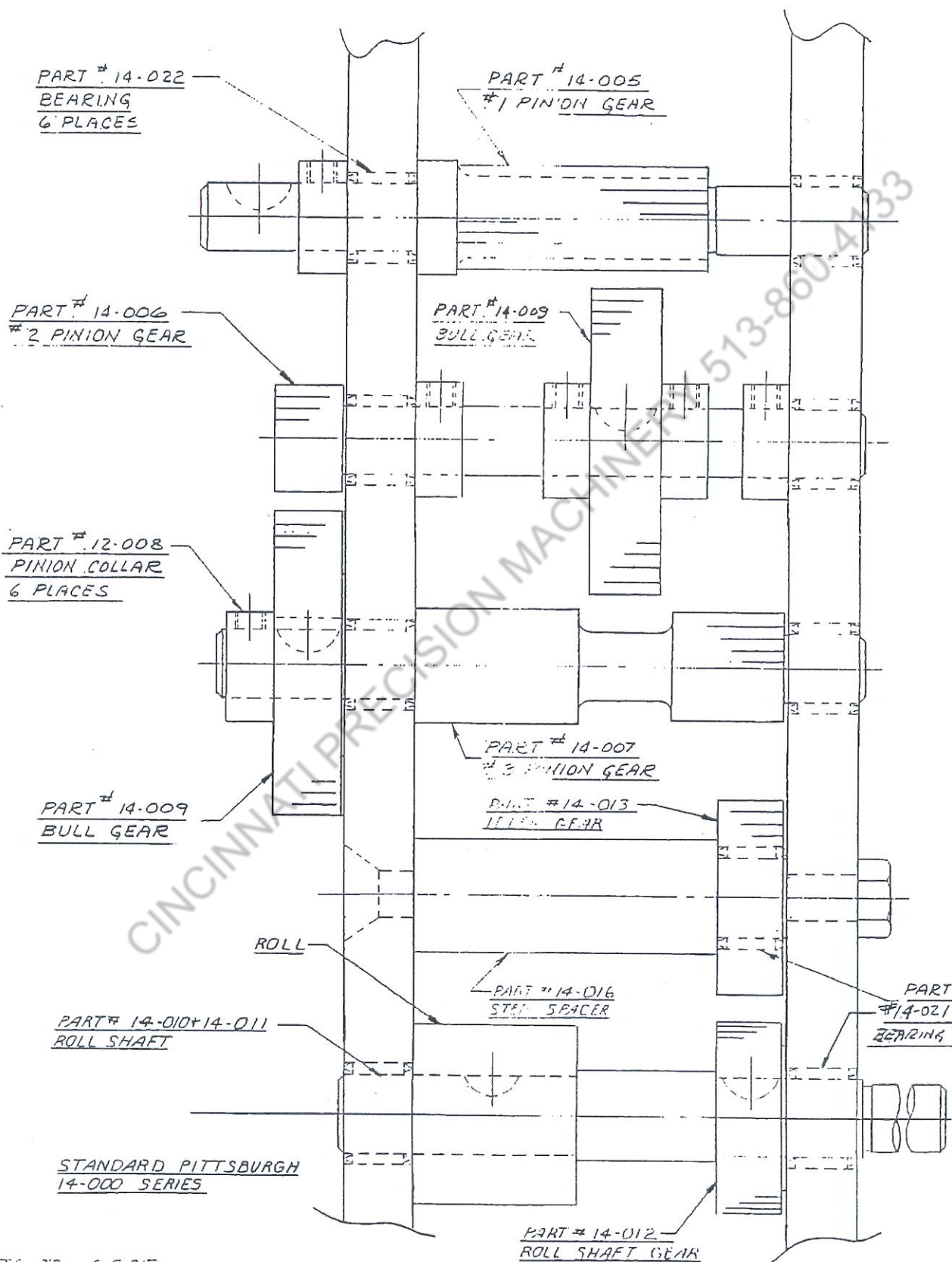
14-051

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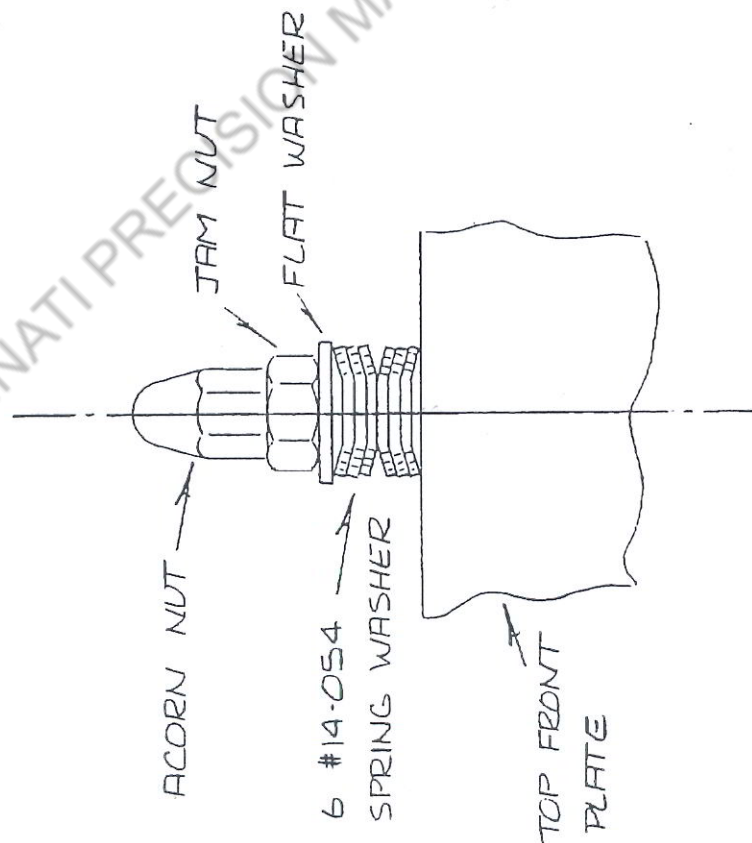
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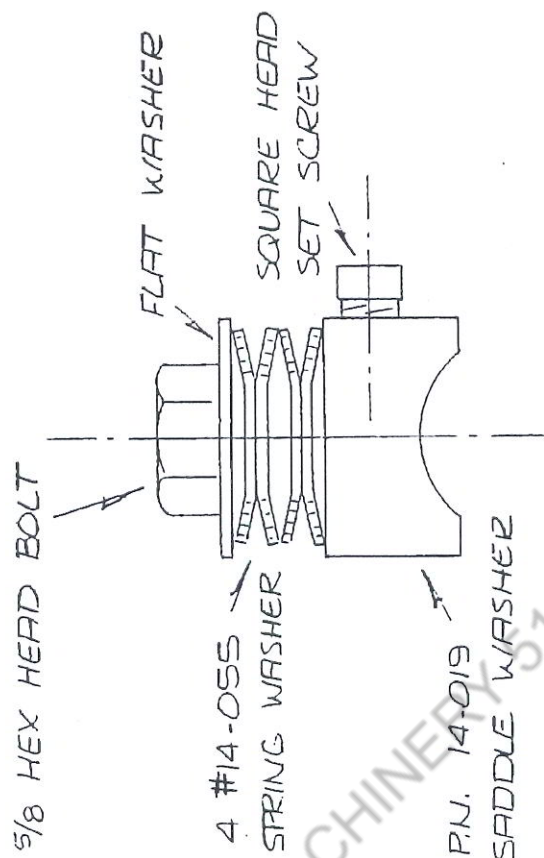
20 GA. STANDARD SPRING WASHER ASSY. INSTRUCTIONS
TO WORK PROPERLY THE ASSYS. MUST BE STACKED AS SHOWN.

3/8 HOLD DOWN STUDS



WHEN INSTALLING TIGHTEN JAM NUT
 UNTIL SPRING WASHERS ARE FLAT
 THEN BACK OFF 1/2 TURN AND TIGHTEN
 ACORN NUT

5/8 HOLD DOWN



WHEN INSTALLING TIGHTEN 5/8 BOLT
 UNTIL SPRING WASHERS ARE FLAT
 THEN BACK OFF 3/4 TURN AND
 TIGHTEN SQUARE HEAD SET SCREW.

8-27-90 KG

Parts List for Flagler Model 20 Standard

Part #	Description	Qty
14-001	Lower Front Plate	1
14-002	Lower Back Plate	1
14-003	Top Front Plate	1
14-004	Top Back Plate	1
14-005	#1 Pinion Gear*	1
14-006	#2 Pinion Gear*	1
14-007	#3 Pinion Gear*	1
12-008	Pinion Collar*	6
14-009	Bull Gear*	2
14-010	Roll Shaft (Top 3, 4, 5 & Bottom 5)*	4
14-011	Roll Shaft (Top 1, 2 & Bottom 1, 2, 3, 4)*	6
14-012	Roll Shaft Gear*	10
14-013	Idler Gear*	4
14-014	Plain Spacer*	5
14-016	Plain Step Spacer*	2
14-017	Drilled Plain Spacer*	2
14-018	Drilled & Tapped Step Spacer*	2
14-051	Hold Down Bolt – 5/8 – 11 NC	2
14-019	Saddle Washer*	2
14-055	Spring Washer 5/8" I.D.	8
14-054	Spring Washer 3/8" I.D.	12
14-021	Bearing 1412*	24
14-022	Bearing 1212-OH*	6
14-056	Bushing*	2
14-052	Snap Ring*	2
14-024	Idler Roll Pin*	2
14-025	Opening Roll Holder*	1
14-026	Head Spacer Shims (Pair)	2
14-027	Stud 3/8" – 16 NC*	2
14-028	Cover Assembly	1
14-031	Cabinet Assembly	1
14-041	Lube Line Assembly – 12"	3
17-046	Lube Line Assembly – 16"	3
14-042	Take Off Gauge*	1
14-042-H	Hardened Feed Gauge	1
14-044	Motor 3/4 HP	1
14-046	Pulley (motor)	1
12-040	Pulley (driven)	1
14-047	"V" Belt	1
10-036	Cord	1
14-057	Bottom 1 Pittsburgh Roll*	1
14-058	Bottom 2 Pittsburgh Roll*	1
14-059	Bottom 3 Pittsburgh Roll*	1
14-060	Bottom 4 Pittsburgh Roll*	1
14-061	Bottom 5 Pittsburgh Roll*	1
14-062	Top 1 Pittsburgh Roll*	1
14-063	Top 2 Pittsburgh Roll*	1
14-064	Top 3 Pittsburgh Roll*	1
14-065	Top 4 Pittsburgh Roll*	1
14-066	Top 5 Pittsburgh Roll*	1
14-067	Bottom Idler Roll*	1
14-068	Top Idler Roll*	1
14-069	Opening Roll*	1

*Denotes illustrated part.

Contact your Flagler Distributor for price and availability of these and other Flagler Products.

Important: Disconnect Power Before Removing Covers for Any Reason



14-062



14-063



14-064



14-065



14-066



14-057



14-058



14-059



14-060



14-061



14-005



14-022



14-018



14-006



14-009



14-016



14-013



14-021



14-069



14-007



12-008



14-014



14-017



14-025



14-010



14-012



14-068



14-056



14-024



14-052



14-011



14-021



14-067



14-056



14-051

14-019



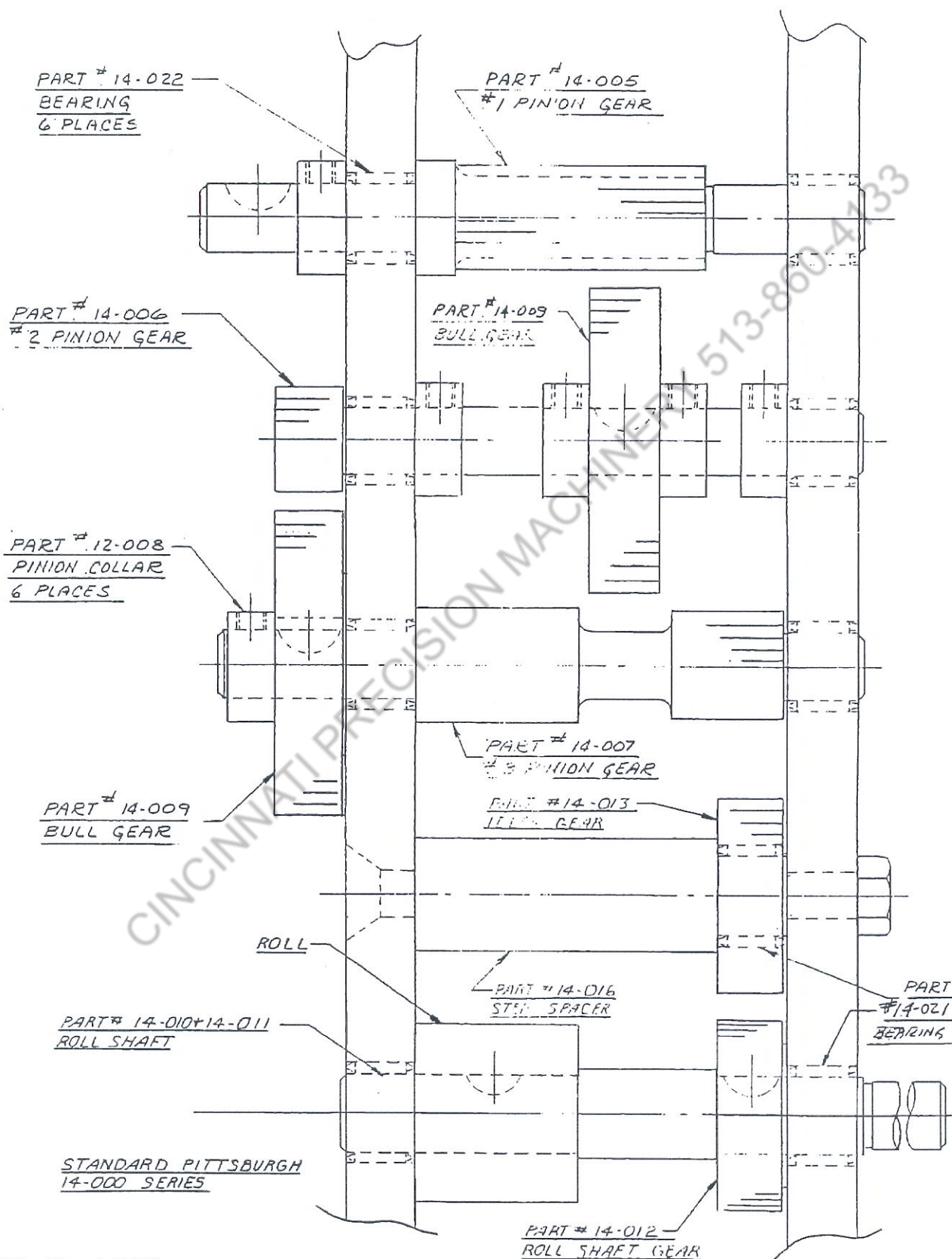
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14-042

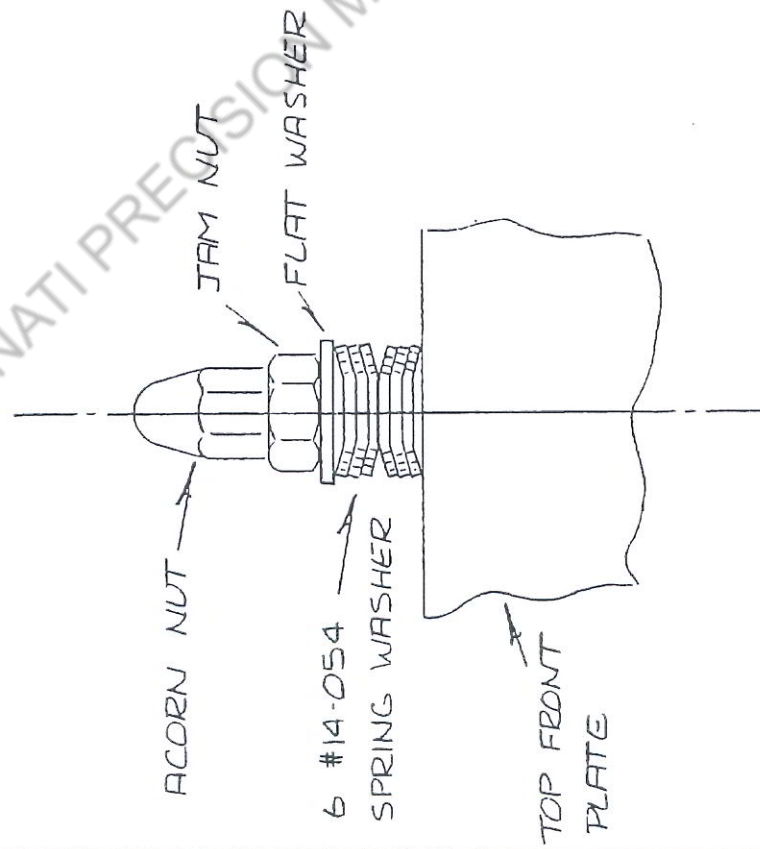
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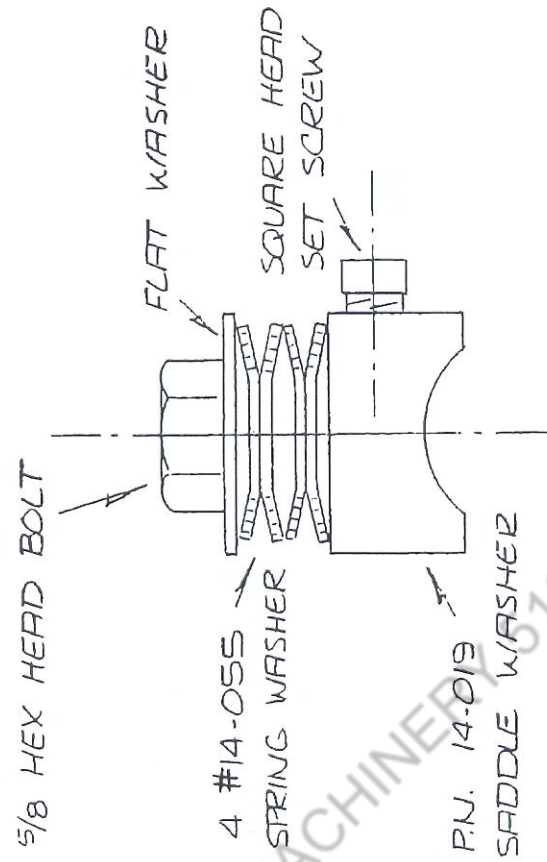
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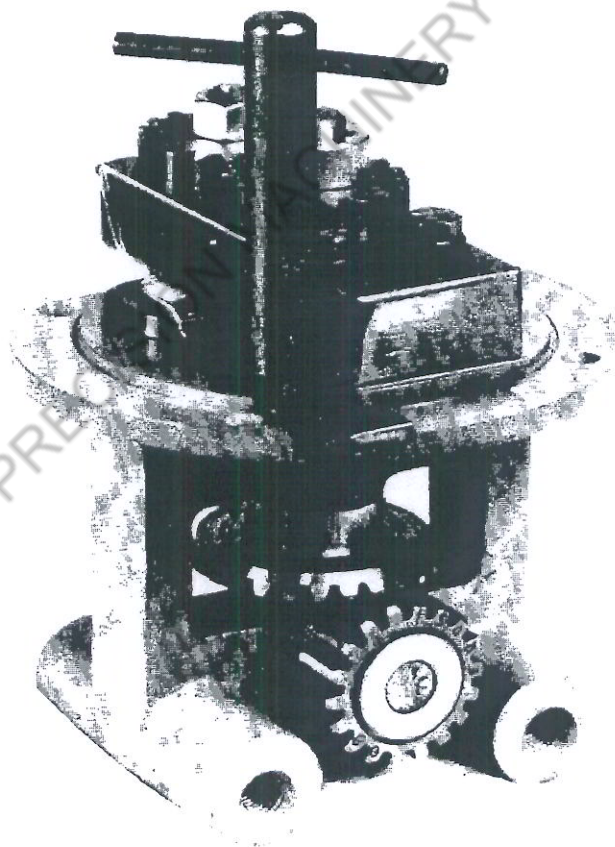
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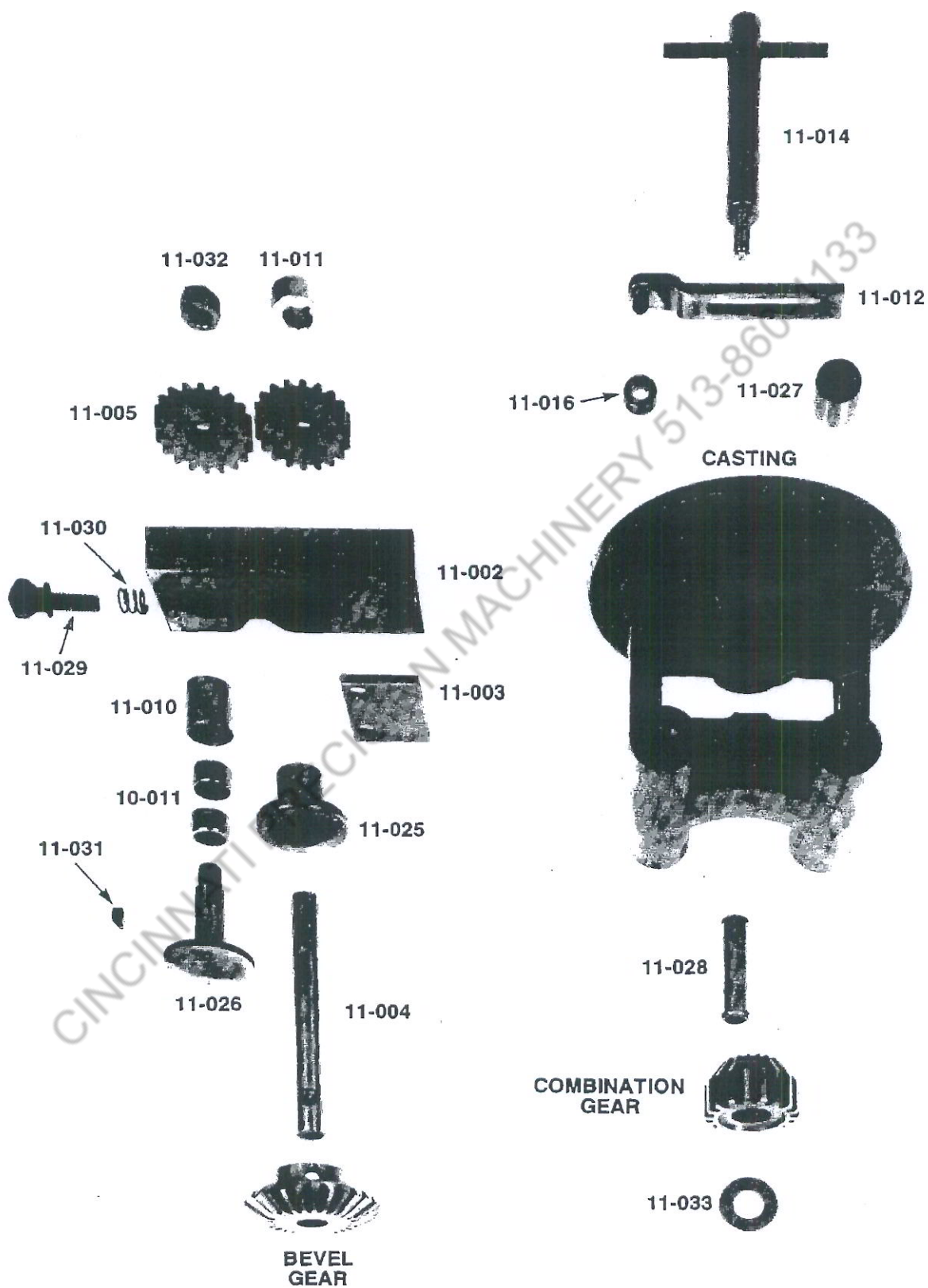


Designers and Manufacturers of Sheet Metal Roll Forming Machinery

Flanging Attachment

Operating Instructions and Parts List





FLANGE FOLLOWER INSTRUCTIONS

The Flange Follower is stamped for different gauges. This setting is for straight pieces and slight curves. When forming the flange an outside radius, more pressure will be need, up to one full revolution inward of the dial. When forming the flange on interior curves, less pressure (then the straight setting) should be used.

For tight interior radiuses (less then 3 ¼" radii) the Flange Follower must be disengaged and the part run through by hand.

The thumb screw also needs to be adjusted for different gauge thickness' of metal. If the metal is not held into the forming rolls this usually means that the Thumb screw is not tight enough. If the flange has a wave to it then the thumb screw is too tight.

If the settings are not correct and the flange does not form properly, simply adjust the machine accordingly and run the piece through again. Depending on the adjustment needed the part will still be good.

PARTS LIST

The following parts are in addition to the parts shown on the Flanging Attachment parts list.

Part Number	Description	Qty
11-101	Swivel Block	1
11-102	Adjustment Screw	1
11-103	Nose	1
11-104	Adjustment Handle	1
11-107	Cam Block Assembly	1
11-108	Cam Follower	1
11-109	Handle w/Ball	1
11-110	Spring	1
11-111	Cover Assembly	1
11-009	Bearing	1
11-033	Oillite	2

THE FLAGLER CORPORATION

Flanging Attachment Parts List

Model 24 Junior Flanging Attachment		Model 22 Portable Flanging Attachment		Model 20 Standard Flanging Attachment		Description
Part No.	Qty.	Part No.	Qty.	Part No.	Qty.	
11-001	1	13-001	1	15-001	1	Casting
11-002	1	11-002	1	11-002	1	Forming Block
11-003	1	11-003	1	11-003	1	Forming Block Spacer
11-004	1	11-004	1	11-004	1	Main Shaft
11-005	2	11-005	2	11-005	2	Plain Gear
11-006	1	11-006	1	15-002	1	Bevel Gear
11-007	1	11-007	1	15-003	1	Combination Gear
11-009	1	11-009	1	NA	NA	Bearing #1012
11-010	1	11-010	1	11-010	1	Race #IR-1316
11-011	1	11-011	1	11-011	1	Collar
10-011	4	10-011	4	10-011	6	Bearing #108
11-012	1	11-012	1	11-012	1	Guide Roll Holder
11-014	1	11-014	1	11-014	1	Roller Guide Handle
11-016	1	11-016	1	11-016	1	Guide Roll
11-017	1	11-017	1	11-017	1	Gear Cover Assembly
11-018	1	13-002	1	15-004	1	Cover Assembly
11-025	1	11-025	1	11-025	1	Plain Roll
11-026	1	11-026	1	11-026	1	Knurled Roll
11-027	1	11-027	1	11-027	1	Lifter Button
11-033	1	11-033	1	11-033	1	Oilite
11-029	1	11-029	1	11-029	1	Thumb Screw
11-030	1	11-030	1	11-030	1	Spring
11-028	1	11-028	1	11-028	1	Dowel Pin
11-031	1	11-031	1	11-031	1	Woodruff Key (modified)
11-032	1	11-032	1	11-032	1	½"-20 NF Hex Nut

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Important: Disconnect Power Before Removing Covers for Any Reason

Operating Instructions for Power Flanging Attachment

1. Tighten the gauge adjustment screw and loosen it a quarter turn (this setting is correct for 26 gauge material). If the flange is wrinkled, the adjustment is too tight; if there is slippage, then it is too loose.
2. Turn up a "starting flange" by using the slot cut in the tabletop. Once the operator is accustomed to the flanger, this will not be necessary. As the metal passes through the forming rolls, exert a small force on the piece in the direction indicated by the arrows in the figure below. This holds the metal to the height gauge and results in an even, uniform flange. Too much force will jam the machine.
3. On exceptionally small outer radii the piece may need to be run through the flanger a second time to remove wrinkles and to straighten the flange.
4. When flanging straight pieces or pieces having a constant radius, the operator may set the adjustable guide. To use the guide simply run a piece partly through the rolls and then slid the guide against the flange and tighten down the T-handle. As a result, the following pieces can be released after started.
5. To flange small inner radii, no guide is needed. Start the piece and LET GO.
6. If you fail to turn the flange to the full height, or the flange runs off the edge of the piece, the piece is not spoiled; simply run it through the flanger again.
7. After flanging a few pieces, the operator will get the "feel" of the machine and find out how easily that the metal is guided up to a perfect flange. For ease in handling of material, stand at the front of the machine.

