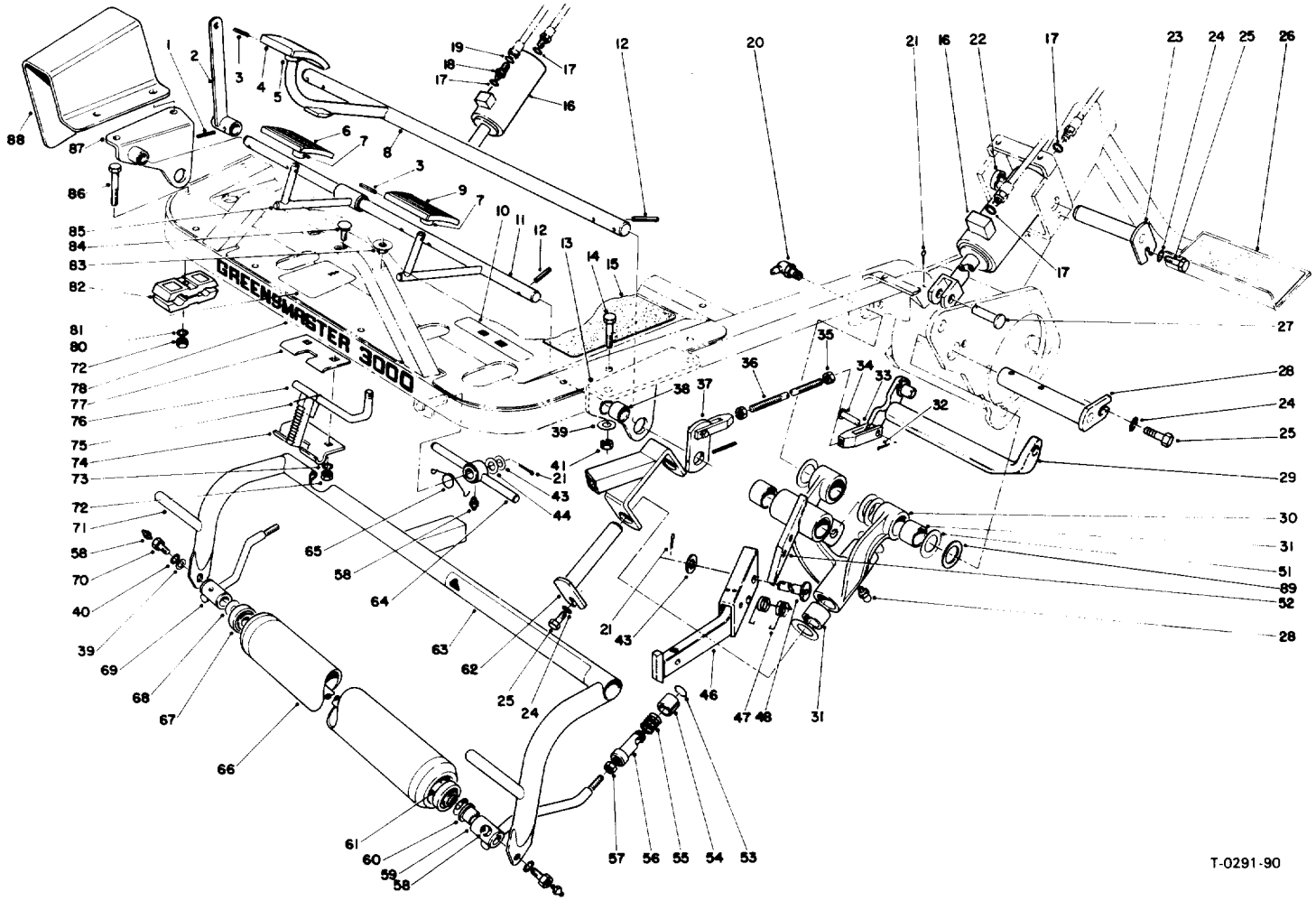
FORM NO. 3313-972

TORO

MODEL NO. 04350-00001 & UP
MODEL NO. 04405-00001 & UP
MODEL NO. 04408-00001 & UP
MODEL NO. 04450-00001 & UP
MODEL NO. 04468-00001 & UP
MODEL NO. 04460-00001 & UP
MODEL NO. 04465-00001 & UP

PARTS CATALOG

GREENSMASTER® 3000

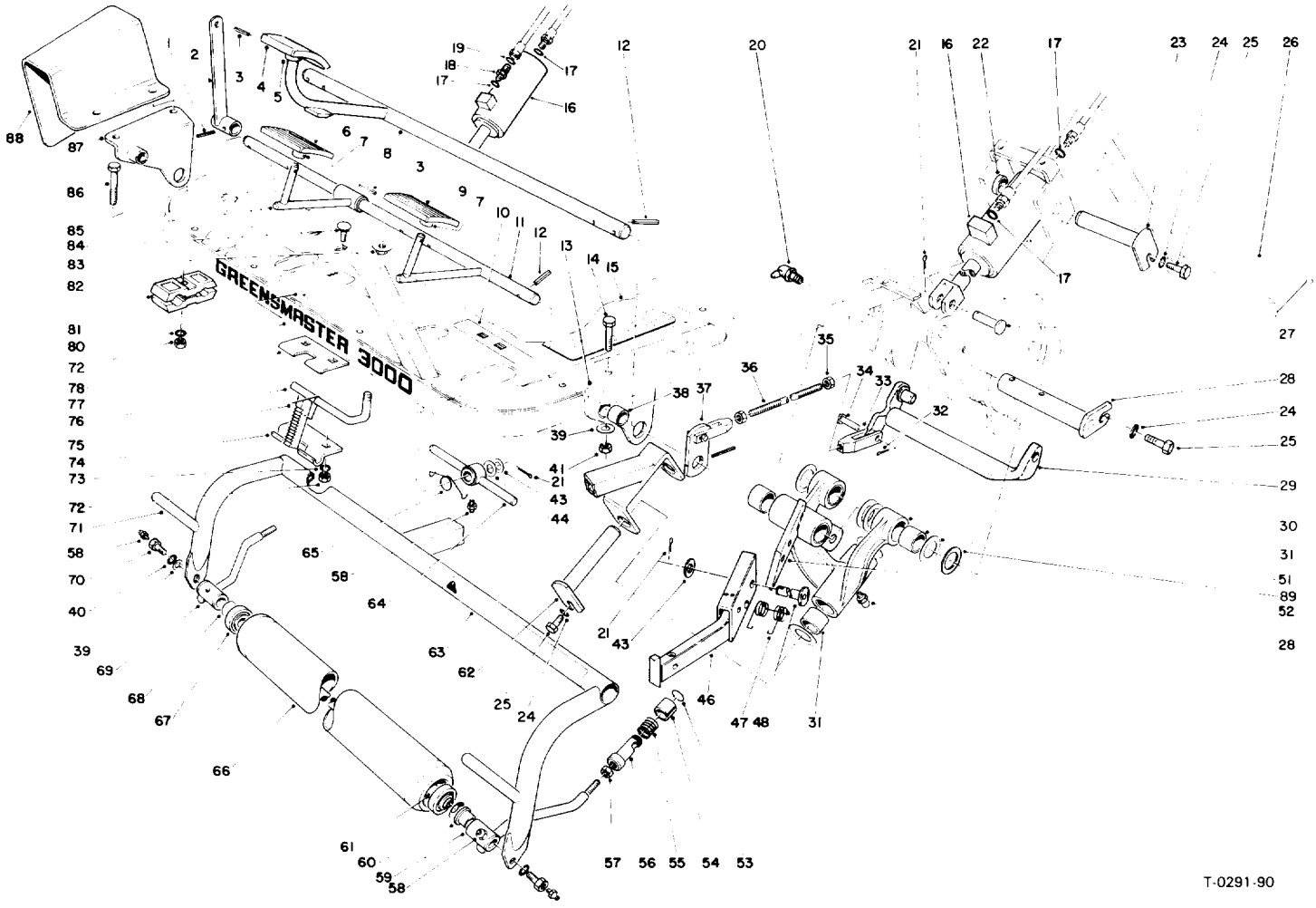


FOOT PEDALS AND ROLLER ASSEMBLY

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	72-9720	Cylinder — Hydraulic	2
17	237-78	O-Ring	4

Ref. No.	Part No.	Description	No. Used
18	340-92	Fitting — Straight	1
19	237-21	O-Ring	1
20	302-60	90° Grease Fitting	4
21	3272-11	Pin — Cotter	4
22	75-9590	Spacer	2
23	10-6060	Pin — Ram Pivot	2
24	3253-4	Lockwasher	6
25	322-1	Capscrew — Hex Hd.	6
26	62-2660	Pad — Foot Step	1
27	283-8	Pin — Clevis	2
28	10-6110	Pin — Hinge	2
29	71-1510	Lever — Brake	1
30	10-7820	Pivot Hinge (Incl. Ref. #31)	1
31	3-0348	Bushing	10
32	3272-6	Pin — Cotter	4
33	282-2	Yoke	4
34	283-1	Pin — Clevis	4
35	3220-2	Nut — Hex	4

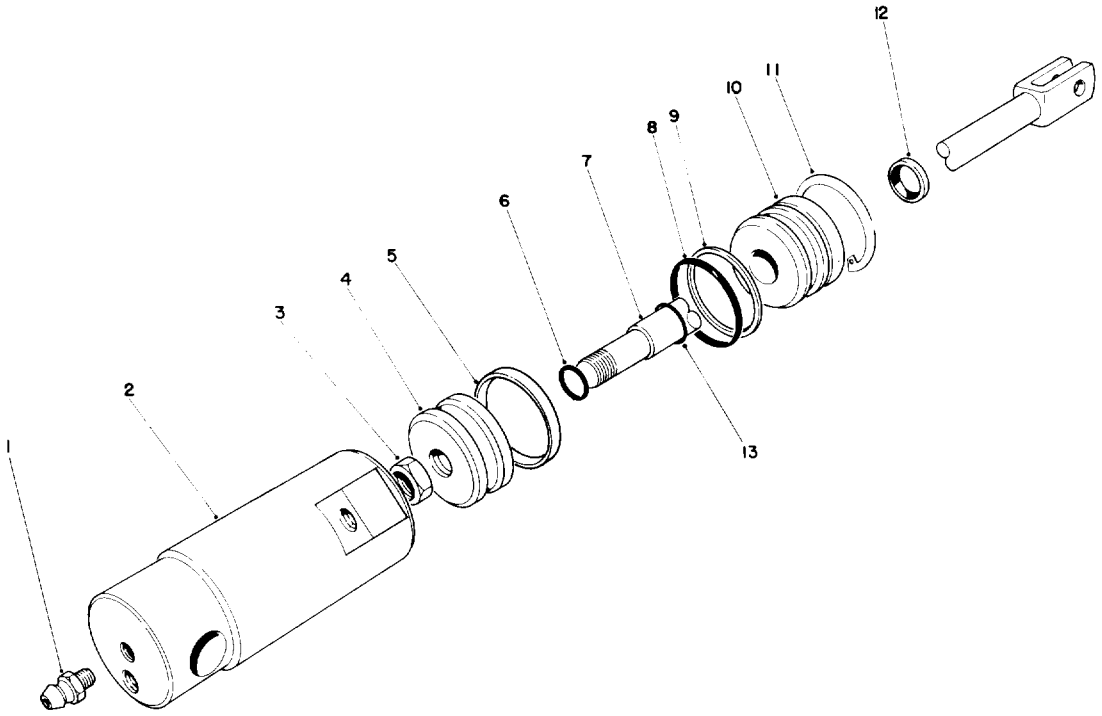
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FOOT PEDALS AND ROLLER ASSEMBLY (Continued)

Ref. No.	Part No.	Description	No. Used
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
43	3256-26	Washer — Flat	2
44	3290-221	Washer — Spring	1
46	62-2390	Bar — Lift Arm L.H.	1
47	57-7650	Spring — Torsion	1
48	63-8750	Pin — Pivot	1
51	10-8110	Washer — Thrust	18
52	62-2460	Lift Arm — L.H. (Incl. Ref. #49)	1
53		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
62	10-6090	Pin — Pivot	2
63	62-5070	Decal — Danger	1
64	12-9050	Lift Pivot	1

Ref. No.	Part No.	Description	No. Used
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	74-3990	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
89	5-1226	Washer — Shim	2



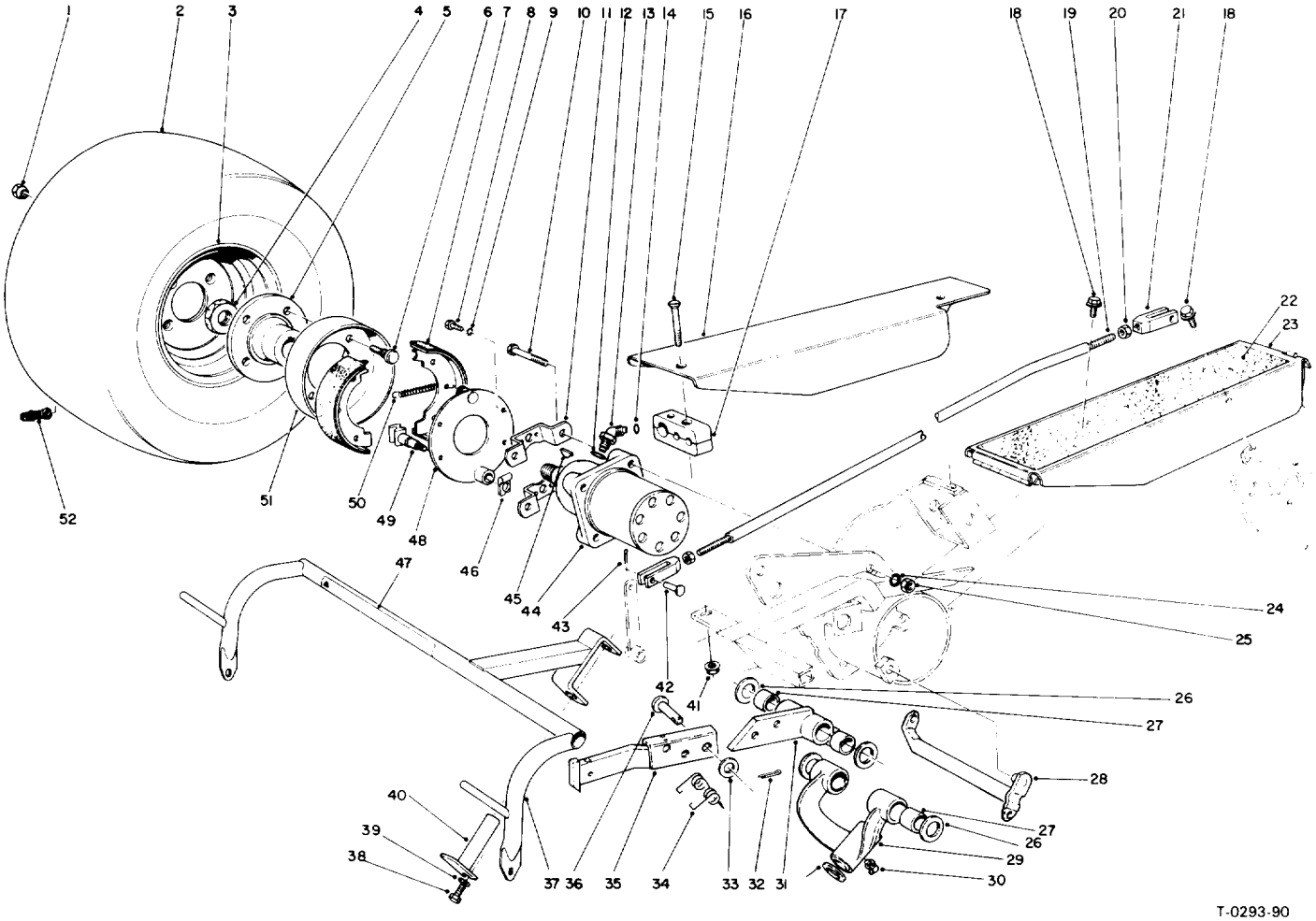
T-0292-90

HYDRAULIC CYLINDER — FRONT NO. 72-9720

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
*	72-9680	Seal Repair Kit (Incl. Ref. #5, 6, 8, 9 & 12-13)	1

* Not Illustrated



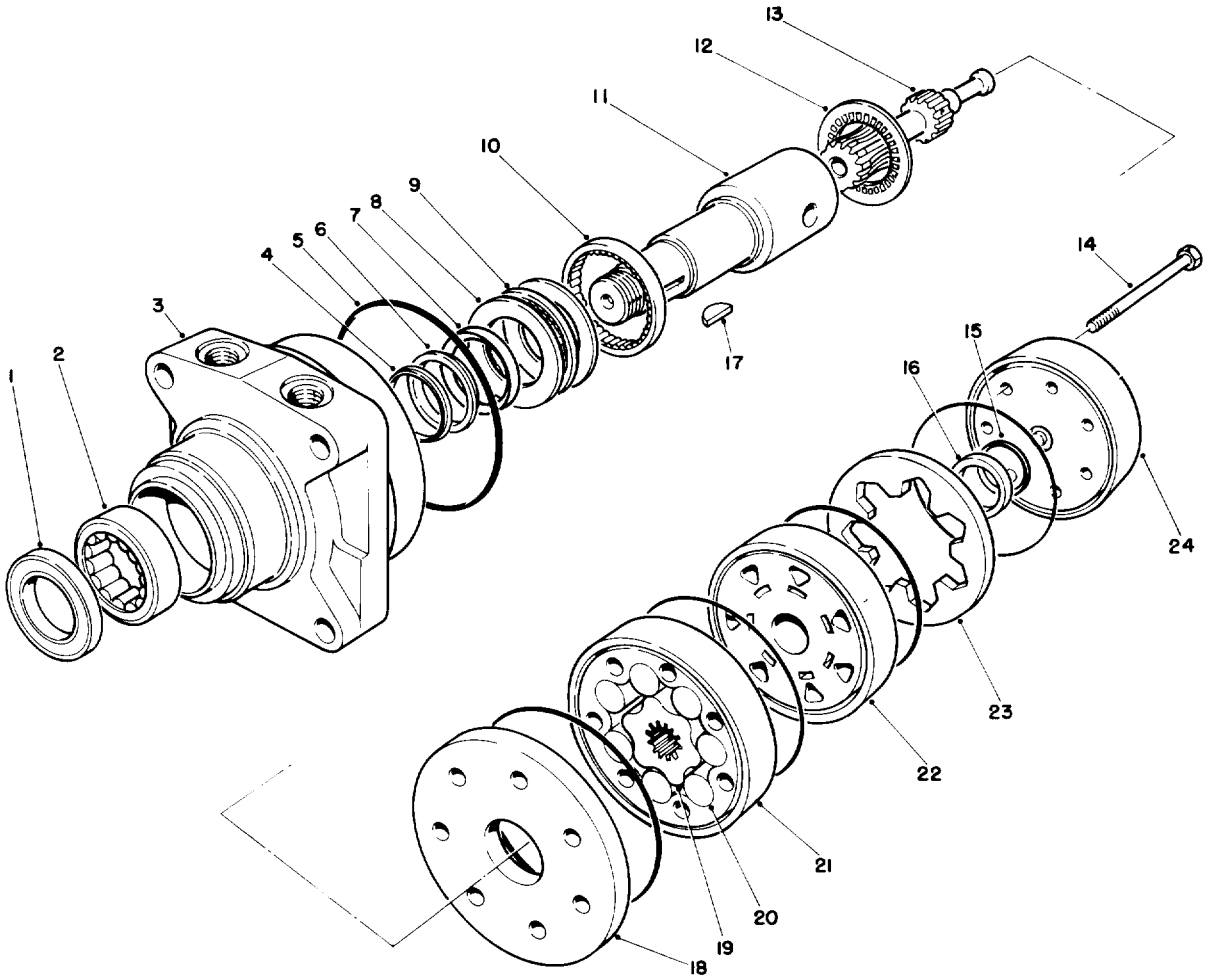
WHEEL AND BRAKE ASSEMBLY

Ref. No.	Part No.	Description	No. Used
1	242-50	Wheel Nut	8
2	28-3680	Tire	2
*	231-124	Tire — Treaded	2
*	62-2580	Spacer	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	70-9840	Shoe & Lining Assembly	4
8	329-3	Capscrew — Hex Hd.	8
9	3255-7	Lockwasher — Ext. Tooth	8
10	325-11	Capscrew — Hex Hd.	8
11	10-8000	Bracket — Brake	4
12	237-80	O-Ring	4
13	340-14	45° Fitting	4
14	237-65	O-Ring	4
15	32108-100	Capscrew — Phil. Hd. Mach.	3
16	49-5450	Plate — Cover	1
17	57-6140	Clamp — Tube Side	4
18	3234-4	Hex Hd. Capscrew	4
19	49-5430	Rod — Control	1
20	3220-2	Nut	2
21	282-2	Yoke	2
22	10-8220	Pad — Tool Box	1
23	49-5410	Box — Tool	1
24	3296-23	Lockwasher	8
25	3217-9	Nut	8
26	10-8110	Thrust Washer	6
27	3-0348	Bushing	6

Ref. No.	Part No.	Description	No. Used
28	71-1510	Arm — Brake	1
29	10-7820	Pivot Hinge (Incl. Ref. #27, 30)	1
30	302-60	Grease Fitting	1
31	62-2440	Arm — Lift R.H.	1
32	3272-11	Pin — Cotter	2
33	3256-26	Washer — Flat	3
34	57-7650	Spring — Torsion	2
35	62-2420	Bar — Lift Arm	1
36	63-8750	Pin — Pivot	2
37	47-5960	Pull Frame — R.H.	1
38	322-1	Capscrew — Hex Hd.	1
39	3253-4	Lockwasher	1
40	10-6090	Pivot Pin	1
41	3296-16	Locknut — Flanged	3
42	283-1	Clevis Pin	2
43	3272-6	Pin — Cotter	2
44	75-9990	Motor — Hydraulic	2
45	3257-42	Key — Woodruff	2
46	70-9850	Clip — Retaining	2
47	62-5070	Decal — Danger	1
48	70-9870	Backing Plate — Brake	2
49	70-9860	Cam Shaft	2
50	70-9880	Spring	4
51	71-1500	Brake Assembly (Incl. Ref. #7, 46, 48-50)	2
52	232-24	Valve Stem w/Cap	2
*†	232-37	Inner Tube — Heavy Duty	2
*	10-6820	Drum Assy. (Incl. Ref. #5, 6)	1

* Not Illustrated

† Service Replacement Part



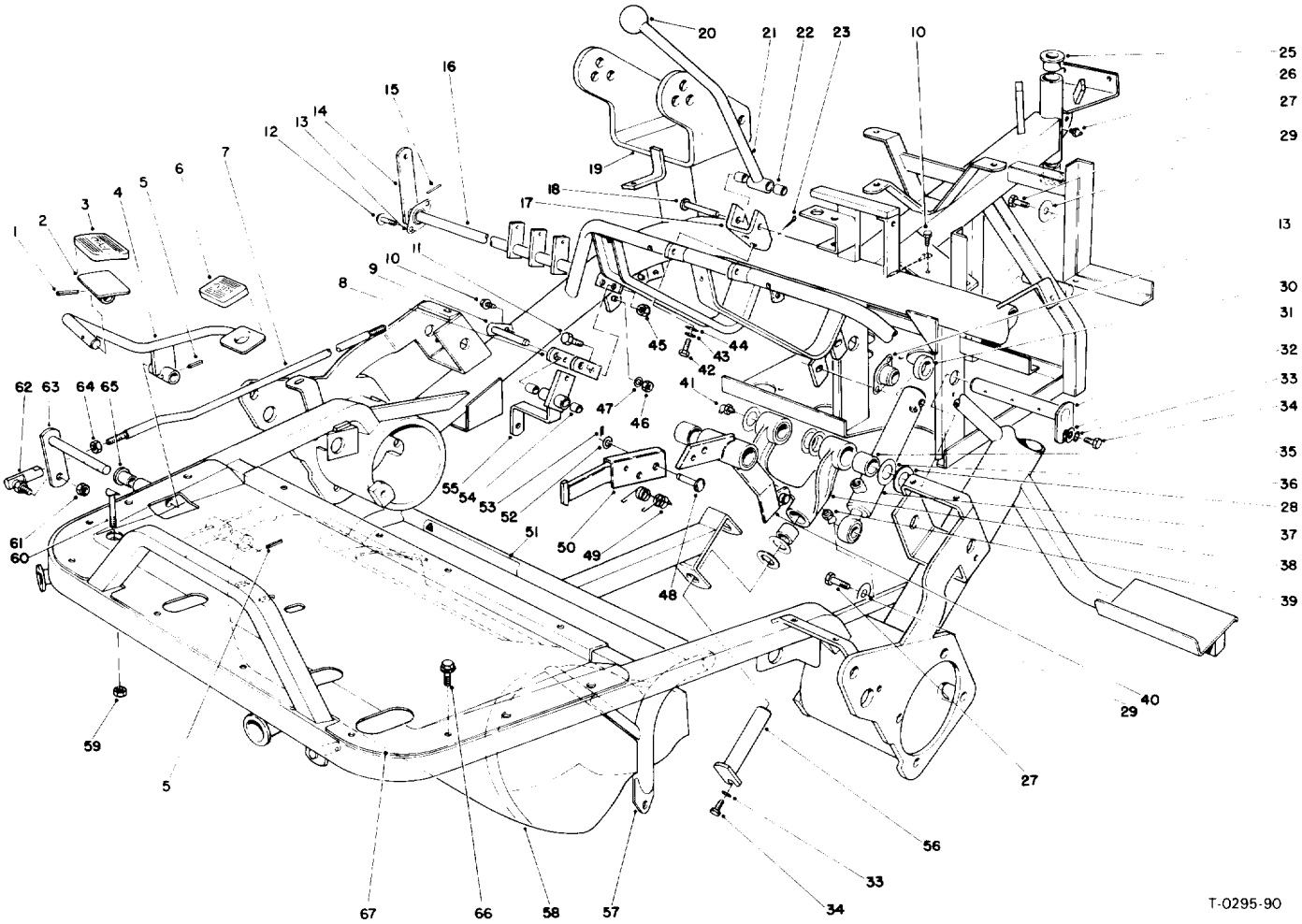
T-0987-90

HYDRAULIC DRIVE MOTOR NO. 75-9990

Ref. No.	Part No.	Description	No. Used
1		Seal — Dirt & Water	1
2		Bearing	1
3		Housing	1
4		Washer — Backup	1
5		Seal Rings	5
6		Washer — Backup	1
7		Seal — Inner	1
8		Washer — Thrust	2
9		Bearing — Thrust	1
10		Bearing	1
11	76-0860	Shaft — Coupling	1
12	76-0850	Bearing — Thrust	1
13	76-0960	Link — Drive	7
14	76-1010	Screw — Cap Hex Hd.	1
15		Seal — Commutator	1
16		Commutator	1

Ref. No.	Part No.	Description	No. Used
17	3257-42	Key — Woodruff	1
18	76-0870	Plate — Wear	1
19		Rotor	1
20		Vane	7
21		Stator	1
22	76-0840	Manifold	1
23		Ring — Commutator	1
24	76-0940	End Cover Assembly	1
*	76-0970	Rotor Set (Incl. Ref. #19-21)	1
*	76-0880	Commutator Assembly (Incl. Ref. #15, 16 & 23)	1
*	76-0800	Seal Kit (Incl. Ref. #1, 4-7 & 15)	1
*	76-0810	Housing Assembly (Incl. Ref. #2, 3 & 8-10)	1

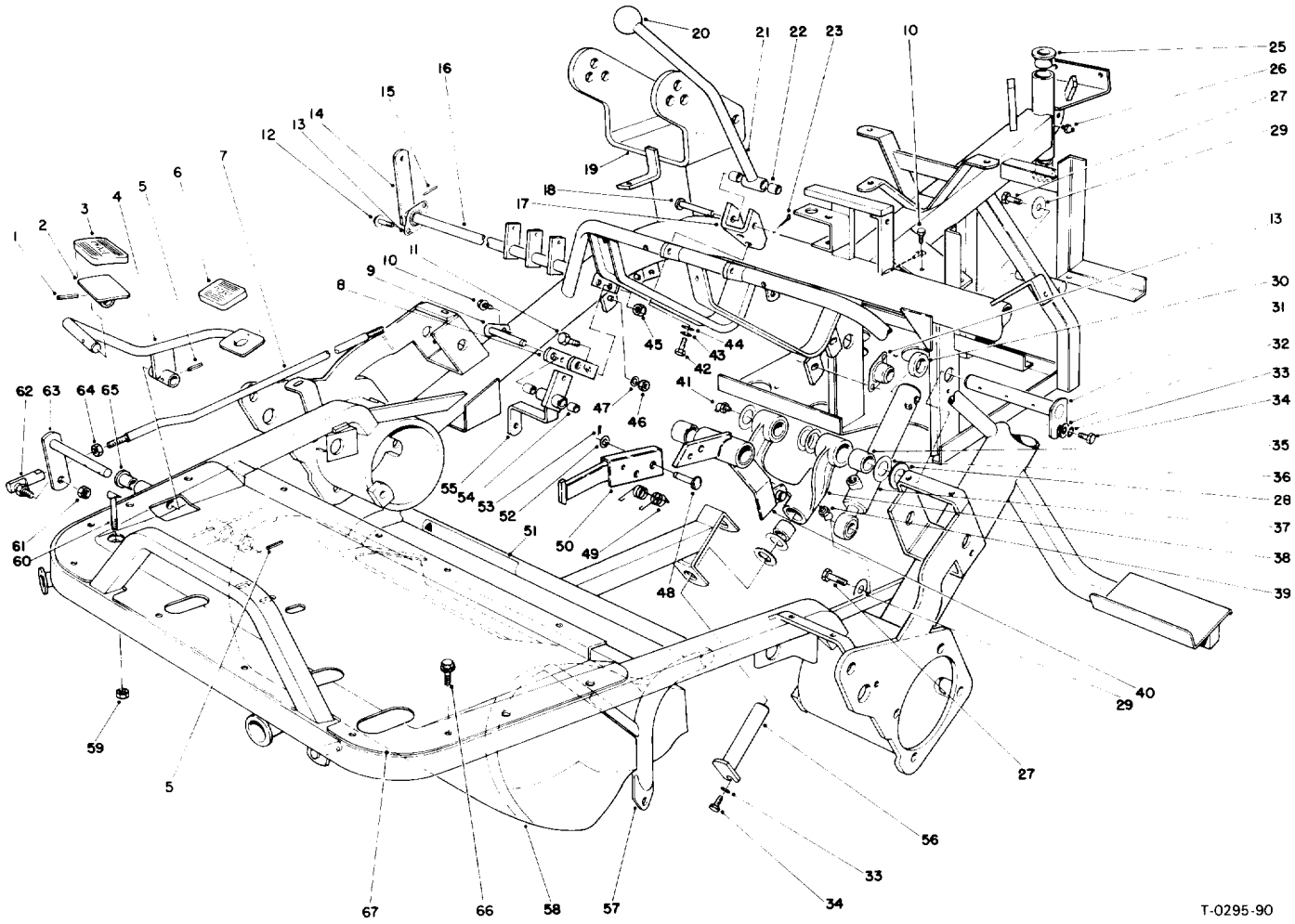
* Not Illustrated



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 — Pentaflo	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	75-9700	Frame (Incl. Ref. #25 & 65)	1
20	233-48	Knob	1
21	68-5930	Handle — Traction (Incl. Ref. #22)	1

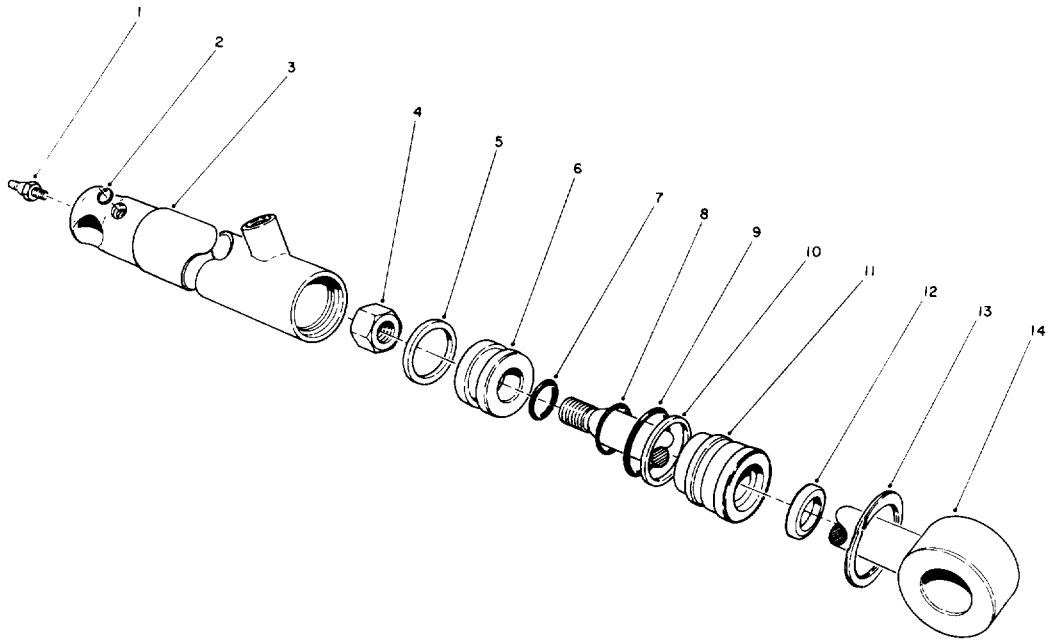
Ref. No.	Part No.	Description	No. Used
22	256-251	Bushing	2
23	3272-4	Pin — Cotter	1
25	256-290	Bushing	2
26	302-5	Grease Fitting	1
27	3234-1	Capscrew — Hex Hd.	2
28	5-1226	Washer	A/R
29	10-7920	Washer — Flat	2
30	27-2540	Spacer — Hub	1
31	27-2550	Pin — Hinge	1
32	3256-23	Washer — Flat	1
33	3253-4	Lockwasher	2
34	322-1	Capscrew — Hex Hd.	2
35	3-0348	Bushing	6
36	10-8110	Washer — Thrust	A/R
37	74-3300	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



FRAME ASSEMBLY (Continued)

Ref. No.	Part No.	Description	No. Used
44	3256-3	Washer — Flat	2
45	3296-29	Nut — Lock	2
46	3296-59	Nut — Lock	4
47	3256-24	Washer — Flat	4
48	63-8750	Pin — Pivot	1
49	57-7650	Spring — Torsion	1
50	62-2420	Bar — Lift Arm (R.H. & Center)	1
51	62-5070	Decal — Danger	1
52	3256-26	Washer — Flat	1
53	3272-11	Pin — Cotter	1
54	256-2	Bushing	2
55	49-6260	Tube — Traction Pivot (Incl. Ref. #54)	1

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
66	32144-14	Capscrew — Hex Hd.	9
67	75-9490	Plate — Footrest	1

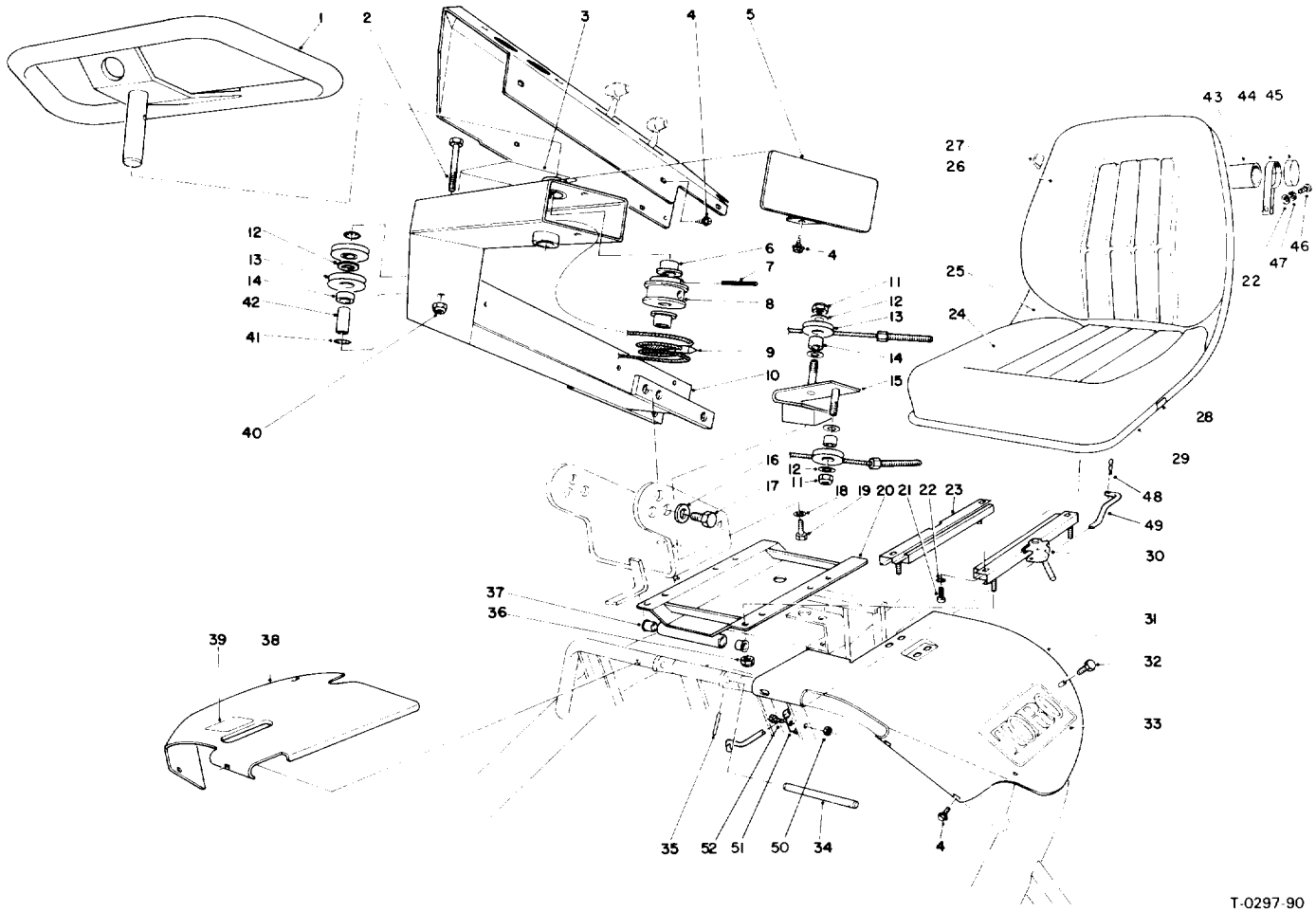


T-0217-90

HYDRAULIC CYLINDER – REAR NO. 74-3300

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	74-3590	Seal Repair Kit (Incl. Ref. #5, 7, 8, 9, 10 & 12)	1

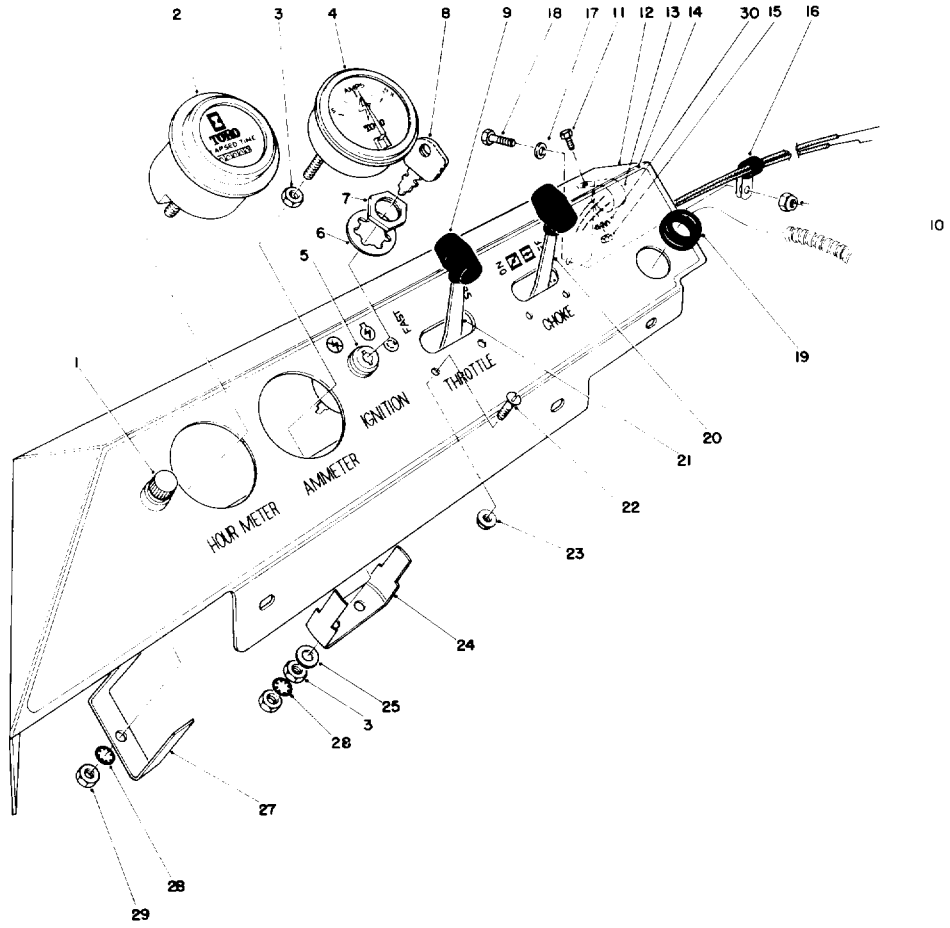


STEERING AND SEAT ASSEMBLY

Ref. No.	Part No.	Description	No. Used
1	49-5900	Steering Wheel Assembly	1
2	321-15	Screw — Cap Hex Hd.	1
3	75-9380	Decal — Caution	1
4	32104-76	Screw — Tapping Acorn Hd.	15
5	10-7370	Tube Cap	1
6	256-113	Bushing	2
7	32121-34	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	75-9720	Cushion — Seat (Incl. Ref. #27 & 28)	1
25	351-81	Shell	1
26	75-9810	Backrest (Incl. Ref. #27 & 28)	1
27	351-79	Clip	6

Ref. No.	Part No.	Description	No. Used
28	351-80	Clip Joint	1
29	351-78	Edging	2
*	75-9190	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	65-5871	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 Prop	1
50	3296-16	Locknut	1
51	68-5310	Clip Seat	1
52	321-3	Capscrew	1

* Not Illustrated



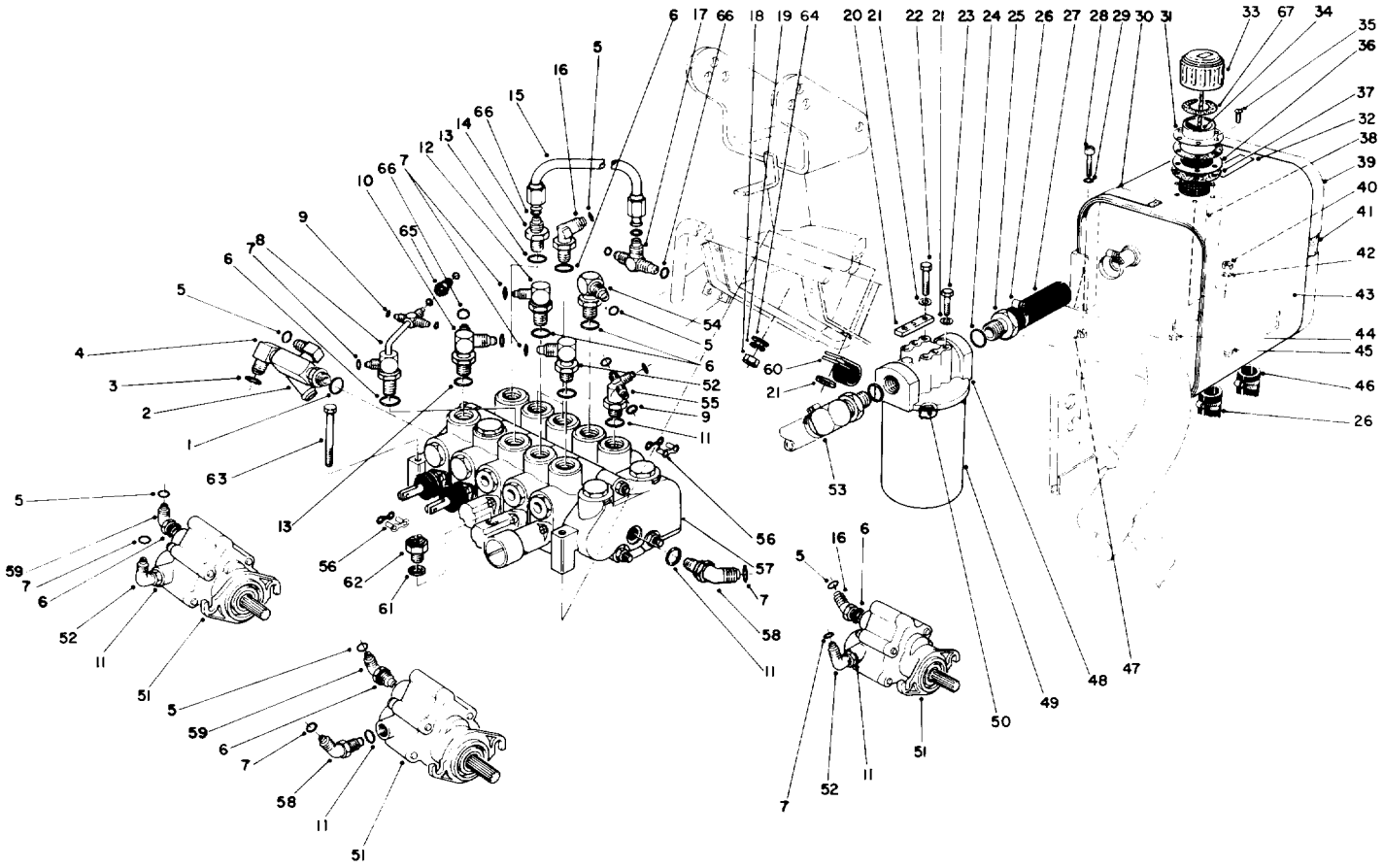
T-0298-90

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	63-8360	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	32105-8	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	3255-7	Lockwasher — Internal Tooth	1

* Not Illustrated
† Obtain Locally

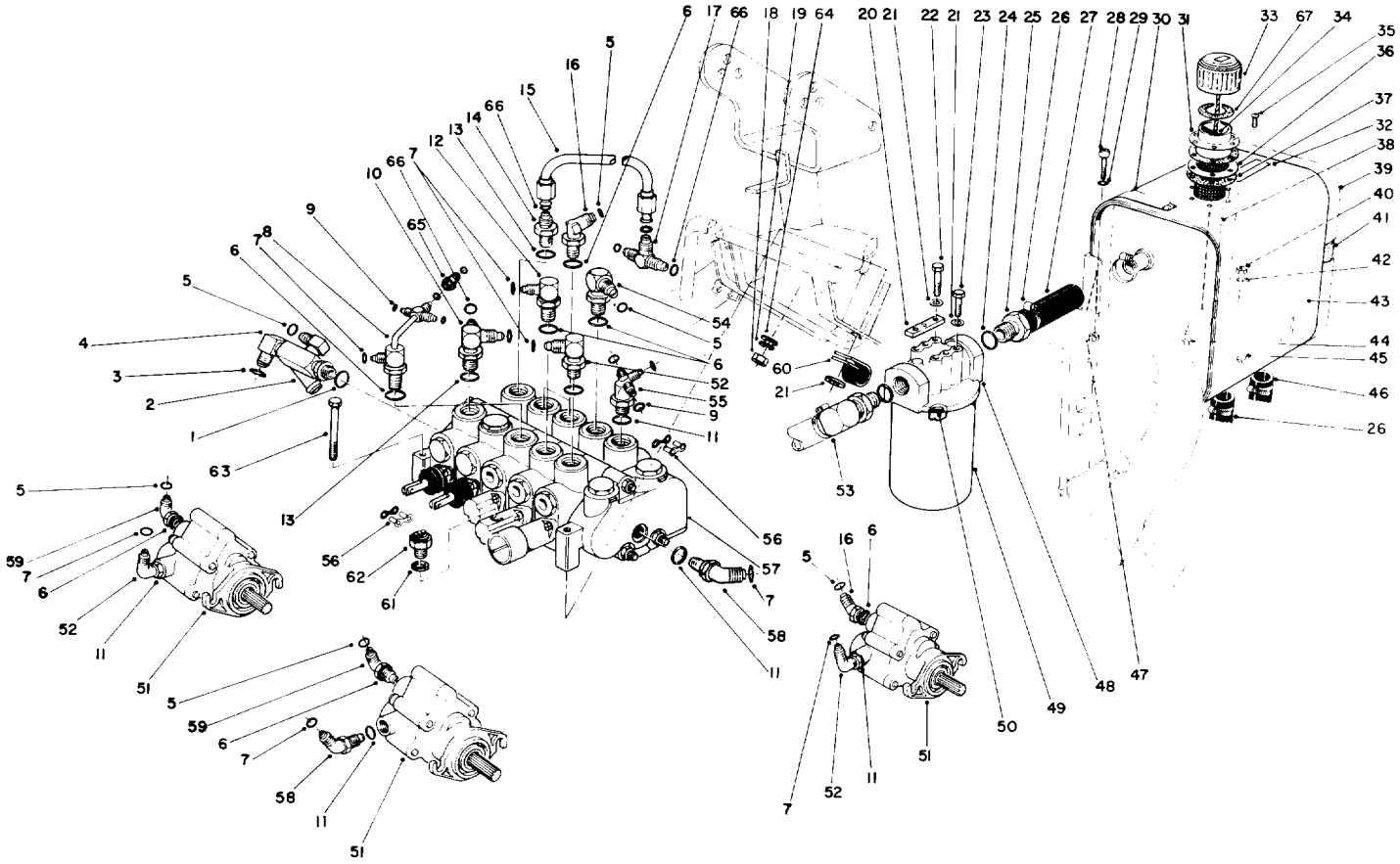


T-0299-90

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	2
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



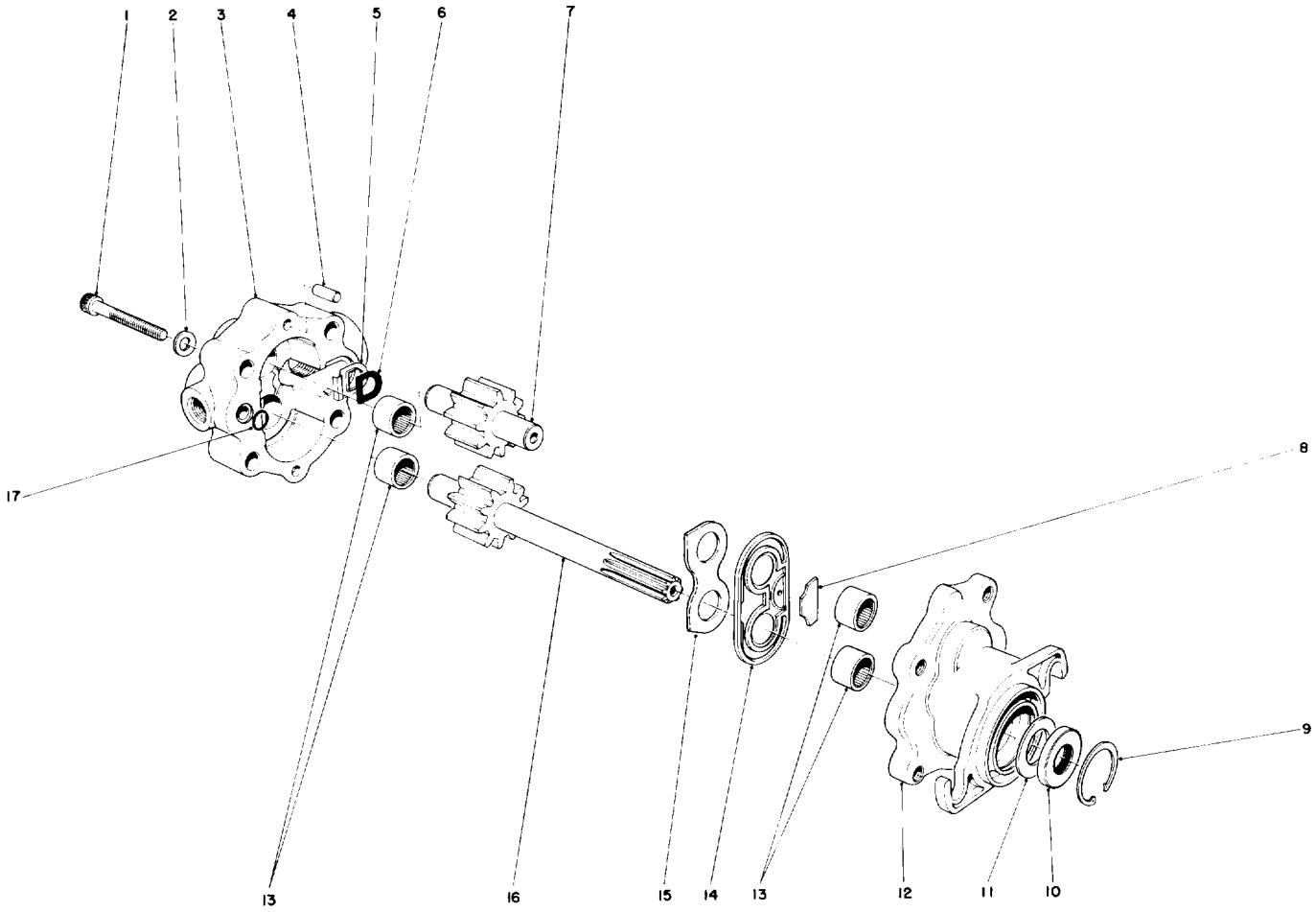
T-0299-90

VALVE BANK AND HYDRAULIC RESERVOIR ASSEMBLY (Continued)

Ref. No.	Part No.	Description	No. Used
41	27-2420	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	74-3570	Filter Element (Incl. Ref. #50)	1
50	72-3850	Seal — Ring	1
51	70-9800	Reel Motor	3
52	340-77	90° Elbow	3
53	353-564	90° Fitting	1
54	63-4090	90° Fitting — Extended	1

Ref. No.	Part No.	Description	No. Used
55	70-2630	Fitting — Crow Foot	1
56	57-6220	Link Connector	5
57	70-8210	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
65	71-0990	Fitting — One Way Orifice	1
66	237-65	O-Ring	6
67	76-1720	Gasket Filler Cap	1
*	44-2500	Hydraulic Oil Dye	1

* Not Illustrated



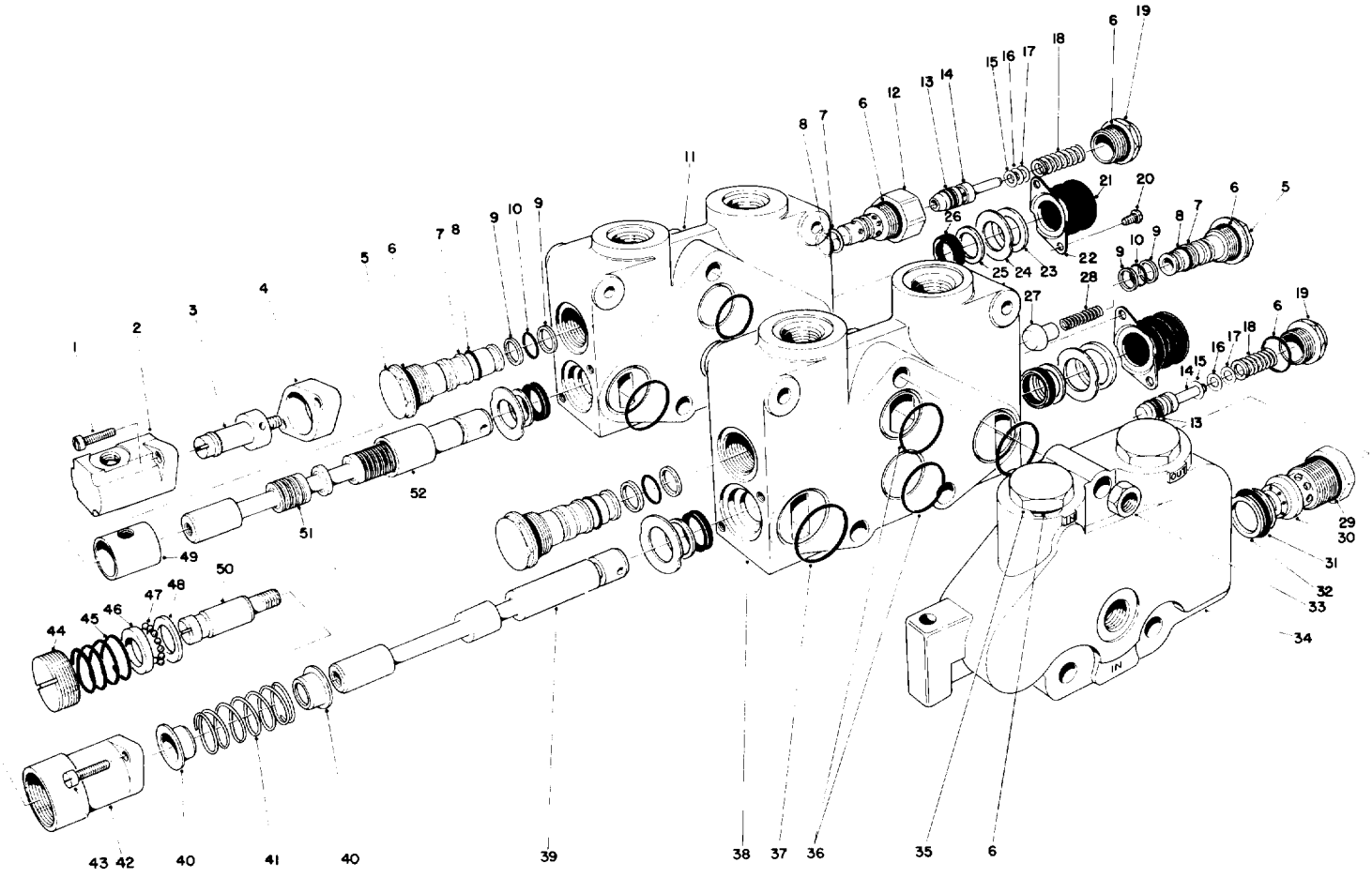
T-0300-90

REEL MOTOR NO. 70-9800

Ref. No.	Part No.	Description	No. Used
1	353-601	Screw Hex Socket Hd.	4
2	353-600	Washer	4
3	353-588	Cover Motor (Incl. Ref. #13)	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		Seal Shaft	1

Ref. No.	Part No.	Description	No. Used
11		Spacer	1
12	353-777	Body Motor (Incl. Ref. #13)	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
18	72-4380	Seal Kit (Incl. Ref. #9-11)	1
19	72-4390	Repair Kit (Incl. Ref. #5, 6, 8-11, 14, 15 & 17)	1

* Not Illustrated



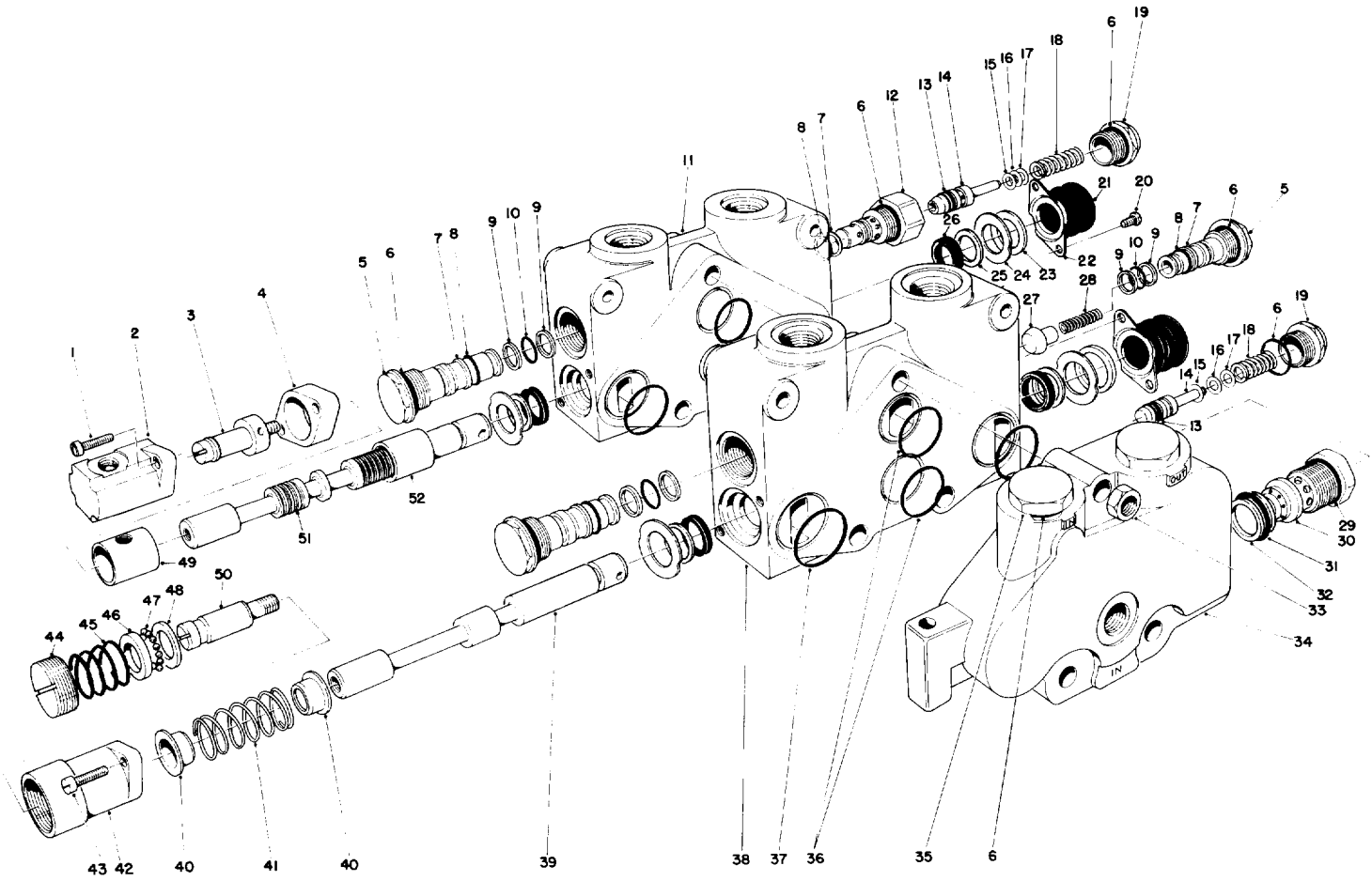
T-0301-90

CONTROL VALVE ASSEMBLY NO. 70-8210 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	3217-7	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	353-780	Bonnet — R. Detent	1
43	3274-15	Screw — Fillister Hd.	2

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



T-0301-90

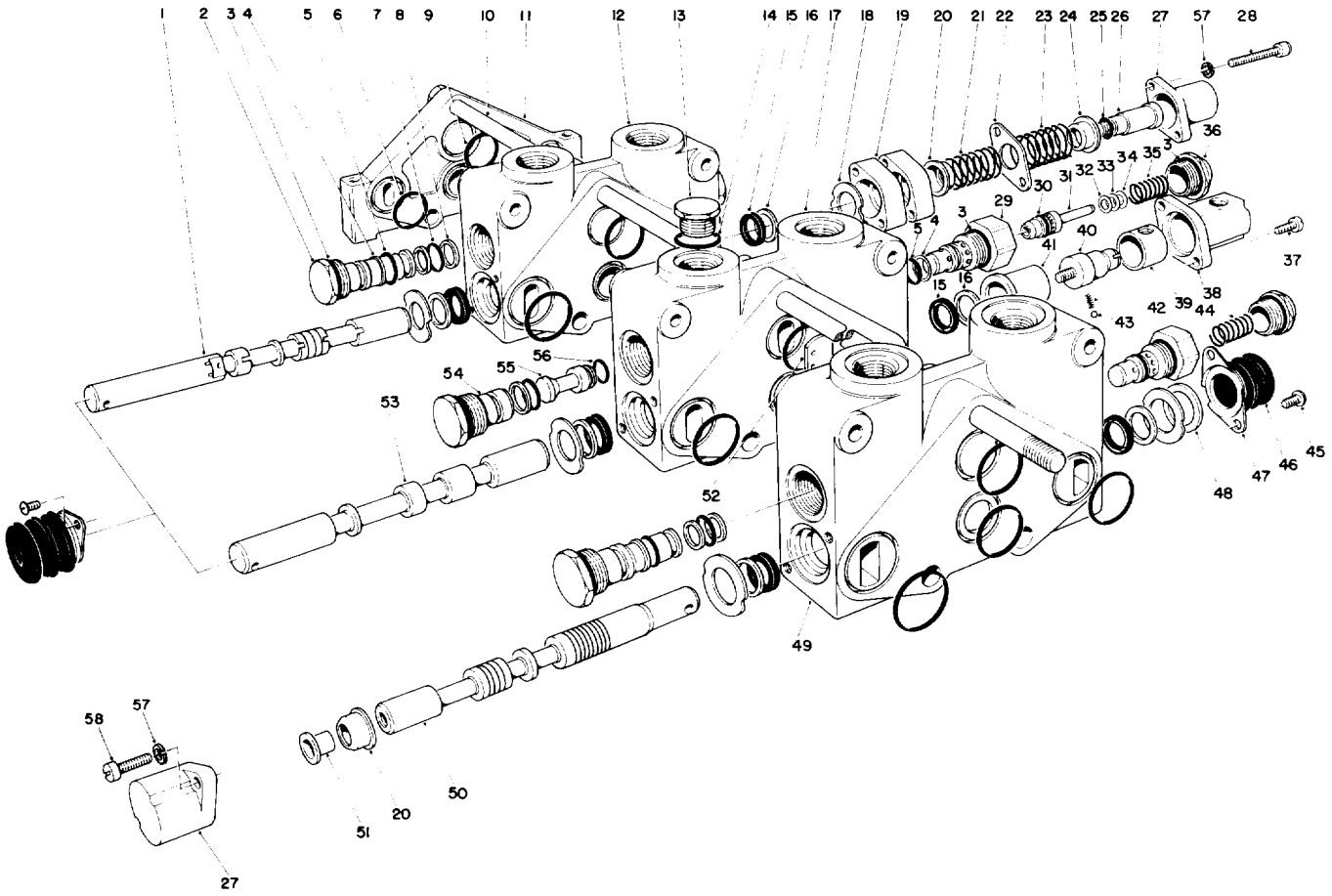
CONTROL VALVE ASSEMBLY NO. 70-8210 Section 1 and 2 (Continued)

Ref. No.	Part No.	Description	No. Used
44		Cap — Adjustment	1
45	353-579	Spring	1
46	42-2680	Race R. Detent	1
47	52-5880	Ball — Steel	12
48	354-29	Plate — Thrust	1
49	353-728	Sleeve	1
50	353-780	Spud — Detent Out (Incl. Ref. #44)	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.



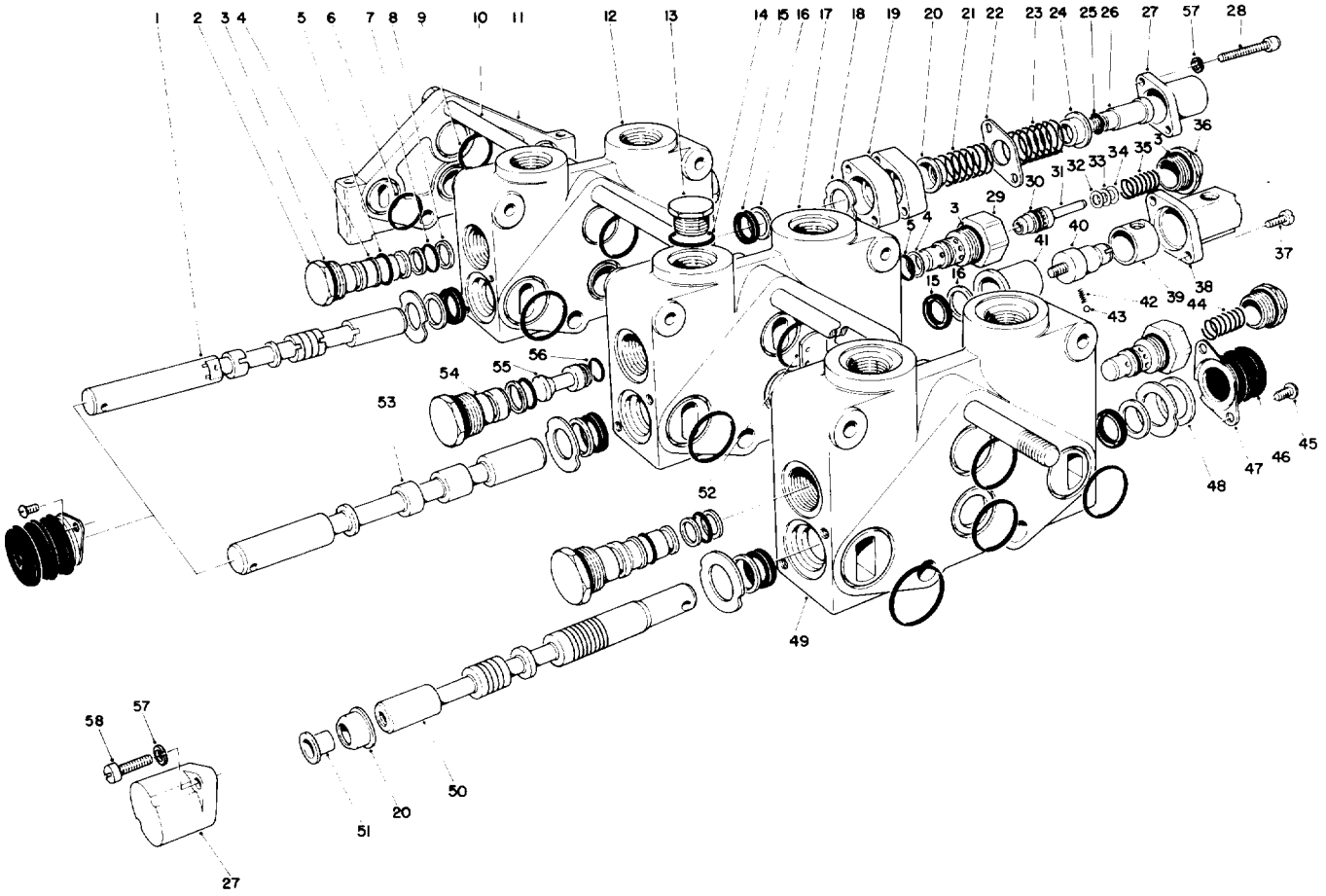
T-0302-90

CONTROL VALVE ASSEMBLY NO. 70-8210 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	8
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	353-530	Spring	1
24	353-808	Collar — Spring	1
25	353-830	Seal — O-Ring	1
26	353-829	Collar Spool	1
27	354-26	Bonnet	2
28	354-28	Screw — Hex Socket Hd.	2
29	353-851	Body — Relief CP-RC Mod.	2
30	353-392	Seal — Relief Poppet PTFE	2
31	353-531	Poppet 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.	2
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-0302-90

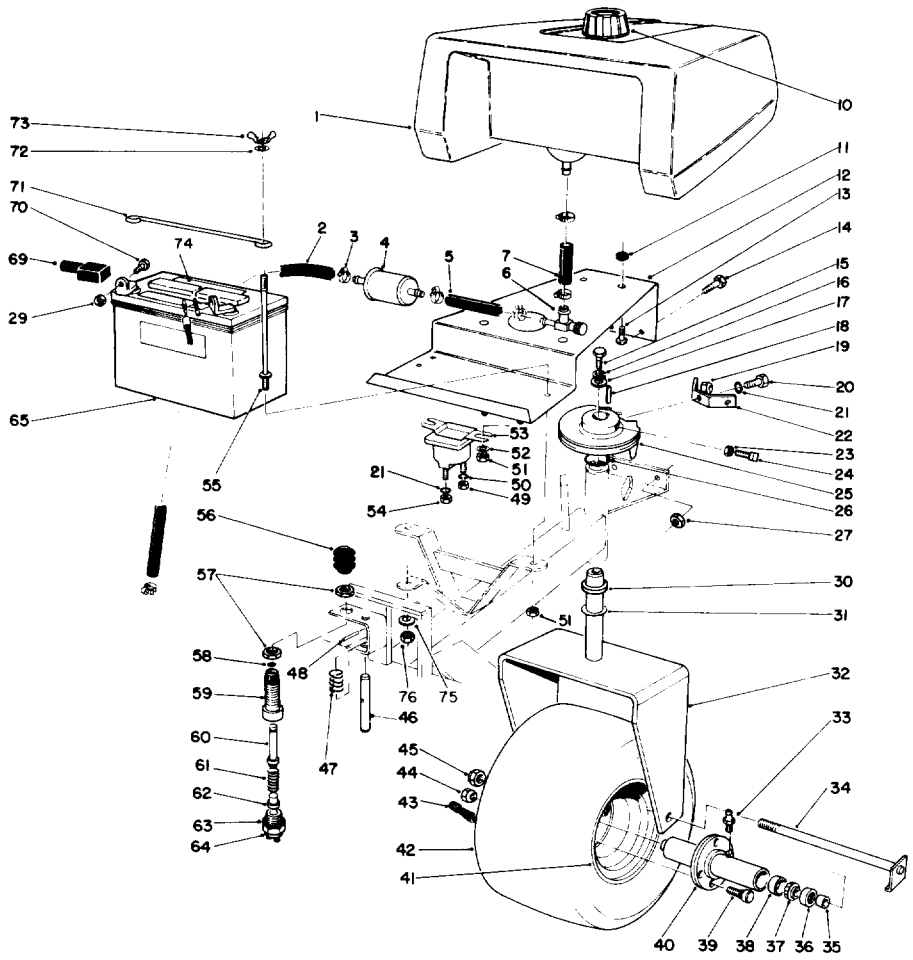
CONTROL VALVE ASSEMBLY NO. 70-8210 Section 3 thru 5 (Continued)

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
57	3253-3	Lockwasher	4
58	3274-84	Capscrew — Hex Hd.	4
*	353-835	Seals — Section, Set (Incl. Ref. #6 & 9)	1

Ref. No.	Part No.	Description	No. Used
*	12-7009	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
*	354-25	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
*	70-8210	Control Valve Assembly Complete	1

* Not Illustrated

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

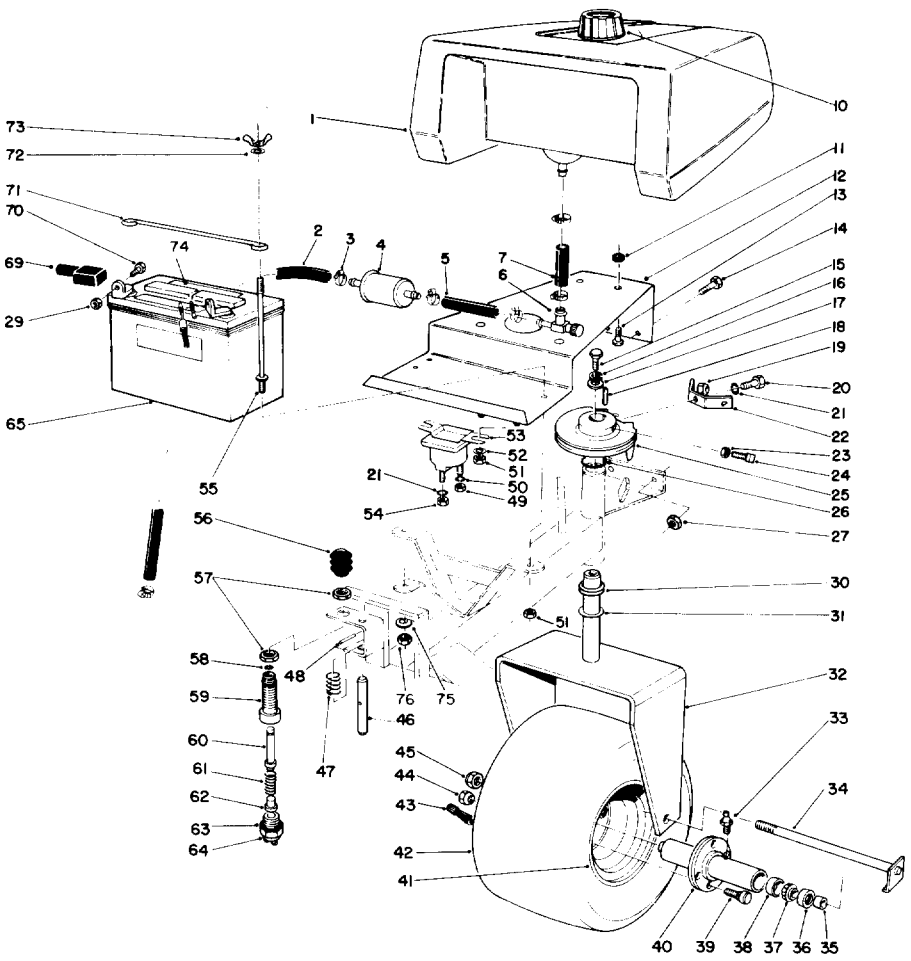


T-0303-90

GAS TANK, BATTERY AND CASTER WHEEL ASSEMBLY

Ref. No.	Part No.	Description	No. Used
1	74-3580	Fuel 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
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

Ref. No.	Part No.	Description	No. Used
23	3218-2	Nut — Jam	2
24	3242-9	Setscrew — Sq. Hd. Cup Point	2
25	61-9390	Drum — Steering	1
26	237-149	O-Ring — Seal	1
27	3296-39	Nut — Lock	2
30	237-148	Seal — Quad Ring	1
31	62-2170	Washer — Thrust	1
32	62-2220	Caster Fork	1
33	302-5	Grease Fitting	1
34	5-3934	Bolt	1
35	74-3730	Spacer	2
36	253-111	Seal	2
37	254-78	Cone	2
38	254-79	Cup	2
39	10-6830	Drive Stud	4
40	75-9440	Hub Assembly	1
41	217-60	Rim	1
42	28-3680	Tire	1
43	232-24	Valve Stem — With Cap	1
44	242-50	Nut — Wheel	4
45	3296-50	Nut — Lock	1



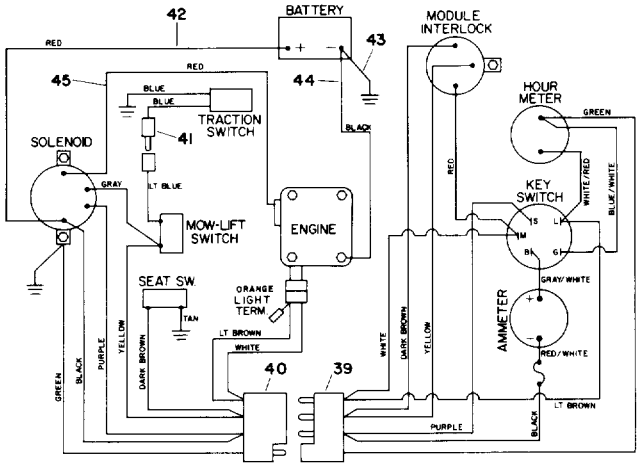
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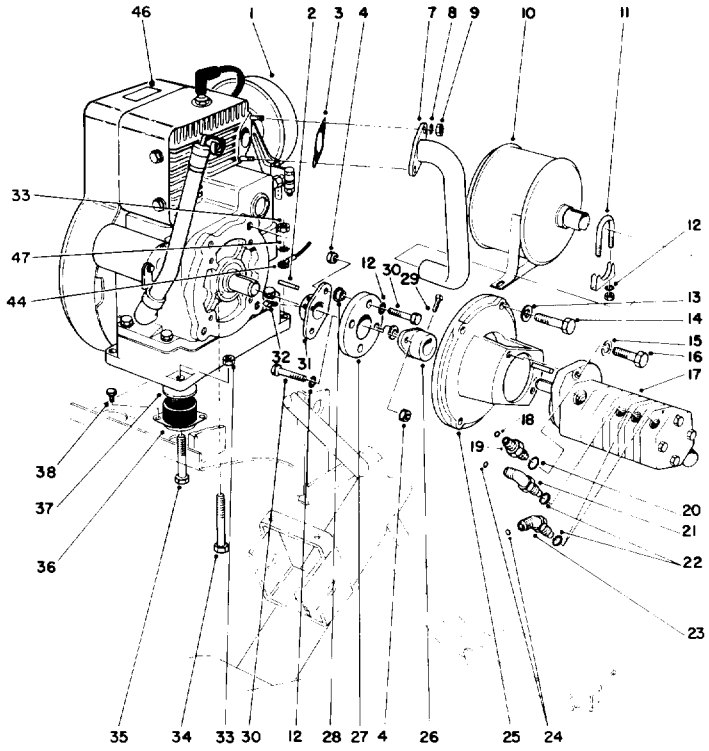
GAS TANK, BATTERY AND CASTER WHEEL ASSEMBLY (Continued)

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	32149-2	Nut — Lock	4
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	28-1400	Battery	1
69	28-8080	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	76-1810	Cap — Battery	2
75	3256-23	Washer — Flat	1
76	3296-29	Locknut	1
*	44-1070	Switch Assy. (Incl. Ref. #56-64)	1

* Not Illustrated





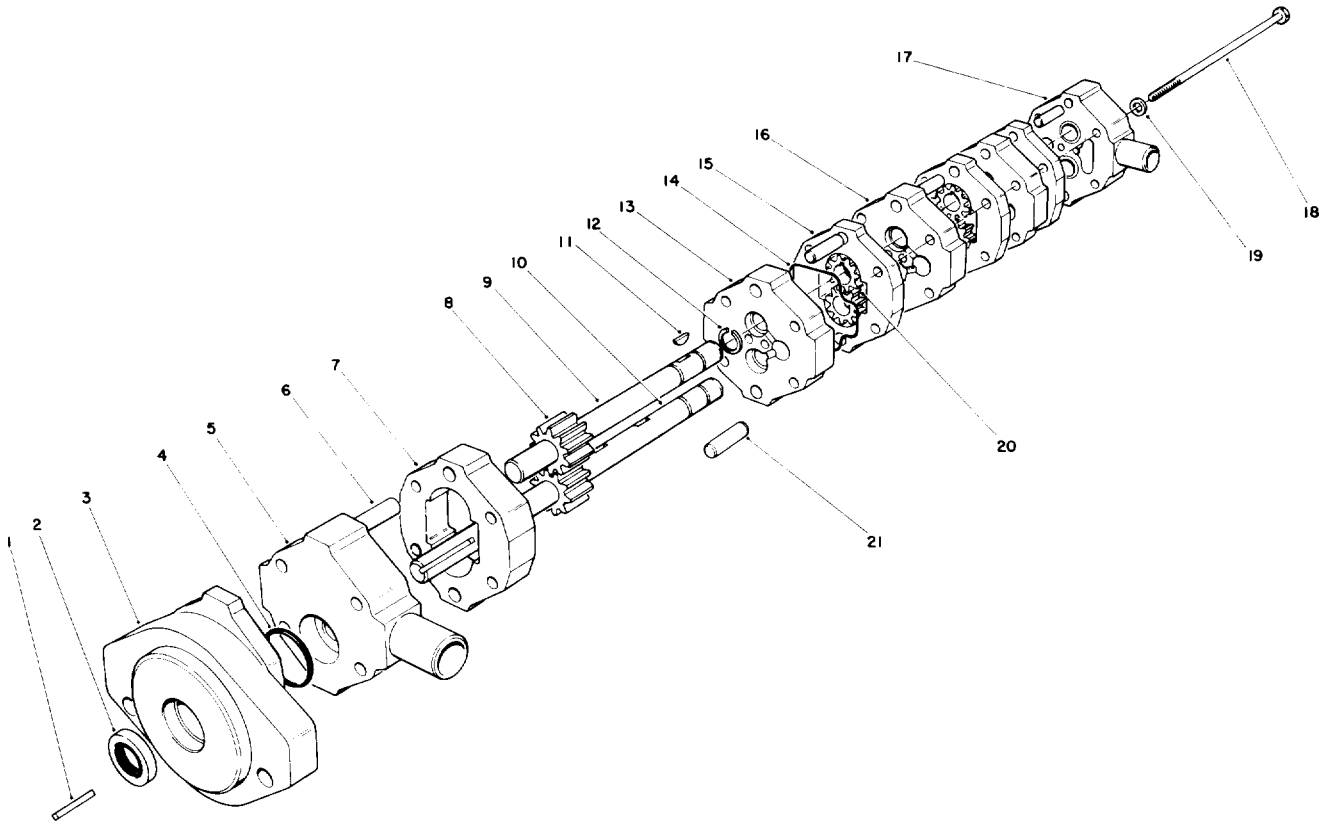
T-0304-90

ENGINE AND WIRING DIAGRAM

Ref. No.	Part No.	Description	No. Used
1	12-7189	Engine	1
2	10-7070	Key — Engine	1
3	2210-275	Gasket — Exhaust	2
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	3253-21	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
24	237-22	O-Ring	2

Ref. No.	Part No.	Description	No. Used
25	27-1930	Pump Mount	1
26	27-1970	Coupling — Pump	1
27	44-2230	Coupling — Rubber	1
28	27-6600	Spacer — Rubber	4
29	3241-6	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	71-3620	Decal — Engine RPM	1
47	3254-6	Lockwasher	1

* Not Illustrated

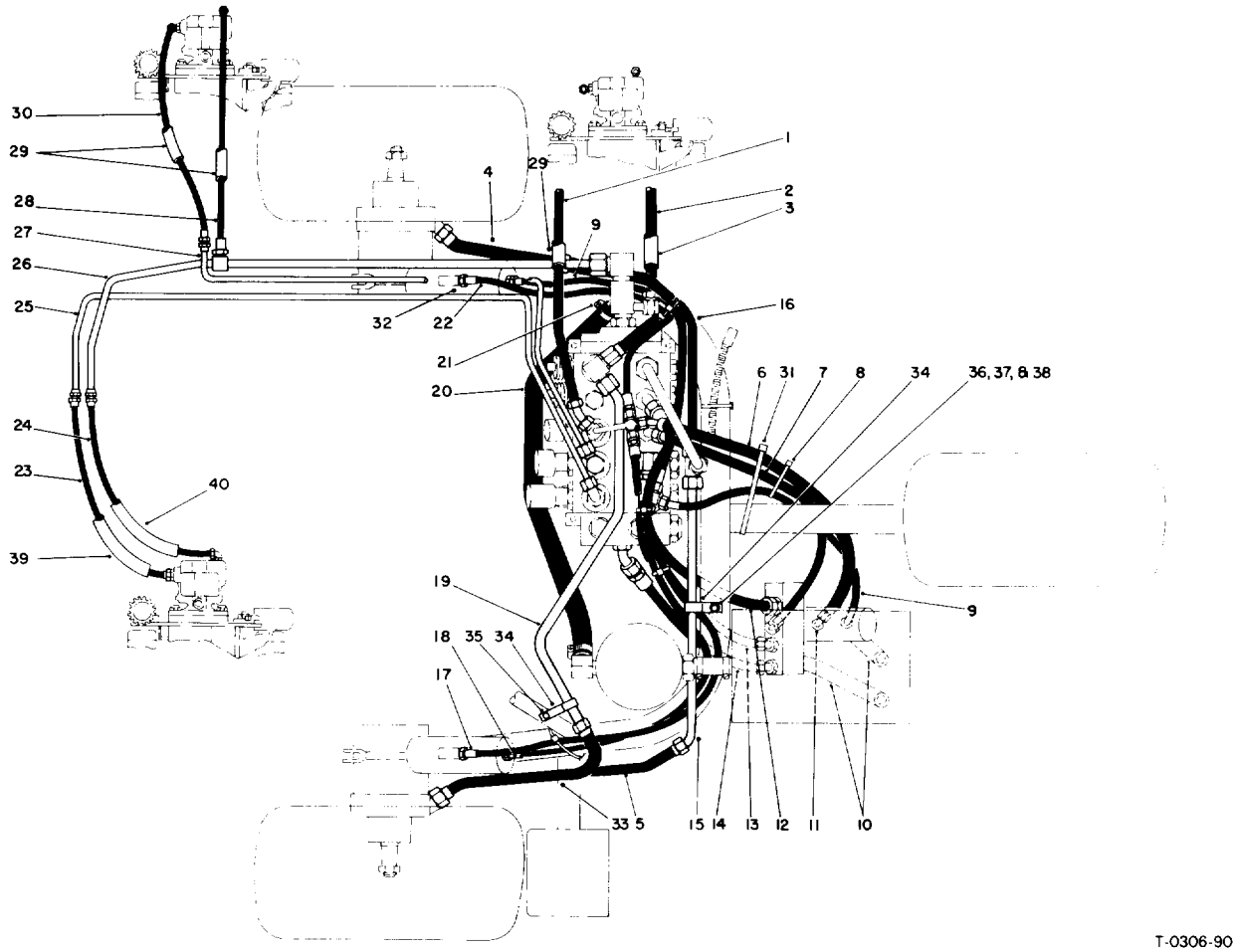


T-0305-90

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

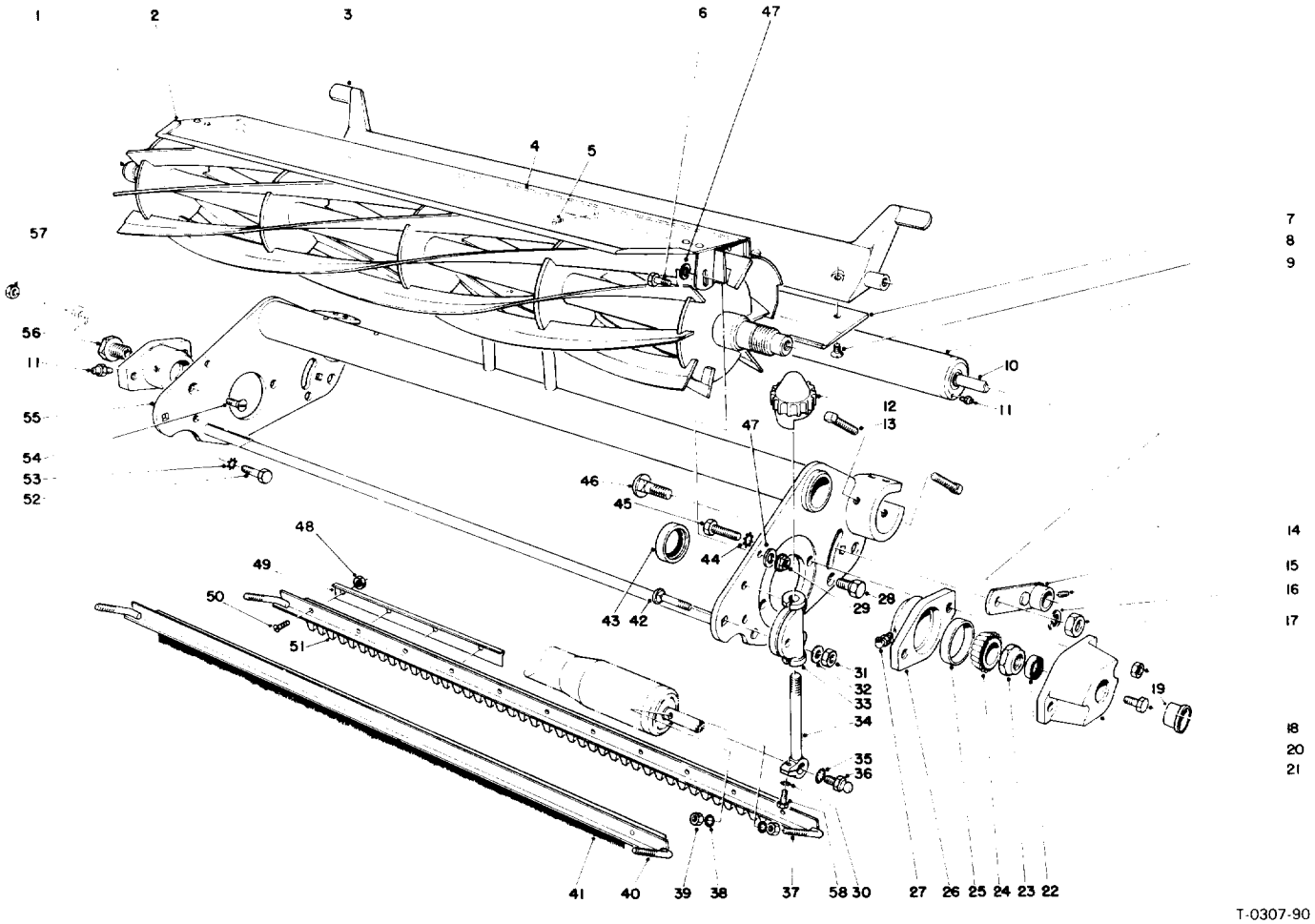


T-0306-90

HYDRAULIC SYSTEMS DIAGRAM

Ref. No.	Part No.	Description	No. Used
1	74-3830	Hose — Pressure Rear (Incl. Ref. #29)	1
2	63-3840	Hose — Return Rear (Incl. Ref. #3)	1
3	56-7981	Splash Shield	1
4	70-8600	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
20	51-0040	Return Line — Manifold to Filter	1
21	2412-3	Clamp — Hose	2

Ref. No.	Part No.	Description	No. Used
22	63-3950	Hose Cylinder — Drop R.H.	1
23	63-3870	Hose — Pressure L.H. (Incl. Ref. #39)	1
24	63-3830	Hose — Return L.H. (Incl. Ref. #40)	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. (Incl. Ref. #29)	1
29	56-7980	Splash Shield	3
30	63-3810	Hose — Pressure R.H. (Incl. Ref. #29)	1
31	3333-975	Cable Tie	1
32	340-92	Fitting — Orifice Str.	1
33	70-8610	Hose — Traction Upper L.H.	1
34	2412-41	R-Clamp	3
35	12-3270	Capscrew	3
36	321-3	Capscrew	1
37	3296-16	Lockwasher	1
38	3256-1	Washer — Flat	2
39	56-7986	Sleeve — Protective	1
40	56-7987	Sleeve — Protective	1



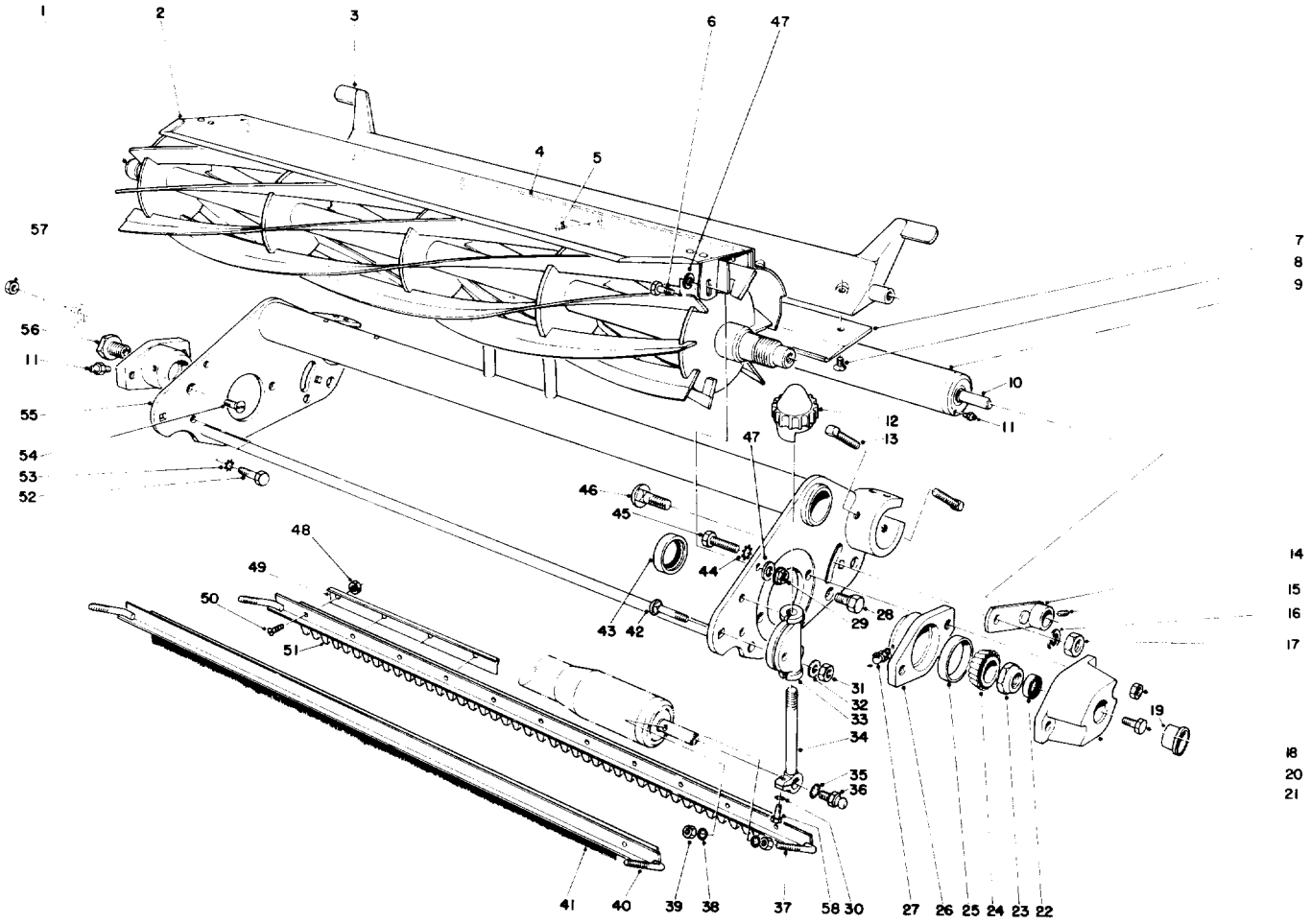
T-0307-90

CUTTING UNITS (5 BLADE) MODEL NO. 04405
(8 BLADE) MODEL NO. 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



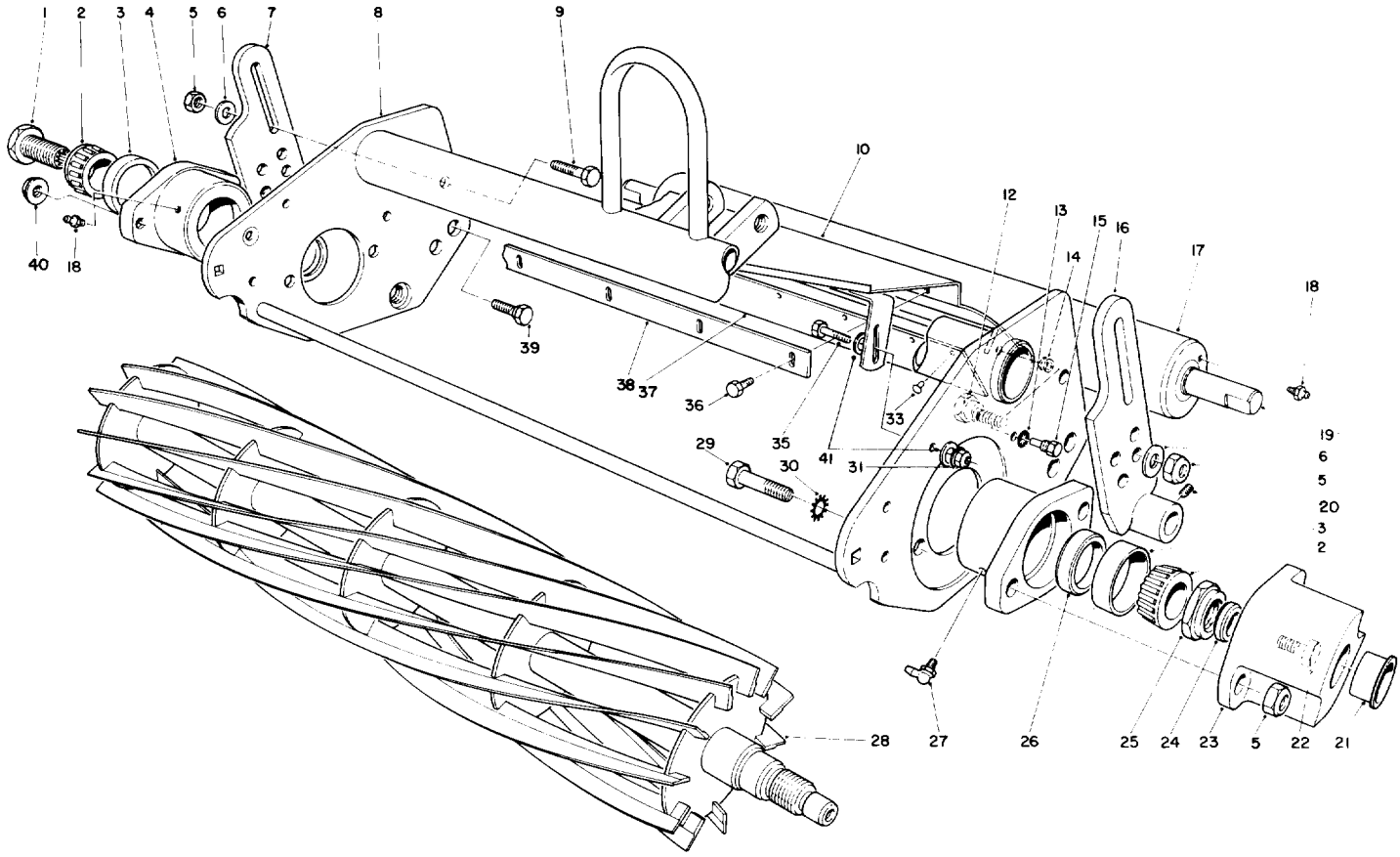
T-0307-90

CUTTING UNITS (5 BLADE) MODEL NO. 04405 (8 BLADE) MODEL NO. 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

Ref. No.	Part No.	Description	No. Used
50	3249-3	Round Head Screw	11
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
*	13-8199	Bar Adj. Gauge (Includes †)	1
†	32122-22	Screw Truss Head	1
†	3219-14	Nut	1

* Not Illustrated



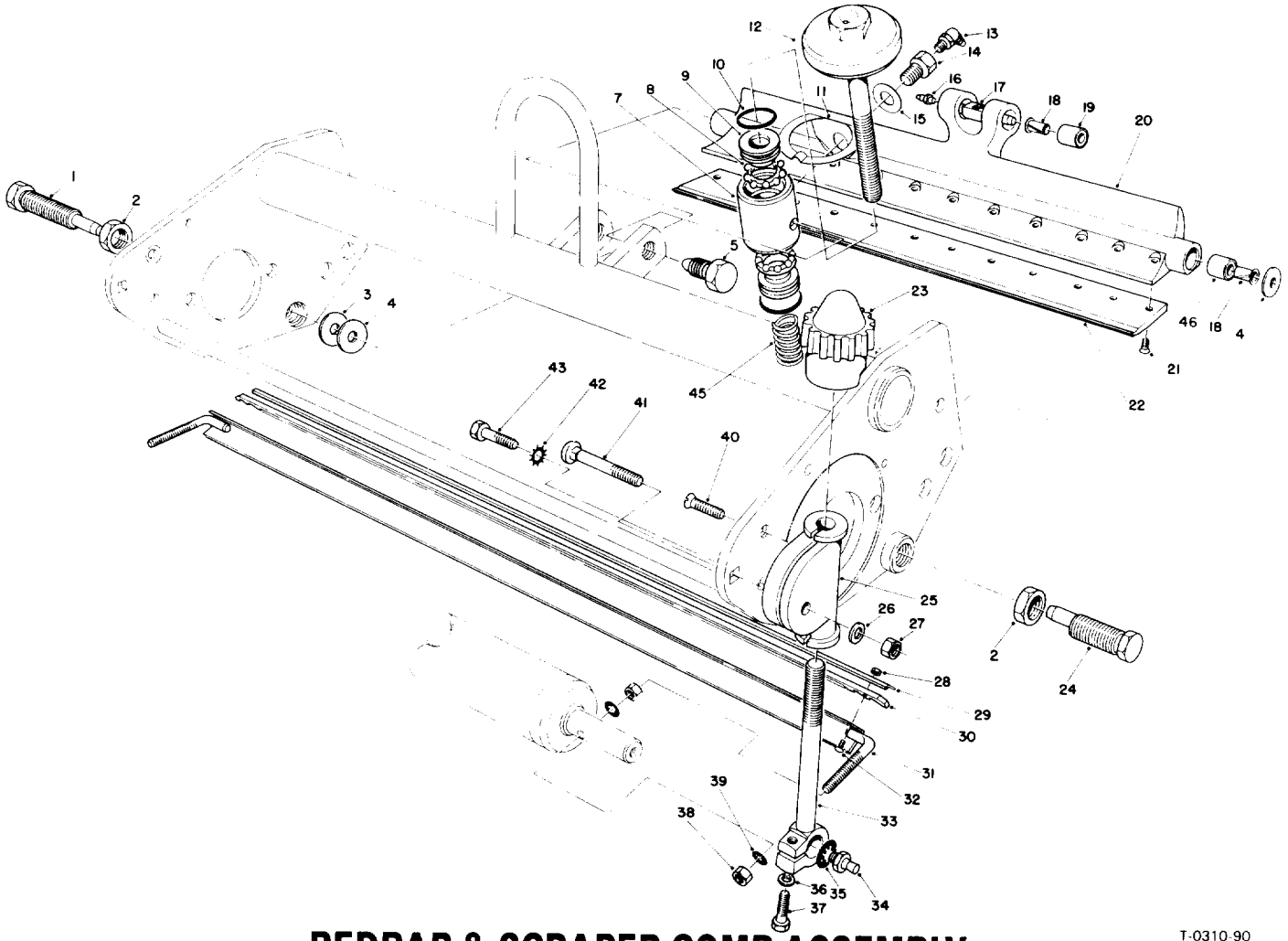
T-0309-90

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

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	1
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	321-5	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
*	13-8199	Bar Adj. Gauge (Includes †)	1
†	32122-2	Screw Truss Hd.	1
†	3219-14	Nut	1
*‡		Backlapping Brush Assembly	1

* Not Illustrated
‡ Special Tool (Ref. Page 49)



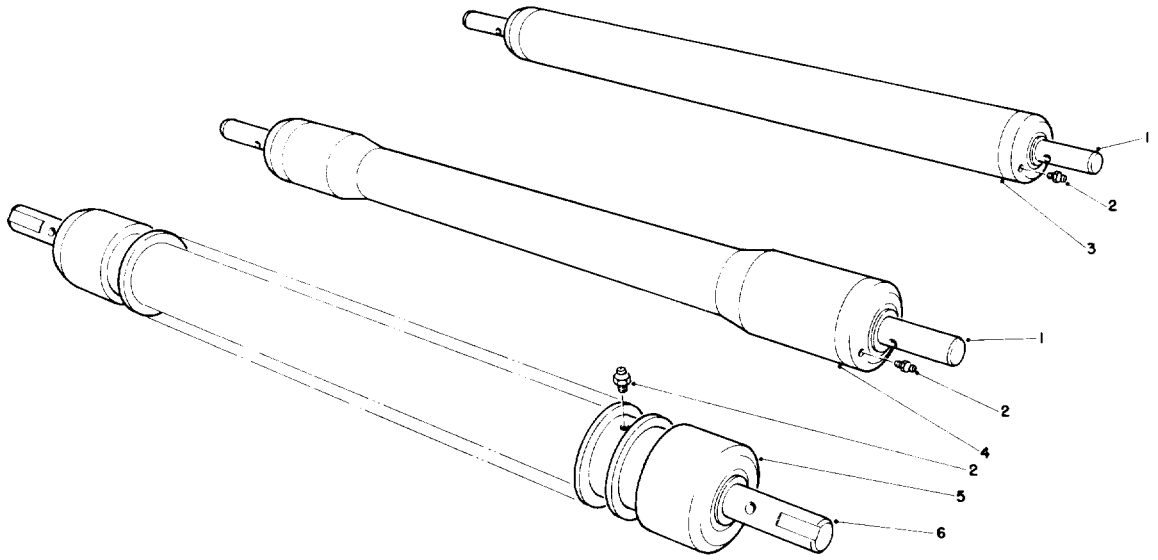
T-0310-90

BEDBAR & SCRAPER COMB ASSEMBLY
(Cutting Units Model Nos. 04450 & 04468)

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

* Not Illustrated

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	66-7230	Spring — Compression	1
46	63-9510	Rubber Bushing Assembly	2



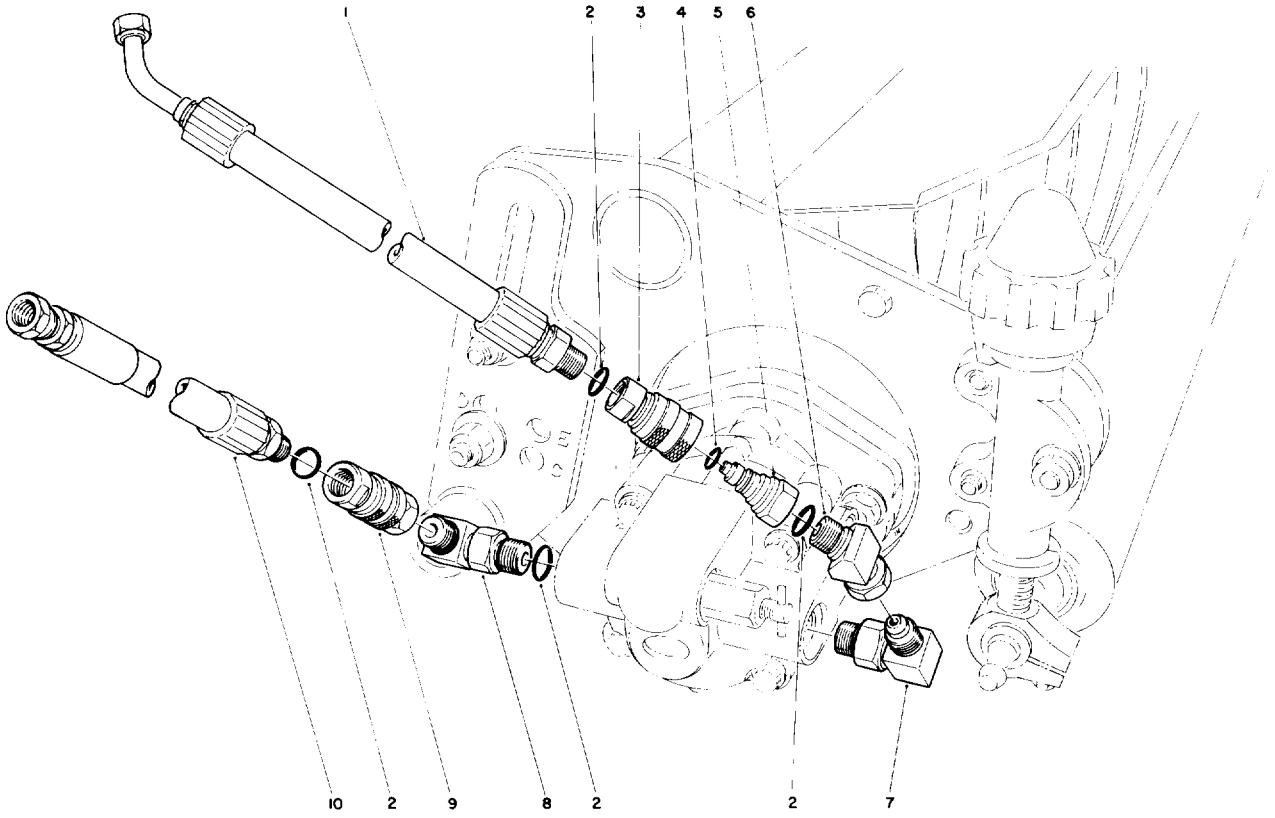
T-0956-90

CUTTING UNIT ROLLER OPTIONS

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

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

* Not Illustrated

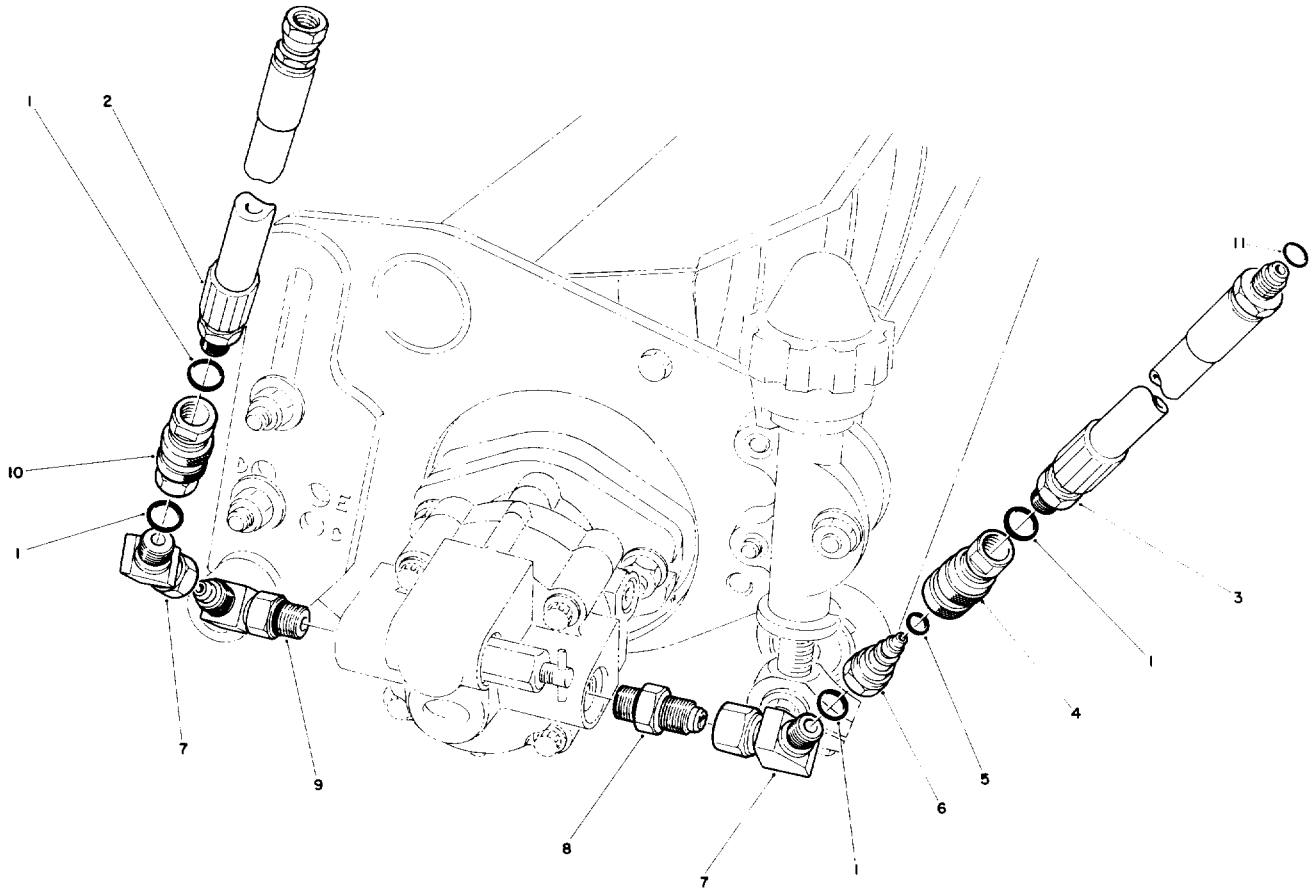


T-0316-90

CENTER BACKLAPPING KIT NO. 63-4960
#1 CUTTING UNIT (Optional)

Ref. No.	Part No.	Description	No. Used
1	70-9960	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	70-9950	Hose Assembly — Return (Incl. Ref. #2)	1

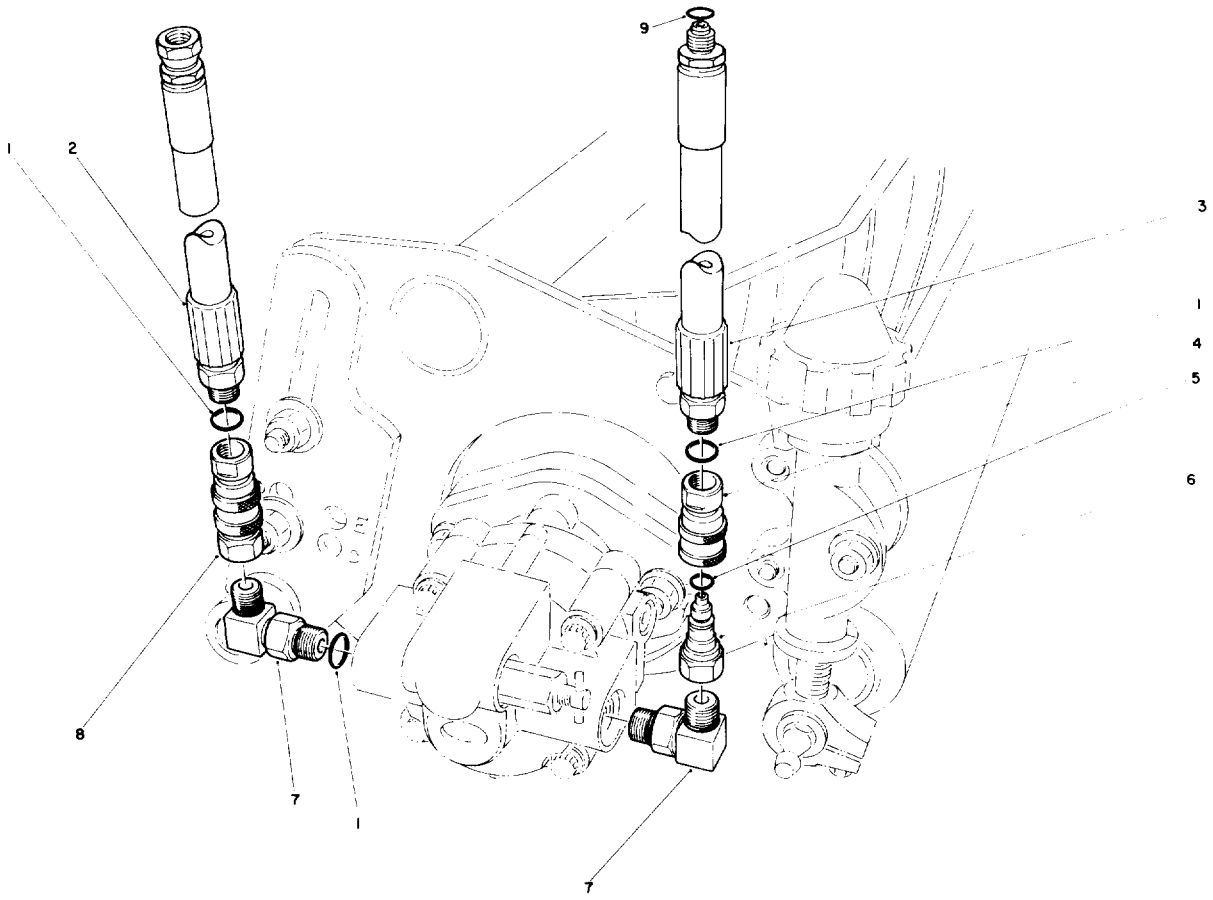


T-0317-90

LEFT FRONT BACKLAPPING KIT NO. 63-4960
#2 CUTTING UNIT (Optional) (Continued)

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

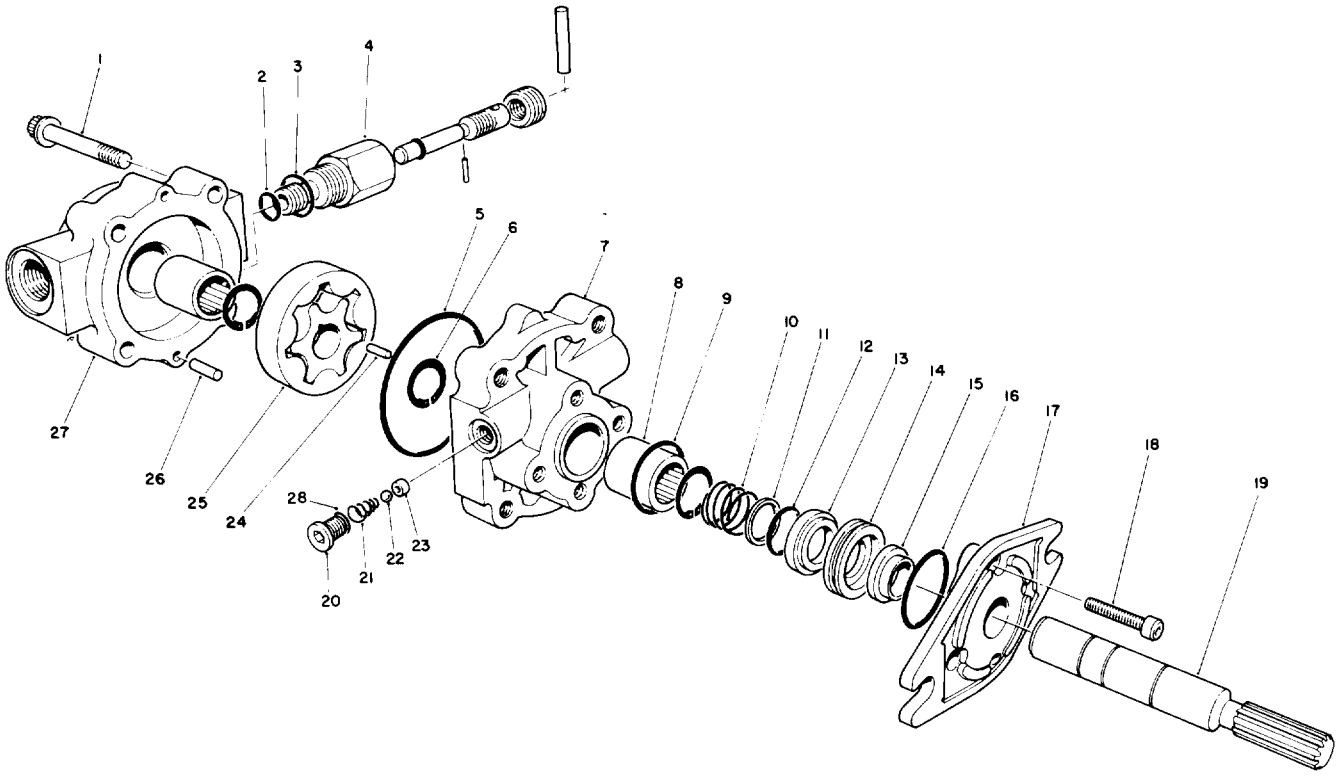


T-0318-90

RIGHT FRONT BACKLAPPING KIT NO. 63-4960
#3 CUTTING UNIT (Optional) (Continued)

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



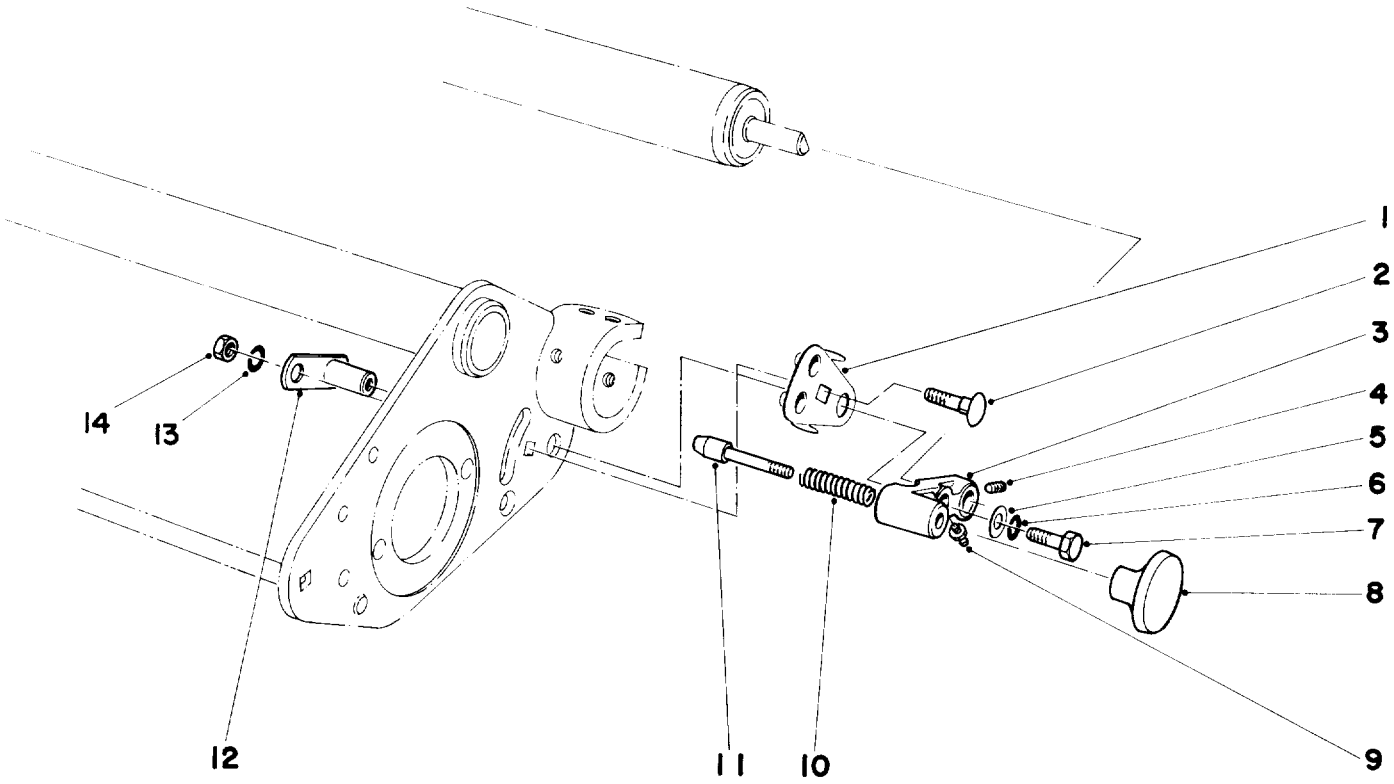
T-0319-90

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

Ref. No.	Part No.	Description	No. Used
17	353-900	Flange — Mounting	1
18	353-905	Screw	4
19	353-904	Shaft	1
20	353-911	Plug (Incl. Ref. #28)	2
21	353-912	Spring — Conical	2
22	353-664	Ball	2
23		Seat	2
24	353-893	Pin — Drive	1
25	353-909	Element — Gerotor	1
26	353-894	Pin — Dowel	2
27	353-891	Body	1
28	237-156	O-Ring	1
*	353-913	Bearing & Seal Kit (Incl. Ref. #5, 8, 9, 12-16)	1
*	54-9510	Motor & By-Pass Assembly (Complete)	3

* Not Illustrated

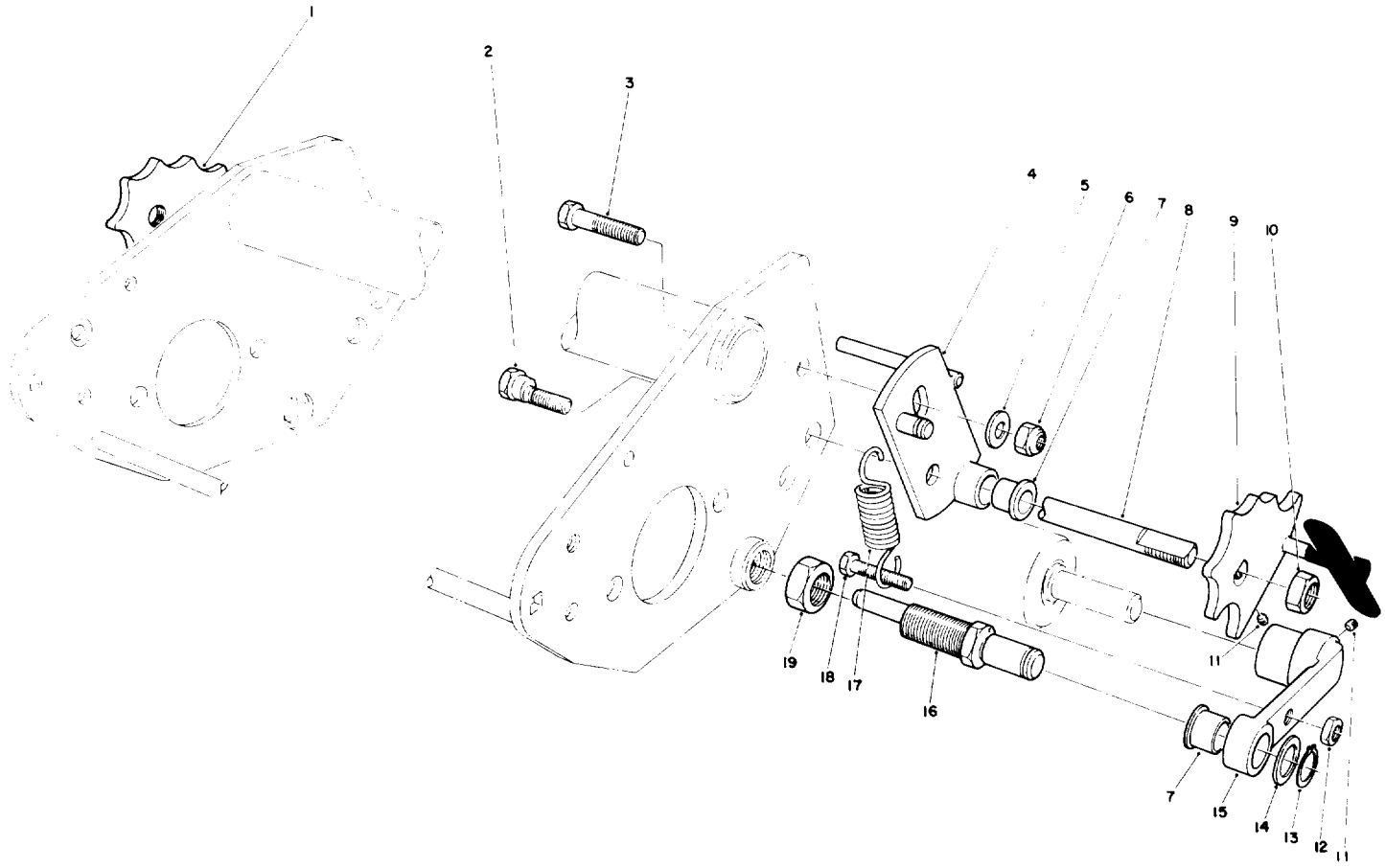


T-0320-90

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

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.	



T-0321-90

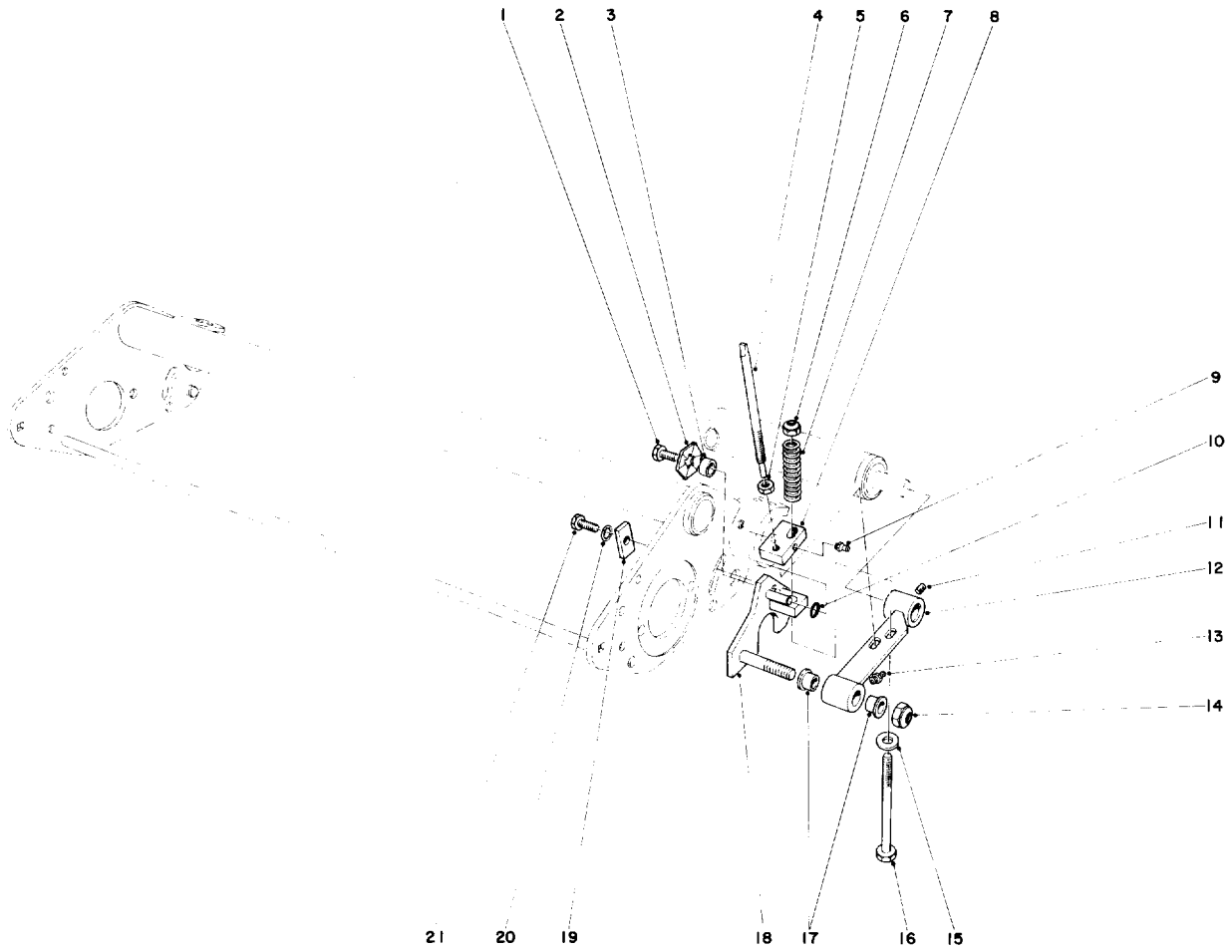
QUICK HEIGHT-OF-CUT SINGLE POINT ADJUST KIT
MODEL NO. 04451 (Optional)

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.



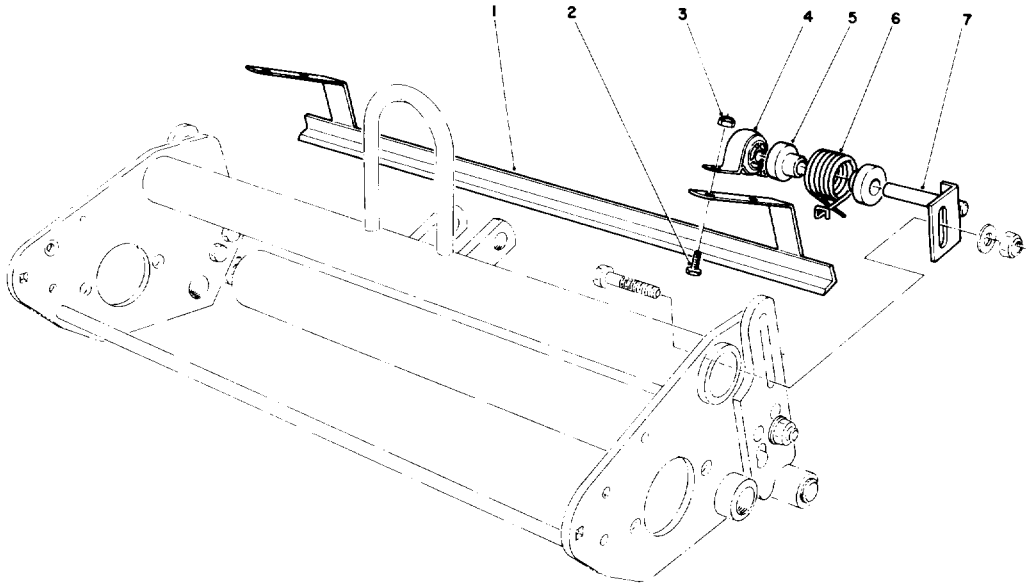
T-0322-90

VARIABLE QUICK HEIGHT-OF-CUT KIT NO. 29-9400 (Optional)
(For Cutting Units Model 04405 & 04408)

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

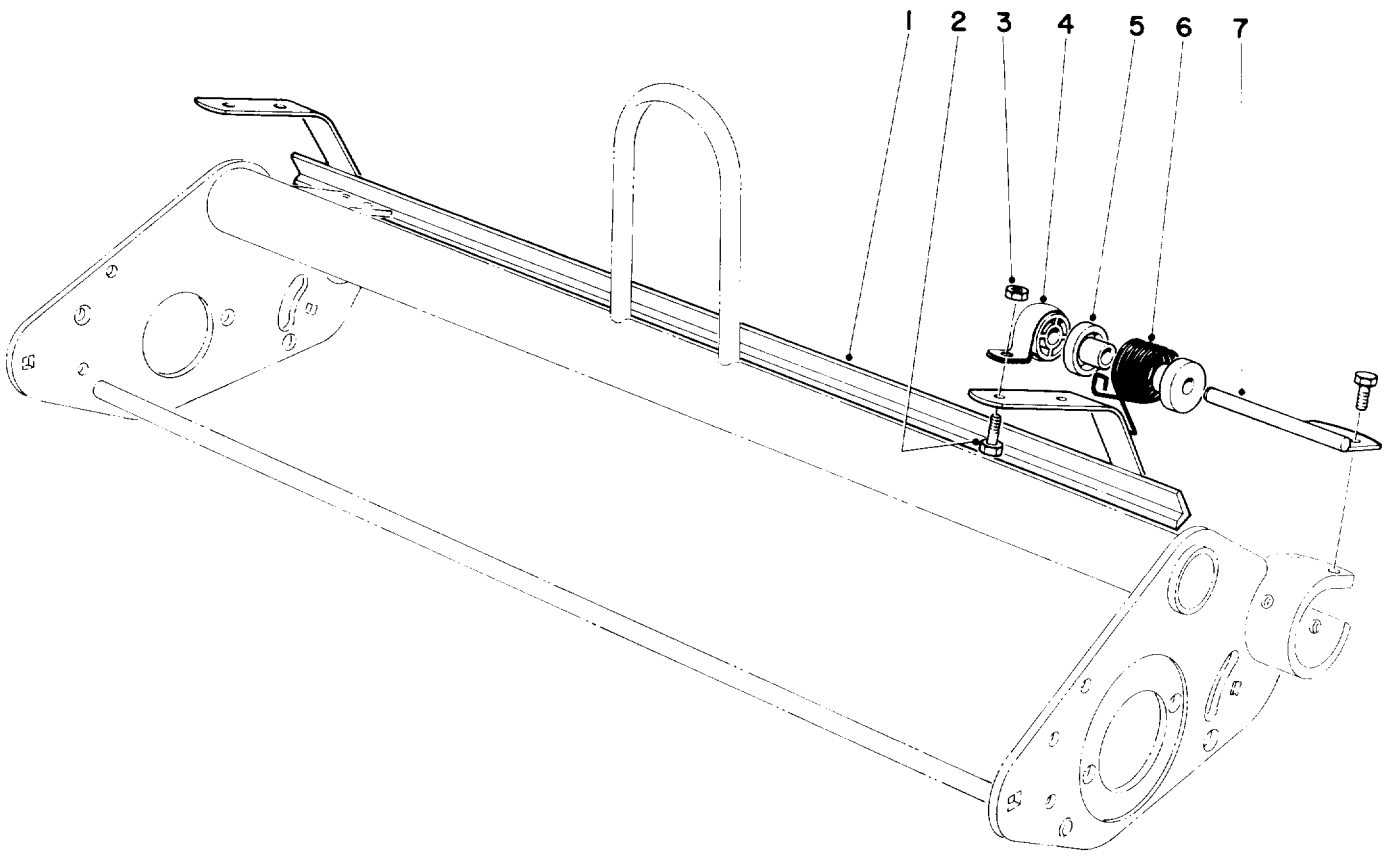


T-0323-90

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



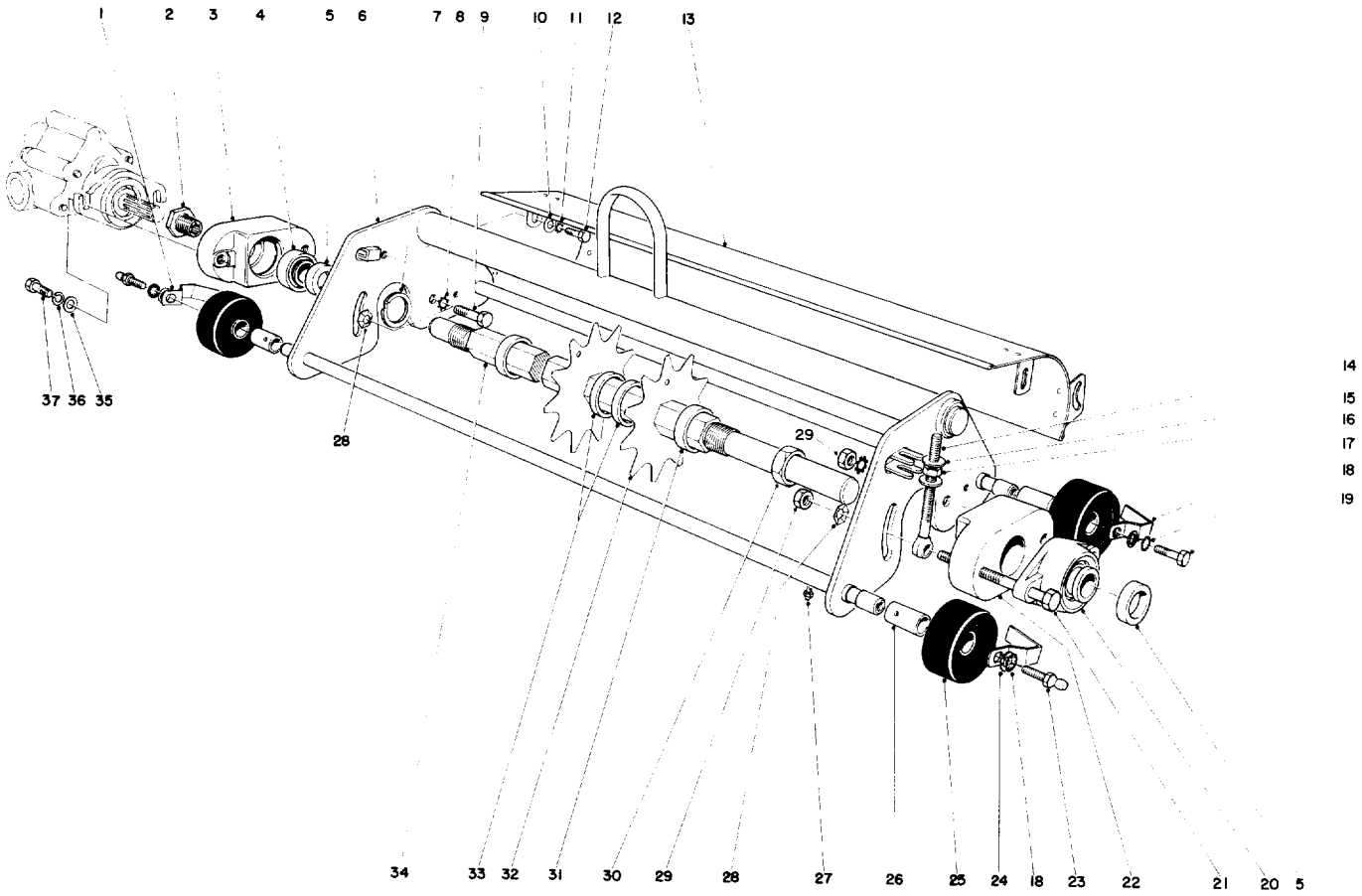
T-0324-90

ROLLER SCRAPER KIT NO. 42-4820 (Optional)
(For Cutting Units Model 04405 & 04408)

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



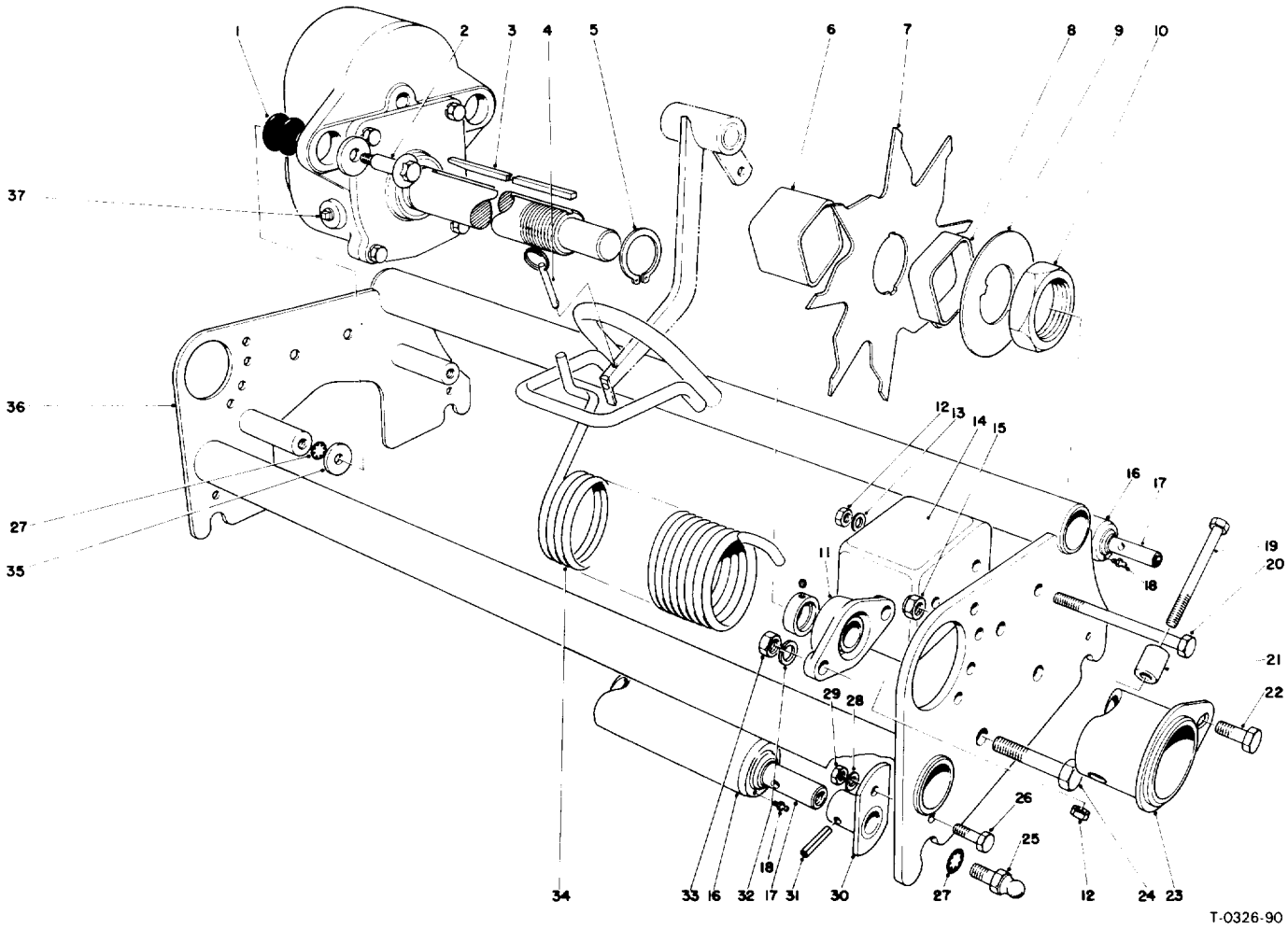
T-0325-90

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

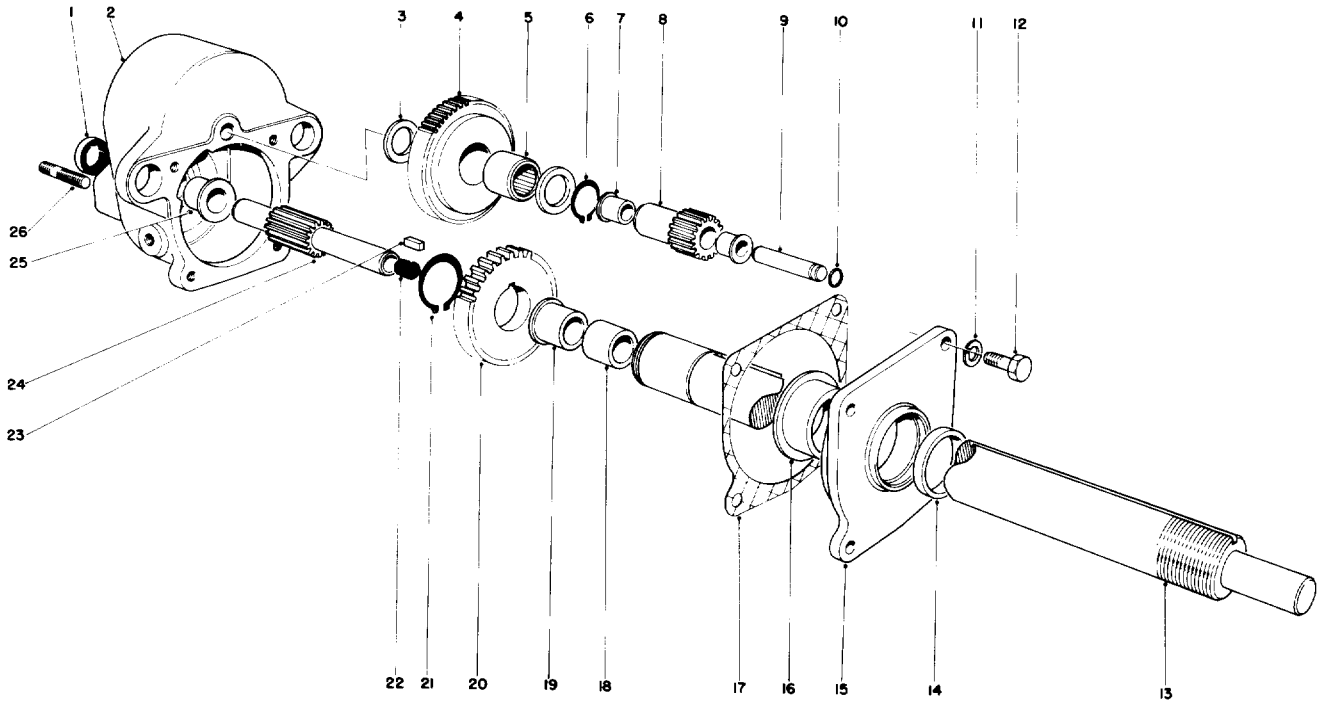


SPIKER ATTACHMENT MODEL NO. 04420 (Optional)

Ref. No.	Part No.	Description	No. Used
1	237-90	Grommet	2
2	56-6590	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

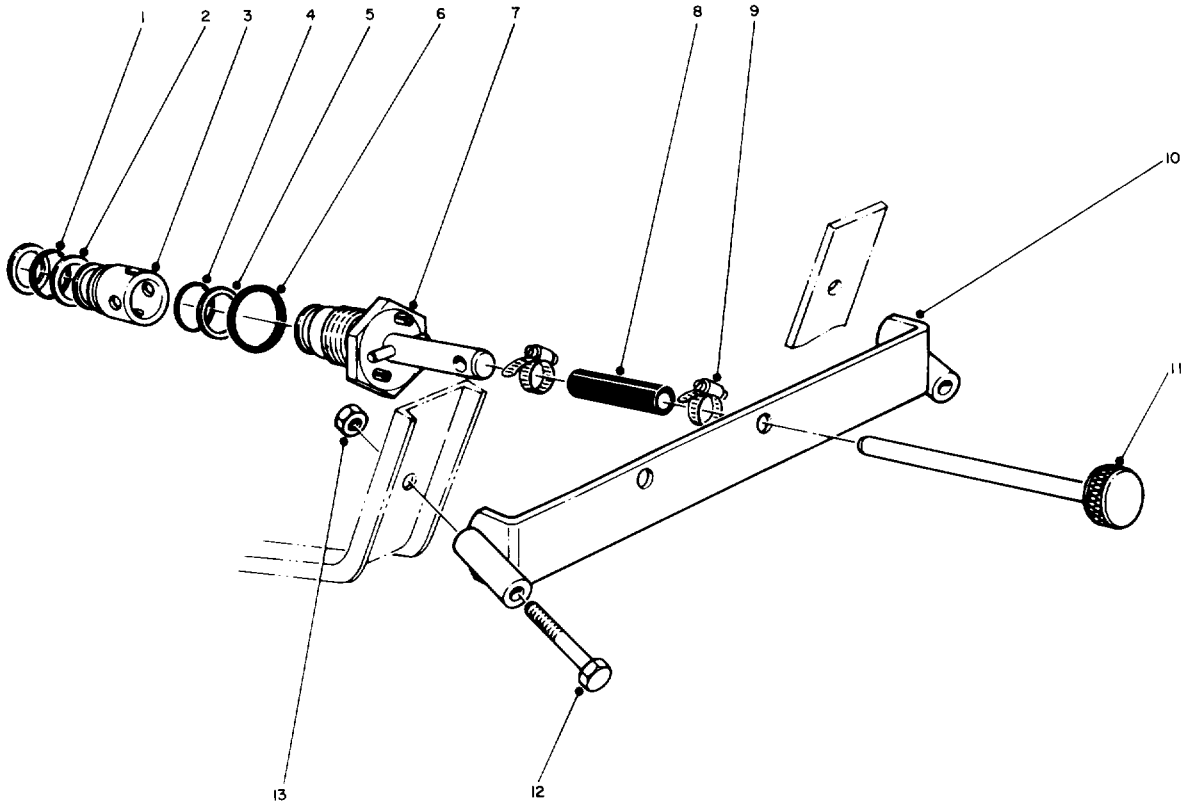


T-0327-90

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

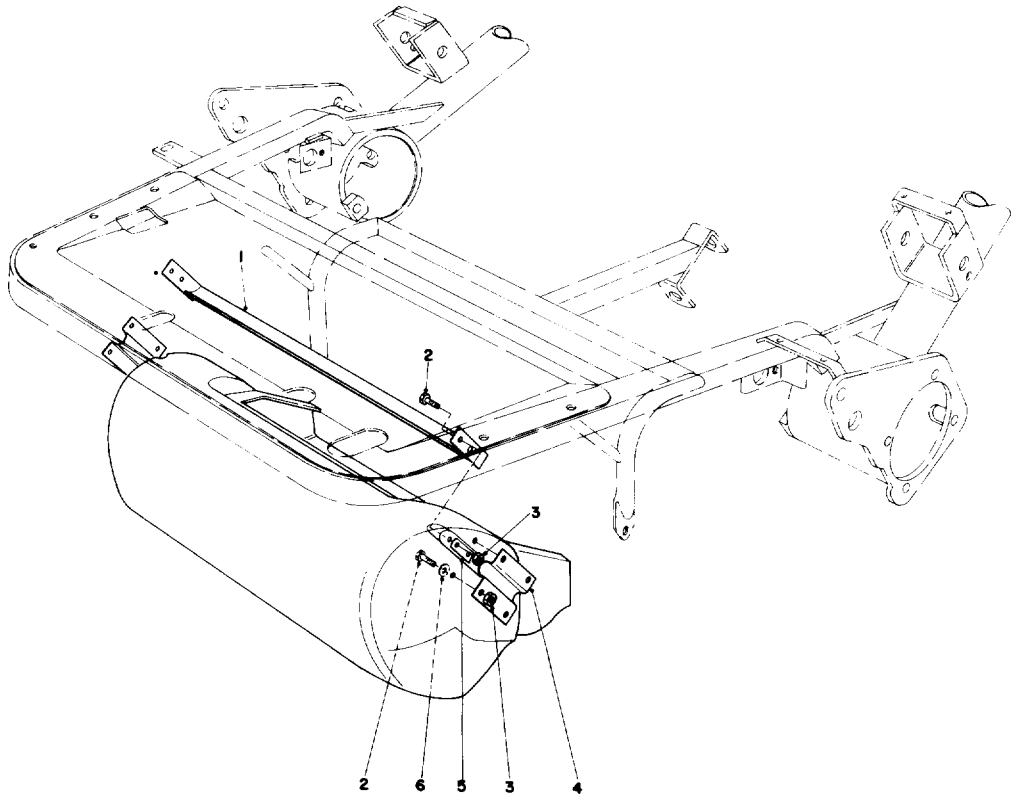


T-0328-90

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

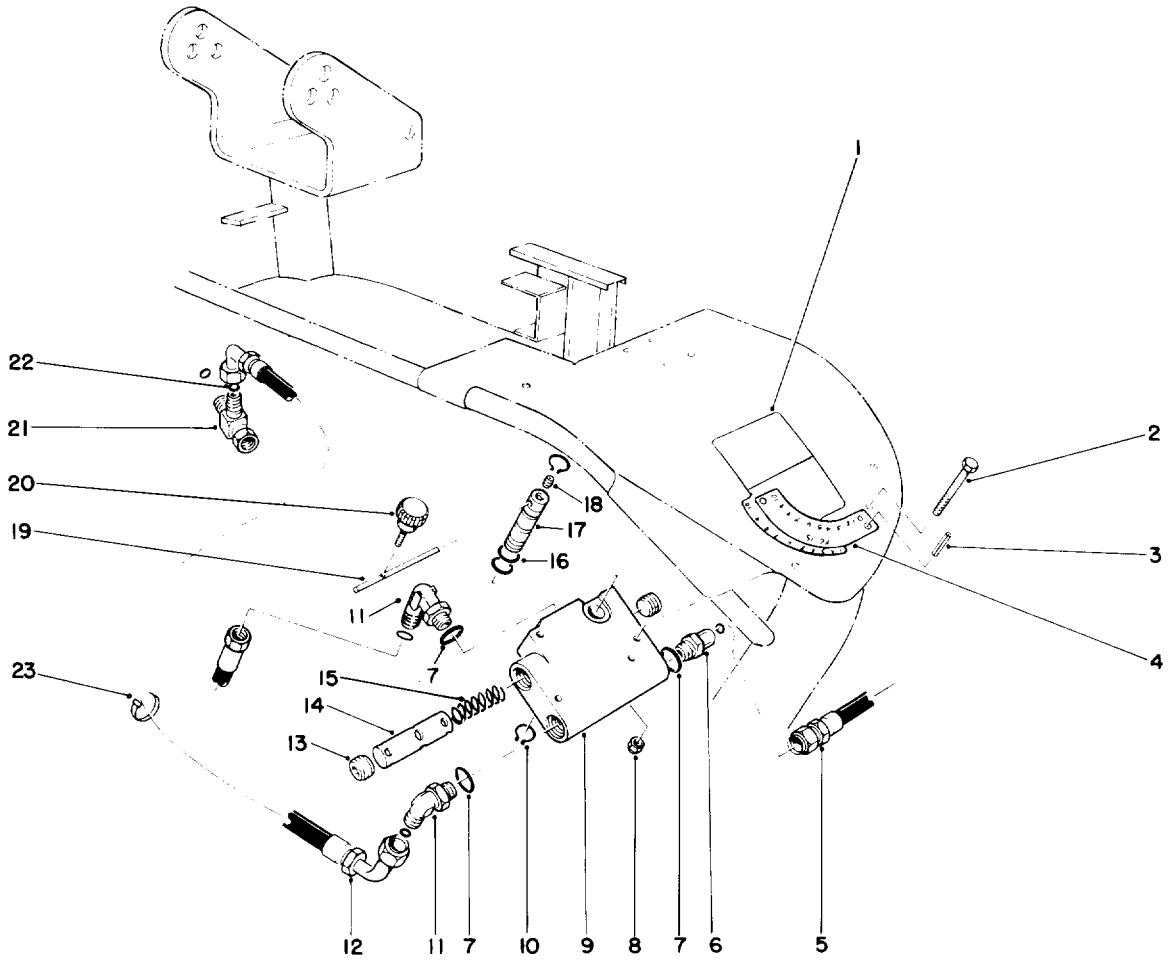


T-0333-90

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



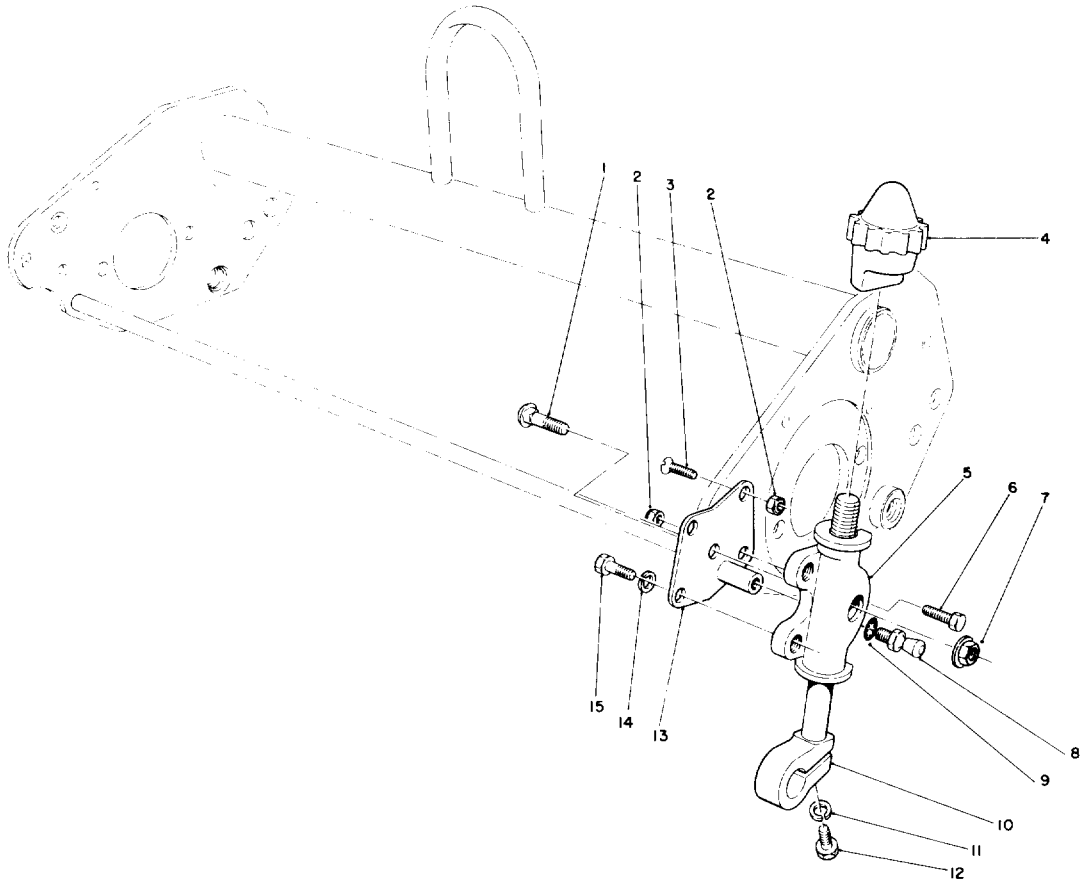
T-0334-90

VARIABLE TRACTION CONTROL KIT MODEL NO. 04411 (Optional)

Ref. No.	Part No.	Description	No. Used
1	74-3490	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)	1
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	2
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
23	3290-378	Cable Tie	2
*	47-6640	Valve Flow Control (Incl. Ref. #3, 4, 9, 10 & 13-20)	1

* Not Illustrated



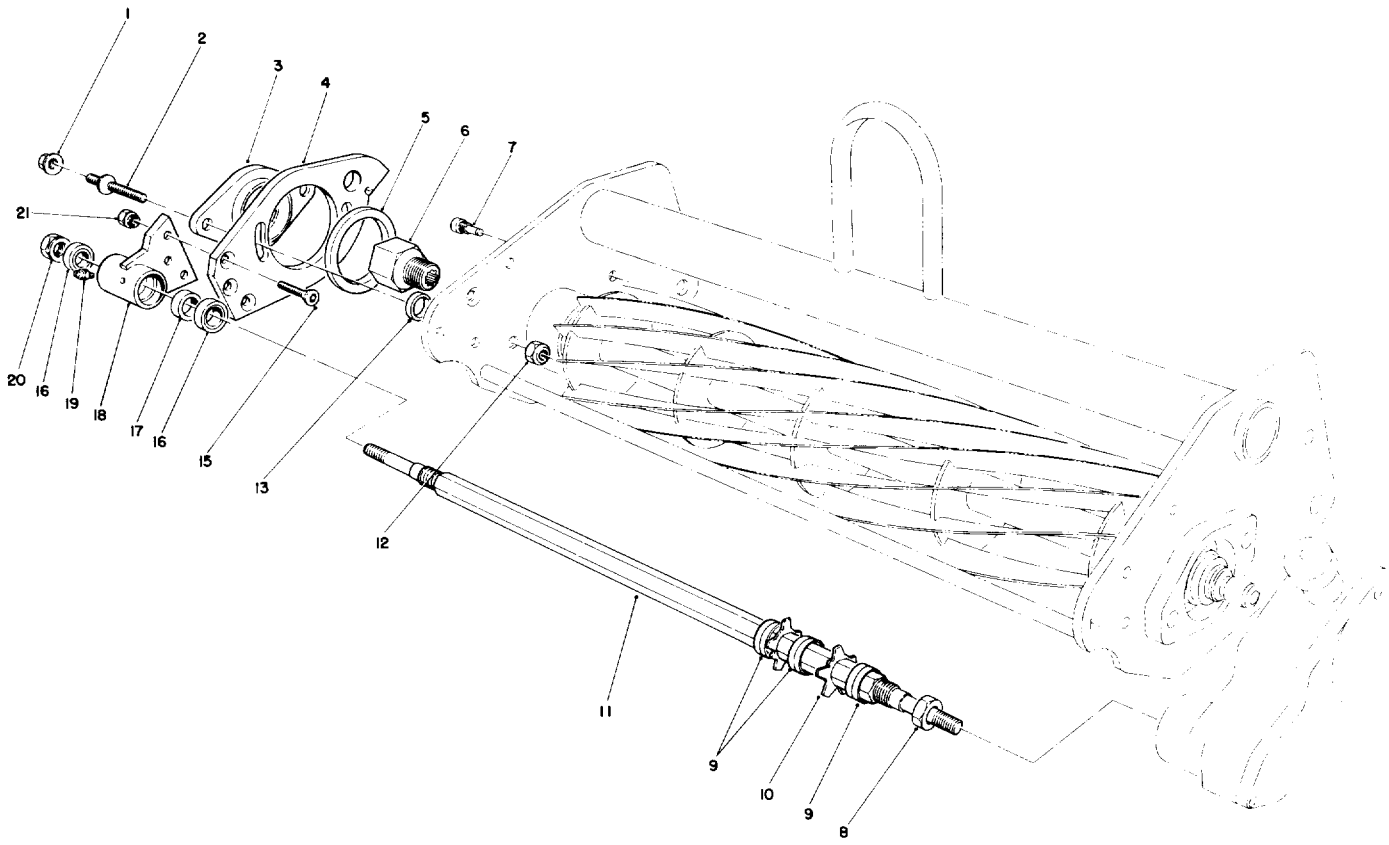
T-0329-90

8 & 11 BLADE CUTTING UNITS w/GROOMER
MODEL NOS. 04460 & 04465

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

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

* Not Illustrated

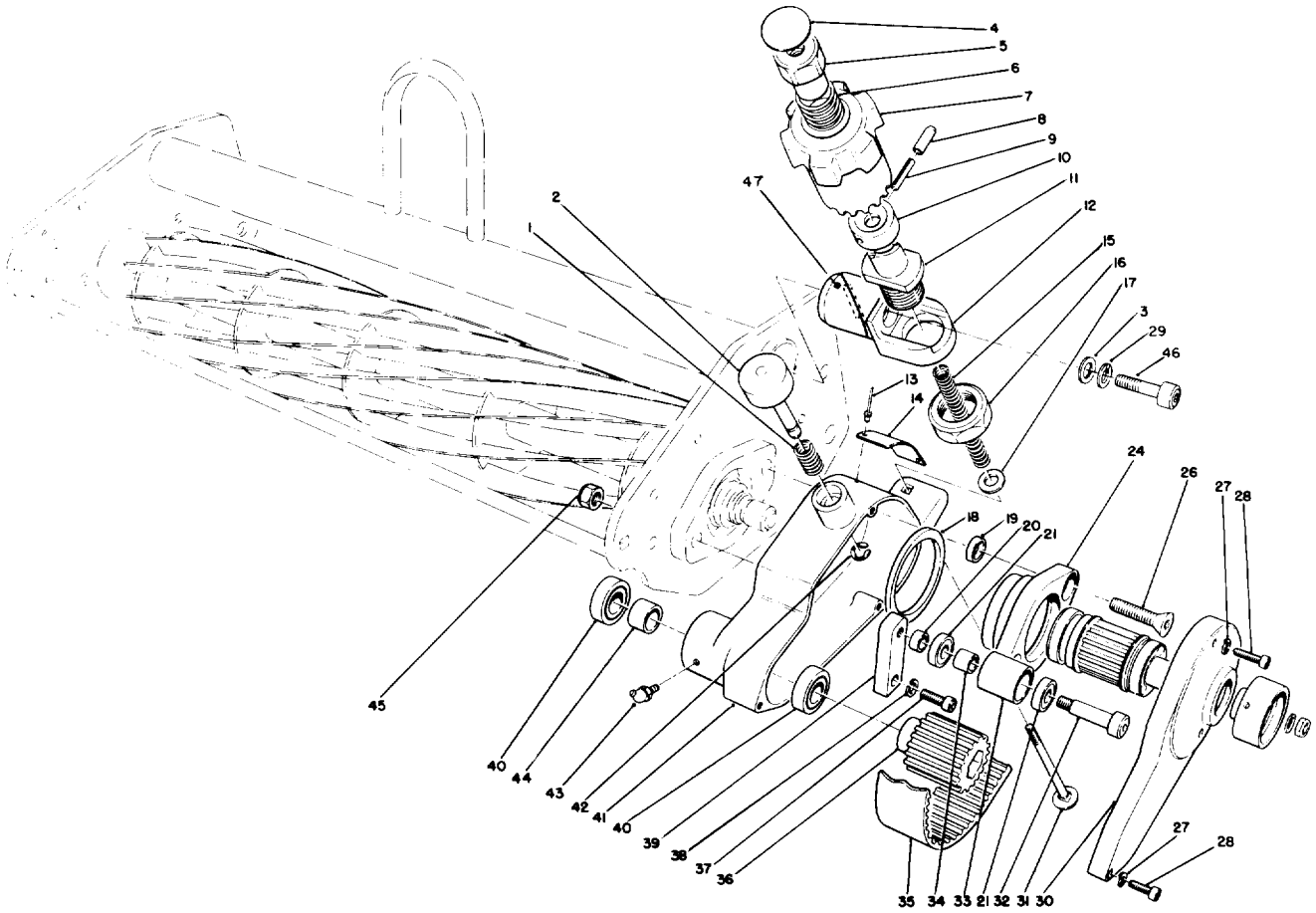


T-0330-90

8 & 11 BLADE CUTTING UNITS w/GROOMER MODEL NOS. 04460 & 04465 (Continued)

Ref. No.	Part No.	Description	No. Used
1	32128-36	Nut — Flange	2
2	65-9970	Stud	2
3	65-9350	Adapter	1
4	65-9230	Plate — Side	1
5	65-9860	Bearing	1
6	65-9730	Nut — Splined	1
7	65-9960	Screw — Pivot	2
8	3296-60	Nut — Lock	2
9	70-1350	Spacer (41 Blade Reel)	84
10	70-1170	Blade (41 Blade Reel)	41

Ref. No.	Part No.	Description	No. Used
11	75-9980	Shaft	1
12	32152-2	Nut — Lock	2
13	65-9820	Spacer	2
15	3289-21	Screw — Flat Hd. Hex Socket	3
16	251-327	Bearing — Ball	2
17	65-9300	Spacer	1
18	65-9220	Housing — Bearing	1
19	302-5	Fitting — Grease	1
20	3296-62	Nut	1
21	3296-4	Nut — Lock	3

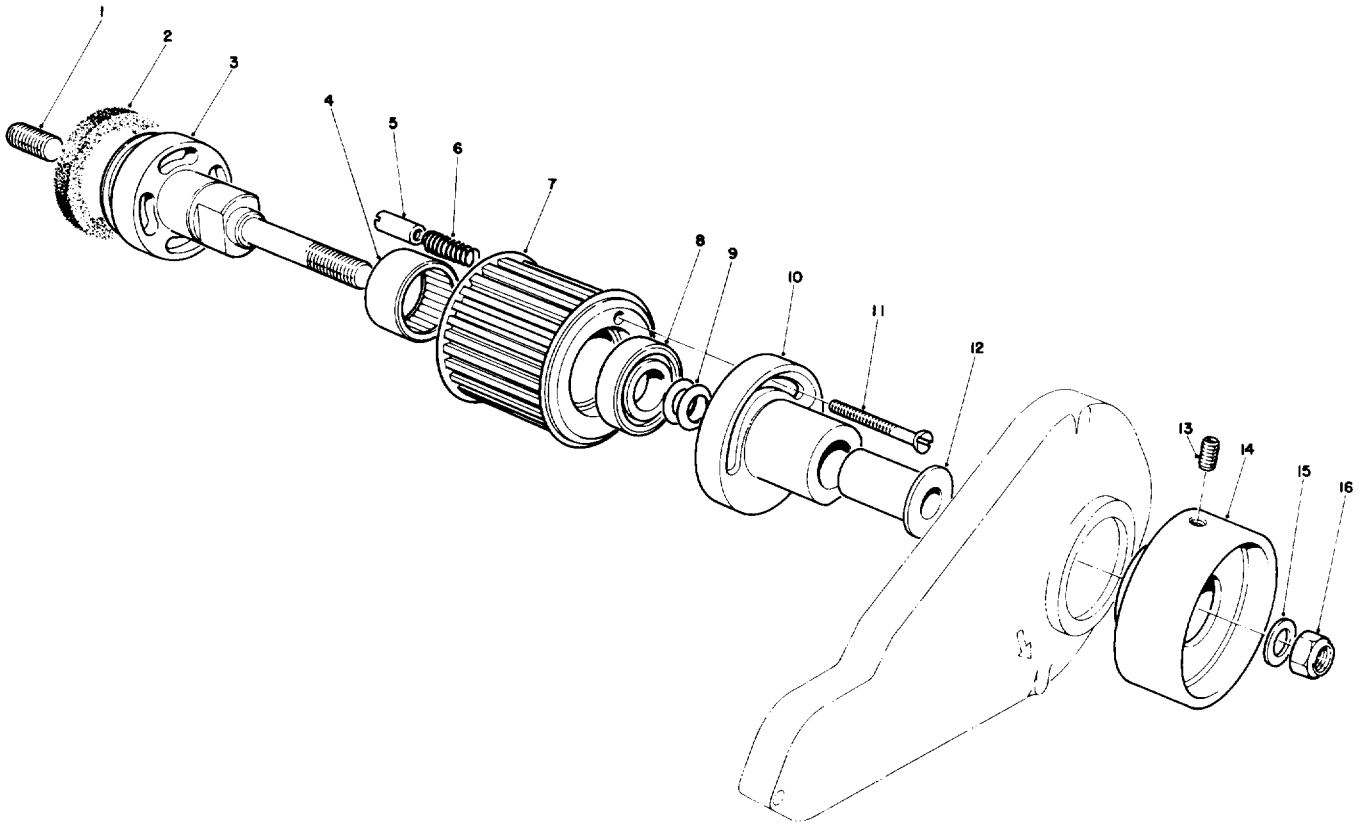


T-0651-90

8 & 11 BLADE CUTTING UNITS w/GROOMER MODEL NOS. 04460 & 04465 (Continued)

Ref. No.	Part No.	Description	No. Used
1	65-9940	Spring	1
2	65-9930	Cap	1
3	3256-74	Washer	1
4	284-3	Plug — Expansion	2
5	65-9570	Driver	2
6	65-9580	Spring	2
7	65-9560	Adjustment Knob Assembly (Incl. Ref. #4-7)	2
8	2410-68	Cover — Pin	2
9	32121-15	Roll Pin	2
10	65-9550	Cap	2
11	65-9830	Ramp	2
12	70-7470	Block — Mounting (Modified)	2
13	3290-271	Rivet — Pop	2
14	65-9950	Plate — Caution	1
15	65-9810	Spring	2
16	3296-49	Nut — Lock	2
17	3256-24	Washer — Flat (L.H. Side)	1
17	65-9850	Washer (R.H. Side)	1
18	65-9860	Bearing	1
19	65-9820	Spacer	2
20	65-9330	Spacer	1
21	251-328	Bearing	2

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

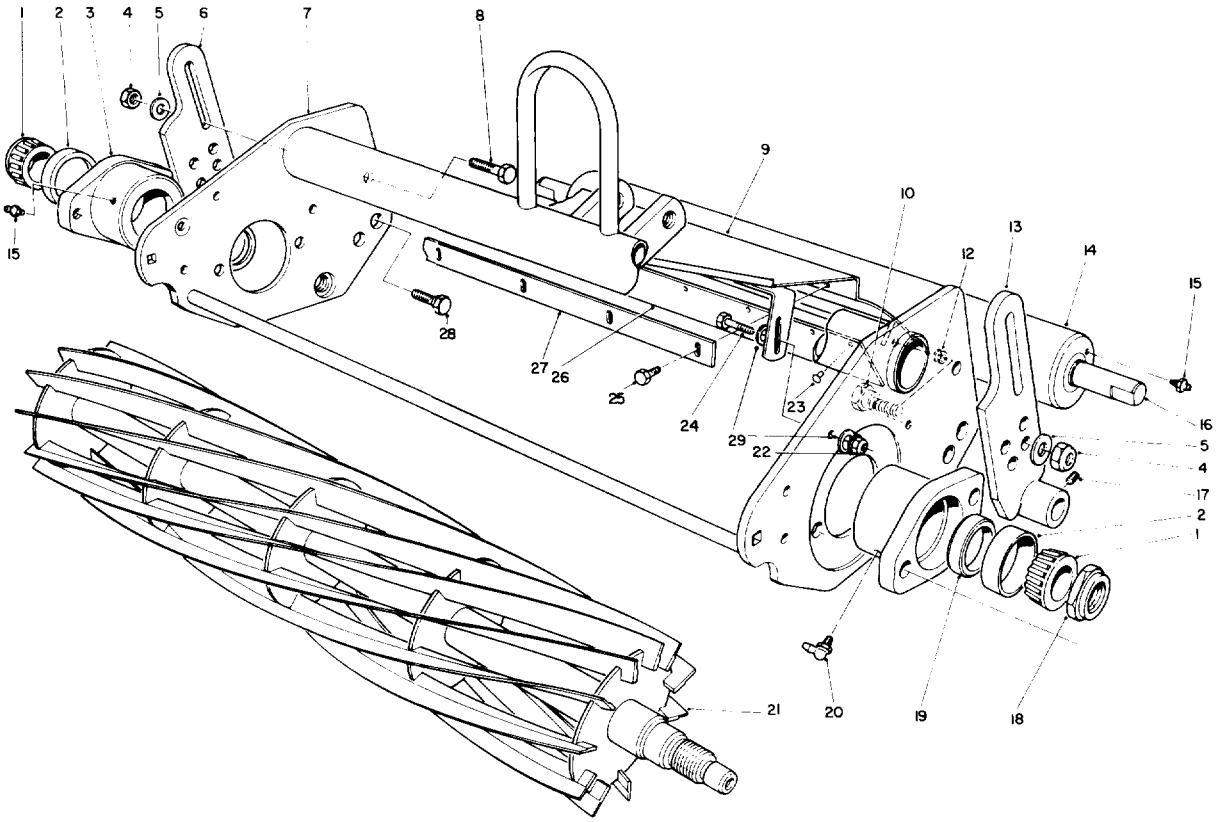


T-0322-90

8 & 11 BLADE CUTTING UNITS w/GROOMER MODEL NOS. 04460 & 04465 (Continued)

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

Ref. No.	Part No.	Description	No. Used
9	3290-480	Washer — Belleville	2
10	65-9640	Disc — Release, Clutch	1
11	65-9650	Screw — Special	1
12	256-300	Bushing — Flange	1
13	32110-13	Screw — Set	2
14	65-9680	Knob — Clutch	1
15	3256-24	Washer — Flat	1
16	3296-17	Nut — Lock	1



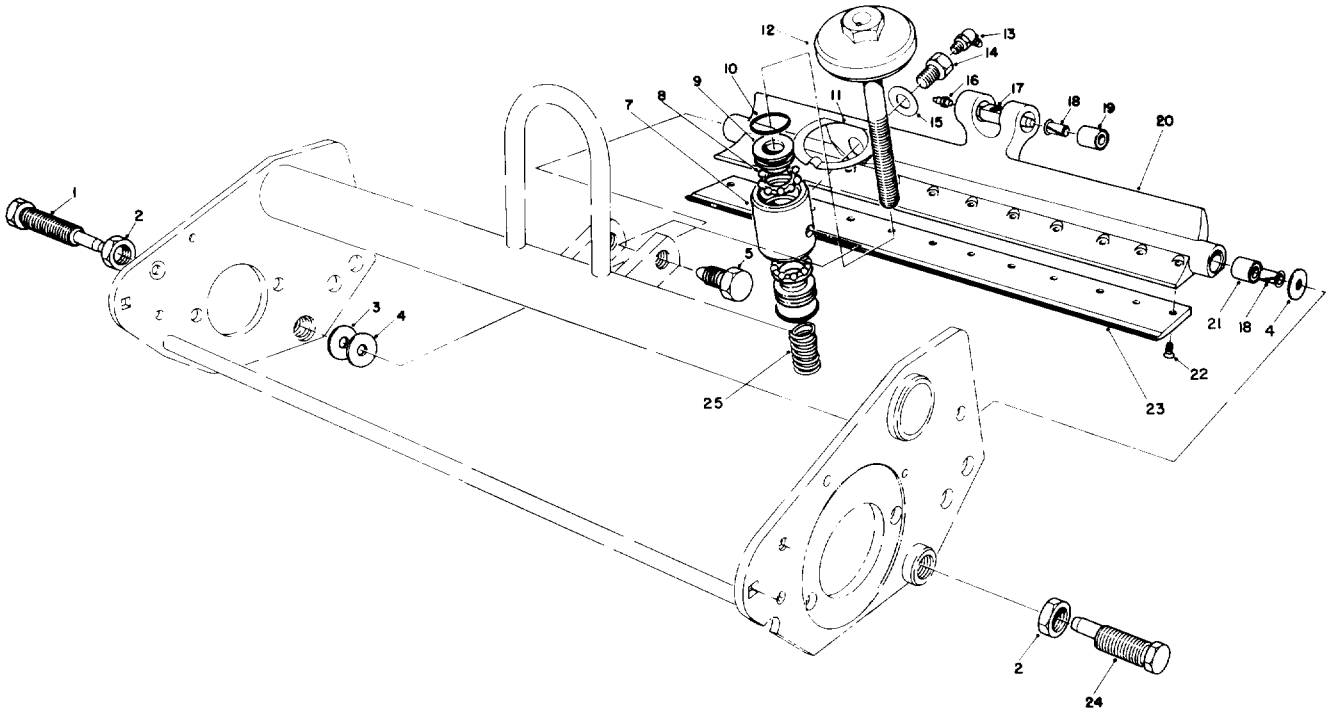
T-0653-90

8 & 11 BLADE CUTTING UNITS w/GROOMER MODEL NOS. 04460 & 04465 (Continued)

Ref. No.	Part No.	Description	No. Used
1	254-94	Bearing — Cone	2
2	254-72	Bearing — Cup	2
3	10-5120	Bearing — Housing	2
4	3296-39	Nut — Lock	4
5	3256-24	Washer	4
6	52-3060	Height of Cut Adjustment R.H.	1
7	70-1200	Frame — Reel	1
8	323-7	Capscrew Hex Hd.	2
9	57-5200	Grass Shield Assembly (Incl. Ref. #26 & 27)	1
10	52-3100	Bolt — Eccentric Height of Cut L.H.	1
12	237-84	Grommet	2
13	52-3090	Height of Cut Adjustment L.H.	1
14	52-3120	Rear Roller Assembly (Incl. Ref. #15 & 16)	1
15	302-5	Grease Fitting	3
16	21-8430	Bearing — Rear Roller	2
17	3290-125	Set Screw	2
18	3296-60	Nut — Lock	1

Ref. No.	Part No.	Description	No. Used
19	253-96	Seal	2
20	302-40	Grease Fitting 90°	1
21	12-2789	Reel — 11 Blade (Model No. 04450)	1
*	12-3599	Reel — 8 Blade (Model No. 04468)	1
22	3296-42	Locknut	2
23	3295-46	Rivet	13
24	321-5	Capscrew — Hex Hd.	2
25	32144-73	Screw — Self Tapping	5
26	57-5210	Flap — Shield	1
27	36-7260	Cut-Off Bar	1
28	52-3110	Bolt — Shoulder Height of Cut R.H.	1
29	3256-22	Washer — Flat	4
*	13-8199	Bar Adj. Gauge (Includes †)	1
†	32122-2	Screw Truss Hd.	1
†	3219-14	Nut	1
*‡		Backlapping Brush Assembly	1

* Not Illustrated
‡ Special Tool



T-0653-90

8 & 11 BLADE CUTTING UNITS w/GROOMER
MODEL NOS. 04460 & 04465 (Continued)

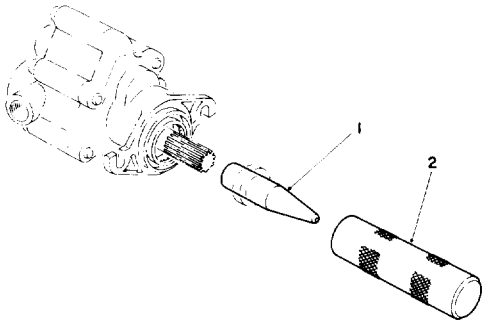
Ref. No.	Part No.	Description	No. Used
1	52-2930	Bolt — Adjustment Shoulder	1
2	3220-6	Nut — Hex Jam	2
3	52-2860	Washer	1
4	52-2900	Washer — Poly	2
5	66-7240	Screw — Pivot Spa	2
7	57-5250	Pivot — Single Point Adjust	1
8	57-5280	Bearing — Cup & Cone Retainer	2
9	57-5290	Race — Inner Bearing	2
10	237-77	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

Ref. No.	Part No.	Description	No. Used
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	63-9510	Rubber Bushing Assembly	2
22	57-4910	Screw — Special	13
23	63-8560	Bed Knife — Tournament	1
*	62-2500	Bed Knife 3/16"	1
*	63-8470	Bed Knife 1/8"	1
*	63-8600	Bedknife — Fairway	1
24	52-2910	Bolt — Eccentric Shoulder L.H.	1
25	66-7230	Spring — Compression	1

* Not Illustrated

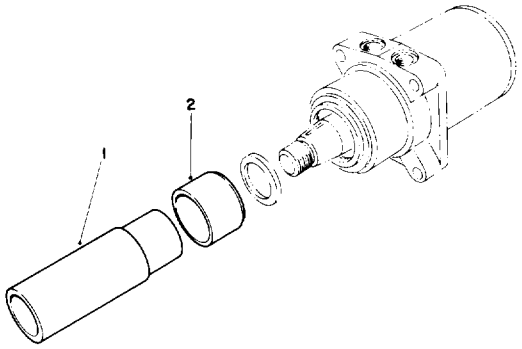
SPECIAL TOOLS

REEL MOTOR SEAL INSTALLATION TOOLS



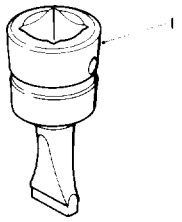
Ref. No.	Part No.	Description	No. Used
1	49-1430	Protector — Seal	1
2	49-1450	Installer — Seal	1

DRIVE MOTOR SEAL INSTALLATION TOOL NO. 19-2660



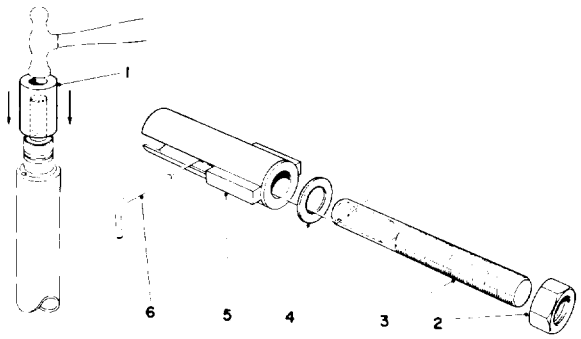
Ref. No.	Part No.	Description	No. Used
1		Driver — Seal	1
2		Holder — Seal	1

BED KNIFE SCREW TOOL NO. 51-0880



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

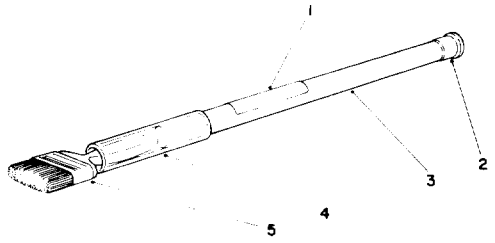
BEARING REPLACEMENT TOOL KIT NO. 23-8900



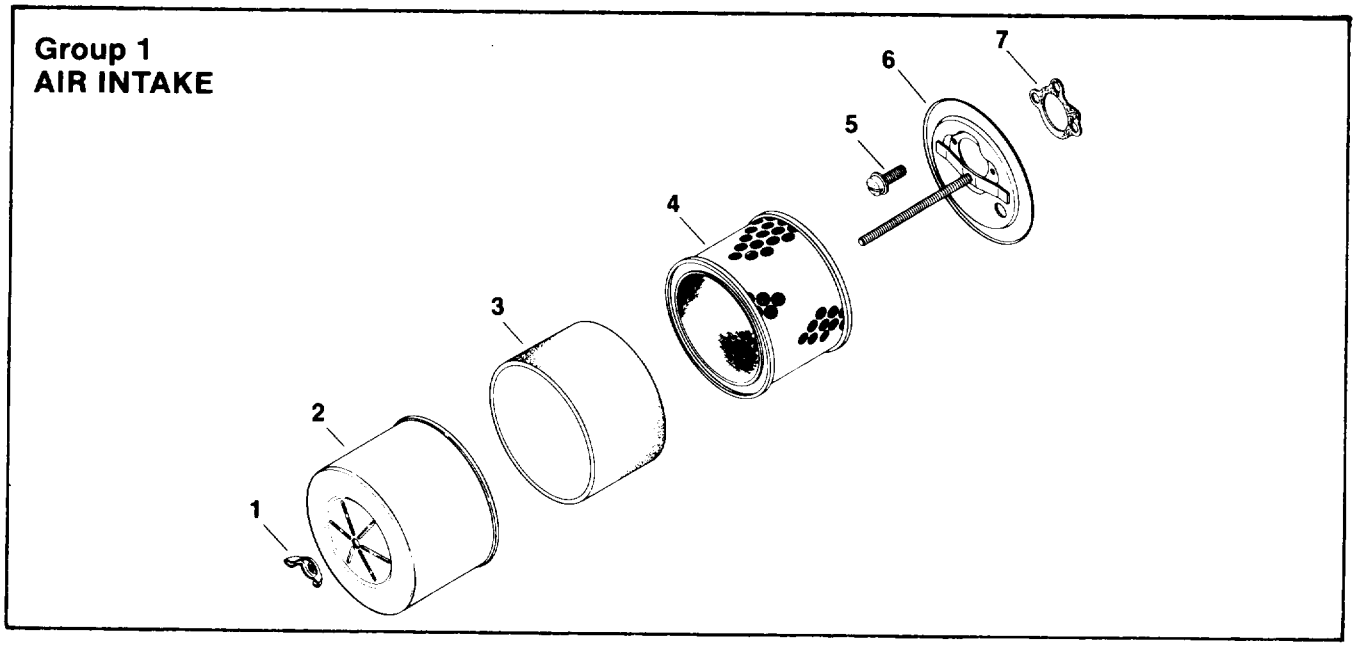
Ref. No.	Part No.	Description	No. Used
1	23-8880	Driver — Bearing	2
2	3219-18	Nut — Hex	1
3	23-8840	Puller — Bolt	1
4	22-6090	Washer — Thrust	1
5	23-8850	Tube — Support	1
6	23-8860	Pin — Bearing Replacement	1

SPECIAL TOOLS

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

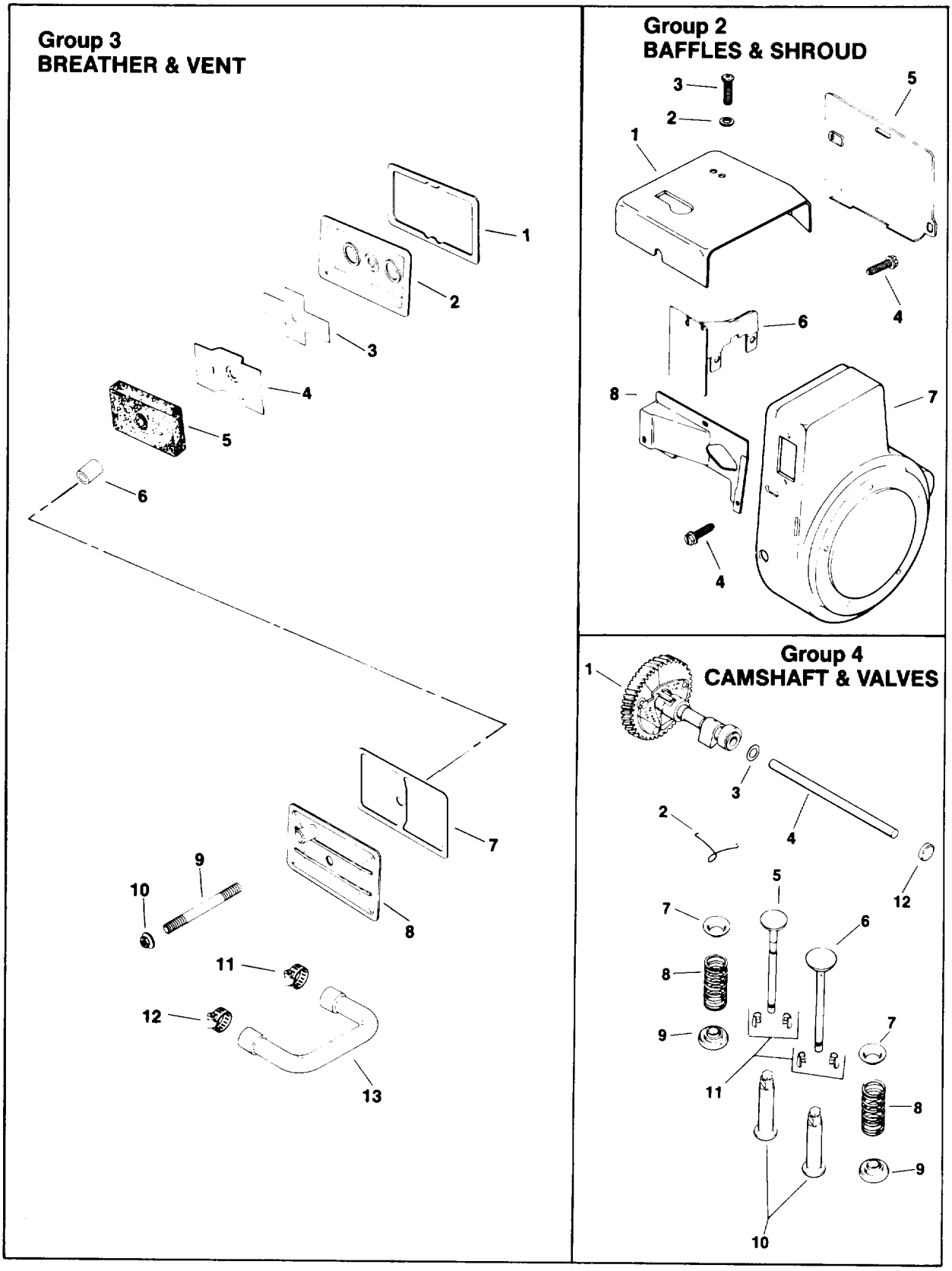


ENGINE ASSEMBLY – KOHLER MODEL NO. M16S-711533

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
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

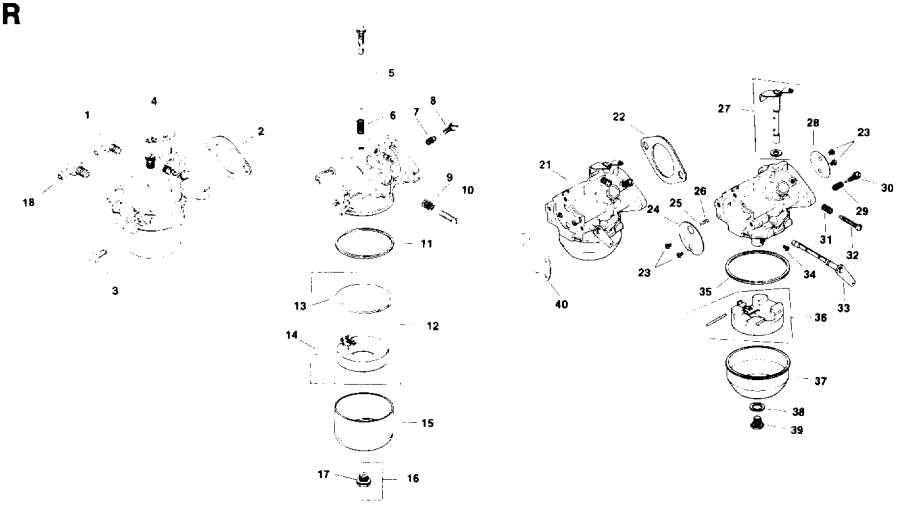


ENGINE ASSEMBLY — KOHLER MODEL NO. M16S-711533

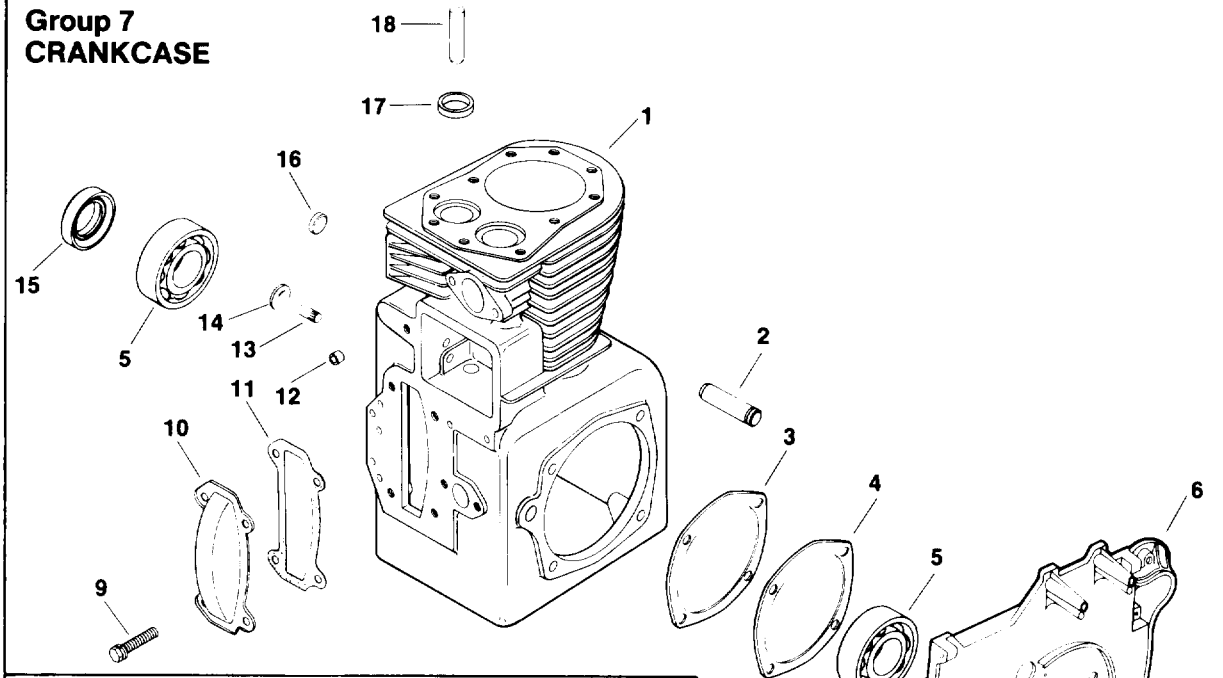
Ref. No.	Part No.	Description	No. Used
		Baffles & Shroud — Group 2	
1	45 063 08	Baffle, Head	1
2	X-25-53	Washer, Plain	1
3	47 086 08	Screw, Pozidriv T.H.	1
4	52 086 11	Screw, Hex Wash. Hd.	6
5	47 063 10	Baffle, Cylinder	1
6	47 063 07	Baffle, Inner	1
7	47 027 42	Housing, Blower	1
8	47 063 11	Baffle,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

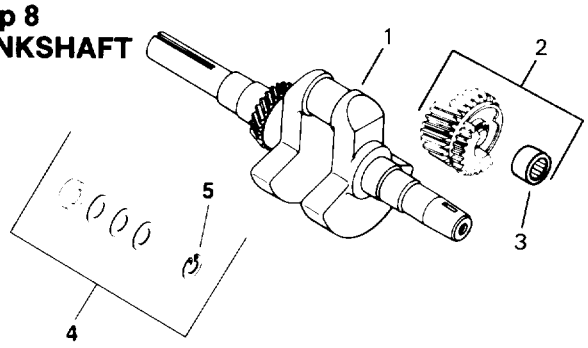
Group 5
CARBURETOR



Group 7
CRANKCASE



Group 8
CRANKSHAFT

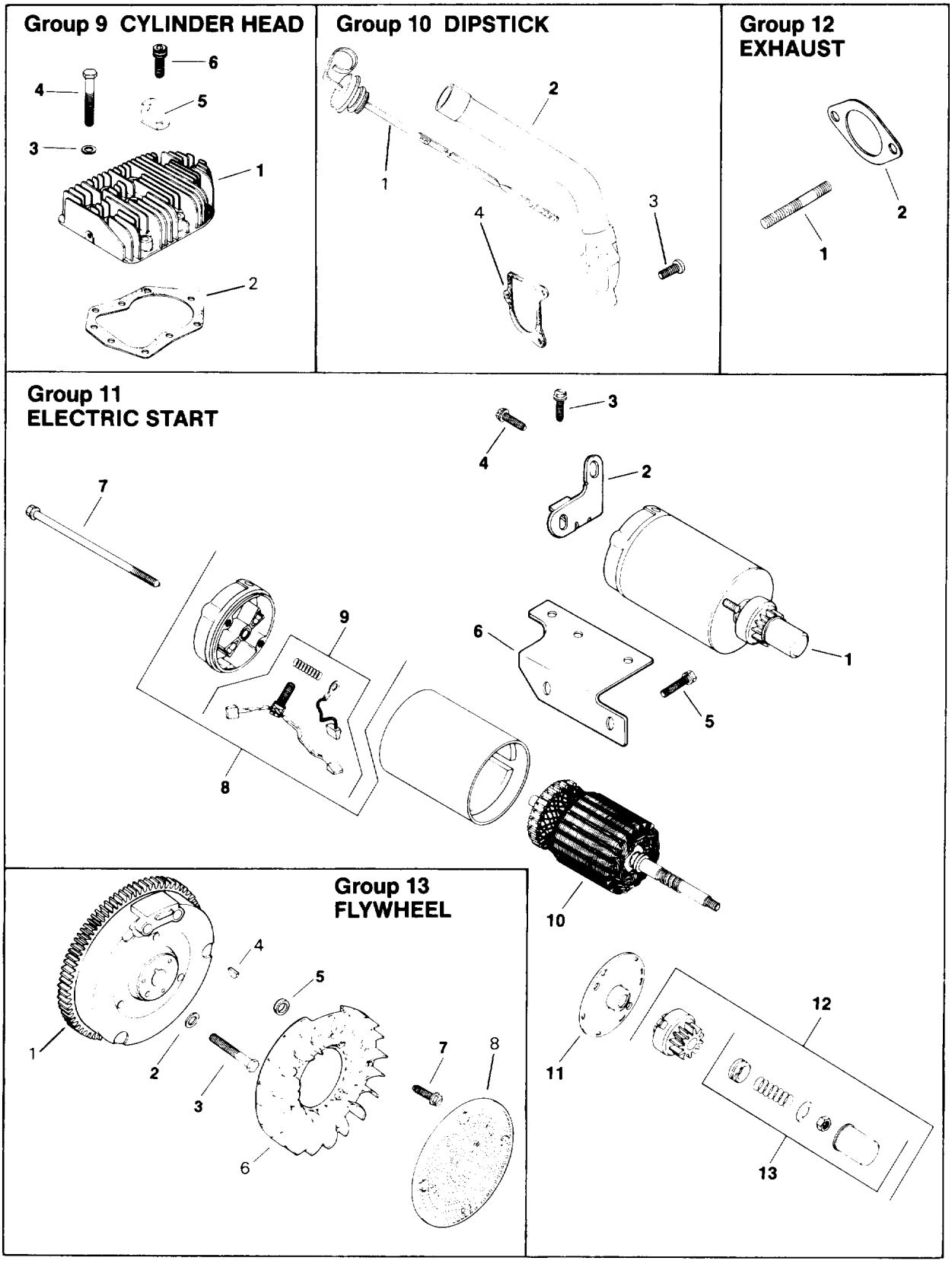


ENGINE ASSEMBLY – KOHLER MODEL NO. M16S-711533 (Continued)

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 — Sltd. Hd. 5/16-18x1	2
		*For Engines Built Before Serial No. 1808809063 Use The Following Parts:	
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 Follwoing 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)

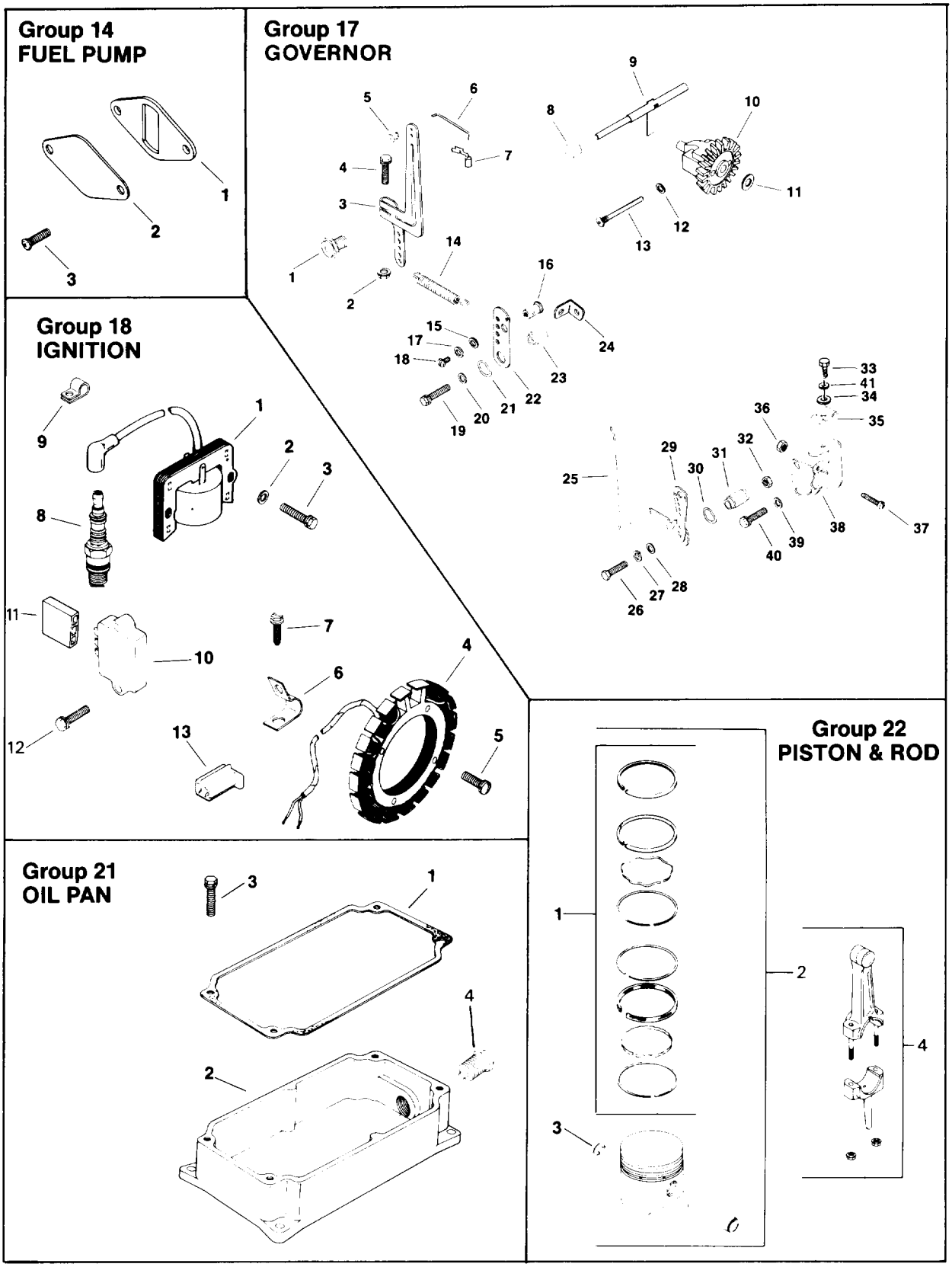


ENGINE ASSEMBLY – KOHLER MODEL NO. M16S-711533 (Continued)

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
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
41	X-19-1	Washer — Lock	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
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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