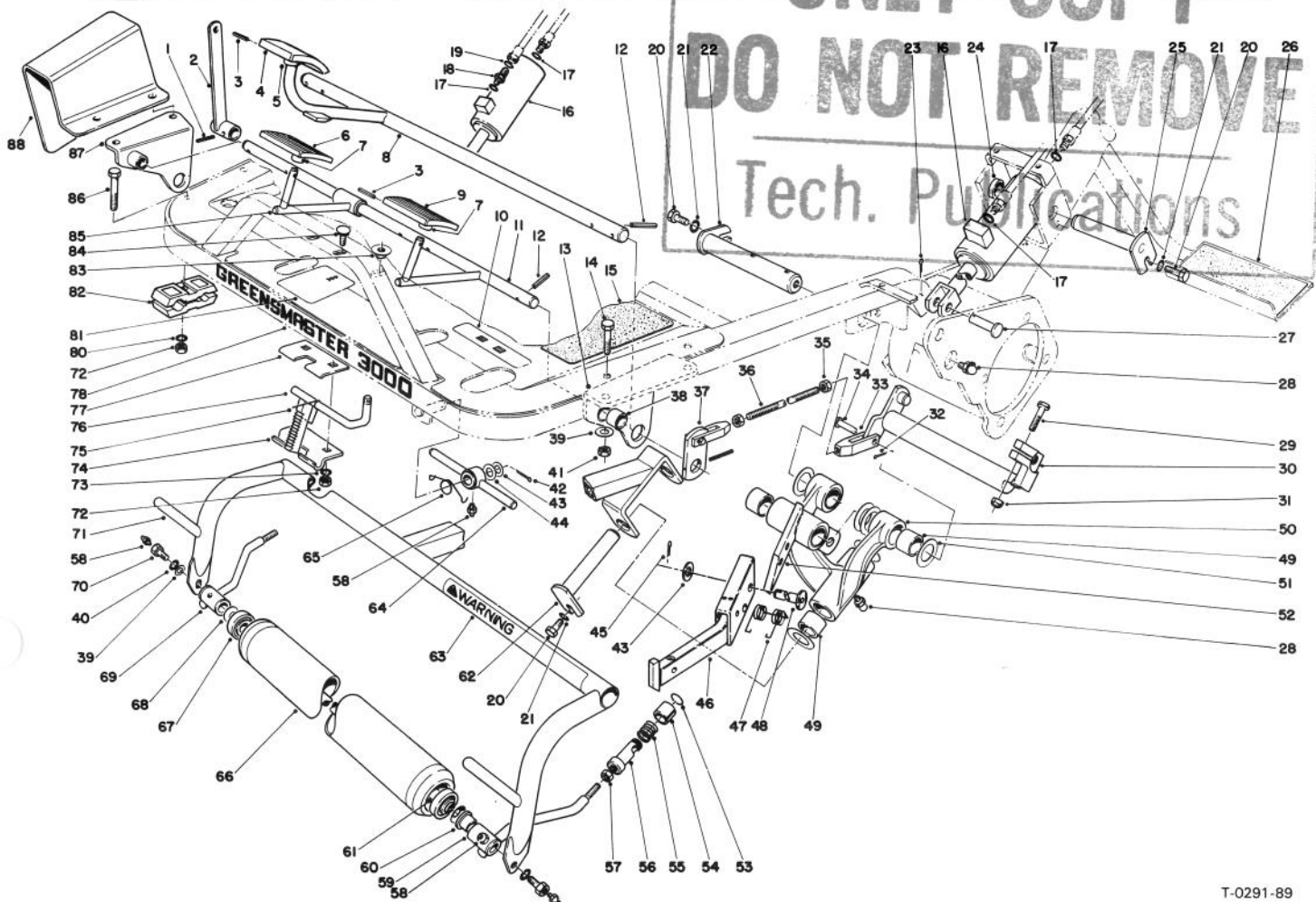


TORO®

MODEL NO. 04350-90001 & UP
 MODEL NO. 04405-90001 & UP
 MODEL NO. 04408-90001 & UP
 MODEL NO. 04450-90001 & UP
 MODEL NO. 04468-90001 & UP

PARTS CATALOG

GREENSMMASTER® 3000

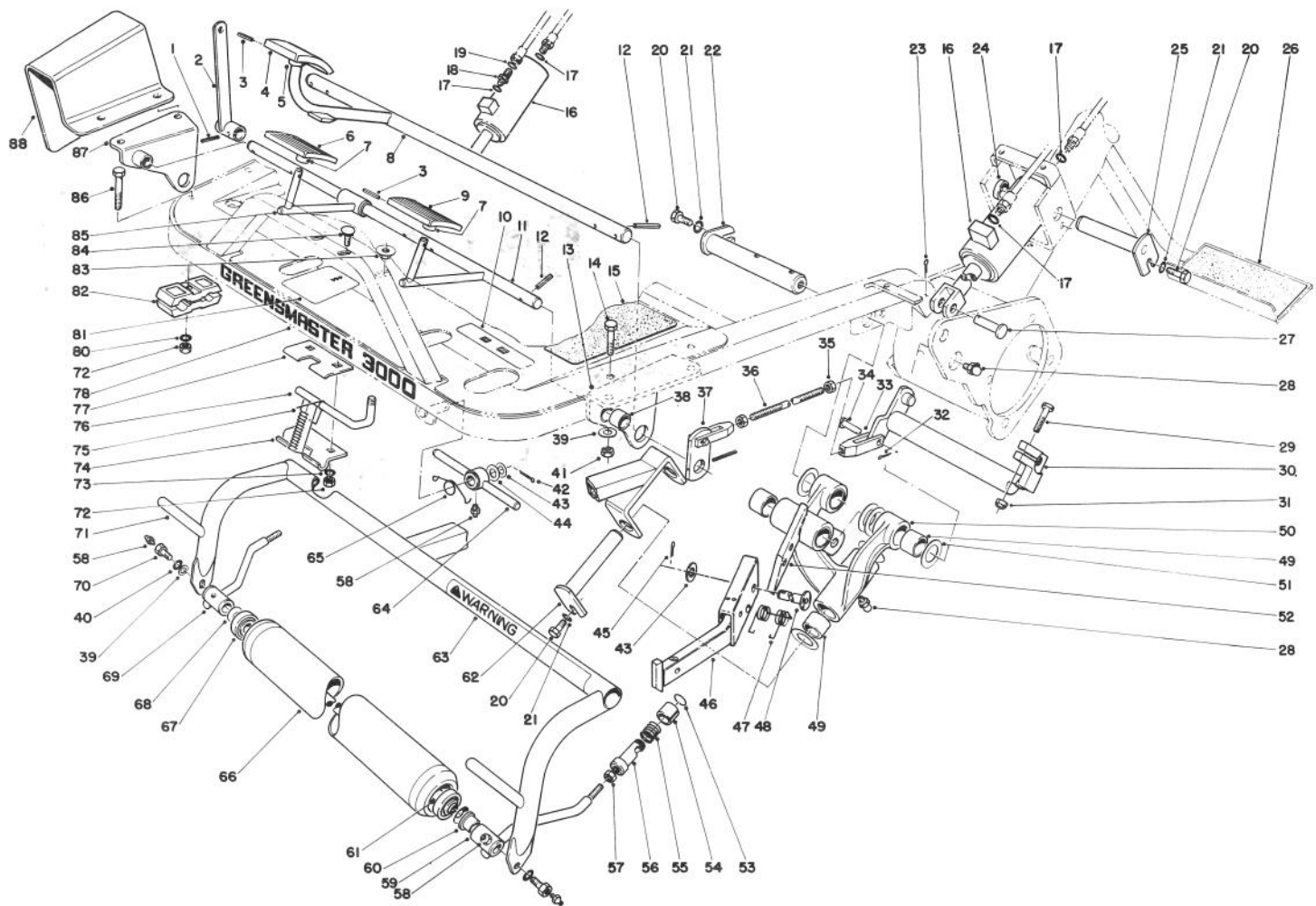


T-0291-89

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	32121-45	Roll Pin	3
4	49-6170	Foot Pad — Brake	1
5	49-6150	Foot Pedal — 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	Roll Pin	8
13	49-6090	Lift Pivot Bracket — L.H. (Incl. Ref. #38)	1
14	323-10	Capscrew — Hex Hd.	4
15	49-6120	Pad — Footrest	1
16	63-9500	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	322-1	Capscrew — Hex Hd.	6
21	3253-4	Lockwasher	6
22	10-6110	Pin — Hinge	2
23	3272-11	Pin — Cotter	2
24	46-6350	Spacer	2
25	10-6060	Pin — Ram Pivot	2
26	62-2660	Pad — Foot Step	1
27	283-8	Pin — Clevis	2
28	302-60	Grease Fitting	4
29	322-6	Capscrew — Hex Hd.	1
30	52-5540	Brake Arm — L.H.	1
31	3296-29	Nut — Lock	1
32	3272-6	Pin — Cotter	4
33	282-2	Yoke	4

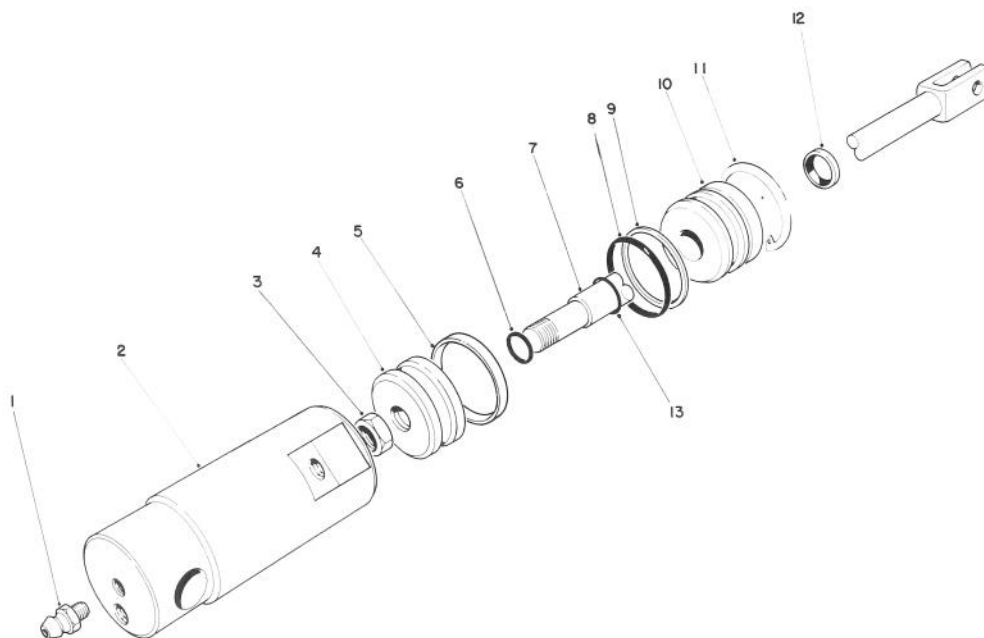


T-0291-89

FOOT PEDALS AND ROLLER ASSEMBLY (Continued)

Ref. No.	Part No.	Description	No. Used
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	Lockwasher	8
41	3296-59	Nut — Hex Jam	4
42	3272-11	Pin — Cotter	1
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
49	3-0348	Bushing	10
50	10-7820	Pivot Hinge (Incl. Ref. #49)	2
51	10-8110	Washer — Thrust	18
52	62-2460	Lift Arm — L.H. (Incl. Ref. #49)	1
53		Retaining Ring	6
54		Sleeve	6
55		Spring	6
56	8-7710	Ball Joint Receiver Assembly (Incl. Ref. #53-55)	6
57	3220-3	Nut — Hex Jam	6
58	302-5	Grease Fitting	8
59	52-2740	Pull Arm Assembly — L.H. (Incl. Ref. #60)	3
60	3-1506	Bushing	12
61	21-8470	Shaft — Yoke Roller	3

Ref. No.	Part No.	Description	No. Used
62	10-6090	Pin — Pivot	2
63	27-2890	Decal — Warning	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 Assembly (Incl. Ref. #58)	6
71	47-5970	Pull Frame — L.H.	1
72	3296-16	Nut — Hex	3
73	3253-3	Lockwasher	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	62-2590	Decal — Greensmaster 3000	1
80	3256-3	Washer — Flat	1
81	27-2830	Decal — Parking Brake	1
82	56-7970	Clamp — Tube	2
83	32141-111	Nut — Hex Hd. Flanged	1
84	3229-22	Bolt — Carriage	2
85	10-6300	Foot Pedal	1
86	321-23	Capscrew — Hex Hd.	1
87	49-6070	Lift Pivot Bracket — R.H. (Incl. Ref. #38)	1
88	49-6110	Guard — Transfer Rod	1



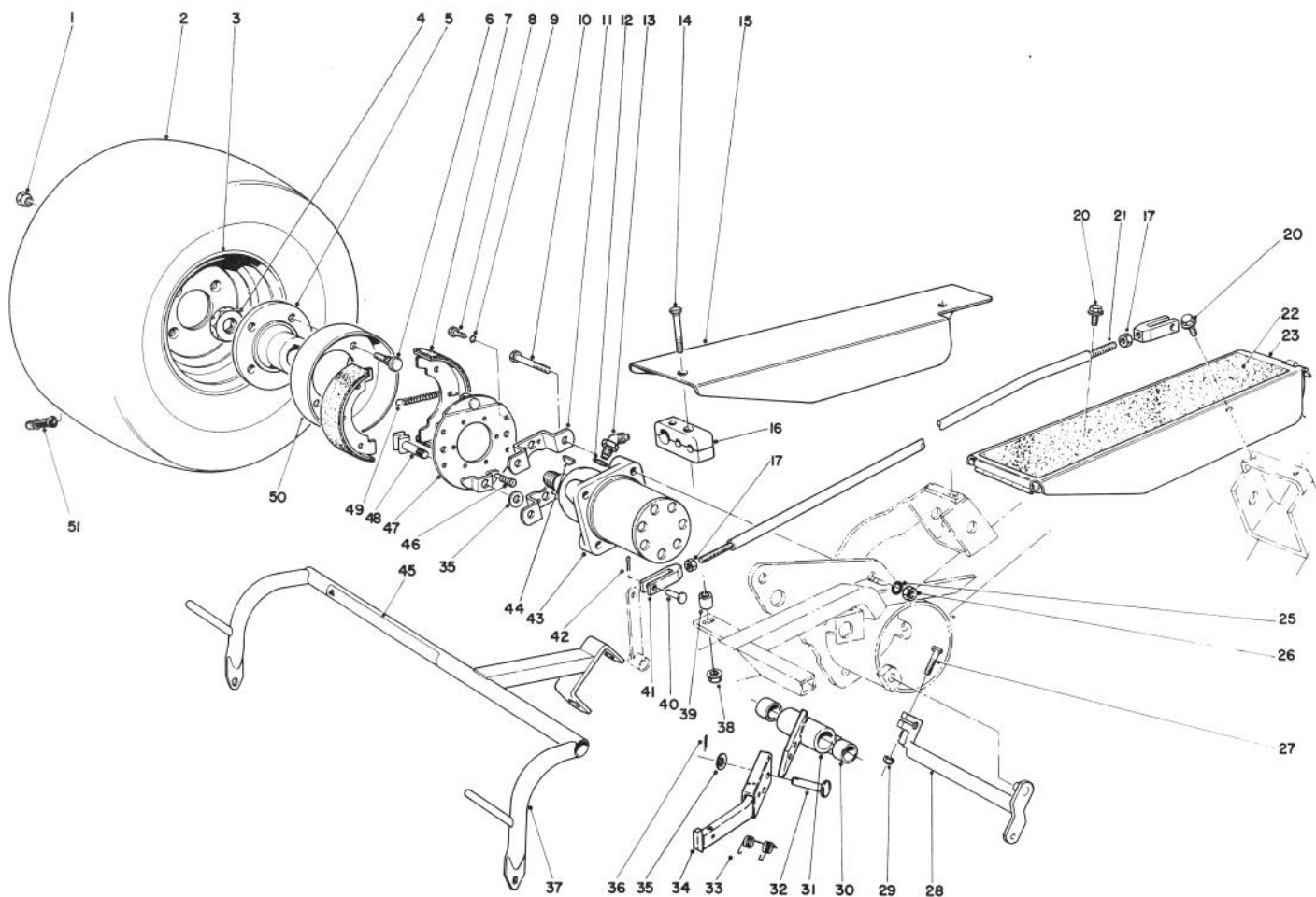
T-0292-89

HYDRAULIC CYLINDER — FRONT NO. 63-9500

Ref. No.	Part No.	Description	No. Used
1	302-2	Grease Fitting	2
2		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	65-4860	Head	1
11	32120-8	Ring — Retaining Internal	1
12		Dust Seal	1
13		Seal Polypak	1
*	65-2980	Seal Repair Kit (Incl. Ref. #5, 6, 8, 9 & 12-13)	1

* Not Illustrated



T-0293-89

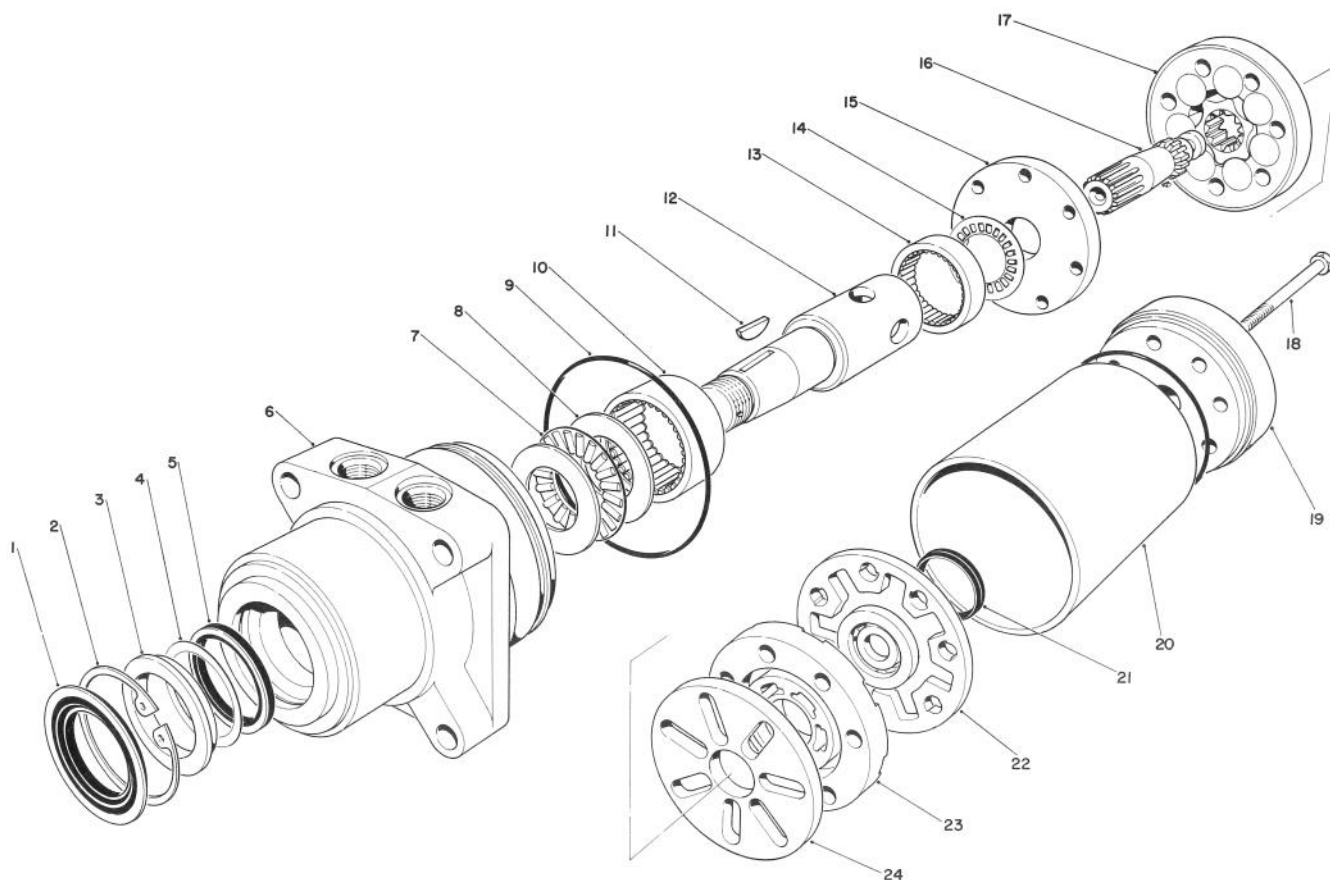
WHEEL AND BRAKE ASSEMBLY

Ref. No.	Part No.	Description	No. Used
1	242-50	Wheel Nut	8
2	28-3680	Tire	2
*	231-124	Tire Treaded	2
3	217-60	Rim	2
4	26-3790	Locknut	2
5	10-6870	Hub — Wheel	2
6	10-6830	Stud — Drive Type	8
7	215-73	Shoe & Lining Assembly	4
8	329-3	Hex Hd. Capscrew	8
9	3255-7	Lockwasher — Ext. Tooth	8
10	325-11	Hex Hd. Capscrew	8
11	10-8000	Bracket — Brake	4
12	237-80	O-Ring	4
13	340-14	45° Fitting	4
14	32108-100	Screw — Phillips Machine	3
15	49-5450	Plate — Cover	1
16	57-6140	Clamp — Tube, Side	4
17	3220-2	Hex Jam Nut	2
20	3234-4	Hex Hd. Capscrew	4
21	49-5430	Rod — Control	1
22	10-8220	Pad — Tool Box	1
23	49-5410	Box — Tool	1
25	3296-23	Lockwasher	8
26	3217-9	Hex Nut	8
27	322-6	Hex Hd. Capscrew	1
28	52-5510	Arm — Brake, R.H.	1
29	3296-29	Locknut	1

Ref. No.	Part No.	Description	No. Used
30	3-0348	Bushing	4
31	62-2460	Arm — Lift, L.H.	1
*	62-2440	Arm — Lift, R.H.	1
32	63-8750	Pin — Pivot	2
33	57-7650	Spring — Torsion	2
34	62-2390	Bar — Lift Arm, L.H.	1
35	3256-26	Flat Washer	3
36	3272-12	Pin — Cotter	2
37	47-5960	Pull Frame — R.H.	1
38	3296-16	Flange Locknut	3
39	22-7810	Spacer	1
40	283-1	Clevis Pin	2
41	282-2	Yoke	2
42	3272-6	Cotter Pin	2
43	10-8010	Motor — Hydraulic	2
44	3257-42	Woodruff Key	1
45	27-2890	Decal — Warning	1
46	215-75	Spring	4
47	3-6944	Support Plate Assembly	2
48	215-74	Cam — Bendix	2
49	215-76	Spring	4
50	10-6820	Brake Drum Assembly (Incl. Ref. #5 & 6)	2
*	62-2580	Spacer	2
51	232-24	Valve Stem w/Cap	2
*†	232-37	Heavy Duty Inner Tube	2

* Not Illustrated

† Service Replacement Part



T-0294-89

NO. 10-8010 HYDRAULIC DRIVE MOTOR

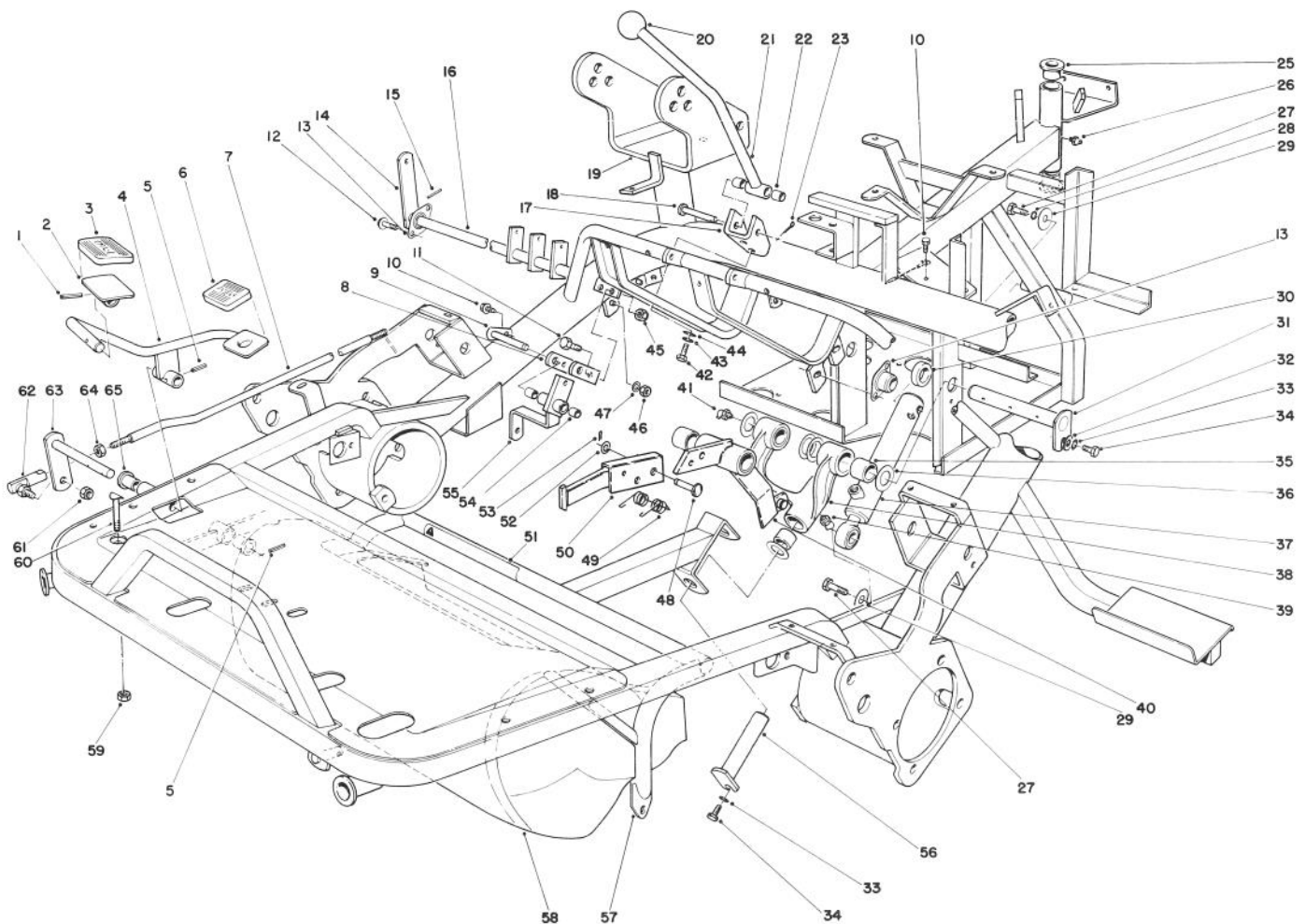
Ref. No.	Part No.	Description	No. Used
1		Dirt Seal	1
2		Retaining Ring	1
3		Spacer	1
4		Shim	1
5		Seal	1
*	353-461	Hydraulic Motor Seal Kit (Incl. Ref. #1-5 & 9 & 21)	1
6†		Housing	1
7	28-1060	Thrust Bearing	1
8	28-0930	Thrust Washer	2
9		Seal Ring	2
10	28-0870	Needle Bearing	1
11	3257-42	Key	1
12	28-0940	Coupling Shaft	1

Ref. No.	Part No.	Description	No. Used
13	28-0860	Needle Bearing	1
14	28-1050	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 47 & 48)

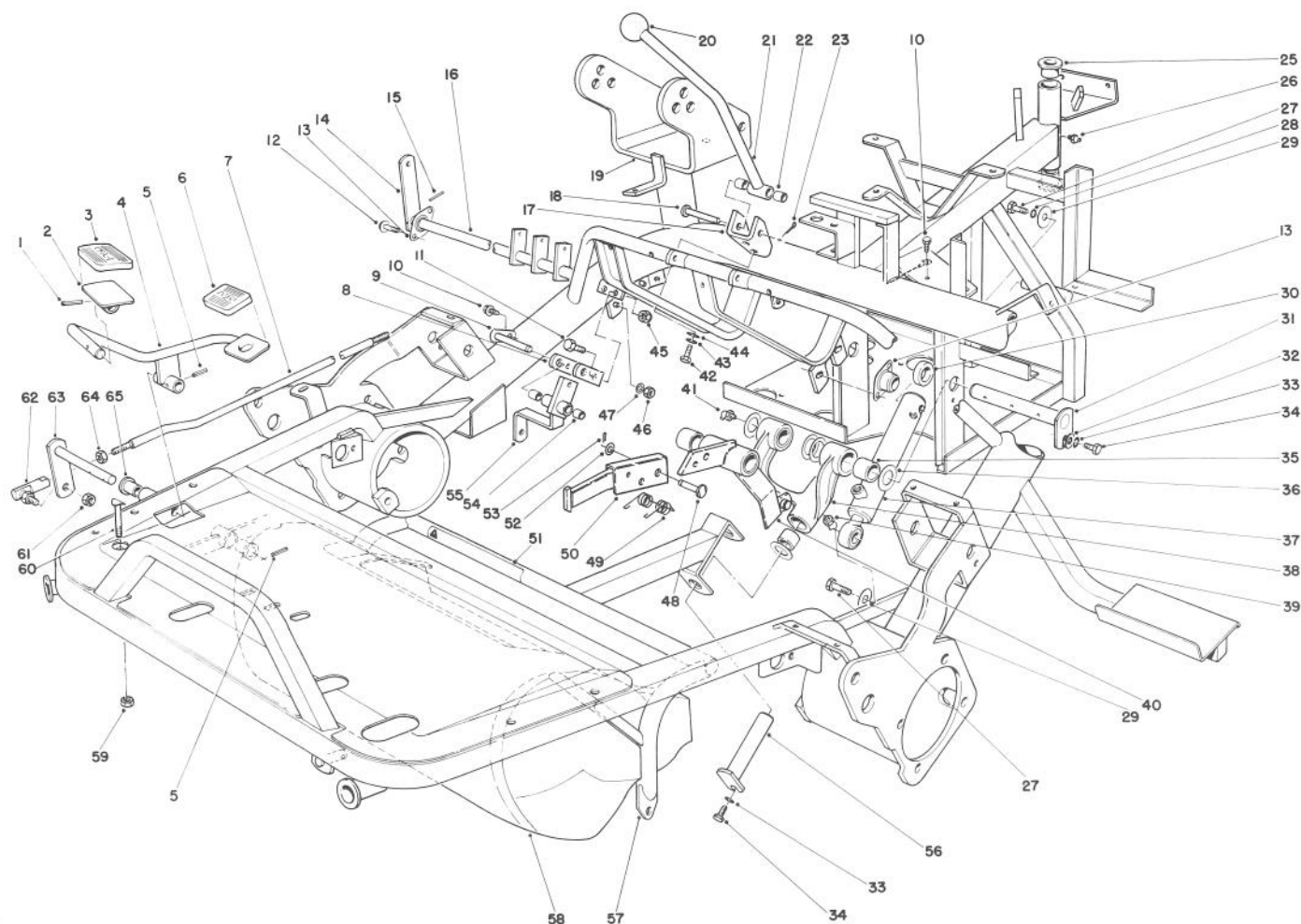


T-0295-89

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 — Pentafllo	1
11	322-5	Capscrew — Hex Hd.	2
12	3234-1	Capscrew — Flanged 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	62-2010	Frame (Incl. Ref. #25 & 65)	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	Pin — Cotter	1
25	256-290	Bushing	2
26	302-5	Grease Fitting	1
27	323-4	Capscrew — Hex Hd.	2
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	Lockwasher	2
34	322-1	Capscrew — Hex Hd.	2
35	3-0348	Bushing	6
36	10-8110	Washer — Thrust	6
37	68-9700	Hydraulic Cylinder Assembly	1
38	10-7820	Pivot Hinge (Incl. Ref. #35)	1
39	302-60	Grease Fitting	1
40	62-2450	Lift Arm — Center (Incl. Ref. #35)	1
41	302-11	45° Grease Fitting	1
42	3211-1	Capscrew — Hex Hd.	2
43	3254-6	Lockwasher	2
44	3256-3	Washer — Flat	2

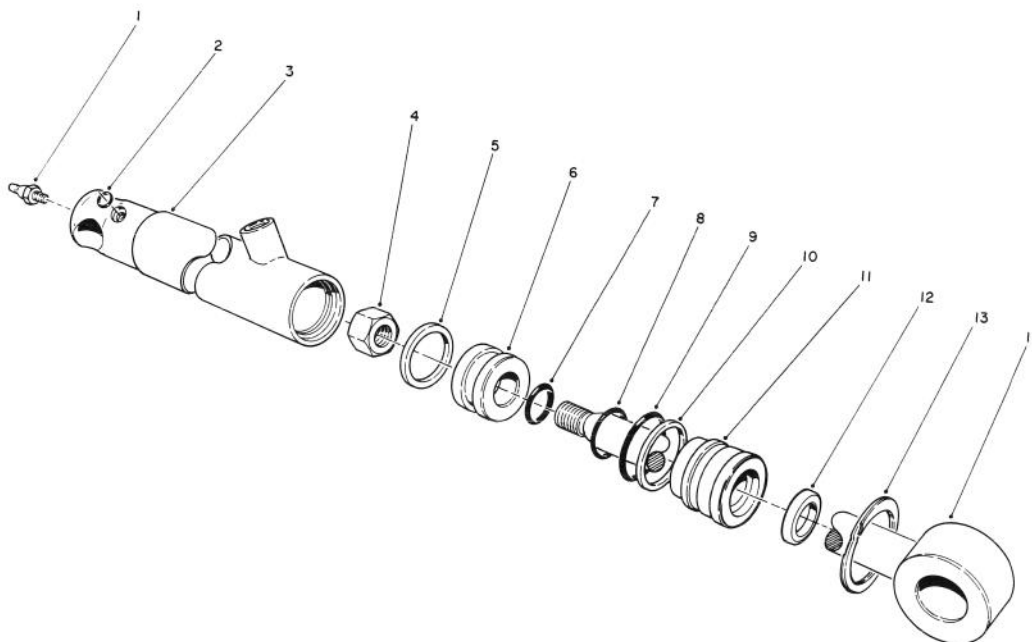


T-0295-89

FRAME ASSEMBLY (Continued)

Ref. No.	Part No.	Description	No. Used
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
50	62-2420	Bar — Lift Arm (R.H. & Center)	1
51	27-2890	Decal — Warning	1
52	3256-26	Washer — Flat	1
53	3272-12	Pin — Cotter	1
54	256-2	Bushing	2
55	49-6260	Tube — Traction Pivot (Incl. Ref. #54)	1

Ref. No.	Part No.	Description	No. Used
56	10-6090	Pin — Pivot	1
57	47-5960	Pull Frame — Rear	1
58	36-7250	Grass Basket	3
59	32128-20	Nut — Hex	1
60	17-9420	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

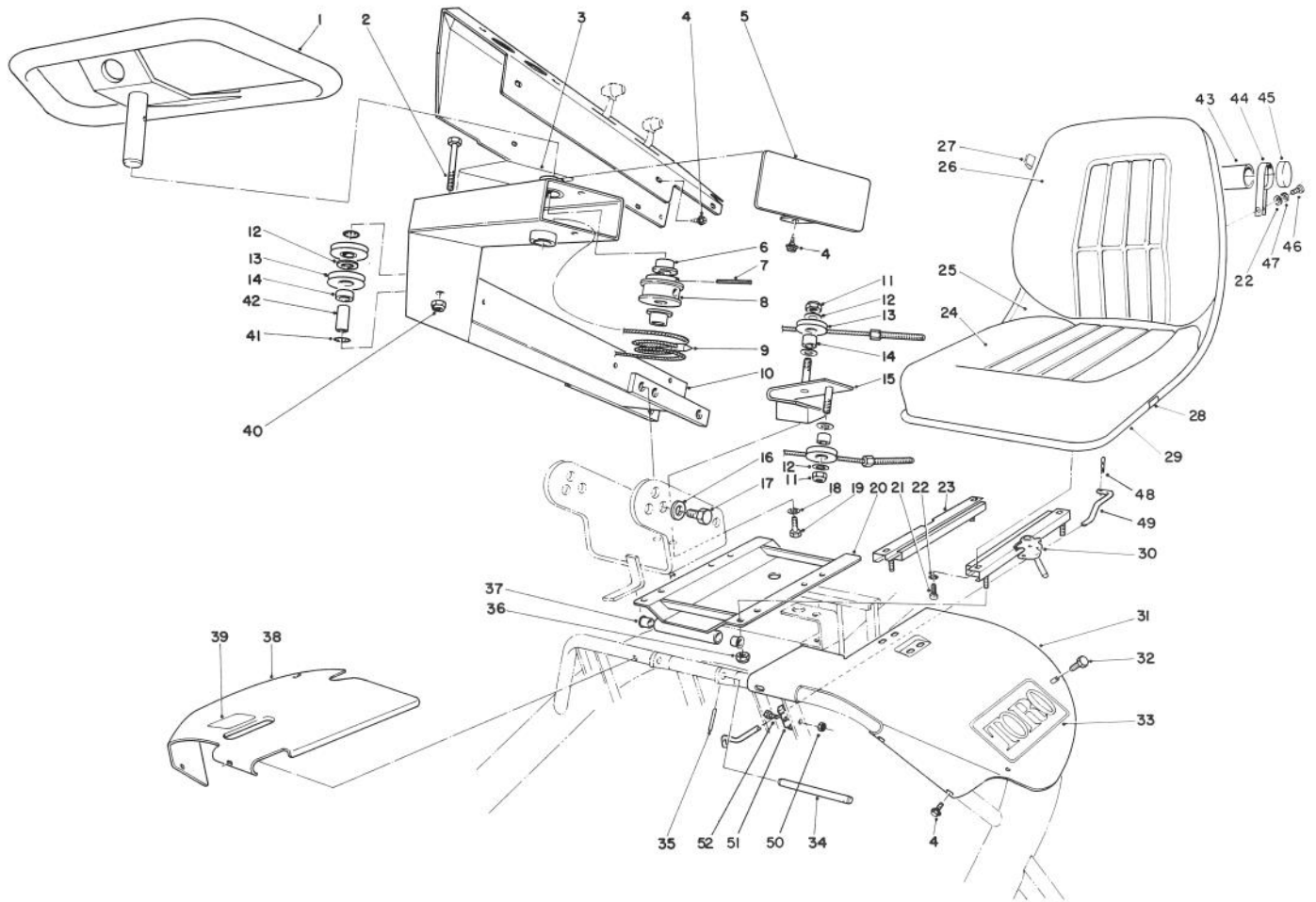


T-0217-89

HYDRAULIC CYLINDER — REAR NO. 68-9700

Ref. No.	Part No.	Description	No. Used
1	302-2	Grease Fitting	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

Ref. No.	Part No.	Description	No. Used
9		O-Ring	1
10		Back Up	1
11	70-2770	Head	1
12		Dust Seal	1
13	43-5220	Retaining Ring	1
14	43-5230	Shaft with Clevis	1
15	70-2790	Seal Repair Kit (Incl. Ref. #5, 7, 8, 9, 10 & 12)	1



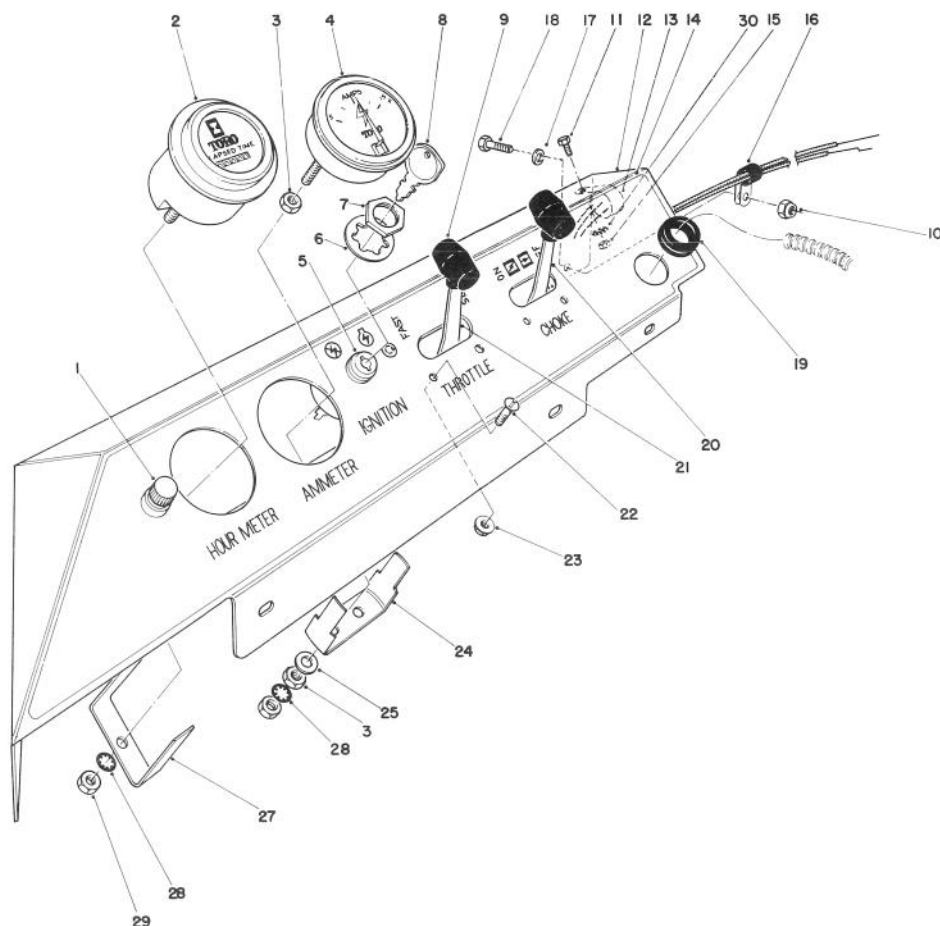
T-0297-89

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	32104-76	Screw — Tapping Acorn Hd.	15
5	10-7370	Tube Cap	1
6	256-113	Bushing	2
7	32121-34	Roll Pin	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 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	6
23	51-0780	Seat Slider	1
24	351-76	Cushion — Seat (Incl. Ref. #27 & 28)	1
25	351-81	Shell	1
26	351-75	Backrest (Incl. Ref. #27 & 28)	1
27	351-79	Clip	6

Ref. No.	Part No.	Description	No. Used
28	351-80	Clip Joint	1
29	351-78	Edging	2
*	63-9410	Seat Assy. (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 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
43	65-5870	Tube	1
44	2412-102	R-Clamp	2
45	65-5890	Cap	2
46	322-3	Capscrew	2
47	3253-4	Lockwasher	2
48	3272-11	Cotter — Pin	1
49	68-5100	Rod — Seat	1
50	3296-16	Locknut	1
51	68-5310	Clip Seat	1
52	321-3	Capscrew	1

* Not Illustrated



T-0298-89

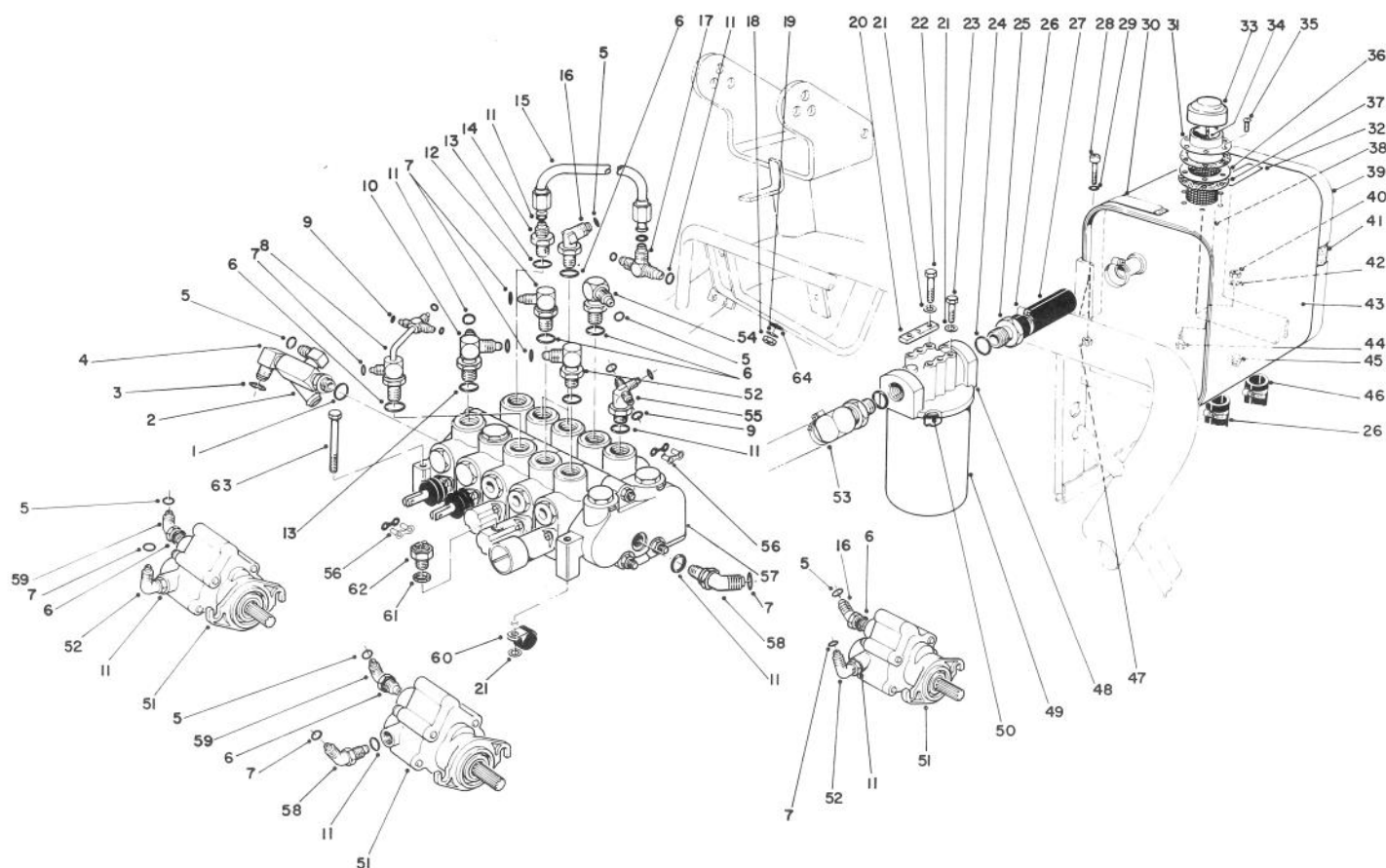
INSTRUMENT PANEL ASSEMBLY

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	Lockwasher	1
7	218-461	Hex Nut	1
8	62-7770	Key	1
9	233-50	Knob	2
10	32128-20	Nut — Lock	1
11	321-3	Hex Hd. Capscrew	1
12	68-9910	Panel — Control	1
13	59-9810	Module	1
14	68-9940	Decal — Control Panel	1
15	32149-2	Locknut — Keps	1

Ref. No.	Part No.	Description	No. Used
16	2412-41	Clip	1
17	3253-23	Flat Washer	1
18	322-4	Hex Hd. Capscrew	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	3251-3	Screw — Machine Rd. Hd. Slotted	4
23	32149-7	Locknut	1
24	39-9600	Clamp — Mounting	2
25	3256-21	Washer	2
27	218-515	Bracket — Mounting	1
28	3254-1	Lockwasher — Internal Tooth	3
29	3217-26	Nut	1
30	3254-8	Lockwasher — Internal Tooth	1

* Not Illustrated

† Obtain Locally

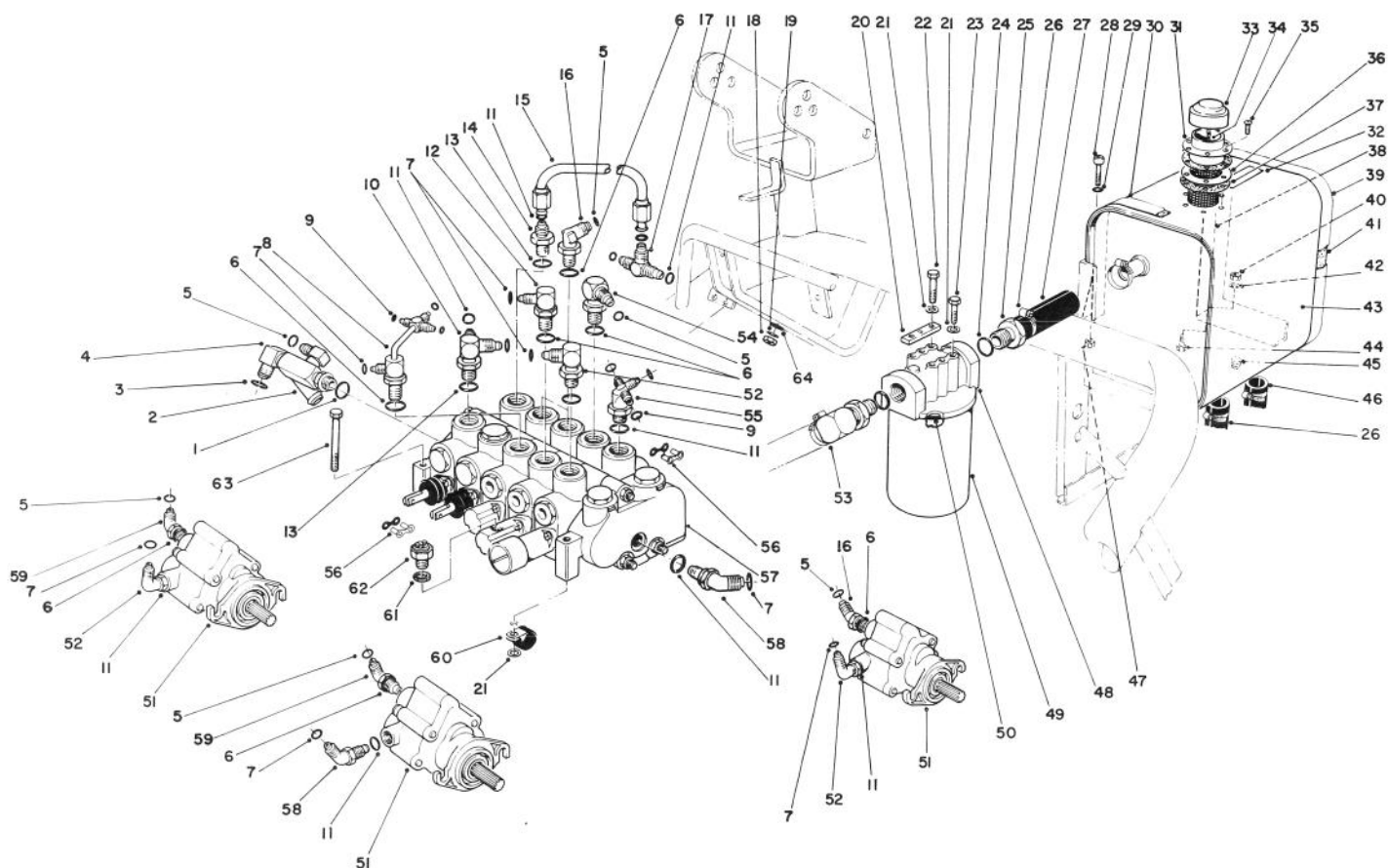


T-0299-89

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	Lockwasher	3
20	27-2380	Spacer — Filler Mount	1
21	3256-23	Washer — Flat	5

Ref. No.	Part No.	Description	No. Used
22	322-4	Capscrew — Hex Hd.	2
23	322-2	Capscrew — Hex Hd.	2
24	237-101	O-Ring	1
25	353-563	Fitting — Straight	1
26	2412-3	Clamp — Hose	8
27	27-2040	Hose	1
28	3274-54	Setscrew — Hex Socket Hd.	2
29	3256-22	Washer — Flat	2
30	27-7980	Strap — Reservoir Assembly Front (Includes 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	Strap — Reservoir Assembly (Incl. Ref. #41)	1
40	3296-16	Nut — Hex	2



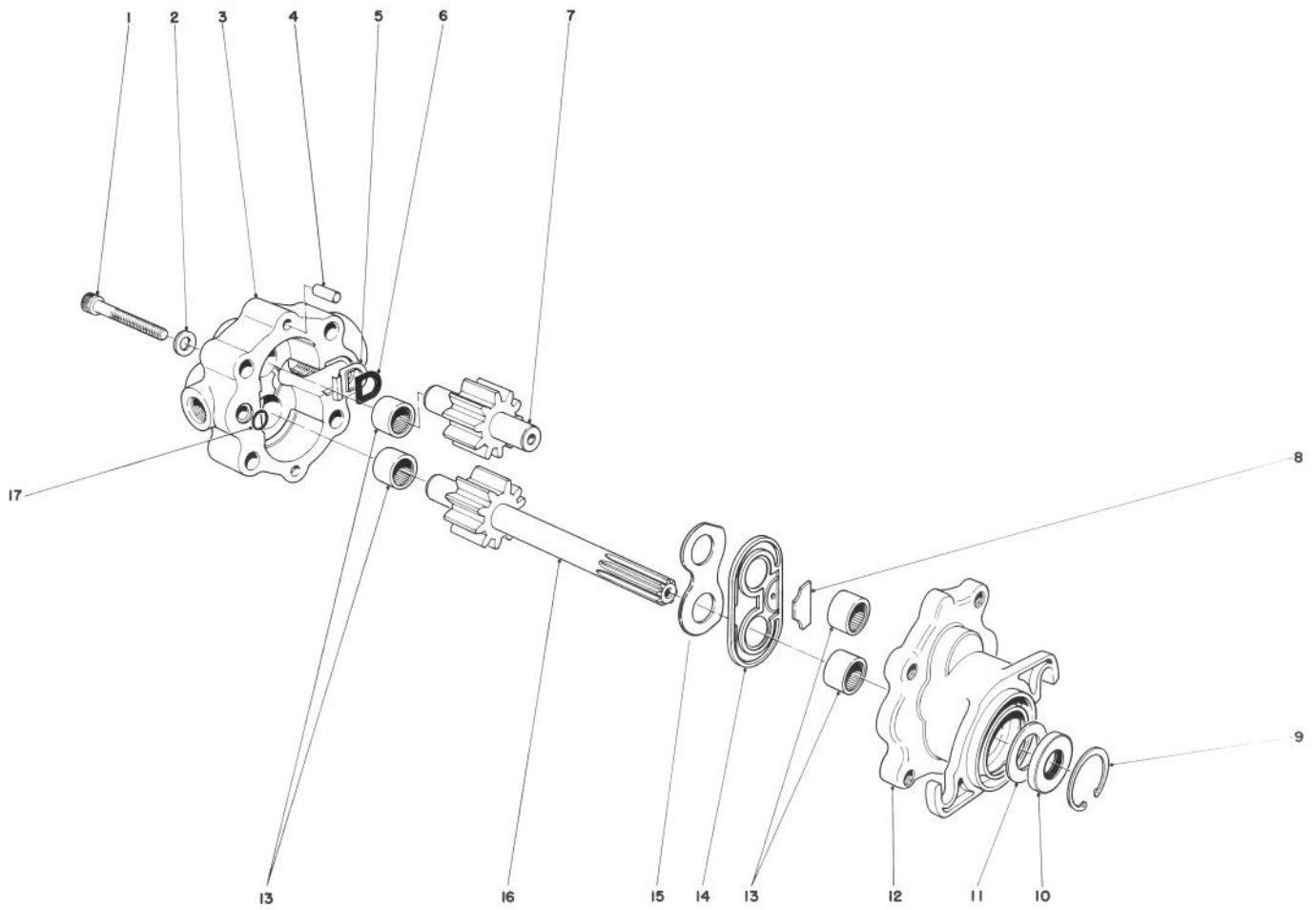
T-0299-89

VALVE BANK AND HYDRAULIC RESERVOIR ASSEMBLY (Continued)

Ref. No.	Part No.	Description	No. Used
41	27-3030	Felt Strip	2
42	3253-3	Lockwasher	2
43	55-8480	Tank Hydraulic	1
44	321-3	Capscrew — Hex Hd.	2
45	281-1	Plug — Oil	1
46	27-3040	Hose — Pump	2
47	32153-4	Nut — Lock	2
48	44-5560	Filter Head — Hydraulic	1
49	68-9880	Filter Element (Incl. Ref. #50)	1
50	68-9980	Seal — Ring	1
51	26-5690	Reel Motor	3
52	340-77	90° Elbow	3
53	353-564	90° Fitting	1

Ref. No.	Part No.	Description	No. Used
54	63-4090	90° Fitting — Extended	1
55	63-4070	Fitting — Crow Foot	1
56	57-6220	Link Connector	5
57	49-5540	Control Valve	1
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	Capscrew — Hex Hd.	3
64	3254-2	Lockwasher — Internal Tooth	1
*	44-2500	Hydraulic Oil Dye	1

* Not Illustrated



T-0300-89

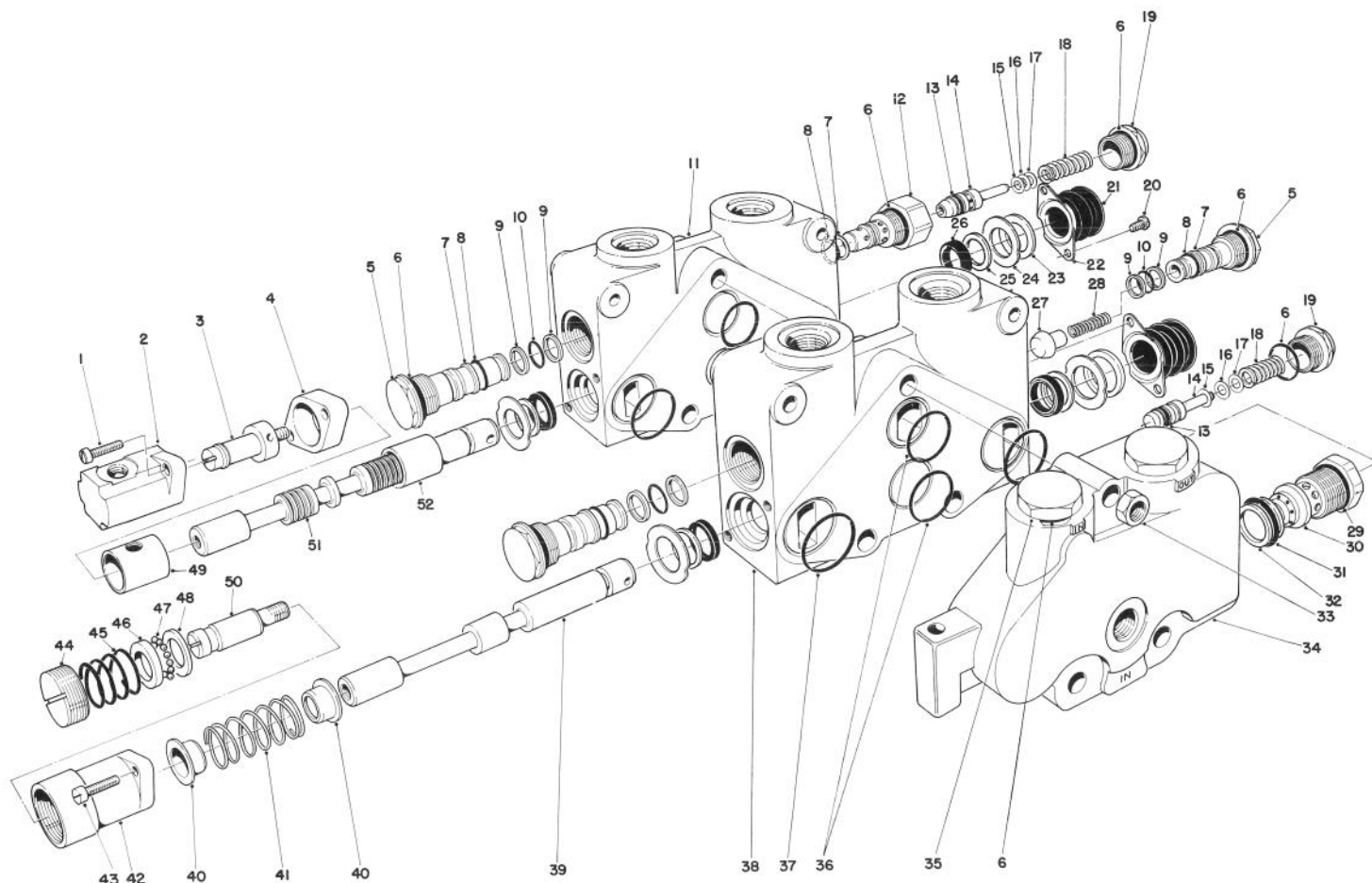
REEL MOTOR NO. 26-5690

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 47-48)



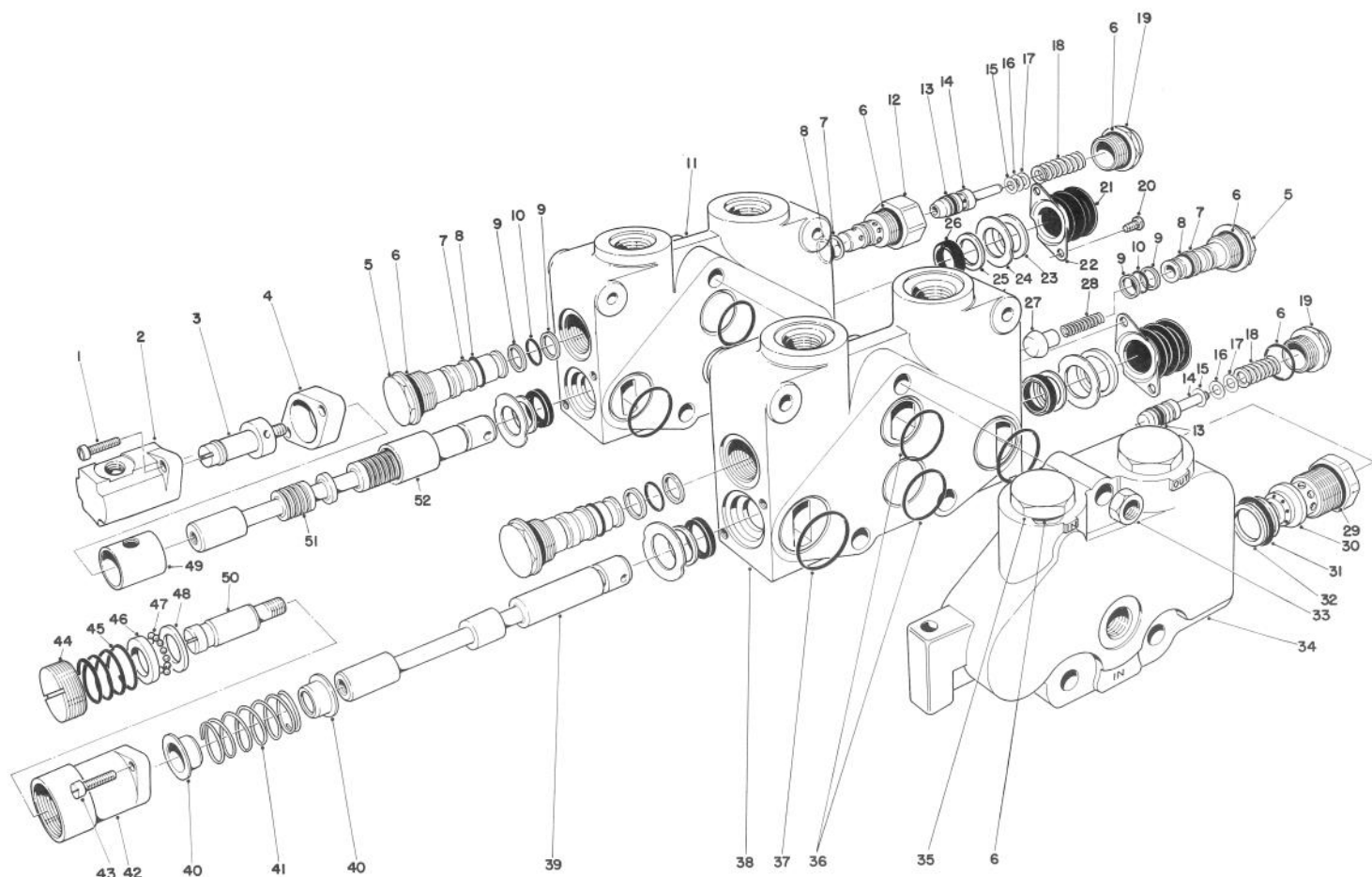
T-0301-89

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	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	Seal — O-Ring	8
7	353-306	Ring — Back-Up	4
8	353-305	Seal — O-Ring	4
9	353-303	Ring — Back-Up	6
10	353-302	Seal — 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

Ref. No.	Part No.	Description	No. Used
22	353-559	Retainer — Boot	2
23	353-560	Washer — Breather	2
24	353-959	Plate — Seal Retainer	4
25	353-958	Ring — Back-Up	4
26	353-957	Seal — Lip	4
27	353-301	Poppet	1
28	353-304	Spring	1
29	353-331	Seal — O-Ring	1
30	353-760	Body Relief	1
31	353-758	Seal — O-Ring	1
32	353-952	Ring — Back-Up	1
33	353-852	Nut — Hex	3
34	353-772	Left End Cover	1
35	353-721	Plug (Incl. Ref. #6)	2
36†		Seal — O-Ring	4
37†		Seal — 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	353-754	Bonnet — R. Detent	1
43	3274-15	Screw — Fillister Hd.	2

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



T-0301-89

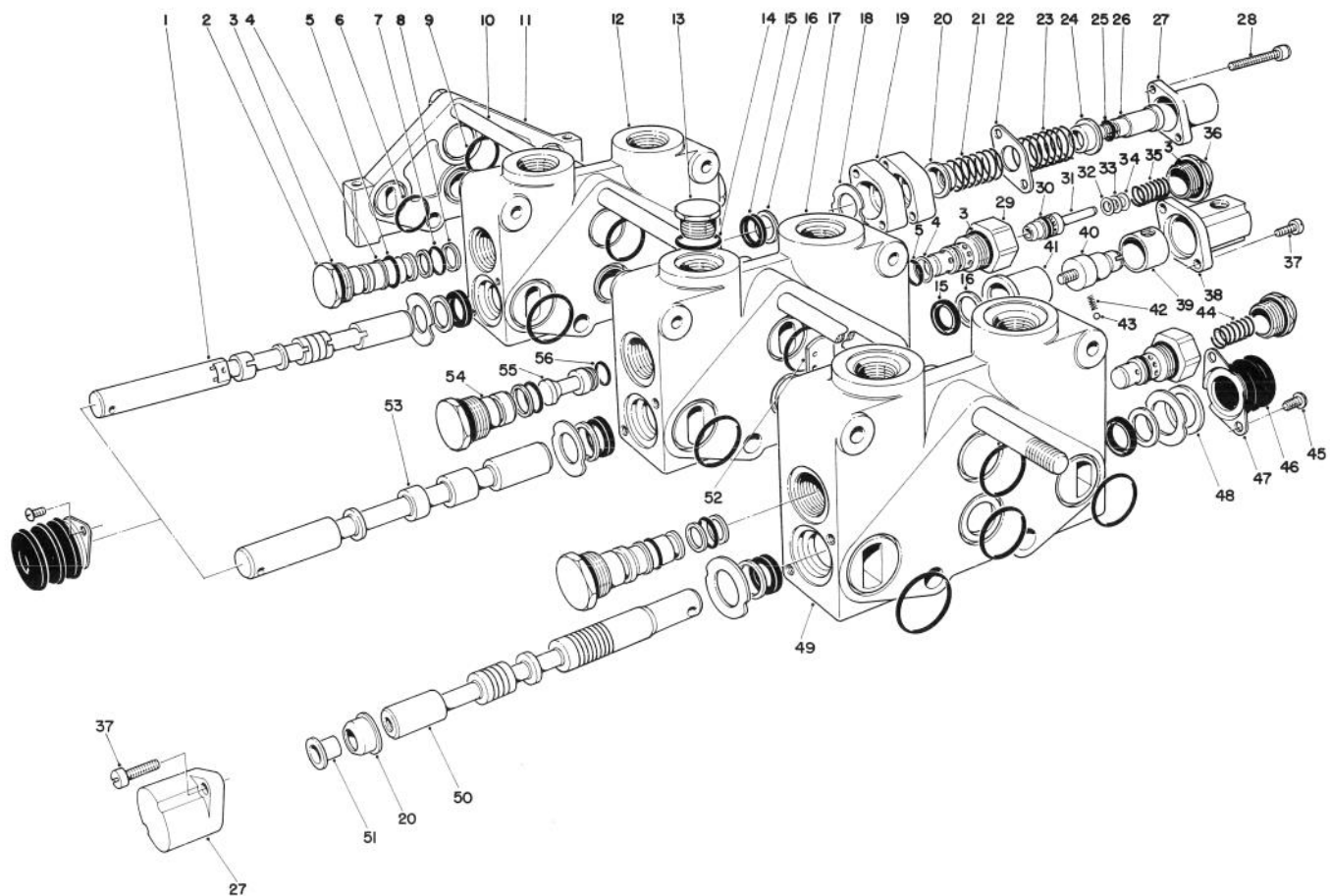
CONTROL VALVE ASSEMBLY NO. 49-5540 Section 1 and 2 (Continued)

Ref. No.	Part No.	Description	No. Used
44	353-763	Cap — Adjustment	1
45	353-579	Spring	1
46	42-2680	Race R. Detent	1
47	353-418	Ball — Steel	12
48	353-582	Plate — Thrust	1
49	353-728	Sleeve	1
50	353-762	Spud — Detent Out	1
51†		Spool — V20 3 Way F.F.	1
52	353-732	Sleeve — Detent	1
*	353-766	Relief WH (2000) PSI Assy. (Incl. Ref. #6, 13-19, 29, 30, & 32)	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. #3, 40-49)	1
*	353-839	Positioner — DI (SPL) Assy. (Incl. Ref. #1, 3-5, 50, & 52)	1
*	353-642	Relief — RC Mod. (Incl. Ref. #6-8, 12-19)	2
*	353-835	Seals — Section, Set (Incl. Ref. #36 & 37)	1
*	12-7009	Seal — Spool, Set (Incl. Ref. #24-26)	1
*	353-854	Boot — Spool Protective Assembly (Incl. Ref. #20-23)	2

* Not Illustrated

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



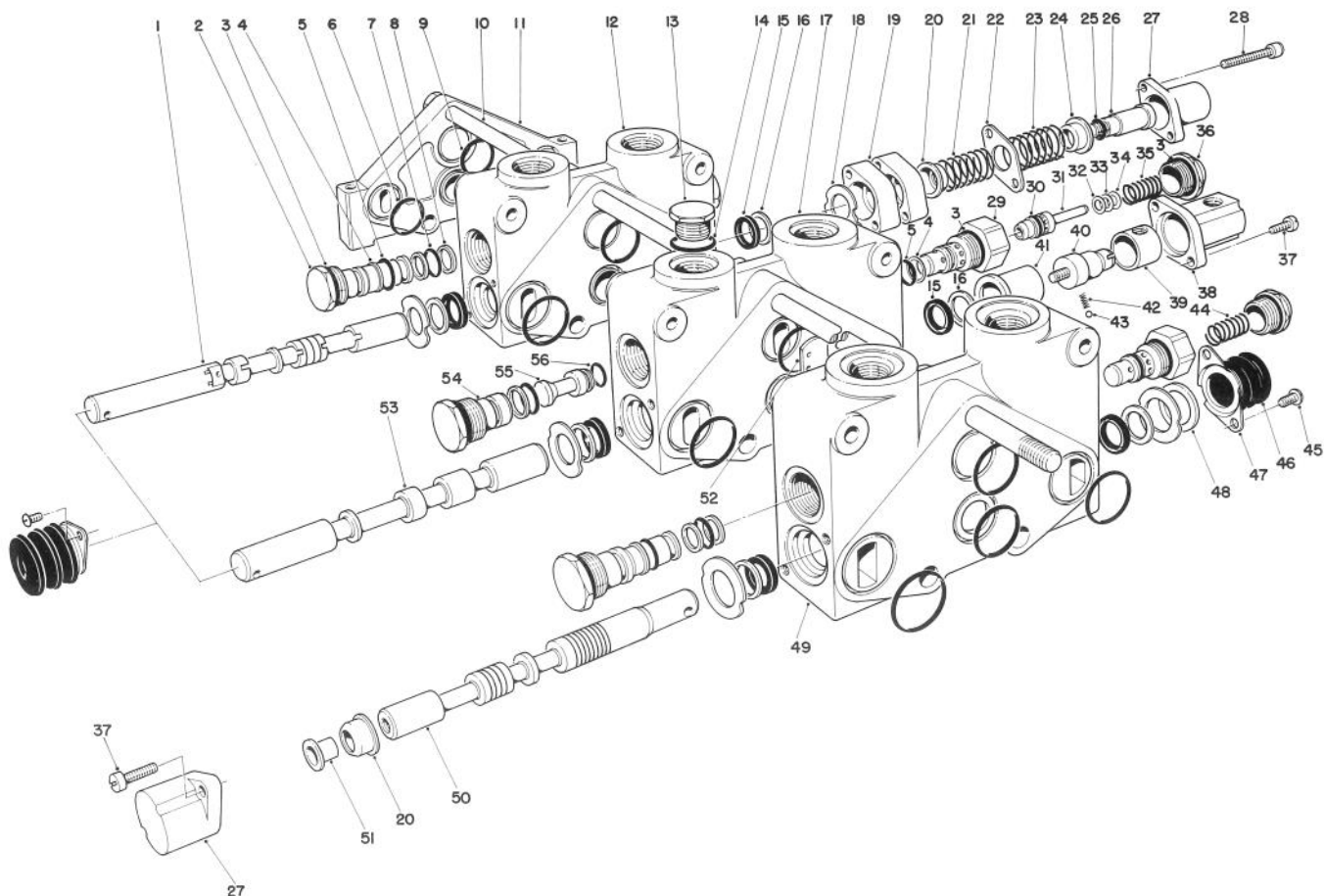
T-0302-89

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	353-957	Seal — Lip	6
16	353-958	Ring — Back-Up	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

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.



T-0302-89

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
53		Spool #4	1
54	353-953	Plug Assembly	1
55	353-844	Plus Series (Incl. Ref. #56)	1
56	353-850	Seal — O-Ring	1
*	353-835	Seals — Section, Set (Incl. Ref. #6 & 9)	1
*	353-960	Seal — Spool, Set (Incl. Ref. #15, 16 & 18)	1

Ref. No.	Part No.	Description	No. Used
*	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 Assembly (Incl. Ref. #20, 27, 37 & 51)	1
*	353-840	Position — DI (SP) Assembly (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
*	49-5540	Control Valve Assembly Complete	1

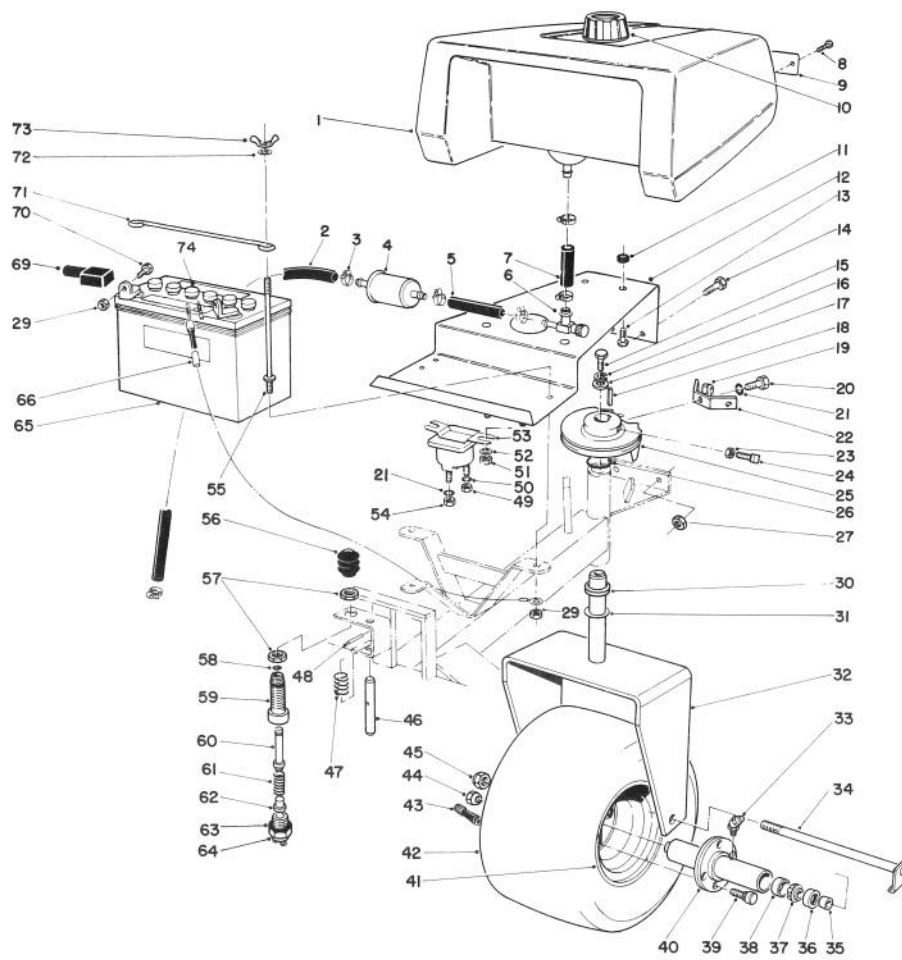
* Not Illustrated

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



Ref. No.	Part No.	Description	No. Used
1	54-9660	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 Shutoff	1
7	56-2230	Hose — Fuel Line	1
8	3290-470	Screw — Oval Head	2
9	61-3310	Plate — Logo	1
10	55-3570	Gas Cap	1
11	237-136	Grommet	4
12	62-2210	Tank Base	1
13	3250-36	Capscrew — Phil. Hd.	4
14	323-6	Capscrew — Hex Hd.	2
15	322-3	Capscrew — Hex Hd.	1
16	3253-4	Lockwasher	1
17	62-2190	Washer — Special	1
18	5-0698	Key	1
19	3296-4	Nut — Lock	2
20	322-5	Capscrew — Hex Hd.	1
21	3253-4	Lockwasher	3
22	3-8516	Anchor — Cable	1

18



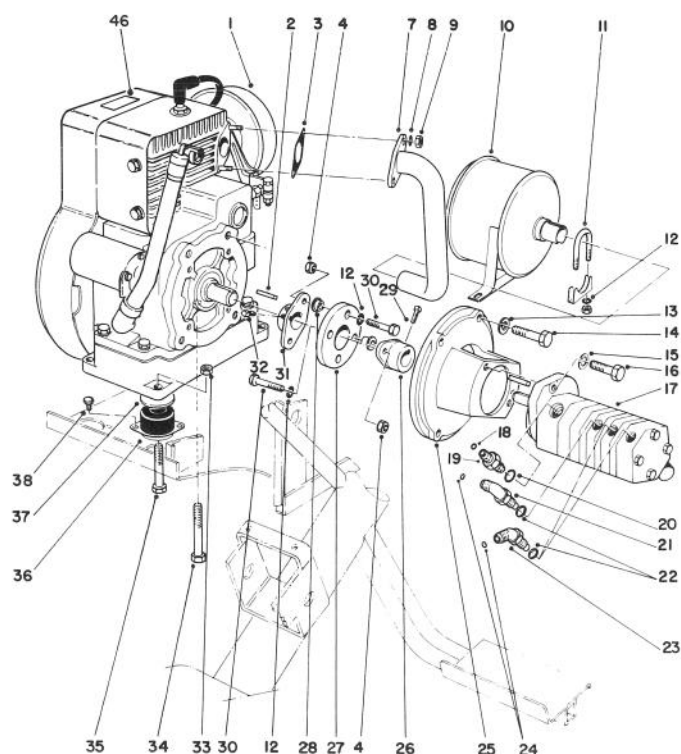
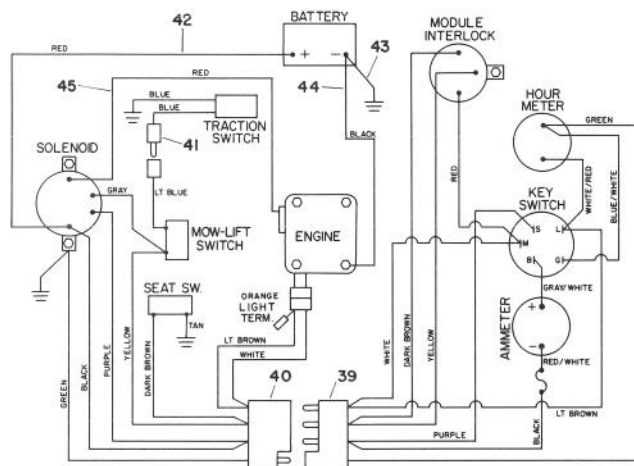
T-0303-89

GAS TANK, BATTERY AND CASTER WHEEL ASSEMBLY (Continued)

Ref. No.	Part No.	Description	No. Used
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	Lockwasher	2
51	32153-4	Nut — Lock	2
52	3256-22	Washer	2
53	28-4210	Solenoid	1
54	3218-13	Nut — Jam	2
55	10-8120	Bolt — Battery	2
56	43-8870	Boot — Switch	1
57	218-461	Nut — Jam	2
58	237-7	O-Ring	1
59	43-8620	Guide — Switch Pin	1

Ref. No.	Part No.	Description	No. Used
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	12-1400	Battery	1
66	3-8168	Decal — Negative Ground	1
69	218-331	Boot Terminal	1
70	321-3	Capscrew — Hex Hd.	2
71	7-0536	Hold Down — Battery	1
72	3256-1	Washer	2
73	32103-12	Wing Nut	2
74	239-18	Cap — Battery	6
*	44-1070	Switch Assy. (Incl. Ref. #56-64)	1

* Not Illustrated



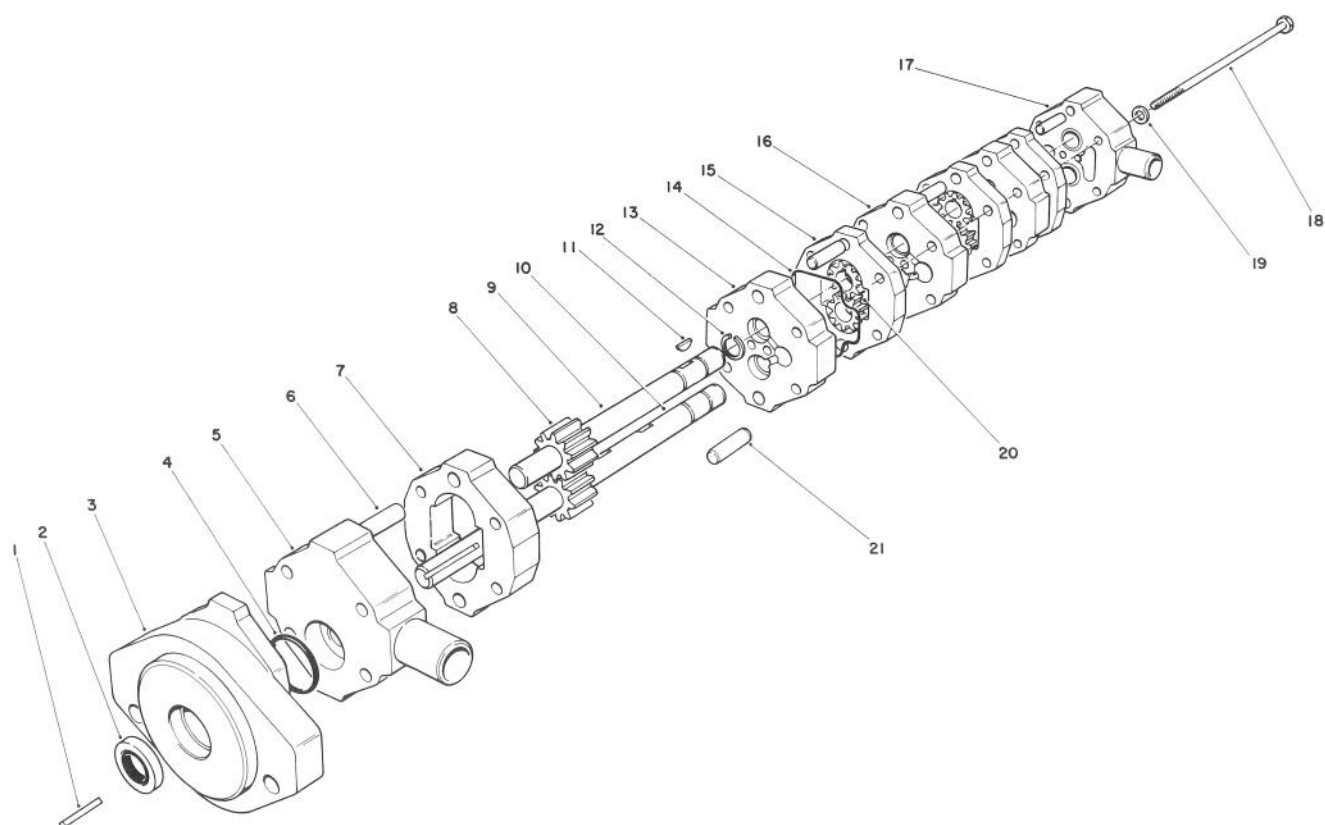
T-0304-89

ENGINE AND WIRING DIAGRAM

Ref. No.	Part No.	Description	No. Used
1	62-2400	Engine	1
2	10-7070	Key — Engine	1
3	2210-275	Gasket — Exhaust	1
4	3296-29	Nut — Lock	4
7	62-2270	Exhaust Pipe	1
8	3253-4	Lockwasher	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	Lockwasher	4
14	324-6	Capscrew — Hex Hd.	4
15	3253-29	Lockwasher	2
16	323-8	Capscrew — 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

Ref. No.	Part No.	Description	No. Used
24	237-22	O-Ring	2
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	Setscrew — Sq. Hd.	2
30	322-6	Capscrew — Hex Hd.	4
31	27-1960	Coupling — Engine	1
32	3241-2	Setscrew — Sq. Hd.	2
33	3296-39	Nut — Lock	4
34	323-15	Capscrew — Hex Hd.	1
35	323-20	Capscrew — Hex Hd.	3
36	27-2150	Mounting Pad — Engine	4
37	28-1140	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 Lead	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

* Not Illustrated

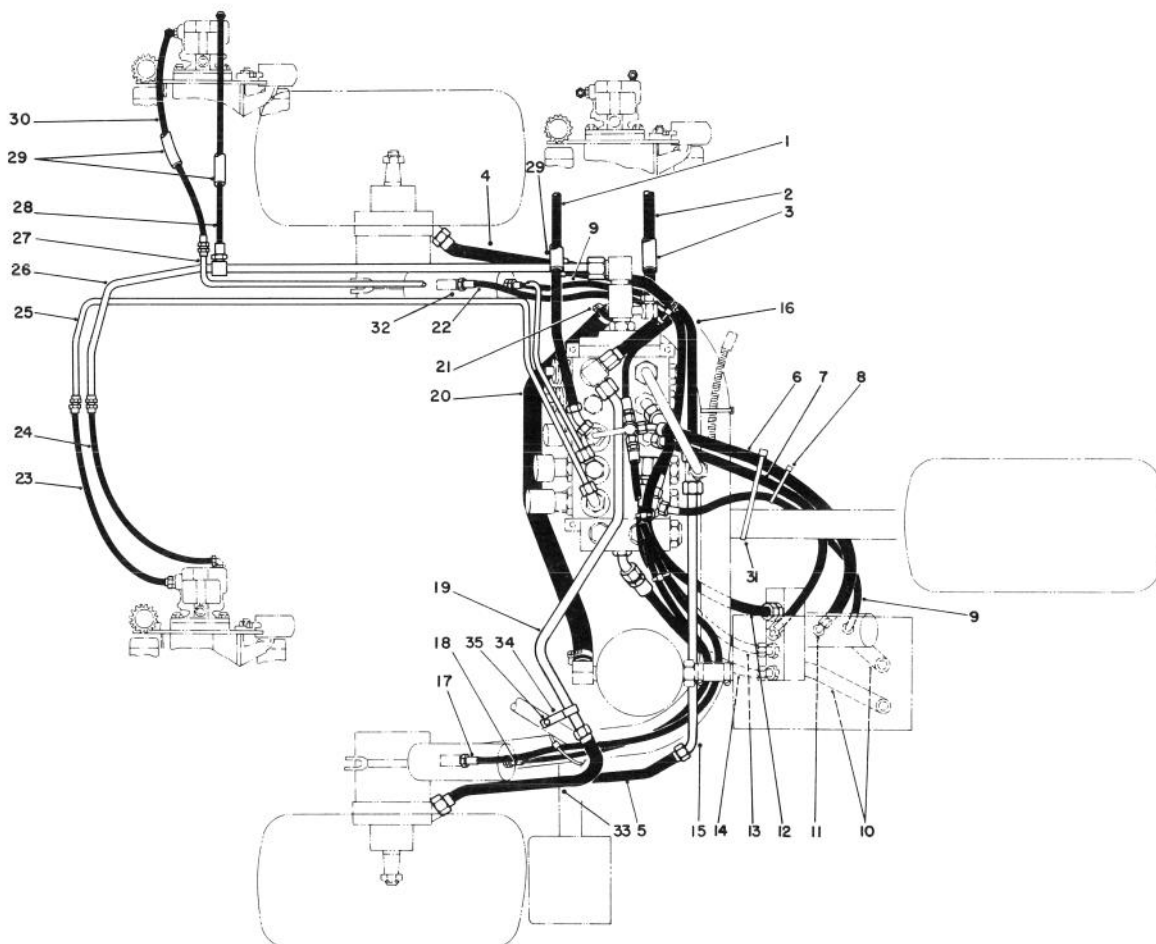


T-0305-89

TRACTION PUMP NO. 62-2300

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	353-970	Dowel	2
7	353-971	Gear Plate — Pump	1
8	353-964	Gear — 59B	2
9	353-965	Idler Shaft Assembly	1
10	353-972	Shaft — Drive	1
11	353-884	Key — Woodruff	4

Ref. No.	Part No.	Description	No. Used
12	353-886	Ring — Retaining	2
13	353-921	Plate Assembly	1
14	353-922	Seal Ring — Pump	8
15	353-969	Gear Plate — 30B	3
16	353-923	Plate Assembly	2
17	353-927	Cover Assembly	1
18	353-966	Screw — Cap Hex Hd.	4
19	353-600	Washer — Flat	4
20	353-967	Gear — 30B	5
21	353-968	Dowel	6

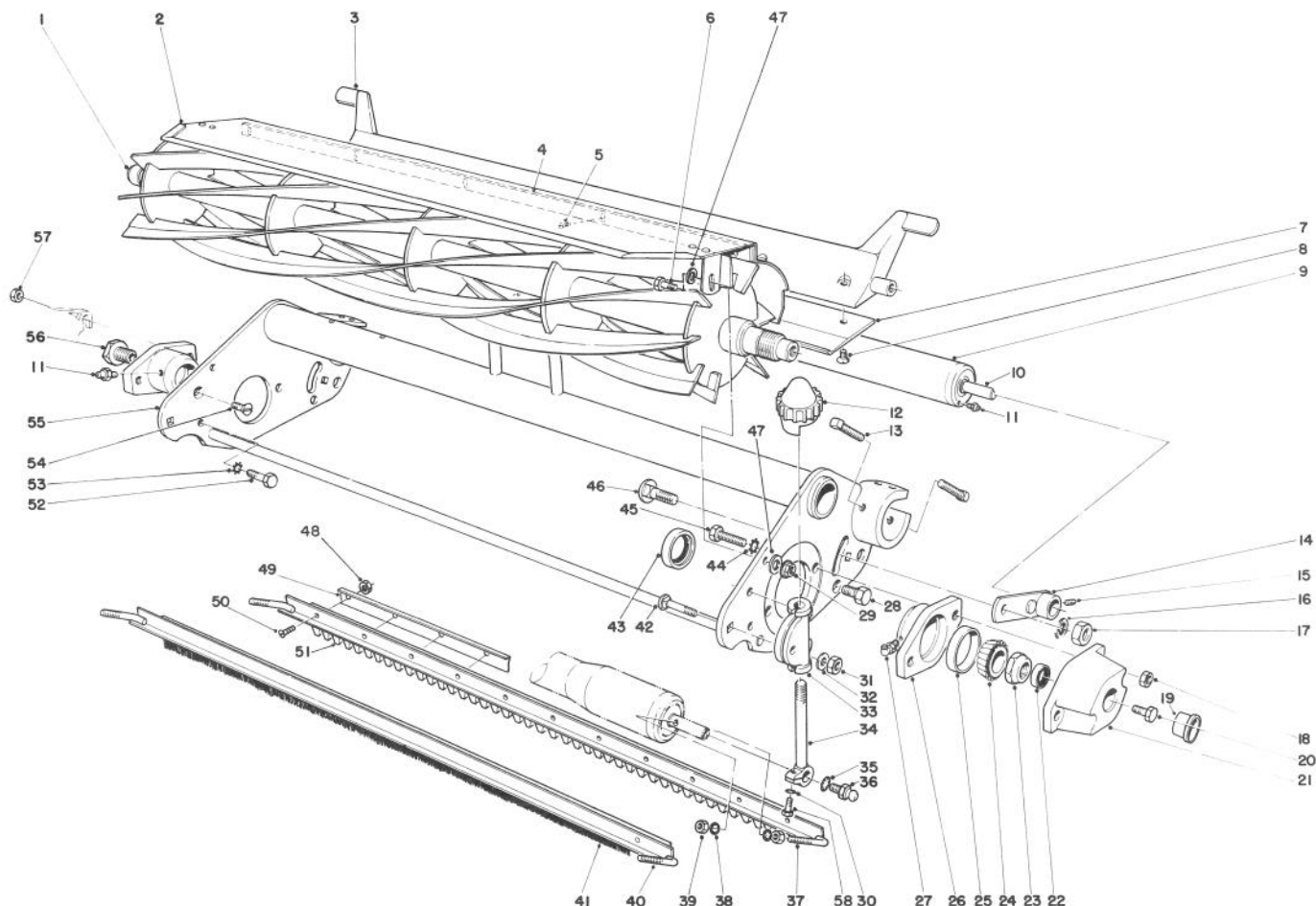


T-0306-89

HYDRAULIC SYSTEMS DIAGRAM

Ref. No.	Part No.	Description	No. Used
1	63-3860	Hose — Pressure Rear	1
2	63-3840	Hose — Return Rear	1
3	56-7981	Splash Shield	1
4	70-7160	Traction Hose — Upper R.H.	1
5	70-7150	Traction Hose — Lower L.H.	1
6	63-3930	Hose Cylinder — Drop Rear	1
7	63-3900	Hose — Pump #3	1
8	3290-379	Cable Tie	6
9	63-3880	Hose Cylinder — Lift R.H. and Rear	2
10	27-3040	Hose — Pump/Inlet	2
11	340-103	45° Elbow Adjustable	1
12	63-3940	Hose — Pump #4	1
13	63-3910	Hose — Pump #2	1
14	63-3920	Hose — Pump #1	1
15	70-7120	Tube — Traction Lower L.H.	1
16	70-7170	Hose — Traction Lower R.H.	1
17	63-3850	Hose Cylinder — Drop L.H.	1
18	63-3890	Hose Cylinder — Lift L.H.	1
19	70-7130	Traction Line — Upper L.H.	1

Ref. No.	Part No.	Description	No. Used
20	51-0040	Return Line — Manifold to Filter	1
21	2412-3	Clamp — Hose	2
22	63-3950	Hose Cylinder — Drop L.H.	1
23	63-3870	Hose — Pressure L.H.	1
24	63-3830	Hose — Return L.H.	1
25	63-4020	Pressure Line — Cutting Unit L.H.	1
26	63-4040	Return Line — R.H.	1
27	63-4030	Pressure Line — Cutting Unit R.H.	1
28	63-3820	Hose — Return R.H.	1
29	56-7980	Splash Shield	3
30	63-3810	Hose — Pressure R.H.	1
31	3333-975	Cable Tie	1
32	340-92	Fitting — Orifice Str.	1
33	70-7140	Hose — Traction Upper L.H.	1
34	2412-41	R-Clamp	3
35	12-3270	Capscrew	3



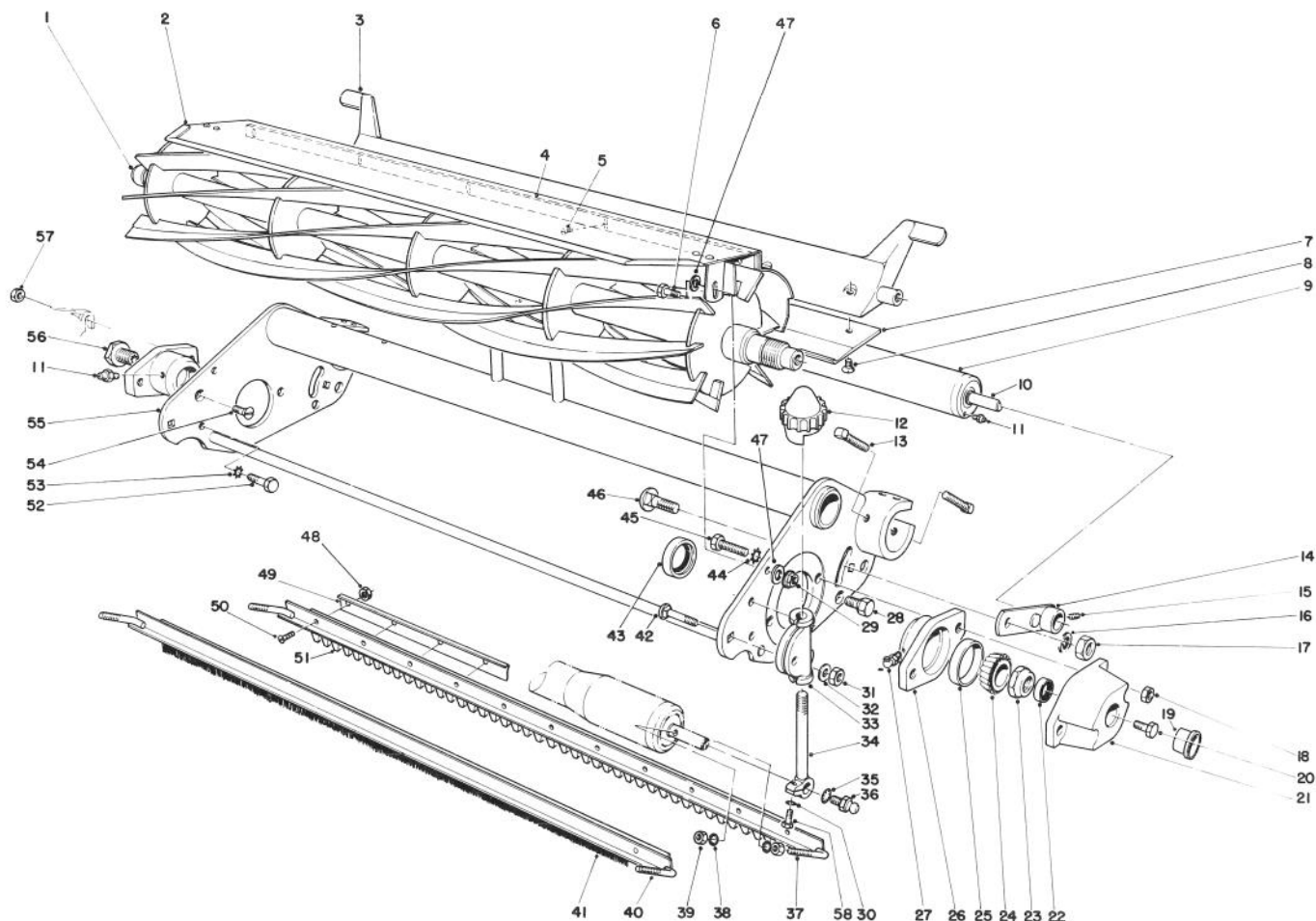
T-0307-89

CUTTING UNIT MODEL NO. 04405 & 04408

Ref. No.	Part No.	Description	No. Used
1	12-3599	Reel Assembly 8 Blade	1
1*	12-8779	Reel Assembly 5 Blade	1
2	36-7190	Grass Shield	1
3	10-4930	Bed Bar	1
4	36-7260	Cut-Off Bar	1
5	32144-73	Screw — Machine Round Hd.	5
6	321-5	Capscrew	2
7	63-8500	Bed Knife 1/8"	1
*	62-2510	Bed Knife 3/16"	1
*	63-8550	Bed Knife — Tournament	1
*	63-8610	Bed Knife — Fairway	1
8	57-4910	Screw — Special	7
9	21-8450	Rear Roller Assembly (Incl. Ref. #10 & 11)	1
10	21-8430	Rear Bearing	2
11	302-5	Grease Fitting	3
12	10-5040	Knob — Height Adjustment	2
13	3243-13	Set Screw Sq. Hd. Oval Point	4
14	27-2650	Height-of-Cut Adjustment	2
15	3290-125	Setscrew	2
16	3253-7	Lockwasher	2
17	3217-9	Locknut	2

Ref. No.	Part No.	Description	No. Used
18	3296-39	Locknut	2
19	12-0460	Caplug	1
20	323-2	Machine Screw Hex Hd.	1
21	10-5080	End Cap	1
22	253-61	Seal	1
23	3296-60	Stop Nut	1
24	254-94	Bearing Cone	2
25	254-72	Bearing Cup	2
26	10-5120	Bearing Housing	2
27	302-40	Grease Fitting	1
28	217-74	Wheel Bolt	2
29	3296-42	Nut — Lock	2
30	3253-3	Lockwasher	2
31	3296-29	Locknut	2
32	3256-23	Flat Washer	2
33	10-5060	Bracket Height of Cut	2
34	10-5010	Screw Roller Adjustment	2
35	3254-6	Shakeproof Washer	2
36	2411-7	Ball Stud	2
37	11-0070	Scraper Comb Assembly (Incl. Ref. #48-51)	1
38	3254-8	Shakeproof Washer	4

* Not Illustrated



T-0307-89

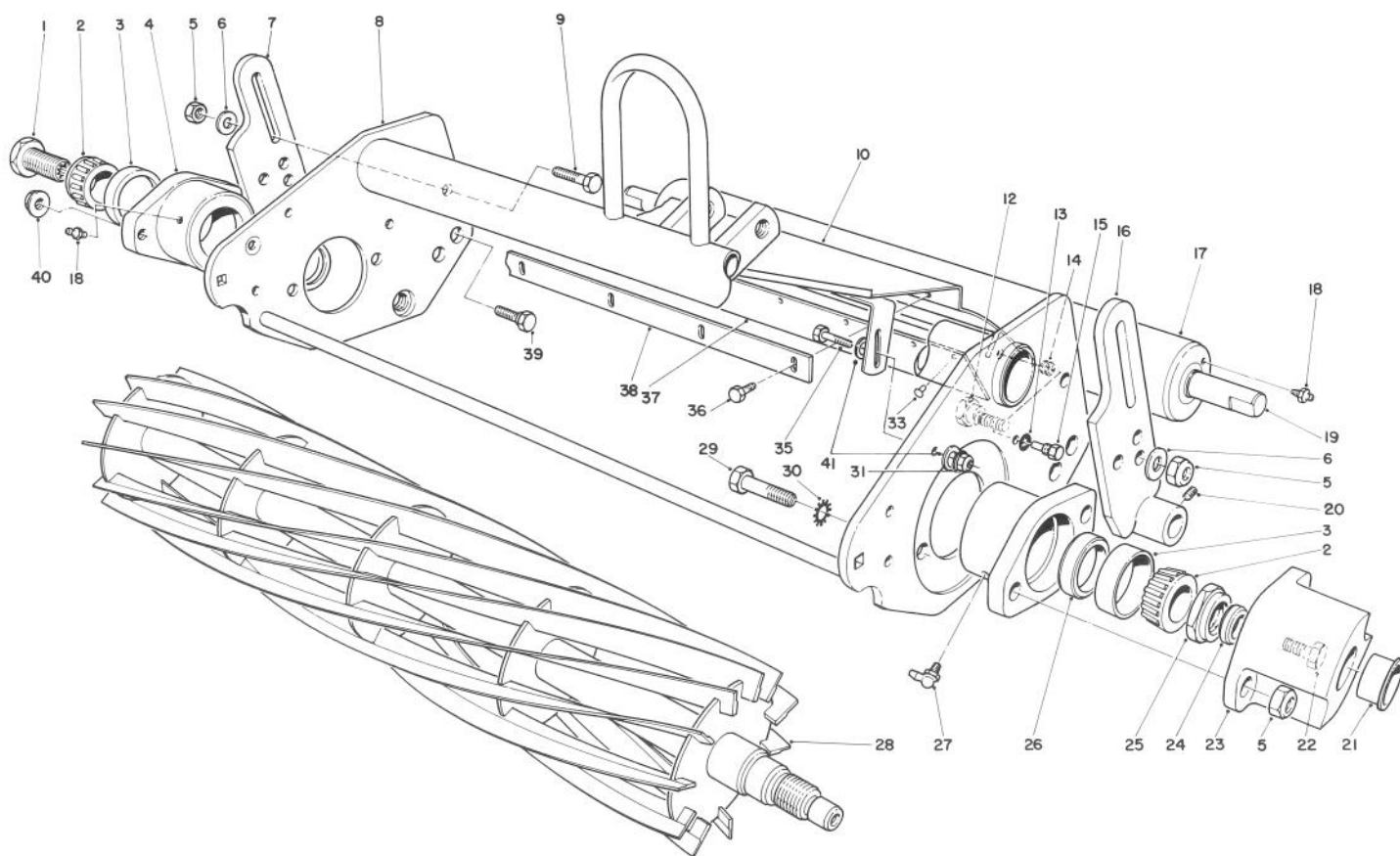
CUTTING UNIT MODEL NO. 04405 & 04408 (Continued)

Ref. No.	Part No.	Description	No. Used
39	3219-1	Hex Nut	4
40	33-1000	Scraper Brush Assembly (Incl. Ref. 41) (Optional)	1
41	33-0630	Brush	1
42	3-7253	Carriage Bolt	2
43	253-96	Oil Seal	2
44	3255-9	Shakeproof Washer	4
45	57-3210	Machine Screw — Special	4
46	3233-26	Carriage Bolt	2
47	3256-22	Washer	4
48	3296-9	Locknut	11
49	8-2520	Support Comb	1
50	3249-3	Round Head Screw	11

Ref. No.	Part No.	Description	No. Used
51	8-2530	Comb — Urethane	1
52	322-5	Capscrew	2
53	3255-8	External Shakeproof	2
54	32108-20	Screw Flat Head	2
55	70-1100	Frame Reel	1
56	10-5100	Nut Spline	1
57	32128-36	Locknut — Flange	2
58	321-4	Capscrew	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 47-48)



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

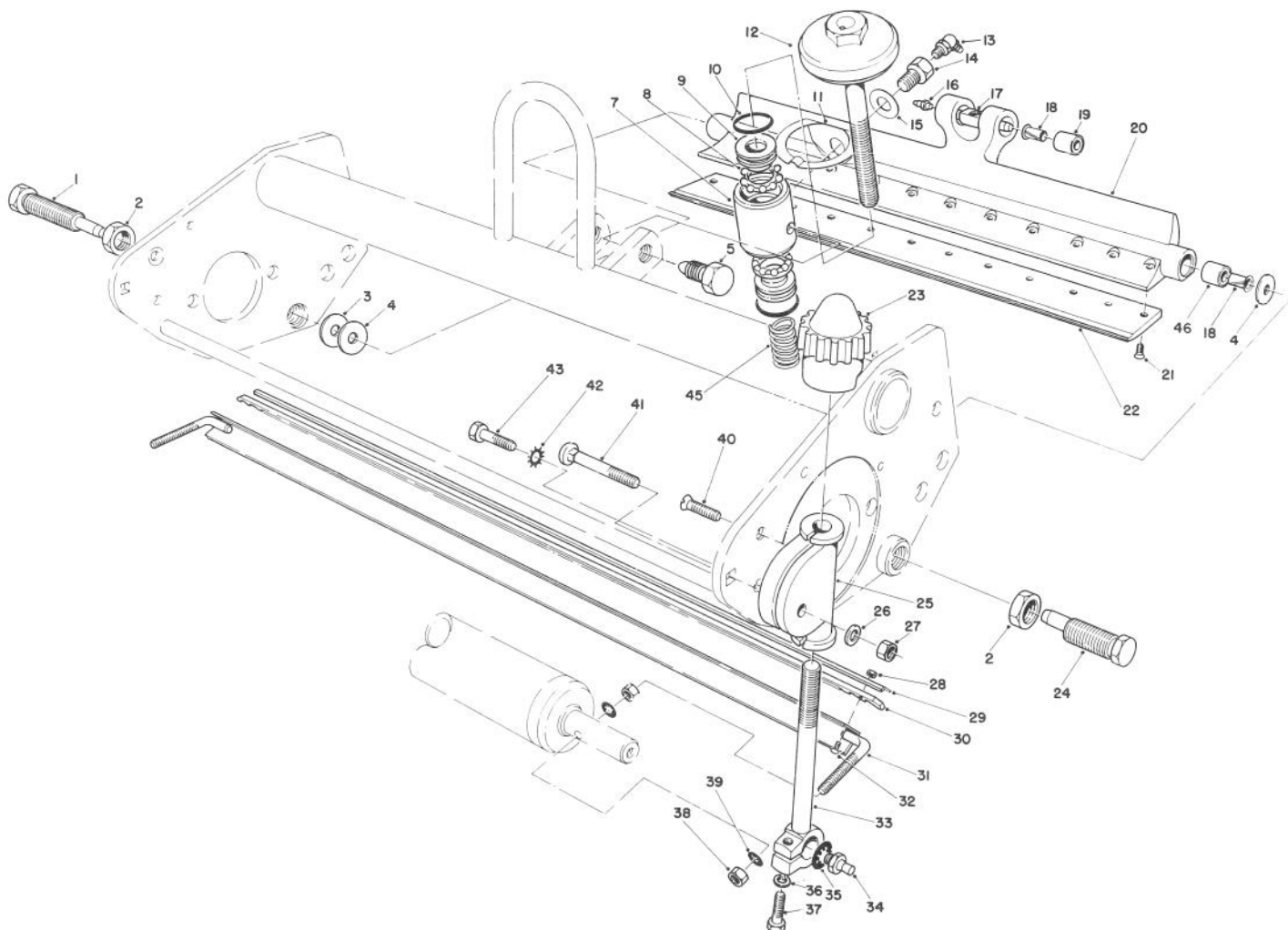
T-0309-89

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	70-1200	Frame — Reel	1
9	323-7	Capscrew 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	52-3090	Height of Cut Adjustment L.H.	1
17	52-3120	Rear Roller Assembly (Incl. Ref. #18 & 19)	1
18	302-5	Grease Fitting	3
19	21-8430	Bearing — Rear Roller	2
20	3290-125	Set Screw	2
21	12-0460	Caplug	1
22	323-2	Screw — Machine Hex Hd.	1
23	10-5080	Cap — End	1

Ref. No.	Part No.	Description	No. Used
24	253-61	Seal	1
25	3296-60	Nut — Lock	1
26	253-96	Seal	2
27	302-40	Grease Fitting 90°	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	Locknut	2
33	3295-46	Rivet	13
35	321-4	Capscrew — 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	Locknut — Flange	2
41	3256-22	Washer — Flat	4
*	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 47-48)



BEDBAR & SCRAPER COMB ASSEMBLY (MODEL NOS. 04450 & 04468)

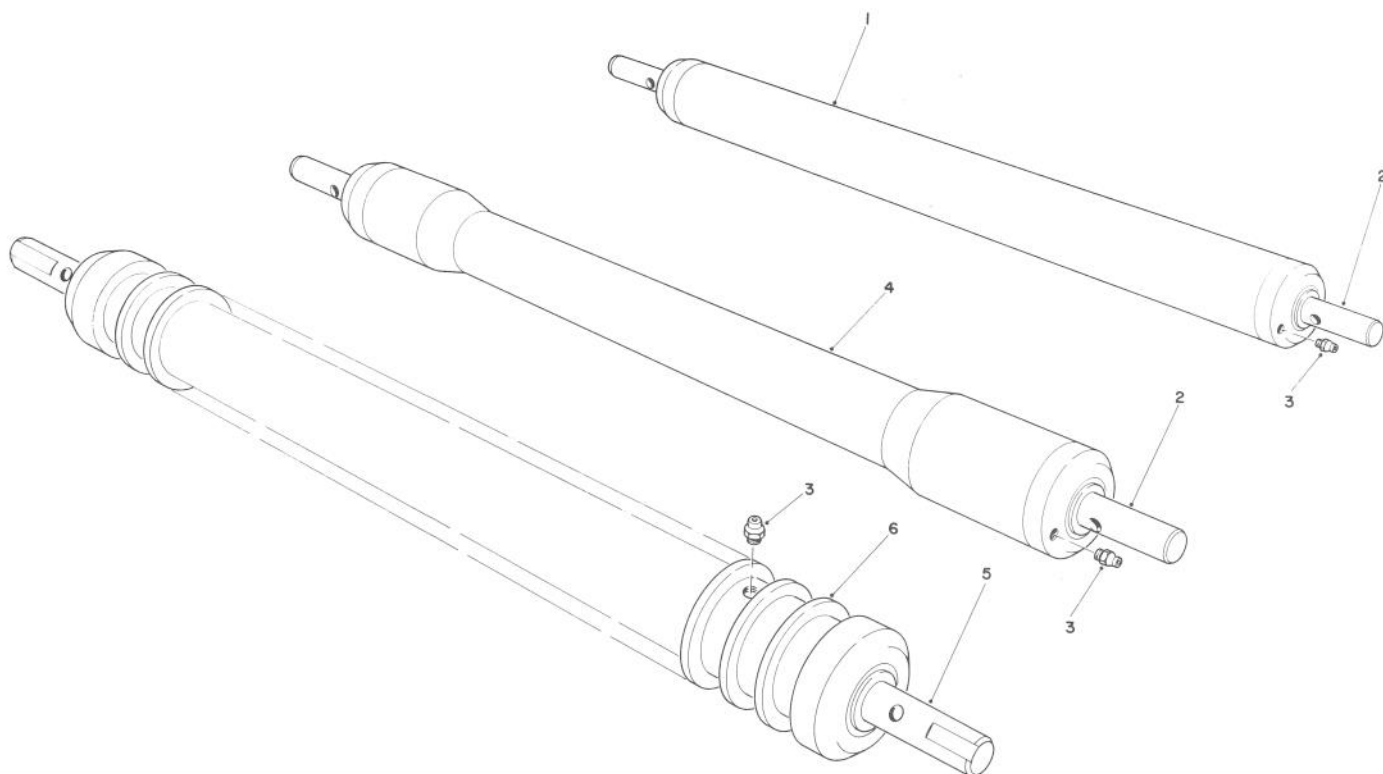
T-0310-89

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	66-7240	Screw — Pivot Spa	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	66-7220	Arm — Spring	1
12	66-7250	Handle Assembly	1
13	302-40	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 — Bedbar	1
18	52-2890	Bushing — Flanged	4
19	62-5510	Rubber Bushing Assembly	2
20	57-4940	Bedbar	1
21	57-4910	Screw — Special	13
22	63-8470	Bed Knife 1/8"	1
*	62-2500	Bed Knife 3/16"	1
*	63-8560	Bed Knife — Tournament	1
*	63-8600	Bedknife — Fairway	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
45	57-5270	Spring — Compression	1
46	63-9510	Rubber Bushing Assembly	2
*†		Tool — Bed Knife Screw	1

* Not Illustrated

† Special Tool (Ref. Page 47-48)



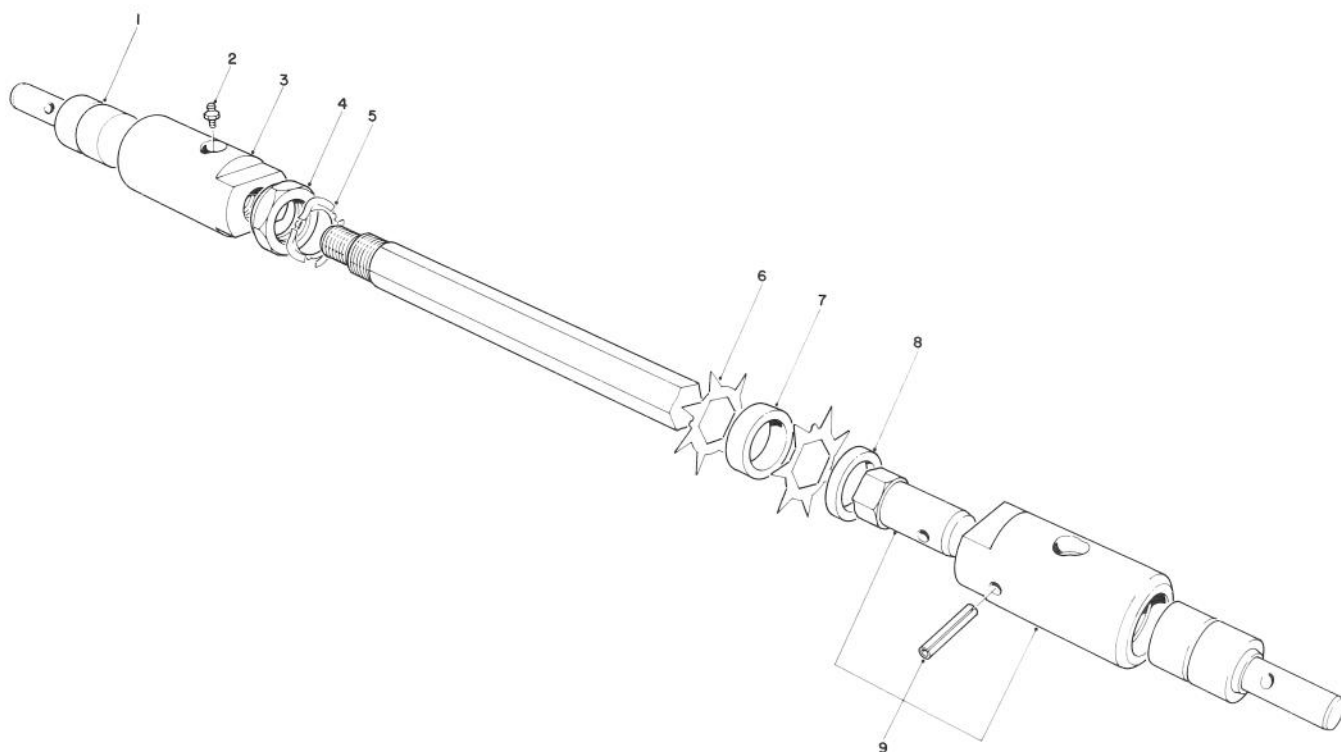
T-0311-89

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

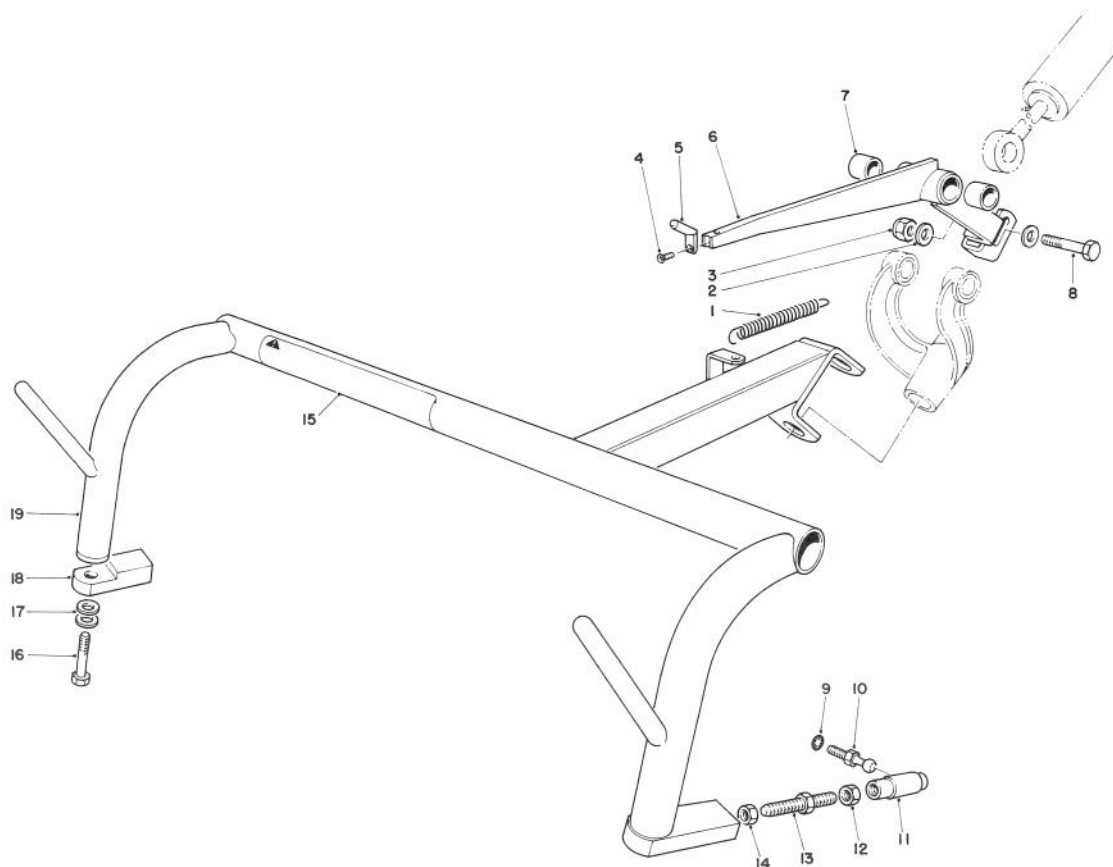


T-0312-89

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

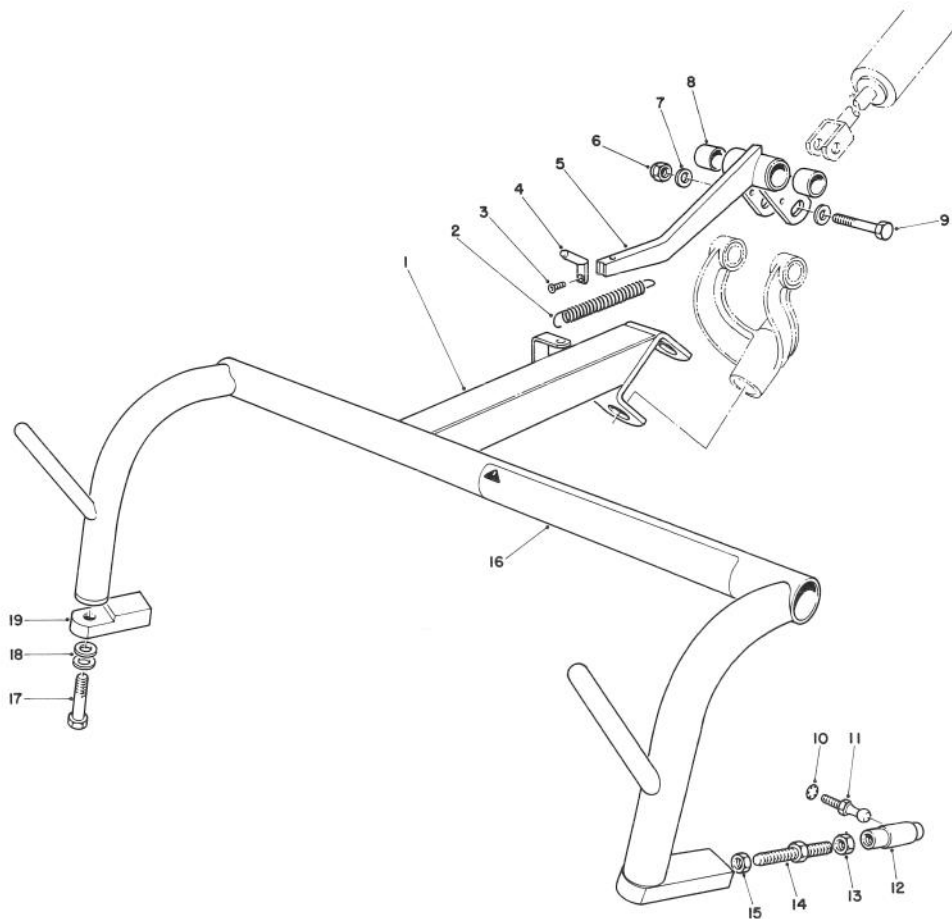


T-0313-89

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	57-3230	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

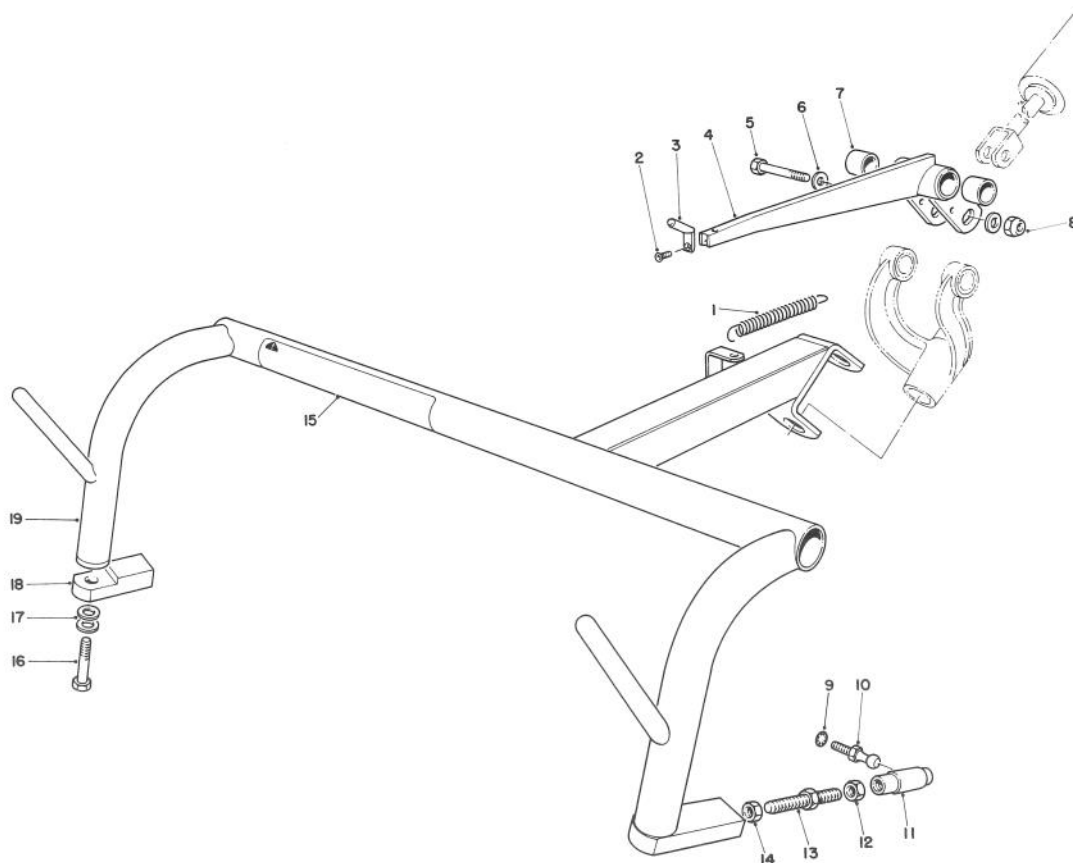


DIRECT SUSPENSION PULL FRAME KIT MODEL NO. 04452 (Optional) (Continued)

T-0314-89

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	57-3230	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

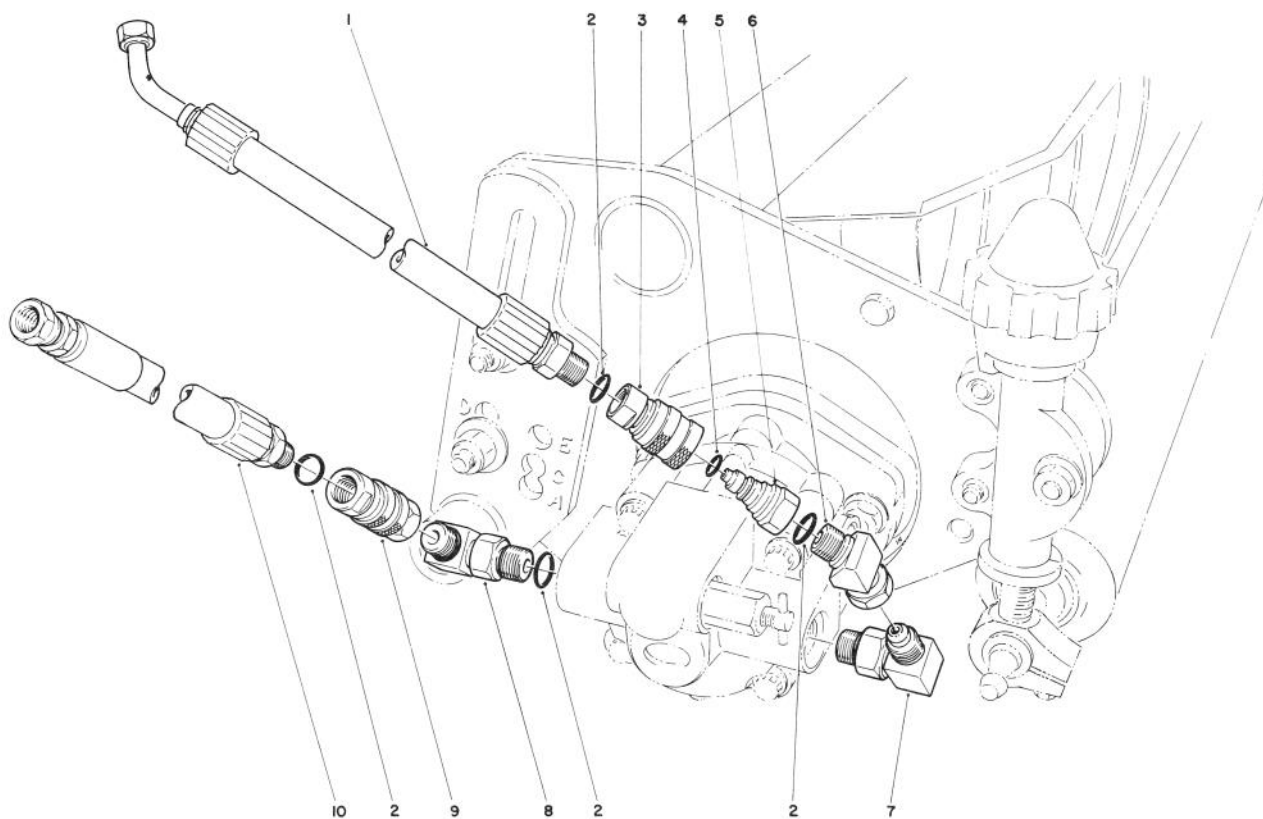


DIRECT SUSPENSION PULL FRAME KIT MODEL NO. 04452 (Optional) (Continued)

T-0315-89

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	57-3230	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

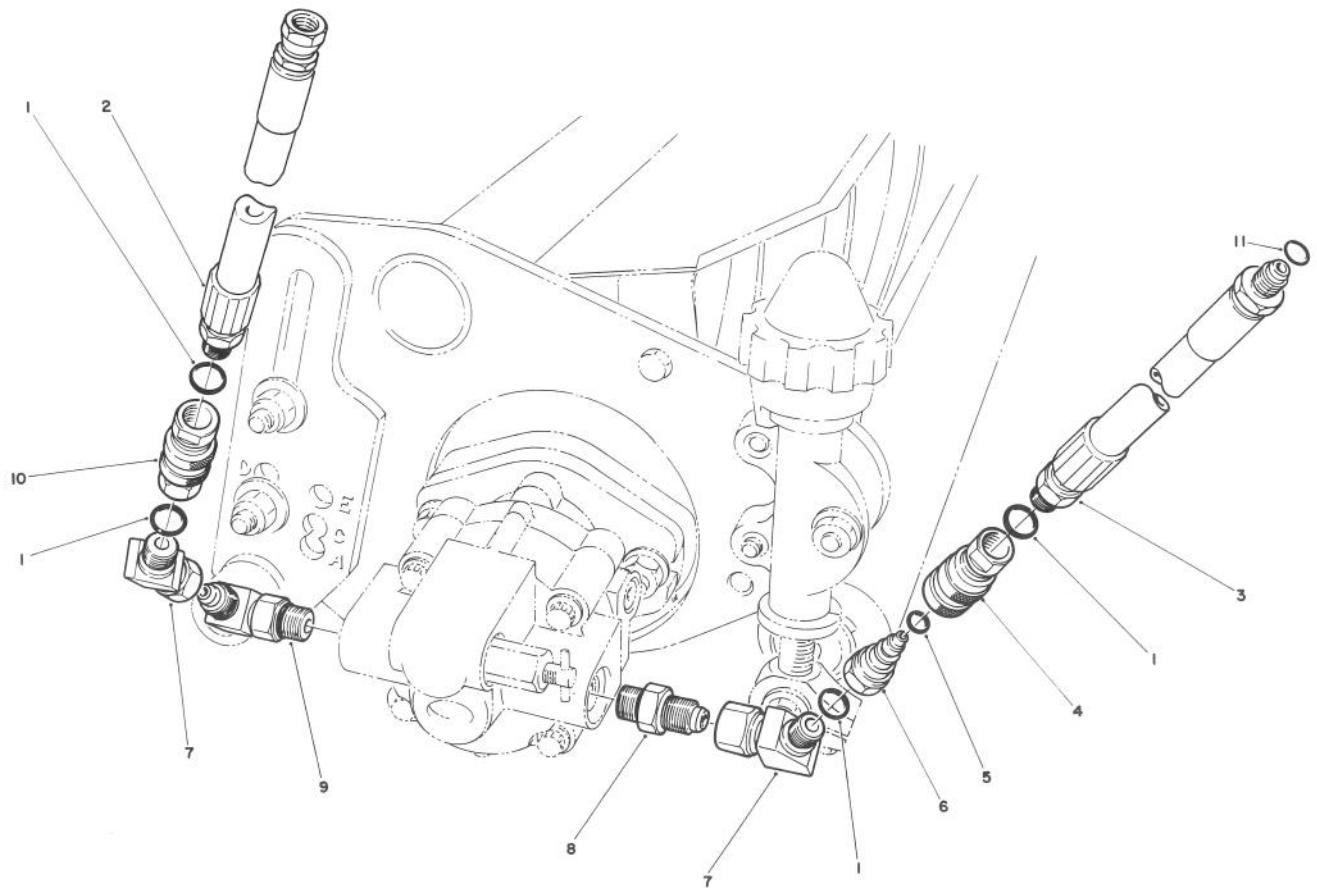


T-0316-89

BACKLAPPING KIT NO. 63-4960 (Optional)

Ref. No.	Part No.	Description	No. Used
1	63-4990	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	63-4980	Hose Assembly — Return (Incl. Ref. #2)	1

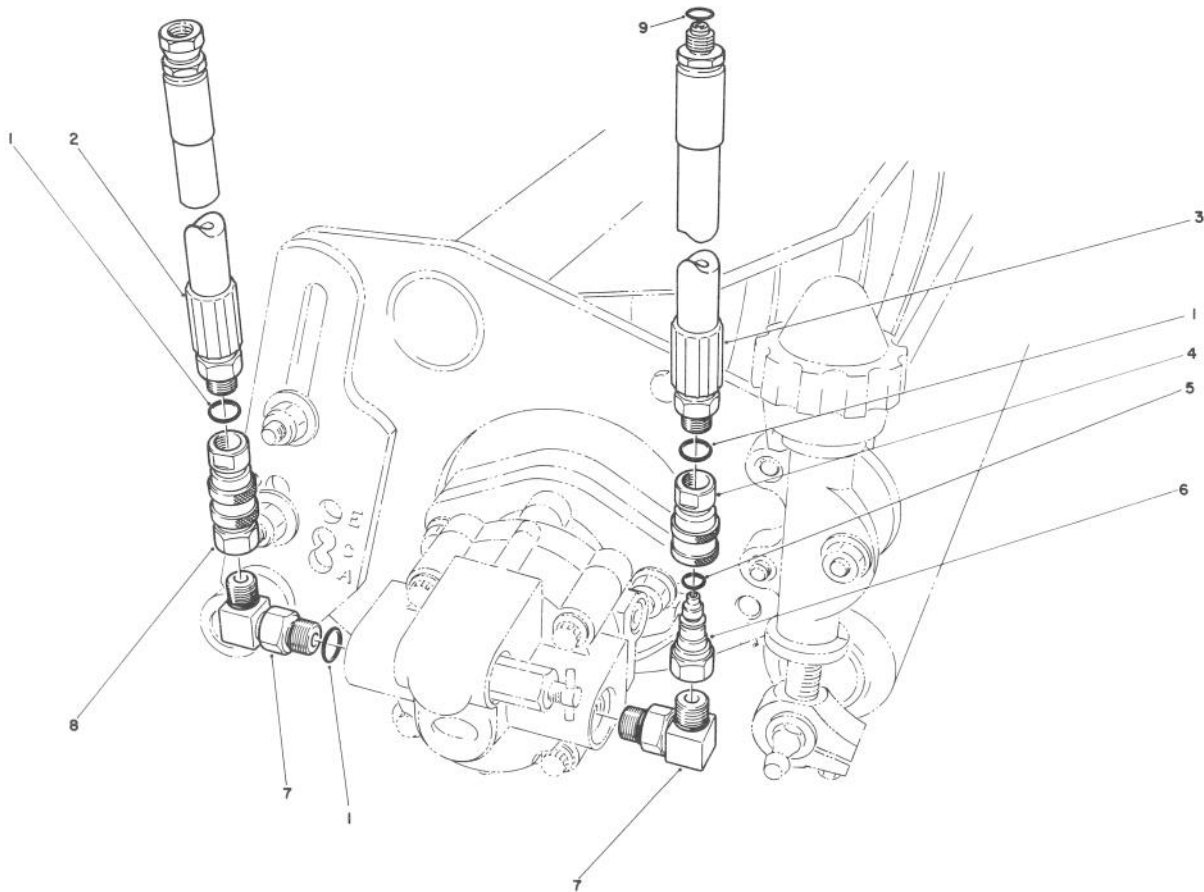


T-0317-89

BACKLAPPING KIT NO. 63-4960 (Optional) (Continued)

Ref. No.	Part No.	Description	No. Used
1	237-42	Seal — O-Ring	6
2	63-4980	Hose Assembly — Return (Incl. Ref. #1)	1
3	63-4970	Hose Assembly — Pressure (Incl. Ref. #1 & 11)	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
11	237-22	Seal — O-Ring	1

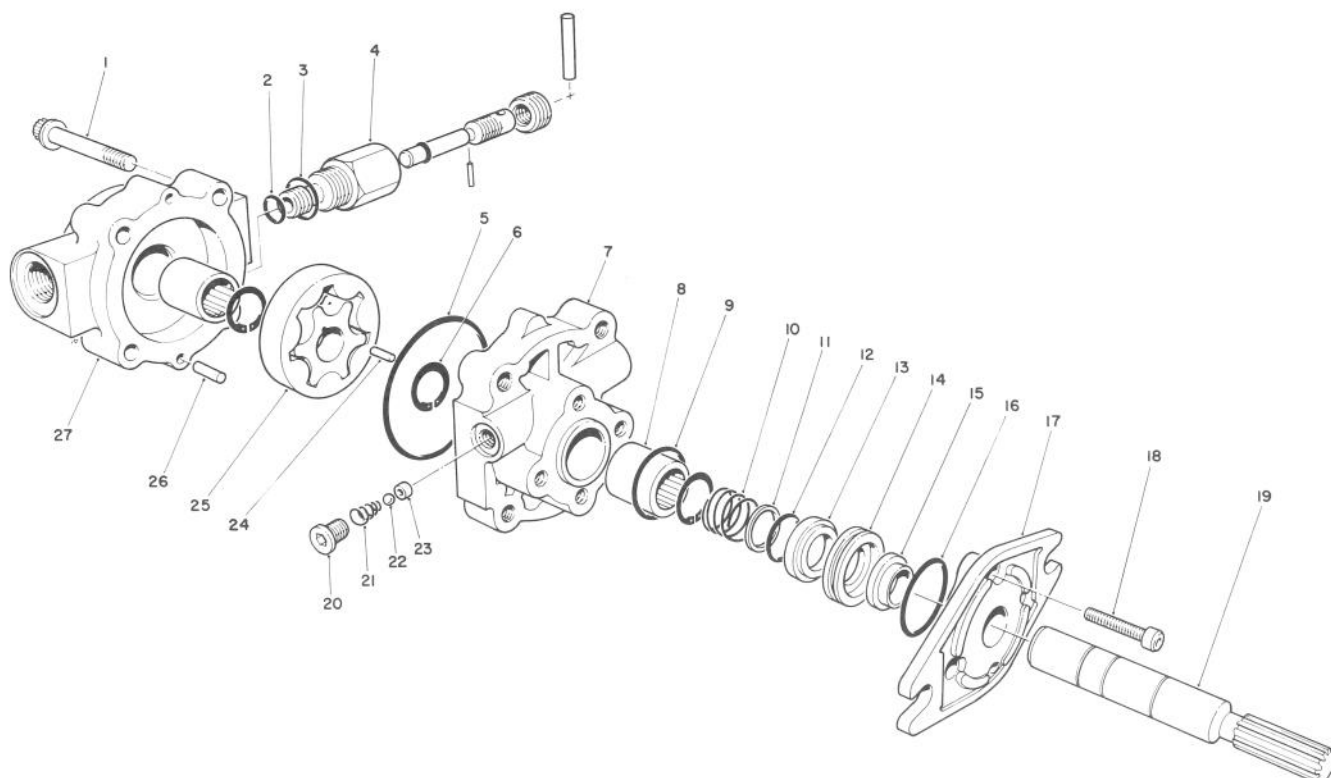


T-0318-89

BACKLAPPING KIT NO. 63-4960 (Optional) (Continued)

Ref. No.	Part No.	Description	No. Used
1	237-42	Seal — O-Ring	6
2	63-4980	Hose Assembly — Return (Incl. Ref. #1)	1
3	63-4970	Hose Assembly — Pressure (Incl. Ref. #1 & 9)	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	54-9540	Fitting — 90° Adjustable Elbow (Incl. Ref. #1)	2
8	54-9620	Coupling — Quick Disconnect (Incl. Ref. #4-6)	2
9	237-22	Seal — O-Ring	1



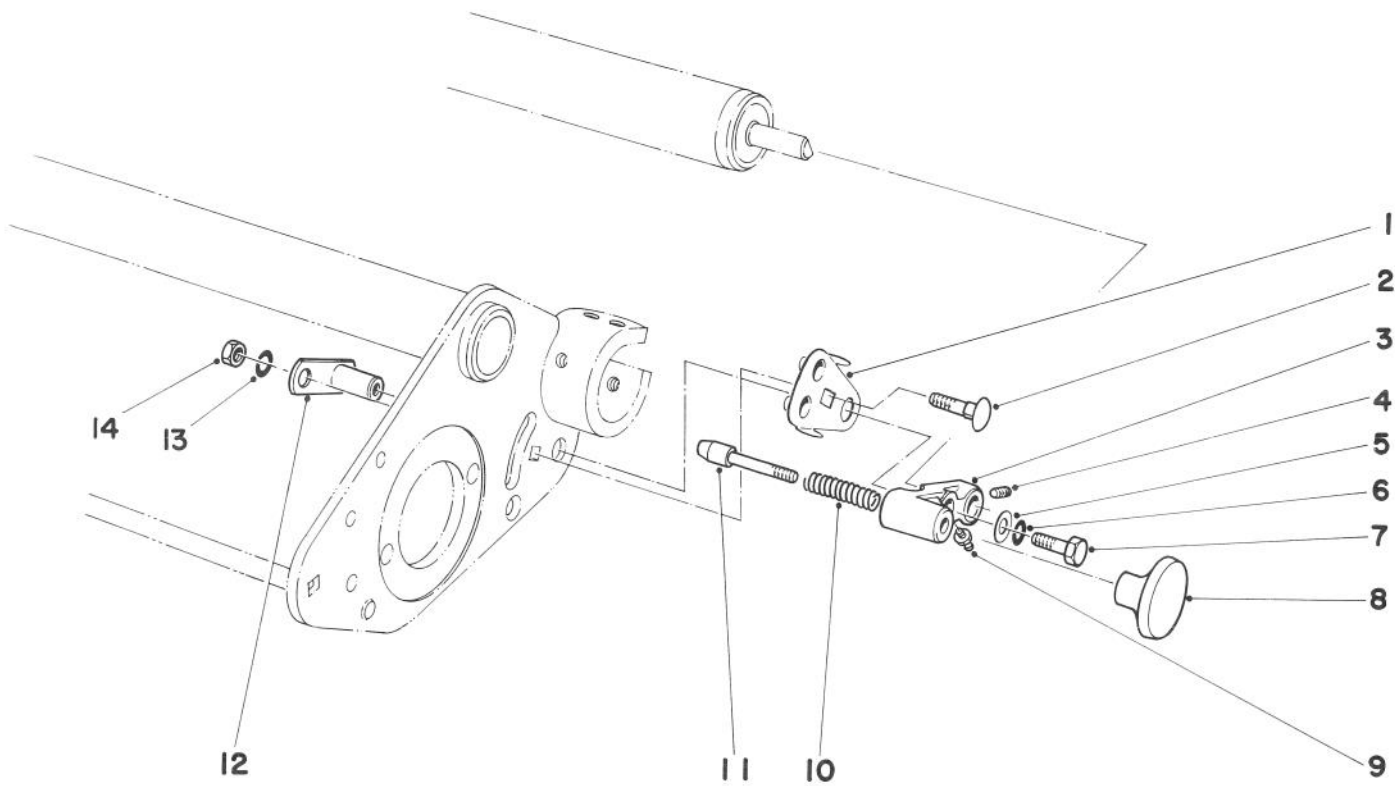
T-0319-89

BACKLAPPING KIT NO. 63-4960 (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	353-910	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	353-899	Cup — Seal	1
14		Seat — Seal	1
15		Seal — Block	1

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	353-909	Element — Gerotor	1
26	353-894	Pin — Dowel	2
27	353-891	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

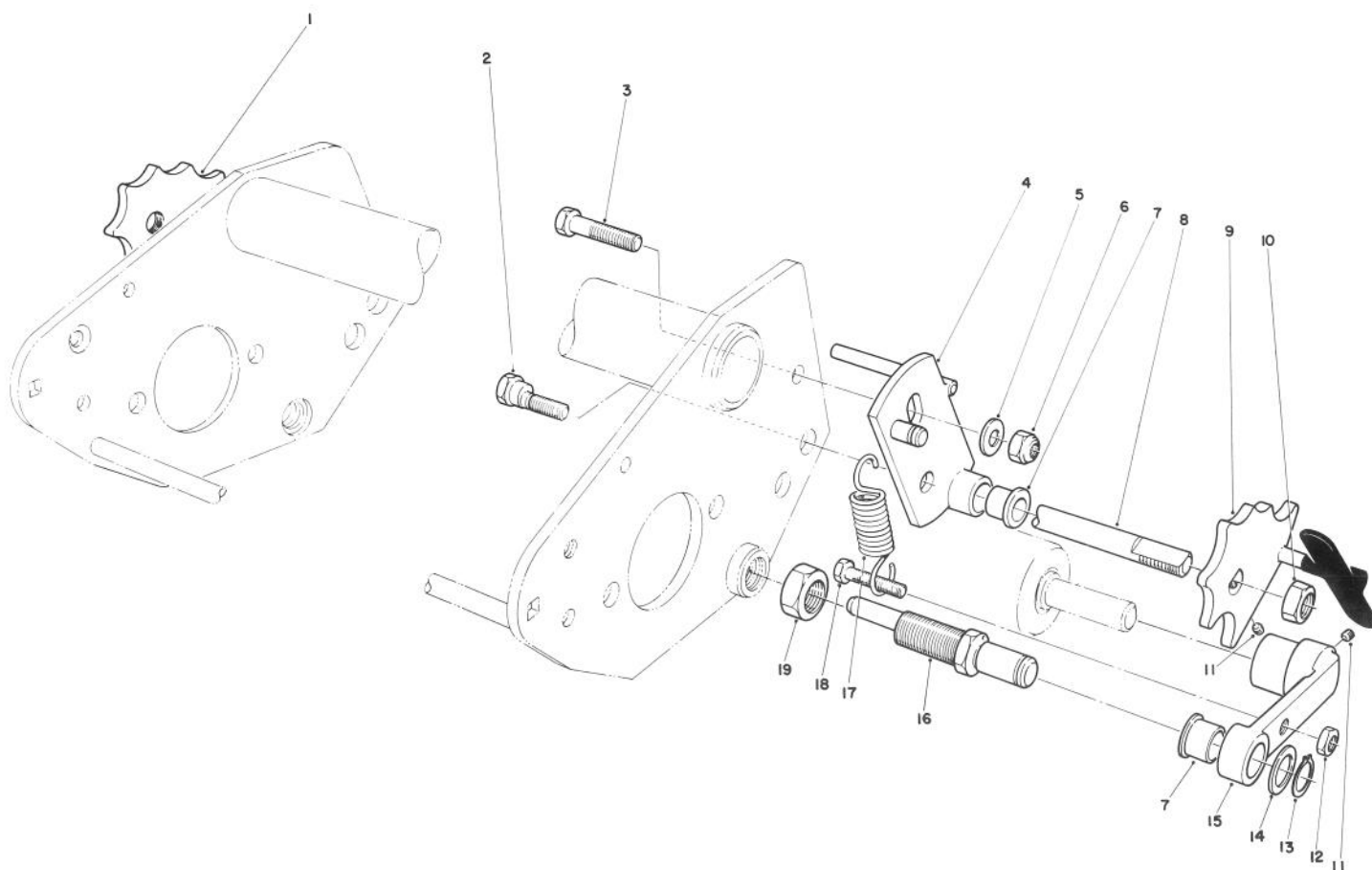


QUICK HEIGHT-OF-CUT KIT NO. 29-5910 (Optional) (MODEL NO. 04405 & 04408 CUTTING UNITS)

T-0320-89

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
8	233-28	Knob	6

Ref. No.	Part No.	Description	No. Used
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 21-5/8" Lg.) with kit.			



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

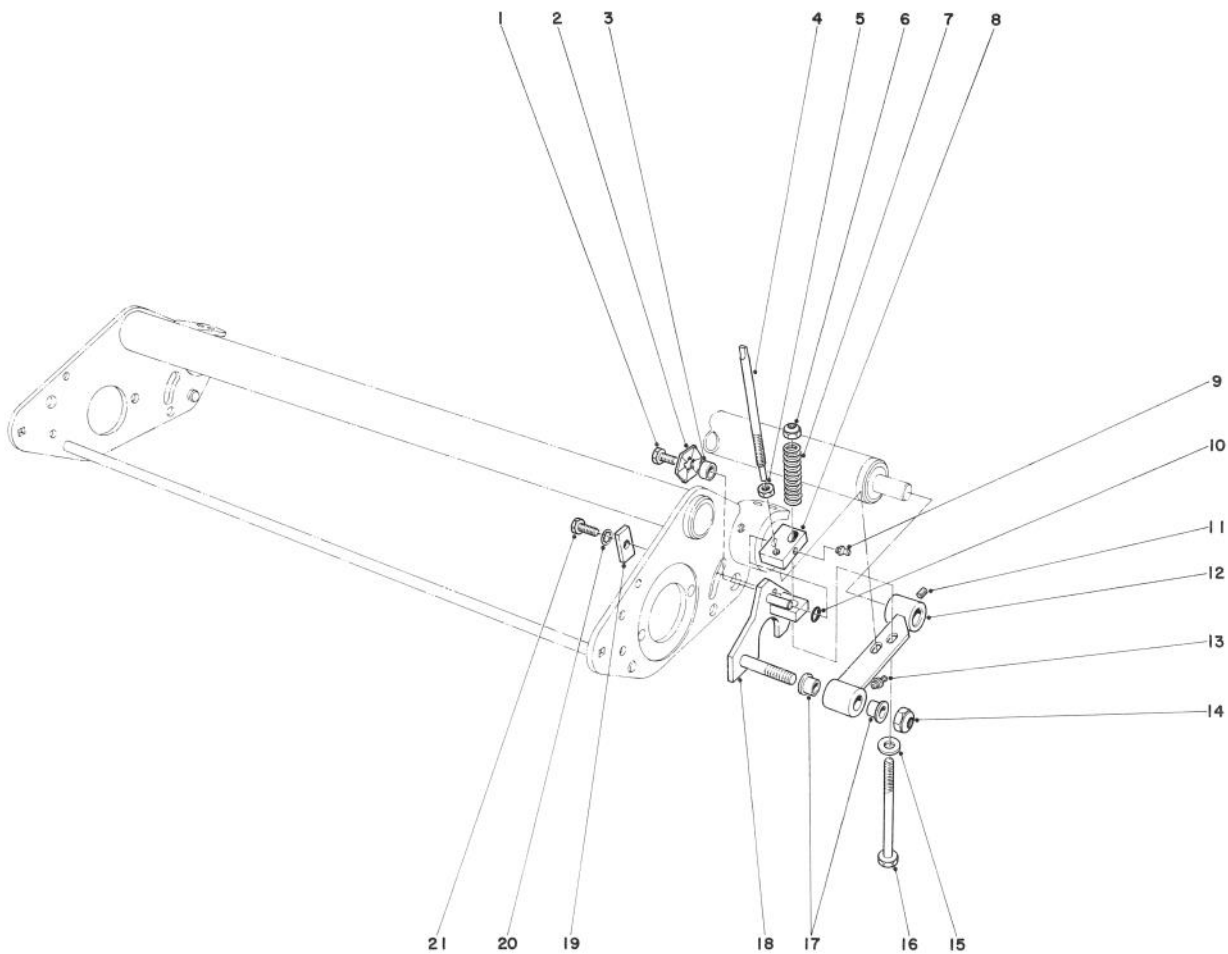
T-0321-89

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.



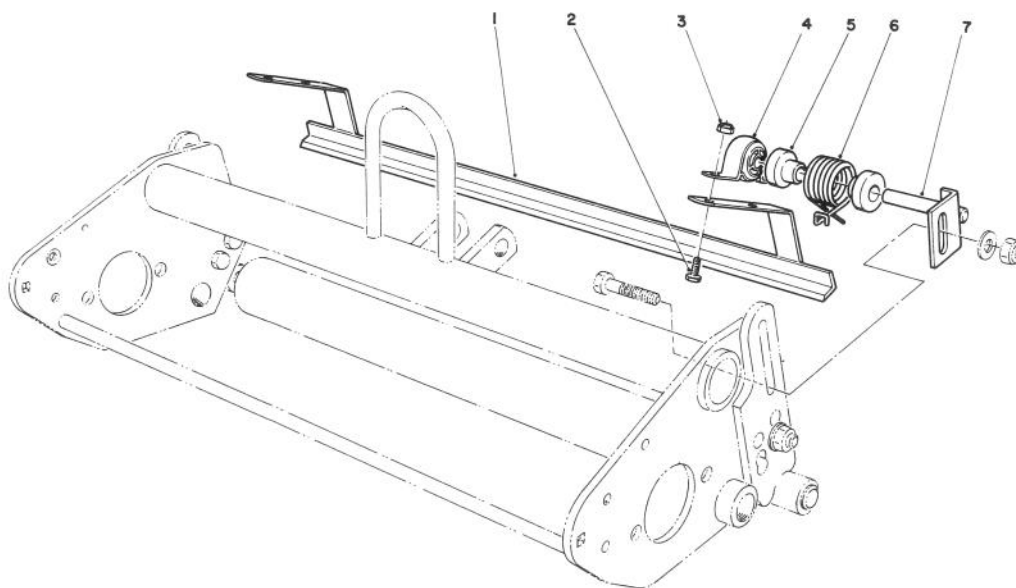
VARIABLE QUICK HEIGHT-OF-CUT KIT NO. 29-9400 (Optional)

T-0322-89

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 21-5/8" Lg.) with kit.			

* Not Illustrated



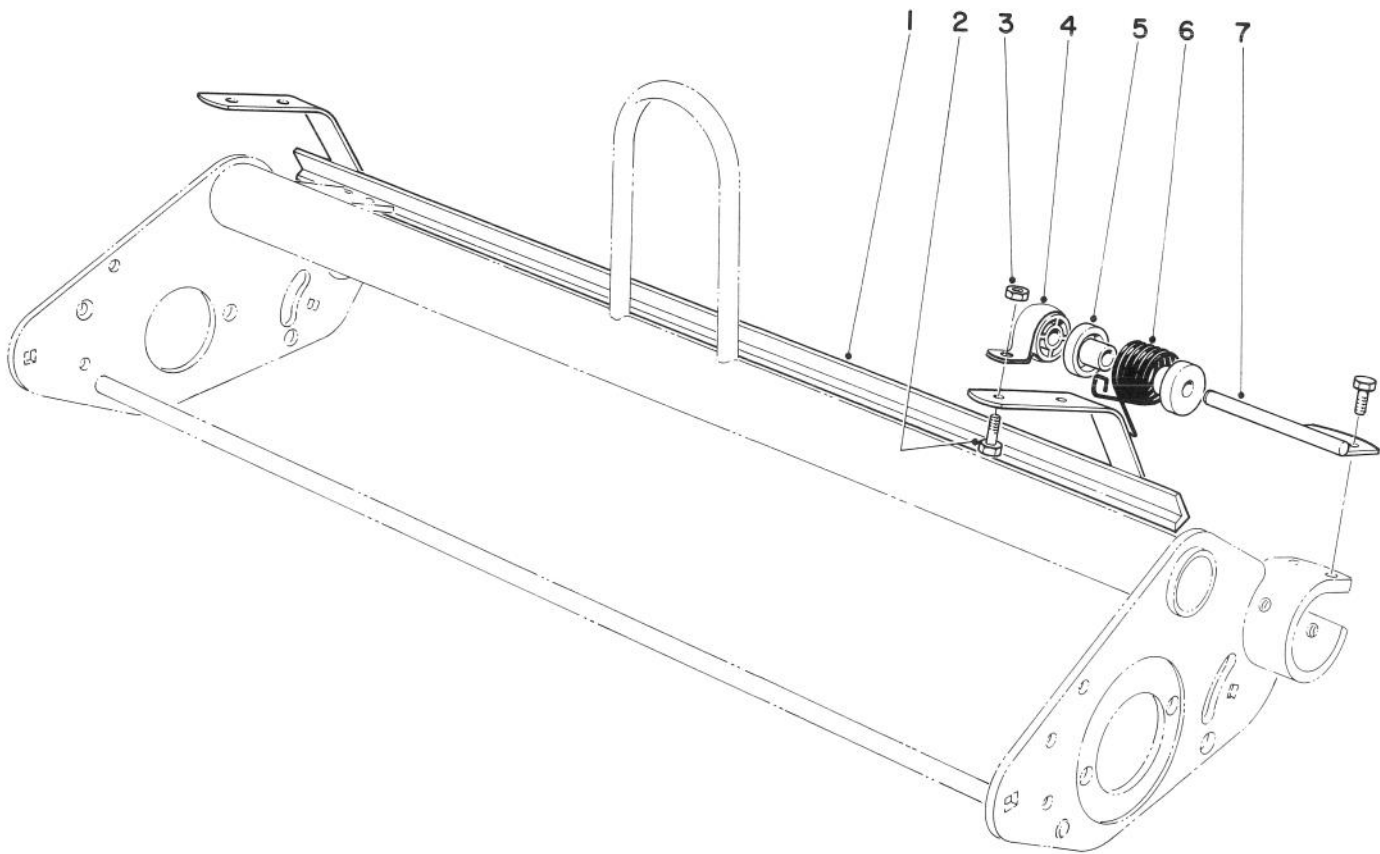
T-0323-89

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

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



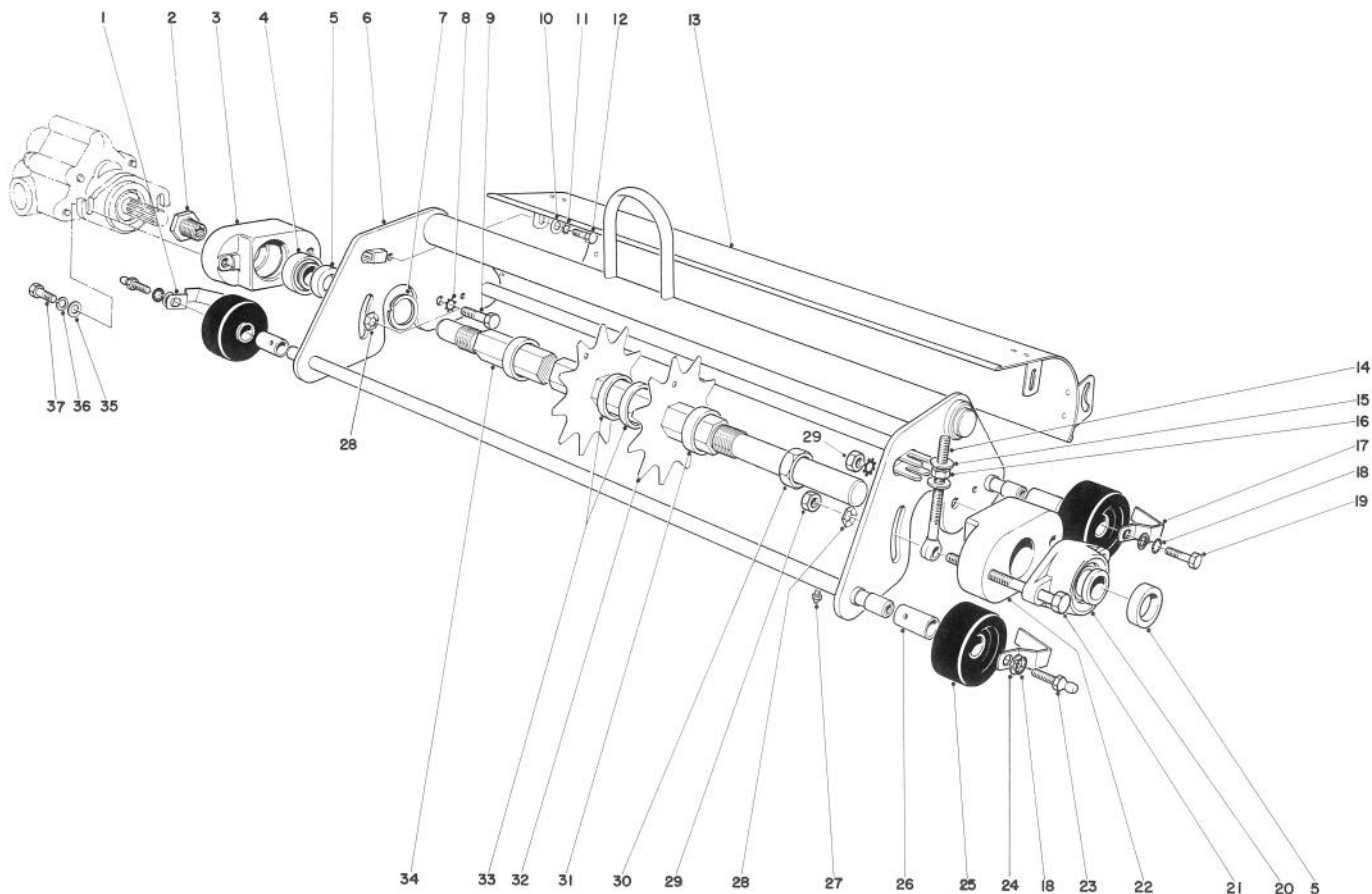
T-0324-89

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



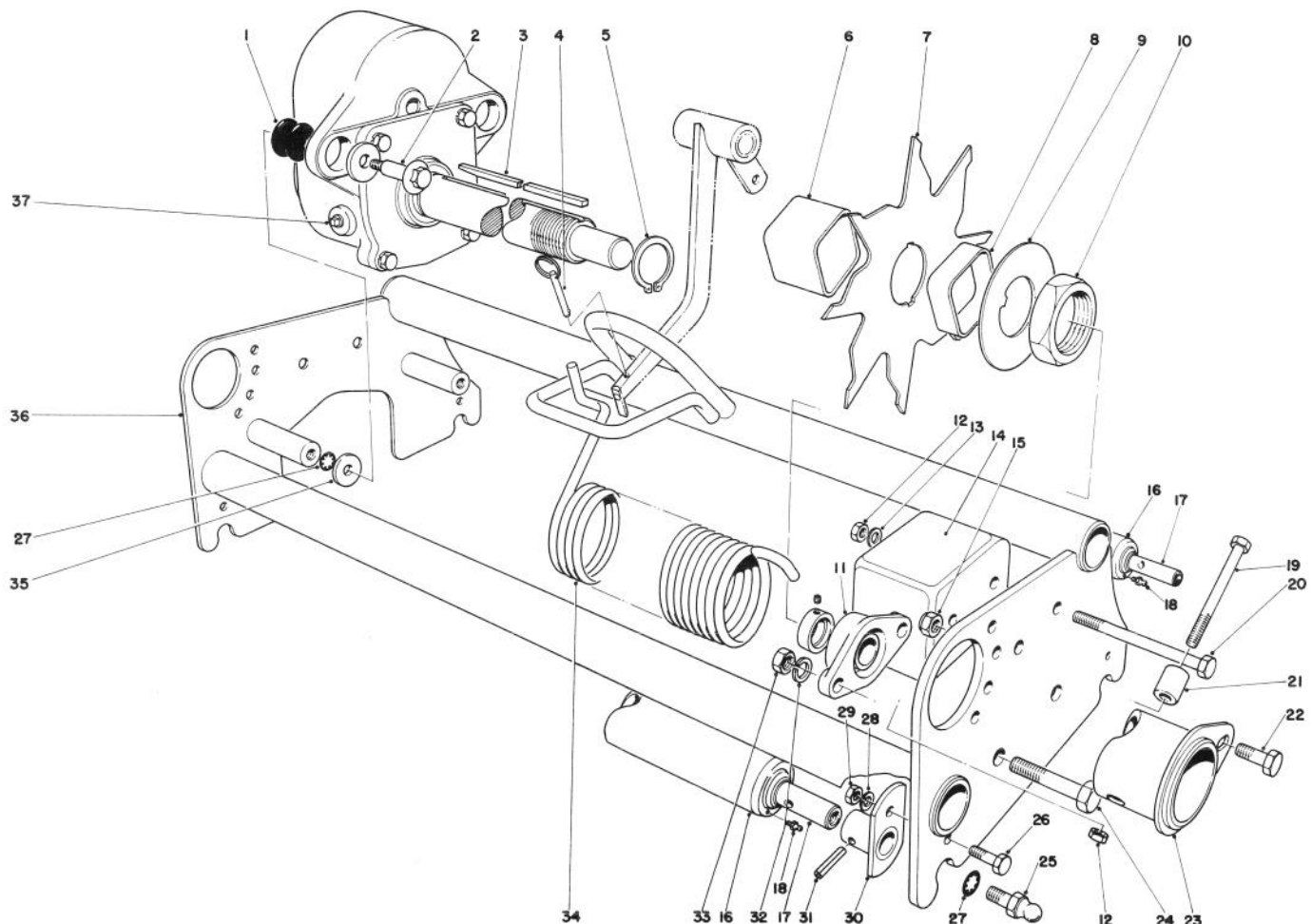
T-0325-89

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	251-247	Bearing — Housing	1

Ref. No.	Part No.	Description	No. Used
21	324-13	Capscrew	2
22	17-1520	Counterweight	1
23	2411-7	Ball Stud	2
24	3256-3	Washer	4
25	17-1630	Wheel	4
26	17-1620	Bushing Wheel	4
27	302-5	Grease Fitting	4
28	3290-334	Pyramidal Lockwasher	2
29	3217-8	Nut	2
30	3220-18	Jam Nut	2
31	17-1580	Spacer	2
32	17-1590	Blade	37
33	17-1600	Spacer	72
34	17-1570	Shaft Hex	1
35	3256-24	Washer	2
36	3255-9	Lockwasher	2
37	323-6	Capscrew	2
*	17-2290	Gauge .060	2
*	17-2300	Gauge .120	2
*	17-2310	Gauge .250	2

* Not Illustrated



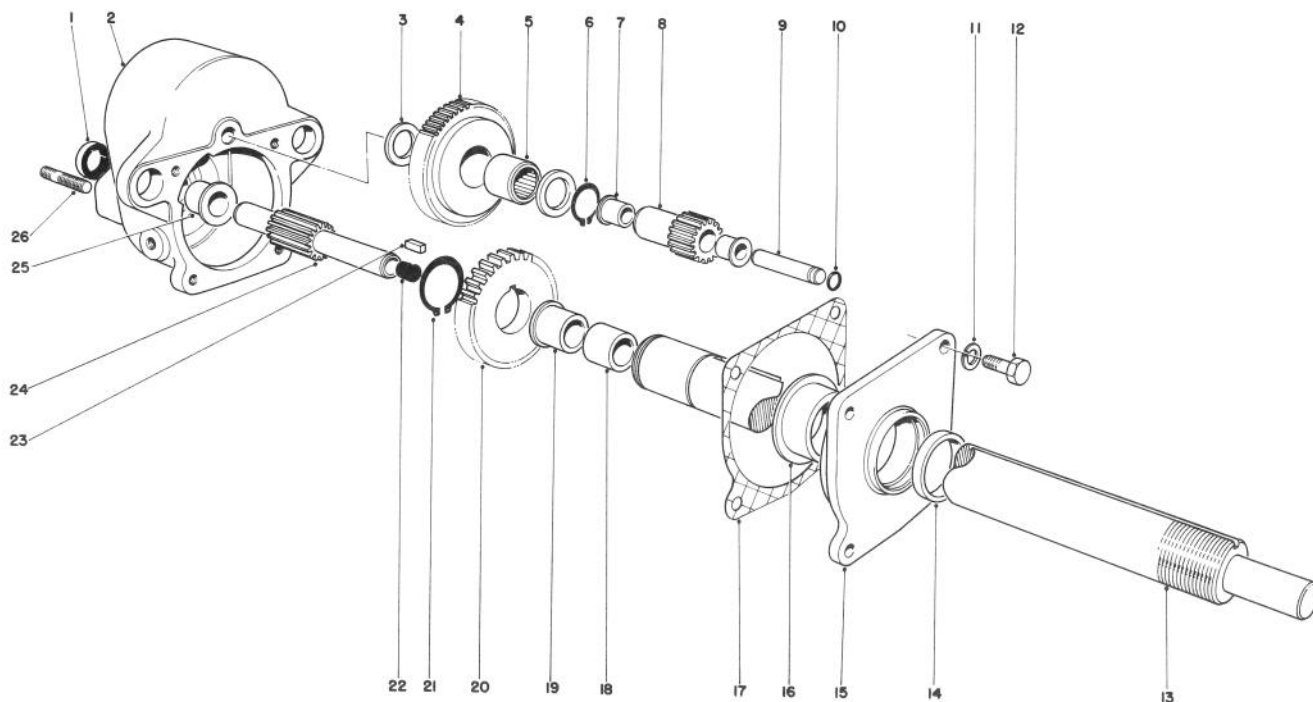
T-0326-89

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	3256-4	Flatwasher	2
14	20-7720	Counter-Weight	1
15	3296-47	Locknut	1
16	52-3170	Roller Assembly (Complete) (Incl. Ref. #17 & 18)	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

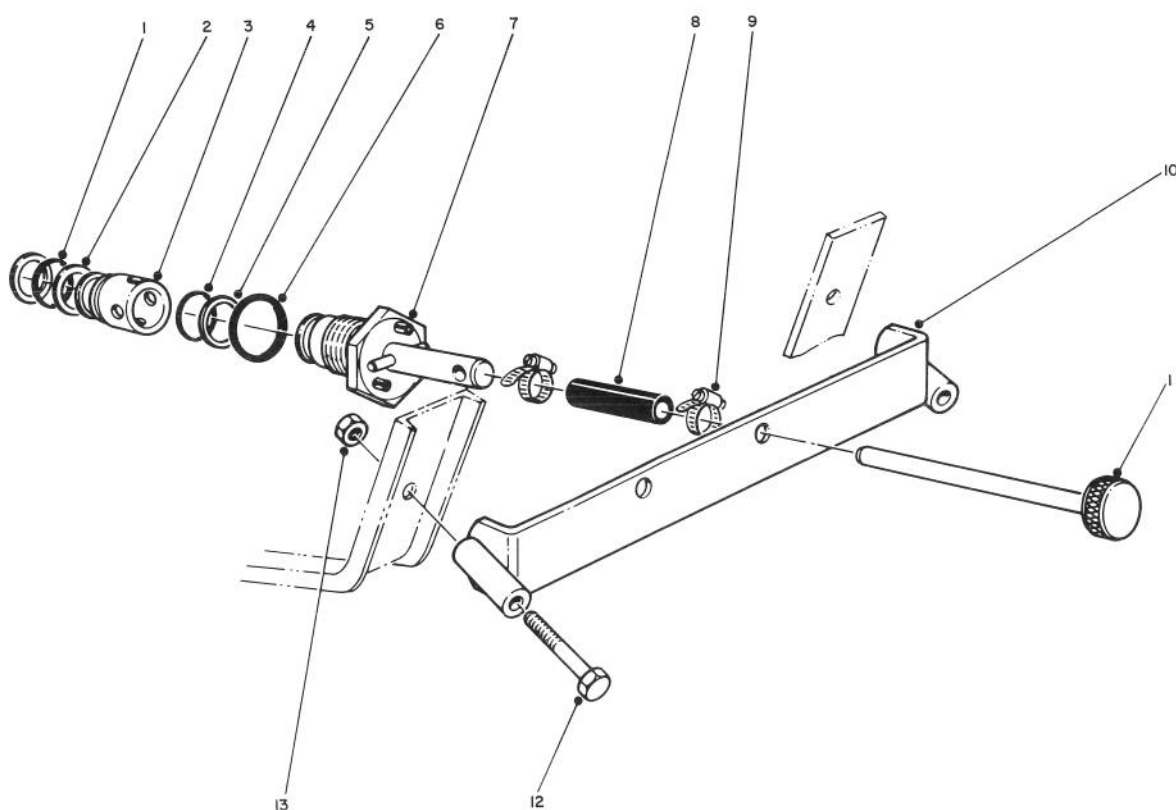


T-0327-89

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	20-7850	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 Assembly	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	20-7750	Gear 16T	1
25	256-244	Bushing	1
26	20-7350	Stud	2

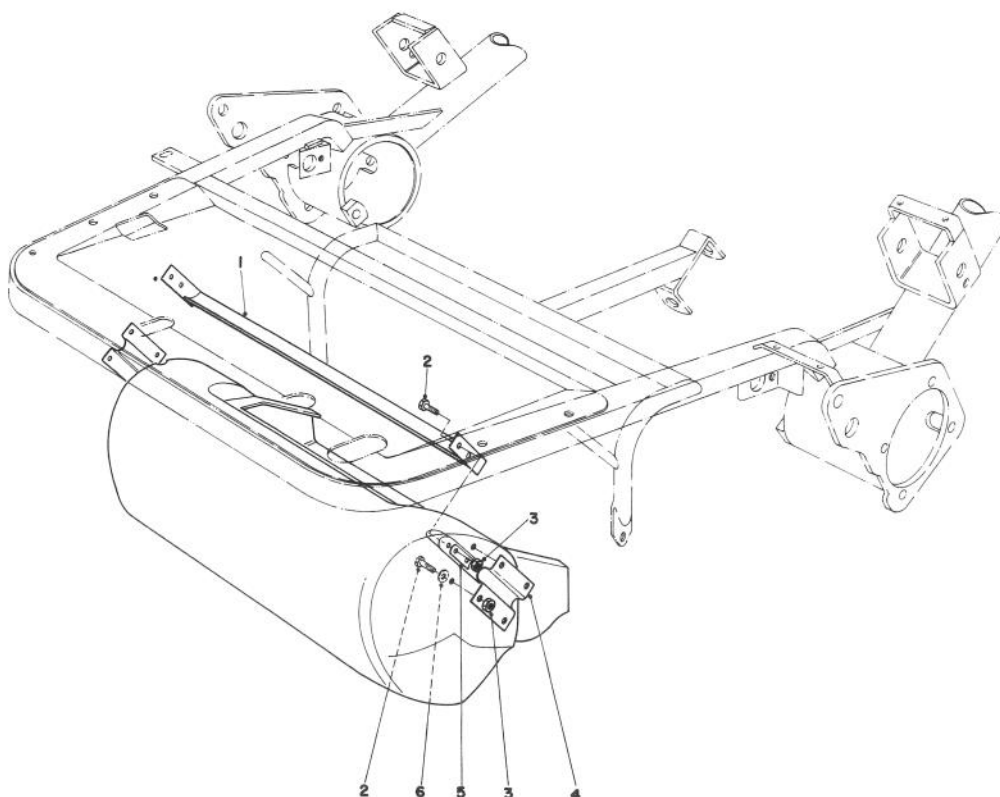


T-0328-89

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. Ref. #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. Ref. #1-6)	1

Ref. No.	Part No.	Description	No. Used
8	18-2400	Hose — Rubber	2
9	2412-45	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

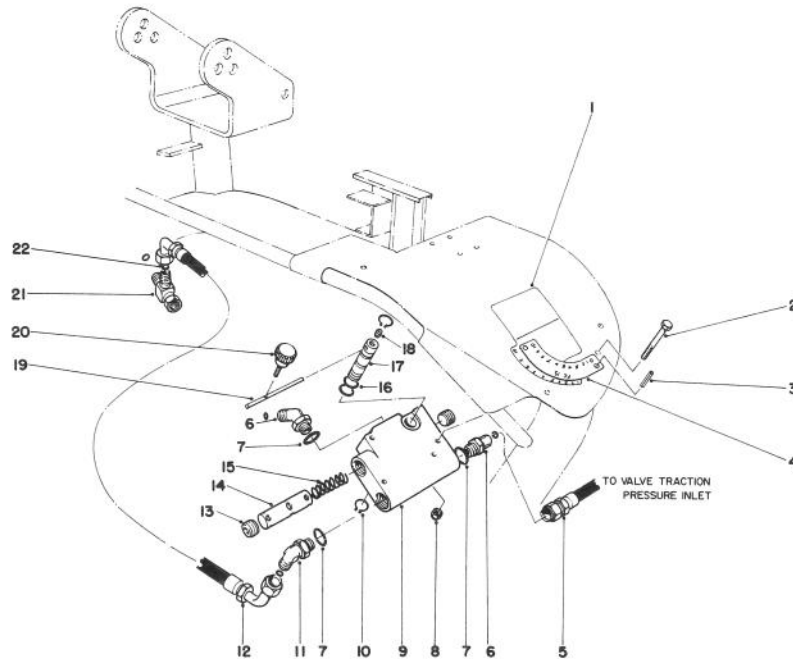


T-0333-89

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



T-0334-89

VARIABLE TRACTION CONTROL KIT MODEL NO. 04411 (Optional)

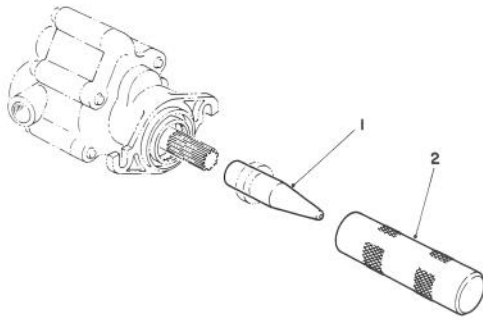
Ref. No.	Part No.	Description	No. Used
1	47-6650	Decal — Traction Control	1
2	321-33	Screw — Cap Hex Hd.	2
3	32121-4	Pin — Roll, Slotted	2
4	49-0320	Plate — Dial	1
5	63-4250	Hose — Hydraulic (Pressure)	1
6	340-89	Elbow — 45° (Incl. Ref. #7)	2
7	237-80	O-Ring	3
8	3296-56	Nut — Lock	2
9		Body — Main	1
10	32120-76	Ring — Snap	2
11	340-105	Elbow — 90° Adjustable	1
12	63-4210	Hose — Hydraulic (Return)	1
13	49-0300	Plug Pipe	2

Ref. No.	Part No.	Description	No. Used
14	49-0370	Spool — Metering	1
15	49-0340	Spring — Metering	1
16	237-54	O-Ring	2
17	66-1660	Spool — Lever Side	1
18	3274-42	Screw — Set Hex Socket	1
19	49-0350	Handle	1
20	49-0360	Screw — Thumb	1
21	340-104	Tee — Swivel Run	1
22	237-30	O-Ring	5
*	47-6640	Valve Flow Control (Incl. Ref. #3, 4, 9, 10 & 13-20)	1
*	3290-378	Cable Tie	2

* Not Illustrated

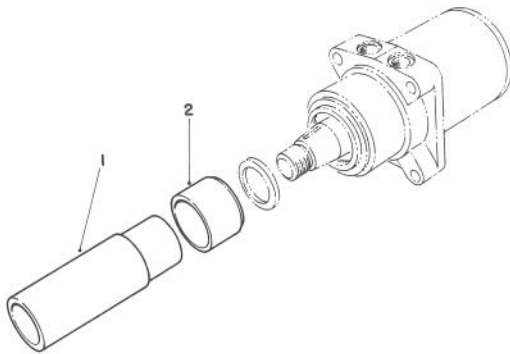
SPECIAL TOOLS

REEL MOTOR SEAL INSTALLATION TOOLS



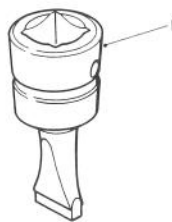
Ref. No.	Part No.	Description	No. Used
1	49-1430	Protector — Seal	1
2	49-1450	Installer — Seal	1

DRIVE MOTOR SEAL INSTALLATION TOOL NO. 19-2660



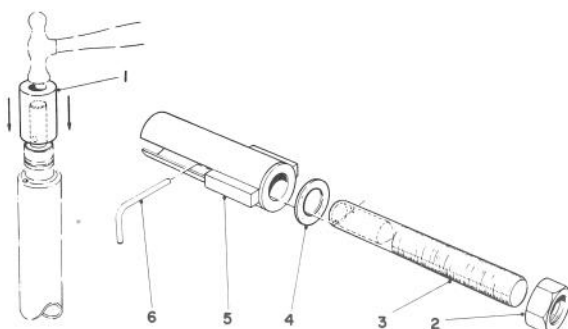
Ref. No.	Part No.	Description	No. Used
1		Driver — Seal	1
2		Holder — Seal	1

BED KNIFE SCREW TOOL NO. 51-0880



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

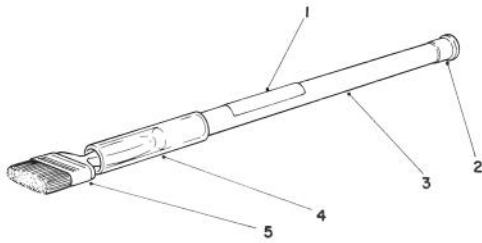
BEARING REPLACEMENT TOOL KIT NO. 23-8900



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	Washer — Thrust	1
5	23-8850	Tube — Support	1
6	23-8860	Pin — Bearing Replacement	1

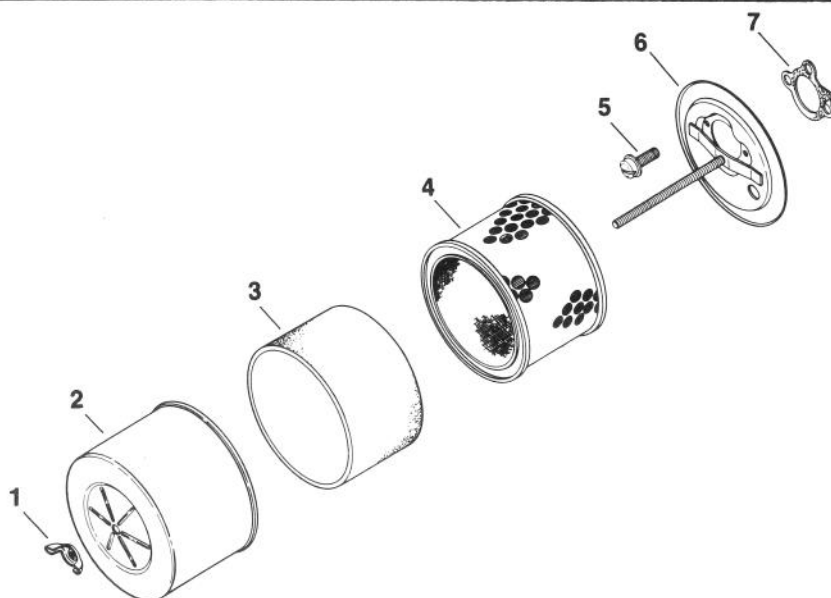
SPECIAL TOOLS (Continued)

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

**Group 1
AIR INTAKE**



ENGINE ASSEMBLY — KOHLER MODEL NO. M16S-711533

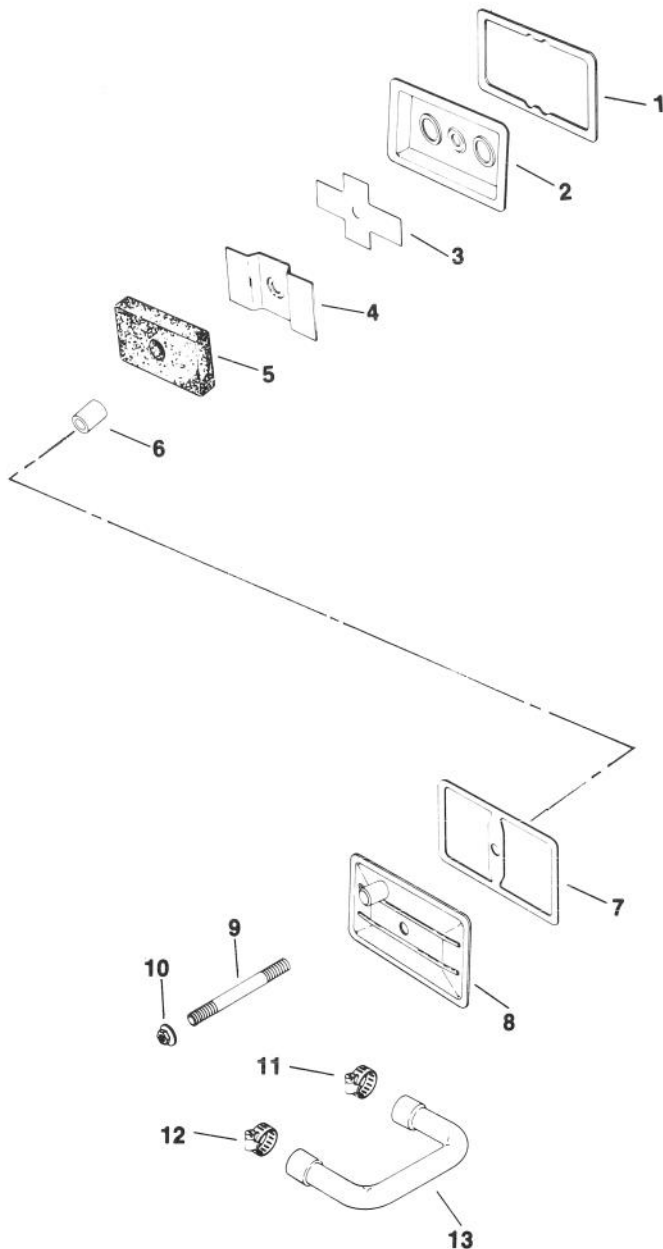
Ref. No.	Part No.	Description	No. Used
		Air Intake — Group 1	
1	X-276-7	Wing Nut	1
2	45 082 01	Cover — Air Cleaner	1
3	45 083 01	Precleaner — Element	1
4	45 083 02	Element	1

Ref. No.	Part No.	Description	No. Used
5	X-167-2	Screw — F.H. Sems	3
6	45 094 01	Base — Air Cleaner	1
7	275341	Gasket — Air Horn	1
*	25 113 07	Decal	1

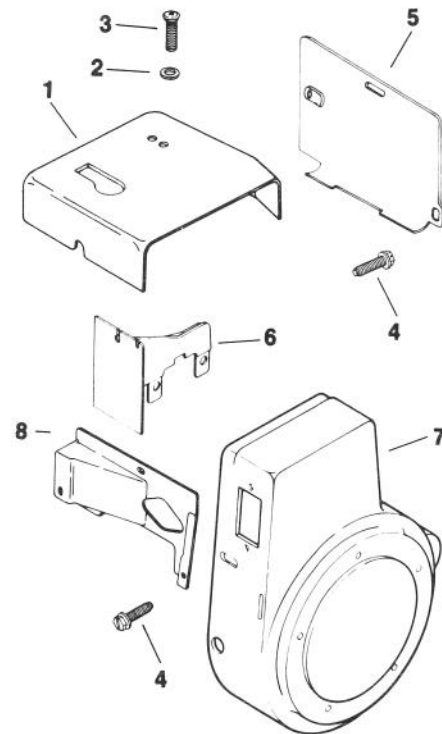
* Not Illustrated

ENGINE ASSEMBLY — KOHLER MODEL NO. M16S-711533

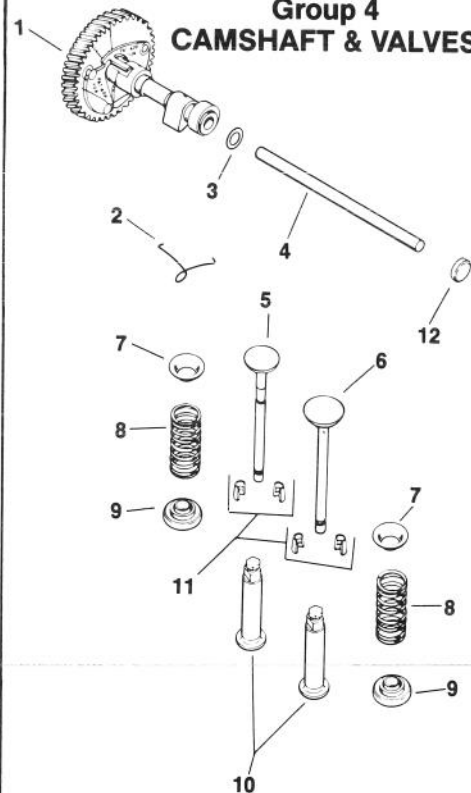
Group 3 BREATHER & VENT



Group 2 BAFFLES & SHROUD



Group 4 CAMSHAFT & VALVES



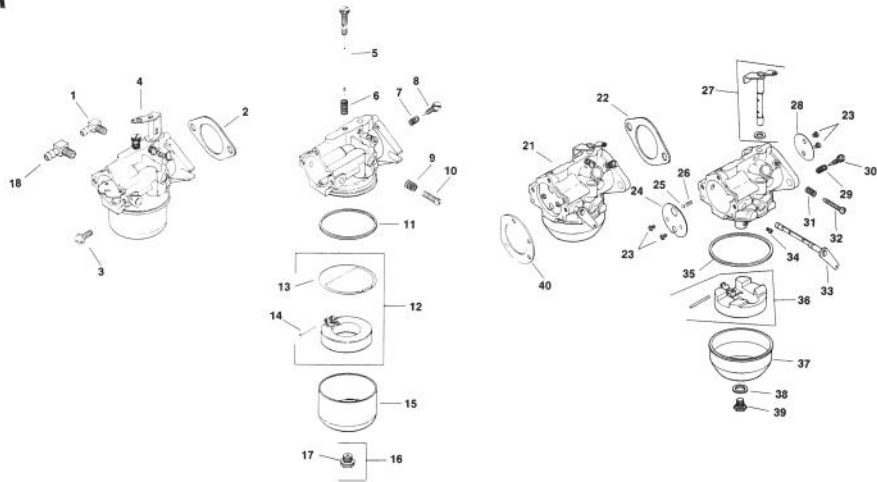
ENGINE ASSEMBLY — KOHLER MODEL NO. M16S-711533

Ref. No.	Part No.	Description	No. Used
Baffles & Shroud — Group 2			
1	45 063 08	Baffle, Head	1
2	X-25-53	Washer, Plain	1
3	47 086 08	Screw, Pozidriv T.H.	1
4	52 086 11	Screw, Hex Wash. Hd.	6
5	47 063 10	Baffle, Cylinder	1
6	47 063 07	Baffle, Inner	1
7	47 027 42	Housing, Blower	1
8	47 063 11	Baffle, Side Air	1
Breather & Vent — Group 3			
1	235048	Gasket, Breather Plate	1
2	235631	Plate, Breather	1
3	235047	Reed, Breather	1
4	235117	Baffle, Breather	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

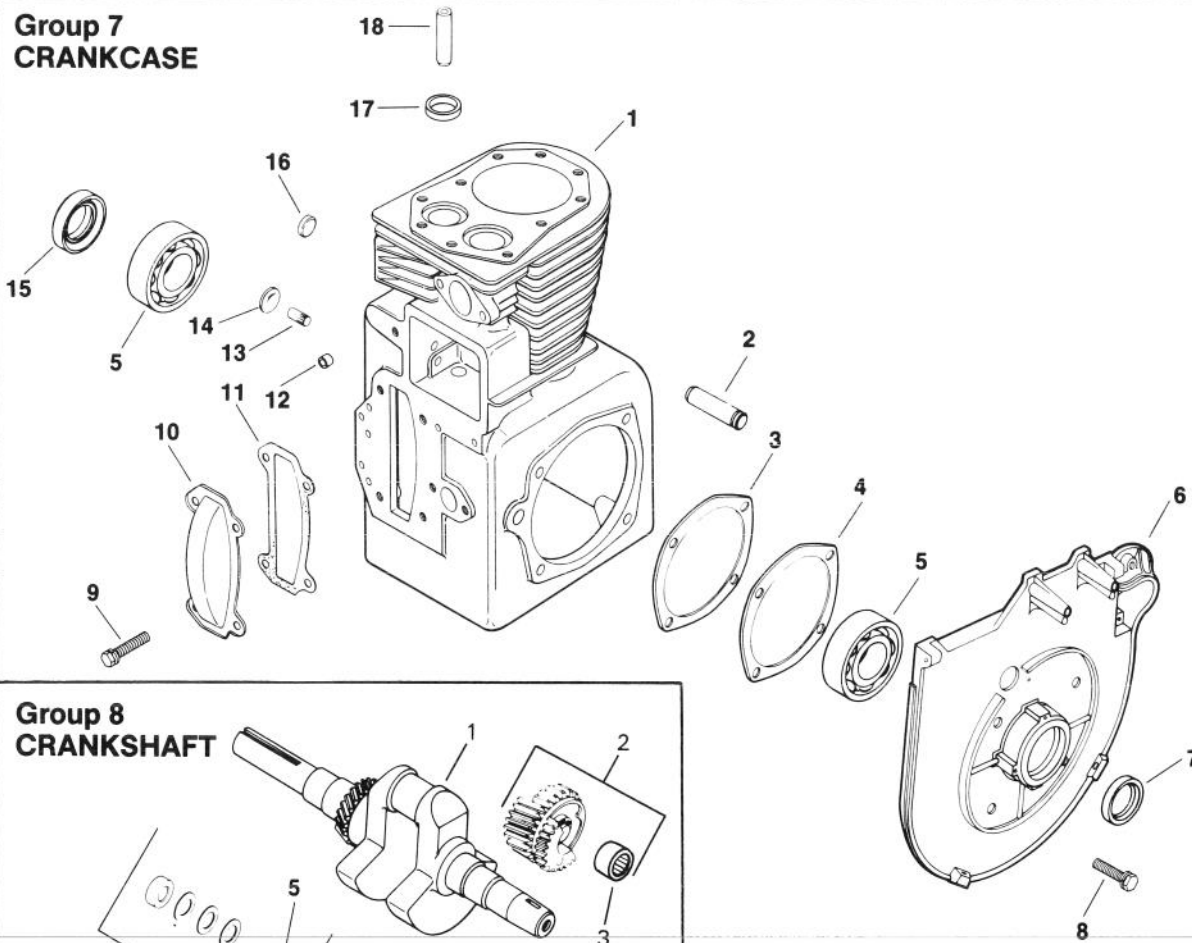
Ref. No.	Part No.	Description	No. Used
10	X-799-1	Palnut	1
11	X-426-3	Clamp, Hose 1/2" Wide	1
12	X-426-9	Clamp, Hose 5/16" Wide	1
13	47 326 02	Hose, Breather	1
Camshaft & Valves — Group 4			
1	47 010 11	Camshaft Assembly	1
2	47 089 01	Spring, Actuating	1
3	275066	Spacer .005	A/R
3	275067	Spacer .010	A/R
4	47 380 09	Pin — Camshaft	1
5	237672	Valve, Exhaust	1
6	235582	Valve, Intake	1
7	235011	Retainer, Upper Spring	2
8	235168	Spring, Valve	2
9	52 413 01	Rotator	2
10	D-235327	Tappet	2
11	41 755 10	Kit, Retainer	2
12	X-702-3	Plug, Cup 1/2 O.D.	1

ENGINE ASSEMBLY – KOHLER MODEL NO. M16S-711533 (Continued)

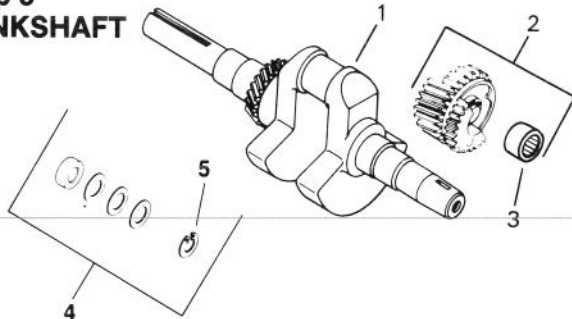
Group 5
CARBURETOR



Group 7 CRANKCASE



Group 8 CRANKSHAFT

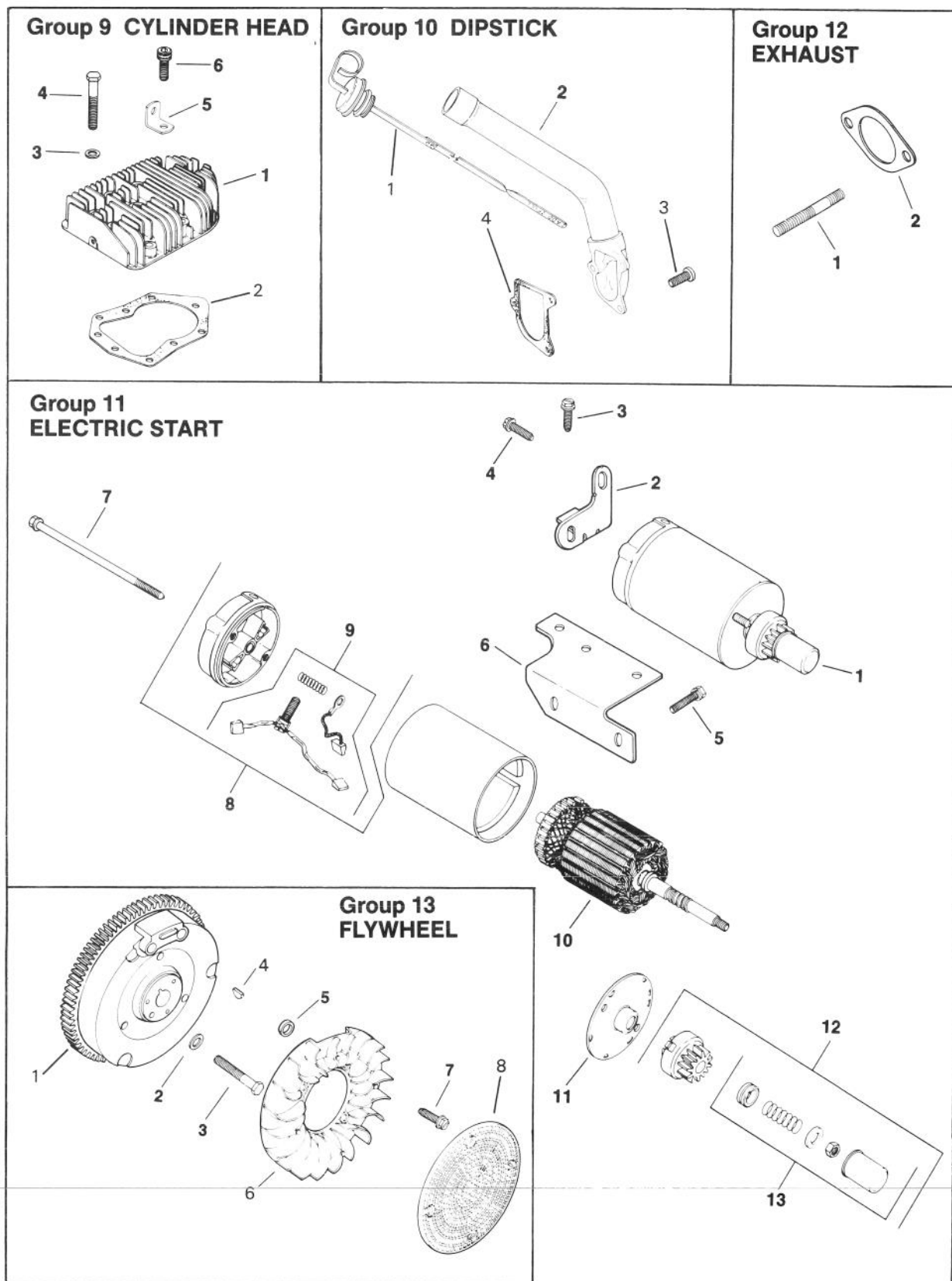


ENGINE ASSEMBLY — KOHLER MODEL NO. M16S-711533 (Continued)

Ref. No.	Part No.	Description	No. Used
		Carburetor — Group 5	
1	45 155 01	Connector — Hose	1
2	47 049 01	Gasket — Carburetor	1
3	X-770-1	Screw — Std. Hd. 5/16-18x1 *For Engines Built Before Serial No. 1808809063 Use The Following Parts:	2
4	45 053 76*	Carburetor Assembly	1
5	45 103 01*	Needle — Main Fuel Adj.	1
6	200383*	Spring — Main Fuel	1
7	200380*	Spring — Idle Fuel	1
8	275231*	Needle — Idle Fuel Adj.	1
9	232555*	Spring — Idle Speed	1
10	232556*	Screw — Idle Speed Adj.	1
11	200375*	Gasket — Bowl	1
12	25 757 03*	Kit — Float	1
13	25 041 02*	Gasket — Bowl Baffle	1
14	200376*	Pin — Float Hinge	1
15	235448*	Bowl — Fuel	1
16	47 100 06*	Screw — Bowl Retainer	1
17	200372*	Gasket — Bowl Ret. Screw	1
18	X-391-10	Connector — Hose	1
19	25 757 02*	Kit — Carburetor Repair (Not Illustrated)	1
20	25 757 05*	Kit — Choke & Throttle Repair (Not Illustrated) #For Engines Built After Serial No. 1808809053 Use The Following Parts:	1
21	45 853 07#	Kit — Carburetor w/Linkage	1
22	47 049 01#	Gasket — Carburetor	1
23	25 086 27#	Screw — Throttle & Choke Plate	4
24	45 146 07#	Plate — Choke	1
25	25 194 01#	Ball — Choke Friction	1
26	25 089 03#	Spring — Choke Friction	1
27	47 144 25#	Shaft — Throttle w/Lever & Seal	1
28	47 146 10#	Plate — Throttle	1
29	25 089 02#	Spring — Idle Fuel	1
30	25 368 01#	Needle — Idle Fuel Adj.	1
31	25 089 04#	Spring — Idle Speed	1
32	25 086 26#	Screw, Idle Speed Adj.	1
33	47 090 38#	Shaft — Choke w/Lever	1
34	45 337 01#	Jet — Main	1
35	25 041 04#	Gasket — Bowl	1
36	25 757 09#	Kit — Float	1
37	25 104 01#	Bowl — Fuel	1
38	25 041 03#	Gasket — Bowl Retainer Screw	1
39	25 100 05#	Screw — Bowl Retainer	1
40	45 041 07#	Gasket — Air Cleaner	2
41	25 757 08#	Kit — Carburetor Repair (Not Illustrated)	1
42	45 755 14#	Kit — High Altitude Jet (Not Illustrated)	1

Ref. No.	Part No.	Description	No. Used
		Crankcase — Group 7	
1	45 782 27	Cylinder Block Assembly (USE: Miniblock) (Incl. Ref. #12, 17 & 18)	1
2	236559	Shaft, Balance Gear Stub	2
3	47 422 05	Gasket, Shim	A/R
4	47 041 09	Gasket, Bearing Plate	1
5	235376	Bearing, Ball	2
6	47 146 07	Plate, Bearing	1
7	47 032 06	Seal, Front Oil	1
8	X-159-2	Screw, H.C. Sems	4
9	X-132-6	Screw, H.C. Sems	4
10	235026	Cover, Camshaft	1
11	235025	Gasket, Camshaft Cover	1
12	234866	Bearing, Governor Cross Shaft	1
13	235125-S	Shaft, Governor	1
14	X-230-11	Plug, Expansion	1
15	47 032 07	Seal, Rear Oil	1
16	47 139 01	Plug, Cup	2
17	230265	Insert, Valve	2
18	235007-S	Guide, Valve	2
		Crankshaft — Group 8	
1	45 142 36	Kit, Crankshaft	1
2	45 043 03	Gear Assembly	2
3	47 030 01	Bearing, Needle	2
4	47 755 01	Kit, Spacer	1
5	X-269-34	Retainer	2

ENGINE ASSEMBLY — KOHLER MODEL NO. M16S-711533 (Continued)



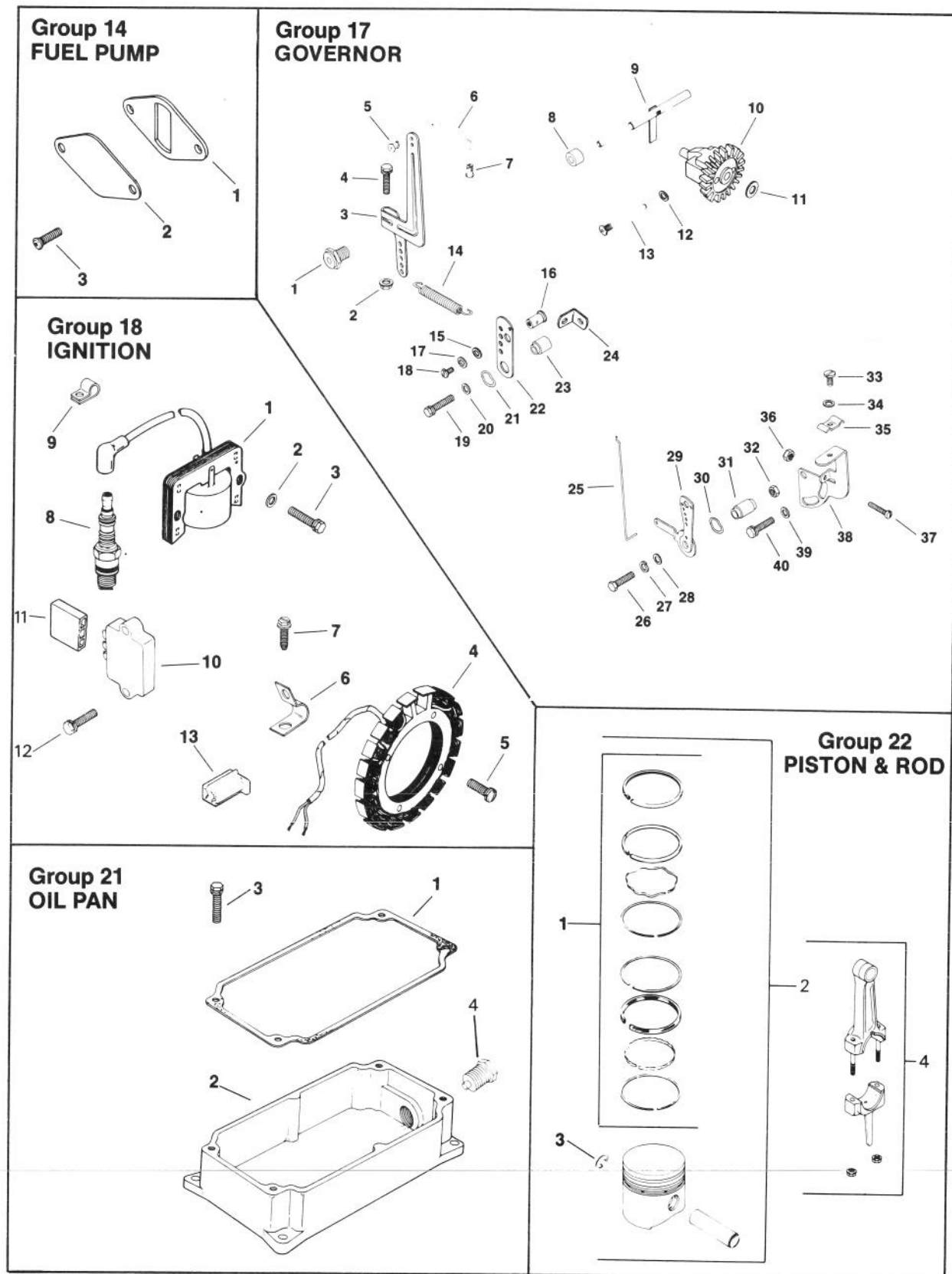
ENGINE ASSEMBLY — KOHLER MODEL NO. M16S-711533 (Continued)

Ref. No.	Part No.	Description	No. Used
		Cylinder Head — Group 9	
1	45 015 09	Head, Cylinder	1
2	45 041 16	Gasket, Head	1
3	270889	Washer, Plain	10
4	270158	Screw, H.C.	9
5	47 445 02	Strap, Lifting	1
6	47 086 17	Screw, Hex Socket Hd.	1
		Dipstick — Group 10	
1	47 272 03	Dipstick	1
2	47 123 14	Adapter, Oil Fill	1
3	X-131-2	Screw, F.H. Sems	3
4	237064	Gasket, Adapter	1
*	45 014 83	Extension	1
		Electric Start — Group 11	
1	41 098 04	Starter Assembly (Incl. Ref. #8-13)	1
2	45 126 17	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. Sems	2
6	47 126 29	Bracket, Solenoid	1

Ref. No.	Part No.	Description	No. Used
7	41 086 19	Bolt, Thru	2
8	41 227 04	Cap, Commutator End Assy.	1
9	52 755 15	Kit, Brush	1
10	45 170 02	Armature	1
11	41 227 03	Cap, Drive End	1
12	47 755 07	Kit, Drive	1
13	47 755 13	Kit, Drive Parts	1
*	25 450 03	Tag, Caution	1
*	52 357 01	Lubricant, Starter	1
		Exhaust — Group 12	
1	41 072 19	Stud	2
2	45 041 15	Gasket, Exhaust	1
		Flywheel — Group 13	
1	47 025 53	Flywheel	1
2	52 468 15	Washer, Plain	1
3	25 086 24	Screw, Hex Mach.	1
4	X-46-3	Key, Woodruff	1
5	25 112 04	Spacer	4
6	25 157 01	Fan	1
7	25 086 21	Screw, Hex Wash. Hd.	4
8	25 162 01	Screen, Grass	1

* Not Illustrated

ENGINE ASSEMBLY – KOHLER MODEL NO. M16S-711533 (Continued)



ENGINE ASSEMBLY — KOHLER MODEL NO. M16S-711533 (Continued)

Ref. No.	Part No.	Description	No. Used
		Fuel Pump — Group 14	
1	25 041 05	Gasket, Fuel Pump	1
2	240282	Cover, Pump Pad	1
3	X-174-2	Screw, Pozidriv F.H. Sems	2
		Governor — Group 17	
1	235476	Bushing, Governor Shaft	1
2	X-799-1	Palnut	1
3	47 090 20	Lever, Governor	1
4	X-776-1	Screw, H.C. Sems	1
5	47 158 07	Bushing, Natural Linkage Retaining	1
6	47 079 05	Linkage, Governor (Governor to Carburetor)	1
7	25 158 09	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	25 468 01	Washer, Plain	1
13	231355	Pin, Governor Stop	1
14	235496	Spring, Governor	1
15	X-25-102	Washer, Plain	1
16	48 755 10	Kit, Clamp (Incl. Ref. #17 & 18)	1
17	X-25-53	Washer	1
18	X-102-3	Screw	1
19	X-132-9	Screw, H.C. Sems	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	47 079 01	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	47 090 06	Lever, Choke Control	1
30	275690	Washer, Wave	1
31	47 112 02	Spacer	1
32	X-76-2	Nut, Hex	1
33	X-67-51	Screw	1
34	25 468 04	Washer	1
35	47 237 02	Clamp, Swivel	1
36	X-72-4	Nut, Hex	1
37	232556	Screw	1
38	47 126 09	Bracket, Control	1
39	X-25-72	Washer, Plain	1
40	X-132-1	Screw, H.C. Sems	1
		Ignition — Group 18	
1		Module, Ignition	
	47 584 01	Before Serial No. 1715900013	1
	47 584 02	After Serial No. 1715900003	1
2	X-25-79	Washer, Plain	2
3	X-156-1	Screw, H.C. Sems	2
4	237878	Kit, Stator (15 amp.)	1
5	X-778-1	Screw, Stator Mounting (Before Serial No. 1723100015)	1
5	X-67-51	Screw, Stator Mounting (After Serial No. 1728100005)	1

Ref. No.	Part No.	Description	No. Used
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	25 755 03	Kit, Rectifier — Regulator	1
11	236602	Connector, Female (3 Contact)	1
12	X-132-5	Screw, H.C. Sems	2
13	41 155 03	Connector, Male (2 Contact)	1
		Not Illustrated	
	47 518 36	Lead, Violet, Rectifier-Regulator to Connector (23" - 14 Gauge - Uninsulated Push on Tab Terminals)	1
		Lead, White, Module to Connector	
	47 518 43	Before Serial No. 1715900013	1
	47 518 37	After Serial No. 1715900003	1
		Oil Pan — Group 21	
1	235057	Gasket, Oil Pan	1
2	235147	Pan, Oil	1
3	X-159-3	Screw, H.C. Sems	4
4	X-305-4	Plug, Hex Hd.	1
		Piston & Rod — Group 22	
1		Ring Set (Std. & .003)	
	45 108 06	Before Serial No. 1820000013	1
	45 108 10	After Serial No. 1820000003	1
1		Ring Set (.010)	
	45 108 07	Before Serial No. 1820000013	1
	45 108 11	After Serial No. 1820000003	1
1		Ring Set (.020)	
	45 108 08	Before Serial No. 1820000013	1
	45 108 12	After Serial No. 1820000003	1
1		Ring Set (.030)	
	45 108 09	Before Serial No. 1820000013	1
	45 108 13	After Serial No. 1820000003	1
2		Piston w/Ring Set (Std.)	
	45 874 01	Before Serial No. 1820000013	1
	45 874 11	After Serial No. 1820000003	1
2		Piston w/Ring Set (.003)	
	45 874 02	Before Serial No. 1820000013	1
	45 874 12	After Serial No. 1820000003	1
2		Piston w/Ring Set (.010)	
	45 874 03	Before Serial No. 1820000013	1
	45 874 13	After Serial No. 1820000003	1
2		Piston w/Ring Set (.020)	
	45 874 04	Before Serial No. 1820000013	1
	45 874 14	After Serial No. 1820000003	1
2		Piston w/Ring Set (.030)	
	45 874 05	Before Serial No. 1820000013	1
	45 874 15	After Serial No. 1820000003	1
3	47 018 01	Retainer, Piston Pin	2
4		Connecting Rod (Std.)	
	45 067 22	Before Serial No. 1731000013	1
	45 067 24	After Serial No. 1731000003	1
4		Connecting Rod (.010)	
	45 067 23	Before Serial No. 1731000013	1
	45 067 25	After Serial No. 1731000003	1

PRODUCT CHANGES

In an effort to make improvements available to TORO owners as quickly as possible, minor changes are incorporated into TORO's products from time to time that do not become immediately shown in the Parts Catalog. If such a change apparently has been made in your unit, which is not reflected in your manual, see your TORO Distributor for information and part numbers.

IDENTIFICATION AND ORDERING

MODEL AND SERIAL NUMBERS

The Greensmaster 3000 has two identification numbers: a model number and a serial number. The two numbers are stamped on a plate which is located on left rear side of sulky frame tube. The Greensmaster 3000 Cutting Units have two identification numbers: a model number and a serial number. The two numbers are stamped on a plate which is located near the drive motor. In any correspondence concerning the Greensmaster 3000 or its cutting units, supply model and

serial numbers to assure that correct information and replacement parts are obtained.

To order replacement parts from an Authorized TORO Distributor, supply the following information:

1. Model and serial numbers.
2. Part number, description, and quantity of part(s) desired.

NOTE: Do not order by reference number if a parts catalog is being used; use the PART NUMBER.

Keep Your TORO All Toro  Insist on Genuine Toro Parts

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MAINTENANCE RECORD

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MAINTENANCE RECORD

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