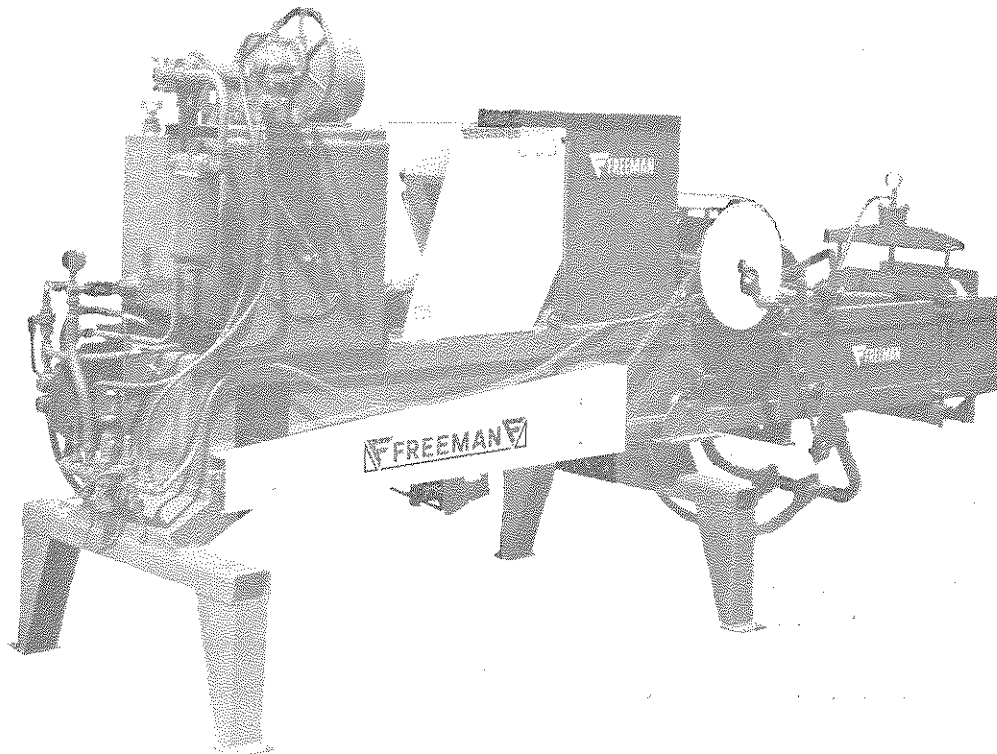


# FREEMAN COTTON MOTES BALER

## PARTS LIST



---

---

*manufactured and distributed by*

**J. A. FREEMAN & SON**



---

---

**PB00000160**      **PORTLAND, OREGON**

## INSTRUCTIONS FOR ORDERING PARTS

1. Part number and description of part.
  - (a) Parts should NOT be ordered from illustration only.
  - (b) Parts should NOT be ordered from numbers on castings.
  - (c) In identifying some parts we refer to them as "front", "rear", right or left. In doing this we consider the "front" of the machine the end the motor and pump are mounted on, and the "rear" where the bale comes out. "Right" and "left" are determined by standing at the rear of the machine facing toward the front.
  - (d) Due to the complexity on some of the parts, we have used reference numbers on the pictures. Please do not use these reference numbers as part numbers.
2. Order by baler serial number and model.
3. Much delay and confusion can be avoided if part numbers are arranged in sequence on all orders.
4. State how to ship: whether by truck, stage, mail, rail, express or freight, air express or air freight.
5. Claims for shortage or error in handling of an order for parts must be made upon receipt of goods.
6. Address all orders for parts as follows:

J. A. Freeman & Son,  
Parts Department,  
2034 N. W. 27th Avenue,  
Portland, Oregon 97210

Place serial number of machine here for your convenience:

Baler Serial No. \_\_\_\_\_

Motor Serial No. \_\_\_\_\_

Permission must be secured before any parts are returned for credit. When parts are returned, the freight must be prepaid or arrangements made so that they can be brought in by our trucks.

### POLICY

1. It is the policy of J. A. Freeman & Son to constantly improve its products whenever it is practical to do so.
2. J. A. Freeman & Son reserve the right to redesign or change its equipment or component parts thereof without incurring any obligation to install or furnish such changes on equipment previously delivered.
3. Unauthorized changes or additions to equipment manufactured by J. A. Freeman & Son relieves the company of further responsibility for warranted operation and breakage replacement.

# Table of Contents

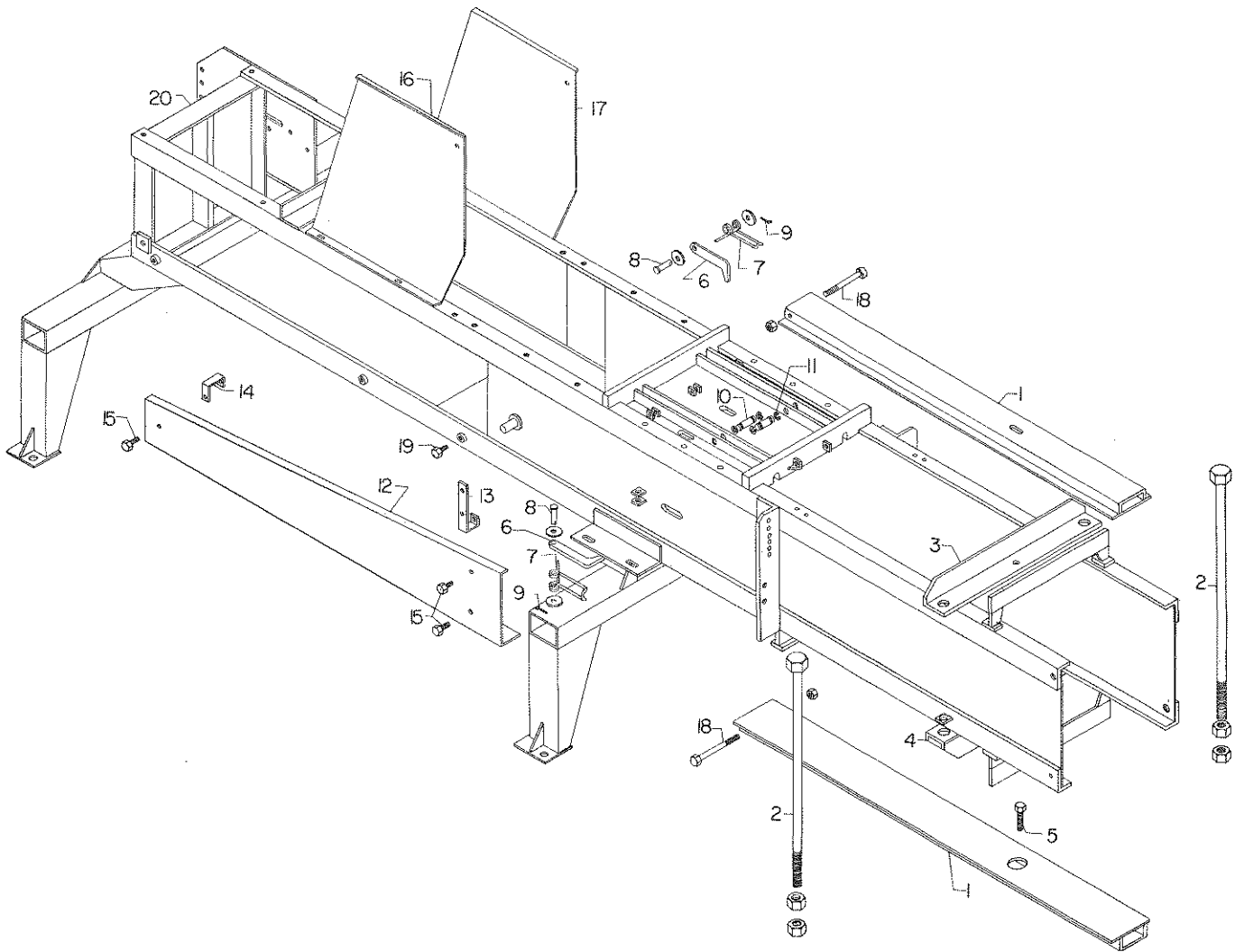
Bale Chamber . . . . .	1
Plunger Assembly . . . . .	2
Packer and packer Chute . . . . .	3
Rear Valve Trip Assembly . . . . .	5
Front Valve Trip Assembly . . . . .	7
Hydraulic Pump and Valve System . . . . .	9
Tension Control Pump Assembly . . . . .	9-10
Tension Control Ram . . . . .	11
Wire Twister Assembly . . . . .	12-13
Twister Trip Assembly . . . . .	14
Wire Box . . . . .	15
Needles and Needle Rack . . . . .	15
Main Hydraulic Pump Assembly . . . . .	16
Main Hydraulic Control Valve Assembly . . . . .	17
Relief Valve Assembly . . . . .	18

## INDEX

PART NO.	PAGE NO.	PART NO.	PAGE NO.	PART NO.	PAGE NO.	PART NO.	PAGE NO.
F 25 . . . . .	2	F 1686 . . . . .	14	F 3041 . . . . .	1	F 3086 . . . . .	2
F 117 . . . . .	3	F 1687 . . . . .	14	F 3042 . . . . .	1	F 3087 . . . . .	2
F 123 . . . . .	2	F 1702 . . . . .	15	F 3043 . . . . .	8	F 3088 . . . . .	2
F 129 . . . . .	5-7	F 1707 . . . . .	1	F 3044 . . . . .	8	F 3089 . . . . .	2
F 172 . . . . .	12	F 3000 . . . . .	1	F 3045 . . . . .	8	F 3090 . . . . .	2
F 220 . . . . .	1	F 3001 . . . . .	6	F 3046 . . . . .	8	F 3091 . . . . .	2
F 246 . . . . .	13	F 3002 . . . . .	2-5-6	F 3047 . . . . .	8-16	F 3092 . . . . .	2-13
F 278 . . . . .	6-14	F 3003 . . . . .	5-6	F 3048 . . . . .	8	F 3093 . . . . .	2
F 440 . . . . .	14	F 3004 . . . . .	5-6	F 3049 . . . . .		F 3094 . . . . .	2
F 481 . . . . .	3-5-7	F 3005 . . . . .	5-6	F 3050 . . . . .	8	F 3095 . . . . .	2
F 797 . . . . .	1	F 3006 . . . . .	5-7	F 3051 . . . . .	8	F 3096 . . . . .	2
F 800 . . . . .	8-11	F 3007 . . . . .	5-7	F 3052 . . . . .	8	F 3097 . . . . .	2
F 829 . . . . .	5-7	F 3008 . . . . .	5-7	F 3053 . . . . .	8	F 3098 . . . . .	2
F 831 . . . . .	5-7	F 3009 . . . . .	5-7	F 3054 . . . . .	9	F 3099 . . . . .	9
F 856 . . . . .	15	F 3010 . . . . .	5-7	F 3055 . . . . .	8	F 3100 . . . . .	8
F 857 . . . . .	15	F 3011 . . . . .	5-7	F 3056 . . . . .	3	F 3101 . . . . .	8
F 883 . . . . .	2	F 3012 . . . . .	7	F 3057 . . . . .	3	F 3102 . . . . .	8
F 1093 . . . . .	8	F 3013 . . . . .	7	F 3058 . . . . .	3	F 3103 . . . . .	8
F 1294 . . . . .	5-7	F 3014 . . . . .	7	F 3059 . . . . .	3	F 3104 . . . . .	8
F 1295 . . . . .	5	F 3015 . . . . .	7	F 3060 . . . . .	3	F 3105 . . . . .	9
F 1513 . . . . .	14	F 3016 . . . . .	7	F 3061 . . . . .	3	F 3106 . . . . .	9-17
F 1514 . . . . .	14	F 3017 . . . . .	7	F 3062 . . . . .	3	F 3107 . . . . .	9
F 1515 . . . . .	14	F 3018 . . . . .	5-7	F 3063 . . . . .	3	F 3108 . . . . .	9
F 1517 . . . . .	5-14	F 3019 . . . . .	7	F 3064 . . . . .	3	F 3109 . . . . .	2-3-9
F 1531 . . . . .	14	F 3020 . . . . .	5-7	F 3065 . . . . .	3	F 3110 . . . . .	2-9
F 1549 . . . . .	15	F 3021 . . . . .	5-7	F 3066 . . . . .	3	F 3111 . . . . .	3-9
F 1550 . . . . .	15	F 3022 . . . . .	5-7	F 3067 . . . . .	3	F 3112 . . . . .	3-9
F 1551 . . . . .	15	F 3023 . . . . .	5-7	F 3068 . . . . .	15	F 3113 . . . . .	2-9
F 1552 . . . . .	15	F 3024 . . . . .	5-7	F 3069 . . . . .	15	F 3114 . . . . .	8
F 1568 . . . . .	7-14	F 3025 . . . . .	5-7	F 3070 . . . . .	3	F 3115 . . . . .	8
F 1571 . . . . .	14	F 3026 . . . . .	7	F 3071 . . . . .	3	F 3116 . . . . .	8
F 1572 . . . . .	14	F 3027 . . . . .	6-7	F 3072 . . . . .	3	F 3117 . . . . .	9
F 1575 . . . . .	14	F 3028 . . . . .	5-7	F 3073 . . . . .	3	F 3118 . . . . .	9
F 1576 . . . . .	13	F 3029 . . . . .	5-7	F 3074 . . . . .	3	F 3119 . . . . .	9
F 1577 . . . . .	13	F 3030 . . . . .	5-7	F 3075 . . . . .	3	F 3120 . . . . .	9
F 1617 . . . . .	14	F 3031 . . . . .	5	F 3076 . . . . .	3	F 3121 . . . . .	9
F 1618 . . . . .	14	F 3032 . . . . .	5	F 3077 . . . . .	3	F 3122 . . . . .	9
F 1619 . . . . .	14	F 3033 . . . . .	5	F 3078 . . . . .	3	F 3123 . . . . .	9
F 1620 . . . . .	13	F 3034 . . . . .	5	F 3079 . . . . .	3	F 3124 . . . . .	9-11
F 1622 . . . . .	13	F 3035 . . . . .	5	F 3080 . . . . .	3	F 3125 . . . . .	9-18
F 1623 . . . . .	13	F 3036 . . . . .	5	F 3081 . . . . .	3	F 3126 . . . . .	9
F 1632 . . . . .	14	F 3037 . . . . .	5	F 3082 . . . . .	3	F 3127 . . . . .	9
F 1633 . . . . .	13	F 3038 . . . . .	5	F 3083 . . . . .	3	F 3128 . . . . .	9
F 1636 . . . . .	2	F 3039 . . . . .	5	F 3084 . . . . .	5	F 3129 . . . . .	9
F 1680 . . . . .	9	F 3040 . . . . .	1	F 3085 . . . . .	3	F 3130 . . . . .	9

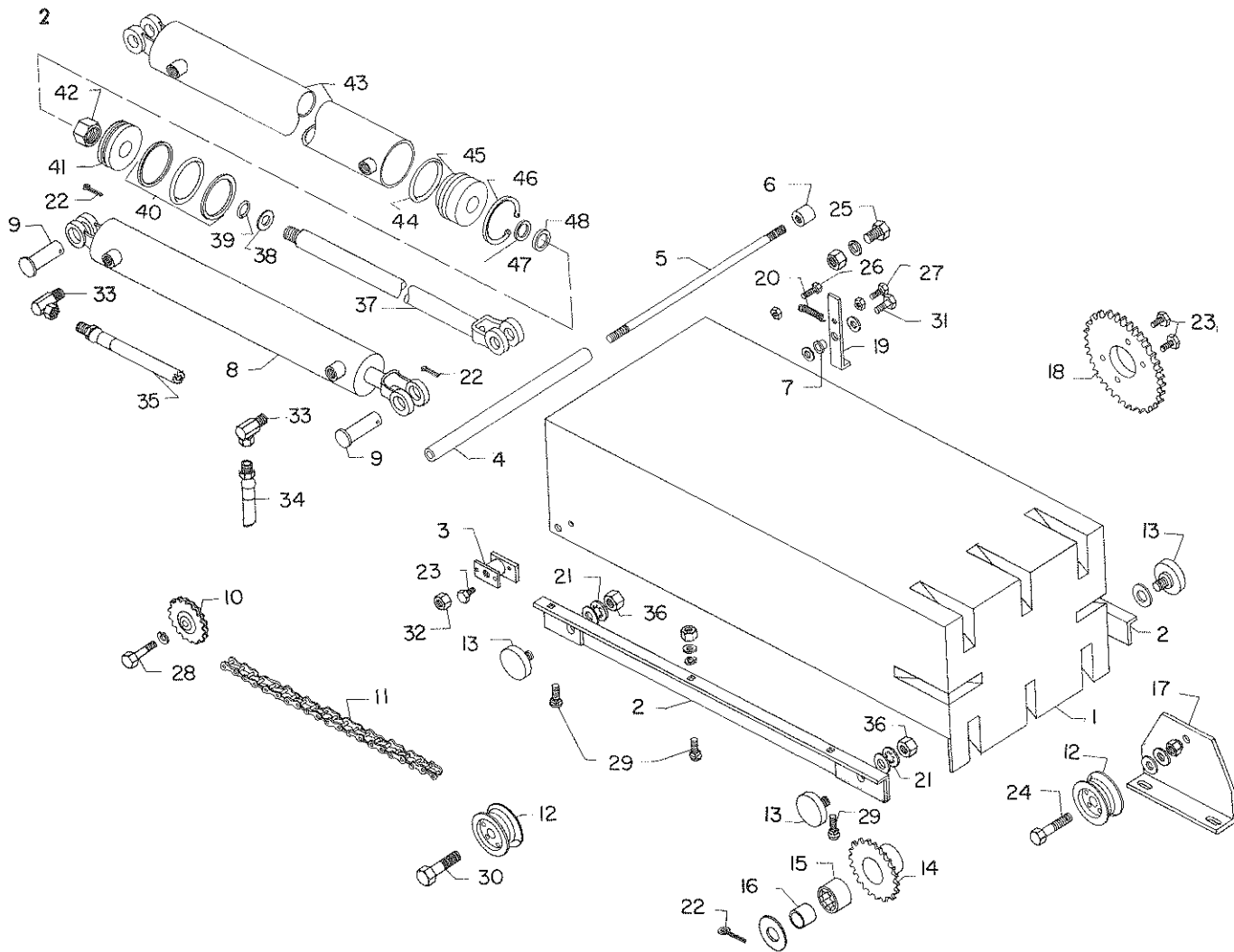
## INDEX

PART NO.	PAGE NO.	PART NO.	PAGE NO.	PART NO.	PAGE NO.	PART NO.	PAGE NO.
F 3131.....	9	F 3193.....	3	F 7335.....	13	FG 1034....	16
F 3132.....	9	F 3194.....	3	F 7344.....	15	FG 1035....	16
F 3133.....	9	F 3195.....	2	F 7348.....	12	FG 1036....	16
F 3134.....	9	F 3196.....	2	F 7431.....	13	FG 1041....	16
F 3135.....	9	F 3197.....	2	F 7432.....	13	FG 1042....	16
F 3136.....	9-18	F 3198.....	2	F 7457.....	13	FG 1045....	16
F 3137.....	9	F 3199.....	2	F 7519.....	13	FG 1049....	16
F 3138.....	9	F 3200.....	2	F 7521.....	15	FG 1141....	17
F 3139.....	9	F 3201.....	2	F 7522.....	15	FG 2519....	17
F 3140.....	9	F 3202.....	2	F 7523.....	15	FG 2529....	17
F 3141.....	9	F 3203.....	2	F 7526.....	5	FG 2531....	17
F 3142.....	9	F 3204.....	2	F 7527.....	5	FG 2702....	17
F 3143.....	9	F 3205.....	2	F 7552.....	15	FG 2706... 17-18	
F 3144.....	9	F 3206.....	2	F 7554.....	15	FG 2716....	18
F 3145.....	9	F 4014.....	15	F 7558.....	15	FG 2781....	17
F 3146.....	9	F 4015.....	15	F 7570.....	13	FG 2783....	17
F 3147.....	9	F 4016.....	15	F 7571.....	13	FG 2784....	17
F 3148.....	9	F 4024.....	12	F 7587.....	5-6	FG 2818....	18
F 3149.....	9	F 4046.....	12	F 7711.....	15	FG 2836....	16
F 3150.....	9	F 4115.... 2-13		FG 014.....	18	FT 10.....	11
F 3151.....	9	F 4133.....	13	FG 510.....	17	FT 11.....	11
F 3152.....	9	F 4134.... 2-13		FG 602.....	16	FT 12.....	11
F 3153.....	9	F 4135.... 2-13		FG 860.....	16	FT 13.....	11
F 3154.....	9	F 4136.....	13	FG 904.....	17	FT 14.....	11
F 3155.....	9	F 4137.....	13	FG 912.....	17	FT 15.....	11
F 3156.....	9	F 4138.....	13	FG 914.....	17	FT 16.....	11
F 3157.....	9	F 4194.....	15	FG 922... 17-18		FT 19.....	11
F 3158.....	9	F 4195.....	15	FG 924... 17-18		FT 73.....	11
F 3159.....	9	F 4204.....	1	FG 925... 17-18		FT 74.... 9-11	
F 3160.....	9	F 5075.....	6	FG 926... 17-18		FT 75.....	9
F 3161.....	9	F 5076.....	6	FG 932.....	17	FT 107... 9-11	
F 3162.....	9	F 5077.....	7	FG 967.....	17	FT 137....	11
F 3163.....	9	F 5159.....	1	FG 969.....	17	FT 153....	11
F 3164.....	5	F 7062.....	12	FG 970.....	17	FT 198....	11
F 3165.....	5	F 7063.....	13	FG 971....	17	FT 199....	11
F 3166.....	5	F 7065.....	12	FG 973... 17-18		FT 500....	10
F 3167.....	9	F 7069.....	13	FG 974... 17-18		FT 503....	10
F 3168.....	7	F 7072.....	13	FG 976....	17	FT 504....	10
F 3169.....	7	F 7075.....	12	FG 1000... 16		FT 505....	10
F 3170.....	5	F 7076... 12-13		FG 1001... 16		FT 506....	10
F 3171.....	5	F 7077.....	12	FG 1002... 16		FT 507....	10
F 3172.....	1	F 7078.....	12	FG 1003... 16		FT 508....	10
F 3173.....	3	F 7079.....	12	FG 1004... 16		FT 509....	10
F 3174.....	3	F 7081.....	12	FG 1005... 16		FT 510....	10
F 3175.....	3	F 7084.....	12	FG 1006... 16		FT 511....	10
F 3176.....	3	F 7085.....	12	FG 1007... 16		FT 512....	10
F 3177.....	3	F 7086.....	12	FG 1008... 16		FT 513....	10
F 3178.....	3	F 7087.....	12	FG 1009... 16		FT 514....	10
F 3179.....	3	F 7089.....	12	FG 1010... 16		FT 515....	10
F 3180.....	3	F 7227... 12-14		FG 1011... 16		FT 516....	10
F 3181.....	3	F 7247.....	13	FG 1012... 16		FT 517....	10
F 3182.....	7	F 7248.....	12	FG 1015... 16		FT 518....	10
F 3183.....	2	F 7257.....	13	FG 1016... 16		FT 519....	10
F 3184.....	1	F 7311.....	12	FG 1017... 16		FT 520....	10
F 3185.....	1	F 7312.....	12	FG 1021... 16		FT 521....	10
F 3186.....	1	F 7313.....	12	FG 1022... 16		FT 524....	10
F 3187.....	1	F 7316.....	12	FG 1026... 16		FT 530....	9
F 3188.....	1	F 7317.....	12	FG 1027... 16		FT 539....	9
F 3189.....	3	F 7318.....	12	FG 1028... 16		FT 541....	10
F 3190.....	3	F 7332.....	13	FG 1031... 16		FT 543... 9-10	
F 3191.....	3	F 7333.....	13	FG 1032... 16		FT 544....	10
F 3192.....	3	F 7334.....	13	FG 1033... 16			



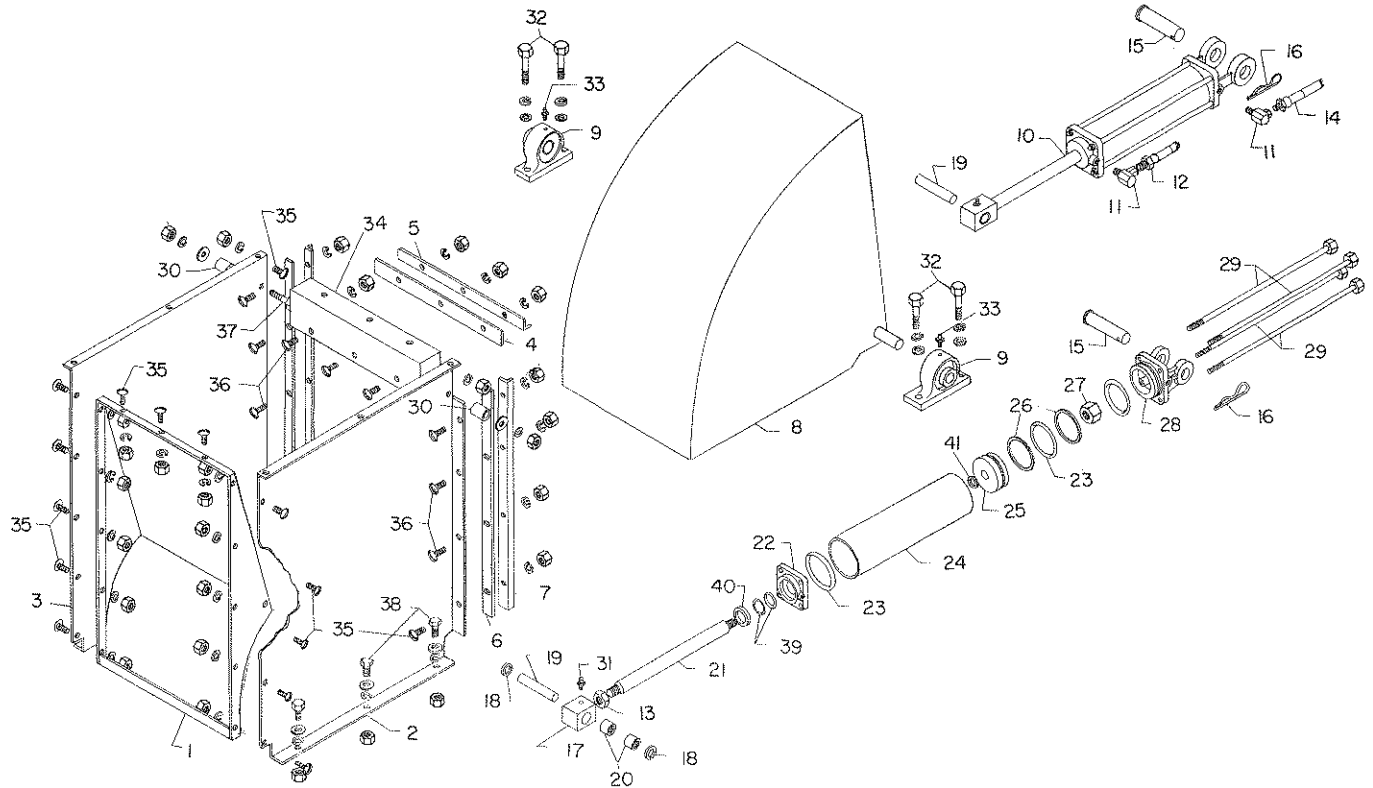
### BALE CHAMBER

REF. NO.	PART NO.	DESCRIPTION	REF. NO.	PART NO.	DESCRIPTION
1	F 3040	Top & Bottom Tension Rail	10	F 4204	Upper Wire Guide Pin
2	F 3041	Tension Bolt	11	F 5159	Snap Ring
3	F 1707	Top Tension Angle	12	F 3184	Chain Shield
4	F 3172	Bottom Tension Angle	13	F 3185	Chain Shield Bracket, Rear
5		3/8" x 1-3/4" H.T.N.C. Cap Screw	14	F 3186	Chain Shield Bracket, Front
6	F 3042	Dog	15		1/4" x 1" N.C. Cap Screw
7	F 797	Dog Spring	16	F 3187	Packer Shield, L.H.
8	F 220	Dog Pin	17	F 3188	Packer Shield, R.H.
9		Cotter Key, 1/8" x 1"	18		1/2" x 5" N.C. Cap Screw
			19		3/8" x 3/4" N.C. Cap Screw
			20	F 3000	Bale Chamber welded assembly



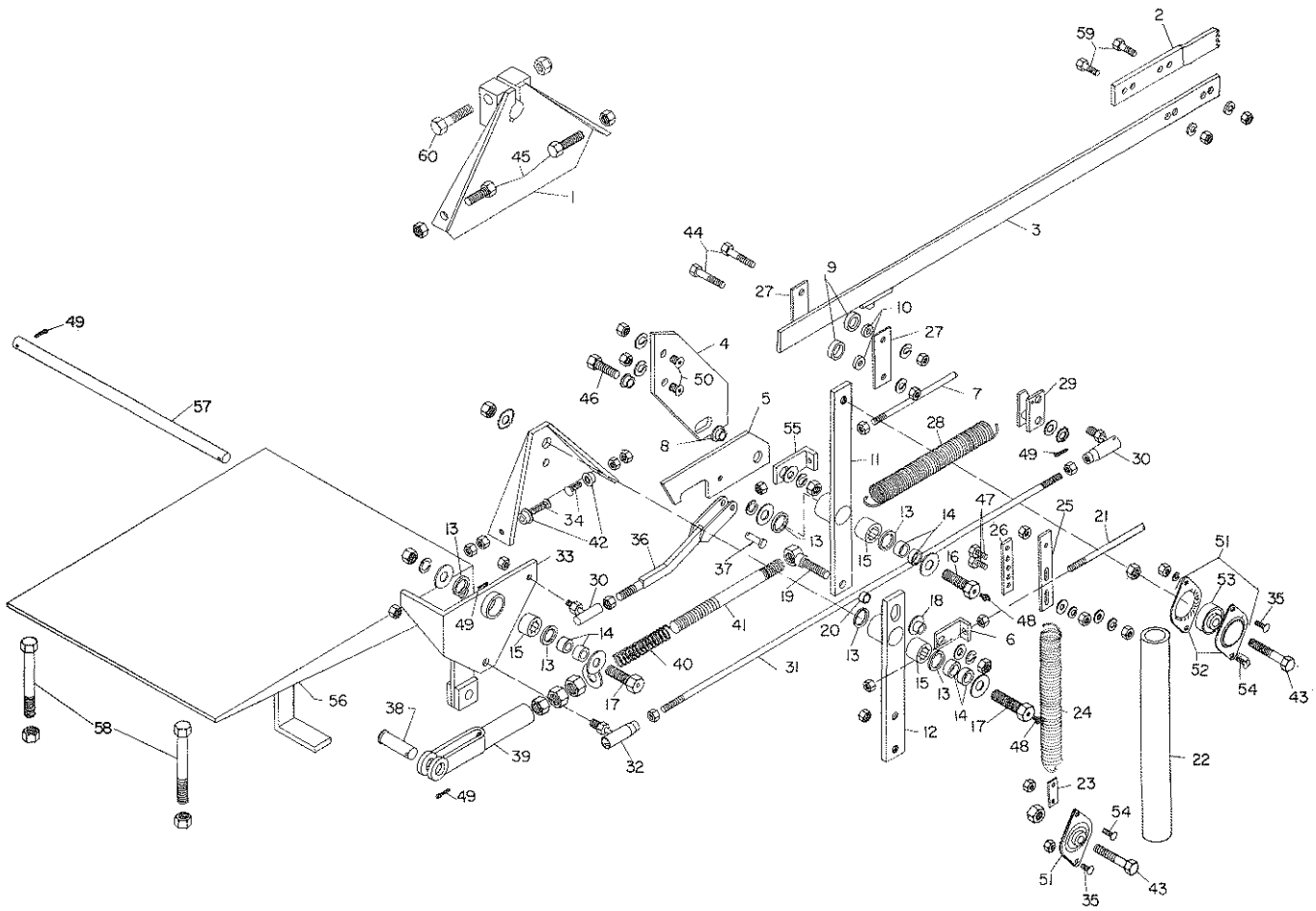
### PLUNGER ASSEMBLY

REF. NO.	PART NO.	DESCRIPTION	REF. NO.	PART NO.	DESCRIPTION
1	F 3086	Plunger	25		1/2" x 3/4" N.C.H.T. Cap Screw
2	F 3087	Plunger Rail, Side	26		1/4" x 1-1/4" N.C.H.T. Cap Screw
3	F 3088	Drive Chain Anchor	27		1/4" x 3/4" N.C.H.T. Cap Screw
4	F 3089	Plunger Pipe	28		5/8" x 1-1/2" N.C.H.T. Cap Screw
5	F 3090	Plunger Rod	29		5/16" x 1" N.C. Carriage Bolt
6	F 3091	Plunger Reset Drive Lug	30		1/2" x 1-3/4" N.C.H.T. Cap Screw
7	F 3002	Ferrule	31		3/8" x 1-1/4" N.C.H.T. Cap Screw
8	F 3093	Hydraulic Cylinder Complete (Plunger)	32		5/8" NF Jam Nut
9	F 3094	Pin	33	F 3109	1/2" N.P.T. 90° Swivel Fitting, 4975 Couplomatic
10	F 3095	Idler Sprocket, (50AG2416)	34	F 3110	1/2" Hose w/1/2" Solid Male Fittings (32")
11	F 3096	Knotter Drive Chain	35	F 3113	1/2" Hose w/1/2" Solid Male Fittings (66")
	F 25	Conn. link for RC 50 chain	36		3/4" NF Nut
	F 123	Offset link for RC 50 chain	37	F 3202	Piston Shaft
12	F 883	Tightener and Idler Pulley for Knotter Drive Chain, 2 used	38	F 3203	Steel Washer
13	F 1636	Roller for Plunger, 3/4" Shank (6901)	39	F 3204	"O" Ring
14	F 3097	Idler Sprocket, (50B24)	40	F 3205	Piston Packing Set
15	F 4134	Bearing, (GR26)	41	F 3206	Piston Head
16	F 4135	Inner Race for F 4134 Bearing, (M1-22-45)	42	F 3195	Piston Nut
17	F 3183	Chain Idler Bracket	43	F 3196	Cylinder Housing
18	F 3092	Clutch Sprocket, (50A39)	44	F 3197	"O" Ring
19	F 3098	Reset Trip Lever	45	F 3198	Cylinder Head
20	F 4115	Spring	46	F 3199	Lock Ring
21		3/4" Internal Star Lock	47	F 3200	Shaft Packing Set
22		Cotter Pin, 3/16" x 2"	48	F 3201	Rod Wiper
23		3/8" x 1" N.C.H.T. Cap Screw			
24		1/2" x 2-1/2" N.C.H.T. Cap Screw			



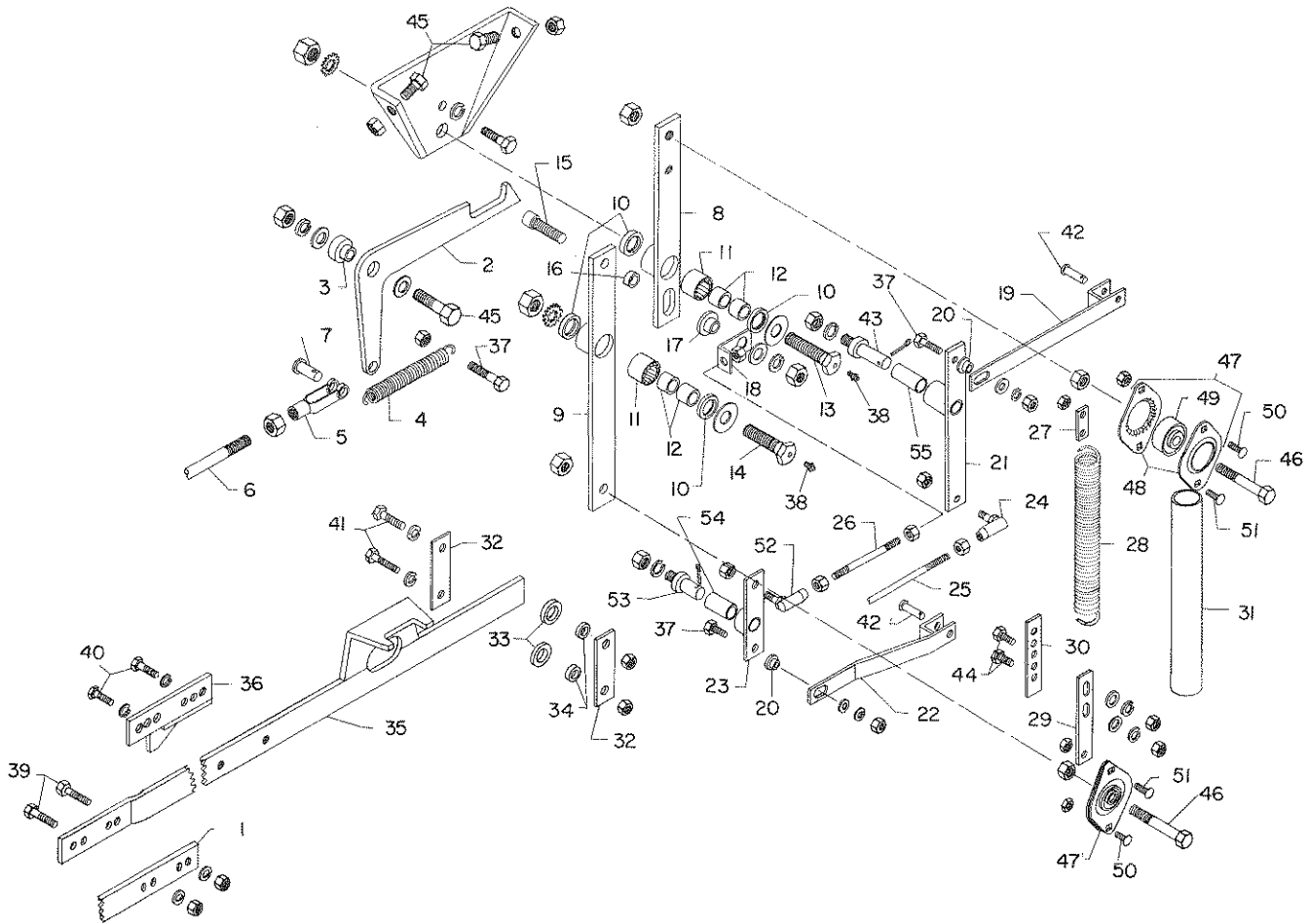
### PACKER AND PACKER CHUTE

REF. NO.	PART NO.	DESCRIPTION	REF. NO.	PART NO.	DESCRIPTION
1	F 3056	Packer Chute Back	23	F 3077	"O" Ring, 3"
2	F 3057	Packer Chute R.H. Side		F 3175	"O" Ring, 4"
3	F 3058	Packer Chute L.H. Side	24	F 3078	Cylinder Housing, 3"
4	F 3059	Packer Chute Top Seal		F 3176	Cylinder Housing, 4"
5	F 3060	Packer Chute Top Seal Plate	25	F 3079	Piston Head, 3"
6	F 3061	Packer Chute Side Seal (2 Used)		F 3177	Piston Head, 4"
7	F 3062	Packer Chute Side Seal Plate (2 Used)	26	F 3080	Back up Ring, 3"
8	F 3063	Packer Complete		F 3178	Back up Ring, 4"
9	F 3064	Bearing for Packer (2 Used)	27	F 3081	Piston Head Nut, 3"
	F 3066	Bearing Insert for F 3064		F 3179	Piston Head Nut, 4"
10	F 3065	Hydraulic Cylinder, Packer Drive, 3"	28	F 3082	Clevis, Cylinder End, 3"
	F 3067	Hydraulic Cylinder, Packer Drive, 4"		F 3180	Clevis, Cylinder End, 4"
11	F 3109	1/2" N.P.T. 90° Swivel Fitting, 4975 Couplomatic	29	F 3083	Cylinder Tie Bolts, 3"
12	F 3112	1/2" Hydraulic Hose w/1/2" male Fittings (58")		F 3181	Cylinder Tie Bolts, 4"
13		1" N.F. Jam Nut	30	F 117	Pipe Spacer
14	F 3111	1/2" Hydraulic Hose w/1/2" male Fittings (46")	31		Grease Fitting, 1/4"
15	F 3070	Hydraulic Cylinder Hinge Pin	32		3/8" x 2" N.C.H.T. Cap Screw
16	F 3071	Hairpin Cotter Key	33		Grease Fitting, 1/8"
17	F 3072	Cylinder rod end	34	F 3085	Packer Chute Front
18	F 3073	Seal	35		1/4" x 1/2" Truss head stove bolt
19	F 3074	Pin, Carburized	36		1/4" x 3/4" Truss head stove bolt
20	F 481	Bearing, (B 1212) (2 Used)	37		1/4" x 1-3/4" N. C. Cap Screw
21	F 3075	Piston Rod for Packer Ram, 3"	38		5/16" x 1/2" N.C. Cap Screw
	F 3173	Piston Rod for Packer Ram, 4"	39	F 3193	"O" ring seal, 1-1/8" for 3" ram
22	F 3076	Cylinder Head, 3"		F 3194	"O" ring seal, 1-1/4" for 4" ram
	F 3174	Cylinder Head, 4"	40	F 3189	Wiper ring, 1-1/8" for 3" ram
				F 3190	Wiper ring, 1-1/4" for 4" ram
			41	F 3191	Gasket, 3" ram
				F 3192	Gasket, 4" ram



**REAR VALVE TRIP ASSEMBLY**

REF. NO.	PART NO.	DESCRIPTION
1	F 3036	Toggle Operating Quadrant
2	F 3025	Trip bar, front
3	F 3027	Trip Bar, rear
4	F 3084	Packer Toggle Catch Bracket
5	F 3031	Packer Toggle Catch
6	F 3032	Packer Valve Operating Rod End
7	F 3003	Plunger Toggle Catch Rod
8	F 3002	Ferrule for Toggle Catch
9	F 829	Plunger Re-set Guide Roller
10	F 831	Plunger Re-set Guide Bushing
11	F 3005	Toggle Control Lever
12	F 3004	Toggle Lever
13	F 7587	Seal (63123 Victor)
14	F 3006	Inner Race (IR88)
15	F 481	Torrington Bearing (B1212)
16	F 3008	Pivot Bolt, Toggle Control Lever, 1/2" x 1-3/4" N.F.H.T.
17	F 3007	Pivot Bolt, Toggle Lever, 1/2" x 2" N.F.H.T.
18	F 3011	Ferrule, Valve Rod End
19	F 3009	Center Bolt, Toggle Lever 3/8" x 1-1/2" S.H.N.C.
20	F 3010	Packer Trip Bushing
21	F 3018	Packer Valve Operating Rod
22	F 3023	Spring Dampener Tube
23	F 3020	Toggle Spring Link
24	F 129	Packer Toggle Spring
25	F 3021	Toggle Spring Adjusting Link, to Bearing
26	F 3022	Toggle Spring Adjusting Link, to Spring
27	F 3024	Plunger Re-set Rod Guide Plate
28	F 1517	Spring
29	F 3033	Compression Door Re-set Lever
30	F 1295	Ball Joint, L.H. Thread, 3/8"
31	F 3034	Compression Door Re-set Rod
32	F 1294	Ball Joint, RH Thread, 3/8"
33	F 3035	Compression Door Lock
34		5/16" x 1-3/4" Carriage bolt
35		1/4" x 1/2" Carriage bolt
36	F 3037	Packer Toggle Catch Rod
37	F 3038	Pin for F 3037
38	F 7527	Pin for F 7526 Clevis
39	F 7526	Clevis, RH Thread, 5/8", compression door
40	F 3170	Spring, compression door
41	F 3039	Shaft, compression door, 5/8" x 9"
42	F 3171	Bumpers, toggle lever
43		1/2" x 2-3/4" N.C.H.T. Cap Screw
44		5/16" x 1-1/4" N.C.H.T. Cap Screw
45		3/8" x 1-1/2" N.C.H.T. Cap Screw
46		3/8" x 1-1/4" N.C.H.T. Cap Screw
47		5/16" x 3/4" N.C.H.T. Cap Screw
48		Grease Fitting, 3/16" drive
49		1/8" x 1" Cotter Pin
50		5/16" x 1" B.H.S.H. Cap Screw
51	F 3028	Bearing Complete w/flangettes 1/2"
52	F 3029	Bearing Flangettes only
53	F 3030	Bearing with Collar, 1/2"
54		1/4" x 3/4" Carriage Bolt
55	F 3164	Rod end, plunger toggle catch
56	F 3165	Compression door
57	F 3166	Hinge pin, compression door
58		3/8" x 4" N.C. Cap Screw
59		5/16" x 1" N.C. Cap Screw
60		3/8" x 2-1/2" N.C.H.T. Cap Screw

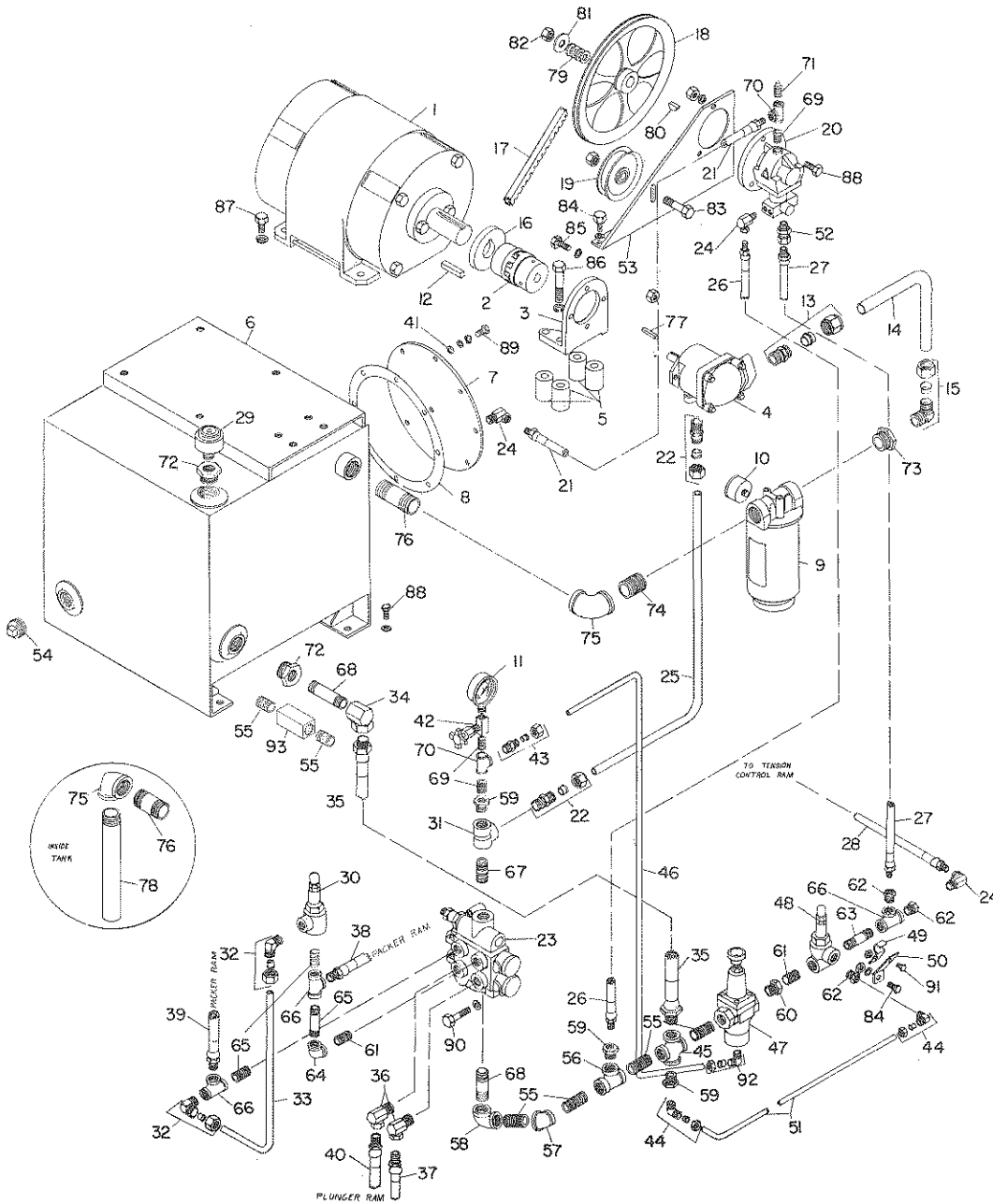


### FRONT VALVE TRIP ASSEMBLY

REF. NO.	PART NO.	DESCRIPTION
1	F 3027	Trip Bar, rear
2	F 3001	Plunger Toggle Catch
3	F 3002	Ferrule for Toggle Catch
4	F 278	Spring for Toggle Catch (Plunger)
5	F 5075	Clevis 5/16" Thread
6	F 3003	Plunger Toggle Catch Rod
7	F 5076	5/16" Clevis Pin
8	F 3004	Toggle Lever
9	F 3005	Toggle Control Lever
10	F 7587	Seal, 63123 Victor

**FRONT VALVE TRIP ASSEMBLY (Cont'd)**

REF. NO.	PART NO.	DESCRIPTION
11	F 481	Torrington Bearing (B1212)
12	F 3006	Inner Race (IR88)
13	F 3007	Pivot Bolt, Toggle Lever, 1/2" x 2" N.F.H.T.
14	F 3008	Pivot Bolt, Toggle Control Lever, 1/2" x 1-3/4" N.F.H.T.
15	F 3009	Center Bolt, Toggle Lever 3/8" x 1-1/2" S.H.N.C.
16	F 3010	Valve Trip Bushing
17	F 3011	Ferrule, Valve Rod End
18	F 3012	Rod End, Plunger valve operating
19	F 3013	Packer Valve Control Bar
20	F 3014	Ferrule, Packer Valve Control Bar
21	F 3015	Packer Valve Operating Lever
22	F 3016	Plunger Valve Control Bar
23	F 3017	Plunger Valve Operating Lever
24	F 1294	Ball Joint, 3/8" R.H. Thread
25	F 3018	Packer Valve Operating Rod
26	F 3019	Plunger Valve Operating Rod
27	F 3020	Toggle Spring Link
28	F 129	Plunger Toggle Spring
29	F 3021	Toggle Spring adj. link (to Bearing)
30	F 3022	Toggle Spring adj. link (to Spring)
31	F 3023	Spring Dampener Tube
32	F 3024	Plunger Re-set Rod Guide Plate (2 used)
33	F 829	Plunger Re-Set Rod Guide Roller (2 used)
34	F 831	Plunger Re-set Rod Guide Bushing (2 used)
35	F 3025	Trip Bar, front
36	F 3026	Trip Bar Lug
37		1/4" x 1" N.C. Cap Screw
38		Grease Fitting, 3/16" drive, #1646
39		5/16" x 1", N.C. Cap Screw
40		5/16" x 1/2" N.C. Cap Screw
41		5/16" x 1-1/4" N.C.H.T. Cap Screw
42		1/4" x 1-1/4" Clevis pin
43	F 3168	Rear Valve lever pin
44		1/4" x 3/4" N.C. Cap Screw
45		3/8" x 1-1/2" N.C.H.T. Cap Screw
46		1/2" x 2-1/2" N.C.H.T. Cap Screw
47	F 3028	Bearing Complete with Flangettes, 1/2"
48	F 3029	Bearing flangette only
49	F 3030	Bearing, w/collar, 1/2"
50		1/4" x 1/2" Carriage Bolt
51		1/4" x 3/4" Carriage Bolt
52	F 5077	Ball joint, 1/4" R. H. Thread
53	F 3169	Front valve lever pin
54	F 1568	Bushing, plunger valve operat- ing lever (1/2" x 5/8" x 1")
55	F 3182	Bushing, packer valve operat- ing lever (1/2" x 5/8" x 1-3/8")

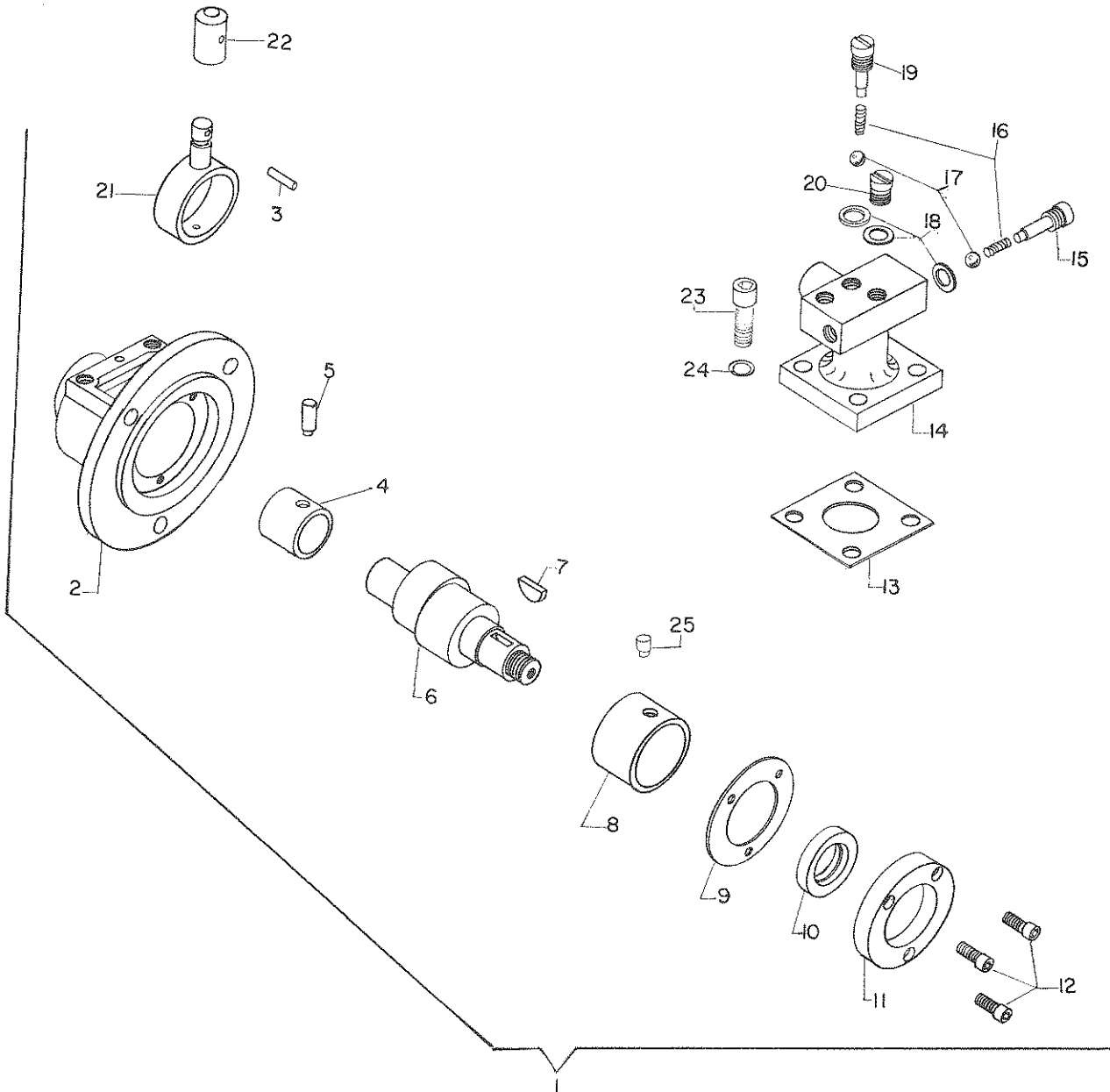


**HYDRAULIC PUMP AND VALVE SYSTEM**

REF. NO.	PART NO.	DESCRIPTION	REF. NO.	PART NO.	DESCRIPTION
1	F 3043	Electric Motor, 10 H.P. 3 phase	10	F 3054	Element Servicing Pressure Gauge
2	F 3100	Electric Motor, 5 H.P., 3 phase	11	F 800	Hydraulic Gauge, 2000 lbs.
	F 3044	Shaft Coupling 3/4" x 1-3/8" G 1000 Gerbing 10 H.P. motor	12	F 1093	Key, 5/16" x 5/16" x 2, 10 H.P. Motor
	F 3101	Shaft Coupling, 3/4" x 1-1/8" 5 H.P. Motor		F 3055	Key, 1/4" x 1/4" x 2", 5 H.P. Motor
	F 3045	Shaft Coupling Insert	13	F 3102	1" straight male Tube Fittings 8205 x 16 Weatherhead
3	F 3046	Hydraulic Pump Foot	14	F 3103	1" x 9" x 8" x .065" Steel Tube
4	F 3047	Hydraulic Pump	15	F 3104	1" x 90° male Tube Fitting, 8405-16 Weatherhead
5	F 3048	Hydraulic Pump foot Block, 4 used	16	F 3114	Sheave, tension Control pump drive 3-1/4" x 1-3/8" bore 10 H.P. motor
6	F 3049	Hydraulic Tank		F 3115	Sheave, tension Control pump drive 3-1/4" x 1-1/8" bore 5 H.P. Motor
7	F 3050	Hydraulic Tank Access Cover Gasket	17	F 3116	Belt, Tension Control pump drive, AX 48 Dayton
8	F 3051	Hydraulic Tank Access Gasket			
9	F 3052	Oil Filter Complete,			
	F 3053	Filter Element			

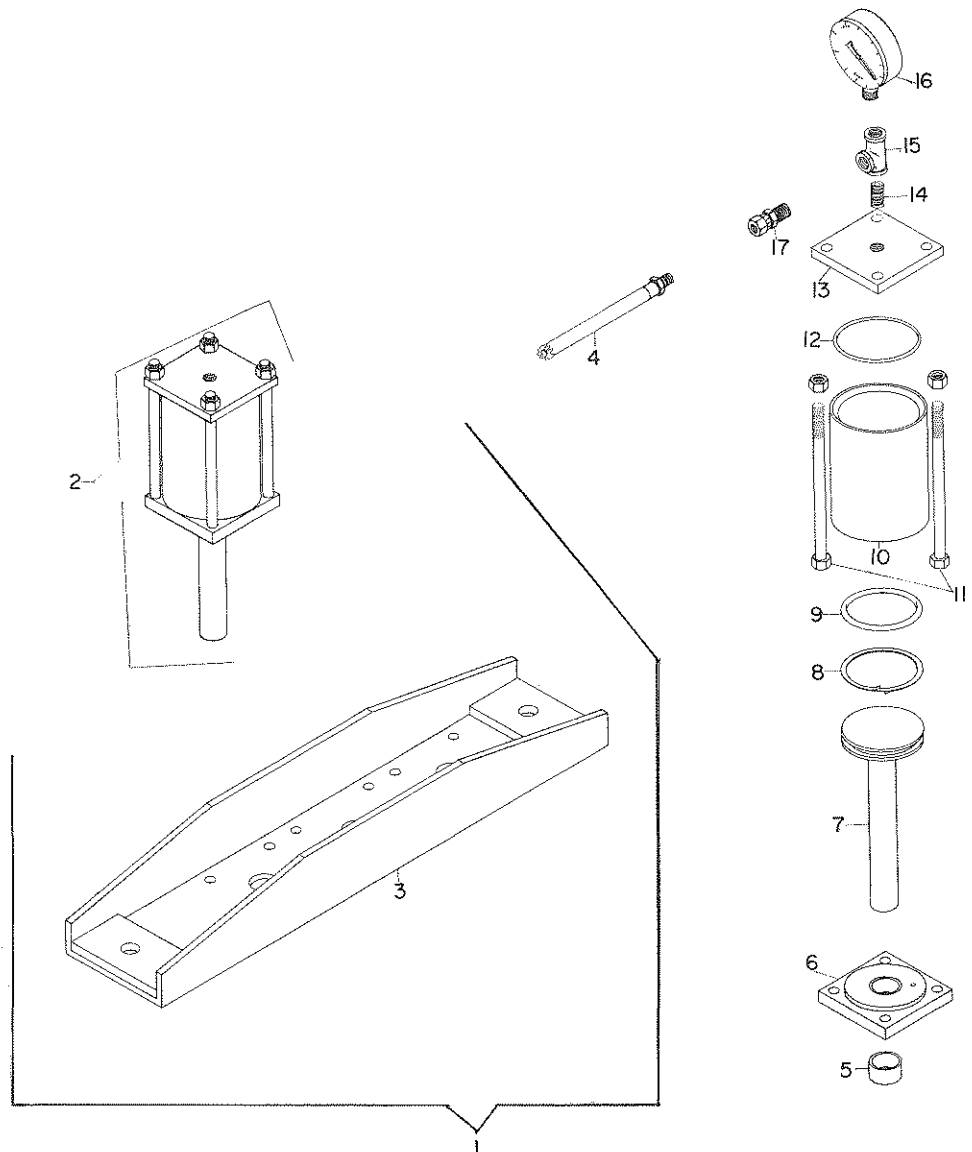
## HYDRAULIC PUMP AND VALVE SYSTEM (Cont'd)

REF. NO.	PART NO.	DESCRIPTION	REF. NO.	PART NO.	DESCRIPTION
18	F 3117	Sheave, Tension Control pump driven, A 1200 x 1"	48	F 3136	Relief valve
19	F 3118	Idler pulley, 008-10601 Fafner	49	F 3137	Pipe clamp, 3/4"
20	FT543	Pump, Tension Control, complete	50	F 3138	Pipe clamp bracket
21	F 3120	Hose, Tension Control pump Bypass, 1/4" x 31-1/2"	51	F 3139	1/4" steel tube, 1/4" x 7-1/2" x 2" x .035"
22	F 3105	3/4" Straight Male Tube Fitting, 8205-12 Weatherhead	52	FT107	1/4" NPT straight swivel fitting
23	F 3106	Hydraulic Valve	53	F 3140	Pump mounting bracket
24	F 3121	1/4" NPT 90° Swivel fitting, 4973 Couplomatic	54	F 3141	1-1/4" NPT Plug
25	F 3107	3/4" x 15" x 24" x .049" Steel Tube 90°	55	F 3142	3/4" close nipple
26	F 3122	Hose, Tension Control pump intake, 1/4" x 54"	56	F 3143	3/4" NPT tee
27	F 3123	Hose, Tension Control pump output, 1/4" x 43"	57	F 3144	3/4" NPT 45° ell
28	F 3124	Hose, Tension Control ram, 1/4" x 150"	58	F 3145	3/4" NPT 90° ell
29	FT 530	Air Filter Assembly	59	F 3146	3/4" x 1/4" NPT reducer bushing
30	F 3125	Relief valve	60	F 3147	3/4" x 1/2" NPT reducer bushing
31	F 3108	3/4" Heavy Duty Tee, 2000 lb.	61	F 3148	1/2" NPT close nipple
32	F 3126	1/2" x 90° Male Tube Fitting, 8405 x 4 x 4 Weatherhead	62	F 3149	1/2" x 1/4" reducer bushing
33	F 3127	1/2" - 6" x 3-1/2" x .049 Steel Tube, 90°	63	F 3150	1/2" x 3" NPT nipple
34	F 3128	3/4" NPT 90° Swivel fitting, 4986 Couplomatic	64	F 3151	1/2" NPT 90° ell
35	F 3129	Hose, Main oil supply, 3/4" x 19"	65	F 3152	1/2" x 2" NPT nipple
36	F 3109	1/2" NPT 90° Swivel Fitting, 4975 Couplomatic	66	F 3167	1/2" NPT tee
37	F 3110	1/2" Hydraulic Hose w/1/2" male Fittings, 32"	67	F 3153	3/4" x 2" nipple
38	F 3111	1/2" Hydraulic Hose w/1/2" male fittings, 46"	68	F 3154	3/4" x 4" nipple
39	F 3112	1/2" Hydraulic Hose w/1/2" male fittings, 58"	69	F 3155	1/4" close nipple
40	F 3113	1/2" Hydraulic Hose w/1/2" male fittings, 66"	70	FT 74	1/4" NPT tee
41	FT538	Washer Seal for Tank Access Cover Bolts, 5/16", 8 used	71	FT 75	1/4" NPT plug
42	F 3130	Needle Valve atrol	72	F 3156	1-1/4" x 3/4" NPT reducer bushing
43	F 3131	1/4" straight male tube fitting, 8205 x 4 x 4 Weatherhead	73	F 3157	1-1/4" x 1" NPT reducer bushing
44	F 3132	1/4" x 90° male tube fitting, 8405 x 4 x 4 Weatherhead	74	F 3158	1-1/4" NPT close nipple
45	F 3133	3/4" High pressure cross	75	F 3159	1-1/4" NPT ell
46	F 3134	1/4" steel tube, 1/4" x 4" x 21" x 5" .035"	76	F 3160	1-1/4" x 2-1/2" NPT nipple
47	F 3135	Relief valve,	77	F 3161	3/16" x 3/16" x 1-1/2" key
	F 3119	Repair kit for F 3135 valve	78	F 3162	1-1/4" x 12" pipe
			79	F 1680	Spacer washer, 28 ga.
			80		Woodruff key, 1/4" x 3/4"
			81		Flat washer, 9/16"
			82		Nut, 5/8" NF Jam
			83		1/2" x 2-1/2" N. C. H. T. Cap screw
			84		3/8" x 3/4" N. C. H. T. Cap screw
			85		3/8" x 1-1/2" N. C. H. T. Cap screw
			86		1/2" x 2-1/2" N. C. H. T. Cap screw
			87		3/8" x 1" N.C.H.T. cap screw
			88		3/8" x 1-1/4" N.C. cap screw
			89		5/16" x 3/4" N.C. cap screw
			90		3/8" x 2" N.C.H.T. cap screw
			91		1/4" x 3/4" N.C. Cap Screw
			92	F 3099	1/4" x 1/8" x 90° male tube fitting, 8405X4, Weather head
			93	F 3163	Check valve



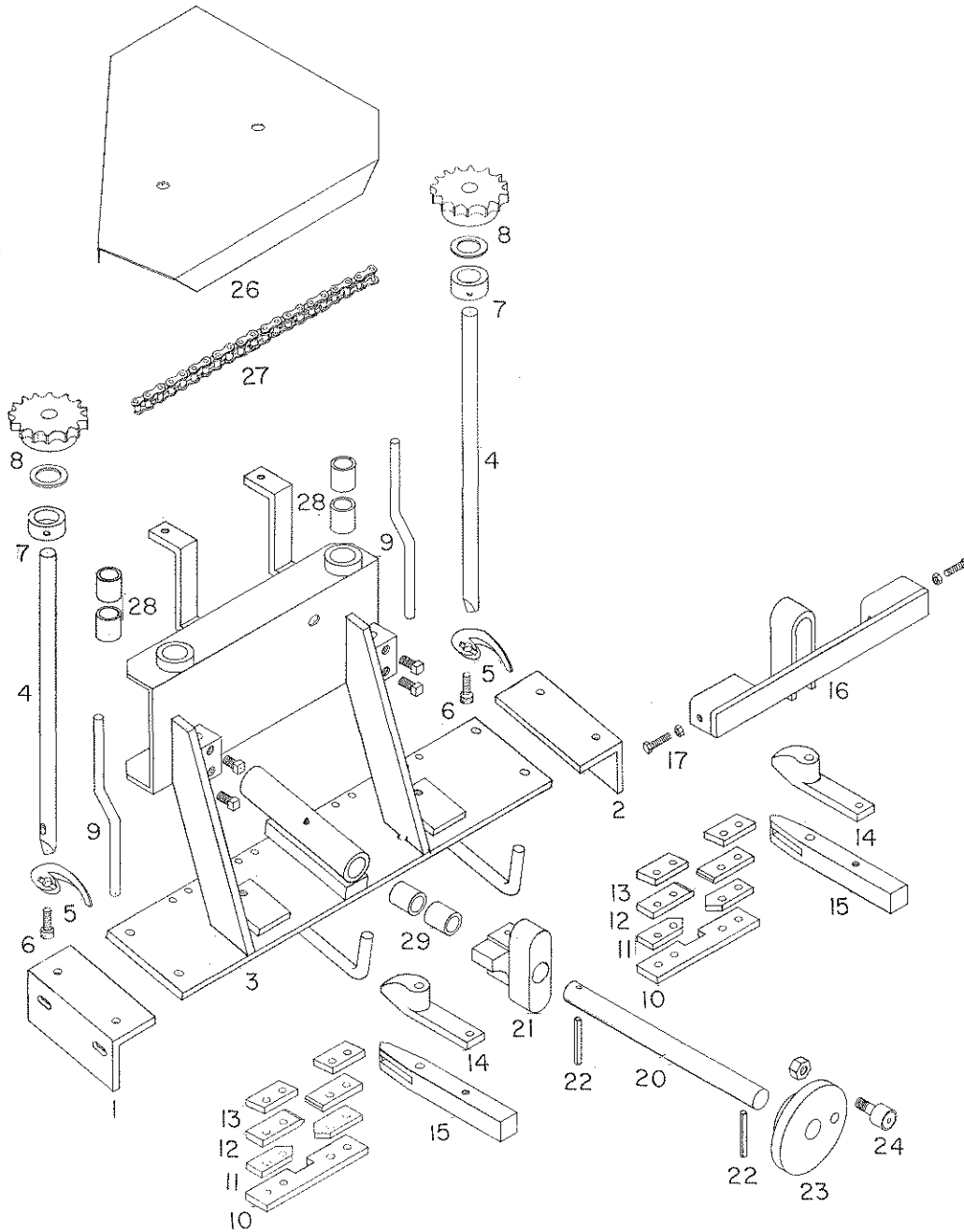
### TENSION CONTROL PUMP

REF. NO.	PART NO.	DESCRIPTION	REF. NO.	PART NO.	DESCRIPTION
1	FT 543	Pump Complete	13	FT 521	Head Gasket
2	FT 544	Crank Case	14	FT 524	Head
3	FT 506	Piston Pin	15	FT 517	Check Valve Pin (intake)
4	FT 508	Crankshaft Bushing (inner)	16	FT 513	Check Ball Spring
5	FT 510	Anchor Pin for FT 508 Bushing	17	FT 512	Check Ball
6	FT 503	Crankshaft	18	FT 514	Gasket
7		Woodruff Key, 1/4" x 3/4"	19	FT 518	Check Valve Pin (outlet)
8	FT 509	Crankshaft Bushing (outer)	20	FT 519	Plug
9	FT 541	Gasket for FT 504 Retaining Ring	21	FT 500	Connecting Rod
10	FT 507	Oil Seal (450045)	22	FT 505	Piston
11	FT 504	Retaining Ring	23	FT 515	Head Bolt (4 used)
12	FT 516	Allen Screws for Retaining Ring (1/4" x 3/4")	24	FT 520	Lock Washer for FT 515
			25	FT 511	Anchor Pin for FT 509 Bushing



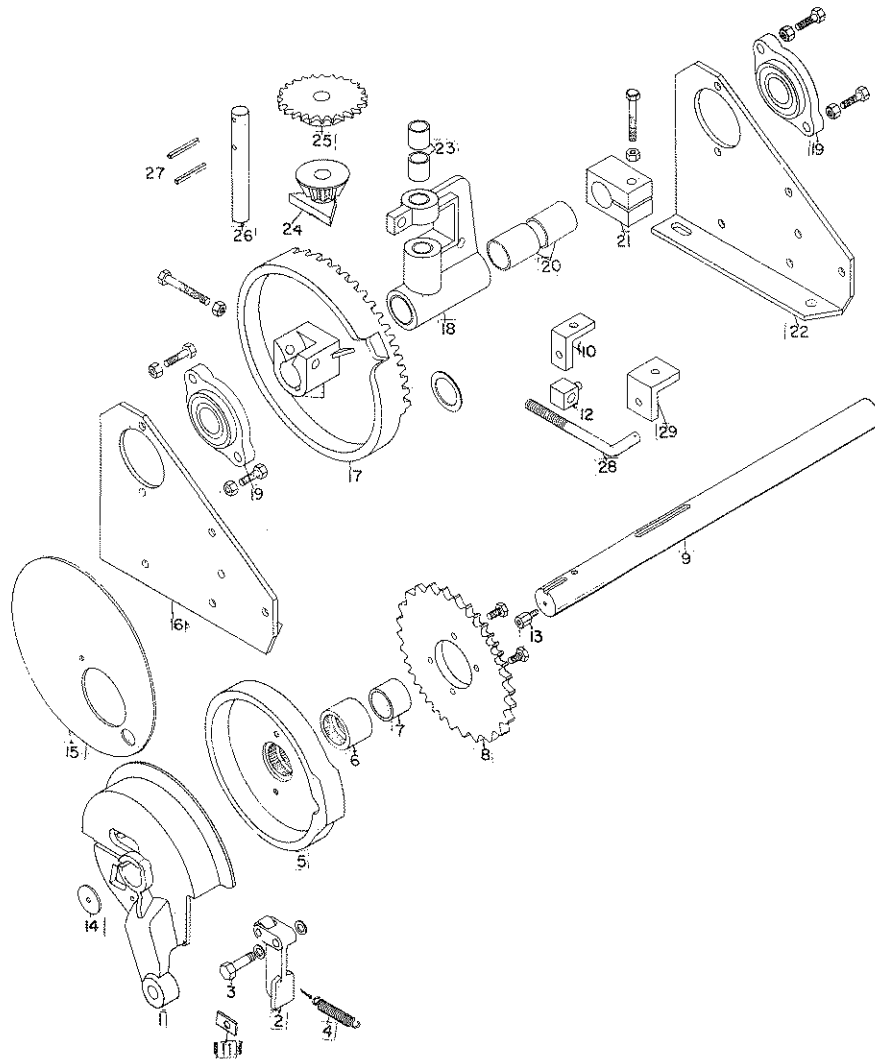
**TENSION CONTROL RAM**

REF. NO.	PART NO.	DESCRIPTION	REF. NO.	PART NO.	DESCRIPTION
1	FT 153	Single Ram Assy. Complete	9	FT 12	O-Ring for Piston
2	FT 198	Cylinder Complete w/top and bottom	10	FT 10	Cylinder
3	FT 199	Cylinder Frame	11	FT 16	Tie Bolt 3/8" x 7" N.F.H.T. w/nut
4	F 3124	Hose Tension Control ram, 1/4" x 150"	12	FT 15	O-Ring Top Seal
5	FT 19	Bushing for FT 14 (1" x 1-1/4" x 5/8")	13	FT 13	Cylinder Top
6	FT 14	Cylinder Bottom w/bushing	14	FT 73	Nipple, 1/4" x 1-1/2"
7	FT 11	Piston	15	FT 74	Tee
8	FT 137	Back Up Ring for FT 12 (MS-28782-37)	16	F 800	Hydraulic Pressure Gauge (2000#)
			17	FT 107	Union Swivel



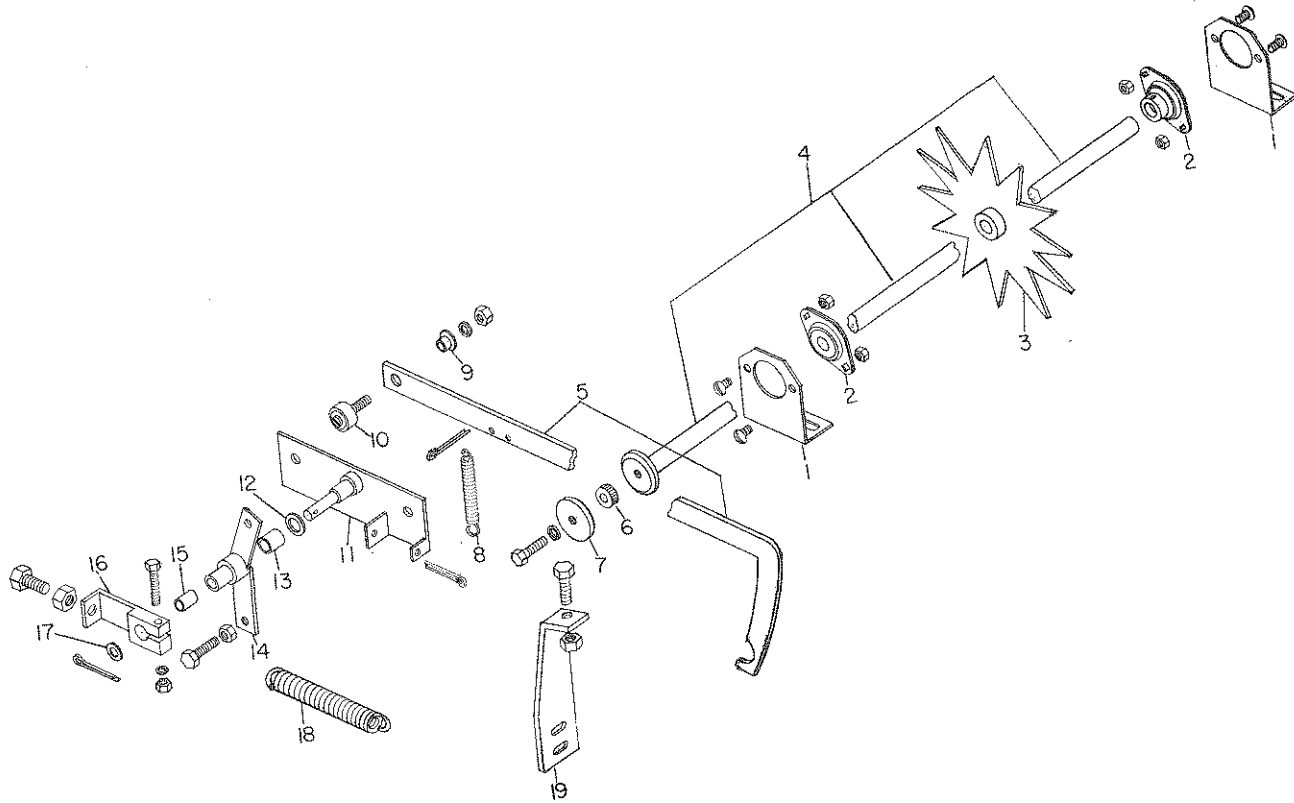
### WIRE KNOTTER

REF. NO.	PART NO.	DESCRIPTION	REF. NO.	PART NO.	DESCRIPTION
1	F 7062	Knotter mounting angle LH	15	F 7313	Wire gripper tongue
2	F 7065	Knotter mounting angle RH	16	F 7316	Shuttle bar with adjusting screws
3	F 7311	Twister and shuttle bar frame	17	F 7081	Shuttle bar adjusting screws
4	F 7089	Twister shaft	20	F 7077	Cam shaft
5	F 4046	Twister hook	21	F 7075	Shuttle bar drive cam
6	F 7248	Twister hook bolt	22	F 7076	Roll pin, 1/4" x 1-1/2"
7	F 172	Set collar 3/4"	23	F 7078	Shuttle bar crank flange
8	F 4024	Sprocket, twister shaft, 15T	24	F 7079	Cam follower
9	F 7318	Wire holder rod	26	F 7317	Shield
10	F 7087	Wire knife	27	F 7348	Twister drive chain, 64P
11	F 7086	Gripper spacer, bottom	28	F 7227	Bushing, twister shaft
12	F 7085	Wire gripper	29	F 7227	Bushing, cam shaft
13	F 7084	Gripper, top plate			
14	F 7312	Wire divider			



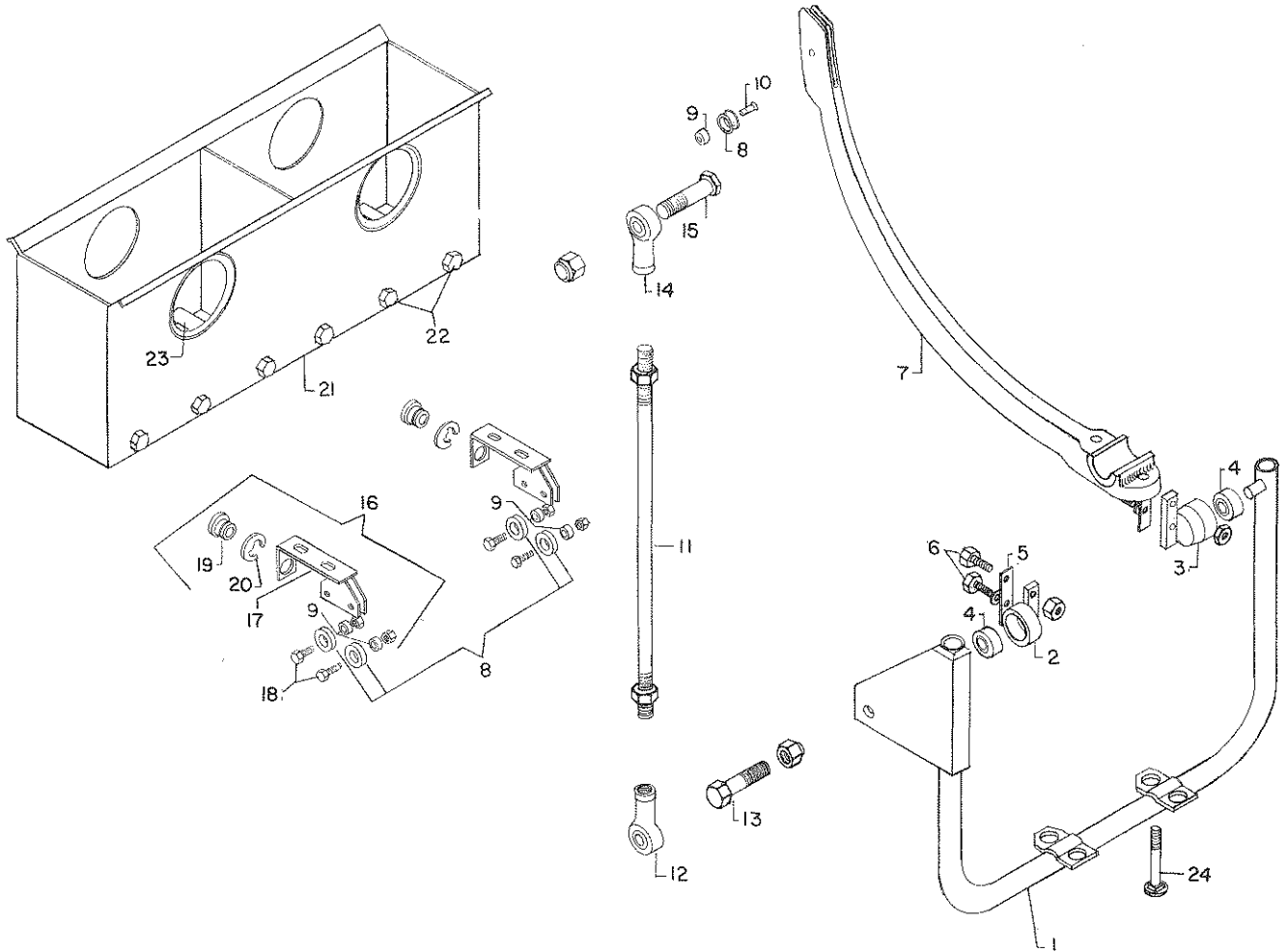
### WIRE KNOTTER

REF. NO.	PART NO.	DESCRIPTION	REF. NO.	PART NO.	DESCRIPTION
1	F 7519	Clutch w/pawl	17	F 7432	Intermittent gear, used with F 7431 pinion
2	F 1622	Clutch pawl	18	F 7072	Pinion frame
	F 1623	Washer each side of pawl 7/16" I.D. x 7/8" O.D. x .025	19	F 7063	Bearing, knotter shaft (2 used)
3	F 1633	Clutch pawl pin	20	F 4137	Bushing for F 7072 frame, 1-3/8" x 1-1/2" x 2"
4	F 4115	Spring, clutch pawl	21	F 4138	Clamp collar
5	F 4133	Notched clutch disc with F 4134 bearing 1-3/8"	22	F 7570	Knotter mount R.H.
6	F 4134	Bearing for F 4133 disc (GR 26)	23	F 7247	Bushing for F 7072 frame 7/8" x 1" x 1"
7	F 4135	Inner race for F 4134 bearing (MI - 22 - 45)	24	F 7431	Pinion, used with F 7432 gear
	F 4136	Hardened washer between F 7519 and F 4133	25	F 7257	Twister drive sprocket, 25T
8	F 3092	Clutch sprocket (50A39)	26	F 7069	Pinion shaft
9	F 7457	Knotter shaft,	27	F 7076	Roll pin, 1/4" x 1-1/2"
10	F 7333	Angle for chain tightener rod	28	F 7334	Chain tightener rod,
11	F 1620	Clutch pawl pin lock	29	F 7332	Angle for chain tightener rod, rear
12	F 7335	Block for chain tightener rod			3/8" N.C. Cap screw, Sprocket to clutch
13	F 1576	Adapter for zerk, end of knotter shaft 3/8" N.F.			3/8" N.C. Cap screw with lock nut, Knotter shaft bearing
14	F 246	Knotter shaft end washer, L.H.			1/2" x 3" N.C. Cap screw with lock nut, intermittent gear and clamp collar
15	F 1577	Shield for knotter clutch			
16	F 7571	Knotter mount L.H.			



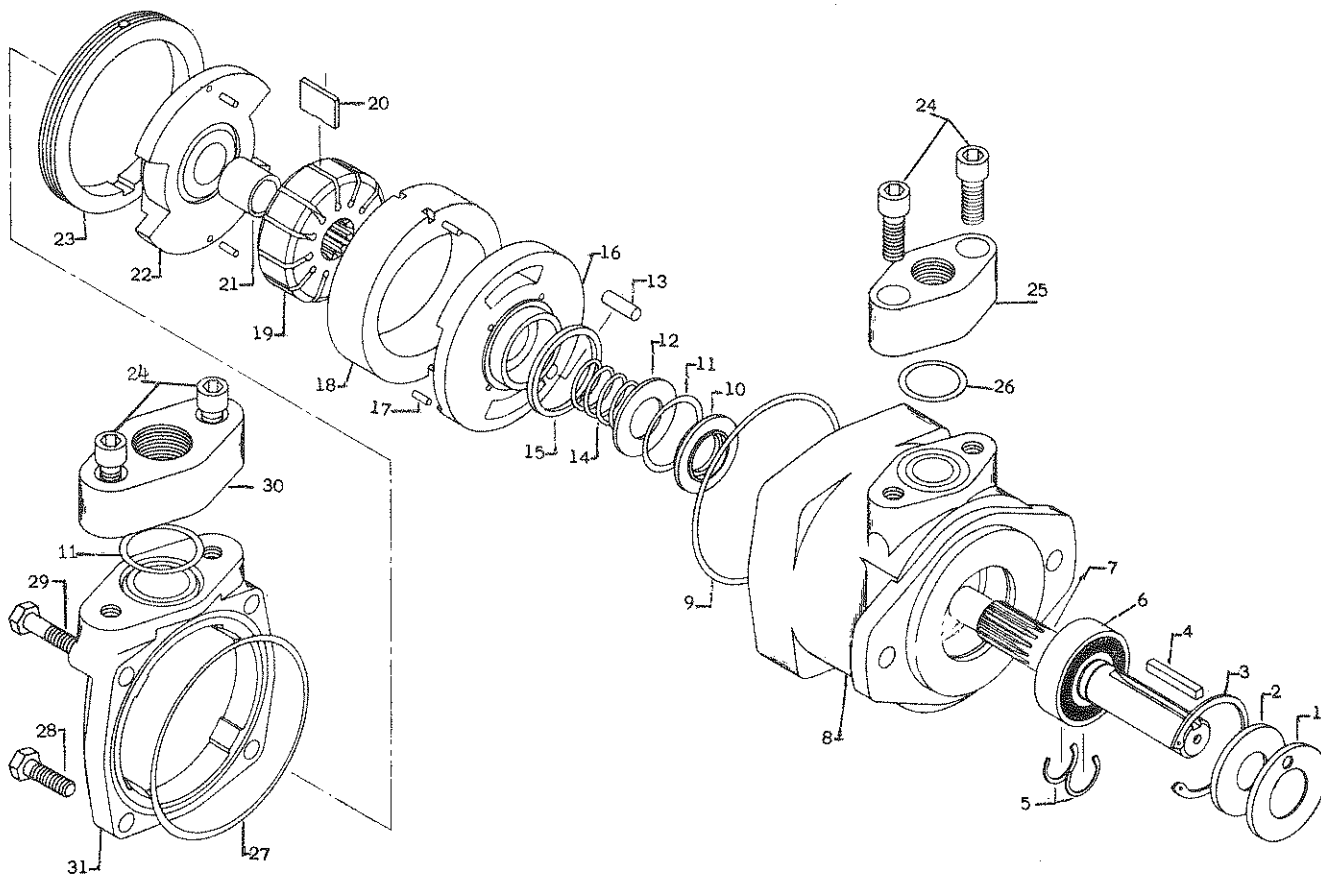
**KNOTTER TRIP ASSEMBLY**

REF. NO.	PART NO.	DESCRIPTION	REF. NO.	PART NO.	DESCRIPTION
1	F 1617	Meter wheel shaft bracket (2 used)	14	F 1514	Reset lever
2	F 1618	Meter wheel shaft bearing complete (2 used)	15	F 1568	Bushing, reset lever 1/2" x 5/8" x 1" oilite
	F 1619	Meter wheel shaft bearing only (RAO12N.P.P.B.)	16	F 1515	Clutch stop lever
3	F 1531	Meter wheel, 10"	17		1/2" x 7/8" 14 ga., machine bushing
4	F 1575	Meter wheel shaft with guide washer	18	F 1517	Trip spring
5	F 1686	Meter trip bar	19	F 1632	Meter trip bar stop with bolt
6	F 1687	Knurled friction disc			1/2" x 1-1/2" NCCS trip bar stop
7	F 1571	Guide washer			1/2" x 1-1/2" NCCS clutch stop
8	F 278	Spring			5/16" x 2" NFCS clutch stop clamp
9	F 440	Ferrule			3/8" x 1-1/4" NCCS knurled roller and washer
10	F 1572	Cam follower bearing			5/16" x 3/4" NCBH bearing to bracket
11	F 1513	Knotter trip mount			
12		3/4" x 1-1/4" 10 ga., machine bushing			
13	F 7227	Bushing 3/4" x 7/8" x 3/4" oilite			



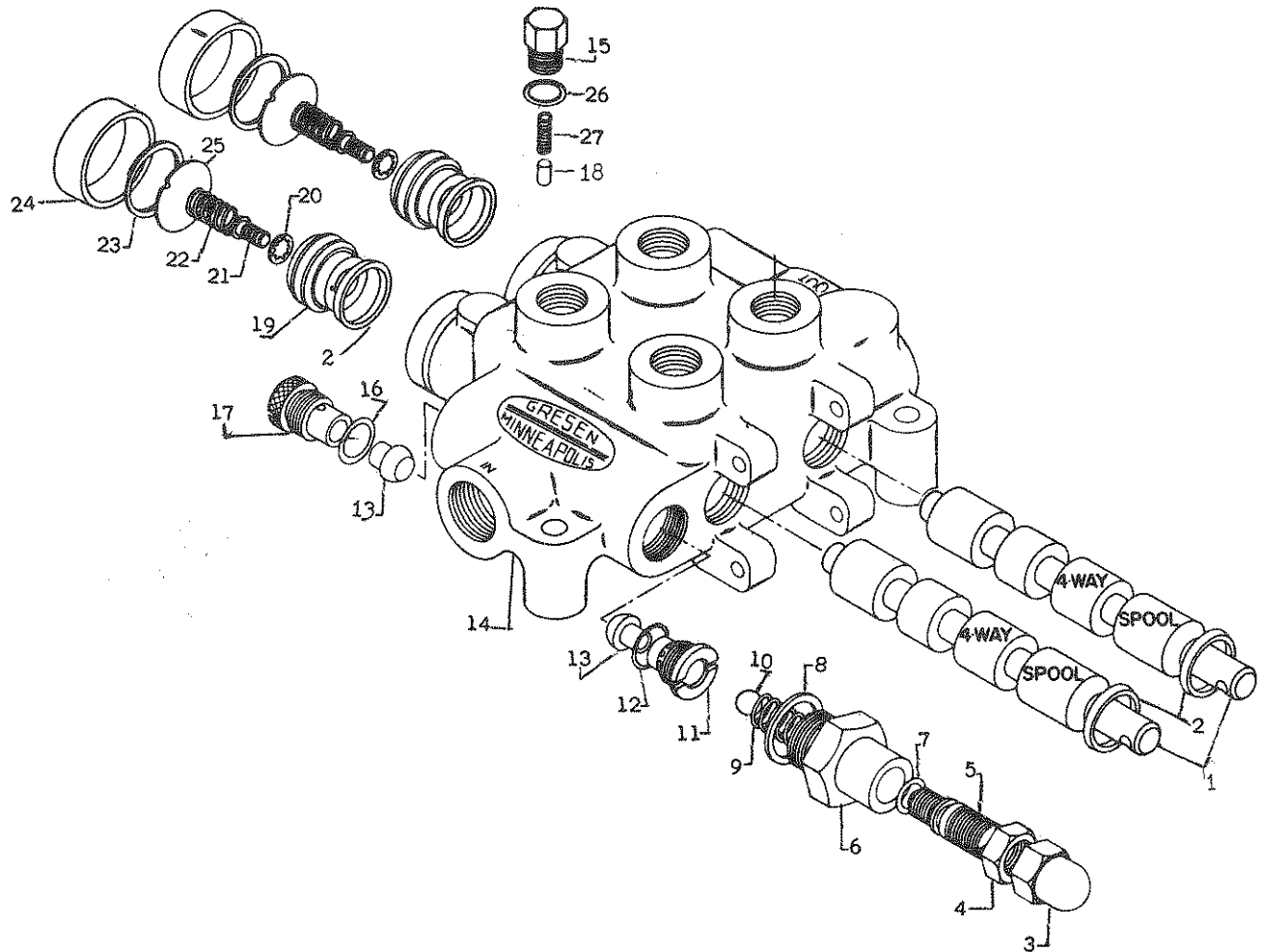
### WIRE BOX, NEEDLES, ETC.

REF. NO.	PART NO.	DESCRIPTION	REF. NO.	PART NO.	DESCRIPTION
1	F 7558	Needle Yoke	12	F 1549	Needle Yoke Drive Rod End R.H. thread
2	F 7522	Needle Yoke Bearing Complete, L.H.	13	F 1552	Bolt w/nut, Drive Rod to Needle Yoke
3	F 7521	Needle Yoke Bearing Complete, R.H.	14	F 1550	Needle Yoke Drive Rod End L.H. thread
4	F 7523	Bearing for F 7521 and F 7522 (K.P. 12A)	15	F 1551	Bolt w/nut, Drive Rod to Clutch
5	F 1702	Shim for Needle Yoke Bearing	16	F 3068	Wire Guide Complete
6		1/2" x 1-3/4" N.C. Cap Screw w/nut	17	F 3069	Wire Guide Frame Only
7	F 7711	Needle, wide base	18		1/4" x 1" N.C. Cap Screw w/lock nut
8	F 4014	Roller for Needle and Wire Guide	19	F 856	Wire Guide Bushing
9	F 4015	Bushing for F 4014 Roller	20	F 857	Snap Ring for F 856 Bushing
10	F 4016	Bolt, Needle Roller	21	F 7344	Wire Box Complete
11	F 7554	Needle Yoke Drive Rod	22	F 4194	Spacer Bolt for Wire Box
			23	F 4195	Pipe Spacer for Wire Box
			24	F 7552	Bolt, Needle to Yoke w/nut, 1/2" x 3-1/4" carriage



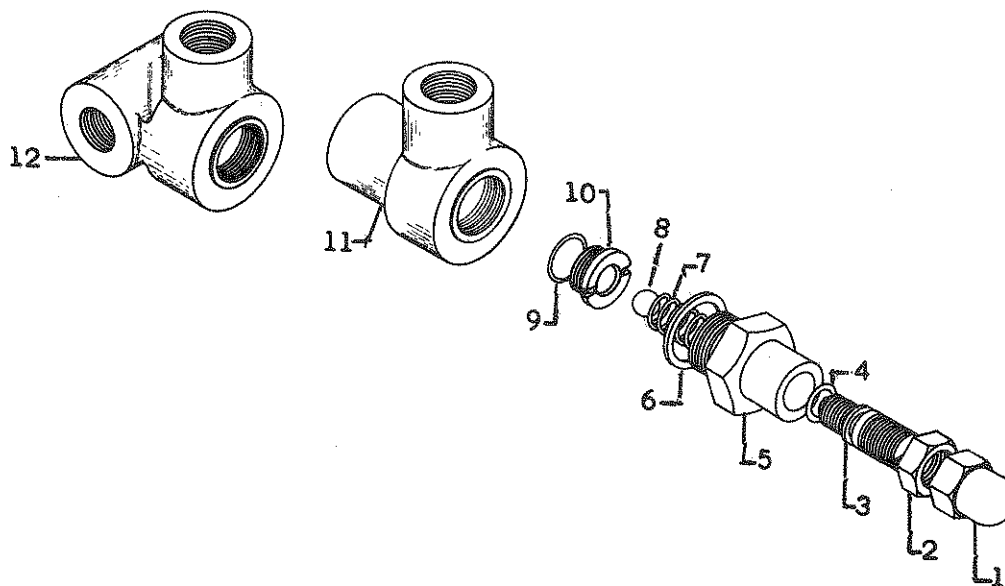
**F 3047**  
**MODEL TB HYDRAULIC VANE TYPE PUMP**

REF. NO.	PART NO.	DESCRIPTION	REF. NO.	PART NO.	DESCRIPTION
1	FG 1041	Dust shield retainer	18	FG 1003	Rotor ring (3 gal.)
2	FG 1042	Leather washer		FG 1006	Rotor ring (6 gal.)
3	FG 1017	Bearing housing snap ring		FG 1009	Rotor ring (9 gal.)
4	FG 1034	Key		FG 1012	Rotor ring (12 gal.)
5	FG 602	Retainer ring (2 used)	19	FG 1002	Rotor
6	FG 1007	Main bearing	20	FG 1011	Vane (12 used)
7	FG 1010	Drive shaft	21	FG 1008	Pilot bearing
8	FG 1000	Pump housing	22	FG 1005	Intake end plate
9	FG 1021	Exhaust plate seal	23	FG 1035	Threaded assembly ring
10	FG 1049	Slip ring	24	FG 1027	Flange bolt
11	FG 860	"O" ring	25	FG 1045	Exhaust flange
12	FG 1015	Slip ring washer	26	FG 2836	Exhaust flange seal "O" ring
13	FG 1028	Exhaust plate locking pin	27	FG 1022	Intake plate seal
14	FG 1016	Slip ring spring	28	FG 1032	Intake cover screw, 5/16" x 1"
15	FG 1031	Exhaust plate quad ring	29	FG 1033	Intake cover screw, 5/16" x 1-5/8"
16	FG 1004	Exhaust end plate	30	FG 1026	Intake flange
17	FG 1036	Reversing stop pin	31	FG 1001	Intake cover



**F 3106**  
**HYDRAULIC CONTROL VALVE**

REF. NO.	PART NO.	DESCRIPTION	REF. NO.	PART NO.	DESCRIPTION
1	FG 904	4 way spool	14	FG 2702	Valve housing
2	FG 932	Spool seal	15	FG 2519	Detent cap
3	FG 974	Acorn cap	16	FG 1141	Check plug "O" ring
4	FG 973	Jam nut	17	FG 2783	Check plug
5	FG 925	Adj. screw	18	FG 971	Detent pin
6	FG 924	Relief body	19	FG 2531	Detent spool adapter
7	FG 926	Adj. screw "O" ring	20	FG 2529	Cent. spring lock washer
8	FG 923	Relief body gasket	21	FG 510	Spring assembly bolt
9	FG 922	Relief spring	22	FG 976	Detent end cap retainer spring
10	FG 014	Ball	23	FG 914	Stop disc snap ring
11	FG 2784	Relief valve seat	24	FG 967	Rubber bonnet
12	FG 2706	Relief valve seat "O" ring	25	FG 912	Stop disc
13	FG 2781	Check poppet	26	FG 970	Detent spring washer
			27	FG 969	Detent spring

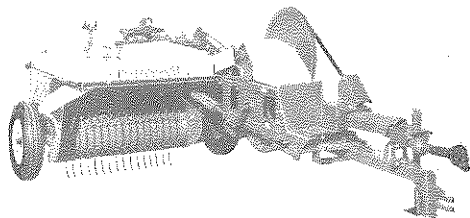


### F 3125 AND F 3136 RELIEF VALVES

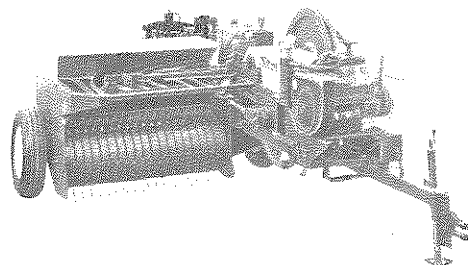
REF. NO.	PART NO.	DESCRIPTION
1	FG 974	Acorn cap
2	FG 973	Jam nut
3	FG 925	Adj. screw
4	FG 926	Adj. screw "O" ring
5	FG 924	Body
6	FG 923	Body gasket
7	FG 922	Spring
8	FG 014	Ball
9	FG 2706	Seat "O" ring
10	FG 2718	Relief seat
11	FG 2716	Housing (J-50)
12	FG 2818	Housing (JL-50)

# FREEMAN HAY BALERS

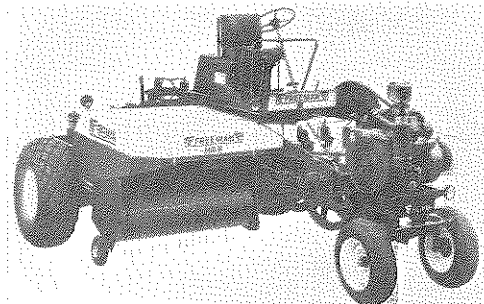
FOR FASTER, MORE ECONOMICAL BALING



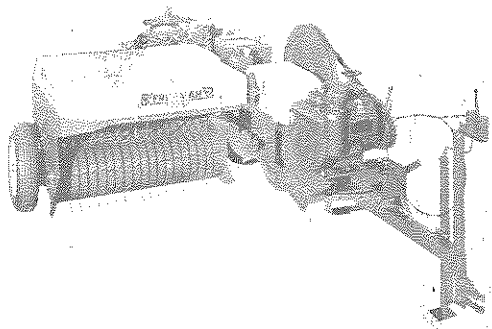
**MODEL 25A**  
TWO TWINE OR WIRE  
PTO OR ENGINE DRIVE



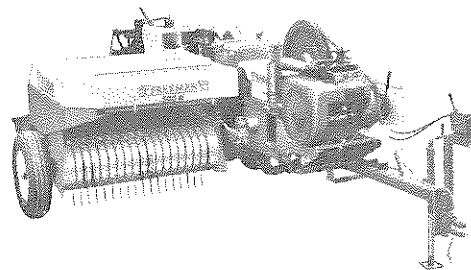
**MODEL 100**  
TWO TWINE OR WIRE  
PTO OR ENGINE DRIVE



**SELF PROPELLED**  
**MODELS 200 AND 300**  
TWO OR THREE TIE  
WIRE OR TWINE

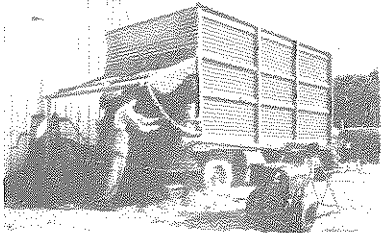


**MODEL 200**  
TWO TWINE OR WIRE  
PTO OR ENGINE DRIVE

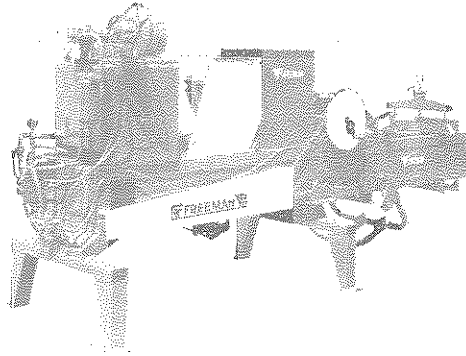


**MODEL 300**  
THREE TWINE OR WIRE  
PTO OR ENGINE DRIVE

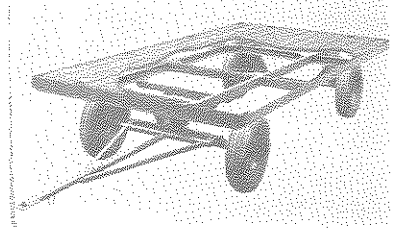
# FREEMAN HEAVY DUTY MACHINERY FOR EASIER...MORE PROFITABLE FARMING



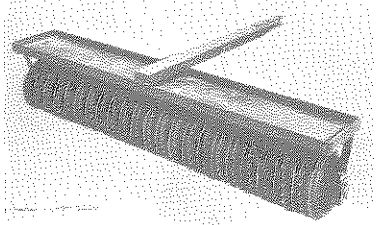
HAY, ENSILAGE or COTTON  
WAGON WITH UNLOADER



COTTON MOTES BALER



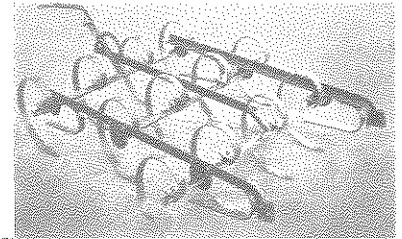
FULL CIRCLE—FIFTH  
WHEEL WAGON



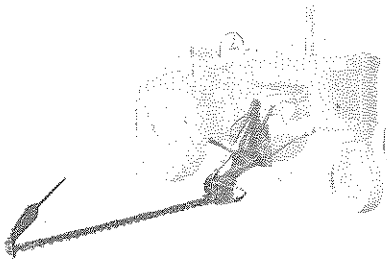
LAND ROLLER



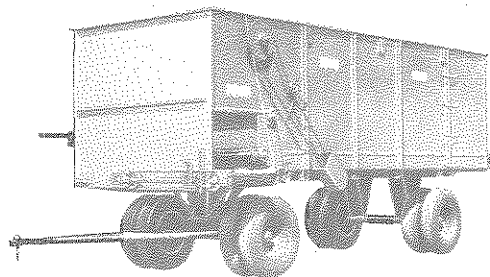
FEEDER WAGON BOX MOUNTED  
ON TRUCK



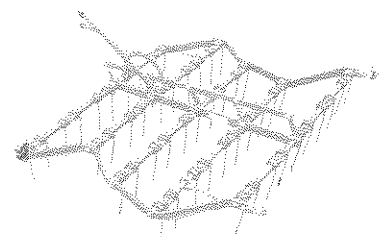
WEED HOG HARROW



DOUBLE SICKLE MOWER



FEEDER WAGON



COIL SPRING HARROW

## OTHER IMPLEMENTS AVAILABLE

BALER TWINE FOR AUTOMATIC BALERS  
FEED RACKS FOR BOX STALLS

AUTOMATIC SILAGE UNLOADING EQUIPMENT  
ELEVATORS FOR FOX CHOPPERS  
FEED TABLES FOR FOX CHOPPERS

SPECIAL FARM TOOLS MADE TO CUSTOMERS' SPECIFICATIONS

*Quality Farm Machinery Since 1889*

*Write for Information*

**J. A. FREEMAN & SON** 2034 N. W. 27th AVE. **PORTLAND, ORE. 97210**