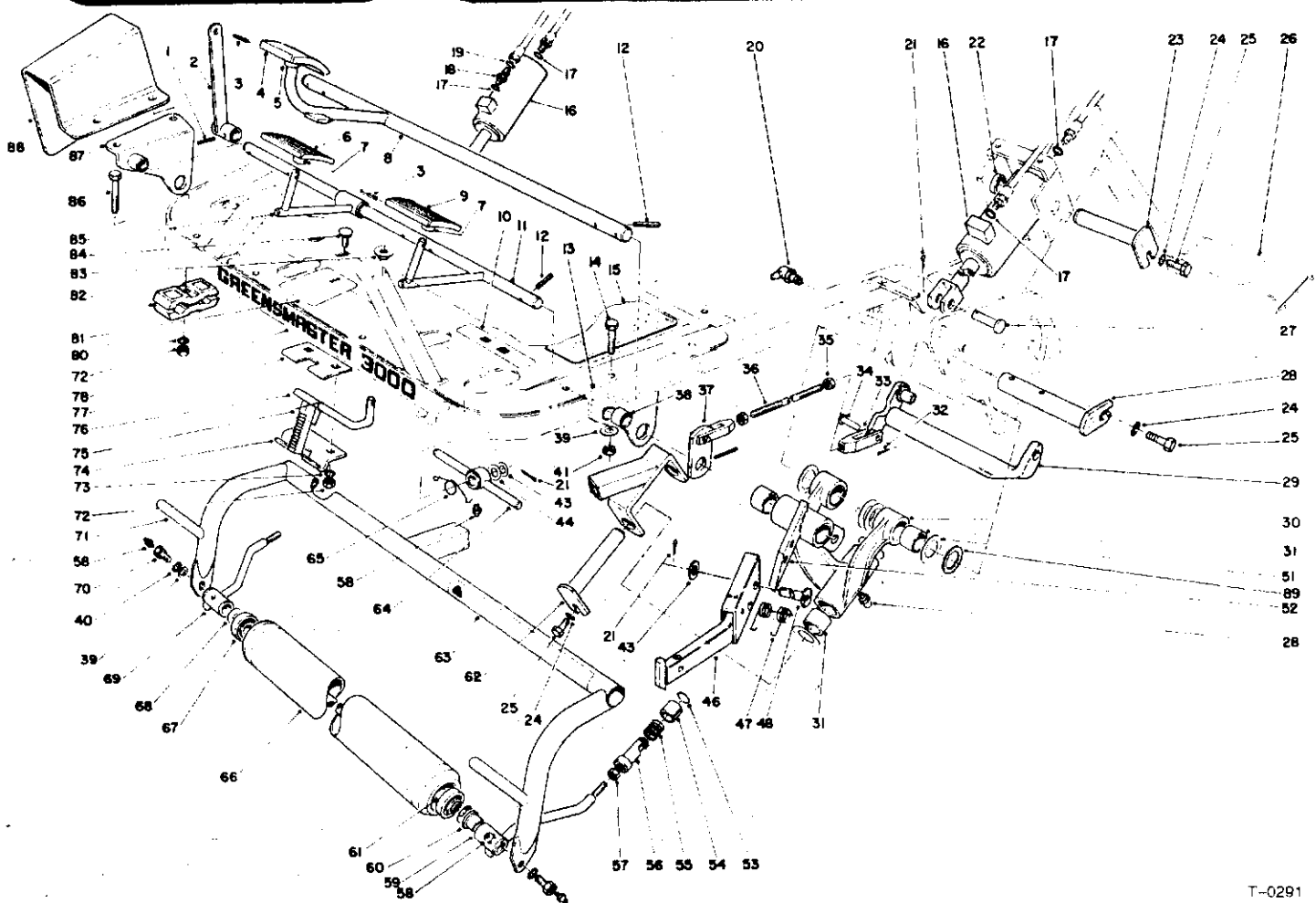


TORO®

MODEL NO. 04350 - 10001 & UP
 MODEL NO. 04405 - 10001 & UP
 MODEL NO. 04408 - 10001 & UP
 MODEL NO. 04450 - 10001 & UP
 MODEL NO. 04458 - 10001 & UP
 MODEL NO. 04450 - 10001 & UP
 MODEL NO. 04465 - 10001 & UP

PARTS CATALOG

GREENSMMASTER® 3000

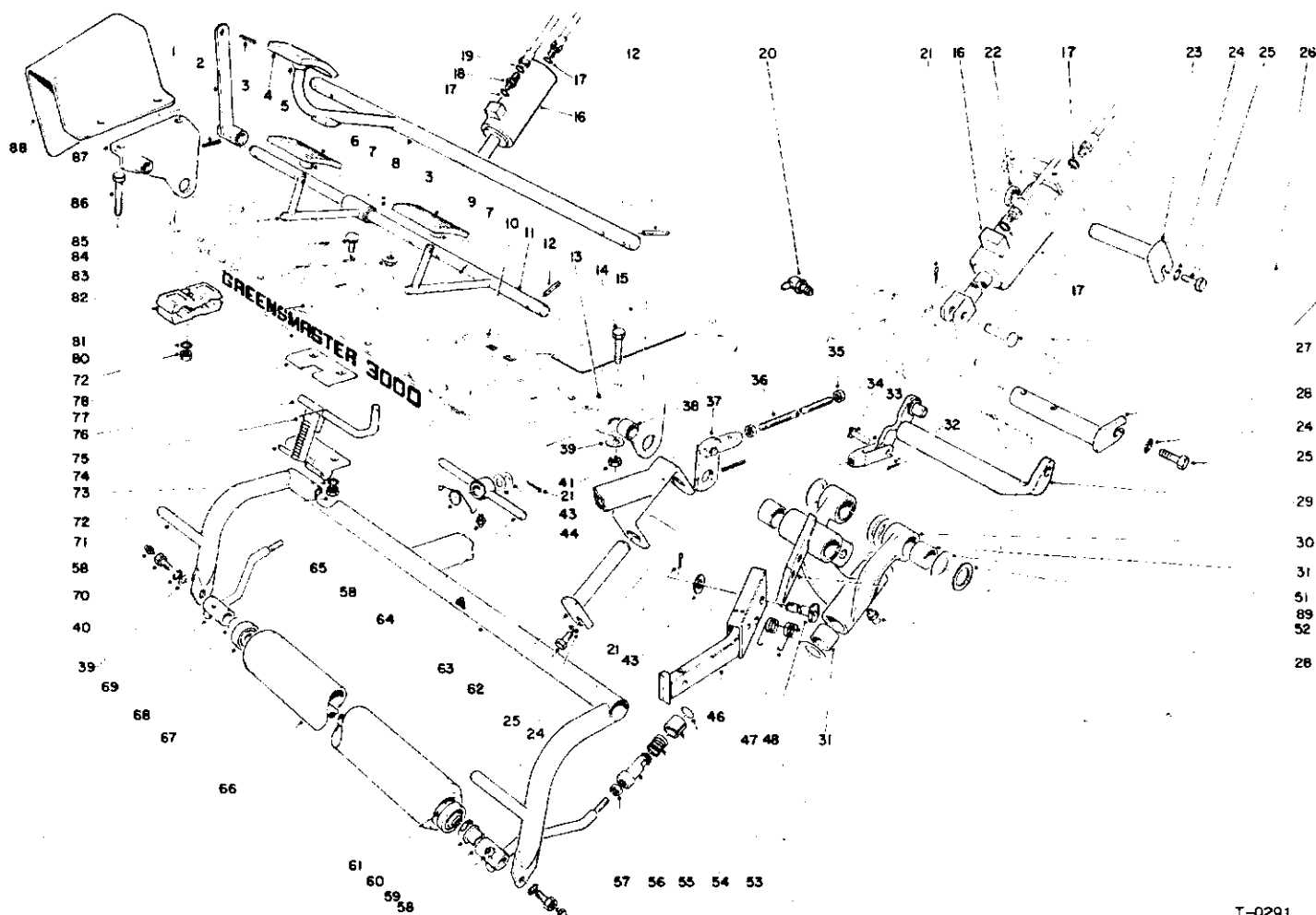


T-0291

FOOT PEDALS & ROLLER ASSEMBLY

Ref. No.	Part No.	Description	No. Used
1	32121-6	Pin - Roll	1
2	49-6200	Lever - Cutting Control	1
3	32121-45	Pin - Roll	3
4	49-6170	Foot Pad - Brake	1
5	49-6150	Foot Pad - Brake	1
6	10-8250	Foot Pad - Mow	1
7	10-6540	Foot Pedal	2
8	49-6130	Shaft - Brake	1
9	10-8240	Foot Pad - Lift	1
10	51-0050	Decal - Mow/Lift	1
11	49-6180	Shaft - Cutting Control	1
12	32121-35	Pin - Roll	8
13	49-6090	Lift Pivot Bracket - L.H. (Incl. Ref. #38)	1
14	323-10	Screw - Cap, Hex Hd.	4
15	49-6120	Pad - Footrest	1
16	72-9720	Cylinder - Hydraulic	2

Ref. No.	Part No.	Description	No. Used
17	237-78	O-Ring	4
18	340-92	Fitting - Straight	1
19	237-21	O-Ring	1
20	302-60	Fitting - Grease	4
21	3272-11	Pin - Cotter	4
22	74-3730	Spacer	2
23	10-6060	Pin - Ram Pivot	2
24	3253-4	Washer - Lock	6
25	322-1	Screw - Cap, Hex. Hd.	6
26	62-2660	Pad - Foot Step	1
27	283-8	Pin - Clevis	2
28	10-6110	Pin - Hinge	2
29	71-1510	Lever - Brake	1
30	10-7820	Hinge - Pivot (Incl. Ref. #31)	1
31	3-0348	Bushing	10
32	3272-6	Pin - Cotter	4

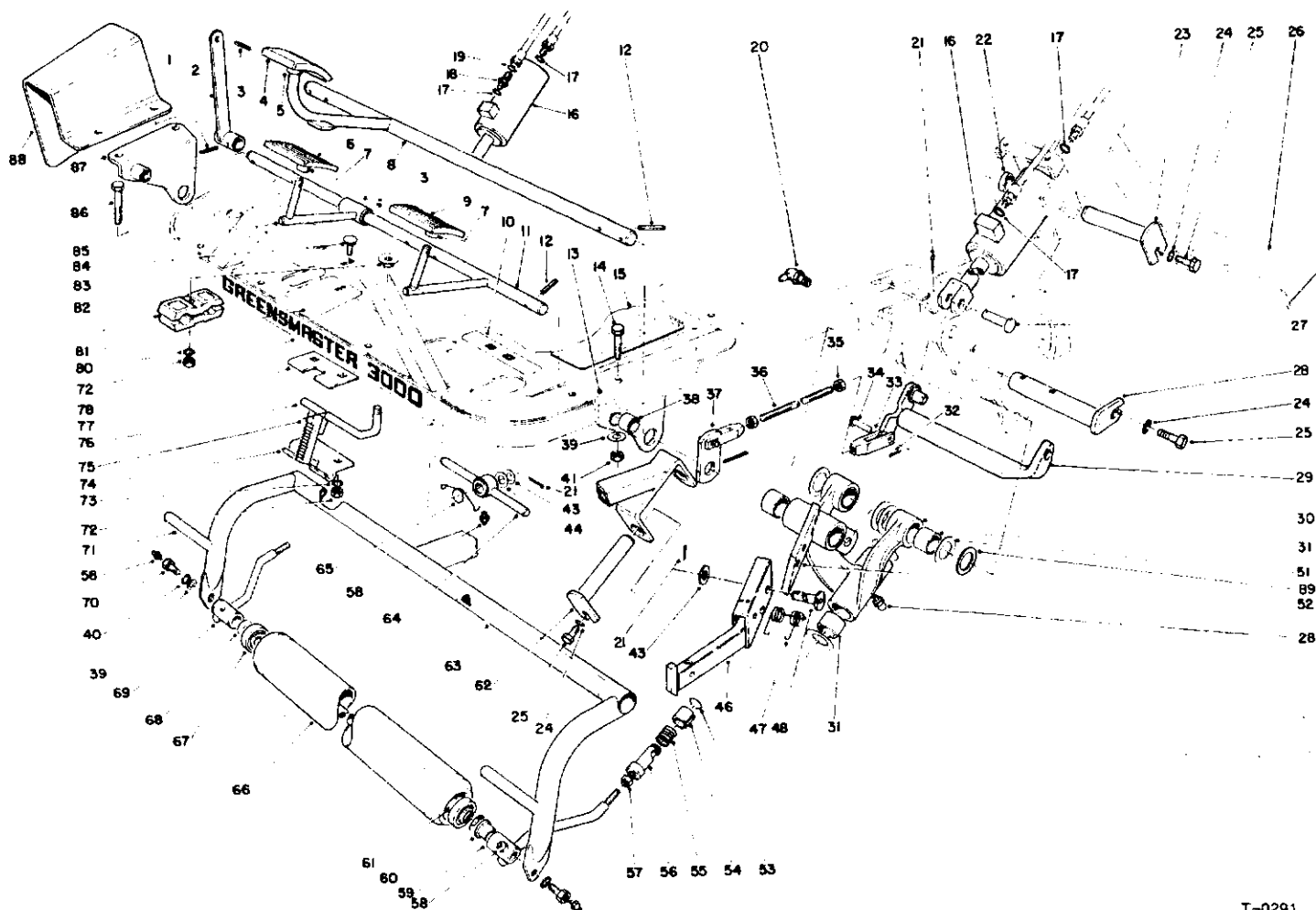


T-0291

FOOT PEDALS AND ROLLER ASSEMBLY (Continued)

Ref. No.	Part No.	Description	No. Used
33	282-2	Yoke	4
34	283-1	Pin - Clevis	4
35	3220-2	Nut - Hex	4
36	27-2270	Rod - Brake Adjustment	2
37	10-8100	Strap - Brake Shaft	2
38	256-32	Bushing	2
39	3256-24	Washer - Flat	10
40	3253-21	Washer - Lock	8
41	3296-59	Nut - Hex, Jam	4
43	3256-26	Washer - Flat	2
44	3290-221	Washer - Spring	1
45	3272-12	Pin - Cotter	1
46	62-2390	Bar - Lift Arm L.H.	1
47	57-7650	Spring - Torsion	1
48	63-8750	Pin - Pivot	1
51	10-8110	Washer - Thrust	18
52	62-2460	Lift Arm - L.H. (Incl. Ref. #49)	1
53		Ring - Retaining	6
54		Sleeve	6
55		Spring	6
56	8-7710	Ball Joint Receiver Assy. (Incl. Ref. #53-55)	6
57	3220-3	Nut - Hex, Jam	6
58	302-5	Fitting - Grease	8

Ref. No.	Part No.	Description	No. Used
59	52-2740	Pull Arm Assembly - L.H. (Incl. Ref. #60)	3
60	3-1506	Bushing	12
61	21-8470	Shaft - Yoke Roller	3
62	10-6090	Pin - Pivot	2
63	62-5070	Decal - Danger	1
64	12-9050	Lift Pivot	1
65	10-9090	Spring - Lift Pivot	1
66	52-2720	Roller Assembly (Incl. Ref. #67)	3
67	251-141	Bearing - Ball	6
68	3290-317	Washer - Spring	6
69	52-2750	Pull Arm Assembly - R.H. (Incl. Ref. #60)	3
70	11-0160	Roller Shaft Screw Assy. (Incl. Ref. #58)	6
71	47-5970	Pull Frame - L.H.	1
72	3296-16	Nut - Hex	3
73	3253-3	Washer - Lock	2
74	10-7890	Hinge - Lower, Park Brake	1
75	10-8140	Spring - Brake Latch	1
76	10-7850	Latch - Parking Brake	1
77	10-7880	Hinge - Upper, Park Brake	1
78	74-3990	Decal - Greensmaster 3000	1
80	3256-3	Washer - Flat	1

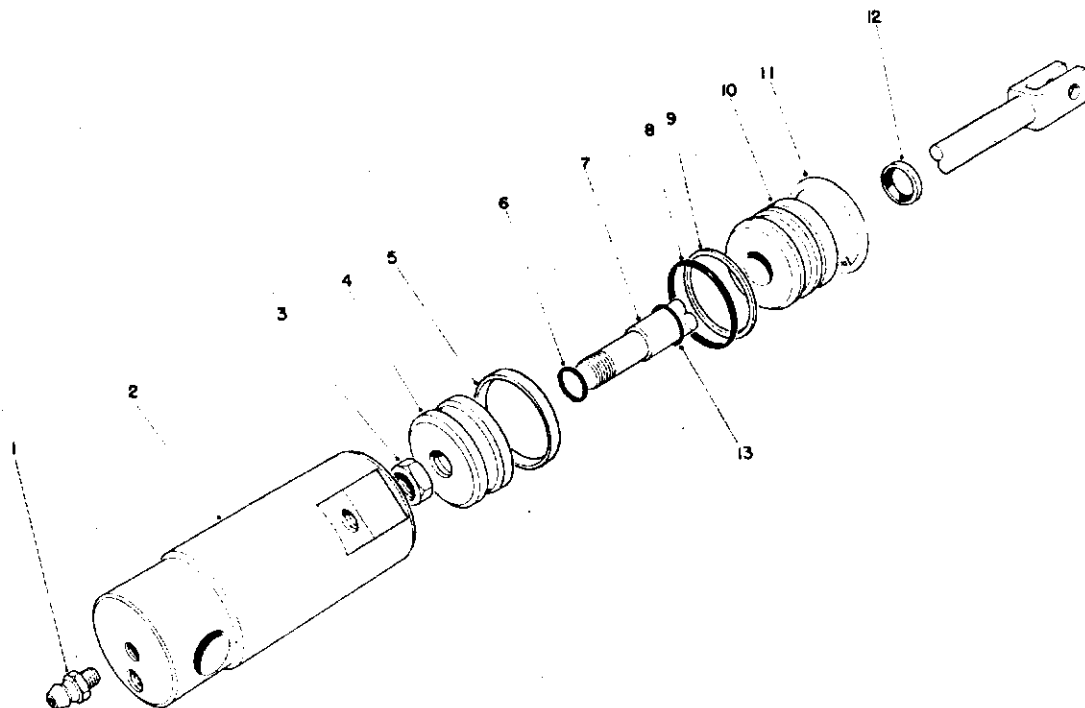


T-0291

FOOT PEDALS AND ROLLER ASSEMBLY (Continued)

Ref. No.	Part No.	Description	No. Used
81	27-2830	Decal - Parking Brake	1
82	56-7970	Clamp - Tube	2
83	32141-111	Nut - Hex Hd. Flange	1
84	3229-22	Bolt - Carriage	2
85	10-6300	Foot Pedal	1

Ref. No.	Part No.	Description	No. Used
86	321-23	Screw - Cap, Hex Hd.	1
87	49-6070	Lift Pivot Bracket - R.H. (Incl. Ref. #38)	1
88	49-6110	Guard - Transfer Rod	1
89	5-1226	Washer - Shim	2



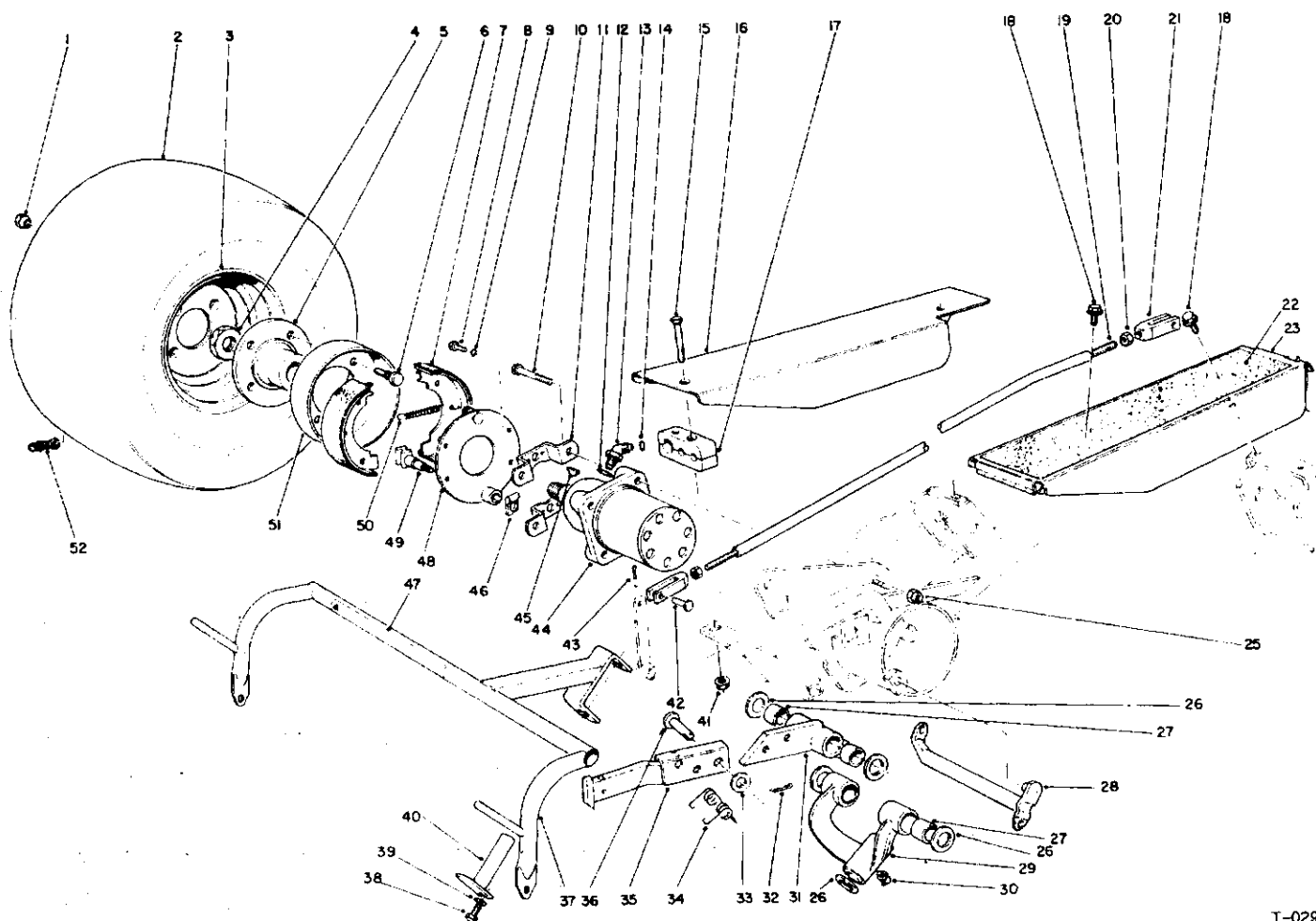
T-0292

FRONT HYDRAULIC CYLINDER NO. 72-9720

Ref. No.	Part No.	Description	No. Used
1	302-2	Fitting - Grease	2
2		Barrel Assembly	1
3	32152-10	Nut-Lock	1
4	52-1990	Piston	1
5		Uniring	1
		O-Ring	1
7	52-1980	Shaft with Clevis	1
8		O-Ring	1

Ref. No.	Part No.	Description	No. Used
9		Washer - Backup	1
10	65-4860	Head	1
11	32120-8	Ring - Retaining Internal	1
12		Dust Seal	1
13		Sea] Polypak	1
*	72-9680	Seal Repair Kit (Incl. Ref.#5, 6, 8, 9 & 12-13)	1

*Not Illustrated



T-0293

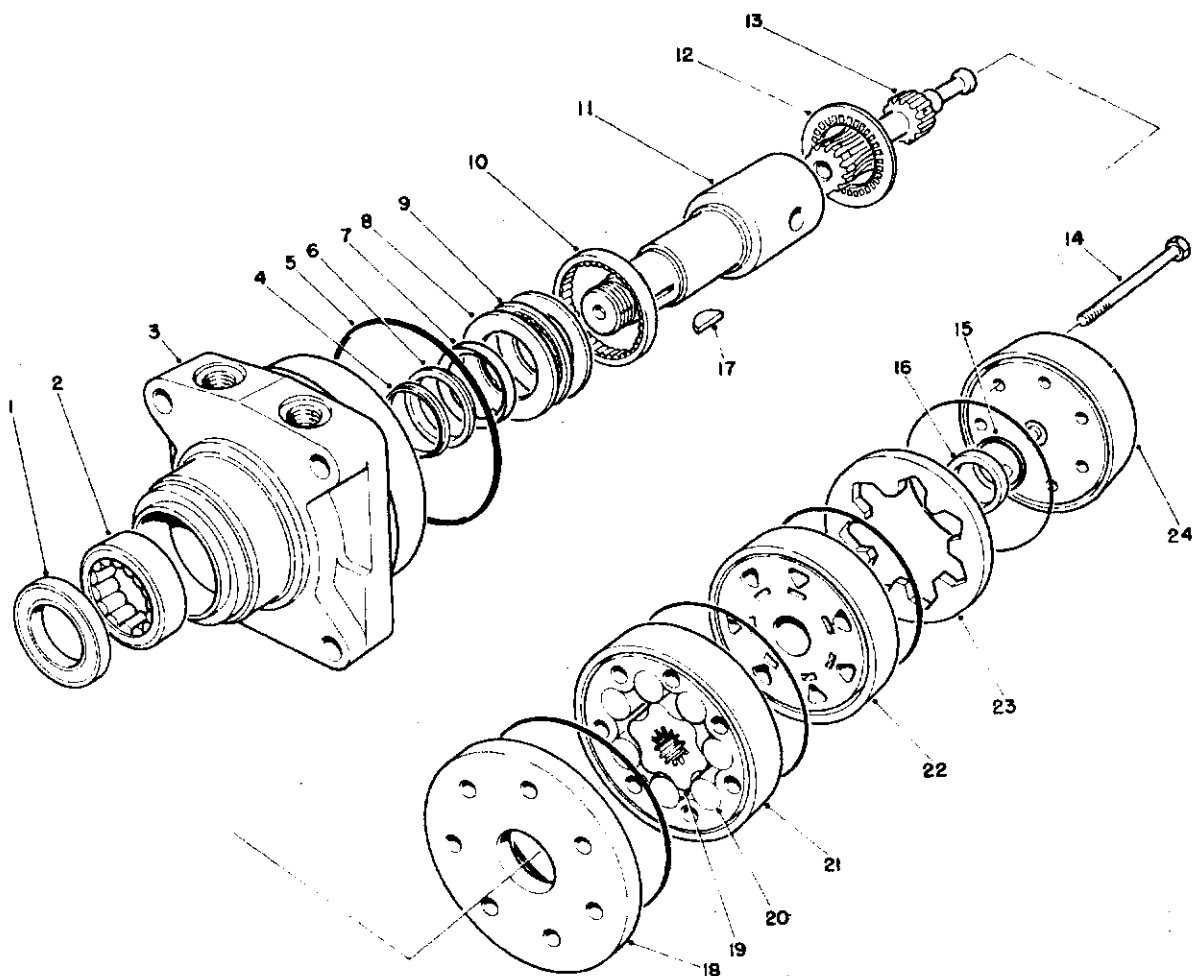
WHEEL AND BRAKE ASSEMBLY

Ref. No.	Part No.	Description	No. Used
1	242-50	Nut - Wheel	8
2	28-3680	Tire	2
*	231-124	Tire - Treaded	2
*	62-2580	Spacer	2
3	217-60	Rim	2
4	26-3790	Nut - Lock	2
5	10-6870	Hub - Wheel	2
6	10-6830	Stud - Drive Type	8
7	70-9840	Shoe & Lining Assembly	4
8	329-3	Screw - Cap, Hex. Hd.	8
9	3255-7	Washer - Lock, Ext. Tooth	8
10	325-11	Screw - Cap, Hex. Hd.	8
11	10-8000	Bracket - Brake	4
12	237-80	O-Ring	4
13	340-14	Fitting	4
14	237-85	O-Ring	4
15	32108-100	Screw - Mach. Phillips Hd.	3
16	49-5450	Plate - Cover	1
17	57-6140	Clamp - Tube Side	4
18	3234-4	Screw - Cap, Hex. Hd.	4
19	49-5430	Rod - Control	1
20	3220-2	Nut	2
21	282-2	Yoke	2
22	10-8220	Pad - Tool Box	1
23	49-5410	Box - Tool	1
25	3296-23	Nut - Lock	8
26	10-8110	Washer - Thrust	6
27	3-0348	Bushing	6
28	71-1510	Arm - Brake R.H.	1

Ref. No.	Part No.	Description	No. Used
29	10-7820	Hinge - Pivot (Incl. Ref. #27 & 30)	1
30	302-60	Fitting - Grease	1
31	62-2440	Arm - Lift, R.H.	2
32	3272-11	Pin - Cotter	2
33	3256-26	Washer - Flat	3
34	57-7650	Spring - Torsion	2
35	62-2420	Bar - Arm, Lift	1
36	63-8750	Pin - Pivot	2
37	47-5960	Frame - Pull, R.H.	1
38	322-1	Screw - Cap, Hex. Hd.	1
39	3253-4	Washer - Lock	1
40	10-6090	Pin - Pivot	1
41	3296-16	Nut - Lock, Flange	3
42	283-1	Pin - Clevis	2
43	3272-6	Pin - Cotter	2
44	75-9990	Motor - Hydraulic	2
45	3257-42	Key - Woodruff	2
46	70-9850	Clip - Retainer	2
47	62-5070	Decal - Danger	1
48	70-9870	Plate - Backing, Brake	2
49	70-9860	Shaft - Cam	2
50	70-9880	Spring	4
51	71-1500	Brake Assembly (Incl. Ref. #7, 46, & 48-50)	2
52	232-24	Valve Stem w/Cap	2
*†	232-37	Inner Tube - Heavy Duty	2
*	10-6820	Drum Assy. (Incl. Ref. #5-6)	1

*Not Illustrated

†Service Replacement Part

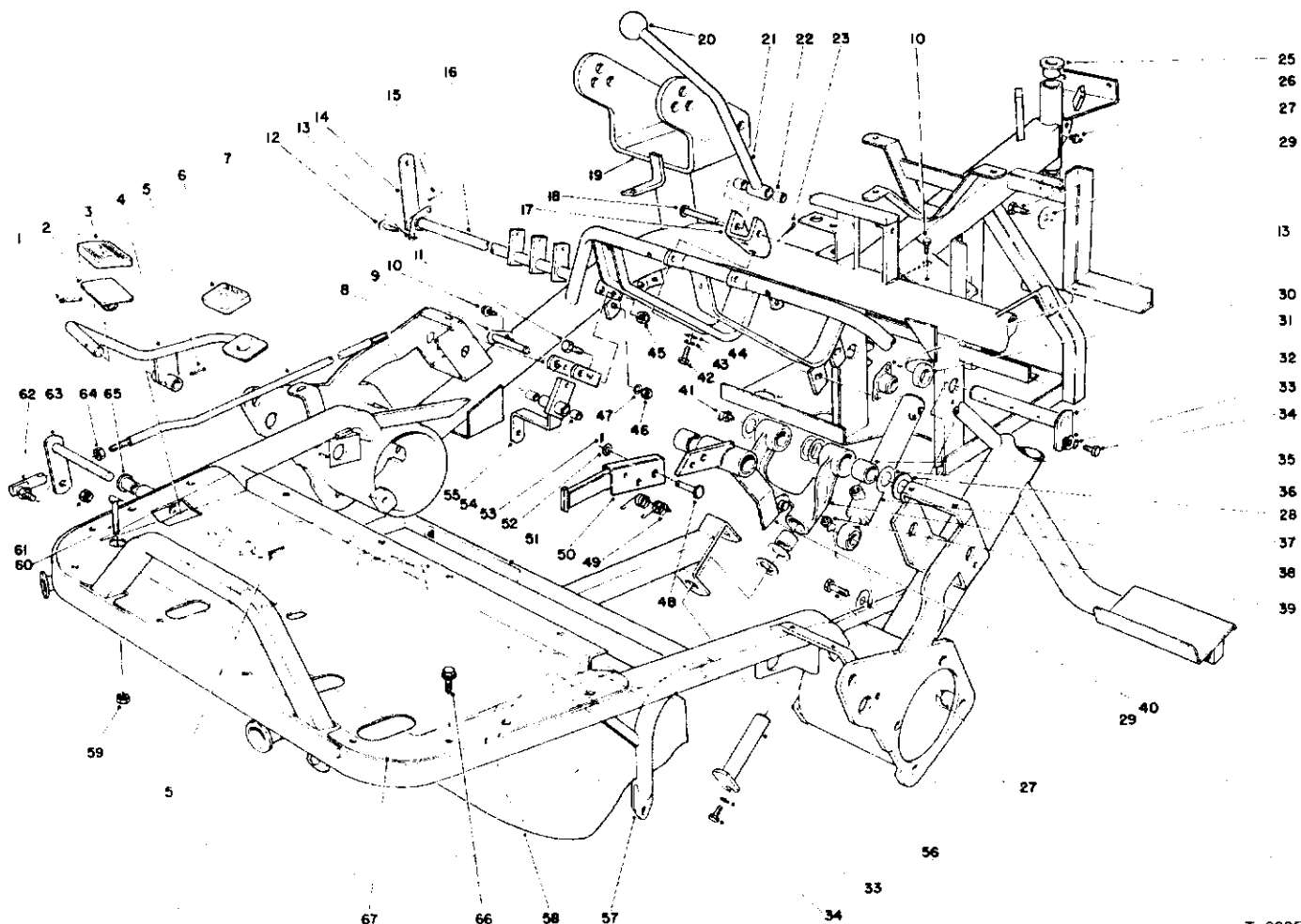


T-0987

HYDRAULIC DRIVE MOTOR NO. 75-9990

Ref. No.	Part No.	Description	No. Used	Ref. No.	Part No.	Description	No. Used
1		Seal - Dirt & Water	1	17	3257-42	Key - Woodruff	1
2		Bearing	1	18	76-0870	Plate - Wear	1
3		Housing	1	19		Rotor	7
4		Washer - Backup	1	20		Vane	1
5		Seal Rings	5	21		Stator	1
6		Washer - Backup	1	22	76-0840	Manifold	1
7		Seal - Inner	1	23		Ring - Commutator	1
8		Washer - Thrust	2	24	76-0940	End Cover Assembly	1
9		Bearing - Thrust	1	*	76-0970	Rotor Set	1
10		Bearing	1			(Incl. Ref. #19-21)	
11	76-0860	Shaft - Coupling	1	*	76-0880	Commutator Assembly	1
12	76-0850	Bearing - Thrust	1			(Incl. Ref. #15, 16 & 23)	
13	76-0960	Link - Drive	7	*	76-0800	Seal Kit	1
14	76-1010	Screw - Cap, Hex. Hd.	1			(Incl. Ref. #1, 4-7 & 15)	
15		Seal - Commutator	1	*	76-0810	Housing Assembly	1
16		Commutator	1			(Incl. Ref. #2, 3 & 8-10)	

*Not Illustrated

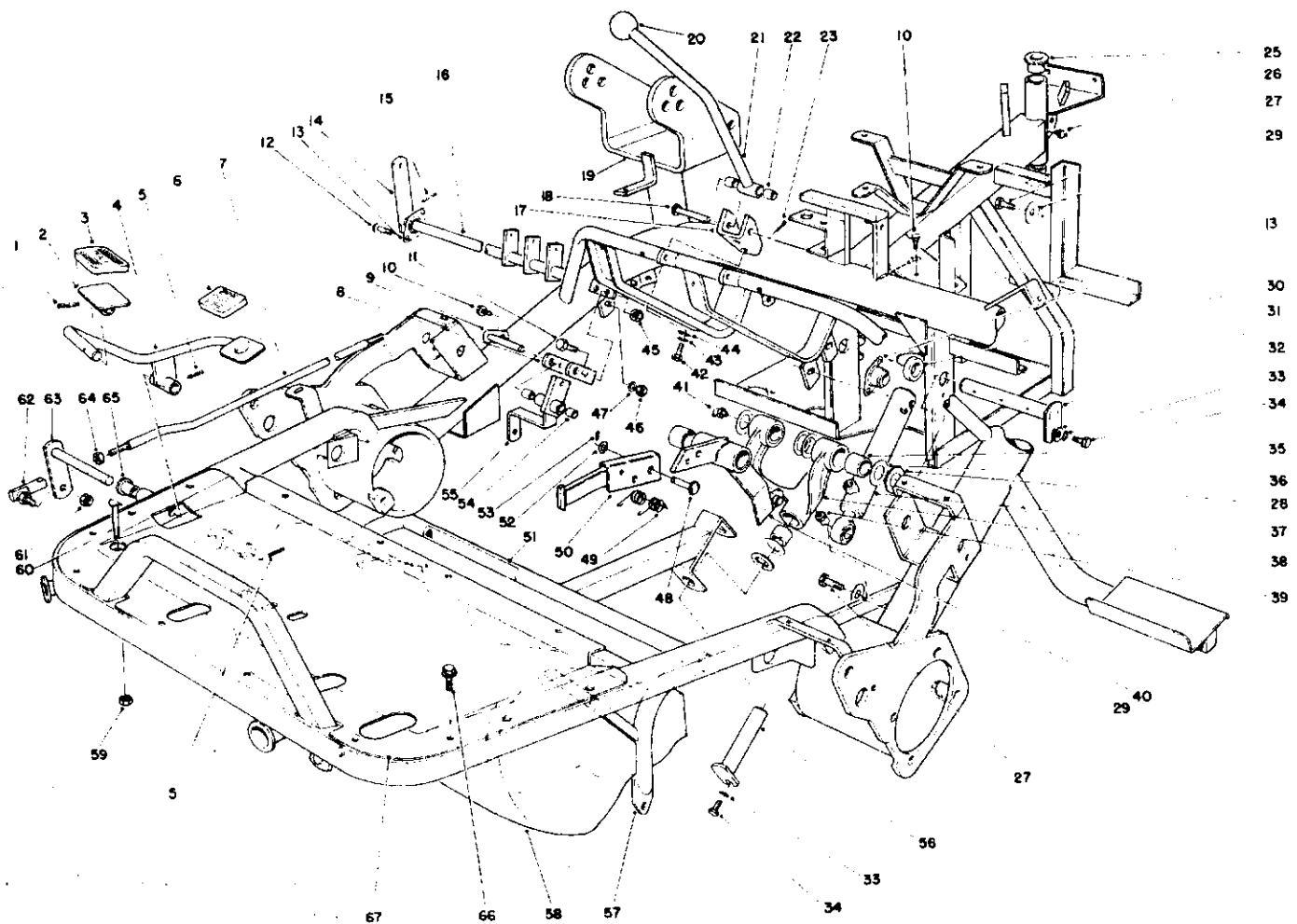


T-0295

FRAME ASSEMBLY

Ref. No.	Part No.	Description	No. Used
1	32121-45	Pin-Roll	1
2	49-6440	Pedal - Accelerator	1
3	49-6470	Pad - Pedal Forward	1
4	49-6380	Rod - Accelerator	1
5	32121-45	Pin-Roll	2
6	49-6430	Pad - Pedal Reverse	1
7	49-6320	Rod - Traction Control	1
8	49-6250	Bracket - Traction Pivot	1
9	49-6290	Shaft - Traction Pivot	1
10	12-3270	Screw - Pentafl	1
11	322-5	Screw - Cap, Hex Hd.	2
12	3234-1	Screw - Flange, Hex. Hd.	4
13	27-2320	Side Flange - Bearing	2
14	47-5320	Lever - Cutting Control	1
15	32121-6	Pin - Roll	1
16	44-0870	Camshaft - Rear	1
17	49-6220	Bracket - Control Arm	1
18	283-57	Pin - Clevis	1
19	75-9700	Frame (Incl. Ref. #25 & 65)	1
20	233-48	Knob	1
21	68-5930	Handle - Traction (Incl. Ref. #22)	1
22	256-251	Bushing	2
23	3272-4	Pin - Cotter	1
25	256-290	Bushing	2

Ref. No.	Part No.	Description	No. Used
26	302-5	Fitting - Grease	1
27	3234-1	Screw - Cap, Hex Hd.	2
28	5-1226	Washer	A/R
29	10-7920	Washer - Flat	2
30	27-2540	Spacer - Hub	1
31	27-2550	Pin - Hinge	1
32	3256-23	Washer - Flat	1
33	3253-4	Washer - Lock	2
34	322-1	Screw - Cap, Hex Hd.	2
35	3-0348	Bushing	6
36	10-8110	Washer-Thrust	6
37	74-3300	Hydraulic Cylinder Assy.	1
38	10-7820	Pivot Hinge (Incl. Ref. #35)	1
39	302-60	Fitting - Grease	1
40	62-2450	Lift Arm - Center (Incl. Ref. #35)	1
41	302-11	Fitting - Grease	1
42	3211-1	Screw - Cap, Hex Hd.	2
43	3254-6	Washer - Lock	2
44	3256-3	Washer - Flat	2
45	3296-29	Nut - Lock	2
46	3296-59	Nut - Lock	4
47	3256-24	Washer - Flat	4
48	63-8750	Pin - Pivot	1
49	57-7650	Spring - Torsion	1

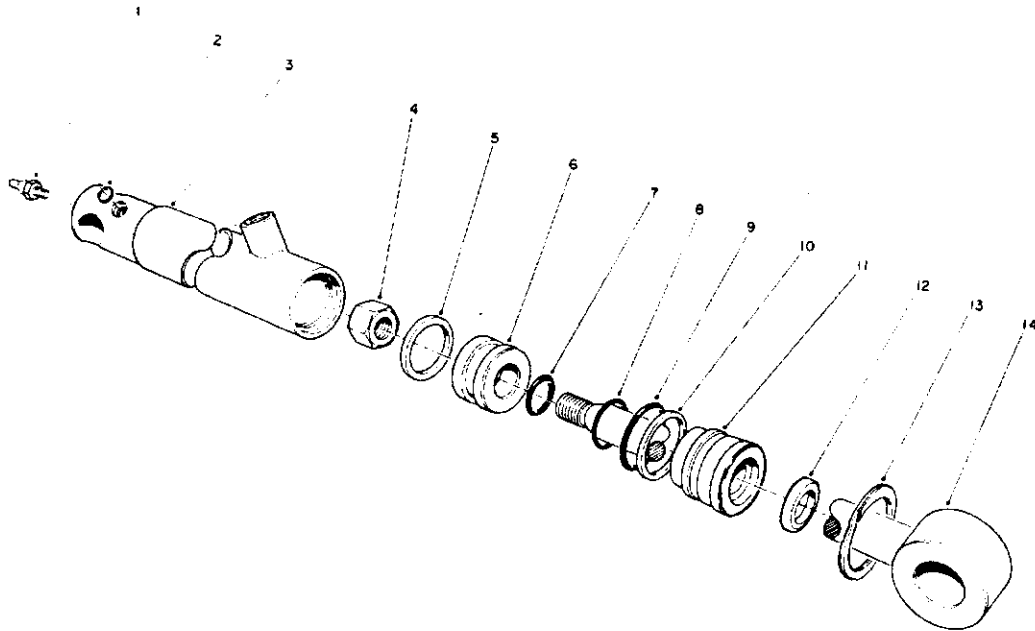


T-0295

FRAME ASSEMBLY (Continued)

Ref. No.	Part No.	Description	No. Used
50	62-2420	Bar - Lift Arm (R.H. & Center)	1
51	62-5070	Decal - Warning	1
52	3256-26	Washer - Flat	1
53	3272-11	Pin - Cotter	1
54	256-2	Bushing	2
55	49-6260	Tube - Traction Pivot (Incl. Ref. #54)	1
56	10-6090	Pin - Pivot	1
57	47-5960	Pull Frame - Rear	1

Ref. No.	Part No.	Description	No. Used
58	36-7250	Grass Basket	3
59	32128-20	Nut - Hex	1
60	77-0480	Screw - Accelerator Stop	1
61	3296-4	Nut - Lock	2
62	2411-32	Ball Joint	2
63	49-6350	Shaft Traction	1
64	3220-2	Nut - Hex, Jam	2
65	256-155	Bushing	2
66	32144-14	Screw - Cap, Hex. Hd.	9
67	75-9490	Plate - Footrest	1

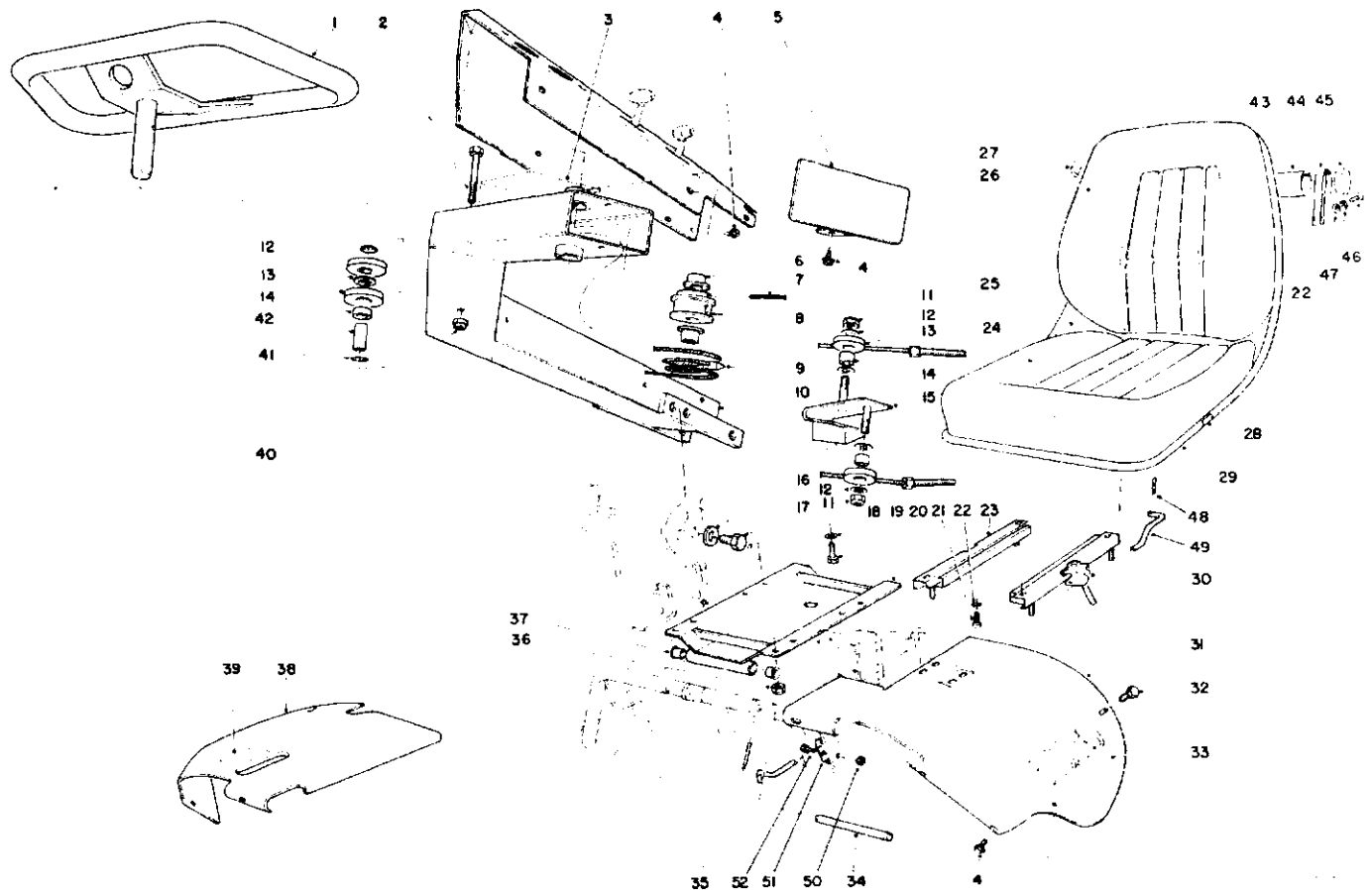


T-0217

REAR HYDRAULIC CYLINDER NO. 74-3300

Ref. No.	Part No.	Description	No. Used
1	302-2	Fitting -- Grease	1
2	237-78	O-Ring	2
3	43-5260	Barrel w/Clevis & Ports	1
4	32152-10	Nut	1
5		Uniring	1
6	70-2780	Piston	1
7		O-Ring	1
8		Poly-Pack	1
9		O-Ring	1

Ref. No.	Part No.	Description	No. Used
10		Back-Up	1
11	70-2770	Head	1
12		Seal -- Dust	1
13	43-5220	Ring -- Retaining	1
14	43-5230	Shaft with Clevis	1
15	74-3590	Seal Repair Kit (Incl. Ref. #5, 7-10 & 12)	1



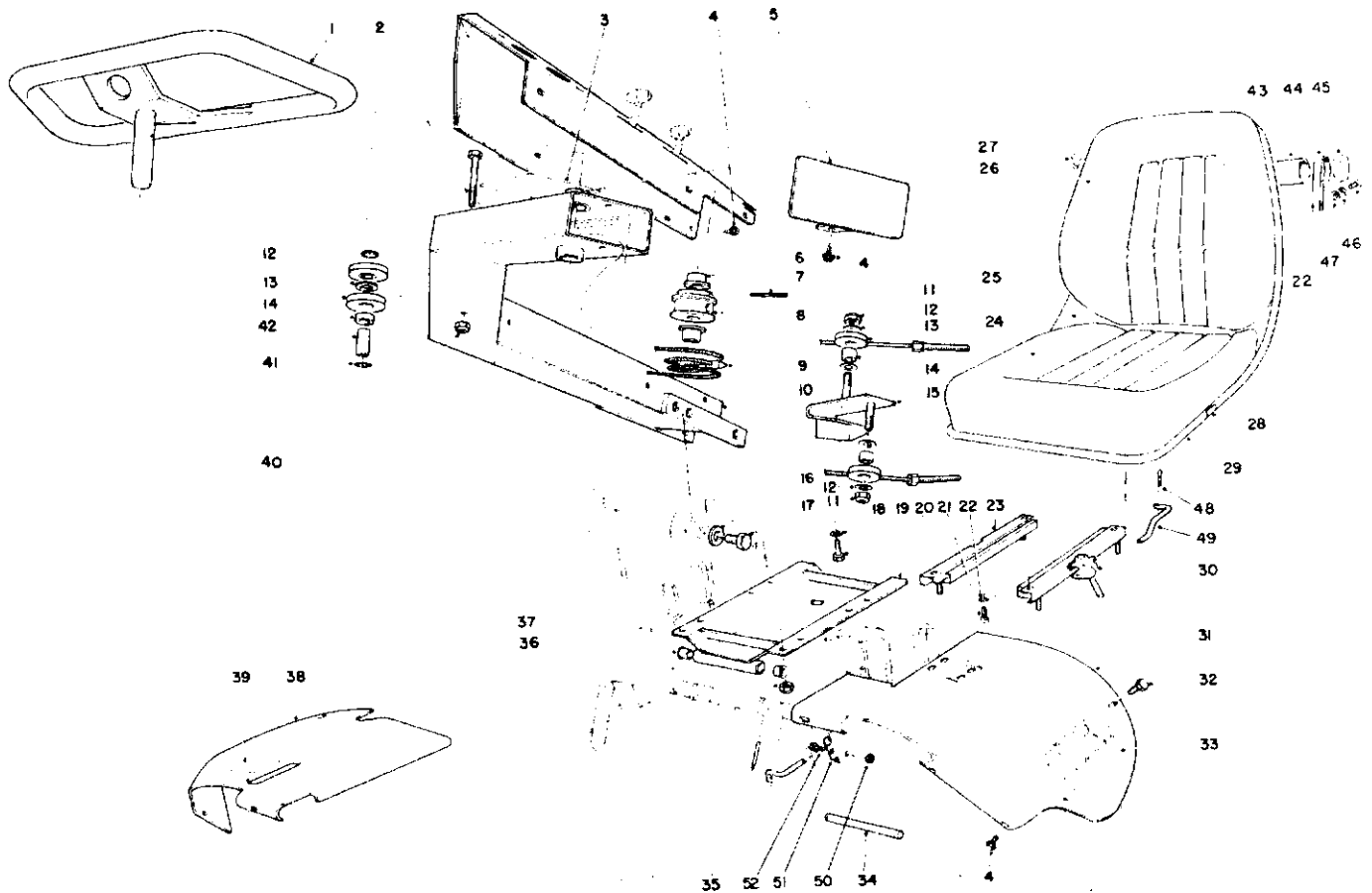
T-0297

STEERING AND SEAT ASSEMBLY

Ref. No.	Part No.	Description	No. Used
1	49-5900	Steering Wheel Assembly	1
2	321-18	Screw- Cap, Hex Hd.	1
3	75-9380	Decal - Caution	1
4	32104-76	Screw - Tapping, Acorn Hd.	15
5	10-7370	Tube Cap	1
6	256-113	Bushing	2
7	32121-34	Pin - Roll	1
8	62-2160	Pulley - Front Steering	1
9	62-2180	Steering Cable	1
10	49-5910	Arm Steering	1
11	3296-39	Nut - Lock	2
12	3256-4	Washer - Flat	4
13	5-2653	Pulley Assembly (Incl. Ref. #14)	4
14	256-2	Bushing	4
15	49-5970	Bracket - Pulley	1
16	3256-26	Washer - Flat	4
17	325-3	Screw- Cap, Hex Hd.	4
18	3253-21	Washer - Lock	2
19	323-6	Screw- Cap, Hex Hd.	2
20	49-5840	Seat Support (Incl. Ref. #37)	1
21	3274-12	Screw - Hex Socket Hd.	4
22	3256-23	Washer - Flat	6
23	51-0780	Seat Slider	1

Ref. No.	Part No.	Description	No. Used
24	75-9720	Cushion - Seat (Incl. Ref. #27 & 28)	1
25	351-81	Shell	1
26	75-9810	Backrest (Incl. Ref. #27 & 28)	1
27	351-79	Clip	6
28	351-80	Clip Joint	1
29	351-78	Edging	2
*	75-9190	Seat Assembly (Incl. Ref. #24-29)	1
30	51-0790	Seat Adjuster	1
31	49-5460	Shield - Valve Cover L.H.	1
32	12-3270	Screw - Thread Forming	2
33	62-5550	Decal - Toro	2
34	49-5880	Shaft - Seat Support	1
35	32121-45	Pin-Roll	1
36	3296-29	Nut - Lock	4
37	256-219	Bushing	2
38	49-5470	Shield - Valve Cover R.H.	1
39	51-0010	Decal - Traction	1
40	3296-8	Nut - Lock	1
41	3290-314	Tinnerman Push-On	2
42	10-7240	Sleeve - Steering Pulley	1
43	65-5871	Tube	1
44	2412-102	R-Clamp	2

*Not Illustrated

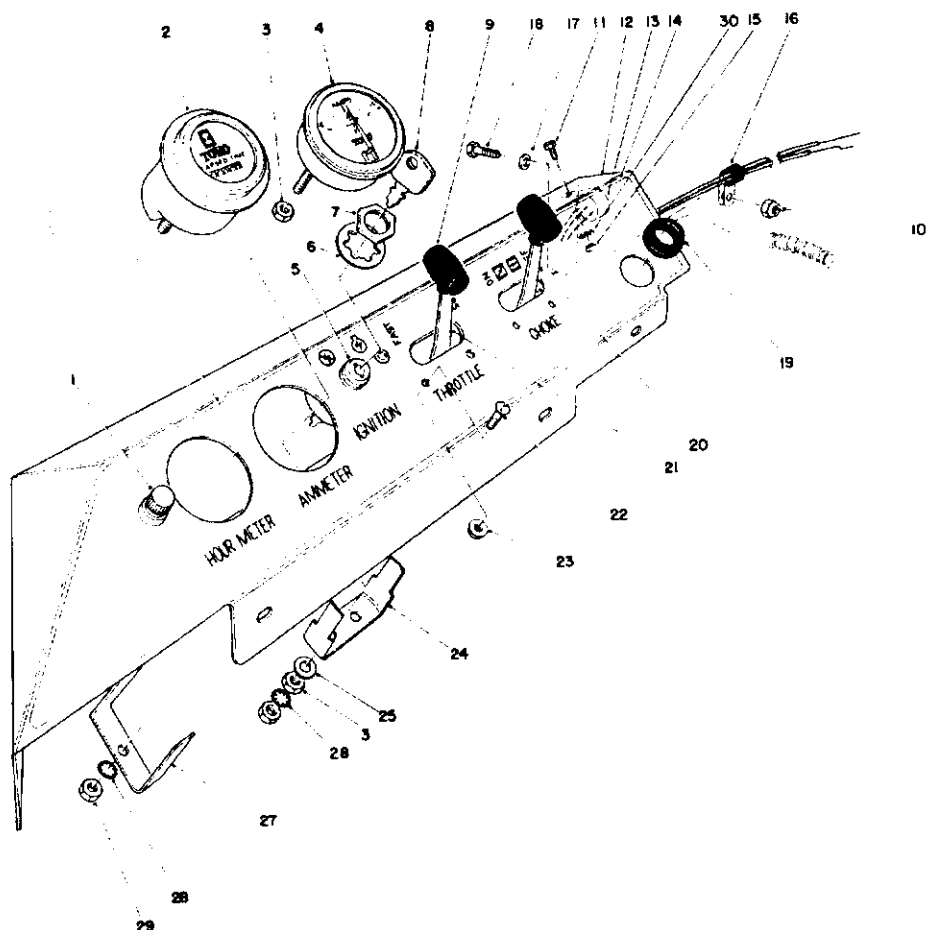


T-0297

STEERING AND SEAT ASSEMBLY (Continued)

Ref. No.	Part No.	Description	No. Used
45	65-5890	Cap	2
46	322-3	Screw - Cap, Hex. Hd.	2
47	3253-4	Washer - Lock	2
48	3272-11	Pin - Cotter	1

Ref. No.	Part No.	Description	No. Used
49	68-5100	Rod - Seat	1
50	3296-16	Nut - Lock	1
51	68-5310	Clip Seat	1
52	321-3	Screw - Cap, Hex. Hd.	1



T-0298

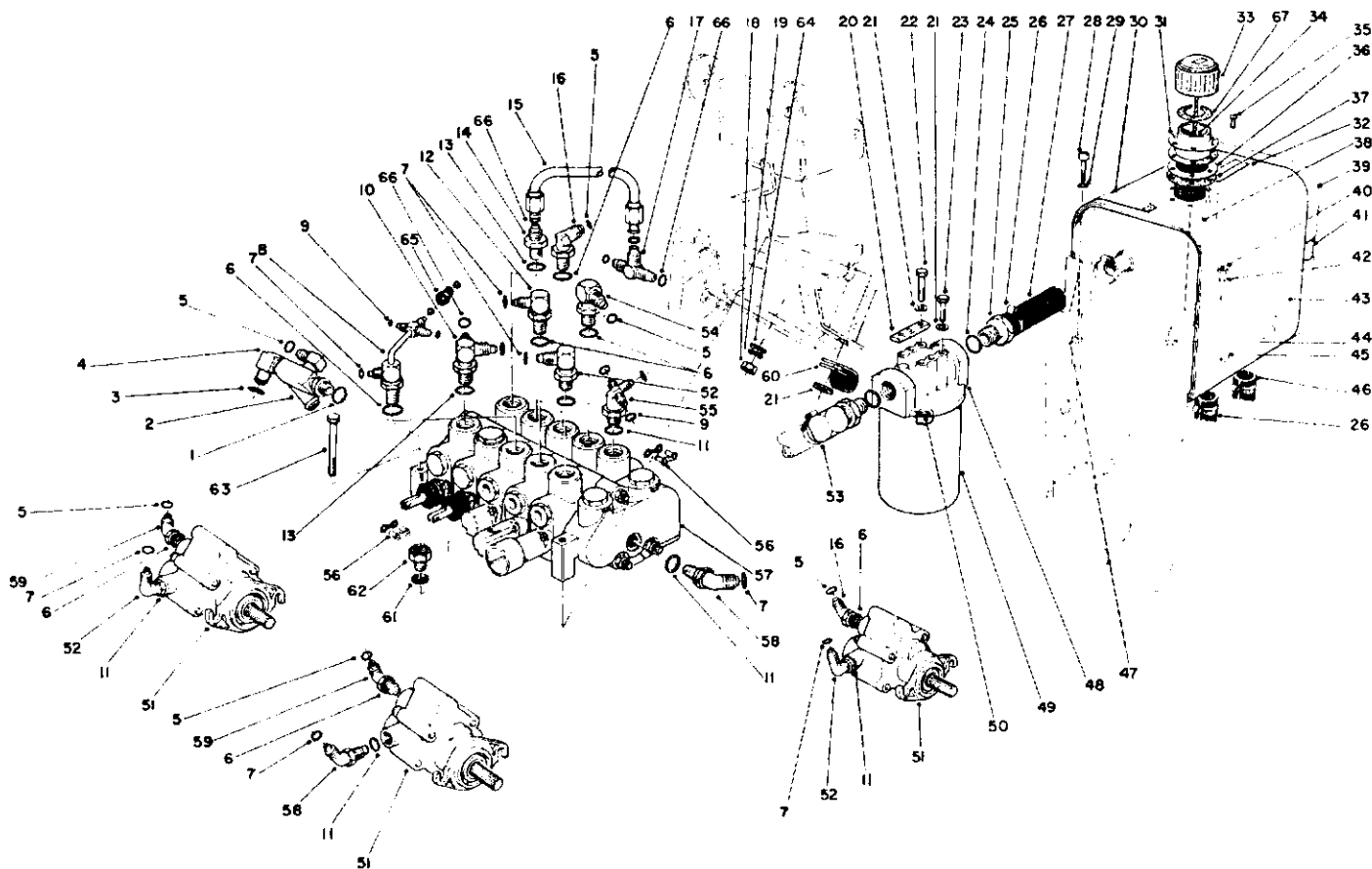
INSTRUMENT PANEL ASSEMBLY

Ref. No.	Part No.	Description	No. Used
1	218-489	Fuse Holder	1
*†		30 Amp Fuse	1
2	12-9990	Hour Meter	1
3	3219-14	Nut	6
4	33-0990	Ammeter	1
5	23-0660	Key Switch	
		(Incl. Ref. #6-7)	1
6	3254-5	Washer - Lock	1
7	218-461	Nut - Hex	1
8	63-8360	Key	1
9	233-50	Knob	2
10	32128-20	Nut - Lock	1
11	321-3	Screw - Cap, Hex. Hd.	1
12	68-9910	Panel - Control	1
13	59-9810	Module	1
14	68-9940	Decal - Control Panel	1
15	32149-2	Nut - Lock, Keps	1

Ref. No.	Part No.	Description	No. Used
16	2412-41	Clip	1
17	3253-23	Washer - Flat	1
18	322-4	Screw - Cap, Hex. Hd.	1
19	237-100	Grommet	1
20	62-2130	Control - Choke	
		(Incl. Ref. #9)	1
21	68-9930	Control - Throttle	
		(Incl. Ref. #9)	1
22	32105-8	Screw - Machine, Rd. Hd.	4
23	32149-7	Nut - Lock	1
24	39-9600	Clamp - Mounting	2
25	3256-21	Washer - Flat	2
27	218-515	Bracket - Mounting	1
28	3254-1	Washer - Lock, Int. Tooth	3
29	3217-26	Nut	1
30	3255-7	Washer - Lock, Int. Tooth	1

*Not Illustrated

†Obtain Locally

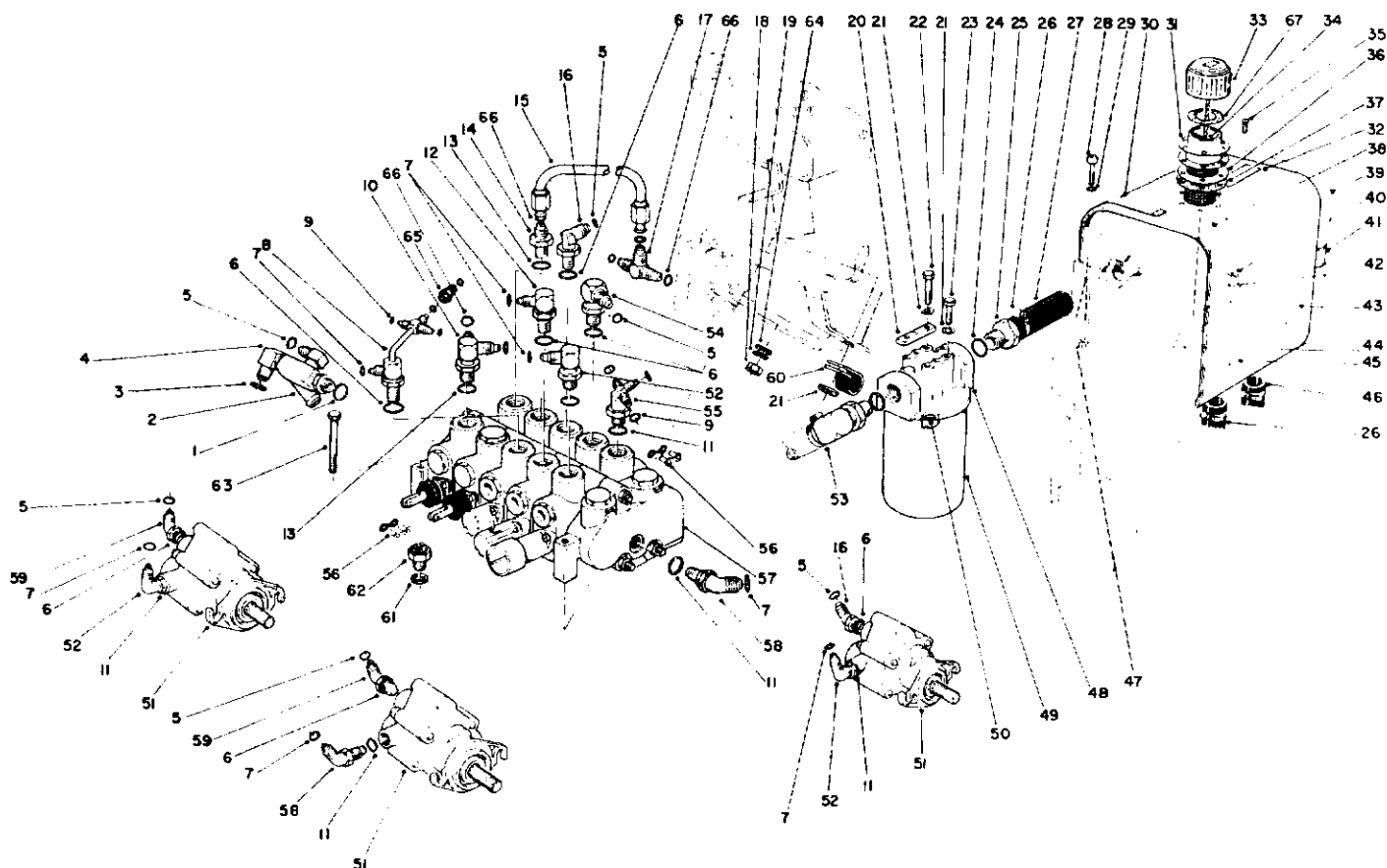


T-0289

VALVE BANK AND HYDRAULIC RESERVOIR ASSEMBLY

Ref. No.	Part No.	Description	No. Used
1	237-81	O-Ring	1
2	63-4080	Manifold Drain Orifice	1
3	237-58	O-Ring	A/R
4	340-16	90° Fitting	1
5	237-30	O-Ring	A/R
6	237-79	O-Ring	8
7	237-22	O-Ring	A/R
8	63-4060	Brazed Tube Assembly	1
9	237-21	O-Ring	7
10	63-4050	Fitting Traction Upper	1
11	237-42	O-Ring	A/R
12	340-18	90° Elbow	1
13	237-80	O-Ring	2
14	340-7	Fitting - Straight	1
15	63-3980	Traction Interconnect Line (Lower)	1
16	340-101	45° Fitting	3
17	340-19	Fitting - Tee	1
18	32128-20	Nut - Hex	3
19	3253-4	Washer - Lock	3
20	27-2380	Spacer - Filler Mount	1
21	3256-23	Washer - Flat	5
22	322-4	Screw - Cap, Hex Hd.	2
23	322-2	Screw - Cap, Hex Hd.	2
24	237-101	O-Ring	1
25	353-563	Fitting - Straight	1

Ref. No.	Part No.	Description	No. Used
26	2412-3	Clamp - Hose	8
27	27-2040	Hose	1
28	3274-54	Screw - Set, Socket Hd.	2
29	3256-22	Washer - Flat	2
30	27-7980	Front Reservoir Strap Assy. (Incl. Ref. #41)	1
31	353-961	Flange Adaptor	1
32	58-6530	Decal - Oil	1
33	62-2570	Breather Cap (Incl. Ref. #31, 34 & 36-37)	1
34	353-962	Cap and Chain Assembly	1
35	32144-34	Screw	6
36	62-2610	Screen Assembly	1
37	353-963	Gasket	2
38	27-2420	Felt Strap - Angle	2
39	27-2400	Reservoir Strap Assembly (Incl. Ref. #41)	1
40	3296-16	Nut-Hex	2
41	27-2420	Felt Strip	2
42	3253-3	Washer - Lock	2
43	55-8480	Tank - Hydraulic	1
44	321-3	Screw - Cap, Hex Hd.	2
45	281-1	Plug - Oil	1
46	27-3040	Hose - Pump	2
47	32153-4	Nut - Lock	2



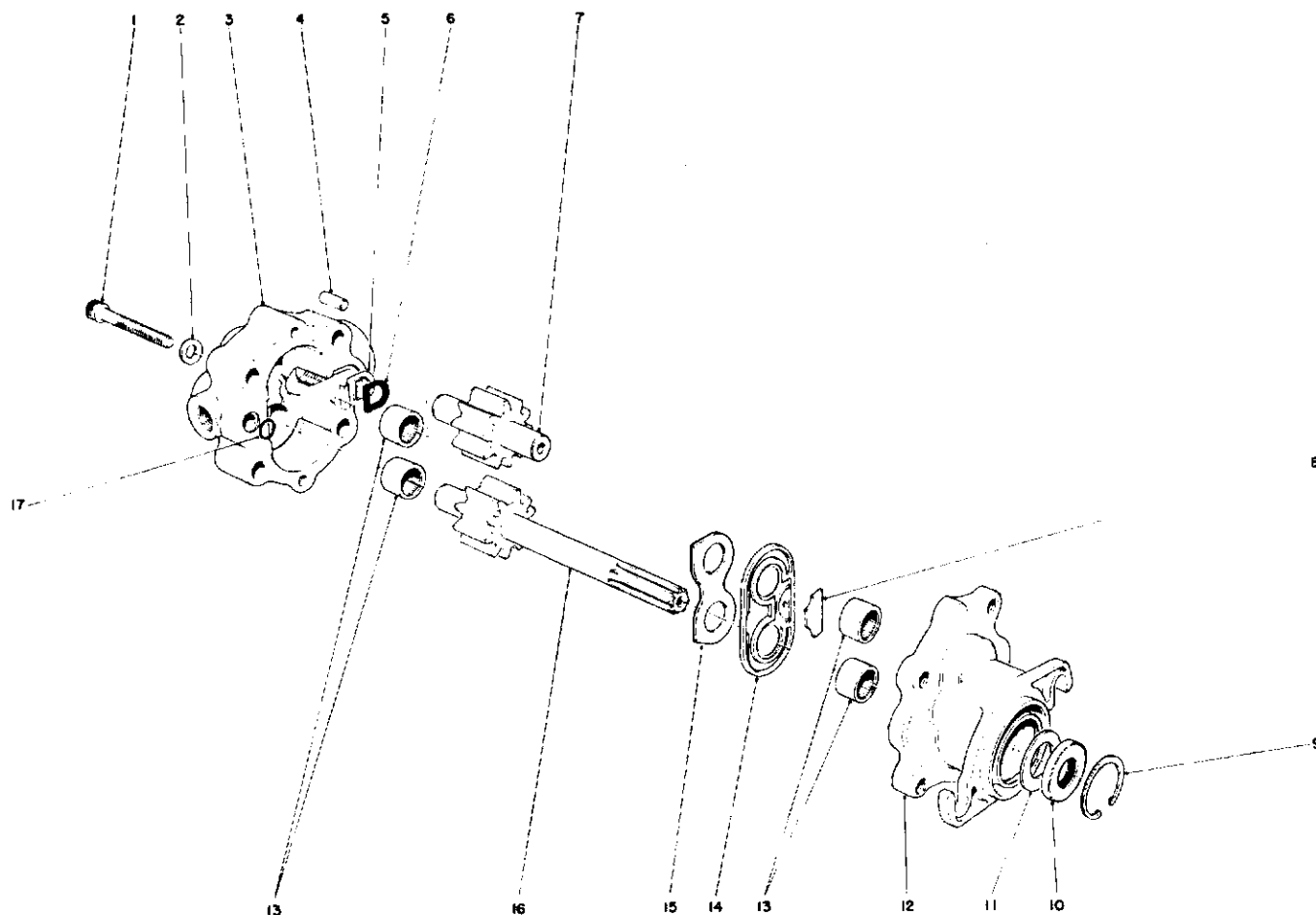
T-0299

VALVE BANK AND HYDRAULIC RESERVOIR ASSEMBLY (Continued)

Ref. No.	Part No.	Description	No. Used
48	44-5560	Filter Head - Hydraulic	1
49	74-3570	Filter Element (Incl. Ref. #50)	1
50	72-3850	Seal - Ring	1
51	70-9800	Reel Motor	3
52	340-77	90° Elbow	3
53	353-564	90° Fitting	1
54	63-4090	90° Fitting - Extended	1
55	70-2630	Fitting - Crow Foot	1
56	57-6220	Link Connector	5
57	70-8210	Control Valve	1

Ref. No.	Part No.	Description	No. Used
58	340-87	45° Fitting	2
59	340-98	90° Elbow	2
60	304-61	Clamp	1
61	38-0410	Nut - Hex	2
62	43-8520	Switch	2
63	322-14	Screw - Cap, Hex Hd.	3
64	3254-2	Washer - Lock, Int. Tooth	1
65	71-0990	Fitting - One Way Orifice	1
66	237-65	O-Ring	6
67	76-1720	Gasket - Cap, Filler	1
*	44-2500	Hydraulic Oil Dye	1

*Not Illustrated

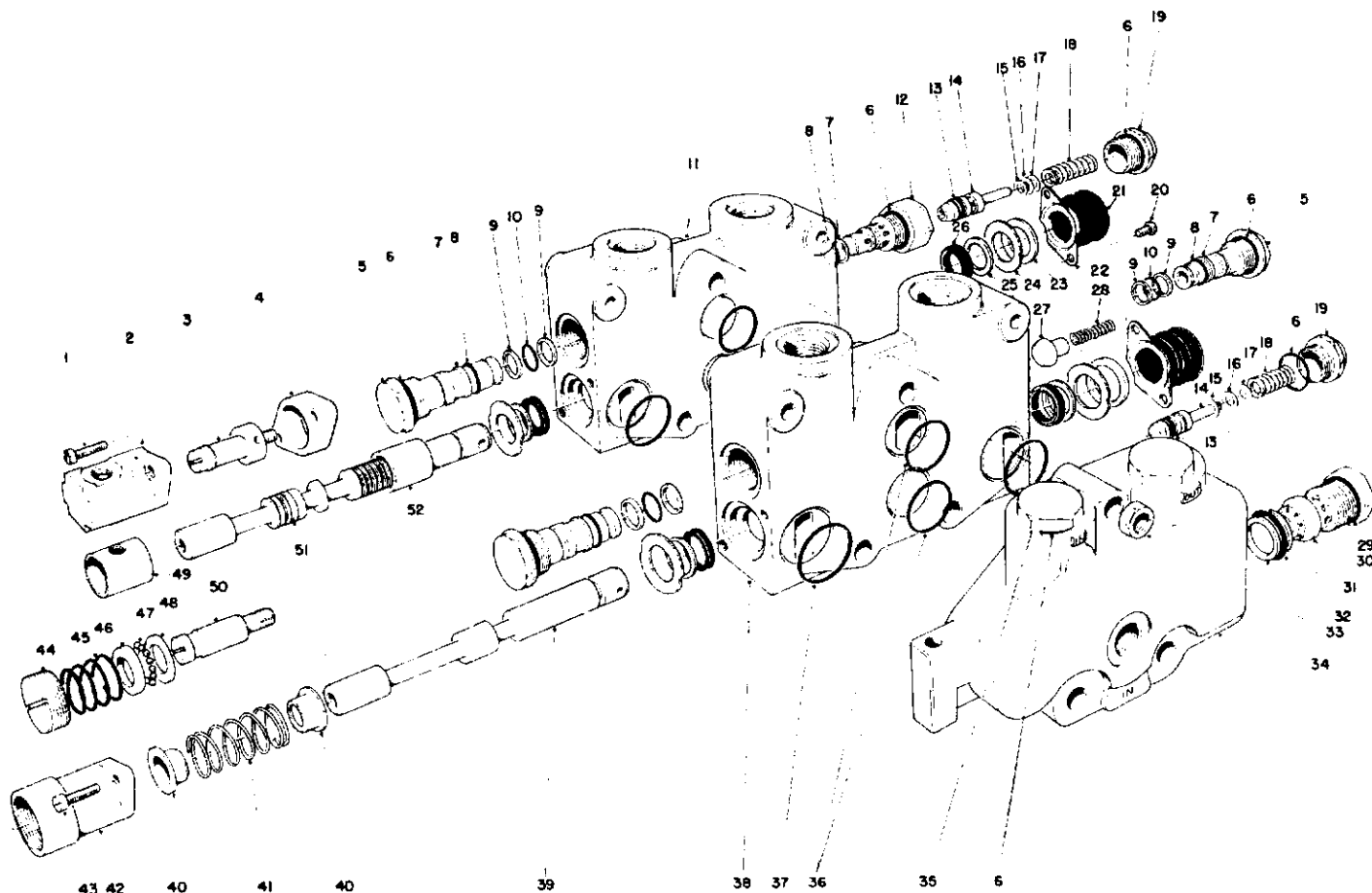


T-0300

REEL MOTOR NO. 70-9800

Ref. No.	Part No.	Description	No. Used
1	353-601	Screw - Hex Socket Hd.	4
2	353-600	Washer	4
3	353-588	Cover - Motor	1
4	353-599	Pin - Dowel	2
5	353-597	Bridging - Insert	1
6	353-598	Gasket - Insert	1
7	353-593	Idler Gear Assembly	1
8	353-591	Block - Anti-Extrusion	1
9	32151-41	Ring - Retaining	1
10		Seal - Shaft	1
11		Spacer	1
12	353-777	Body - Motor	1

Ref. No.	Part No.	Description	No. Used
13	353-586	Bearing - Needle	4
14	353-594	Seal Assembly	1
15	353-595	Wear Plate	1
16	353-592	Drive Shaft Assembly	1
17	353-596	O-Ring	1
18	72-4380	Seal Kit (Incl. Ref. #9-11)	1
19	72-4390	Repair Kit (Incl. Ref. #5, 6, 8-11, 14, 15 & 17)	



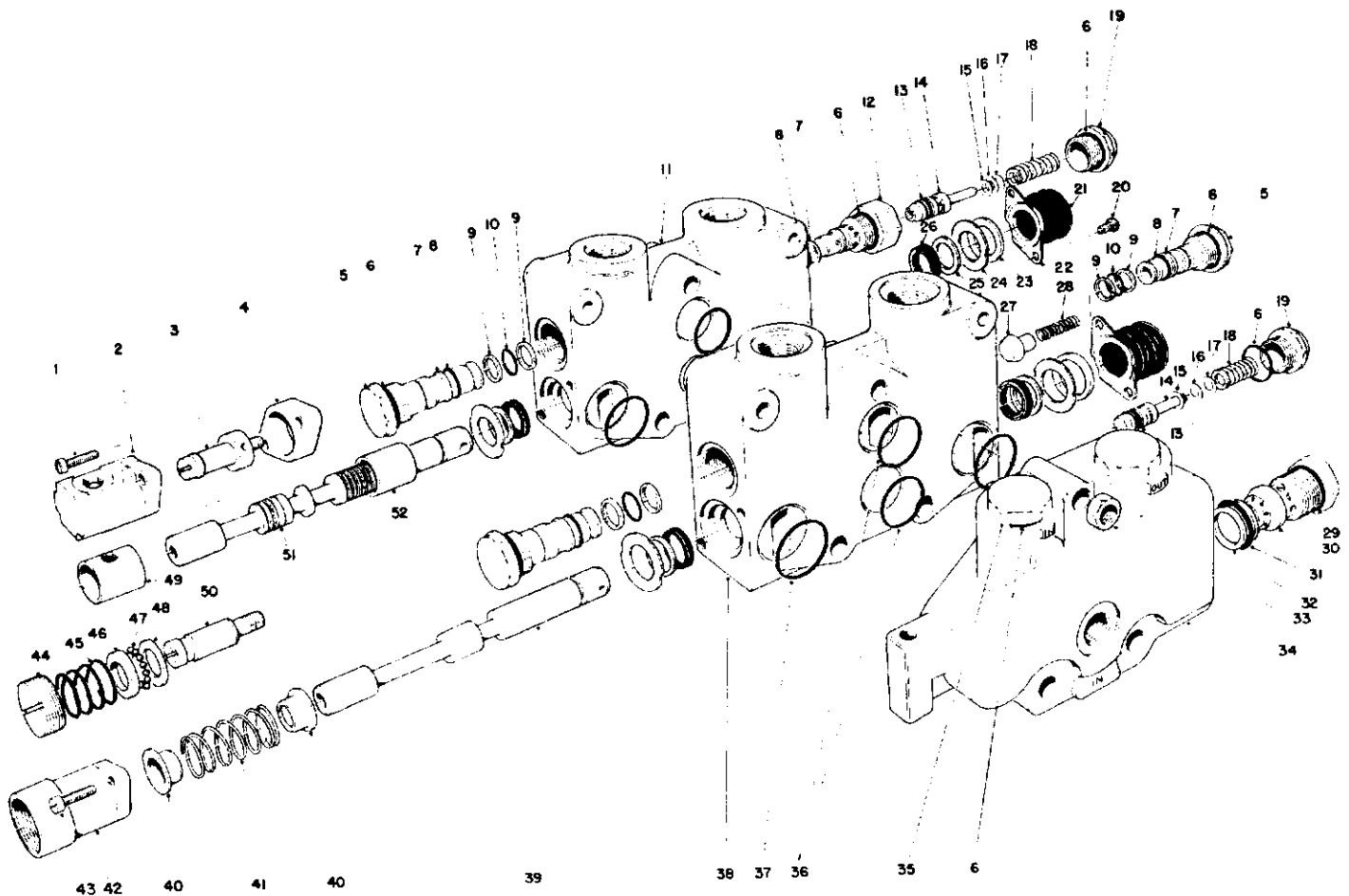
T-0301

CONTROL VALVE ASSY. NO. 70-8210 (Sections 1 & 2)

Ref. No.	Part No.	Description	No. Used
1	3274-70	Screw - Hex, Socket Hd.	2
2	353-727	Bonnet	1
3	353-729	Spud - Detent	1
4	353-733	Spacer - Bonnet	1
5	353-481	Plug - Load Check (Incl. Ref. #6-10)	3
6	237-54	O-Ring	8
7	353-306	Ring - Backup	4
8	353-305	O-Ring	4
9	353-303	Ring - Backup	6
10	353-302	O-Ring	3
11		Housing V20T	1
12	353-851	Body - Relief CP-RC Mod.	1
13	353-392	Seal - Relief Poppet PTFE	2
14	353-531	Poppet Assy. (Incl. Ref. #13)	2
15	353-328	Washer - Shim	A/R
16	353-329	Washer - Shim	A/R
17	353-330	Washer - Shim	A/R
18	353-855	Spring	2
19	353-334	Cap - Relief	2
20	3274-52	Screw - Hex, Socket Hd.	4
21	353-575	Boot - Dust Cap	2
22	353-559	Retainer - Boot	2
23	353-560	Washer - Breather	2

Ref. No.	Part No.	Description	No. Used
24	353-959	Plate - Seal Retainer	4
25	353-958	Ring - Backup	4
26	353-957	Seal - Lip	4
27	353-301	Poppet	1
28	353-304	Spring	1
29	353-331	O-Ring	1
30	353-760	Body Relief	1
31	353-758	O-Ring	1
32	353-952	Ring - Backup	1
33	3217-7	Nut - Hex	3
34	353-772	Left End Cover	1
35	353-721	Plug (Incl. Ref. #6)	2
†36		O-Ring	4
†37		O-Ring	4
†38		Housing Section #1	1
†39		Spool V20 SPL	1
40	353-417	Collar Spring	2
41	353-530	Spring	1
42	353-780	Bonnet - R. Detent	1
43	3274-15	Screw - Fillister Hd.	2
44	353-763	Cap - Adjustment	1
45	353-579	Spring	1
46	42-2680	Race R. Detent	1
47	52-5880	Ball - Steel	12

†Parts Available as Assemblies Listed as (*Not Illustrated) on Following Page



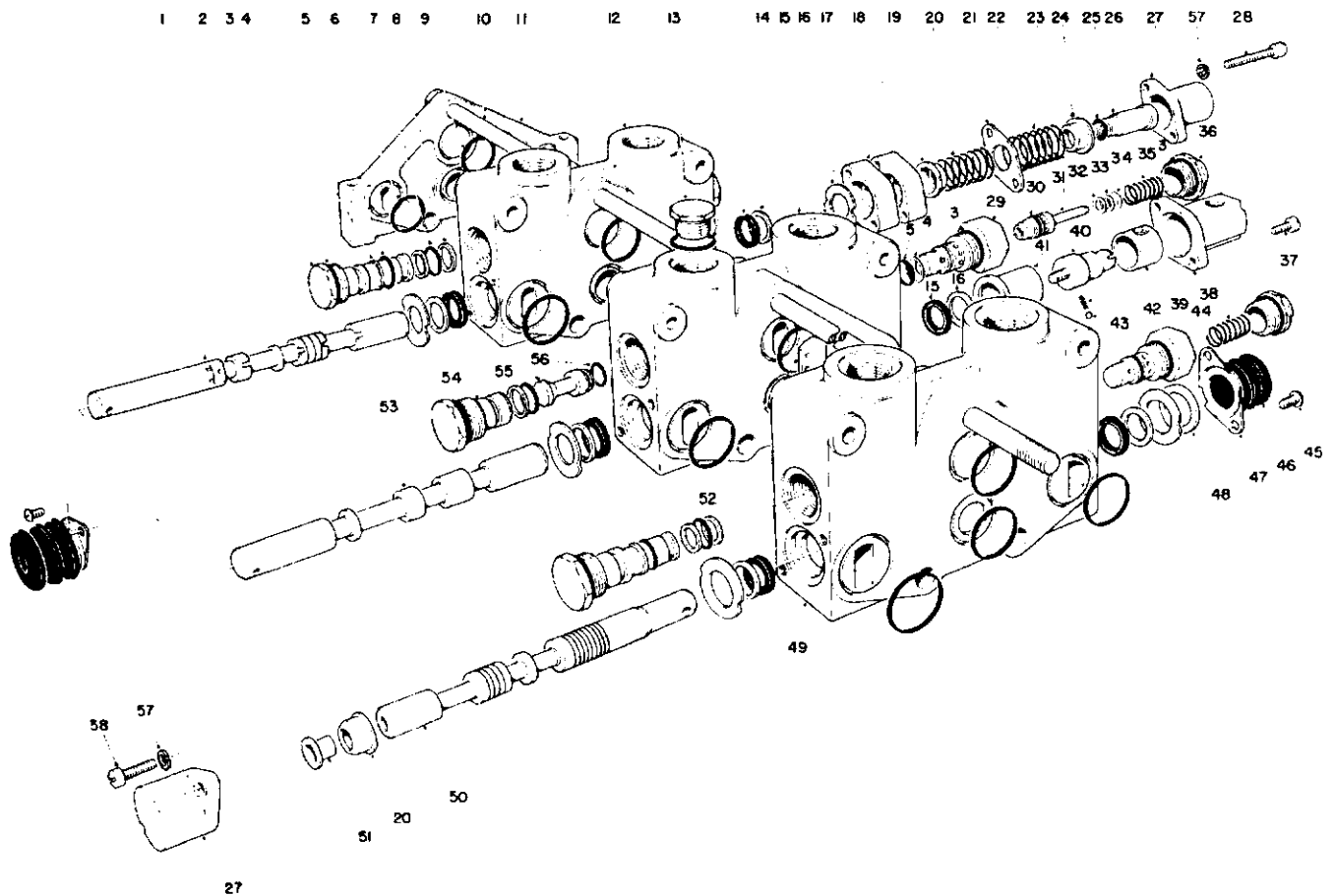
T-0301

CONTROL VALVE ASSEMBLY NO. 70-8210 (Sections 1 And 2) (Continued)

Ref. No.	Part No.	Description	No. Used	Ref. No.	Part No.	Description	No. Used
48	354-29	Plate - Thrust	1	*	353-839	Positioner - DI (SPL) Assy. (Incl. Ref. #1, 3-5, 50 & 52)	1
49	353-728	Sleeve	1	*	353-642	Relief - RC Mod. (Incl. Ref. #6-8, & 12-19)	2
50	353-780	Spud - Detent Out	1	*	353-835	Seals - Section Set (Incl. Ref. #36 & 37)	1
†51		Spool V20 3 Way F.F.	1	*	12-7009	Seal - Spool Set (Incl. Ref. #24-26)	1
52	353-732	Sleeve - Detent	1	*	353-854	Boot - Spool Assembly (Incl. Ref. #20-23)	2
*	353-766	Relief WH (2000) PSI Assy. (Incl. Ref. #6, 13-19, 29, 30 & 32)	1				
*	353-768	Section #1 Complete	1				
*	353-837	Section #2 Complete	1				
*	353-780	Positioner - R. Detent (Out) (Incl. Ref. #3, 40-49)	1				

*Not Illustrated

†Parts Available as Assemblies Listed as (*Not Illustrated) on This Page



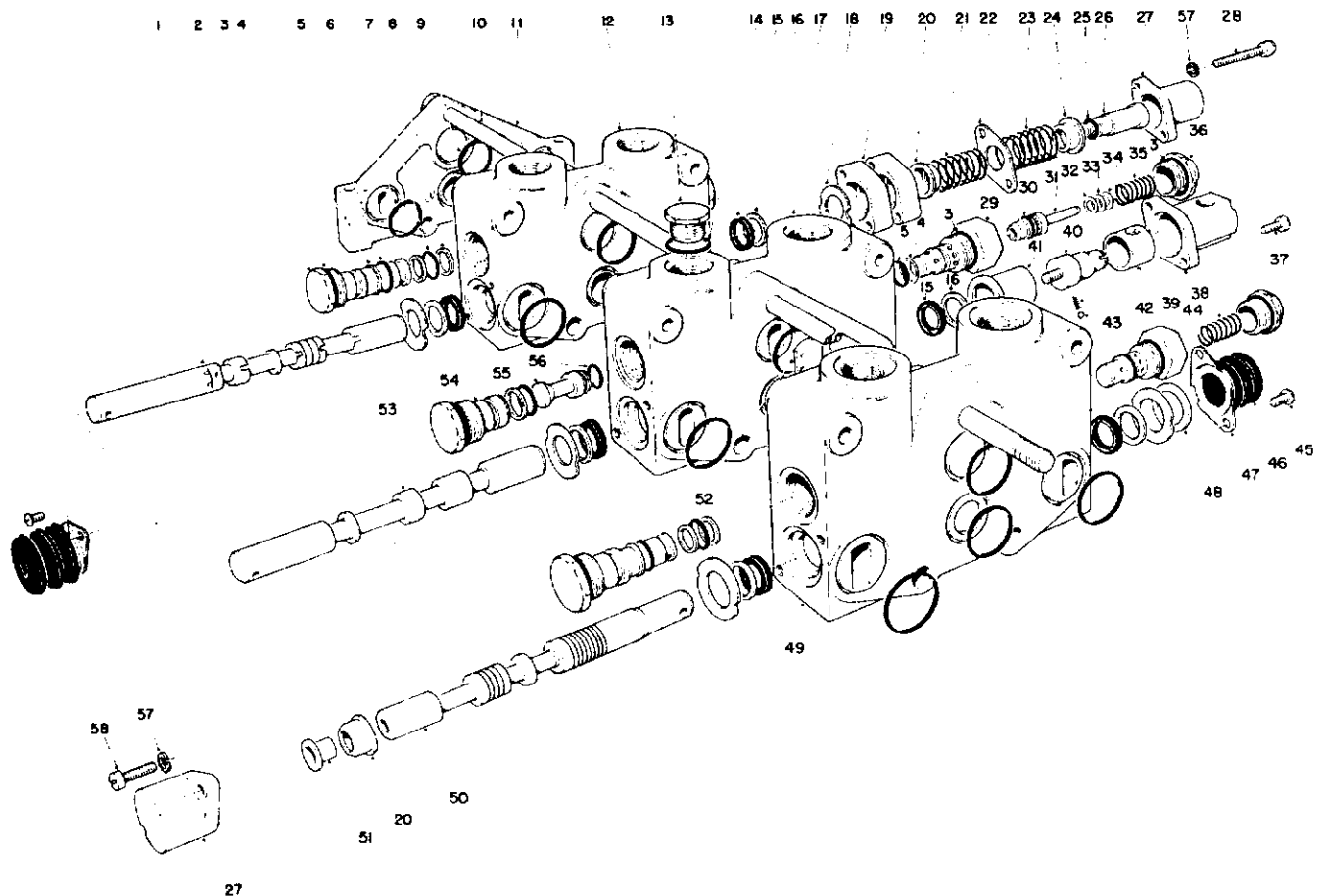
T-0302

CONTROL VALVE ASSY. NO. 70-8210 (Sections 3 Thru 5)

Ref. No.	Part No.	Description	No. Used
†1		Spool #5	1
2	353-481	Plug - Load Check (Incl. Ref. #3-5 & 7-8)	3
3	237-54	O-Ring	6
4	353-306	Ring - Backup	5
5	353-305	O-Ring	5
†6		O-Ring	8
7	353-302	O-Ring	3
8	353-303	Ring - Backup	6
†9		O-Ring	8
10	353-853	Bolt - Hex Hd.	3
11	353-668	Plate - Cap Rt. Cover	1
12		Housing V20 #5	1
13	353-550	Plug Assembly (Incl. Ref. #14)	1
14	353-848	O-Ring	1
15	353-957	Seal - Lip	6
16	353-958	Ring - Backup	6
†17		Housing V20 #4	1
18	353-959	Plate - Seal Retainer	6
19	353-733	Spacer - Bonnet	2
20	353-417	Collar Spring	2
21	353-831	Spring	1
22	353-529	Plate Seal	1
23	353-530	Spring	1

Ref. No.	Part No.	Description	No. Used
24	353-808	Collar - Spring	1
25	353-830	O-Ring	1
26	353-829	Collar Spool	1
27	354-26	Bonnet	2
28	354-28	Screw - Hex, Socket Hd.	2
29	353-851	Body - Relief CP-RC Mod.	2
30	353-392	Seal - Relief Poppet PTFE	2
31	353-531	Poppet Assembly (Incl. Ref. #30)	2
32	353-328	Washer - Shim	A/R
33	353-329	Washer - Shim	A/R
34	353-330	Washer - Shim	A/R
35	353-398	Spring	1
36	353-334	Cap - Relief	2
37	52-5900	Screw - Fillister Hd.	4
38	353-847	Bonnet (SPL)	1
39	353-849	Sleeve	1
40	353-846	Spud - DI (SPL)	1
41	353-845	Sleeve - Detent	1
42	353-730	Spring	1
43	353-731	Ball	1
44	353-855	Spring	1
45	3274-52	Screw - Hex, Socket Hd.	6
46	353-575	Boot - Dust Cap	3
47	353-559	Retainer - Boot	3

†Parts Available as Assemblies Listed as (*Not Illustrated) on Following Page



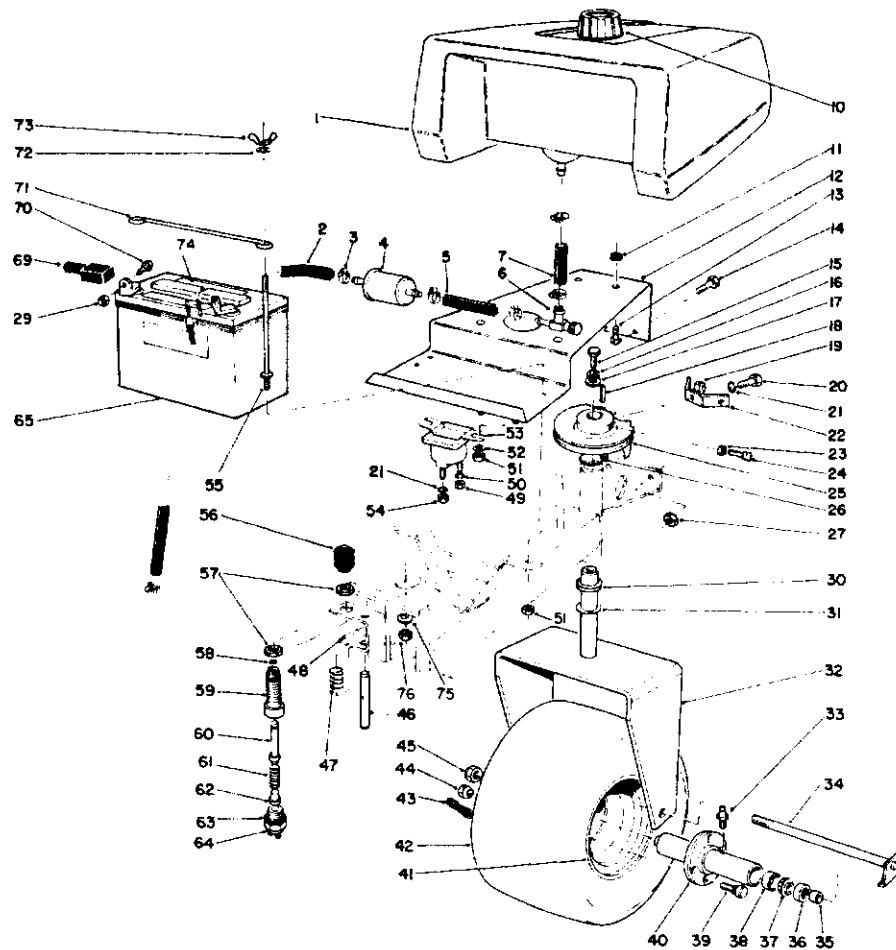
T-0302

CONTROL VALVE ASSEMBLY NO. 70-8210 (Sections 3 Thru 5) (Continued)

Ref. No.	Part No.	Description	No. Used	Ref. No.	Part No.	Description	No. Used
†48	353-560	Washer - Breather	3	*	353-770	Section #3 Assembly (Complete)	1
49		Housing V20 #2	1	*	354-25	Section #4 Assembly (Complete)	1
†50		Spool V20 3 Way F.F.	1	*	353-834	Section #5 Assembly (Complete)	1
51	52-5860	Collar - Spool	1	*	353-841	Position - Spool Assembly (Incl. Ref. #20, 27, 37 & 51)	1
52	353-765	Disc - Seal	1	*	353-840	Position - DI (SP) Assy. (Incl. Ref. #37-43)	1
†53		Spool #4	1	*	353-642	Relief - RC Mod. Assembly (Incl. Ref. #3-5 & 29-36)	1
54	353-953	Plug Assembly	1	*	353-833	Positioner Assembly (Incl. Ref. #19-28)	1
55	353-844	Plus Series (Incl. Ref. #56)	1		70-8210	Control Valve Assembly Complete	1
56	353-850	O-Ring	1				
57	3253-3	Washer - Lock	4				
58	3274-84	Screw - Cap, Hex. Hd.	4				
*	353-835	Seals - Section Set (Incl. Ref. #6 & 9)	1				
	12-7009	Seal - Spool Set (Incl. Ref. #15, 16 & 18)	1				
*	353-854	Boot - Spool Assembly (Incl. Ref. #45-48)	3				

*Not Illustrated

†Parts Available as Assemblies Listed as (*Not Illustrated) on This Page

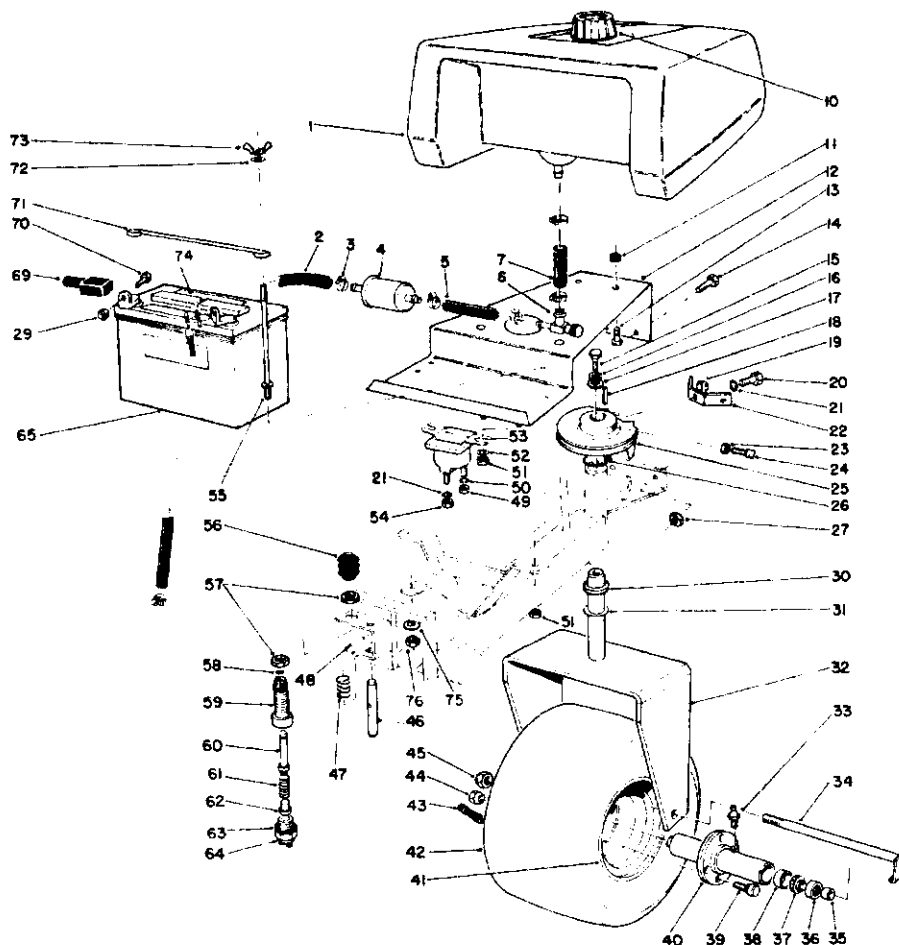


T-0303

GAS TANK BATTERY AND CASTER WHEEL ASSEMBLY

Ref. No.	Part No.	Description	No. Used
1	74-3580	Gas Tank	1
2	62-2470	Hose - Gas Line (Long)	1
3	2412-36	Clamp - Gas Line	6
4	18-1520	Fuel Filter	1
5	56-2240	Hose - Gas Line (Short)	1
6	56-2520	Fitting - Fuel Shut-off	1
7	56-2230	Hose - Fuel Line	1
10	55-3570	Gas Cap	1
11	237-136	Grommet	4
12	62-2210	Tank Base	1
13	3250-36	Screw - Phil. Hd.	4
14	323-6	Screw - Cap, Hex Hd.	2
15	322-3	Screw - Cap, Hex Hd.	1
16	3253-4	Washer - Lock	1
17	62-2190	Washer - Special	1
18	5-0698	Key	1
19	3296-4	Nut - Lock	2
20	322-5	Screw - Cap, Hex Hd.	1
21	3253-4	Washer - Lock	3
22	3-8516	Anchor - Cable	1
23	3218-2	Nut - Jam	2
24	3242-9	Screw - Set, Sq. Hd.	2
25	61-9390	Drum - Steering	1
26	237-149	O-Ring - Seal	1
27	3296-39	Nut - Lock	2

Ref. No.	Part No.	Description	No. Used
29	3217-5	Nut - Hex	4
30	237-148	Seal - Quad Ring	1
31	62-2170	Washer-Thrust	1
32	62-2220	Caster Fork	1
33	302-5	Fitting - Grease	1
34	5-3934	Bolt	1
35	74-3730	Spacer	2
36	253-111	Seal	2
37	254-78	Cone	2
38	254-79	Cup	2
39	10-6830	Drive Stud	4
40	75-9440	Hub Assembly	1
41	217-60	Rim	1
42	28-3680	Tire	1
43	232-24	Valve Stem - With Cap	1
44	242-50	Nut - Wheel	4
45	3296-50	Nut - Lock	1
46	51-0350	Pin - Seat Spring	1
47	3-6685	Spring	1
48	3284-3	Pin Groove	1
49	3219-14	Nut-Hex	3
50	3254-1	Washer - Lock	2
51	32149-2	Nut - Lock	2
52	3256-22	Washer - Flat	2

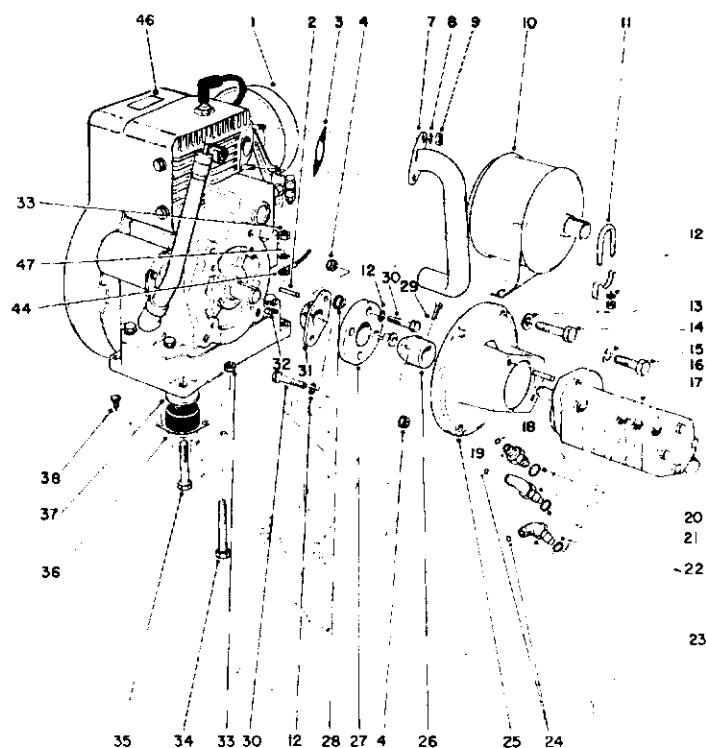
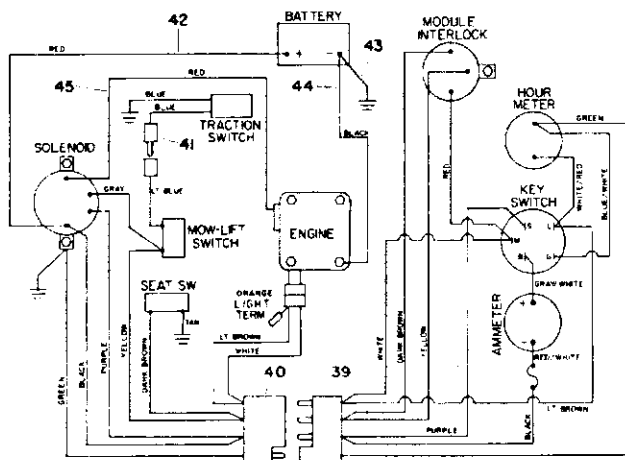


T-0303

GAS TANK BATTERY AND CASTER WHEEL ASSEMBLY (Continued)

Ref. No.	Part No.	Description	No. Used	Ref. No.	Part No.	Description	No. Used
53	28-4210	Solenoid	1	65	28-1400	Battery	1
54	3218-13	Nut - Jam	2	69	28-8080	Boot Terminal	1
55	10-8120	Bolt - Battery	2	70	321-3	Screw - Cap, Hex Hd.	2
56	43-8870	Boot - Switch	1	71	7-0536	Hold Down - Battery	1
57	218-461	Nut - Jam	2	72	3256-1	Washer - Flat	2
58	237-7	O-Ring	1	73	32103-12	Nut - Wing	2
59	43-8620	Guide - Switch Pin	1	74	76-1810	Cap - Battery	6
60	43-8860	Plunger - Switch	1	75	3256-23	Washer - Flat	1
61	43-8600	Spring - Compression	1	76	3296-29	Nut - Lock	1
62	43-8610	Guide - Spring & Ball Seat	1	*	44-1070	Switch Assembly (Incl. Ref. #56-64)	1
63	237-30	O-Ring	1				
64	38-0430	Switch - Neutral	1				

*Not Illustrated



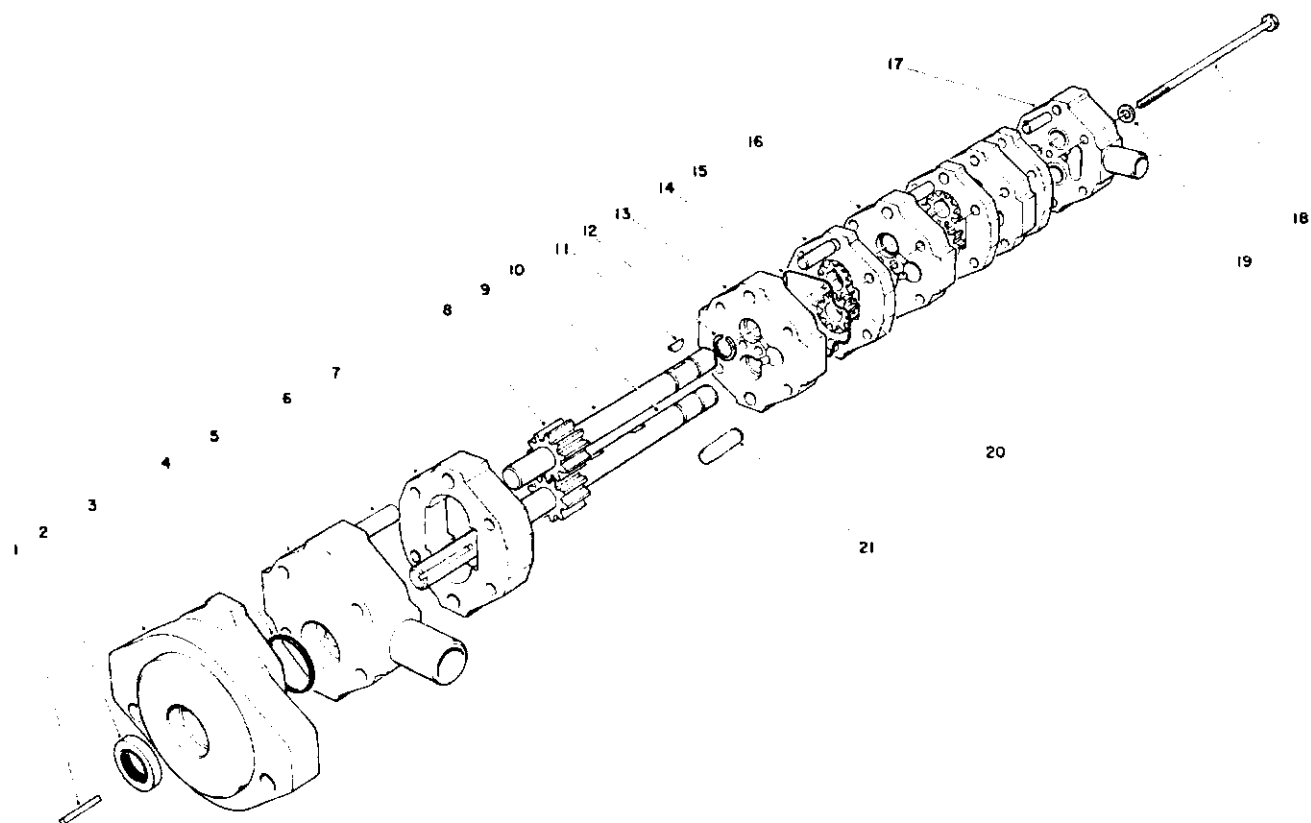
T-0304

ENGINE AND WIRING DIAGRAM

Ref. No.	Part No.	Description	No. Used
1	12-7189	Engine	1
2	10-7070	Key - Engine	1
3	82-5570	Gasket - Exhaust	1
4	3296-29	Nut - Lock	4
7	62-2270	Exhaust Pipe	1
8	3253-4	Washer - Lock	2
9	3217-6	Nut - Hex	2
10	62-2110	Muffler Assembly	1
*	62-2780	Spark Arrestor Muffler (Optional)	1
11	2412-76	Muffler Clamp Assembly	1
12	3256-23	Washer - Flat	6
13	3253-6	Washer - Lock	4
14	324-6	Screw - Cap, Hex Hd.	4
15	3253-21	Washer - Lock	2
16	323-8	Screw - Cap, Hex Hd.	2
17	62-2300	Traction Pump Assembly	1
18	237-30	O-Ring	1
19	340-6	Fitting - Straight	1
20	237-79	O-Ring	1
21	340-77	90° Fitting	1
22	237-42	O-Ring	3
23	340-87	45° Fitting	2
24	237-22	O-Ring	2

Ref. No.	Part No.	Description	No. Used
25	27-1930	Pump Mount	1
26	27-1970	Coupling - Pump	1
27	44-2230	Coupling - Rubber	1
28	27-6600	Spacer - Rubber	4
29	3241-6	Screw - Set, Sq. Hd.	2
30	322-6	Screw - Cap, Hex Hd.	4
31	27-1960	Coupling - Engine	1
32	3241-2	Screw - Set, Sq. Hd.	2
33	3296-39	Nut - Lock	4
34	323-15	Screw - Cap, Hex Hd.	1
35	323-20	Screw - Cap, Hex Hd.	3
36	27-2150	Mounting Pad - Engine	4
37	63-7400	Washer - Flat	4
38	32144-1	Screw - Thread Forming	8
39	62-2350	Wire Harness - Column	1
40	62-2340	Wire Harness - Frame	1
41	62-2360	Wire Harness - Traction	1
42	10-7130	Wire - Solenoid to Starter	1
43	28-2120	Wire - Battery to Ground	1
44	27-3070	Wire - Battery to Engine	1
45	62-2630	Wire Assembly	1
46	68-7220	Decal - Engine RPM	1
47	3254-6	Washer - Lock	1

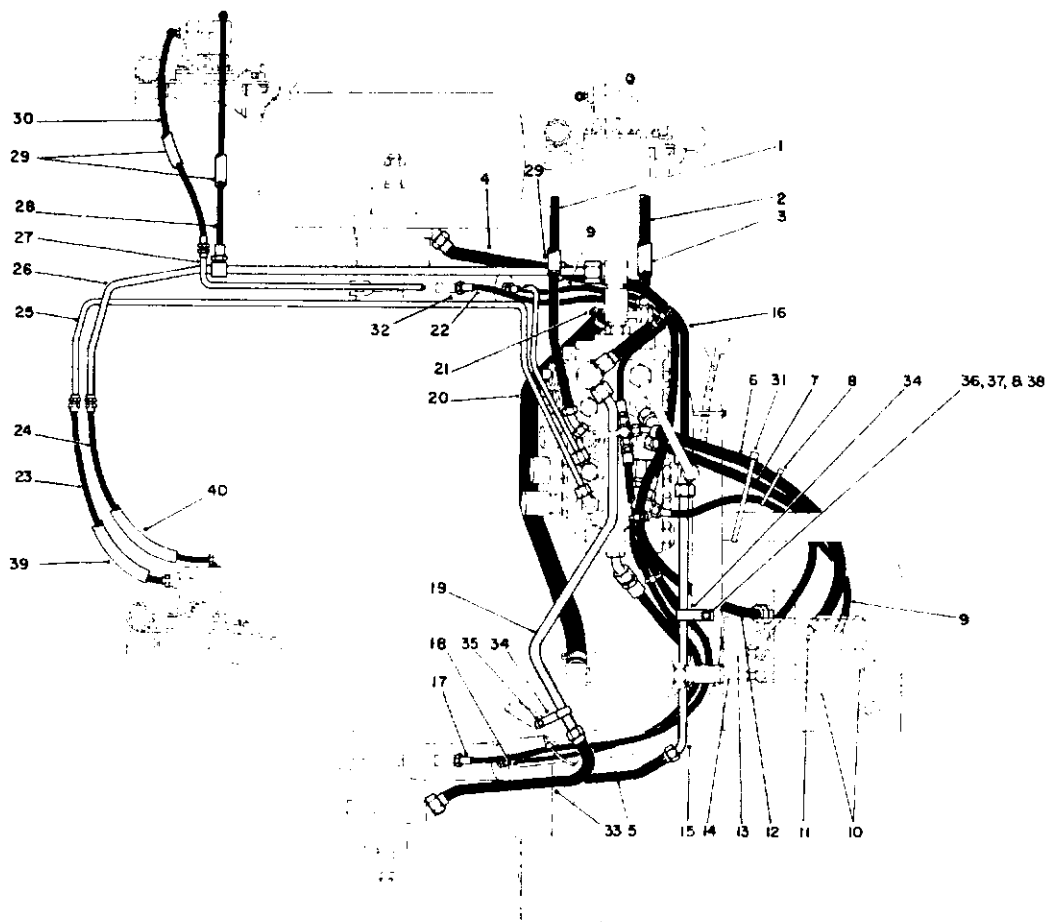
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T-0305

TRACTION PUMP NO. 62-2300

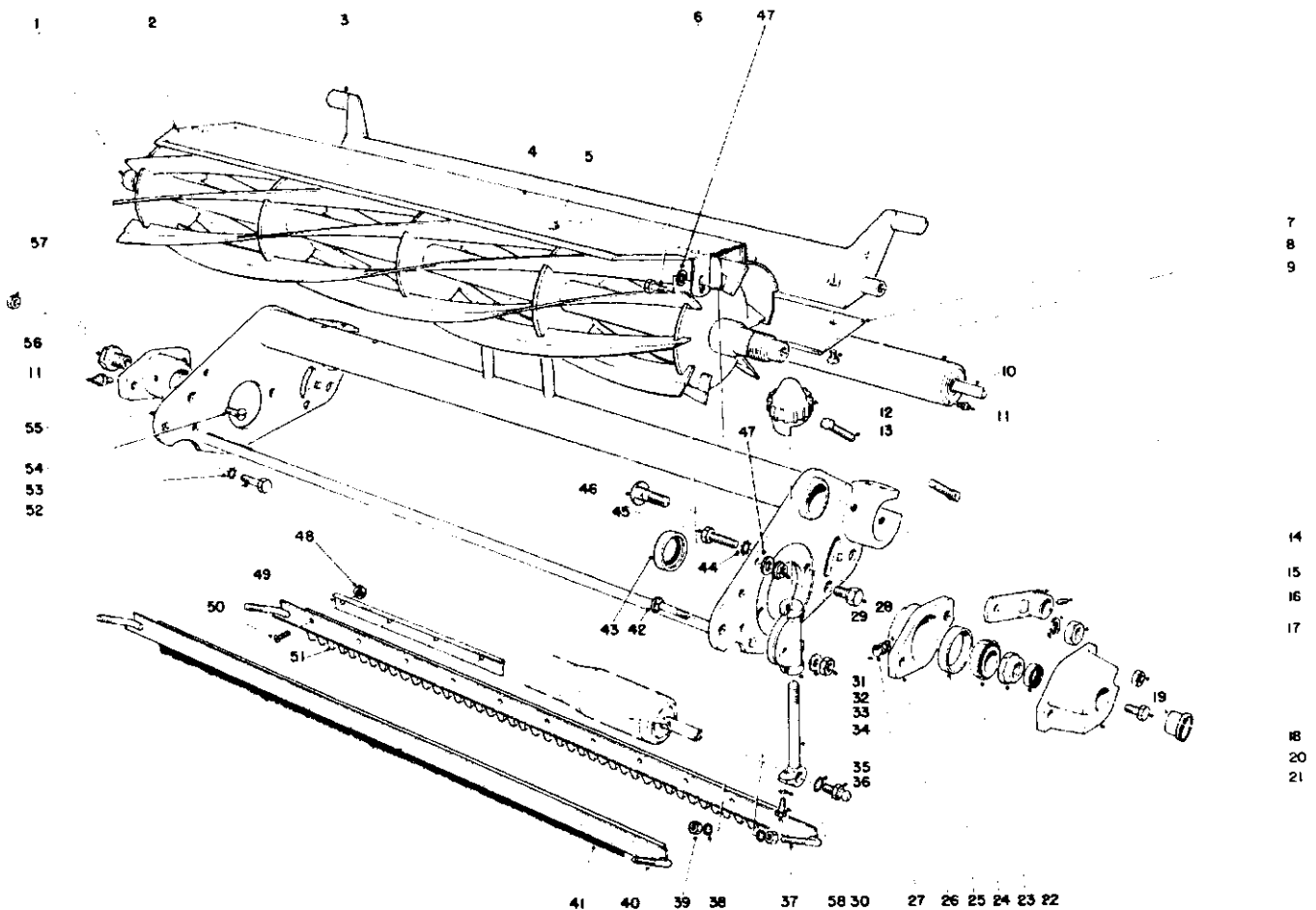
Ref. No.	Part No.	Description	No. Used	Ref. No.	Part No.	Description	No. Used
1	5-0946	Key - Square	1	12	353-886	Ring - Retaining	2
2	353-931	Seal - Oil	1	13	353-921	Plate Assembly	1
3	353-916	Flange Assembly	1	14	353-922	Seal Ring - Pump	8
4	353-917	O-Ring	1	15	353-969	Gear Plate - 30B	3
5	353-918	Body Assembly	1	16	353-923	Plate Assembly	2
6	353-970	Dowel	2	17	353-927	Cover Assembly	1
7	353-971	Gear Plate - Pump	1	18	353-966	Screw - Cap, Hex Hd.	4
8	353-964	Gear - 66B	2	19	353-600	Washer - Flat	4
9	353-965	Idler Shaft Assembly	1	20	353-967	Gear - 33B	5
10	353-972	Shaft - Drive	1	21	353-968	Dowel	6
11	353-884	Key - Woodruff	4				



T-0306

HYDRAULIC SYSTEMS DIAGRAM

Ref. No.	Part No.	Description	No. Used	Ref. No.	Part No.	Description	No. Used
1	74-3830	Hose - Pressure, Rear (Incl. Ref. #29)	1	23	63-3870	Hose - Pressure L.H. (Incl. Ref. #39)	1
2	63-3840	Hose -Return, Rear (Incl. Ref. #3)	1	24	63-3830	Hose - Return L.H. (Incl. Ref. #40)	1
3	56-7981	Splash Shield	1	25	63-4020	Pressure Line Cutting Unit L.H.	1
4	70-8600	Traction Hose - Upper R.H.	1	26	63-4040	Return Line - R.H.	1
5	70-7150	Traction Hose - Lower L.H.	1	27	63-4030	Pressure Line Cutting Unit R.H.	1
6	63-3930	Hose Cylinder - Drop, Rear	1	28	63-3820	Hose - Return R.H. (Incl. Ref. #29)	1
7	63-3900	Hose - Pump #3	1	29	56-7980	Splash Shield	3
8	3290-379	Tie - Cable	6	30	63-3810	Hose - Pressure R.H. (Incl. Ref. #29)	1
9	63-3880	Hose Cylinder Lift R.H. and Rear	2	31	3333-975	Cable Tie	1
10	27-3040	Hose - Pump/Inlet	2	32	340-92	Fitting - Orifice Str.	1
11	340-103	45° Elbow Adjustable	1	33	70-8610	Hose - Traction, Upper L.H.	1
12	63-3940	Hose - Pump #4	1	34	2412-41	R-Clamp	3
13	63-3910	Hose -Pump #2	1	35	12-3270	Screw - Cap, Hex. Hd.	3
14	63-3920	Hose - Pump #1	1	36	321-3	Screw - Cap, Hex. Hd.	1
15	70-7120	Tube - Traction Lower L.H.	1	37	3296-16	Nut - Lock	1
16	70-7170	Hose - Traction Lower R.H.	1	38	3256-1	Washer - Flat	2
17	63-3850	Hose - Cylinder - Drop L.H.	1	39	56-7986	Sleeve - Protective	1
18	63-3890	Hose - Cylinder - Lift L.H.	1	40	56-7987	Sleeve - Protective	1
19	70-7130	Traction Line - Upper L.H.	1				
20	68-5880	Return Line - Man. to Filter	1				
21	2412-3	Clamp - Hose	2				
22	63-3950	Hose -Cylinder - Drop L.H.	1				

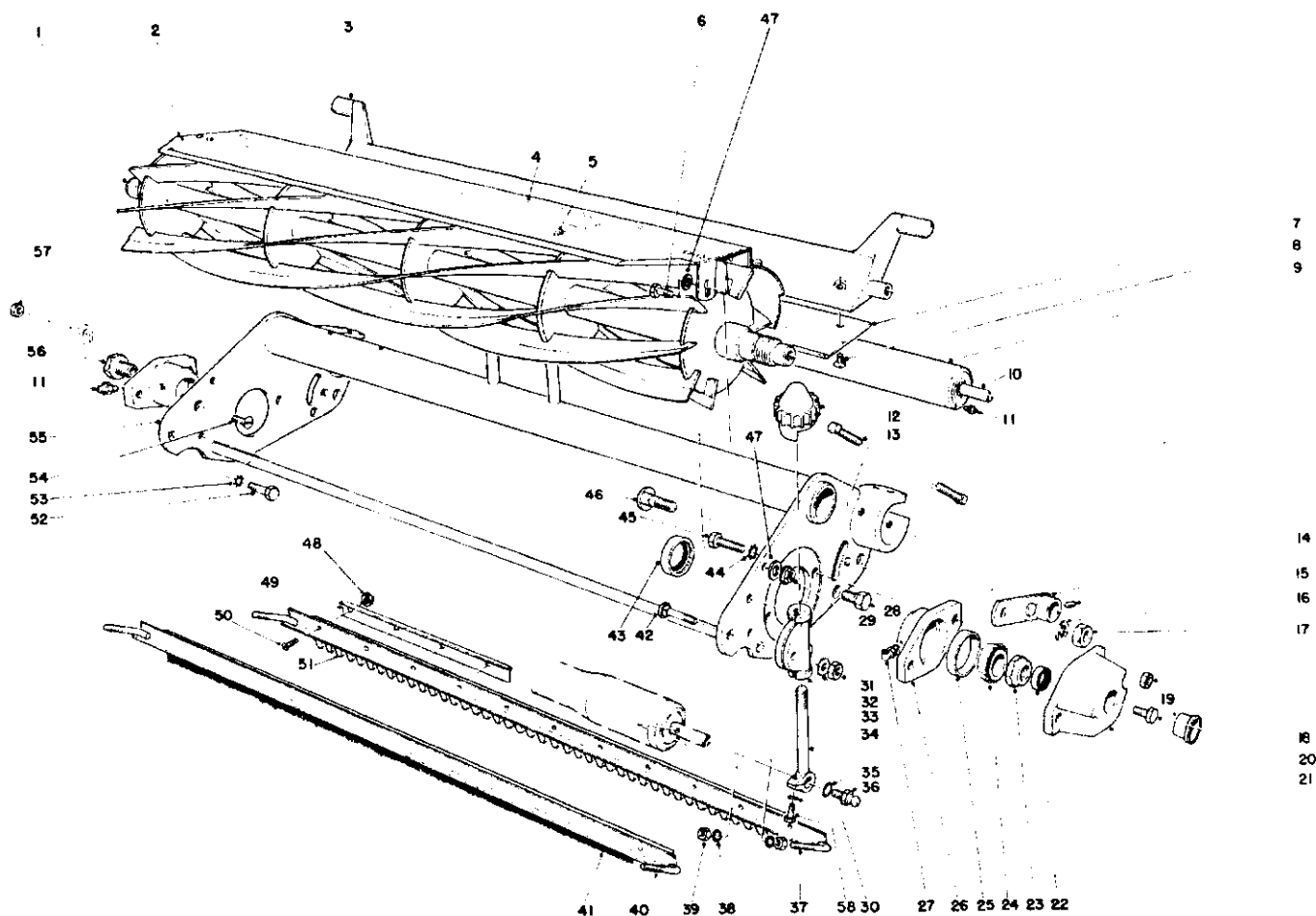


T-0307

CUTTING UNIT MODEL NO. 04405 & 04408

Ref. No.	Part No.	Description	No. Used	Ref. No.	Part No.	Description	No. Used
1	12-3599	Reel Assy. 8 Blade (04408)	1	22	253-61	Seal	1
*	12-8779	Reel Assy. 5 Blade (04405)	1	23	3296-60	Nut - Lock	1
2	36-7190	Grass Shield	1	24	254-94	Cone - Bearing	2
3	10-4930	Bed Bar	1	25	254-72	Cup - Bearing	2
4	36-7260	Cut-Off Bar	1	26	10-5120	Housing - Bearing	2
5	32144-73	Screw - Round Hd.	5	27	302-40	Fitting - Grease	1
6	321-5	Screw - Cap. Hex. Hd.	2	28	217-74	Wheel Bolt	2
7	63-8500	Bed Knife 1/8"	1	29	3296-42	Nut - Lock	2
*	62-2510	Bed Knife 3/16"	1	30	3253-3	Washer - Lock	2
*	63-8550	Bed Knife - Tournament	1	31	3296-29	Nut - Lock	2
*	63-8610	Bed Knife - Fairway	1	32	3256-23	Washer - Flat	2
8	57-4910	Screw - Special	7	33	10-5060	Bracket Height of Cut	2
9	21-8450	Rear Roller Assembly (Incl. Ref. #10 & 11)	1	34	10-5010	Screw - Roller Adjustment	2
10	21-8430	Rear Bearing	2	35	3254-6	Washer - Lock	2
11	302-5	Fitting - Grease	3	36	2411-7	Ball Stud	2
12	10-5040	Knob - Height Adjustment	2	37	11-0070	Scraper Comb Assembly (Incl. Ref. #48-51)	1
13	3243-13	Screw - Set. Sq. Hd.	4	38	3254-8	Washer - Lock	4
14	27-2650	Height-of-Cut Adjustment	2	39	3219-1	Nut - Hex	4
15	3290-125	Screw - Set	2	40	33-1000	Scraper Brush Assembly (Incl. Ref. #41) (Optional)	1
16	3253-7	Washer - Lock	2	41	33-0630	Brush	1
17	3217-9	Nut - Hex.	2	42	3-7253	Bolt - Carriage	2
18	3296-39	Nut - Lock	2	43	253-96	Oil Seal	2
19	12-0460	Caplug	1	44	3255-9	Washer - Lock	4
20	323-2	Screw - Mach. Hex Hd.	1	45	57-3210	Screw - Mach. Special	4
21	10-5080	End Cap	1				

*Not Illustrated



T-0307

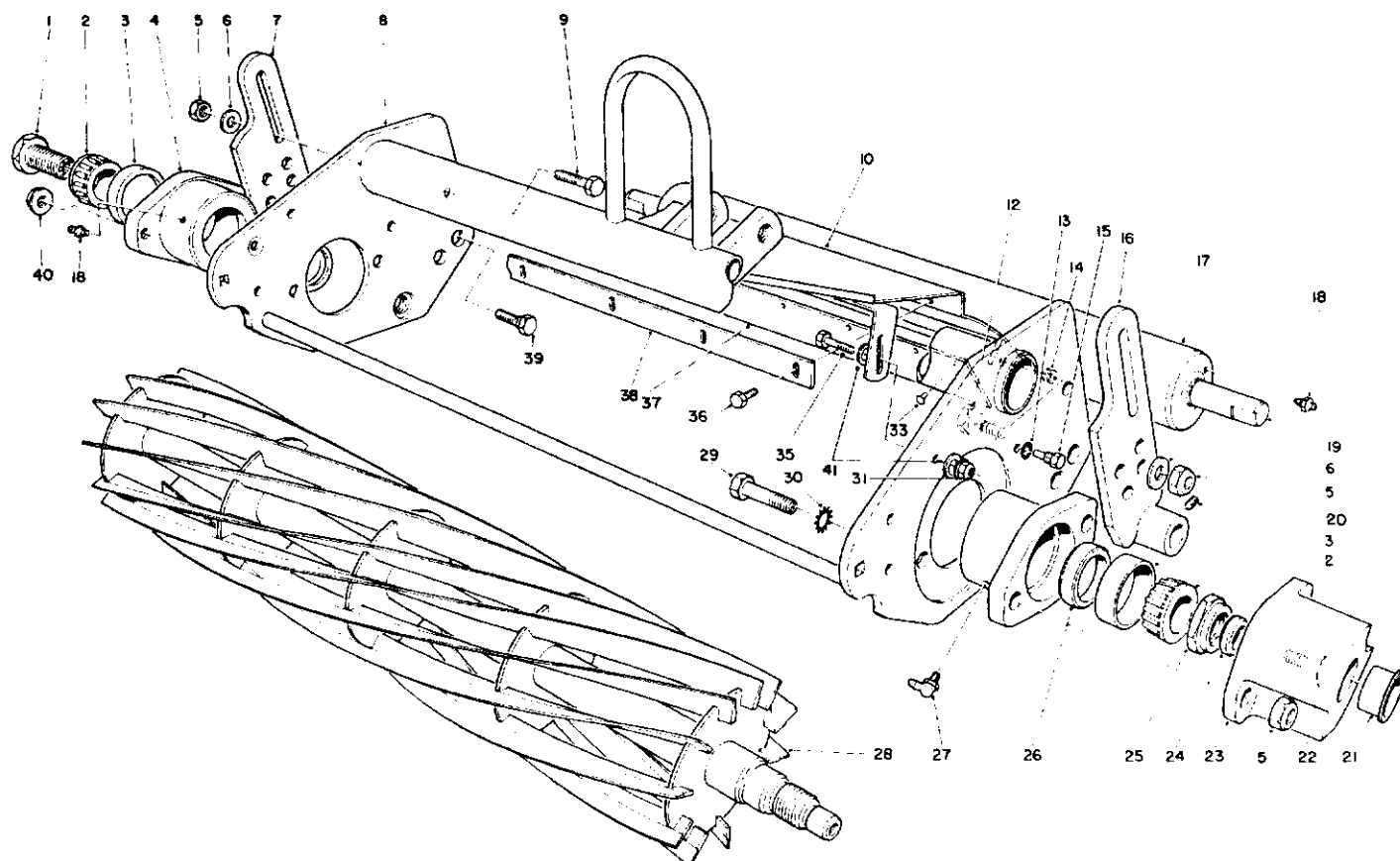
CUTTING UNIT MODEL NO. 04405 & 04408 (Continued)

Ref. No.	Part No.	Description	No. Used
46	3233-26	Bolt - Carriage	2
47	3256-22	Washer - Flat	4
48	3296-9	Nut - Lock	11
49	8-2520	Support Comb	1
50	3249-3	Screw - Round Head	11
51	8-2530	Comb - Urethane	1
52	322-5	Screw - Cap, Hex. Hd.	2
53	3255-8	Washer - Lock	2
54	32108-20	Screw - Flat Head	2

Ref. No.	Part No.	Description	No. Used
55	70-1100	Frame - Reel	1
56	10-5100	Nut - Spline	1
57	32128-36	Nut - Nut, Flange	2
58	321-4	Screw - Cap, Hex. Hd.	2
*	13-8199	Bar Adj. Gauge (Includes †)	1
*†	32122-22	Screw - Truss Head	1
*†	3219-14	Nut - Hex	1

*Not Illustrated

†Special Tool for Installation



T-0309

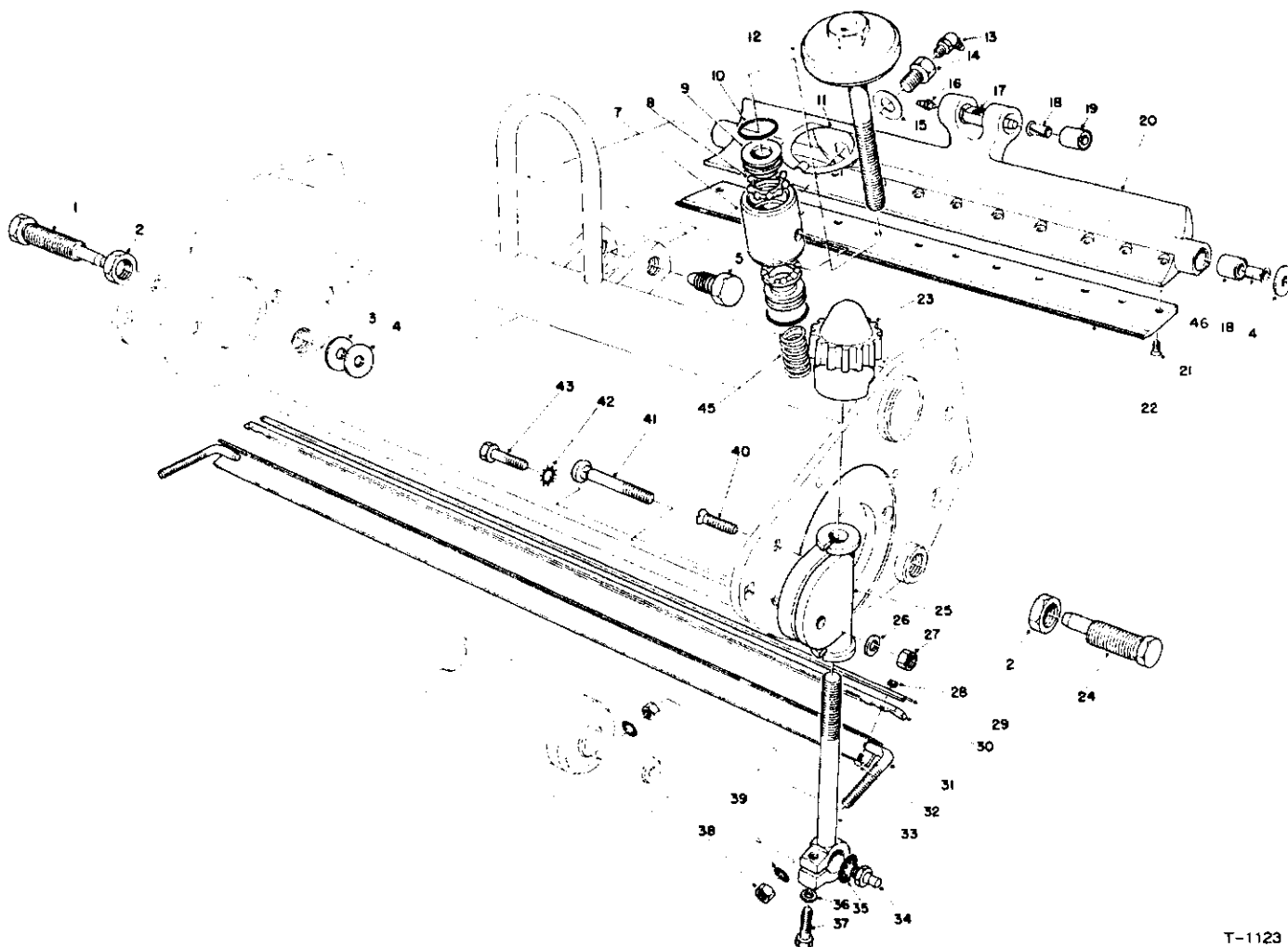
CUTTING UNIT MODEL NO. 04450 (11 Blade) CUTTING UNIT MODEL NO. 04468 (8 Blade)

Ref. No.	Part No.	Description	No. Used
1	77-0340	Nut - Spline	1
2	254-94	Cone - Bearing	2
3	254-72	Cup - Bearing	2
4	10-5120	Housing - Bearing	2
5	3296-39	Nut - Lock	6
6	3256-24	Washer - Flat	4
7	77-1060	Bracket - Height of Cut (R.H.)	1
8	70-1200	Frame - Reel	1
9	323-7	Screw - Cap, Hex Hd.	2
10	57-5200	Grass Shield Assembly (Incl. Ref. #33 & 37)	1
12	52-3100	Bolt - Eccentric (Height of Cut L.H.)	1
13	3254-6	Washer - Lock	2
14	237-84	Grommet	2
15	57-9910	Screw - Pivot	2
16	77-1080	Bracket - Height of Cut (L.H.)	1
17	52-3120	Rear Roller Assembly (Incl. Ref. #18 & 19)	1
18	302-5	Fitting - Grease	3
19	21-8430	Bearing - Rear Roller	2
20	3246-2	Screw - Set	2
21	12-0460	Caplug	1
22	323-2	Screw - Machine, Hex Hd.	1

Ref. No.	Part No.	Description	No. Used
23	10-5080	Cap-End	1
24	253-61	Seal	1
25	3296-60	Nut - Lock	1
26	253-96	Seal	2
27	302-40	Fitting - Grease	1
28	12-2789	Reel - 11 Blade (Model No. 04450)	1
*	12-3599	Reel - 8 Blade (Model No. 04468)	1
29	57-3210	Screw - Machine, Special	4
30	3255-9	Washer - Lock	4
31	3296-42	Nut - Lock	2
33	3295-46	Rivet	13
35	321-5	Screw - Cap, Hex Hd.	2
36	32144-73	Screw - Self Tapping	5
37	57-5210	Flap - Shield	1
38	36-7260	Cut-Off Bar	1
39	52-3110	Bolt - Shoulder (Height of Cut R.H.)	1
40	32128-36	Nut - Lock, Flange	2
41	3256-22	Washer - Flat	4
*	13-8199	Bar Adj. Gauge (Includes †)	1
*†	32122-2	Screw - Truss Hd.	1
*†	3219-14	Nut - Hex	1
*†		Backlapping Brush Assy.	1

*Not Illustrated

†Special Tool for Installation



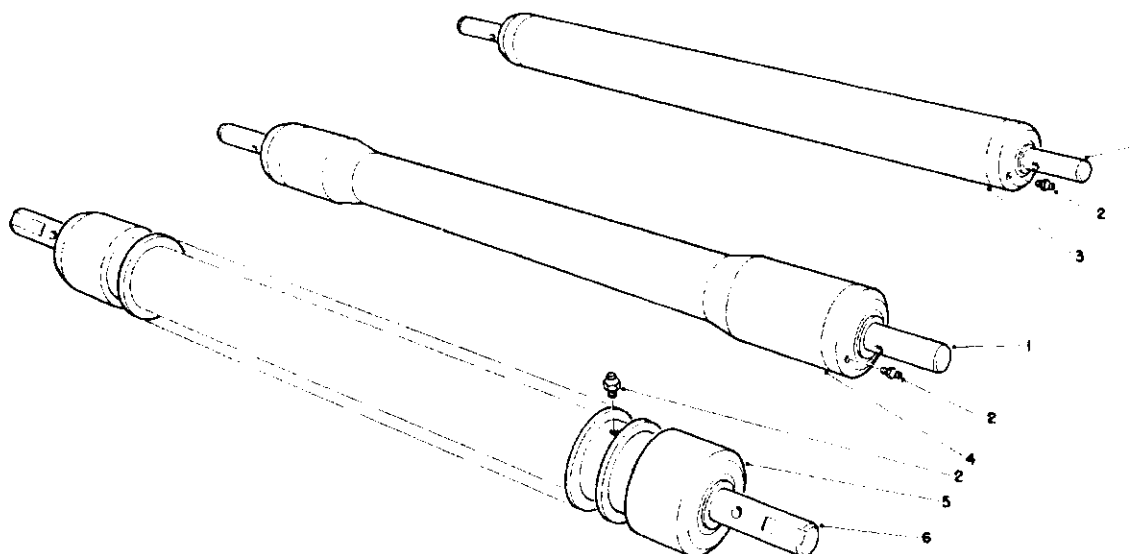
T-1123

BEDBAR & SCRAPER COMB ASSEMBLY FOR CUTTING UNIT MODEL NO. 04450 & 04468

Ref. No.	Part No.	Description	No. Used	Ref. No.	Part No.	Description	No. Used
1	52-2930	Bolt - Adjustment Shoulder	1	27	3296-29	Nut - Lock	2
2	3220-6	Nut - Hex. Jam	2	28	3296-9	Nut - Lock	11
3	52-2860	Washer	1	29	8-2520	Support - Comb	1
4	52-2900	Washer - Poly	2	30	8-2530	Comb - Urethane	1
5	66-7240	Screw - Pivot SPA	2	31	11-0070	Scraper Comb Assembly (Incl. Ref. #28-30 & 32)	1
7	77-0330	Pivot - Single Point Adjust.	1	32	3249-3	Screw - Round Hd.	11
8	77-0350	Retainer - Bearing	2	33	10-5010	Screw - Roller Adjustment	2
10	237-77	O-Ring	2	34	2411-7	Ball Stud	2
11	66-7220	Arm - Spring	1	35	3254-6	Washer - Lock	2
12	77-0300	Handle Assembly	1	36	3253-3	Washer - Lock	2
14	324-25	Screw - Cap, Hex. Hd.	1	37	321-4	Screw - Cap, Hex Hd.	2
15	3256-25	Washer - Flat	1	38	3219-1	Nut - Hex	4
16	302-18	Fitting - Grease	1	39	3254-8	Washer - Lock	4
17	57-5260	Pivot - Bedbar	1	40	32108-20	Screw - Machine, Flat Hd.	2
18	52-2890	Bushing - Flanged	4	41	3-7253	Bolt - Carriage	2
19	62-5510	Rubber Bushing Assembly	2	42	3255-8	Washer - Lock	2
20	57-4940	Bedbar	1	43	322-5	Screw - Cap, Hex Hd.	2
†21	57-4910	Screw - Special	13	45	66-7230	Spring - Compression	1
22	63-8470	Bed Knife 1/8"	1	46	63-9510	Rubber Bushing Assembly	2
*	62-2500	Bed Knife 3/16"	1	47	77-0490	Decal - Bolt, Eccentric	1
*	63-8560	Bed Knife - Tournament	1	*	36-7250	Grass Basket Assembly	2
*	63-8600	Bedknife - Fairway	1	*	13-3659	Overhaul Kit (Incl. Ref. #2, 3, 24 & 26 On page 27. #4, 18-19, 21 & 46 on this page)	1
23	10-5040	Knob - Height Adjustment	2				
24	52-2910	Bolt - Eccentric Shoulder (L.H.)	1				
25	10-5060	Bracket - Height of Cut	2				
26	3256-23	Washer - Flat	2				

*Not Illustrated

†Special Tool for Installation



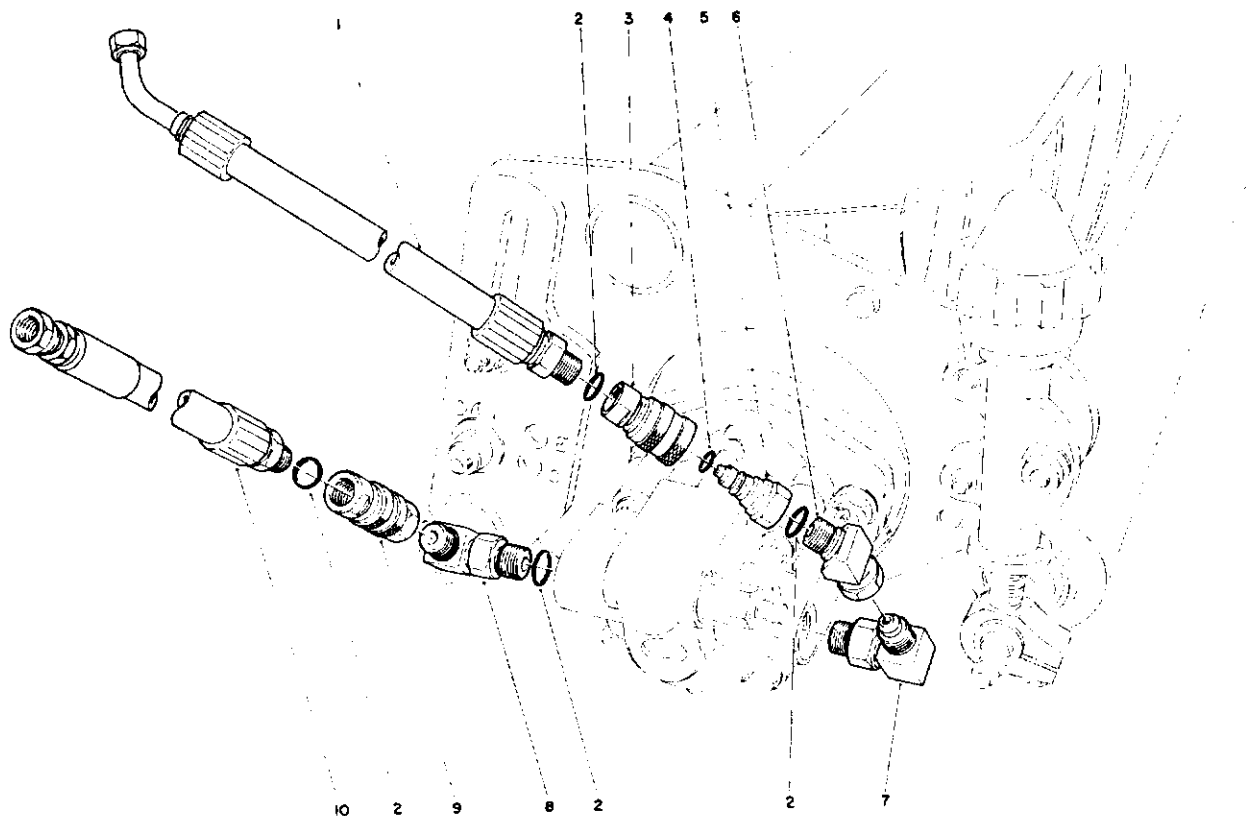
T-0956

CUTTING UNIT ROLLER OPTIONS

Ref. No.	Part No.	Description	No. Used
1	52-3180	Bearing - Front Roller	2
2	302-5	Fitting - Grease	2
3	52-3170	Full Front Roller Assembly (Incl. Ref. #1 & 2)	1
4	52-3590	Swaged Roller Assembly (Incl. Ref. #1 & 2)	1

Ref. No.	Part No.	Description	No. Used
5	71-1550	Wiehle Roller Assembly (Incl. Ref. #2 & 6)	1
6	52-3210	Bearing - Wiehle Roller	2
*	04412	Full Roller Carton of 3	1
*	04414	Swaged Roller Carton of 3	1
*	04424	Wiehle Roller Carton of 3	1

*Not Illustrated

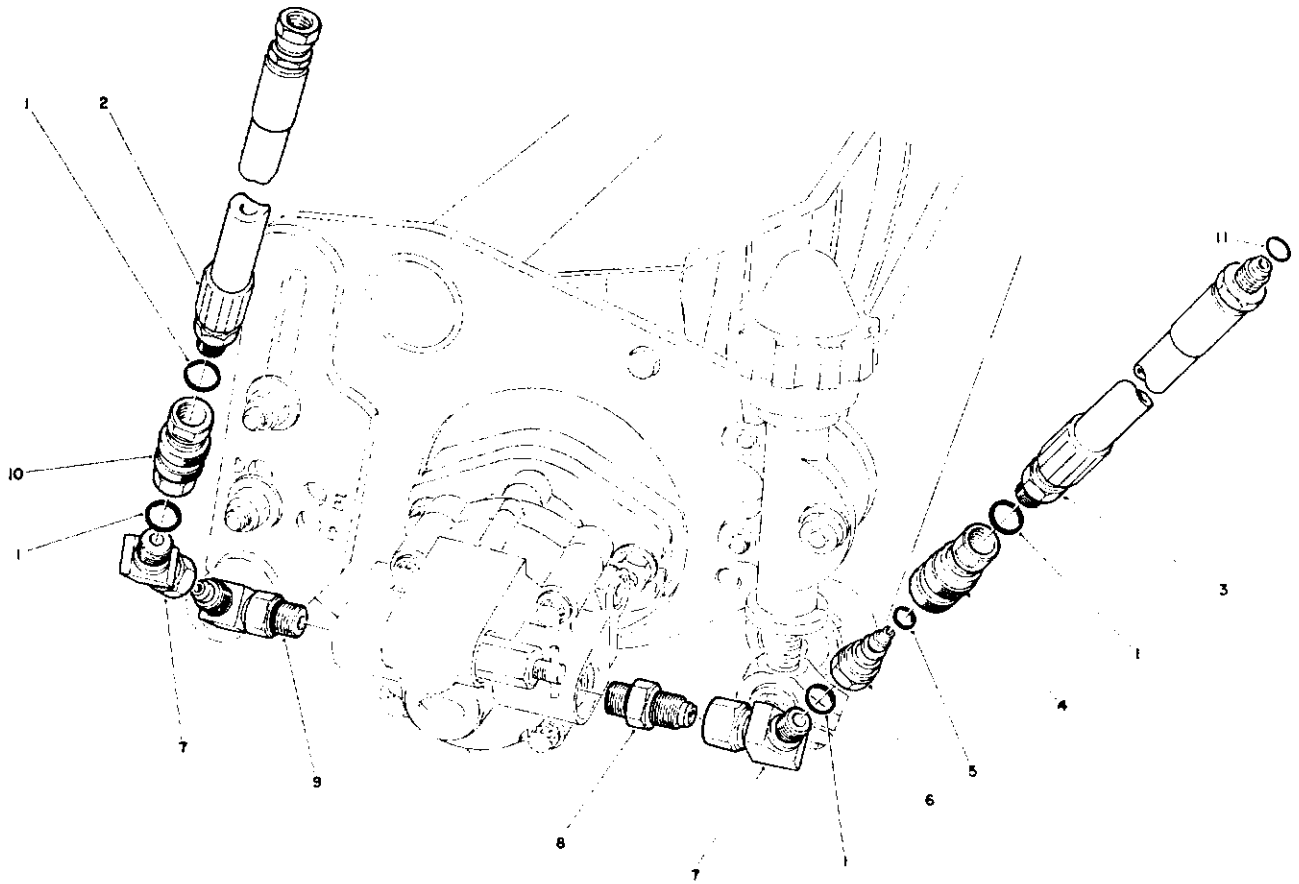


T-0316

BACKLAPPING KIT NO. 63-4960 (Optional) #1 Cutting Unit

Ref. No.	Part No.	Description	No. Used
1	70-9960	Hose Assembly - Pressure (Incl. Ref. #2)	1
2	237-42	O-Ring	6
3	353-934	Coupling	2
4	237-142	O-Ring	2
5	353-933	Coupling	2
6	54-9530	Fitting - 45° Swivel Elbow (Incl. Ref. #2)	1

Ref. No.	Part No.	Description	No. Used
7	353-374	Fitting - 90° Adjustable El.	1
8	54-9540	Fitting - 90° Adjustable El. (Incl. Ref. #2)	1
9	54-9620	Coupling - Quick Dscnct. (Incl. Ref. #3-5)	2
10	70-9950	Hose Assembly - Return (Inc. Ref. #2)	1

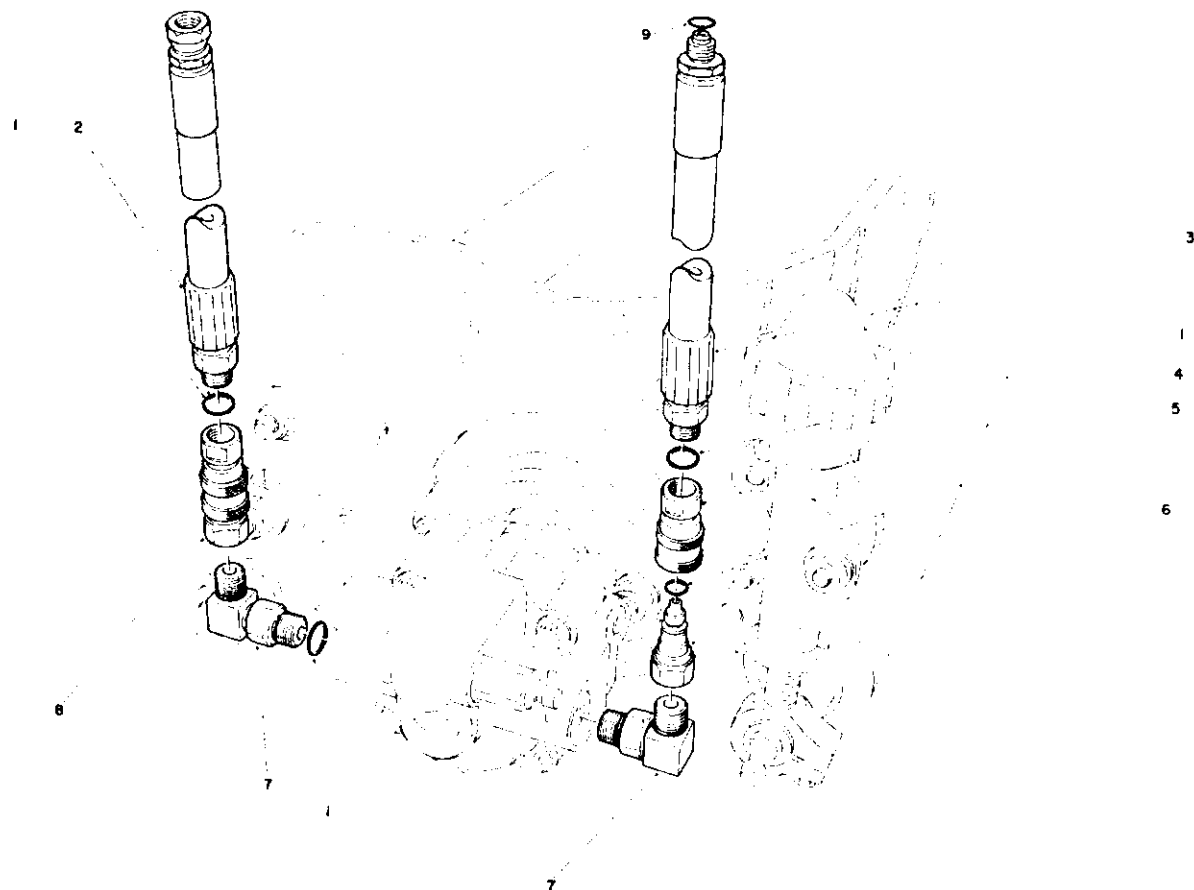


T-0317

BACKLAPPING KIT NO. 63-4960 (Cont.) #2 Cutting Unit

Ref. No.	Part No.	Description	No. Used
1	237-42	O-Ring	6
2	70-9950	Hose Assembly - Return (Incl. Ref. #1)	1
3	70-9940	Hose Assembly - Pressure (Incl. Ref. #1 & 11)	1
4	353-934	Coupling	2
5	237-142	O-Ring	2
6	353-933	Coupling	2

Ref. No.	Part No.	Description	No. Used
7	54-9530	Fitting - 45° Swivel Elbow (Incl. Ref. #1)	2
8	353-384	Fitting - Straight	1
9	353-374	Fitting - 90° Adjustable El.	1
10	54-9620	Coupling - Quick Dscnct. (Incl. Ref. #4-6)	2
11	237-22	O-Ring	1

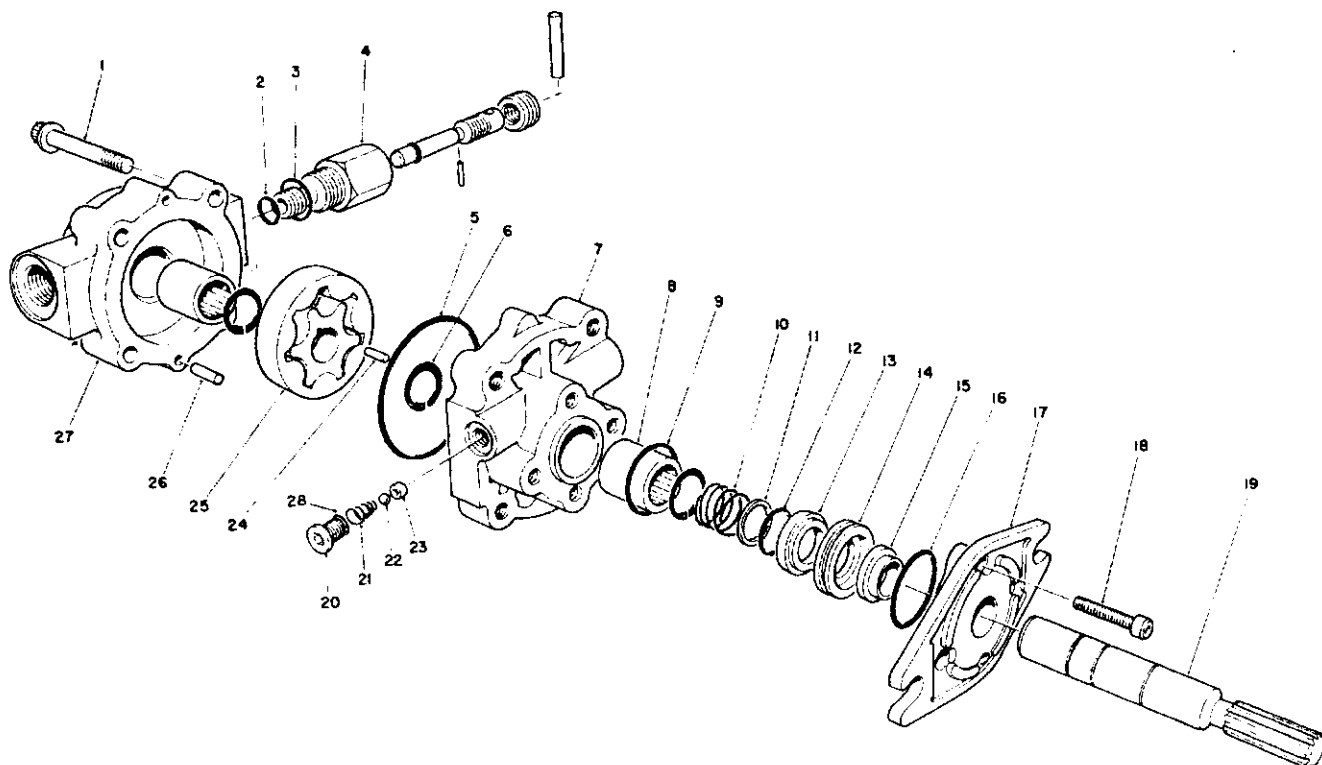


BACKLAPPING KIT NO. 63-4960 (Cont.) No. 3 Cutting Unit

T-0318

Ref. No.	Part No.	Description	No. Used
1	237-42	O-Ring	6
2	70-9950	Hose Assembly - Return (Incl. Ref. #1)	1
3	70-9940	Hose Assembly - Pressure (Incl. Ref. #1 & 9)	1
4	353-934	Coupling	2
5	237-142	O-Ring	2

Ref. No.	Part No.	Description	No. Used
6	353-933	Coupling	2
7	54-9540	Fitting - 90° Adjustable El. (Incl. Ref. #1)	2
8	54-9620	Coupling - Quick Dscnct. (Incl. Ref. #4-6)	2
9	237-22	O-Ring	1



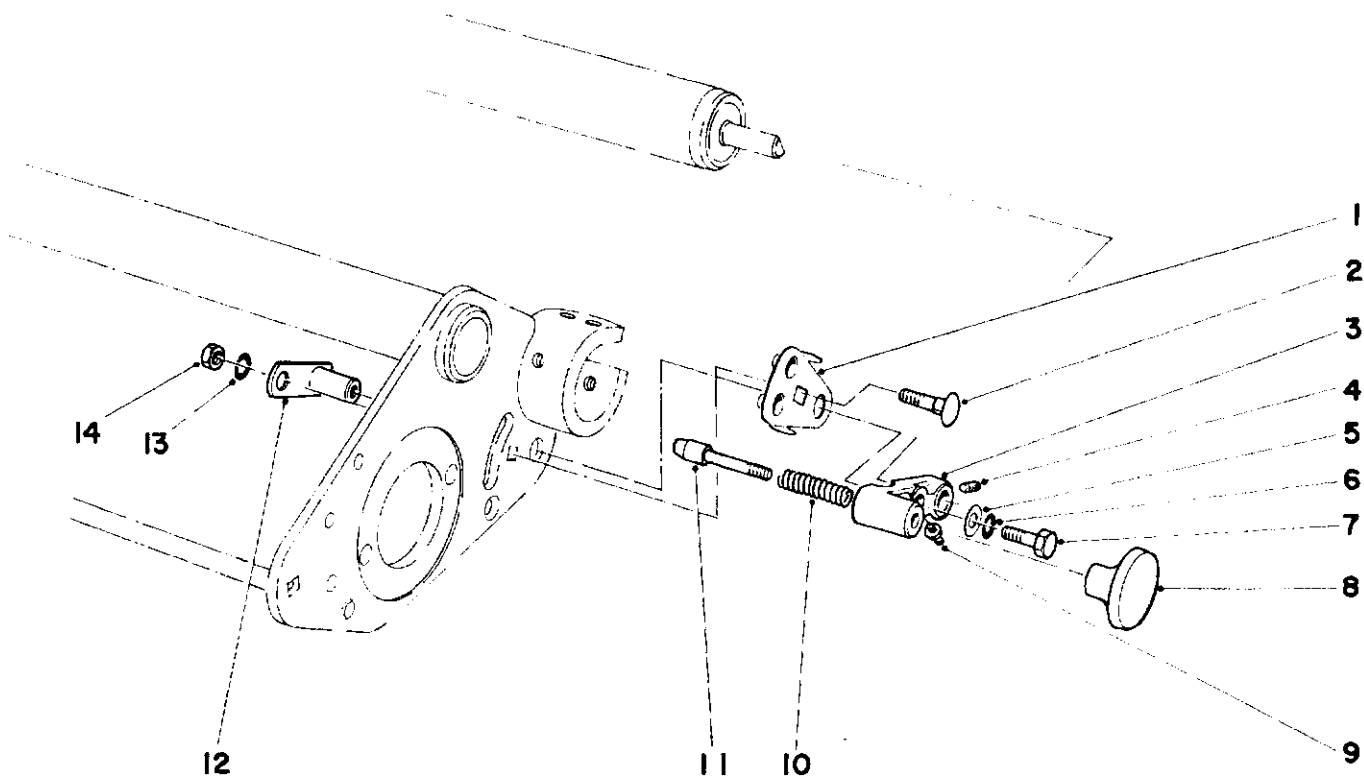
T-0319

BACKLAPPING KIT NO. 63-4960 (Cont.)

Ref. No.	Part No.	Description	No. Used
1	353-892	Screw- 12 Pt.	4
2	353-850	O-Ring	1
3	353-914	O-Ring	1
4	54-9520	Valve - By-Pass (Incl. Ref. #2 & 3)	1
5		O-Ring	1
6	353-907	Ring - Retaining	3
7	353-895	Cover (Incl. Ref. #23)	1
8	353-910	Bearing - Needle	2
9		O-Ring	1
10	353-906	Spring	1
11	353-897	Washer-Seal	1
12		O-Ring	1
13	353-899	Cup- Seal	1
14		Seat-Seal	1
15		Seal-Block	1
16		O-Ring	1

Ref. No.	Part No.	Description	No. Used
17	353-900	Flange - Mounting	1
18	353-905	Screw	4
19	353-904	Shaft	1
20	353-911	Plug (Incl. Ref. #28)	2
21	353-912	Spring - Conical	2
22	353-664	Ball	2
23		Seat	2
24	353-893	Pin - Drive	1
25	353-909	Element - Gerotor	1
26	353-894	Pin - Dowel	2
27	353-891	Body	1
28	237-156	O-Ring	1
*	353-913	Bearing & Seal Kit (Incl. Ref. #58912-16)	1
*	54-9510	Motor & By-Pass Assy. (Complete)	3

*Not Illustrated

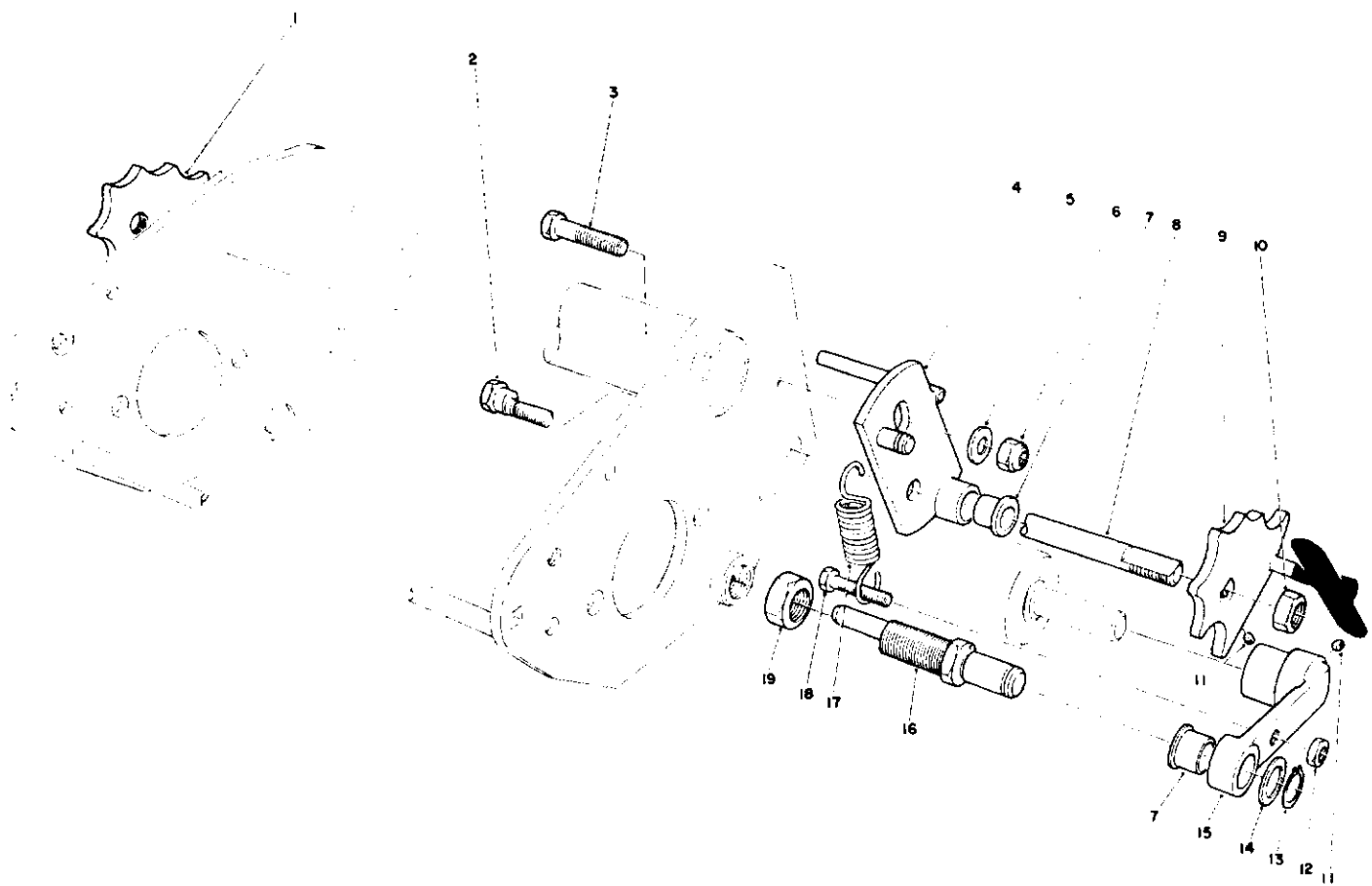


T-0320

QUICK HEIGHT-OF-CUT KIT NO. 29-5910 **(CUTTING UNIT MODEL NO. 04405 & 04408)**

Ref. No.	Part No.	Description	No. Used	Ref. No.	Part No.	Description	No. Used
1	10-5140	Adj. Plate - Height-of-Cut	6	8	233-28	Knob	6
2	3230-23	Bolt - Carriage	6	9	302-18	Fitting - Grease	6
3	10-4870	Bracket Height-of-Cut	6	10	10-4850	Spring - Compression	6
4	3245-7	Screw - Set	6	11	10-4880	Pin - Height-of-Cut	6
5	3256-2	Washer - Flat	6	12	20-4700	Pivot Pin	6
6	3253-3	Washer - Lock	6	13	3253-4	Washer - Lock	6
7	321-3	Screw - Cap, Hex. Hd.	6	14	3217-6	Nut - Hex.	6

Note: Use Rear Roller (21-8450 21-5/8" Lg.) with kit.



T-0321

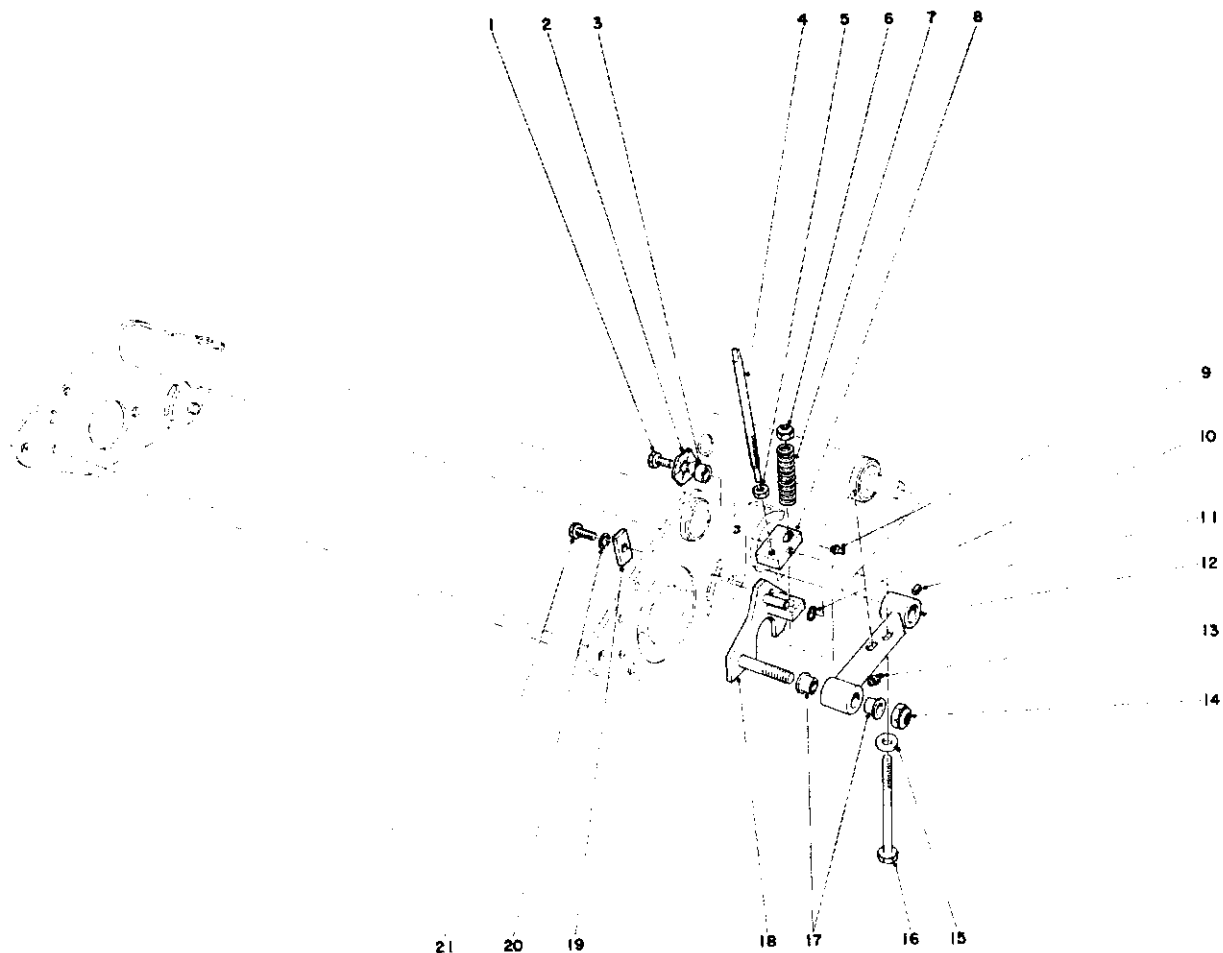
QUICK HEIGHT-OF-CUT SINGLE POINT ADJUST KIT MODEL NO. 04451 (Optional)

Ref. No.	Part No.	Description	No. Used
1	54-7190	Cam - Quick H.O.C.	3
†2	52-3100	Bolt - H.O.C. (L.H. Eccentric)	3
†*	52-3110	Bolt - H.O.C. (R.H. Shoulder)	3
†3	323-7	Screw - Cap, Hex Hd.	6
4	54-7250	Bracket - Quick H.O.C. (L.H.) (Incl. Ref. #7)	3
*	54-7120	Bracket - Quick H.O.C. (R.H.) (Incl. Ref. #7)	3
†5	3256-24	Washer - Flat	12
†6	3296-39	Nut - Lock	12
7	256-155	Bushing - Flange	12
8	54-7180	Shaft-Cam	3
9	54-7240	Cam - Quick H.O.C. (L.H. & Center)	2

Ref. No.	Part No.	Description	No. Used
*	54-7200	Cam - Quick H.O.C. (R.H.)	1
10	32153-7	Nut - Lock	6
11	3290-125	Screw - Set	12
12	3218-2	Nut - Jam	6
13	32120-3	Ring - Snap	6
14	36-4780	Washer	6
15	54-7140	Pull Arm Assembly (Incl. Ref. #7)	6
16	54-7300	Bolt - Bedbar (L.H. Eccentric)	3
*	54-7310	Bolt - Bedbar (R.H. Shoulder)	3
17	54-7170	Spring - Extension	6
18	322-9	Screw - Cap, Hex Hd.	6
†19	3220-6	Nut - Lock	6

*Not Illustrated

†Items NOT included in kit obtain from existing cutting unit.



T-0322

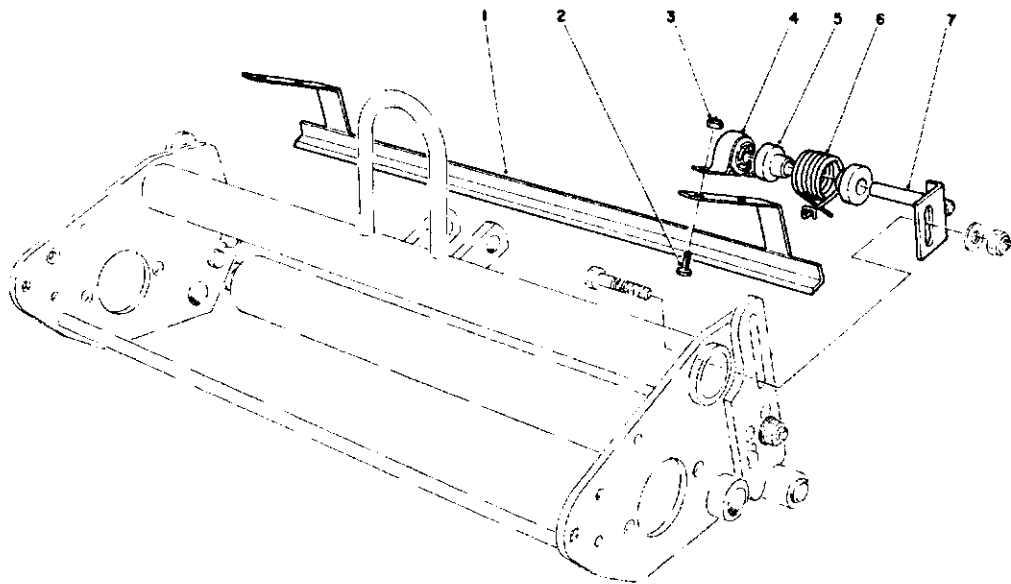
VARIABLE QUICK HEIGHT-OF-CUT KIT NO. 24-9400 (Optional)

Ref. No.	Part No.	Description	No. Used
1	322-2	Screw - Cap. Hex. Hd.	2
2	3290-238	Washer - Lock	2
3	24-9200	Spacer - Mounting	2
4	24-9260	Rod - Adjustment	2
5	3218-2	Nut - Jam	2
6	3296-29	Nut - Lock	2
7	24-9370	Spring - Compression	2
8	24-9220	Pivot Plate	2
9	302-22	Fitting - Grease	2
10	237-21	O-Ring	2
11	3245-1	Screw - Set	2
12	24-9330	Pivot Arm L.H. (Incl. Ref. #13 & 17)	1

Ref. No.	Part No.	Description	No. Used
*	24-9340	Pivot Arm R.H. (Incl. Ref. #13 & 17)	1
13	302-5	Fitting - Grease	2
14	3296-44	Nut - Lock	2
15	3256-23	Washer - Flat	2
16	322-23	Screw - Cap. Hex. Hd.	2
17	256-116	Bushing	4
18	24-9320	Base Plate L.H.	1
*	24-9310	Base Plate R.H.	1
19	24-9240	Washer	2
20	3254-2	Washer - Lock	2
21	322-3	Screw - Cap. Hex. Hd.	2

*Not Illustrated

Note: Use Rear Roller (21-8450 21-5/8" Lg.) with kit.



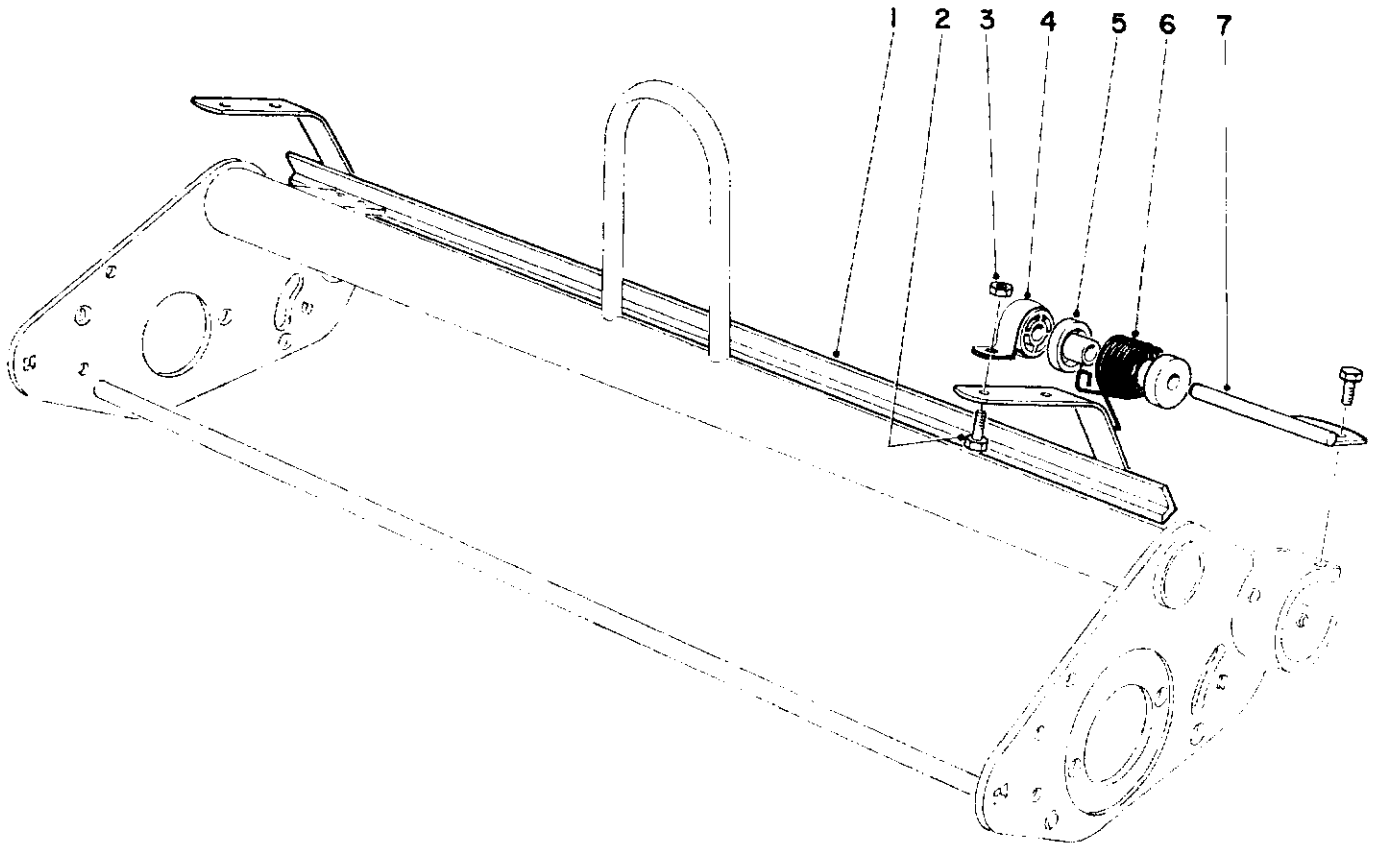
T-0323

ROLLER SCRAPER (S.P.A.) KIT NO. 53-9240 (Optional)

Ref. No.	Part No.	Description	No. Used
1	42-4800	Scraper Bar	1
2	321-3	Screw - Cap, Hex. Hd.	4
3	32152-4	Nut - Lock	4
4	256-239	Bearing	2

Ref. No.	Part No.	Description	No. Used
5	19-9560	Spring Spacer	4
6	19-9540	Spring L.H.	1
*	19-9550	Spring R.H.	1
7	53-9250	Bracket - Scraper Mount	2

* Not Illustrated



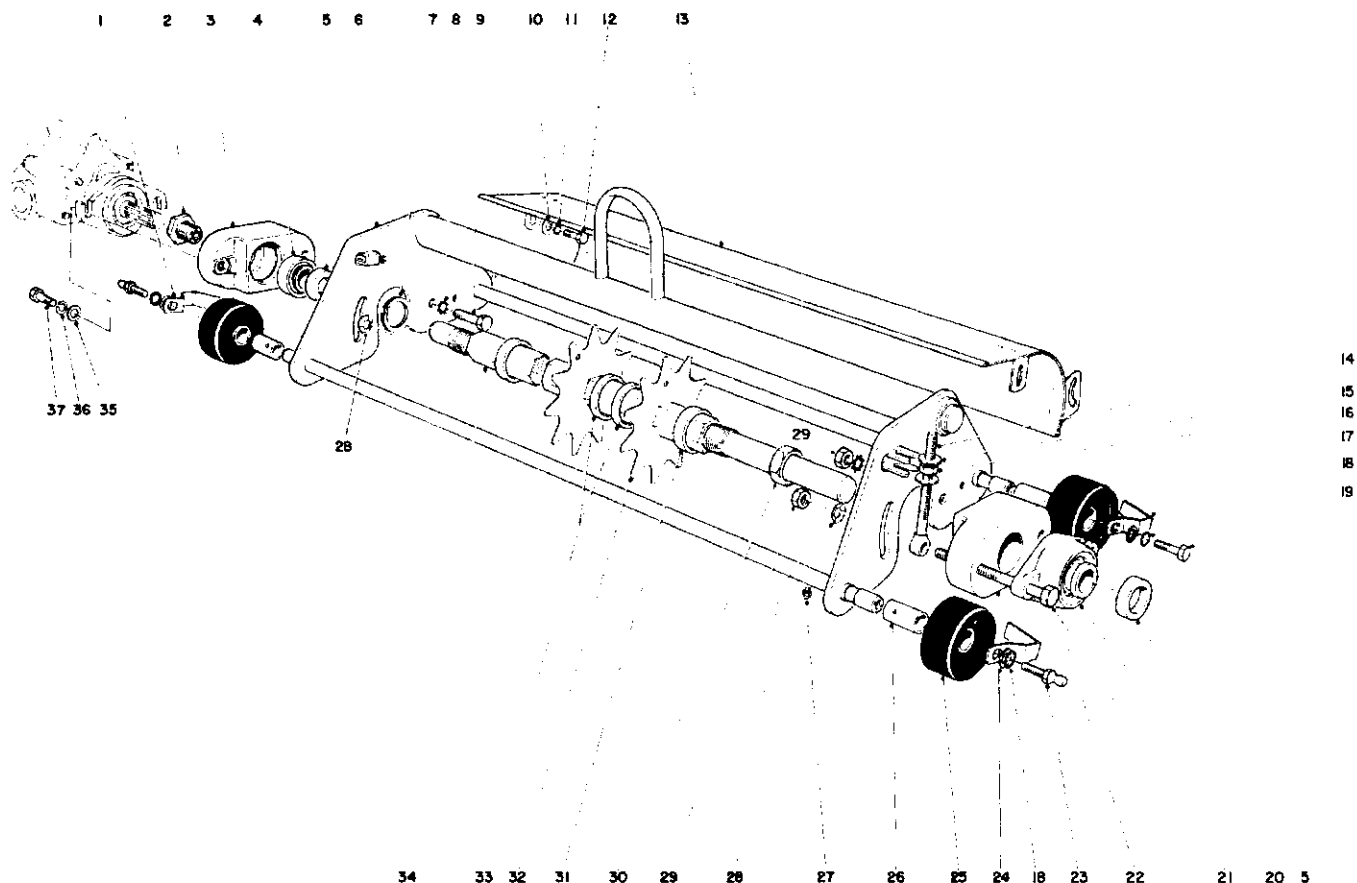
T-0324

ROLLER SCRAPER KIT NO. 42-4820 (Optional)

Ref. No.	Part No.	Description	No. Used
1	42-4800	Scraper Bar	1
2	321-3	Screw - Cap, Hex. Hd.	8
3	32152-4	Nut - Lock	4
4	256-239	Bearing	2
5	19-9560	Spring Spacer	4

Ref. No.	Part No.	Description	No. Used
6	19-9540	Spring L.H.	1
*	19-9550	Spring R.H.	1
7	42-4780	Scraper Mount L.H.	1
*	42-4790	Scraper Mount R.H.	1

*Not Illustrated

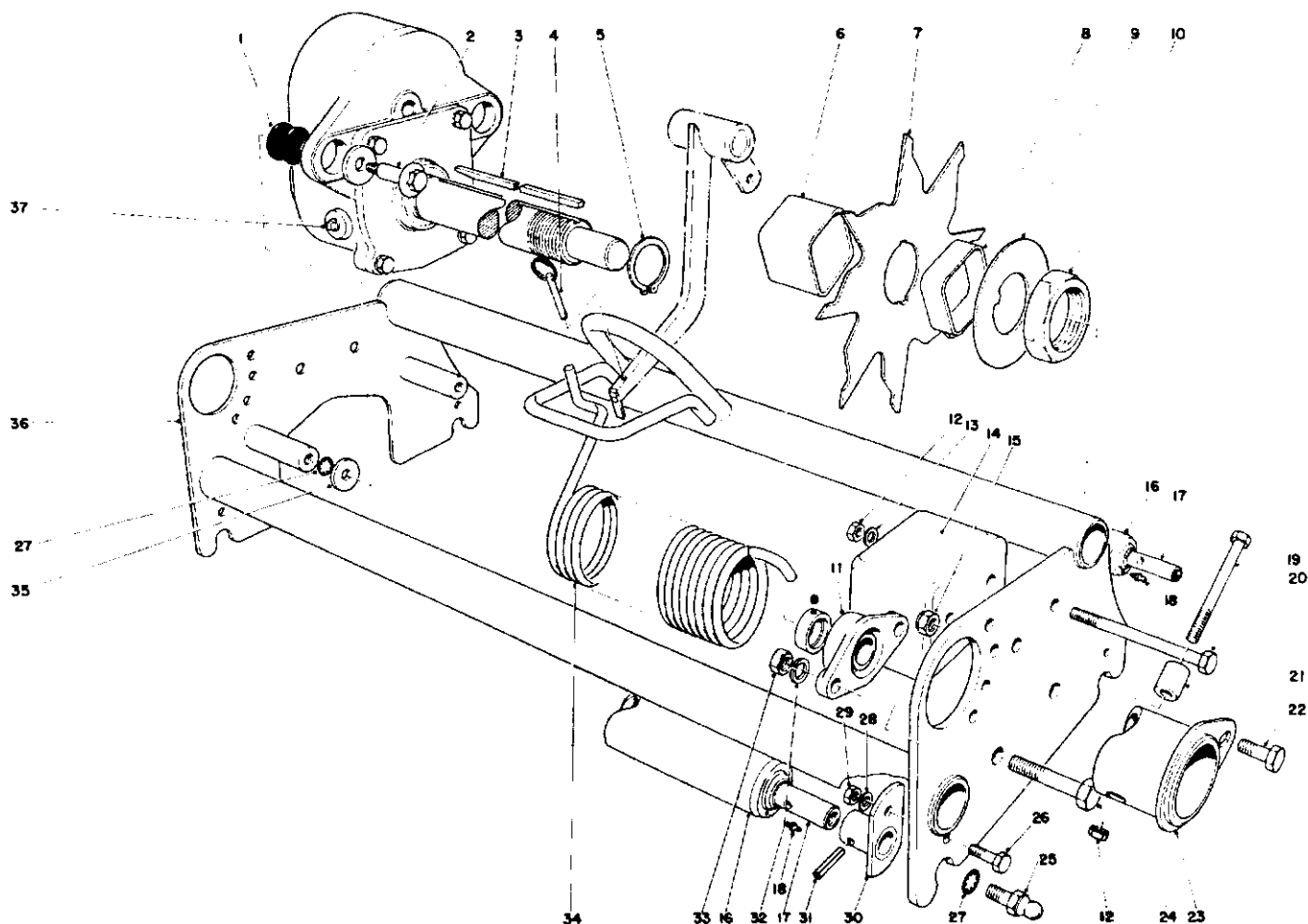


T-0325

THATCHING REEL ATTACHMENT MODEL NO. 04416 (Optional)

Ref. No.	Part No.	Description	No. Used	Ref. No.	Part No.	Description	No. Used
1	17-1650	Scraper - Wheel R.H.	2	21	324-13	Screw - Cap, Hex. Hd.	2
2	10-5100	Nut - Spline	1	22	17-1520	Counterweight	1
3	17-1610	Housing - Bearing	1	23	2411-7	Ball Stud	2
4	251-206	Bearing	1	24	3256-3	Washer - Flat	4
5	251-77	Lock Collar	2	25	17-1630	Wheel	4
6	17-1450	Frame W.A.	1	26	17-1620	Bushing - Wheel	4
7	32120-77	Ring -Retaining	1	27	302-5	Fitting -Grease	4
8	3255-16	Washer - Lock, Ext. Tooth	2	28	3290-334	Washer - Lock, Pyramidal	2
9	324-6	Screw - Cap, Hex. Hd.	2	29	3217-8	Nut - Hex.	2
10	3256-22	Washer - Flat	4	30	3220-18	Nut - Jam	2
11	3255-7	Washer - Lock, Ext. Tooth	4	31	17-1580	Spacer	2
12	329-1	Screw - Cap, Hex. Hd.	4	32	17-1590	Blade	37
13	17-1530	Grass Shield	1	33	17-1600	Spacer	72
14	17-1510	Eye Bolt	2	34	17-1570	Shaft Hex	1
15	17-1710	Washer	4	35	3256-24	Washer - Flat	2
16	3217-7	Nut - Hex.	2	36	3255-9	Washer - Lock	2
17	17-1640	Scraper-Wheel L.H.	2	37	323-6	Screw - Cap, Hex. Hd.	2
18	3254-6	Washer - Lock, Ext. Tooth	4	*	17-2290	Gauge .060	2
19	3211-3	Screw - Cap, Hex. Hd.	2	*	17-2300	Gauge .120	2
20	251-247	Housing - Bearing	1	*	17-2310	Gauge .250	2

*Not Illustrated

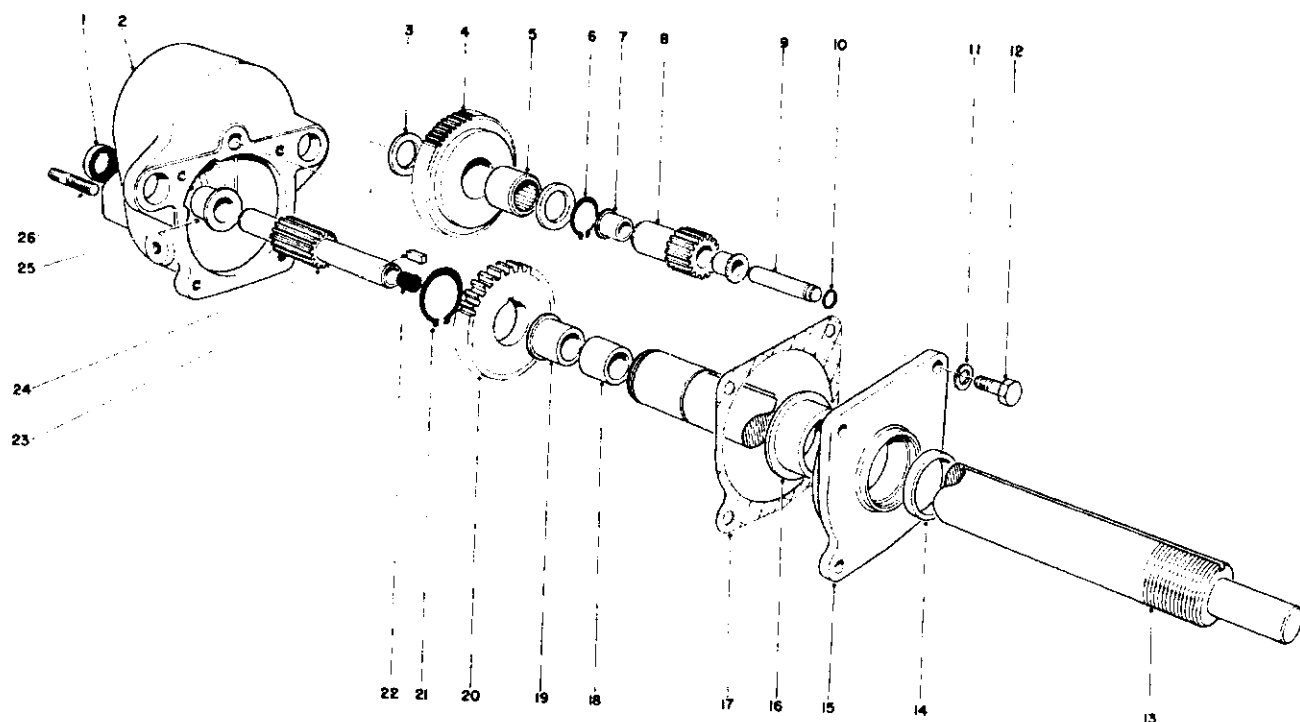


T-0326

SPIKER ATTACHMENT MODEL NO. 04420 (Optional)

Ref. No.	Part No.	Description	No. Used	Ref. No.	Part No.	Description	No. Used
1	237-90	Grommet	2	19	323-15	Screw - Cap, Hex. Hd.	1
2	56-6590	Bolt	2	20	323-11	Screw - Cap, Hex. Hd.	2
3	20-7370	Key - Square	1	21	20-7530	Spacer	1
4	21-9110	Ball Lock Pin	1	22	322-3	Screw - Cap, Hex. Hd.	1
5	32151-44	Ring - Retaining	1	23	20-7540	Spring Tube	1
6	20-7390	Spacer	9	24	324-6	Screw - Cap, Hex. Hd.	2
7	20-7380	Blade	10	25	2411-7	Ball Stud	2
8	20-7400	Spacer	1	26	321-4	Screw - Cap, Hex. Hd.	4
9	20-7790	Washer	1	27	3254-6	Washer - Lock, Int. Tooth	4
10	3218-17	Nut - Nut	1	28	3253-3	Washer - Lock	4
11	251-247	Bearing Assembly	1	29	3217-5	Nut - Hex.	4
12	3296-39	Nut - Lock	3	30	20-7570	Roller Mounting Bracket	4
13	3256-4	Washer - Flat	2	31	32121-16	Pin - Roll	4
14	20-7720	Counter-Weight	1	32	3255-16	Washer - Lock	2
15	3296-47	Nut - Lock	1	33	3217-8	Nut - Hex.	2
16	52-3170	Roller Assembly (Complete)	2	34	20-7520	Spring	1
		(Incl. Ref. #17 & 18)		35	20-7510	Spacer	4
17	52-3180	Front Roller Bearing	4	36	20-7420	Frame	1
18	302-5	Fitting - Grease	4	37	281-2	Plug - Pipe	1
				*	21-6000	Spiker Depth Gauge	1

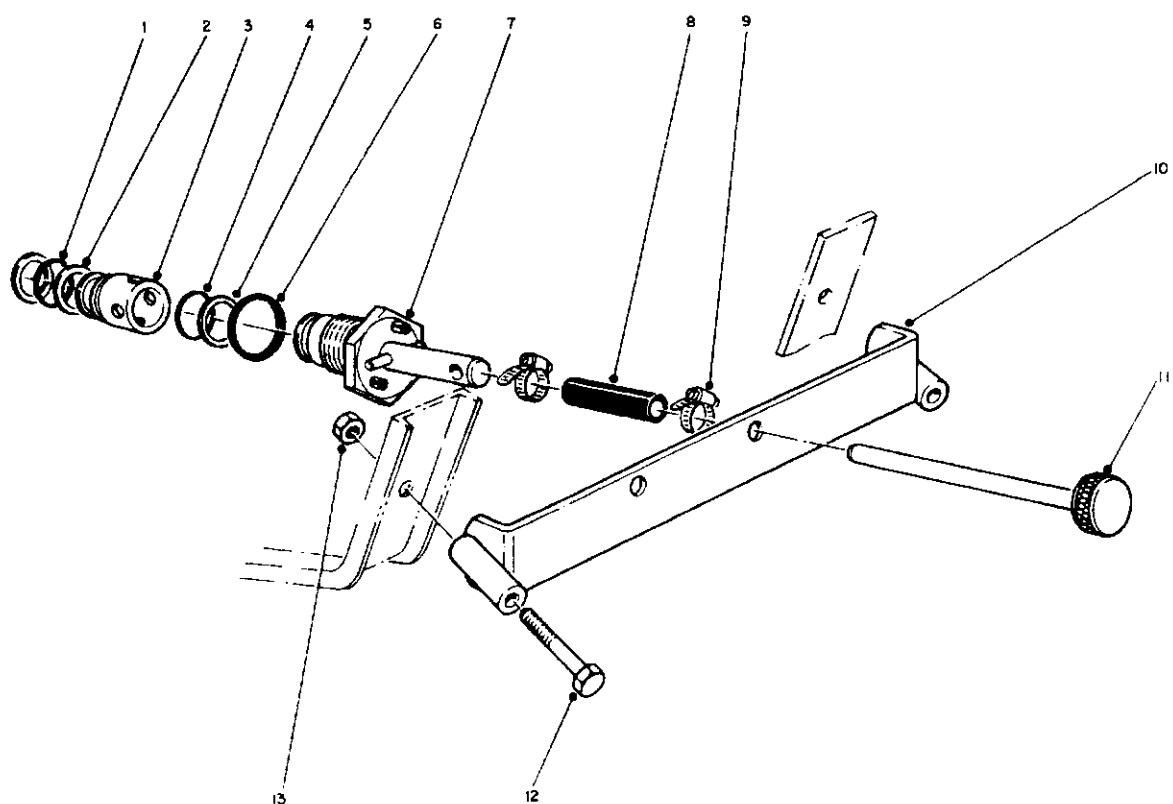
*Not Illustrated



SPIKER ATTACHMENT MODEL NO. 04420 (Optional) (Continued)

T-0327

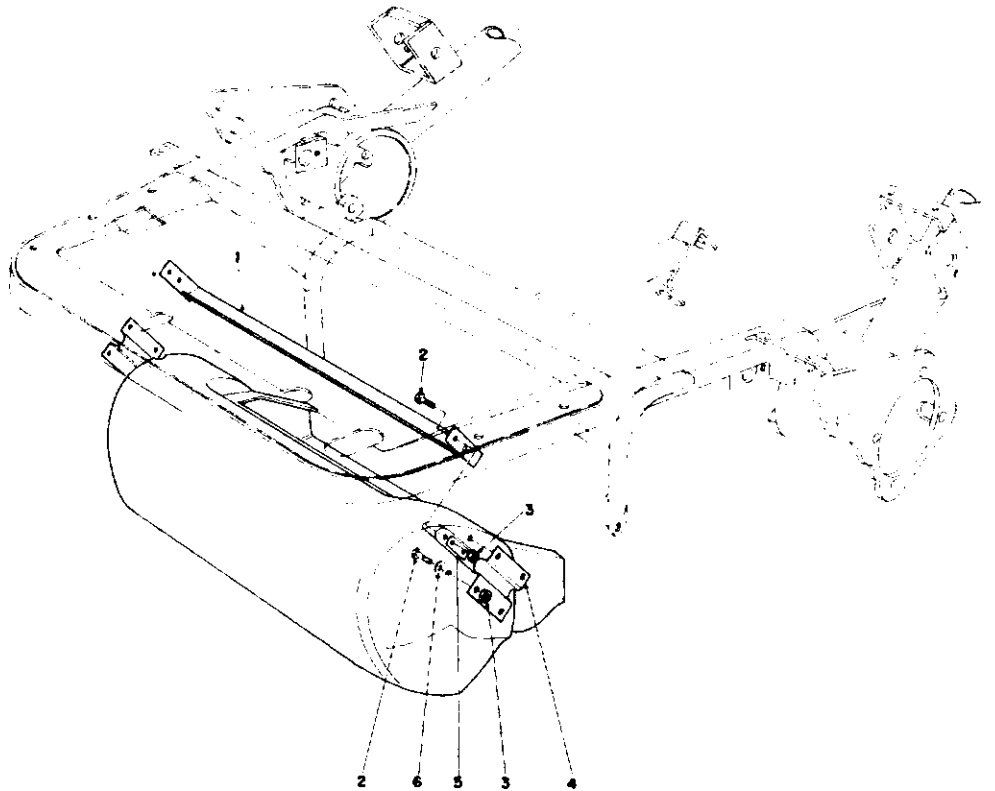
Ref. No.	Part No.	Description	No. Used	Ref. No.	Part No.	Description	No. Used
1	253-131	Seal	1	14	253-130	Seal	1
2	53-9960	Housing Assembly (Incl. Ref. #1 & 25-26)	1	15	20-7700	Cover Assembly (Incl. Ref. #14 & 16)	1
3	256-115	Washer - Thrust	2	16	20-7740	Bushing	1
4	20-7850	Gear 64T	1	17	20-7410	Gasket	1
5	352-284	Bearing	1	18	256-27	Bushing	1
6	32151-29	Ring - Retaining	1	19	256-117	Bushing	1
7	256-243	Bushing	2	20	20-7820	Gear 45T	1
8	20-7690	Gear 15T (Incl. Ref. #7)	1	21	32151-35	Ring - Retaining	1
9	20-7330	Countershaft	1	22	2410-34	Plug	1
10	237-22	O-Ring	1	23	20-7360	Key	1
11	3253-4	Washer - Lock	4	24	20-7750	Gear 16T	1
12	322-5	Screw - Cap, Hex. Hd.	4	25	256-244	Bushing	1
13	23-5150	Shaft Assembly	1	26	20-7350	Stud	2



T-0328

REEL SHUTOFF KIT NO. 28-2150 (Optional)

Ref. No.	Part No.	Description	No. Used	Ref. No.	Part No.	Description	No. Used
1	353-302	O-Ring	2	7	353-503	Shutoff Valve Set (2 Valves Per Set) (Incl. Ref. #1-6)	1
2	353-303	Back-Up Seal	4	8	18-2400	Hose - Rubber	2
3	353-484	Check (Incl. Ref. #1 & 2)	2	9	2412-45	Hose Clamp	4
4	353-305	O-Ring	2	10	28-2070	Front Bracket	1
5	353-306	Washer - Backup	2	11	20-2210	Knob Assembly	2
6	237-54	O-Ring	2	12	321-10	Screw - Cap, Hex. Hd.	2
				13	3217-5	Nut - Hex.	2

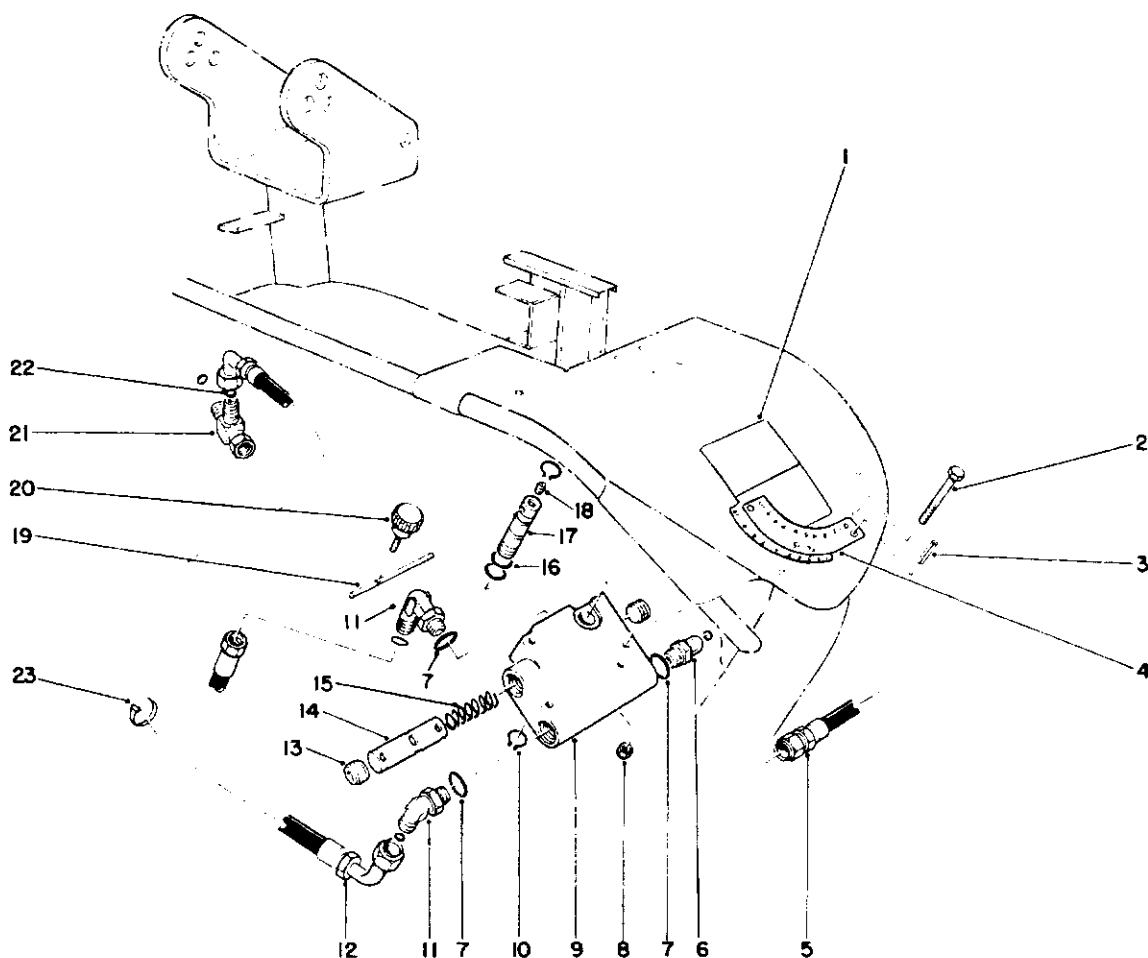


T-0333

BASKET REINFORCEMENT KIT NO. 26-0900 (Optional)

Ref. No.	Part No.	Description	No. Used
1	26-0930	Lift - Support	3
2	321-2	Screw - Cap, Hex. Hd.	36
3	32153-4	Nut - Lock	36

Ref. No.	Part No.	Description	No. Used
4	26-0940	Wear Plate	6
5	26-0950	Plate - Dished	6
6	3256-2	Washer - Flat	24

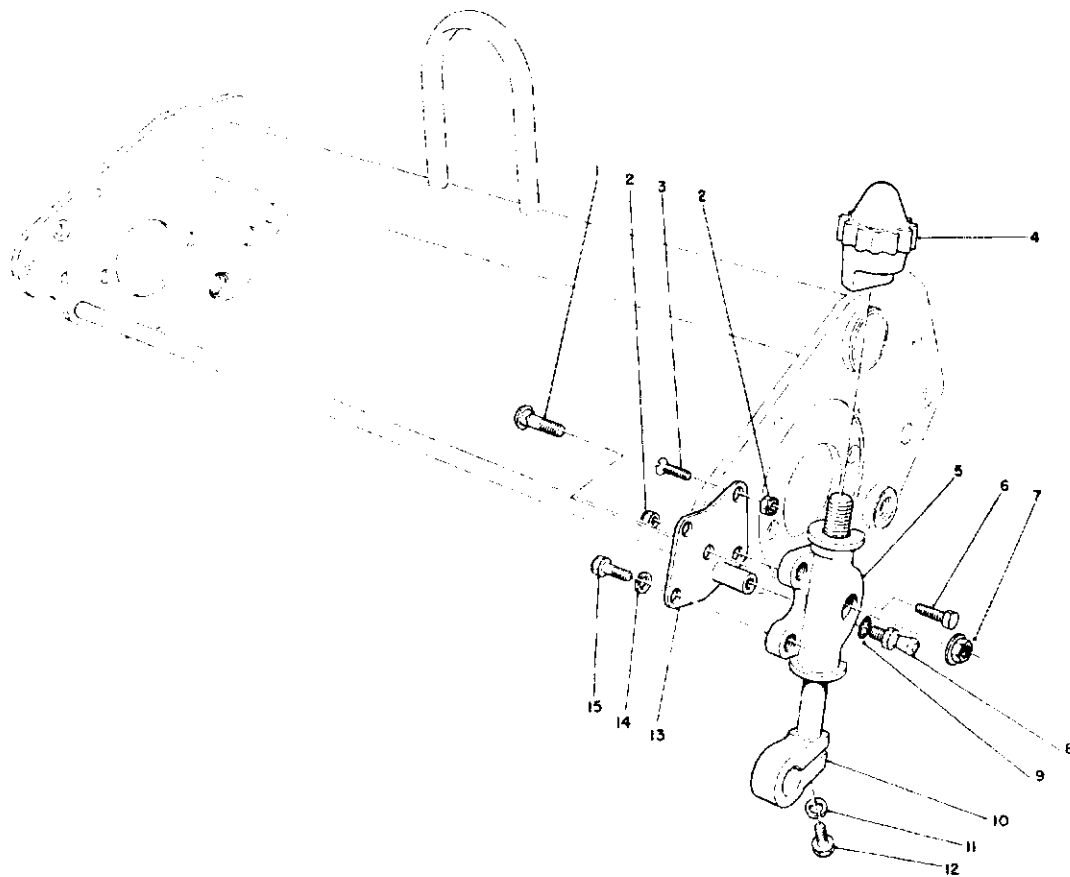


T-0334

VARIABLE TRACTION CONTROL KIT MODEL NO. 04411 (Optional)

Ref. No.	Part No.	Description	No. Used	Ref. No.	Part No.	Description	No. Used
1	74-3490	Decal - Traction Control	1	13	49-0300	Plug - Pipe	2
2	321-33	Screw - Cap Hex Hd.	2	14	49-0370	Spool - Metering	1
3	32121-4	Pin - Roll, Slotted	2	15	49-0340	Spring - Metering	1
4	49-0320	Plate - Dial	1	16	237-54	O-Ring	2
5	63-4250	Hose - Hydraulic (Pressure)	1	17	66-1660	Spool - Lever Side	1
6	340-89	Elbow - 45° (Incl. Ref. #7)	2	18	3274-42	Screw - Set Hex Socket	1
7	237-80	O-Ring	3	19	49-0350	Handle	1
8	3296-56	Nut - Lock	2	20	49-0360	Screw - Thumb	1
9		Body - Main	1	21	340-104	Tee - Swivel Run	1
10	32120-76	Ring - Snap	2	22	237-30	O-Ring	5
11	340-105	Elbow - 90° Adjustable	1	23	3290-378	Tie - Cable	2
12	63-4210	Hose - Hydraulic (Return)	1	*	47-6640	Valve Flow Control (Incl. Ref. #3, 4, 9, 10 & 13-20)	1

*Not Illustrated



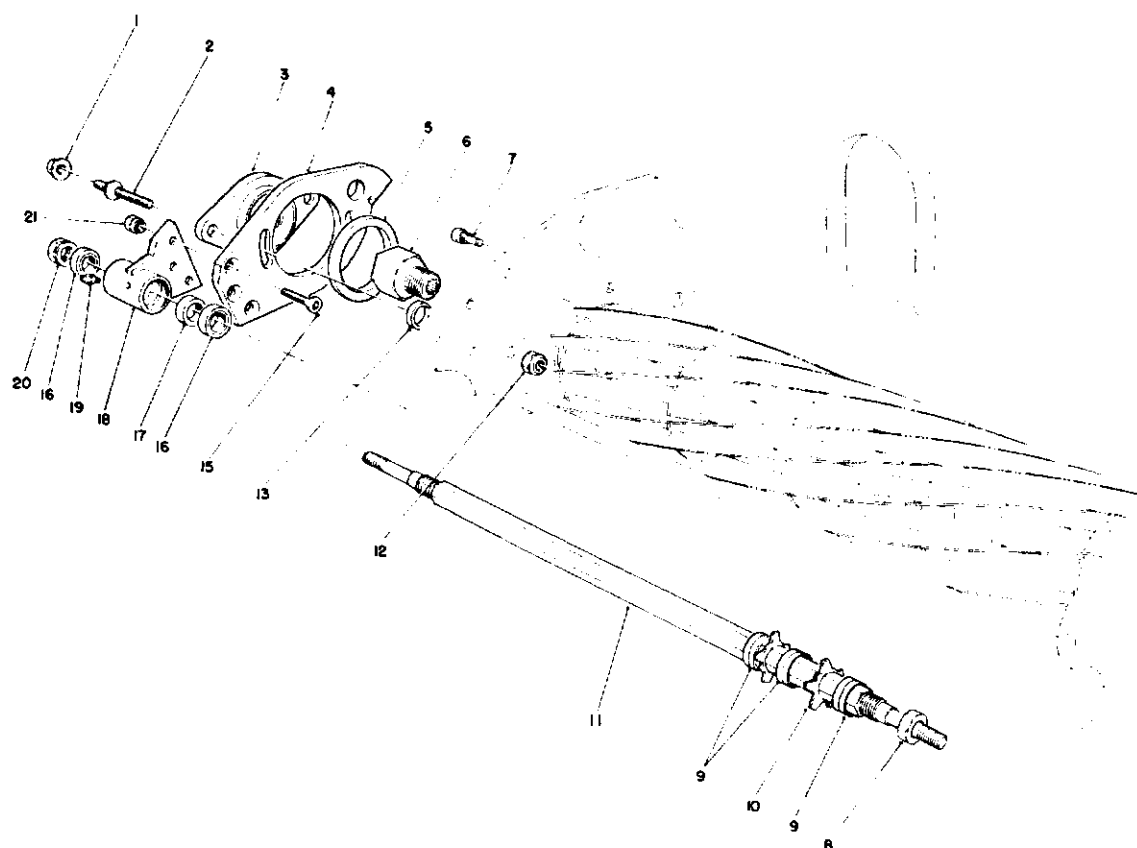
T-0329

8 & 11 BLADE CUTTING UNITS w/GROOMER MODEL NO. 04460 & 04465

Ref. No.	Part No.	Description	No. Used
1	3230-5	Bolt - Carriage	2
2	3296-47	Nut - Lock	4
3	32108-20	Screw - Mach. Flat Hd.	2
4	10-5040	Knob - Height Adjustment	2
5	65-9490	Bracket - HOC	2
6	322-3	Screw - Cap, Hex. Hd.	2
7	32128-25	Nut - Hex. Flange	2
8	2411-7	Stud - Ball	2

Ref. No.	Part No.	Description	No. Used
9	3254-6	Washer - Lock, Int. Tooth	2
10	65-9500	Screw - Roller Adjustment	2
11	3253-3	Washer - Lock	2
12	321-4	Screw - Cap, Hex. Hd.	2
13	65-9530	Roller Extension W.A. - LH	1
	65-9460	Roller Extension W.A. - RH	1
14	3253-4	Washer - Lock	4
15	322-2	Screw - Cap, Hex. Hd.	4

*Not Illustrated

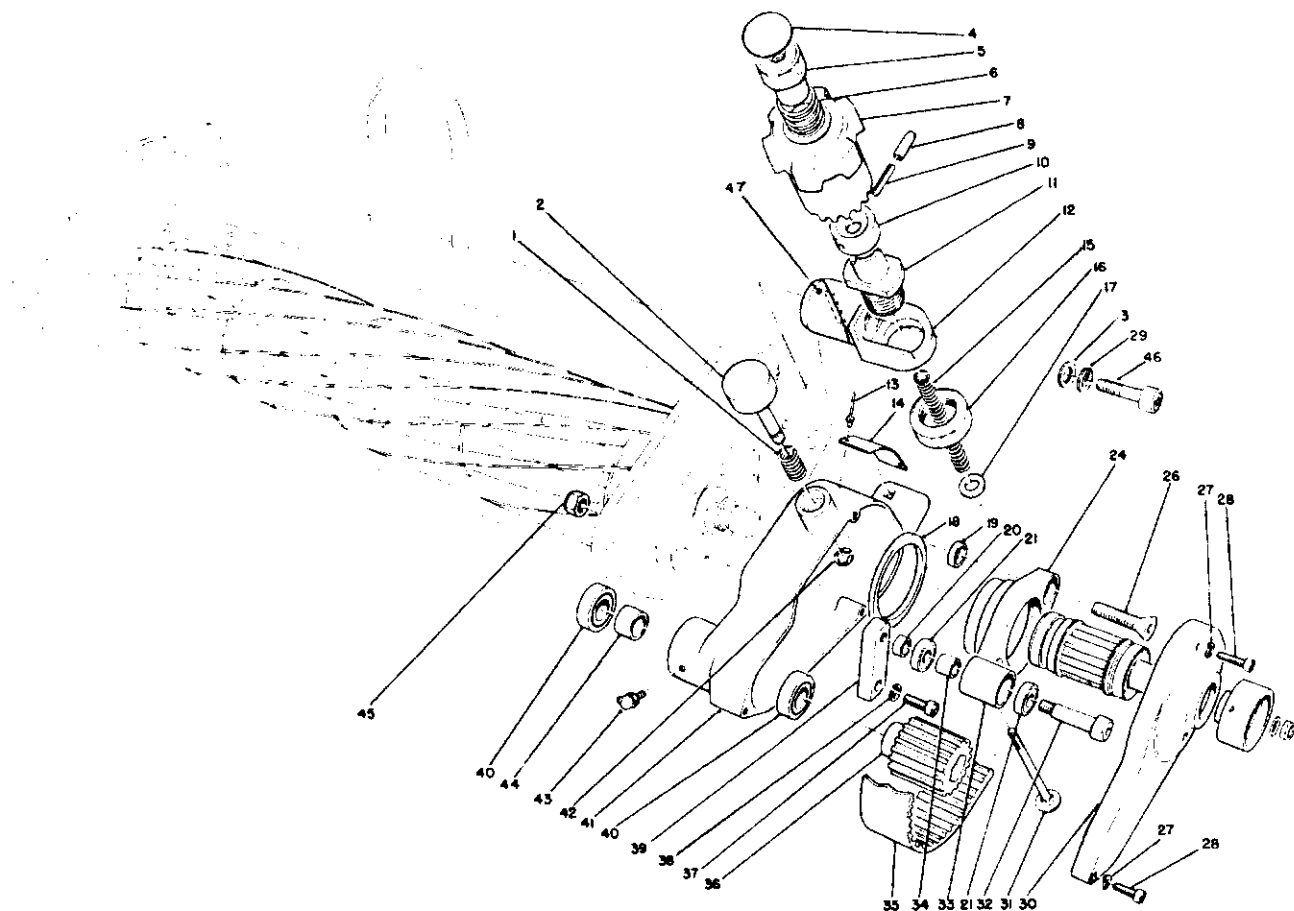


8 & 11 BLADE CUTTING UNITS w/GROOMER MODEL NO. 04460 & 04465 (Continued)

T-0330

Ref. No.	Part No.	Description	No. Used
1	32128-36	Nut - Flange	2
2	65-9970	Stud	2
3	65-9350	Adapter	1
4	65-9230	Plate - Side	1
5	65-9860	Bearing	1
6	77-0560	Nut - Splined	1
7	65-9960	Screw - Pivot	2
8	3296-60	Nut - Lock	2
9	70-1350	Spacer (41 Blade Reel)	84
10	70-1170	Blade (41 Blade Reel)	41
11	75-9980	Shaft	1

Ref. No.	Part No.	Description	No. Used
12	32152-2	Nut - Lock	2
13	65-9820	Spacer	2
15	3289-21	Screw - Hex. Soc. Fl. Hd.	3
16	251-327	Bearing - Ball	2
17	65-9300	Spacer	1
18	65-9220	Housing - Bearing	1
19	302-5	Fitting - Grease	1
20	3296-62	Nut	1
21	3296-4	Nut - Lock	3
22	3254-6	Washer - Lock, Int. Tooth	2

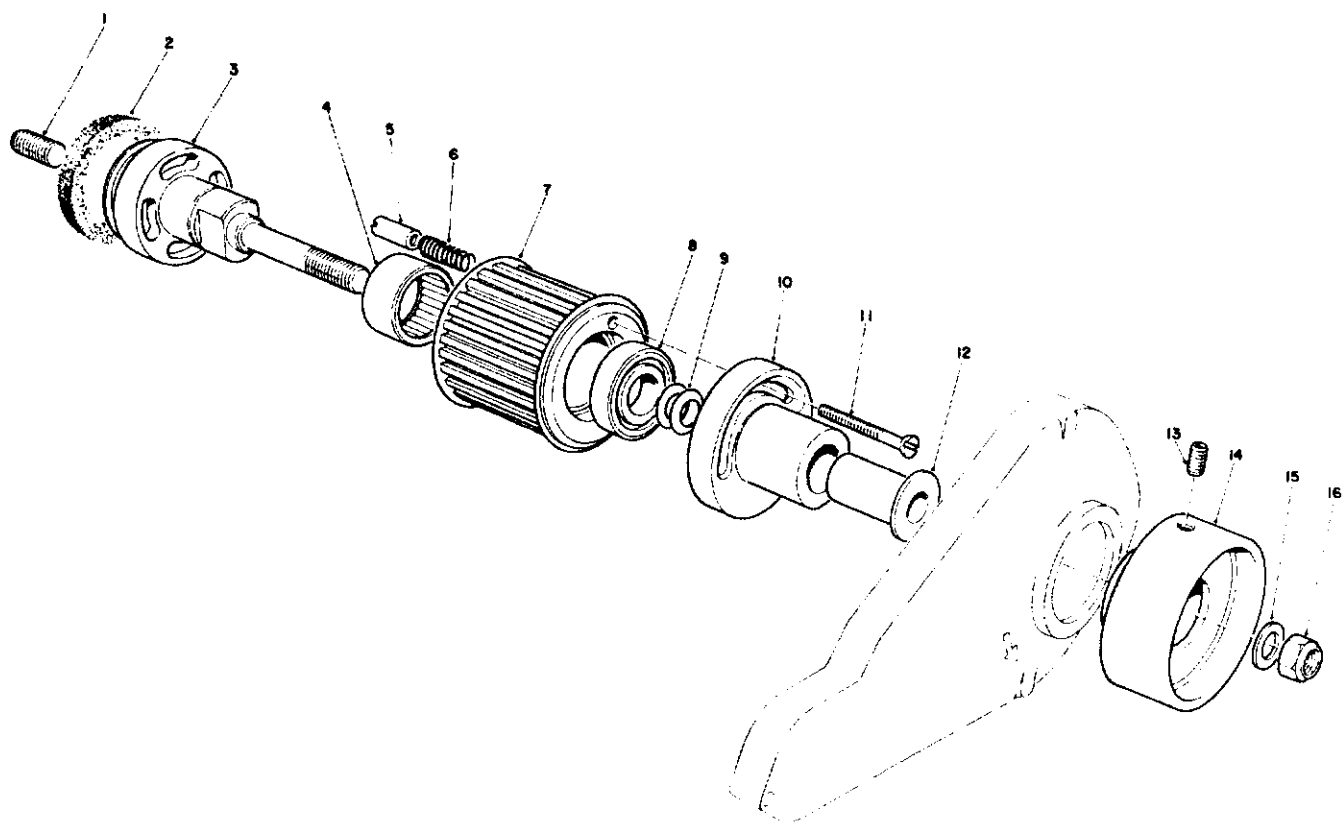


T-0651

8 & 11 BLADE CUTTING UNITS w/GROOMER MODEL NO. 04460 & 04465 (Continued.)

Ref. No.	Part No.	Description	No. Used
1	65-9940	Spring	1
2	65-9930	Cap	1
3	3256-74	Washer - Flat	1
4	284-3	Plug - Expansion	2
5	65-9670	Driver	2
6	65-9580	Spring	2
7	65-9560	Adj. Knob Assembly (Incl. Ref. #4-7)	2
8	2410-68	Cover - Pin	2
9	32121-15	Pin - Roll	2
10	65-9550	Cap	2
11	65-9830	Ramp	2
12	70-7470	Block - Mounting (Modified)	2
13	3290-271	Rivet - Pop	2
14	65-9950	Plate - Caution	1
15	65-9810	Spring	2
16	3296-49	Nut - Lock	2
17	3256-24	Washer - Flat (LH Side)	1
*	65-9850	Washer (RH Side)	1
18	65-9860	Bearing	1
19	65-9820	Spacer	2
20	65-9330	Spacer	1
21	251-328	Bearing	2

Ref. No.	Part No.	Description	No. Used
24	65-9350	Adapter	1
26	3289-19	Screw - Flat Hd. Socket	2
27	3253-12	Washer - Lock	3
28	3274-13	Screw - Cap, Soc. Head	3
29	3253-4	Washer - Lock	2
30	65-9710	Cover - Belt	1
31	65-9890	Bolt - Carriage	1
32	65-9340	Screw - Shoulder	1
33	65-9320	Idler - Pulley	1
34	65-9980	Spacer - Pulley, Idler	1
35	65-9700	Belt	1
36	65-9290	Pulley - Driven	1
37	3274-22	Screw - Cap, Hex. Soc.	1
38	3253-4	Washer - Lock	1
39	65-9310	Block - Idler	1
40	251-327	Bearing	2
41	65-9270	Housing - Drive, Belt	1
42	32120-18	Ring - Retaining	1
43	302-11	Fitting - Grease	1
44	65-9300	Spacer - Pulley, Driven	1
45	32152-2	Nut - Lock	2
46	3274-86	Screw - Cap, Soc. Hd.	2
47	257-10	Washer	2

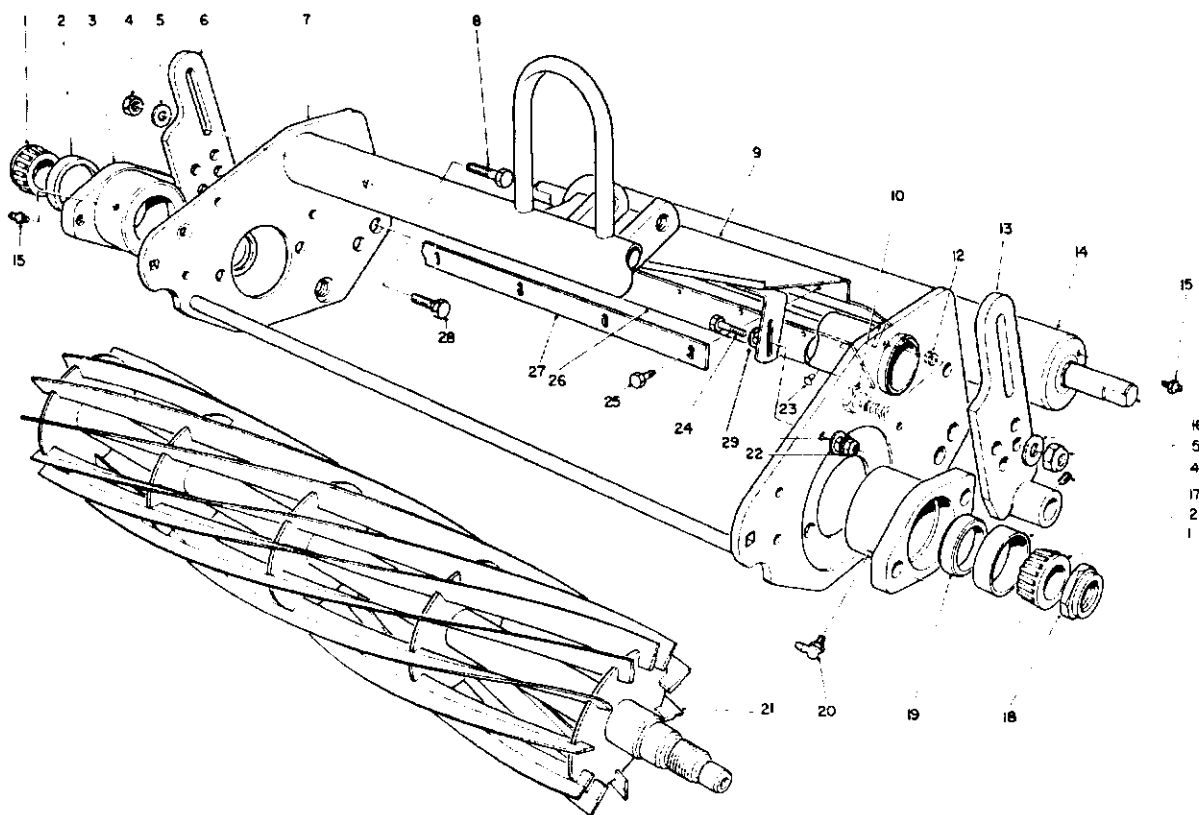


T-0322

8 & 11 BLADE CUTTING UNITS w/GROOMER MODEL NO. 04460 & 04465 (Continued)

Ref. No.	Part No.	Description	No. Used
1	75-9540	Screw - Set, Soc. Hd.	1
2	65-9900	Seal - Felt	1
3	65-9610	Adapter	1
4	252-110	Bearing - Needle	1
5	65-9660	Pin - Clutch	1
6	65-9670	Spring - Compression	1
7	65-9630	Pulley - Driver	1
8	251-327	Bearing - Roller	1

Ref. No.	Part No.	Description	No. Used
9	3290-480	Washer - Belleville	2
10	65-9640	Disc - Release, Clutch	1
11	65-9650	Screw - Special	1
12	256-300	Bushing - Flange	1
13	32110-13	Screw - Set	2
14	65-9680	Knob - Clutch	1
15	3256-24	Washer - Flat	1
16	3296-39	Nut - Lock	1



T-1124

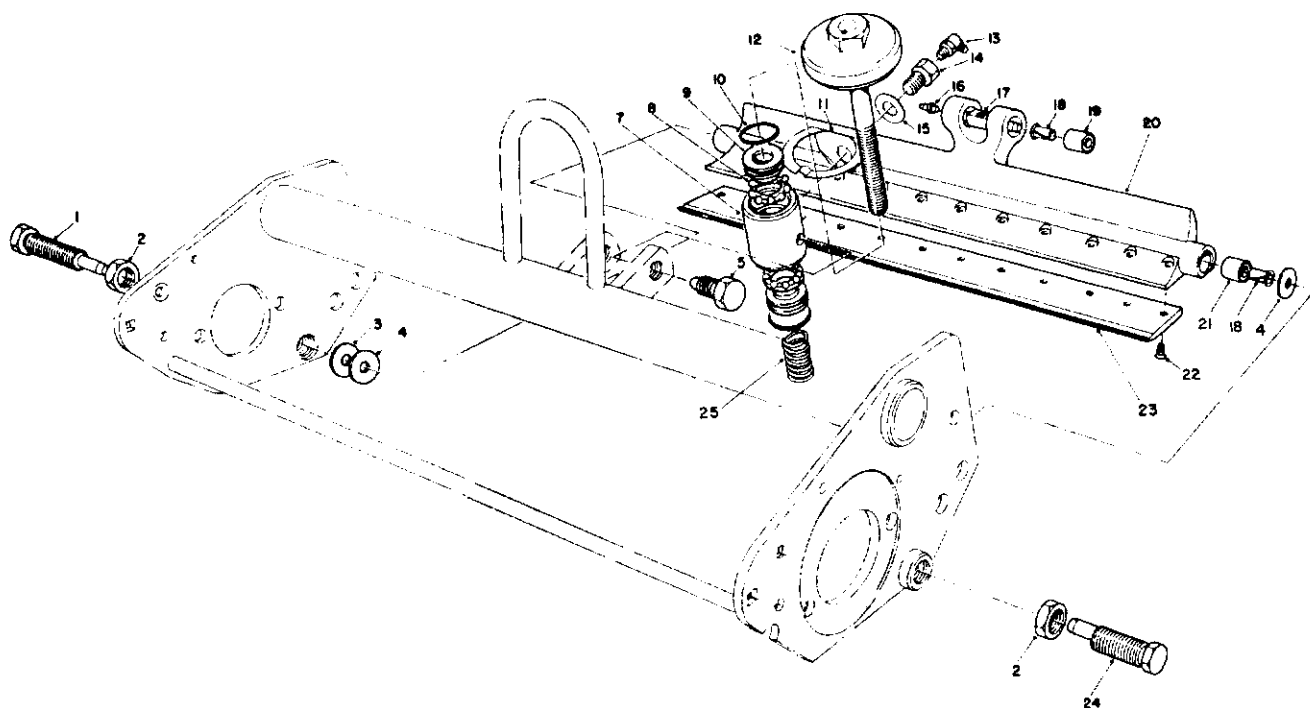
8 & 11 BLADE CUTTING UNITS w/GROOMER MODEL NO. 04460 & 04465 (Continued)

Ref. No.	Part No.	Description	No. Used
1	254-94	Cone - Bearing	2
2	254-72	Cup - Bearing	2
3	10-5120	Housing - Bearing	2
4	3296-39	Nut - Lock	4
5	3256-24	Washer - Flat	4
6	77-1060	HOC Adjustment - RH	1
7	70-1200	Frame - Reel	1
8	323-7	Screw - Cap, Hex. Hd.	2
9	57-5200	Grass Shield Assembly (Incl. Ref. #26 & 27)	1
10	52-3100	Bolt - Eccentric, HOC - LH	1
12	237-84	Grommet	2
13	77-1080	HOC Adjustment - LH	1
14	52-3120	Rear Roller Adjustment (Incl. Ref. #15 & 16)	1
15	302-5	Fitting - Grease	2
16	21-8430	Bearing - Roller, Rear	2
17	3246-2	Screw - Set	2
18	3296-60	Nut - Lock	1

Ref. No.	Part No.	Description	No. Used
19	253-96	Seal	2
20	302-11	Fitting - Grease	1
21	12-2789	Reel - 11 Blade (Model No. 04450)	1
*	12-3599	Reel 8 Blade (Model No. 04465)	1
22	3296-42	Nut - Lock	2
23	3295-46	Rivet	13
24	321-5	Screw - Cap, Hex. Hd.	2
25	32144-73	Screw - Self Tapping	5
26	57-5210	Flap - Shield	1
27	36-7260	Cut-Off Bar	1
28	52-3110	Bolt - Shoulder, HOC - RH	1
29	3256-22	Washer - Flat	4
*	13-8199	Bar Adj. Gauge (Includes †)	1
†	32122-2	Screw - Truss Head	1
†	3219-14	Nut	1
*‡		Brush - Backlapping	1

*Not Illustrated

*‡Special Tool Section page 52.



T-1125

8 & 11 BLADE CUTTING UNITS w/GROOMER MODEL NO. 04460 & 04465 (Continued)

Ref. No.	Part No.	Description	No. Used
1	52-2930	Bolt - Shoulder, RH	1
2	3220-6	Nut - Hex. Jam	2
3	52-2860	Washer	1
4	52-2900	Washer - Poly	2
5	66-7240	Screw - Pivot, SPA	2
7	77-0330	Pivot - Single Point Adj.	1
8	77-0350	Washer - Thrust, Nylon	2
10	257-5	Washer - Steel	1
11	66-7220	Arm - Spring	1
12	77-0300	Handle Assembly	1
14	324-25	Screw - Cap, Hex. Hd.	1
15	3256-25	Washer - Flat	1
16	302-18	Fitting - Grease	1
17	57-5260	Pivot - Bedbar	1
18	52-2890	Bushing - Flanged	4
19	62-5510	Bushing Assy. - Rubber	2

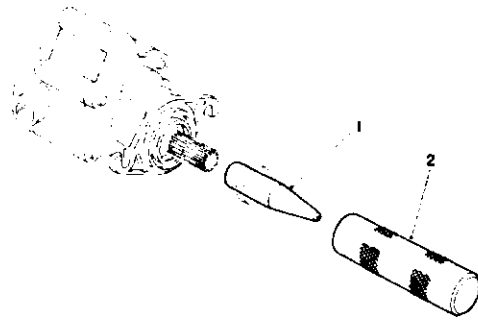
Ref. No.	Part No.	Description	No. Used
20	57-4940	Bedbar	1
21	63-9510	Bushing Assy. - Rubber	1
22	57-4910	Screw - Special	13
23	63-8560	Bed Knife - Tournament	1
*	62-2500	Bed Knife - 3/16"	1
*	63-8470	Bed Knife - 1/8"	1
*	63-8600	Bed Knife - Fairway	1
24	52-2910	Bolt - Eccentric, LH	1
25	66-7230	Spring - Compression	1
26	77-0490	Decal - Bolt, Eccentric	1
*	13-3659	Overhaul Kit (Incl. Ref. #1, 2 & 19 On page 49. #4, 18, 19, 21 & 22 on this page.	1
*‡	51-0880	Tool - Bed Knife Screw	1

*Not Illustrated

*‡See Special Tool section next page.

SPECIAL TOOLS

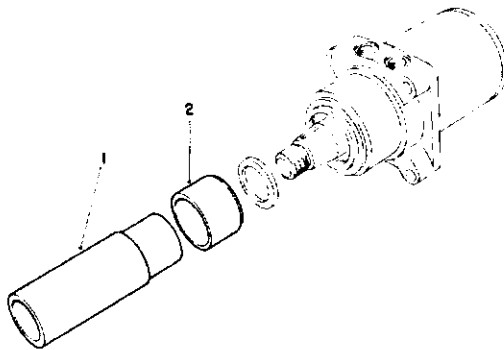
REEL MOTOR SEAL INSTALLATION TOOLS



T-0727

Ref. No.	Part No.	Description	No. Used
1	49-1430	Protector - Seal	1
2	49-1450	Installer - Seal	1

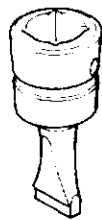
DRIVE MOTOR SEAL INSTALLATION TOOL NO. 19-2660



T-0728

Ref. No.	Part No.	Description	No. Used
1		Driver - Seal	1
2		Holder - Seal	1

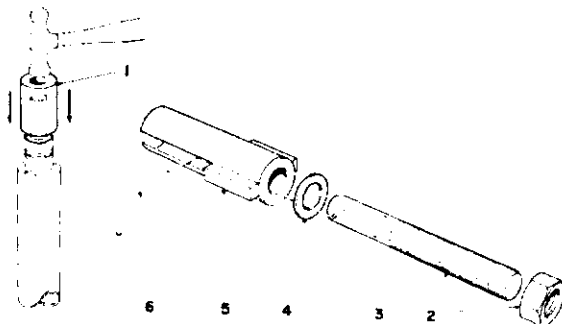
BED KNIFE SCREW TOOL NO. 51-0880



T-0729

Ref. No.	Part No.	Description	No. Used
1		Tool - Bed Knife Screw	1

BEARING REPLACEMENT TOOL KIT NO. 23-8900

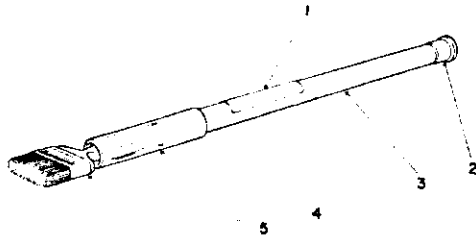


T-0730

Ref. No.	Part No.	Description	No. Used
1	23-8880	Driver - Bearing	2
2	3219-18	Nut - Hex.	1
3	23-8840	Puller - Bolt	1
4	22-6090	Washer - Thrust	1
5	23-8850	Tube - Support	1
6	23-8860	Pin - Bearing Rplcmnt.	1

SPECIAL TOOLS (Continued)

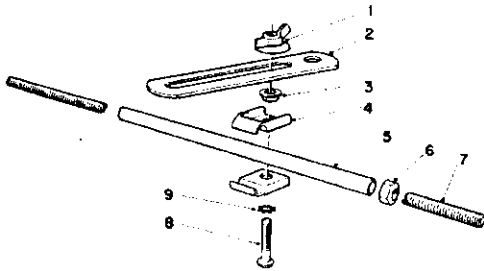
BACKLAPPING BRUSH ASSEMBLY NO. 29-9100



T-0731

Ref. No.	Part No.	Description	No. Used
1	12-9140	Decal	1
2	2410-18	Plug	1
3	29-9080	Handle	1
4	29-9090	Hose - Handle	1
5	36-4310	Brush	1

ALIGNMENT TOOL NO. 20-0120

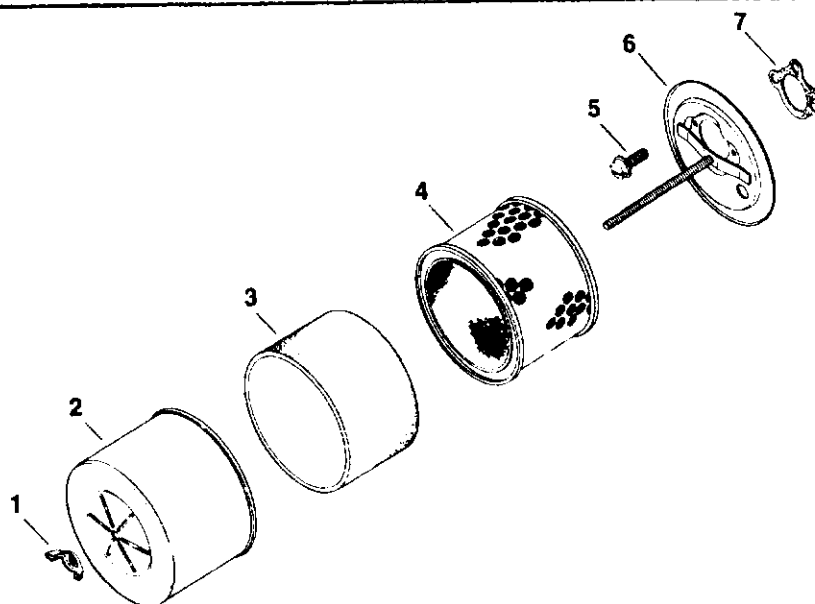


T-0732

Ref. No.	Part No.	Description	No. Used
1	3-4808	Nut - Wing	1
2	20-0110	Bracket - Alignment	1
3	32128-20	Nut - Lock, Flange	1
4	3-6657	Clip - Skid	2
5	20-0070	Tube	1
6	3219-2	Nut - Hex.	1
7	20-0080	Rod	1
8	32122-35	Screw - Truss Head	1
9	3255-8	Washer - Lock, Int. Tooth	1

Note: Special tools may be ordered from: Owatonna Tool Company
2013 4th St. NW
Owatonna, MN 55060

**Group 1
AIR INTAKE**



T-1179

ENGINE ASSEMBLY – KOHLER MODEL NO. M16S-711533

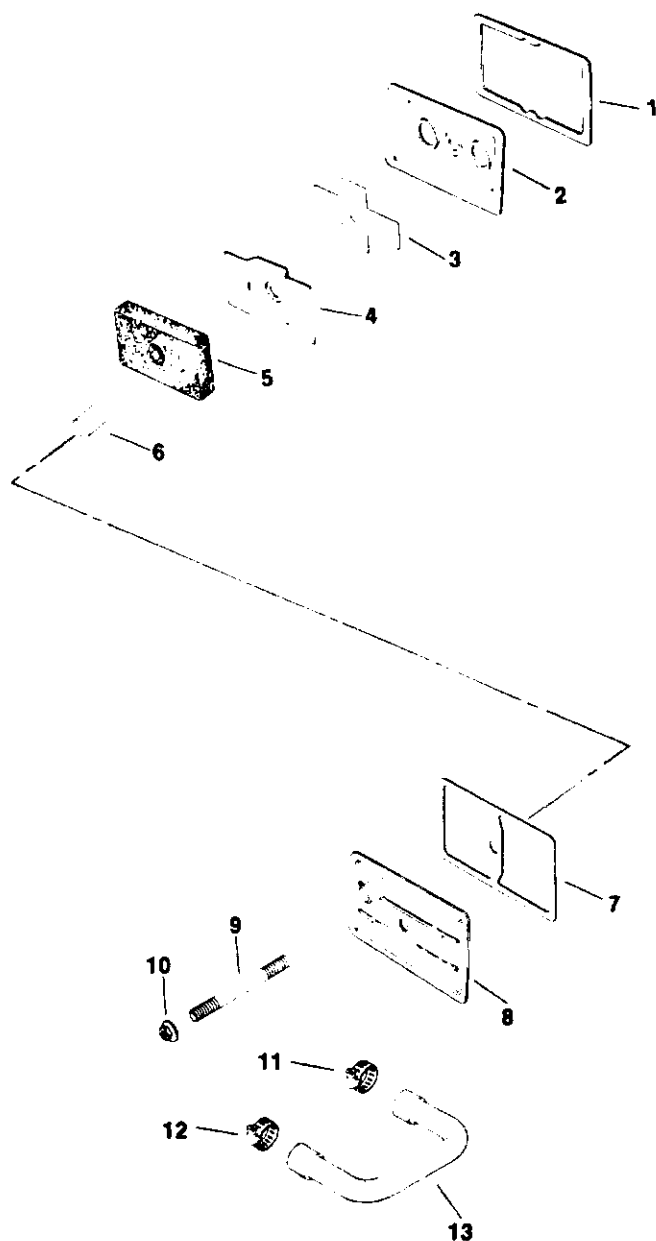
Ref. No.	Part No.	Description	No. Used
1	X-276-7	Air Inlake Nut - Wing	1
2	4508201	Cover - Air Cleaner	1
3	4508301	Precleaner - Element	1
4	4508302	Element	1

Ref. No.	Part No.	Description	No. Used
5	X-167-2	Screw - F.H.	3
6	4509401	Base - Air Cleaner	1
7	275341	Gasket - Air Horn	1
*	2511307	Decal	1

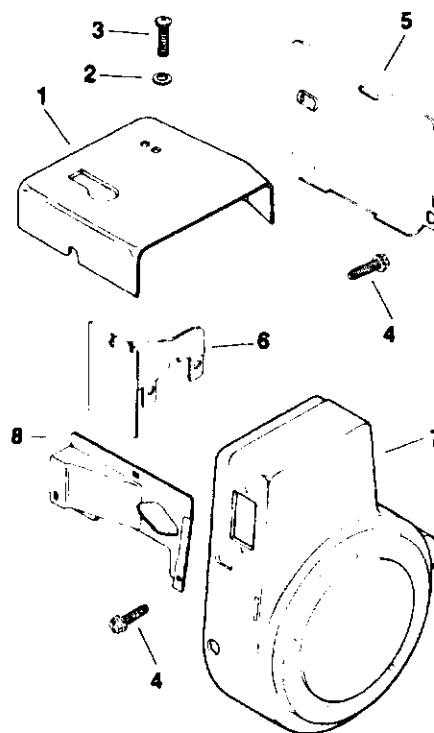
*Not Illustrated

ENGINE ASSEMBLY – KOHLER MODEL NO. M16S-711533

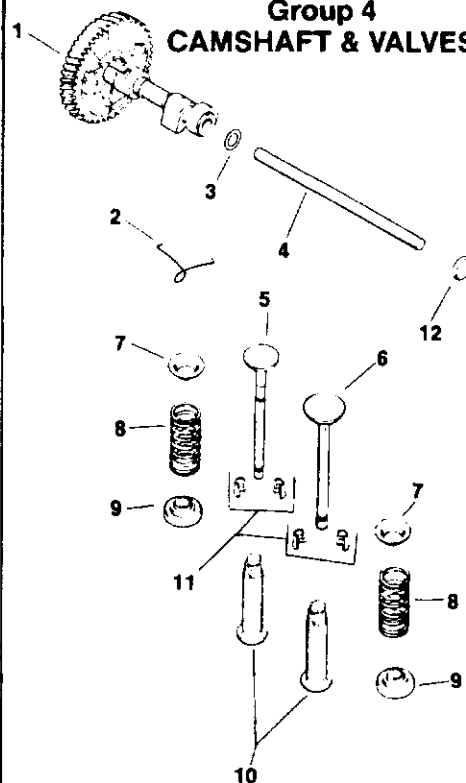
Group 3 BREATHER & VENT



Group 2 BAFFLES & SHROUD



Group 4 CAMSHAFT & VALVES

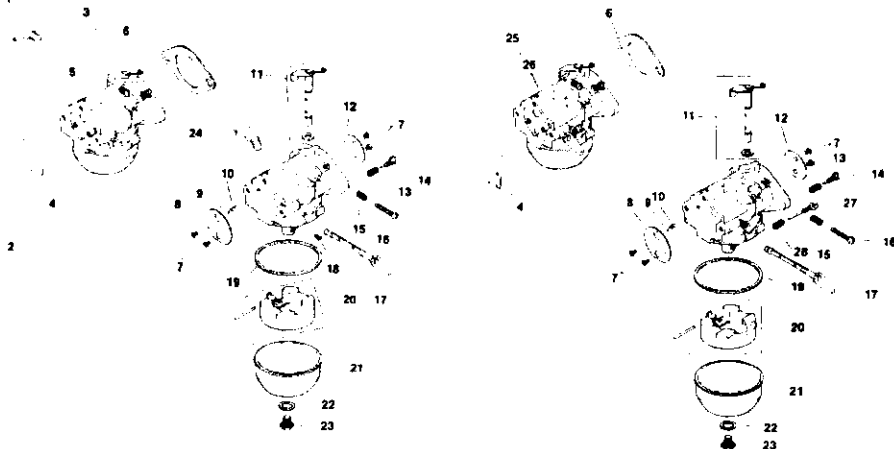


ENGINE ASSEMBLY – KOHLER MODEL NO. M16S-711533

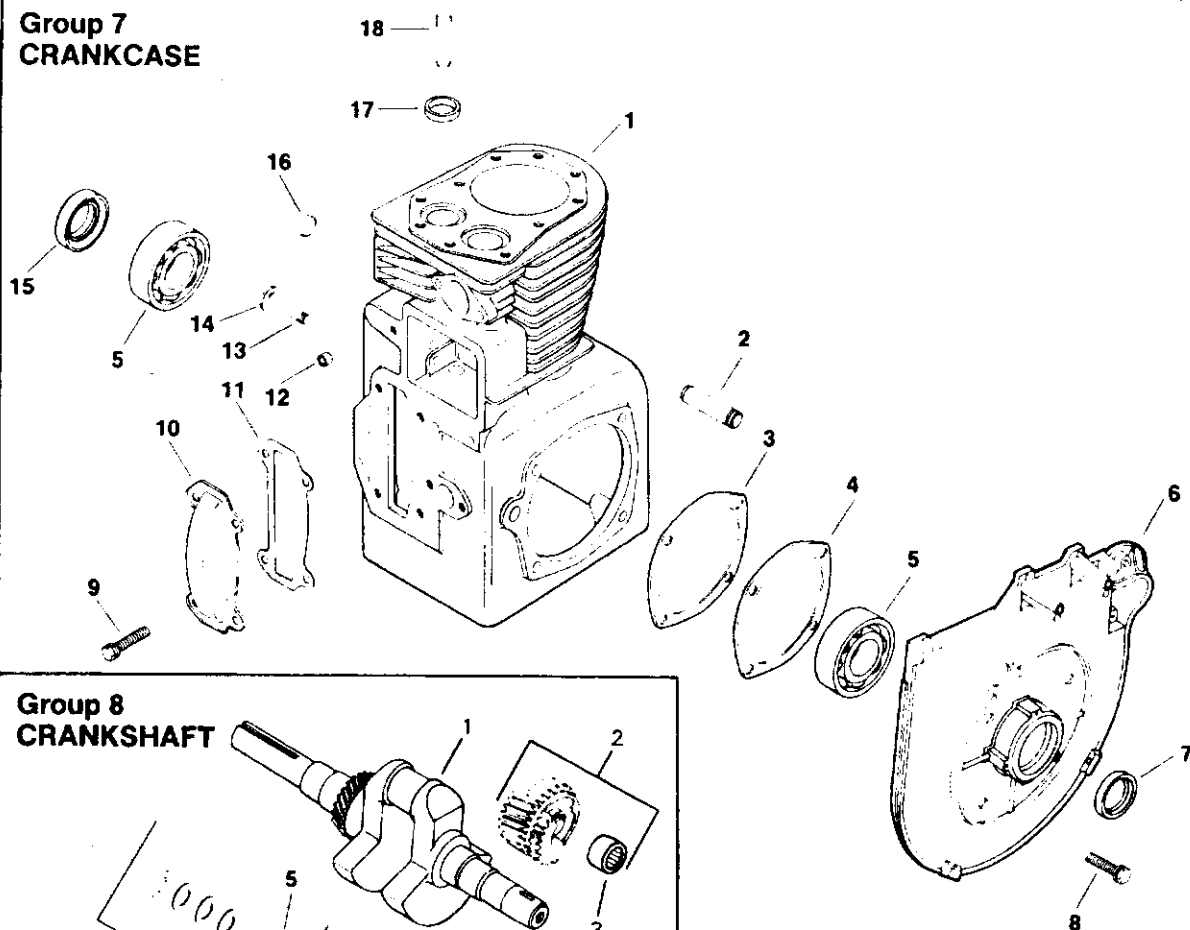
Ref. No.	Part No.	Description	No. Used	Ref. No.	Part No.	Description	No. Used
		Baffles & Shroud				Camshaft & Valves	
1	4506308	Baffle - Head	1	1	4701011	Camshaft Assembly	1
2	X-25-53	Washer - Plain	1	2	4708901	Spring - Actuating	1
3	4708608	Screw - Pozidriv T.H.	1	3	275066	Spacer .005	A/R
4	5208611	Screw - Hex Wash. Hd.	6	3	275067	Spacer .010	A/R
5	4706310	Baffle - Cylinder	1	4	4738009	Pin - Camshaft	1
6	4706307	Baffle - Inner	1	5	237672	Valve - Exhaust	1
7	4702742	Housing - Blower	1	6	235582	Valve - Intake	1
8	4706311	Baffle -Side Air	1	7	235011	Retainer - Upper Spring	2
		Breather & Vent		8	235168	Spring -Valve	2
1	235048	Gasket - Breather Plate	1	9	5241301	Rotator	2
2	235631	Plate - Breather	1	10	D-235327	Tappet	2
3	235047	Reed - Breather	1	11	4175510	Kit - Retainer	2
4	235117	Baffle - Breather	1	12	X-702-3	Plug Cup 1/2 O.P.	1
5	235118	Filter - Breather	1				
6	231032	Seal - Breather	1				
7	275144	Gasket -Valve Cover	1				
8	275839	Cover - Valve	1				
9	275220	Stud - Valve Cover	1				
10	X-799-1	Palnut	1				
11	X-426-3	Clamp - Hose 1/2" Wide	1				
12	X-426-9	Clamp - Hose 5/16" Wide	1				
13	4732602	Hose - Breather	1				

ENGINE ASSEMBLY – KOHLER MODEL NO. M16S-711533

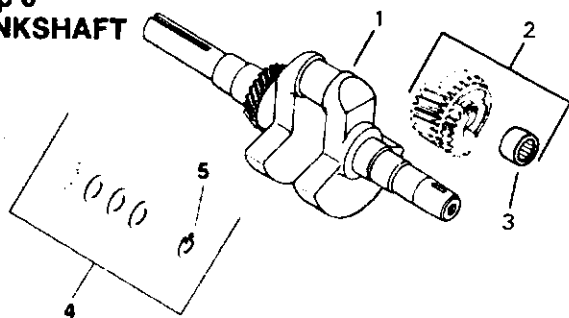
Group 5 CARBURETOR



Group 7 CRANKCASE



Group 8 CRANKSHAFT



ENGINE ASSEMBLY – KOHLER MODEL NO. M16S-711533

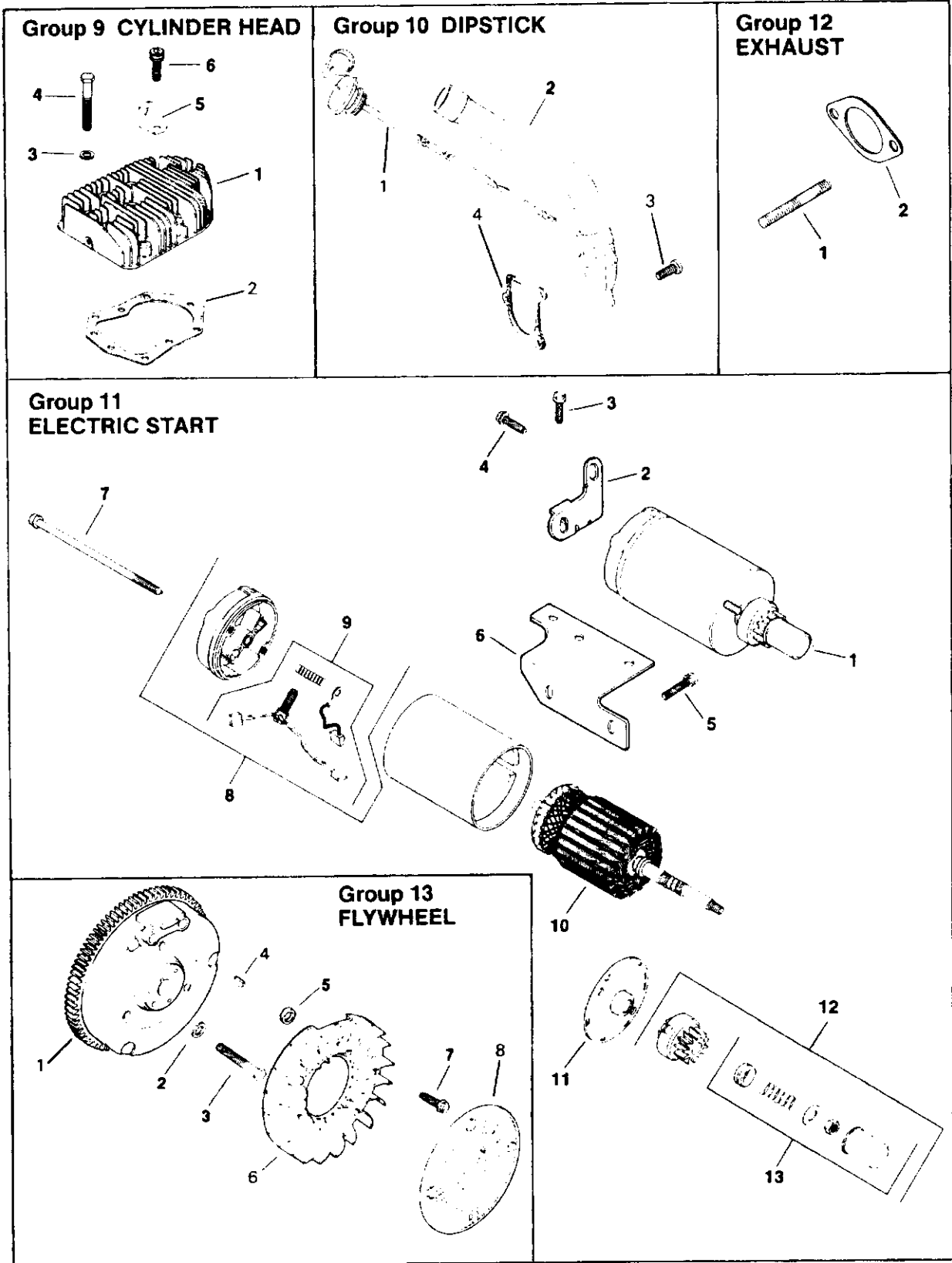
Ref. No.	Part No.	Description	No. Used
		Carburetor	
1	4515501	Connector – Hose	1
2	X-770-1	Screw – Slt. Hd.	2
		Built with the following:	
3	4585307	Kit – Carburetor w/Linkage	1
4	4504107	Gasket – Air Cleaner	1
†5	4505378	Assembly – Carburetor	1
6	4704901	Gasket – Carburetor	1
7	2508627	Screw – Throttle & Choke Plate	4
8	4514607	Plate – Choke	1
9	2519401	Ball – Choke Friction	1
10	2508903	Spring – Choke Friction	1
11	4714425	Shaft – Throttle w/Lever & Seal	1
12	4714610	Plate – Throttle	1
13	2508902	Spring – Idle, Fuel	1
14	2536801	Needle – Idle, Fuel Adjust.	1
15	2508904	Spring – Idle, Speed	1
16	2508626	Screw – Idle Speed Adjust.	1
17	4709038	Lever Assembly, Choke	1
18	4533701	Jet – Main	1
19	2504104	Gasket – Bowl	1
20	2575709	Kit – Float	1
21	2510401	Bowl – Fuel	1
22	2504103	Gasket – Bowl Ret. Screw	1
23	2510005	Screw – Bowl Retainer	1
24	2515505	Connector – Hose	1
*	2575711	Kit – Carburetor Repair	1
*	4575514	Kit – High Altitude Jet or built with the following:	1
25	4585313	Kit – Carburetor	1
4	4504107	Gasket – Air Cleaner	1
6	4704901	Gasket – Carburetor	1
†26	4505384	Carburetor Assembly	1
7	2508627	Screw – Throttle & Choke Plate	4
8	4514607	Plate – Choke	1
9	2519401	Ball – Choke Friction	1
10	2508903	Spring – Choke Friction	1
11	4714425	Shaft – Throttle w/Lever & Seal	1
12	4714610	Plate – Throttle	1
13	2508902	Spring – Idle, Fuel	1
14	2536801	Needle – Idle, Fuel Adjust.	1
15	2508904	Spring – Idle, Speed	1
16	2508626	Screw – Idle Speed Adjust.	1
17	4709038	Lever Assembly, Choke	1
19	2504104	Gasket – Bowl	1
20	2575709	Kit – Float	1
21	2510401	Bowl – Fuel	1
22	2504103	Gasket – Bowl Ret. Screw	1
23	2510005	Screw – Bowl Retainer	1
24	2515505	Connector – Hose	1
27	2536803	Needle – Main, Fuel	1
28	2508902	Spring – Main, Fuel	1
*	2575711	Kit – Carburetor Repair	1

Ref. No.	Part No.	Description	No. Used
		Crankcase	
1	4578228	Cylinder Block Assembly (USE: Miniblock) (Incl. Ref. #12, 17 & 18)	1
2	236559	Shaft – Balance Gear Stub	2
3	4742205	Gasket – Shim	A/R
4	4704109	Gasket – Bearing Plate	1
5	235376	Bearing – Ball	2
6	4714611	Plate – Bearing	1
7	4703206	Seal – Front, Oil	1
8	X-159-2	Screw – H.C.	4
9	X-132-6	Screw – H.C.	4
10	235026	Cover – Camshaft	1
11	235025	Gasket – Camshaft, Cover	1
12	234866	Bearing – Cross Shaft	1
13	235125-S	Shaft – Governor	1
14	X-230-11	Plug – Expansion	1
15	4703207	Seal – Rear, Oil	1
16	4713901	Plug – Cup	2
17	230265	Insert – Valve	2
18	235007-S	Guide – Valve	2
		Crankshaft	
1	4514236	Kit – Crankshaft	1
2	4504303	Gear Assembly (Incl. Ref. #3)	2
3	4703001	Bearing – Needle	2
4	4775501	Kit – Spacer	1
5	X-269-34	Retainer	2

*Not Illustrated

†For information only. Not available separately.

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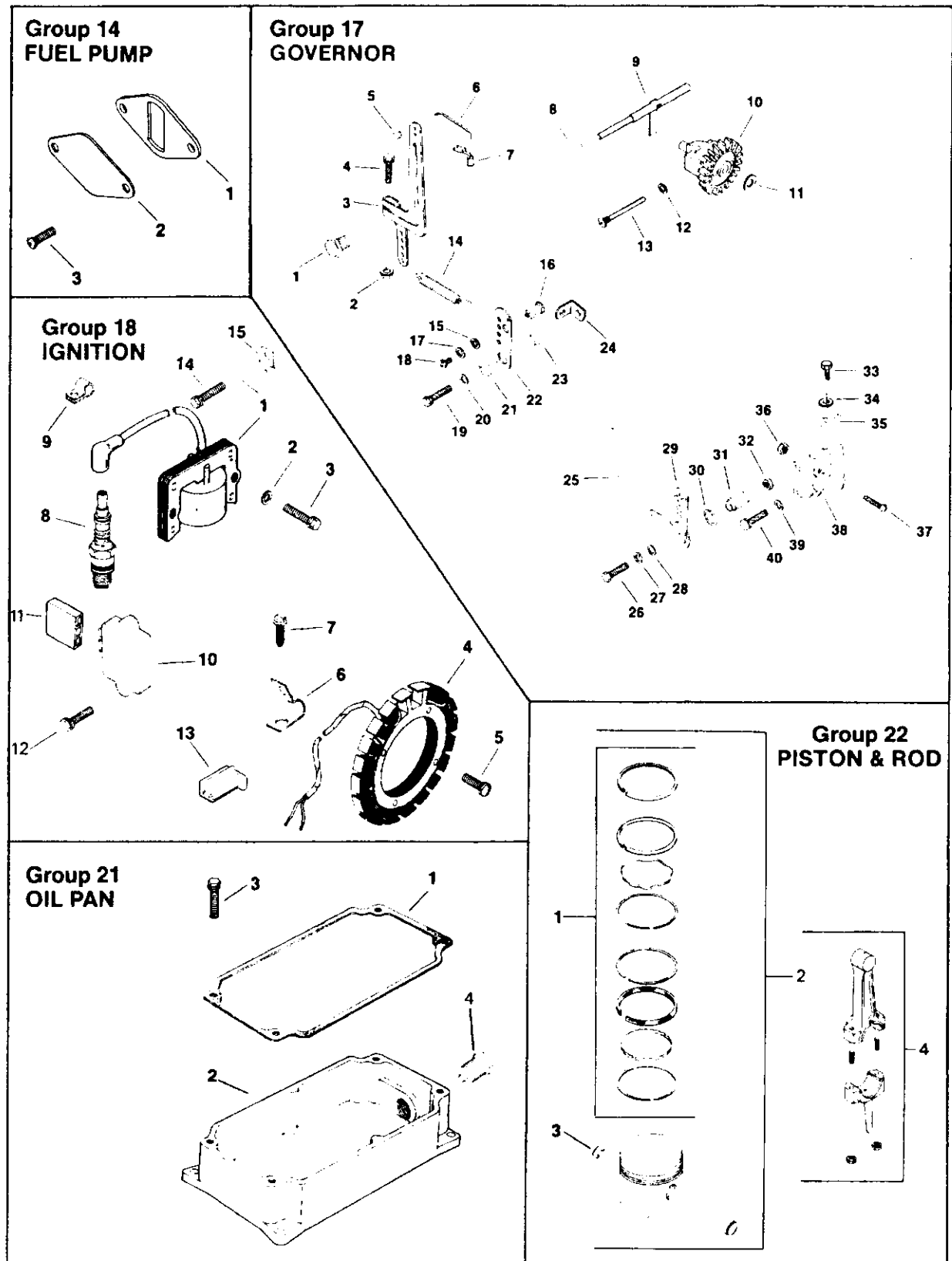


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Ref. No.	Part No.	Description	No. Used
		Cylinder Head	
1	4501509	Head – Cylinder	1
2	4504117	Gasket – Head	1
3	270889	Washer – Plain	10
4	270158	Screw – H.C.	9
5	4744502	Strap – Lifting	1
6	4708617	Screw – Hex Socket Hd.	1
		Dipstick	
1	4727203	Dipstick	1
2	4712314	Adapter – Oil Fill	1
3	X-131-2	Screw – F.H.	3
4	237064	Gasket – Adapter	1
*	4501483	Extension	1
		Electric Start	
1	4109804	Starter Assembly (Incl. Ref. #8-13)	1
2	4512617	Brace – Tail	1
3	X-67-83	Screw – Hex Wash. Hd.	1
4	X-67-62	Screw – Hex Wash. Hd.	1
5	X-159-2	Screw – H.C.	2
6	4712629	Bracket – Solenoid	1
7	4108619	Bolt – Thru	2
8	4122704	Commutator End Cap	1
9	5275515	Kit – Brush	1
10	4517002	Armature	1
11	4122703	Cap – Drive End	1
12	4775507	Kit – Drive	1
13	4775513	Kit – Drive Parts	1
*	2545003	Tag – Caution	1
*	5235701	Lubricant – Starter	1

Ref. No.	Part No.	Description	No. Used
		Exhaust	
1	4107219	Stud	2
2	4504115	Gasket – Exhaust	1
		Flywheel	
1	4702553	Flywheel	1
2	5246815	Washer – Plain	1
3	2508624	Screw – Hex Mach.	1
4	X-46-3	Key – Woodruff	1
5	2511204	Spacer	4
6	2515701	Fan	1
7	2508621	Screw – Hex Wash. Hd.	4
8	2516201	Screen – Grass	1

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Ref. No.	Part No.	Description	No. Used
		Fuel Pump	
1	2504105	Gasket – Fuel Pump	1
2	240282	Cover – Pump Pad	1
3	X-174-2	Screw – Pozidriv F.H.	2
		Governor	
1	235476	Bushing – Governor Shaft	1
2	X-799-1	Palnut	1
3	4709020	Lever – Governor	1
4	X-776-1	Screw – H.C.	1
5	4715807	Bushing – Natural Linkage Retaining	1
6	4707910	Linkage Governor (Governor to Carburetor)	1
7	2515809	Bushing – Black Linkage Retaining	1
8	X-400-80	Spacer	1
9	A-235256-S	Kit – Governor Cross Shaft	1
10	A-235743-S	Kit – Governor Gear	1
11	237022	Washer – Thrust	1
12	2546801	Washer – Plain	1
13	231355	Pin – Governor Stop	1
14	235496	Spring – Governor	1
15	X-25-102	Washer – Plain	1
16	4875510	Kit – Clamp (Incl. Ref. #17 & 18)	1
17	X-25-58	Washer	1
18	X-102-3	Screw	1
19	X-132-9	Screw H.C.	1
20	X-25-63	Washer – Plain	1
21	275690	Washer – Wave	1
22	236249	Bracket – Speed Control	1
23	235085	Spacer	1
24	235084	Bracket	1
25	4707901	Linkage Choke (Carburetor to Lever)	1
26	X-5-26	Screw – H.C.	1
27	X-20-1	Washer – Lock	1
28	X-25-63	Washer – Plain	1
29	4709006	Lever – Choke Control	1
30	275690	Washer – Wave	1
31	4711202	Spacer	1
32	X-76-2	Nut – Hex	1
33	X-67-51	Screw	1
34	2546804	Washer	1
35	4723702	Clamp – Swivel	1
36	X-72-4	Nut – Hex	1
37	232556	Screw	1
38	4712609	Bracket – Control	1
39	X-25-72	Washer – Plain	1
40	X-132-1	Screw – H.C.	1

Ref. No.	Part No.	Description	No. Used
		Ignition	
1	4758402	Module Ignition	1
2	X-25-79	Washer – Plain	2
3	X-156-1	Screw – H.C.	2
4	237878	Kit – Stator (15 amp.)	1
5	X-67-51	Screw – Stator Mounting	4
6	X-728-1	Clip – Lead	1
7	X-67-59	Screw – Hex Wash. Hd.	1
8	235041-S	Spark Plug RH-10	1
9	210281	Clip – Hi-Tension Lead	1
10	2575503	Kit, Rectifier – Regulator	1
11	236602	Connector – Female (3 Contact)	1
12	X-132-5	Screw – H.C.	2
13	4115503	Connector – Male (2 Contact)	1
14	X-321-6	Screw, Sems Hex.	1
15	235173	Clip, Cable	1
		NOT ILLUSTRATED	
	4751836	Lead – Violet Rect.–Reg. to Connector 23" 14 Gauge Uninsulated Push on Tab Lead White Module to Connector	1
	4751843	Lead – White, w/Diode (5" – 18 Gauge) Insulated Push on Tab – Insulink	
		Oil Pan	
1	235057	Gasket – Oil Pan	1
2	235147	Pan – Oil	1
3	X-159-3	Screw – H.C.	4
4	X-305-4	Plug – Hex Hd.	1
		Piston & Rod	
1	4510810	Ring Set (Std. & .003)	1
1	4510811	Ring Set (.010)	1
1	4510812	Ring Set (.020)	1
1	4510813	Ring Set (.030)	1
2	4587411	Piston w/Ring Set (Std.)	1
2	4587412	Piston w/Ring Set (.003)	1
2	4587413	Piston w/Ring Set (.010)	1
2	4587414	Piston w/Ring Set (.020)	1
2	4587415	Piston w/Ring Set (.030)	1
3	4701801	Retainer Piston Pin	2
4	4506724	Connecting Rod (Std.)	1
4	4506725	Connecting Rod (.010)	1

MAINTENANCE RECORD

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