

TROUBLE SHOOTING HYDRAULIC CYLINDER, Continued

cylinder and damage to the cylinder may occur. Any time this occurs, release all pressure and disassemble the cylinder to determine the cause. (See servicing cylinder or servicing stroke limiting valve).

After flushing the valve, retract the ram and test. If leaking is still present, this procedure may be repeated before continuing on with any disassembly operations.

If this did not successfully stop the leaking, close the release valve handle and raise the ram sharply against the oil cushion by means of the spike handwheel. This tends to force the ball (Item C-22) firmly on its seat. Test again for pressure.

If the leak still persists, bring the ram down within 1/2" of the bottom of its stroke and block the ram. Remove the set screw (Item C-16) which locks the pinion (Item C-15) in place and withdraw the pinion. Remove the cap screws (Items C-27) which hold the cylinder head in place. Lower the head down to the table plate.

Once again, apply pressure with the hand pump.

NOTE: Observe pressure gauge. Do not allow pressure in the cylinder to increase over 1000 PSI.

With the aid of a flash light, determine whether the leak occurs at the stroke limiting valve, around the joint between the ram and piston (due to loose piston nut Item C-2), or between the cylinder wall and piston seal as a result of a worn piston seal or damaged cylinder wall.

If it is determined that the leak is in the cylinder, see the section on servicing cylinder or servicing stroke limiting valve.

If it is determined that the cylinder piston seal (Item C-6) and the stroke limiting valve (Items C-20 thru C-25) do not leak, the piston lock nut (Item C-2) is tight, and the pump handle does not rebound, then the release valve

TROUBLE SHOOTING HYDRAULIC CYLINDER, Continued

located within the reservoir is the probable fault. The usual cause is dirt stuck in the release valve seat.

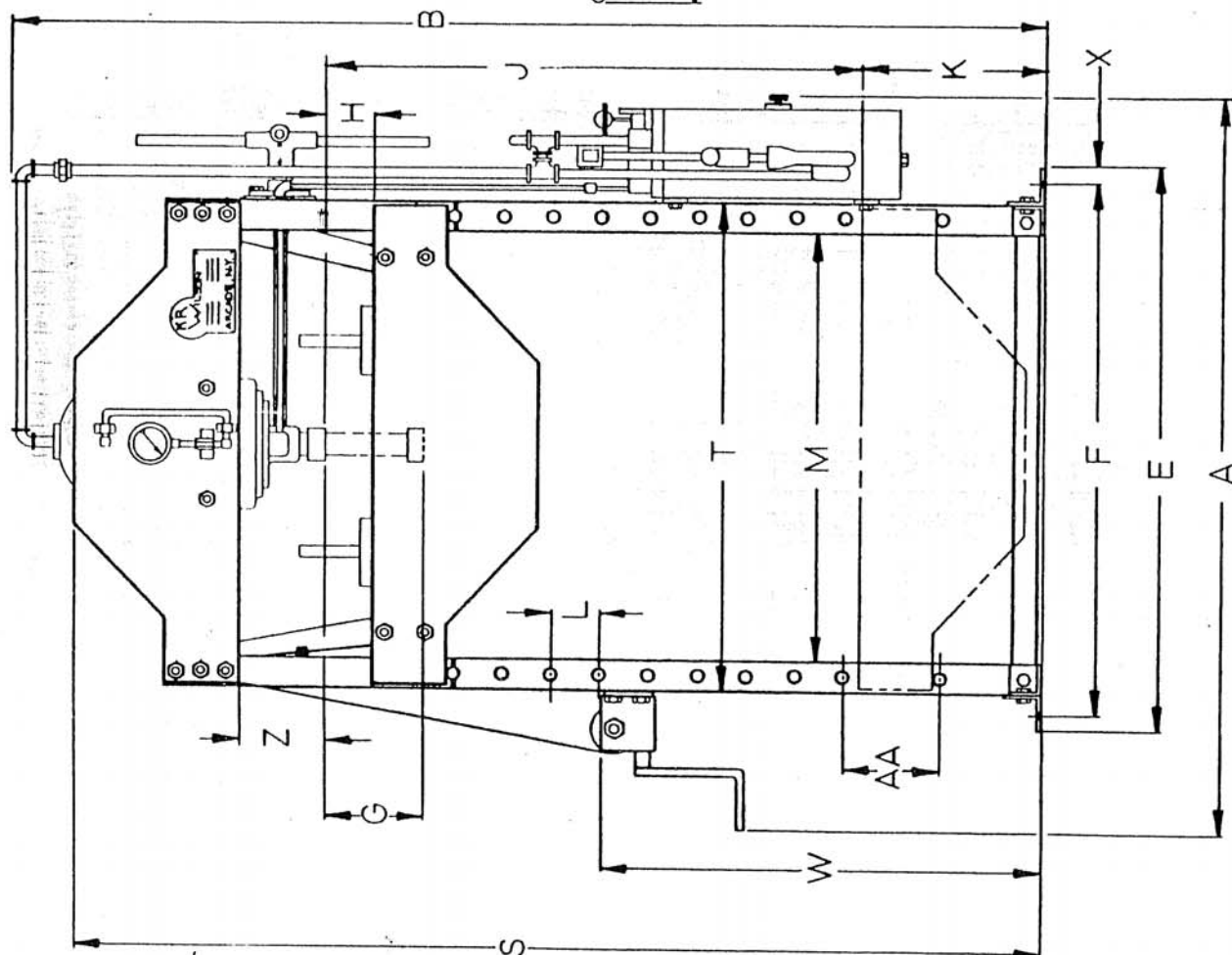
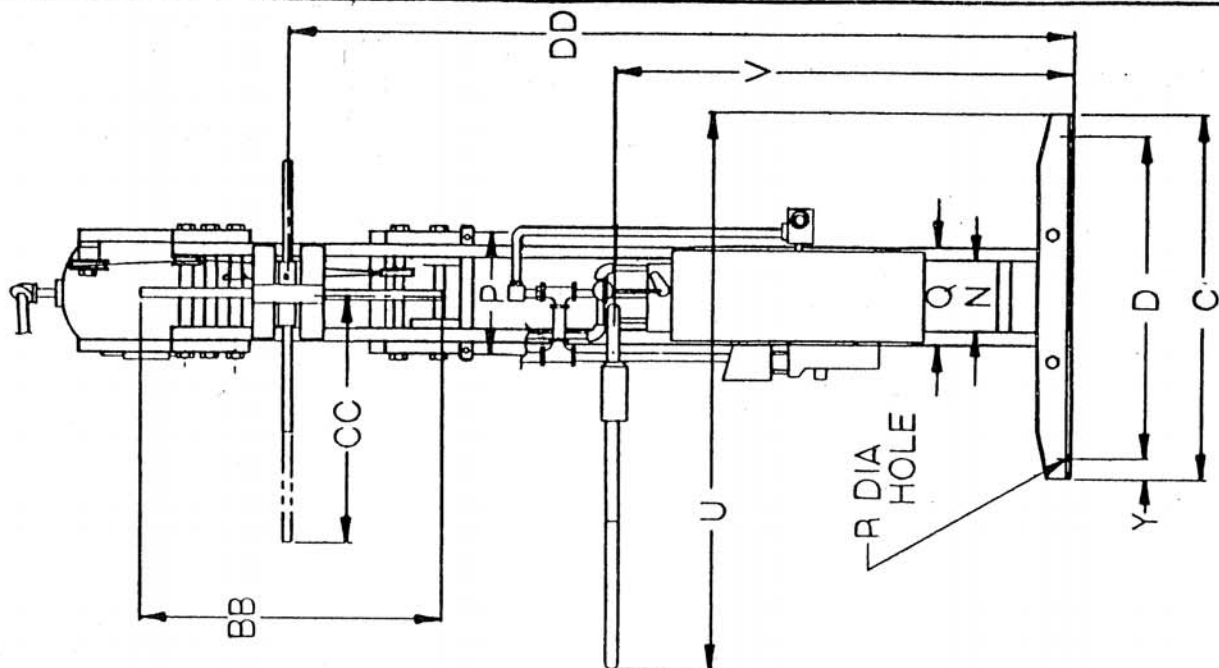
Frequently this dirt can be dislodged by placing the release valve handlever in the open position (toward the front of the press) rapidly traversing the cylinder ram (Item C-28) through the use of the spike handwheel (C-1-2431 Item 7). Return the release valve to the closed position (toward the rear of the press) and test.

If this did not successfully stop the leaking, the release valve may be out of adjustment. Readjust the release valve and test again. (See Adjustment and Servicing of Release Valve.)

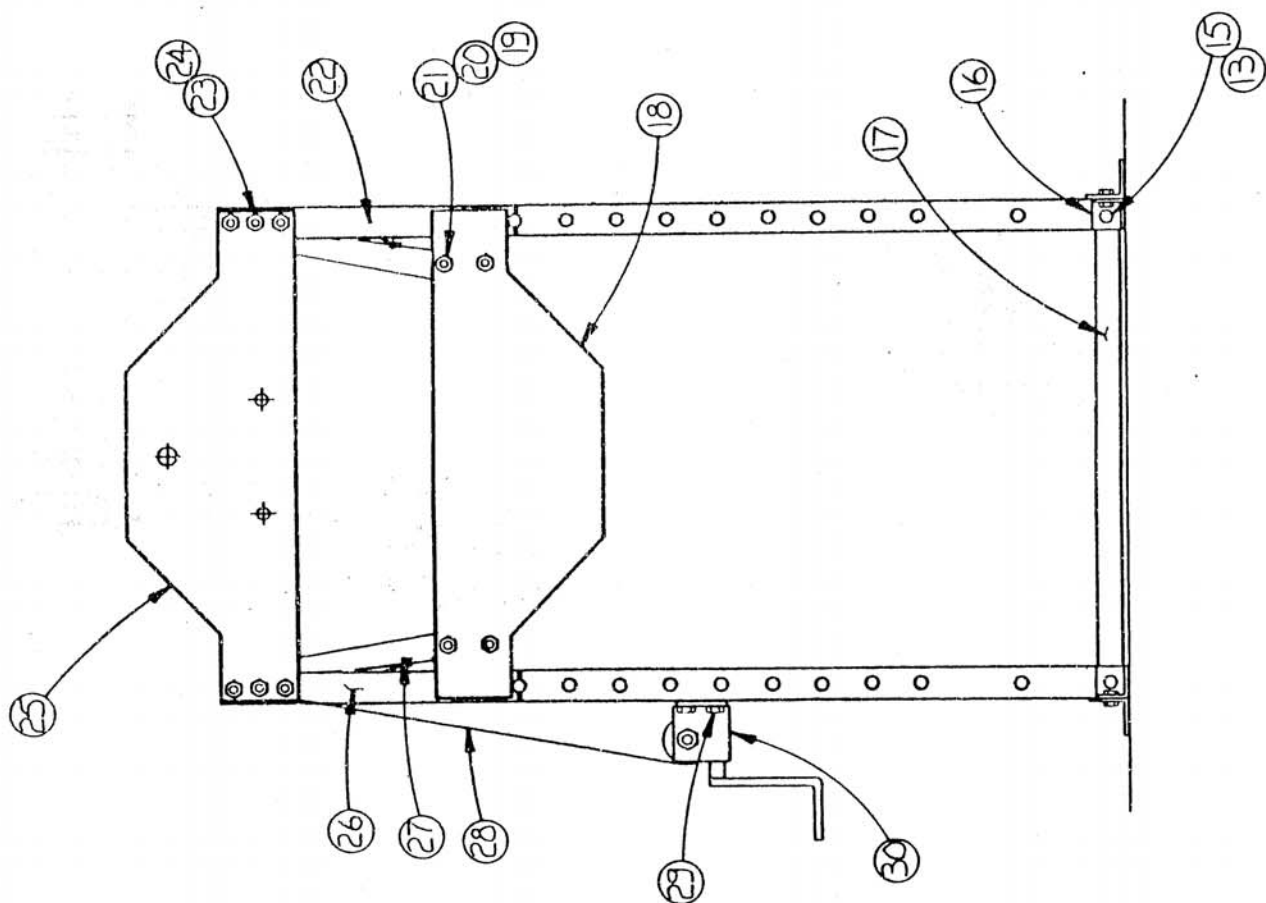
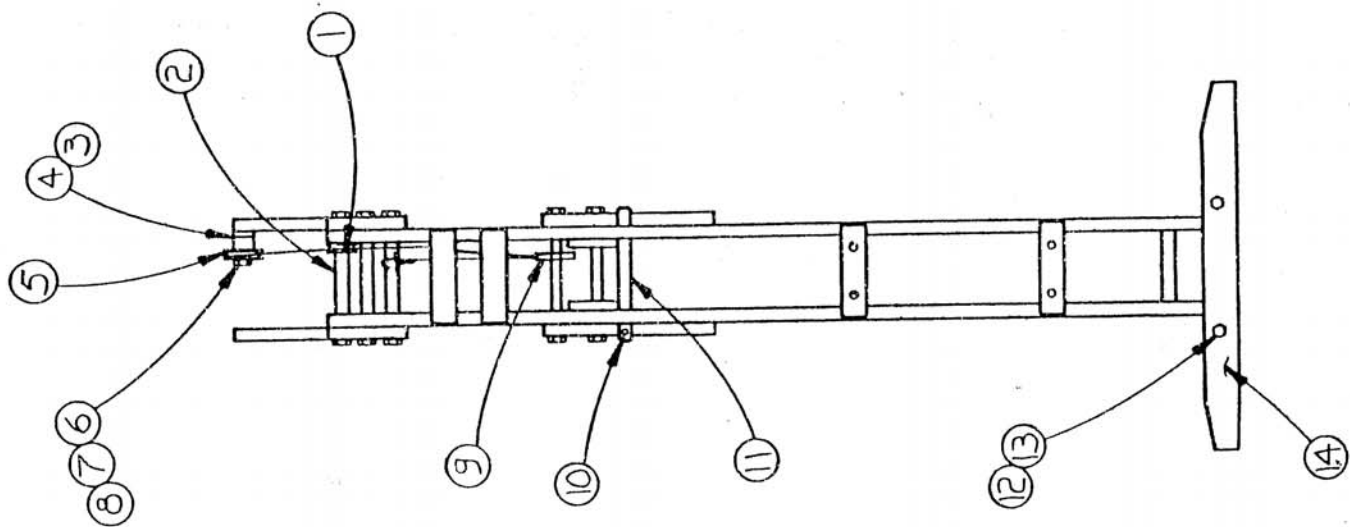
If the leak still exists, the release valve may have to be disassembled and serviced. (See Adjustment and Servicing of Release Valve.)

SPECIFICATION DESCRIPTION		25 TON MODEL 37	50 TON MODEL 37E	60 TON MODEL 37G	75 TON MODEL 37F	100 TON MODEL 37K
Cylinder Working Pressure		2550	5100	6100	5300	5200
Cylinder Bore Diameter		5	5	5	6	7
Press Capacity in Tons		25	50	60	75	100
Cylinder Rod Diameter		2½	2½	2½	2 15/16	2 15/16
Table Travel		40	40	40	35	36
Mechanical Press Capacity in Tons		3	3	3	3	3
Mechanical Press Leverage Ratio	Standard	38:1	38:1	38:1	38:1	38:1
	Government	48:1	48:1	48:1	48:1	48:1
Table Pin Diameter		7/8	1 1/8	1 1/8	1 1/4	1 1/2
Crown & Table Plate Size		3/4x6	1x 13	1x13½	1x 15	1½x16 3/4
Frame Upright Size		3/4x2	1x 2½	1x 2½	1½x 3	1½x 4
Single Pump Output/Stroke in Cu.In.		.841	.841	.841	.841	.841
Double Pump Output/Stroke in Cu.In.		2.053	2.053	2.053	2.053	2.053
Pump Plunger Travel		2 3/4	2 3/4	2 3/4	2 3/4	2 3/4

DIMENSION	DESCRIPTION	25 TON MODEL 37	50 TON MODEL 37E	60 TON MODEL 37G	75 TON MODEL 37F	100 TON MODEL 37K
A	OVERALL LEFT TO RIGHT	49 1/4	54	62	69	78 1/4
B	OVERALL HEIGHT		83	83	81 3/4	99
C	FLOOR MOUNTING SURFACE FRONT TO BACK	30	30	30	36	36
D	FLOOR MOUNTING HOLE SPACING FRONT TO BACK	28	28	28	32	32
E	FLOOR MOUNTING SURFACE LEFT TO RIGHT	34 1/4	42	47 1/4	56	61 1/2
F	MOUNTING HOLE SPACING LEFT TO RIGHT	31 1/2	39 1/4	44 1/2	51 3/4	57 1/4
G	STROKE	7 1/2	7 1/2	7 1/2	7 1/2	13 1/4
H	MINIMUM DAYLIGHT		4 5/8	4 5/8		
J	MAXIMUM DAYLIGHT		44 5/8	44 5/8		
K	MINIMUM WORKHEIGHT	9 3/4	15 1/4	15 1/4	17 3/8	18 7/8
L	BED ADJUSTMENT INCREMENTS (SMALL)	4	4	4	4	4
M	DISTANCE BETWEEN UPRIGHTS LEFT TO RIGHT	24 1/4	31	36 1/4	42	45 1/2
N	DISTANCE BETWEEN UPRIGHTS FRONT TO BACK	5 1/2	6	6	6 1/2	8
P	TABLE DEPTH FRONT TO BACK	8 5/8	10 1/8	10 1/8	11 1/8	13 5/8
Q	DISTANCE BETWEEN TABLE PLATES	7 1/8	8 1/8	8 1/8	9 1/8	11 1/8
R	FLOOR MOUNTING HOLE DIAMETER	17/32	17/32	17/32	17/32	17/32
S	FRAME OVERALL HEIGHT	66 1/4	79 3/8	79 7/8	80 1/4	87 1/2
T	FRAME OVERALL WIDTH LEFT TO RIGHT	28 1/4	36	41 1/4	48	53 1/2
U	OVERALL PRESS DEPTH FRONT TO BACK	46	46	46	49 1/2	50 1/4
V	PUMP HANDLE HEIGHT	35 1/4	35 1/4	35 1/4	35 1/4	35 1/4
W	WINCH HEIGHT	36 3/4	36 3/4	36 3/4	36 3/4	36 3/4
X	MOUNTING HOLE LOCATION	1 3/8	1 3/8	1 3/8	1 7/8	1 7/8
Y	MOUNTING HOLE LOCATION	1	1	1	2	2
Z	CYLINDER MOUNTING SURFACE TO END OF RETRACTED RAM		6 1/2	6 1/2		
AA	BED ADJUSTMENT INCREMENTS (LARGE)	8	N/A	N/A	7	N/A
BB	HANDWHEEL SHAFT					
	LENGTH					
CC	RADIUS OF (EXTENDED) HANDWHEEL SHAFT					
DD	HANDWHEEL HEIGHT		62 1/2	62 1/2	60 1/2	65 1/2



REV.	DESCRIPTION	DATE	BY
REVISIONS			
DIMENSIONAL DATA			
DRAWN BY:	MM	DATE:	31 ST OCT 1980
CHECKED BY:	DHS		c-1-2432



REV.	DESCRIPTION	DATE	BY
REVISIONS			
FRAME ASSEMBLY		DATE 9TH SEPT. 1980	
DRAWN BY	MM	CHECKED BY	DHS
		C-1-2430	

FRAME ASSEMBLY

REFERENCE DRAWING C-1-2430

REF. NO.	DESCRIPTION	QTY	MODEL					PART NO.	DRAWING NO.
			37 (25)	37E (50)	37G (60)	37F (75)	37K(100)		
1	PULLEY	3	X	X	X			5014	(A) 5014
						X		7014	(A) 7014
							X	7014A	(A) 7014A
2	SPACER	2	X					5060-25	B-1-2254-B
				X	X			5060	B-1-2254-C
						X		7558	B-1-2254-D
							X	1058	B-1-2254-E
3	HEX HEAD CAP SCREW	2	X	X	X			5019-S	
		N/A				X	X		
4	BRACKET	1	X	X	X			5019	A-5019
						X		7015A	(A) 7015A
5	PULLEY	1				X		B-1-2405-A	B-1-2405-A
			X	X	X			5014-C	(A) 5014-C
6	HEX NUT	1				X	X	7015	(A) 7015
			X	X	X			4044-N	
						X		7015-D	(A) 7015-D
7	BUSHING	1					X	B-1-2405-C	B-1-2405-C
			X	X	X			5016	A-5016
8	HEX HEAD CAP SCREW	1				X	X	7015B	(A) 7015B
			X	X	X			4044	
						X		7015C	(A) 7015C
9	PULLEY	N/A	X					B-1-2405-B	B-1-2405-B
		2		X	X			5014B	
10	STOP PIN	2				X	X	7014B	(A) 7014B
		2	X	X	X	X	X	7001	
11	TABLE PIN	2	X					5000-25	(A) 5000-25
				X	X			5000-50/60	(A) 5000
						X		7000	(A) 7000
							X	1000	(A) 1000
12	HEX HEAD CAP SCREW	4	X	X	X	X	X	7563-S	
13	STANDARD HEX NUT	8	X	X	X	X	X	7563-N	
			37 (25)	37E (50)	37G (60)	37F (75)	37K(100)		

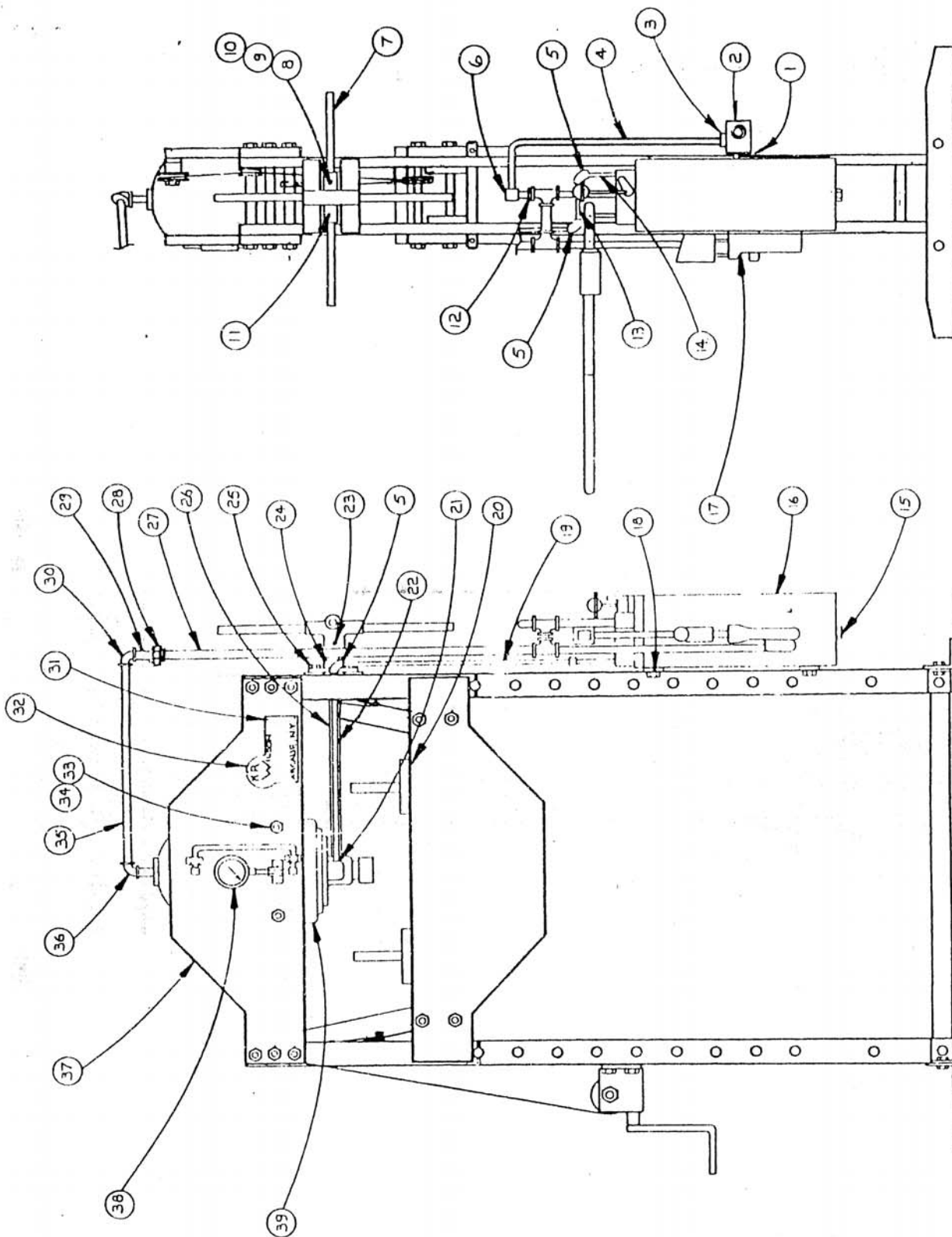
FRAME ASSEMBLY REFERENCE DRAWING C-1-2430										
REF. NO.	DESCRIPTION		QTY.	MODEL					PART NO.	DRAWING NO.
				37 (25)	37E (50)	37G (60)	37F (75)	37K(100)		
14	BASE MEMBER		2	X					5054-25	A-2554
				X	X				5054	A-5054
							X		7554	A-7554
							X		1054	B-1054
15	HEX HEAD CAP SCREW	1/2"-13NC x 2½" Lg	4	X	X	X	X		7563-L	
		1/2"-13NC x 3" Lg					X	1063-L		
16	BRACKET		4	X					5062-25	A-2562
				X	X				5062-50	A-5062
							X		7562	(A) 7562
							X		1062	(A) 1062
17	TIE BAR		2	X					5053-25	(A) 5053-25
				X					5053-50	(A) 5053-50
						X			6053	A -6053
							X		7553	(A) 7553
							X		1053	(A) 1053
18	TABLE PLATE		2	X					5052-25	B-2552
				X					5052-50	B-5052
						X			6052	B-6052
							X		7552	B-7552
							X		1052	B-1052
19	SPACER	¾" PIPE x 7 1/8" Lg	4	X					5061-25	B-1-2254-A
		N/A		X	X	X	X			
20	TABLE STUD		4	X					5059-25	A-2558
				X	X				5059-50	A-5059
						X			7557	(A) 7557
							X		1057	A 1057
21	STD. HEX NUT	5/8" - 11 NC	8	X					5059-25-N	
		¾" - 10 NC	16		X	X	X	X	7559-N	
22	RIGHT SIDE MEMBER		1	X					5050-25-R	B-2550-R
				X	X				5050-R	B-5050-R
						X			7550-R	B-7550-R
							X		1050-R	B-1050-R

K.R. WILSON, INC.

ARCADE, NEW YORK 14009, U.S.A.

FRAME ASSEMBLY
REFERENCE DRAWING C-1-2430

[illegible]



REV	DESCRIPTION	DATE	BY
REVISIONS			
K. R. WILSON, INC.			
ARCADE, NEW YORK			
GENERAL		ASSEMBLY	
DRAWN BY: MM		DATE: 31 ST OCT. 1980	
CHECKED BY: DHS		C-1-2431	

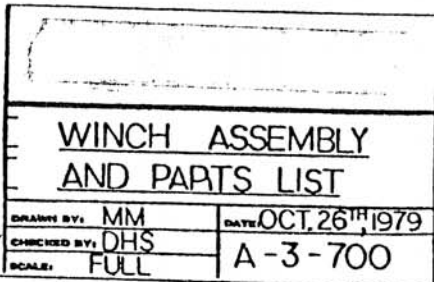
GENERAL ASSEMBLY
REFERENCE DRAWING #C-1-2431

REF. NO.	DESCRIPTION	QTY	MODEL					PART NO.	DRAWING NO.
			37 (25)	37E (50)	37G (60)	37F (75)	37K (100)		
1	NIPPLE 1/2" SCH 80 x 2" LG	1	X	X	X	X	X		
2	RELIEF VALVE 3000 PSI (Max)	1	X						
	5000 PSI (Max)			X	X	X	X		
3	ADAPTER (Straight)	1	X	X	X	X	X		
4	ELBOW 3/8 - 18 NPT	3	X	X	X	X	X	7023-72	
5	TUBE 1/2" OD x 21 1/2" LG	1	X	X	X	X	X		
6	ADAPTER (RT. ANGLE)	1	X	X	X	X	X		
7	SPIKE HANDWHEEL	2	X	X	X	X	X	4096	(A) 4096
8	3/8" DIA. BALL	2	X	X	X	X	X	5026	
9	SPRING	2	X	X	X	X	X	4019	B-1-3736-C
10	PIPE PLUG	2	X	X	X	X	X	5027	
11	HANDWHEEL HUB	1	X	X	X	X	X	5006	(B) 5006
12	REDUCING BUSHING 3/4 to 1/2	1	X	X	X	X	X		
13	NIPPLE 3/8" SCH 40 x 2 1/2" LG	1	X	X	X	X	X	7023-73	
14	PIPE 3/8 SCH 40 x 8" LG	1	X	X	X	X	X	5024	
15	MAGNETIC PIPE PLUG	1	X	X	X	X	X	403PG	
16	OIL RESERVOIR 3 Gallon	1	X	X	X	X	X	4046	C-1-2265
	10 Gallon						X	12580	D-1-3738-A
17	TWO SPEED HAND PUMP ASSEMBLY	1	X	X	X	X	X	A-1-2433	A-1-2433
18	HEX HEAD CAP SCREW 3/8"-16NC x 3/4" LG	4	X	X	X	X	X	7057-C	
19	PIPE 3/8" SCH 40 18" LG	1	X					4094-50	
	24" LG			X	X			4094-75	
	20 1/2" LG					X		4094-60	
	26 1/2" LG						X	1023	
20	"V" BLOCK	2	X					5035-25	B-2-8045
			X	X				5035	B-2-8045
					X			7535	B-2-8069
						X		1035	B-1035
21	PIN 1/2" Dia x 2" LG	1	X	X	X	X	X	7018-A	
22	PIPE 3/8" SCH 40 14" LG	1	X					4094-25	
	18" LG			X				4094-50	
	20 1/2" LG				X			4094-60	
	24" LG					X		4094-75	
	28" LG						X	1094	
			37 (25)	37E (50)	37G (60)	37F (75)	37K (100)		

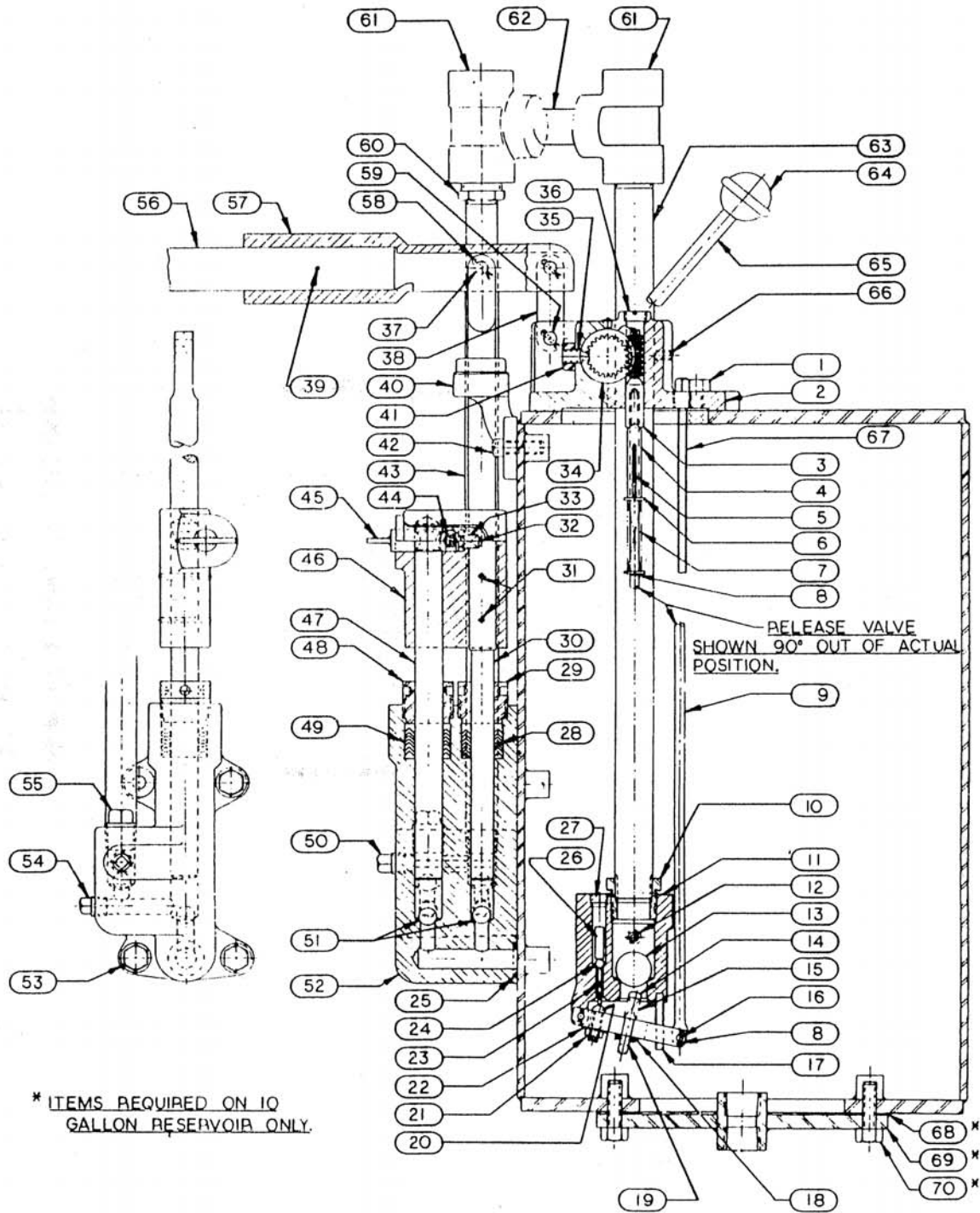
GENERAL ASSEMBLY
REFERENCE DRAWING #C-1-2431

[illegible]

W-100				WINCH ASSEMBLY			
PART #	QTY.	DRAWING#	DESCRIPTION	PART #	QTY.	DRAWING#	DESCRIPTION
W-101	1	A-3-703 A-3-704 B-3-713	CABLE DRUM	W-109	1		WORM GEAR
W-102	1	A-3-709	HANDLE	W-110	1		WORM DRIVE PIN
W-103	1	A-3-701 A-3-707	FRAME	W-111	1		SHAFT DRIVE PIN
W-104	1	A-3-706	WORM SHAFT	W-112	1		NUT
W-105	1	A-3-708	SPOOL SHAFT	W-113	1		WORM GEAR (BRZ)
W-106	1	A-3-705	SPACER	W-114	2		WORM ROLL PIN
W-107	2		DRUM BUSHING	W-115	1		SCREW
W-108	2		GEAR BUSHING	W-116	1		WASHER
				W-117	AT ASSY		WASHER



K.R. WILSON TWO SPEED HAND PUMP AND RELEASE VALVE ASSEMBLY
FOR HAND OPERATED SHOP PRESSES.



* ITEMS REQUIRED ON 10
GALLON RESERVOIR ONLY.

1 DEC 1980

A-1-2433

2 SPEED HAND PUMP & RELEASE VALVE ASSEMBLY
REFERENCE DRAWING #A-1-2433

REF. NO.	DESCRIPTION	QTY	MODEL					PART NO.	DRAWING NO.
			37 (25)	37E (50)	37G (60)	37F (75)	37K(100)		
1	Hex Head Cap Screw 3/8"-16NC x 1" LG	4	X	X	X	X	X	4044A	C-1-3741-C
2	Tank Cover	1	X	X	X	X	X	4042	C-1-3741-A
3	Control Rack	1	X	X	X	X	X	4043	C-1-3753-A
4	Release Valve Sleeve	1	X	X	X	X	X	4043-A	C-1-3753-B
5	Sleeve Guide Pin	1	X	X	X	X	X	4045-A	C-1-3753-E
6	1/4" Standard Flat Washer	2	X	X	X	X	X	4043-B	C-1-3753-F
7	Compression Spring	1	X	X	X	X	X	4043-C	C-1-3753-D
8	Cotter Pin 1/16" Dia x 1/2" Lg	3	X	X	X	X	X	4055-B	D-1-3755-L
9	Control Rod	1	X	X	X	X	X	4045	C-1-3753-C
10	Reducing Bushing 1" to 3/4"	1	X	X	X	X	X	4048	D-1-3755-J
11	Release Valve Body	1	X	X	X	X	X	4077	C-1-3852
12	Ball Stop Pin Plug Assembly	1	X	X	X	X	X	4049	D-1-3755-D
13	Ball 1" Dia.	1	X	X	X	X	X	4050	D-1-3755-K
14	Pin Release Valve	1	X	X	X	X	X	4051	D-1-3755-E
15	Compression Spring	1	X	X	X	X	X	4052	D-1-3755-G
16	Hinge Pin	2	X	X	X	X	X	4054	D-1-3755-F
17	Roll Pin	1	X	X	X	X	X	----	C-1-3852-B
18	Cotter Pin 3/32" Dia x 3/4" Lg	1	X	X	X	X	X	4052-B	D-1-3755-U
19	Tripping Bar	1	X	X	X	X	X	4053	D-1-3755-B
20	Trip Screw	1	X	X	X	X	X	4085	D-1-3755-H
21	Hex Nut 1/4" - 20 NC	1	X	X	X	X	X	4085-N	D-1-3755-S
22	Lockwasher 1/4" Dia	1	X	X	X	X	X	4085-A	D-1-3755-T
23	Push Pin	1	X	X	X	X	X	4084	D-1-3755-R
24	Ball 1/4" Dia.	1	X	X	X	X	X	4083	D-1-3755-Q
25	O Ring	1	X	X	X	X	X	4014-RG	B-1-3745-E
26	Ballast Pin	1	X	X	X	X	X	4082	D-1-3755-P
27	Pipe Plug	1	X	X	X	X	X	4081	D-1-3755-N
28	Chevron Packing (5/8" ID)	1	X	X	X	X	X	6064-C1	B-1-3746-C
29	Packing Gland Nut (for 5/8" ID)	1	X	X	X	X	X	4065-9	B-1-3746-A
30	Primary Plunger (5/8" Dia)	1	X	X	X	X	X	4062	C-1-3748-A
31	Pin	2	X	X	X	X	X	4070	C-1-3750-C
32	Flat Pt. Soc.Set Scr. 1/4"-20NC x 1" Lg	1	X	X	X	X	X	4069	C-1-3750-D
33	Compression Spring	1	X	X	X	X	X	4052	C-1-3750-B
34	Control Pinion	1	X	X	X	X	X	4076	C-1-3754-A
35	Set Screw 3/8"-24NF x 1" Lg Dog Pt	1	X	X	X	X	X	4075	C-1-3754-J
36	Plug 9/16" - 18 NF	1	X	X	X	X	X	4041	C-1-3754-D
37	Pin 3/8" Rivet x 1 1/2" Lg	2	X	X	X	X	X	4073	C-1-3749-D
38	Pump Plunger Hinge	1	X	X	X	X	X	4074	C-1-3749-C
39	Cotter Pin 3/16" Dia x 2" Lg	1	X	X	X	X	X	4072-A	C-1-3749-A
40	Plunger Guide	1	X	X	X	X	X	4079	A-1-3751-A
			37 (25)	37E (50)	37G (60)	37F (75)	37K(100)		

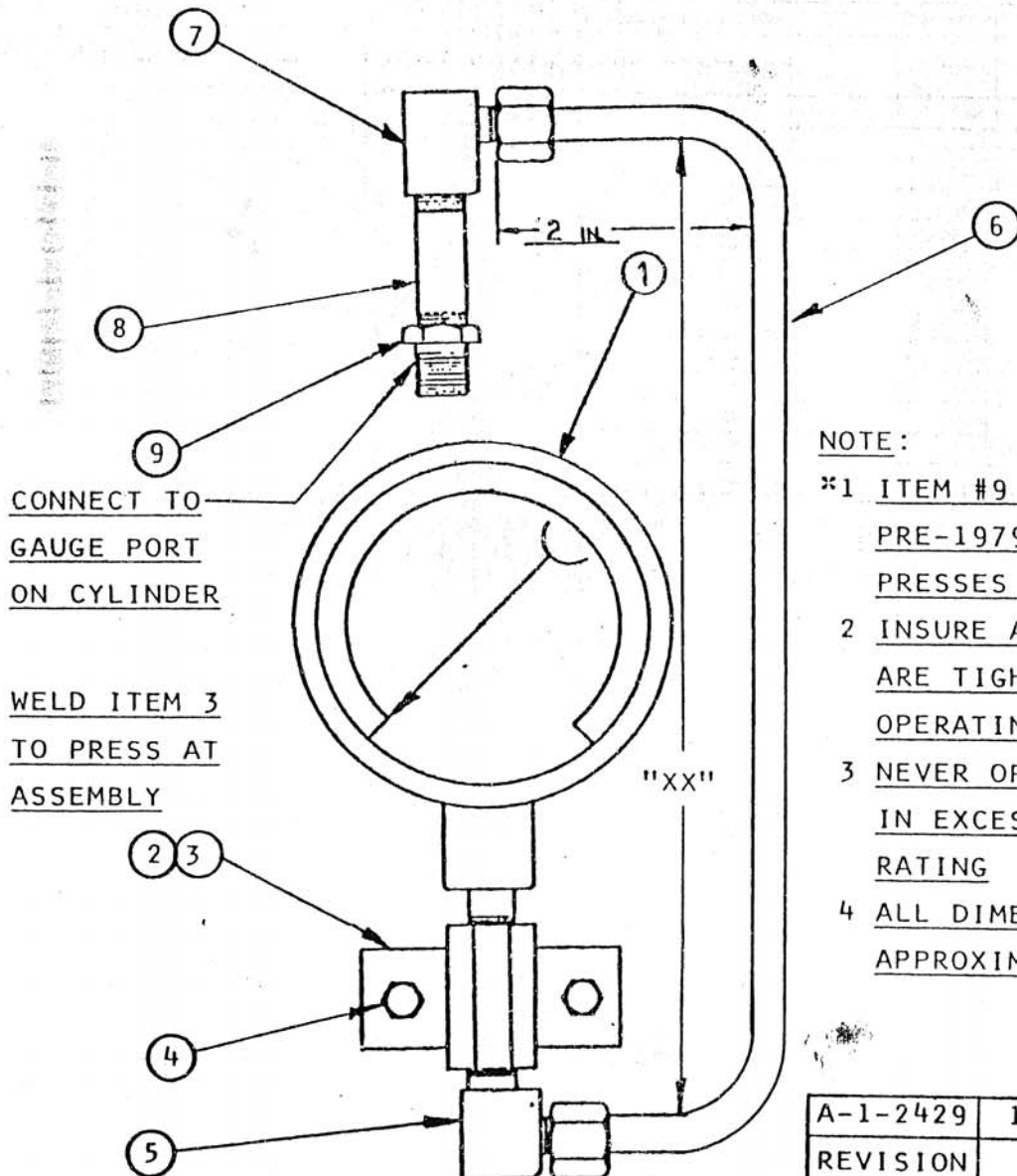
2 SPEED HAND PUMP & RELEASE VALVE ASSEMBLY
REFERENCE DRAWING #A-1-2433

REF. NO.	DESCRIPTION	QTY	MODEL					PART NO.	DRAWING NO.
			37 (25)	37E (50)	37G (60)	37F (75)	37K(100)		
41	Hex Jam Nut 3/8" - 24NF	1	X	X	X	X	X	4075-N	C-1-3754-K
42	Fil. Head Screw 3/8"-16NC x 1" Lg	2	X	X	X	X	X	4047	A-1-3751-B
43	Pipe 1/2" SCH 80 x 18½" Lg	1	X	X	X	X	X	4063	C-1-3754-E
44	Std. Hex Nut 1/4" -20NC	1	X	X	X	X	X	4069-A	C-1-3750-E
45	Plunger Key	1	X	X	X	X	X	4068	A-1-3752-A
46	Double Plunger Yoke	1	X	X	X	X	X	4067	C-1-3750-A
47	Secondary Plunger	1	X	X	X	X	X	4066	C-1-3748-A
48	Packing Gland Nut (For 3/4" ID)	1	X	X	X	X	X	4065	B-1-3746-B
49	Chevron Packing (3/4" ID)	1	X	X	X	X	X	4064-C	B-1-3746-D
50	Ball Retainer	1	X	X	X	X	X	4061-20	B-1-3745-A
51	Ball 1/2" Dia.	4	X	X	X	X	X	4059-19	B-1-3745-D
52	Double Plunger Pump	1	X	X	X	X	X	4060	C-1-3747-A
53	Hex Head Cap Screw 3/8-16NC x 1½" Lg	3	X	X	X	X	X	4044	B-1-3745-F
54	Pipe Plug 1/4" - 18 NPT	2	X	X	X	X	X	4061	B-1-3745-B
55	Pipe Plug 1/2" - 14 NPT	1	X	X	X	X	X	4061-21	B-1-3745-C
56	Handle Extension	1	X	X	X	X	X	4071	C-1-3749-A
57	Pump Handle Socket	1	X	X	X	X	X	4072	C-1-3749-B
58	Cotter Pin	3	X	X	X	X	X	4073-C	C-1-3749-F
59	Pin 3/8" Rivet x 2" Lg	1	X	X	X	X	X	4073-L	C-1-3749-E
60	Reducing Bushing 3/4" to 1/2"	1	X	X	X	X	X	4063-A	C-1-3754-M
61	Tee 3/4" - 14 NPT (6000 PSI)	2	X	X	X	X	X	4086	C-1-3754-F
62	Nipple 3/4" Sch 80 x 3" Lg	1	X	X	X	X	X	4097	C-1-3754-G
63	Pipe 3/4" Sch 80 x 21" Lg	1	X	X	X	X	X	4080	D-1-3755-M
64	Knob 1 5/16" Dia.	1	X	X	X	X	X	4040-B	C-1-3754-C
65	Release Lever	1	X	X	X	X	X	4040	C-1-3754-B
66	Set Screw 1/4"-20NC x 3/4" Lg	1	X	X	X	X	X	4078	C-1-3754-L
67	Oil Level Dip Stick	1	X	X	X	X	X	4046-1	C-1-3741-D
68	Gasket	1	X	X	X	X		N/A	N/A
69	Cleanout Plate	1	X	X	X	X		12582	B-1-3739-B
								N/A	N/A
								12581	B-1-3739-A
70	Hex Head Cap Screw 3/8" - 16 NC x 1 1/4" Lg	6	X	X	X	X		N/A	N/A
								12583	B-1-3739-C

GAUGE ASSEMBLY

TONNAGE	MODEL	STROKE			DIMENSION	
		7½	11	14	"XX"	"ZZ"
25	37	X			9½	14
			X		16	20½
50	37E	X			9½	14
			X		16	20½
60	37G	X			9½	14
			X		16	20½
75	37F	X			11½	16
			X		16	20½
100	37K			X	18	22½

ITEM NO	QTY	DESCRIPTION	DRAWING
1	1	GAUGE	
2	1	COUPLING	B-1-2428-A
3	1	MOUNT	B-1-2428-B
4	2	¼" 20 NC X ½" HHCS	B-1-2428-C
5	1	90 DEGREE MALE ADAPTER	
6	1	3/8" TUBE X "ZZ" LONG	
7	1	90 DEG. FEMALE ADAPTER	
8	1	¼" NIPPLE X 2" LONG	
9	1	REDUCER ½ NPT TO ¼ NPT	



NOTE:

- *1 ITEM #9 REQUIRED FOR PRE-1979 MODEL PRESSES ONLY
- 2 INSURE ALL CONNECTIONS ARE TIGHT BEFORE OPERATING PRESS
- 3 NEVER OPERATE PRESS IN EXCESS OF ITS RATING
- 4 ALL DIMENSIONS ARE APPROXIMATE

A-1-2429	17 MARCH 1981
REVISION	

HAND OPERATED CYLINDER ASSEMBLY
REFERENCE DRAWING NO. C-1-2434

REF. NO.	DESCRIPTION	QTY	MODEL					PART NO.	DRAWING NO.
			37 (25)	37E (50)	37G (60)	37F (75)	37K (100)		
C-1*	REDUCING BUSHING	1	X	X	X			4031	
						X	X	2406	
C-2	PISTON LOCK NUT	1	X	X	X			4006	
						X	X	7506	(A) 7506
C-3	PISTON FOLLOWER LOCK NUT	1	X	X	X			N/A	N/A
						X	X	7506-A	(A) 7506-A
C-4	UPPER FOLLOWER	1	X	X	X			4007	(B) 4007
						X		7507	(B) 7507
							X	1007	(B) 7-DA14-38
C-5	EXPANDER SPRING	1	X	X	X			4007S	(A) 4007-S
						X		7507-S	(A) 7507-S
							X	1007-S	
C-6	UPPER PISTON SEAL	1	X	X	X			4009	(B) 4009
						X		7509	(B) 7509
							X	1009	(B) 1009
C-7	PISTON	1	X	X	X			4011	(B) 4011
						X		7511	(A) 7511
							X	1011	(B) 1011
C-8	LOWER PISTON SEAL	1	X	X	X			4010	(B) 4010
						X		7510	(B) 7510
							X	1010	(B) 1010
C-9	LOWER FOLLOWER	1	X	X	X			4008	(A) 4008
						X		7508	(A) 7508
							X	1008	(B) 1008
C-10	HEX HEAD CAP SCREWS 5/16"-18NC x 3/4	4	X	X	X	X	X	7508-A	
C-11	PISTON KEY	1	X	X	X			4017	
						X	X	7517	
C-12	FIBER WASHER	1	X	X	X			4011-W	
						X	X	7511-W	
C-13	CYLINDER HEAD GASKET	1	X	X	X			4013	(B) 4013
						X		7513	(A) 7513
							X	1013	(A) 1013
C-14	CYLINDER HEAD	1	X	X	X			4026	(B) 4026
						X		7526	(B) 7526
							X	1026	(B) 1026
C-15	PINION	1	X	X	X	X	X	4027	(A) 4027
C-16	SET SCREW 5/16"-18 NC x 1" Lg	1	X	X	X	X	X	4027-S	
C-17	STD. HEX NUT 5/16" - 18 NC	1	X	X	X	X	X		
C-18	SET SCREW 3/8"-16NC x 3/8" Lg	1	X	X	X			7538	
	CUP POINT	2				X	X	7538	
			37 (25)	37E (50)	37G (60)	37F (75)	37K (100)		

HAND OPERATED CYLINDER ASSEMBLY
REFERENCE DRAWING NO. C-1-2434

REF. NO.	DESCRIPTION	QTY	MODEL					PART NO.	DRAWING NO.
			37 (25)	37E (50)	37G (60)	37F (75)	37K (100)		
C-19	RAM NOSE (FLAT)	1	X	X	X			4029	(A) 4029
						X	X	7529	(A) 7529-R
C-20	STROKE LIMITING VALVE SPRING	1	X	X	X			4019	B-1-3736-C
						X	X	7519	B-1-3736-G
C-21	STROKE LIMITING VALVE BODY	1	X	X	X	X	X	4020	B-1-3736-A
C-22	STROKE LIMITING VALVE BALL	1	X	X	X	X	X	4021	B-1-3736-F
C-23	STROKE LIMITING VALVE PUSH PIN	1	X	X	X	X	X	4022	B-1-3736-D
C-24	STROKE LIMITING VALVE TRIP PIN	1	X	X	X	X	X	4023	B-1-3736-E
C-25	STROKE LIMITING VALVE TRIP CUP	1	X	X	X	X	X	4024	B-1-3736-B
C-26*	CYLINDER	1	X					4018	(B) 4018
				X	X			4018-A	C-1-2159-A
						X		7518	C-6DA-SR-HO-7½
						X		1018	C-2-3212-A
C-27	HEX HEAD CAP SCREW	3/8-16NC x 1½ LG	3	X	X	X		4037	
		3/8-16NC x 3½ LG	1	X	X	X		4037-L	
		1/2-13NC x 2 LG	6			X		7563	
		3/4-10NC x 1½ LG	6				X	1063	
C-28*	RAM	1	X	X	X			4025	(B) 4025
						X		7525	(B) 7525
						X		1025	(B) 1025

* FOR NON-STANDARD 11 1/4" STROKE CYLINDERS

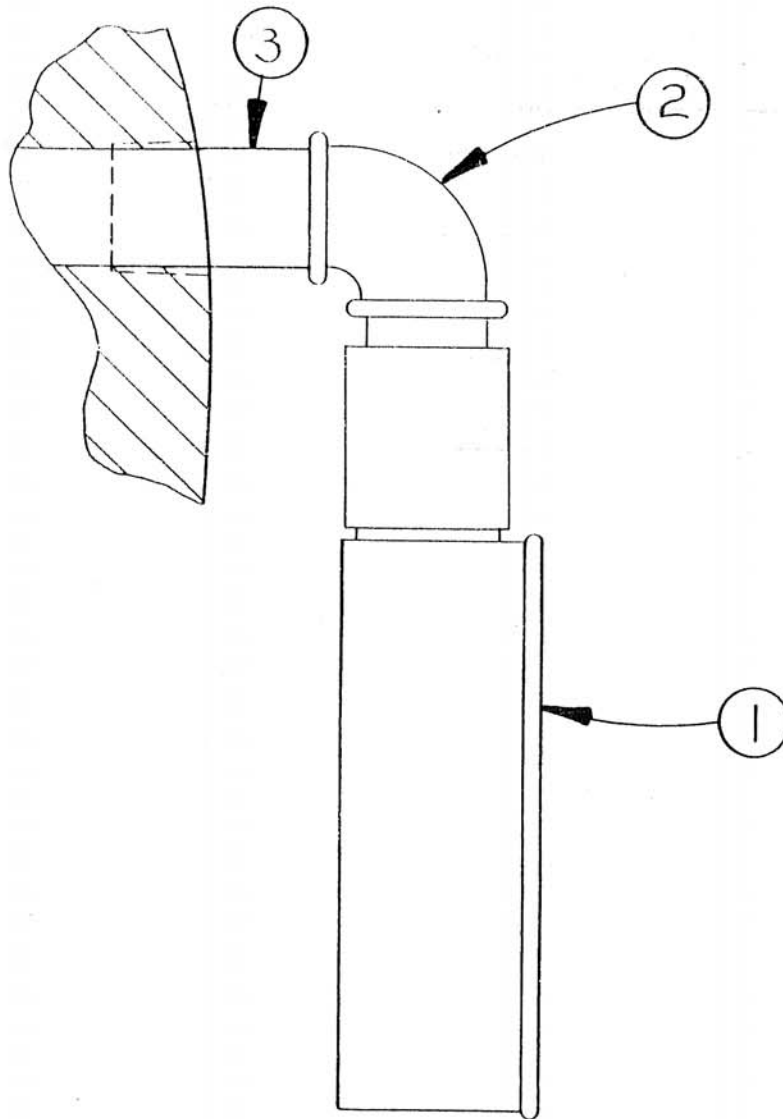
C-1	REDUCING BUSHING	1	X	X	X	X		2406	
C-26	CYLINDER	1	X	X	X			5-DA-11-30	C-1-2420
						X		6-DA-11-30	C-6DA-SR-HO-12
C-28	RAM	1	X	X	X			4025-12	(B) 4025
						X		7525-12	(B) 7525

37K (100)
37F (75)
37G (60)
37E (50)
37 (25)

GAUGE ASSEMBLY

ITEM	MODEL					DESCRIPTION	PART #
1	X					GAUGE	4036-25
		X					4036-50
			X				4036-60
				X			7536
					X		1036
2	X	X	X			NIPPLE	1/4" SCH 80 x 2" LG
				X			1/2" SCH 80 x 2 1/2" LG
					X		1/2" SCH 80 x 3" Lg
3	X	X	X			ELBOW	1/4" NPT 6000 PSI
				X	X		4034
							1/2" NPT 6000 PSI

37	25 TON
37E	50 TON
37G	60 TON
37F	75 TON
37K	100 TON



A-I-2435

