flagler

Designers and Manufacturers of Sheet Metal Roll Forming Machinery

22 GA. Portable Pittsburgh Machine

Operating Instructions and Parts List

56513 Precision Drive Chesterfield, MI. 48051

P 586-749-6300

F 586-749-6363

www.flaglercorp.com

Operating Instructions

A feed gage is located on the entrance end of the machine. Place the metal (22 GA. max) against the feed gage and run the metal into the forming rolls. Use care to hold the material firmly against the feed gage. See figure 1. When feeding long sheets be sure that they are flat on the table as well as against the feed gage, especially upon entry.

COVER MUST BE IN PLACE DURING OPERATION

Lubrication

Due to the low speed of this machine, the shaft bearings do not require lubrication. However, if galvanized material is being used, the roller dies should be lubricated regularly with **Flagler Lubaroll**. This will help remove galvanized build up.

Specifications

Length 34" x Width 16" x Height 14" Weight 200 lbs.
Motor standard ½ HP 115 volt AC drive, single "V" belt
Needle Bearings Throughout

Installation Of Forming Rolls

Installation of Pittsburgh Lock, Right Angle Flange, Double Seam and 180° Hem Rolls: Mount the feed gage as shown in figure 1. The rolls are identified by the letters and number stamped on the outside end of each roll. The letters and numbers correspond to the rolls position on the machine **("T" top rolls, "B" bottom rolls, #1 Roll at the feed entrance of the machine thru #6 Roll at the exit end)** Mount the rolls on the corresponding shafts, with the outside end facing the outside of the machine. Use the hardware provided to fasten the rolls into place. Be sure all keys are in place; tighten the rolls down securely before adjusting the gages as per adjustment instructions.

Installation of Drive Cleat Rolls; The Drive Cleat Rolls are installed on the side of the machine as shown in figure 1. Mount the drive cleat feed gauge as it is shown in figure 1. Mount the rolls on the shafts, as instructed above. Leave the roll DC-1 3 free to float without a washer, but leave the key in place. Tighten all the other rolls securely. Adjust the drive cleat feed gage as instructed. The anti-bow slide plate should no be mounted on the exit of the machine.

IMPORTANT: DISCONNECT POWER BEFORE REMOVING COVERS FOR ANY REASON.

Adjustment Instructions

Disconnect machine from power source. Remove cover from machine. The hold down studs must be tight for all standard gages. If aluminum material is being used it may be necessary to loosen the hold down studs to prevent distortion of the material.

Pittsburgh Lock, Right Angle Flange, Double Seam and 180° Hem Rolls: The feed gage settings are adjusted most efficiently by laying a straight edge along the outside ends of the rolls and measuring from the straight edge as shown in figure 1.

Drive Cleat Rolls are set by laying a straight edge on the outside of the gage and measuring to the faces of the rolls ¾" see figure 1. Due to the differences in various materials, the feed gage is adjusted by trial and error. If the finished cleat bows up, adjust the slide "down" as shown in figure 1. If the material bows down adjust the slide "UP". Slight movement is needed for proper adjustment.

Flagler 22 GA Portable Parts List

Part #	Description	Qty.	Part #	Description	Qty.
12-001	Top Front Plate	1	12-023	Bearing B-1210	5
12-002	Top Back Plate	1	12-024	Angle Iron Bracket	2
12-003	Bottom Front Plate	1	12-025	Cover Assembly	1
12-004	Bottom Back Plate	1	12-026	Cabinet Assembly	1
12-005	#1 Pinion Gear		10-032	½ HP Motor	1
12-006	#2 Pinion Gear	1	12-039	Motor Pulley	1
12-007	#3 Pinion Gear	1	12-040	Head Pulley	1
12-008	Pinion Collar	6	12-041	"V" Belt	1
12-010	Roll Gear	2	10-012	Bearing B-128-OH	6
12-011	Roll Shaft	12	10-036	Cord	1
12-012	Roll Shaft Gear	12	10-037	Connector	1
12-013	Idler Gear	5	10-038	Switch	1
12-014	Thrust Collar	12	10-039	Switch Cover	1
12-015	Plain spacer	4	12-042	Hold Down Washer	12
12-016	Plain Step Spacer	3	12-043	Grease Fitting	4
12-017	Plain Drilled Spacer	2	12-044	# 61 Woodruff Key	12
12-018	Tapped Step Spacer	2	12-045	3/160 x 3/8 Long Pin	12
12-019	Saddle Washer	2	12-046	# 9 Woodruff Key	3
12-020	Spring Washer B1000-050	8	12-047	Hold Down Stud	2

Pittsburgh Rolls

Part no.	Description	Qty.
12-048	Top 1 Pittsburgh Roll	1
12-049	Top 2 Pittsburgh Roll	1
12-050	Top 3 Pittsburgh Roll	1
12-051	Top 4 Pittsburgh Roll	1
12-052	Top 5 Pittsburgh Roll	1
12-053	Top 6 Pittsburgh Roll	1
12-054	Btm. 1 Pittsburgh Roll	1
12-055	Btm. 2 Pittsburgh Roll	1
12-056	Btm. 3 Pittsburgh Roll	1
12-057	Btm. 4 Pittsburgh Roll	1
12-058	Btm. 5 Pittsburgh Roll	1
12-059	Btm. 6 Pittsburgh Roll	1
12-063	Feed Gage	1
12-064	Opening Roll Holder	1
12-065	Sta. 5-6 Platform Assy.	1
12-069	Opening Roll	1
		1

Double Seam Rolls

Part no.	Description	Qty.
12-101	Top 1 Double Seam Roll	1
12-102	Top 2 Double Seam Roll	1
12-103	Top 3 Double Seam Roll	1
12-104	Top 4 Double Seam Roll	1
12-105	Top 5 Double Seam Roll	1
12-106	Top 6 Double Seam Roll	1
12-107	Btm. 1 Double Seam Roll	1
12-108	Btm. 2 Double Seam Roll	1
12-109	Btm. 3 Double Seam Roll	1
12-110	Btm. 4 Double Seam Roll	1
12-111	Btm. 5 Double Seam Roll	1
12-112	Btm. 6 Double Seam Roll	1
12-063	Feed Gage	1
12-061	Take-Off Gage	1

Standard machines are equipped with Pittsburgh rolls

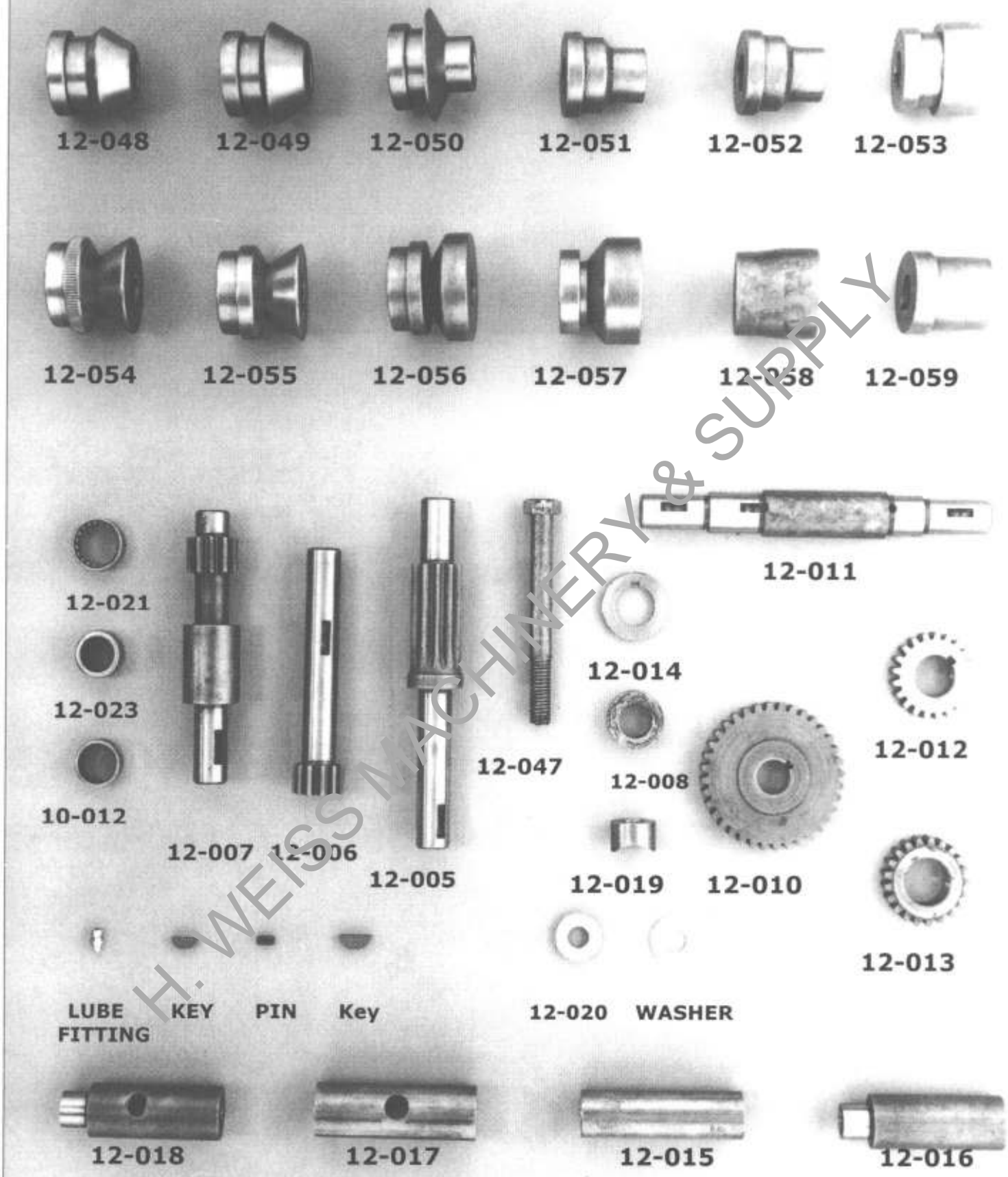
Right Angle Flange Rolls

Part no.	Description	Qty.
12-301	Top 1 RAF Roll	1
12-302	Top 2 RAF Roll	1
12-303	Top 3 RAF Roll	1
12-304	Top 4 RAF Roll	1
12-305	Top 5 RAF Roll	1
12-306	Top 6 RAF Roll	1
12-307	Btm. 1 RAF Roll	1
12-308	Btm. 2 RAF Roll	1
12-309	Btm. 3 RAF Roll	1
12-310	Btm. 4 RAF Roll	1
12-311	Btm. 5 RAF Roll	1
12-312	Btm. 6 RAF Roll	1
12-063	Feed Gage	1
12-061	Take-Off Gage	1

Drive Cleat Rolls

Part no.	Description	Qty.
12-201	Top 1 Drive Cleat Roll	1
12-202	Top 2 Drive Cleat Roll	1
12-203	Top 3 Drive Cleat Roll	1
12-204	Top 4 Drive Cleat Roll	1
12-205	Top 5 Drive Cleat Roll	1
12-206	Top 6 Drive Cleat Roll	1
12-207	Btm. 1 Drive Cleat Roll	1
12-208	Btm. 2 Drive Cleat Roll	1
12-209	Btm. 3 Drive Cleat Roll	1
12-210	Btm. 4 Drive Cleat Roll	1
12-211	Btm. 5 Drive Cleat Roll	1
12-212	Btm. 6 Drive Cleat Roll	1
12-213	Feed Guide	1
12-216	Anti-Bow Slide	1

Part no.	Description	Qty.
12-401	Top 1 Hem Roll	1
12-402	Top 2 Hem Roll	1
12-403	Top 3 Hem Roll	1
12-404	Top 4 Hem Roll	1
12-405	Top 5 Hem Roll	1
12-406	Top 6 Hem Roll	1
12-407	Bottom 1 Hem Roll	1
12-408	Bottom 2 Hem Roll	1
12-409	Bottom 3 Hem Roll	1
12-410	Bottom 4 Hem Roll	1
12-411	Bottom 5 Hem Roll	1
12-412	Bottom 6 Hem Roll	1
12-063	Feed Gage	1
12-061	Take-Off Gage	1



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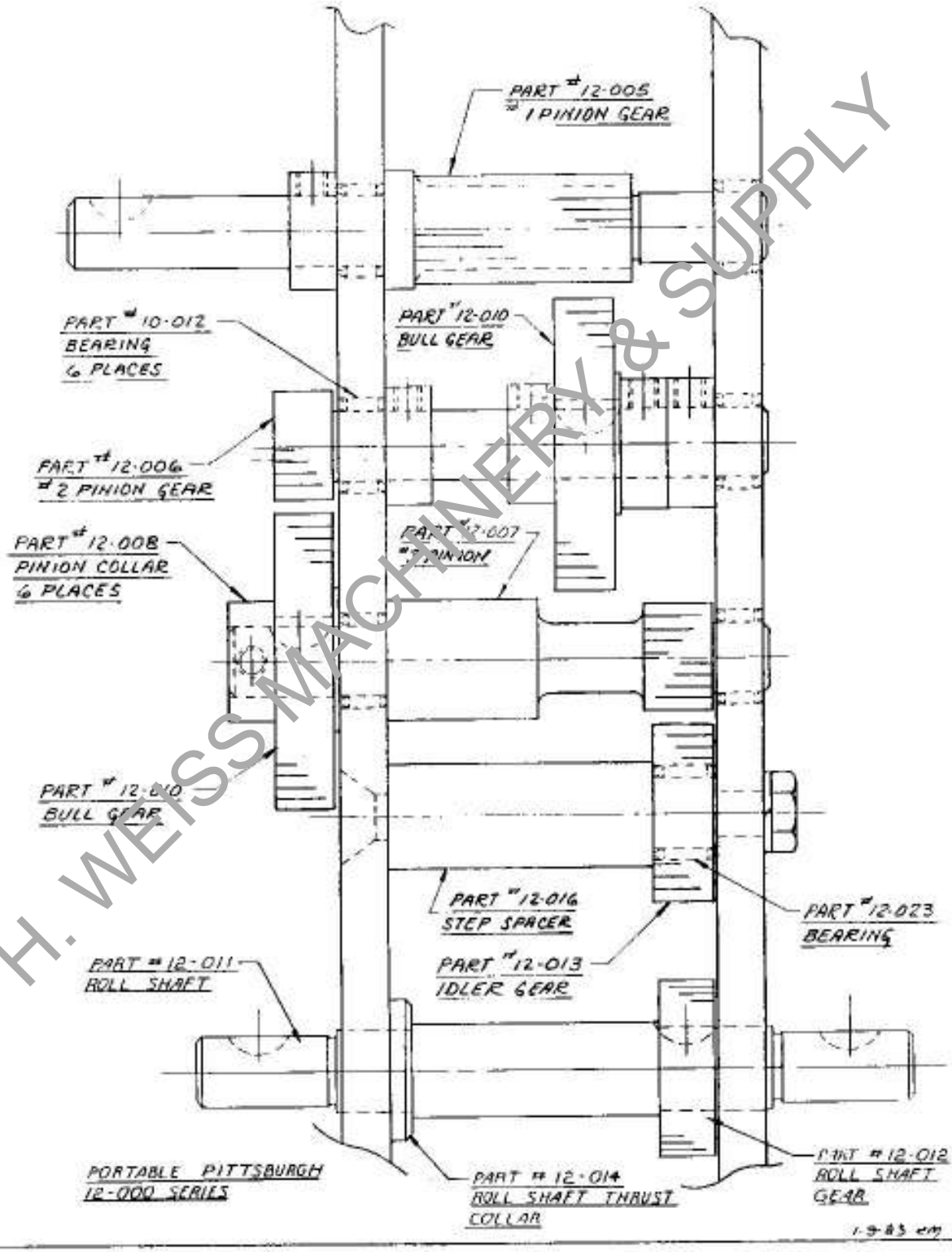
56513 PRECISION DRIVE, CHESTERFIELD, MICHIGAN 48051
TELEPHONE: (586) 749-6300 FAX: (586) 749-6363



1. Turn gauge adjustment screw all the way in and then 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, it is too loose.

2. Turn up a "starting flange" by using the slot cut in the table top. (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. 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, it may be necessary to pass the piece through the rolls a second time to remove wrinkles and straighten the flange.

4. When flanging straight pieces or pieces having a. constant radius, the operator may set the adjustable guide. Run a piece partly through. the rolls and then set the guide against the flanged edge and then pieces may 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 run off the edge, the piece isn't spoiled. Just run it through the flanger again.

7. After the operator has flanged a few pieces, he will get the "feel" of the machine and find how easily the metal is guided to bring up a perfect flange. For ease in handling of material, stand in front of the machine.

TO OPERATE
POWER
FLANGING
ATTACHMENT