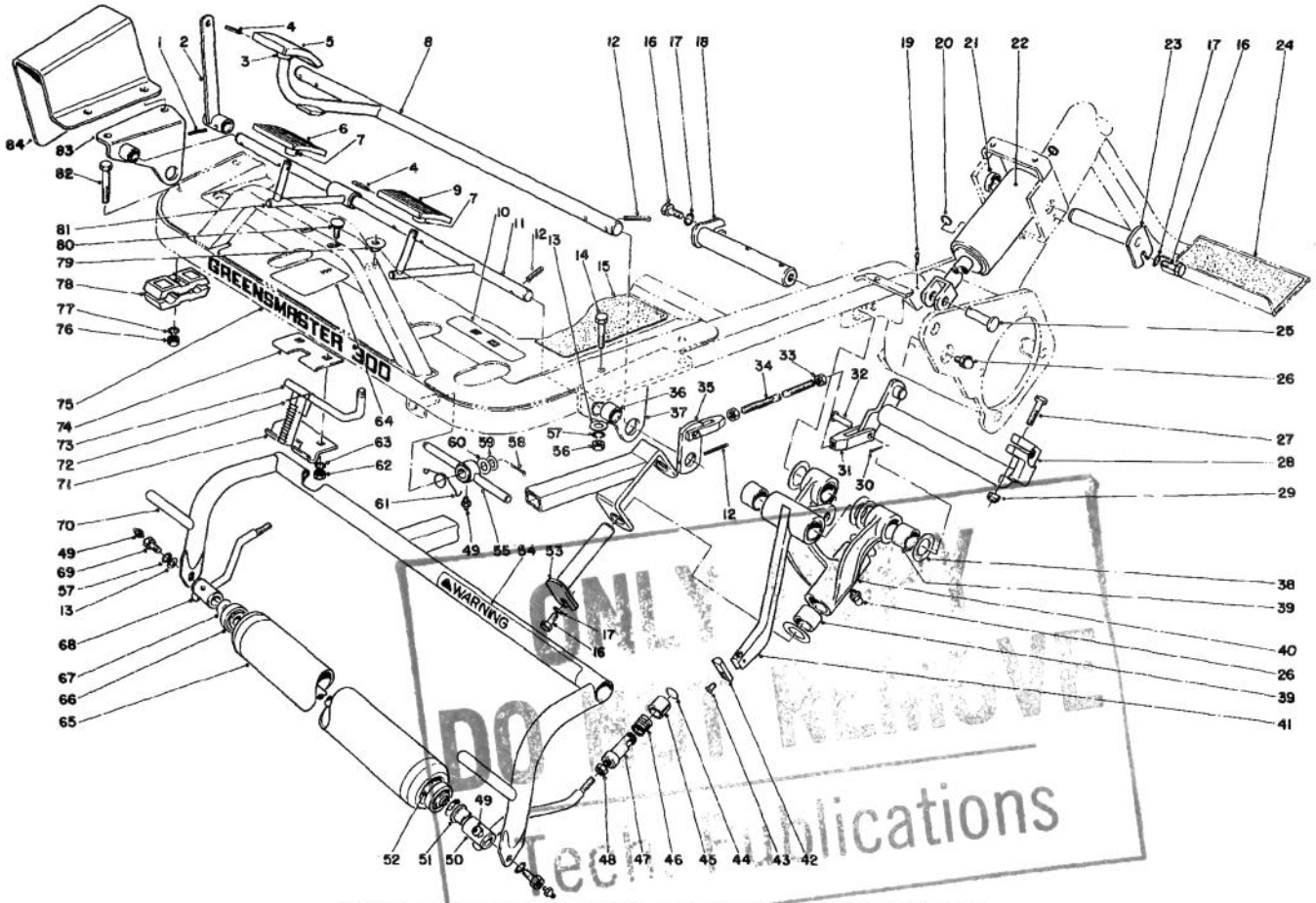
FORM NO. 3312-962

TORO®

MODEL NO. 04345-70001 & UP
MODEL NO. 04407-70001 & UP
MODEL NO. 04445-70001 & UP
MODEL NO. 04450-70001 & UP
MODEL NO. 04458-70001 & UP

PARTS CATALOG

GREENSMASTER® 300



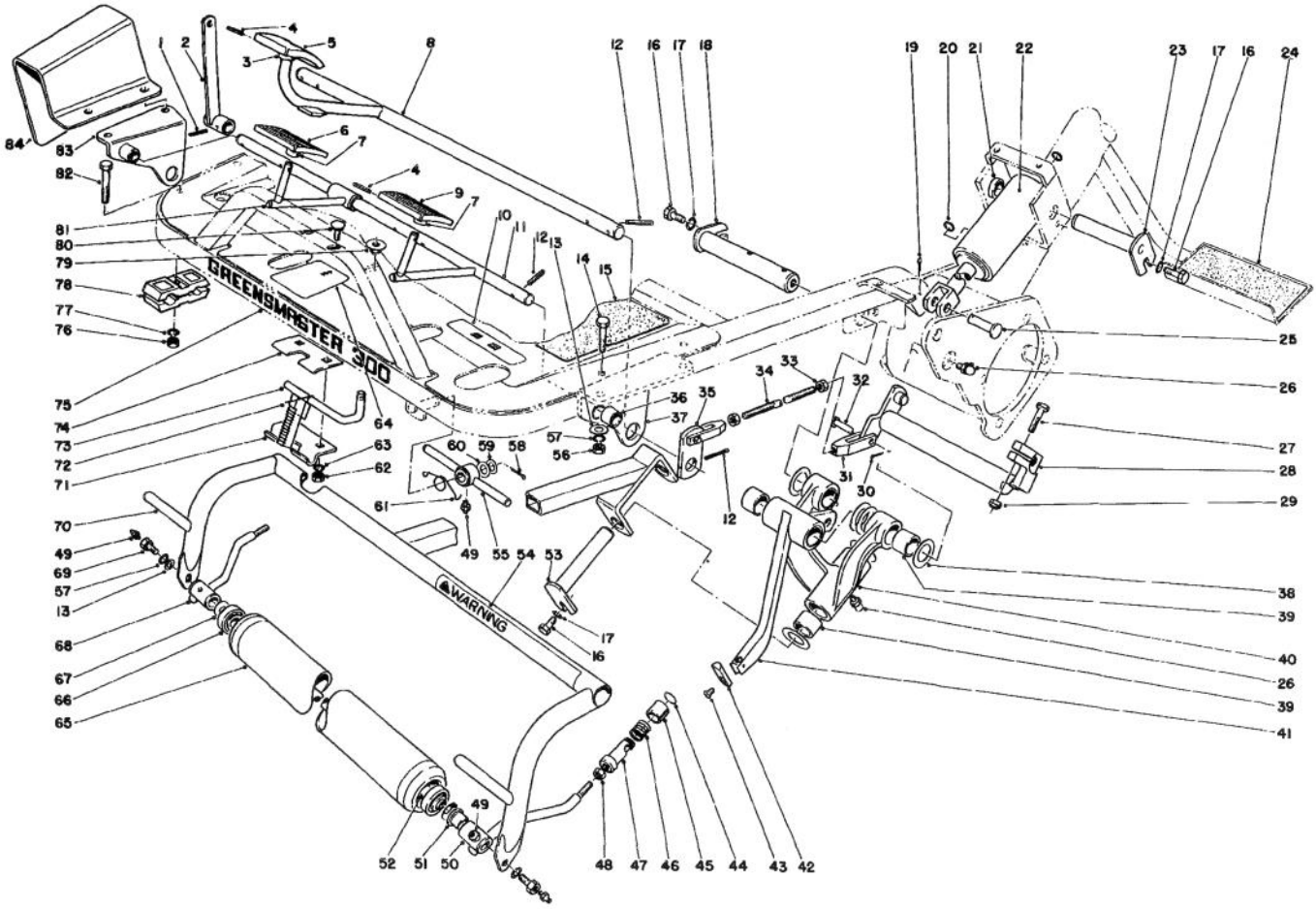
ONLY
DO NOT REMOVE
Tech Publications

FOOT PEDALS AND ROLLER ASSEMBLY

Ref. No.	Part No.	Description	No. Used
1	32121-6	Roll Pin	1
2	49-6200	Lever — Cutting Control	1
3	49-6150	Foot Pedal Brake	1
4	32121-45	Roll Pin	3
5	49-6170	Pad — Foot Brake	1
6	10-8250	Foot Pad — Mow	1
7	10-6540	Foot Pedal	2
8	49-6130	Brake Shaft	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	3256-24	Washer — Plain	10
14	323-11	Screw — Cap Hex Hd.	4
15	49-6120	Pad — Foot Rest	1
16	322-1	Screw	6
17	3253-4	Washer — Lock	6
18	10-6110	Pin Hinge	2

Ref. No.	Part No.	Description	No. Used
19	3272-10	Pin — Cotter	2
20	237-78	O-Ring	4
21	46-6350	Spacer	2
22	51-0120	Cylinder — Hydraulic	2
23	10-6060	Pin — Ram Pivot	2
24	10-8200	Pad — Foot Step	1
25	283-8	Pin — Clevis	2
26	302-40	Grease Fitting	4
27	322-6	Screw Cap	1
28	52-5540	Brake Arm L.H.	1
29	3296-29	Nut — Lock	1
30	3272-6	Cotter Pin	4
31	282-2	Yoke	4
32	283-1	Clevis Pin	4
33	3220-2	Nut — Hex Hd.	4
34	27-2270	Rod — Brake Adjustment	2
35	10-8100	Strap — Brake Shaft	2
36	256-32	Bushing	2

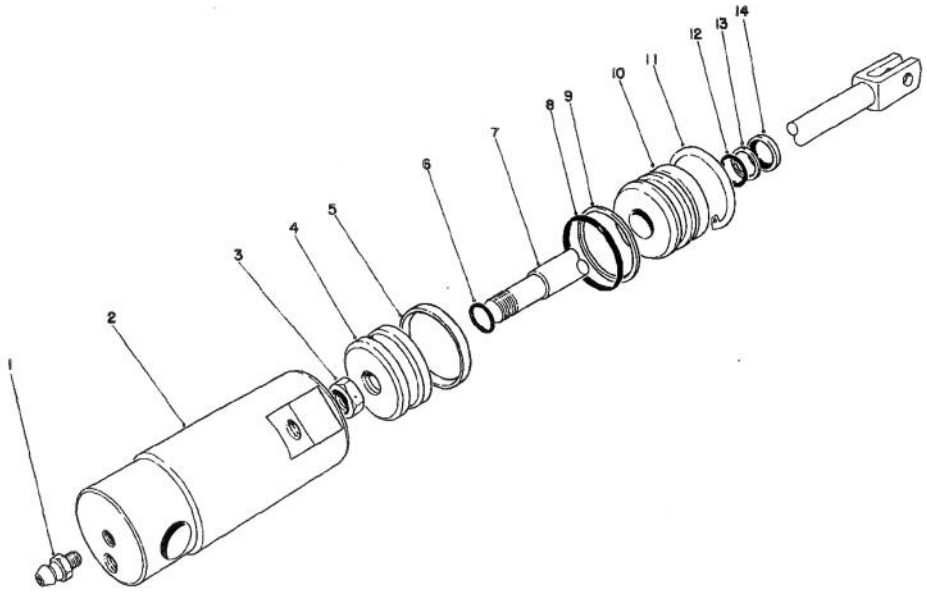
© The Toro Company — 1986



FOOT PEDALS AND ROLLER ASSEMBLY (Continued)

Ref. No.	Part No.	Description	No. Used
37	49-6090	Lift Pivot Bracket L.H. (Incl. Ref. #36)	1
38	10-8110	Thrust Washer	12
39	3-0348	Bushing	10
40	10-7820	Pivot Hinge (Incl. Ref. #39)	2
41	51-2890	Lift Arm L.H. (Incl. Ref. #39)	1
42	51-3140	Stop — Lift Arm	1
43	3289-18	Screw — Hex Socket Flat Hd.	1
44		Retaining Ring	6
45		Sleeve	6
46		Spring	6
47	8-7710	Ball Joint Receiver Assy. (Incl. Ref. #44-46)	6
48	3220-3	Nut — Hex Jam	6
49	302-5	Grease Fitting	12
50	52-2740	Pull Arm Assembly L.H. (Incl. Ref. #51)	3
51	3-1506	Bushing	12
52	21-8470	Shaft — Yoke Roller	3
53	10-6090	Pin Pivot	2
54	27-2890	Decal — Warning	1
55	12-9050	Lift Pivot	1
56	3218-3	Nut — Hex Jam	4
57	3253-21	Washer — Lock	10
58	3272-11	Cotter Pin	1
59	3256-26	Washer — Plain	1
60	3290-221	Washer — Spring	1

Ref. No.	Part No.	Description	No. Used
61	10-9090	Spring — Lift Pivot	1
62	3217-5	Nut — Hex	2
63	3253-3	Washer — Lock	2
64	27-2830	Decal — Parking Brake	1
65	52-2720	Roller Assy. (Incl. Ref. #66)	3
66	251-141	Ball Bearing	6
67	3290-317	Washer — Spring	6
68	52-2750	Pull Arm Assembly R.H. (Incl. Ref. #51)	3
69	11-0160	Roller Shaft Screw Assy. (Incl. Ref. #49)	6
70	47-5970	Pull Frame L.H.	1
71	10-7890	Lower Park Brake Hinge	1
72	10-8140	Spring — Brake Latch	1
73	10-7850	Parking Brake Latch	1
74	10-7880	Upper Park Brake Hinge	1
75	54-7320	Decal — Greensmaster 300	1
76	32128-32	Nut — Lock	1
77	3256-56	Washer — Flat	1
78	56-7970	Clamp Tube	1
79	32141-111	Nut Hex Large Flange	1
80	3229-22	Bolt — Carriage	2
81	10-6300	Foot Pedal	1
82	321-20	Screw — Cap Hex Hd.	1
83	49-6070	Lift Pivot Bracket R.H. (Incl. Ref. #36)	1
84	49-6110	Transfer Rod Guard	1

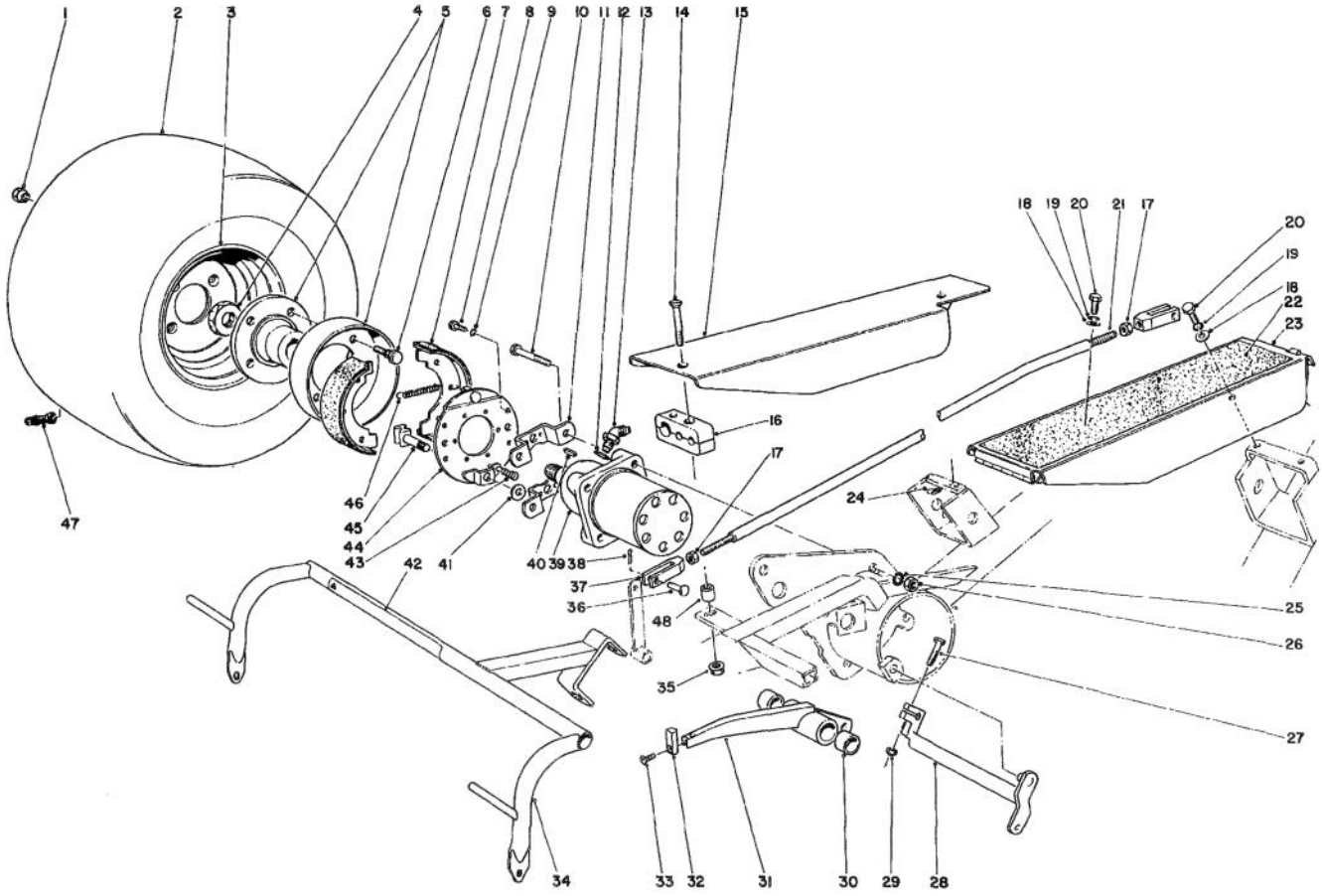


HYDRAULIC CYLINDER—FRONT NO. 51-0120

Ref. No.	Part No.	Description	No. Used
1	302-2	Grease Fitting	2
2	51-0130	Barrel Assembly	1
3	32152-10	Nut — Lock	1
4	52-1990	Piston	1
5		Uniring	1
6		O-Ring	1
7	52-1980	Shaft with Clevis	1
8		O-Ring	1

Ref. No.	Part No.	Description	No. Used
9		Washer — Back Up	1
10	46-4930	Head	1
11	32120-65	Ring — Retaining Internal	1
12		O-Ring	1
13		Washer — Back Up	1
14		Dust Seal	1
*	46-4900	Seal Repair Kit (Incl. Ref. #5, 6, 8, 9 & 12-14)	1

*Not Illustrated

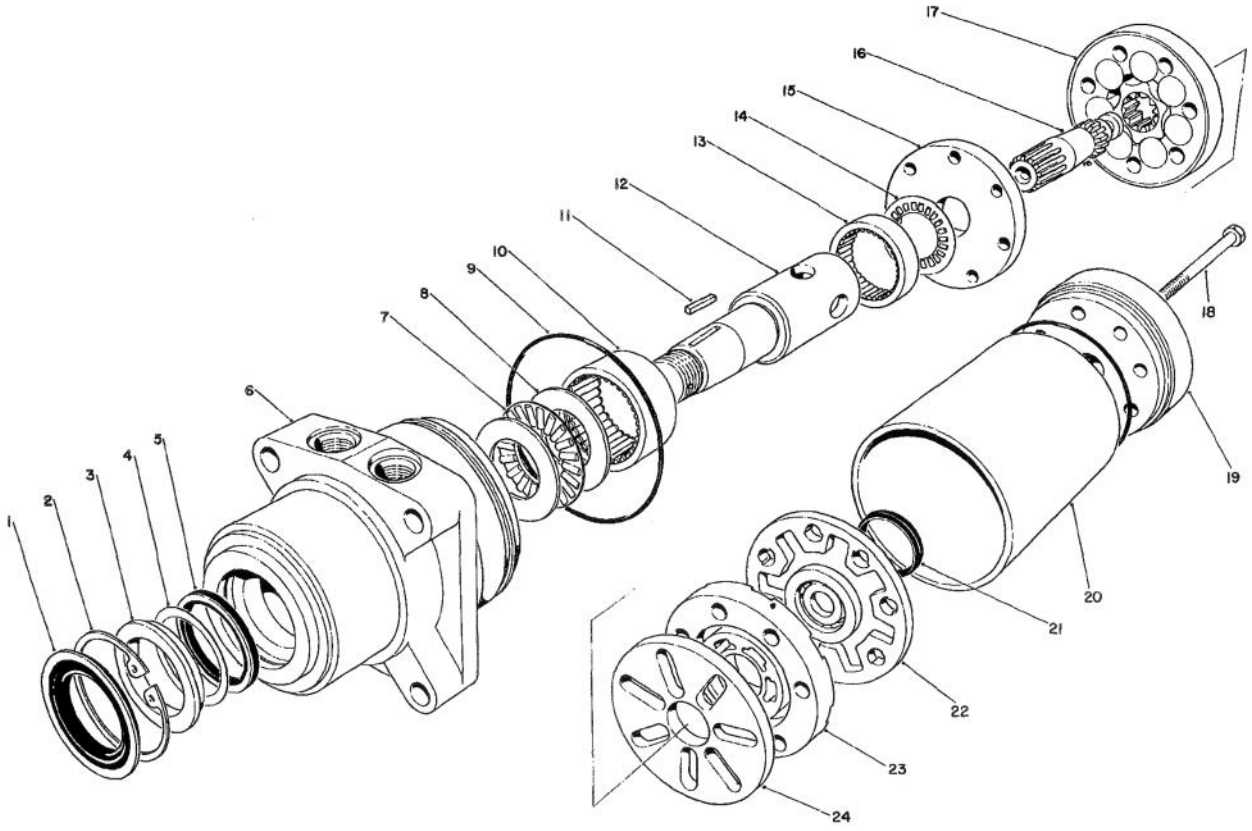


WHEEL AND BRAKE ASSEMBLY

Ref. No.	Part No.	Description	No. Used
1	242-50	Wheel Nut	8
2	28-3680	Tire	2
3	217-60	Rim	2
4	26-3790	Nut — Lock	2
5	10-6820	Brake Drum Assembly (Incl. Ref. #6)	2
6	10-6830	Drive Type Stud	8
7	11-1579	Shoe and Lining Assembly	4
8	329-3	Screw — Cap Hex Hd.	8
9	3255-7	Washer — Lock External Tooth	8
10	325-11	Screw — Cap Hex Hd.	8
11	10-8000	Bracket — Brake	4
12	237-80	O-Ring	4
13	353-389	45° Elbow	4
14	32108-100	Screw — Machine Flat Hd.	3
15	49-5450	Plate — Cover	1
16	57-6140	Clamp Tube	4
17	3220-2	Nut — Hex Jam	2
18	3256-22	Washer — Plain	4
19	3253-3	Washer — Lock	4
20	321-2	Screw — Cap Hex Hd.	4
21	49-5430	Control Rod	1
22	10-8220	Pad Tool Box	1
23	49-5410	Tool Box	1
24	3290-318	Tinnerman Clip	1

Ref. No.	Part No.	Description	No. Used
25	3253-7	Washer — Lock	8
26	3217-9	Nut — Hex	8
27	322-6	Screw	1
28	52-5510	Brake Arm R.H.	1
29	3296-29	Nut — Lock	1
30	3-0348	Bushing	2
31	51-2910	Lift Arm R.H. (Incl. Ref. #30)	1
32	51-3140	Stop — Lift Arm	1
33	3289-18	Screw — Hex Socket Flat Hd.	1
34	47-5960	Pull Frame R.H.	1
35	32128-32	Nut — Lock	2
36	283-1	Clevis Pin	2
37	282-2	Yoke	2
38	3272-6	Cotter Pin	2
39	10-8010	Hydraulic Motor	2
40	11-5790	Key	2
41	3256-26	Washer — Plain	2
42	27-2890	Decal — Warning	1
43	215-75	Spring	4
44	3-6944	Support Plate Assembly	2
45	215-74	Cam — Bendix	2
46	215-76	Spring	4
47	232-24	Valve Stem w/Cap	2
48	22-7810	Spacer	1
*†	232-37	Heavy Duty Inner Tube	2

*Not Illustrated
†Service Replacement Part



NO. 10-8010 HYDRAULIC DRIVE MOTOR

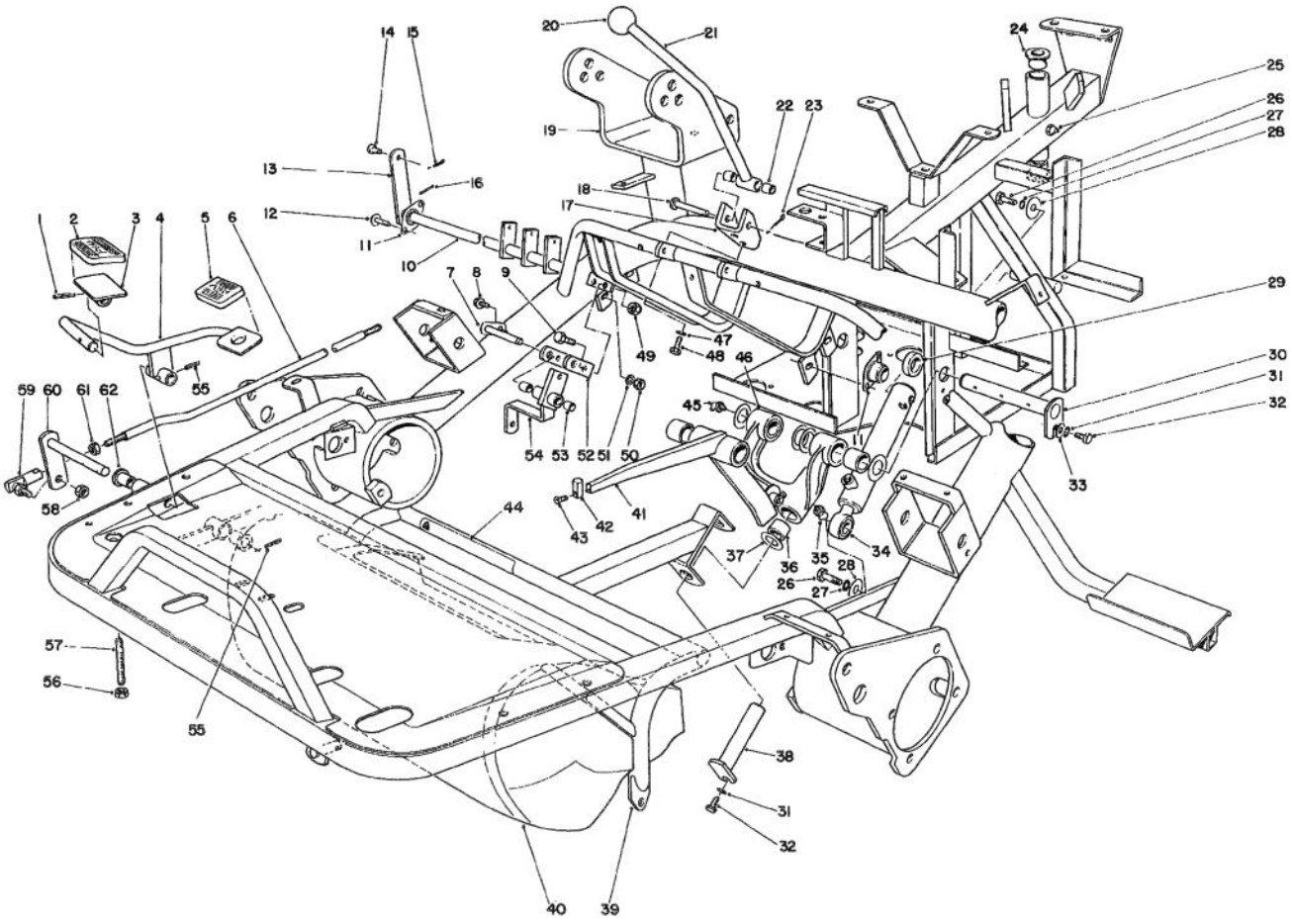
Ref. No.	Part No.	Description	No. Used
1		Dirt Seal	1
2		Retaining Ring	1
3		Spacer	1
4		Shim	1
5		Seal	1
*	353-461	Hydraulic Motor Seal Kit (Incl. Ref. #1-5 & 9 & 21)	1
†6		Housing	1
7	28-1060	Thrust Bearing	1
8	28-0930	Thrust Washer	2
9		Seal Ring	2
10	28-0870	Needle Bearing	1
11	11-5790	Key	1

Ref. No.	Part No.	Description	No. Used
12	28-0940	Coupling Shaft	1
13	28-0860	Needle Bearing	1
14	28-0150	Thrust Bearing	1
†15		Wear Plate	1
16	28-0880	Drive Link	1
17	28-0890	Rotor Assembly	1
18	3211-32	Capscrew	7
†19		End Cover Assembly	1
20	353-671	Sleeve Protector	1
21		Bonded Ring	1
22	28-1100	Commutator Assembly	1
23	36-5000	Manifold Assy. (Incl. Ref. #24)	1
24		Manifold Plate	1
*‡		Seal Installation Tool	1

*Not Illustrated

†Replacement parts not available from Toro.

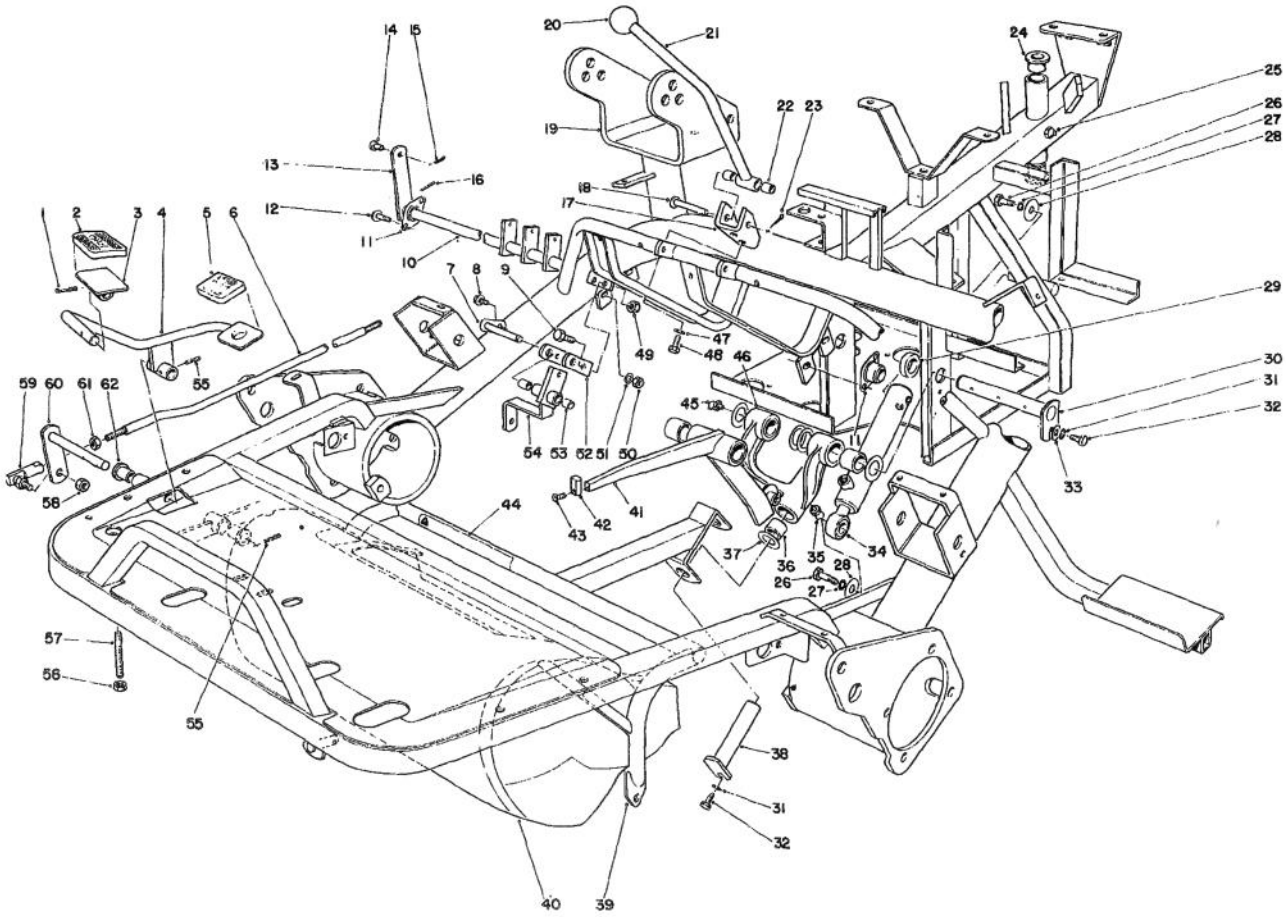
‡Special Tool (Ref. Page 51)



FRAME ASSEMBLY

Ref. No.	Part No.	Description	No. Used
1	32121-45	Pin — Roll	1
2	49-6470	Pad — Pedal Forward	1
3	49-6440	Pedal — Accelerator	1
4	49-6380	Rod — Accelerator	1
5	49-6430	Pad — Reverse	1
6	49-6320	Traction Control	1
7	49-6290	Shaft Traction Pivot	1
8	12-3270	Screw — Pentaflo	1
9	322-5	Screw — Cap Hex Hd.	2
10	44-0870	Rear Camshaft	1
11	27-2320	Side Flange Bearing	2
12	3234-1	Screw — Cap Hex Hd. Flange	4
13	47-5320	Lever — Cutting Control	1
14	283-1	Clevis Pin	1
15	3272-6	Cotter Pin	1
16	32121-6	Pin — Roll	1
17	49-6220	Bracket — Control Arm	1
18	283-57	Pin — Clevis	1
19	49-5550	Frame (Incl. Ref. #24 & 60)	1
20	233-48	Knob	1
21	49-6230	Handle — Traction (Incl. Ref. #22)	1

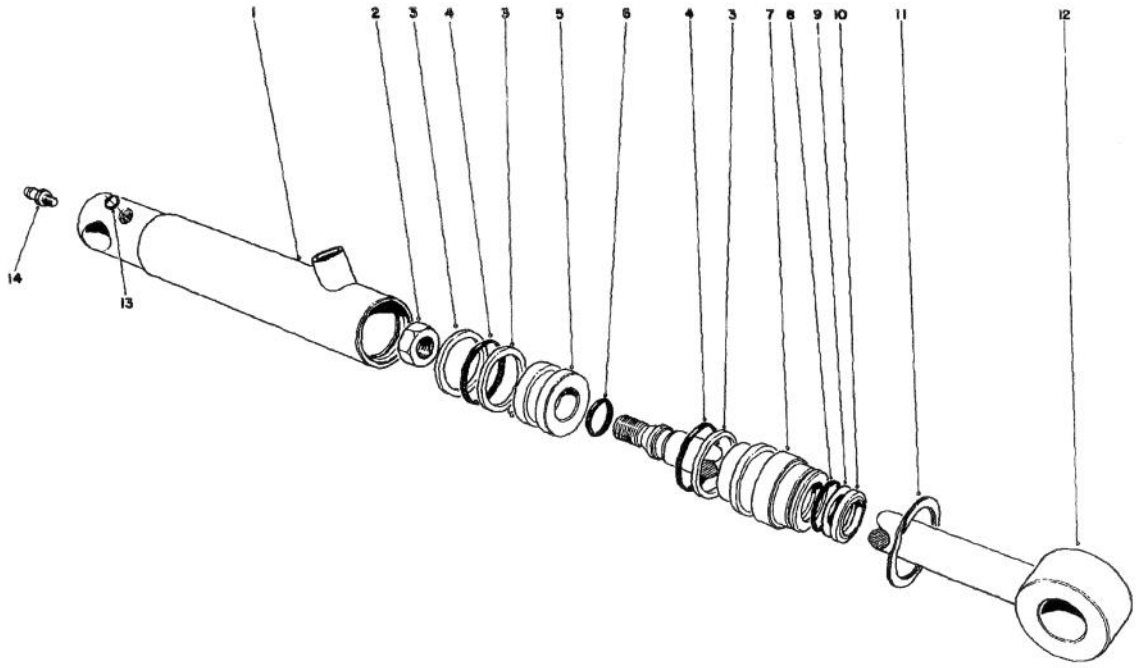
Ref. No.	Part No.	Description	No. Used
22	256-251	Bushing	2
23	3272-4	Cotter Pin	1
24	256-150	Bushing	2
25	302-5	Grease Fitting	1
26	323-4	Screw — Cap Hex Hd.	2
27	3255-9	Washer — Lock External Tooth	2
28	10-7920	Washer	2
29	27-2540	Spacer — Hub	1
30	27-2550	Pin Hinge	1
31	3253-4	Washer — Lock	2
32	322-1	Screw — Cap Hex Hd.	2
33	3256-23	Washer — Flat	1
34	43-5260	Lift Cylinder Rear	1
35	302-40	Grease Fitting	1
36	3-0348	Bushing	6
37	10-8110	Thrust Washer	6
38	10-6090	Pin — Pivot	1
39	47-5960	Pull Frame Rear	1
40	36-7250	Grass Basket	3
41	51-2930	Lift Arm Center (Incl. Ref. #36)	1
42	51-3140	Stop — Lift Arm	1
43	3289-18	Screw — Hex Socket Flat Hd.	1



FRAME ASSEMBLY

Ref. No.	Part No.	Description	No. Used
44	27-2890	Decal — Warning	1
45	302-11	Grease Fitting 45°	1
46	10-7820	Pivot Hinge (Incl. Ref. #36)	1
47	3254-6	Washer — Lock	2
48	3211-1	Screw — Cap Hex Hd.	2
49	3296-29	Nut — Lock	2
50	32153-2	Nut — Lock	4
51	3256-24	Washer — Plain	4
52	49-6250	Bracket — Traction Pivot	1
53	256-2	Bushing	2

Ref. No.	Part No.	Description	No. Used
54	49-6260	Tube — Traction Pivot (Incl. Ref. #53)	1
55	32121-23	Roll Pin	2
56	3217-6	Nut — Hex	1
57	17-9420	Screw — Accelerator Stop	1
58	3296-4	Locknut	2
59	2411-32	Ball Joint	2
60	49-6350	Shaft Traction	1
61	3220-2	Nut — Hex Jam	2
62	256-155	Bushing	2

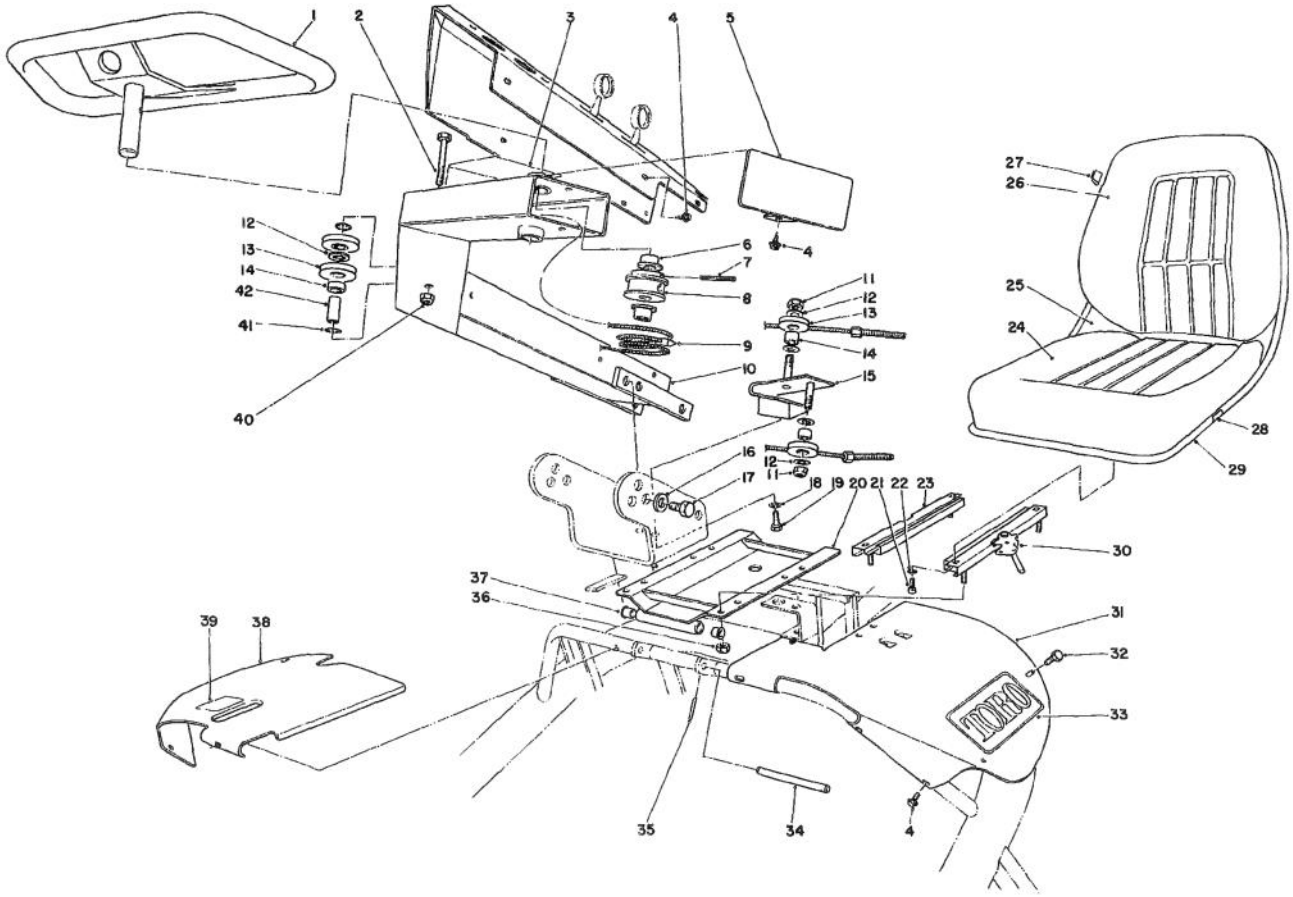


HYDRAULIC CYLINDER—REAR NO. 43-5260

Ref. No.	Part No.	Description	No. Used
1		Barrel w/Clevis & Ports	1
2	43-5130	Nut	1
3		Back Up Washer	3
4		O-Ring	2
5	43-5150	Piston	1
6		O-Ring	1
7	43-5140	Head	1
8		O-Ring	1

Ref. No.	Part No.	Description	No. Used
9		Leather	1
10		Seal — Dust	1
11	43-5220	Ring — Retaining	1
12	43-5230	Shaft w/Clevis	1
13	237-78	O-Ring	2
14	302-2	Grease Fitting	1
*	43-5250	Repair Kit (Incl. Ref. #3, 4, 6, 8, 9 & 10)	1

*Not Illustrated

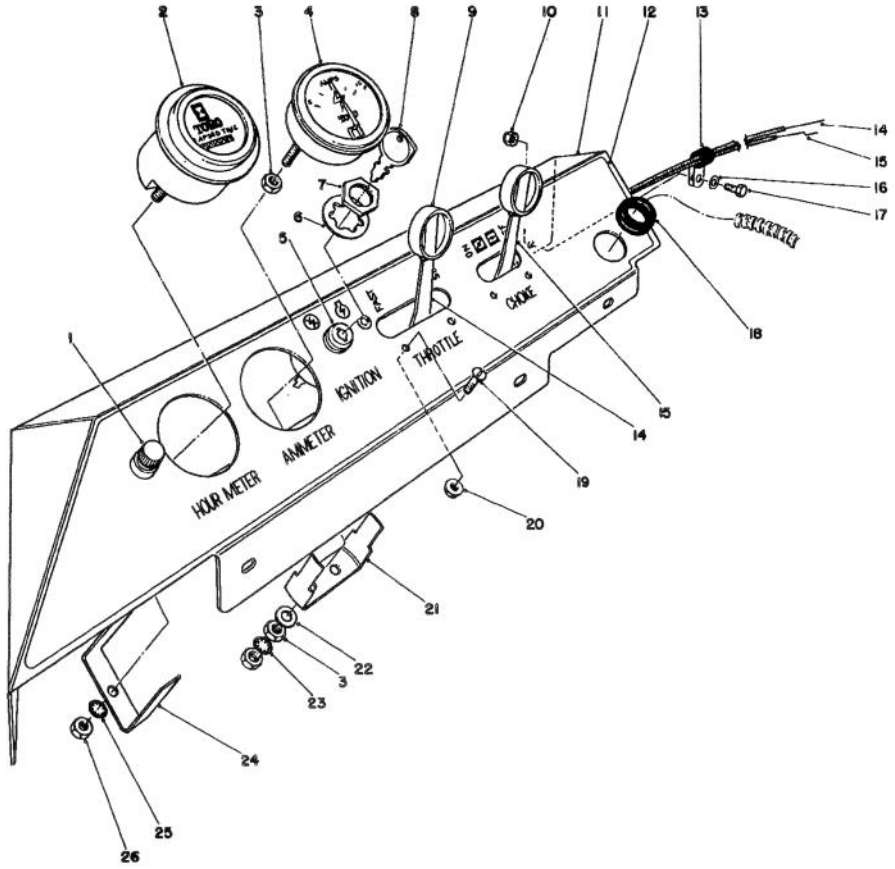


STEERING AND SEAT ASSEMBLY

Ref. No.	Part No.	Description	No. Used
1	49-5900	Steering Wheel Assembly	1
2	321-15	Screw — Cap Hex Hd.	1
3	27-2880	Decal — Caution	1
4	32104-77	Screw — Tapping Acorn Hd.	14
5	10-7370	Tube Cap	1
6	256-113	Bushing	2
7	32121-34	Roll Pin	1
8	10-7210	Pulley — Front Steering	1
9	49-5960	Steering Cable	1
10	49-5910	Arm Steering	1
11	3296-44	Nut — Lock	2
12	3256-4	Washer — Flat	5
13	5-2653	Pulley Assy. (Incl. Ref. #14)	4
14	256-2	Bushing	4
15	49-5970	Bracket — Pulley	1
16	3256-26	Washer — Plain	4
17	325-3	Screw — Cap Hex Hd.	4
18	3253-21	Lockwasher	2
19	323-6	Screw — Cap Hex Hd.	2
20	49-5840	Seat Support (Incl. Ref. #37)	1
21	3274-12	Screw — Hex Socket	4
22	3256-23	Washer	4
23	51-0780	Seat Slider	1

Ref. No.	Part No.	Description	No. Used
24	351-76	Cushion — Seat (Incl. Ref. #27 & 28)	1
25	351-77	Shell	1
26	351-75	Backrest (Incl. Ref. #27 & 28)	1
27	351-79	Clip	6
28	351-80	Clip Joint	1
29	351-78	Edging	2
*	49-8130	Seat Assy. (Incl. Ref. #24-29)	1
30	51-0790	Seat Adjuster	1
31	49-5460	Shield — Valve Cover L.H.	1
32	32140-16	Screw — Thread Forming Hex Hd.	2
33	43-5110	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

*Not Illustrated

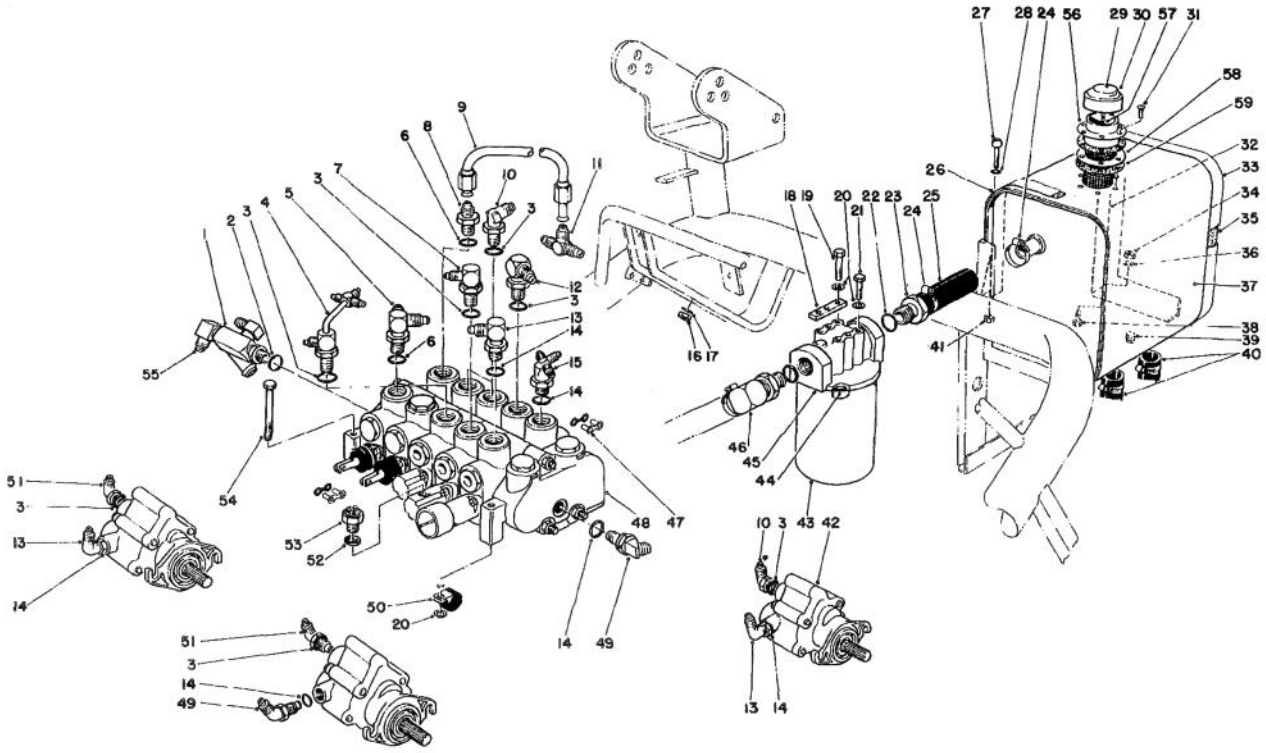


INSTRUMENT PANEL ASSEMBLY

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	27-2360	Key Switch (Incl. Ref. #6-8)	1
6		Lockwasher	1
7		Hex Nut	1
8	218-412	Key (Set of 2)	1
9	233-35	Knob	2
10	3296-47	Nut — Lock	1
11	49-6010	Panel — Control	1
12	49-6040	Decal — Control Panel	1
13	2412-10	Clip	1
14	49-6020	Control — Throttle (Incl. Ref. #9)	1

Ref. No.	Part No.	Description	No. Used
15	49-6030	Control — Choke (Incl. Ref. #9)	1
16	3256-23	Washer — Plain	1
17	322-4	Screw — Cap Hex Hd.	1
18	237-100	Grommet	1
19	3251-3	Screw — Machine Round Hd. Slotted	4
20	32149-7	Nut — Lock	4
21	39-9600	Mounting Clamp	1
22	3256-21	Washer	2
23	3254-8	Lockwasher — Internal	2
24	218-515	Mounting Bracket	1
25	3254-1	Washer — Lock Internal Tooth	1
26	3217-26	Nut	1

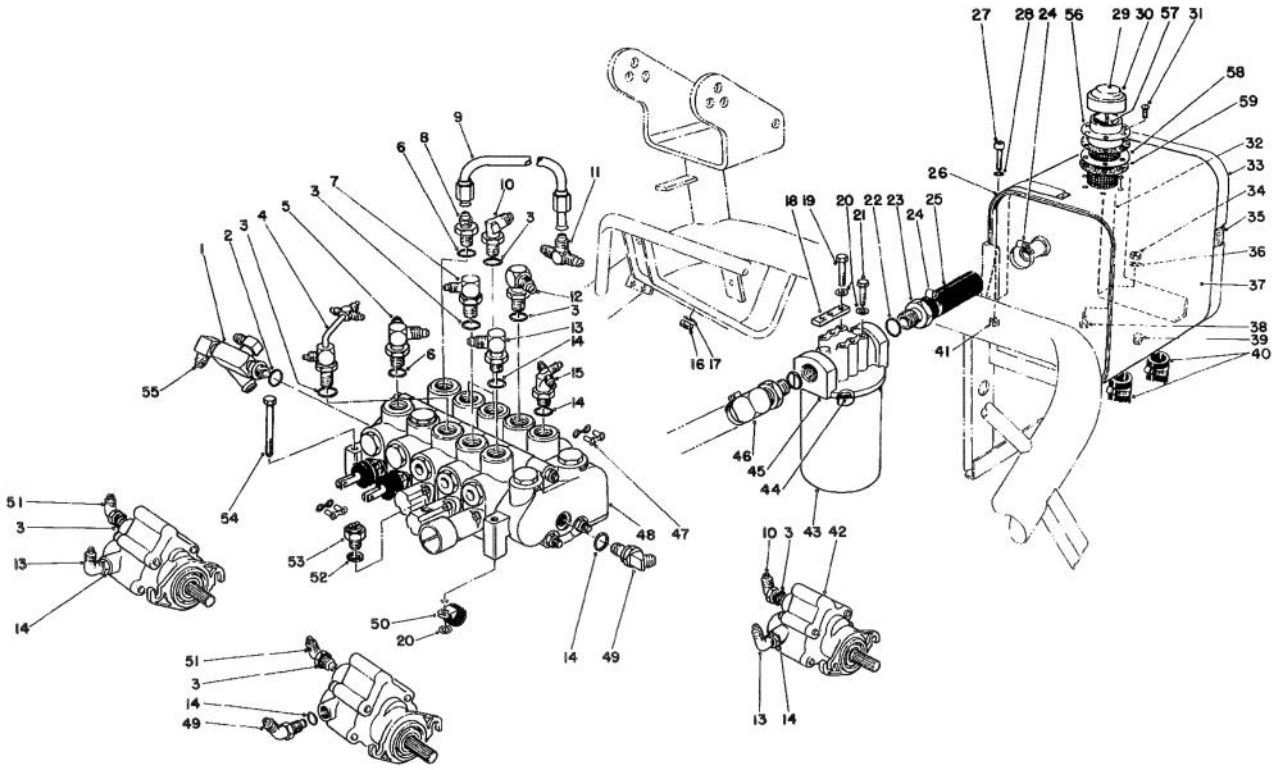
*Not Illustrated
†Obtain Locally



VALVE BANK AND HYDRAULIC RESERVOIR ASSEMBLY

Ref. No.	Part No.	Description	No. Used
1	55-7110	Manifold	1
2	237-81	O-Ring	1
3	237-79	O-Ring	8
4	27-3000	Brazed Tube Assembly	1
5	27-2570	Fitting	1
6	237-80	O-Ring	2
7	353-537	90° Elbow	1
8	353-385	Straight Fitting	1
9	51-0020	Traction Interconnect Line (Lower)	1
10	353-379	45° Fitting	3
11	353-380	Tee Tube	1
12	353-373	90° Extended Fitting	1
13	353-374	90° Elbow	3
14	237-42	O-Ring	6
15	44-5540	Fitting — Crows Foot	1
16	3217-6	Nut — Hex	3
17	3253-4	Washer — Lock	3
18	27-2380	Spacer — Filler Mount	1
19	322-4	Screw — Cap Hex Hd.	2
20	3256-23	Washer — Plain	5

Ref. No.	Part No.	Description	No. Used
21	322-2	Screw — Cap Hex Hd.	2
22	237-101	O-Ring	1
23	353-563	Fitting — Straight	1
24	2412-3	Clamp — Hose	6
25	27-2040	Hose	1
26	27-7980	Strap — Reservoir Assembly Front (Incl. Ref. #35)	1
27	3274-54	Screw — Set Hex Socket Hd.	2
28	3256-22	Washer — Plain	2
29	11-6350	Decal — Oil	1
30	353-572	Breather Cap (Incl. Ref. #57)	1
31	32104-76	Screw	6
32	27-2420	Felt Strap — Angle	2
33	27-2400	Strap — Reservoir Assembly (Incl. Ref. #35)	1
34	3217-5	Nut — Hex	2
35	27-3030	Felt Strip	2
36	3253-3	Washer — Lock	2
37	55-8480	Tank — Hydraulic	1
38	321-3	Screw — Cap Hex Hd.	1
39	281-1	Oil Plug	1

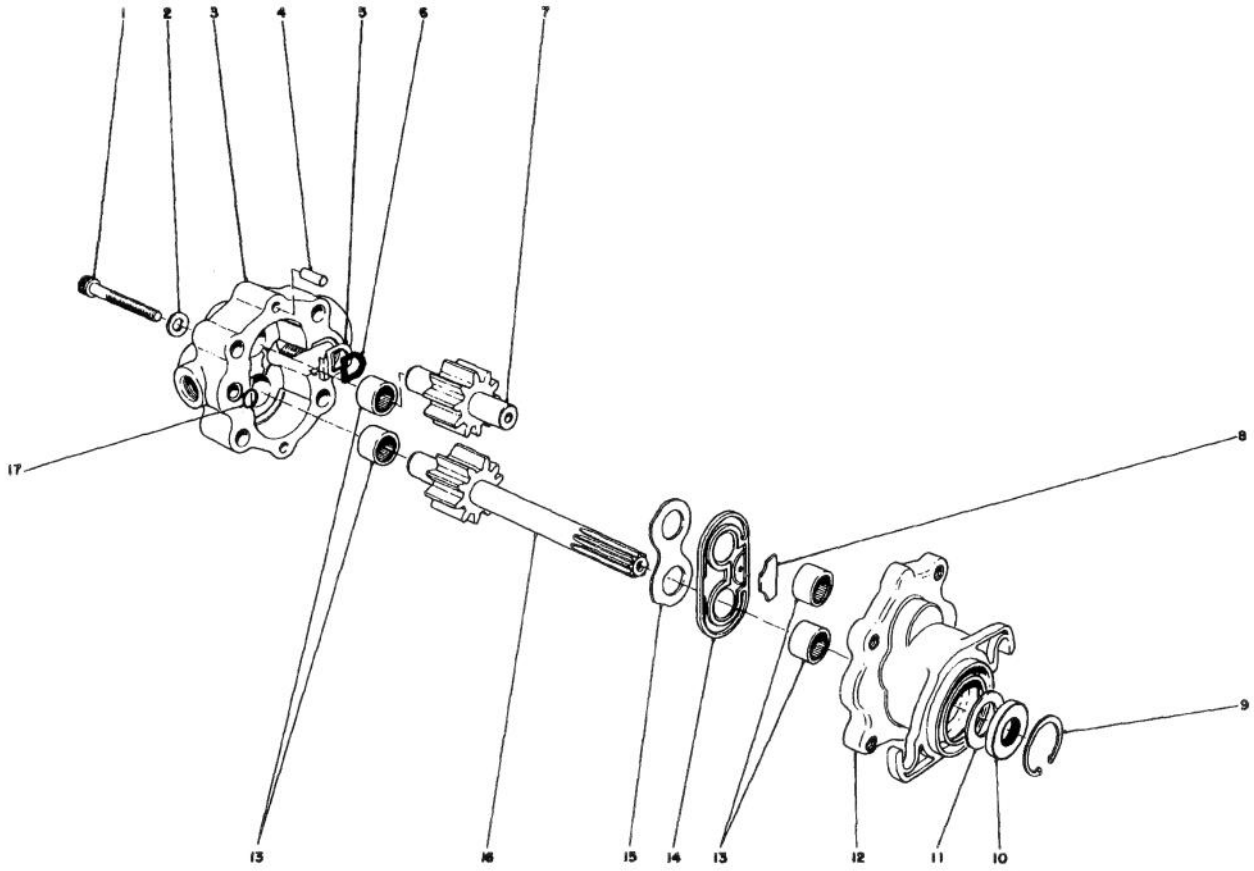


VALVE BANK & HYDRAULIC RESERVOIR ASSEMBLY (Continued)

Ref. No.	Part No.	Description	No. Used
40	27-3040	Hose — Pump Inlet	2
41	32153-4	Nut — Lock	2
42	26-5690	Reel Motor	3
43	28-2110	Filter Element (Incl. Ref. #44)	1
44	44-5330	Seal Ring	1
45	44-5560	Hydraulic Filter Head	1
46	353-564	Fitting 90°	1
47	57-6220	Connecting Link	5
48	49-5540	Control Valve	1
49	353-212	Fitting 45°	2
50	304-61	Clamp	1

Ref. No.	Part No.	Description	No. Used
51	353-371	90° Elbow	2
52	38-0410	Nut — Hex	2
53	43-8520	Switch	2
54	322-20	Screw — Cap Hex Hd.	3
55	353-876	Fitting 90°	1
56	353-501	Flange Adapter	1
57		Spring & Chain Assembly	1
58	353-573	Screen Assembly	1
59	353-500	Gasket	2
*†	44-2500	Hydraulic Oil Dye	1

*Not Illustrated
†Optional



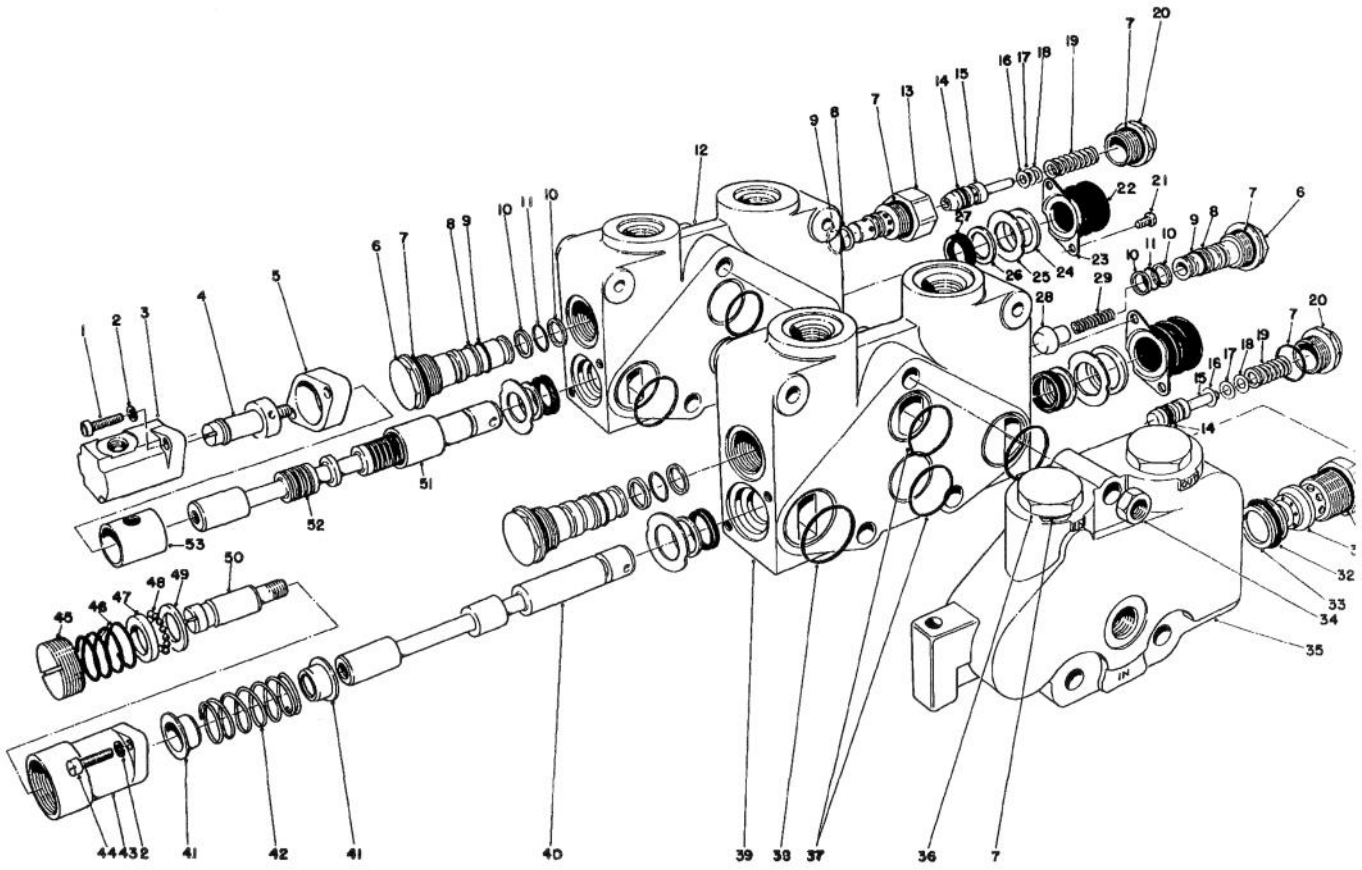
REEL MOTOR NO. 26-5690

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	Dowel Pin	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	Retaining Ring	1
10	353-585	Seal Shaft	1

Ref. No.	Part No.	Description	No. Used
11	353-590	Spacer	1
12	353-777	Body Motor	1
13	353-586	Needle Bearing	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
*†		Seal Installer	1
*†		Seal Protector	1

*Not Illustrated

† Special Tool (Ref. Page 51)

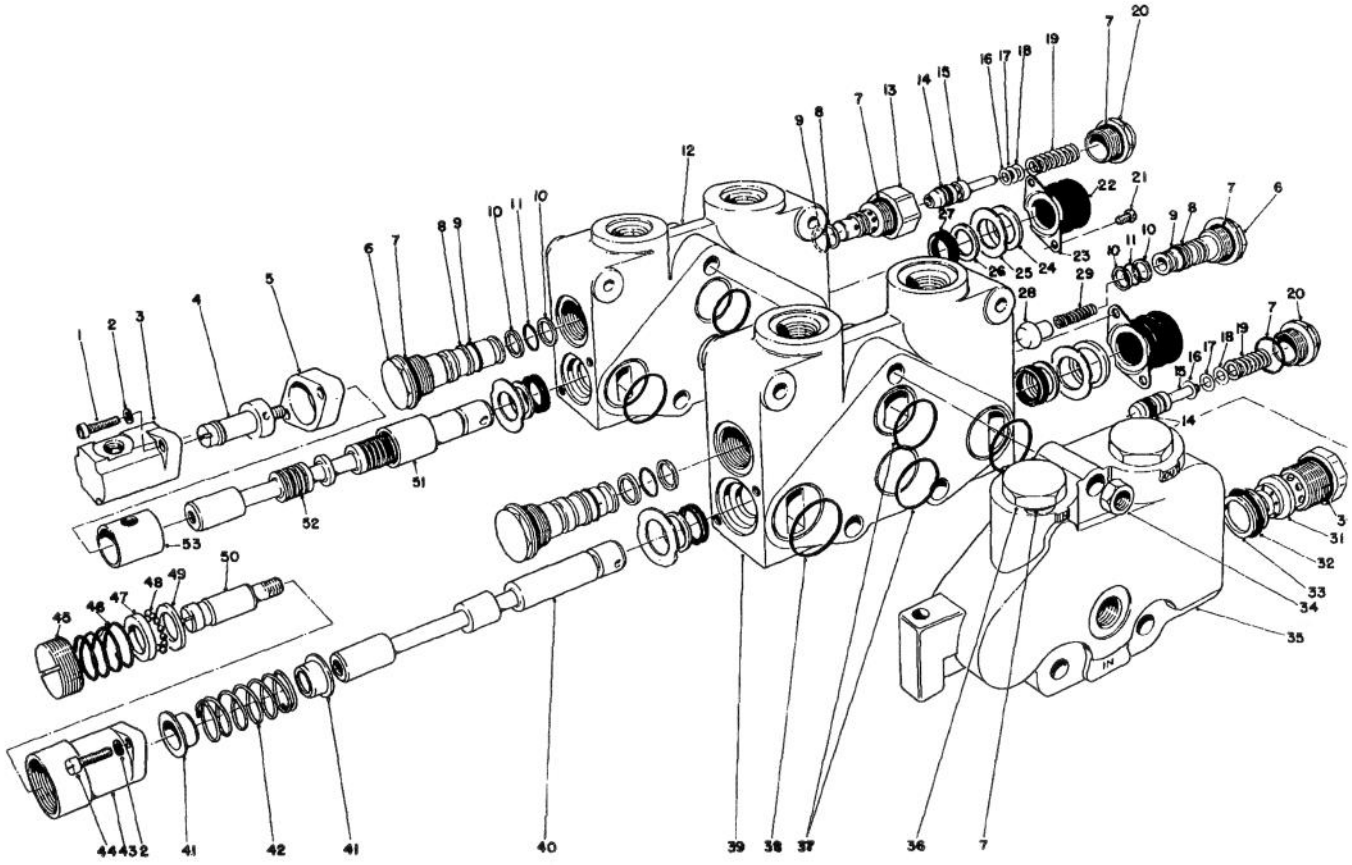


CONTROL VALVE ASSEMBLY NO. 49-5540 Section 1 and 2

Ref. No.	Part No.	Description	No. Used
1	3274-70	Screw, Hex — Socket Hd.	2
2	3253-3	Lockwasher	4
3	353-727	Bonnet	1
4	353-729	Spud — Detent	1
5	353-733	Spacer — Bonnet	1
6	353-481	Plug — Load Check (Incl. Ref. #7-11)	3
7	237-54	Seal — O-Ring	8
8	353-306	Ring — Back-Up	4
9	353-305	Seal — O-Ring	4
10	353-303	Ring — Back-Up	6
11	353-302	Seal — O-Ring	3
12†		Housing V20T	1
13	353-851	Body — Relief CP-RC Mod.	1
14	353-392	Seal — Relief Poppet PTFE	2
15	353-531	Poppet Assy. (Incl. Ref. #14)	2
16	353-328	Washer — Shim	A/R
17	353-329	Washer — Shim	A/R
18	353-330	Washer — Shim	A/R
19	353-855	Spring	2
20	353-334	Cap — Relief	2
21	3274-52	Screw — Hex Socket Hd.	4

Ref. No.	Part No.	Description	No. Used
22	353-575	Boot, Dust Cap	2
23	353-559	Retainer — Boot	2
24	353-560	Washer — Breather	2
25†		Plate — Seal Retainer	4
26†		Ring — Back-Up	4
27†		Seal — O-Ring	4
28	353-301	Poppet	1
29	353-304	Spring	1
30	353-331	Seal — O-Ring	1
31	353-760	Body Relief	1
32	353-758	Seal — O-Ring	1
33	353-952	Ring — Back-Up	1
34	353-852	Nut — Hex	3
35	353-772	Left End Cover	1
36	353-721	Plug (Incl. Ref. #7)	2
37†		Seal — O-Ring	4
38†		Seal — O-Ring	4
39†		Housing Section #1	1
40†		Spool — V20 SPL	1
41	353-417	Collar Spring	2
42	353-530	Spring	1
43	353-754	Bonnet — R. Detent	1

† Parts available in assemblies listed as (*Not Illustrated) on Page 15.



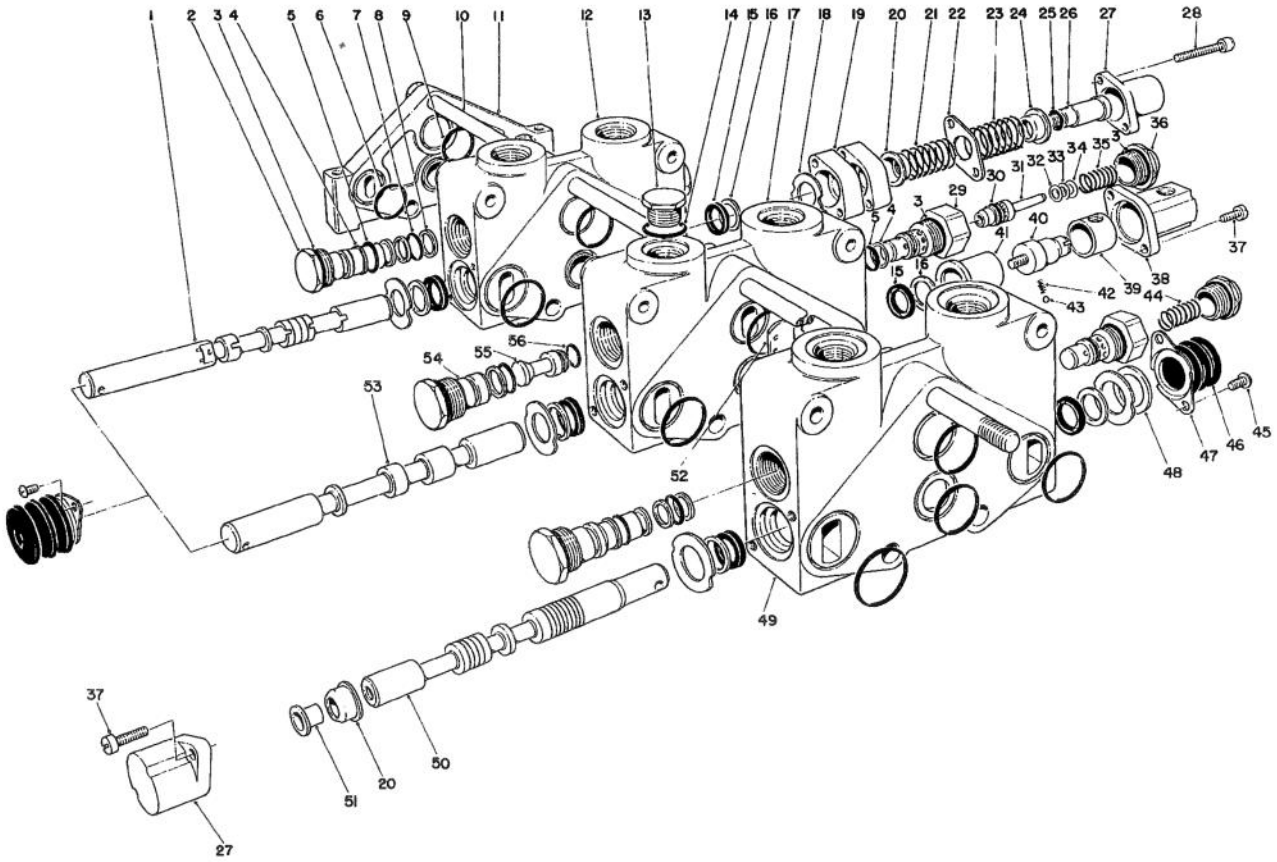
CONTROL VALVE ASSEMBLY NO. 49-5540 Section 1 and 2 (Continued)

Ref. No.	Part No.	Description	No. Used
44	3274-15	Screw — Fillister Hd.	2
45	353-763	Cap — Adjustment	1
46	353-579	Spring	1
47	42-2680	Race R. Detent	1
48	353-418	Ball — Steel	12
49	353-582	Plate — Thrust	1
50	353-762	Spud — Detent Out	1
51	353-732	Sleeve — Detent	1
52†		Spool — V20 3 Way F.F.	1
53	353-728	Sleeve	1
*	353-766	Relief WH (2000) PSI Assy. (Incl. Ref. #7, 14-20, 30-31 & 33)	1
*	353-768	Section #1 Complete	1

Ref. No.	Part No.	Description	No. Used
*	353-837	Section #2 Complete	1
*	353-780	Positioner — R. Detent (Out) (Incl. Ref. #2, 41-50)	1
*	353-839	Positioner — DI (SPL) Assy. (Incl. Ref. #1-5, 51 & 53)	1
*	353-642	Relief — RC Mod. (Incl. Ref. #7-9, 13-20)	2
*	353-835	Seals — Section — Set (Incl. Ref. #37 & 38)	1
*	353-515	Seal, Spool — Set (Incl. Ref. #25-27)	1
*	353-854	Boot — Spool Protective Assembly (Incl. Ref. #21-24)	2

*Not Illustrated

†Parts available in assemblies listed as (*Not Illustrated) on This Page.

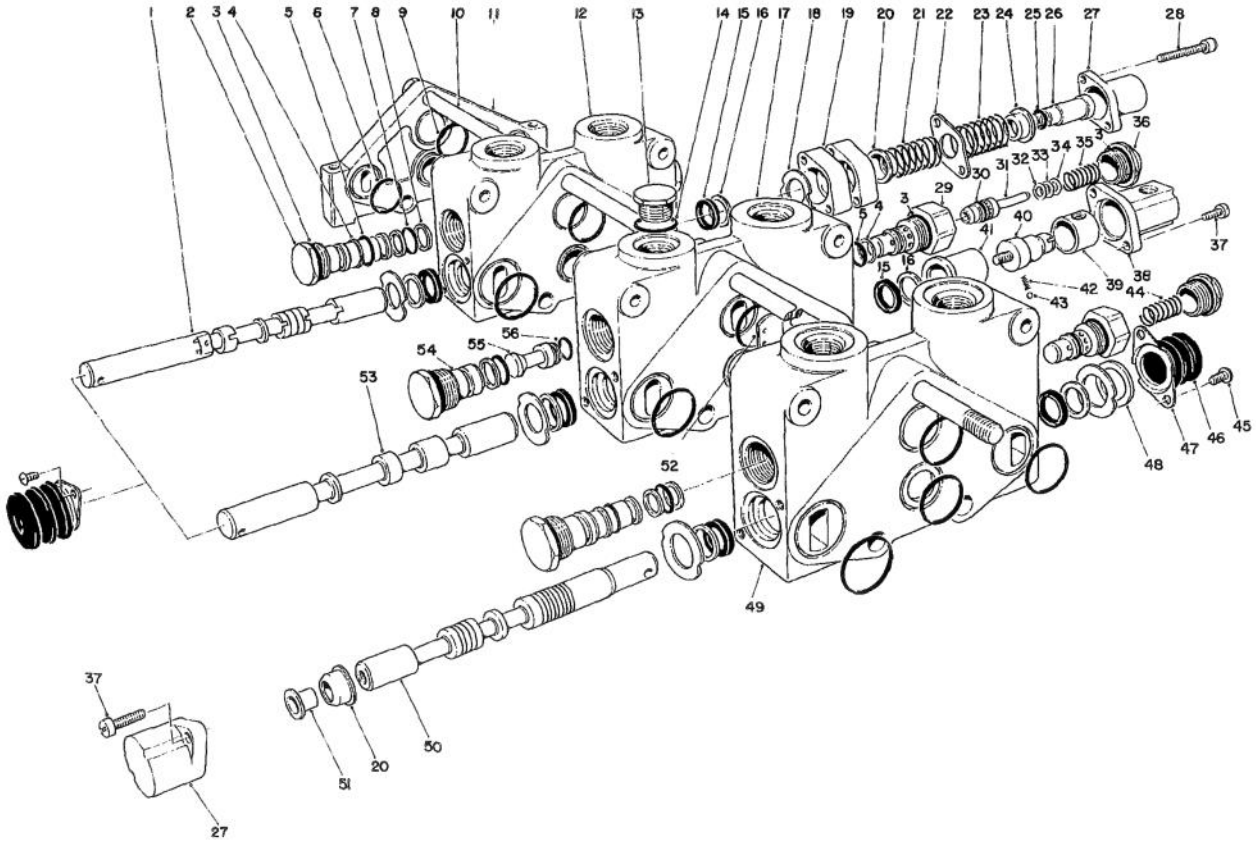


CONTROL VALVE ASSEMBLY NO. 49-5540 Section 3 thru 5

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	Seal — O-Ring	6
4	353-306	Ring — Back-Up	5
5	353-305	Seal — O-Ring	5
6†		Seal — O-Ring	8
7	353-302	Seal — O-Ring	3
8	353-303	Ring — Back-Up	6
9†		Seal — 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 Assy. (Incl. Ref. #14)	1
14	353-848	Seal — O-Ring	1
15†		Seal — O-Ring	6
16†		Ring — Back-Up	6
17†		Housing V20 #4	1
18†		Plate — Seal Retainer	6
19	353-733	Spacer — Bonnet	2
20	353-417	Collar Spring	2
21	353-831	Spring	1

Ref. No.	Part No.	Description	No. Used
22	353-529	Plate Seal	1
23	353-581	Spring	1
24	353-808	Collar — Spring	1
25	353-830	Seal — O-Ring	1
26	353-829	Collar Spool	1
27	52-5870	Bonnet	2
28	3274-62	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 Assy. (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

†Parts available in assemblies listed as (*Not Illustrated) on Page 17.



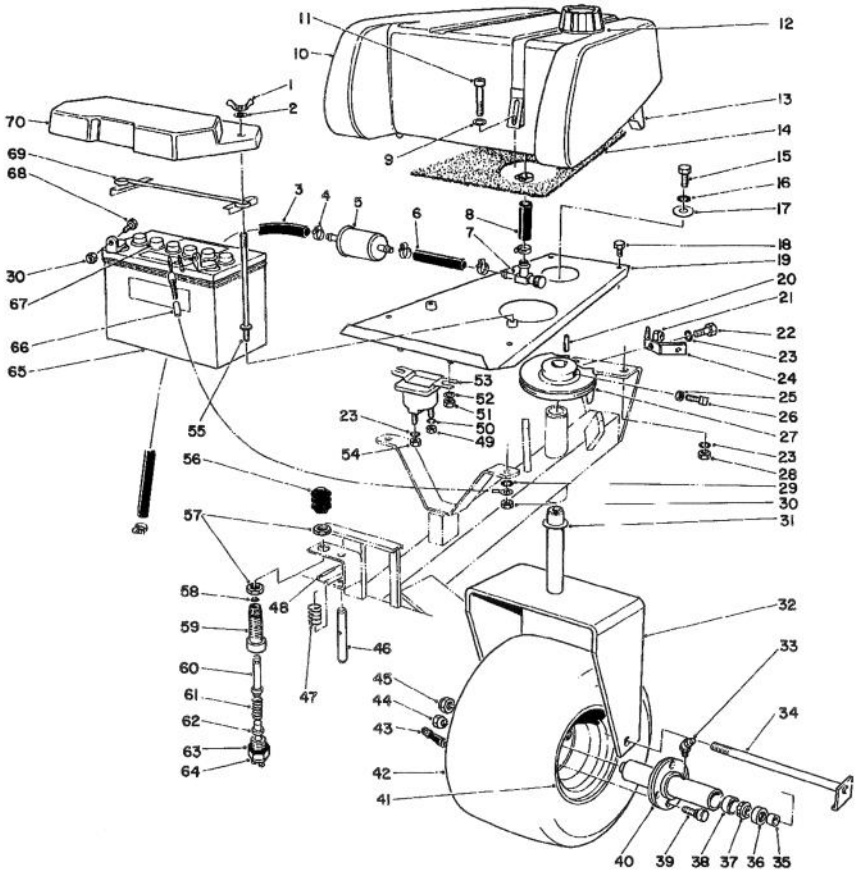
CONTROL VALVE ASSEMBLY NO. 49-5540 Section 3 thru 5 (Continued)

Ref. No.	Part No.	Description	No. Used
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
48	353-560	Washer — Breather	3
49		Housing V20 #2	1
50		Spool V20 3 Way F.F.	1
51	52-5860	Collar — Spool	1
52	353-765	Disc — Seal	1
57		Spool #4	1
54	353-953	Plug Assembly	1
55	353-844	Plus Series (Incl. Ref. #58)	1
56	353-850	Seal — O-Ring	1
*	353-835	Seals — Section — Set (Incl. Ref. #9 & 6)	1

Ref. No.	Part No.	Description	No. Used
*	353-515	Seal, Spool — Set (Incl. Ref. #15, 16 & 18)	1
*	353-854	Boot — Spool Protective Assy. (Incl. Ref. #45-48)	3
*	353-770	Section #3 Assy. (Complete)	1
*	353-838	Section #4 Assy. (Complete)	1
*	353-834	Section #5 Assy. (Complete)	1
*	353-841	Position — Spool Assy. (Incl. Ref. #20, 27, 37 & 51)	1
*	353-840	Position — DI (SP) Assy. (Incl. Ref. #37-43)	1
*	353-642	Relief — RC Mod. Assembly (Incl. Ref. #3-5 & 29-36)	1
*	353-833	Positioner Assembly (Incl. Ref. #19-28)	1

*Not Illustrated

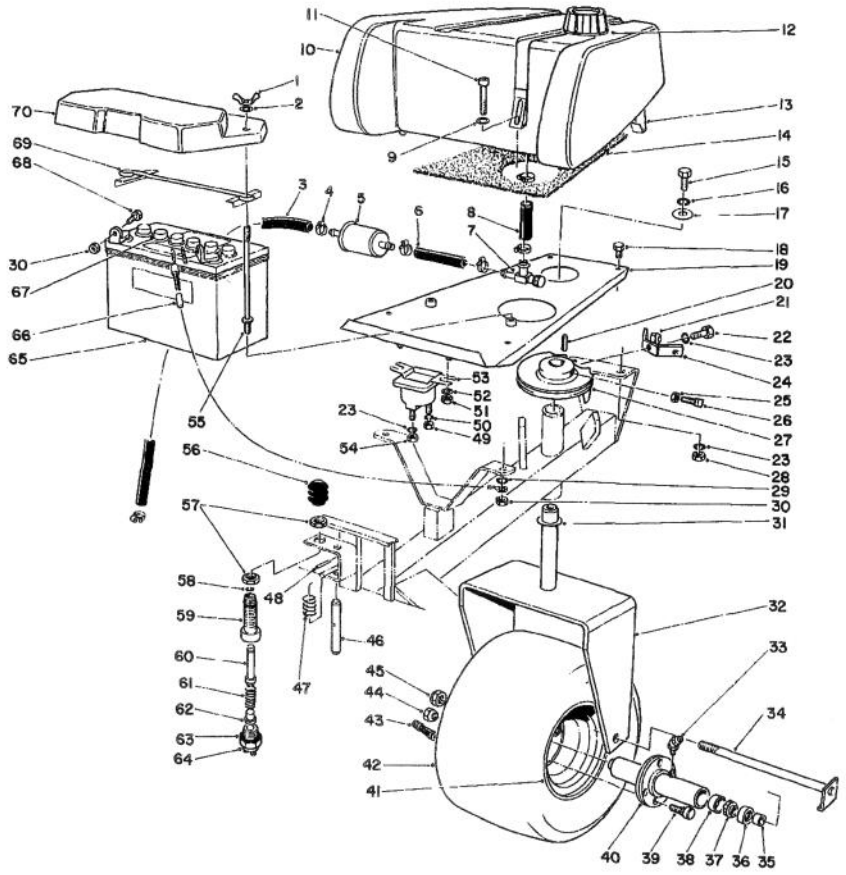
†Parts available in assemblies listed as (*Not Illustrated) on This Page.



GAS TANK, BATTERY AND CASTER WHEEL ASSEMBLY

Ref. No.	Part No.	Description	No. Used
1	32103-12	Wing Nut	2
2	3256-1	Washer — Plain	2
3	24-7930	Hose — Gas Line (Long)	1
4	2412-36	Clamp — Gas Line	6
5	18-1520	Fuel Filter	1
6	56-2240	Hose — Gas Line (Short)	1
7	56-2520	Fitting — Fuel Shutoff	1
8	56-2230	Hose — Fuel Line	1
9	3-1034	Washer	2
10	56-9630	Gas Tank	1
11	3274-56	Screw — Cap Socket Hd	2
12	55-3570	Gas Cap	1
13	28-2060	Gas Tank Strap	2
14	10-9080	Foam — Tank Support	1
15	321-4	Screw — Cap Hex Hd.	1
16	3253-3	Washer — Lock	1
17	13-3710	Washer — Special	1
18	322-2	Screw — Cap Hex Hd.	2
19	10-6130	Tank Base	1
20	5-0946	Key	1
21	3296-4	Nut — Lock	2
22	322-5	Screw — Cap Hex Hd.	1

Ref. No.	Part No.	Description	No. Used
23	3253-4	Washer — Lock	5
24	3-8516	Anchor — Cable	1
25	3218-2	Nut — Hex Jam	2
26	3242-9	Screw — Set Square Hd. Cup Point	2
27	51-2710	Drum — Steering	1
28	3217-6	Nut — Hex	2
29	3254-8	Washer — Lock Int. Tooth	2
30	3217-5	Nut — Hex	4
31	3-6558	Thrust Washer	1
32	49-5830	Caster Fork	1
33	302-11	Grease Fitting	1
34	5-3934	Bolt	1
35	217-96	Spacer	2
36	253-111	Seal	2
37	254-78	Cone	2
38	254-79	Cup	2
39	10-6830	Drive Stud	4
40	217-95	Hub Assembly	1
41	217-60	Rim	1
42	28-3680	Tire	1
43	232-24	Valve Stem w/Cap	1

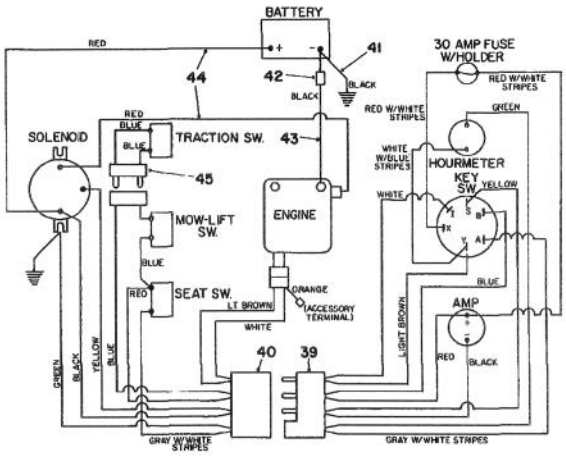


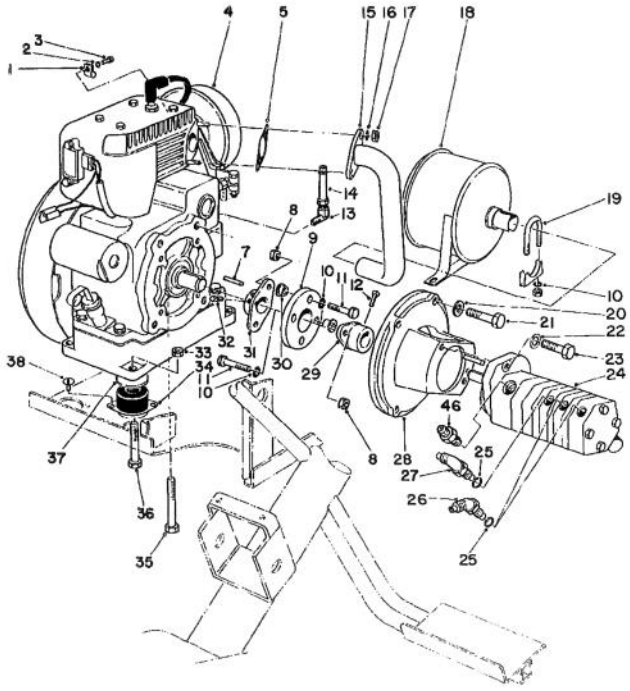
GAS TANK, BATTERY AND CASTER WHEEL ASSEMBLY (Continued)

Ref. No.	Part No.	Description	No. Used
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	2
50	3253-17	Washer — Lock	1
51	32153-4	Nut — Lock	2
52	3256-22	Washer	2
53	6-1600	Solenoid	1
54	3218-13	Nut — Hex Jam	2
55	10-8120	Battery Bolt	2
56	43-8870	Boot — Switch	1
57	218-461	Nut — Hex Jam	2
58	237-7	O-Ring	1

Ref. No.	Part No.	Description	No. Used
59	43-8620	Guide — Switch Pin	1
60	43-8860	Plunger — Switch	1
61	43-8600	Spring — Compression	1
62	43-8610	Guide — Spring & Ball Seat	1
63	237-30	O-Ring	1
64	38-0430	Switch — Neutral	1
65	28-1400	Battery	1
66	3-8168	Decal — Negative Ground	1
67	239-18	Vent Cap	6
68	321-3	Screw — Cap Hex Hd.	2
69	7-0534	Battery Clamp	1
70	51-0140	Cover — Battery	1
*	44-1070	Switch Assembly (Incl. Ref. #56-64)	1

*Not Illustrated



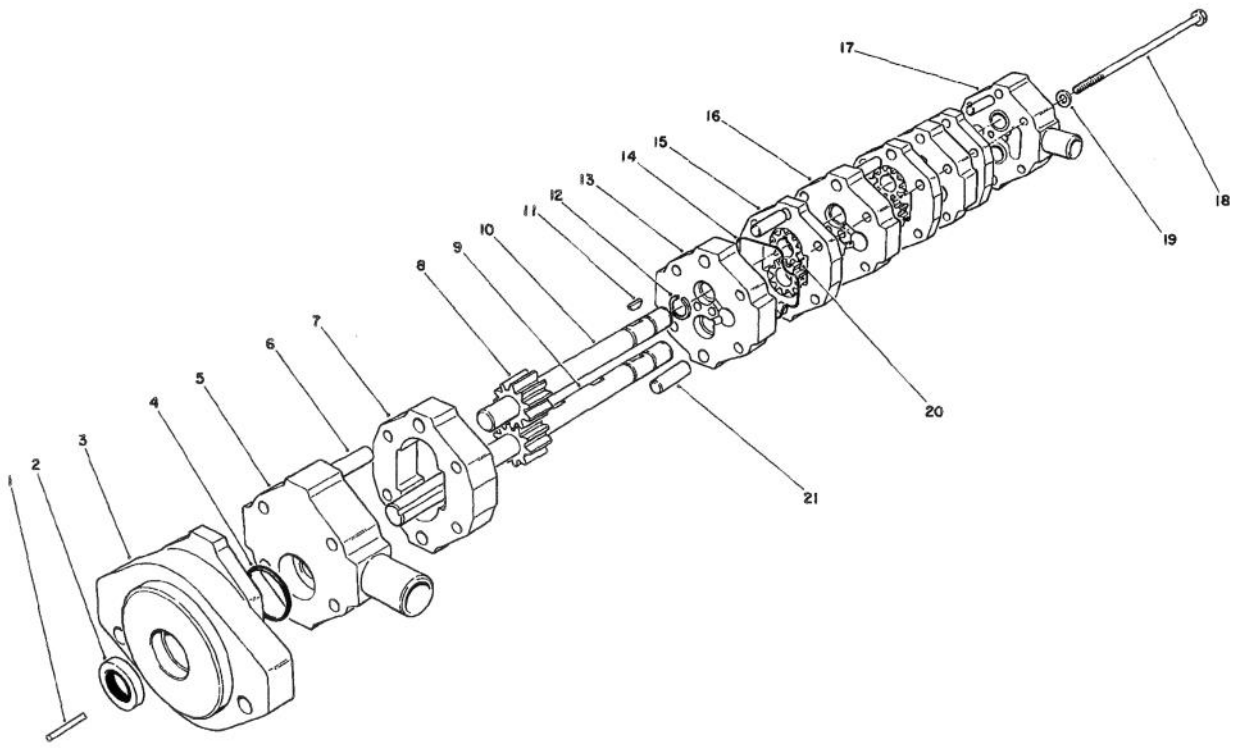


ENGINE AND WIRING DIAGRAM

Ref. No.	Part No.	Description	No. Used
1	2412-32	Clamp — Bowden Wire	2
2	3255-7	Washer — Lock External Tooth	2
3	321-3	Screw — Cap Hex Hd.	2
4	11-8569	Engine (49-5520)	1
5	2210-118	Gasket	1
7	10-7070	Key — Engine	1
8	3296-29	Nut — Lock	4
9	44-2230	Coupling — Rubber	1
10	3256-23	Washer — Plain	6
11	322-6	Capscrew	4
12	3241-6	Screw — Set Sq. Hd.	2
13	353-775	Elbow 90°	1
14	353-711	Straight Barb Hose Stem	1
15	10-7010	Exhaust Pipe	1
16	3253-4	Washer — Lock	2
17	3217-6	Nut — Hex	2
18	36-7200	Muffler Assembly	1
19	2412-37	Muffler Clamp Assembly	1
20	3253-6	Washer — Lock	4
21	324-6	Screw — Cap Hex Hd.	4
22	3253-29	Washer — Lock	2
23	323-8	Screw — Cap Hex Hd.	2
24	54-7510	Pump	1
25	237-42	O-Ring	3

Ref. No.	Part No.	Description	No. Used
26	353-212	Fitting	2
27	353-374	Fitting	1
28	27-1930	Pump Mount	1
29	27-1970	Coupling — Pump	1
30	27-6600	Spacer Rubber	4
31	27-1960	Coupling — Engine	1
32	3241-2	Screw — Set Sq. Hd.	2
33	32153-2	Nut — Lock	4
34	27-2150	Engine Mounting Pad	4
35	323-15	Screw — Cap Hex Hd.	1
36	323-20	Screw — Cap Hex Hd.	3
37	28-1140	Washer	4
38	32144-1	Screw — Thread Forming Hex Hd.	8
39	49-6060	Wire Harness — Column	1
40	49-6050	Wire Harness — Frame	1
41	28-2120	Wire — Battery to Ground	1
42	3-8168	Decal — Negative Ground	1
43	27-3070	Wire — Battery to Engine	1
44	10-7130	Wire — Solenoid to Starter & Battery to Solenoid	2
45	52-3270	Wire Harness — Traction Lead	1
46	353-433	Fitting - Hyd. Straight	1
*	36-7310	Spark Arrestor Muffler	1

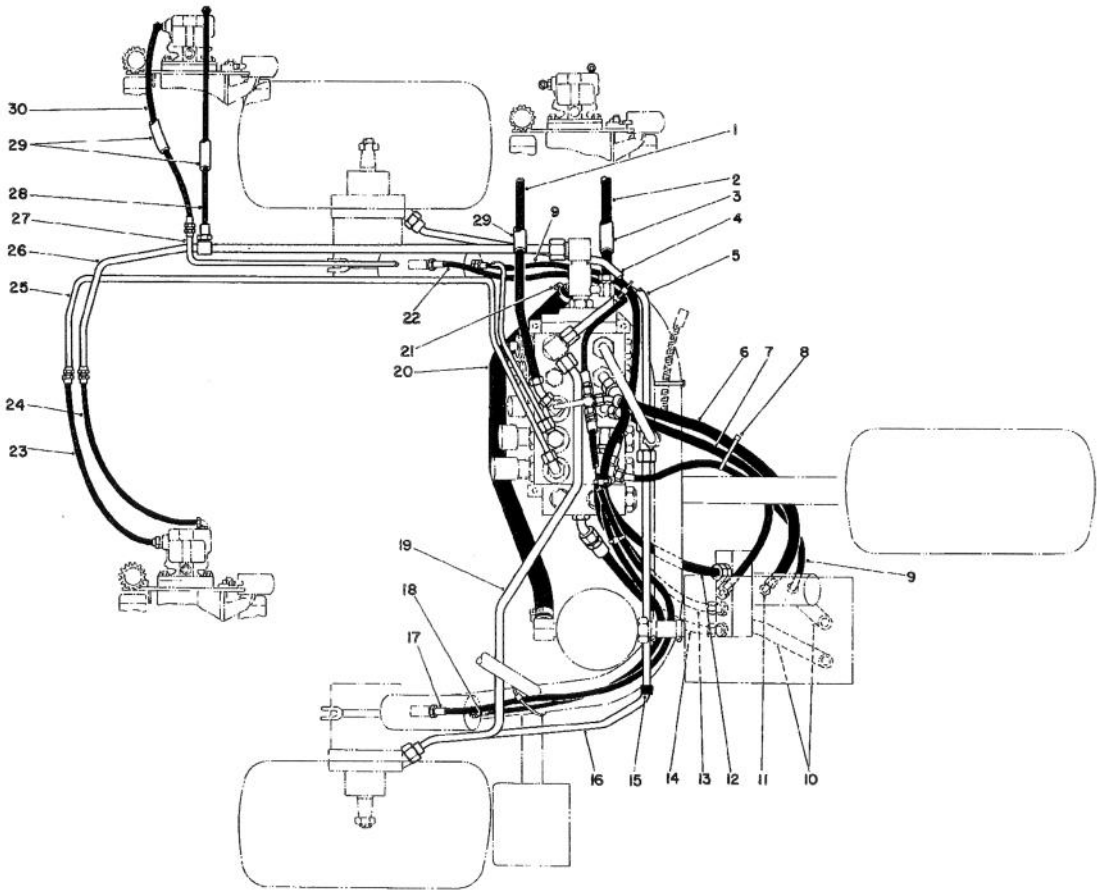
*Not Illustrated



TRACTION PUMP NO. 54-7510

Ref. No.	Part No.	Description	No. Used
1	5-0946	Key — Square	1
2	353-931	Seal — Oil	1
3	353-916	Flange Assembly	1
4	353-917	Seal — O-Ring	1
5	353-918	Body Assembly	1
6	353-920	Dowel	2
7	353-919	Gear Plate — Pump	1
8	353-930	Gear — 59B	2
9	353-929	Shaft — Idler	1
10	353-915	Shaft — Drive	1
11	353-884	Key — Woodruff	5

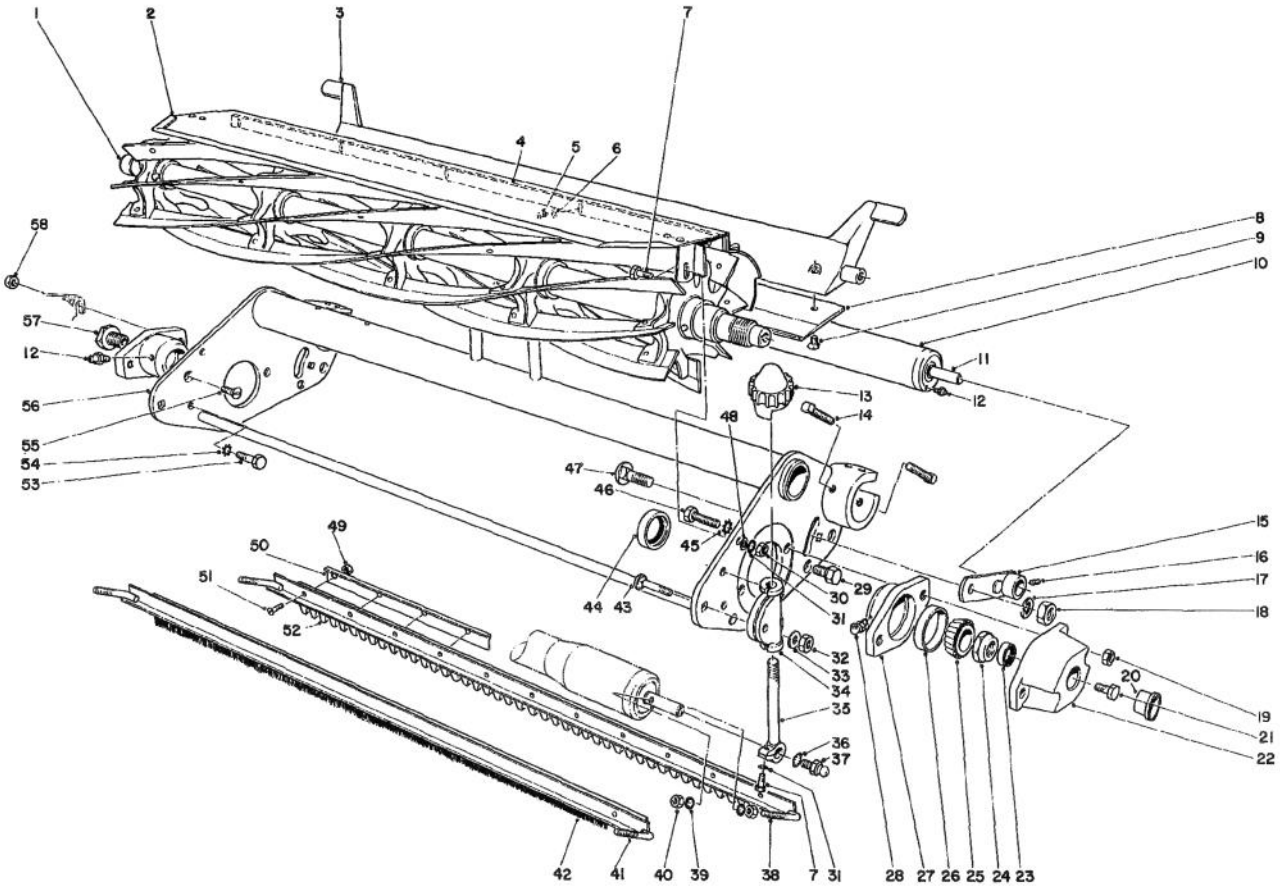
Ref. No.	Part No.	Description	No. Used
12	353-886	Ring — Retaining	4
13	353-921	Plate Assembly	1
14	353-922	Seal Ring — Pump	8
15	353-924	Gear Plate — 30B	3
16	353-923	Plate Assembly	2
17	353-927	Cover Assembly	1
18	353-928	Screw — Cap Hex Hd.	4
19	353-600	Washer — Flat	4
20	353-926	Gear — 30B	6
21	353-925	Dowel	6



HYDRAULIC SYSTEMS DIAGRAM

Ref. No.	Part No.	Description	No. Used
1	38-6710	Hose — Pressure Rear	1
2	27-2060	Hose — Return Rear	1
3	56-7981	Splash Shield	1
4	51-0080	Upper R.H. Traction Line	1
5	51-0070	Traction Line R.H. Lower	1
6	54-9700	Hose Cylinder Drop Rear	1
7	47-4840	Hose — Pump #3	1
8	3290-379	Cable Tie	5
9	47-4820	Hose Cylinder Lift R.H. & Rear	2
10	27-3040	Hose — Pump Inlet	2
11	353-431	Elbow 45° Adjustable	1
12	61-8670	Hose — Pump #4	1
13	47-4850	Hose — Pump #2	1
14	48-1760	Hose — Pump #1	1
15	38-3400	Guard — Rubber	1
16	10-7500	Lower Traction Line L.H.	1

Ref. No.	Part No.	Description	No. Used
17	27-2090	Hose Cylinder Drop L.H.	1
18	47-4830	Hose Cylinder Lift L.H.	1
19	51-0060	Upper L.H. Traction Line	1
20	51-0040	Return Line Manifold to Filter	1
21	2412-3	Clamp — Hose	2
22	27-2100	Hose Cylinder Drop R.H.	1
23	38-6720	Hose — Pressure L.H.	1
24	10-7670	Hose — Return L.H.	1
25	51-0090	L.H. Pressure Line Cutting Unit	1
26	51-0100	Return Line	1
27	51-0110	R.H. Pressure Line Cutting Unit	1
28	10-7660	Hose — Return R.H.	1
29	56-7980	Splash Shield	3
30	38-6730	Hose — Pressure R.H.	1

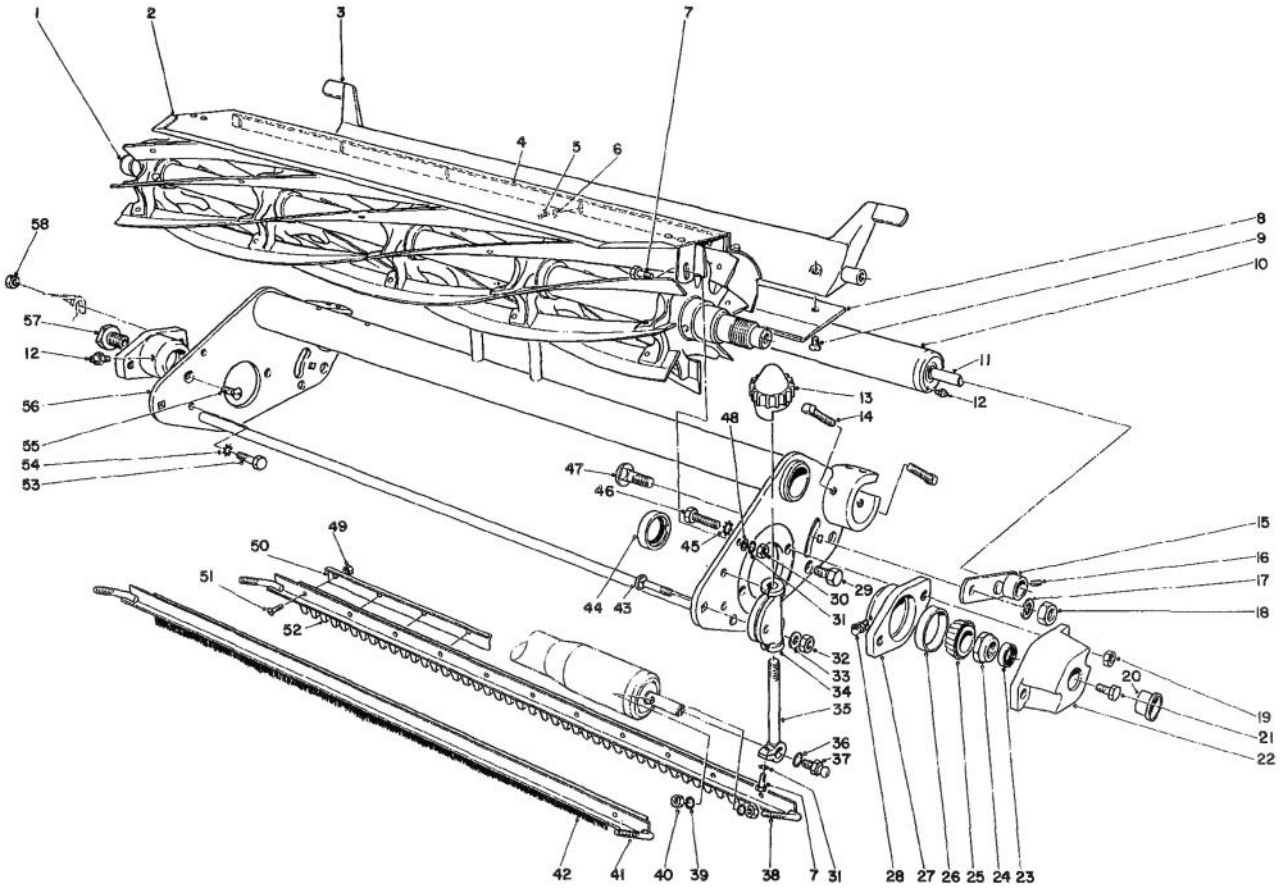


CUTTING UNIT MODEL NO. 04407

Ref. No.	Part No.	Description	No. Used
1	5-3189	Reel Assembly	1
2	36-7190	Grass Shield	1
3	10-4930	Bed Bar	1
4	36-7260	Cut-Off Bar	1
5	3290-237	Screw — Machine Round Hd.	5
6	3256-14	Washer	5
7	321-4	Capscrew	4
8	19-8880	Bed Knife 1/8"	1
*	17-7040	Bed Knife 3/16"	1
*	51-2610	Bed Knife — Tournament	1
9	57-4910	Screw Special	7
10	21-8450	Rear Roller Assembly (Incl. Ref. #11 & 12)	1
11	21-8430	Rear Bearing	2
12	302-5	Grease Fitting	3
13	10-5040	Knob — Height Adjustment	2
14	3243-13	Set Screw Sq. Hd. Oval Point	4
15	27-2650	Height-of-Cut Adjustment	2
16	3290-125	Setscrew	2
17	3253-7	Lockwasher	2
18	3217-9	Locknut	2
19	3296-39	Locknut	2

Ref. No.	Part No.	Description	No. Used
20	12-0460	Caplug	1
21	323-2	Machine Screw Hex Hd.	1
22	10-5080	End Cap	1
23	253-61	Seal	1
24	3296-60	Stop Nut	1
25	254-94	Bearing Cone	2
26	254-72	Bearing Cup	2
27	10-5120	Bearing Housing	2
28	302-40	Grease Fitting	1
29	217-74	Wheel Bolt	2
30	3217-5	Hex Nut	2
31	3253-3	Lockwasher	4
32	3296-29	Locknut	2
33	3256-23	Flat Washer	2
34	10-5060	Bracket Height of Cut	2
35	10-5010	Screw Roller Adjustment	2
36	3254-6	Shakeproof Washer	2
37	2411-7	Ball Stud	2
38	11-0070	Scraper Comb Assembly (Incl. Ref. #49-52)	1
39	3254-8	Shakeproof Washer	4
40	3219-1	Hex Nut	4

*Not Illustrated



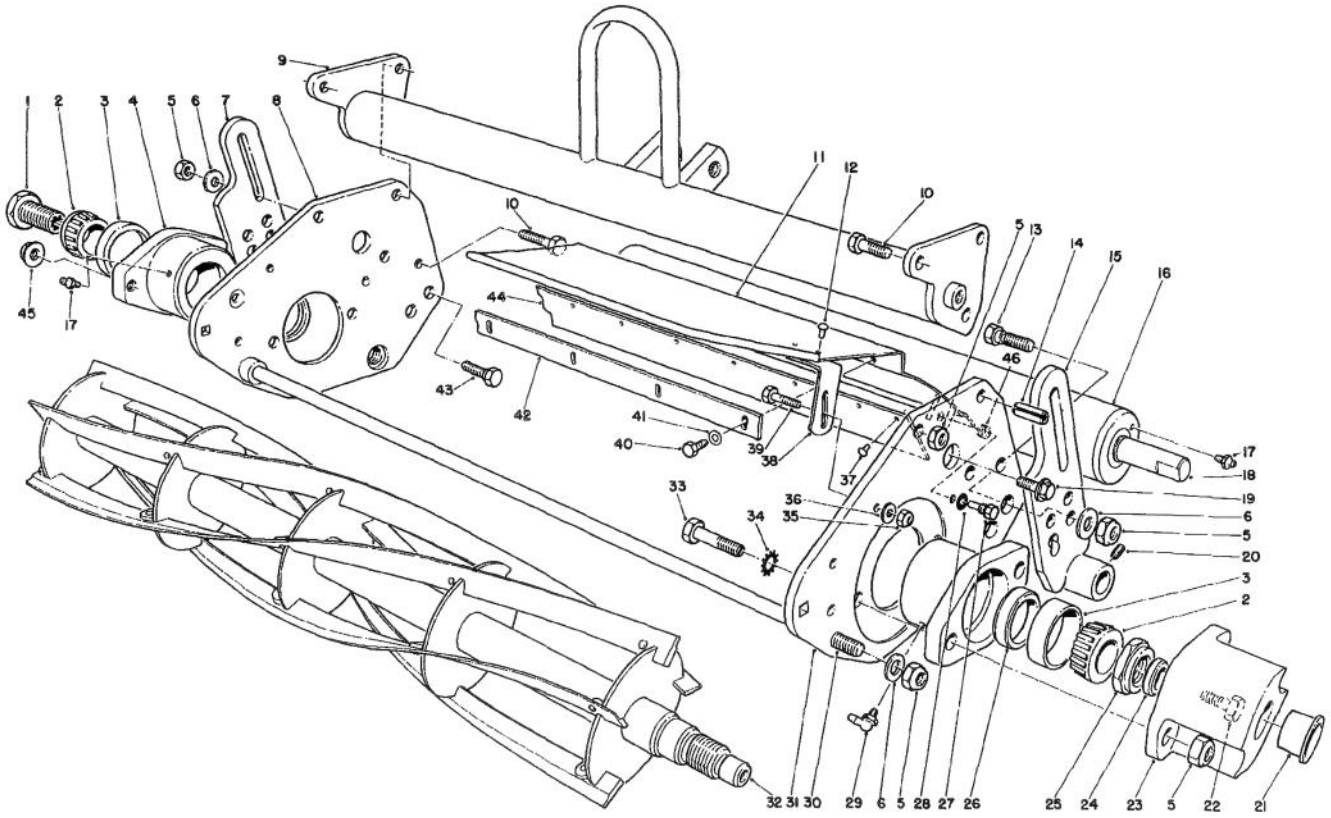
CUTTING UNIT MODEL NO. 04407 (Continued)

Ref. No.	Part No.	Description	No. Used
41	33-1000	Scraper Brush Assembly (Incl. Ref. #42) (Optional)	1
42	33-0630	Brush	1
43	3-7253	Carriage Bolt	2
44	253-96	Oil Seal	2
45	3255-9	Shakeproof Washer	4
46	57-3210	Machine Screw Special	4
47	3233-26	Carriage Bolt	2
48	3256-1	Washer	2
49	3296-9	Locknut	11
50	8-2520	Support Comb	1
51	3249-3	Round Head Screw	11

Ref. No.	Part No.	Description	No. Used
52	8-2530	Comb — Urethane	1
53	322-5	Capscrew	2
54	3255-8	External Shakeproof	2
55	32108-20	Screw Flat Head	2
56	36-7230	Frame Reel	1
57	10-5100	Nut Spline	1
58	32128-36	Locknut	2
*	1-8789	Bar Adj. Gauge (Includes †)	1
†	32122-22	Screw Truss Head	1
†	3219-14	Nut	1
*‡		Bearing Replacement Tool Kit	1
*‡		Tool — Bed Knife Screw	1

*Not Illustrated

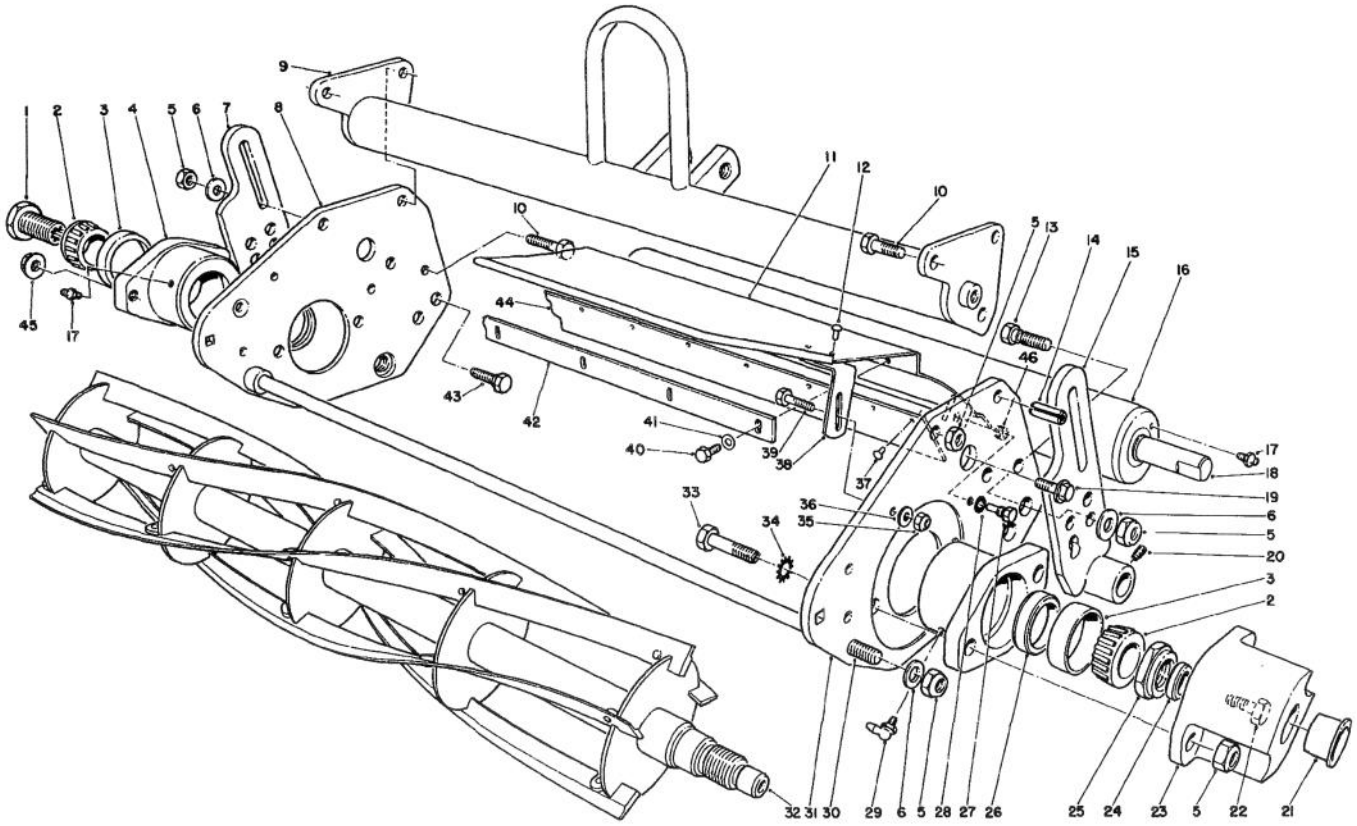
‡Special Tool (Ref. Page 51)



CUTTING UNIT (5 BLADE) MODEL NO. 04445

Ref. No.	Part No.	Description	No. Used
1	10-5100	Nut — Spline	1
2	254-94	Bearing Cone	2
3	254-72	Bearing Cup	2
4	10-5120	Housing — Bearing	2
5	3296-39	Nut — Lock	6
6	3256-24	Washer — Plain	4
7	52-3060	Height of Cut Adjustment R.H.	1
8		Side Plate R.H.	1
9		Cross Tube	1
10	323-7	Capscrew Hex Hd.	2
11	57-5200	Grass Shield Assembly (Incl. Ref. #12, 37, 38 & 44)	1
12	3295-28	Rivet	4
13	52-3100	Bolt — Eccentric Height of Cut L.H.	1
14		Pin — Roll	2
15	52-3090	Height of Cut Adjustment L.H.	1
16	52-3120	Rear Roller Assembly (Incl. Ref. #17 & 18)	1
17	302-5	Grease Fitting	3
18	21-8430	Bearing — Rear Roller	2

Ref. No.	Part No.	Description	No. Used
19		Screw — Hex Hd. Locking Flange	2
20	3290-125	Screw — Set Hex Socket Cup Point	2
21	12-0460	Caplug	1
22	323-2	Screw — Machine Hex Hd.	1
23	10-5080	Cap — End	1
24	253-61	Seal	1
25	3296-60	Nut — Lock	1
26	253-96	Seal	2
27	57-9910	Screw — Pivot	2
28	3254-6	Washer — Lock	2
29	302-40	Grease Fitting 90°	1
30		Support Rod	1
31		Side Plate L.H.	1
32	12-0729	Reel Assembly — 5 Blade	1
33	57-3210	Machine Screw — Special	4
34	3255-9	Washer — Lock	4
35	3296-42	Nut — Lock	2
36	3256-1	Washer	2

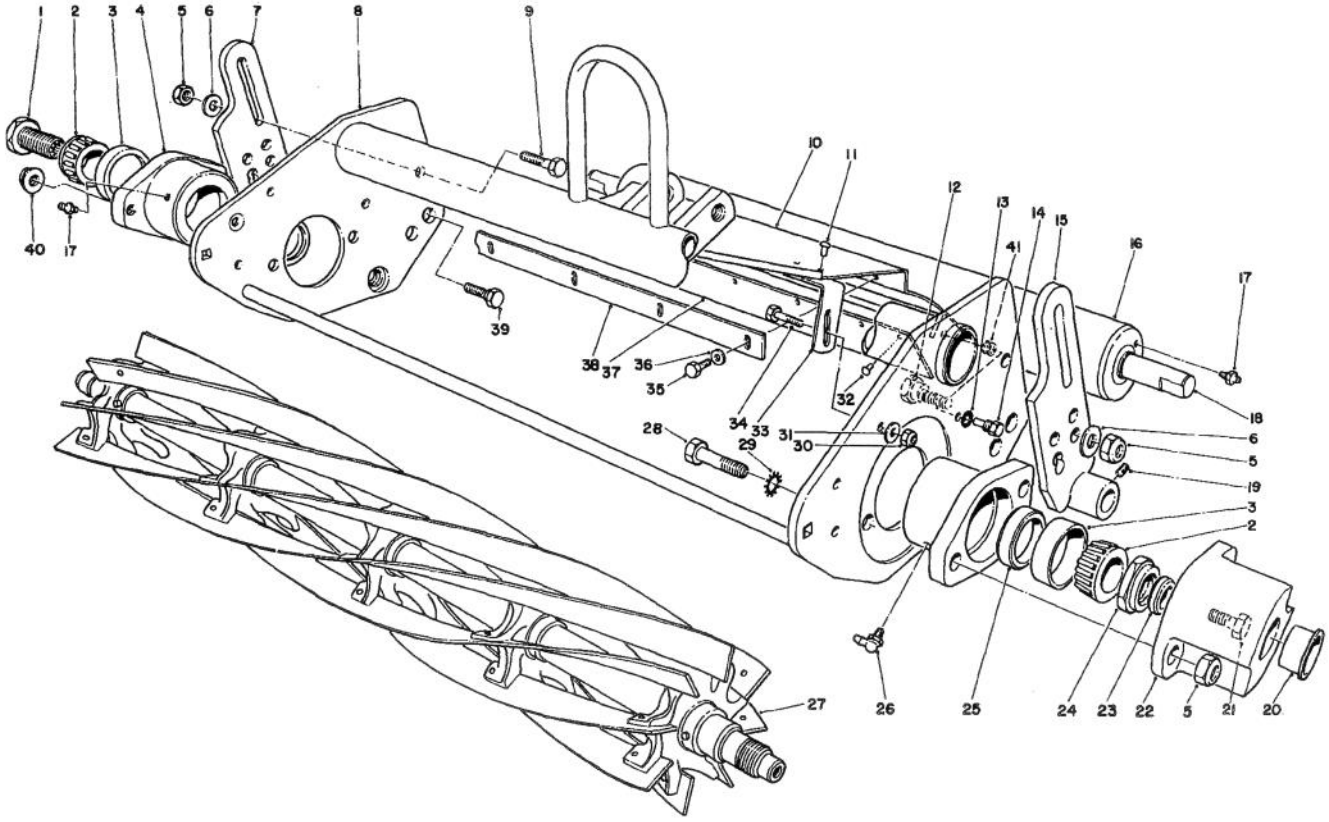


CUTTING UNIT (5 BLADE) MODEL NO. 04445 (Continued)

Ref. No.	Part No.	Description	No. Used
37	3295-46	Rivet	13
38	52-3040	Bracket L.H.	1
*	52-3050	Bracket R.H.	1
39	321-5	Capscrew Hex Hd.	2
40	3290-237	Screw — Machine Hex Hd.	5
41	3256-14	Washer	5
42	36-7260	Cut-Off Bar	1
43	52-3110	Bolt — Shoulder Height of Cut R.H.	1
44	57-5210	Flap — Shield	1

Ref. No.	Part No.	Description	No. Used
45	32128-36	Nut — Lock	2
46	237-84	Grommet	2
*	57-5010	Frame Assembly (Incl. Ref. #5, 6, 8-10, 14, 19 & 30-31)	1
*	1-8789	Bar Adj. Gauge (Includes †)	1
†	32122-22	Screw Truss Hd.	1
†	3219-14	Nut	1
*‡		Bearing Replacement Tool Kit	1
*‡		Backlapping Brush Assembly	1

*Not Illustrated
‡Special Tool (Ref. Page 51 & 52)

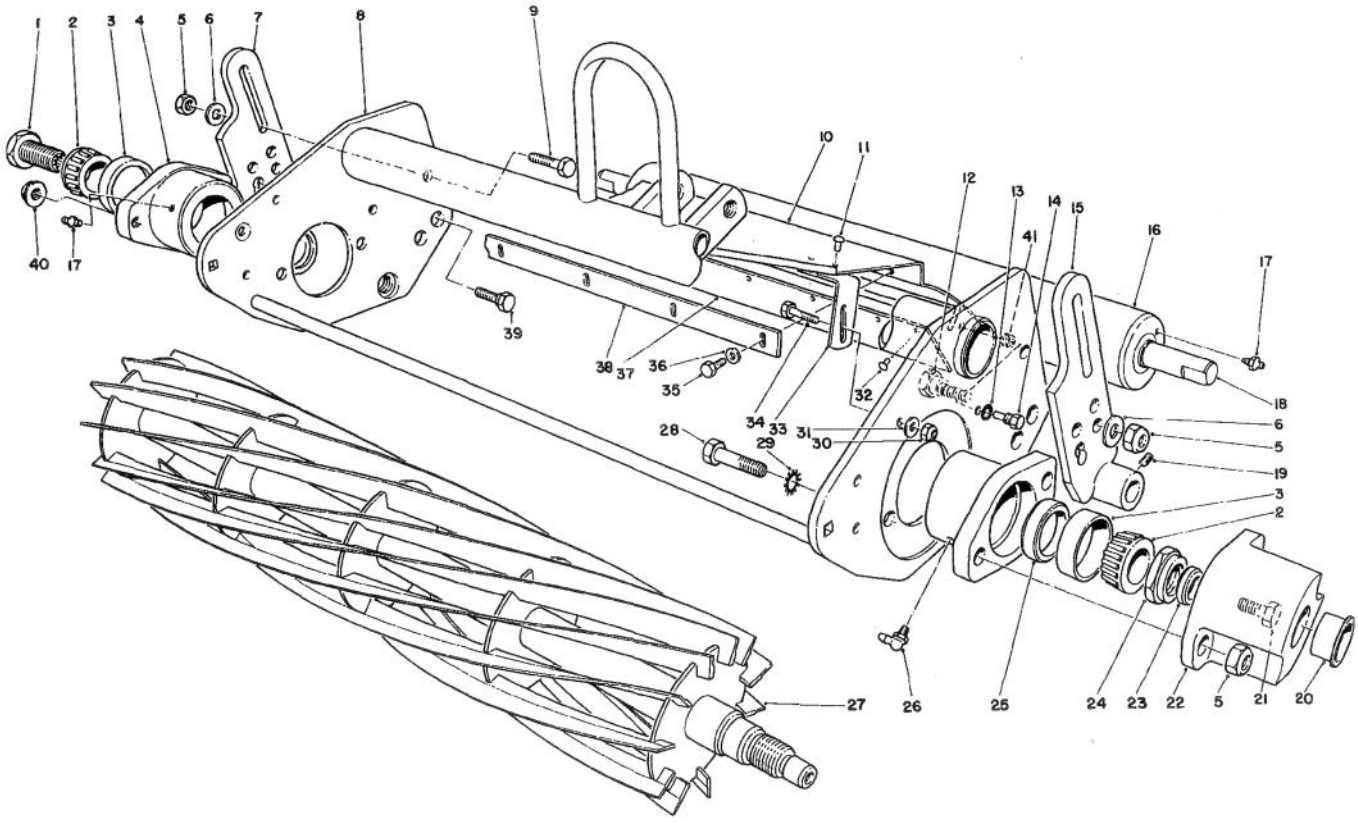


CUTTING UNIT (8 BLADE) MODEL NO. 04458

Ref. No.	Part No.	Description	No. Used
1	10-5100	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	4
7	52-3060	Height of Cut Adjustment R.H.	1
8	57-5100	Frame — Reel	1
9	323-7	Hex Hd. Capscrew	2
10	57-5200	Grass Shield Assembly (Incl. Ref. #11, 32, 33 & 37)	1
11	3295-28	Rivet	4
12	52-3100	Bolt — Eccentric Height of Cut L.H.	1
13	3254-6	Washer — Lock	2
14	57-9910	Screw — Pivot	2
15	52-3090	Height of Cut Adjustment L.H.	1
16	52-3120	Rear Roller Assembly (Incl. Ref. #17 & 18)	1
17	302-5	Grease Fitting	3
18	21-8430	Bearing — Rear	2
19	3290-125	Hex Socket Set Screw	2
20	12-0460	Caplug	1
21	323-2	Screw — Machine Hex Hd.	1
22	10-5080	Cap — End	1
23	253-61	Seal	1

Ref. No.	Part No.	Description	No. Used
24	3296-60	Nut — Lock	1
25	253-96	Seal	2
26	302-40	90° Grease Fitting	1
27	5-3189	Reel Assembly	1
28	57-3210	Screw — Machine Special	4
29	3255-9	Washer — Lock	4
30	3296-42	Nut — Lock	2
31	3256-1	Washer	2
32	3295-46	Rivet	13
33	52-3040	Bracket — L.H.	1
*	52-3050	Bracket — R.H.	1
34	321-4	Capscrew — Hex Hd.	4
35	3290-237	Screw — Machine Hex Hd.	5
36	3256-14	Washer	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	Locknut	2
41	237-84	Grommet	2
*	1-8789	Bar Adj. Gauge (Includes †)	1
†	32122-2	Screw Truss Hd.	1
†	3219-14	Nut	1
*†		Bearing Replacement Tool Kit	1
*†		Backlapping Brush Assembly	1

*Not Illustrated
‡ Special Tool (Ref. Page 51 & 52)

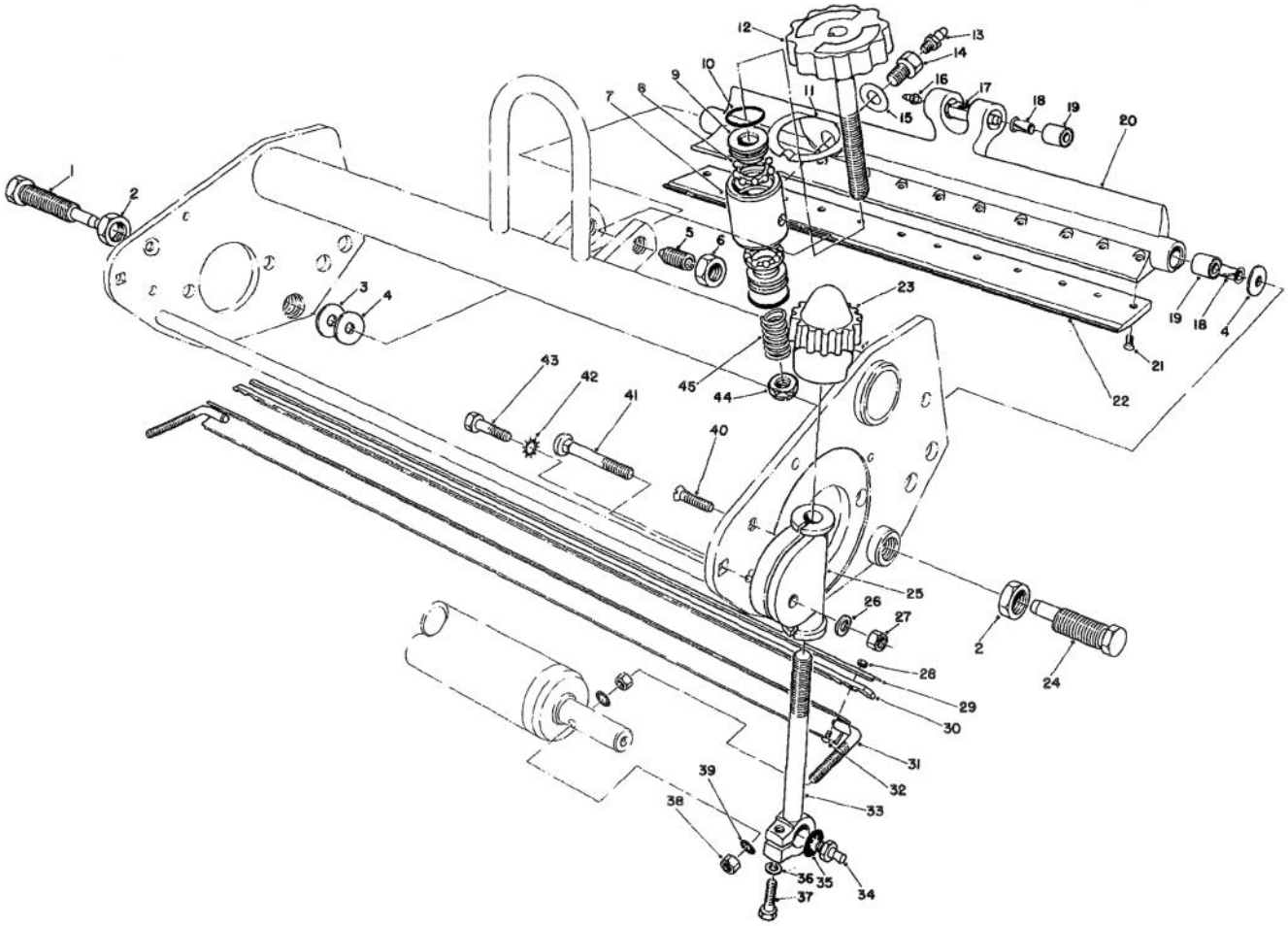


CUTTING UNIT (11 BLADE) MODEL NO. 04450

Ref. No.	Part No.	Description	No. Used
1	10-5100	Nut — Spline	1
2	254-94	Bearing — Cone	2
3	254-72	Bearing — Cup	2
4	10-5120	Bearing — Housing	2
5	3296-39	Nut — Lock	6
6	3256-24	Washer	4
7	52-3060	Height of Cut Adjustment R.H.	1
8	57-5100	Frame — Reel	1
9	323-7	Capscrew Hex. Hd.	2
10	57-5200	Grass Shield Assembly (Incl. Ref. #11, 32, 33 & 37)	1
11	3295-28	Rivet	4
12	52-3100	Bolt — Eccentric Height of Cut L.H.	1
13	3254-6	Washer — Lock	2
14	57-9910	Screw — Pivot	2
15	52-3090	Height of Cut Adjustment L.H.	1
16	52-3120	Rear Roller Assembly (Incl. Ref. #17 & 18)	1
17	302-5	Grease Fitting	3
18	21-8430	Bearing — Rear Roller	2
19	3290-125	Set Screw	2
20	12-0460	Caplug	1
21	323-2	Screw — Machine Hex. Hd.	1
22	10-5080	Cap — End	1
23	253-61	Seal	1
24	3296-60	Nut — Lock	1

Ref. No.	Part No.	Description	No. Used
25	253-96	Seal	2
26	302-40	Grease Fitting 90°	1
27	12-2789	Reel	1
28	57-3210	Screw — Machine Special	4
29	3255-9	Washer — Lock	4
30	3296-42	Nut — Lock	2
31	3256-1	Washer	2
32	3295-46	Rivet	13
33		Bracket — L.H.	1
*		Bracket — R.H.	1
34	321-4	Capscrew — Hex Hd.	4
35	3290-237	Screw — Machine Hex Hd.	5
36	3256-14	Washer	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	Locknut	2
41	237-84	Grommet	2
*	1-8789	Bar Adj. Gauge (Includes †)	
†	32122-22	Screw Truss Hd.	1
†	3219-14	Nut	1
*†		Bearing Replacement Tool Kit	1
*†		Backlapping Brush Assembly	1

*Not Illustrated
† Special Tool (Ref. Page 51 & 52)

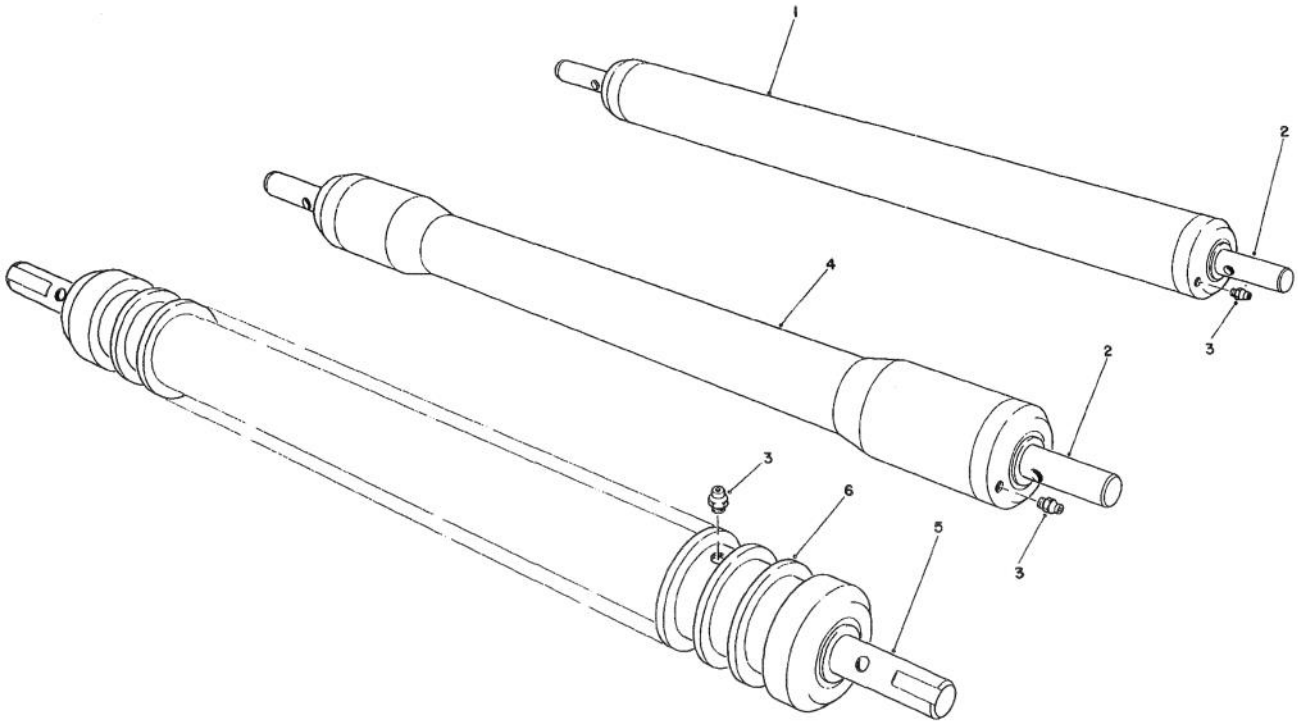


BEDBAR & SCRAPER COMB ASSEMBLY (MODEL NOS. 04445, 04458 & 04450)

Ref. No.	Part No.	Description	No. Used
1	52-2930	Bolt — Adjustment Shoulder	1
2	3220-6	Nut — Hex Jam	2
3	52-2860	Washer	1
4	52-2900	Washer — Poly	2
5	57-5190	Screw — Set Hex Socket	2
6	3218-18	Nut — Hex Jam	2
7	57-5250	Pivot — Single Point Adjust	1
8	57-5280	Bearing — Cup & Cone Retainer	2
9	57-5290	Race — Inner Bearing	2
10	237-77	Seal — "O" Ring	2
11	52-3000	Arm — Spring	1
12	57-4870	Handle Assembly	1
13	302-5	Grease Fitting	1
14	52-2990	Capscrew — Spring Retainer	1
15	3256-25	Washer	1
16	302-18	Grease Fitting	1
17	57-5260	Pivot — Bed Bar	1
18	52-2890	Bushing — Flanged	4
19	52-2870	Rubber Bushing Assembly	4
20	57-4940	Bedbar	1
21	57-4910	Screw — Special	13
22	57-4960	Bed Knife 1/8"	1
*	57-4970	Bed Knife 3/16"	1
*	57-4980	Bed Knife — Tournament	1

Ref. No.	Part No.	Description	No. Used
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	2
27	3296-29	Nut — Lock	2
28	3296-9	Locknut	11
29	8-2520	Support — Comb	1
30	8-2530	Comb — Urethane	1
31	11-0070	Scraper Comb Assembly (Incl. Ref. #28-30 & 32)	1
32	3249-3	Round Hd. Screw	11
33	10-5010	Screw — Roller Adjustment	2
34	2411-7	Ball Stud	2
35	3254-6	Washer — Lock	2
36	3253-3	Washer — Lock	2
37	321-4	Capscrew Hex Hd.	2
38	3219-1	Nut — Hex	4
39	3254-8	Washer — Lock	4
40	32108-20	Screw — Machine Flat Hd.	2
41	3-7253	Bolt — Carriage	2
42	3255-8	Washer — Lock	2
43	322-5	Capscrew Hex Hd.	2
44	3296-62	Nut — Hex Lock	1
45	57-5270	Spring — Compression	1
*†		Tool-Bed Knife Screw	1

*Not Illustrated
‡Special Tool (Ref. Page 51)

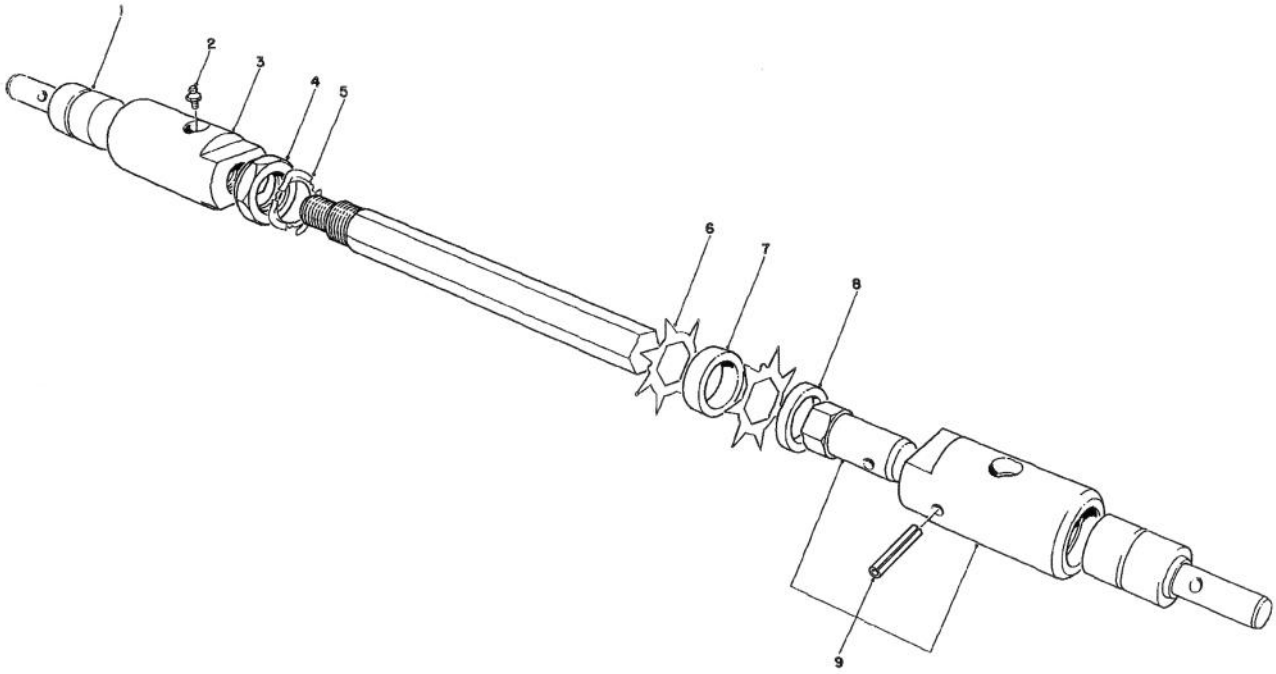


CUTTING UNIT ROLLER OPTIONS

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

Ref. No.	Part No.	Description	No. Used
5	52-3210	Bearing — Wiehle Roller	2
6	52-3200	Wiehle Roller Assembly (Incl. Ref. #3 & 5)	1
*	04412	Full Roller Carton of 3	1
*	04414	Swaged Roller Carton of 3	1
*	04423	Wiehle Roller Carton of 3	1

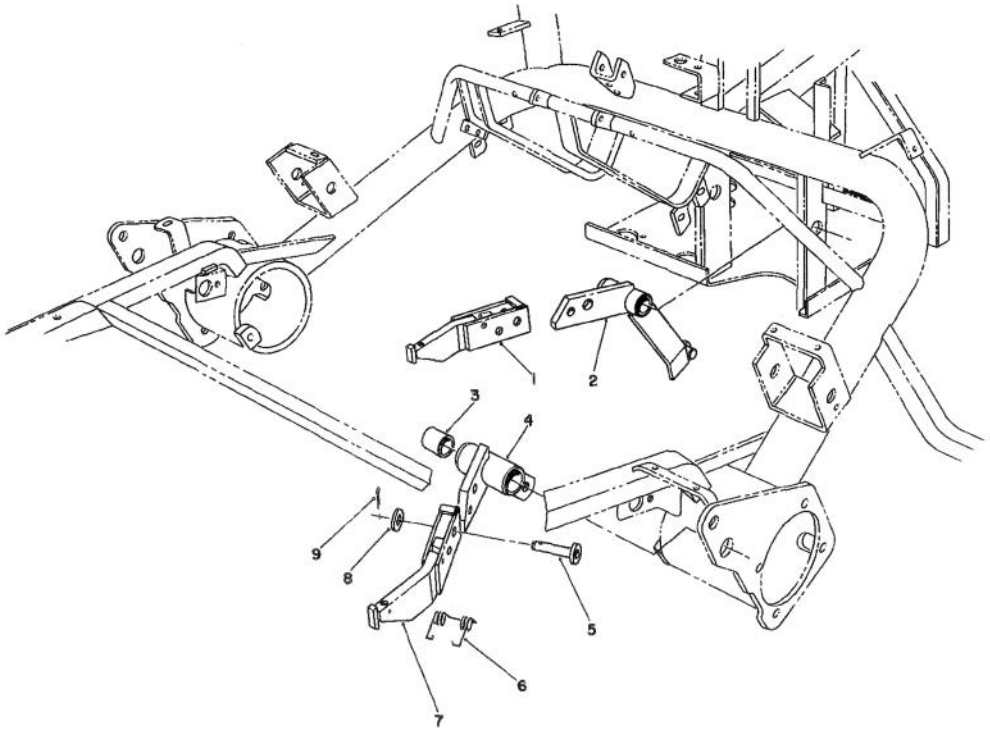
*Not Illustrated



SPIKER ROLLER MODEL NO. 04430 (Optional)

Ref. No.	Part No.	Description	No. Used
1	52-3180	Bearing — Front Roller	2
2	302-5	Fitting — Grease	2
3	57-0970	Hub — Bearing	1
4	3296-49	Nut — Lock	1
5	57-7790	Washer — Spring	1

Ref. No.	Part No.	Description	No. Used
6	57-0950	Blade — Spiker Roller	26
7	26-1580	Spacer 1/2	27
8	27-1040	Spacer 1/4	2
9	57-7780	Hex Shaft Assembly	1

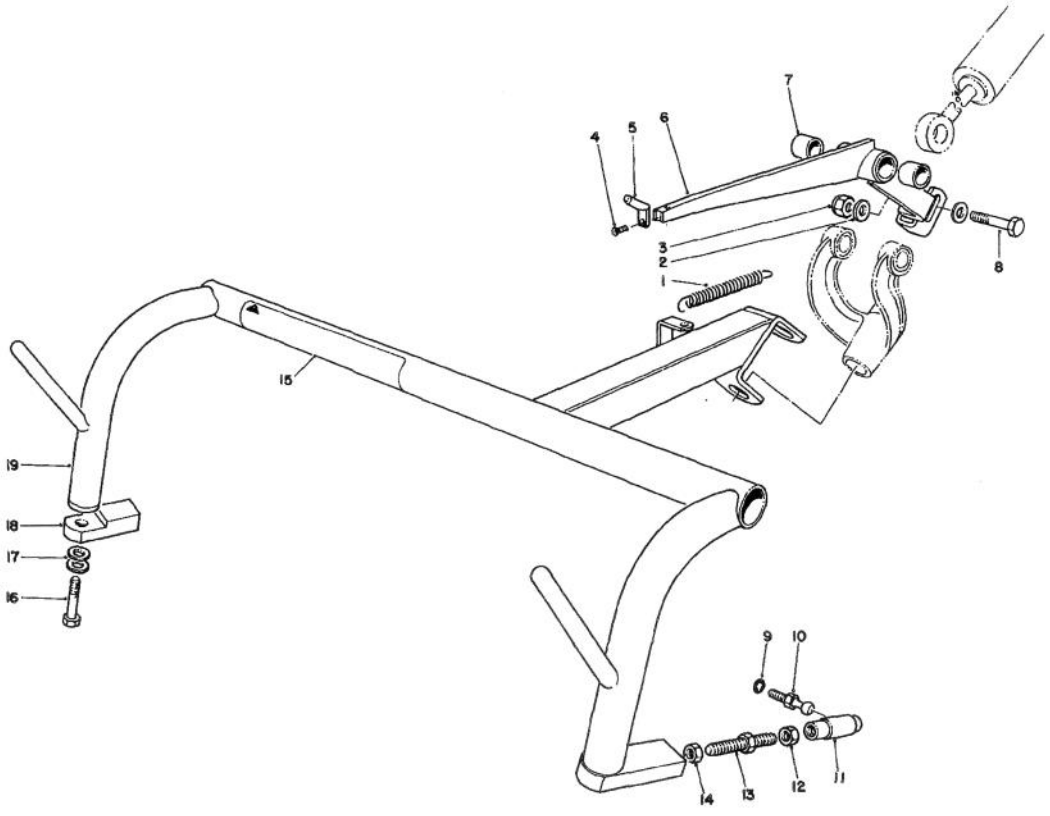


FAIRWAY LIFT ARM KIT NO. 57-7770 (Optional)

Ref. No.	Part No.	Description	No. Used
1	57-7710	Bar — Lift Arm Center & R.H.	2
2	57-7700	Arm — Lift Center	1
3	3-0348	Bushing	6
4	57-7680	Arm — Lift L.H.	1
*	57-7660	Arm — Lift R.H.	1

Ref. No.	Part No.	Description	No. Used
5	57-7630	Pin — Pivot	3
6	57-7650	Spring — Torsion	3
7	57-7750	Bar — Lift Arm L.H.	1
8	3256-26	Washer	3
9	3272-12	Cotter Pin	3

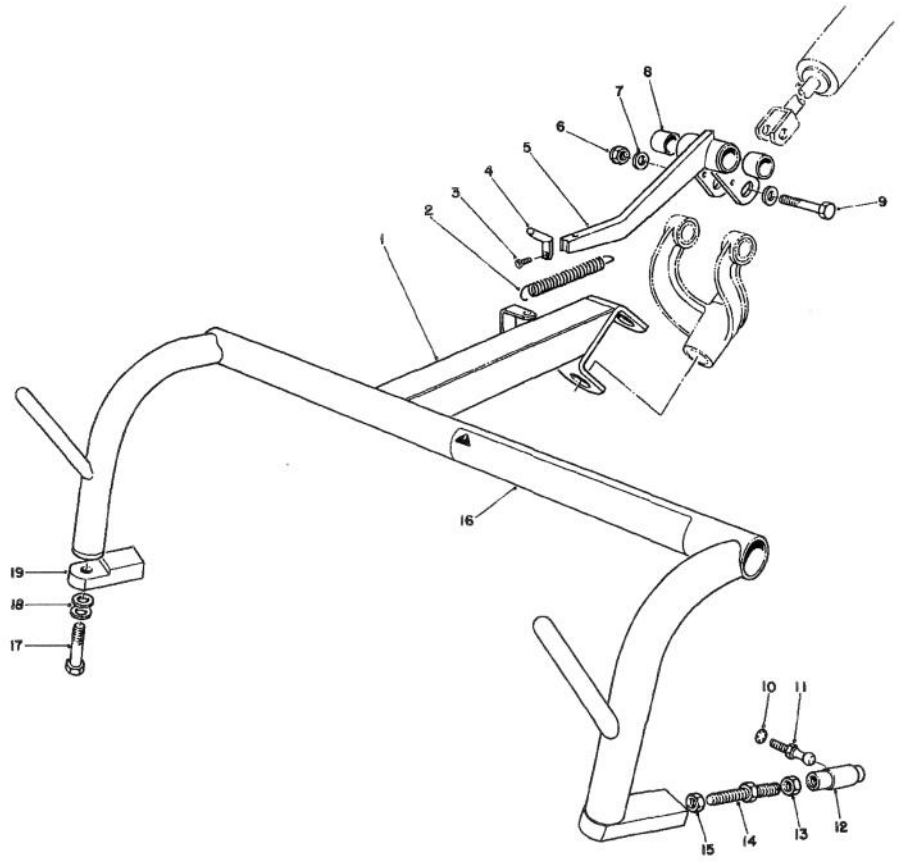
*Not Illustrated



DIRECT SUSPENSION PULL FRAME KIT MODEL NO. 04452 (Optional)

Ref. No.	Part No.	Description	No. Used
1	54-9490	Spring — Extension	1
2	3256-28	Washer	2
3	3296-15	Nut — Lock	1
4	3289-18	Screw — Hex. Socket Flat Hd.	1
5	54-9470	Lift Pin Stop	1
6	54-9400	Lift Arm Center (Incl. Ref. #7)	1
7	3-0348	Bushing	2
8	3216-1	Capscrew	1
9	3254-6	Washer — Lock Internal Tooth	2
10	54-7430	Ball Stud	2

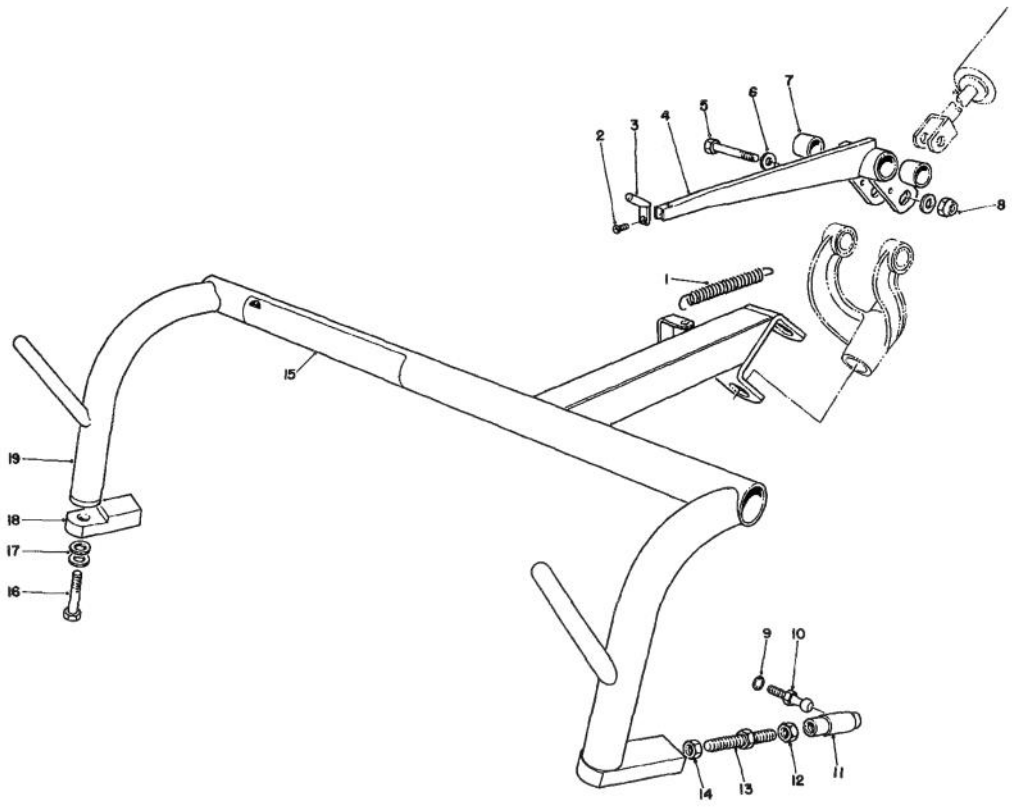
Ref. No.	Part No.	Description	No. Used
11	54-7460	Ball Joint	2
12	3220-5	Nut — Jam R.H.	2
13	54-9460	Stud — Take Up	2
14	3220-12	Nut — Jam L.H.	2
15	27-2890	Decal — Warning	1
16	3212-25	Capscrew	1
17	3256-25	Washer — Flat	2
18	54-9450	Bar — Swing, Pull Frame	1
19	54-7340	Pull Frame R.H. & Center	1



DIRECT SUSPENSION PULL FRAME KIT
MODEL NO. 04452 (Optional) (Continued)

Ref. No.	Part No.	Description	No. Used
1	54-7420	Pull Frame L.H.	1
2	54-9490	Spring — Extension	1
3	3289-18	Screw — Hex. Socket Flat Hd.	1
4	54-9470	Lift Pin Stop	1
5	54-7550	Lift Arm L.H. (Incl. Ref. #8)	1
6	3296-45	Nut — Lock	1
7	3256-26	Washer — Flat	2
8	3-0348	Bushing	2
9	325-11	Capscrew	1
10	3254-6	Washer — Lock Internal Tooth	2

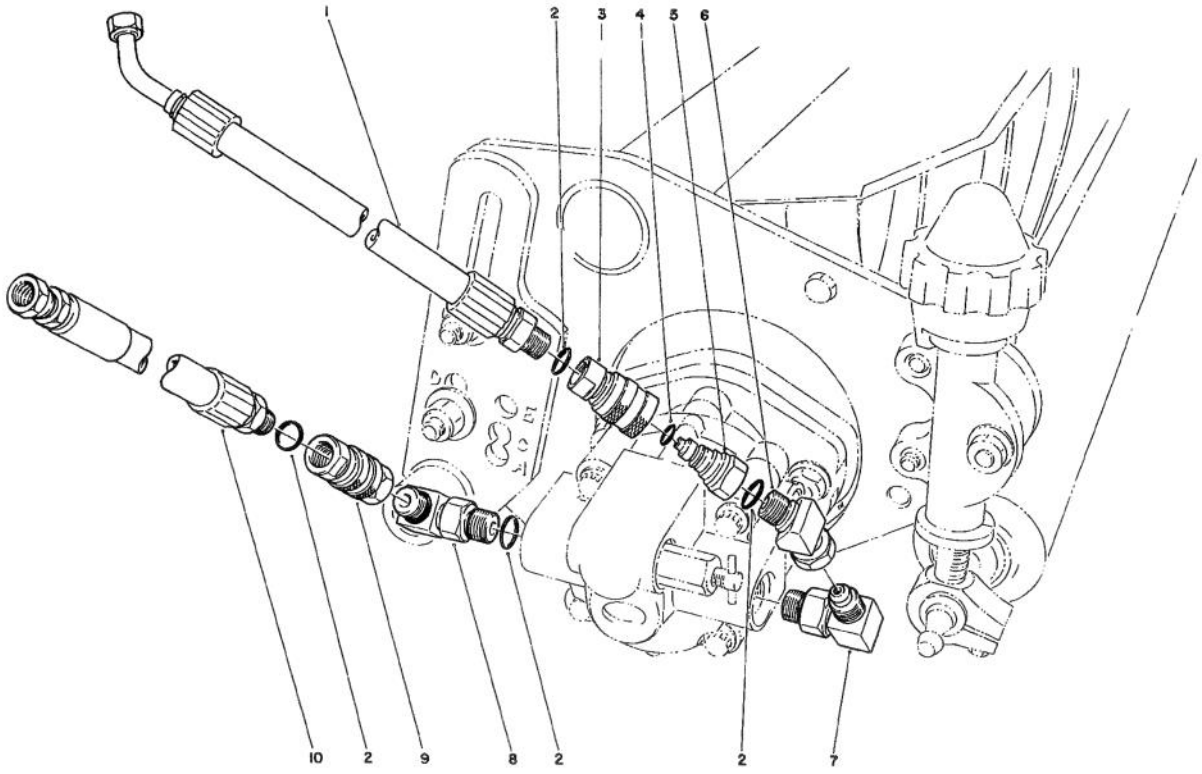
Ref. No.	Part No.	Description	No. Used
11	54-7430	Ball Stud	2
12	54-7460	Ball Joint	2
13	3220-5	Nut — Jam R.H.	2
14	54-9460	Stud — Take Up	2
15	3220-12	Nut — Jam L.H.	2
16	27-2890	Decal — Warning	1
17	3212-25	Capscrew	1
18	3256-25	Washer — Flat	2
19	54-9450	Bar — Swing, Pull Frame	1



DIRECT SUSPENSION PULL FRAME KIT
MODEL NO. 04452 (Optional) (Continued)

Ref. No.	Part No.	Description	No. Used
1	54-9490	Spring — Extension	1
2	3289-18	Screw — Hex. Socket Flat Hd.	1
3	54-9470	Lift Pin Stop	1
4	54-7530	Lift Arm R.H. (Incl. Ref. #7)	1
5	325-11	Capscrew	1
6	3256-26	Washer — Flat	2
7	3-0348	Bushing	2
8	3296-45	Nut — Lock	1
9	3254-6	Washer — Lock Internal Tooth	2
10	54-7430	Ball — Stud	2

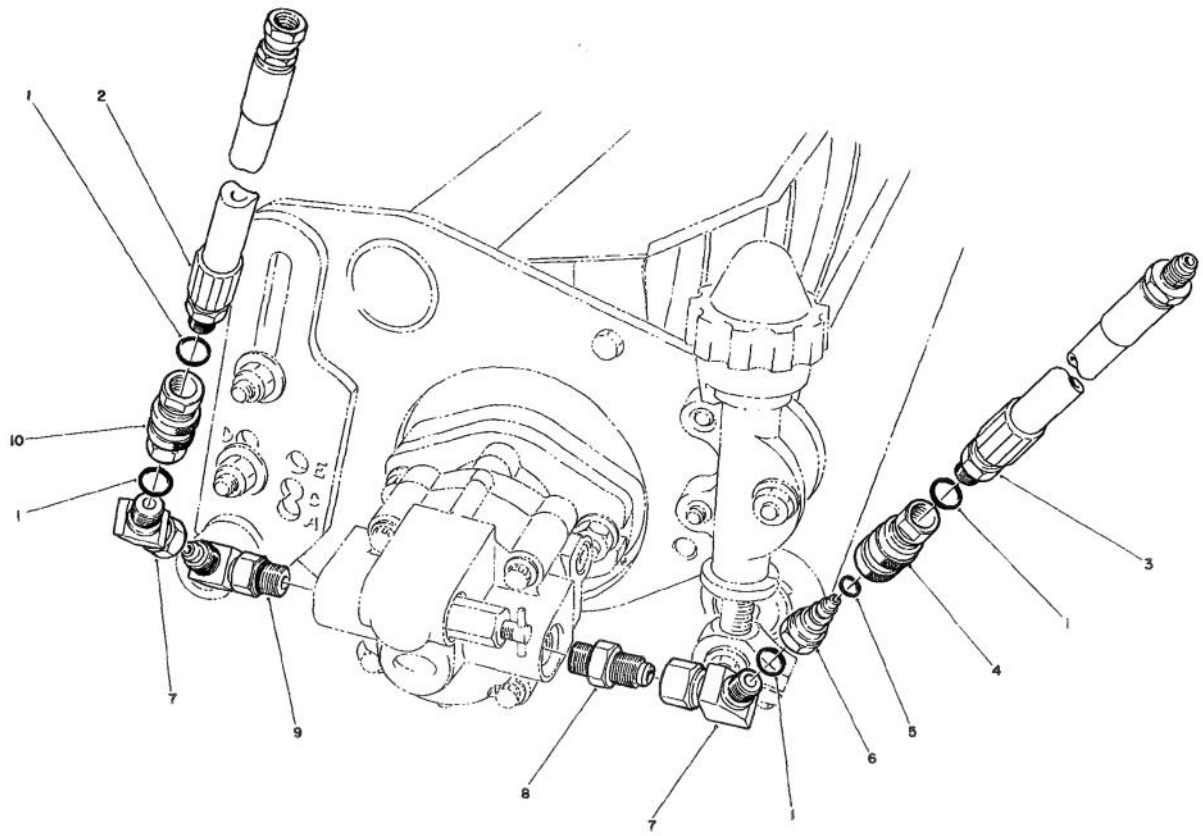
Ref. No.	Part No.	Description	No. Used
11	54-7460	Ball Joint	2
12	3220-5	Nut — Jam R.H.	2
13	54-9460	Stud — Take Up	2
14	3220-12	Nut — Jam L.H.	2
15	27-2890	Decal — Warning	1
16	3212-25	Capscrew	1
17	3256-25	Washer — Flat	2
18	54-9450	Bar — Swing	1
19	54-7340	Pull Frame R.H. & Center	1



BACKLAPPING KIT NO. 54-9500 (Optional)

Ref. No.	Part No.	Description	No. Used
1	54-9600	Hose Assembly — Pressure (Incl. Ref. #2)	1
2	237-42	Seal — O-Ring	6
3	353-934	Coupling	2
4	237-142	Seal — O-Ring (Quick Disconnect)	2
5	353-933	Coupling	2
6	54-9530	Fitting — 45° Swivel Elbow (Incl. Ref. #2)	1

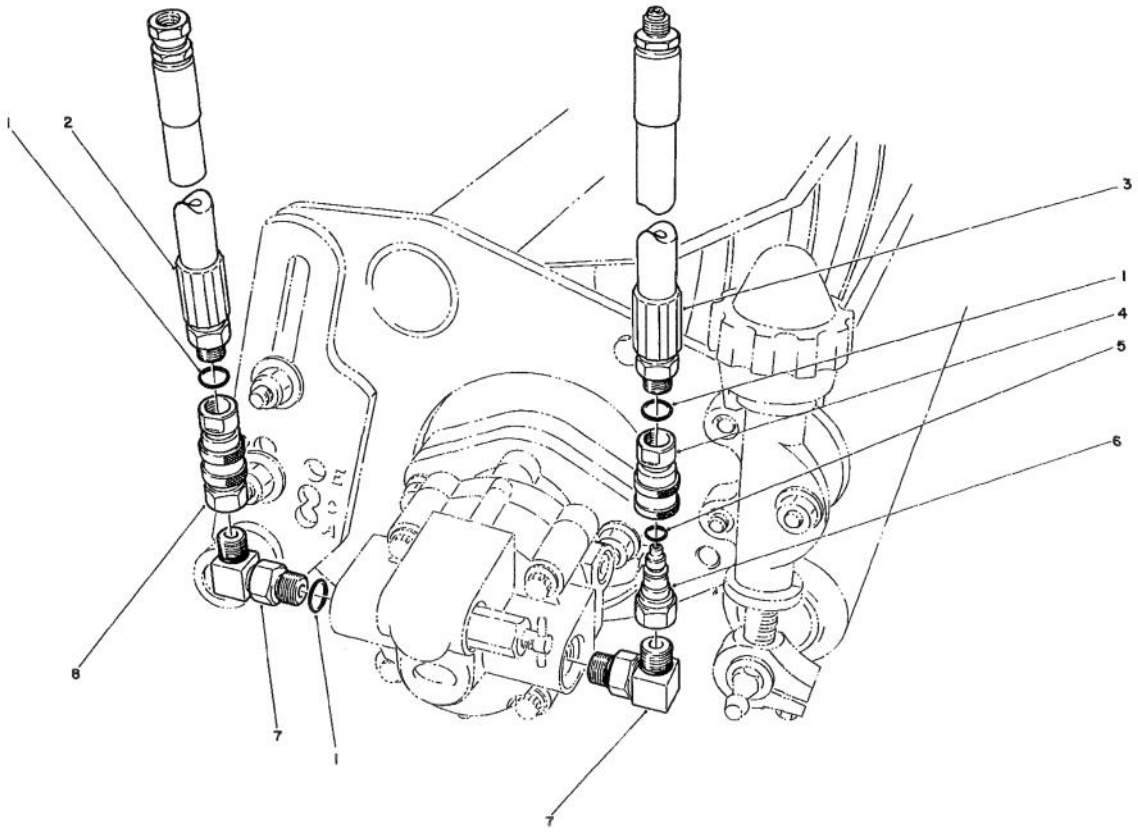
Ref. No.	Part No.	Description	No. Used
7	353-374	Fitting — 90° Adjustable Elbow	1
8	54-9540	Fitting — 90° Adjustable Elbow (Incl. Ref. #2)	1
9	54-9620	Coupling — Quick Disconnect (Incl. Ref. #3-5)	2
10	54-9590	Hose Assembly — Return (Incl. Ref. #2)	1



BACKLAPPING KIT NO. 54-9500 (Optional) (Continued)

Ref. No.	Part No.	Description	No. Used
1	237-42	Seal — O-Ring	6
2	54-9590	Hose Assembly — Return (Incl. Ref. #1)	1
3	54-9580	Hose Assembly — Pressure (Incl. Ref. #1)	1
4	353-934	Coupling	2
5	237-142	Seal — O-Ring (Quick Disconnect)	2

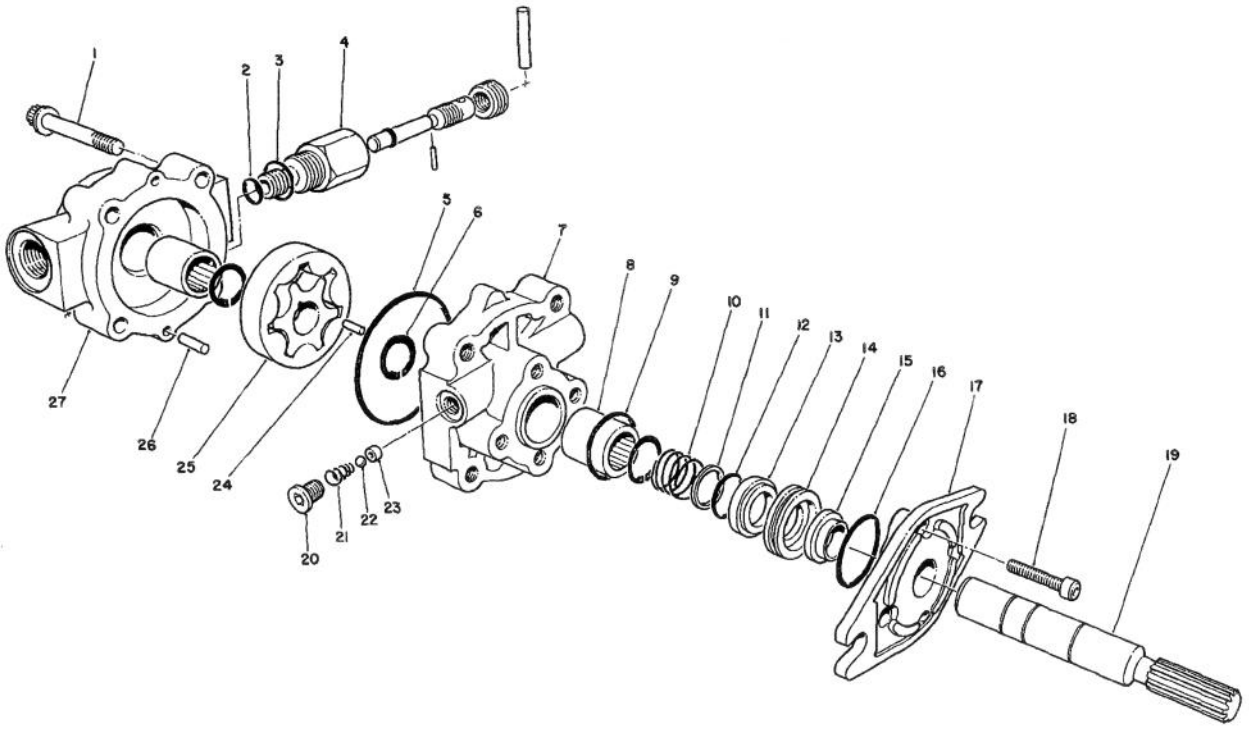
Ref. No.	Part No.	Description	No. Used
6	353-933	Coupling	2
7	54-9530	Fitting — 45° Swivel Elbow (Incl. Ref. #1)	2
8	353-384	Fitting — Straight	1
9	353-374	Fitting — 90° Adjustable Elbow	1
10	54-9620	Coupling — Quick Disconnect (Incl. Ref. #4-6)	2



BACKLAPPING KIT NO. 54-9500 (Optional) (Continued)

Ref. No.	Part No.	Description	No. Used
1	237-42	Seal — O-Ring	6
2	54-9590	Hose Assembly — Return (Incl. Ref. #1)	1
3	54-9580	Hose Assembly — Pressure (Incl. Ref. #1)	1
4	353-934	Coupling	2

Ref. No.	Part No.	Description	No. Used
5	237-142	Seal — O-Ring (Quick Disconnect)	2
6	353-933	Coupling	2
7	54-9540	Fitting — 90° Adjustable Elbow (Incl. Ref. #1)	2
8	54-9620	Coupling — Quick Disconnect (Incl. Ref. #4-6)	2

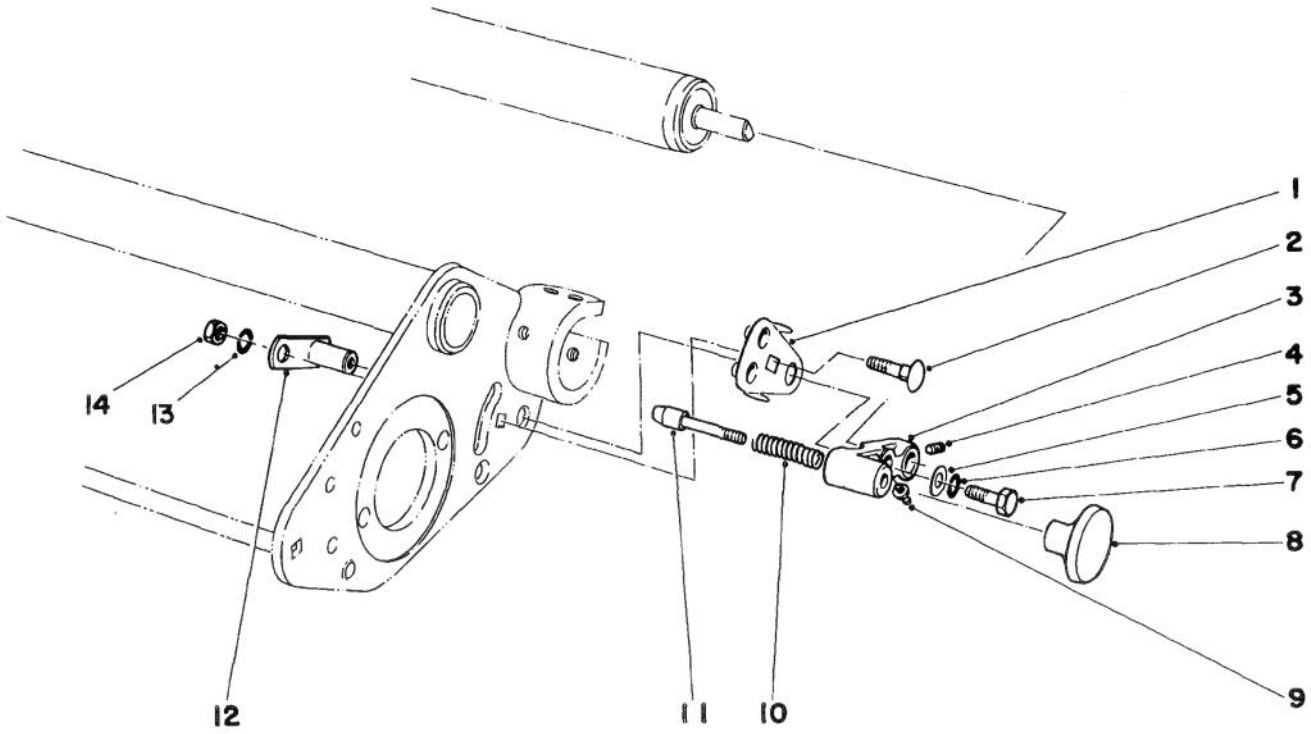


BACKLAPPING KIT NO. 54-9500 (Optional) (Continued)

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

Ref. No.	Part No.	Description	No. Used
16		Seal — O-Ring	1
17	353-900	Flange — Mounting	1
18	353-905	Screw	4
19	353-904	Shaft	1
20	353-911	Plug	2
21	353-912	Spring — Conical	2
22	353-664	Ball	2
23		Seat	2
24	353-893	Pin — Drive	1
25		Element — Gerotor	1
26	353-894	Pin — Dowel	2
27		Body	1
*	353-913	Bearing & Seal Kit (Incl. Ref. #5, 8, 9, 12-16)	1
*	54-9510	Motor & By-Pass Assembly (Complete)	3

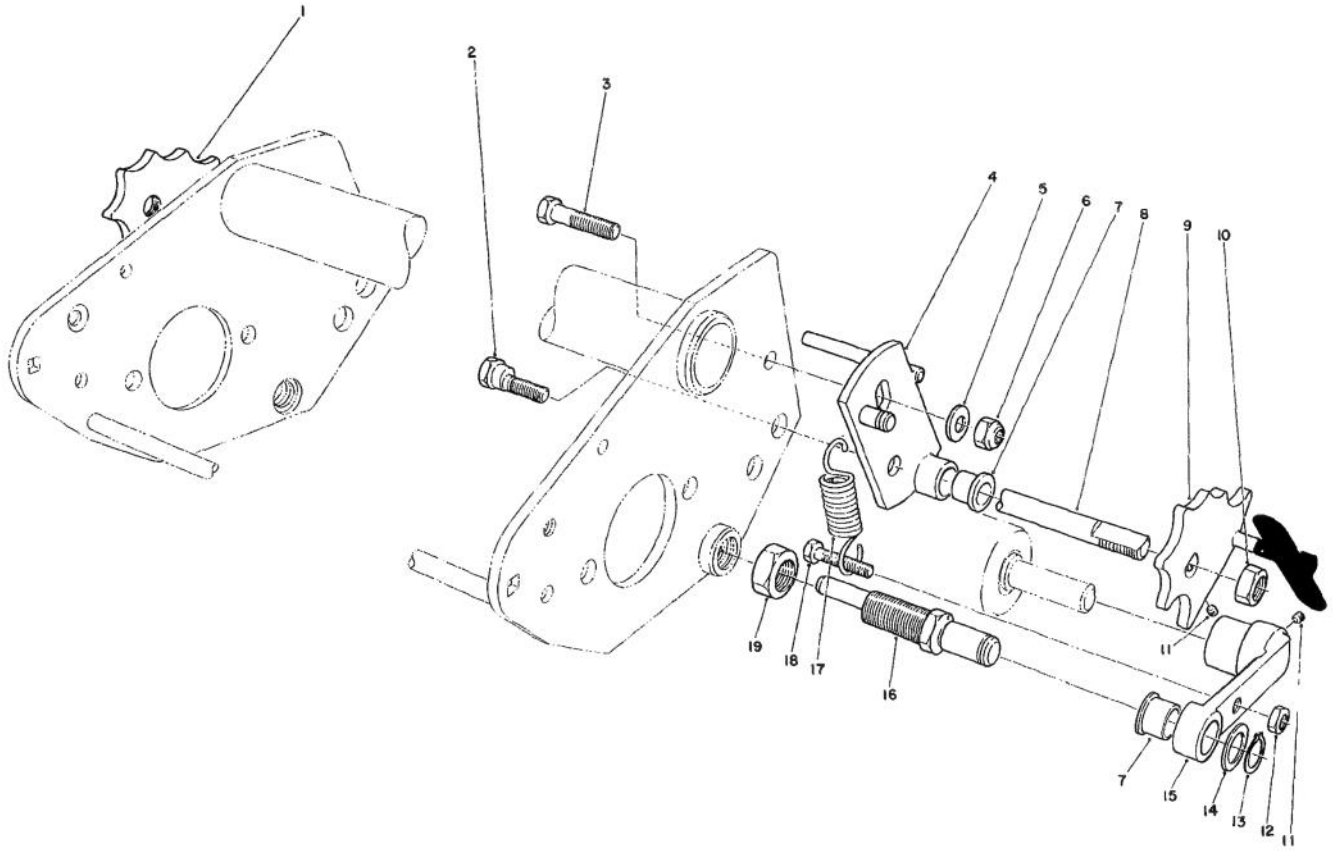
*Not Illustrated



QUICK HEIGHT-OF-CUT KIT NO. 29-5910 (Optional)

Ref. No.	Part No.	Description	No. Used
1	10-5140	Adj. Plate — Height-of-Cut	6
2	3-5861	Carriage Bolt	6
3	10-4870	Bracket Height-of-Cut	6
4	3245-7	Set Screw	6
5	3256-2	Washer	6
6	3253-3	Lockwasher	6
7	321-3	Capscrew	6

Ref. No.	Part No.	Description	No. Used
8	233-28	Knob	6
9	302-18	Grease Fitting	6
10	10-4850	Spring Compression	6
11	10-4880	Pin Height-of-Cut	6
12	20-4700	Pivot Pin	6
13	3253-4	Lockwasher	6
14	3217-6	Hex Nut	6
		Note: Use Rear Roller (21-8450 21⅛" Lg.) with kit.	

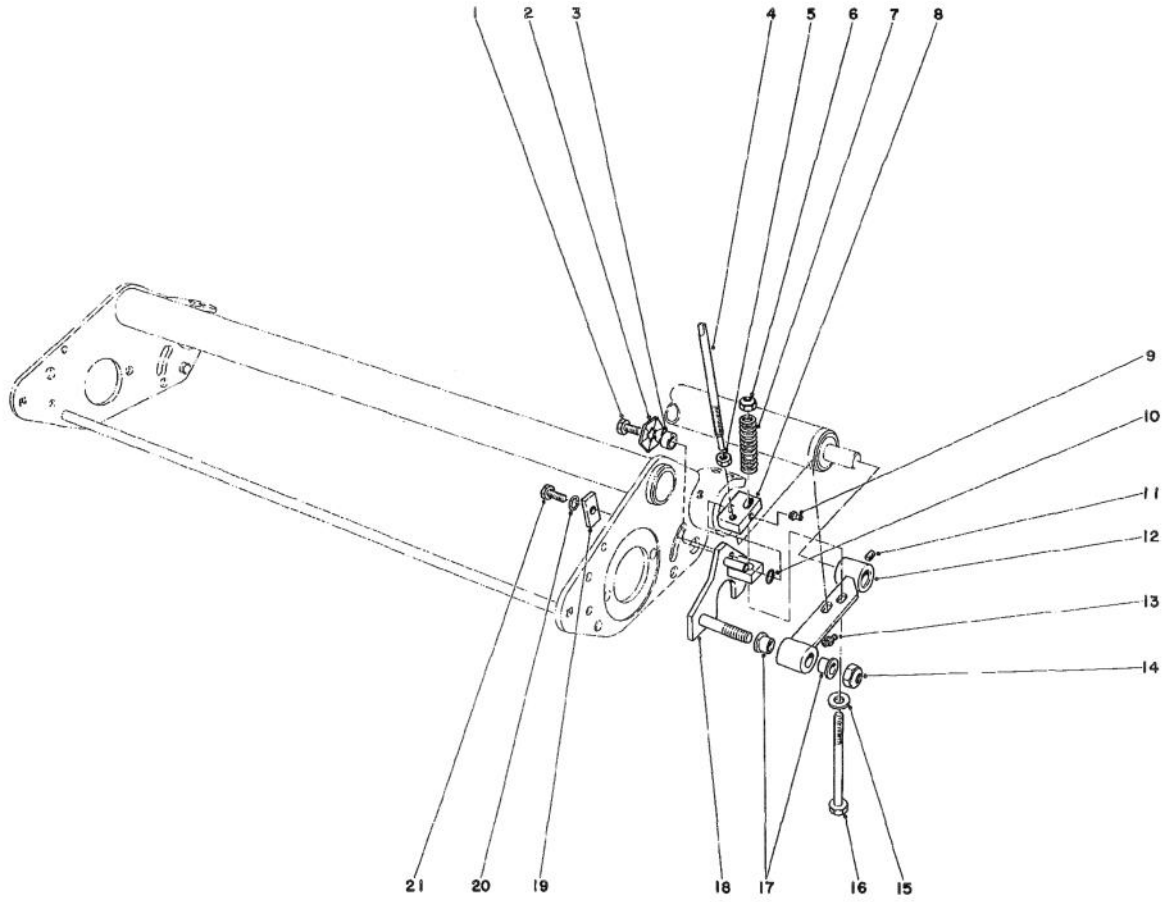


QUICK HEIGHT-OF-CUT SINGLE POINT ADJUST KIT
MODEL NO. 04451 (Optional)

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 Quick H.O.C. Kit. Obtain From Existing Cutting Units.

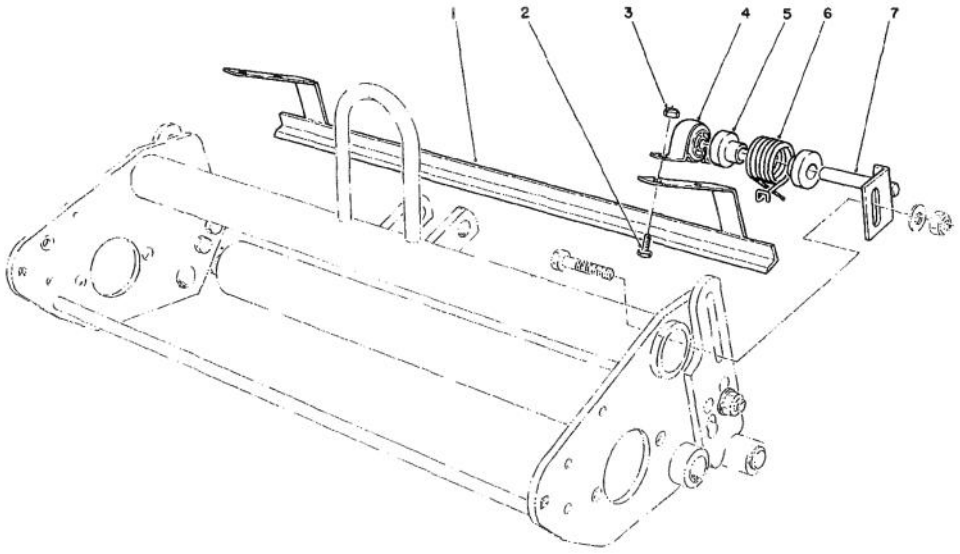


VARIABLE QUICK HEIGHT-OF-CUT KIT NO. 24-9400 (Optional)

Ref. No.	Part No.	Description	No. Used
1	322-2	Capscrew	2
2	3290-238	Lockwasher	2
3	24-9200	Spacer Mounting	2
4	24-9260	Rod Adjustment	2
5	3218-2	Jam Nut	2
6	3296-29	Locknut	2
7	24-9370	Spring — Compression	2
8	24-9220	Pivot Plate	2
9	302-22	Grease Fitting	2
10	237-21	O-Ring	2
11	3245-1	Set Screw	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	Grease Fitting	2
14	3296-44	Locknut	2
15	3256-23	Washer	2
16	322-23	Capscrew	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	2
21	322-3	Capscrew	2
		Note: Use Rear Roller (21-8450 21⅝" Lg.) with kit.	

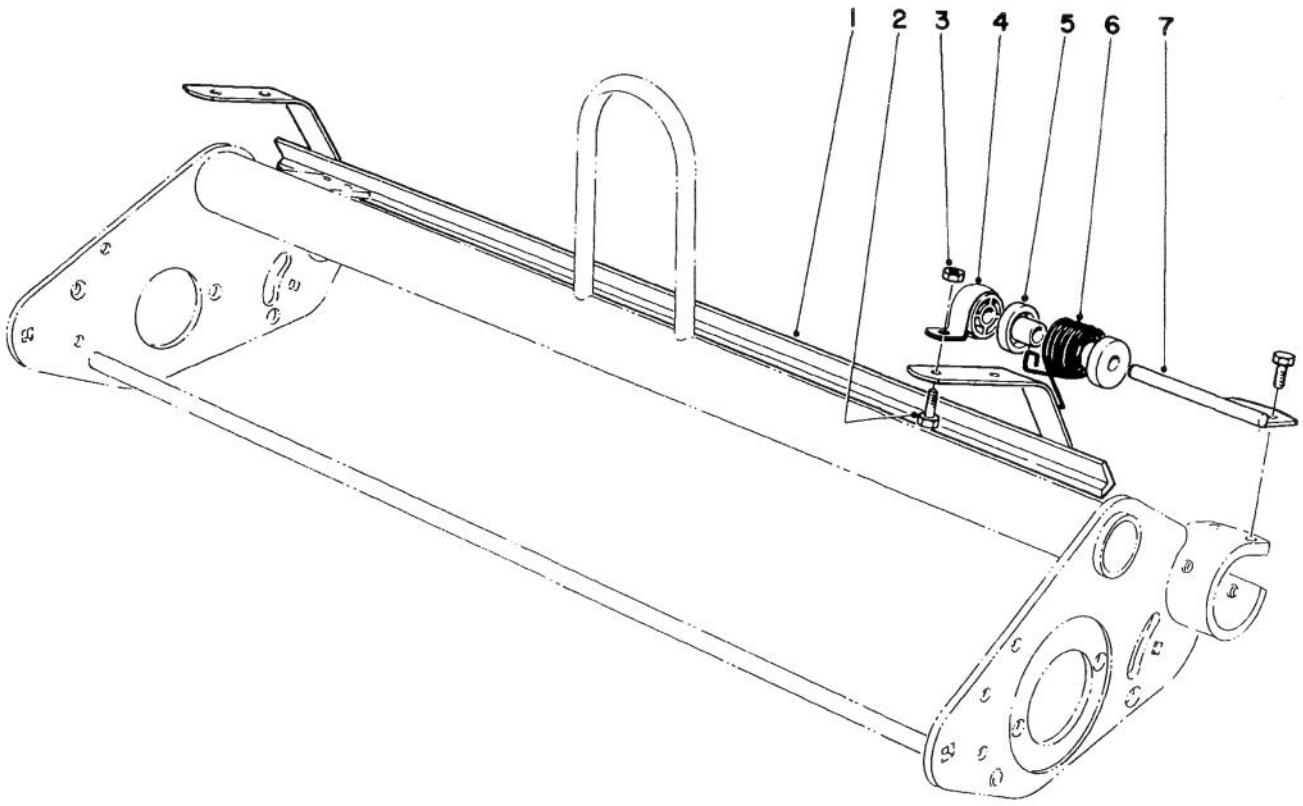
*Not Illustrated



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	Capscrew	4
3	32152-4	Locknut	4
4	256-239	Bearing	2
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

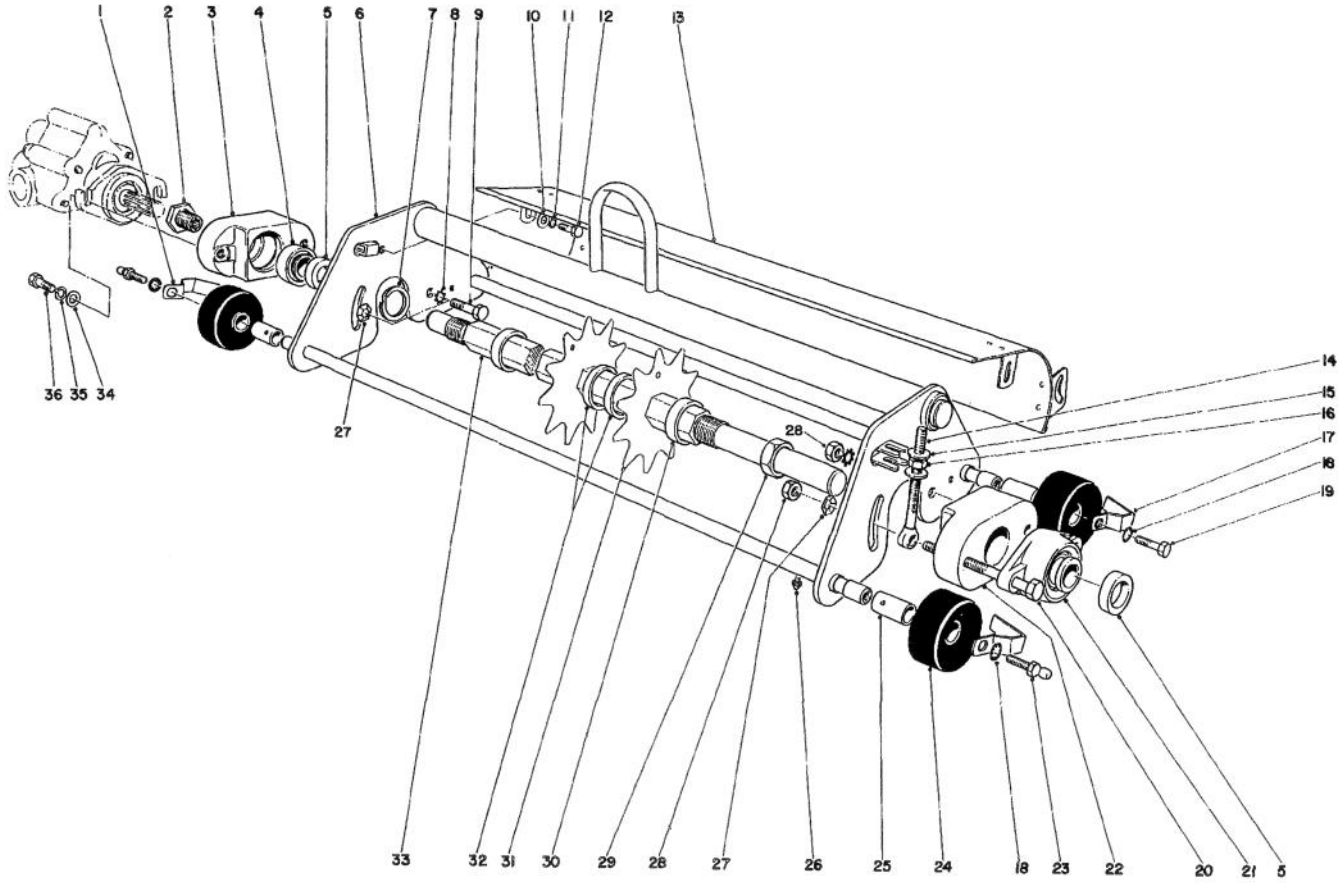


ROLLER SCRAPER KIT NO. 42-4820 (Optional)

Ref. No.	Part No.	Description	No. Used
1	42-4800	Scraper Bar	1
2	321-3	Capscrew	8
3	32152-4	Locknut	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

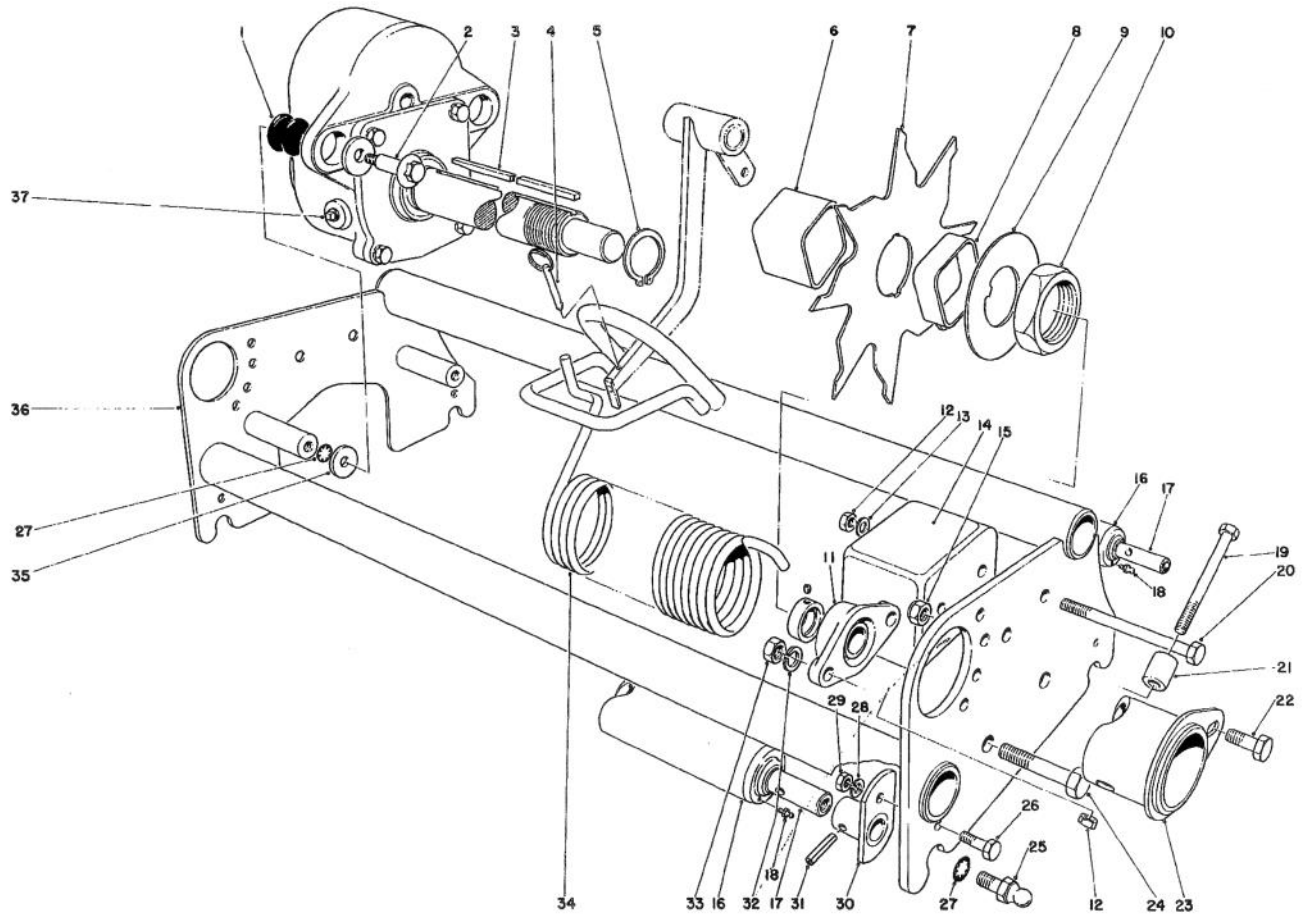


THATCHING REEL ATTACHMENT MODEL NO. 04416 (Optional)

Ref. No.	Part No.	Description	No. Used
1	17-1650	Scraper — Wheel R.H.	2
2	10-5100	Spline Nut	1
3	17-1610	Housing — Bearing	1
4	251-206	Bearing	1
5	251-77	Lock Collar	2
6	17-1450	Frame W.A.	1
7	32120-77	Retaining Ring	1
8	3255-16	Ext. Lockwasher	2
9	324-6	Capscrew	2
10	3256-22	Washer	4
11	3255-7	Ext. Lockwasher	4
12	329-1	Capscrew	4
13	17-1530	Grass Shield	1
14	17-1510	Eye Bolt	2
15	17-1710	Washer	4
16	3217-7	Nut	2
17	17-1640	Scraper — Wheel L.H.	2
18	3254-6	Int. Lockwasher	4
19	3211-3	Capscrew	2
20	324-13	Capscrew	2

Ref. No.	Part No.	Description	No. Used
21	251-247	Bearing — Housing	1
22	17-1520	Counterweight	1
23	2411-7	Ball Stud	2
24	17-1630	Wheel	4
25	17-1620	Bushing Wheel	4
26	302-5	Grease Fitting	4
27	3290-334	Pyramidal Lockwasher	2
28	3217-8	Nut	2
29	3220-18	Jam Nut	2
30	17-1580	Spacer	2
31	17-1590	Blade	37
32	17-1600	Spacer	72
33	17-1570	Shaft Hex	1
34	3256-24	Washer	2
35	3255-9	Lockwasher	2
36	323-6	Capscrew	2
*	17-2290	Gauge .060	2
*	17-2300	Gauge .120	2
*	17-2310	Gauge .250	2

*Not Illustrated

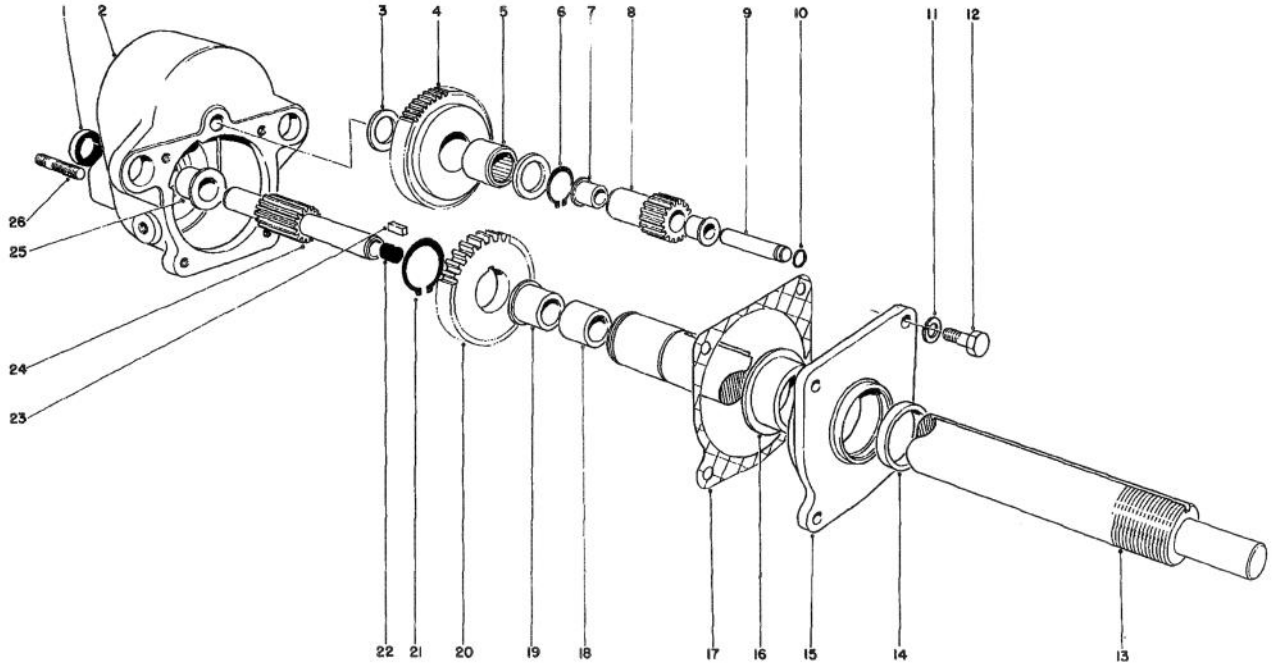


SPIKER ATTACHMENT MODEL NO. 04420 (Optional)

Ref. No.	Part No.	Description	No. Used
1	237-90	Grommet	2
2	3-2652	Bolt	2
3	20-7370	Square Key	1
4	21-9110	Ball Lock Pin	1
5	32151-44	Retaining Ring	1
6	20-7390	Spacer	9
7	20-7380	Blade	10
8	20-7400	Spacer	1
9	20-7790	Washer	1
10	3218-17	Nut	1
11	251-247	Bearing Assembly	1
12	3296-39	Locknut	3
13	3256-24	Flatwasher	2
14	20-7720	Counter-Weight	1
15	3296-47	Locknut	1
16	52-3170	Roller Assembly (Complete)	2
17	52-3180	Front Roller Bearing	4
18	302-5	Grease Fitting	4
19	323-15	Capscrew	1

Ref. No.	Part No.	Description	No. Used
20	323-11	Capscrew	2
21	20-7530	Spacer	1
22	322-3	Capscrew	1
23	20-7540	Spring Tube	1
24	324-6	Capscrew	2
25	2411-7	Ball Stud	2
26	321-4	Capscrew	4
27	3254-6	Lockwasher — Int. Tooth	4
28	3253-3	Lockwasher	4
29	3217-5	Nut	4
30	20-7570	Roller Mounting Bracket	4
31	32121-16	Roll Pin	4
32	3255-16	Lockwasher	2
33	3217-8	Nut	2
34	20-7520	Spring	1
35	20-7510	Spacer	4
36	20-7420	Frame	1
37	281-2	Pipe Plug	1
*	21-6000	Spiker Depth Gauge	1

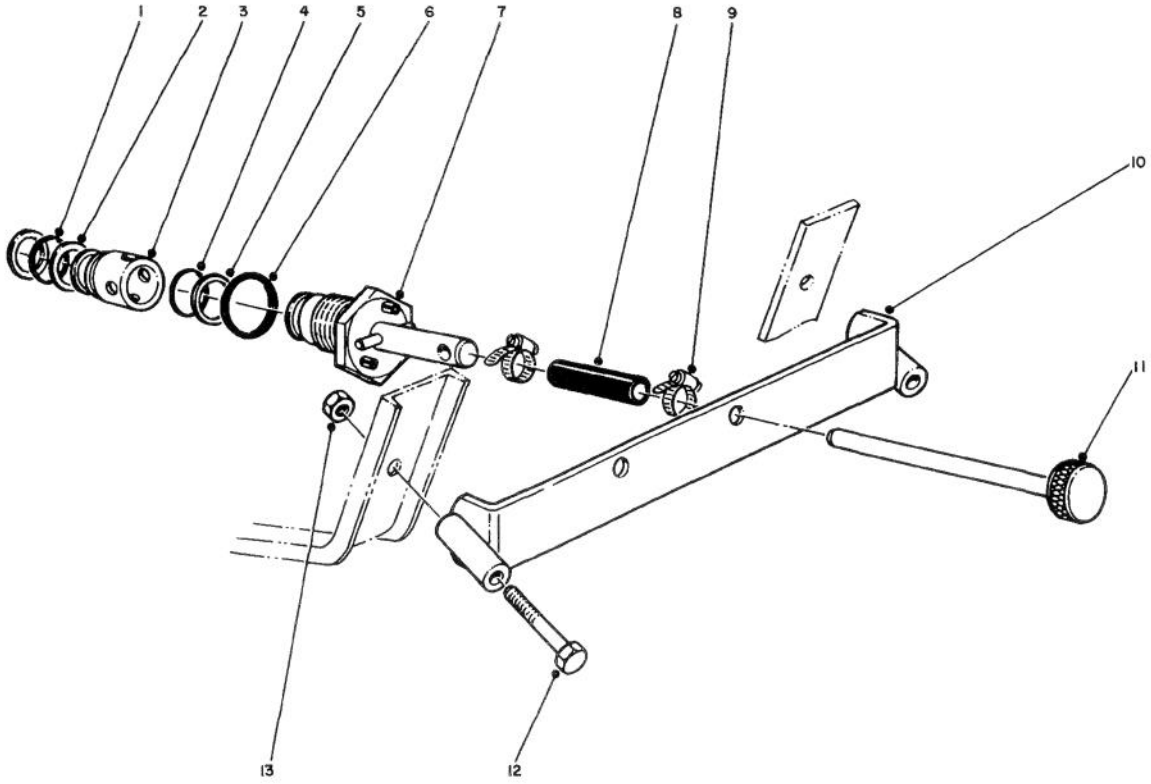
*Not Illustrated



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

Ref. No.	Part No.	Description	No. Used
1	253-131	Seal	1
2	53-9960	Housing Assembly (Incl. Ref. #1, 25-26)	1
3	256-115	Thrust Washer	2
4	20-7320	Gear 64T	1
5	352-284	Bearing	1
6	32151-29	Snap Ring	1
7	256-243	Bushing	2
8	20-7690	Gear 15T (Incl. Ref. #7)	1
9	20-7330	Countershaft	1
10	237-22	O-Ring	1
11	3253-4	Lockwasher	4
12	322-5	Capscrew	4
13	23-5150	Shaft Assy.	1

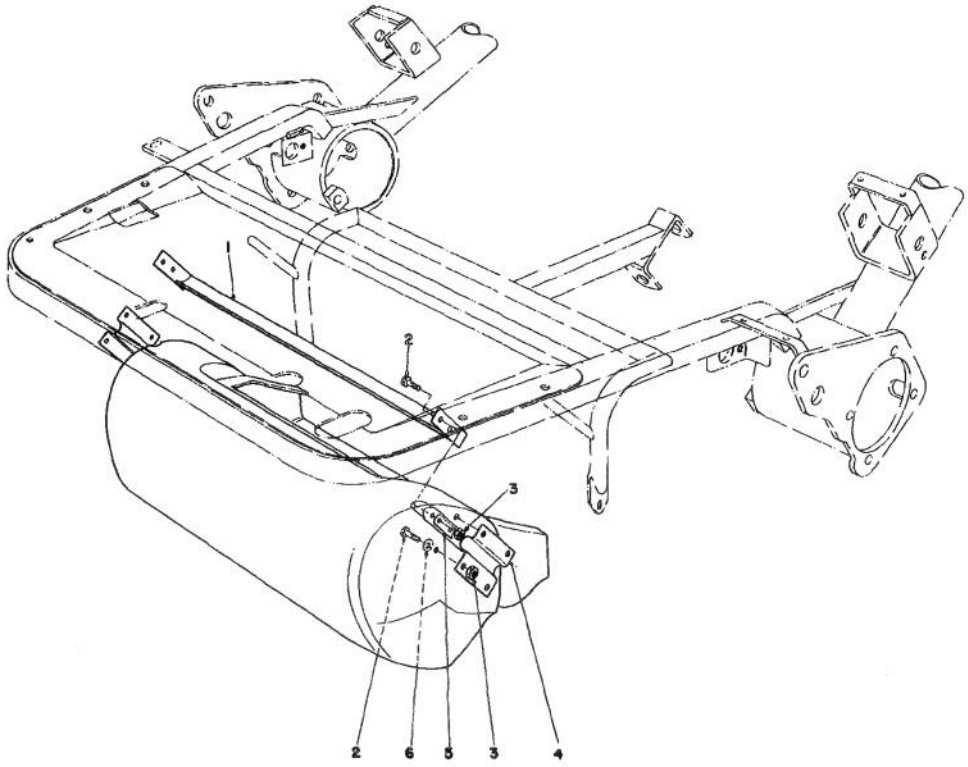
Ref. No.	Part No.	Description	No. Used
14	253-130	Seal	1
15	20-7700	Cover Assembly (Incl. Ref. #14 & 16)	1
16	20-7740	Bushing	1
17	20-7410	Gasket	1
18	256-27	Bushing	1
19	256-117	Bushing	1
20	20-7820	Gear 45T	1
21	32151-35	Snap Ring	1
22	2410-34	Plug	1
23	20-7360	Key	1
24	20-7340	Gear 16T	1
25	256-244	Bushing	1
26	20-7350	Stud	2



REEL SHUTOFF KIT NO. 28-2150 (Optional)

Ref. No.	Part No.	Description	No. Used
1	353-302	O-Ring	2
2	353-303	Back-Up Seal	4
3	353-484	Check (Incl. Items 1 & 2)	2
4	353-305	O-Ring	2
5	353-306	Back-Up Washer	2
6	237-54	O-Ring	2
7	353-503	Shutoff Valve Set (2 Valves Per Set) (Incl. Items 1 thru 6)	1

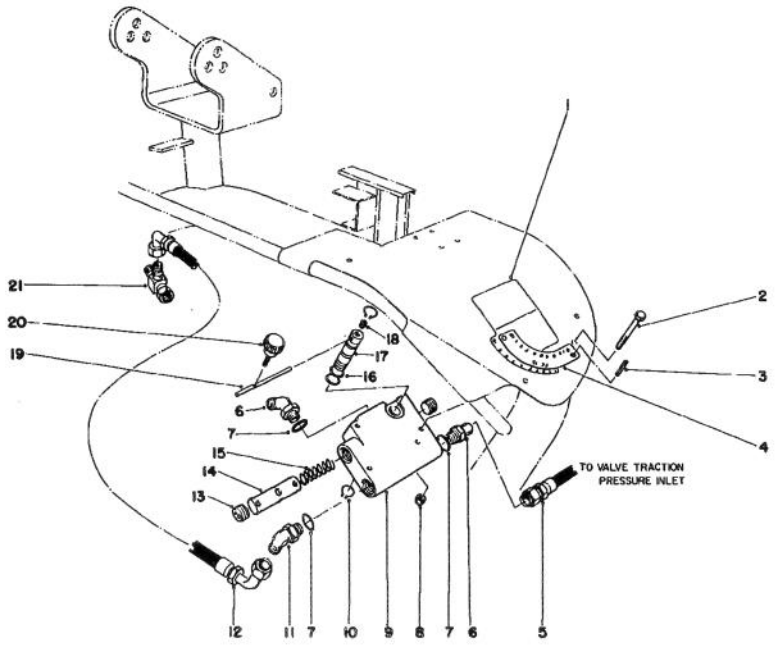
Ref. No.	Part No.	Description	No. Used
8	18-2400	Hose — Rubber	2
9	2412-36	Hose Clamp	4
10	28-2070	Front Bracket	1
11	20-2210	Knob Assembly	2
12	321-10	Capscrew	2
13	3217-5	Nut	2



BASKET REINFORCEMENT KIT NO. 26-0900 (Optional)

Ref. No.	Part No.	Description	No. Used
1	26-0930	Lift Support	3
2	321-2	Hex Hd. Capscrew	36
3	32153-4	Locknut	36

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



VARIABLE TRACTION CONTROL KIT MODEL NO. 04410 (Optional)

Ref. No.	Part No.	Description	No. Used
1	47-6650	Decal — Traction Control	1
2	321-33	Screw — Cap Hex Hd.	2
3	32121-4	Pin — Roll, Slotted	2
4	49-0320	Plate — Dial	1
5	47-6620	Hose — Hydraulic (Pressure)	1
6	353-427	Elbow — 45° (Incl. Ref. #7)	2
7	237-80	O-Ring	3
8	3296-56	Nut — Lock	2
9		Body — Main	1
10	32120-76	Ring — Snap	2
11	353-426	Elbow — 90° Adjustable	1
12	47-6630	Hose — Hydraulic (Return)	1
13	49-0300	Plug Pipe	2
14	49-0370	Spool — Metering	1
15	49-0340	Spring — Metering	1

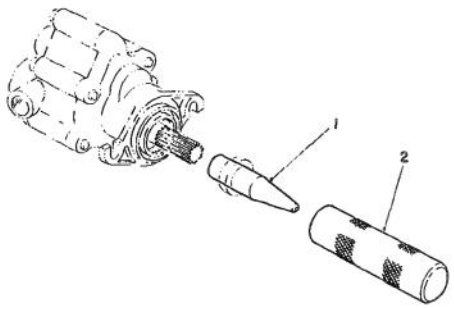
Ref. No.	Part No.	Description	No. Used
16	237-54	O-Ring	2
17	49-0330	Spool — Lever Side	1
18	3274-42	Screw — Set Hex Socket	1
19	49-0350	Handle	1
20	49-0360	Screw — Thumb	1
21	353-425	Tee — Swivel Run	1
*	47-6640	Valve Flow Control (Incl. Ref. #3, 4, 9, 10 & 13-20)	1
*	3290-378	Cable Tie	2
*†	49-0390	Spacer	2
*†	3255-7	Washer — Lock External	3
*†	321-8	Screw — Cap Hex Hd.	2
*†	321-5	Capscrew	1
*†	3256-1	Washer — Plain	4

*Not Illustrated

† Note: Fasteners required for mounting Kit on Traction Unit with Model No. 04327.

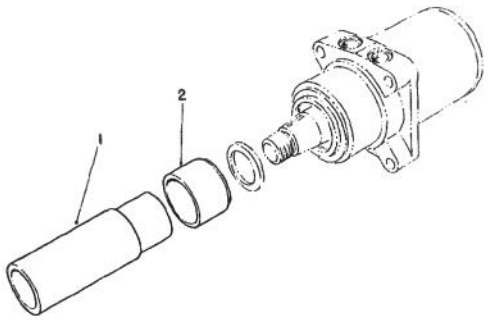
SPECIAL TOOLS

REEL MOTOR SEAL INSTALLATION TOOLS



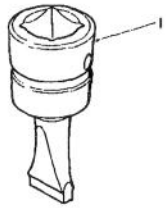
Ref. No.	Part No.	Description	No. Used
1	49-1430	Protector — Seal	1
2	49-1450	Installer — Seal	1

DRIVE MOTOR SEAL INSTALLATION TOOL NO. 19-2660



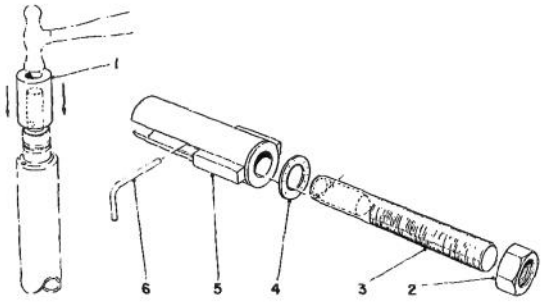
Ref. No.	Part No.	Description	No. Used
1		Driver — Seal	1
2		Holder — Seal	1

BED KNIFE SCREW TOOL NO. 51-0880



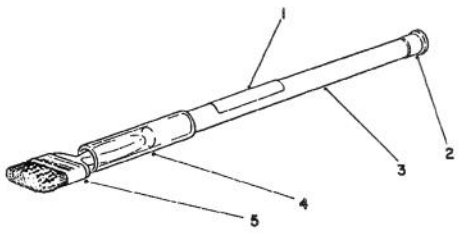
Ref. No.	Part No.	Description	No. Used
1		Tool — Bed Knife Screw	1

BEARING REPLACEMENT TOOL KIT NO. 23-8900

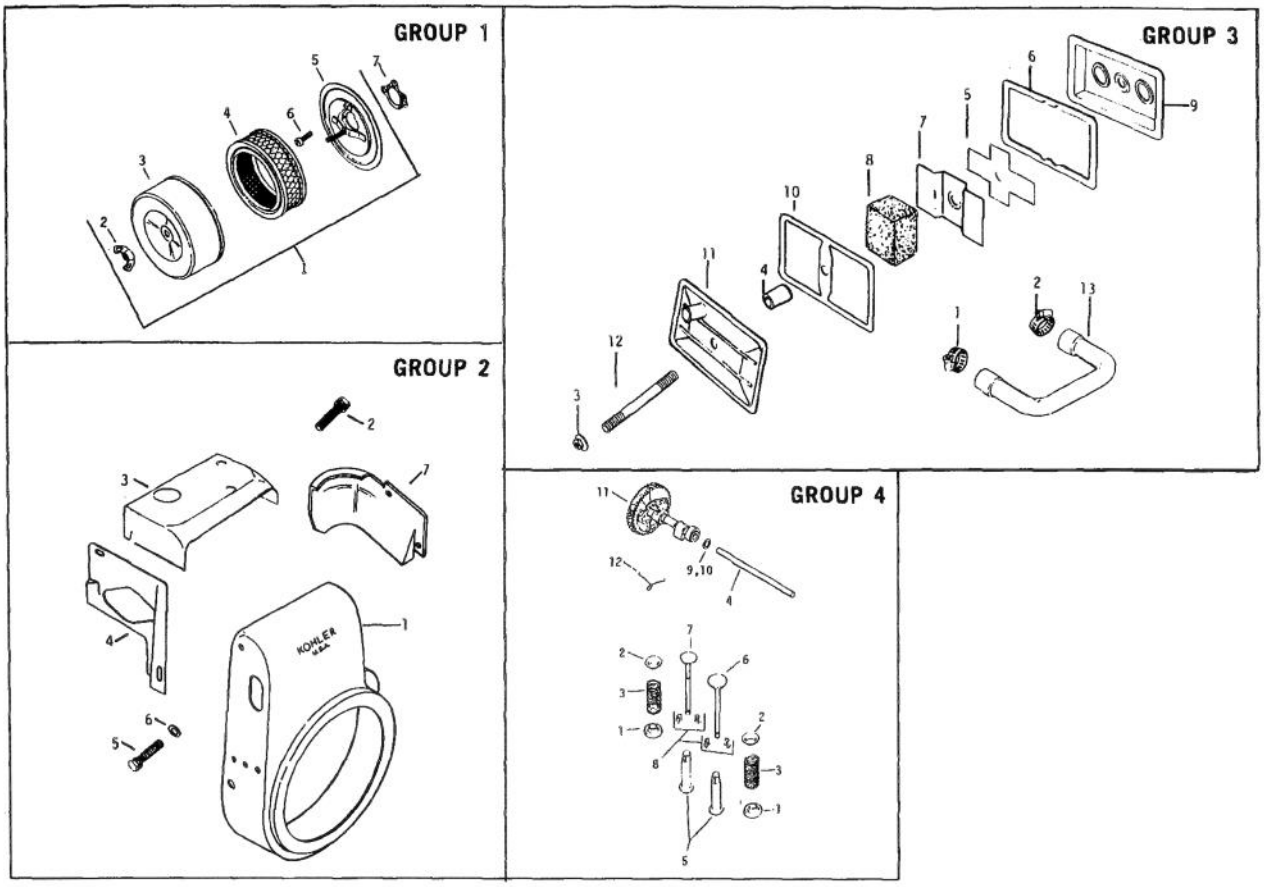


Ref. No.	Part No.	Description	No. Used
1	23-8880	Driver — Bearing	2
2	3219-18	Nut — Hex	1
3	23-8840	Puller — Bolt	1
4	22-6090	Bushing — Thrust	1
5	23-8850	Tube — Support	1
6	23-8860	Pin — Bearing Replacement	1

BACKLAPPING BRUSH ASSEMBLY NO. 29-9100



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

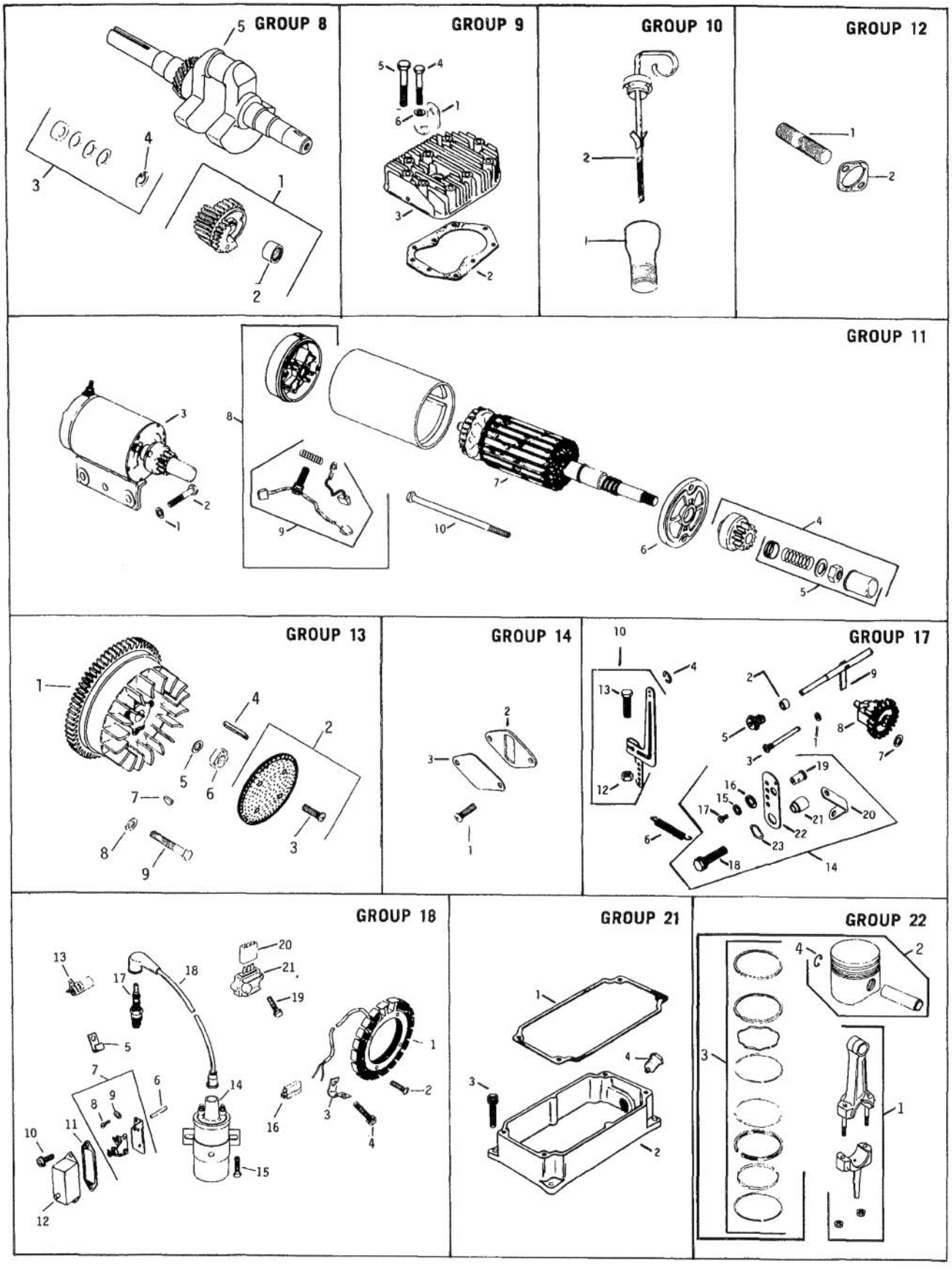


ENGINE ASSEMBLY—KOHLER MODEL K-321S SPEC. NO. 60407

Ref. No.	Part No.	Description	No. Used
		Air Intake — Group 1	
1	A-235100	Cleaner — Air Assembly	1
2	X-276-7	Wing Nut	1
3	235102	Cover — Air Cleaner	1
4	235116	Element	1
5	235101	Base — Air Cleaner	1
6	X-167-2	Screw — H.C. 10-32-5/16	3
7	275341	Gasket — Air Horn	1
	2511301	Decal — Air Cleaner	1
		Baffles & Shroud — Group 2	
1	47 027 18	Housing — Blower	1
2	X-132-2	Screw — H.C. 1/4-20 x 3/4	5
3	237677	Baffle — Head	1
4	235652	Baffle — Side Air	1
5	X-132-6	Screw — H.C. 1/4-20 x 1/2	2
6	X-25-53	Washer — Plain 1/4	1
7	235054	Baffle — Cylinder	1
		Breather & Vent — Group 3	
1	X-426-3	Clamp — Hose	1
2	X-426-9	Clamp — Hose	1
3	X-799-1	Palnut — 1/4-20	1
4	231032	Seal — Breather	1

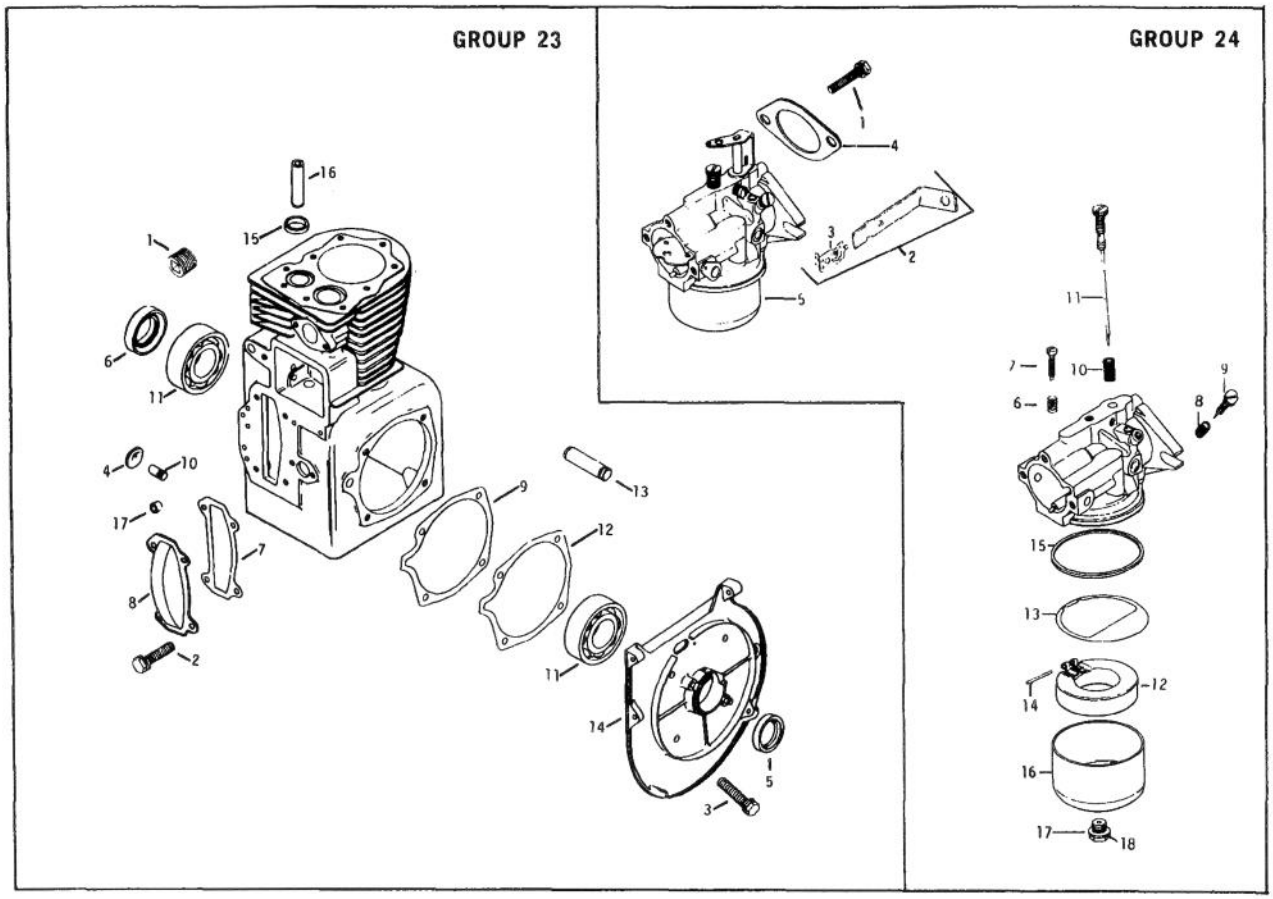
Ref. No.	Part No.	Description	No. Used
5	235047	Reed — Breather	1
6	235048	Gasket — Breather Plate	1
7	235117	Baffle — Breather	1
8	235118	Filter — Breather	1
9	235631	Plate — Breather	1
10	275144	Gasket — Valve Cover	1
11	275839	Cover — Valve	1
12	275220	Stud — Valve Cover	1
13	47 326 02	Hose	1
		Camshaft & Valves — Group 4	
1	230020	Rotator	2
2	235011	Retainer — Spring Upper	2
3	235168	Spring — Valve	2
4	47 380 09	Pin — Camshaft	1
5	D-235327	Tappet	2
6	235582	Valve — Intake	1
7	237672	Valve — Exhaust	1
8	41 755 10	Kit — Retainer	2
9	275066	Spacer .005 (A.R.)	1
10	275067	Spacer .010 (A.R.)	1
11	47 010 09	Camshaft Assembly	1
12	47 089 01	Spring — Actuating	1

ENGINE ASSEMBLY—KOHLER MODEL K-321S SPEC. NO. 60407 (Continued)



ENGINE ASSEMBLY—KOHLER MODEL NO. K321S SPEC. NO. 60407 (Cont.)

Ref. No.	Part No.	Description	No. Used
		Crankshaft — Group 8	
2	45 043 03	Gear Assembly	1
2	47 042 01	Bearing — Needle	2
3	47 755 01	Kit — Spacer	1
4	X-269-34	Retainer Before S/N 15139547 Use	2
5	45 014 05	Crankshaft After S/N 15139546 Use	1
5	45 142 17	Kit — Crankshaft (Inc. Flywheel Hardware)	1
		Cylinder Head — Group 9	
1	47 445 02	Strap — Lifting	1
2	47 041 10	Gasket — Head	1
3	237670	Head — Cylinder	1
4	270158	Screw — H.C. 3/8-16 x 1-1/2	8
5	270721	Screw — H.C. 3/8-16 x 1-3/4	1
6	270889	Washer — Plain 3/8	10
		Dipstick — Group 10	
1	47 123 08	Tube — Oil Fill	1
2	237013	Dipstick	1
		Electric Start — Group 11	
1	X-22-1	Washer — Lock 3/8	2
2	234948	Screw — H.C. 3/8-16 x 1-11/32	2
3	45 098 07	Starter Assembly	1
4	47 755 07	Kit — Drive	1
5	47 755 13	Kit — Drive Parts	1
6	237650	Cap — Drive End	1
7	45 170 02	Armature	1
8	48 227 04	Cap — Commutator End	1
9	48 755 15	Kit — Brush	1
10	237649	Thru Bolt w/Washer	1
	52 357 01	Lubricant — Starter	1
		Exhaust — Group 12	
1	41 072 19	Stud	2
2	235122	Gasket — Exhaust Flange	2
		Flywheel — Group 13	
1	47 025 24	Flywheel	1
2	47 755 15	Kit — Grass Screen	1
3	47 086 08	Screw — Pozidriv T.H. 1/4-20 x 5/8 Before S/N 15139547 Use	4
4	X-286-17	Key — Square	1
5	X-25-104	Washer — Plain 5/8	1
6	X-119-14	Nut — Lock 5/8-18 After S/N 15139546 Use	1
7	X-46-3	Key — Woodruff	1
8	52 114 02	Washer — Plain 1-3/8 O.D.	1
9	25 086 04	Screw — Hex. Mach. 3/8-24 x 1-1/8	1
		Fuel Pump — Group 14	
1	X-174-2	Screw — F.H.M. 1/4-20 x 3/4	2
2	52 041 17	Gasket — Fuel Pump	1
3	240282	Cover — Pump Pad	1
		Governor — Group 17	
1	2546801	Washer — Plain 1/4	1
2	X-400-80	Spacer	1
3	231355	Pin — Governor Stop	1
4	235278	Retainer — Rod	1
5	235476	Bushing	1
6	235496	Spring — Governor	1
7	237022	Washer — Thrust	1
8	A-235743S	Kit — Governor Gear	1
9	A-235256S	Kit — Governor Cross Shaft	1
10	A-237653	Lever — Governor Assembly	1
12	X-799-1	Palnut 1/4-20	1
13	X-776-1	Screw — Sems 1/4-20 x 1-1/4	1
14	A-236947	Bracket — Speed Control Assy.	1
15	X-25-63	Washer — Plain 1/4	1
16	X-25-102	Washer — Plain 1/4	1
17	X-51-8	Screw — R.H.M. 8-32 x 1/4	1
18	X-132-9	Screw — H.C. 1/4-20 x 1-1/4	1
19	47 755 10	Kit — Clamp	1
20	235084	Bracket — Adjusting Screw	1
21	235085	Spacer	1
22	236249	Bracket — Speed Control	1
23	275690	Washer — Tension	1
		Ignition — Group 18	
1	237878	Kit — Stator	1
2	X-778-1	Screw — R.H. 10-24 x 3/4	4
3	X-728-1	Clip	1
4	X-67-59	Screw — Self-Tap 8-32 x 3/8	1
5	275303	Clip	1
6	47 411 04	Rod — Breaker	1
7	47 150 03	Breaker	1
8	X-141-5	Screw — R.H.M. 8-32 x 1/4	1
9	X-25-65	Washer — Plain #8	1
10	X-131-1	Screw — R.H.M. 10-24 x 3/8	4
11	52 041 11	Gasket — Cover	1
12	232535	Cover — Breaker	1
13	230722	Condenser	1
14	231281	Coil — Ignition	1
15	X-132-2	Screw — H.C. 1/4-20 x 3/4	2
16	48 155 02	Connector	1
17	235041-S	Plug — Spark	1
18	238057	Kit — Hi-Tension Lead	1
19	X-132-4	Screw — H.C. 1/4-20 x 1	2
20	236602	Connector	1
21	41 403 05	Regulator — Rectifier	1
	A-231533	Lead — (17" - 14 Gauge - Insulated Barrel Eyelet - Uninsulated Barrel Open Side)	1
	25 518 11	Lead — (18" - 14 Gauge - Insulated Barrel Eyelet - Uninsulated Push On Tab)	1
	25 518 05	Lead Black (5" - 14 Gauge - Uninsulated Push On Tab Terminals)	1
		Oil Pan — Group 21	
1	235057	Gasket — Oil Pan	1
2	235147	Base — Oil Pan	1
3	X-159-3	Screw — H.C. 3/8-16 x 1-1/4	4
4	X-305-4	Plug — Magnetic Drain, 3/8 Hex Head	1
		Piston & Rod — Group 22	
1	47 067 09	Connecting Rod Assy. (Std.) Before S/N 15082623 Use	1
	A237344	After S/N 15082622 Use Connecting Rod Assy. (.010)	1
	A-237344-10	Before S/N 15082623 Use	1
	47 067 10	After S/N 15082622 Use	1
2	47 874 11	Piston w/Ring Set (Std.)	1
	47 874 12	Piston w/Ring Set (.003)	1
	47 874 13	Piston w/Ring Set (.010)	1
	47 874 14	Piston w/Ring Set (.020)	1
	47 874 15	Piston w/Ring Set (.030)	1
3	236763	Ring Set (Std. & .003)	1
	236764	Ring Set (.010)	1
	236765	Ring Set (.020)	1
	236766	Ring Set (.030)	1
4	47 018 01	Retainer Piston Pin	2
	B-237836	Miniblock	1
	47 755 08	Gasket Set w/Seals	1
	47 004 01	Gasket Set w/Seals	1



ENGINE ASSEMBLY—KOHLER MODEL K-321S SPEC. NO. 60407 (Continued)

Ref. No.	Part No.	Description	No. Used
		Crankcase — Group 23	
1	47 139 01	Plug — Pipe	1
2	X-132-6	Screw — H.C. 1/4-20x1/2	4
3	X-159-2	Screw — H.C. 3/8-16x1	4
4	X-230-11	Plug — Expansion	1
5	47 032 06	Seal — Front Oil	1
6	47 032 07	Seal — Rear Oil	1
7	235025	Gasket — Camshaft Cover	1
8	235026	Cover — Camshaft	1
9	235070	Gasket — Bearing Plate .010 (A.R.)	1
10	235125-S	Shaft — Governor	1
11	235376	Bearing — Ball	2
12	235757	Gasket — Bearing Plate	1
13	236559	Shaft — Balance Gear Stub	2
14	45 156 02	Plate — Bearing Block — Cylinder Assembly (Use: B-237836 miniblock)	1
15	230265	Insert — Intake	2
16	235007-S	Guide — Valve	2
17	234866	Bearing	1

Ref. No.	Part No.	Description	No. Used
		Carburetor — Group 24	
1	X-770-1	Screw — Sltd. Hd. 5/16-18x1	2
2	A-236919	Bracket — Choke Assembly	1
3	235603	Clip — Choke Cable	1
4	47 049 01	Gasket — Carburetor	1
5	47 053 20	Carburetor Assembly	1
6	232555	Spring — Idle Speed	1
7	232556	Screw — Idle Speed Adj.	1
8	200380	Spring — Idle Fuel	1
9	275231	Needle — Idle Fuel Adj.	1
10	200383	Spring — Main Fuel	1
11	47 103 01	Needle — Main Fuel Adj.	1
12	25 757 03	Kit — Float	1
13	25 041 02	Gasket — Bowl Baffle	1
14	200376	Pin — Float Hinge	1
15	200375	Gasket — Bowl	1
16	235448	Bowl — Fuel	1
17	47 100 06	Screw — Bowl Retainer	1
18	200372	Gasket — Bowl Retainer Screw	1
	25 757 01	Kit — Carburetor Repair	1
	2575705	Kit — Throttle & Choke Repair	1