Operators Manual No134 Deep Throat Mechanical Press

CAUTION

Before operating the 134 hydraulic press, read and understand this operator's manual. Become familiar with the controls of the machine.

FOR MAXIMUM SAFETY

- Always wear eye protection when operating this machine.
- Install and use all necessary point-of-operation guards.
- Maintain adequate ground at all times. A ground indicator has been provided.
- Keep the machine and the area around the machine free of clutter.
- Always double check punch to die alignment to prevent tool breakage and possible injury.
- Be sure to punch with in the eight ton capacity of this press. Type and thickness of material vs. final hole size will determine the tonnage.
- Do not nibble. Always punch a full hole.
- Use only punches and dies designed for this tool. They are marked either "W" in a circle or R-W.
- Keep all tooling sharp.

PANEL CONTROLS

- ON/OFF These two buttons, located on the main control panel on the right side of the machine, turn the hydraulic power unit on and off. To safely turn off the entire machine (for servicing, etc.), use the safety switch on the left side of the machine.
- JOG/RUN This switch selects either of two running modes. The RUN position is for automatic, single stroke operation. In this position, the foot switch must be released to repeat the cycle. The JOG position permits the operator to inch the ram down for alignment and center spotting. In the JOG position, the ram will continue downward until the foot switch is released. At the bottom-of-stroke of the machine (set at the factory), the ram automatically returns to the top-of-stroke position.
- GROUND- This light serves as a ground fault indicator. When the machine is properly, grounded, the white indicator light will glow. Should it not glow, press the white indicator cover. If the light remains out, the bulb is defective and should be replaced. If the bulb lights with the cover depressed, but goes out when the cover is released, the ground is faulty. Investigate and restore proper ground before operation.
- JOG UP This button, located on the right side of the machine in the top shroud, will raise the ram from any intermediate position. The ram will continue to rise until the button is released or the machine reaches its absolute top-of-stroke position. The JOG UP button overrides both the JOG/RUN switch and the adjustable top-of-stroke mechanism.

PUNCH TO DIE ALIGNMENT

Select the desired punch and die. Insert die into die adaptor (if needed) and tighten screw. Place die adaptor (or die) in die shoe and tighten square head set screw. Leave die shoe bolts loose. Insert punch into punch holder and tighten set screw (it may be necessary to move the die shoe for adequate clearance). Set the selector switch on the main control panel to JOG, turn the machine on, and inch the punch toward the die. Adjust the loose die shoe so the punch can enter without striking the die. There should be equal clearance around the punch for proper punching action, If the ram reaches the bottom-of-stroke position before the punch can enter the die, remove wear plates from the top of the ram lever and replace them below. This will lower the ram so the punch can enter the die. When the punch and die are properly aligned tighten the die shoe bolts. Recheck alignment after tightening. Adjust wear plates so at the bottom-of-stroke the punch enters the die between 1/16 and 1/32 of an inch.

TOP-OF-STROKE ADJUSTMENT

After punch to die alignment is verified, the ram top-of-stroke position must be set. The stroke of the l34 press is infinitely variable between zero and one inch. To set desired stroke length, lower the punch (using the JOG setting) to the desired top-of-stroke height. Loosen the two knurled nuts of the trip mechanism on top of the ram. Run the upper nut up threaded spindle until it contacts the limit switch roller. Continue to run the nut up until a distinct click is heard. Turn nut another quarter turn in the same direction and lock it in place by turning the lower knurled nut against it. The ram will continue to stop at this position until the knurled nuts are moved or the wear plates are adjusted.

The ram can be run up to the full one inch stroke position by pressing the JOG UP button. This will facilitate tool change and part removal. To return to limited stroke operation, depress the foot switch until the punch enters the die. On returning the ram will once again stop at the preset height.

Mechanical - Hydraulic - Electrical Parts List

ITEM	DESCRIPTION	PART NO.	REQ'D
1)	Frame	731140141	1
2)	Cylinder Bracket	731200254	1
3)	Cylinder Link	731240255	1
4)	Connect. Link Nut	730560055	4
5)	Connect. Link	731240070	2
6)	Connect. Link Stud	731160075	2
7)	Washer, Die Shoe Sup.	678033119	2
8)	Die Shoe Support	731320145	
9)	Ram Lever	731030146	1
10)	Plug Button	60000027	2
11)	Retaining Ring	600164304	2
12)	Retaining Ring	600164307	2
13)	Ram Lever Pin	731160143	1
14)	Conn. Link Stud	731160144	
15)	Frame Cover	731220257	
16)	Top Shroud	731440269	
17)	Front Shroud	731440259	
18)	Side Shroud	731440258	2
19)	Snap Bushing	600000167	3
20)	Stand	731060266	
21)	Safety Switch	/51000200	G
21)	For 208 & 230 volts	660031301	
	For 460 volts	660031302	
22)	Safety Switch Fuses	000031302	6.
22)	For 208 & 230 volts	660051706	3
	For 460 volts	660051713	3
23)	Enclosure w/Panel (Comp.)		5
23)	For 208 volts	660193111	1
	For 230 & 460 volts	660193110	1
	Stop Push Button (red)	660082016	1
25)	Start Push Button (green)	660082015	1
26)	Selector Switch	660082017	1
27)	Ground Indicator	660082023	1
28)	Magnetic Starter	660021210	1
29)	Heater Coils	000021210	•
_>)	For 208 & 230 volts	660041452	3
	For 460 volts	660041447	3
30)	Transformer	000011117	5
50)	For 208 volts	660132411	1
	For 230 & 460 volts	660132412	1
31)	Fuse (F-1)	660051720	1
32)	Fuse Block	660051722	1
33)	Relay CR-1, CR-2	660142502	1 ea.
34)	Relay CR-3	660142503	2
35)	Terminal Block	660000005	18
36)	Foot switch	660092104	1
37)	Limit Switch	660152613	2
5.)	Link ownen	300122012	-





