

diagraph[®] MSP[®]

JUMBO STENCIL CUTTING MACHINE PARTS LIST AND OPERATING MANUAL



Marion, IL USA

STK. NO. 5800-152, REV B

Warning: This machine contains pinch points which can injure personnel when not used properly. This machine is designed to punch letters, numbers or symbols out of material using very sharp punches and dies. Do not place hands or fingers in machine to clear paper jams; use only the proper tools to clean and work on the machine. Only qualified personnel should perform maintenance on this machine.



OPERATING INSTRUCTIONS

1. PRIOR TO OPERATION: make sure that no punches have become stuck in their dies during shipment and check for free rotation of the circular assembly which houses the punches and dies. Stuck punches can be separated by prying them apart with a screwdriver.
2. Rotate the cam rod (item #3), located at the front of the machine's base, until it points upward, releasing the pressure between the upper and lower feed wheels. Your machine is now ready to insert the stencil board.
3. Insert the stencil board between the upper and lower feed wheels (items #2 & 6) with the left hand edge of the board aligned with the left-most vertical red line on the base. Align the edge of the board nearest the operator with one of the red horizontal lines in the base.



Note: Normally, multiple line cut stencils require that the red line nearest the operator represents the first line to be cut.

4. Rotate the cam lever (item #3) downward to secure the stencil board between the upper and lower feed wheels to secure the stencil board.
5. Rotate the die disc until the pointer (item #10) points to the desired character. Cut by pulling the handle (item #8) with a firm, quick motion. Allow the adjustment stop screw to control the depth of cut or stroke by acting as a "positive stop". Return the handle to its full upward position before continuing to the next character.
6. To use the spacing character, pull the handle (item #8) approximately halfway down until a definite clicking sound is heard.
7. To cut successive lines repeat steps 2, 3, 4 and 5 while advancing the stencil to the next horizontal red line on the base to produce a new line of text.

PROBLEMS AND CORRECTIONS

CHARACTER DOES NOT CUT

1. Adjust the stop screw (see pg. 4) nearest the operator on the yoke to lengthen the stroke of the handle. This will provide a deeper penetration of the punch into the die.



CAUTION: Make this adjustment in small increments because excessive penetration may cause other punches to stick in their dies resulting in difficult machine operation and premature failure.

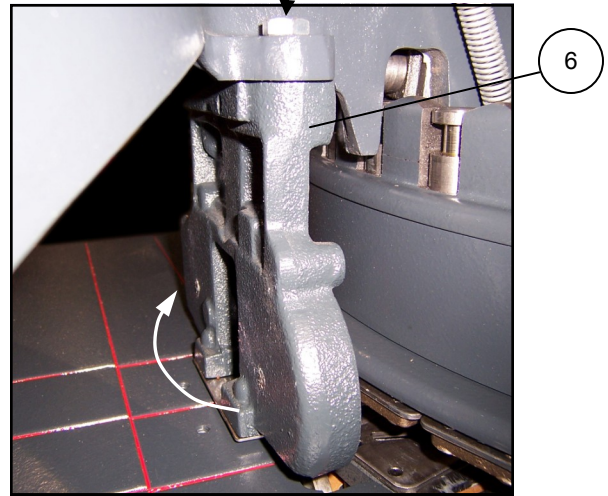
2. Inspect punch and die for paper segments. Remove any obstructions with the cleaning hook provided (item #11).
3. If the actions above fail to correct the problem, contact the Diagraph sales office for assistance. It is recommended that replacement of punches and dies be done by Diagraph personnel.

IMPROPER SPACING

1. Inspect the knurled upper feed rollers (item #6) for paper clogs and clean with a wire brush.
2. Check to see that the upper and lower feed rollers rotate freely (items #2 & 6).
3. Check for sufficient pressure between the upper and lower feed rollers. Pressure may be increased by adding thin shim stock between the upper feed casting and the yoke, thus forcing the upper feed rollers downward toward the lower feed.
4. If the characters are spaced too closely together, it may be necessary to readjust the mounting of the upper feed assembly to its extreme left position as viewed by the operator;
 - A. Release pressure between the upper and lower feed rollers by rotating the cam rod (item #3)..
 - B. Loosen the two screws which secure the upper feed casting to the yoke. (see image below)
 - C. Push the upper feed roller toward the operator's left, then tighten the mounting screws.
5. If characters are spaced too far apart, repeat step 4 and reposition the upper feed assembly toward the operator's right.
6. If the above suggestions fail, contact the Diagraph sales office for assistance.

STENCIL BOARD NOT FEEDING STRAIGHT

1. If the lower left-hand corner of stencil board moves away from the operator (feeds “up-hill”) as it is fed from right to left, the upper feed assembly will require adjustment as follows:
 - A. Disengage pressure between the feed rollers by rotating the cam rod (item #3).
 - B. Loosen the screws securing the upper feed to the yoke.
 - C. Rotate the upper feed assembly in a clockwise direction and retighten screws.



MAINTENANCE

1. To ensure the maximum life of punches and dies and to minimize maintenance and repairs, use only the stencil board specifically formulated and processed by Diagraph



CAUTION: Do not attempt to cut metal. This will permanently damage the machine.

2. Periodically examine the punches and dies for particles of clogged stencil board and remove with the cleaning hook (item #11).
3. Routinely lubricate all moving parts with a lightweight grade of machine oil.

PUNCH AND DIE REPLACEMENT

Punch and die replacement should be performed by qualified Diagraph personnel. Improper procedures during installation can result in damaged components. However, if due to circumstances the customer must do so, please carefully follow the steps below:

1. Position the machine on its side with the edge of the raised dial casting resting against a support or block (preferably wood) to secure it in position.

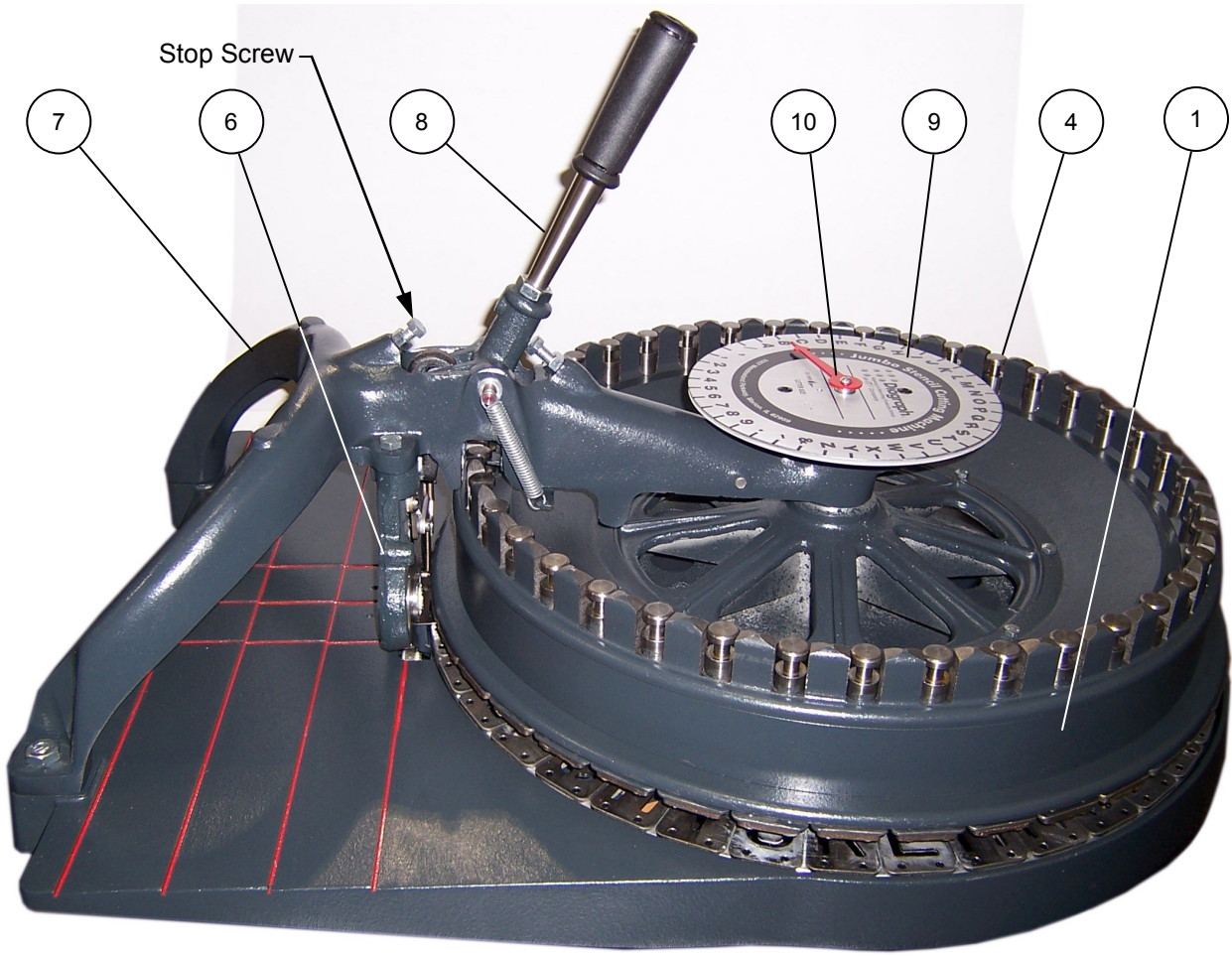


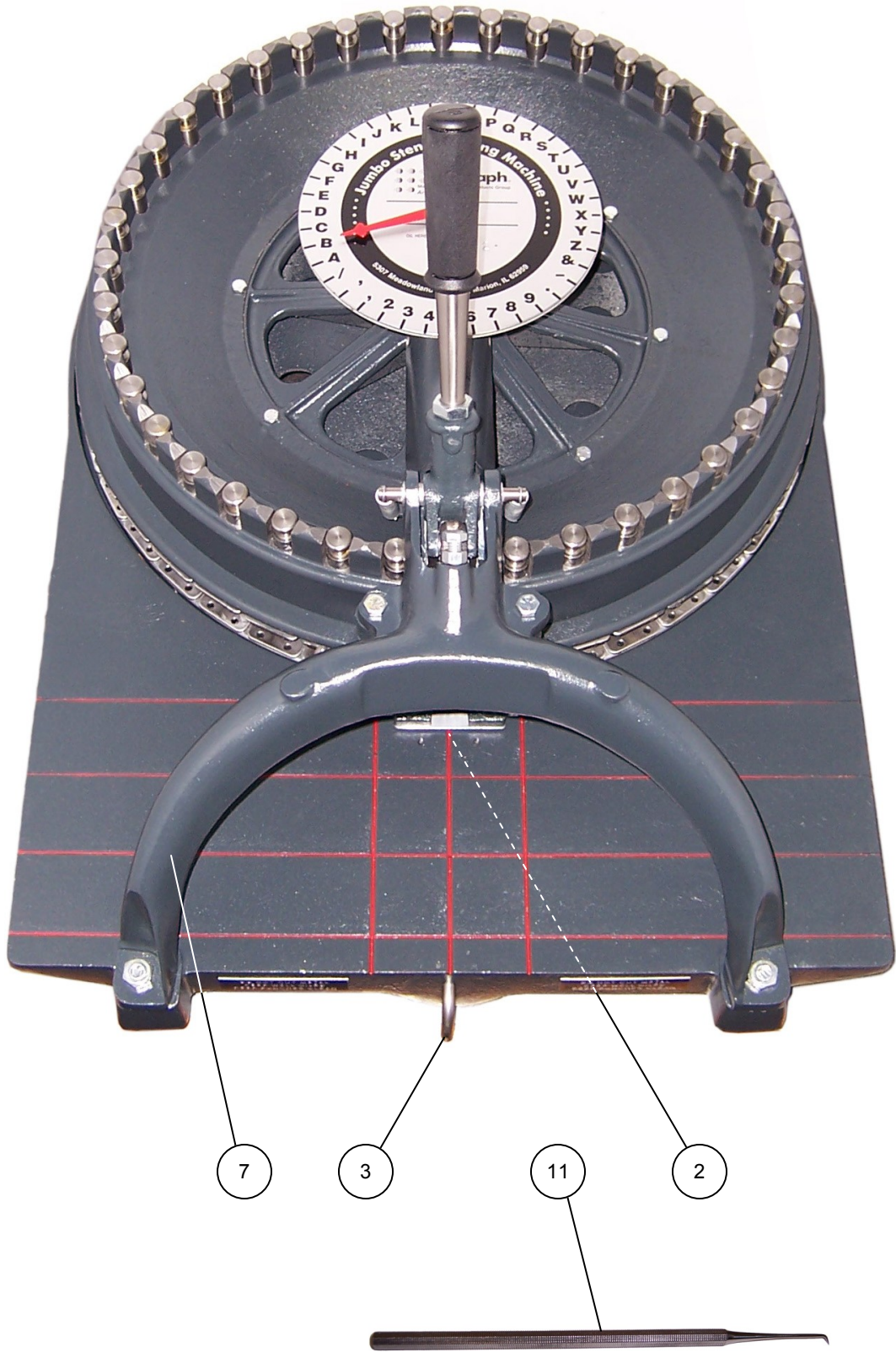
CAUTION: Machine is very heavy. We recommend at least 2 people moving the machine at any time.

2. Rotate the character to be replaced so that it aligns with the cutout portion in the base located at the rear of the machine.
3. With a screwdriver, remove the four screws securing the die and slide die out, being careful not to drop the screws or die into the machine.
4. Insert the screwdriver through the holes in the die carrier and remove the four screws securing the punch, being careful not to drop the screws or punch into the machine.
5. Note the positioning of the color coded markings on the new punch and die and separate them by carefully prying them apart.
6. Place punch screws into new punch and carefully slide the punch into its mounting position with the color code facing outward from the center of the machine. Tighten the four screws securely.
7. Carefully place die on punch and make certain the color coded markings are aligned. Apply very slight pressure to start the die mating with the punch.
8. Raise the punch until the die is against the die carrier. Insert the die mounting screws and washers and tighten screws alternately, a little at a time.

0120-000 JUMBO STENCIL MACHINE, 2"

Ref No	Stock No	Description	Req'd
1	0113-189	Band, Jumbo	1
2	0113-806	Lower Feed Assembly	1
3	0113-072	Rod, Cam	1
4	0120-835	Punch Plate & Shank Assy	40
5	See Pg. 6	Punch & Die	---
6	0113-805	Upper Feed Assy (2")	1
7	0113-804	Yoke Assembly	1
8	0113-879	Handle Assembly	1
9	0113-187	Dial Plate, Jumbo	1
10	0113-034	Indicator	1
11	0109-223	Cleaning Hook	1
12	0113-045	Screw, Die	4/Die
13	0113-046	Screw, Punch 1/4-28 Special	4/Punch





PUNCH & DIE ASSEMBLY NUMBERS



	2"
A	0120-200
B	0120-201
C	0120-202
D	0120-203
E	0120-204
F	0120-205
G	0120-206
H	0120-207
I	0120-208
J	0120-209
K	0120-210
L	0120-211
M	0120-212
N	0120-213
O	0120-214
P	0120-215
Q	0120-216
R	0120-217
S	0120-218
T	0120-219
U	0120-220
V	0120-221
W	0120-222
X	0120-223
Y	0120-224
Z	0120-225
&	0120-226
-	0120-227
.	0120-228
/	0120-229
2	0120-230
3	0120-231
4	0120-232
5	0120-233
6	0120-234
7	0120-235
8	0120-236
9	0120-237
'	0120-238
,	0120-239

(For special Punches & Dies contact Customer Service)
 Punch & Die Screws are not included with Punch & Die Assemblies