

**RMT AIR TOGGLE PRESS
MODELS 18D, 20D. & 24D**



FOREMOST MACHINERY CORPORATION

425 Huehl Road, Northbrook, Illinois 60062
Tel: (847)272-7880 FAX: (847)272-7948

RMT 18D, 20D, & 24D PNEUMATIC PRESSES

INSTALLATION

These presses are equipped with a 3/8" Hose Barb inlet (Item No. 32, see attached parts list and general assembly drawing). To assure rapid and positive response, the supply line should have a 3/4" ID minimum with no constrictions present. As with all pneumatic machinery, adequate air lubrication and cleanliness are vital factors affecting the life of the air cylinder, valves, and seals. Therefore, it is recommended that a filter and lubricator be fitted in the air supply line, preferably as close as possible to the press.

SET UP

The ram stroke is preset at the factory to 0", which means the Ram(4) will be down. Ram stroke is changed using the Handwheel(76). Additional ram stroke varies the top position of the Ram. An In-Line Shut-Off and Exhaust Valve(33) is located at the air inlet and should be moved to the "Off" position before set up. Doing so enables the Link Arm(18) to be raised and lowered by hand and allows the ram stroke to be varied.

1. Remove the Top Cover(15).
2. Slide the die onto the press bed.
3. Raise the Link Arm(18) completely. The Ram(4) will be at the bottom of its stroke.
4. Bolt the top die to the Ram using the two through holes in the Ram's flanges. Attach the bottom die to the bed. Tighten Set Screw(6) against the die post.
5. Loosen the Cap Screws(10) on the Swivel Block(12) and the Ram Link Clamp(16).
6. Using the Ram Adjusting Screw(14), lower the top die to the correct bottom position.
7. To assure the ram adjustment does not change and to maximize the life of the Swivel Block(12), Ram Link Clamp(16), and Ram Adjusting Screw(14), tighten the Cap Screws(10).
8. Lower the Link Arm(18), raising the Ram(4) to its uppermost position.
9. Using the Handwheel(76), adjust the stroke to the minimum required.
10. Slide the Shut-Off Valve(33) to the "On" position and operate the press.
11. After a few sample parts are made, it may be necessary to repeat steps 5-7 for a final adjustment of the stroke depth.

MAINTENANCE

Grease Nipples(5) are provided on the Rod End(62), Link Arm(18), Ram Link Clamp(16), Ram(4), and Gib Strips(8). These should be greased periodically depending on use. Other bearing areas use oil-impregnated bronze bushings and do not require grease.

Before use, check to assure that the Cap Screws(10) and (28) holding the Ram Adjusting Screw(14) and Trunnion Pins(38) are tight. Check to assure Set Screws(9) and (23) are tight against the Ram Pin(2), Link Pin(19), and Pivot Pins(24).

As the Gib Strips(8) wear, they may need to be tightened against the Ram(4) to more firmly guide it. To do so, loosen the Cap Screws(7) and move the Gib Strips using Set Screws(31). Re-tighten the Cap Screws.

For repair or maintenance, such as seal and 'O' ring replacement, the air cylinder can be quickly and easily removed using the following procedure.

1. Remove the Handwheel(76) by loosening the Set Screw(9).
2. Remove the Cap Screw(77) and Sleeve(78).
3. Once the Sleeve is removed, the Worm Shaft(80) can be rotated out of the cylinder. Be careful not to loose the Thrust Washers(79).
4. Disconnect the hoses from the top and bottom of the air cylinder.
5. Remove the Roll Pin(21) and the Cylinder Link Pin(22).
6. Remove the Cap Screws(28) and the Trunnion Pins(38).
7. Lift out the cylinder.
8. To re-install the cylinder, repeat steps 1-6 in reverse order.

PARTS LIST

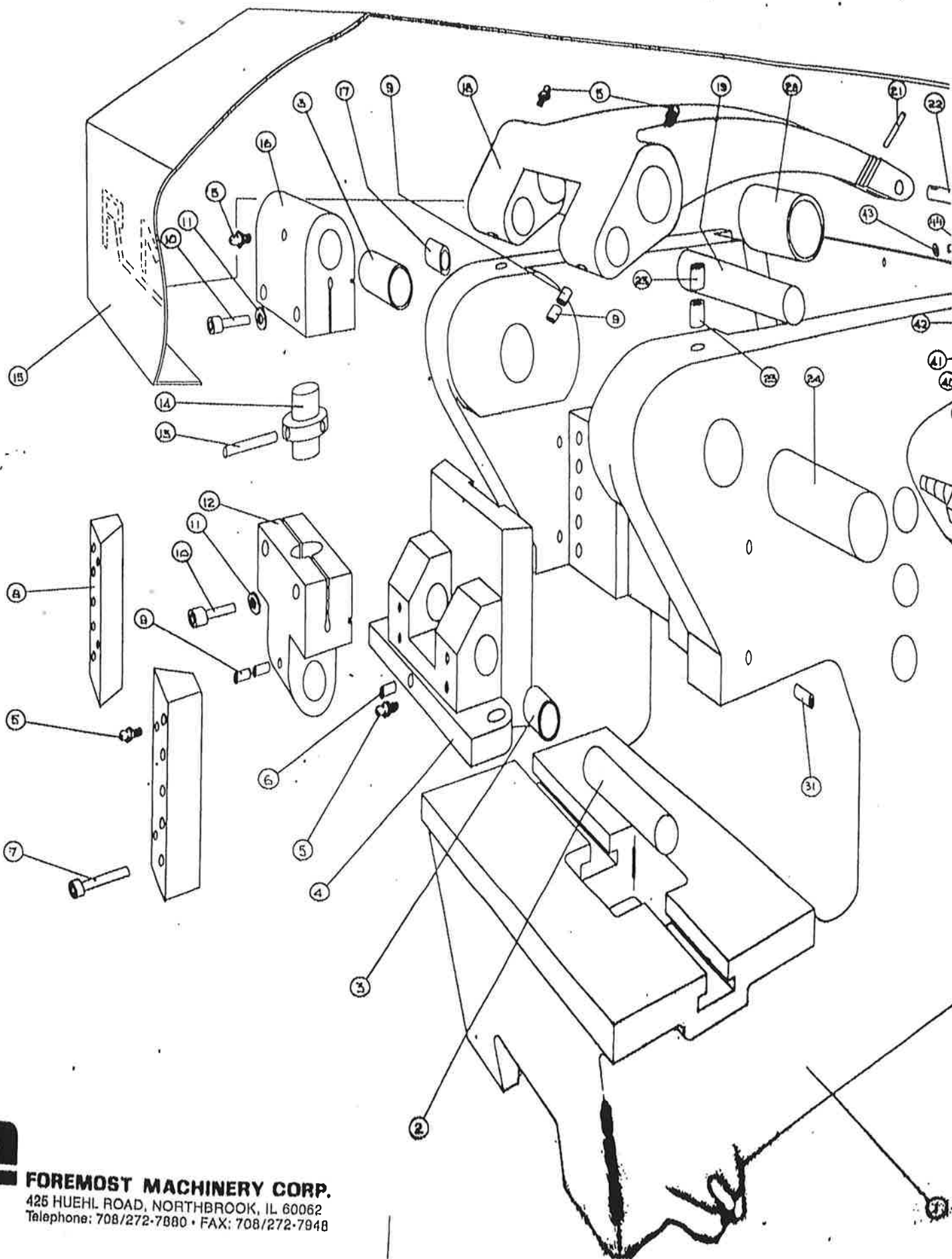
<u>ITEM</u>	<u>QTY</u>	<u>PART NBR</u>	<u>DESCRIPTION</u>
1	1	R2016/1	BODY
2	1	R2016/2	PIN, RAM
3	4	R2016/3	BUSHING
4	1	R2016/4	RAM
5	7	R2016/5	GREASE NIPPLE
6	1	R2016/6	SET SCREW, 5/16-24 X 3/4" LG
7	4	R2016/7	3/8-16 X 2 LG SHCS
8	2	R2016/8	GIB STRIP
9	4	R2016/9	SET SCREW
10	4	R2016/10	SOCKET HEAD CAP SCREW
11	4	R2016/11	FLAT WASHER
12	1	R2016/12	SWIVEL BLOCK
13	Ref	R2016/13	TOMMY BAR
14	1	R2016/14	RAM ADJUSTING SCREW
15	1	R2016/15	COVER, TOP
16	1	R2016/16	RAM LINK CLAMP
17	2	R2016/17	BUSHING
18	1	R2016/18/16T	LINK ARM, 18 TON, 2 1/2" STROKE
		R2016/18/18T	LINK ARM, 20 TON, 2" STROKE
		R2016/18/20T	LINK ARM, 24 TON, 1 1/2" STROKE
19	1	R2016/19	PIN, LINK
20	2	R2016/20	BUSHING, LINK
21	1	R2016/21	ROLL PIN
22	1	R2016/22	PIN, CYLINDER LINK
23	4	R2016/23	SET SCREW, 5/16-18 X 1/2" LG
24	2	R2016/24	PIN, PIVOT
25			
26	1	R2016/26	COVER PLATE, UPPER
27	12	R2016/27	LOCKWASHER
28	12	R2016/28	2 BA X 1/2" LG SHCS
29	1	R2016/29	BULKHEAD FITTING
30	1	R2016/30	ELBOW, 1/8" BSP - 90 DEGREE
31	4	R2016/31	SET SCREW
32	1	R2016/32	HOSE BARB
33	1	R2016/33	SHUT-OFF VALVE
34	1	R2016/34	ELBOW, F/F
35	2	R2016/35	NUT, BSP
36	1	R2016/36	COVER PLATE, LOWER
37	2	R2016/37	ELBOW, M/F
38	2	R2016/38	PIN, TRUNNION
39	2	R2016/39	SCREW, 2 BA
40	2	R2016/40	BUMPER
41	2	R2016/41	WASHER
42	2	R2016/42	BRACKET
43	2	R2016/43	LOCKWASHER
44	2	R2016/44	SOCKET HEAD CAP SCREW

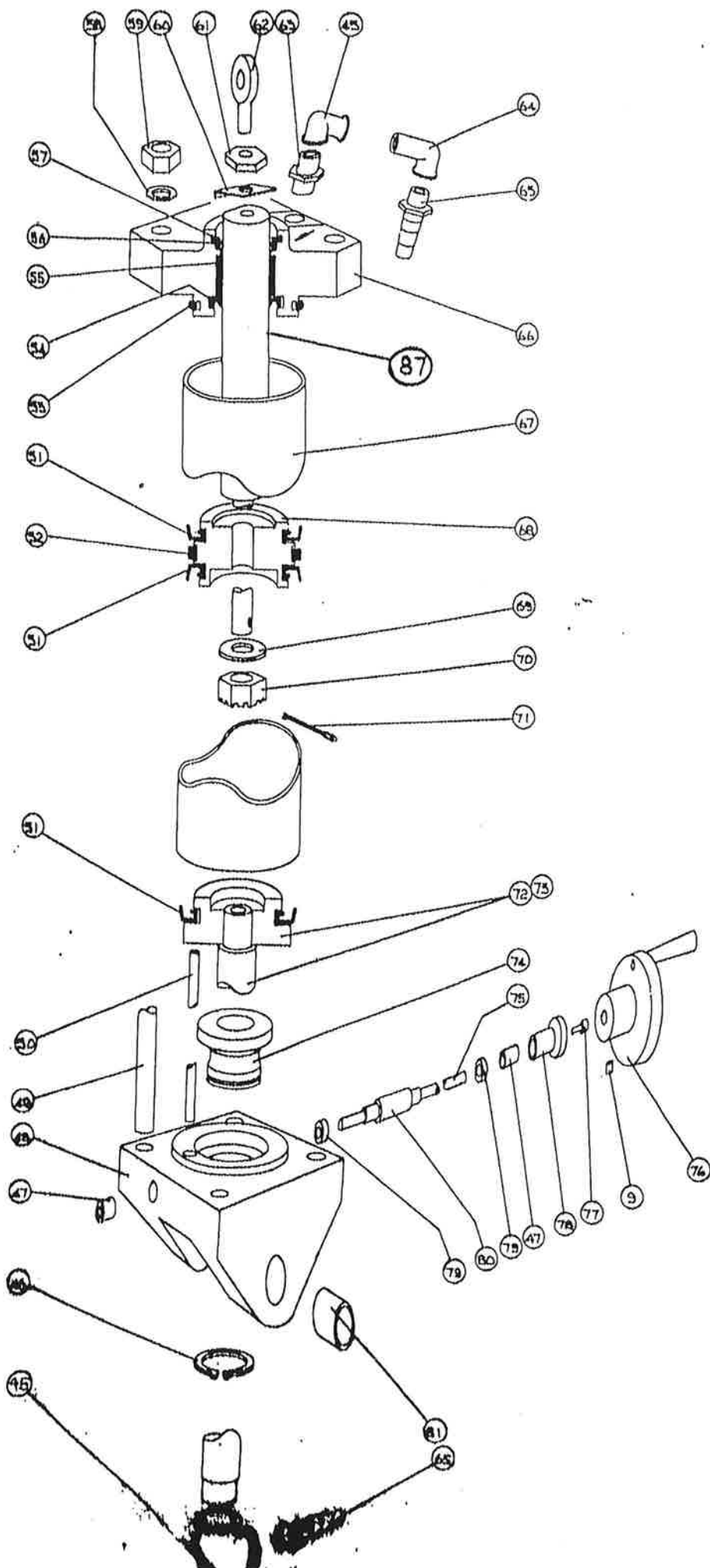
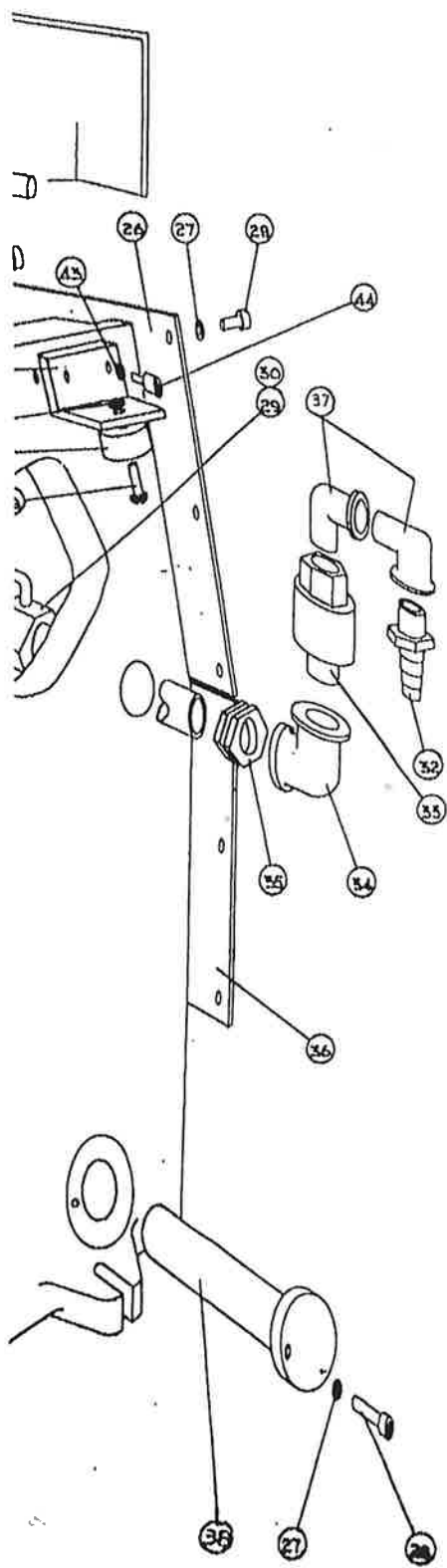
45	2	R2016/45	ELBOW, F/F
46	1	R2016/46	SNAP RING
47	2	R2016/47	BUSHING, WORMSHAFT
48	1	R2016/48	CYLINDER REAR END
49	4	R2016/49	TIE ROD
50	1	R2016/50	STAY BAR
51	3	R2016/51+	SEAL, PISTON
52	1	R2016/52+	WEAR RING
53	1	R2016/53+	O RING
54	1	R2016/54+	SEAL, PISTON ROD
55	1	R2016/55+	BUSHING, PISTON ROD
56	1	R2016/56+	SEAL, WIPER
57	1	R2016/57	SNAP RING
58	1	R2016/58	WASHER
59	1	R2016/59	NUT
60	1	R2016/60	WASHER TAB
61	1	R2016/61	NUT
62	1	R2016/62	ROD END
63	1	R2016/63	COUPLING
64	1	R2016/64	ELBOW, M/F
65	2	R2016/65	HOSE BARB
66	1	R2016/66	CYLINDER HEAD
67	1	R2016/67	CYLINDER TUBE
68	1	R2016/68	PISTON HEAD
69	1	R2016/69	WASHER
70	1	R2016/70	NUT, SLOTTED
71	1	R2016/71	COTTER PIN
72	1	R2016/72#	CYLINDER ADJUSTING HEAD
73	1	R2016/73#	CYLINDER ADJUSTING SCREW
74	1	R2016/74	WORM NUT
75	1	R2016/75	WORM SHAFT EXTENSION
76	1	R2016/76	HANDWHEEL
77	1	R2016/77	2 BA X 3/8" LG SHCS
78	1	R2016/78	SLEEVE
79	2	R2016/79	WASHER, THRUST
80	1	R2016/80	WORM SHAFT
81	2	R2016/81	BUSHING, CYLINDER REAR END
82	1	R2016/82*	BRACKET, GUARD LOCK
83	1	R2016/83*	NUT, NYLOC
84	1	R2016/84*	FLAT WASHER
85	1	R2016/85*	PLATE, GUARD LOCK
86	1	R2016/86*	1/4 BSF X 1 1/4" LG SHCS
87	1	R2016/87	PISTON ROD
88	1	RDGRD*	"D" MODEL GATE GRD, W/O HDWE.
		RDWBGRD*	"D" MODEL WIDE BED GUARD ONLY
89	12	R2016PB*	PISTON BUMPERS

* - PARTS NOT SHOWN

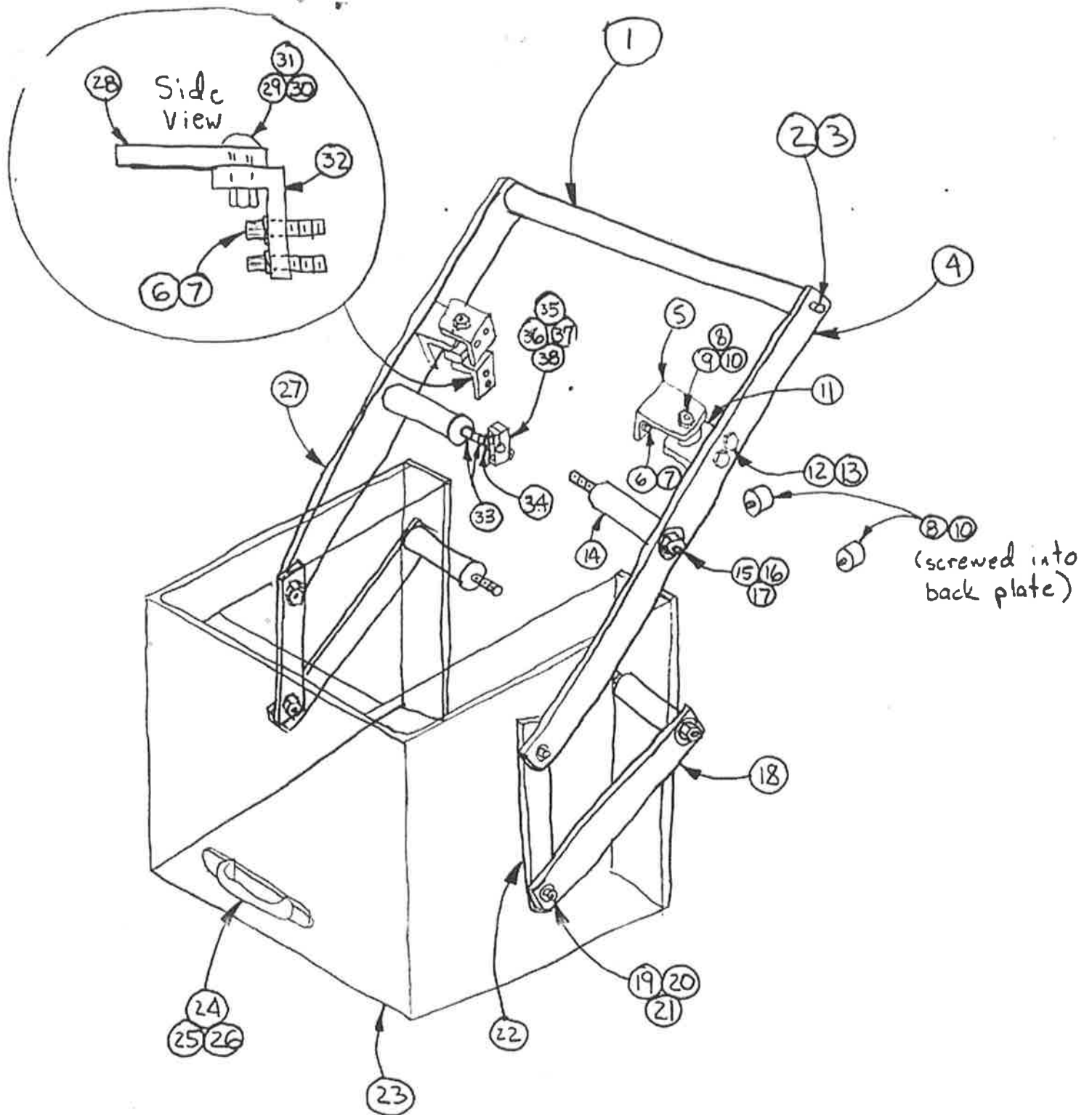
- SOLD ONLY AS AN ASSEMBLY

+ - SOLD ONLY AS A KIT





'D' Press Guard



FOREMOST MACHINERY CORPORATION

425 Huehl Road, Northbrook, Illinois 60062
Tel: (708)272-7880 FAX: (708)272-7948

RMT 'D' PRESS SAFETY GUARD PARTS LIST

<u>ITEM</u>	<u>QTY</u>	<u>PART NO.</u>	<u>DESCRIPTION</u>
1	1	RG01D	COUNTERWEIGHT, 1-3/8 OD X 19-3/4 LG.
2	2	RH02	S.H.C.S., 5/16-22 BSF X 3.4 LG.
3	2	RH03	LOCKWASHER, 5/16
4	1	RG02D	BRACKET, LONG, 1/4 X 1-1/4 X 30-3/4 LG.
5	2	RG03D	BRACKET, BUMPER, 1/4 X 1-3/16 X 3-1/8 X 2-1/4 WIDE
6	6	RH13	S.H.C.S., 1/4-26 BSF X 3/4 LG.
7	6	RH14	LOCKWASHER, 1/4
8	4	RH22	MACHINE SCREW, SLOTTED ROUND HEAD, 2 BA X 1 LG.
9	2	RH23	NUT, 2 BA
10	4	RG04ABCD	BUMPER, 1-3/8 OD X 1 T
11	2	RG04D	BRACKET, ANGLE, 1/4 X 1-3/16 X 2-3/8 X 2-1/4 WIDE
12	4	RH26	H.H.C.S., 1/4-26 BSF X 3/4 LG.
13	4	RH16	NUT, NYLOC, 1/4-26 BSF
14	3	RG05D -	SPACER, 1-1/4 OD X 4-1/2 LG.
15	3	RG06D	STUD, THREADED, 1/2 OD X 6-3/8 LG. CASTING: 1/2-13 X 5/8 LG. BRACKET: 1/2-20 X 1 LG.
16	3	RH27	WASHER, 1/2 ID, 1-1/8 OD, .093 T
17	3	RH28	NUT, NYLOC, 1/2-20
18	2	RG07D	BRACKET, SHORT, 1/4 X 1-1/4 X 12-3/4 LG.
19	4	RH29	S.H.C.S., 5/16-18 X 1/2 LG.
20	4	RH30	WASHER, 5/16 ID, 3/4 OD, .074 T
21	4	RG08D	NUT, SPECIAL FLANGED

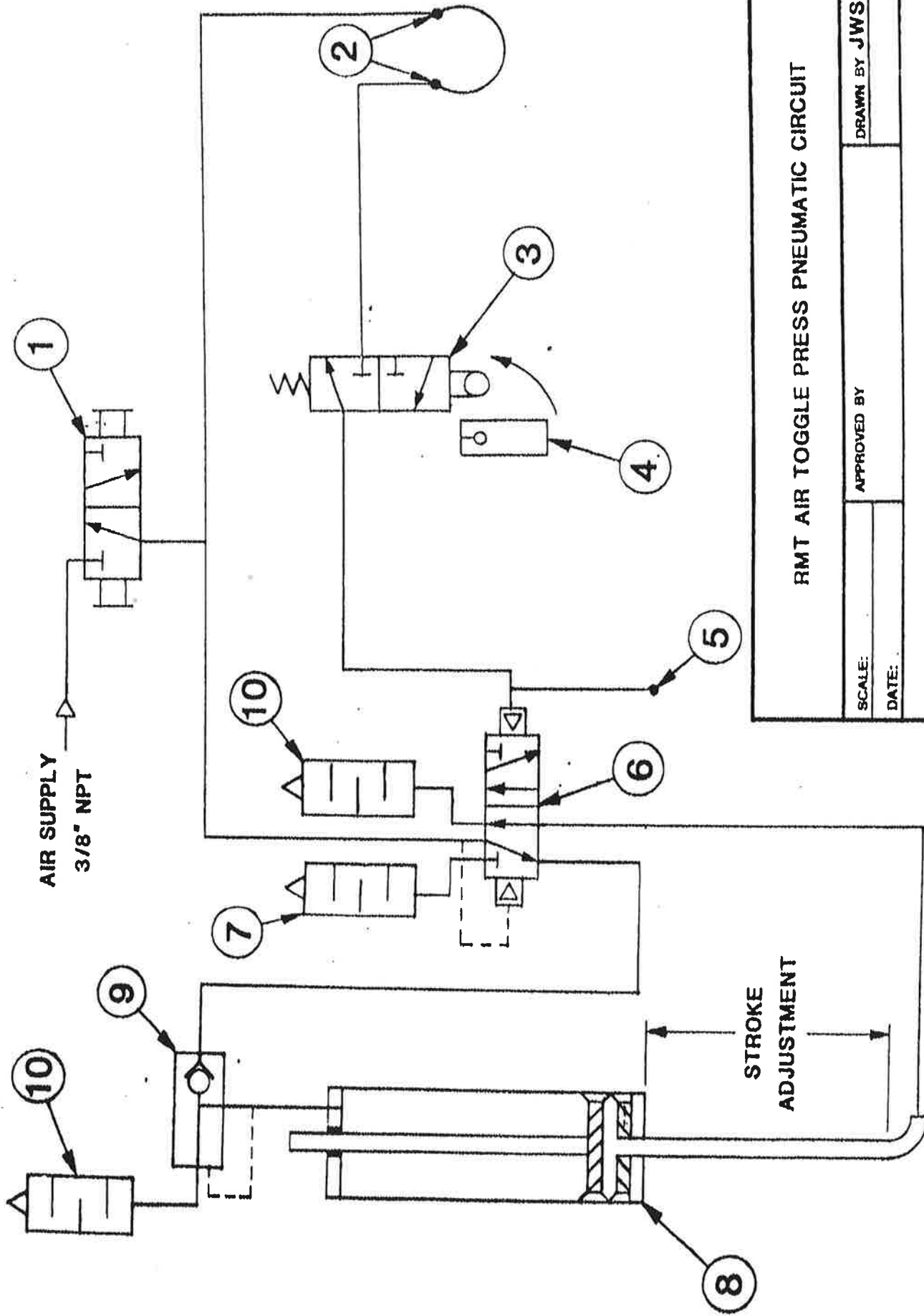
<u>ITEM</u>	<u>QTY</u>	<u>PART NO.</u>	<u>DESCRIPTION</u>
22	2	RG09D	BRACKET, GUARD, 1/4 X 1-1/4 X 9-5/16 LG.
23	1	RDGRD	GUARD
24	1	RG01ABCD	HANDLE, GUARD
25	2	RH08	S.H.C.S., 1/4-20 X 3/4 LG.
26	1	RG02ABCD	BRACKET, HANDLE, 1/8 X 1 X 7-7/16 LG.
27	1	RG10D	BRACKET & SPACER WELDMENT, 1/4 X 1-1/4 X 30-3/4 LG.
28	1	RG02AD	LATCH, GUARD, 1/4 X 2-7/8 X 1-3/16 WIDE
29	1	RH15	B.H.C.S., 1/4-26 BSF X 1 LG.
30	1	RH07	WASHER, 1/4 ID, 5/8 OD, .056 T
31	1	RH16	NUT, NYLOC, 1/4-26 BSF
32	1	RG01AD	BRACKET, ANGLE, 3/16 X 1-5/8 X 2 X 1-3/16 WIDE
33	2	RG11D	BUSHING, BRONZE, 1/2 ID, 5/8 OD, 1/2 LG.
34	1	RH09	WASHER, 3/8 ID, 7/8 OD, .049 T
35	1	RG03ABCD	LEVER, RAM ACTUATING
36	1	RH10	H.H.C.S., ROUNDED HEAD, 1/4-26 BSF X 1 LG
37	1	RH11	NUT, 1/4-26
38	1	RH17	H.H.C.S., 1/4-26 BSF X 5/8 LG.
39*	1	RG12D	BRACKET, QUICK EXHAUST, 1/4 X 2 X 3 X 2-1/4 WIDE
40*	2	RH18	H.H.C.S., 5/16-18 X 3/4 LG. (RG12D)
41*	2	RH03	LOCKWASHER, 5/16 (RG12D)
42*	2	RH20	H.H.C.S., 2 BA X 1 LG. (C)
43*	2	RH21	LOCKWASHER, 2 BA (C)
44*	2	RH32 RH31	H.H.C.S., 5/16-18 X 1-1/4 LG. (A) H.H.C.S., 5/16-18 X 2 LG. (B)
45*	2	RH03	LOCKWASHER, 5/16 (A B)
46*	2	RH33	NUT, 5/16-18 (A B)

* - VALVE HARDWARE (NOT SHOWN ON DRAWING)

A - FOR MARTONAIR VALVE NO. UM/22456/40

B - FOR SCHRADER-BELLOWS VALVE NO. 3458MP

C - FOR SCHRADER-BELLOWS VALVE NO. 43003CS



RMT AIR TOGGLE PRESS PNEUMATIC CIRCUIT			
SCALE:	APPROVED BY	DRAWN BY JWS	
DATE:			
FOREMOST MACHINERY CORPORATION, NORTHBROOK, IL			
SHEET 1 OF 2		DRAWING NUMBER RMTPCD	

ITEM	QTY	PART NO.	DESCRIPTION
1	1	R2016/33	SHUT OFF SLEEVE VALVE
2	2		1/8" NPT PORTS FOR OPTIONAL CONTROLS (JUMPERED)
3	1	B43003CS	3 PORT, 2 POSITION, 3 WAY VALVE
4	1		RAM TRIP LEVER (GUARD ACTUATED)
5	1		1/8" NPT PORT FOR PRODUCTION COUNTER (PLUGGED)
6	1	B3458 MP	5 PORT, 2 POSITION, 4 WAY VALVE
7	1	B476	MUFFLER
8	1		ADJUSTABLE STROKE CYLINDER
9	1	B3340D	QUICK EXHAUST
10	2	566	MUFFLER

SINGLE CYCLE OPERATION

1. INSERT MATERIAL INTO DIE.
2. MANUALLY LOWER PLASTIC GUARD. ONCE IT IS DOWN, LEVER (4) OPERATES VALVE (3) SHIFTING VALVE (6) TO ADVANCE AIR CYLINDER (8).
3. RAM WILL ADVANCE TO BOTTOM OF STROKE AND REMAIN THERE UNTIL THE PLASTIC GUARD IS RELEASED.

WARNING

1. SHUT OFF AIR SUPPLY BEFORE MAKING ADJUSTMENTS OR TOOL CHANGES.
2. DO NOT REMOVE GUARD OR MODIFY AIR CIRCUIT WITHOUT SAFETY PRECAUTION.
3. DO NOT REPOSITION TRIP LEVER WITHOUT SAFETY PRECAUTION. LEVER IS PRESET AT FACTORY TO TRIP PRESS ONLY WHEN GUARD IS WITHIN 1/4" OF ENCLOSING DIE SPACE.

RMT AIR TOGGLE PRESS PNEUMATIC CIRCUIT

SCALE:

APPROVED BY:

DRAWN BY

DATE:

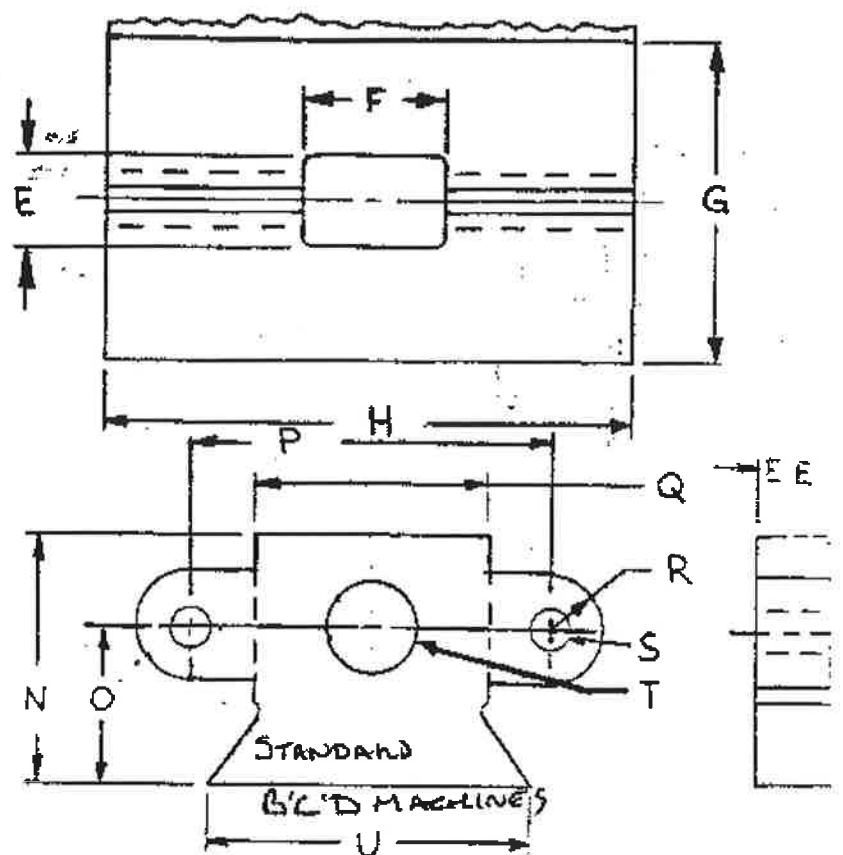
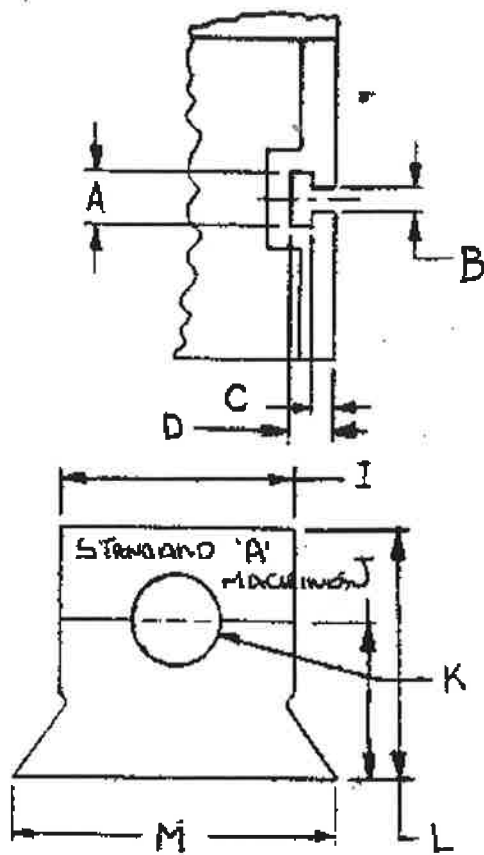
REVISED

FOREMOST MACHINERY CORPORATION

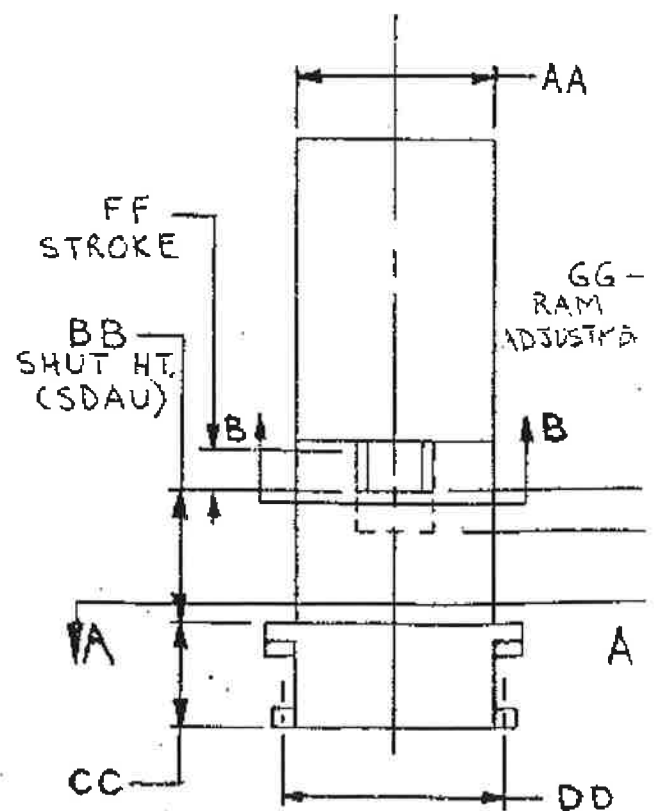
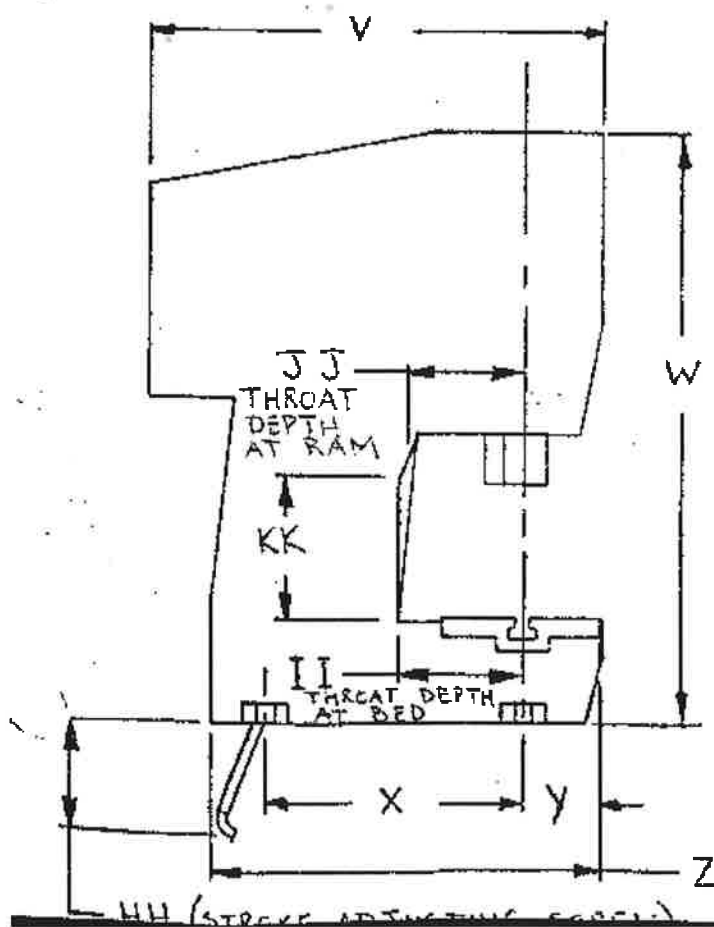
SHEET 2 OF 2

DRAWING NUMBER

RMTPCD



SECTION A-A (RAM ONLY, CLAMP) SECTION B-B (RAM ONLY, FLANGED)



RMT AIR TOGGLE PRESSES

DIMENSIONS AND SPECIFICATIONS

DESCRIPTION		MACHINE MODEL NUMBER									
"T" SLOT											
		3A	5B	7B	6C	8C	10C	12C	18D	20D	24D
A	width at top	1-3/16"	1-3/8"	1-3/8"	1-1/2"	1-1/2"	1-1/2"	1-1/2"	1-1/2"	1-1/2"	1-1/2"
B	width at bottom	17/32"	11/16"	11/16"	3/4"	3/4"	3/4"	3/4"	3/4"	3/4"	3/4"
C	depth at top	1/2"	1/2"	1/2"	1/2"	1/2"	1/2"	1/2"	5/8"	5/8"	5/8"
D	depth overall	1"	1-1/8"	1-1/8"	1-1/8"	1-1/8"	1-1/8"	1-1/8"	1-1/4"	1-1/4"	1-1/4"
BED - optional wide bed available on "C" and "D" models only											
		3A	5B	7B	6C	8C	10C	12C	18D	20D	24D
E	bed hole, F-B	2"	3"	3"	3"	3"	3"	3"	4"	4"	4"
F	bed hole, L-R	3-1/8"	3-1/4"	3-1/4"	3-1/2"	3-1/2"	3-1/2"	3-1/2"	4-1/2"	4-1/2"	4-1/2"
G	bed depth	7"	8"	8"	9"	9"	9"	9"	12"	12"	12"
H	bed width	11-3/4"	12"	12"	14"	14"	14"	14"	18"	18"	18"
H	bed width - wide bed	N/A	N/A	N/A	20"	20"	20"	20"	24"	24"	24"
CLAMP RAM - standard on "A" machines, optional on "B" and "C" machines, not available on "D" machines											
		3A	5B	7B	6C	8C	10C	12C	18D	20D	24D
I	width at front	2-9/16"	3-1/8"	3-1/8"	3-1/8"	3-1/8"	3-1/8"	3-1/8"	N/A	N/A	N/A
J	back to hole center	1-3/4"	1-3/4"	1-3/4"	1-3/4"	1-3/4"	1-3/4"	1-3/4"	N/A	N/A	N/A
K	hole diameter	1"	1-9/16"	1-9/16"	1-9/16"	1-9/16"	1-9/16"	1-9/16"	N/A	N/A	N/A
K	hole depth	1-1/4"	2"	2"	2"	2"	2"	2"	N/A	N/A	N/A
L	front to back	2-3/4"	3"	3"	3"	3"	3"	3"	N/A	N/A	N/A
M	width at back	3-9/16"	3-7/8"	3-7/8"	3-7/8"	3-7/8"	3-7/8"	3-7/8"	N/A	N/A	N/A
FLANGE RAM - not available on "A" machines, standard on "B", "C" and "D" machine											
		3A	5B	7B	6C	8C	10C	12C	18D	20D	24D
N	front to back	N/A	3-3/8"	3-3/8"	3-3/8"	3-3/8"	3-3/8"	3-3/8"	4-1/4"	4-1/4"	4-1/4"
O	back to hole centers	N/A	1-3/4"	1-3/4"	1-3/4"	1-3/4"	1-3/4"	1-3/4"	2-1/2"	2-1/2"	2-1/2"
P	hole centers	N/A	3-15/16"	3-15/16"	3-15/16"	3-15/16"	3-15/16"	3-15/16"	5-1/2"	5-1/2"	5-1/2"
Q	width at front	N/A	2-3/4"	2-3/4"	2-3/4"	2-3/4"	2-3/4"	2-3/4"	4-1/8"	4-1/8"	4-1/8"
R	flange radius	N/A	5/8"	5/8"	5/8"	5/8"	5/8"	5/8"	3/4"	3/4"	3/4"
S	flange hole diameter	N/A	9/16"	9/16"	9/16"	9/16"	9/16"	9/16"	9/16"	9/16"	9/16"
T	ram hole diameter	N/A	1-9/16"	1-9/16"	1-9/16"	1-9/16"	1-9/16"	1-9/16"	1-9/16"	1-9/16"	1-9/16"
T	ram hole depth	N/A	2"	2"	2"	2"	2"	2"	3"	3"	3"
U	width at back	N/A	3-7/8"	3-7/8"	3-7/8"	3-7/8"	3-7/8"	3-7/8"	5-1/4"	5-1/4"	5-1/4"
BASIC DIMENSIONS											
		3A	5B	7B	6C	8C	10C	12C	18D	20D	24D
V	overall depth at top	20"	18"	18"	21"	21"	21"	21"	32"	32"	32"
W	overall height	25"	30"	30"	35"	35"	35"	35"	44-1/2"	44-1/2"	44-1/2"
X	hole centers, F-B	11-1/2"	12"	12"	14"	14"	14"	14"	23"	23"	23"
Y	front to front holes	3-3/8"	3-7/8"	3-7/8"	4-3/8"	4-3/8"	4-3/8"	4-3/8"	5-7/8"	5-7/8"	5-7/8"
Z	overall depth at base	17-1/4"	19-1/4"	19-1/4"	23"	23"	23"	23"	32"	32"	32"
AA	width at top	9"	10"	10"	12"	12"	12"	12"	12"	12"	12"
BB	shut height - SDAU	6"	7"	7-11/16"	6-3/4"	7-1/2"	8"	8-1/2"	8-1/2"	9"	9-1/2"
CC	base to bed	4-3/4"	5-1/4"	5-1/4"	7"	7"	7"	7"	10-5/8"	10-5/8"	10-5/8"
DD	hole centers, L-R	10-1/2"	10-1/2"	10-1/2"	12-7/8"	12-7/8"	12-7/8"	12-7/8"	12-3/4"	12-3/4"	12-3/4"
EE	flange thickness	N/A	7/8"	7/8"	7/8"	7/8"	7/8"	7/8"	1"	1"	1"
FF	maximum stroke	2"	2"	1-5/16"	3-1/4"	2-1/2"	2"	1-1/2"	2-1/2"	2"	1-1/2"
GG	ram adjustment	1/2"	3/4"	3/4"	1"	1"	1"	1"	5/8"	5/8"	5/8"
HH	max. extend below	0"	0"	0"	6-1/2"	6-1/2"	6-1/2"	6-1/2"	13"	13"	13"
II	throat depth at bed	5-1/2"	5-1/2"	5-1/2"	8-1/2"	8-1/2"	8-1/2"	8-1/2"	8-7/8"	8-7/8"	8-7/8"
JJ	throat depth at ram	5"	5"	5"	7-1/2"	7-1/2"	7-1/2"	7-1/2"	6-1/2"	6-1/2"	6-1/2"
KK	height of back surface	N/A	N/A	N/A	N/A	N/A	N/A	N/A	6-1/2"	6-1/2"	6-1/2"



RMT AIR TOGGLE PRESS WARRANTY CERTIFICATE

As part of the purchase of a new RMT Pneumatic Toggle Press, a parts warranty will be included. The warranty begins at the point of initial shipment and will not automatically be passed along to second owners. The warranty applies to equipment, which has been installed, protected, maintained and used in accordance with the specifications and instructions of the manufacturer, for its intended purposes, without modification, misuse or abuse by the PURCHASER.

Mechanical parts and components are warranted for a period of 12 months from the date of shipment.
Pneumatic parts and components are warranted for a period of 90 days from the date of shipment.

PARTS WARRANTY: In the event of a problem, the purchaser contacts RMT's American Master Distributor whose service technicians will provide over the phone trouble shooting measures to resolve the situation. The purchaser is responsible for executing all required troubleshooting steps to determine the problem. If it is determined that any part has failed due to a defect in material or workmanship within the Warranty Period (defined above), a replacement part will be provided free of charge except for the freight costs which are the purchaser's responsibility. The purchaser is responsible for installing any replacement parts and/or all labor charges associated with installation of replacement parts. The purchaser may be required to send damaged parts prepaid to RMT's American Master Distributor for inspection. Replacement parts are warranted only for the balance of the original Warranty Period.