INSTRUCTIONS FOR
Dake® 75PA - 75PB - 75PC - 75PD - 75PE - 75PF
AIR HYDRAULIC PRESSES

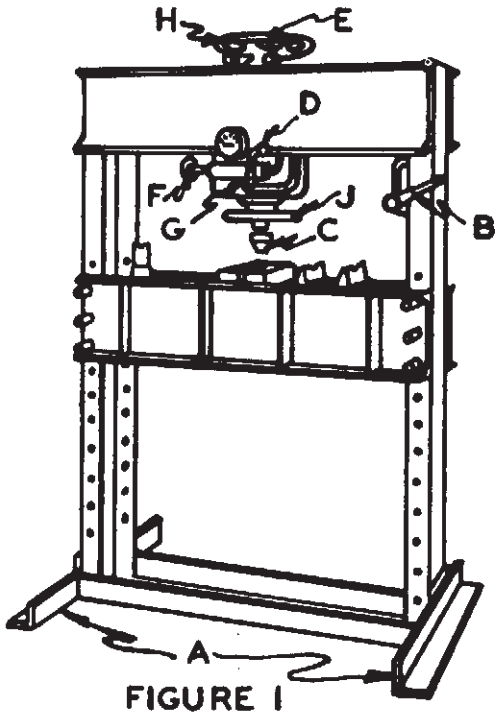


FIGURE 1

I. SETTING UP THE PRESS FOR OPERATION

For shipping convenience some parts are removed. Assemble these parts in the following order:

1. Bolt base angles "A" to uprights using bolts and nuts furnished. Shoulder base angles against the stops on uprights.
NOTE: Base angles "A" should touch floor at all points. Use shims where necessary.

2. Place hand crank "B" over shaft which raises and lowers table.

3. Fasten screw nose "C" to ram screw by means of thumb screw provided.

4. Connect airline into street ell "D" at the top of control valve block.
NOTE: Avoid restrictions in air supply line to insure ample air to airmotor. To insure maximum of performance the air supply line should be a ½" pipe line if the distance from compressor to press is 0-30 feet, ¾" line 30-60 ft., and 1" if greater than 60 ft. If press is furnished with two or more pumps, these pipe sizes should be increased accordingly.

5. To fill the press with oil:
   A. Be sure and use a good clean light oil. We recommend Socony Vacuum's DTE Oil Light or its equal to obtain the best results. It is well to filter through cheese cloth but avoid lint.
   B. Remove plug in street ell back of press. Fill with oil through street ell until oil is level with top.
   C. Remove plug "E" at top of cylinder and with release valve "F" firmly closed, open throttle valve "G" so motor runs slowly filling cylinder with oil level to the top. Release throttle valve. This will remove air from dome of cylinder.
   D. Replace plug "E" at top of cylinder. Add enough oil through street ell to again bring it level with top and replace fill plug.
   NOTE: Use a good grade of sealing compound on threads when replacing plugs.

6. Accessories for press:
   A. Foot Valve
   When using foot valve remove plug in tee of airline of press and connect hose from foot valve to this opening. Connect air supply line to inlet side of foot valve. Put plug in street ell "D" top of control block.
   B. Air Regulator With or Without Gauge
   When assembling these parts they must be installed in air supply line ahead of control valve or foot valve.
   C. Air Filter
   Must be installed ahead of air regulator when used or ahead of hand control valve or foot valve when air regulator is not used.

7. Hand Throttle and Foot Valve
Press can be arranged so that hand throttle and foot valve can both be connected to press and either valve used to operate the ram. Connect hand throttle as described in Section I, paragraph 4, and foot valve as per Section I, paragraph 6. If air regulator is used, it must be in supply line ahead of both valves.

II. OPERATION AND CONTROL

Press is now ready for operation, but before proceeding it is advisable for operator to acquaint himself with the controls.

1. Handwheel "H" at top of press is used to lock workhead in any desired position along head channels. Always lock workhead securely before applying any pressure. Models 25PA and 25PB workheads are in fixed position at center of head channels.

2. Hand crank "B" is provided to raise or lower table channels to proper height for work. When desired height is obtained, insert table pins.
NOTE: Be sure all table pins are in place before applying any pressure. Also slack off on cable.

3. Small handwheel "F" at left of valve block operates ball valve which releases pressure on ram. This valve should be kept firmly closed and opened only a turn or two when it is desired to return ram to its up position.

4. Handwheel "J" above screw nose adjusts ram screw into or out of ram and facilitates adjusting screw nose with the work to be done.
NOTE: It is advisable to raise the table one or two holes rather than run the screw out to its limit of travel.
Important — Always leave a gap of ½" between bumper and reservoir before pressure is started. Damage to piston and collar may result if this is not carried out.

5. Presses are furnished with table plates, V-blocks, and screw nose to facilitate supporting work in process.

6. Throttle valve "G" located at front of control block is easily operated with slight hand pressure and automatically shuts off when pressure is released.

7. Relief valve in pressure line is set to unload at maximum pressure and should not be tampered with.

III. MAINTENANCE

1. If press loses pressure:
   A. Check all tubing joints for leaks and tighten nuts.
   B. Leakage past release valve
   Loosen packing nut and remove valve stem. Have small

container to catch whatever oil drains from this opening. Using brass rod as a drift reseat valve by striking sharply with hammer. After reseating replace valve rod and tighten packing nut. Oil that has drained out can be replaced in reservoir through street ell rear of press in pump base.

C. Leakage past check valves — Reseat valves using brass rod as a drift and striking sharply with hammer.

D. Leakage in throttle valve — Remove pipe plug rear of control block. Remove spring and valve stem. Clean out valve seat. Replace valve washer and reassemble valve. Air leakage past valve stem may be stopped by adjusting packing nut on the front of the control block.

2. Slow movement of ram

A. Check air supply line for restrictions to determine if air motors are getting ample supply of air.

B. Check level of hydraulic fluid. Ram will not travel its full stroke if there is not enough fluid. Fill reservoir to level as per Section I, item 5.

3. Hydraulic fluid — After considerble research and tests made with the cooperation of the pump manufacturer we recommend D.T.E. Oil Light as manufactured by the Socony Vacuum Oil Co. Inc. When making a complete change of oil in press it requires approximately 6¼ quarts.

4. Pump — Enclosed with these instructions you will find repair parts sheet and instructions for care and operation of air motor.

CAUTION: When disconnecting any parts of this machine relative to repairing be extremely careful that all parts are clean to prevent entrance of dirt in the hydraulic system.

REPAIR PARTS LIST

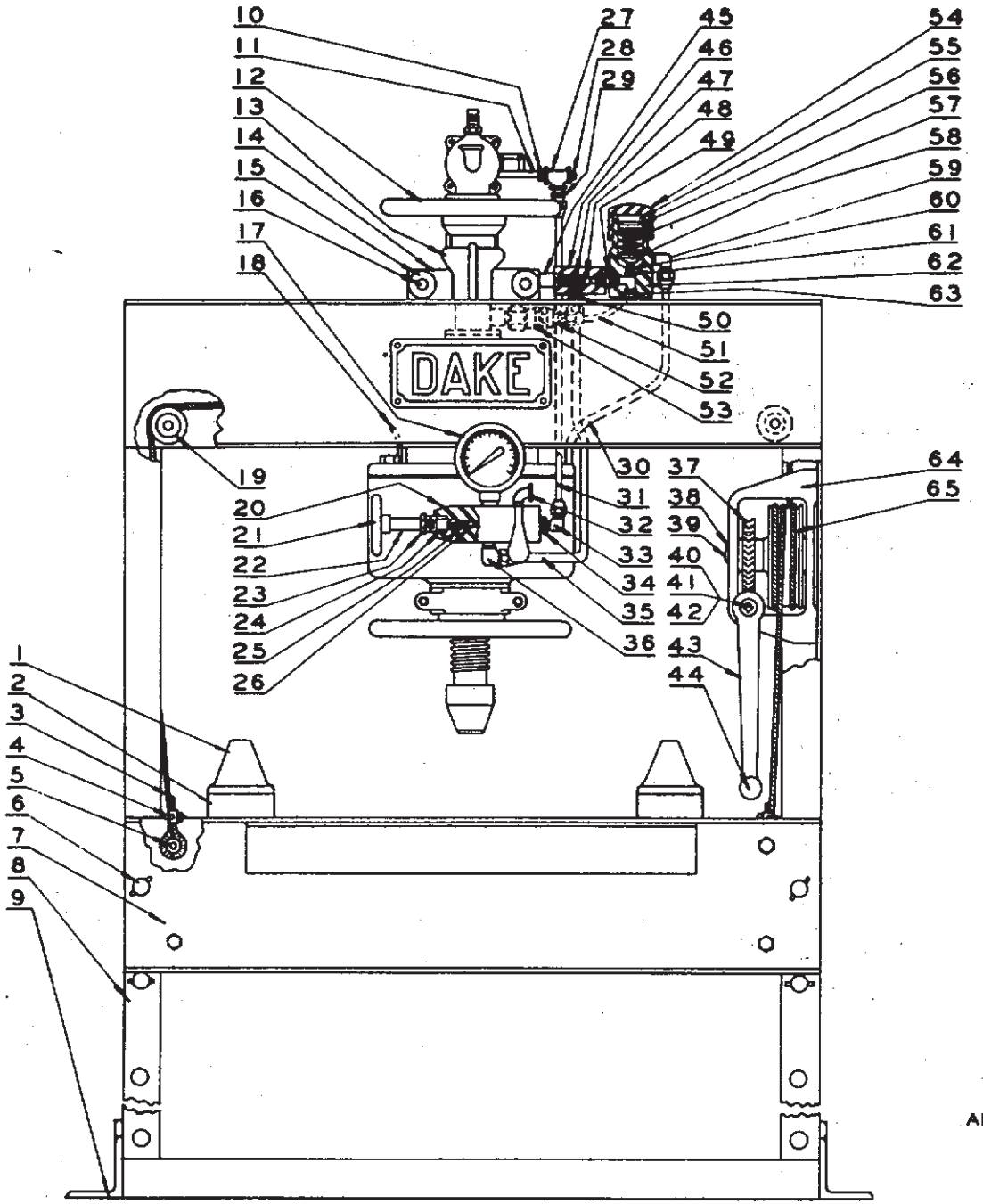
Note: Always give Model Number and Serial Number of Press when Ordering Parts

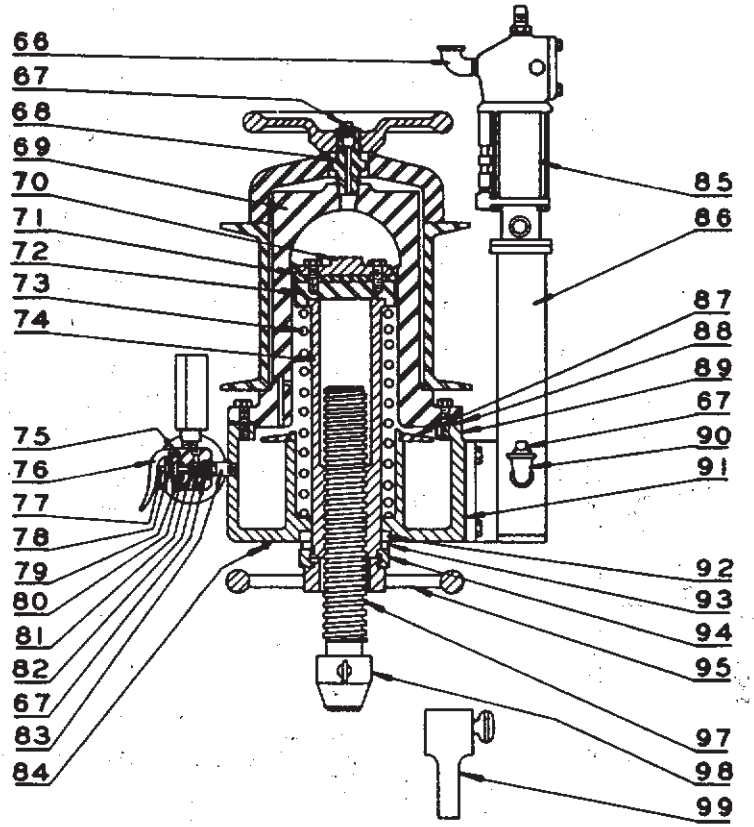
Item No.	Part No.	Description
1	336	Vee Block (2 Req.)
2	702	Table Plate (2 Req.)
3	726	Cable
4	583	Cable Clamp (4 Req.)
5	716	Table Spacer (4 Req.)
6	569	Table Pin (6 Req.)
7	701029	Table Channel 2 req.
8	700120	Frame Assembly
9	566	Base Angle (2 Req.)
10	1100	Reducer Bushing
11	1101	Pipe Nipple (Single Pump Only)
12	701759	Handwheel
13	732	Yoke
14		
15	592	Roller (4 Req.)
16	733	Roller Shaft (2 Req.)
17	729	Gauge
18	632	Air Vent
19	727	Pulley (2 Req.)
20	1085	Control Block
21	10631	Handwheel
22	1129	Valve Rod
23	576	Packing Nut
†24	987	Release Valve Packing (7 Req.)
25	1109	Ball Retainer
26	586	Ball
27	1115	Pipe Tee (Single Pump)
	1333	Pipe Tee (Double & Triple Pump)
28	1567	Pipe Plug (Single Pump)
	588	Pipe Plug (Double & Triple Pump)
29	1247	Tube Nipple (Single Pump Only)
	1251	Tube Nipple (Double Pump)
30	700198	By-Pass Tube
31	700195	Air Tube (Single Pump)
	700199	Air Tube (Double & Triple Pump)
32	1110	Street Ell
33	1248	Tube Ell (Single Pump)
	1252	Tube Ell (Double & Triple Pump)
34	1102	Reducer Bush. (Single Pump Only)
35	700197	Pressure Tube
36	1252	Tube Ell
37	736	Worm Gear
38	737	Drum Key
39	724	Drum Shaft
40	385	Worm
41	384	Worm Shaft
42	386	Worm Key
43	701653	Crank
44		
45	1113	Pipe Nipple
46	1112	Check Valve Body
47	579	Check Valve Spring
48	586	Check Ball
49	1107	Pipe Nipple
50	1251	Tube Nipple
51	700196	Pressure Tube (Single and Double Pump)
52	1247	Tube Nipple (Single Pump)
	1249	Tube Tee (Double & Triple Pump)
53	1104	Check Valve
54	1096	Relief Valve Cap
55	1095	Spring Retainer
56	1111	"O" Ring
57	1221	Spring
58	1094	Ball Retainer
59	1248	Tube Ell
60	1222	Ball Valve
61	1220	Valve Seat
62	1093	Valve Body
63	588	Pipe Plug
64	725	Hoist Frame
65	723	Drum
66	1108	Street Ell
67	596	Pipe Plug (3 Req.)
68	731	Gauge Extension
69	693	Cylinder
70	704	Supporting Ring
†71	706	Cup Leather
72	735	Piston Cap (Included with Piston Ass'y
73	705	Ram Spring
74	701802	Piston Assembly
75	1091	Valve Lever Pin
76	1090	Valve Lever
77	1086	Air Valve Stem
78	1089	Packing Nut
†79	1122	Valve Stem Packing (3 Req.) ea. set
80	1092	Packing Washer
†81	1087	Air Valve
82	1088	Air Valve Spring
83	1107	Pipe Nipple
84	589	Pipe Plug (3 Req.)
85	1130	Pump (90 Lb. Air Pressure)
	1133	Pump (145 Lb. Air Pressure)
86	1131	Pump Base (Single Pump)
	1334	Pump Base (Double Pump)
87	734	Baffle Plate
†88	1478	Cylinder Gasket
89	695	Reservoir
90	590	Street Ell
†91	591	Gasket
†92	1477	Oil Seal
†93	738	Piston Bumper
94	718	Clamp Ring
95	701628	Screw Adjusting Wheel
97	559	Adjusting Screw
98	572	Screw Nose
99	344	Vee Screw Nose
	701296	Repair Kit (Includes Items 24, 71, 79, 81, 88, 91, 92, 93)

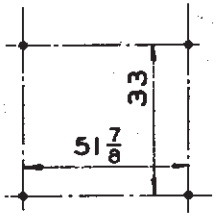
PARTS NOT ILLUSTRATED USED WITH DOUBLE PUMP ONLY

100	1329	Close Nipple
101	1330	Pipe Coupling
102	700171	Air Tube
103	700172	Pressure Tube
104	1335	Air Manifold (Double Pump)
	1331	Close Nipple

†Items in repair kit







ANCHOR BOLT LOCATION

SAFEGUARDING THE POINT OF OPERATION

ANSI B11.2 – Hydraulic Power Presses
Safety Requirements for Construction, Care and Use

It is important that Dake press users have a clear understanding of their responsibility involving the care and use of their Dake hydraulic press, including point-of-operation safe guards. Dake strongly recommends that Dake press users obtain a copy of the current American National Standard Institute (ANSI) B11.2 standard, for a more complete understanding of their responsibilities.

ANSI B11.2 states the following, relative to point of operation safeguarding:

"Normally, only the employer (press user) can determine the requirements of the press productions system components, including the dies and methods for feeding. There fore, the employer is ultimately responsible to designate and provide the point-of-operation safeguarding system".

The standard also discusses additional responsibilities of the employer. Some of the key responsibilities are:

- The employer is responsible for the safety, use and care of the hydraulic power press production system.
- The employer is responsible to consider the sources of hazards for all tasks to be implemented on the hydraulic power press production system.
- The employer is required to eliminate or control identified hazards in the scope of their work activity.
- The employer is responsible for the training of personnel, caring for, inspecting, maintaining and operating hydraulic press production systems to ensure their competence.
- The employer is responsible to provide and ensure that point-of-operation safeguarding is used, checked, maintained and where applicable, adjusted on ever production operation performed on a press production system.

A complete and current copy of the ANSI B11.2 standard can be obtained by contacting the following:

American National Standards Institute
1430 Broadway
New York, NY 10018

AMT – The Association for Manufacturing Technology
7901 Westpark Drive
Mclean, VA 22102