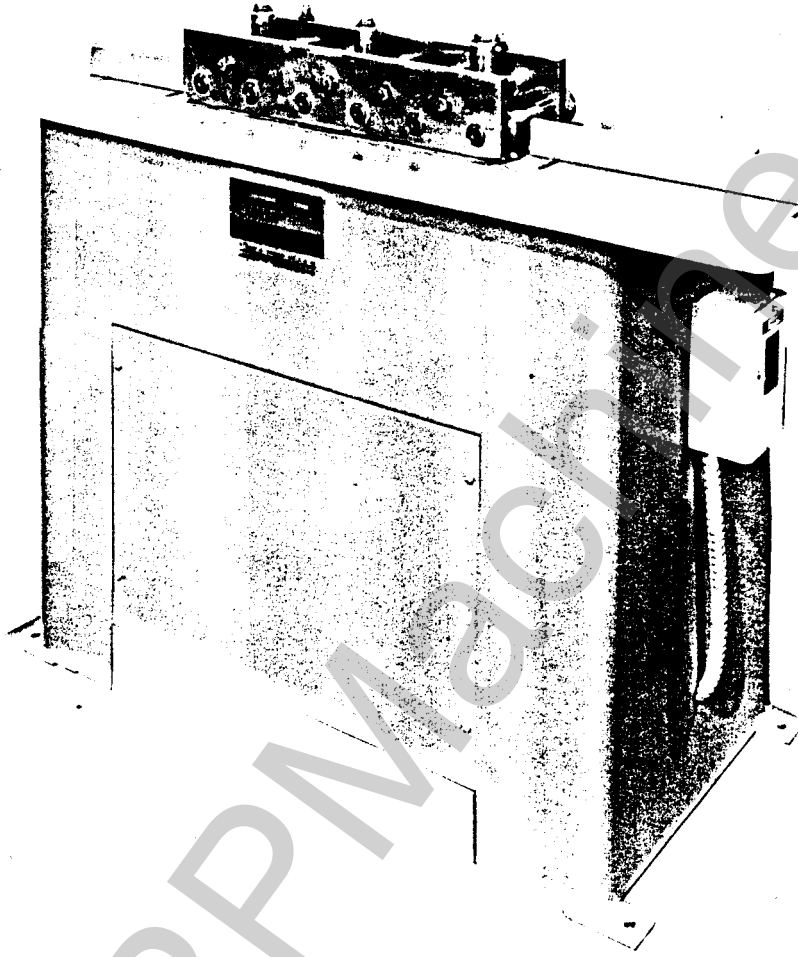


GENERAL OPERATING INSTRUCTIONS AND PARTS LIST



20 GA. HIGH SPEED PITTSBURGH MACHINE

the **flagler** corp.

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CHESTERFIELD, MI 48051

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WWW.FLAGLERCORP.COM

OUR NEW
AREA CODE IS
586

20 GAUGE HIGH-SPEED

WIRING INSTRUCTIONS

The electricals on this machine are generally 220/440/3/60 and are normally wired at the factory for 220 volt current. Diagrams for change of voltage are on the motor.

OPERATING INSTRUCTIONS FOR PITTSBURGH ROLLS

Your Flagler High Speed Pittsburgh Machine has been adjusted at the Factory, but due to the variations in materials in different localities, it is sometimes necessary to re-adjust it. Proceed as follows;

1. If material slips or sticks on leaving forming head, tighten hold down stud at finishing end slightly.
2. If material works away from the feed gauge, tighten hold down studs at starting end until it corrects itself.
3. If material shows heavy pressure marks, loosen hold down studs slightly.

If a wider or narrower hammer-over edge desired, move the angle feed gauge forward or back. Be sure to keep the gauge parallel with the front edge of the top plate of the machine. MATERIAL SHOULD NOT TOUCH GAUGE ON FINISH END OF MACHINE.

It is very important that sheets be held flat and against the angle gauge when starting through for forming head. The 18" feed table has been designed to help the operator in this operation.

The Flagler High Speed will handle pieces 8" and longer. If shorter, leave on long piece, notch and cut afterwards.

INSTALLATION INSTRUCTIONS FOR AUXILIARY ROLLS

1. Remove top cover.
2. Remove rear section of top cabinet plate. This will expose the extended shafts on which the rolls are to be mounted.
3. (A) RIGHT ANGLE FLANGE AND DOUBLE SEAM (ACMF)

In general, installation of any of these sets of rolls is the same. Pittsburgh lock rolls are installed at the factory, but the following will be helpful for auxiliary sets.

Mount angle feed gauge, if not already on machine. The rolls are identified by stampings on the outside end of the rolls, the letter and number corresponding to the position on the machine. For example -#T-1 roll is the top or upper roll in the first set; #B-1 is the bottom roll in the first set; #T-2 is the top roll in the second set, and so on. These rolls are mounted on their corresponding shafts with the numbered side faced out from the machine (this is very important) and held in place with the screws and washers provided for them. Be sure all screws are in place; Tighten rolls down securely and then proceed to adjust the gauge as per the adjustment instructions.

3. (B) DRIVE CLEAT ROLLS

Drive Cleat Rolls are installed on the side of the machine as shown in Fig. 1. Remove angle feed gauge. Mount the drive cleat feed gauge into position (Fig. 1.) Mount rolls on shafts as per instructions above, leaving roll #DC-T3 free to float without a screw or washer but with key in place. Tighten all other rolls securely and adjust the drive cleat feed gauge as per the adjustment instructions.

Note:

4. Replace rear section of top cabinet plate.
5. Adjust machine.
6. Replace top cover.
7. Machine ready to operate.

ADJUSTMENT INSTRUCTIONS

1. RIGHT ANGLE FLANGE, DOUBLE SEAM (AND ACME FORMS)

Angle feed gauge setting are best made by laying a straight edge along the outside faces of the rolls and suitably measuring from the straight edge as shown in Fig. 1. (See set up chart for dimensions).

2. DRIVE CLEAT ROLLS

Drive Cleat Rolls feed gauge is set by laying a straight edge on the outside of the gauge and measuring to the face of the rolls 3/4". (See Fig. 1.)

GENERAL OPERATING INSTRUCTIONS

Make sure that all of the adjustments are complete as per instructions. Start machine and run material into the forming rolls, taking care to hold material snugly against the angle feed gauge (Fig. 1.) It is of great importance when forming in either direction, check the feed gauge for parallel. If the material used is aluminum, see instructions covering adjustments.

LUBRICATING INSTRUCTIONS

Check and refill the four grease cups on the under side of the forming unit at least once a month. The slower speed shafts do not require lubrication. If machine is used out of doors, an oil or grease film will prevent rusting of surfaces.

FOR SAFETY PURPOSES DISCONNECT POWER BEFORE REMOVING COVERS TO CLEAN

COVERS MUST BE IN PLACE WHEN IN OPERATION

FLAGLER 20 GAUGE HI-SPEED

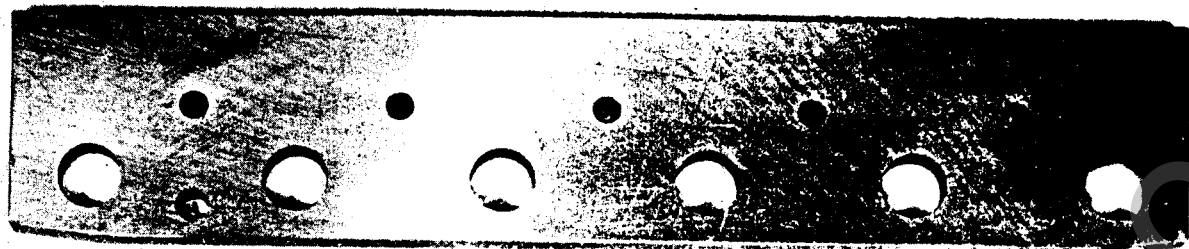
Part no.	Description	Quantity
16-001	Bottom Front Plate	1
16-002	Bottom Back Plate	1
16-003	Top Front Plate	1
16-004	Top Back Plate	1
16-005	#1 Pinion Gear	1
17-007	#3 (or 2) Pinion Gear	1
17-008	Pinion Collar	2
17-062	Pinion Collar w/Keyway	1
17-009	Bull Gear	1
17-010	Roll Shaft	12
17-012	Roll Shaft Gear	12
17-013	Idler Gear	4
17-014	Driver Idler Gear	1
17-015	Plain Spacer	7
17-017	Plain Step Spacer	2
17-018	Plain Drilled Spacer	3
17-019	Drill & Tap Step Spacer	2
17-020	D & T Long Step Spacer	1
14-052	Snap Ring	2
17-021	Idler Roll Pin	2
17-022	Saddle Washer	3
16-013	Spring Washer # B-1250-040	24
14-054	Spring Washer # B-0750-040	24
17-058	Bearing 1612	24
20-005	Bearing 162412	4
12-021	Bearing 148	8
14-021	Bearing 1412	2
11-009	Bearing 1012	2
16-012	Oilite TT-1709-01	2
17-024	Opening Roll Holder	1
17-059	Hold Down Stud	2
17-025	Spacer Washers	2
17-031	Grease Bolt	1
16-006	--Cover Assembly--	1
16-007	Top & Side	1
17-035	End	2
16-009	--Cabinet Assembly--	1
17-037	Skirt	2
17-038	Louver Panel	1
17-039	Upper Side Panel	2
17-040	Feed Plate	1
17-041	Take-Off Plate	1
16-010	Side Plate	2
17-063	Feet	2
17-044	Bottom Side Angle	2
14-040	Lag Screw Plate	4

FLAGLER 20 GAUGE HI-SPEED

Part no.	Description	Quantity
17-050	Motor Support	2
14-048	--Motor Clamp Assembly--	4
14-049	Base	4
14-050	Spacer	4
17-046	Lube Tube: 19" w/14-053	3
14-041	Lube Lines: 12" w/14-053	2
14-053	Lube Line Fittings	10
17-051	Motor (3N657-6)	1
17-052	Sheave (Driver)	1
17-053	Sheave (Driven)	1
17-054	Bushing	1
17-055	"V" Belt	2
17-056	Starter	1
16-011	Heater	3
10-031	Label-Manufacturer	1
10-040	Label-OSHA	1
10-042	Warning Label	1
10-043	Made In USA Label	1
17-048	Feed Gage	1
17-049	Take-Off Gage	1
16-062	Top 1 Pittsburgh Roll	1
16-063	Bottom 1 Pittsburgh Roll	1
16-064	Top 2 Pittsburgh Roll	1
16-065	Bottom 2 Pittsburgh Roll	1
16-066	Top 3 Pittsburgh Roll	1
16-067	Bottom 3 Pittsburgh Roll	1
16-068	Top 4 Pittsburgh Roll	1
16-069	Bottom 4 Pittsburgh Roll	1
16-070	Top 5 Pittsburgh Roll	1
16-071	Bottom 5 Pittsburgh Roll	1
16-072	Top 6 Pittsburgh Roll	1
16-073	Bottom 6 Pittsburgh Roll	1
17-082	Opening Roll	1
16-075	Top Idler Roll	1
16-076	Bottom Idler Roll	1
17-150	Top 1 3/8 Double Seam Roll	1
17-151	Top 2 3/8 Double Seam Roll	1
17-152	Top 3 3/8 Double Seam Roll	1
17-153	Top 4 3/8 Double Seam Roll	1
17-154	T. 5-10 3/8 Double Seam Roll	1
17-157	Btm 1 3/8 Double Seam Roll	1
17-158	Btm 2 3/8 Double Seam Roll	1
17-159	Btm 3 3/8 Double Seam Roll	1
17-160	Btm 4 3/8 Double Seam Roll	1
17-161	Btm 5 3/8 Double Seam Roll	1
17-162	Btm 6 3/8 Double Seam Roll	1
17-048	Feed Gage	1

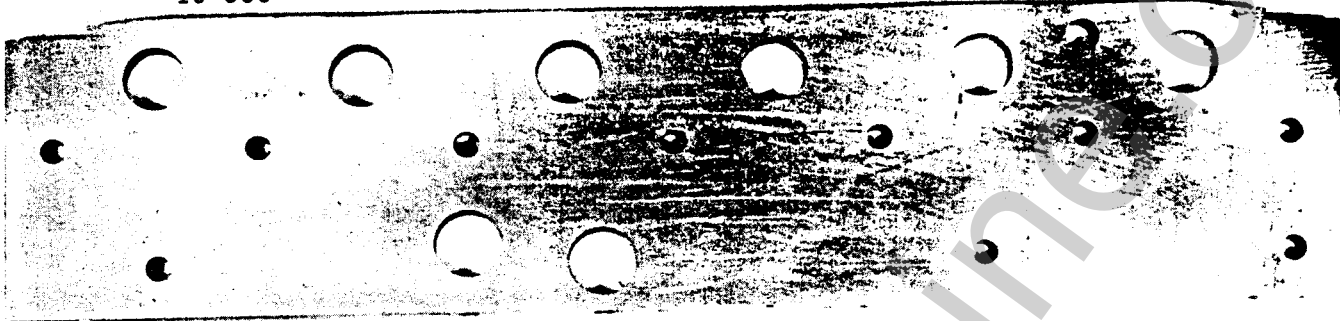
FLAGLER 20 GAUGE HI-SPEED

Part no.	Description	Quantity
17-049	Take-Off Gage	1
17-201	Top 1 1 1/8 Dr. Cleat Roll	1
17-202	Top 2 1 1/8 Dr. Cleat Roll	1
17-203	Top 3 1 1/8 Dr. Cleat Roll	1
17-205	Top 5 1 1/8 Dr. Cleat Roll	1
17-206	Top 6 1 1/8 Dr. Cleat Roll	1
17-207	T. 7-10 1 1/8 Dr. Cleat Roll	1
17-208	Btm 1 1 1/8 Dr. Cleat Roll	1
17-209	Btm 2 1 1/8 Dr. Cleat Roll	1
17-210	Btm 3 1 1/8 Dr. Cleat Roll	1
17-212	Btm 5 1 1/8 Dr. Cleat Roll	1
17-213	Btm 6 1 1/8 Dr. Cleat Roll	1
17-214	B. 7-10 1 1/8 Dr. Cleat Roll	1
12-213	--Feed Gage Assembly--	1
12-214	Base	1
12-215	Guide Rail	2
14-211	Straightener	1
17-401	Top 1 RAF Roll	1
17-402	Top 2 RAF Roll	1
17-403	Top 3 RAF Roll	1
17-404	Top 4 RAF Roll	1
17-405	Top 5 RAF Roll	1
17-406	Top 6 RAF Roll	1
17-408	Bottom 1 RAF Roll	1
17-409	Bottom 2 RAF Roll	1
17-410	Bottom 3 RAF Roll	1
17-411	Bottom 4 RAF Roll	1
17-412	Bottom 5 RAF Roll	1
17-413	Bottom 6 RAF Roll	1
17-048	Feed Gage	1
17-049	Take-Off Gage	1



16-003

16-004



16-001

16-002



16-062



16-064



16-066



16-068



16-070



16-072



16-063



16-065



16-067



16-069



16-071



16-073



17-010



17-013



17-014



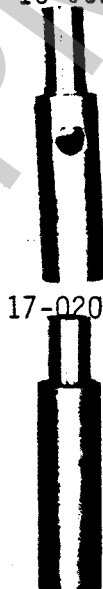
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16-005

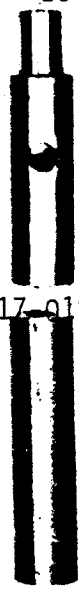


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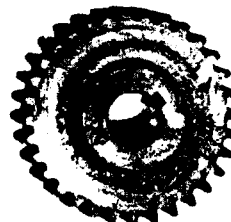
17-020

17-017



17-019

17-015



17-009



TT-1709-01



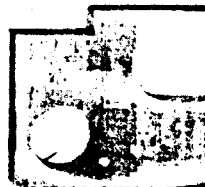
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17-023



17-082



17-024

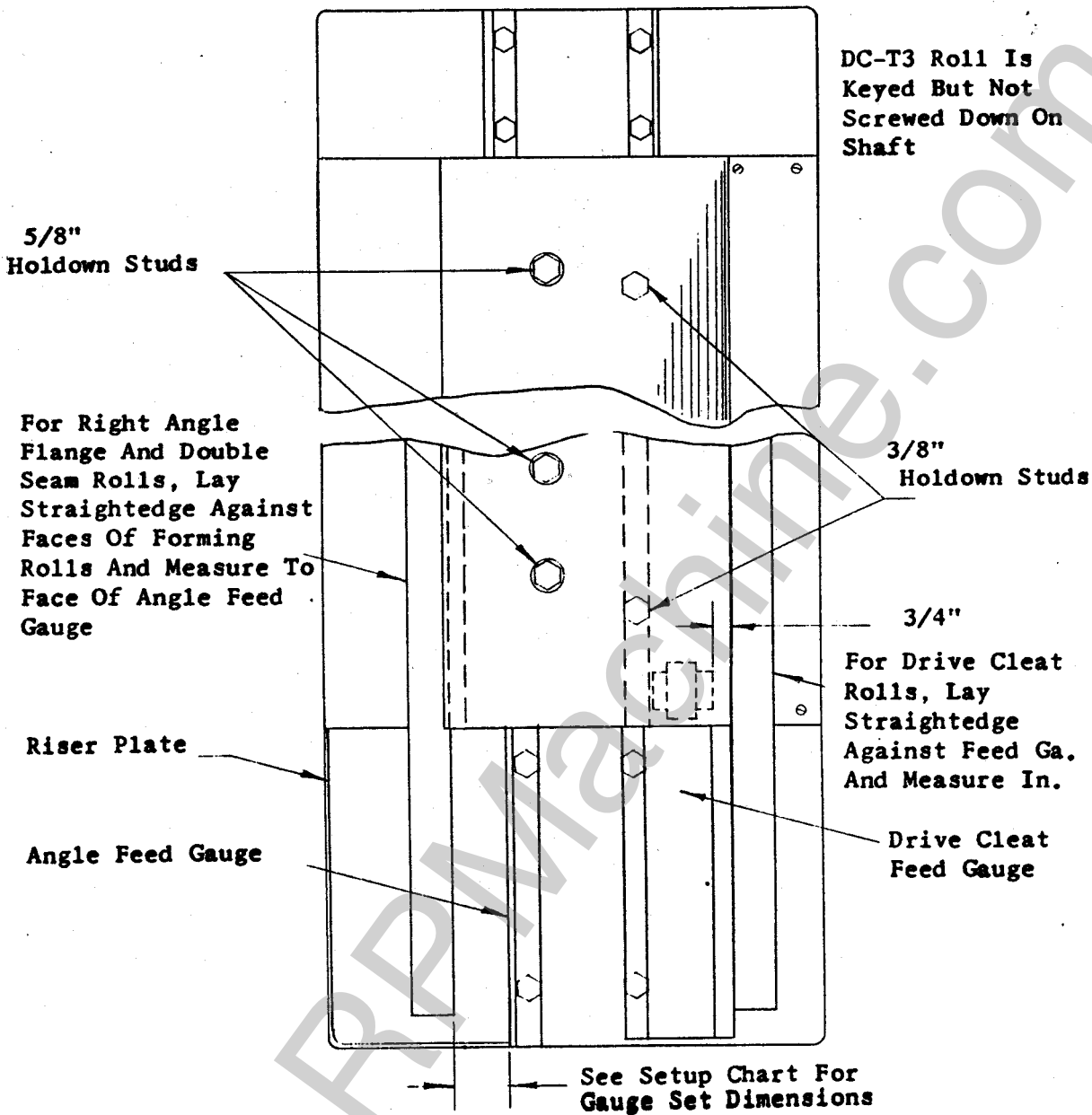


17-059



17

17

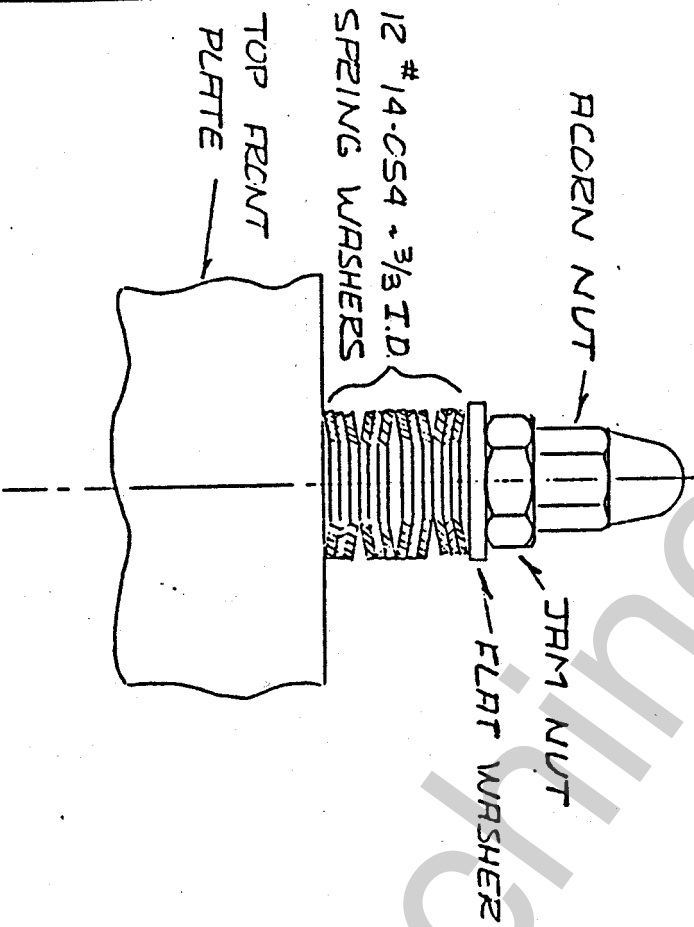


<u>GUAGE SET UP CHART</u>			
	Pitts.	D. S.	R. A. F.
Material Allowance (Appx.)	1"	1"	To suit
20-22 Gauge Set (Appx.)	2-3/8"	1 1/4"	1-1/16"
For Drive Cleat Rolls Shear Mat'l. 2-1/8" Max. Set Feed Ga. Straightedge 3/4" From Edges of Rolls (Fig 1)			

20 GR. HI-SPEED SPRING WASHER ASSY. INSTRUCTIONS

TO WORK PROPERLY THE ASSYS. MUST BE STACKED AS SHOWN

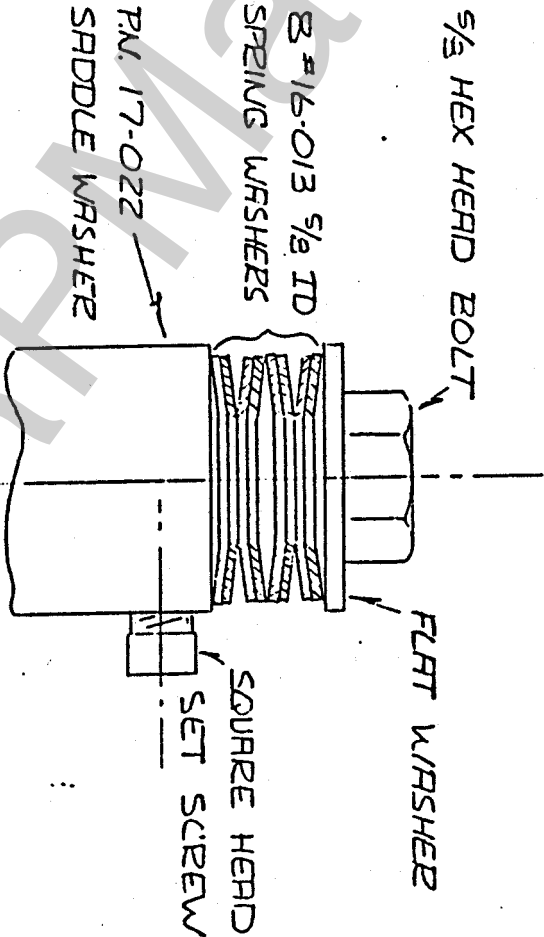
3/8 HOLD DOWN STUDS



WHEN INSTALLING TIGHTEN TRIM NUT UNTIL SPRING WASHERS ARE FLAT THEN BACK OFF ONE TURN AND TIGHTEN LOCK NUT.

4-19-90 KE

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