



Hand Operated #12 & #18 Turret Punch Press



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TABLE OF CONTENTS

Installing Gauges	3
Lubrication	3
Setup	3
Ram Adjustment	3
To Index Turret	3
Removing Punch Holders	4
Removing Punches	4
Removing Dies	4
Installing Punches	4
Installing Dies	5
Punching Strippers	5
Mounting Strippers	5
Parts List	6
Parts List	7

INSTALLING GAUGES - Photo 1

If machine is ordered with micro-twin gauging it will be necessary to install and zero side gauge.

1. Insert gauge support rod and lead screw into hole (A) and (B) in side of machine base. Insert dog point set screw into base through hole (C) in chain cover (D). Dog point should engage hole in gauge support rod.
2. Position gauge until side gauge is centered on die. Set calibration ring on zero, or lower a punch, position side gauge against it and set half of punch diameter on gauge calibration ring.

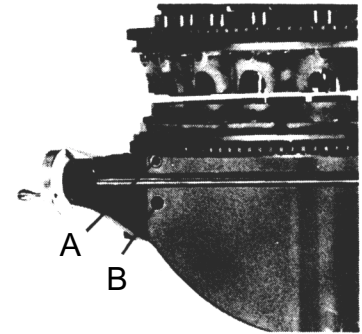


Photo 1

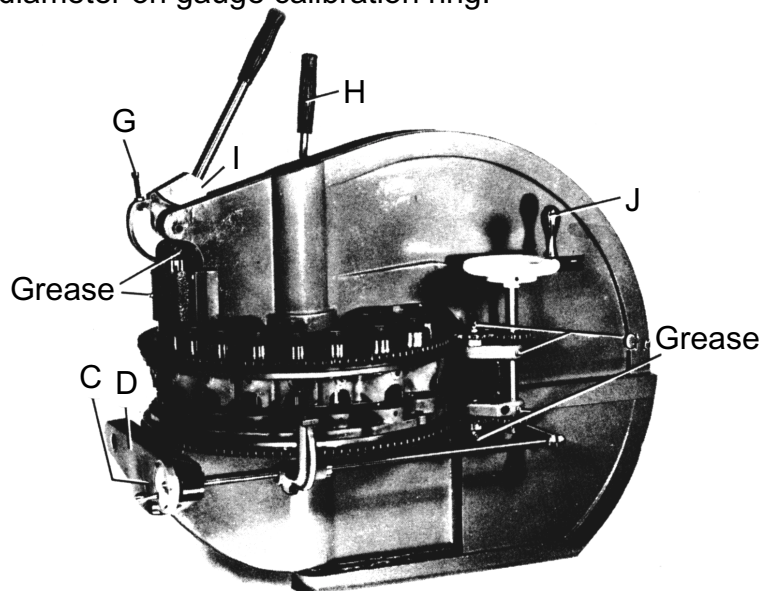


Photo 2

LUBRICATION - Photo 2

Grease at points indicted. Oil all 18 punches occasionally.

SETUP - Photo 2

Machine is equipped with a long and short handle. The short handle is more convenient to use on light materials while effort is reduced using long handle on heavier material. To remove loosen screw (F). Screw should always be locked in spot on handle or burrs will make changing difficult.

RAM ADJUSTMENT - Photo 2

Stroke is adjustable using screw (G). (Punch should not enter die farther than necessary to part material.)

TO INDEX TURRET - Photo 2

1. Pull forward on index handle (H).
2. Rotate turret to desired station. On 18 station turrets rotate together using index wheel (J). On 12 station pull on die holder or turrets to rotate. Upper and lower turret rotate separately. Rotate lower turret by lifting lower index handle and rotate until numbers on turrets match.

REMOVING PUNCH HOLDERS - Photos 3 and 4

1. Insert pin retractor (K) in hole of punch holder to be removed.
2. Push in to retract pin and tighten set screw (L) to hold it retracted.
3. Hook puller (M) under head of punch holder and pull. If ball plunger (N) is tightened excessively punch holders may pull hard. Only enough pressure is required on ball plungers to prevent punch holders from dropping by their own weight. It is easier to pull punch holder if they are first bumped down 1/4" to 1/2", giving a start before plunger enters detent in holder.

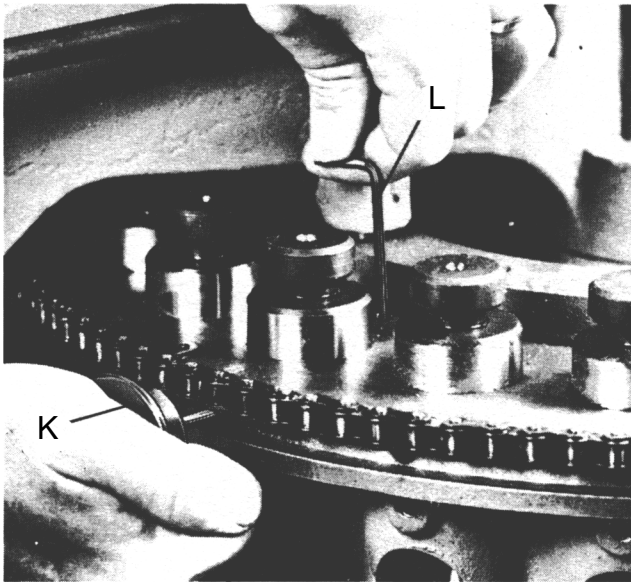


Photo 3

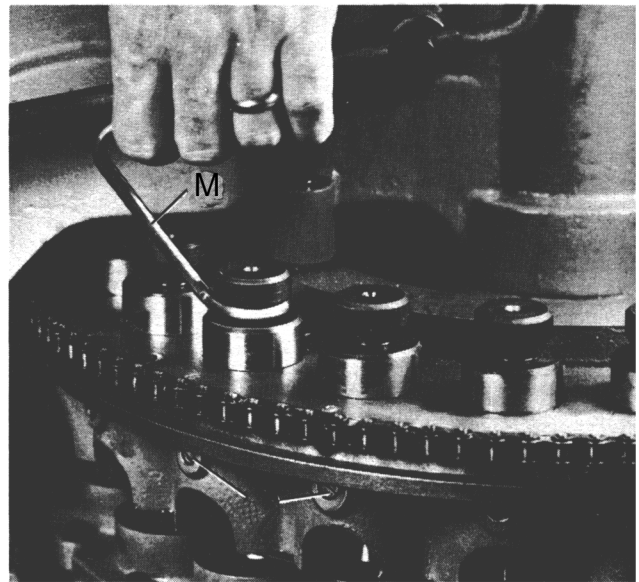


Photo 4

REMOVING PUNCHES - Photo 5

1. Loosen set screw (O). (Several revolutions required.)
2. Remove punch. If punch sticks in holder, bump from behind using pin retractor (K).

REMOVING DIES - Photo 5

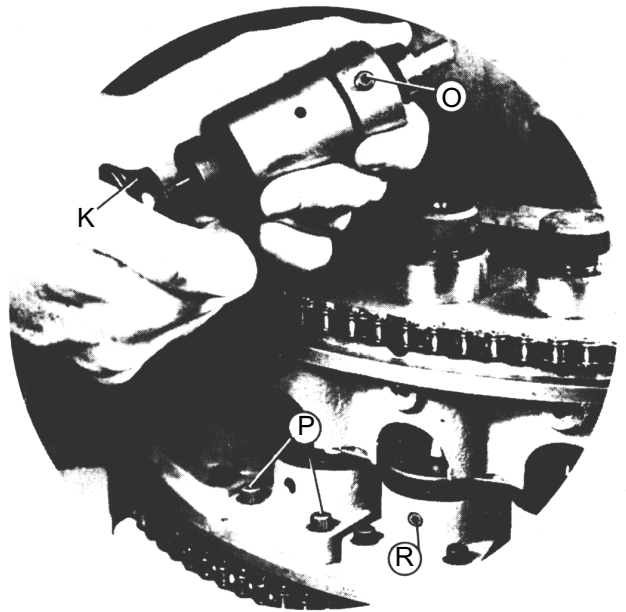
1. Remove screws (P).
2. Pull die holder out.
3. Loosen set screw (R) several revolutions.
4. Remove die.

INSTALLING PUNCHES - Photo 5

1. Insert punch in punch holder.
2. Tighten set screw (O). (Note: On punches other than rounds tighten lightly as it is necessary to rotate punch to line up with die in a later step.)
3. Put punch holder in turret tapping down with palm of hand until detent is reached.
4. Release guide pin by loosening set screw (L) (Photo 3).
5. Rotate punch holder to engage guide pin in V slot opposite set screw (O).

INSTALLING DIES - Photo 5

1. Put die in holder, rotating shapes other than rounds to required angle required in relation to work piece. Tighten set screw (R).
2. Reinsert die holder in turret so slot engages shoulder screw.
3. Fasten down lightly with screws (P).
4. Rotate turrets to front or punching position. *Line up punches and dies in this position only.*
5. Lower punch into die, do not force and damage cutting edges. Due to power of cam action it is not possible to "feel" punch striking edge of die, so in cases where clearance is small it is best to lower punch to top of die, then lift die over punch and low both together. To lift die holder, insert hex wrench in set screw (R) and tilt die holder, using wrench for leverage.
6. Line up die with punch so clearance is equal all around.
7. Tighten screws (O) and (P).

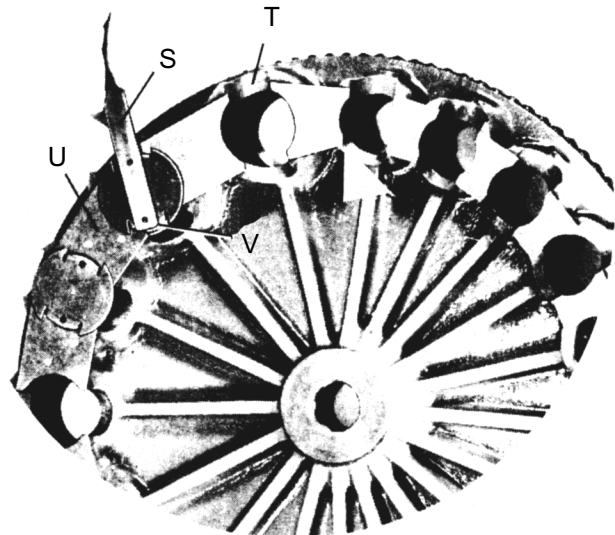


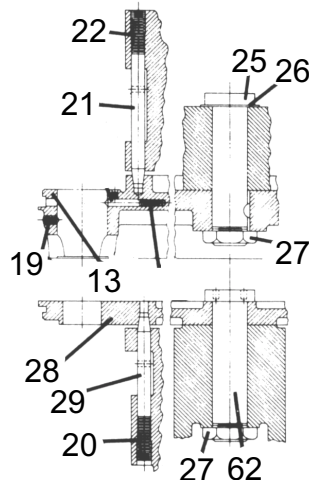
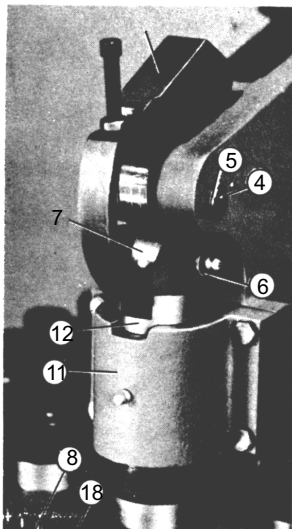
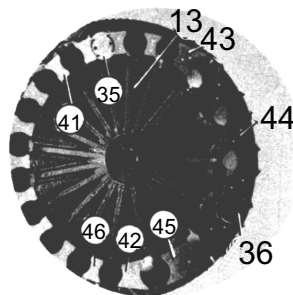
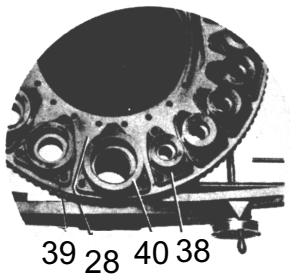
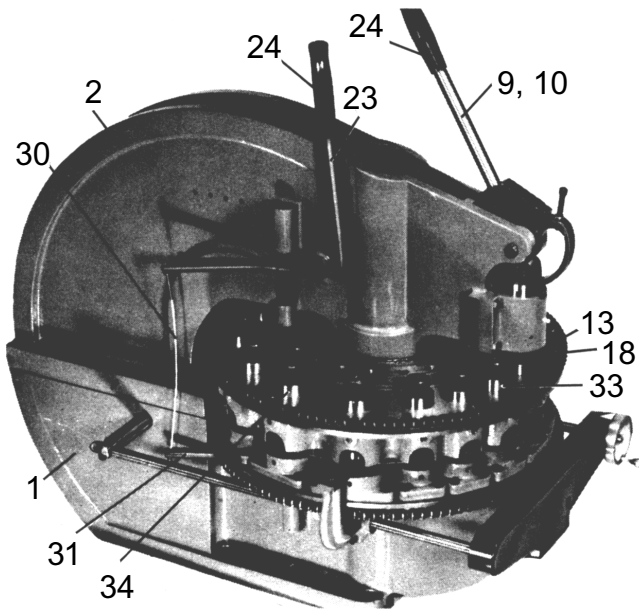
PUNCHING STRIPPERS

1. Strippers are supplied without holes. A center mark is provided for location under centering point of punch for clearance hole. The hole size depends on the thickness of material to be punched. Thin materials require a much closer stripping pressure than heavier material. As a general rule 1/32" clearance is sufficient.

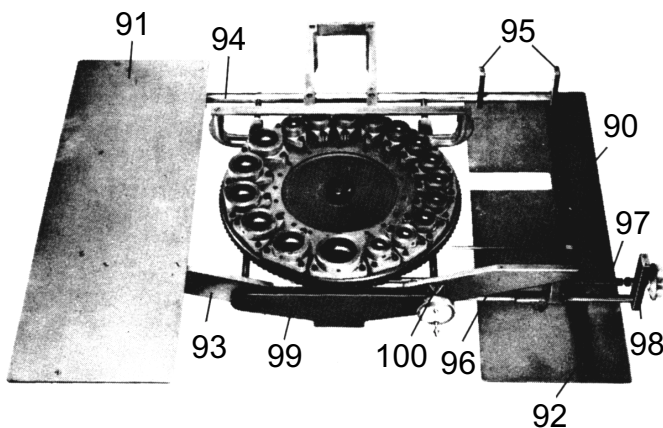
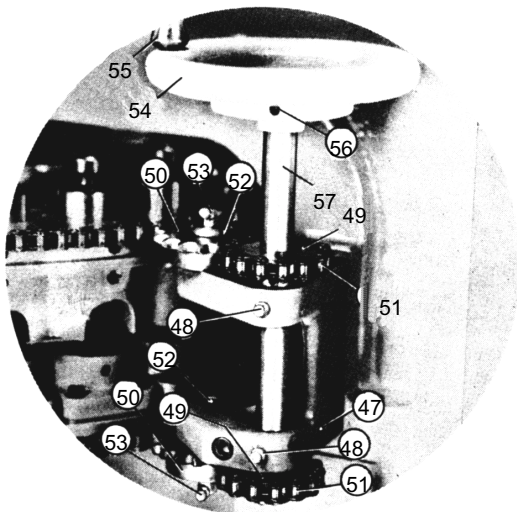
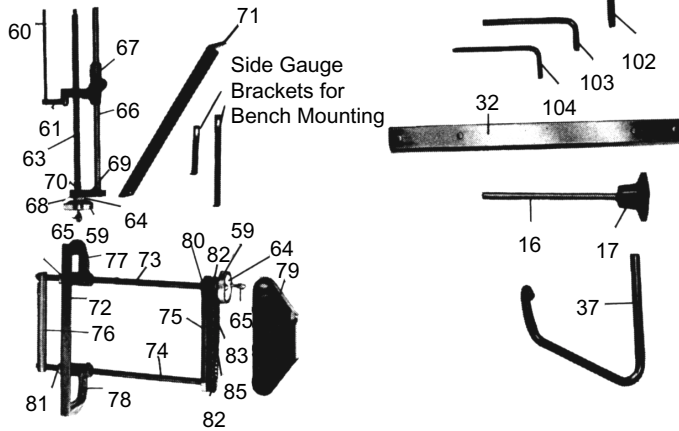
MOUNTING STRIPPERS - Photo 6

1. After punching required clearance hole in stripper, line up lugs (V) on stripper with slot in upper turret hole and rotate 90 degrees with spanner wrench (S) provided to engage lugs in recess between upper turret (T) and stripper clips (U).





Item No.	Description	Part Number #12 Station	Part Number #18 Station
1	Base	060-1101002	8062110-100
2	Upper Casting	060-1102002	8062110-200
3	Cam	8030120-200	8030120-200
4	Cam Pin	8030120-302	8030120-302
5	Retaining Rings	8470510-100	8470510-100
6	Cam Roller Pin	8060120-300	8060120-300
7	Roller	8156111-300	8156111-300
8	Decals No. 1-12	6504001	
9	Short Handle Arm Assy.	8230120-800	8230120-800
10	Long Handle Arm Assy.	8030120-800	8030120-800
11	Cap	8060110-800	8060110-800
12	Ram	8060121-300	8060121-300
13	Upper Turret	060-1111016	3818109-000
16	Punch Knockout	8060610-300	8060610-300
17	Plastic Knob	8120810-200	8120810-200
18	Chain		8066430-101
19	Ball Plungers	8699900-200	8699902-000
20	Spring	5102125	8510200-700
21	Index Pin A	8060120-301	8060120-301
22	Spring	8510200-700	8510200-700
23	Index Handle A	060-1107001	8062110-701
24	Plastic Handle Grip		8120810-400
25	Turret Bolt Upper	8067470-400	8067470-400
26	Thrust Bearing	8310710-300	8310710-300
27	Turret Nut	8067470-400	8067470-400
28	Lower Turret	060-1111015	3818108-000
29	Index Pin B	8100120-300	8100120-301
30	Cable Assy.	060-1301001	8062130-106
31	Index Handle B	060-1225001	8000110-701
32	Stripper Wrench	8060610-303	8060610-303
33	Punch Holder Small	8060150-103	8060150-103
34	Punch Holder Large	8000150-103	8000150-103
35	Stripper Small	8060140-304	8060140-304
36	Stripper Large	8000140-304	8000140-304
37	Puller	8060610-304	8060610-304
38	Die Holder A	8060150-204	8060150-204
39	Die Holder B	8000150-204	8000150-204
40	Die Holder C	8100150-204	8100150-204
41	Stripper Clip A	060-1403050	8062140-305
42	Stripper Clip B	060-1403051	8400140-305
43	Stripper Clip C	060-1403052	8500140-305
44	Stripper Clip D	060-1403053	8600140-305
45	Stripper Clip E	060-1403054	8700140-305
46	Grooved Drive Studs	8060120-306	8060120-306
47	Index Mount		8062111-006
48	Grease Fitting	8690100-200	8690100-200



Item No.	Description	Part Number #12 Station	Part Number #18 Station
49	Index Sprocket A		8062530-106
50	Index Sprocket B		8000530-106
51	Chain #41		8066430-101
52	Sprocket Bearing		8310411-100
53	Grease Fitting		8901011-000
54	Index Wheel		8062110-707
55	Handle		8120811-600
56	Dowel Pin		0010598-000
57	Index Wheel Shaft		8062111-207
59	Calibration Ring	8060160-302	8060160-302
60	Side Material Gauge	060-1402030	8062140-203
61	Gauge Arm	8160140-203	8160140-203
62	Turret Bolt Lower	8000470-100	8000470-100
63	Lead Screw C	8260140-203	8260140-203
64	Gauge Wheel	8020145-103	8020145-103
65	Handle	8120810-300	8120810-300
66	Gauge Supp. Rod B	8360140-203	8360140-203
67	Lead Screw Clamp C	8460140-203	8460140-203
68	Indicator	8120145-103	8120145-103
69	Indicator Mount	8660140-203	8660140-203
70	Bearing Sleeve	8311310-700	8311310-700
71	Side Gauge Bracket	060-1402037	8162140-203
72	Back Material Gauge	060-1401017	8062140-101
73	Lead Screw A	060-1401018	8162140-101
74	Lead Screw B	060-1401019	8262140-101
75	Gauge Support Bar	060-1401020	8062140-102
76	Gauge Supp. Rod A	060-1401021	8162140-102
77	Lead Screw Clamp R	8260140-102	8260140-102
78	Lead Screw Clamp L	8360140-102	8360140-102
79	Chain Cover	060-1106024	060-1106024
80	Indicator	8560140-203	8560140-203
81	Lead Screw Nut	8620470-404	8620470-404
82	Lead Screw Sprocket	8060530-102	8060530-102
83	Chain	8430190-100	8430190-100
85	Chain Tightener	8320145-104	8320145-104
90	Table Right		8062110-507
91	Table Left		8162110-507
92	Angle		8262110-507
93	Table Support Bar		062-1105080
94	Table Support Rod		062-1105081
95	Table Support Block		062-1105082
96	Gauge Support Rod C		8062140-208
97	Lead Screw D		8162140-208
98	Indicator Mount B		8262140-208
99	Table Chain Cover		8065110-602
100	Indicator B		8362140-208
101	Stand	060-1109000	8062110-900
102	Socket Screw Key	8610200-400	8610200-400
103	Socket Screw Key	8610200-300	8610200-300
104	Socket Screw Key	8610200-200	8610200-200