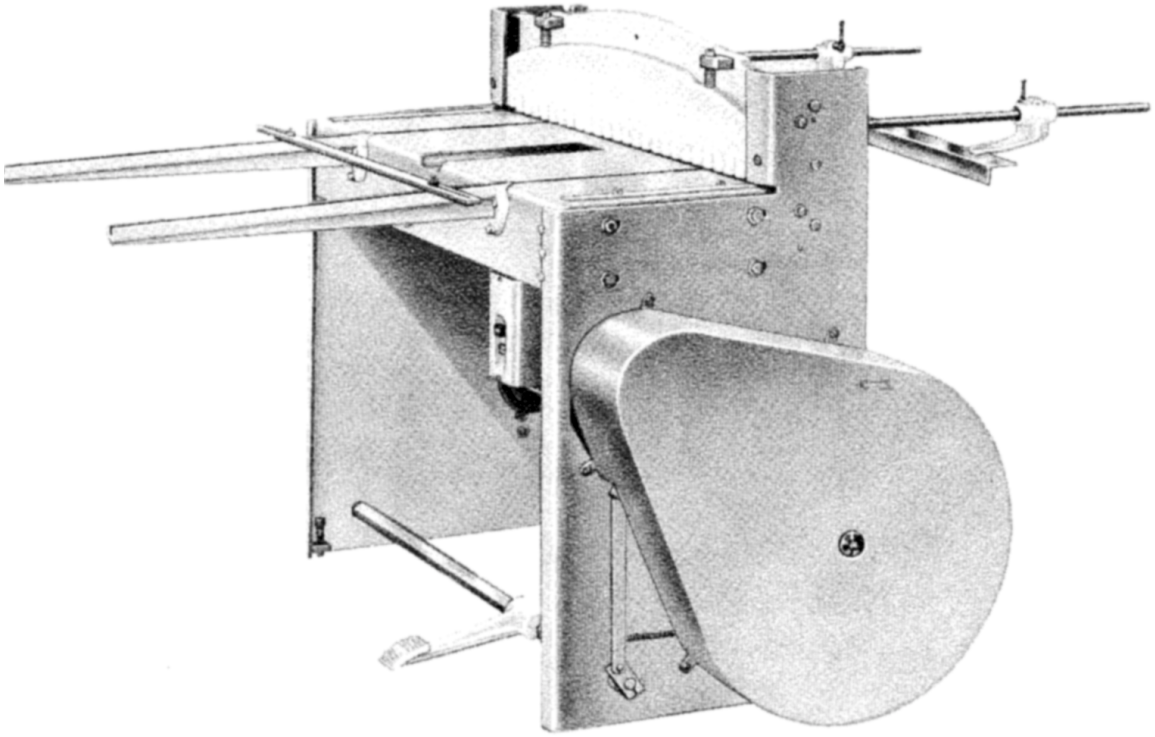
OPERATOR'S MANUAL & INSTRUCTIONS

Di-Acro 36 Power Shear



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LEVELING AND SECURING

The Di-Acro Power Shear No. 36P should be bolted to the floor to prevent creeping. Shear has three foot pads with bolt holes for this purpose, the fourth foot pad is adjustable to compensate for an uneven floor. After the machine has been set in its location, check with a feeler gauge to make certain that th bed is seated on both side frames.

If Bed Is Not Seated:

1. Loosen four bed clamp bolts A (photo page 5) and bed adjusting screw B (photo page 5) on side that is not seated.
2. Adjust screw on foot pad until bed is seated on rail. Lock screw.
3. Check clearance between blades and tighten bed screws A. Note: Clearance between blade should be as close as possible without rubbing. Contact will dull blades and possibly chip them. See Adjusting Blade Clearance on page 5.

If Bed Is Seated:

1. Loosen adjustable screw on foot pad so that it is not touching floor.
2. Lower adjustable screw so thta is touches floor, then turn screw in an additional one-half turn and tighten lock nut. This should eliminate any twist or strain.

ADJUSTING GAUGES

Front gauge is furnished as standard equipment. T-slotted front gauge extensions are bolted to the bed and a bar for gauging material is provided. (Top of left frame is notched for storing). The protractor gauge is stored on the left side frame (see photo page 5).

To Mount Rear Material Gauge Rods:

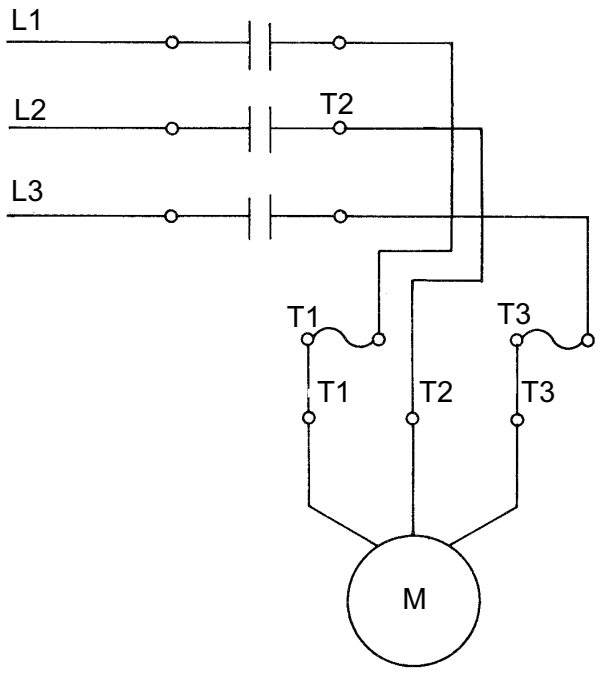
Insert socket head screws through holes in holddown bar and ram and screw into gauge rods keeping the steel rule side up. Slide brackets holding angle gauge onto gauge rods.

To Zero Rear Material Gauge

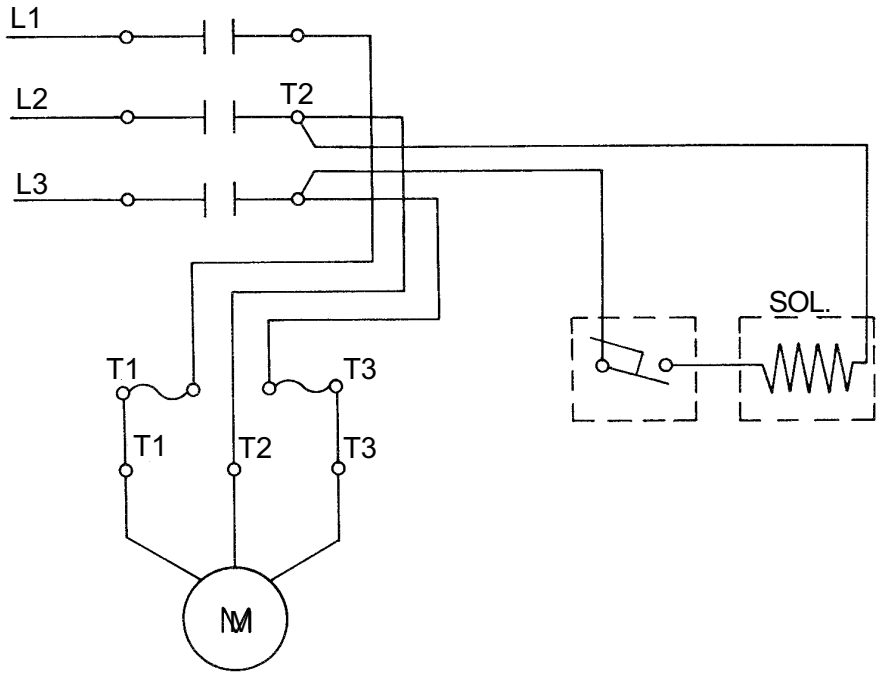
Move angle bar forward until contact is made with lower blade. Reading at rear edge of brackets should be zero, if not, loosen screws holding steel rule to gauge rod and position rule on zero. Tighten screws.

WIRING

Double check to make sure motor is wired to proper line voltage. Rotation of the flywheel should be coutnter clockwise when facing flywheel end of machine or the top of the flywheel should come towards you when standing in front of the machine. If rotation is wrong, interchange any two of the main line leads. See wiring diagrams below.



NO. 36P POWER SHEAR STANDARD LINE DIAGRAM



NO. 36P POWER SHEAR LINE DIAGRAM WITH REMOTE CONTROL

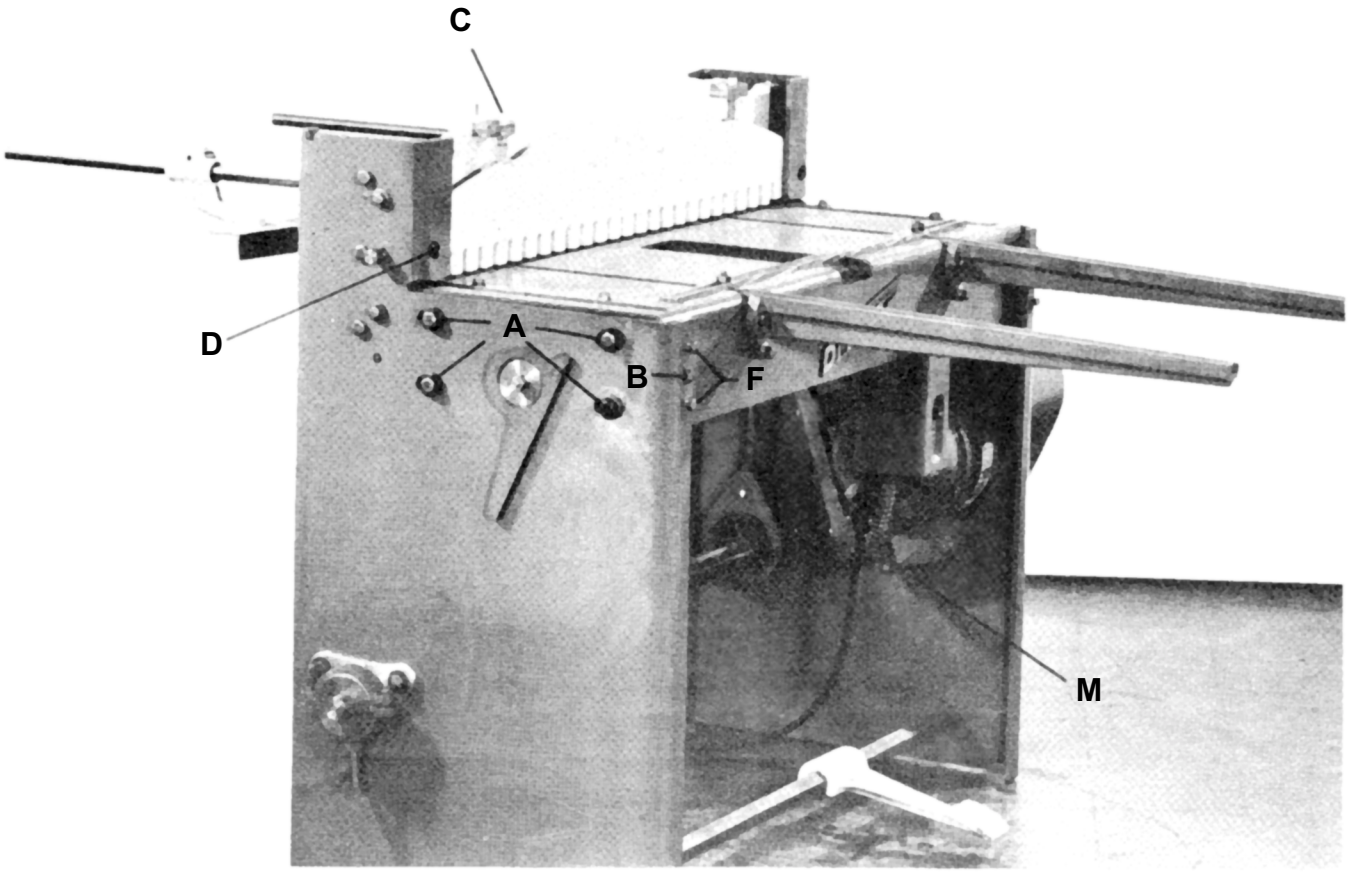
BLADE CLEARANCE

If bed clamp screws (A) have been loosened to level machine for blades have been sharpened, it will be necessary to adjust blade clearance.

Blade clearance may be varied but for linger blade life a few thousandths clearance is better than contact between the blades. Best results are generally obtained with .002” clearance on the ends and .001” clearance in the center.

Adjusting Blade Clearance:

1. Move ram (by hand) to the bottom of stroke. Brake end of crankshaft has a hole to insert a turn bar for this purpose.
2. Adjust bed to obtain equal clearance of blades on both ends of ram. Opposing screws B and F on each end will move bed in or out when bed clamp bolts A are loose.
3. If clearance is different in center or anywhere along blade, adjust nuts G (photo page 6). This will align top blade with lower blade (loosening inner nut and tightening outer nut will pull blade and ram forward or decrease the clearance).
4. When final adjustment is complete, nuts G should be locked against blade straightener. Note: Check clearance while this is being done— 1/16” of a turn can vary blade straightener approximately .007”.



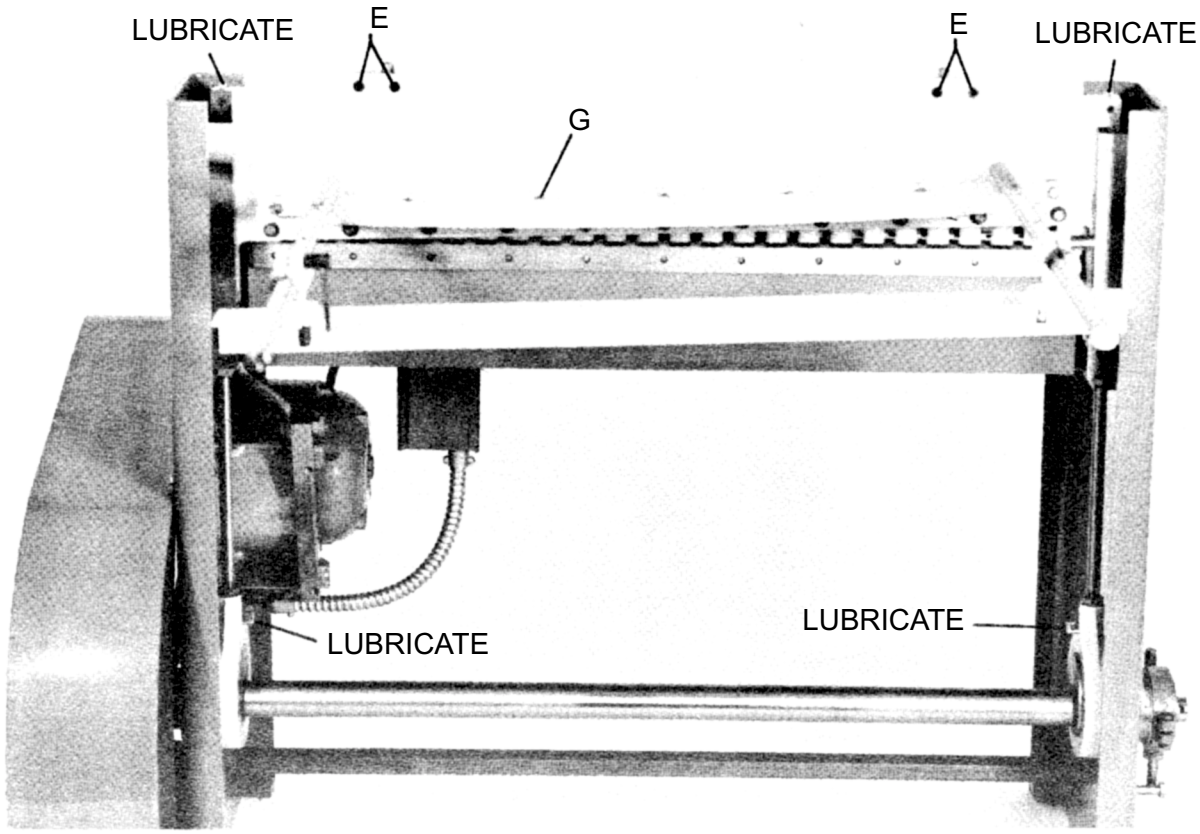
BLADE SHARPENING
Sharpen the widest sides only as bed can be adjusted in this direction. If other sides are ground it becomes necessary to shim lower blade to raise it to table level.

To Remove Lower Blade
1. Remove Bolts accessable through opening in bottom of bed.

To Remove Upper Blade
1. Remove holddown bar form machine screw D (photo page 5) and E.
2. Remove bolts fastening blade to ram.

ADJUSTING HOLDDOWN BAR
To increase or decrease opening between holddown bar and bed, adjust nuts C (photo page 5) until proper opening is obtained. Adjustment should be made when ram is at top of stroke.

LUBRICATION
Lubricate as points indicated with machine oil (SAE 30-50 viscosity).
Main bearings are oilite and do not require additional lubrication. Clutch linkage and flywheel should be lubricated periodically depending upon use.



CLUTCH

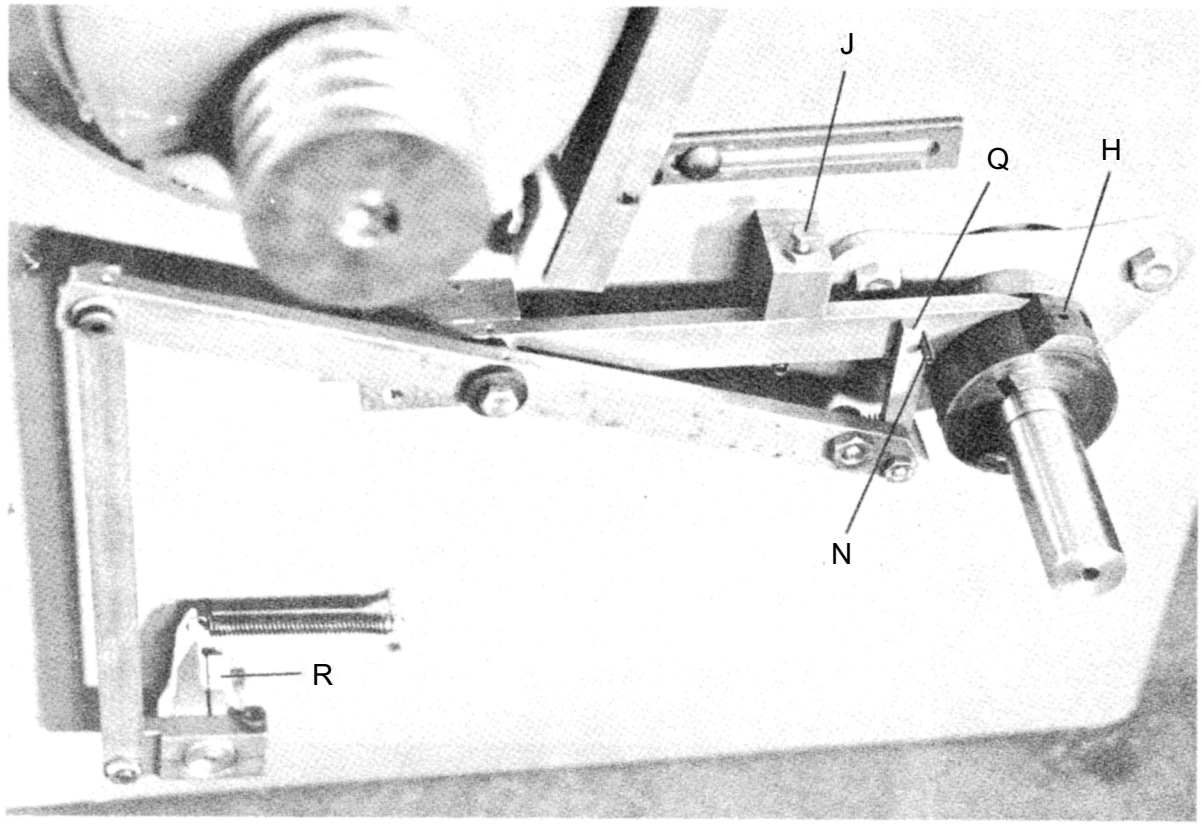
Clutch on the 36 Powershear is a key type with non-repeat safety feature. To use on continuous operation remove cam H behind flywheel. See detailed drawing of clutch on page 10.

TROUBLE SHOOTING

1. If foot pedal is depressed and Shear does not operate the key may be stuck or pedal may hit floor before release lever releases key. Remove flywheel guard and make the following adjustments.

A. Remove screw and washer form end of crankshaft.
B. Remove flat head screws holding drive plate to flywheel.
C. Remove flywheel (note: Drive plate will not come off at this time).
D. Remove retaining ring exposed by removing flywheel and take off drive plate.
E. Depress foot pedal. If key does not fly out of hole, push it out form behind. Remove any burr with a whetstone.
F. If link Q does not engage pin N adjust stop R.
G. Depress pedal and check if release lever clears key. If not readjust linkage.

(continued on page 8)



(Trouble shooting - continued)

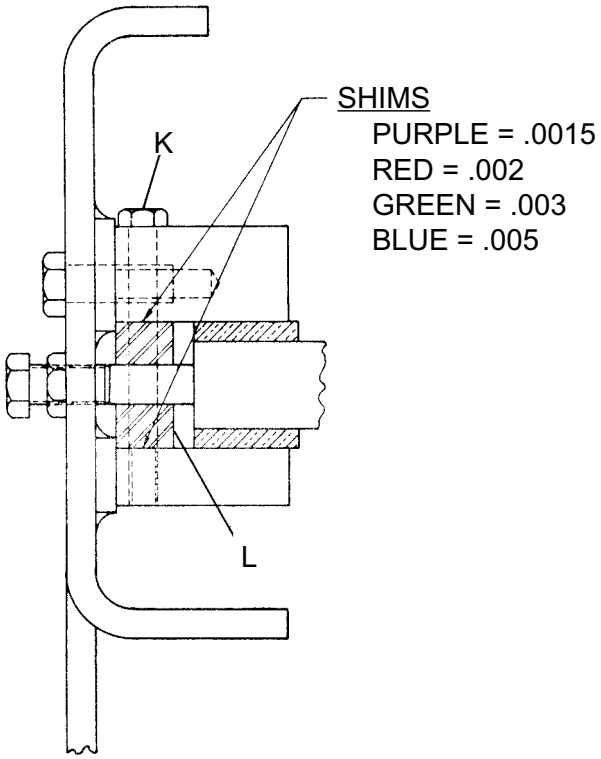
2. If non-repeat cam is in place and shear cycles more than once.
A. Adjust screw J (photo page 7) to obtain more tension on release lever.
B. If step A is unsuccessful remove flywheel per step No. 1 on page 7 and examine release lever and key. Replace if worn excessively.
C. Adjust brake.

ADJUSTING CLEARANCE OF RAM SLIDES

Clearance on ram slides should be kept to a minimum but should not bind. Binding in guides will cause undue wear and reduce machine capacity.
1. Loosen bolt K and remove required amount of shims or grind spacer L.
2. Tighten bolts evenly

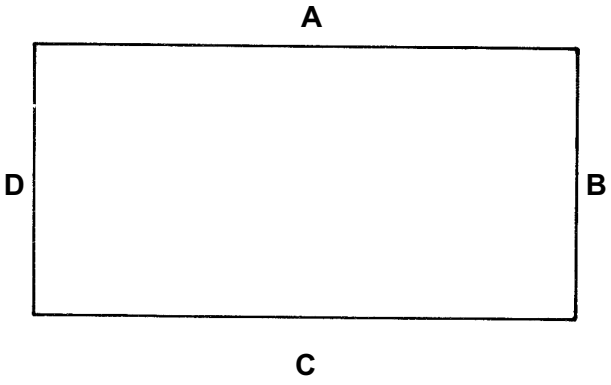
ADJUSTING ANTI-CLICK SPRING

Adjust screw M (photo page 5) until release lever rides against side of clutch slot away from flywheel. This prevents key form contacting drive lugs when flywheel is running idle. Both over adjustment or under adjustment can cause anti-click spring to be inoperative.



HANDY TIPS TO GET THE MOST OUT OF YOUR DI-ACRO SHEAR

Di-Acro Shears are designed to shear material to extremely close tolerance. For satisfactory results the machine must be level and proper clearance of shear blades maintained. Holddown bar prevents drawing of material to insure straightest possible cut, however, excessive hoddown pressure is detrimental. Extreme accuracy and highest degree of straightness is obtained by first shearing material oversize, then cut to finish size by trimming.



PARALLEL SHEARING

Either fornt gauge or back is used. The narrower the strip, the greater the difficulty in shearing straight and parallel.

The front gauge always gives the most accurate results, especially on narrow widths. It is not necessarily set absolutely parallel with the shear blade to obtain a parallel cut; the difference varies according to the strain in the metal. The most perfect parallel edges are obtained by shearing oversize, then trimming to the exact size.

SHEARING TO A SCRIBED LINE

A scried line on material can be seen through the openings in the hold-down and aligned with cutting edge of shear blades for ordinary accuracy. Most accurate shearing to a line can be done by sighting down between the holddown and ram using the cutting edge of the lower blade for align-

SQUARING

Side gauges may not be absolutely square with the shear blade; their position can best be determined by actual shearing. The following method of squaring a sheet will produce teh least amount of irregularity. Without turning sheet upside down between operations, tim long edge A; with edge A against front gauge, trim along edge C; with edge C against same side gauge used i the second cut, trim edge D.

SHEARING SHORT LENGTHS

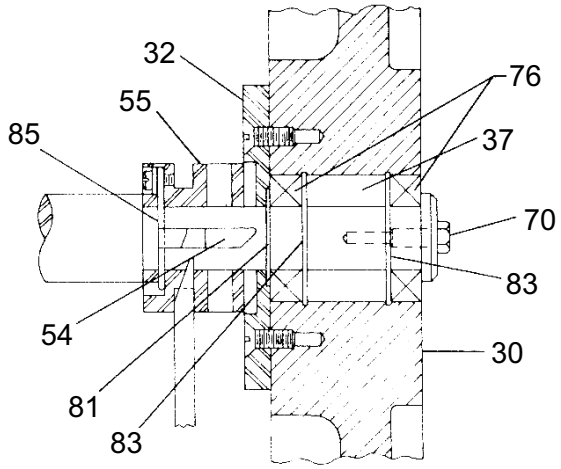
When the material to be sheared is narrow or strip, and the cut is choppy, shearing should be done at the extreme right side of machine.

REPETITIONAL SHEARING OF LONG SHEETS

When shearing in lengths greater than the range of the back gauge, or when a predertermined succession of various sizes are to be sheared, a front extension gauge with a series of adjustable stops should be used. The operator moves the sheet forward, then pulls is back to the stop to gauge.

MATERIAL TWIST

The narrower the strip being sheared the greater the amount of twist. Twist can be almost avoided by feeding the sheet from teh back and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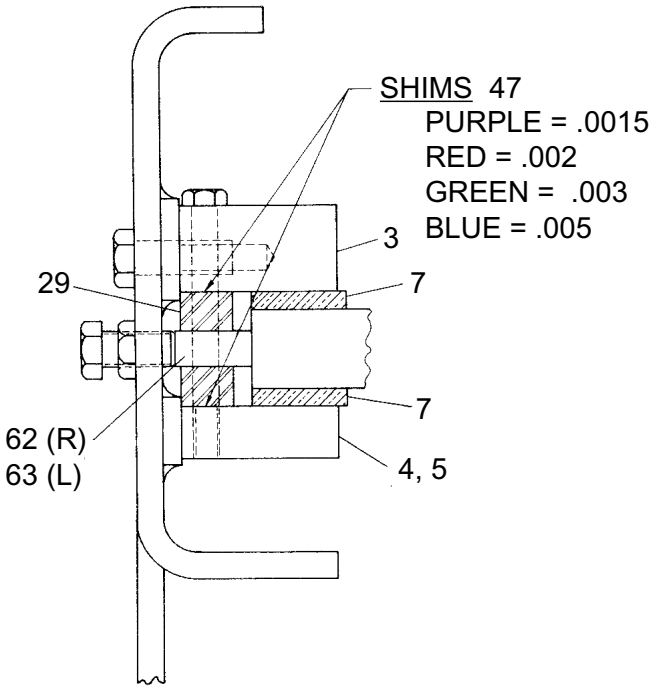
SHIMS 47
PURPLE = .0015
RED = .002
GREEN = .003
BLUE = .005
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62 (R)
63 (L)
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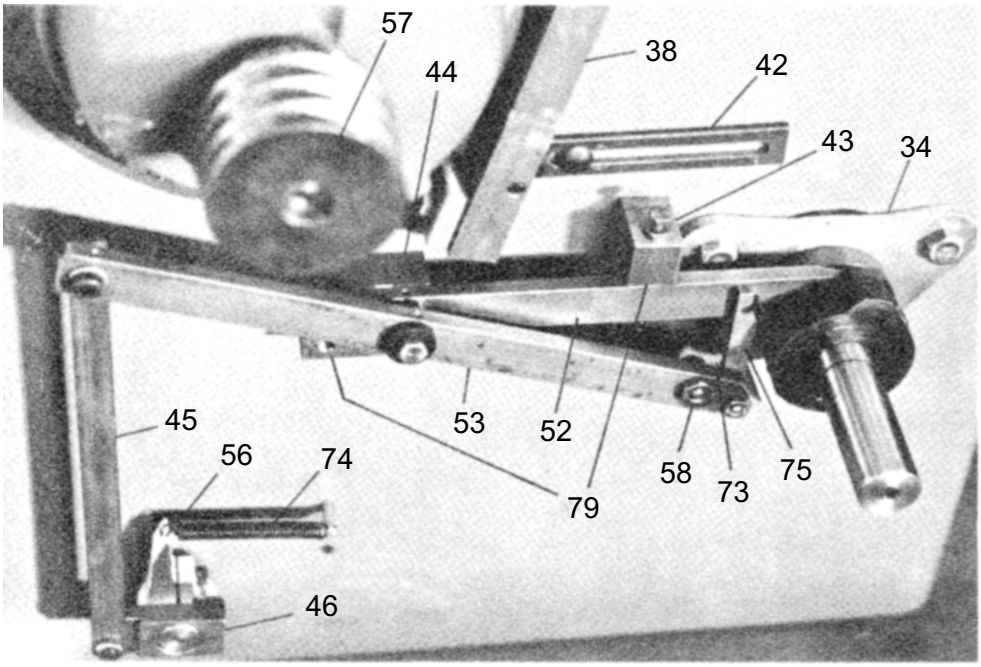
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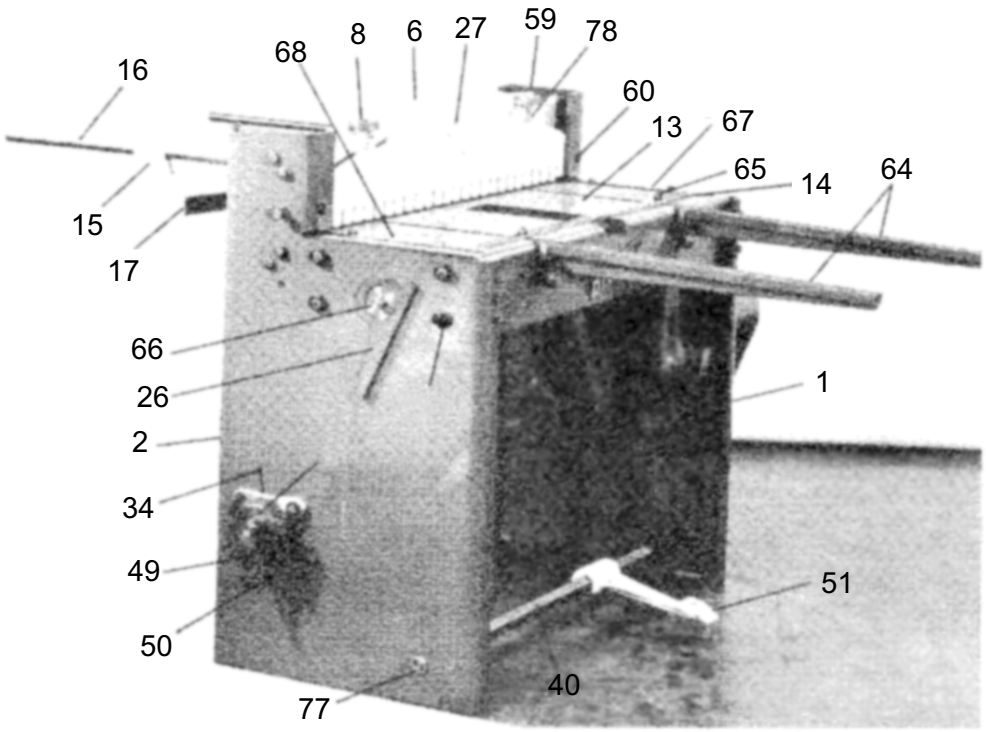
Item No.	Part No.	Description
3	237-1108005	Rear Guide
4	237-1108006	Front Guide R
5	237-1108007	Front Guide L
7	237-3120020	Wear Strip
29	238-1108003	Guide Spacer
30	238-1204005	Flywheel
32	238-1206007	Drive Pin
34	238-3104009	Main Bearing
37	238-1108012	Spacer
38	238-1110014	Motor Mount R
42	238-1110018	Adjustment Strap
43	238-1301020	Spring Container
44	238-1301021	Lever Mount
45	238-1301093	Link
46	238-1301023	Pedal Arm
47	238-5701024	Shim
52	5696	Clutch Release Lever
53	5995	Trip Lever
54	250-1206039	Clutch Dog
55	250-1206038	Clutch
56	651-1301078	Pedal Return
57	280-1205035	V. Belt Sheave
58	035-1301097	Spring Bolt
62	280-3107008	Thrust Bearing
63	280-3120010	Take Up Screw Insert
70	056-4701087	Shaft Bolt
73	120-5102022	Spring
74	420-5101032	Spring
75	056-1301094	Safety Link
76	1654SS	Bearing
79	9-1006-21	Danly Spring
81	5108-125	Retaining Ring
83	5008-250	Retaining Ring
85	250-4705040	Clutch Spring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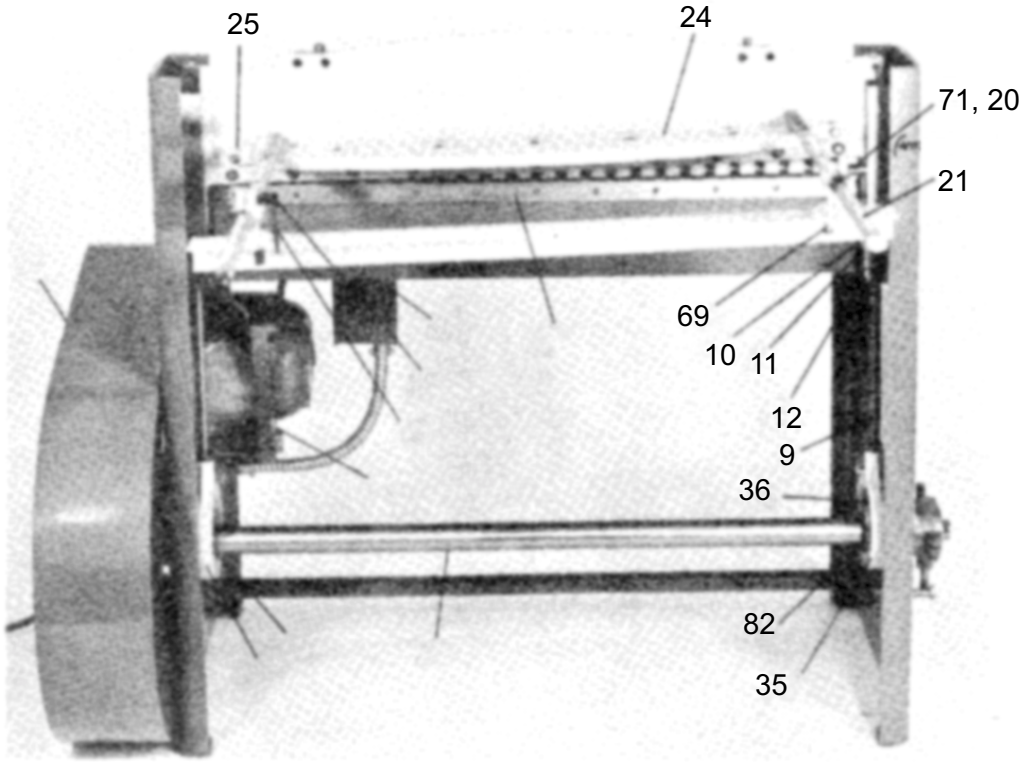
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Item No.	Part Number	Description
1	238-1103001	Side Frame Assembly R
2	238-1103002	Side Frame Assembly L
6	237-1213015	Ram
8	237-1213022	Ram Stop
9	238-1201025	Connecting Rod
10	237-1203026	Clevis Pin
11	237-4706027	Pin Retainer
12	237-1201028	Clevis
13	237-1104030	Bed Assembly
14	237-1434038	Front Gauge
15	237-1434040	Gauge Clamp
16	237-1434041	Gauge Rod
17	237-1434042	Gauge Angle
18	237-1434043	Clamp Screw
19	237-1434044	Handle
20	237-1434045	Shoe
21	237-1601046	Rule
22	236-1209009-O	Blade
23	236-1209009-HC	Blade, HCHC
24	236-1213011	Blade Straightener
25	236-1213012	Blade Straightener Spacer
26	236-1435028	Protractor Body
27	236-1213031	Holddown Bar
31	238-1106006	Flywheel Guard Assembly
33	238-1201008	Crankshaft
34	238-3104009	Main Bearing
35	238-1212010	Pitman
36	238-1202011	Eccentric
39	238-1110015	Motor Mount L
40	238-1301016	Pedal Shaft
41	23717	Switch Mount
48	270-1207054	Brake Collar
49	270-1207055	Brake Shoe
50	056-1207056	Brake Rod
51	651-1301075	Foot Pedal
59	236-4701033	Holddown Stud
60	236-1108035	Holddown Guide
64	280-1434072	Front Gauge Ext.
65	28074	T Bolt
66	280-1435075	Protractor Clamp
67	280-1432087	Squaring Gauge R
68	280-1432088	Squaring Gauge L
69	310-5102009	Spring
71	SPMG-3	Spring
72	12021	Waher
77	FL102-6	Flange Bearing
78	9-1224-21	Danly Spring
82	5100-175	Retaining Ring