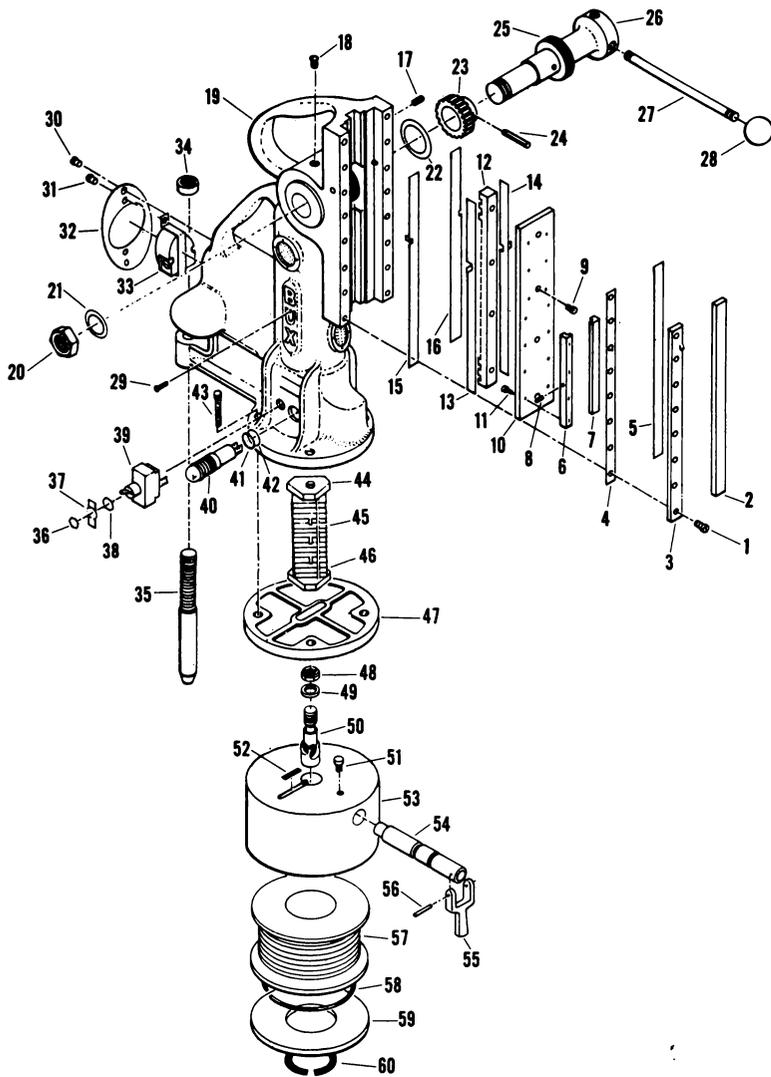


4/19/63

Stanley Industrial Tool Company  
 338 North Vandeventer Ave.  
 St. Louis 8, Missouri  
 Phone OLive 2-3423

**BUX** magnetic products



**BUX ELECTRO-MAGNETIC DRILL PRESSES  
 MODELS L-2RP AND L-3RP**

**ORDERING OF PARTS**

The parts price list should be referred to when ordering replacement parts. ALWAYS INCLUDE COMPLETE NAMEPLATE DATA WHEN ORDERING REPLACEMENT PARTS. Parts may be purchased from your BUX Authorized Service Station or from the factory.

**PARTS LIST**

Index No.	Part No.	Qty.
1	1144 1144	14-20
2	1164 3064	1
3	1165 3065	1
4-5	1180 3066	1 ea.
6	1017 1017	1
7	1018 1018	1
8	1124 1124	1
9	1166 1166	4-5
10	1031 3031	1
11	1158 1158	8
12	2016 3016	1
13	1061L 3061L	1
14	1061R 3061R	1
15	1150L 3062L	1
16	1150R 3062R	1
17	1124 1124	6-9
18	1079 1079	2
19	2042 3069	1
20	8065 8065	1
21	3122 3122	1
22	3116 3116	1
23	2011 2011	1
24	2012 2012	1
25	8106 8106	1
26	3142 3142	1
27	1041 3041	4
28	1042 1042	4
29	1090 1090	1
30	1076 1076	2
31	1076 1076	2
32	3113 3113	1
33	1035 1035	1
34	1064 1064	1
35	1047 3047	1
36	— —	1
37	1117 1117	1
39	1138 1138	1
40	1139 1139	1
41	— —	1
42	— —	1
43	1183 3073	4
44	2027 3013	1
45	1025 1025	1
46	2028 3328	1
47	2028 3328	1
48	2512 8141	1
49	3520 3520	1
50	3519 3519	1
51	3515 3515	1
52	8187 8187	1
53	2524 2524	1
54	2536 3536	1
55	8186 8186	1
56	3503 3503	1
57	3524 3524	1
58	2532 8094	1
59	2250 8221	1
60	8078 8078	1
	2528 8115	1
	2527 8096	1
	8086 8086	1
	3119 3119	1

**BUCK MFG. CO.**

1355 NORTH 10th STREET • SAN JOSE, CALIFORNIA

# OPERATING AND MAINTENANCE INSTRUCTIONS

## OPERATION

The BUX Electro-Magnetic Drill Press may be operated in any position—vertical, horizontal, or inverted. Before attempting to operate the drill press, however, you must understand the following principles of operation.

### DRILLING THIN AND NON-FERROUS MATERIAL

... The electro-magnet contained in the drill press operates at its nominal gripping power on material  $\frac{1}{2}$ -inch or more thick, as shown in the graph below. To drill thin or non-ferrous material, simply place a  $\frac{1}{2}$ -inch thick plate against the back of the material. This plate should be 6 by 6 inches or larger. When the magnet is energized by turning on the switch, the plate and the drill press will be held securely in place.

**SURFACE**... It is *not* necessary to have a clean, smooth, or unpainted surface to operate the press. However, for drilling large holes without a pilot hole, remove any loose rust, grime, or dirt in order to assure maximum drill point pressure.

**ENERGIZING THE ELECTRO-MAGNET**... Place the drill press on the material to be drilled near the punch mark. Turn the power switch ON. This applies full power to the magnet coil.

**RADIAL POSITIONING**... With the drill press held firmly in position on the material to be drilled, simply loosen the locking cam by rotating the handle on the side of the magnet. The drill press is then easily turned through 330 degrees and can be positively locked in any position by tightening the handle. The handle will also release the drill press for maximum lateral (fore and aft) movement.

**DRILLING IN HORIZONTAL OR OVERHEAD POSITIONS**... If drilling in a horizontal or overhead position, hold the press with your left hand on the magnet switch. Hold the press with your right hand on the pinion shaft hub so that a twist of the wrist will move the drill bit in and out enough to locate the bit on the punch mark. Place the drill press near the punch mark and turn on the magnet switch. Position the drill radially. *Always use a safety chain or cable when drilling in overhead positions.* If the power source fails, the press will drop. The safety chain should be positioned so that the press would drop away from the operator.

## OPERATING SEQUENCE

1. Place the press on the material to be drilled.<sup>1</sup>
2. Turn on the magnet switch.
3. Loosen the radial positioning handle and locate the drill bit exactly on the punch mark.
4. Loosen the knurled nut and adjust the stabilizer leg to come into firm contact with the material being drilled and hand-tighten the knurled nut.
5. Turn on the drill and apply pressure lightly to the feed handles in direct line with the bit until a full cut is obtained, then increase pressure to complete the drilling.

## SERVICE AND MAINTENANCE

**LUBRICATION**... Oil all moving and sliding surfaces on the drill stand daily with a few drops of high grade motor oil. To oil the pinion shaft bushings, remove the two oil hole screws located directly above the centerline of the pinion shaft and put a few drops of oil in each hole. Always replace the screws. Oil the contacting surfaces on the slide and rack by moving the slide to the extreme up and down position.

**DISASSEMBLY**... Remove the drill and disconnect it from the drill press before starting disassembly.

**PINION SHAFT**... Remove the hex nut on the end of the pinion shaft. Pull the pinion shaft (with the pinion gear) out of the drill post.

**SLIDE AND RACK**... Remove the stop screw from torque bar. Pull the slide and rack up until it comes out of the retainer bars and drill post.

### DRILL POST AND ELECTRICAL COMPONENTS

... Remove the four cap screws holding the drill post to the magnet pole piece. Facing the front (slide) of the drill press, lean the drill post to the left, keeping it close to the magnet so as not to place a strain on the wires running between the post and the magnet. With the post lying on its side, disconnect the two wires running between the post and the magnet. The magnet and swivel assembly will be released from the press for further disassembly. Remove the drill cord receptacle and disconnect the wiring. Remove the strain clip on the power input cord for the drill press and pull the cord out of the drill post. Remove screw located left side of post approximately half way up, then withdraw rectifier from post cavity. Disconnect wiring to the rectifier terminals. In order to properly install a new rectifier, be sure the "AC" or input power leads are connected to the yellow color coded terminals. The "DC" output terminals are color coded black and red respectively and may be connected to the load with either polarity.

Special care should be taken in the radial positioner type units to insure that all slack is removed from coil leads to prevent them from being crimped.

**RADIAL POSITIONER ASSEMBLY**... Remove the locking nut from the aligning stud on top of the pole piece and lift off the washer and dead plate. The cam shaft assembly is held in place by a  $\frac{1}{4}$ " socket head cap screw that is screwed into the top of the pole piece. Remove screw and withdraw cam shaft assembly. Remove carefully steel strip (part #52) which secures lead wires in milled slot. Remove aligning stud and withdraw carefully leads that are threaded up through same in a plastic insulated sleeve.

**ELECTRO-MAGNETIC COIL**... To remove coil, first remove lock ring from groove on pole piece center. Then remove retainer plate and coil will come right out easily.

