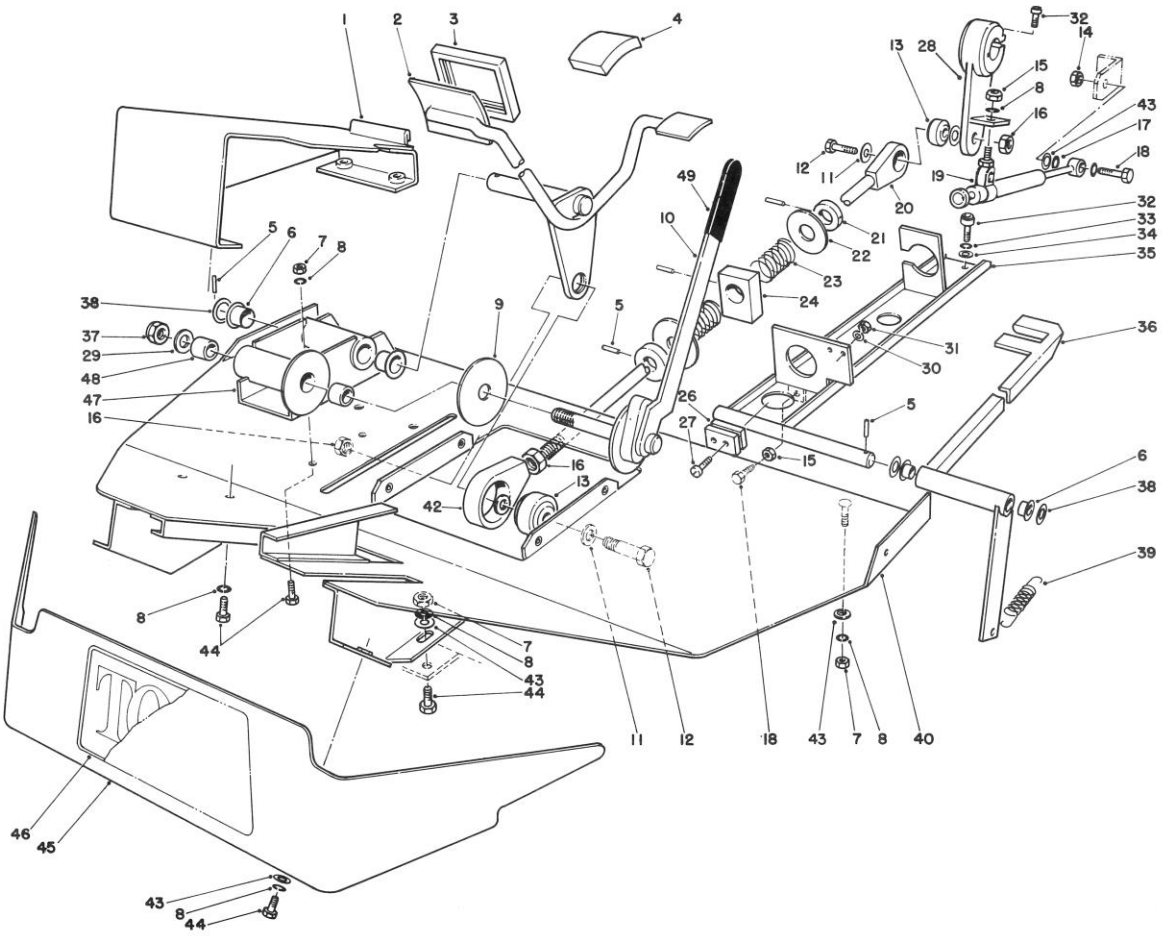
FORM NO. 3313-736

TORO®

MODEL NO. 03700-90001 & UP

PARTS CATALOG

REELMASTER 450-D

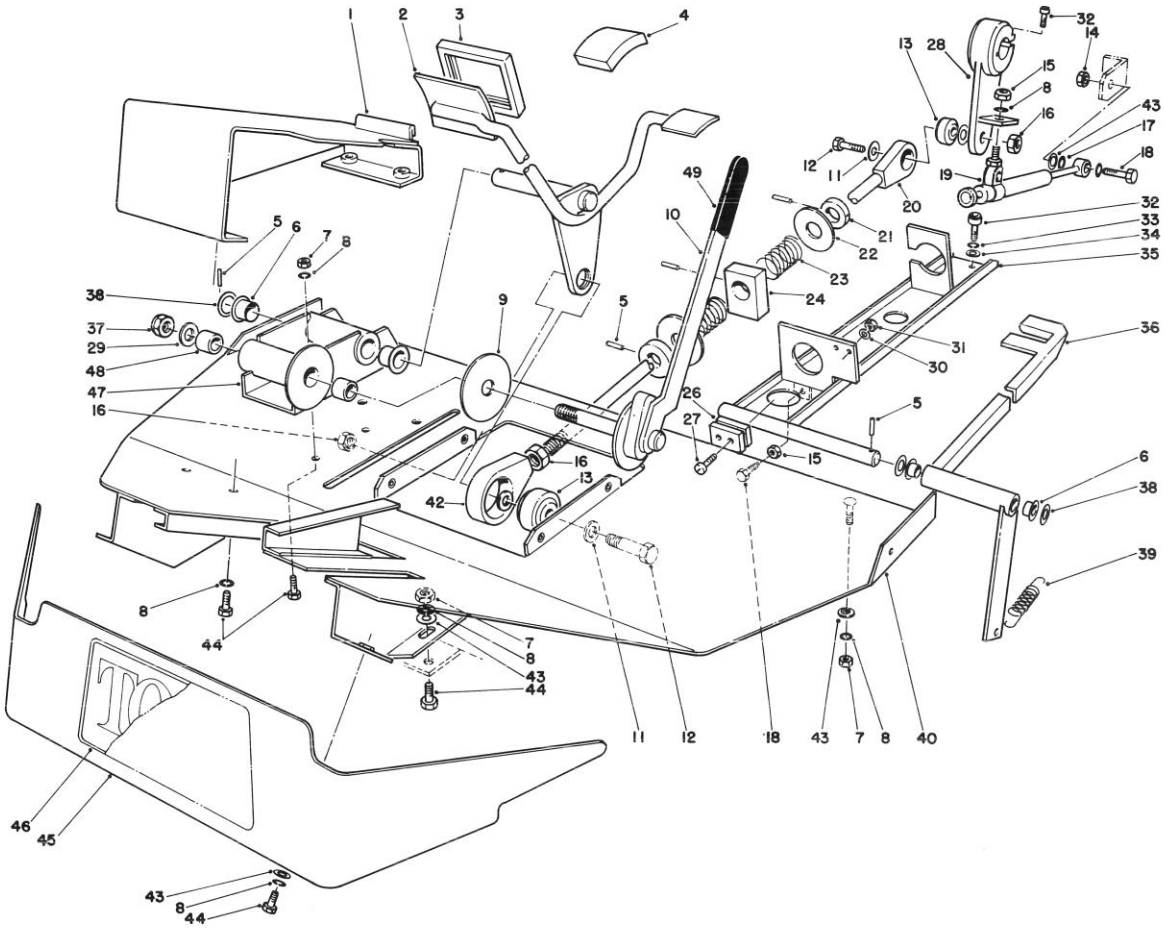


FOOT REST & PEDAL ASSEMBLY

Ref. No.	Part No.	Description	No. Used
1	58-9580	Foot Rest	1
2	60-0640	Pedal — Traction	1
3	49-6470	Pad — Forward	1
4	49-6430	Pad — Reverse	1
5	60-2110	Roll Pin	5
6	48-6790	Bushing — Flanged	4
7	48-7930	Nut — Hex	7
8	48-9570	Lockwasher	15
9	3-2858	Disc — Friction	1
10	60-1130	Lever	1
11	3290-483	Washer	4
12	325-9	Bolt	2
13	47-7030	Bushing — Rubber	2
14	48-9510	Nut — Hex	1
15	48-7940	Nut — Hex	3

Ref. No.	Part No.	Description	No. Used
16	3217-9	Nut — Hex	3
17	3290-482	Washer	2
18	48-7740	Bolt	3
19	48-7100	Dampener	1
20	58-0760	Rod Assembly	1
21	58-4310	Ring	2
22	58-5100	Washer	2
23	60-5700	Spring	2
24	58-9010	Block	1
26	29-6161	Switch	2
27	3250-40	Screw	2
28	58-7800	Lever Pump	1
29	60-6990	Washer	1
30	3255-24	Washer	1
31	3217-29	Nut — Hex	1

©The Toro Company — 1989

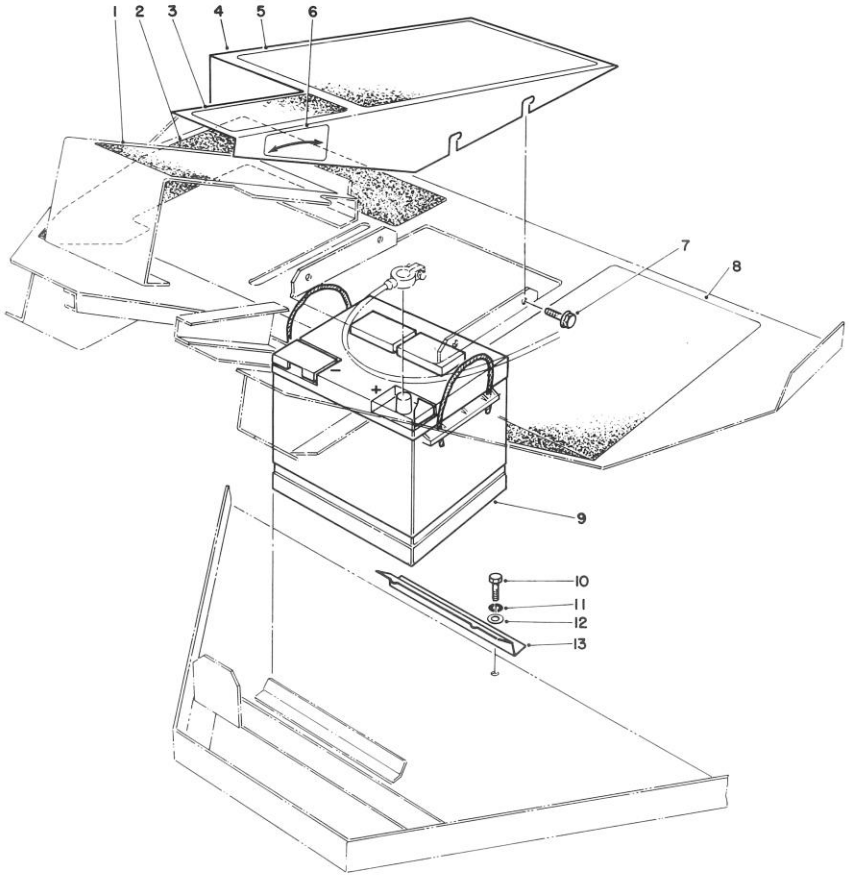


T-0113-89

FOOT REST & PEDAL ASSEMBLY (Continued)

Ref. No.	Part No.	Description	No. Used
31	3217-29	Nut — Hex	1
32	60-6540	Bolt	3
33	48-9590	Lockwasher	2
34	48-9580	Washer	2
35	60-0730	Bracket — Neutral Lock	1
36	58-0800	Lever — Neutral Lock	1
37	3296-19	Nut — Lock	1
38	60-6740	Washer	3
39	48-6940	Spring	1

Ref. No.	Part No.	Description	No. Used
40	58-7290	Plate — Floor	1
42	60-0760	Clevis	1
43	48-8030	Washer	6
44	48-7710	Bolt	11
45	58-0400	Shroud — Front	1
46	62-7400	Decal — Toro	1
47	60-0600	Bracket	1
48	60-1110	Bushing	2
49	3-7877	Grip	1



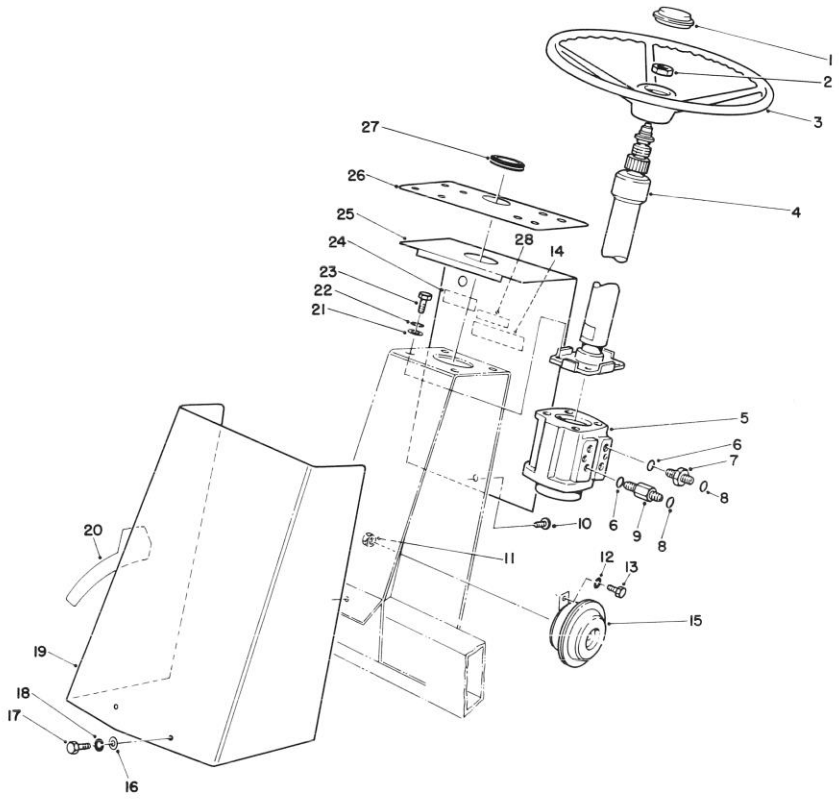
T-0114-89

FOOT PADS & BATTERY

Ref. No.	Part No.	Description	No. Used
1	59-7280	Foot Pad — Traction	1
2	58-6510	Foot Pad — R.H.	1
3	62-6440	Foot Pad	1
4	58-7390	Foot Rest Assembly	1
5	58-6630	Foot Pad — Center	1
6	59-7960	Decal — Latch	1
7	48-6900	Bolt — Hex Hd. Washer Face	3

Ref. No.	Part No.	Description	No. Used
8	58-6620	Foot Pad — L.H.	1
9†		Battery	1
10	48-7700	Bolt	2
11	48-9570	Lockwasher	2
12	48-8030	Washer	2
13	58-7270	Bar — Clamp	1

† Obtain Locally



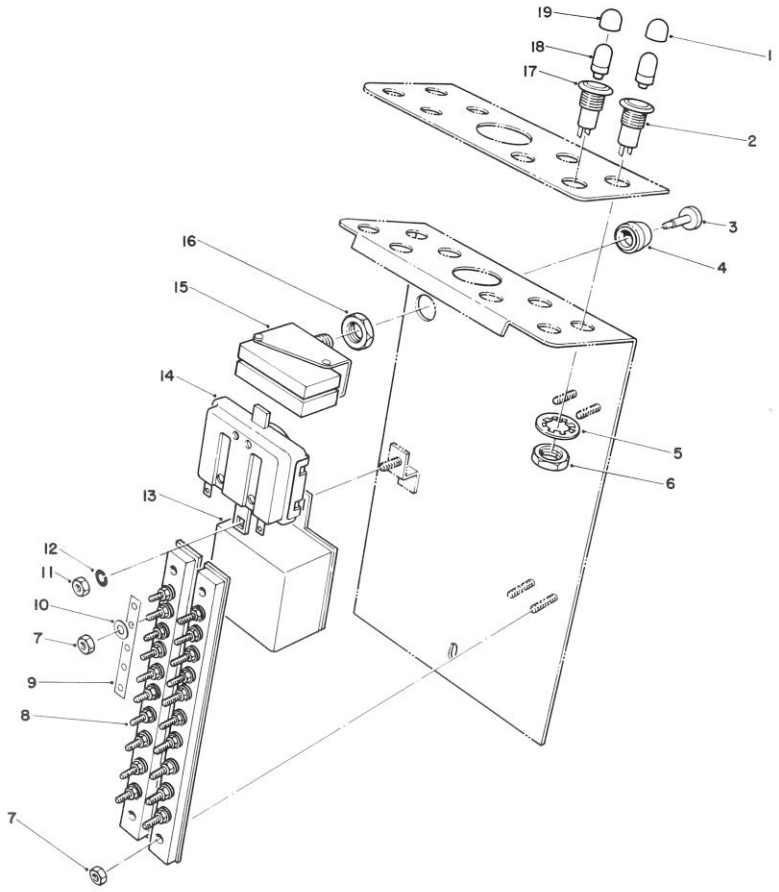
T-0115-89

STEERING TOWER

Ref. No.	Part No.	Description	No. Used
1	52-6190	Button — Horn	1
2	47-6990	Nut — Hex	1
3	48-4320	Steering Wheel	1
4	58-5960	Steering Column	1
5	58-3950	Valve — Steering	1
6	237-79	O-Ring	4
7	340-3	Fitting (Incl. Ref. #6 & 8)	3
8	237-22	O-Ring	4
9	59-6430	Valve — Check (Incl. Ref. #6 & 8)	1
10	60-3260	Screw	1
11	48-7930	Nut	1
12	48-9570	Lockwasher	1
13	48-7710	Capscrew	1
14	60-4080	Decal — Full Speed	1

Ref. No.	Part No.	Description	No. Used
15	48-4590	Horn	1
16	48-8010	Washer	2
17	48-7610	Capscrew	2
18	48-8020	Lockwasher	2
19	58-0500	Cover	1
20*	63-4540	Decal — Ground Speed	1
21	3256-24	Washer	4
22	3253-5	Lockwasher	4
23	323-8	Capscrew	4
24	59-7210	Decal — Press to Test	1
25	58-0540	Panel — Display	1
26	58-6570	Panel — Display	1
27	60-0790	Grommet	1
28	44-7450	Decal — Noise Warning	1

* 63-4540 Standard Speed Ratio is 19.62:1.0 (12 MPH)



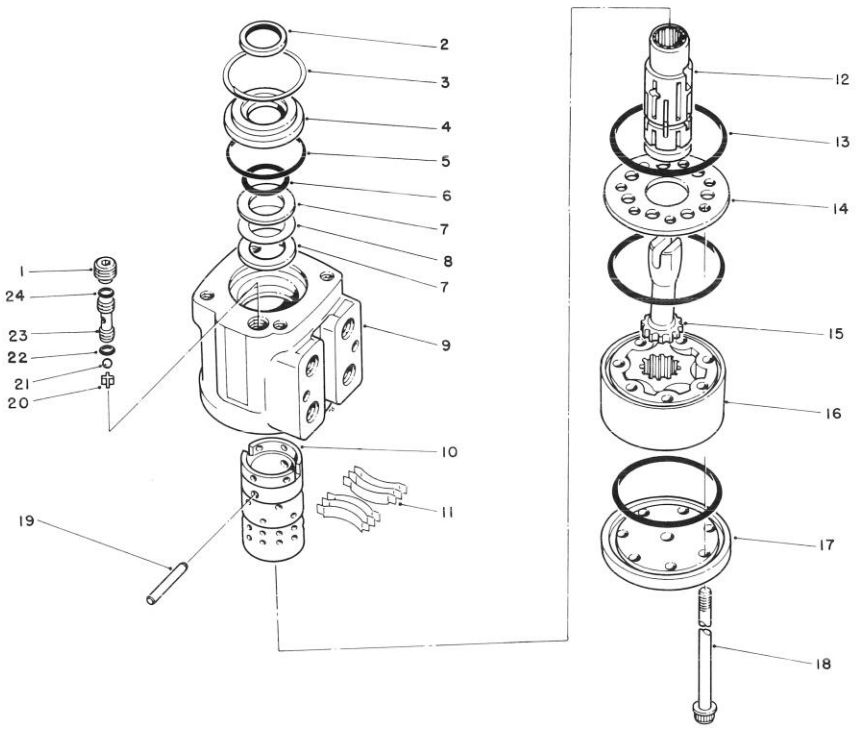
T-0116-89

STEERING TOWER — ELECTRICAL ASSEMBLY

Ref. No.	Part No.	Description	No. Used
1	218-533	Lens — Cap (Red)	5
2	44-2210	Body (Incl. Ref. #1, 5, 6, & 18)	5
3‡		Button — Push	1
4‡		Bezel — Locking	1
5	218-536	Lockwasher — Internal Tooth	8
6	218-535	Nut — Hex	8
7	3219-14	Nut — Hex	24
8	59-7420	Strip — Terminal (Incl. Ref. #7 & 9)	2
9	60-1260	Link — Bar	1

Ref. No.	Part No.	Description	No. Used
10	3256-21	Washer	20
11	48-7880	Nut — Hex	1
12	48-8000	Lockwasher	1
13	58-7480	Flasher	1
14	22-7820	Buzzer	1
15	59-7250	Switch (Incl. Ref. #3, 4, & 16)	1
16‡		Nut — Hex	1
17	44-2212	Body (Incl. Ref. #5, 6, 18 & 19)	3
18†		Lamp #1891	8
19	218-562	Lens — Cap (Amber)	3

† Obtain Locally
‡ Not Serviceable Separately.



T-0117-89

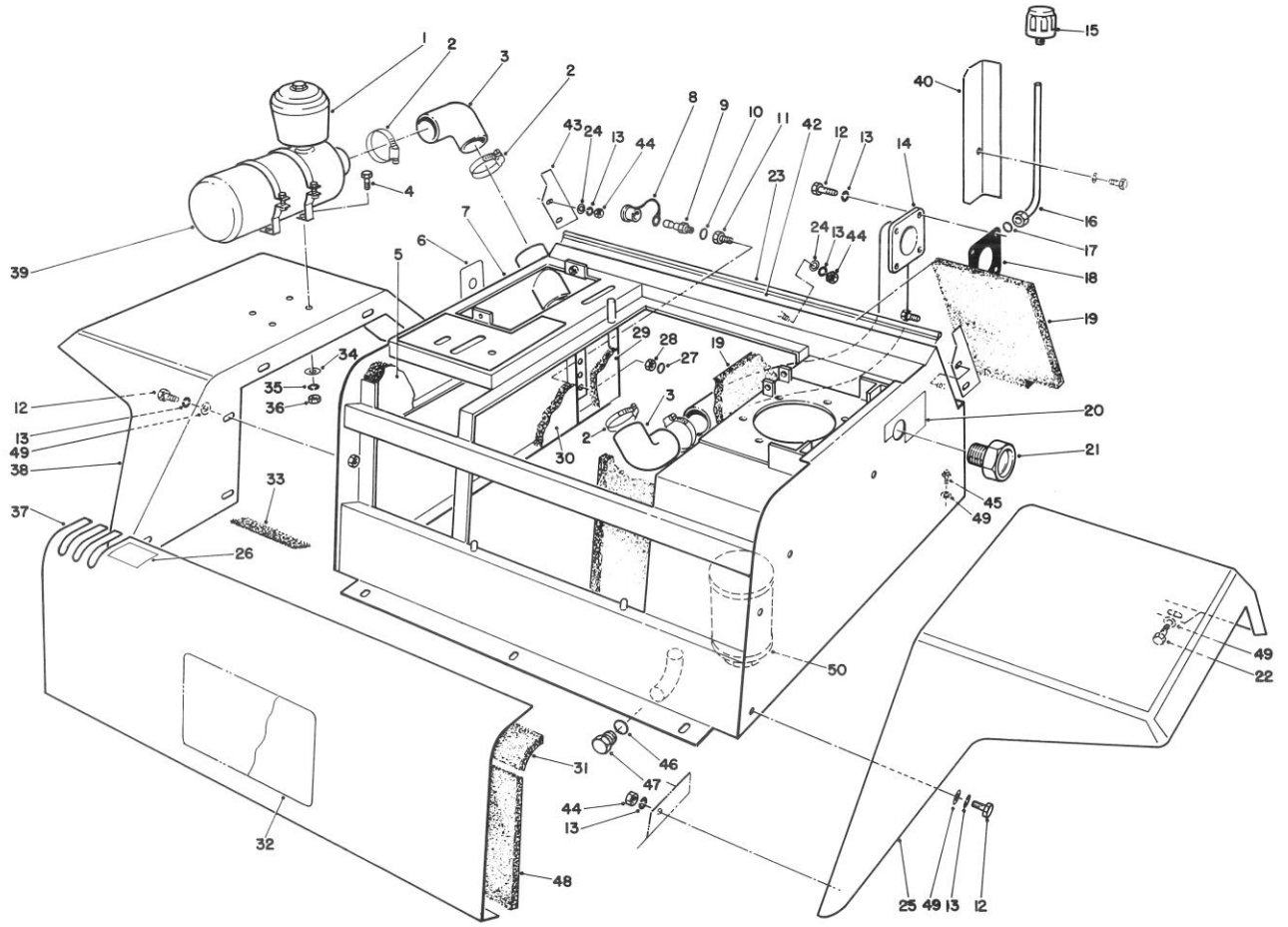
POWER STEERING VALVE ASSEMBLY NO. 58-3950

Ref. No.	Part No.	Description	No. Used
1	52-9260	Screw — Set	1
2	49-0180	Seal 1" I.D.	1
3	52-9230	Ring — Retaining	1
4	52-9240	Bushing — Seal Gland	1
5	49-0190	Seal 1.875 I.D.	1
6	49-0200	Seal — Quad Ring 1.062 I.D.	1
7	59-6730	Race — Bearing	2
8	59-6740	Bearing — Needle Thrust	1
9†		Housing	1
10†		Sleeve — Control	1
11	59-6820	Centering Spring Kit	1
12†		Spool — Control	1
13	49-0230	Seal	3
14	59-6850	Plate — Spacer	1
15	59-6860	Drive	1

Ref. No.	Part No.	Description	No. Used
16	59-6870	Gerotor	1
17	59-6890	Cap — End	1
18	59-6900	Screw — Cap	7
19	59-6830	Pin Kit — Centering	1
20	52-9290	Retainer — Check Ball	1
21	52-9280	Ball — Check	1
22	49-0220	Seal	1
23	52-9270	Seat — Check Ball	1
24	49-0210	Seal	1
*	52-9250	Needle Bearing Kit (Incl. Ref. #7 & 8)	1
*	59-6810	Control Parts Assembly (Incl. Ref. #9-12 & 19)	1
*	49-0170	Seal Kit (Incl. Ref. #2, 5, 6, 13, 22 & 24)	1

* Not Illustrated

† Not Serviceable Separately.

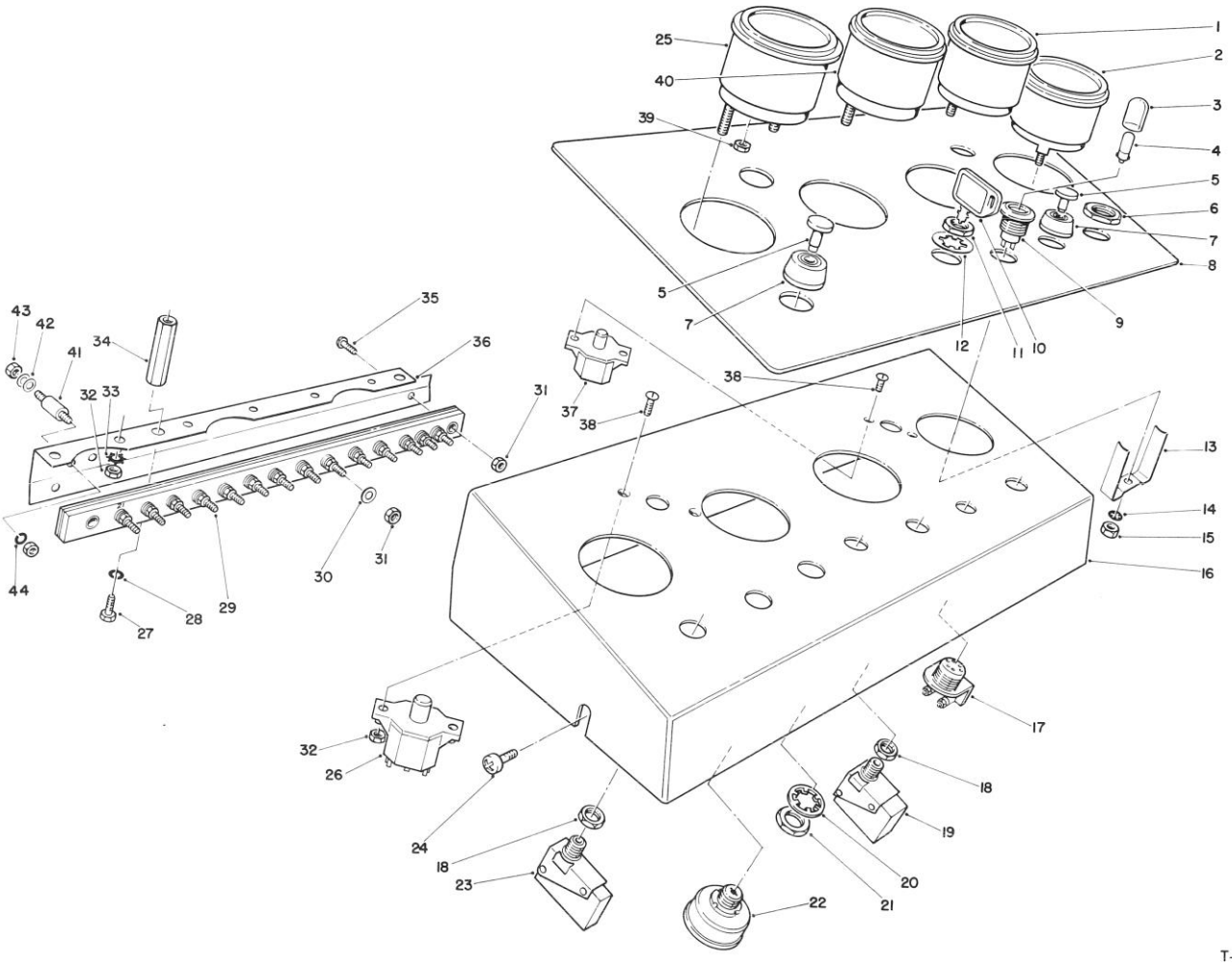


T-0118-89

FENDERS & CENTER CONSOLE ASSEMBLY

Ref. No.	Part No.	Description	No. Used
1	48-7430	Pre-Cleaner — Filter Assembly	1
2	2412-42	Clamp	4
3	60-0060	Elbow	2
4	48-7710	Bolt	4
5	68-7590	Panel — Lining	1
6	58-6680	Panel — Test Ports	1
7	58-1910	Center Console Assembly	1
8	353-947	Cap — Dust	5
9	59-7410	Fitting — Diagnostic (Incl. Ref. #10)	5
10	237-42	O-Ring	5
11	58-6580	Fitting (Incl. Ref. #27 & 28)	5
12	48-7620	Bolt	14
13	48-8020	Lockwasher	22
14	60-4230	Pipe — Air Intake	1
15	68-6150	Breather	1
16	60-1870	Pipe Assembly	1
17	237-65	O-Ring	1
18	51-6550	Gasket	1
19	68-7610	Panel — Lining	1
20	59-7290	Decal Hyd. Fill	1
21	58-5940	Sight Glass	1
22	48-6900	Screw — Self-Tap	4
23	58-5360	Seal	1
24	48-8010	Washer	8

Ref. No.	Part No.	Description	No. Used
25	58-0980	Fender — L.H.	1
26	62-6290	Decal — Lift Lever	1
27	237-21	O-Ring	5
28	3220-11	Nut — Hex	5
29	68-7580	Panel — Lining	1
30	68-7600	Panel — Lining	1
31	68-7800	Panel — Lining	1
32	58-6540	Decal — Operator Warning	1
33	68-7840	Strip — Foam	1
34	48-8030	Washer	4
35	48-9570	Lockwasher	4
36	48-7930	Nut — Hex	4
37	58-1750	Panel — Access	1
38	58-0990	Fender — R.H.	1
39	48-4220	Air Filter Assembly (Complete)	1
40	60-2020	Shield — Heat	1
42	58-3620	Seal Plate — Front	1
43	58-3070	Seal Plate — Side	2
44	48-7890	Nut	10
45	48-6900	Screw — Self-Tapping	2
46	237-80	O-Ring	1
47	58-9160	Plug — Drain	1
48	68-7810	Panel — Lining	1
49	3256-16	Washer	14
50	48-7120	Element — Suction	1



T-0119-89

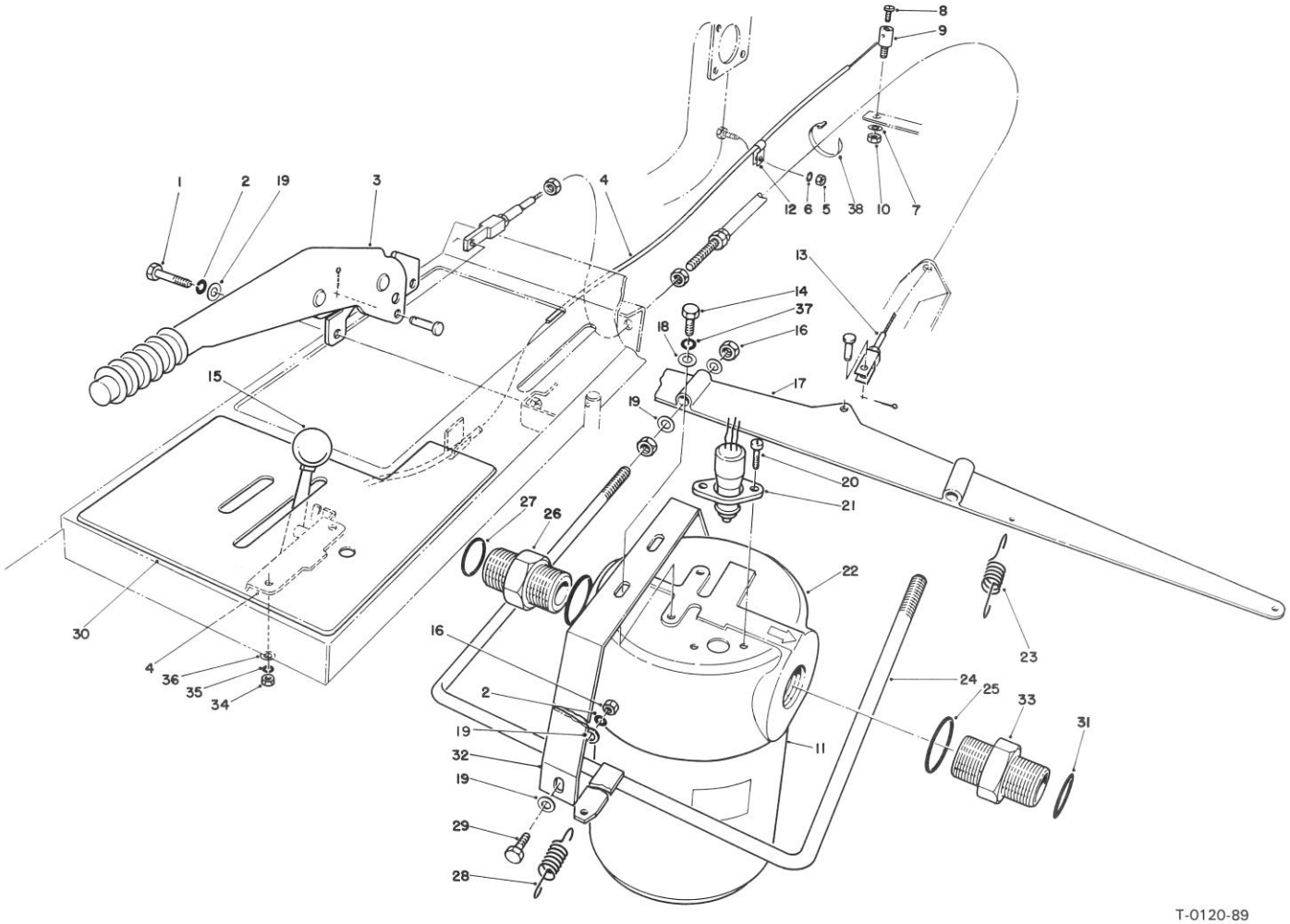
INSTRUMENT PANEL

Ref. No.	Part No.	Description	No. Used
1	58-5920	Ammeter (Incl. Ref. #32-33)	1
2	12-8130	Hourmeter (Incl. Ref. #13-15)	1
3	218-533	Lens — Red	1
4*		Lamp #1891	1
5†		Button — Push	2
6†		Nut — Hex	1
7†		Bezel	2
8	58-6550	Panel Face — Side Console	1
9	44-2210	Warning Light (Incl. Ref. #3, 4, 20 & 21)	1
10	62-7770	Key	1
11	218-446	Nut — Hex	1
12	218-447	Lockwasher — Internal Tooth	1
13	218-515	Clamp — Mounting	1
14	3254-1	Lockwasher	1
15	3217-26	Nut — Hex	1
16	58-2120	Panel — Instrument	1
17	58-2040	Indicator — Glow Plug (Incl. Ref. #6)	1
18†		Nut — Hex	2
19	59-7220	Switch — Glow Plug (Incl. Ref. #5, 7 & 18)	1
20	218-536	Lockwasher — Internal Tooth	1
21	218-535	Nut — Hex	1
22	27-2360	Switch — Ignition	1

Ref. No.	Part No.	Description	No. Used
23	58-6930	Switch — Engine Overide (Incl. Ref. #5, 7 & 18)	1
24	60-2170	Screw — Pan Head	2
25	59-7180	Gauge — Engine Temp. (Incl. Ref. #32-33)	1
26	43-4001	Circuit Breaker 10 Amp	1
27	48-7610	Capscrew	2
28	48-8020	Lockwasher	2
29	60-1610	Strip — Terminal	1
30	3256-21	Washer	14
31	3219-14	Nut — Hex	16
32	3217-25	Nut	10
33	3255-20	Lockwasher	6
34	60-1090	Spacer	2
35	3250-41	Screw — Pan Head	2
36	60-1080	Clamp — Gauge	1
37	43-4000	Circuit Breaker 40 Amp	1
38	32108-102	Screw — Slotted Head	4
39	3217-16	Nut — Hex	6
40	58-5900	Gauge — Fuel (Incl. Ref. #32-33)	1
41	60-4450	Spacer — Insulating	1
42	52-6430	Washer	2
43	48-7880	Nut	2
44	48-8000	Lockwasher	1

* Obtain Locally

† Not Serviceable Separately.



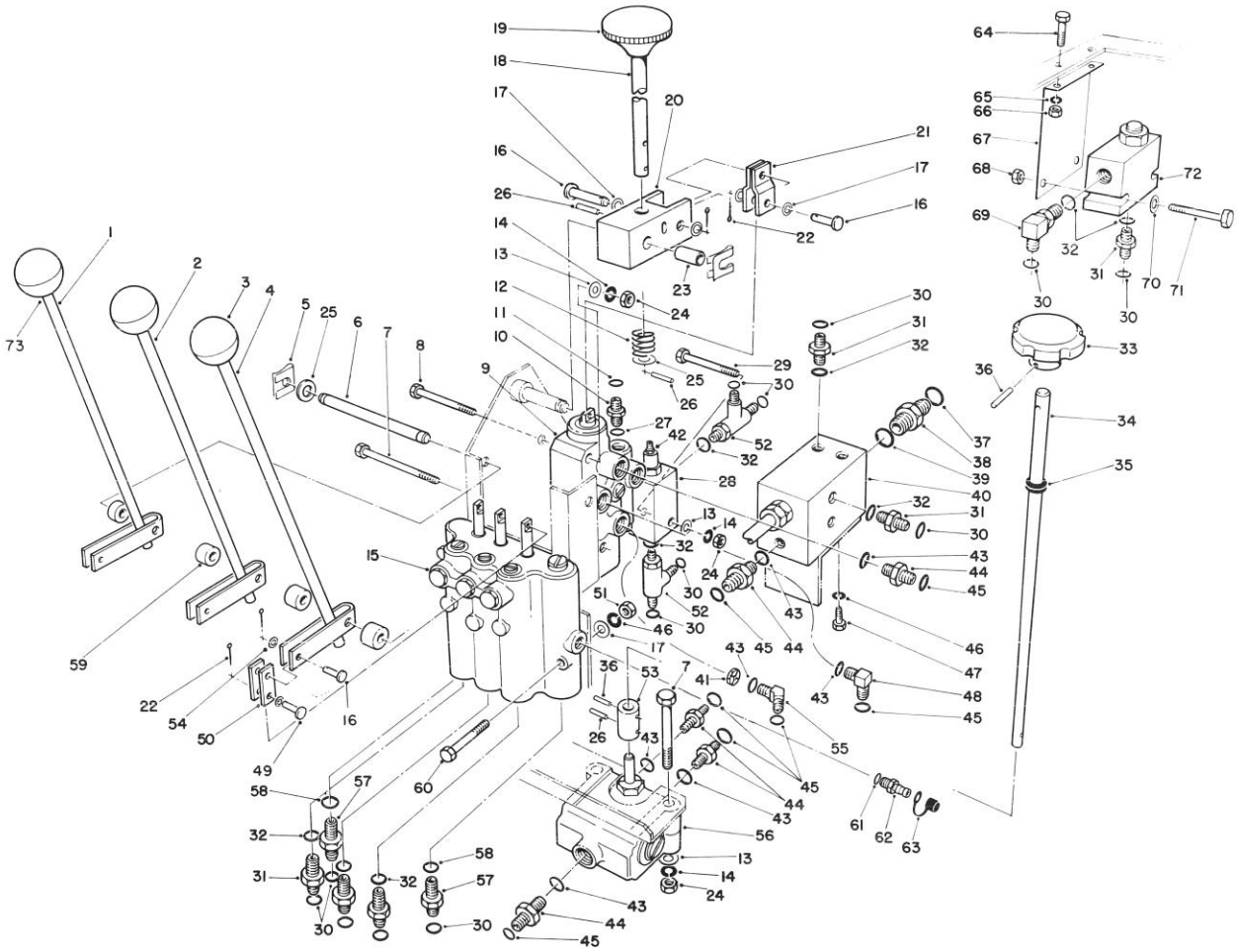
T-0120-89

PARKING BRAKE, THROTTLE & OIL FILTER ASSEMBLY

Ref. No.	Part No.	Description	No. Used
1	48-7700	Bolt	2
2	48-9570	Lockwasher	4
3	53-6070	Brake — Parking	1
4	59-7240	Throttle Assembly (Incl. Ref. #15)	1
5	48-7890	Nut — Hex	1
6	48-8020	Lockwasher	1
7	3256-22	Washer	1
8	25-8640	Screw	1
9	25-9090	Swivel	1
10	3296-13	Nut — Hex	1
11†	58-6610	Element Assembly	1
12	2412-31	Clip	1
13	58-7030	Cable — Brake, Complete	1
14	322-5	Bolt	2
15	233-25	Knob	1
16	48-7930	Nut — Hex	6
17	58-2170	Bar	1
18	3256-56	Washer	2
19	48-8030	Washer	10
20	32104-101	Screw	2

Ref. No.	Part No.	Description	No. Used
21	59-7120	Switch — Hydraulic Filter Warning (Incl. Ref. #20)	1
22	58-5550	Filter Assembly — Hyd. Oil (Incl. Ref. #11, 20 & 21)	1
23	60-2140	Spring	2
24	58-2270	Rod Assembly	1
25	237-123	O-Ring	2
26	340-80	Adapter (Incl. Ref. #25 & 27)	1
27	340-65	O-Ring	1
28	48-6940	Spring	1
29	48-9460	Bolt	2
30	58-6560	Panel — Side, Control	1
31	340-64	O-Ring	1
32	58-1670	Bracket — Filter	1
33	340-10	Adapter (Incl. Ref. #25 & 31)	1
34	48-7880	Nut — Hex	2
35	48-8000	Lockwasher	2
36	52-6430	Washer	2
37	3253-4	Lockwasher	2
38	250-1	Cable — Tie	1

† Do not substitute.

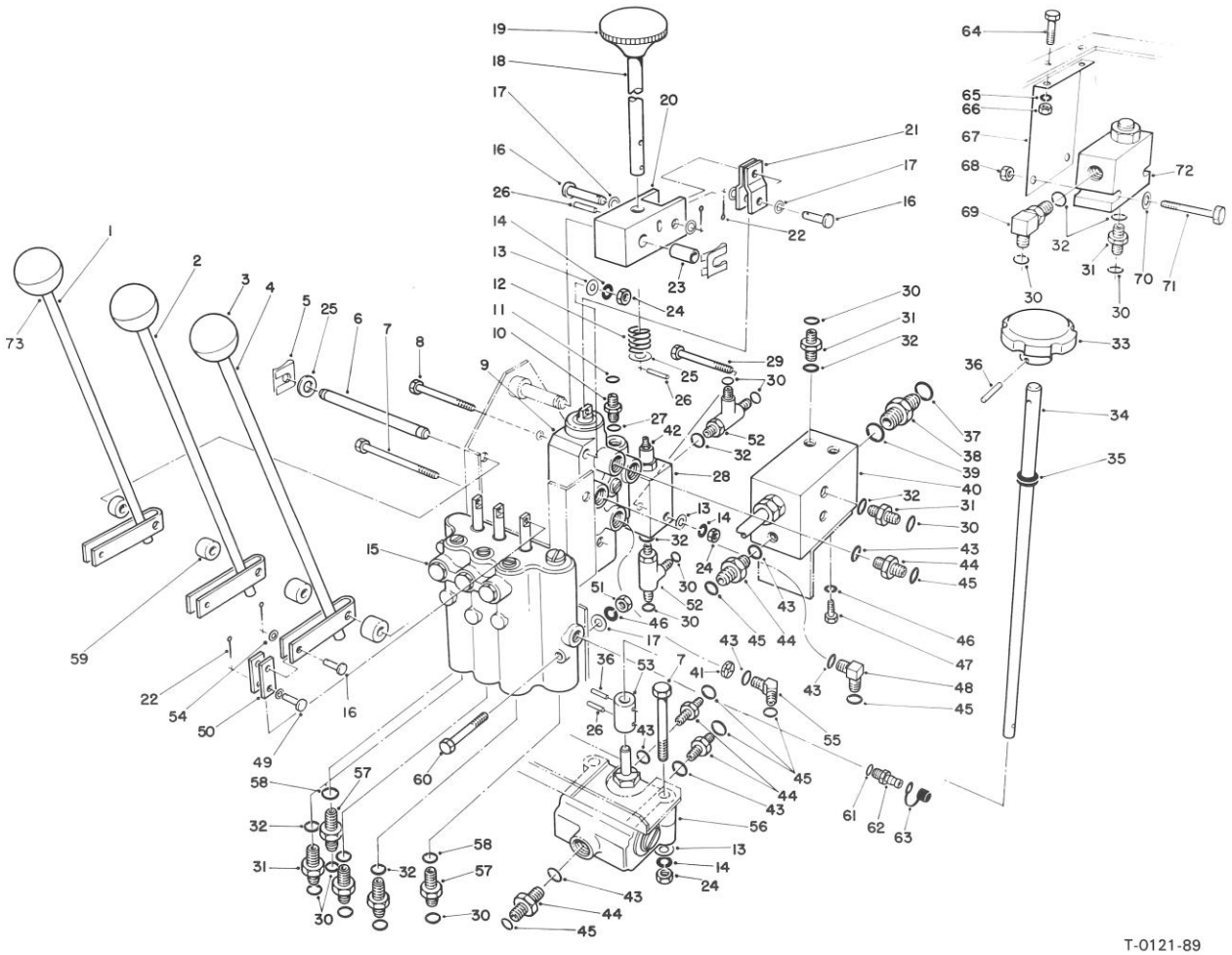


T-0121-89

VALVE CONTROLS

Ref. No.	Part No.	Description	No. Used
1	58-1740	Lever — R.H.	1
2	58-1700	Lever — Ctr.	1
3	58-1340	Knob	3
4	58-1720	Lever — L.H.	1
5	60-5690	Clip — Safety	3
6	58-1520	Pin — Pivot	1
7	42-9310	Bolt	3
8	42-9510	Bolt	1
9	63-4800	Valve — Control	1
10	340-92	Fitting (Incl. Ref. #11 & 27)	1
11	237-21	O-Ring	1
12	58-7190	Spring	1
13	48-8030	Washer	5
14	48-9570	Lockwasher	5
15	58-5470	Valve — Lift Control	1
16	58-3830	Pin — Clevis	5
17	48-8010	Washer	6
18	58-4450	Lever	1
19	233-10	Knob	1
20	58-4460	Clevis	1
21	58-1570	Link	2
22	58-1480	Pin — Cotter	8

Ref. No.	Part No.	Description	No. Used
23	60-0550	Bushing	1
24	48-7930	Nut — Hex	5
25	48-9580	Washer	2
26	32121-118	Roll Pin	3
27	237-78	O-Ring	1
28	58-5520	Valve (Incl. Ref. #42)	1
29	48-9430	Bolt	1
30	237-22	O-Ring	15
31	340-2	Fitting (Incl. Ref. #30 & 32)	7
32	237-42	O-Ring	11
33	59-7130	Knob	1
34	58-1510	Shaft	1
35	59-7910	Grommet	1
36	60-2110	Pin — Spirol	2
37	340-64	O-Ring	1
38	340-80	Fitting (Incl. Ref. #37 & 39)	1
39	237-123	O-Ring	1
40	58-2150	Manifold	1
41	66-5410	Orifice	1
42		Cartridge Pressure Relief	1
43	237-80	O-Ring	9
44	340-7	Fitting (Incl. Ref. #43 & 45)	6

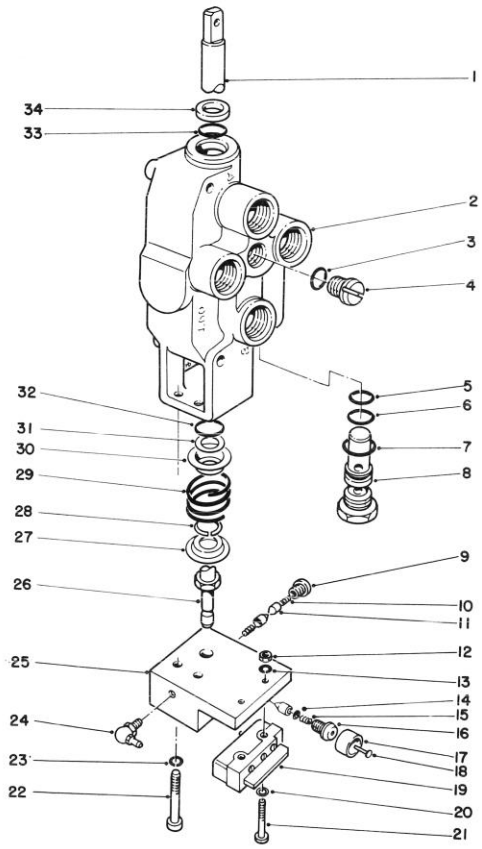


VALVE CONTROLS (Continued)

Ref. No.	Part No.	Description	No. Used
45	237-65	O-Ring	9
46	48-8020	Lockwasher	4
47	48-7620	Bolt	2
48	340-17	Fitting (Incl. Ref. #43 & 45)	2
49	58-3810	Pin — Clevis	3
50	58-1560	Link	6
51	48-7890	Nut — Hex	1
52	340-86	Tee	2
53	58-1530	Coupling	1
54	52-6430	Washer	6
55	66-5860	Adapter — 45° (Incl. Ref. #43 & 45)	1
56	58-5490	Valve — Flow Control	1
57	340-3	Fitting (Incl. Ref. #30 & 58)	2
58	237-79	O-Ring	2
59	58-1540	Spacer	4
60	60-6650	Bolt	2

Ref. No.	Part No.	Description	No. Used
†61	237-42	O-Ring	1
†62	59-7410	Fitting — Diagnostic (Incl. Ref. #61)	1
†63	353-947	Cap — Dust	1
64	321-3	Screw — Cap, Hex Hd.	2
65	3253-3	Washer — Lock	2
66	3217-5	Nut — Hex	2
67	63-4690	Bracket — Valve	1
68	3296-8	Nut — Lock	2
69	340-77	Elbow — 90° (Incl. Ref. #30 & 32)	1
70	3256-22	Washer — Flat	2
71	321-10	Screw — Cap, Hex Hd.	2
72	63-4700	Valve — Flow Regulator	1
73	3290-484	Ring — Tolerance	3
*	66-5590	Seal Kit (For Item #72)	1
*	66-5580	Seal Repair Kit (For Item #28)	1

Note: † Used on Units with Serial No. 70594 & Up.
* Not Illustrated



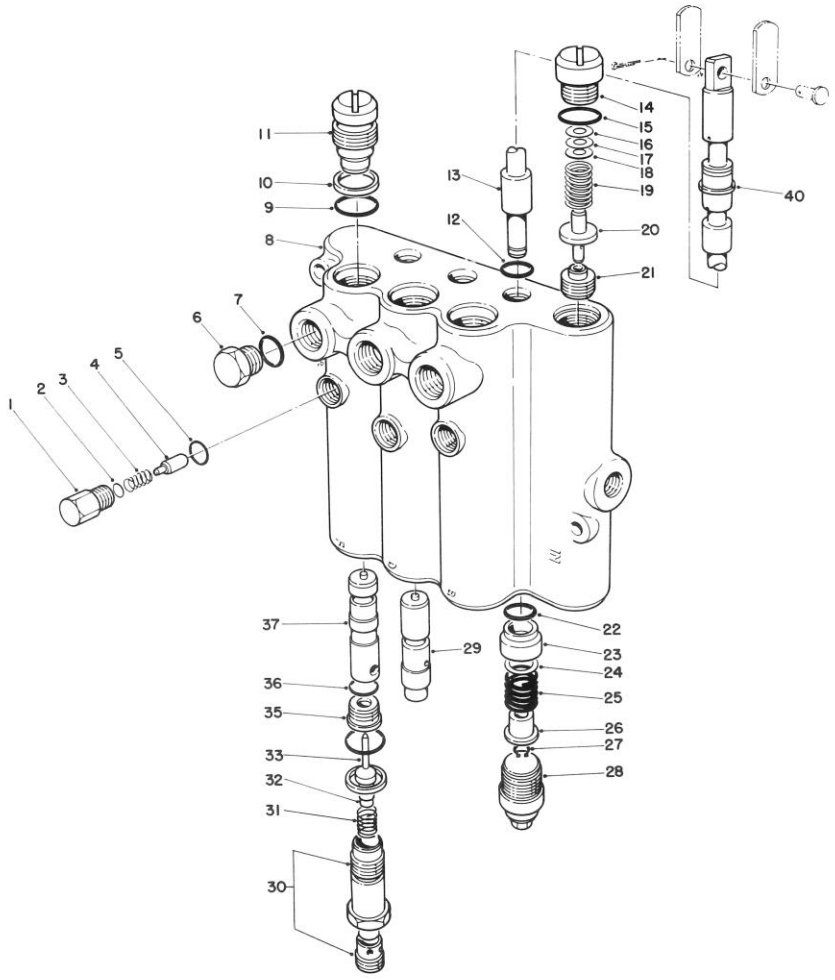
T-0123-89

REEL CONTROL VALVE ASSEMBLY NO. 63-4800

Ref. No.	Part No.	Description	No. Used
1†		Spool	1
2†		Body	1
3	59-8140	O-Ring	1
4	59-8160	Plug (Incl. Ref. #3)	1
5	63-4440	O-Ring	1
6	59-7860	Washer — Back-Up	1
7	42-1220	O-Ring	1
8	63-4780	Valve — Relief (Incl. Ref. #5-7)	1
9	59-8060	Plug — Detent	1
10	59-8050	Spring — Detent	2
11	59-8150	Pawl — Detent	3
12	66-5440	Nut — Lock	2
13	3253-19	Washer — Lock	2
14	63-4860	Circlip	1
15	63-4510	Spring	1
16	59-8230	Plug	1
17	66-5420	Sleeve	1
18	63-4850	Plunger	1

Ref. No.	Part No.	Description	No. Used
19	60-4550	Switch — Micro	1
20	3256-13	Washer — Plain	2
21	66-5430	Screw — Machine	2
22	63-4830	Screw — Cap Hd.	2
23	59-8070	Washer — Lock	2
24	302-33	Fitting — Grease	1
25	63-4820	Detent — Block	1
26	63-4840	Spool — Screw	1
27	59-8100	Washer — Shallow	1
28	59-8170	Washer — Wire	1
29	59-8040	Spring	1
30	59-8080	Washer — Deep	1
31	59-8180	Washer	1
32	59-7780	O-Ring	1
33	59-8120	O-Ring	1
34	59-8190	Wiper	1
*	59-8250	Seal Kit (Incl. Ref. #3, 4-7, 32 & 34)	1

* Not Illustrated
† Not Serviceable Separately



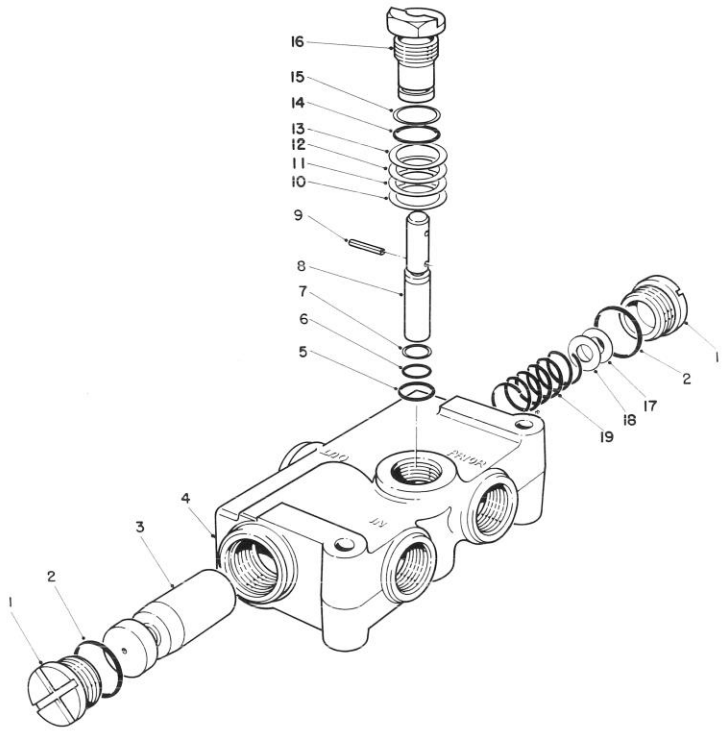
T-0124-89

CONTROL VALVE ASSEMBLY NO. 58-5470

Ref. No.	Part No.	Description	No. Used
1	58-6780	Plug Assembly (Incl. Ref. #5)	3
2	60-6450	Disc	A/R
3	58-6760	Spring	3
4	58-6770	Detent Plunger	3
5	58-6790	O-Ring	3
6	58-6710	Plug Assembly (Incl. Ref. #7)	3
7	58-6720	O-Ring	3
8†		Body	1
9	60-5720	O-Ring	3
10	58-6370	Washer — Back-up	6
11	58-6350	Plug Assy. (Incl. Ref. #9 & 10)	6
12	60-6410	O-Ring	6
13†		Spool (Incl. Ref. #12)	3
14	58-6740	Plug Assembly (Inc. Ref. #15)	1
15	58-6750	O-Ring	1
16	58-6470	Washer	A/R
17	58-6480	Washer	A/R
18	58-6490	Washer	A/R
19	58-6430	Spring — Dark Blue	1
20	58-6440	Poppet	1

Ref. No.	Part No.	Description	No. Used
21†		Seat	1
22	58-6450	O-Ring	3
23	58-6400	Bushing	3
24	58-6700	Washer	3
25	58-6730	Spring	3
26	58-6310	Spacer	3
27	58-6460	Retaining Ring	3
28	58-6420	Cap Assembly	3
29	60-6380	Plunger	1
30	58-6380	Plug Assembly	3
31	58-6410	Spring	3
32	60-6440	Eyelet	3
33	58-6290	Poppet Assembly	3
35	58-6330	Seat Assy. (Incl. Ref. #36)	3
36	58-6340	O-Ring	3
37	58-6300	Plunger	2
40	58-6320	Wiper — Seal	3
*	58-6390	Lockout — Poppet Stop	3
*	60-3780	Seal Kit (Incl. Ref. #5, 7, 9, 10, 12, 15, 22, 27, 33, 36 & 40)	1

* Not Illustrated
† Non-serviceable



T-0125-89

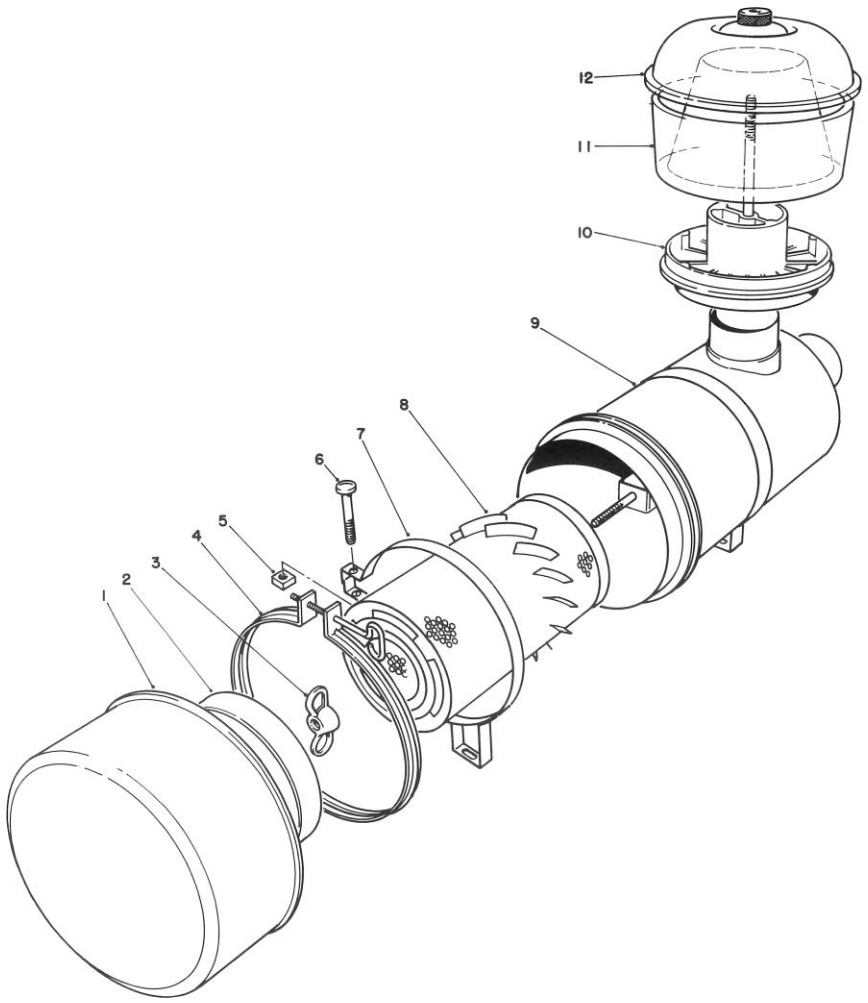
PRIORITY FLOW CONTROL — VALVE ASSEMBLY NO. 58-5490

Ref. No.	Part No.	Description	No. Used
1	59-7600	Plug Assembly (Incl. Ref. #2)	2
2	59-7610	O-Ring	2
3†		Spool	1
4†		Body	1
5	59-7640	O-Ring	1
6	59-7650	O-Ring	1
7	60-5950	Back-Up Washer	1
8	59-7670	Metering Stem	1
9	59-7680	Groove Pin	1
10	59-7690	Shim	A/R
11	59-7700	Shim	A/R

Ref. No.	Part No.	Description	No. Used
12	59-7710	Shim	A/R
13	59-7720	Shim	A/R
14	59-7780	O-Ring	1
15	58-6370	Back-Up Washer	1
16	59-7740	Metering Plug	1
17	59-7750	Shim	A/R
18	59-7760	Shim	A/R
19	59-7770	Spring	1
*	63-4520	Seal Kit (Incl. Ref. #2, 5-7, 14 & 15)	1

* Not Illustrated

† Not Serviceable Separately.



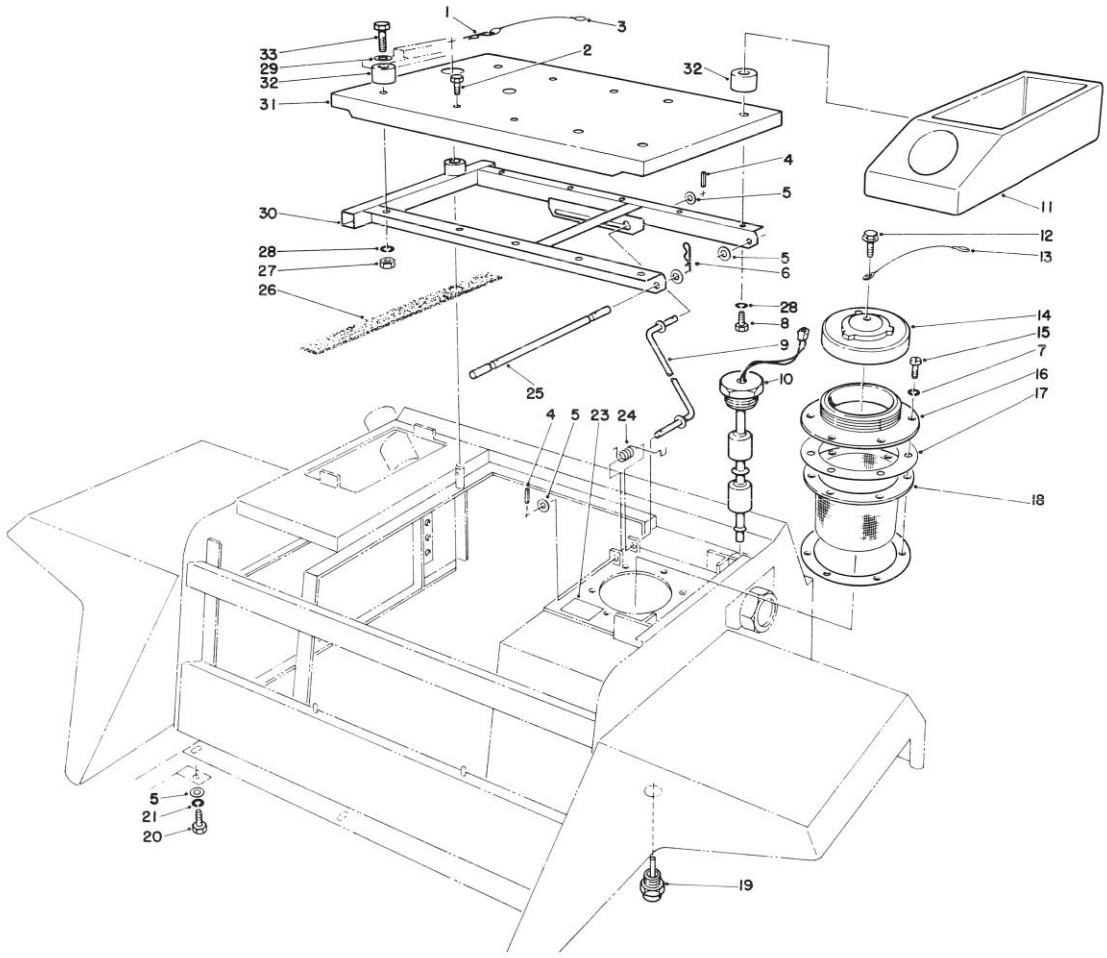
T-0126-89

AIR CLEANER ASSEMBLY

Ref. No.	Part No.	Description	No. Used
1	27-7150	Cup Assembly	1
2	27-7140	Baffle	1
3	27-7120	Nut	1
4	27-7130	Clamp Assembly	1
5	32107-11	Nut — Square	2
6	3258-19	Screw — Machine	2
7	27-7170	Band Assembly (Incl. Ref. #5 & 6)	2
8	27-7110	Element Assembly	1

Ref. No.	Part No.	Description	No. Used
9†		Housing	1
10	62-6300	Sleeve Assembly	1
11	33-1270	Bowl	1
12	33-1260	Cover Assembly	1
*	48-7430	Pre-Cleaner Assembly (Incl. Ref. #10-12)	1
*	48-4220	Air Filter Assembly (Incl. Ref. #1-4, 8-9)	1
*	27-7220	Air Cleaner Soap	1

* Not Illustrated
† Not Serviceable Separately.



T-0127-89

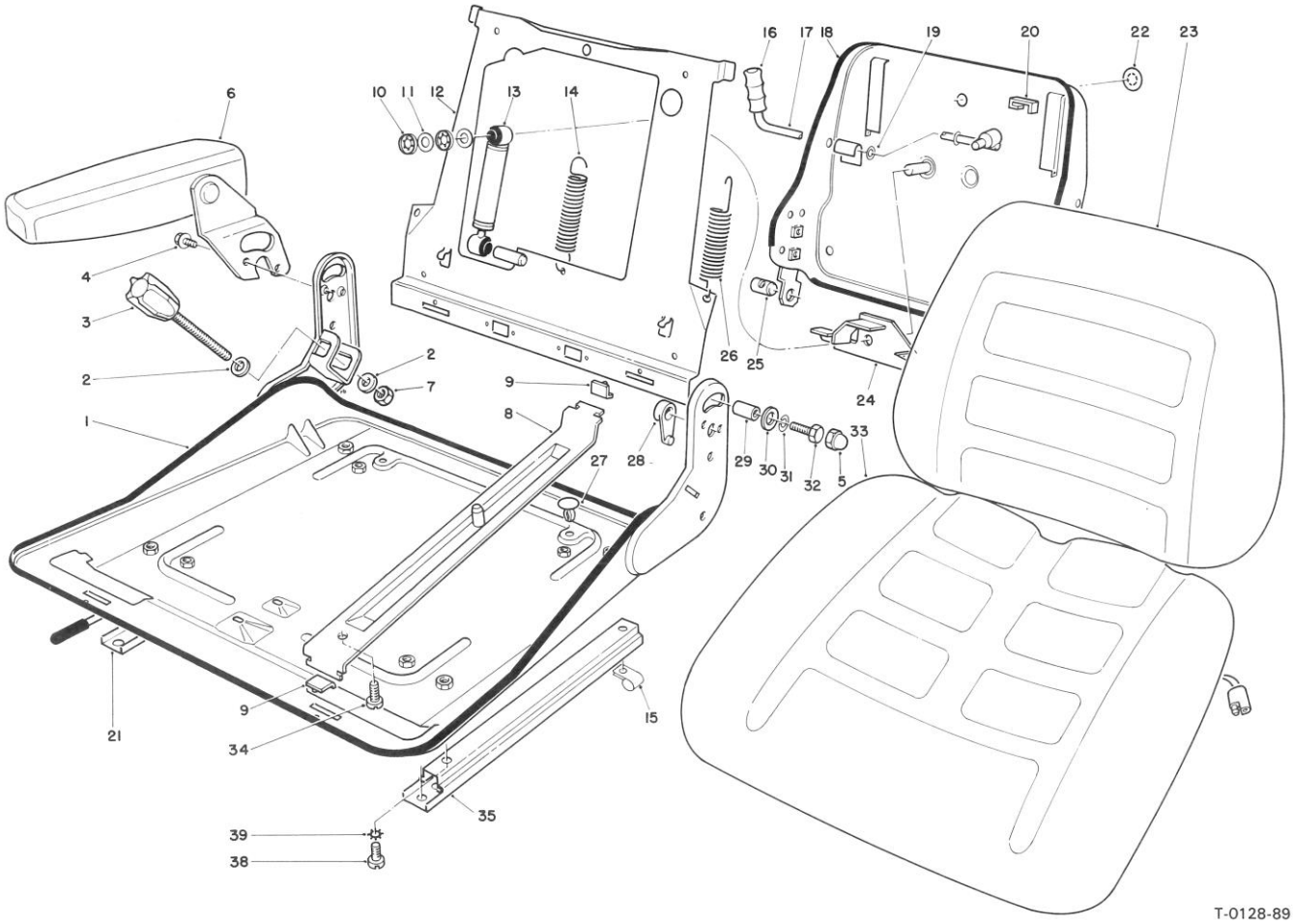
SEAT PLATFORM & FILLER CAP ASSEMBLY

Ref. No.	Part No.	Description	No. Used
1	3390-355	Clip — Retaining	1
2	48-7710	Capscrew	2
3	60-2160	Wire — Retaining (Incl. Ref. #1)	1
4	3272-11	Pin — Cotter	2
5	48-9580	Washer	6
6	3290-250	Hairpin — Cotter	2
7	3253-15	Lockwasher	6
8	322-5	Capscrew	4
9	58-1650	Rod — Seat	1
10	60-4170	Switch — Oil Level	1
11	58-6980	Service — Console	1
12†		Screw — Washer Face	1
13†		Wire — Tie	1
14†		Cap	1
15	60-6500	Screw	6
16†		Ring	1
17	58-6820	Gasket	2
18†		Screen	1
19	60-5580	Switch — Temperature	1

Ref. No.	Part No.	Description	No. Used
20	48-7780	Capscrew	2
21	48-9590	Lockwasher	2
23	58-6530	Decal — Hydraulic Oil	1
24	60-0050	Spring	1
25	58-1640	Pin — Seat Pivot	1
26	68-7850	Strip — Foam	1
27	48-7930	Nut — Hex	6
28	48-9570	Lockwasher	10
29	48-8030	Washer	4
30	58-1580	Frame Assembly — Seat	1
31	58-9830	Plate — Seat	1
32	26-4840	Spacer	8
33	48-7730	Capscrew	4
*	58-6800	Filler Cap Assembly (Incl. Ref. #12-14 & 16-18)	1
*	68-7660	Foam — Seat Tray (Rear)	1
*	68-7670	Foam — Seat Tray (Front)	1
*	68-7680	Foam — Seat Tray (Center)	1

* Not Illustrated

† Not Serviceable Separately.

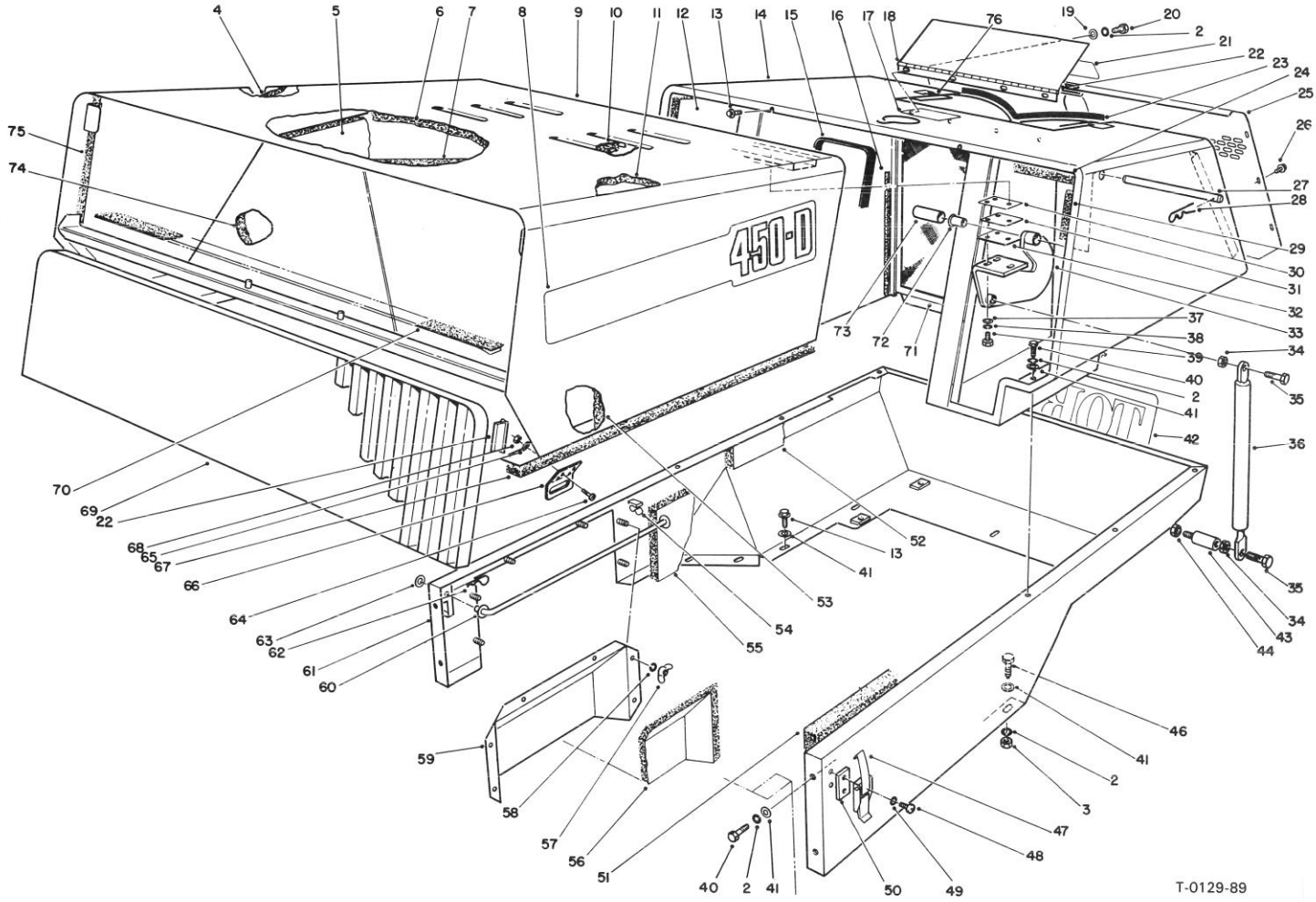


SUSPENSION SEAT ASSEMBLY

Ref. No.	Part No.	Description	No. Used
1	56-3810	Seat Platform	1
2	56-3880	Washer Flat	2
3	56-3870	Adjustment Knob	1
4	56-3850	Screw — Hex Hd. Machine	4
5	56-3960	Cover — Screw Hex Hd. Machine	4
6	55-4660	Arm Rest Assembly	2
7	56-3890	Nut — Hex	1
8	56-3970	Seat — Carrier	2
9	56-3980	Clip — Rail	4
10	56-4080	Axle Clamp	2
11	39-9500	Washer — Flat	2
12	56-4040	Back Plate	1
13	62-7670	Seat Shock Absorber	1
14	56-4050	Extension Spring	1
15	2412-67	R-Clamp	1
16		Grip — Cover	1
17	56-4150	Lever — Handle (Incl. #16)	1
18	56-3820	Seat Platform Back	1
19	56-4160	Washer — Flat	2
20	56-4130	Bumper	2

Ref. No.	Part No.	Description	No. Used
21	40-3790	Bottom Rail Assy. R.H.	1
22	56-4120	Cover	1
23	56-3800	Seat Cushion — Back	1
24	56-4100	Lever — Bracket	1
25	56-4170	Clevis — Pin	1
26	56-4060	Extension — Spring	1
27	56-4190	Seat Cap	2
28	56-3900	Spacer Arm Left	1
*	56-3910	Spacer Arm Right	1
29	56-3920	Bushing	4
30	56-3930	Washer — Flat	4
31	56-3940	Washer — Lock	4
32	56-3950	Capscrew — Hex Hd.	4
33	56-3790	Seat Cushion — Bottom	1
34	56-3990	Machine Screw	2
35	40-3820	Bottom Rail Assembly L.H.	1
38	56-4020	Machine Screw	4
39	56-4030	Washer — Lock	4
*	55-8420	Seat Assembly (Incl. Ref. #1-3, 5, 7-14, 16-35 & 38-39)	1

*Not Illustrated

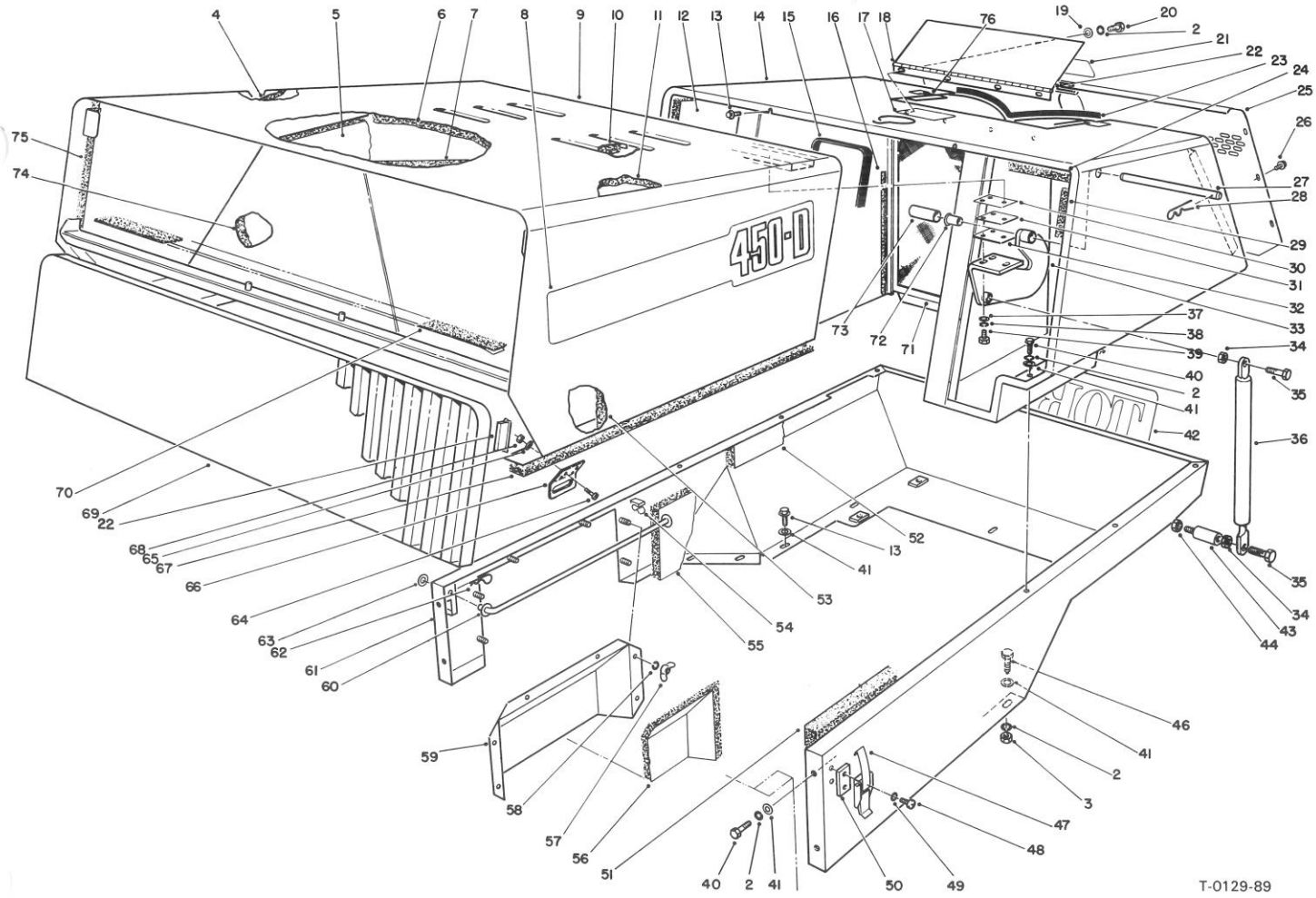


FRONT & REAR CANOPY ASSEMBLY

Ref. No.	Part No.	Description	No. Used
2	48-8020	Lockwasher	19
3	48-7890	Nut — Hex	1
4	68-7830	Lining — Foam, R.H.	1
5	68-7730	Lining — Foam	1
6	68-7710	Lining — Foam	1
7	68-7720	Lining — Foam	1
8	58-5930	Decal — 450D	2
9	68-6080	Canopy — Front	1
10	68-7700	Lining — Foam	2
11	68-7820	Lining — Foam, L.H.	1
12	68-7750	LIning — Foam, R.H.	1
13	48-6900	Screw — Self-Tapping	9
14	58-4220	Canopy — Rear	1
15	60-3770	Strip — Sealing, L.H.	1
*	60-3760	Strip — Sealing, R.H.	1
16	68-7570	Strip — Sealing	A/R
17	58-6940	Decal — Coolant	1
18	58-5270	Hinge — Lid	1
19	3256-16	Washer	6
20	48-7610	Bolt	4
21	49-2280	Decal — Diesel Fuel	1
22	58-4250	Latch — Magnetic	3

Ref. No.	Part No.	Description	No. Used
23	58-7820	Strip — Edge	2
24	68-7760	Lining — Foam, L.H. Rear Canopy	1
*	68-7770	Lining — Foam, R.H. Rear Canopy	1
25	72-0260	Grill — Rear	1
26	58-5300	Screw — Self-Tapping	10
27	58-3910	Pin — Hinge	2
28	3290-355	Pin	2
29	68-7740	Lining — Foam, L.H.	1
30	58-5330	Spacer	2
31	58-5340	Spacer	2
32	58-5350	Sapcer	2
33	58-1970	Plate — Hinge, L.H.	1
*	58-1980	Plate — Hinge, R.H.	1
34	48-7930	Nut — Hex	4
35	60-6750	Bolt	4
36	58-7220	Spring — Gas	2
37	48-8030	Washer	6
38	48-9570	Lockwasher	6
39	48-9460	Bolt	6
40	48-7620	Bolt	10

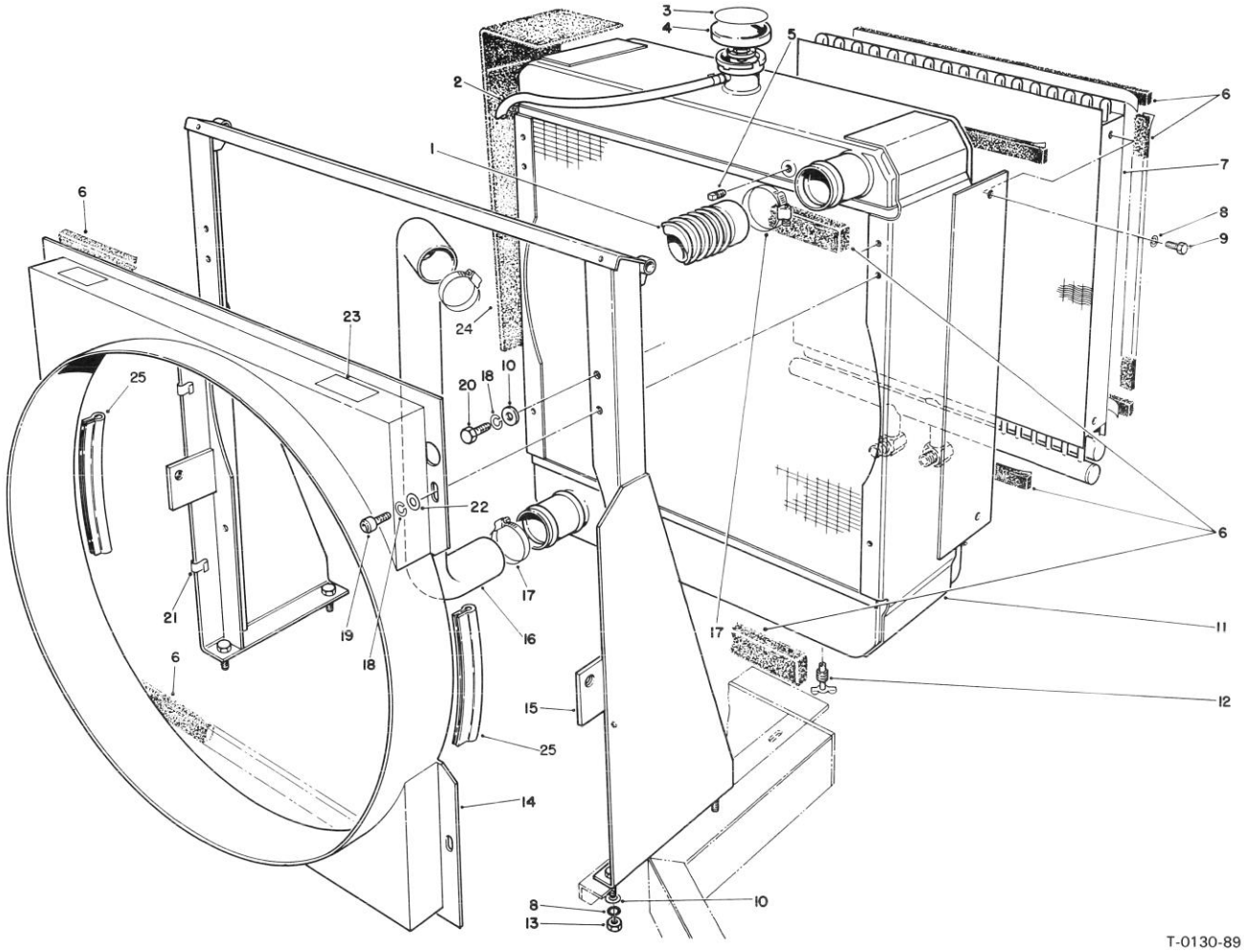
*Not Illustrated



FRONT & REAR CANOPY ASSEMBLY (Continued)

Ref. No.	Part No.	Description	No. Used
41	3256-16	Washer	18
42	66-6140	Decal — Toro	1
43	58-2740	Stud	2
44	60-6770	Nut — Hex	2
46	48-7630	Screw	1
47	58-5380	Latch — Spring Draw	2
48	3250-25	Screw	4
49	3253-2	Lockwasher	4
50	58-7070	Spacer	2
51	68-7630	Lining — Foam	1
52	68-7620	Lining — Foam	1
53	68-7780	Lining — Foam	1
54	60-0930	Clip	1
55	68-7650	Lining — Foam	1
56	68-7640	Lining — Foam	1
57	60-3580	Wing Nut	6
58	3253-3	Lockwasher	6
59	58-8030	Cover	1

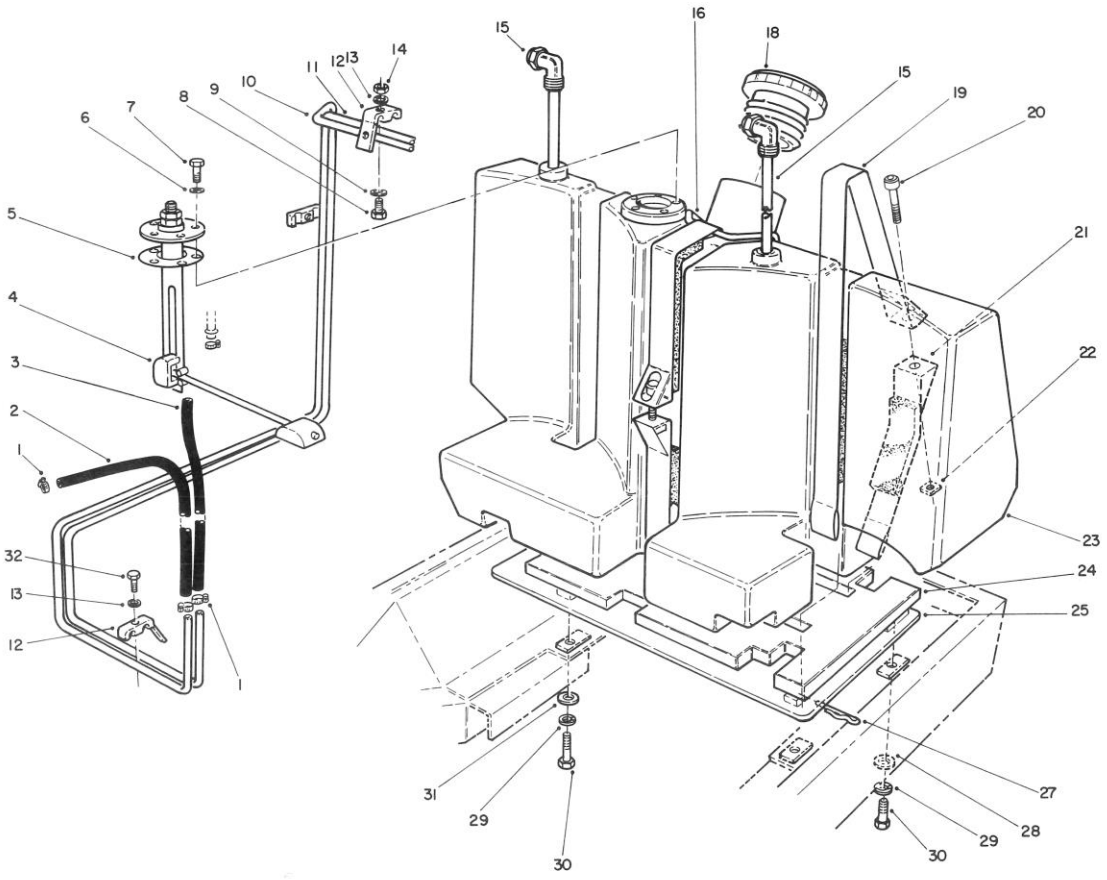
Ref. No.	Part No.	Description	No. Used
60	60-0880	Prop Assembly	1
61	58-1230	Body — Lower	1
62	3290-467	Clip	1
63	48-9580	Washer	1
64	3250-31	Capscrew	10
65	3256-21	Washer — Flat	8
66	68-6040	Bracket — Latch	2
67	68-7860	Strip — Foam	2
68	3296-27	Nut — Hex	10
69	58-4230	Grill — Front	1
70	68-7880	Strip — Foam	1
71	68-7900	Screen	1
72	58-3930	Bushing — Flanged	2
73	58-3940	Tube — Spacer	2
74	68-7690	Lining — Foam	1
75	68-7790	Lining — Foam	1
76	52-9590	Latch — Assembly	2



RADIATOR & OIL COOLER ASSEMBLY

Ref. No.	Part No.	Description	No. Used
1	60-3700	Hose — Flexible	1
2	60-3680	Hose — Overflow	1
3	59-8440	Decal — Warning	1
4	58-5420	Cap — Radiator 13 PSI	1
5	281-2	Plug	1
6	68-7570	Sealing Strip	A/R
7	58-5540	Cooler — Hyd. Oil	1
8	48-9570	Lockwasher	8
9	48-7680	Capscrew	4
10	48-8030	Washer	6
11	58-5410	Radiator (Incl. Ref. 12)	1
12	304-46	Plug — Drain	1
13	48-7930	Nut	4

Ref. No.	Part No.	Description	No. Used
14	58-1190	Shroud	1
15	58-1840	Frame	1
16	58-8100	Hose	1
17	48-6020	Clamp	4
18	3253-4	Lockwasher	6
19	3274-10	Socket Hd. Capscrew	4
20	322-3	Capscrew	2
21	60-0930	Clip	2
22	3256-71	Washer	4
23	54-0890	Decal — Rotating	2
24	68-7870	Lining — Radiator	1
25	69-9725	Strip — Sealing	2

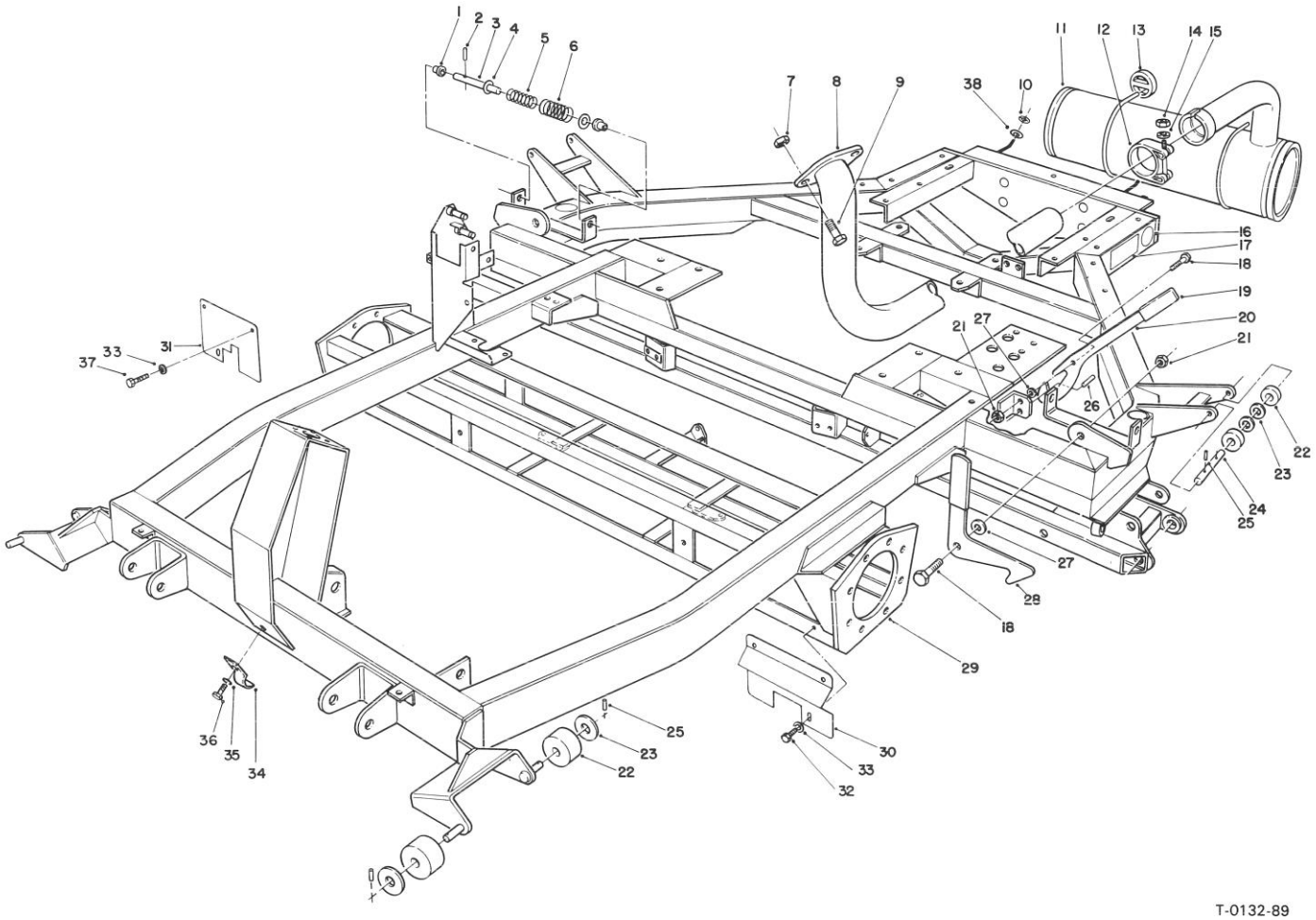


T-0131-89

FUEL TANK ASSEMBLY

Ref. No.	Part No.	Description	No. Used
1	60-3570	Hose — Clamp	4
2	60-3550	Hose — Return	1
3	60-3560	Hose — Delivery	1
4	60-2210	Sender — Fuel	1
5	62-7650	Gasket	1
6	3253-2	Lockwasher	5
7	3252-18	Screw	5
8	48-7630	Screw	2
9	48-8010	Washer — Flat	2
10	58-4610	Tube — Return	1
11	58-4600	Tube — Delivery	1
12	58-4630	Clamp	3
13	48-8020	Lockwasher	3
14	48-7890	Nut — Hex	2
15	72-0250	Fuel Pipe Assembly	2

Ref. No.	Part No.	Description	No. Used
16	13-6319	Strap Assembly w/Foam	1
18	72-0090	Cap — Fuel Tank	1
19	13-6329	Strap Assembly w/Foam	2
20	3274-62	Capscrew	4
21	13-6339	Strap Assembly w/Foam	4
22	32107-1	Nut — Square	4
23	72-0010	Tank — Fuel	1
24	72-0110	Pad — Fuel Tank	1
25	72-0040	Plate — Fuel Tank	1
27	3290-355	Cotter Pin	6
28	3256-27	Washer — Flat	2
29	48-9570	Lockwasher	4
30	48-7730	Bolt	4
31	48-8030	Washer — Flat	2
32	48-6900	Screw	1



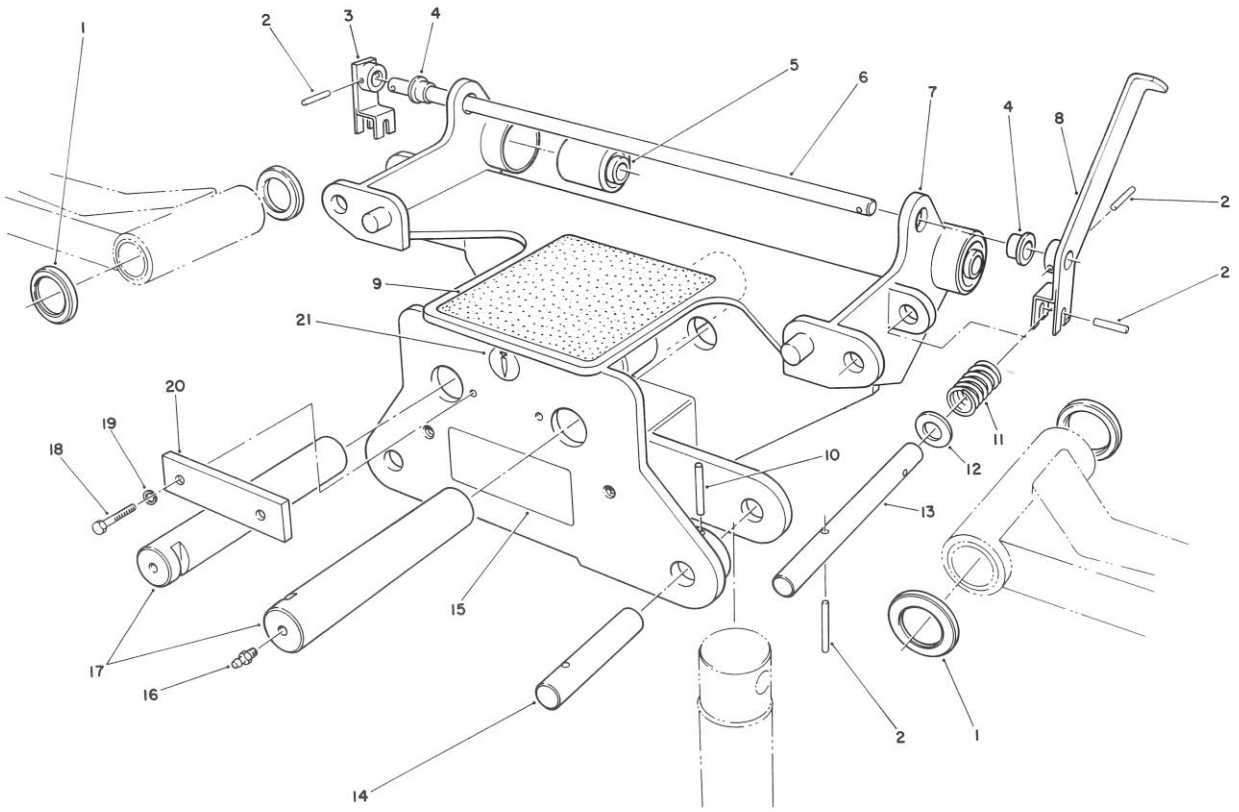
T-0132-89

CHASSIS & MUFFLER ASSEMBLY

Ref. No.	Part No.	Description	No. Used
1	58-2800	Bushing	4
2	60-3720	Roll Pin	2
3	58-2810	Rod	2
4	3256-7	Washer	4
5	48-6780	Spring	2
6	60-1240	Spring	2
7	60-6660	Nut — Hex	2
8	58-2570	Tube — Exhaust	1
9	48-9470	Bolt	2
10	60-1670	Spring Nut	2
11	58-2490	Muffler	1
*†	59-7460	Muffler (Spark Arrester)	1
12	60-1980	Clamp (Incl. Ref. #14 & 15)	1
13	60-0750	Mount — Rubber	2
14††		Nut	1
15††		Washer	1
16	58-6520	Decal — Grease	3
17	58-5910	Decal — Tire Pressure	2
18	60-6870	Bolt	3
19	48-7080	Cap	3

Ref. No.	Part No.	Description	No. Used
20	58-3800	Lever	1
21	51-2070	Nut	3
22	60-0120	Roller	8
23	51-2060	Washer	8
24	60-0160	Pin — Roller, Rear	2
25	60-2110	Roll Pin	8
26	48-8830	Roll Pin	1
27	48-8850	Washer — Bevel	3
28	48-8540	Lever	2
29	58-0330	Chassis	1
30	60-4190	Grass Shield — L.H.	1
31	60-4200	Grass Shield — R.H.	1
32	48-6900	Screw — Hex Hd.	3
33	48-8010	Washer	4
34	60-2080	Clamp — Hose	1
35	48-9570	Lockwasher	1
36	48-7680	Capscrew — Hex Hd.	1
37	48-6000	Screw — Self Tapping	3
38	3256-4	Washer — Flat	2

* Not Illustrated
† Optional
†† Not Serviceable Separately.

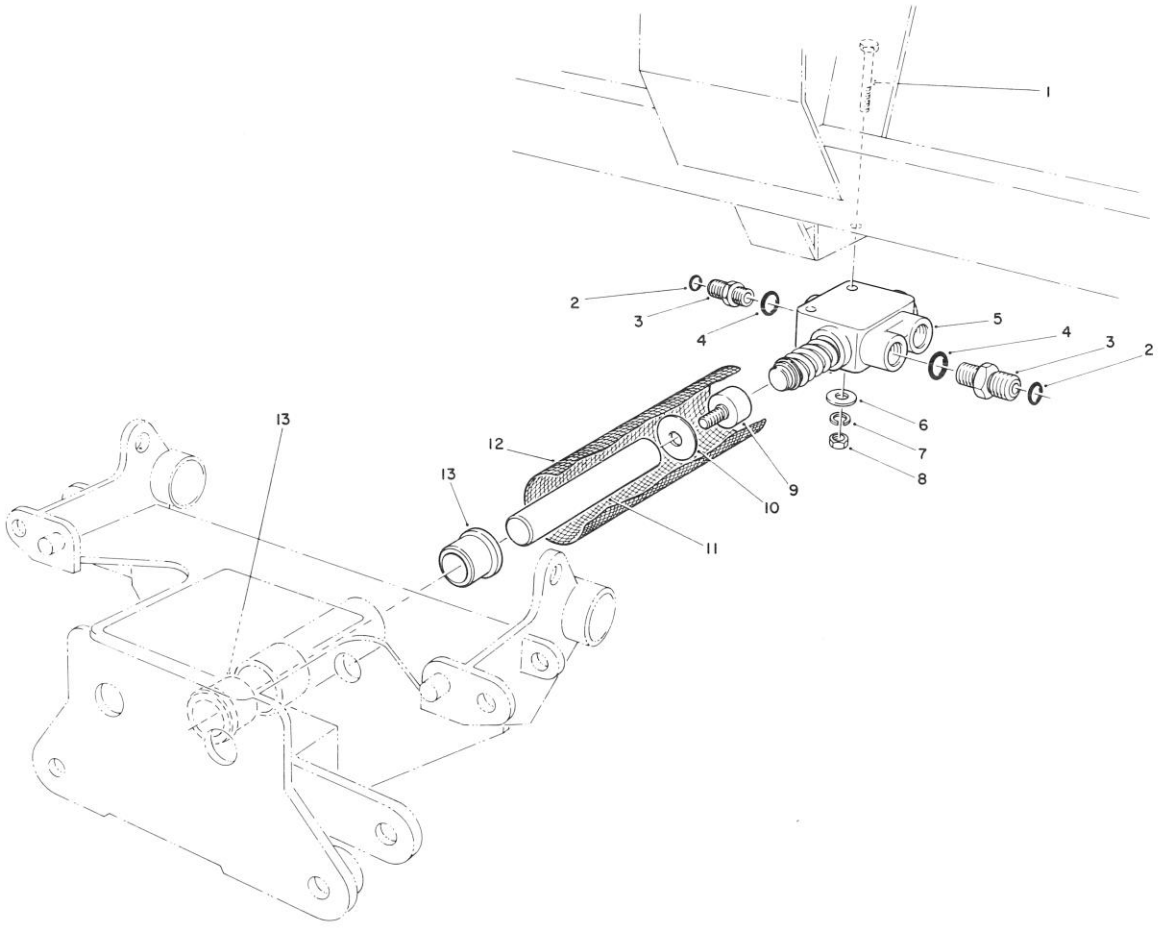


T-0133-89

FRONT CARRIER ASSEMBLY

Ref. No.	Part No.	Description	No. Used
1	48-6660	Washer — Thrust	4
2	60-2000	Pin — Dowel	6
3	60-1750	Lever — R.H.	1
4	60-1990	Bushing — Flange	2
5	47-7010	Bushing	2
6	60-1820	Shaft — Pivot	1
7	60-0070	Carrier — Front	1
8	60-1780	Lever — L.H.	1
9	58-6990	Pad — Step	1
10	60-1270	Pin — Spirol	2
11	60-0670	Spring — Compression	2

Ref. No.	Part No.	Description	No. Used
12	51-2060	Washer	2
13	60-1830	Rod — Latch	2
14	58-2720	Pin — Cylinder Mount	2
15	63-4380	Decal — Towing	1
16	302-5	Fitting — Grease	2
17	60-0090	Pin Lift Arm Pivot	2
18	48-7700	Screw — Cap Hex Hd.	2
19	48-9570	Washer — Lock	2
20	60-0190	Retainer	1
21	58-6520	Decal — Grease	1

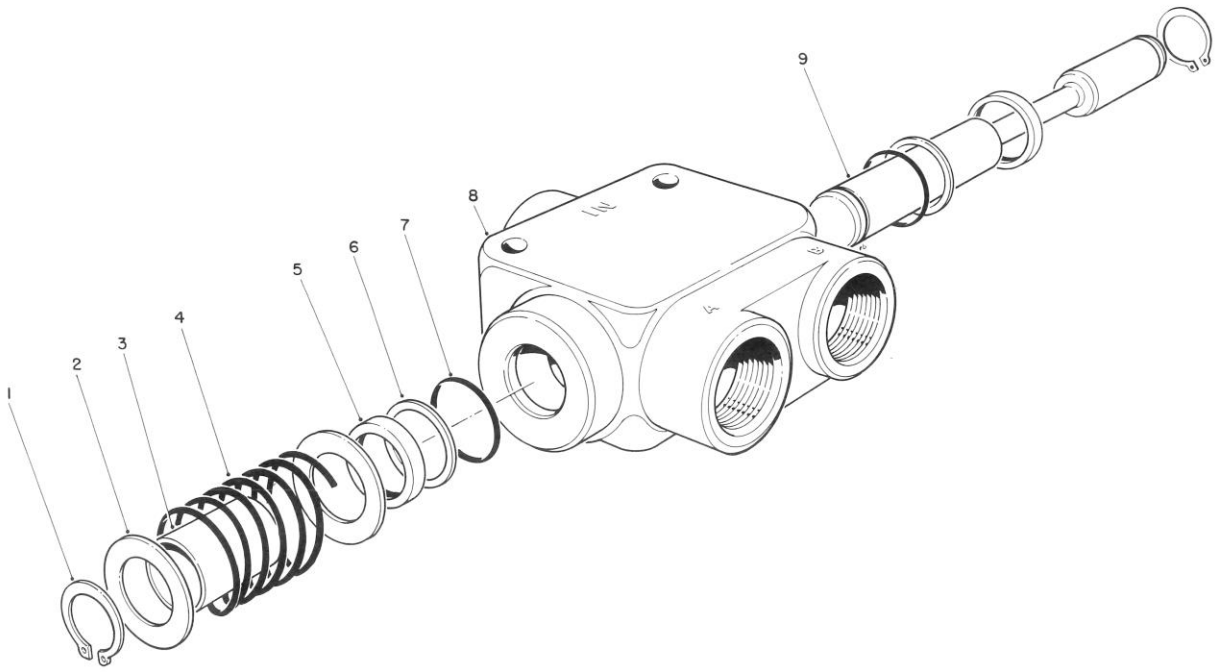


T-0134-89

PUSH ROD ASSEMBLY

Ref. No.	Part No.	Description	No. Used
1	60-6690	Screw — Cap Hex Hd.	2
2	237-65	O-Ring	3
3	340-7	Fitting — Straight (Incl. Ref. #2 & 4)	3
4	237-80	O-Ring	3
5	58-5460	Valve — Shutoff	1
6	48-8030	Washer	2

Ref. No.	Part No.	Description	No. Used
7	48-9570	Washer — Spring	2
8	48-7930	Nut	2
9	59-7140	Bumper	1
10	3256-68	Washer	A/R
11	60-0300	Rod	1
12	58-9620	Cover — Cordura	1
13	48-6640	Bushing — Flange	2



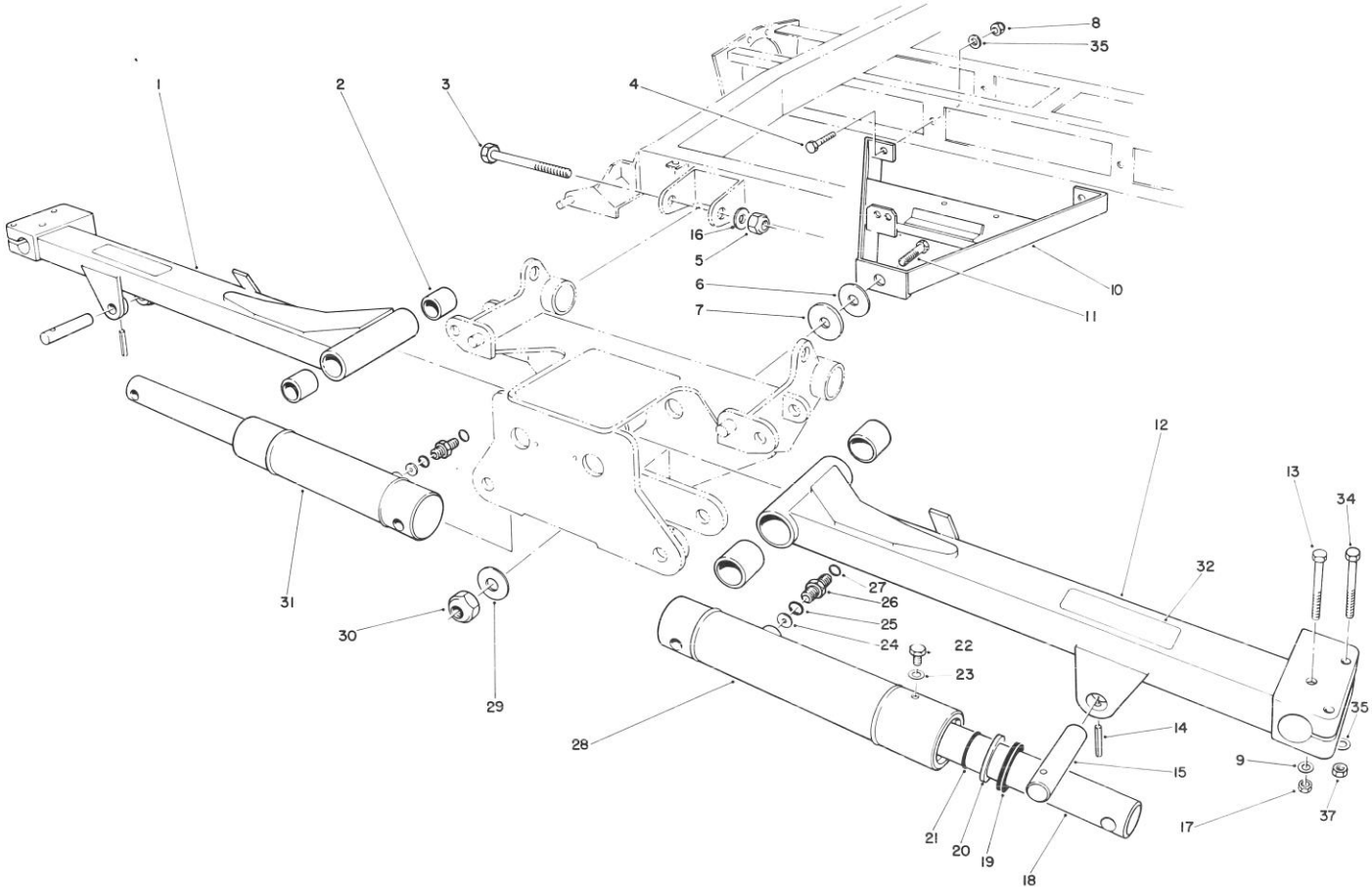
T-0135-89

REEL SHUT-OFF VALVE NO. 58-5460

Ref. No.	Part No.	Description	No. Used
1	59-7810	Circlip	2
2	59-7820	Washer	2
3†		Spacer	1
4	59-7840	Spring	1
5	59-7850	Wiper	2

Ref. No.	Part No.	Description	No. Used
6	59-7860	Back-Up Washer	2
7	59-7780	O-Ring	2
8†		Body	1
9†		Spool	1
*	59-7890	Seal Kit (Incl. Ref. #1, 5, 6 & 7)	1

* Not Illustrated
† Not Serviceable Separately.



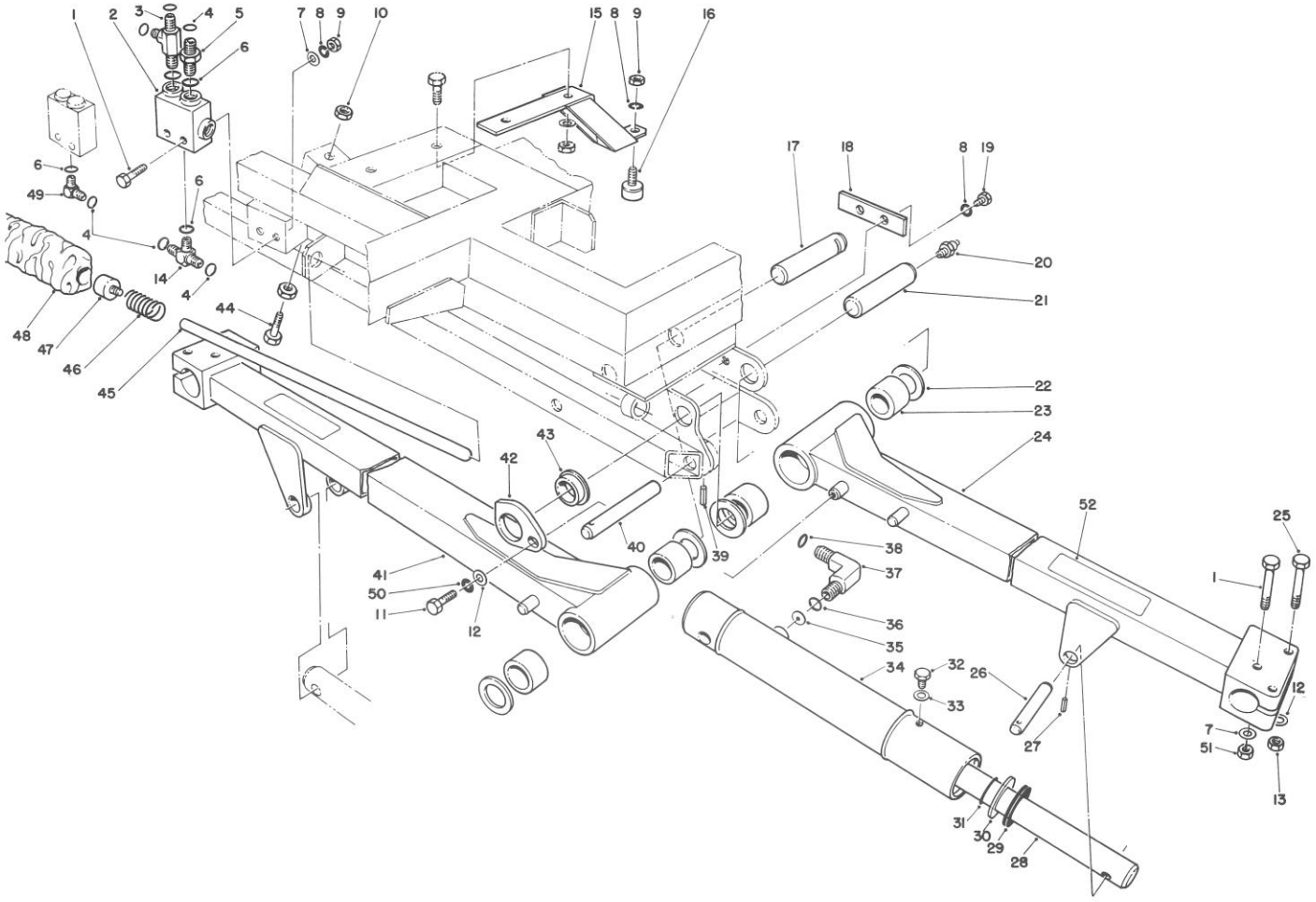
T-0136-89

NO. 2 & 3 LIFT ARMS ASSEMBLY

Ref. No.	Part No.	Description	No. Used
1	60-0230	No. 3 Lift Arm (Incl. Ref. #2)	1
2	60-0110	Bushing	4
3	48-9260	Bolt	2
4	48-9470	Bolt	2
5	3296-23	Nut — Lock	2
6	52-6180	Washer	AR
7	60-3250	Washer — Rubber	1
8	48-9520	Nut — Lock	2
9	48-8030	Washer	2
10	60-0440	A-Frame	1
11	48-7580	Bolt	1
12	60-0220	No. 2 Lift Arm (Incl. Ref. #2)	1
13	60-6690	Bolt	2
14	60-1280	Roll Pin	2
15	58-4380	Pivot — Pin	2
16	3256-26	Washer	2
17	48-9510	Nut — Hex Lock	2
18†		Rod	2
19	60-3630	Wiper	2

Ref. No.	Part No.	Description	No. Used
20	60-3620	Seal	2
21	60-3610	Snap — Ring	2
22	60-3660	Screw — Bleed	2
23	60-3650	Washer	2
24	59-7340	Orifice (.041)	2
25	237-42	O-Ring	2
26	340-2	Adapter (Incl. Ref. #25 & 27)	2
27	237-22	O-Ring	2
28†		Barrel — Cylinder	2
29	48-9600	Washer	1
30	48-9540	Nut	1
31	58-5450	Cylinder — Complete (Incl. Ref. #18-24 & 28)	2
32	61-3610	Decal	2
34	48-7570	Bolt	4
35	48-9580	Washer	6
37	48-9520	Nut — Hex Lock	4
*	62-6370	Seal Kit — Lift Cylinder (Incl. Ref. #19-21 & 23)	1

* Not Illustrated
† Not Serviceable Separately.



T-0137-89

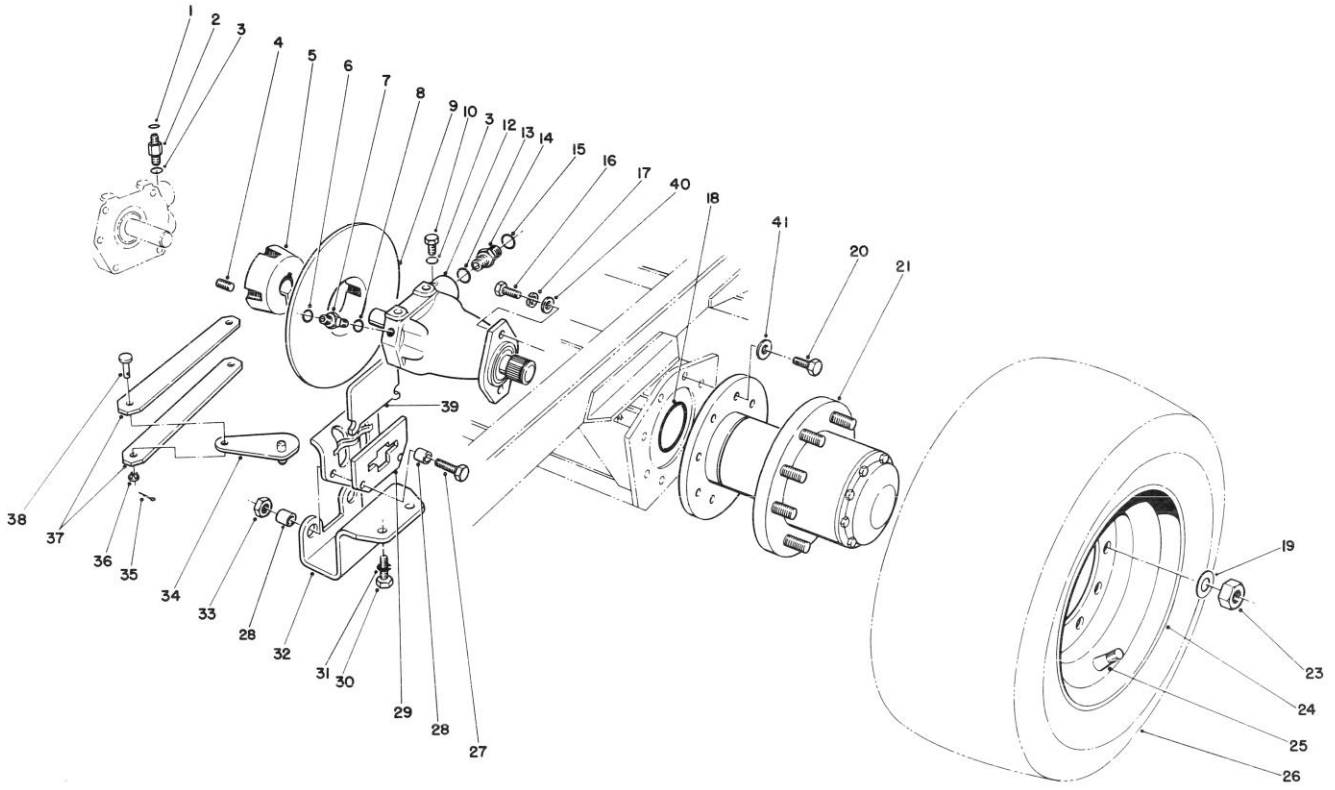
NO. 1, 4 & 5 LIFT ARMS ASSEMBLY

Ref. No.	Part No.	Description	No. Used
1	60-6690	Bolt	7
2	58-5460	Valve — Shut-off	2
3	340-22	Fitting — Tee (Incl. Ref. #4 & 6)	2
4	237-65	O-Ring	9
5	340-7	Fitting (Incl. Ref. #4 & 6)	2
6	237-80	O-Ring SAE	6
7	48-8030	Washer	7
8	48-9570	Lockwasher	8
9	48-7930	Nut — Hex	4
10	48-9530	Nut — Hex	2
11	48-7780	Bolt	2
12	48-9580	Washer	8
13	48-9520	Nut — Lock	6
14	340-93	Fitting — Tee (Incl. Ref. #4 & 6)	1
15	60-1050	Bracket	2
16	48-3280	Bumper	2
17	60-0090	Pin — #1 Liftarm Pivot	1
18	60-0190	Retainer — #1 & 4 Pivot Pin	1
*	60-1640	Retainer — #5 Pivot Pin	1
19	48-7700	Bolt	4
20	302-5	Grease Fitting	3
21	60-0100	Pin — #4 & 5 Liftarm Pivot	2
22	48-6660	Washer	6
23	60-0110	Bushing	6
24	60-0240	Lift Arm No. 4 (Incl. Ref. #23)	1
25	48-7570	Bolt	6
26	58-4380	Pivot — Pin	3
27	60-1280	Roll Pin	3
28†		Rod	3
29	60-3630	Wiper	3

Ref. No.	Part No.	Description	No. Used
30	60-3620	Seal	3
31	60-3610	Snap — Ring	3
32	60-3660	Screw — Bleed	3
33	60-3650	Washer	3
34†		Barrel — Cylinder	3
35	59-7340	Orifice (.041)	3
36	237-42	O-Ring SAE	3
37	340-77	Fitting (Incl. Ref. #36 & 38)	3
38	237-22	O-Ring	3
39	60-1270	Roll Pin	3
40	58-2720	Pivot — Pin	3
41	60-0210	Lift Arm No. 1 (Incl. Ref. #23)	1
42	58-9210	Cam	2
43	60-0080	Bushing — Flanged	2
44	53-5940	Bolt	1
45	60-1340	Rod — Push R.H.	1
*	60-1350	Rod — Push L.H.	1
46	58-3570	Spring — Compression	2
47	59-7140	Bumper	2
48	58-9630	Sleeve — Protector	2
49	340-17	Fitting (Incl. Ref. #4 & 6)	1
50	48-9590	Lockwasher	2
51	48-9510	Nut — Hex Lock	3
52	61-3610	Decal	3
*	58-5450	Cylinder — Lift, Complete (Incl. Ref. #28-35)	3
*	60-0250	Lift Arm No. 5 (Incl. Ref. #23)	1
*	62-6370	Seal Kit — Lift Cylinder (Incl. Ref. #29-31 & 33)	1

* Not Illustrated

† Not Serviceable Separately.



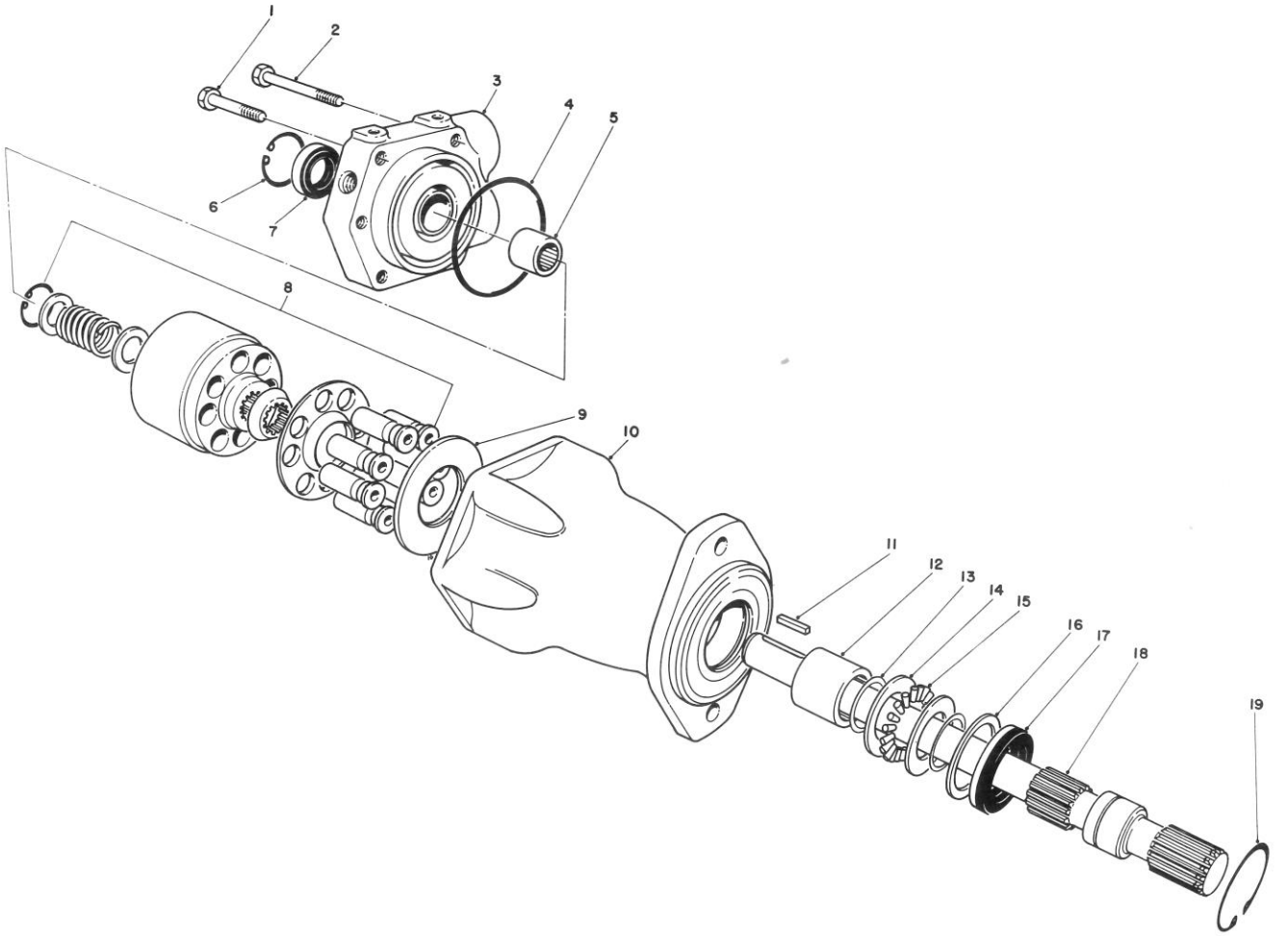
T-0138-89

TRACTION DRIVE ASSEMBLY

Ref. No.	Part No.	Description	No. Used
1	237-21	O-Ring	2
2	340-90	Fitting (Incl. Ref. #1 & 3)	2
3	237-118	O-Ring	4
4	3247-10	Set Screw	4
5	23-1840	Bushing (Incl. Ref. #4)	2
6	237-22	O-Ring	2
7	340-2	Fitting (Incl. Ref. #6 & 8)	2
8	237-42	O-Ring	2
9	58-0070	Brake Disc	2
10	353-948	Plug (Incl. Ref. #3)	2
12	58-5430	Motor — Wheel	2
13	237-81	O-Ring	4
14	340-9	Fitting (Incl. Ref. #13 & 15)	4
15	237-58	O-Ring	4
16	323-18	Bolt	4
17	3253-5	Lockwasher	4
18	353-949	O-Ring	2
19	60-6990	Washer	18
20	327-3	Bolt	16
21†	58-5530	Hub — Drive (High Speed Ratio 15.88:1)	2

Ref. No.	Part No.	Description	No. Used
21†	62-6400	Hub — Drive (Standard Speed Ratio 19.62:1)	2
23	3219-5	Nut — Hex	18
24	58-5610	Rim	2
25	58-5620	Tube — Inner	2
26	63-4480	Tire	2
27	323-20	Bolt	4
28	58-3780	Spacer	8
29	29-1060	Bracket	2
30	322-3	Bolt	4
31	3253-4	Lockwasher	4
32	58-0110	Bracket	2
33	3296-17	Nut — Lock	4
34	29-1070	Lever Assembly	2
35	3272-2	Cotter Pin	4
36	60-1740	Nut — Spring	4
37	58-2300	Link — Brake	4
38	60-1730	Pin — Clevis	4
39	58-0120	Pad	4
40	3256-3	Washer	4
41	3256-27	Washer	16

† Standard Speed Ratio has 19.62:1 Tag on Cover.



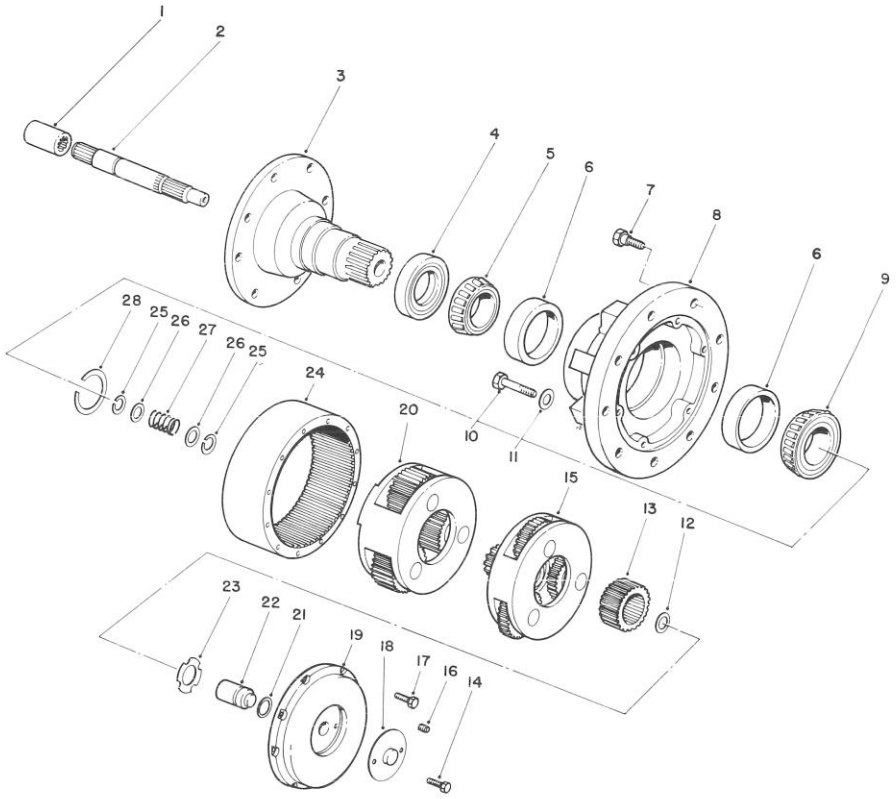
T-0139-89

WHEEL MOTOR NO. 58-5430

Ref. No.	Part No.	Description	No. Used
1	59-8290	Cap Screw	3
2	59-8280	Cap Screw	3
3	59-8270	Back Plate Assembly (Incl. Ref. #5)	1
4	59-8260	O-Ring	1
5	60-3590	Bearing	1
6†		Retaining Ring	1
7†		Shaft Seal	1
8	59-8340	Rotating Assembly	1
9	59-8350	Camplate Assembly	1
10	59-8300	Housing Assy. (Incl. Ref. #12)	1
11	59-8380	Key	1

Ref. No.	Part No.	Description	No. Used
12	60-3380	Bearing	1
13	32151-29	Retaining Ring	2
14	252-71	Thrust Race	1
15	252-66	Thrust Bearing	1
16	33-3720	Washer	1
17	59-8370	Shaft Seal	1
18	59-8360	Drive Shaft	1
19	32151-13	Retaining Ring	1
*	59-8390	Seal Repair Kit (Incl. Ref. #4, 6, 7, 13, 17 & 19)	1
*	66-5840	Seal Repair Kit (Incl. Ref. #6 & 7)	1

* Not Illustrated
* Not Serviceable Separately.



T-0140-89

PLANETARY GEAR DRIVE ASSEMBLY NO. 62-6400

(**58-5530 High Speed Ratio 15.88:1)

(††62-6400 Standard Speed Ratio 19.62:1)

Ref. No.	Part No.	Description	No. Used
1	60-3800	Coupling	1
2	60-3810	Input Shaft	1
3	60-3820	Spindle	1
4	60-3830	Oil Seal	1
5	60-3840	Bearing Cone	1
6	60-3850	Bearing Cup	2
7	60-3860	Wheel Bolt	9
8	60-3870	Hub	1
9	60-3880	Bearing Cone	1
10	60-3890	Hex Hd. Bolt	6
11	60-3910	Flat Washer	6
12	60-3980	Thrust Washer	1
13**	60-3970	Primary Sun Gear	1
13††	62-6430	Primary Sun Gear	1
14	60-4070	Hex Hd. Bolt	2
15**	60-3960	Primary Carrier Assembly	1

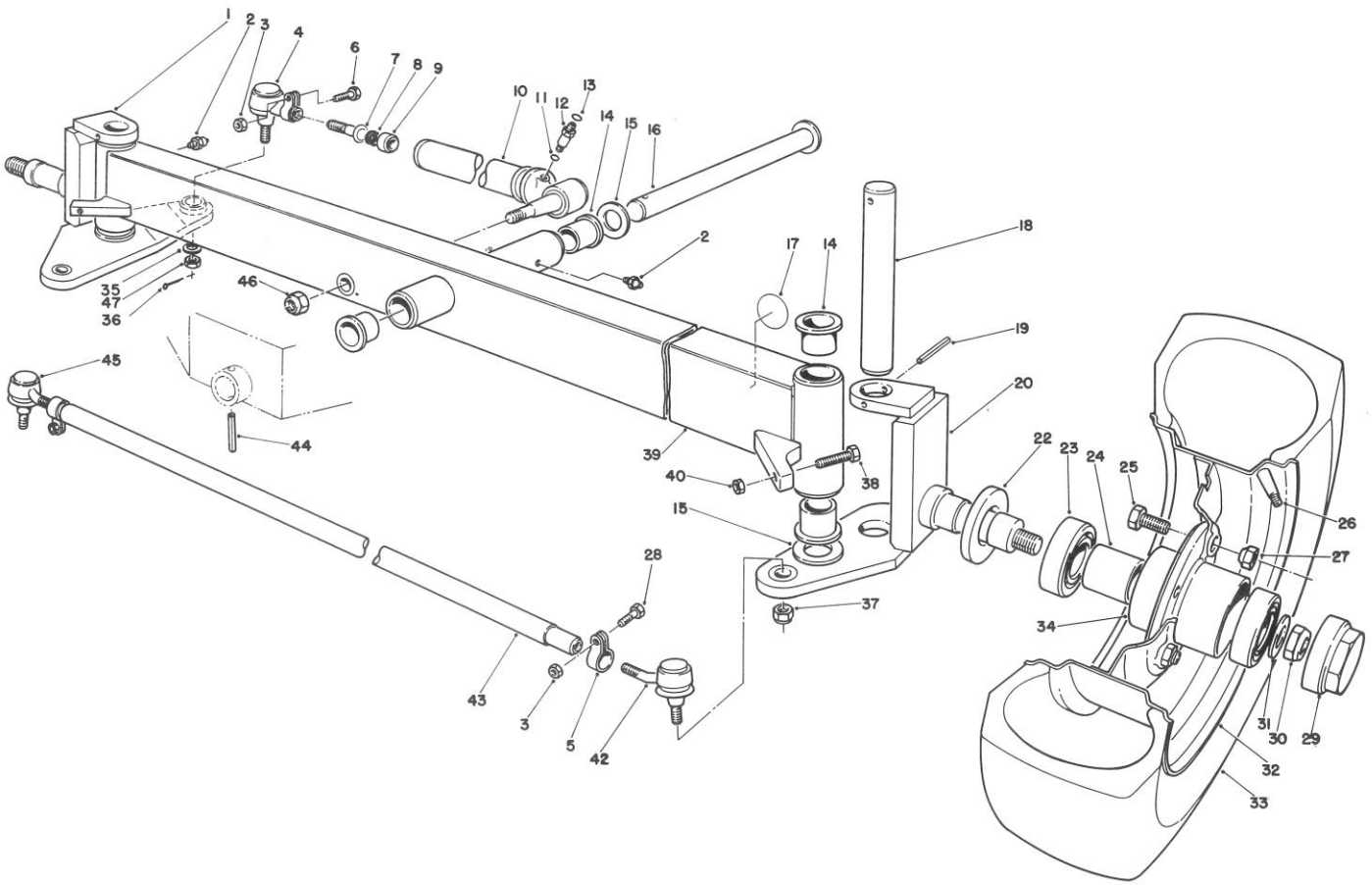
Ref. No.	Part No.	Description	No. Used
15††	62-6410	Primary Carrier Assembly	1
16	60-4040	Pipe Plug	1
17	60-4030	Hex Hd. Bolt	8
18	60-4060	Disengage Cover	1
19	60-4050	Large Cover	1
20**	60-4000	Secondary Carrier Assembly	1
20††	62-6420	Secondary Carrier Assembly	1
21	60-4020	"O" Ring	1
22	60-4010	Disengage Plunger	1
23	60-3990	Thrust Washer	1
24	60-3900	Ring Gear	1
25	60-3930	Retaining Ring	2
26	60-3940	Washer	2
27	60-3950	Disengage Spring	1
28‡	62-6450	Retaining Ring Kit	1
*	62-6460	Tube — RTV Sealant	1

* Not Illustrated

** Note: High Speed Ratio is 15.88:1

†† Note: Standard Speed Ratio is 19.62:1 and has Tag on Cover.

‡ Note: Incl. seven different thickness for service adjustment of Bearings.



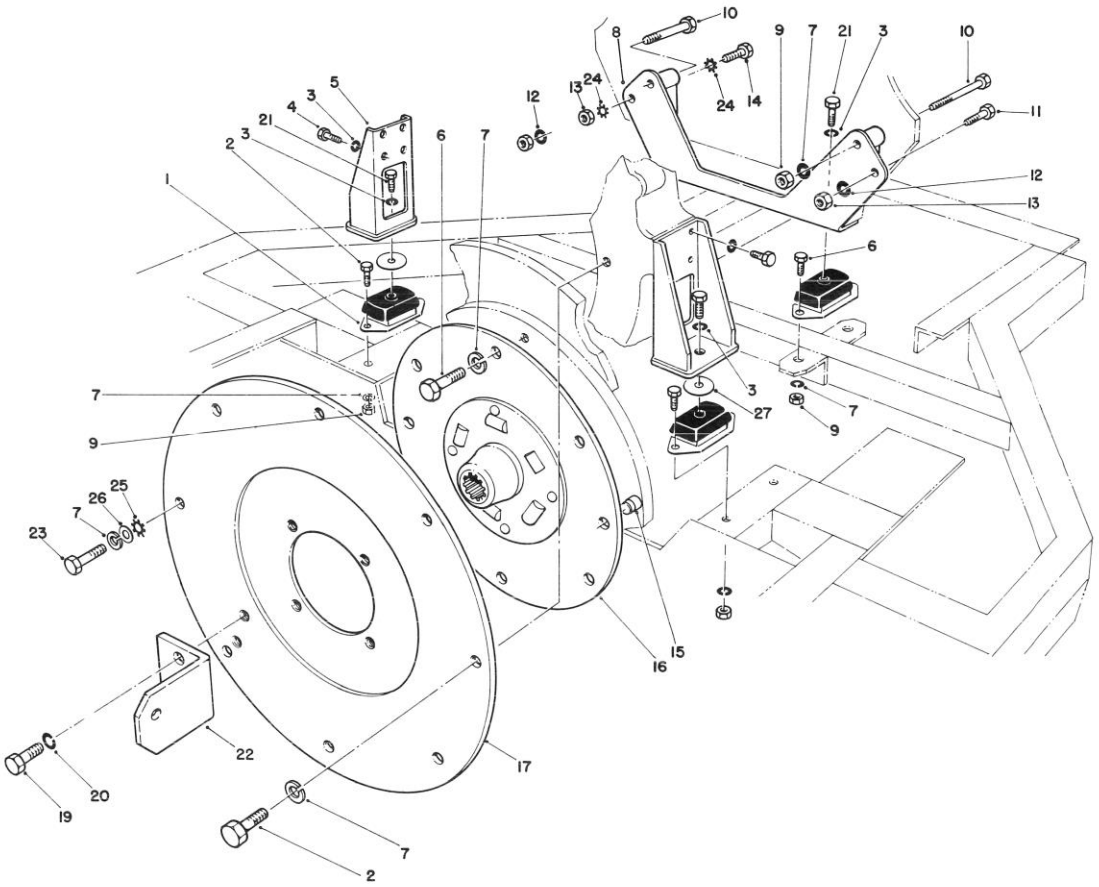
T-0141-89

STEERING AXLE

Ref. No.	Part No.	Description	No. Used
1	60-0860	Knuckle — Steering, R.H.	1
2	302-5	Grease Fitting	3
3	48-9510	Nut — Hex Lock	3
4	60-0870	Joint — Ball	1
5	48-8790	Clamp	2
6	48-7740	Bolt	1
7	60-3180	Ring	1
8	58-6320	Wiper	1
9	60-3200	Seal	1
10	58-5890	Cylinder — Steering	1
*	62-6360	Seal Kit (Incl. Ref. #7-9)	1
11	237-78	O-Ring	2
12	58-4530	Adaptor	2
13	237-22	O-Ring	2
14	48-6640	Bushing — Flanged	6
15	48-6660	Washer — Thrust	3
16	58-4330	Pin — Pivot	1
17	58-6520	Decal — Grease	2
18	58-9470	Pin — Steering Knuckle	2
19	60-1160	Pin — Spirol	2
20	60-0850	Knuckle — Steering, L.H.	1
22	51-1980	Seal	2
23	51-1990	Bearing	4
24	51-2000	Spacer — Bearing	2

Ref. No.	Part No.	Description	No. Used
25	51-2020	Stud — Wheel	10
26	232-27	Stem — Valve	2
27	51-2010	Nut — Lug	10
28	48-9430	Bolt	2
29	51-2030	Cap — Dust	2
30	53-6900	Nut — Axle	2
31	53-6890	Washer	2
32	58-5590	Rim	2
33	58-5570	Tire	2
34	58-9080	Hub Assembly (Incl. Ref. #22-25, 27 & 29-31)	2
35	51-2060	Washer	1
36	3272-13	Pin — Cotter	3
37	3296-28	Nut — Hex Lock	2
38	51-2050	Bolt	2
39	58-0310	Axle — Steering	1
40	48-9520	Nut — Hex Lock	2
42	48-8780	Pin — Ball, L.H. (Incl. Ref. #37)	1
43	48-8760	Track — Rod	1
44	60-3670	Pin — Expansion	1
45	48-8770	Pin — Ball, R.H. (Incl. Ref. #37)	1
46	3296-63	Nut — Hex Lock	1
47	32136-13	Nut — Castle	1

* Not Illustrated
† Not Serviceable Separately.

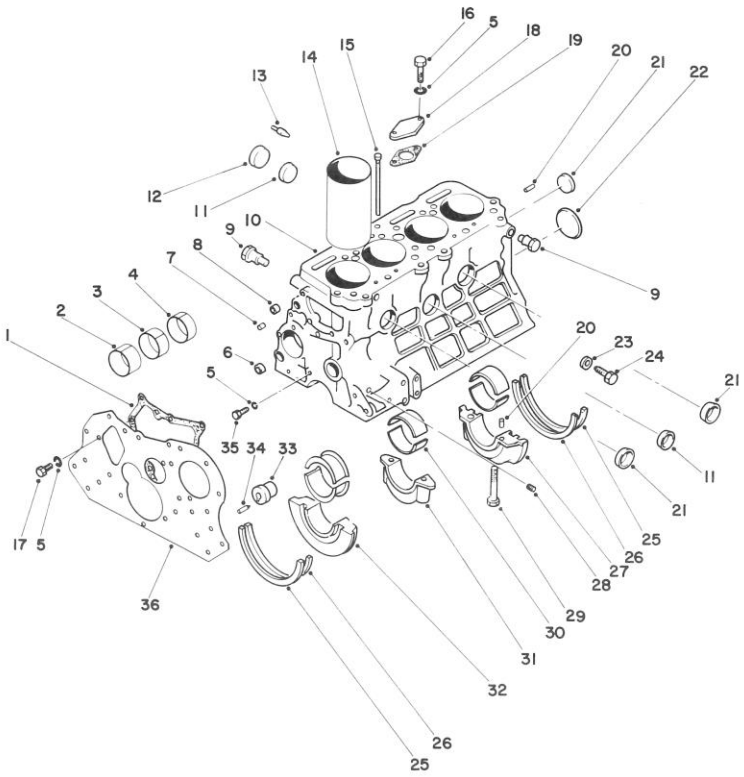


T-0142-89

ENGINE INSTALLATION ASSEMBLY

Ref. No.	Part No.	Description	No. Used
1	48-3250	Mount — Rubber	4
2	48-9470	Bolt	11
3	48-8070	Lockwasher	12
4	48-7830	Bolt	8
5	48-3380	Leg — Support	2
6	48-7780	Bolt	10
7	48-9590	Lockwasher	24
8	58-0660	Foot — Front	1
9	48-7960	Nut — Hex	10
10	48-7570	Bolt	2
11	48-9460	Bolt	1
12	48-9570	Lockwasher	2
13	48-7930	Nut — Hex	3

Ref. No.	Part No.	Description	No. Used
14	60-4540	Bolt	1
15	58-3590	Dowel	2
16	48-6260	Coupling — Spring Center	1
17	58-0320	Plate — Pump Adapter	1
19	3213-20	Bolt	2
20	3253-7	Lockwasher	2
21	60-6870	Bolt	4
22	60-1010	Lug — Angle	1
23	48-9480	Bolt	1
24	3255-8	Lockwasher	2
25	3255-9	Washer	1
26	48-9580	Washer	1
27	58-5100	Washer	2



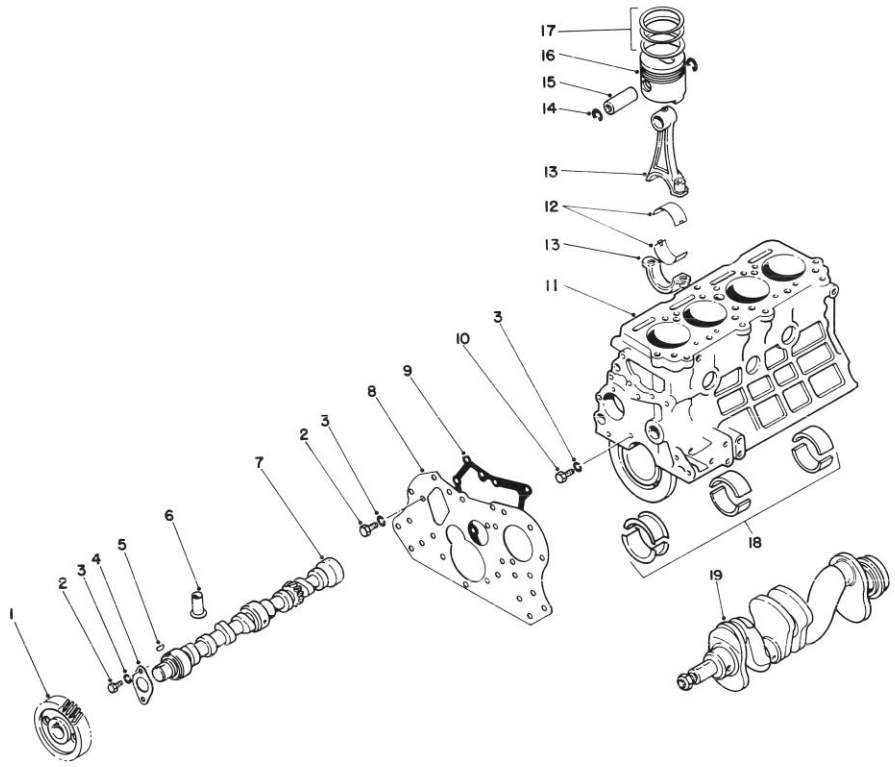
T-0143-89

CRANKCASE ASSEMBLY

Ref. No.	Part No.	Description	No. Used
1	51-5730	Gasket	1
2	51-5500	Bushing — Camshaft No. 1	1
3	51-5510	Bushing — Camshaft No. 2	1
4	51-5520	Bushing — Camshaft No. 3	1
5	51-7250	Washer	5
6	51-5530	Cap — Sealing	2
7	51-5540	Pin — Dowel Gear Case	2
8	51-5690	Cap	1
9	51-5580	Hanger	2
10†		Crankcase	1
11	51-5600	Cap — Sealing	3
12	51-5670	Cap — Sealing	2
13	51-8260	Switch — Indicator	1
14	51-5550	Sleeve — Cylinder Std.	4
*	51-8090	Sleeve — Cylinder Oversize	4
15	51-5560	Pipe — Oil	1
16	60-7280	Bolt	2
17	60-7110	Bolt	2
18	51-6480	Cover	1
19	51-6490	Gasket	1
20	51-5610	Pin — Dowel	8
21	51-5590	Cap — Sealing	3

Ref. No.	Part No.	Description	No. Used
22	51-5660	Plug — Expansion	1
23	51-8270	Washer — Sealing	1
24	51-8280	Bolt	1
25	51-5750	Gasket	2
26	51-5760	Retainer	2
27†		Cap — Bearing No. 3	1
28	51-7180	Plug — Taper	3
29	51-5620	Bolt	6
30	51-5770	Bearing Set Std.	1
*	51-8100	Bearing Set 0.25mm Undersize	1
*	51-8110	Bearing Set 0.50mm Undersize	1
*	51-8120	Bearing Set 0.75mm Undersize	1
31†		Cap — Bearing No. 2	1
32†		Cap — Bearing No. 1	1
33	51-5640	Shaft Assembly — Idler Gear (Incl. Ref. #34)	1
34	51-5650	Pin — Spring	1
35	60-7310	Bolt	1
36	51-5720	Plate — Front	1
*	62-6310	Engine Overhaul Gasket Kit	1
*	58-5630	Engine — Complete	1

* Not Illustrated
† Not Serviceable Separately.



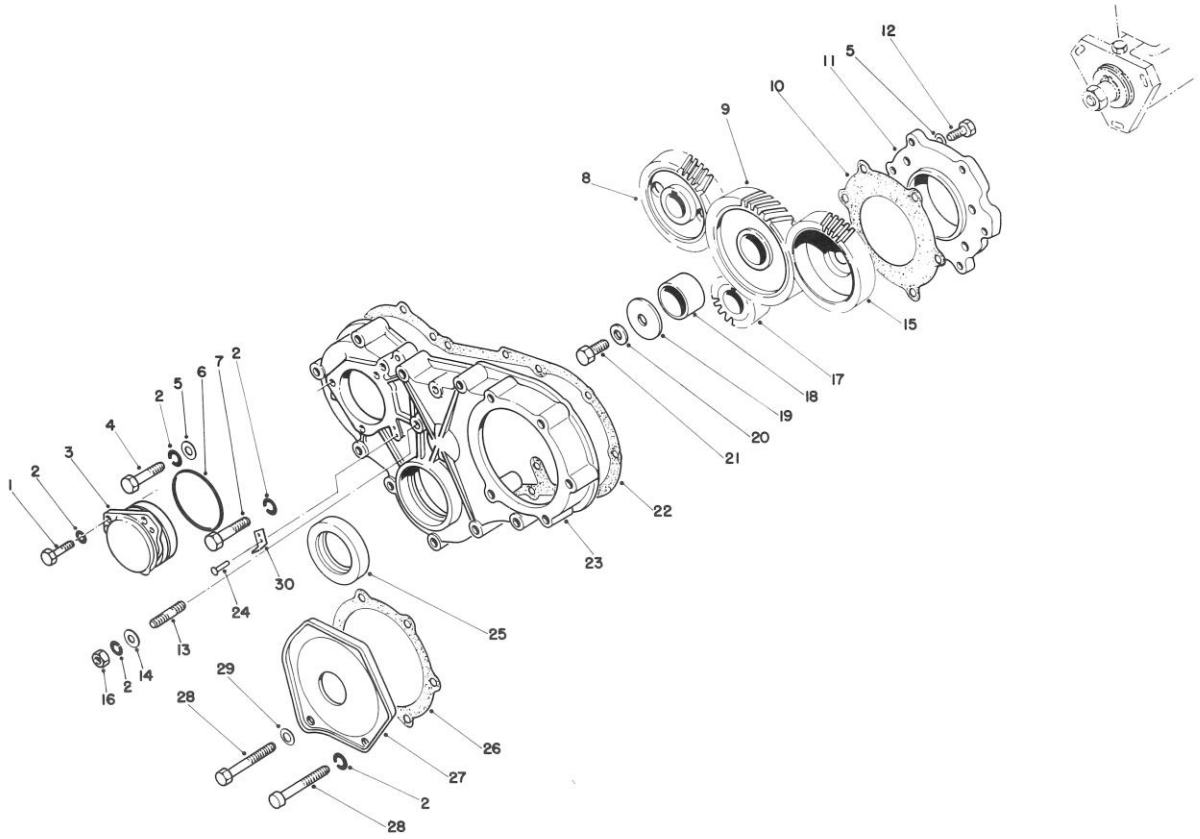
T-0144-89

SHORT BLOCK ASSEMBLY NO. 58-5670
(TO BE USED ON ENGINE PRIOR TO SER. NOS. 159990 ONLY)

Ref. No.	Part No.	Description	No. Used
1	51-6410	Gear — Camshaft	1
2	60-7110	Bolt	4
3	51-7250	Lockwasher	5
4	51-5470	Plate — Thrust	1
5	51-5460	Key Woodruff	1
6	51-5440	Tappet	8
7	51-5450	Camshaft	1
8	51-5720	Plate — Front	1
9	51-5730	Gasket	1
10	60-7310	Bolt	1

Ref. No.	Part No.	Description	No. Used
11*		Crankcase Assembly	1
12	51-6240	Bearing — Connecting Rod	8
13	51-6200	Connecting Rod Assembly	4
14	51-6190	Ring — Snap	8
15	51-6180	Pin Piston	4
16	51-6170	Piston	4
17	51-6160	Ring Set — Piston	4
18	51-5770	Bearing Set — Main	1
19	51-6250	Crankshaft Assembly	1

* Not Serviceable Separately.

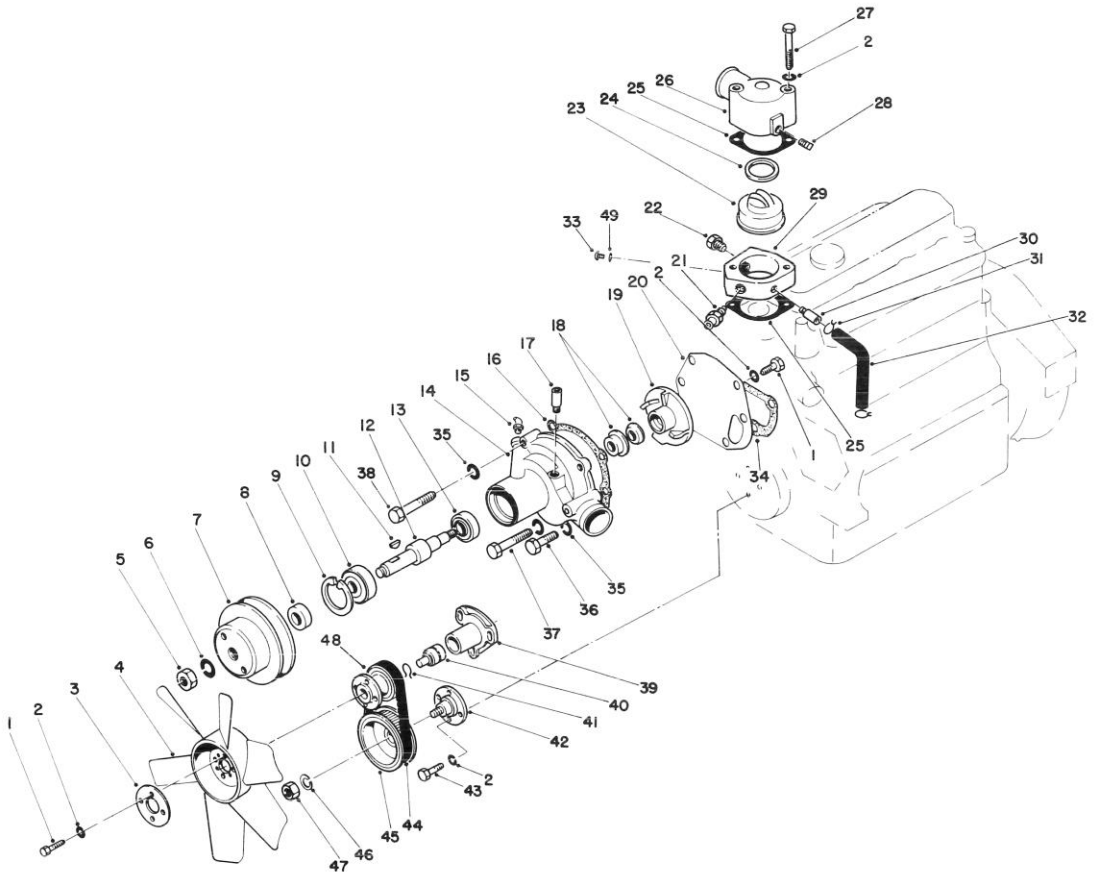


T-0146-89

TIMING GEAR & CASE COMPONENTS

Ref. No.	Part No.	Description	No. Used
1	60-7110	Bolt	3
2	51-7250	Washer — Spring	20
3	60-7080	Case	1
4	60-7040	Bolt	1
5	51-5160	Washer	2
6	60-7060	O-Ring	1
7	60-7050	Bolt	8
8	51-6410	Gear — Camshaft	1
9	51-6420	Idler — Gear Assembly (Incl. Ref. #18)	1
10	60-7190	Gasket — Flange Plate	1
11	60-7200	Plate — Flange	1
12	51-8310	Bolt	1
13	60-7150	Stud	3
14	60-5060	Washer	3
15	60-7230	Gear — Injector Pump	1

Ref. No.	Part No.	Description	No. Used
16	60-7120	Nut	3
17	51-6450	Gear — Crankshaft	1
18	51-6430	Bushing	1
19	51-6400	Plate — Thrust	1
20	51-6390	Washer	1
21	60-7210	Bolt	1
22	51-5820	Gasket	1
23	60-7100	Case — Timing Gear	1
24	60-7160	Rivet	2
25	51-5870	Seal	1
26	51-5860	Gasket	1
27	51-5850	Cover	1
28	60-7180	Bolt	5
29	51-5840	Washer — Sealing	1
30	60-7170	Pointer	1

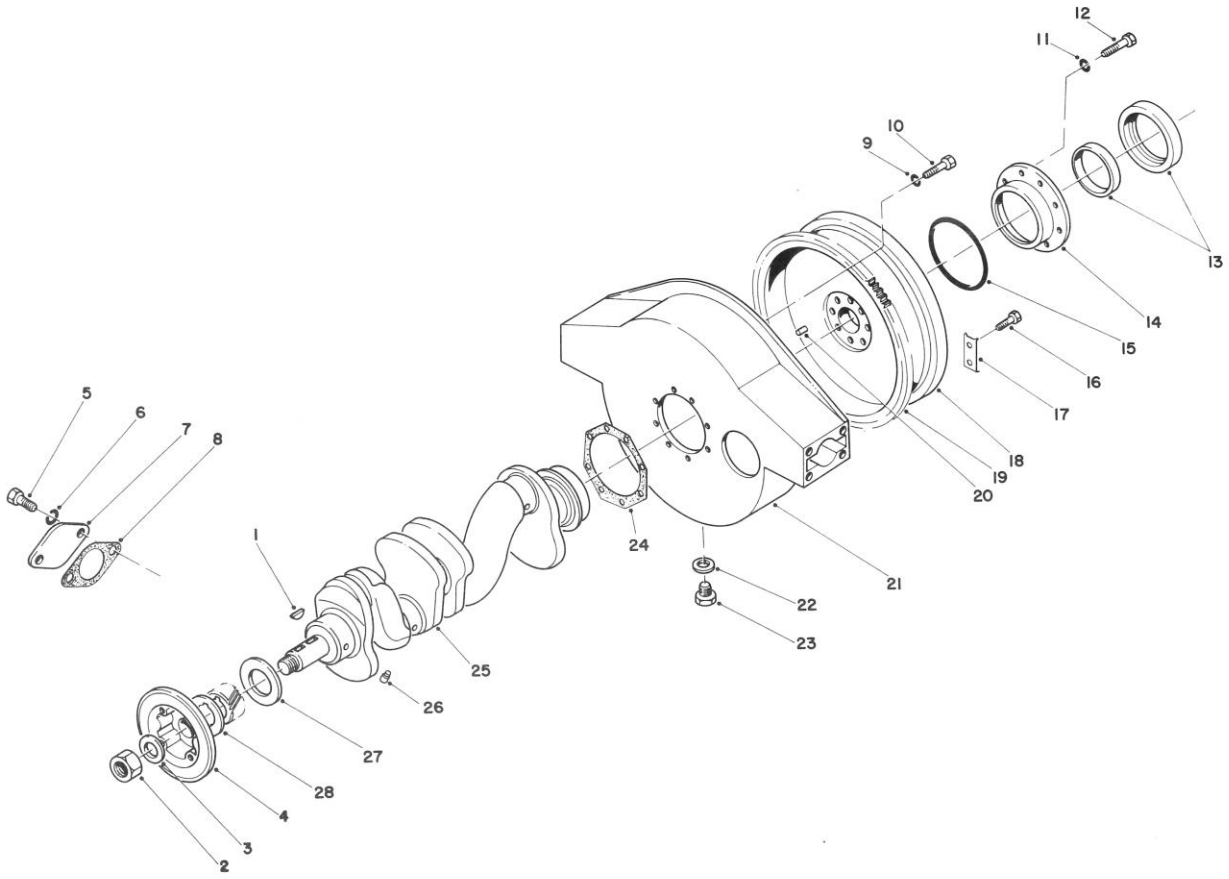


T-0148-89

WATER PUMP & THERMOSTAT HOUSING ASSEMBLY

Ref. No.	Part No.	Description	No. Used
1	60-7110	Bolt	6
2	51-7250	Washer — Spring	10
3	51-7270	Plate — Washer	1
4	49-0130	Fan	1
5	51-6910	Nut — Jam	1
6	51-6920	Washer — Spring	1
7	51-7130	Pulley — Water Pump	1
8	51-6930	Spacer — Water Pump	2
9	51-6940	Ring — Snap	1
10	51-6950	Bearing — Ball	1
11	51-6960	Key — Woodruff	1
12	51-6970	Shaft	1
13	51-6980	Ball Bearing	1
14	51-8240	Water Pump Assy. (Incl. Ref. #1, 2, 5-13, 15-20, 34-38)	1
15	51-7020	Grease Fitting	1
16	51-7010	Gasket	1
17	51-6990	Pipe	1
18	51-7030	Seal Unit	1
19	51-7040	Impeller	1
20	51-7050	Cover	1
21	60-5590	Switch — Temp.	1
22	59-7160	Sender — Temp.	1
23	51-7230	Thermostat	1
24	51-7220	Gasket	1

Ref. No.	Part No.	Description	No. Used
25	51-7210	Gasket	2
26	51-7160	Elbow Assy. (Incl. Ref. #28)	1
27	68-6030	Bolt	2
28	281-7	Plug	1
29	58-2110	Housing — Thermostat	1
30	51-7170	Pipe	1
31	51-7200	Clamp — Hose	2
32	51-7190	Hose — By-Pass	1
33	62-6320	Screw — Brass	1
34	51-7080	Gasket	1
35	51-6390	Washer — Spring	4
36	51-4910	Bolt	2
37	51-4920	Bolt	1
38	51-4930	Bolt	1
39	60-5280	Support Housing	1
40	60-5290	Bearing & Shaft Assembly	1
41	60-5310	Wire	1
42	60-5320	Shaft — Drive	1
43	60-7370	Bolt	4
44	62-6390	Belt	1
45	60-5200	Pulley — Drive	1
46	60-5230	Washer — Spring	1
47	60-5220	Nut	1
48	60-5300	Pulley — Driver	1
49	3255-5	Washer — Lock	1

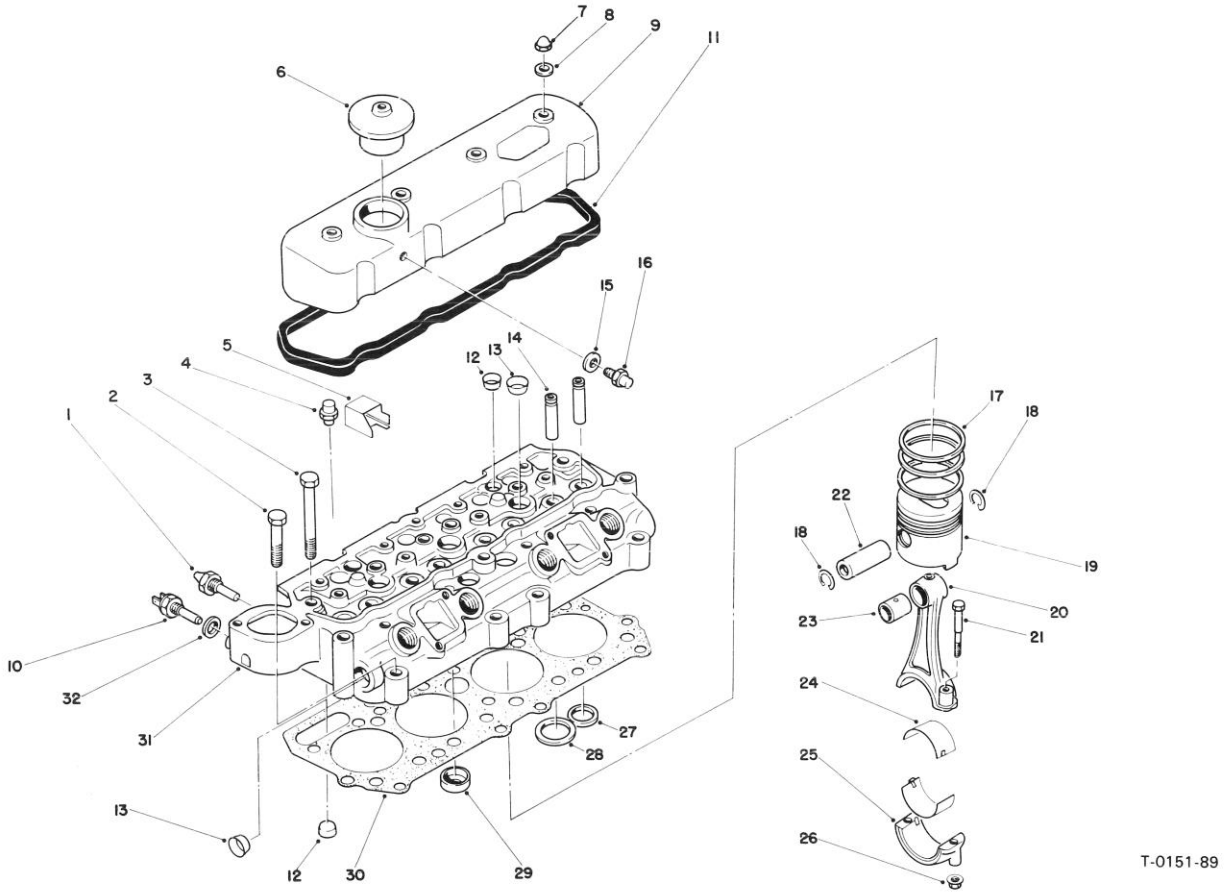


T-0150-89

CRANKSHAFT & FLYWHEEL HOUSING COMPONENTS

Ref. No.	Part No.	Description	No. Used
1	51-5460	Key — Woodruff	2
2	60-5220	Nut	1
3	51-6270	Washer	1
4	51-6310	Pulley — Crankshaft	1
5	60-7110	Bolt	2
6	51-7250	Washer — Spring	2
7	51-6010	Cover	1
8	51-6020	Gasket	1
9	51-6390	Washer — Spring	7
10	60-7480	Bolt	7
11	51-7400	Washer — Spring	8
12	60-7490	Bolt	8
13	60-7430	Oil Seal Assembly	1
14	51-5900	Case — Oil Seal	1
15	51-5910	O-Ring	1

Ref. No.	Part No.	Description	No. Used
16	51-6370	Bolt Seal	4
17	51-6360	Washer — Lock	2
18	51-6340	Flywheel Assy. (Incl. Ref. #19)	1
19	51-6350	Gear — Ring	1
20	51-6300	Pin — Dowel	2
21	51-5940	Housing — Flywheel	1
22	51-6100	Gasket — Flywheel Housing	1
23	51-6030	Plug	1
24	51-5980	Gasket	1
25	51-6250	Crankshaft Assembly (Incl. Ref. #1-3, 20 & 26)	1
26	60-7470	Plug	4
27	51-6330	Plate — Thrust	1
28	51-6320	Plate — Baffle	1



CYLINDER HEAD & PISTON COMPONENTS

Ref. No.	Part No.	Description	No. Used
1	51-5070	Switch — Temp. Warning	1
2	51-5030	Bolt — Cylinder Head	5
3	51-5040	Bolt — Cylinder Head	10
*	63-4740	Bolt — Cylinder Head	2
4	51-5050	Connector — Fitting	1
5	51-5410	Cover	1
6	51-5250	Cap — Oil Fill	1
7	51-5360	Nut — Cap	4
8	51-5370	Gasket	4
9	51-5380	Rocker Cover Assembly (Incl. Ref. #5, 15-16)	1
10	59-7950	Switch — Cold Start	1
11	51-5420	Gasket — Rocker Cover	1
12	51-5530	Cap — Sealing	6
13	51-4940	Cap — Sealing	10
14	51-4950	Guide Valve	8
15	51-5390	Washer — Sealing	1
16	51-5400	Connector	1
17	51-6160	Piston Ring Set Std.	1
*	51-8130	Piston Ring Set O.S. 0.25mm	1
*	51-8140	Piston Ring Set O.S. 0.50mm	1
*	51-8150	Piston Ring Set O.S. 0.75mm	1
18	51-6190	Ring Snap	8
19x	51-6170	Piston Std.	4
19xx	72-0240	Piston Std.	4
* x	51-8160	Piston O.S. 0.25mm	4
* x	51-8170	Piston O.S. 0.50mm	4

Ref. No.	Part No.	Description	No. Used
* x	51-8180	Piston O.S. 0.75mm	4
20	51-6200	Connecting Rod — Assembly (Incl. Ref. #21, 23, 25 & 26)	4
21	51-6220	Bolt	8
22	51-6180	Pin — Piston	4
23	51-6210	Bushing	4
24	51-6240	Bearing — Connecting Rod Std.	8
*	51-8190	Bearing — Connecting Rod U.S. 0.25mm	8
*	51-8200	Bearing — Connecting Rod U.S. 0.50mm	8
*	51-8210	Bearing — Connecting Rod U.S. 0.75mm	8
25†		Cap — Connecting Rod	4
26	51-6230	Nut	8
27	51-4970	Insert — Valve Seat, Exhaust	4
28	51-4980	Insert — Valve Seat, Inlet	4
29x	51-4990	Jet — Combustion Std.	4
29xx	72-0230	Jet — Combustion Std.	4
* x	51-8080	Jet — Combustion O.S.	4
30	51-5000	Gasket — Cylinder Head	1
31x	51-4900	Cylinder Head Assembly (Incl. Ref. #12-14 & 27-29)	1
31xx	72-0220	Cylinder Head Assembly (Incl. Ref. #12-14 & 27-29)	1
32	51-6890	Gasket	1

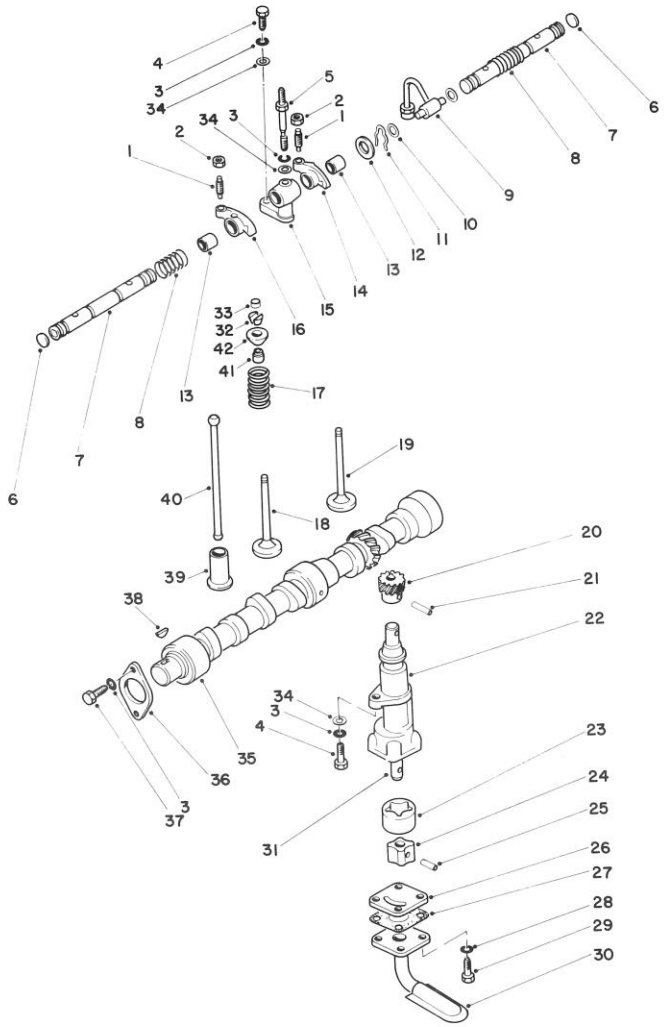
* Not Illustrated

Note: Dimensions listed in millimeters to convert to inches; divide mm by 25.4.

† Not Serviceable Separately.

x Used on Engine Ser. Nos. 159989 and below.

xx Used on Engine Ser. Nos. 159990 and up.



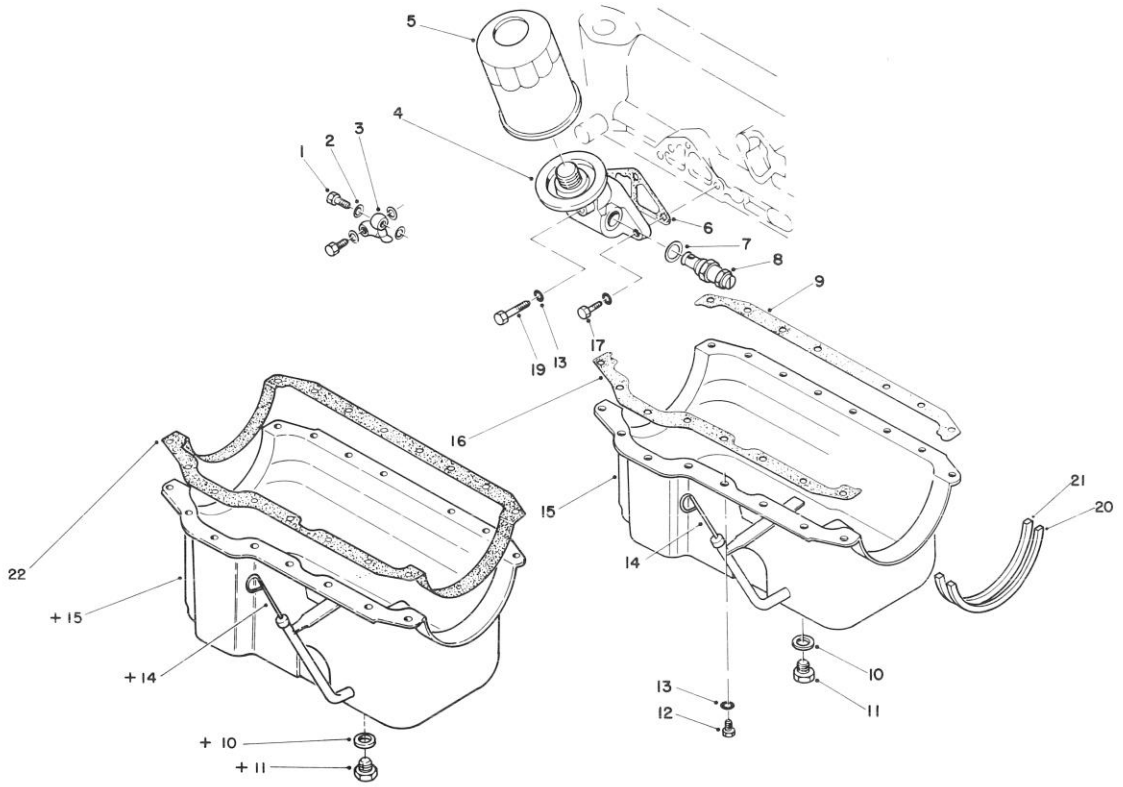
T-0152-89

VALVE, CAMSHAFT & PUMP COMPONENTS

Ref. No.	Part No.	Description	No. Used
1	51-5130	Screw — Adjusting	8
2	51-5210	Nut — Jam	8
3	51-7250	Washer — Spring	11
4	60-7370	Bolt	5
5	51-5190	Bolt	4
6	51-5090	Plug — Expansion	2
7	51-5080	Rocker Shaft Assembly (Incl. Ref. #6)	2
8	51-5100	Spring — Rocker Shaft	2
9	51-5250	Pipe — Oil	1
10	51-5240	Seal — O-Ring	2
11	51-5260	Ring — Snap	4
12	51-5270	Washer	4
13	51-5120	Bushing — Rocker	8
14	51-5200	Rocker Assembly (Incl. Ref. #1, 2 & 13)	4
15	51-5150	Bracket — Rocker Shaft	4
16	51-5110	Rocker Assembly (Incl. Ref. #1, 2 & 13)	4
17	51-5320	Spring — Valve	8
18	51-5340	Valve — Inlet	4
19	51-5330	Valve — Exhaust	4
20	51-6680	Gear — Pump Drive	1
21	51-6690	Pin	1

Ref. No.	Part No.	Description	No. Used
22	51-6670	Oil Pump Assy. (Incl. Ref. #20, 21, 23-26, 28-29 & 31)	1
23†		Rotor — Outer	1
24†		Rotor — Inner	1
25†		Pin	1
26	51-6720	Cover — Oil Pump Case	1
27	51-6760	Gasket	1
28	51-7400	Washer — Spring	4
29	60-7290	Bolt	4
30	51-6750	Strainer — Oil	1
31†		Shaft — Pump Main	1
32	51-5290	Keeper — Valve	16
33	51-5280	Cap	8
34	51-5160	Washer — Plain	9
35	51-5450	Camshaft	1
36	51-5470	Plate — Thrust	1
37	60-7110	Bolt	2
38	51-5460	Key — Woodruff	1
39	51-5440	Tappet	8
40	51-5430	Pushrod	8
41	51-5310	Seal — Valve Stem	8
42	51-5300	Retainer — Upper	8
*	51-6700	Oil Pump Rotor Assembly (Incl. Ref. #23-25 & 31)	1

* Not Illustrated
† Not Serviceable Separately.



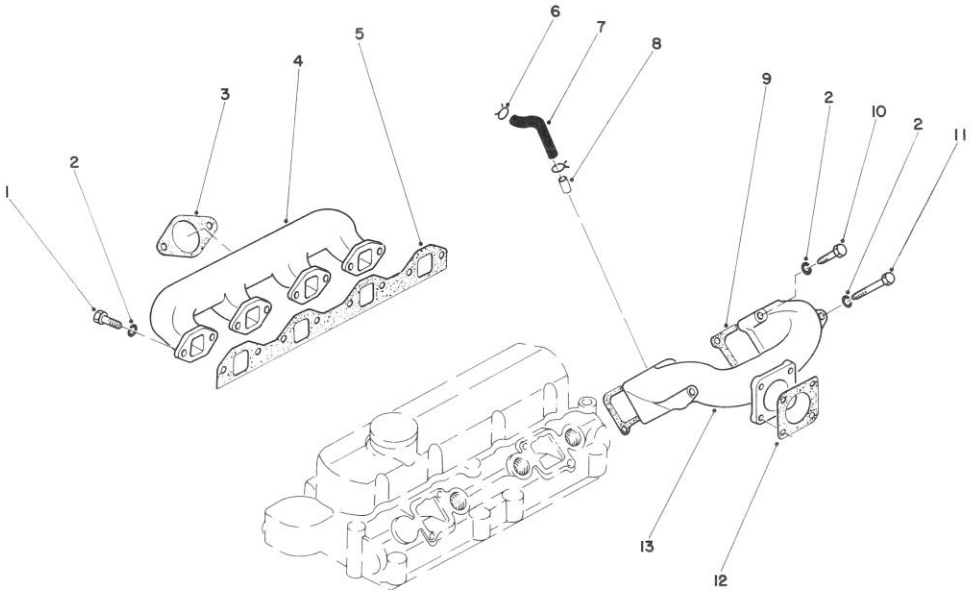
T-0153-89

OIL PAN & OIL FILTER

Ref. No.	Part No.	Description	No. Used
1	51-6880	Bolt — Joint	2
2	51-6890	Gasket	4
3	51-6900	Pipe — Oil	1
4	51-6800	Oil Filter Assembly (Incl. Ref. #5 & 7-8)	1
5	49-2500	Filter Element	1
6	51-6870	Gasket	1
7	51-6820	Washer — Gasket	1
8	51-6830	Relief Valve Assembly	1
9	51-6080	Gasket Oil Pan	1
10	51-6100	Gasket	1
10†	68-6430	Gasket	1
11	51-6110	Plug	1
11†	68-6420	Plug	1

Ref. No.	Part No.	Description	No. Used
12	60-7110	Bolt	16
13	51-7250	Washer — Spring	19
14	51-6150	Dipstick	1
14†	68-6440	Dipstick	1
15	51-6090	Oil Pan Assembly (Incl. Ref. #10 & 11)	1
15†	68-6400	Oil Pan Assembly (Incl. Ref. #10 & 11)	1
16	51-6070	Gasket — Oil Pan	1
17	60-7370	Bolt	2
19	60-7360	Bolt	1
20	51-5750	Gasket	2
21	51-5760	Retainer	2
22†	68-6410	Gasket	1

† Used on engines with serial numbers 157972 & up.

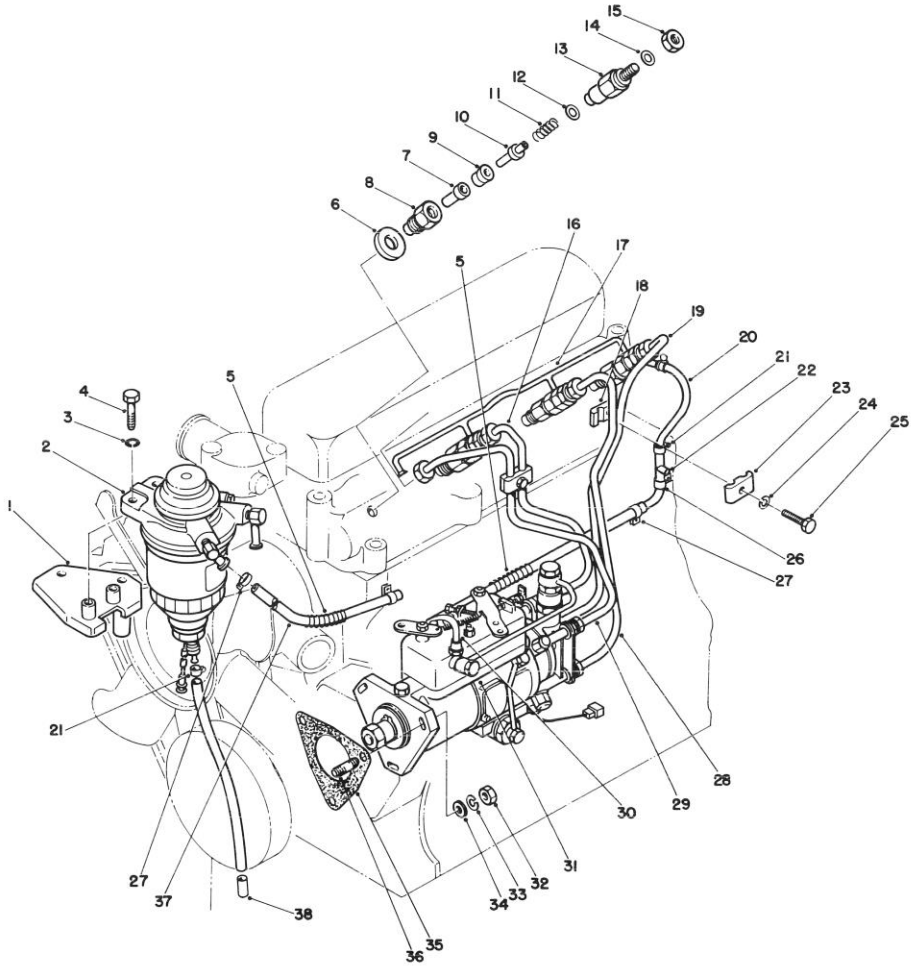


T-0154-89

INLET & EXHAUST MANIFOLD

Ref. No.	Part No.	Description	No. Used
1	60-7280	Bolt	8
2	51-7250	Washer — Spring	12
3	51-6630	Gasket — Exhaust Pipe	1
4	51-6620	Manifold — Exhaust	1
5	51-6660	Gasket — Exhaust Manifold	1
6	51-6600	Clamp	2
7	51-7190	Hose — Rubber	1

Ref. No.	Part No.	Description	No. Used
8	51-7170	Pipe	1
9	51-6500	Gasket — Intake Manifold	2
10	60-7040	Bolt	2
11	60-7300	Bolt	2
12	51-6550	Gasket — Intake Pipe	1
13	51-6540	Manifold — Inlet	1



T-0155-89

FUEL SYSTEM INJECTION PUMP & NOZZLE COMPONENTS

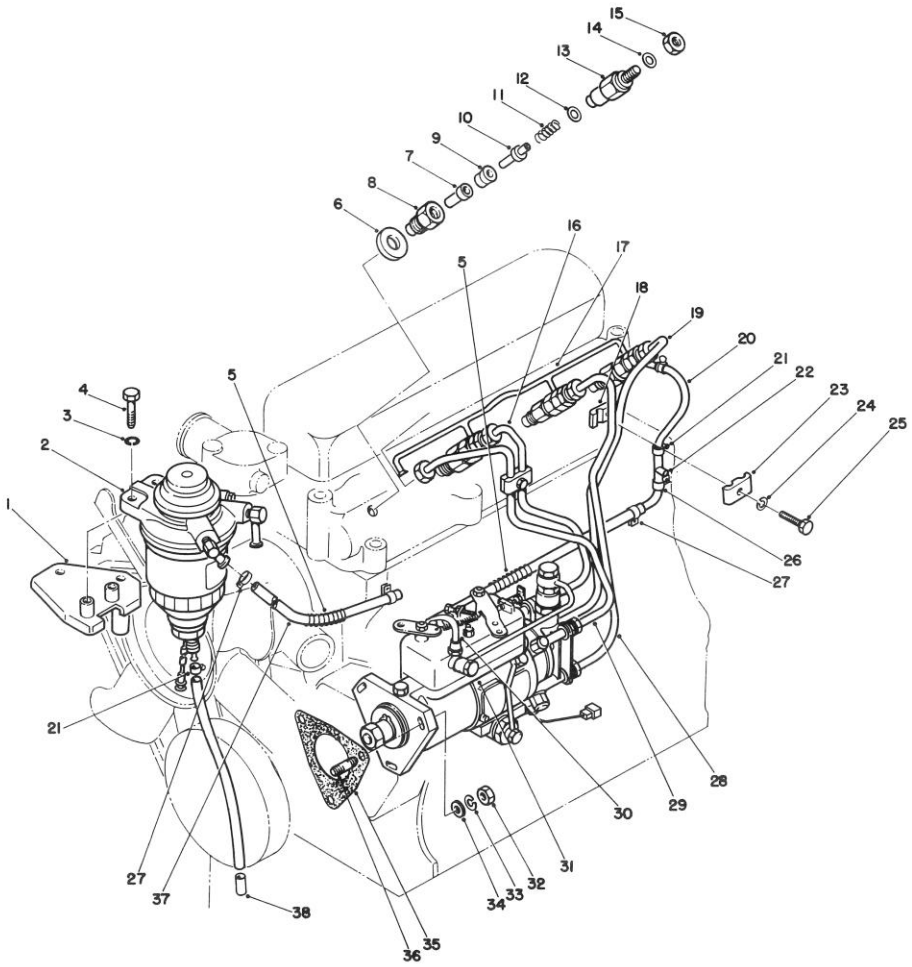
Ref. No.	Part No.	Description	No. Used
1	60-5000	Bracket	1
2	60-5010	Fuel Filter Assembly	1
3	51-7250	Washer	2
4	60-7050	Bolt	2
5	60-5030	Wrap — Spiral	2
6x	51-7320	Gasket	4
6xx	72-0140	Gasket	4
7x	63-4750	Nozzle Tip Assembly	4
7xx	72-0160	Nozzle Tip Assembly	4
8x	51-7530	Nut — Retaining	4
8xx	72-0270	Nut — Retaining	4
9x	51-7520	Spacer	4
9xx	72-0280	Spacer	4
10x	51-7510	Pin — Pressure	4
10xx	72-0290	Pin — Pressure	4
11x	51-7500	Spring — Pressure	4
11xx	72-0300	Spring — Pressure	4
12x	68-6470	Injector Shim Kit (1.0 mm thru 1.95 mm in .05 mm increments)	1
12xx	72-0340	Injector Shim Kit (0.9 mm thru 1.95 mm in .025 mm increments)	1
13x	51-7480	Nozzle — Body	4
13xx	72-0320	Nozzle — Body	4
14x	51-7470	Packing	4

Ref. No.	Part No.	Description	No. Used
14xx	72-0330	Packing	4
15x	51-7460	Nut	4
15xx	72-0310	Nut	4
*x	51-7440	Nozzle Assembly Complete (Incl. Ref. #7-15)	4
*xx	72-0150	Nozzle Assembly Complete (Incl. Ref. #7-15)	4
*	51-7450	Nozzle Holder Assembly (Incl. Ref. #8-15)	4
16x	60-5130	Pipe — Injector No. 2	1
16xx	72-0180	Pipe — Injector No. 2	1
17x	51-7380	Pipe — Fuel Leak-off	1
17xx	72-0210	Pipe — Fuel Leak-off	1
18	60-5090	Clamp — Lower	2
19x	60-5140	Pipe — Injector No. 4	1
19xx	72-0200	Pipe — Injector No. 4	1
20	60-5150	Hose — Rubber	1
21	60-5160	Clip	3
22	60-5170	Connector	1
23	60-5210	Clamp — Upper	2
24	51-7400	Washer — Spring	2
25	60-7290	Bolt	2
26	60-5180	Clip	1
27	60-5020	Clip	4
28x	60-5120	Pipe — Injector No. 3	1

* Not Illustrated

x Used on Engine Ser. Nos. 159989 and below.

xx Used on Engine Ser. Nos. 159990 and up.



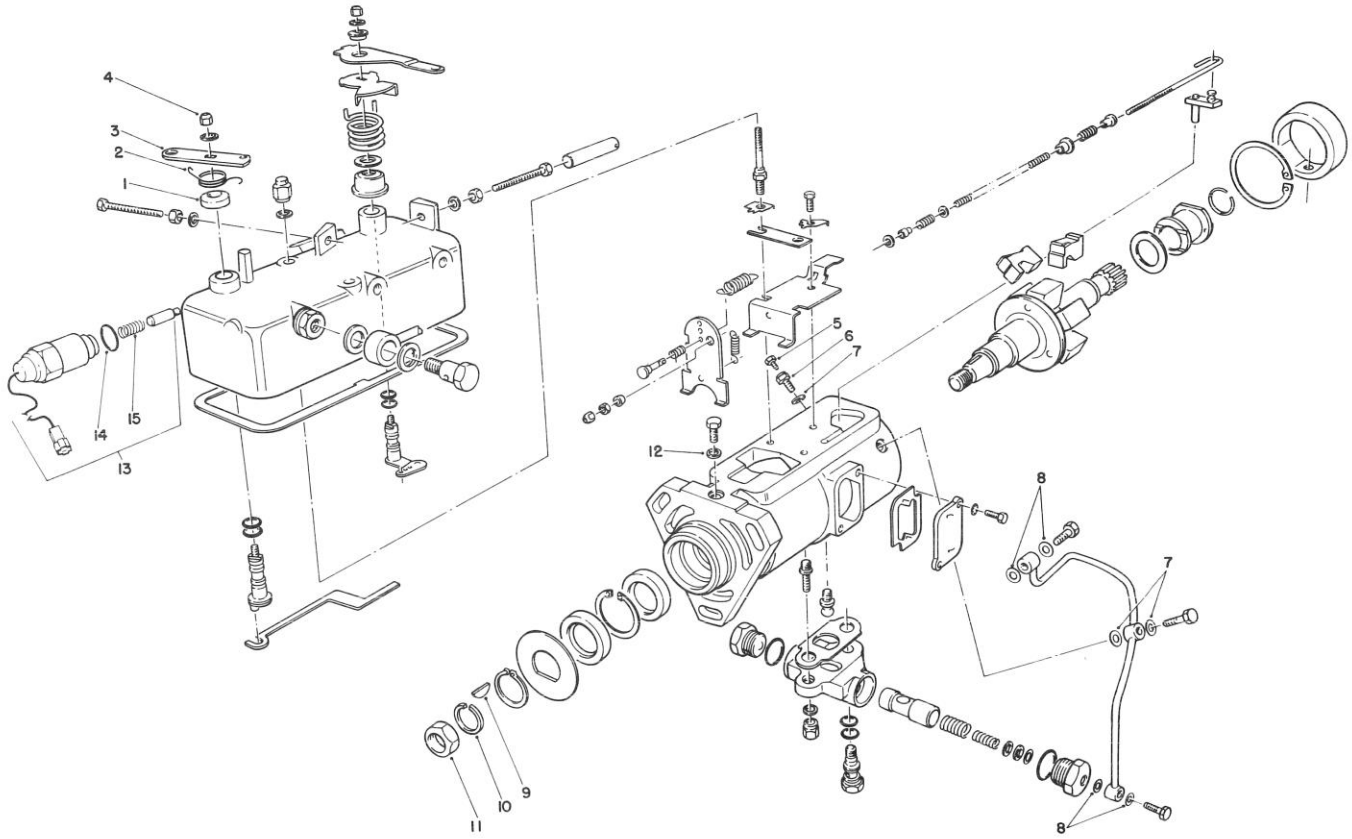
T-0155-89

FUEL SYSTEM INJECTION PUMP & NOZZLE COMPONENTS (Continued)

Ref. No.	Part No.	Description	No. Used
28xx	72-0190	Pipe —Injector No. 3	1
29x	60-5110	Pipe — Injector No. 1	1
29xx	72-0170	Pipe —Injector No. 1	1
30	60-5070	Pipe — Fuel	1
31	60-5100	Injection Pump Assembly Complete	1
32	60-7120	Nut	3

Ref. No.	Part No.	Description	No. Used
33	51-7250	Washer — Spring	3
34	60-5060	Washer	3
35	60-5050	Gasket	1
36	60-7150	Stud	3
37	60-5040	Hose — Fuel Feed	1
38	60-2780	Tube — Drain	1

x Used on Engine Ser. Nos. 159989 and below.
xx Used on Engine Ser. Nos. 159990 and up.

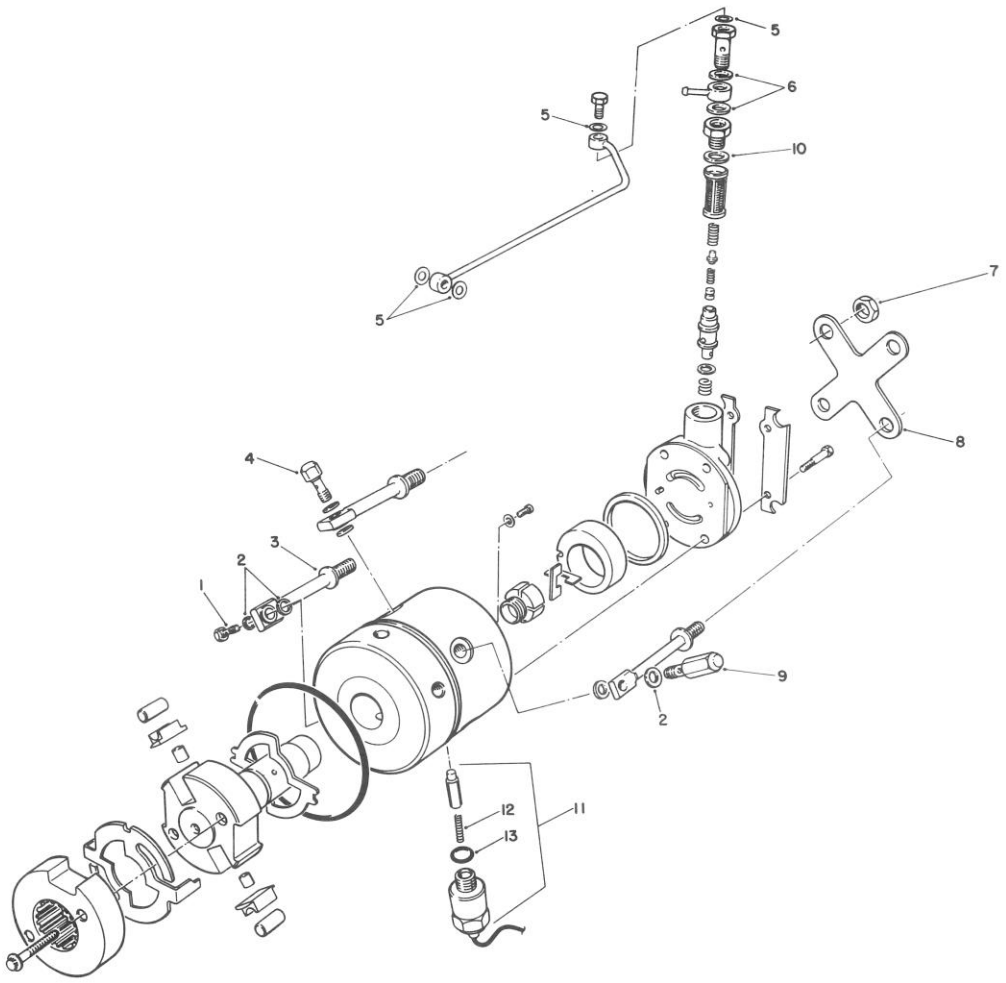


T-0156-89

FUEL INJECTION PUMP NO. 60-5100

Ref. No.	Part No.	Description	No. Used
1	63-4550	Cap	1
2	63-4560	Spring	1
3	63-4570	Lever	1
4	63-4580	Nut	1
5	63-4590	Screw — Vent	1
6	63-4600	Body — Screw Vent	1
7	63-4610	Washer	3
8	63-4620	Washer	4

Ref. No.	Part No.	Description	No. Used
9	63-4630	Key	1
10	63-4640	Washer — Lock	1
11	60-7260	Nut — Hex	1
12	60-3060	Washer	1
13	60-3160	Solenoid (Incl. Ref. #14 & 15)	1
14	60-3150	Sealing Ring	1
15	60-3140	Spring	1

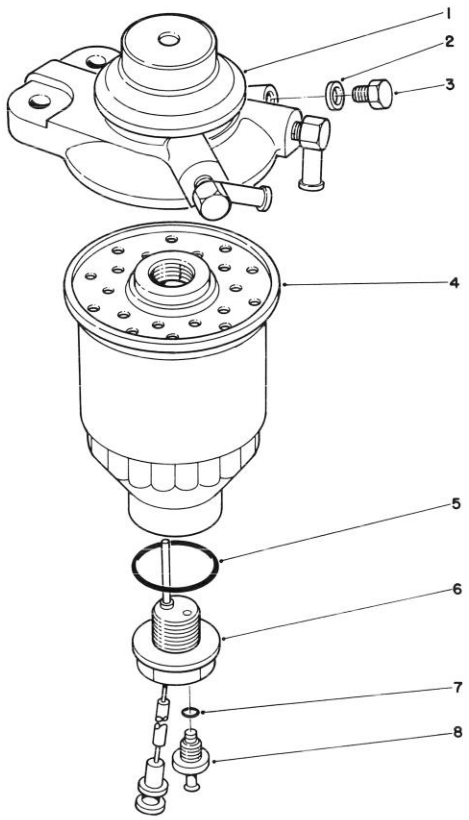


T-0157-89

FUEL INJECTION PUMP NO. 60-5100 (Continued)

Ref. No.	Part No.	Description	No. Used
1	60-3070	Valve — Pressure	1
2	60-3060	Washer	8
3	60-3090	Banjo	4
4	63-4670	Valve — Pressure	2
5	63-4660	Washer	4
6	63-4650	Washer	2
7	60-3120	Nut	4

Ref. No.	Part No.	Description	No. Used
8	60-3130	Plate — Clamping	1
9	60-3100	Valve — Pressure	1
10	60-3110	Washer	1
11	60-3160	Solenoid (Incl. Ref. #12 & 13)	1
12	60-3140	Spring	1
13	60-3150	Sealing Ring	1



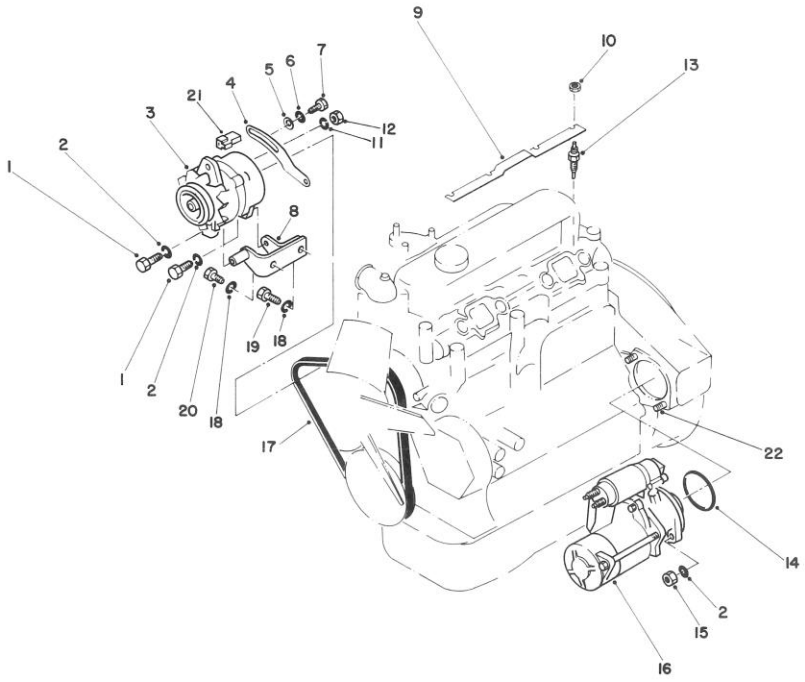
T-0158-89

FUEL FILTER ASSEMBLY NO. 60-5010

Ref. No.	Part No.	Description	No. Used
1*		Body Assembly	1
2*		Seal	1
3	60-5450	Air Plug (Incl. Ref. #2)	1
4	60-5470	Filter Element Assembly (Incl. Ref. #5)	1

Ref. No.	Part No.	Description	No. Used
5*		O-Ring	1
6	60-5480	Sensor — Water	1
7*		O-Ring	1
8	60-5490	Drain Plug Kit (Incl. Ref. #7)	1

* Not Serviceable Separately.



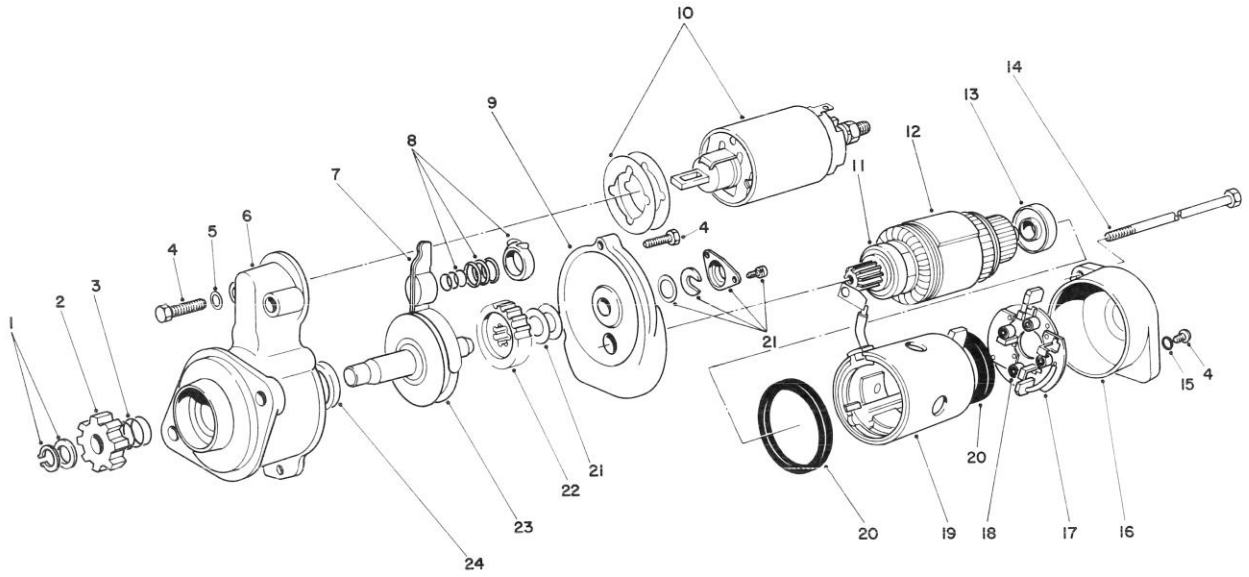
T-0159-89

ELECTRICAL COMPONENT PARTS

Ref. No.	Part No.	Description	No. Used
1	51-8640	Bolt	2
2	51-6390	Washer — Spring	4
3	60-5420	Alternator	1
4	51-8580	Plate — Adjusting	1
5	51-8590	Washer — Plain	1
6	51-7250	Washer — Spring	1
7	60-7370	Bolt	1
8	51-8600	Bracket — Alternator	1
9	51-8650	Plate — Connection	1
10*		Nut	4
11	48-8000	Washer — Spring	1

Ref. No.	Part No.	Description	No. Used
12	48-7880	Nut	1
13	51-8660	Plug — Glow (Incl. Ref. #10)	4
14	60-5430	O-Ring	1
15	51-5970	Nut	2
16	51-7590	Motor — Starter	1
17	49-2520	Belt	1
18	51-8610	Washer — Spring	2
19	51-8620	Bolt	1
20	51-8630	Bolt	1
21	58-6970	Diode	1
22	51-5950	Stud	2

* Not Serviceable Separately.



T-0160-89

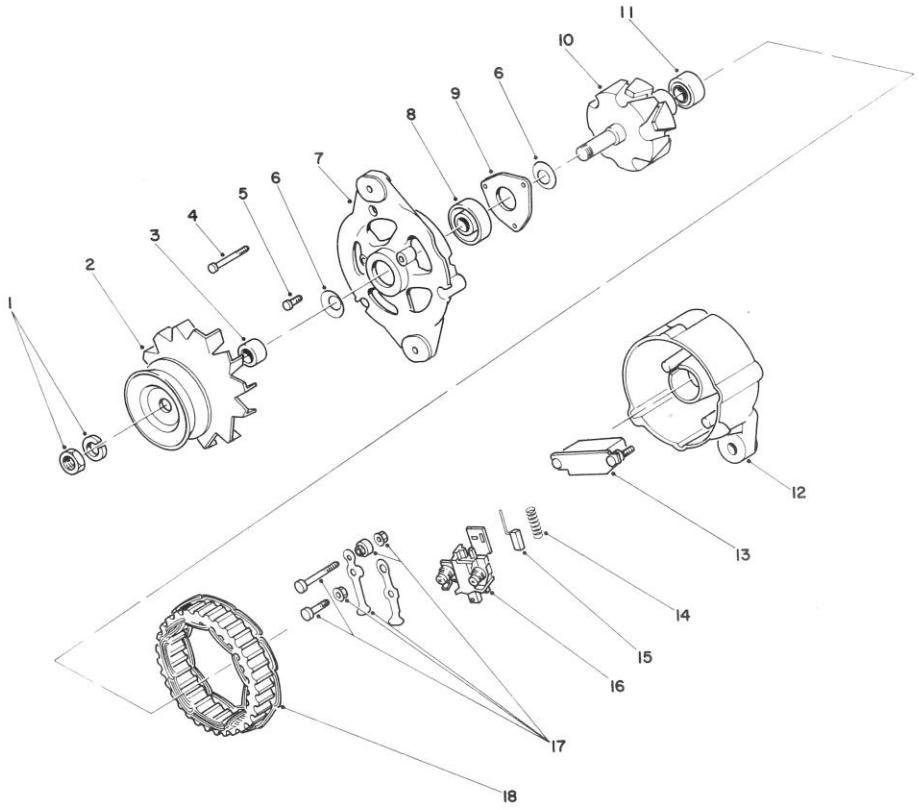
STARTER MOTOR ASSEMBLY NO. 51-7590

Ref. No.	Part No.	Description	No. Used
1	51-7740	Retaining Ring Assembly	1
2	51-7730	Gear Pinion Assembly (Incl. Ref. #1 & 3)	1
3†		Spring	1
4	51-7600	Screw Set	1
5	51-7610	Packing	2
6	51-7620	Cover Assembly Front (Incl. Ref. #24)	1
7	51-7640	Lever Assembly	1
8	51-7650	Spring Assembly	1
9	51-7660	Bracket Assembly Center	1
10	51-7670	Solenoid	1
11	51-7690	Bearing	1
12	51-7680	Armature Assembly (Incl. Ref. #11 & 13)	1
13	51-7700	Bearing	1

Ref. No.	Part No.	Description	No. Used
14	51-7710	Bolt Set	1
15	51-7840	Ring — Rubber	2
16	51-7830	Cover — Rear	1
17	51-7810	Brush Holder Assembly (Incl. Ref. #18)	1
18	51-7820	Spring — Brush	4
19	51-7800	Yoke Assembly	1
20	51-7790	Packing	2
21	51-7780	Cover Set	1
22	51-7770	Gear — Pinion	1
23	51-7760	Shaft Assembly	1
24	51-7630	Seal — Oil	1
*	51-7750	Gear Assembly (Incl. Ref. #22 & 23)	1
*	51-7720	Shaft Assy., Clutch Assy. (Incl. Ref. #1-3 & 21-24)	1

* Not Illustrated

† Not Serviceable Separately.



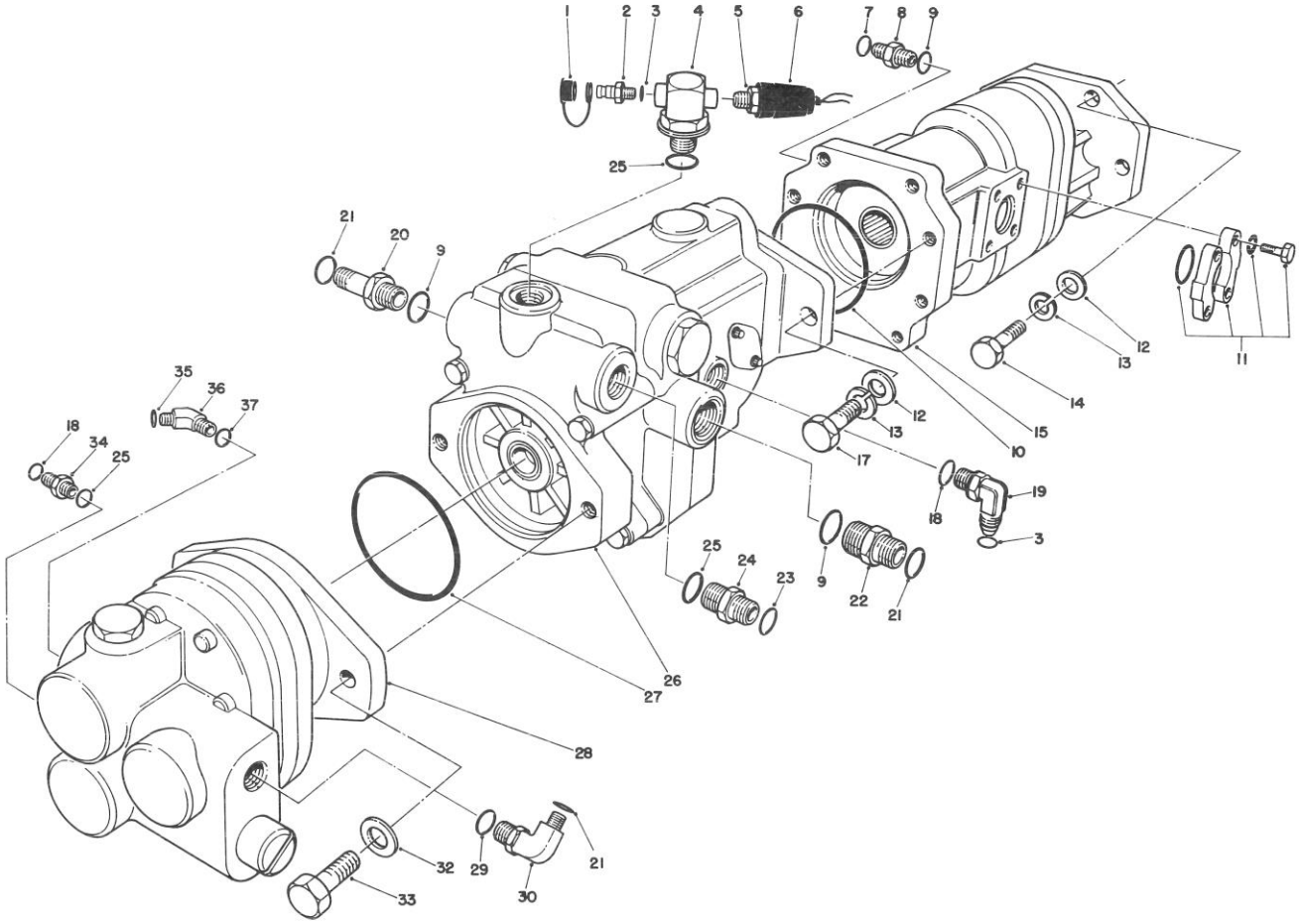
T-0161-89

ALTERNATOR ASSEMBLY NO. 60-5420

Ref. No.	Part No.	Description	No. Used
1	51-7850	Nut Assembly	1
2	60-5330	Pulley Assembly (Incl. Ref. #3)	1
3†		Collar — Shaft	1
4	51-7870	Screw Set	1
5	51-7890	Screw Set	1
6†		Spring Washer	2
7	60-5340	Cover Assembly — Front (Incl. Ref. #5, 6, 8 & 9)	1
8	60-5350	Bearing	1
9†		Plate — Bearing Retainer	1
10	51-7910	Rotor Assembly (Incl. Ref. #11)	1

Ref. No.	Part No.	Description	No. Used
11	60-5360	Bearing	1
12	60-5380	Cover Assembly — Rear (Incl. Ref. #13, 16 & 17)	1
13	60-5370	Rectifier Assembly	1
14	51-7980	Spring — Return	2
15	51-7970	Brush	2
16	51-7960	Regulator Assembly (Incl. Ref. #14 & 15)	1
17	51-7950	Terminal Assembly	1
18	51-7930	Stator	1

† Not Serviceable Separately.



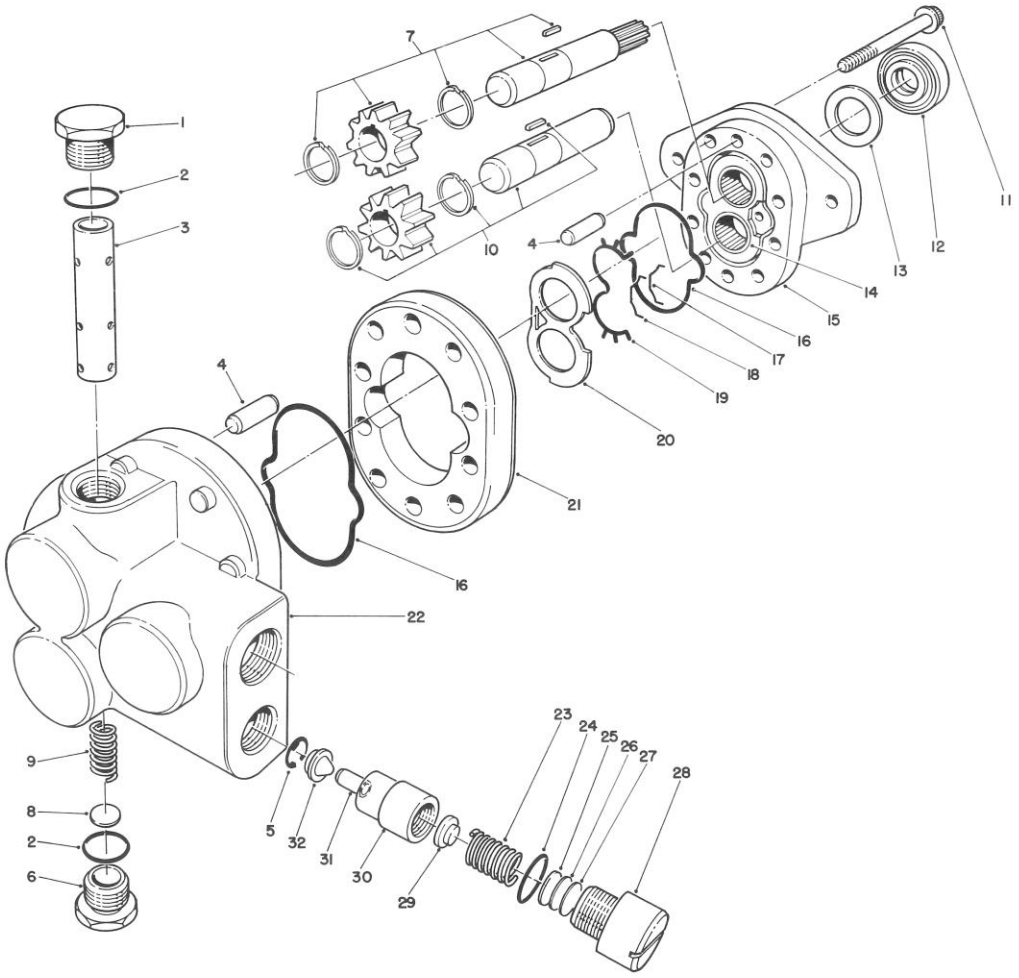
T-0162-89

HYDRAULIC PUMP CONNECTIONS

Ref. No.	Part No.	Description	No. Used
1	353-947	Cap — Dust	1
2	59-7410	Fitting — Diagnostic (Incl. Ref. #3)	1
3	237-42	O-Ring	2
4	59-7450	Run — Tee (Incl. Ref. #25)	1
5	60-1060	Switch — Pressure	1
6	60-1070	Boot	1
7	237-65	O-Ring	1
8	340-8	Fitting (Incl. Ref. #7 & 9)	1
9	237-81	O-Ring	3
10	59-8550	O-Ring	1
11	340-62	Kit — Flange	1
12	3256-26	Washer	6
13	3253-7	Lockwasher	6
14	3213-2	Bolt	4
15	58-5510	Pump — Gear (Incl. Ref. #10)	1
17	325-5	Bolt	2
18	237-22	O-Ring	2
19	340-77	Adapter — 90° (Incl. Ref. #3 & 18)	1

Ref. No.	Part No.	Description	No. Used
20	340-11	Fitting Long (Incl. Ref. #9 & 21)	1
21	237-58	O-Ring	3
22	340-9	Fitting (Incl. Ref. #9 & 21)	1
23	237-30	O-Ring	1
24	340-4	Fitting (Incl. Ref. #23 & 25)	1
25	237-79	O-Ring	3
26	58-5660	Pump — Piston	1
27	60-3520	O-Ring	1
28	58-5650	Pump — Gear	1
29	237-146	O-Ring	1
30	340-15	Fitting 90° (Incl. Ref. #21 & 29)	1
32	60-3540	Washer	2
33	60-3530	Bolt	2
34	340-3	Fitting (Incl. Ref. #18 & 25)	1
35	237-30	O-Ring	1
36	340-89	Fitting 45° (Incl. Ref. #35 & 37)	1
37	237-80	O-Ring	1
*	58-5500	Tandum Pump Assembly (Incl. Ref. #26-28 & 32-33)	1

* Not Illustrated



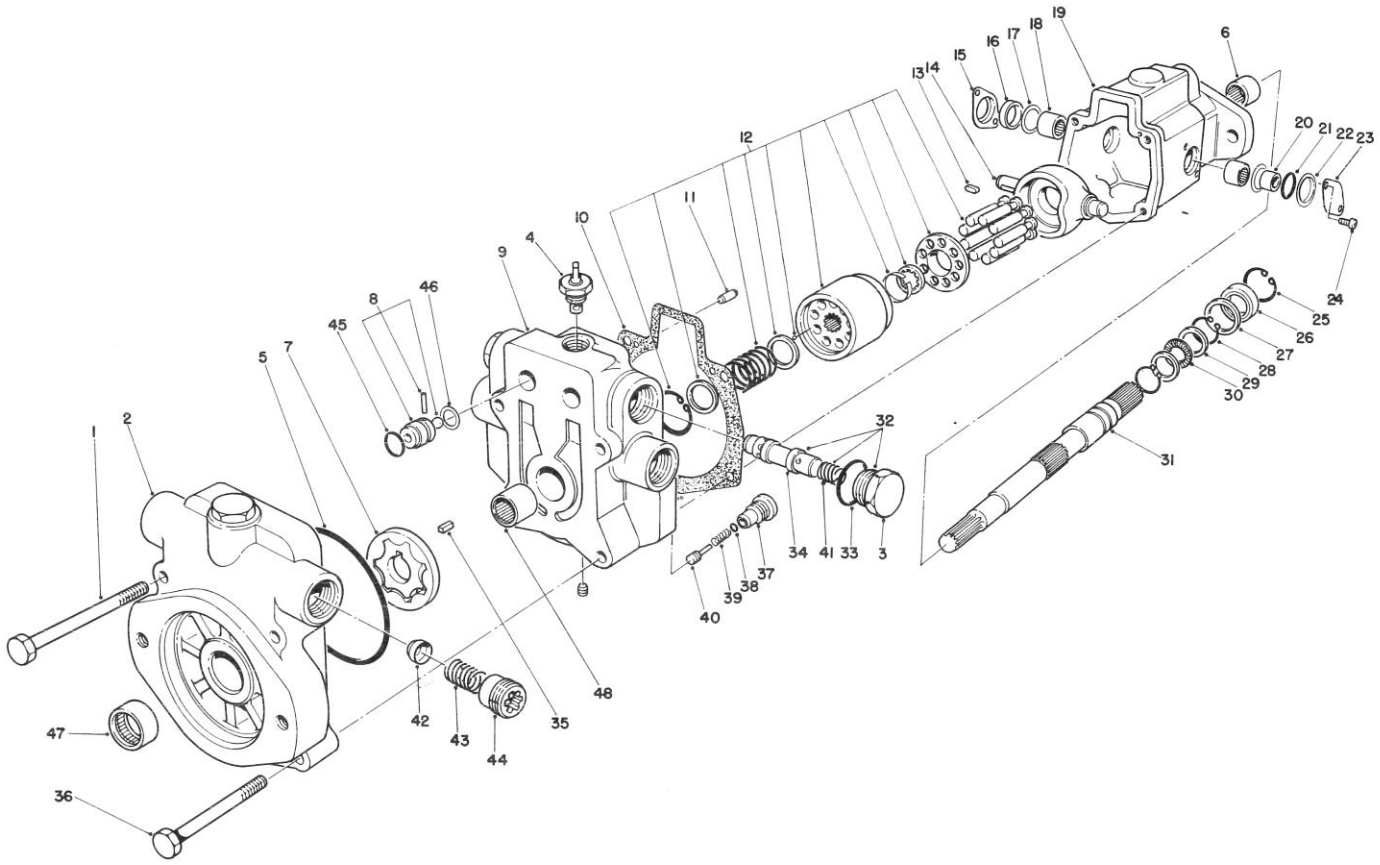
T-0163-89

GEAR PUMP ASSEMBLY NO. 58-5650

Ref. No.	Part No.	Description	No. Used
1	60-5860	Plug (Incl. Ref. #2)	1
2	60-5720	O-Ring	2
3†		Spool	1
4	60-5760	Dowel Pin	4
5†		Retaining Ring	1
6	60-5710	Plug (Incl. Ref. #2)	1
7	60-5780	Gear Drive Assembly (Incl. Ref. #5-8)	1
8	60-5730	Disc	A/R
9	60-5820	Spring	1
10	60-5770	Idler Gear Assembly	1
11	42-3140	Capscrew	8
12	49-2640	Seal — Shaft	1
13	60-5890	Washer	1
14		Bushing	2
15	49-2660	Front Plate Assembly (Incl. Ref. #14)	1
16	42-3120	O-Ring	2
17	49-2680	Molded O-Ring	1

Ref. No.	Part No.	Description	No. Used
18	49-2700	Bearing Seal	1
19	49-2690	Backup Gasket	1
20	49-2670	Wear Plate	1
21	60-5740	Body Assembly (Incl. Ref. #4)	1
22†		Back Plate Assembly	1
23	60-5790	Spring	1
24	60-5880	O-Ring	1
25	60-5830	Washer	A/R
26	60-5840	Washer	A/R
27	60-5850	Washer	A/R
28	60-5870	Plug Assembly (Incl. Ref. #24)	1
29	60-5810	Plug Seat	1
30†		Cartridge Assembly	1
31	60-5800	Seat	1
32†		Poppet	1
*	60-5910	Back Plate Repair Kit	1
*	60-5900	Seal Repair Kit (Incl. Ref. #2, 12, 13, 16-20 & 24)	1

* Not Illustrated
† Not Serviceable Separately.



T-0164-89

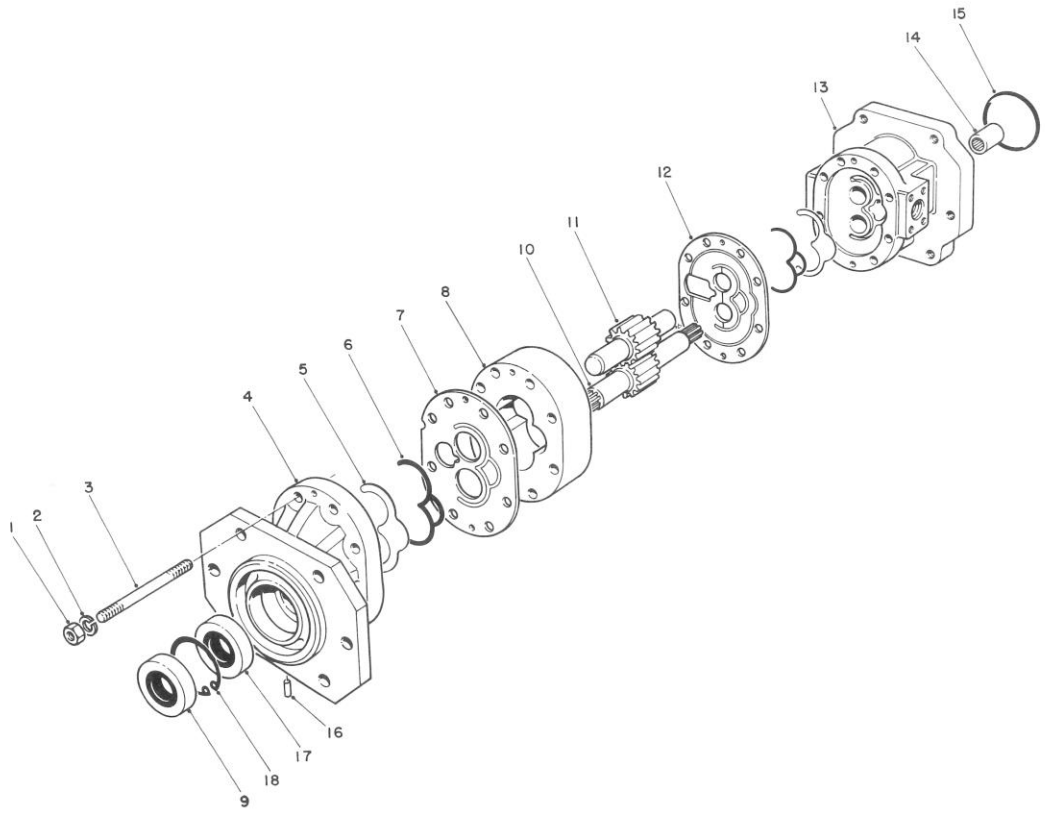
PISTON PUMP ASSEMBLY 58-5660

Ref. No.	Part No.	Description	No. Used
1	60-6230	Capscrew	2
2	60-6200	Charge Pump Adapter Assy. (Incl. Ref. #42-44 & 47)	1
3	70-1240	Plug Assembly (Incl. Ref. #33)	2
4‡	39-2080	Tow Valve Assembly	1
5	60-6180	O-Ring	1
6	63-4390	Needle Bearing	1
7	60-6350	Gerotor Gear Assembly	1
8	33-4970	Check Valve Assembly (Incl. Ref. #45 & 46)	2
9	60-6040	Back Plate Assembly (Incl. Ref. #4, 37-40 & 48)	1
10	60-6130	Housing Gasket	1
11	60-6370	Dowel Pin	2
12	60-6030	Rotating Kit Assembly	1
13	60-6310	Key	1
14	60-6020	Camplate	1
15	60-6120	Seal Cover	1
16	42-2720	Shaft Seal	1
17	60-6250	Washer	2
18	60-6110	Needle Bearing	2
19	60-6000	Housing Assembly (Incl. Ref. #6)	1
20	60-5990	Inner Race	1
21	60-6190	O-Ring	1
22	60-6210	O-Ring Cover	1
23	60-6010	Trunnion Cover	1
24	60-6330	Screw	4
25	60-6260	Retaining Ring	1

Ref. No.	Part No.	Description	No. Used
26	60-6300	Shaft Seal	1
27	60-6240	Washer	1
28	60-6270	Retaining Ring	2
29	60-6160	Thrust Race	2
30	60-6170	Needle Thrust Bearing	1
31	60-6140	Drive Shaft	1
32	68-6460	Relief Valve Kit (Incl. Ref. #3, 34 & 41)	2
33	60-5980	O-Ring	2
34		Relief Valve Assembly	2
35	60-6320	Key	1
36	60-6220	Capscrew	2
37	60-6060	Cartridge	1
38	60-6080	O-Ring	1
39	60-6090	Spring	1
40	60-6070	Poppet	1
41		Spring	1
42	33-4990	Poppet	1
43	39-2140	Spring	2
44	39-2130	Retainer — Spring	1
45	237-114	O-Ring	2
46	60-5950	Washer — Back-up	2
47	60-6150	Bearing	1
48	60-6050	Bearing	1
*	60-6400	Seal Kit (Incl. Ref. #5, 10, 16, 21, 26, 28, 29, 33, 38, 45 & 46)	1
*	60-6360	Charge Relief Valve Spring Kit	1
*	60-6340	Bleed-off Valve Assy. Kit	1

* Not Illustrated

‡ Note: Used on Units with Serial No. 70591 & Up



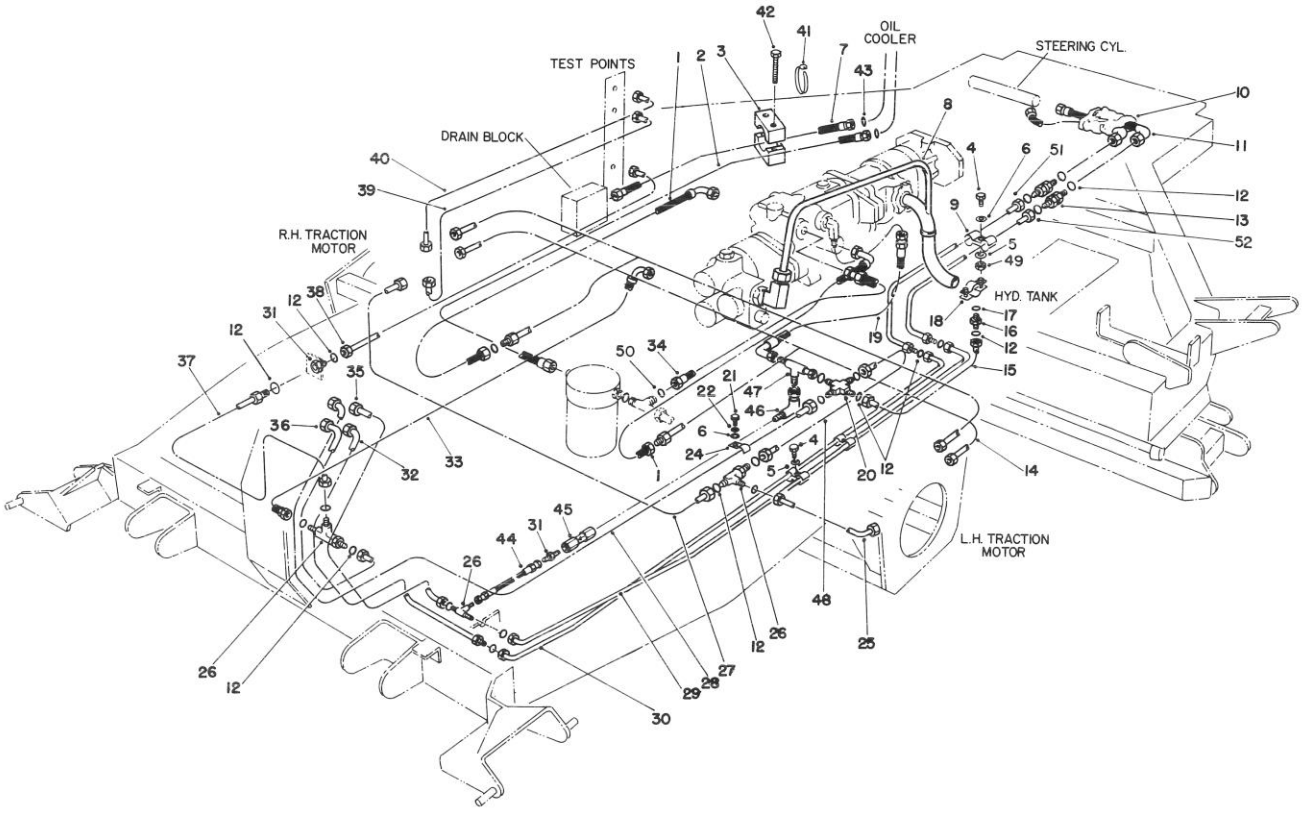
T-0165-89

PUMP ASSEMBLY NO. 58-5510

Ref. No.	Part No.	Description	No. Used
1	59-7580	Nut	8
2	59-7590	Lockwasher	8
3	59-7970	Stud	8
4	59-7980	Front Cover	1
5	59-7990	Seal Gland	2
6	59-8470	Seal Retainer	2
7	59-8480	Front Wear Plate	1
8	59-8490	Center S/A Section	1
9	59-8590	Shaft Seal	1
10	59-8500	Drive Gear — Spline	1

Ref. No.	Part No.	Description	No. Used
11	59-8600	Driven Gear	1
12	59-8520	Rear Wear Plate	1
13	59-8530	Port Section	1
14	59-8540	Coupling	1
15	59-8550	O-Ring	1
16	59-8560	Plug	1
17	59-8570	Shaft Seal	1
18	59-8580	Retaining Ring	1
*	59-8610	Seal Kit (Incl. Ref. #5, 6, 9 & 17)	1

* Not Illustrated



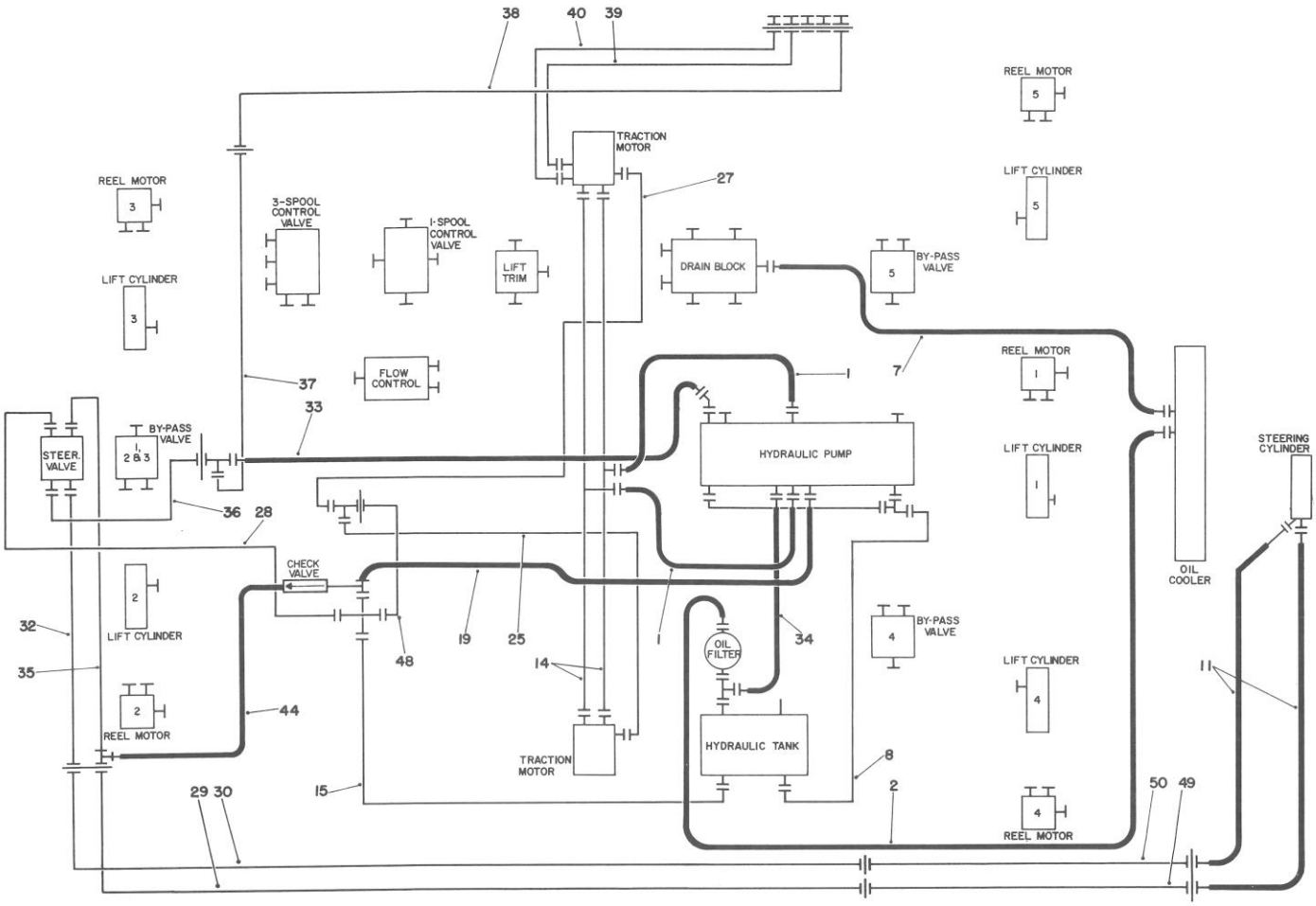
T-0166-89

HYDRAULIC CIRCUIT — TRACTION & STEERING

Ref. No.	Part No.	Description	No. Used
1	58-5860	Hose Assembly	2
2	58-6950	Hose Assembly	1
3	60-2650	Clamp Assembly — Hose	1
4	48-7640	Capscrew	3
5	48-8020	Lockwasher	3
6	48-8010	Washer	1
7	58-6960	Hose Assembly	1
8	60-1900	Tube Assembly	1
9	58-3880	Clamp	3
10	60-2010	Sleeve — Protective	1
11	58-5850	Hose Assembly	2
12	237-22	O-Ring	23
13	340-71	Fitting	2
14	58-5690	Tube Assembly	2
15	58-4720	Tube Assembly	1
16	340-3	Fitting	1
17	237-79	O-Ring	1
18	58-6690	Clamp	1
19	60-1250	Hose Assembly	1
20	340-23	Fitting	1
21	48-7690	Capscrew	1
22	48-8020	Lockwasher	1
24	60-1360	Clamp	1
25	58-4790	Tube Assembly	1
26	340-68	Fitting — Tee	3
27	58-4860	Tube Assembly	1
28	58-4840	Tube Assembly	1
29	68-6320	Tube Assembly	1

Ref. No.	Part No.	Description	No. Used
30	68-6350	Tube Assembly	1
31	340-2	Fitting	2
32	58-4800	Tube Assembly	1
33	58-5720	Hose Assembly	1
34	58-5870	Hose Assembly	1
35	66-5810	Tube Assembly	1
36	58-4740	Tube Assembly	1
37	58-7780	Tube Assembly	1
38	58-7750	Tube Assembly	1
39	58-7770	Tube Assembly	1
40	58-7760	Tube Assembly	1
41	48-4480	Tie Strap	3
42	48-7610	Screw	2
43	340-65	O-Ring	2
44	66-5800	Hose Assembly	1
45	66-5780	Valve — Check	1
46	340-110	Adapter — 90°	1
47	340-115	Adapter — Tee	1
48	58-4710	Tube Assembly	1
49	48-7890	Nut — Hex	1
50	237-30	O-Ring	1
51	68-6330	Tube Assembly	1
52	68-6360	Tube Assembly	1
*	68-6310	Tube Assembly (Incl. Ref. #12, 29 & 51)	1
*	68-4340	Tube Assembly (Incl. Ref. #12, 30 & 52)	1

* Not Illustrated



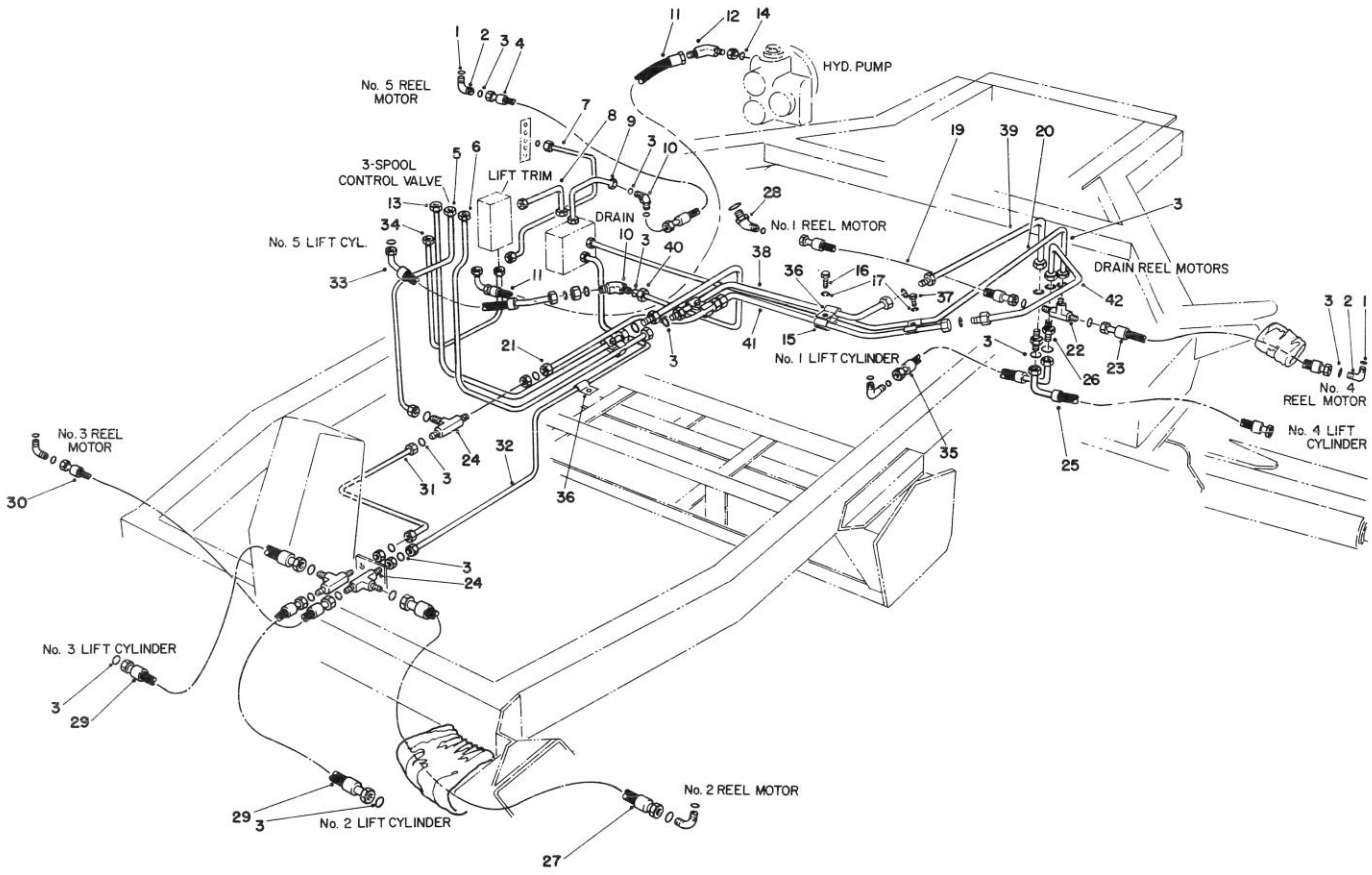
T-0167-89

HYDRAULIC SCHEMATIC – TRACTION & STEERING

Ref. No.	Part No.	Description	No. Used
1	58-5860	Hose Assembly	2
2	58-6950	Hose Assembly	1
7	58-6960	Hose Assembly	1
8	60-1900	Tube Assembly	1
11	58-5850	Hose Assembly	2
14	58-5690	Tube Assembly	2
15	58-4720	Tube Assembly	1
19	60-1250	Hose Assembly	1
25	58-4790	Tube Assembly	1
27	58-4860	Tube Assembly	1
28	58-4840	Tube Assembly	1
29	68-6320	Tube Assembly	1
30	68-6350	Tube Assembly	1
32	58-4800	Tube Assembly	1
33	58-5720	Hose Assembly	1

Ref. No.	Part No.	Description	No. Used
34	58-5870	Hose Assembly	1
35	66-5810	Tube Assembly	1
36	58-4740	Tube Assembly	1
37	58-7780	Tube Assembly	1
38	58-7750	Tube Assembly	1
39	58-7770	Tube Assembly	1
40	58-7760	Tube Assembly	1
44	66-5800	Hose Assembly	1
48	58-4710	Tube Assembly	1
49	68-6330	Tube Assembly	1
50	68-6360	Tube Assembly	1
*	68-6310	Tube Assembly (Incl. Ref. #29 & 49)	1
*	68-4340	Tube Assembly (Incl. Ref. #30 & 50)	1

* Not Illustrated

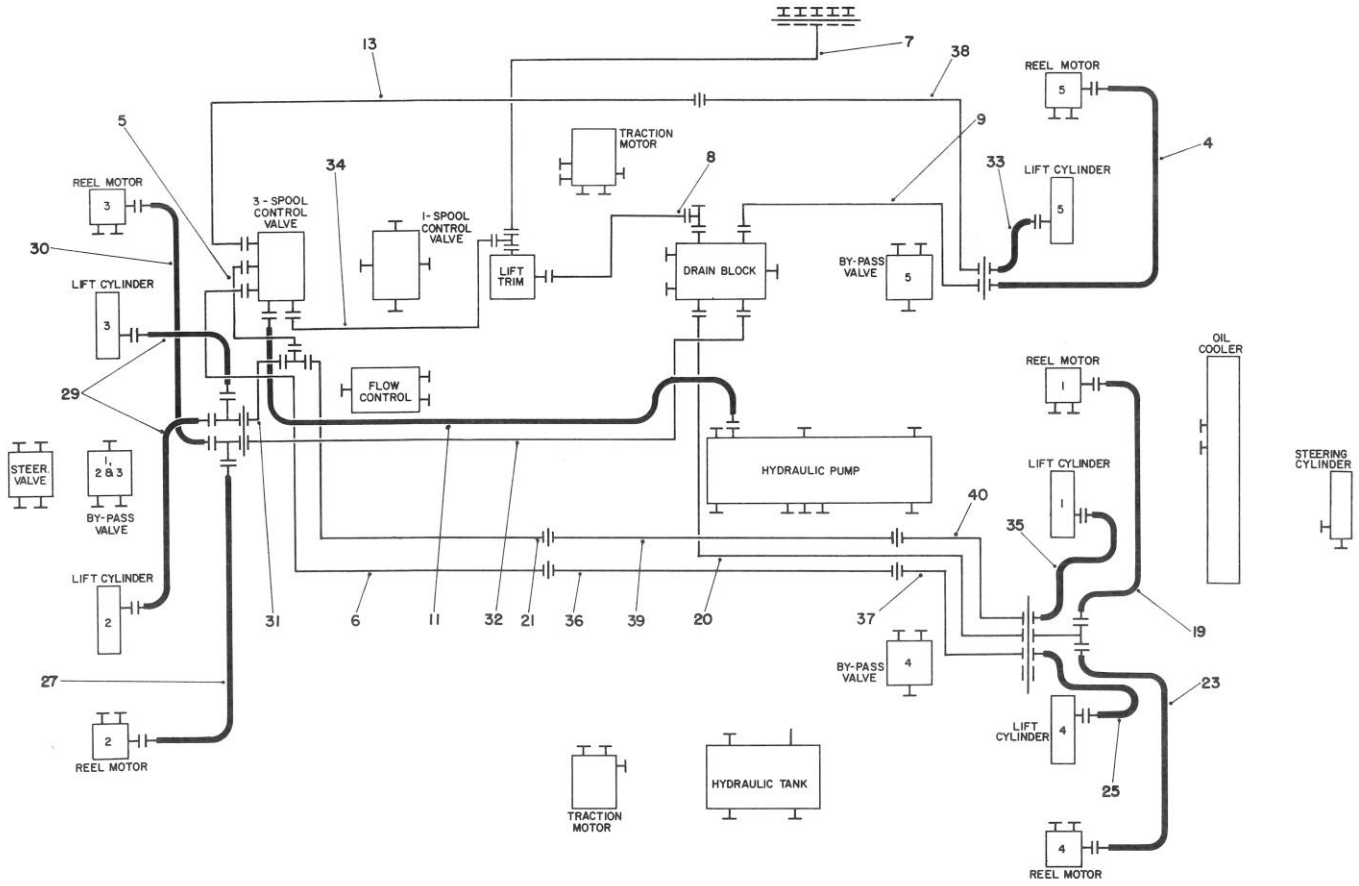


HYDRAULIC CIRCUIT — LIFT ARMS

Ref. No.	Part No.	Description	No. Used
1	237-42	O-Ring	7
2	340-77	Fitting — Adapter 90°	4
3	237-22	O-Ring	31
4	58-6660	Hose Assembly	1
5	58-4750	Tube Assembly	1
6	68-6240	Tube Assembly	1
7	58-7730	Tube Assembly	1
8	63-4680	Tube Assembly	1
9	58-4780	Tube Assembly	1
10	340-69	Fitting — Adapter 45°	2
11	58-5710	Hose Assembly	1
12	340-89	Fitting — Adapter 45°	1
13	68-6390	Tube Assembly	1
14	237-80	O-Ring	1
15	58-3880	Clamp — Tube	4
16	60-6650	Capscrew	1
17	48-8020	Lockwasher	5
18	48-8010	Washer	1
19	58-5840	Hose Assembly	1
20	58-4850	Tube Assembly	1
21	68-6280	Tube Assembly	1
22	60-2180	Fitting — Tee	1
23	58-5820	Hose Assembly	1
24	340-68	Fitting — Tee	3

Ref. No.	Part No.	Description	No. Used
25	60-1630	Hose Assembly	1
26	340-71	Fitting — Adapter	2
27	58-6670	Hose Assembly	1
28	340-87	45° Adapter	1
29	58-5850	Hose Assembly	2
30	58-5830	Hose Assembly	1
31	58-4760	Tube Assembly	1
32	58-4880	Tube Assembly	1
33	58-5810	Hose Assembly	1
34	58-4870	Tube Assembly	1
35	58-5800	Hose Assembly	1
36	60-1360	Clamp — Tube	2
37	48-7640	Capscrew	5
38	68-6250	Tube Assembly	1
39	68-6260	Tube Assembly	1
40	68-6380	Tube Assembly	1
41	68-6290	Tube Assembly	1
42	68-6300	Tube Assembly	1
*	68-6230	Tube Assembly (Incl. Ref. #3, 6, 38 & 39)	1
*	68-6370	Tube Assembly (Incl. Ref. #3, 13 & 40)	1
*	68-6270	Tube Assembly (Incl. Ref. #3, 21, 41 & 42)	1

* Not Illustrated



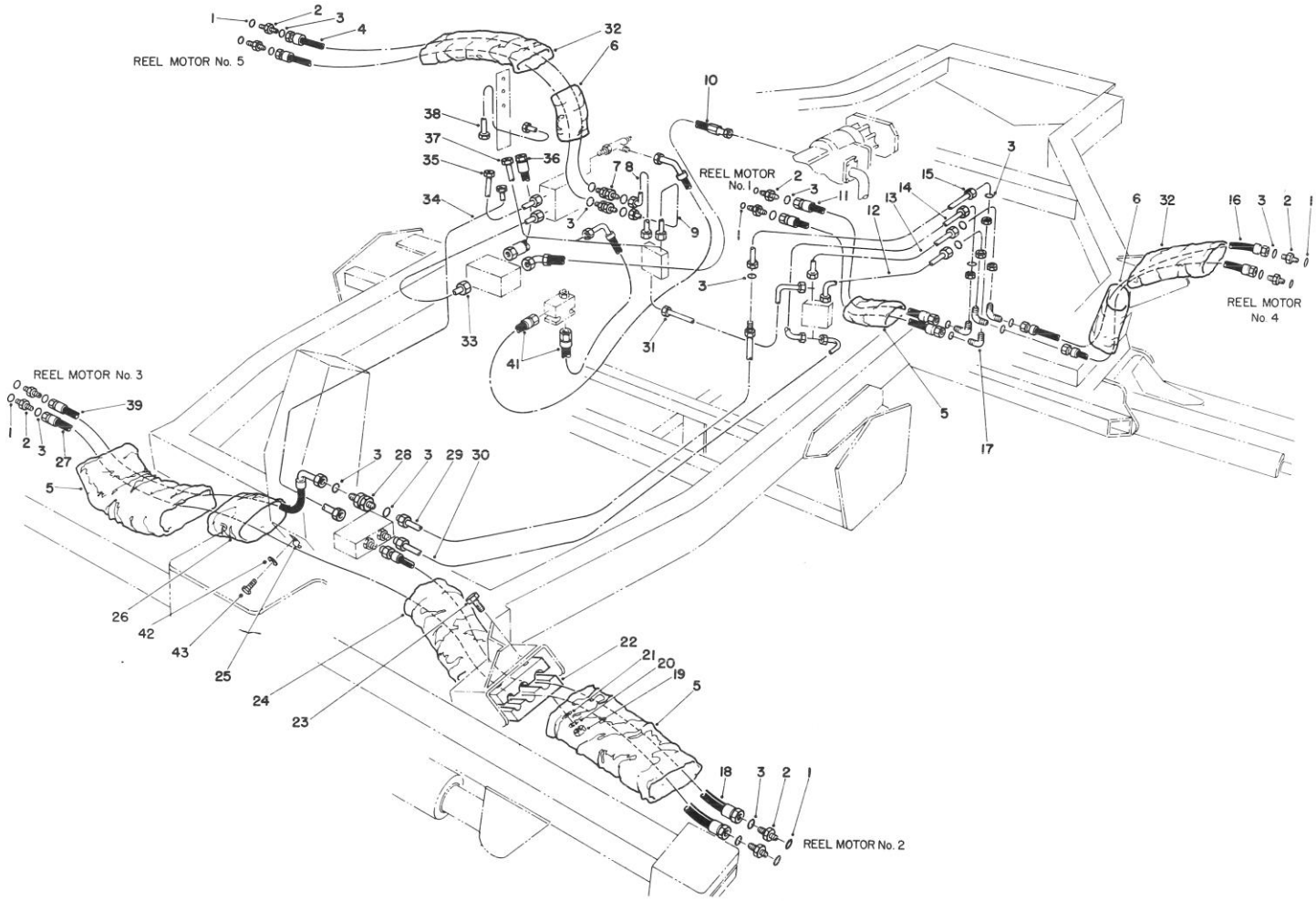
T-0169-89

HYDRAULIC CIRCUIT – SCHEMATIC, LIFT ARMS

Ref. No.	Part No.	Description	No. Used
4	58-6660	Hose Assembly	1
5	58-4750	Tube Assembly	1
6	68-6240	Tube Assembly	1
7	58-7730	Tube Assembly	1
8	63-4680	Tube Assembly	1
9	58-4780	Tube Assembly	1
11	58-5710	Hose Assembly	1
13	68-6390	Tube Assembly	1
19	58-5840	Hose Assembly	1
20	58-4850	Tube Assembly	1
21	68-6280	Tube Assembly	1
23	58-5820	Hose Assembly	1
25	60-1630	Hose Assembly	1
27	58-6670	Hose Assembly	1
29	58-5850	Hose Assembly	2
30	58-5830	Hose Assembly	1

Ref. No.	Part No.	Description	No. Used
31	58-4760	Tube Assembly	1
32	58-4880	Tube Assembly	1
33	58-5810	Hose Assembly	1
34	58-4870	Tube Assembly	1
35	58-5800	Hose Assembly	1
36	68-6250	Tube Assembly	1
37	68-6260	Tube Assembly	1
38	68-6380	Tube Assembly	1
39	68-6290	Tube Assembly	1
40	68-6300	Tube Assembly	1
*	68-6230	Tube Assembly (Incl. Ref. #6, 36 & 37)	1
*	68-6370	Tube Assembly (Incl. Ref. #13 & 38)	1
*	68-6270	Tube Assembly (Incl. Ref. #21, 39 & 40)	1

* Not Illustrated

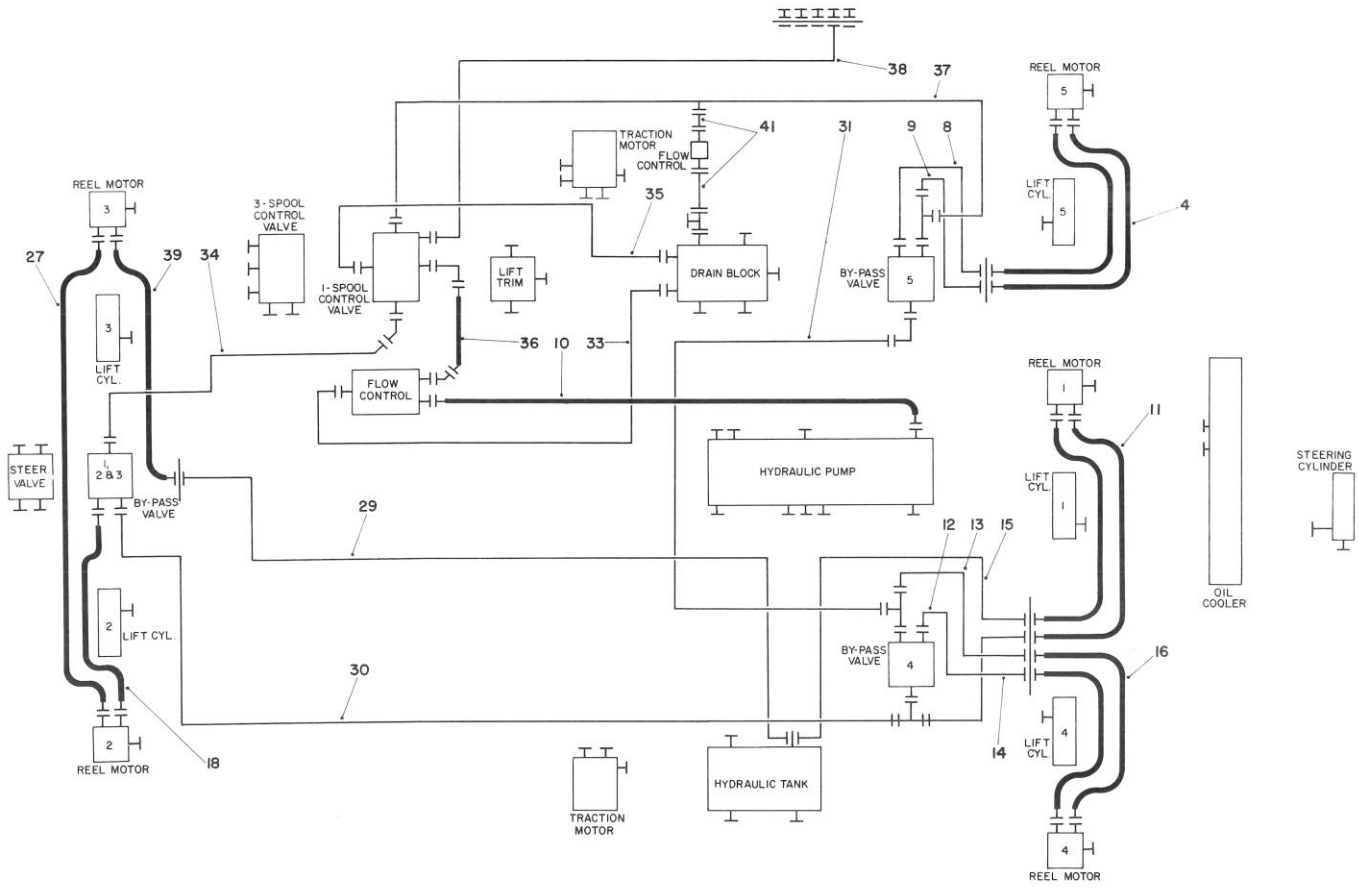


T-0170-89

HYDRAULIC — CUTTING CIRCUIT

Ref. No.	Part No.	Description	No. Used
1	237-81	O-Ring	10
2	340-8	Fitting — Adapter	10
3	237-65	O-Ring	26
4	58-5770	Hose Assembly	2
5	59-7190	Sleeve — Protective	3
6	59-7260	Sleeve — Protective	2
7	340-73	Fitting — Adapter 45°	2
8	58-4960	Tube Assembly	1
9	58-4970	Tube Assembly	1
10	58-5730	Hose Assembly	1
11	58-5790	Hose Assembly	2
12	58-5060	Tube Assembly	1
13	58-5000	Tube Assembly	1
14	58-5020	Tube Assembly	1
15	58-5040	Tube Assembly	1
16	58-5780	Hose Assembly	2
17	340-72	Fitting — Adapter 90°	4
18	58-5750	Hose Assembly	1
19	48-7890	Nut — Hex	4
20	48-8020	Lockwasher	4
21	48-8010	Washer	4
22	59-6160	Clamp — Split	4

Ref. No.	Part No.	Description	No. Used
23	60-4530	Capscrew	4
24	60-5650	Sleeve — Protective	1
25	60-2080	Clamp — Hose	1
26	60-5660	Sleeve — Protective	1
27	58-5740	Hose Assembly	1
28	340-76	Fitting — Adapter	1
29	58-4990	Tube Assembly	1
30	58-5070	Tube Assembly	1
31	58-4950	Tube Assembly	1
32	59-7200	Sleeve — Protective	2
33	58-5050	Tube Assembly	1
34	58-5030	Tube Assembly	1
35	58-4980	Tube Assembly	1
36	60-3340	Hose Assembly	1
37	63-4710	Tube Assembly	1
38	58-7740	Tube Assembly	1
39	58-5760	Hose Assembly	1
40	340-87	45° Adapter	1
41	60-1250	Hose Assembly	2
42	48-9570	Lockwasher	1
43	48-7680	Bolt — H.H.	1

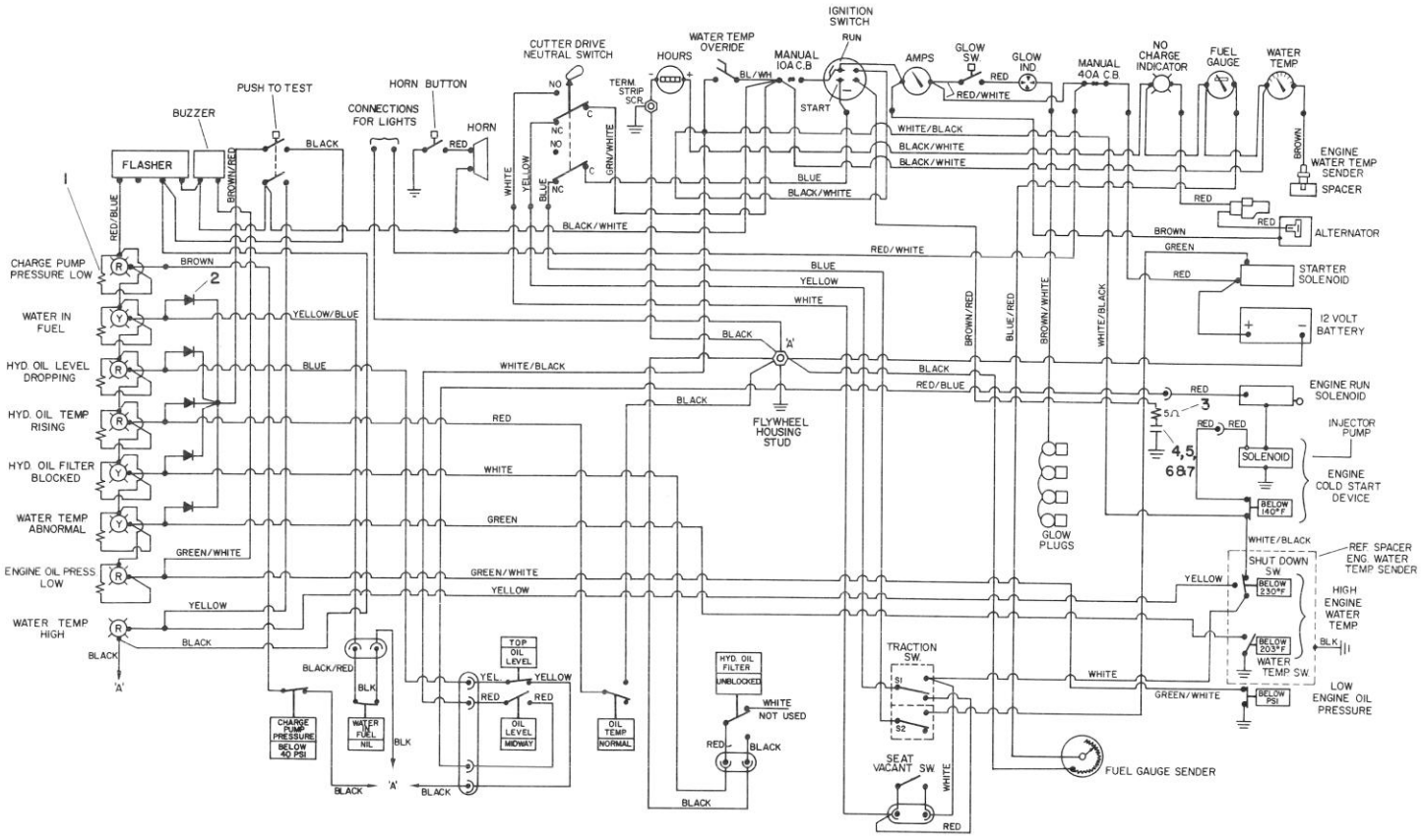


T-0171-89

HYDRAULIC SCHEMATIC – CUTTING CIRCUIT

Ref. No.	Part No.	Description	No. Used
4	58-5770	Hose Assembly	2
8	58-4960	Tube Assembly	1
9	58-4970	Tube Assembly	1
10	58-5730	Hose Assembly	1
11	58-5790	Hose Assembly	2
12	58-5060	Tube Assembly	1
13	58-5000	Tube Assembly	1
14	58-5020	Tube Assembly	1
15	58-5040	Tube Assembly	1
16	58-5780	Hose Assembly	2
18	58-5750	Hose Assembly	1
27	58-5740	Hose Assembly	1

Ref. No.	Part No.	Description	No. Used
29	58-4990	Tube Assembly	1
30	58-5070	Tube Assembly	1
31	58-4950	Tube Assembly	1
33	58-5050	Tube Assembly	1
34	58-5030	Tube Assembly	1
35	58-4980	Tube Assembly	1
36	60-3340	Hose Assembly	1
37	63-4710	Tube Assembly	1
38	58-7740	Tube Assembly	1
39	58-5760	Hose Assembly	1
41	60-1250	Hose Assembly	2

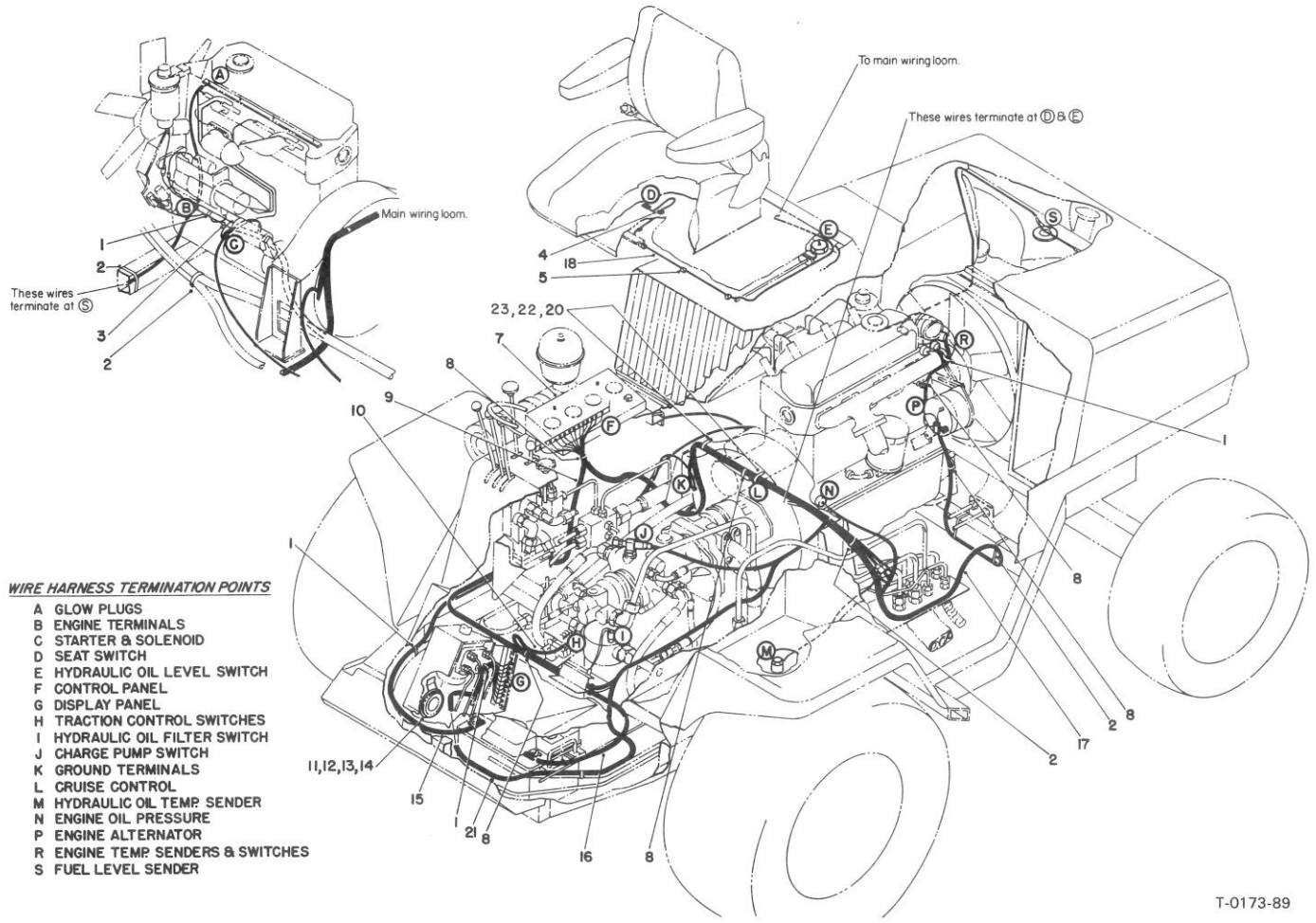


T-0172-89

ELECTRICAL DIAGRAM

Ref. No.	Part No.	Description	No. Used
1	60-1720	Resistor	7
2	48-4470	Diode	5
3	38-2860	Resistor	1
4	37-2690	Capacitor	1

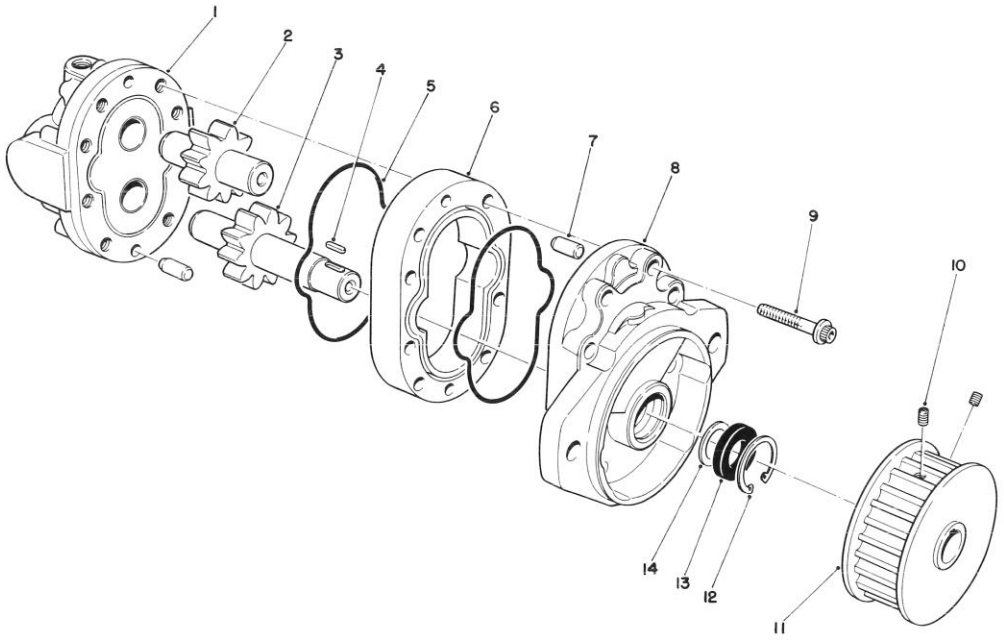
Ref. No.	Part No.	Description	No. Used
5	2412-74	Clamp	1
6	60-2660	Wire — Resistor to Capacitor	1
7	60-2670	Wire — Capacitor to Ground	1



ELECTRICAL SYSTEM DIAGRAM

Ref. No.	Part No.	Description	No. Used
1	3290-381	Tie — Cable	7
2	250-1	Tie — Cable	4
3	2412-109	Clip	1
4	237-100	Grommet	1
5	60-0930	Clip	3
7	60-1310	Wiring Harness — Control Panel	1
8	3290-378	Tie — Cable	12
9	66-5450	Wiring Harness	1
10	60-1840	Wiring Harness — Traction Control Switches	1
11	48-4590	Horn — Disc	1

Ref. No.	Part No.	Description	No. Used
12	48-7730	Screw — Hex Hd.	1
13	48-9570	Lockwasher	1
14	48-7930	Nut	1
15	58-3850	Cable — Negative, Battery	1
16	58-3840	Cable — Positive, Battery	1
17	60-1330	Wiring Harness — Main	1
18	59-8640	Jumper Wire Assy. — Seat	1
20	63-4790	Clip	2
21	60-1300	Wiring Harness Display Panel	1
22	48-8000	Lockwasher	2
23	48-7880	Nut — Hex	2



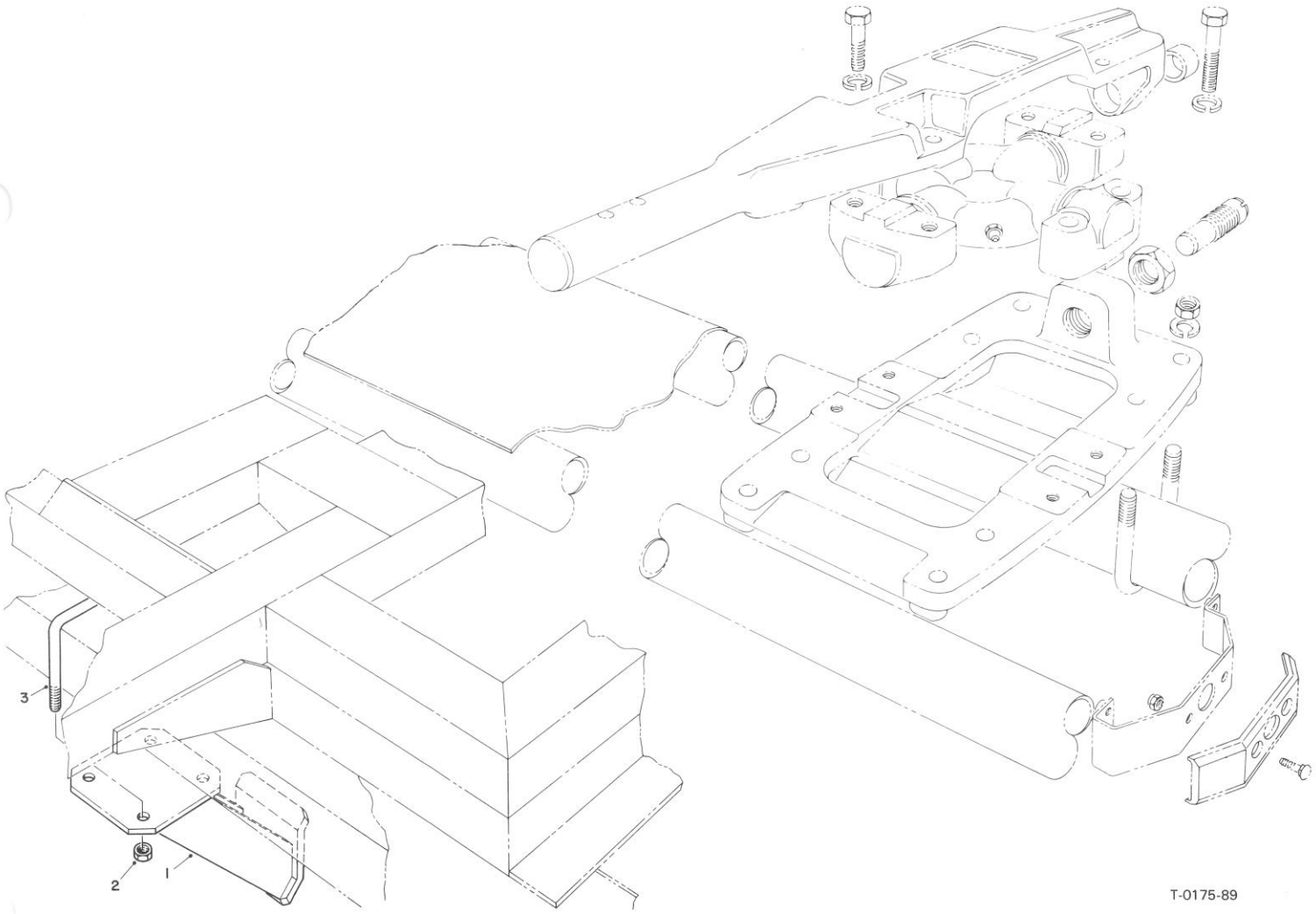
T-0174-89

REEL MOTOR ASSEMBLY NO. 66-5700

Ref. No.	Part No.	Description	No. Used
1	66-5720	Housing Assembly w/Bushings	1
2	66-5750	Idler Gear	1
3	66-5760	Drive Gear	1
4	47-2380	Key	1
5	59-8420	O-Ring	2
6	66-5740	Body	1
7	42-2010	Pin — Dowel	2
8	66-5730	Plate Assembly — Front w/Bushings	1

Ref. No.	Part No.	Description	No. Used
9	66-5770	Screw — Cap, Soc. Hd.	8
10	3246-17	Screw — Set	2
11	47-7150	Pulley — Drive	1
12	59-8320	Ring — Snap	1
13	66-5710	Seal — Shaft	1
14	60-5890	Washer — Backup	1
*	66-5700	Reel Motor Assembly (Incl. Ref. #1-9, 12-14)	1
*		Seal Repair Kit (Incl. Ref. #5, 12-14)	1

* Not Illustrated



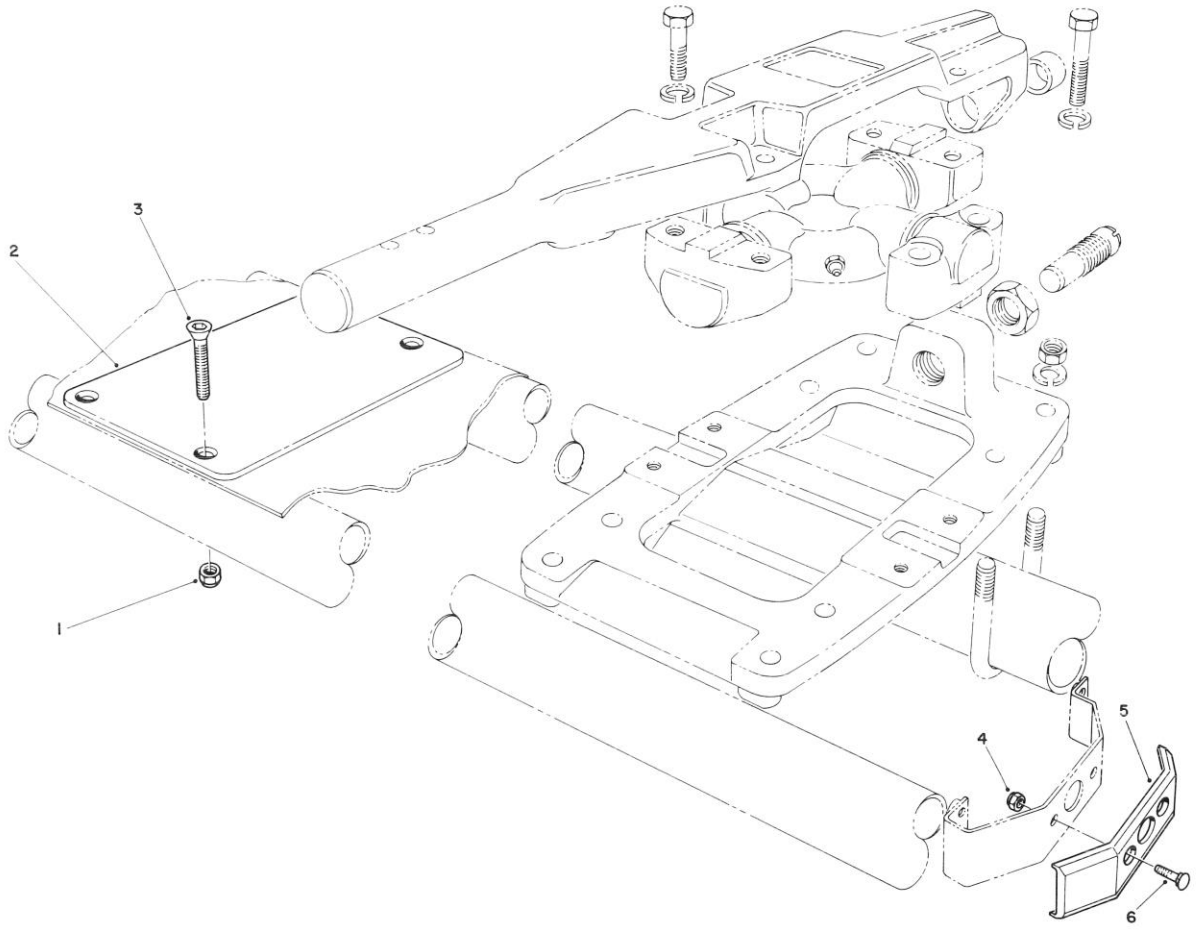
T-0175-89

CUTTING UNIT FLOTATION KIT MODEL NO. 03760
(CUTTING UNIT NO. 1)

Ref. No.	Part No.	Description	No. Used
1	66-5490	Bumper — Roller	2
2	3296-47	Locknut	8
3	66-5560	U-Bolt	4

Ref. No.	Part No.	Description	No. Used
*	3296-45	Locknut	2
*	62-6060	Casting — Weight	1
*	3233-1	Carriage Bolt	2

* Not Illustrated



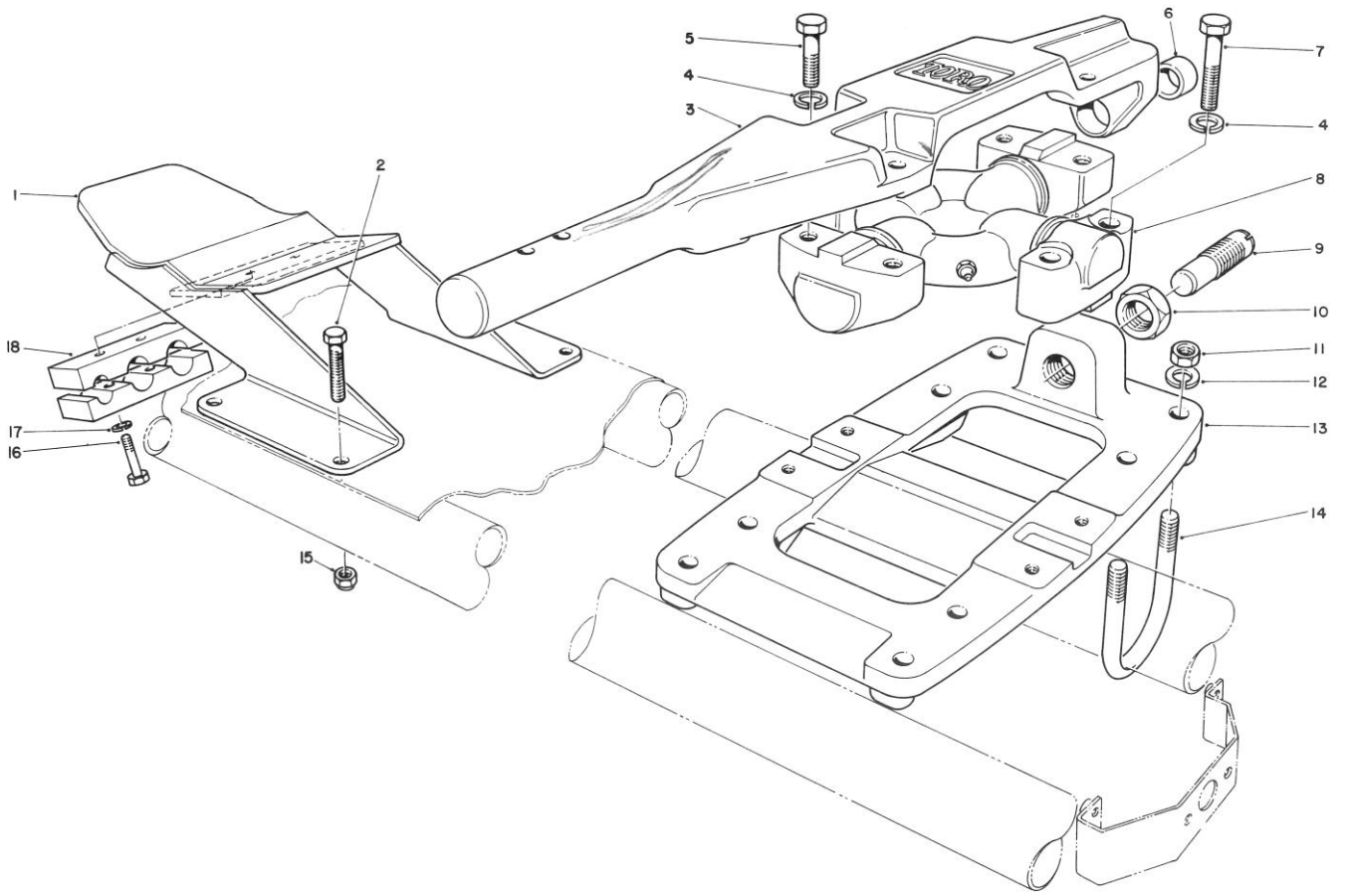
T-0176-89

CUTTING UNIT FLOTATION KIT MODEL NO. 03760 (Continued)

(CUTTING UNITS NO. 2 & 3)

Ref. No.	Part No.	Description	No. Used
1	3296-8	Locknut	8
2	66-5630	Plate — Tipper	2
3	3289-20	Screw	8

Ref. No.	Part No.	Description	No. Used
4	3296-45	Locknut	4
5	62-6060	Casting — Weight	2
6	3233-1	Carriage Bolt	4

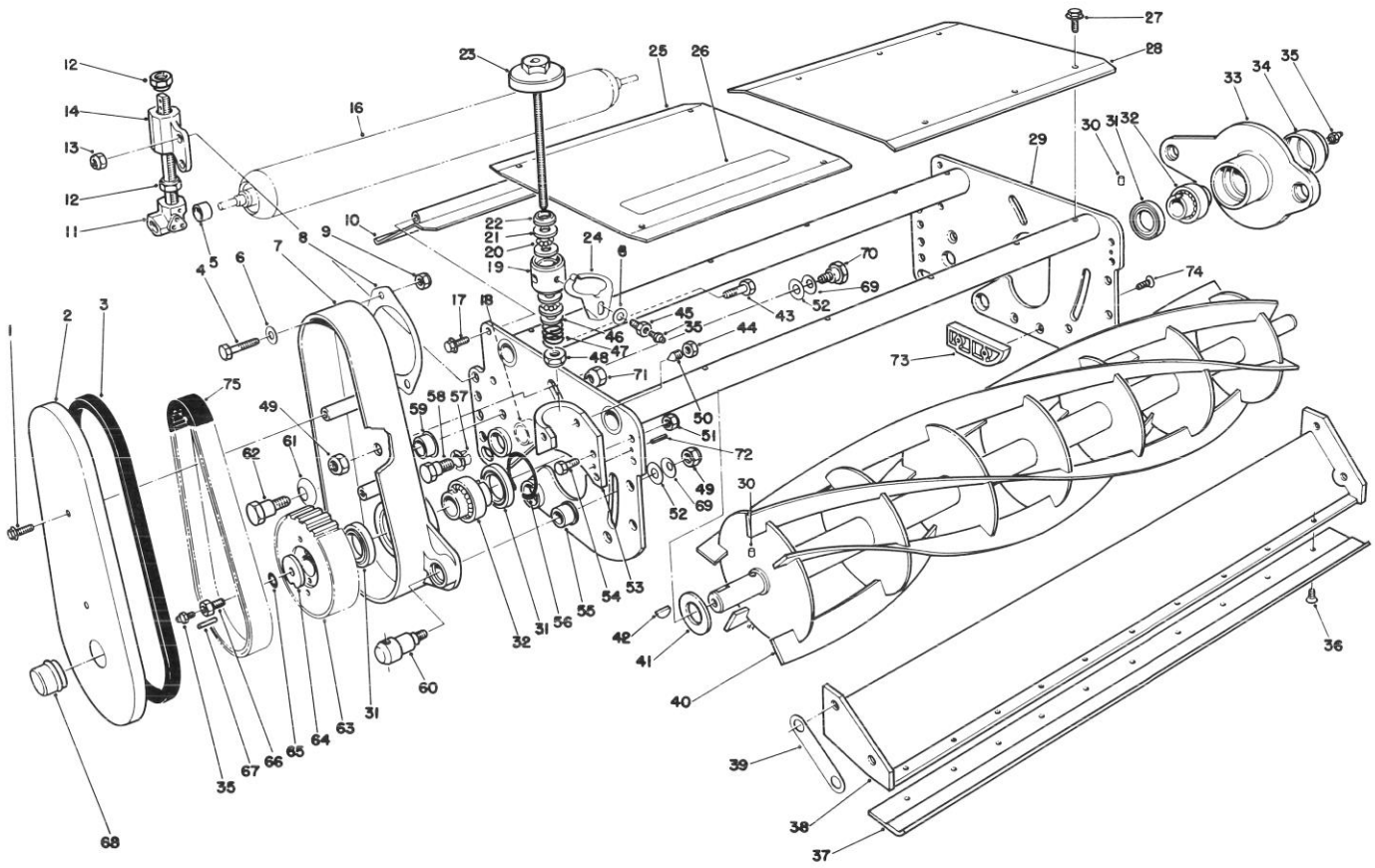


T-0177-89

CUTTING UNIT FLOTATION KIT MODEL NO. 03760 (Continued)
(CUTTING UNITS NO. 4 & 5)

Ref. No.	Part No.	Description	No. Used
1	59-7550	Bracket — Tipper	2
2	321-11	Hex Hd. Capscrew	8
3	59-5880	Arm — Pivot	5
4	3253-21	Lockwasher	40
5	3211-4	Hex Hd. Capscrew	20
6	256-286	Bushing — Steel Back	5
7	3211-8	Hex Hd. Capscrew	20
8	59-5910	Cross & Bearing	5
9	59-5940	Pin — Lockout	5

Ref. No.	Part No.	Description	No. Used
10	3218-7	Jam Nut	5
11	48-7930	Nut	40
12	48-9570	Lockwasher	40
13	59-5900	Base — Pivot	5
14	48-6060	U-Bolt	20
15	3296-8	Locknut	8
16	321-18	Hex Hd. Capscrew	4
17	3253-3	Lockwasher	4
18	59-6160	Clamp — Hose	4



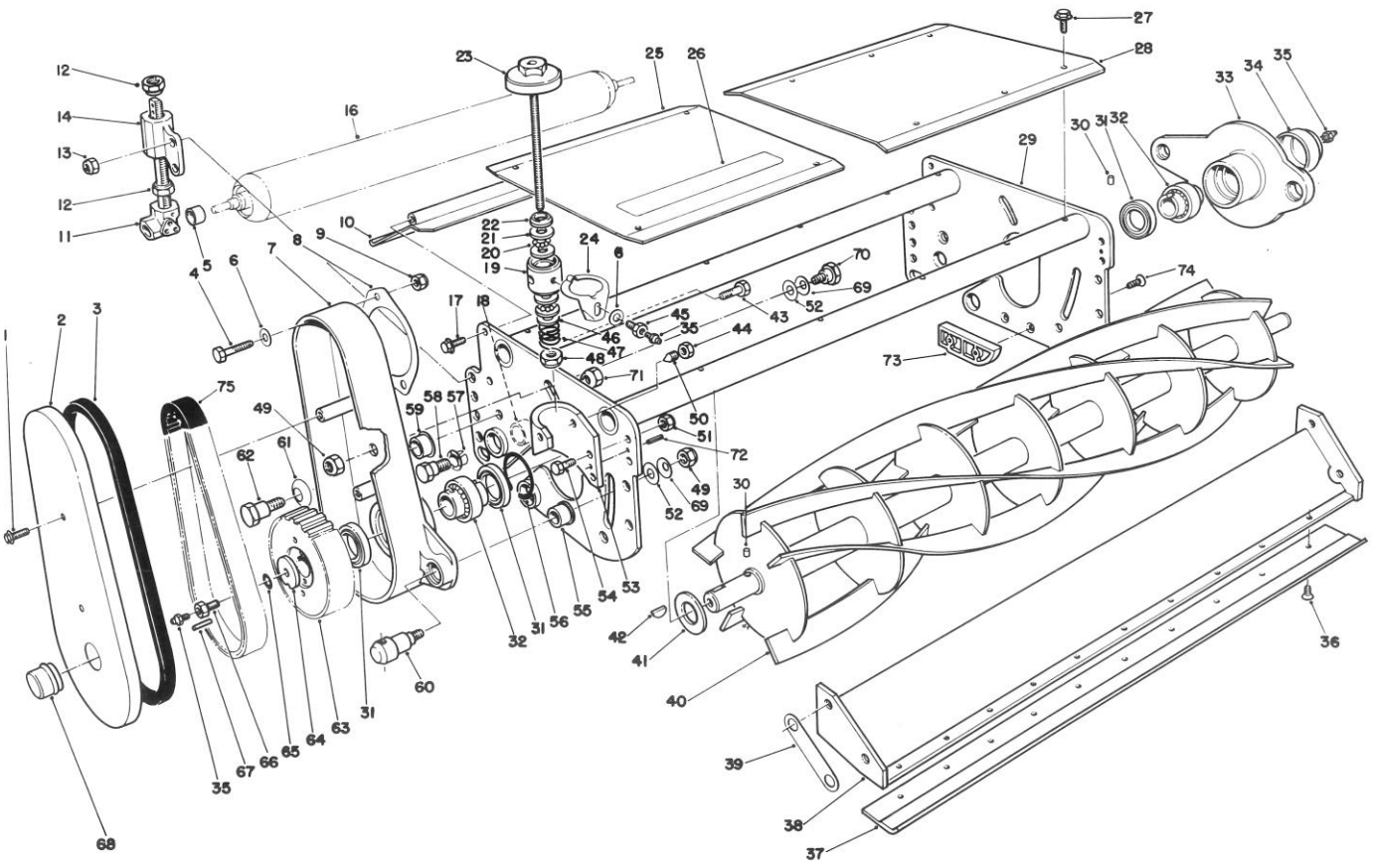
T-0178-89

CUTTING UNIT R.H. & CENTER ASSEMBLY
(5 BLADE MODEL 03755 & 7 BLADE MODEL 03747)

Ref. No.	Part No.	Description	No. Used
1	3234-14	Screw — Flange Hd.	2
2	48-9071	Cover — Drive Housing R.H.	1
3	47-7170	Gasket	1
4	324-6	Bolt	2
5	59-5780	Roller Bushing	2
6	3256-25	Washer	3
7	62-6470	Drive Housing R.H.	1
8	48-9050	Shield Drive Plate	1
9	3296-48	Nut — Lock	2
10	51-1600	Grass Deflector R.H. & Center	1
11	59-5700	Collar Assembly	2
12	59-5820	Nut — Cone	4
13	3296-25	Nut — Lock	4
14	59-5770	Roller Adj. Housing	2
16	59-5630	Rear Roller Assembly	1
17	3234-12	Screw — Flange Hd.	2
18	62-6110	Bushing Assembly	4
19	52-2980	Pivot Adjust	2
20	257-6	Bearing	4
21	257-5	Washer — Thrust	8
22	253-84	Seal	2
23	59-5580	Handle Assembly	2

Ref. No.	Part No.	Description	No. Used
24	52-3000	Arm Spring	2
25	59-5840	Cover — Outboard	1
26	59-7790	Decal	1
27	11-9760	Screw	8
28	59-5830	Cover — Inboard	1
29	12-4679	Frame (Incl. Ref. #18)	1
30	48-8880	Pin — Dowel	2
31	253-145	Seal	3
32	59-6140	Bearing	2
33	59-5550	Bearing Housing	1
34	59-5560	Cap — Dust	1
35	302-5	Grease Zerk	4
36	57-4910	Screw	10
37	59-5890	Bedknife	1
38	59-5470	Bedbar	1
39	48-9240	Spacer	2
40	12-4459	Reel (5-Blade)	1
*	12-4469	Reel (7-Blade)	1
41	38-7330	Grass Shield	2
42	3257-3	Key — Woodruff	1
43	325-7	Bolt	4
44	3218-18	Nut — Jam	4

* Not Illustrated



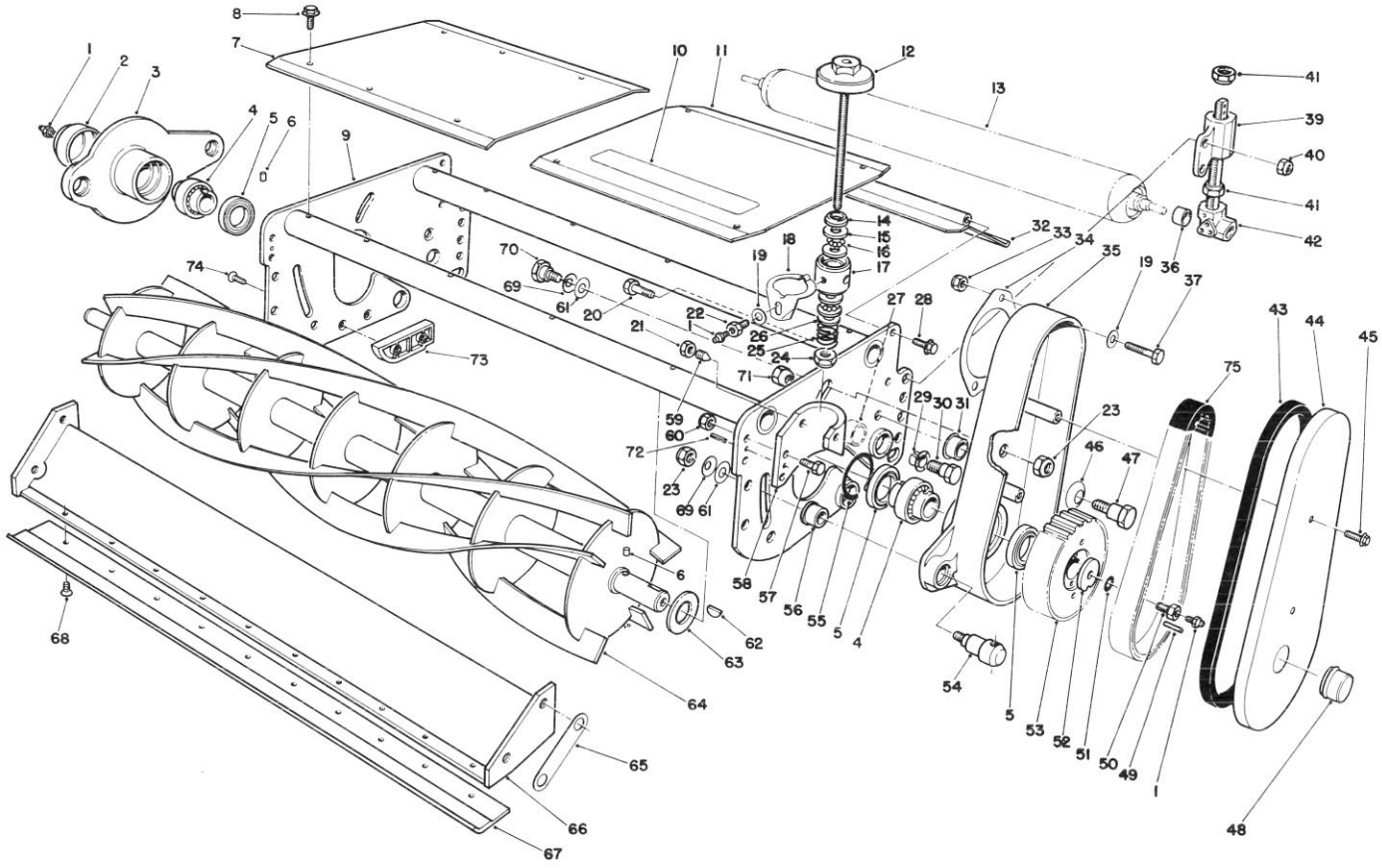
T-0178-89

CUTTING UNIT R.H. & CENTER ASSEMBLY (Continued)
(5 BLADE MODEL 03755 & 7 BLADE MODEL 03747)

Ref. No.	Part No.	Description	No. Used
45	52-2990	Capscrew	2
46	29-8870	Washer	2
47	5-4373	Spring	2
48	3296-62	Nut — Lock	2
49	3296-28	Nut — Lock	3
50	57-5190	Set Screw	4
51	3296-26	Nut — Lock	4
52	62-6090	Shim	3
53	59-5610	Bracket R.H. Bedknife Adj.	1
*	59-5600	Bracket L.H. Bedknife Adj.	1
54	323-7	Bolt	4
55	256-113	Flange Bushing	2
56	32151-71	Retaining Ring	1
57	256-292	Bushing Nyliner	4
58	66-5570	Bolt Shoulder	4
59	256-252	Bushing — Flange	2
60	59-5570	Pin — Adjuster	2

Ref. No.	Part No.	Description	No. Used
61	3290-440	Washer — Belleville	2
62	48-9020	Bolt	2
63	47-7140	Pulley — Driven	1
64	59-6150	Washer — Pulley	1
65	3254-4	Washer — Lock	1
66	59-6190	Capscrew — Reel	1
67	32121-50	Pin — Roll	1
68	59-7490	Plug — Grease Fitting	1
69	3290-473	Washer — Belleville	3
70	62-6080	Bolt — Shoulder	1
71	242-50	Nut — Cone	2
72	32121-2	Pin — Roll	2
73	62-6070	Deflector Block (Not used on 5-Blade Cutting Unit)	2
74	32108-101	Flat Head Screw (Not used on 5-Blade Cutting Unit)	4
75	47-7160	Belt	1

* Not Illustrated



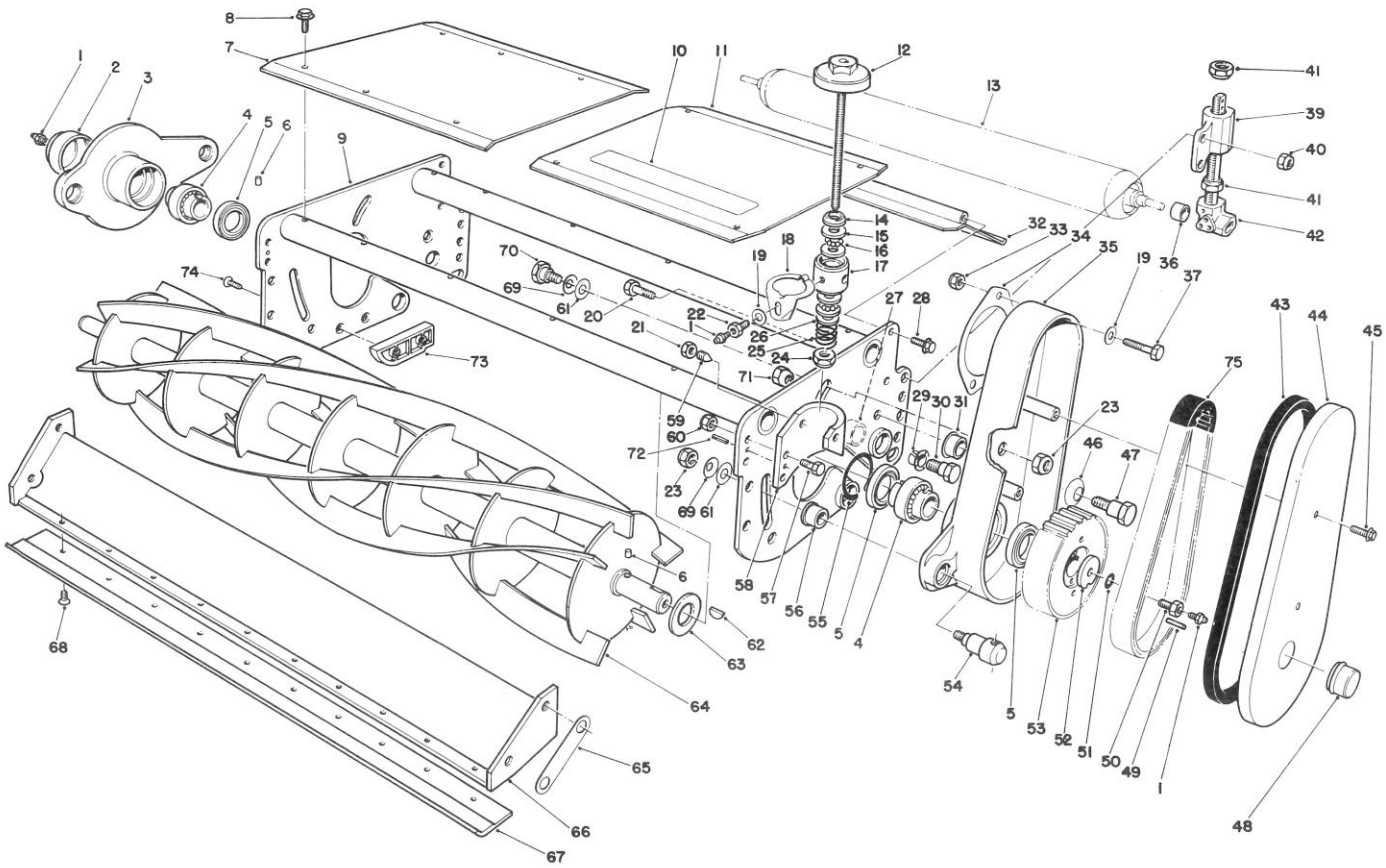
T-0179-89

CUTTING UNIT ASSEMBLY L.H.

(5 BLADE MODEL NO. 03745 & 7 BLADE MODEL NO. 03737)

Ref. No.	Part No.	Description	No. Used
1	302-5	Grease Zerk	4
2	59-5560	Cap — Dust	1
3	59-5550	Bearing Housing	1
4	59-6140	Bearing	2
5	253-145	Seal	3
6	48-8880	Pin — Dowel	2
7	59-5830	Cover — Inboard	1
8	11-9760	Screw	8
9	12-4679	Frame (Incl. Ref. #27)	1
10	59-7790	Decal	1
11	59-5840	Cover — Outboard	1
12	59-5580	Handle Assembly	2
13	59-5630	Rear Roller Assembly	1
14	253-84	Seal	2
15	257-5	Washer — Thrust	8
16	257-6	Bearing	4
17	52-2980	Pivot Adjust	2
18	52-3000	Arm — Spring	2
19	3256-25	Washer	3
20	325-7	Bolt	4
21	3218-18	Nut Jam	4
22	52-2990	Capscrew	2

Ref. No.	Part No.	Description	No. Used
23	3296-28	Nut — Lock	3
24	3296-62	Nut — Lock	2
25	5-4373	Spring	2
26	29-8870	Washer	2
27	62-6110	Bushing Assembly	4
28	3234-12	Screw — Flange Hd.	2
29	256-292	Bushing Nylinder	4
30	66-5570	Bolt — Shoulder	4
31	256-252	Bushing Flange	2
32	52-9660	Grass Deflector L.H.	1
33	3296-48	Nut — Lock	2
34	48-9050	Shield — Drive Plate	1
35	62-6480	Drive Housing L.H.	1
36	59-5780	Roller Bushing	2
37	324-6	Bolt	2
39	59-5770	Roller Adj. Housing	2
40	3296-25	Nut — Lock	4
41	59-5820	Nut — Cone	4
42	59-5700	Collar Assembly	2
43	47-7170	Gasket	1
44	48-9081	Cover — Drive Housing L.H.	1
45	3234-14	Screw — Flange Hd.	2



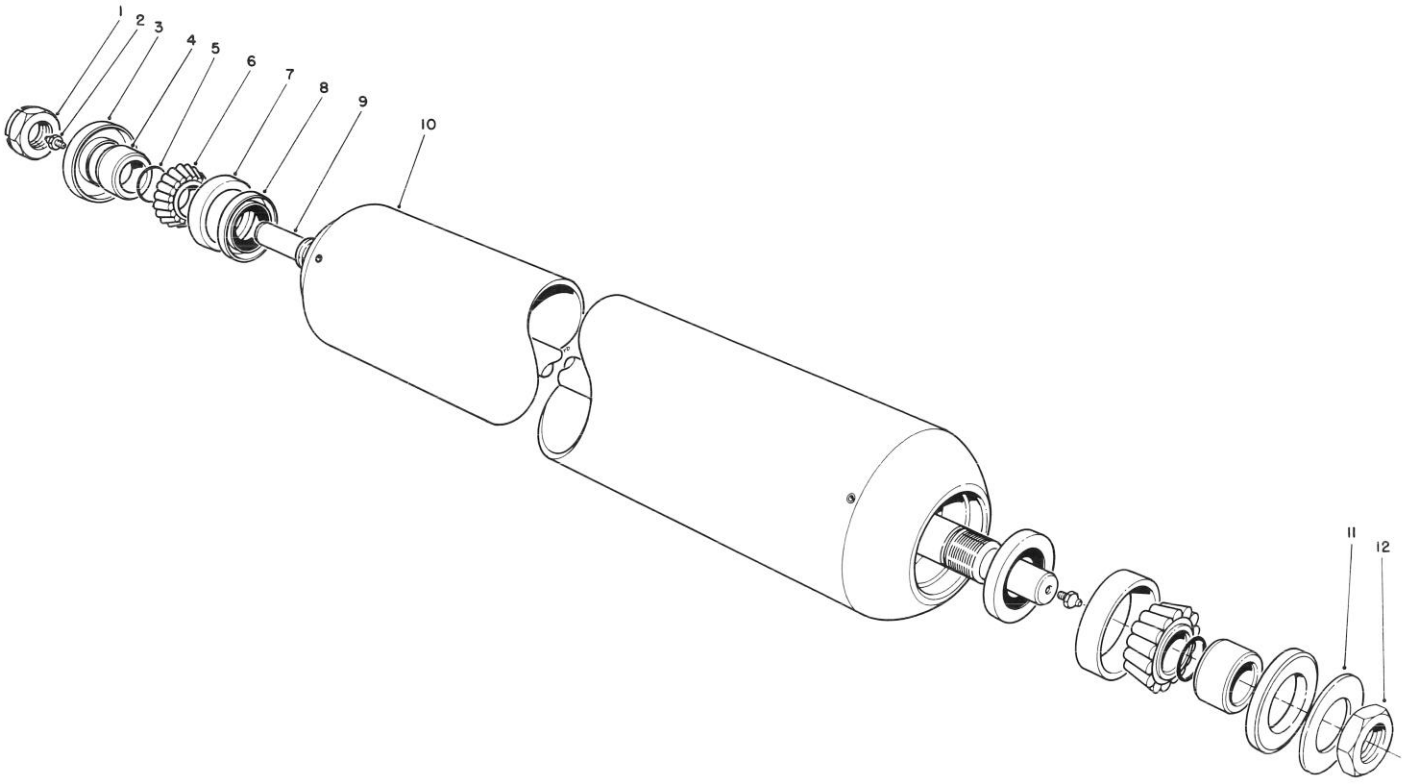
T-0179-89

CUTTING UNIT ASSEMBLY L.H. (Continued)
(5 BLADE MODEL NO. 03745 & 7 BLADE MODEL NO. 03737)

Ref. No.	Part No.	Description	No. Used
46	3290-440	Washer — Belleville	2
47	48-9020	Bolt	2
48	59-7490	Plug — Grease Fitting	1
49	32121-50	Pin — Roll	1
50	59-6190	Capscrew — Reel	1
51	3254-4	Washer — Lock	1
52	59-6150	Washer — Pulley	1
53	47-7140	Pulley — Driven	1
54	59-5570	Pin — Adjuster	2
55	32151-71	Retaining Ring	1
56	256-113	Flange Bushing	2
57	323-7	Bolt	4
58	59-5600	Bracket — L.H. Bedknife Adj.	1
*	59-5610	Bracket — R.H. Bedknife Adj.	1
59	57-5190	Set Screw	4
60	3296-26	Nut — Lock	4
61	62-6090	Shim	3
62	3257-3	Key — Woodruff	1

Ref. No.	Part No.	Description	No. Used
63	38-7330	Grass Shield	2
64	12-4459	Reel (5-Blade)	1
*	12-4469	Reel (7-Blade)	1
65	48-9240	Spacer	2
66	59-5470	Bedbar	1
67	59-5890	Bedknife	1
68	57-4910	Screw	10
69	3290-473	Washer — Belleville	3
70	62-6080	Bolt — Shoulder	1
71	242-50	Nut — Cone	2
72	32121-2	Pin Roll	2
73	62-6070	Deflector Block (Not used on 5 Blade Cutting Unit)	2
74	32108-101	Flat Head Screw (Not used on 5 Blade Cutting Unit)	4
75	47-7160	Belt	1
*	63-4330	Decal - 5 Blade	1

* Not Illustrated

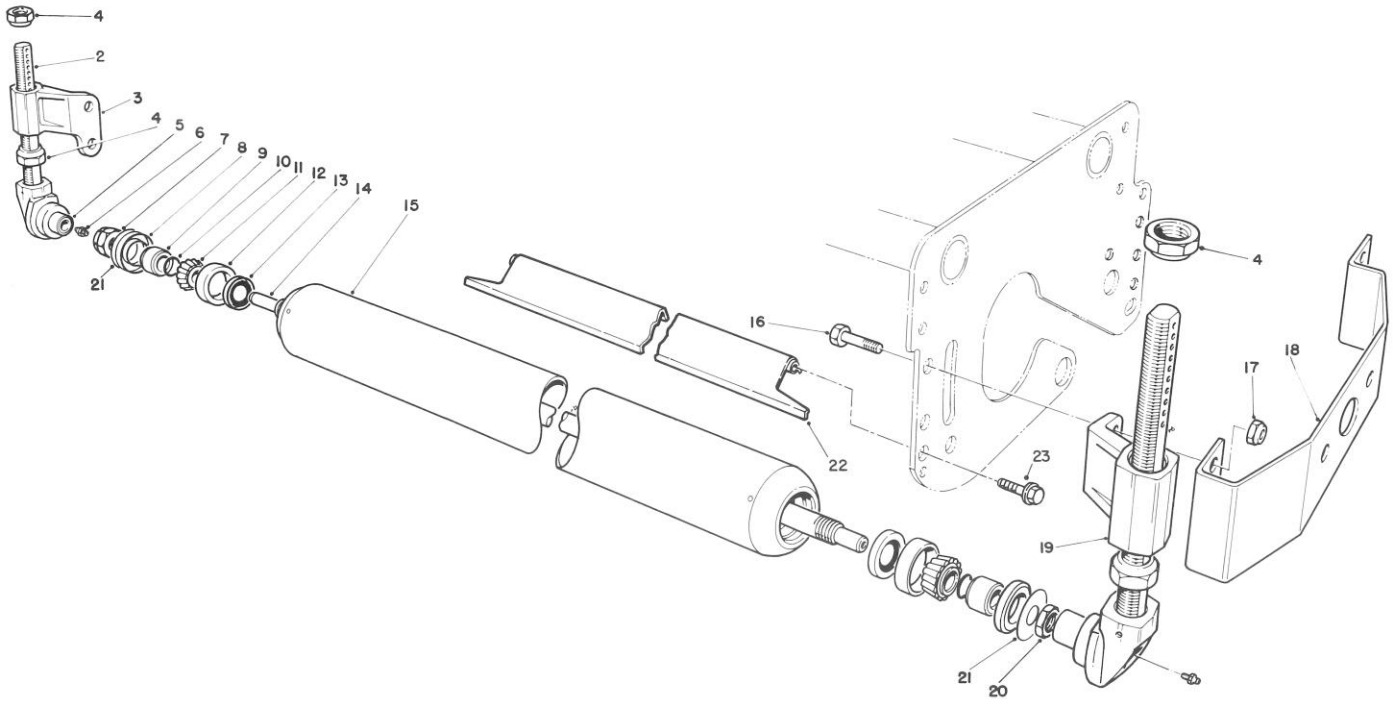


T-0180-89

REAR ROLLER ASSEMBLY NO. 59-5630

Ref. No.	Part No.	Description	No. Used
1	32127-47	Nut — Flex Lock	1
2	302-5	Fitting — Grease	2
3	253-117	Seal — Grease	2
4	59-5690	Sleeve — Wear	2
5	237-54	O-Ring	2
6	254-78	Bearing Cone	2

Ref. No.	Part No.	Description	No. Used
7	254-79	Bearing Cup	2
8	253-122	Seal — Grease	2
9	66-5640	Shaft — Roller	1
10	59-5640	Tube & End Cap Assembly	1
11	66-5620	Washer — Thrust	2
12	3220-7	Nut — Jam	1



T-0181-89

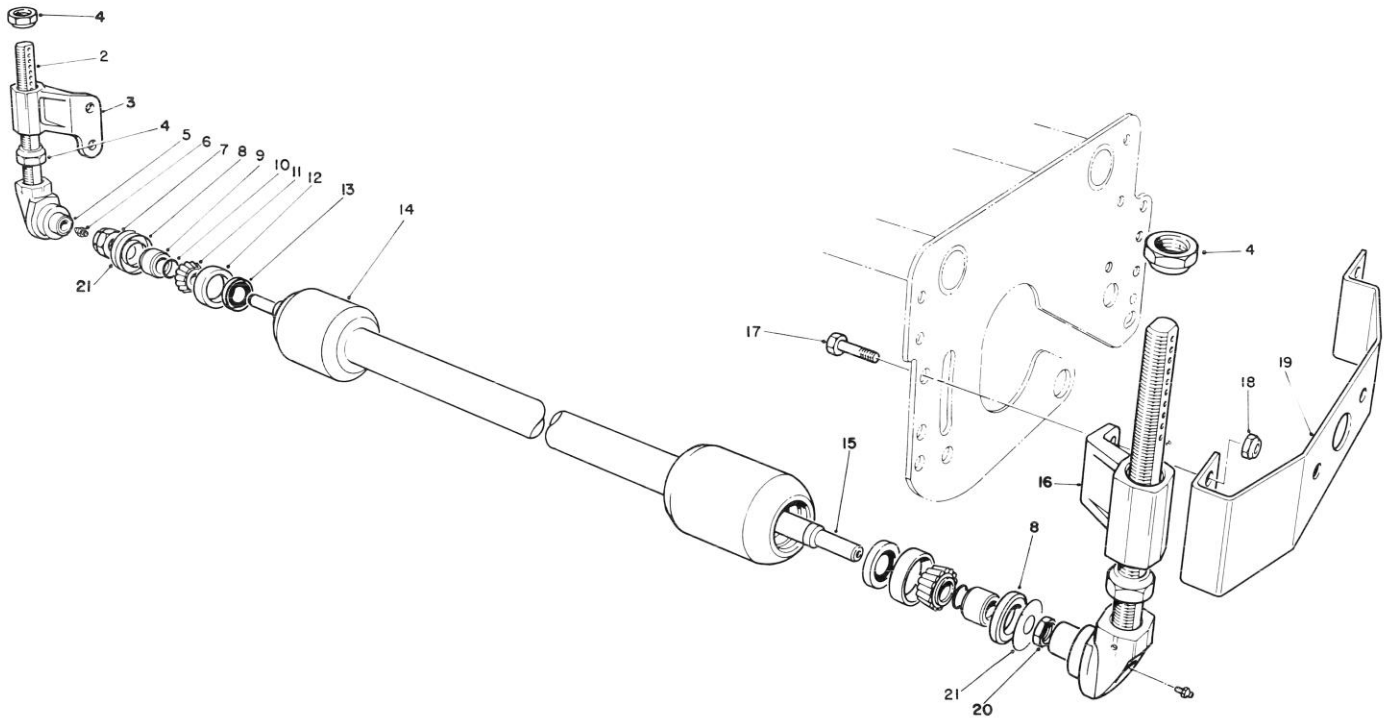
FRONT ROLLER KIT MODEL NO. 03742 (Optional)

Ref. No.	Part No.	Description	No. Used
2	62-6010	Collar Assembly	2
3	62-5980	Roller Adjuster Housing R.H.	1
4	59-5820	Nut — Cone	4
5	59-5780	Bushing Assembly	2
6	302-5	Grease Fitting	2
7	32127-47	Nut — Flex Lock	1
8	253-117	Seal — Grease	2
9	59-5690	Sleeve — Wear	2
10	237-54	O-Ring	2
11	254-78	Bearing — Cone	2
12	254-79	Bearing — Cup	2
13	253-122	Seal — Grease	2
14	66-5650	Shaft — Roller	1
15	62-6190	Roller Tube	1
16	325-7	Capscrew — Hex Hd.	4
17	3296-25	Nut — Lock	4
18	59-5620	Guard	2
19	62-5960	Roller Adjuster Housing L.H.	1
20	3220-7	Nut — Jam	1
21	66-5620	Washer — Thrust	2
*	62-6200	Roller (Incl. Ref. #6-15 & 20-21)	1

FRONT ROLLER SCRAPER KIT PART NO. 62-6220 (Optional)

Ref. No.	Part No.	Description	No. Used
22†		Scraper	1
23	3234-11	Screw Flange	2

* Not Illustrated
† Not Serviceable Separately.



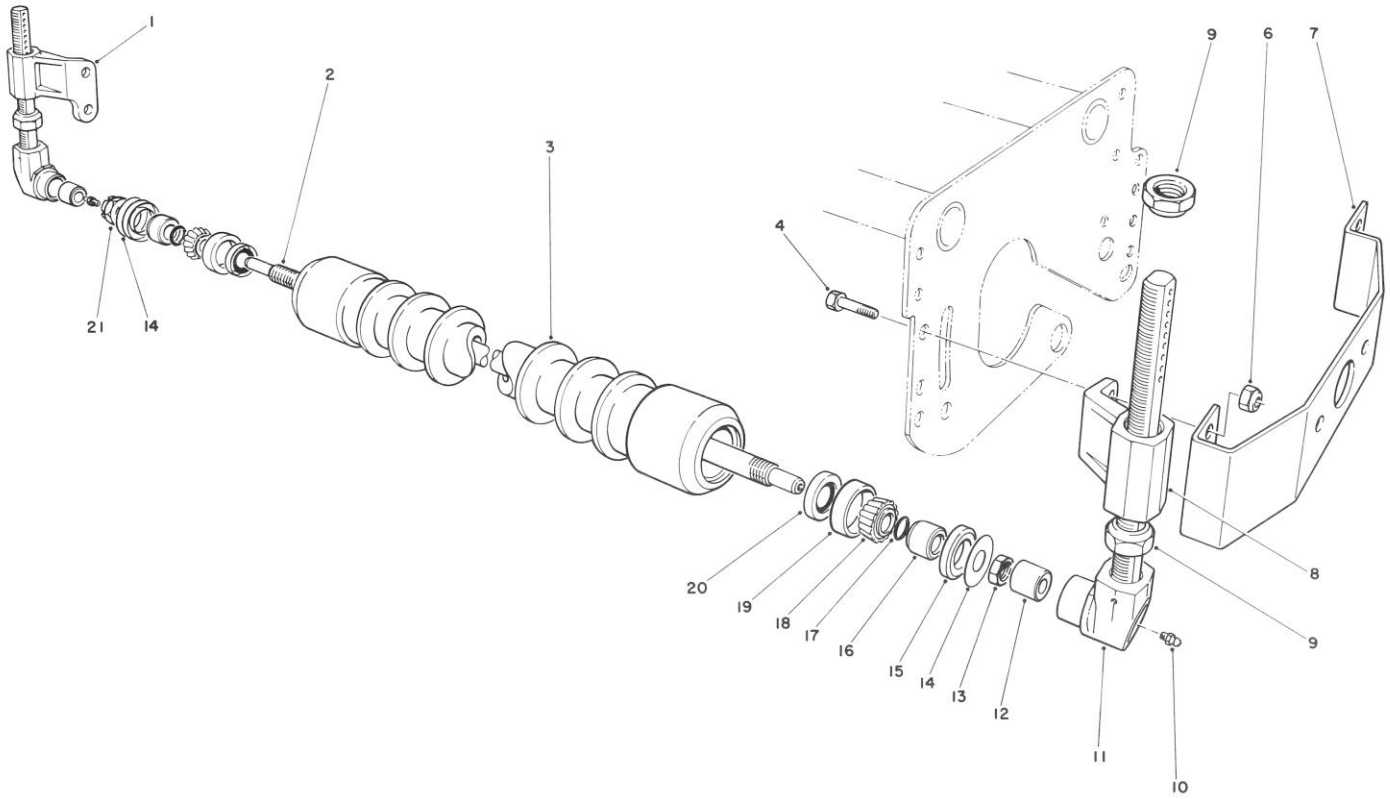
T-0182-89

SECTIONAL ROLLER KIT MODEL NO. 03738 (Optional)

Ref. No.	Part No.	Description	No. Used
2	62-6010	Collar Assembly	2
3	62-5980	Housing Roller Adjuster R.H.	1
4	59-5820	Nut — Cone	4
5	59-5780	Bushing Assembly	2
6	302-5	Fitting — Grease	2
7	32127-47	Nut — Flex Lock	1
8	253-117	Seal — Grease	2
9	59-5690	Sleeve — Wear	2
10	237-54	O-Ring	2
11	254-78	Bearing — Cone	2
12	254-79	Bearing — Cup	2

Ref. No.	Part No.	Description	No. Used
13	253-122	Seal — Grease	2
14	62-6150	Roller — Sectional	1
15	66-5650	Shaft — Roller	1
16	62-5960	Housing Roller Adjuster L.H.	1
17	325-7	Capscrew — Hex Hd.	4
18	3296-25	Nut — Lock	4
19	59-5620	Guard	2
20	3220-7	Nut — Jam	1
21	66-5620	Washer — Thrust	2
*	62-6180	Roller Assembly (Incl. Ref. #6-15, 20 & 21)	1

* Not Illustrated



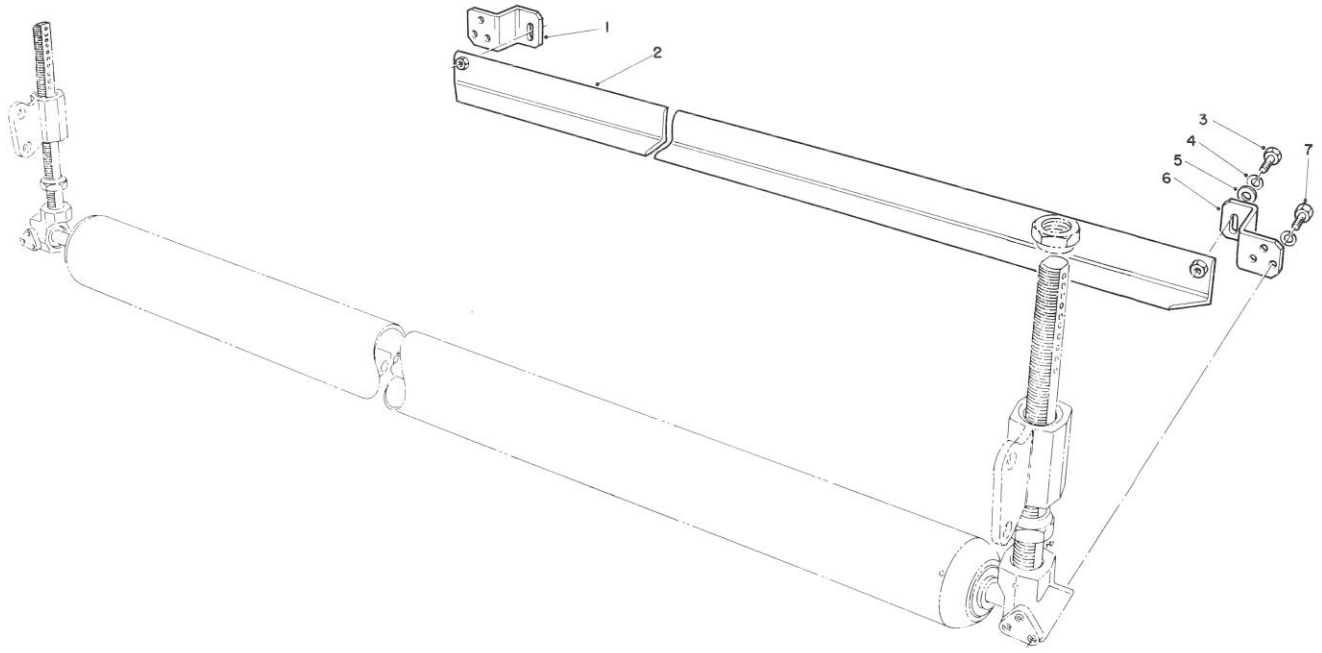
T-0183-89

WIEHLE ROLLER KIT MODEL NO. 03740 (Optional)

Ref. No.	Part No.	Description	No. Used
1	62-5980	Housing — Adjuster R.H.	1
2	62-6040	Shaft — Roller	1
3	62-6030	Roller — Wiehle	1
4	325-7	Screw — Cap Hex Hd.	4
6	3296-25	Nut — Lock	4
7	59-5620	Guard	2
8	62-5960	Housing — Adjuster L.H.	1
9	59-5820	Nut — Cone	4
10	302-5	Fitting — Grease	2
11	62-6010	Collar Assembly	2
12	59-5780	Bushing	2

Ref. No.	Part No.	Description	No. Used
13	3220-7	Nut — Jam	1
14	66-5620	Washer — Thrust	2
15	253-117	Seal — Outer	2
16	59-5690	Sleeve — Wear	2
17	237-54	O-Ring	2
18	254-78	Bearing — Cone	2
19	254-79	Bearing — Cup	2
20	253-122	Seal — Inner	2
21	32127-47	Nut — Flex Lock	1
*	62-6130	Wiehle Roller Assembly (Incl. Ref. #2, 3, 10 & 12-21)	1

* Not Illustrated



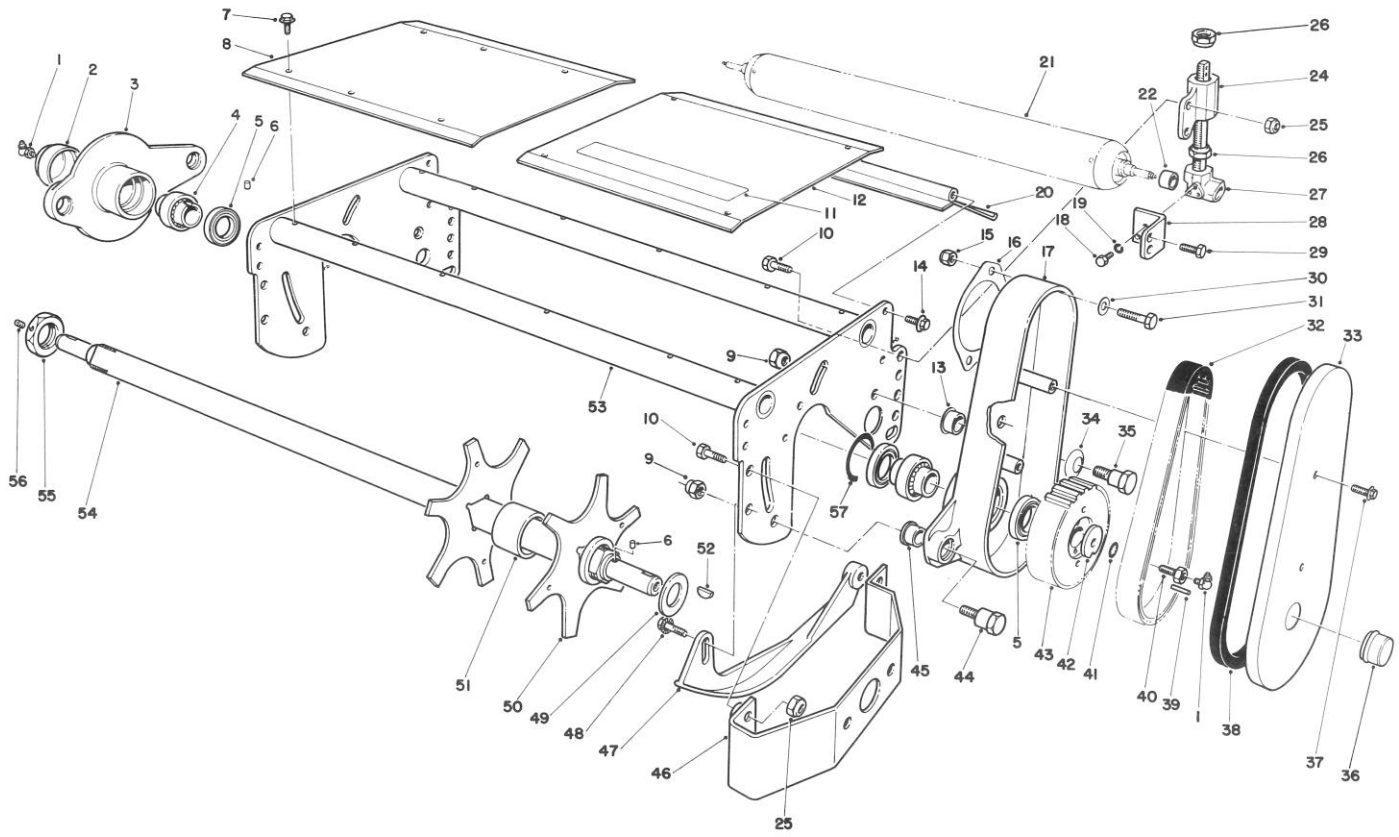
T-0184-89

REAR ROLLER SCRAPER KIT NO. 59-6090 (Optional)

Ref. No.	Part No.	Description	No. Used
1	59-6070	Bracket — Scraper R.H.	1
2†		Scraper	1
3	322-3	Screw — Cap Hex Hd.	2
4	3253-4	Lockwasher	8

Ref. No.	Part No.	Description	No. Used
5	3256-2	Washer	2
6	59-6080	Bracket — Scraper L.H.	1
7	322-2	Screw — Cap Hex Hd.	6

† Not Serviceable Separately.



T-0185-89

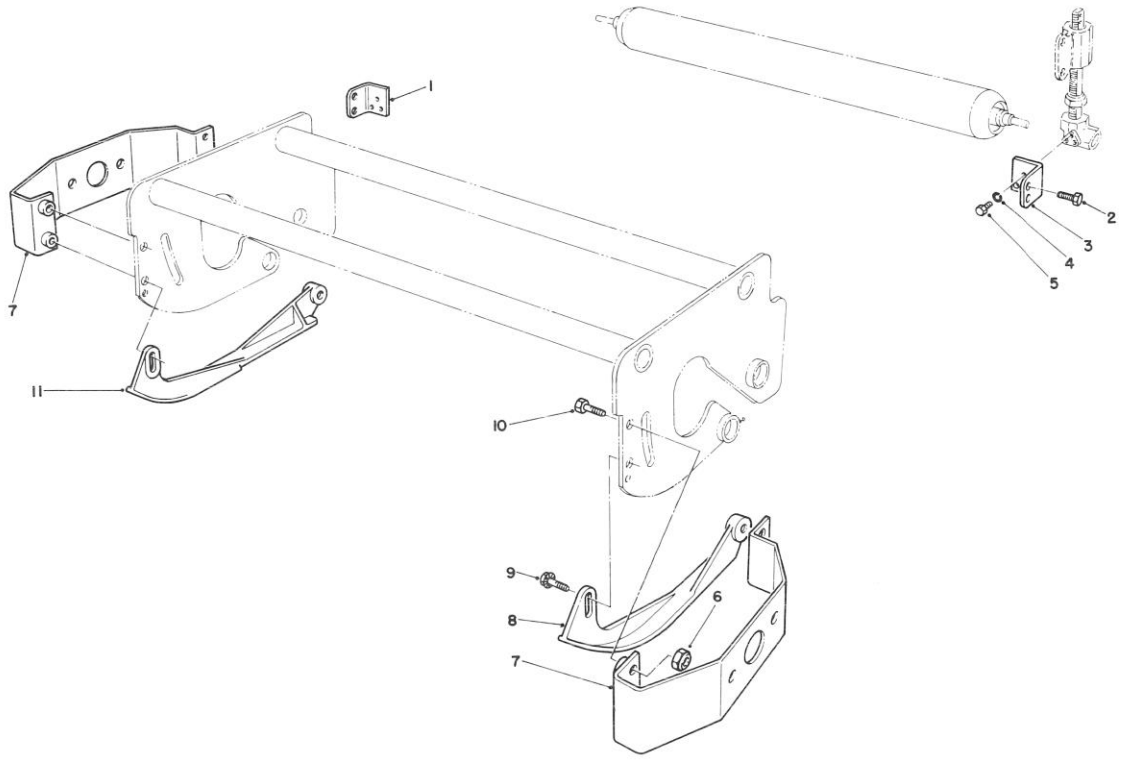
DETHATCHER REEL ASSEMBLIES R.H. & L.H. (Optional)

(R.H. ASSEMBLY MODEL NO. 03732 L.H. ASSEMBLY MODEL NO. 03730)

Ref. No.	Part No.	Description	No. Used
1	302-40	Grease Fitting — 90°	2
2	59-5560	Cap — Dust	1
3	59-5550	Bearing Housing	1
4	59-6140	Bearing	2
5	253-145	Seal	3
6	48-8880	Pin — Dowel	2
7	11-9760	Screw	8
8	59-5830	Cover — Inboard	1
9	3296-28	Nut — Lock	4
10	325-7	Bolt	6
11	59-7790	Decal	1
12	59-5840	Cover — Outboard	1
13	256-252	Bushing — Flange	2
14	3234-12	Screw — Flange	2
15	3296-48	Nut — Lock	2
16	48-9050	Shield — Drive Plate	1
17	62-6480	Drive Housing — L.H.	1
*	62-6470	Drive Housing — R.H.	1
18	322-2	Bolt	6
19	3253-4	Washer — Lock	6
20	52-9660	Grass Deflector — L.H.	1
*	51-1600	Grass Deflector — R.H.	1
21	59-5630	Rear Roller Assembly	1
22	59-5780	Bushing Assembly	2
24	59-5770	Roller Adjuster Housing	2
25	3296-25	Nut — Lock	8
26	59-5820	Nut — Cone	4
27	59-5700	Collar Assembly	2
28	59-6010	Skid Bracket L.H.	1
*	59-6000	Skid Bracket R.H.	1
29	325-5	Bolt	2
30	3256-25	Washer	1

Ref. No.	Part No.	Description	No. Used
31	324-6	Bolt	2
32	47-7160	Belt	1
33	48-9081	Cover — Drive Housing L.H.	1
*	48-9071	Cover — Drive Housing R.H.	1
34	3290-440	Washer — Belleville	2
35	48-9020	Bolt — Shoulder	2
36	59-7490	Plug — Grease Fitting	1
37	3234-14	Screw — Flange	2
38	47-7170	Gasket	1
39	32121-50	Pin — Roll	1
40	59-6190	Capscrew	1
41	3254-4	Washer — Lock	1
42	59-6150	Washer — Pulley	1
43	47-7140	Pulley — Driven	1
44	59-6340	Bolt — Shoulder	2
45	256-113	Bushing — Flange	2
46	59-6020	Guard	2
47	59-5990	Skid L.H.	1
*	59-5980	Skid R.H.	1
48	3234-27	Screw — Flange	2
49	38-7330	Grass Shield	2
50	59-6280	Blade	12
51	59-6320	Spacer	11
52	3257-3	Key — Woodruff	1
53	59-6250	Frame	1
54	59-6290	Shaft & Stop Assembly	1
55	59-6330	Nut	1
56	3246-17	Set Screw	1
57	32151-71	Ring — Retaining	1
*	59-6270	Shaft — Thatcher Assembly (Incl. Ref. #50-51 & 54-56)	1

* Not Illustrated



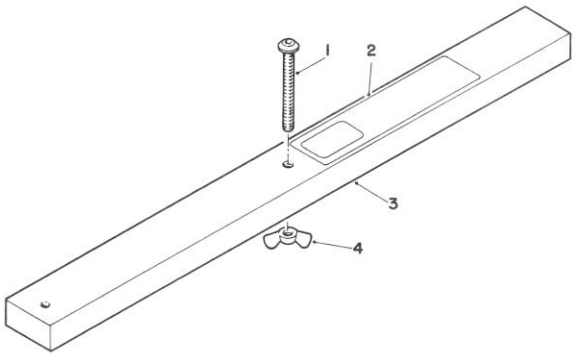
T-0186-89

SIDE SKID KIT MODEL NO. 03744 (Optional)

Ref. No.	Part No.	Description	No. Used
1	59-6000	Bracket — Skid R.H.	5
2	325-4	Screw — Cap Hex Hd.	10
3	59-6010	Bracket — Skid L.H.	5
4	3253-4	Lockwasher	30
5	322-2	Screw — Cap Hex Hd.	30
6	3296-25	Nut — Lock	20

Ref. No.	Part No.	Description	No. Used
7	59-6020	Guard	10
8	59-5990	Skid L.H.	5
9	3234-27	Screw — Cap Hex Hd.	10
10	325-7	Screw — Cap Hex Hd.	10
11	59-5980	Skid R.H.	5

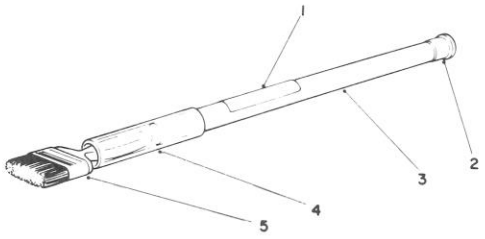
SPECIAL TOOLS



T-0191-89

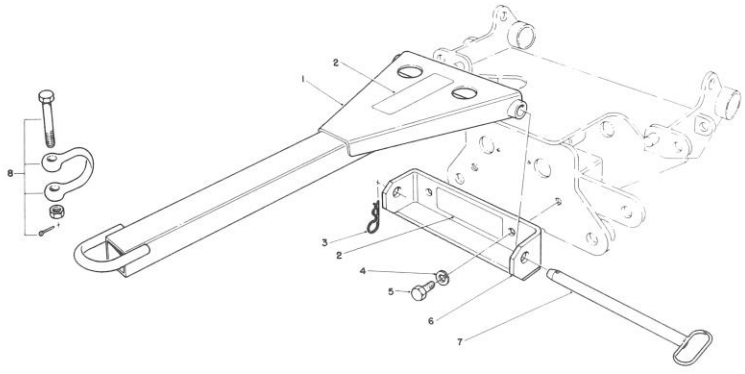
GAUGE BAR ASSEMBLY NO. 59-7900

Ref. No.	Part No.	Description	No. Used
1	3274-75	Button Hd. Socket Capscrew	1
2	59-7930	Decal	1
3	59-7940	Bar	1
4	32103-3	Wing Nut	1



BACKLAPPING BRUSH ASSEMBLY NO. 29-9100

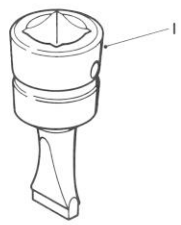
Ref. No.	Part No.	Description	No. Used
1	12-9140	Decal	1
2	2410-18	Plug	1
3	29-9080	Handle	1
4	29-9090	Hose — Handle	1
5	36-4310	Brush	1



T-0190-89

TOW BAR ASSEMBLY NO. 58-7020

Ref. No.	Part No.	Description	No. Used
1	12-7579	Tow Bar (Incl. Ref. #2)	1
2	59-7100	Decal — Towing Instructions	2
3	60-4150	Retaining Pin	1
4	48-8070	Lockwasher	2
5	48-7830	Screw — Hex Hd.	2
6	12-7589	Bracket — Tow Bar (Incl. Ref. #2)	1
7	60-4120	Pin — Tow Bar	1
8	60-4480	Shackle Assembly	1



BED KNIFE SCREW TOOL NO. 51-0880

Ref. No.	Part No.	Description	No. Used
1	51-0880	Tool — Bed Knife Screw	1

INDEX

Description	Page
Foot Rest & Pedal Assembly	1-2
Foot Pads & Battery	3
Steering Tower	4
Steering Tower-Electrical Assembly	5
Power Steering Valve Assembly No. 58-3950	6
Fenders & Center Console Assembly	7
Instrument Panel	8
Parking Brake, Throttle & Oil Filter Assembly	9
Valve Controls	10-11
Reel Control Valve Assembly No. 63-4800 (used on units with serial no. 80501 & up)	12
Control Valve Assembly 58-5470	13
Priority Flow Control — Valve Assembly No. 58-5490	14
Air Cleaner Assembly	15
Seat Platform & Filler Cap Assembly	16
Suspension Seat Assembly	17
Front & Rear Canopy Assembly	18-19
Radiator & Oil Cooler Assembly	20
Fuel Tank Assembly	21
Chassis & Muffler Assembly	22
Front Carrier Assembly	23
Push Rod Assembly	24
Reel Shut-off Valve No. 58-5460	25
No. 2 & 3 Lift Arms Assembly	26
No. 1, 4 & 5 Lift Arms Assembly	27
Traction Drive Assembly	28
Wheel Motor No. 58-5430	29
Planetary Gear Drive Assembly No. 58-5530	30
Steering Axle	31
Engine Installation Assembly	32
Crankcase Assembly	33
Short Block Assembly No. 58-5670	34
Timing Gear & Case Components	35
Water Pump & Thermostat Housing Assembly	36
Crankshaft & Flywheel Housing Components	37
Cylinder Head & Piston Components	38
Valve, Camshaft & Oil Pump Components	39
Oil Pan & Oil Filter	40

Description	Page
Inlet & Exhaust Manifold	41
Fuel System Injection Pump & Nozzle Components	42-43
Fuel Injection Pump No. 60-5100	44-45
Fuel Filter Assembly No. 60-5010	46
Electrical Component Parts	47
Starter Motor Assembly No. 51-7590	48
Alternator Assembly No. 60-5420	49
Hydraulic Pump Connections	50
Gear Pump Assembly No. 58-5650	51
Piston Pump Assembly 58-5660	52
Pump Assembly No. 58-5510	53
Hydraulic Circuit — Traction & Steering	54
Hydraulic Schematic — Traction & Steering	55
Hydraulic Circuit — Lift Arms	56
Hydraulic Circuit — Schematic, Lift Arms	57
Hydraulic — Cutting Circuit	58
Hydraulic Schematic — Cutting Circuit	59
Electrical Diagram	60
Electrical System Diagram	61
Reel Motor Assembly No. 66-5700	62
Cutting Unit Flotation Kit Model No. 03760	63-65
Cutting Unit R.H. & Center Assembly (5 Blade Model 03755 & 7 Blade Model 03747)	66-67
Cutting Unit Assembly L.H. (5 Blade Model 03745 & 7 Blade Model 03737)	68-69
Rear Roller Assembly No. 59-5630	70
Front Roller Kit Model No. 03742 (Optional)	71
Front Roller Scraper Kit Part No. 62-6220 (Optional)	71
Sectional Roller Kit Model No. 03738 (Optional)	72
Wiehle Roller Kit Model No. 03740 (Optional)	73
Rear Roller Scraper Kit No. 59-6090 (Optional)	74
Dethatcher Reel Assemblies R.H. & L.H. (Optional) (R.H. Assembly Model No. 03732 L.H. Assembly Model No. 03730)	75
Side Skid Kit Model No. 03744 (Optional)	76
Special Tools	77

The Toro Promise

A ONE YEAR LIMITED WARRANTY

The Toro Company promises to repair your TORO Product if defective in materials or workmanship. The following time periods from the date of purchase apply:

Commercial Products..... 1 Year

The costs of parts and labor are included, but the customer pays the transportation costs on walk rotary mowers with cutting unit widths of less than 25".

If you feel your TORO product is defective and wish to rely on The Toro Promise, the following procedure is recommended:

1. Contact your Authorized TORO Distributor or Commercial Dealer (the Yellow Pages of your telephone directory is a good reference source).
2. The TORO Distributor or Commercial Dealer will advise on the arrangements that can be made to inspect and repair your product.
3. The TORO Distributor or Commercial Dealer will inspect the product and advise you whether the product is defective and, if so, make all repairs necessary to correct the defect without an extra charge to you.

If for any reason you are dissatisfied with the distributor's analysis of the defect or the service performed, you may contact us.

Write:

TORO Commercial Products Service Department
8111 Lyndale Avenue South
Minneapolis, Minnesota 55420

The above remedy of product defects through repair by an Authorized TORO Distributor or Commercial Dealer is the purchaser's sole remedy for any defect.

THERE IS NO OTHER EXPRESS WARRANTY. ALL IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR USE ARE LIMITED TO THE DURATION OF THE EXPRESS WARRANTY.

Some states do not allow limitations on how long an implied warranty lasts, so the above limitation may not apply to you.

This Warranty applies only to parts or components which are defective and does not cover repairs necessary due to normal wear, misuse, accidents, or lack of proper maintenance. Regular, routine maintenance of the unit to keep it in proper condition is the responsibility of the owner.

All warranty repairs reimbursable under the Toro Promise must be performed by an Authorized TORO Commercial Dealer or Distributor using Toro approved replacement parts.

Repairs or attempted repairs by anyone other than an Authorized TORO Distributor or Commercial Dealer are not reimbursable under the Toro Promise. In addition, these unauthorized repair attempts may result in additional malfunctions, the correction of which is not covered by warranty.

THE TORO COMPANY IS NOT LIABLE FOR INDIRECT, INCIDENTAL OR CONSEQUENTIAL DAMAGES IN CONNECTION WITH THE USE OF THE PRODUCT INCLUDING ANY COST OR EXPENSE OF PROVIDING SUBSTITUTE EQUIPMENT OR SERVICE DURING PERIODS OF MALFUNCTION OR NON-USE.

Some states do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation or exclusion may not apply to you.

This warranty gives you specific legal rights, and you may also have other rights which vary from state to state.

COUNTRIES OTHER THAN THE UNITED STATES OR CANADA

Customers who have purchased TORO products exported from the United States or Canada should contact their TORO Distributor (Dealer) to obtain guarantee policies for your country, province or state. If for any reason you are dissatisfied with your Distributor's service or have difficulty obtaining guarantee information, contact the TORO importer. If all other remedies fail, you may contact us at The Toro Company.

Compliance with Radio Interference Regulations Certified.
Certifie Conforme au Reglement sur le Brouillage Radioelectrique.

MAINTENANCE RECORD

Date	Hours Used	Oil Change	Air Cleaner Service	Lubrication	Sharpen Blade	Winter Storage	Spring Service	Spark Plug Gap