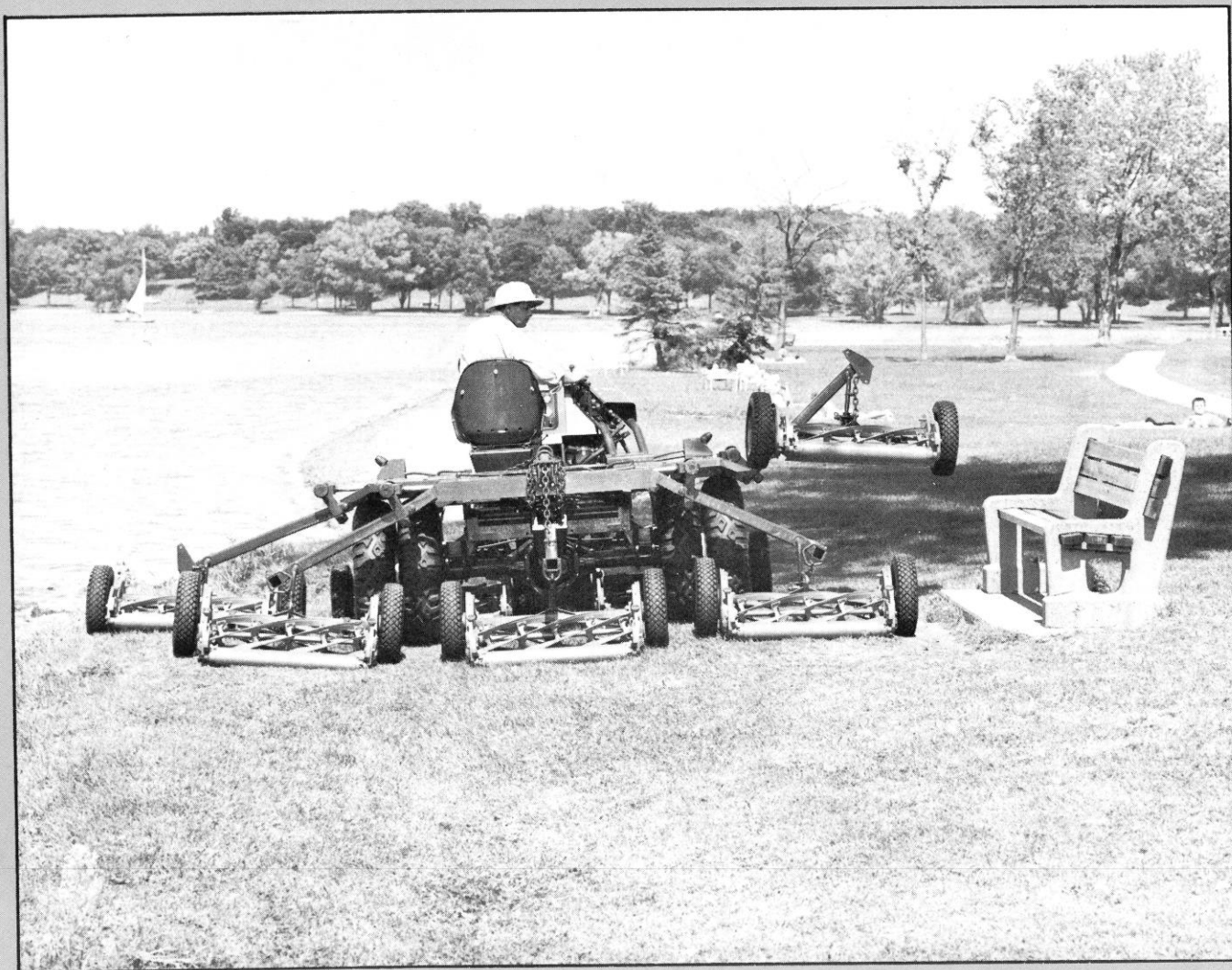




OWNER'S OPERATING AND PARTS MANUAL



5 and 7 UNIT HYDRAULIC PARKMASTER - ROADMASTER

MODEL NOS. 33713-40003 & UP; 33713-50003 & UP; 33713-60001 & UP; 33713-70001 & UP; 33716-80001 & UP
MODEL NOS. 33773-40001 & UP; 33773-50101 & UP; 33773-60001 & UP; 33773-70001 & UP; 33773-80001 & UP

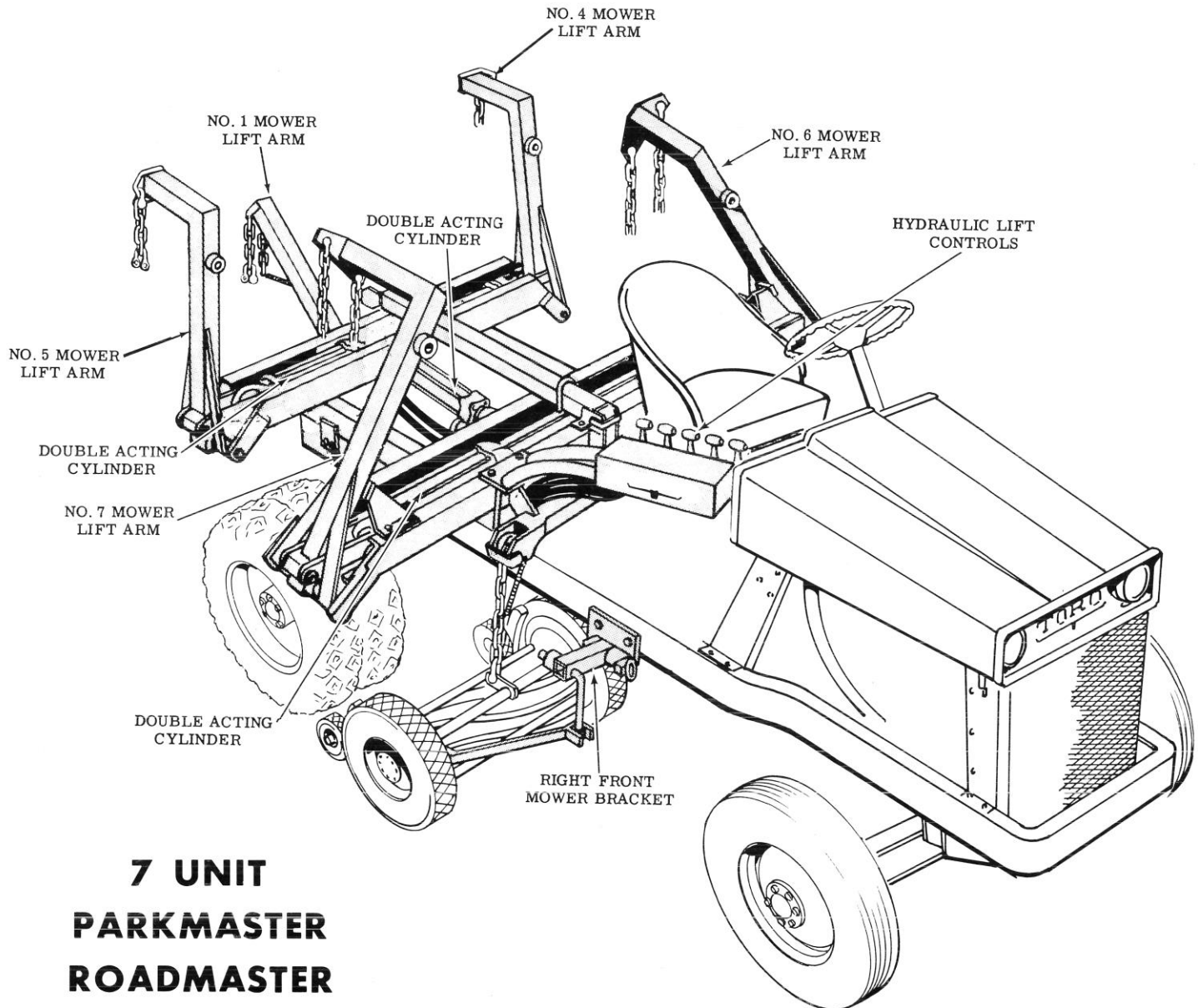
Price 25 cents

to the Toro owner

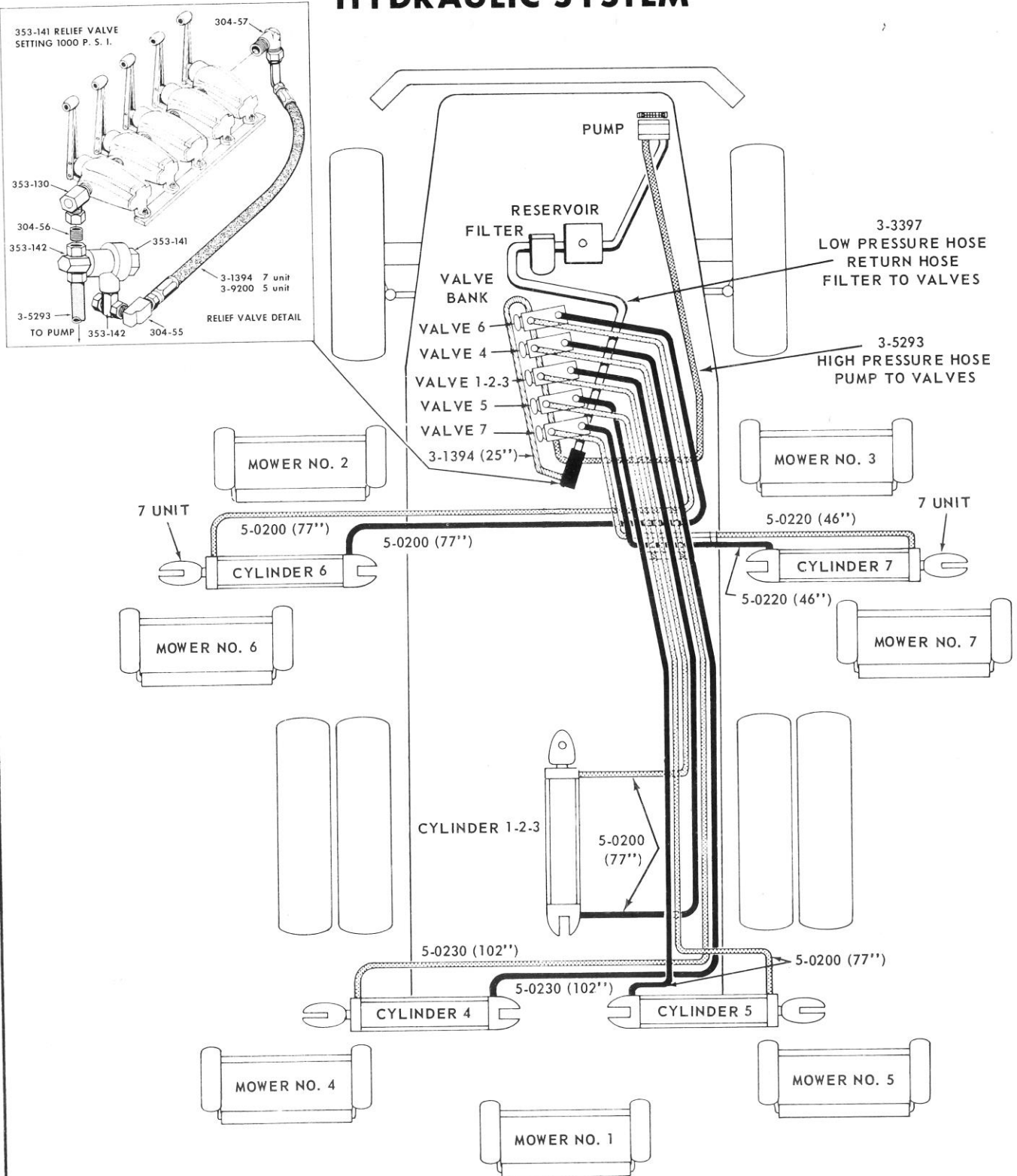
This Owner Manual has been especially prepared for your information and guidance in the operation and care of your new Toro Hydraulic Parkmaster and Roadmaster.

Properly adjusted, operated and maintained, this Toro Parkmaster or Roadmaster will respond quickly and easily to every reasonable demand and give years of reliable service.

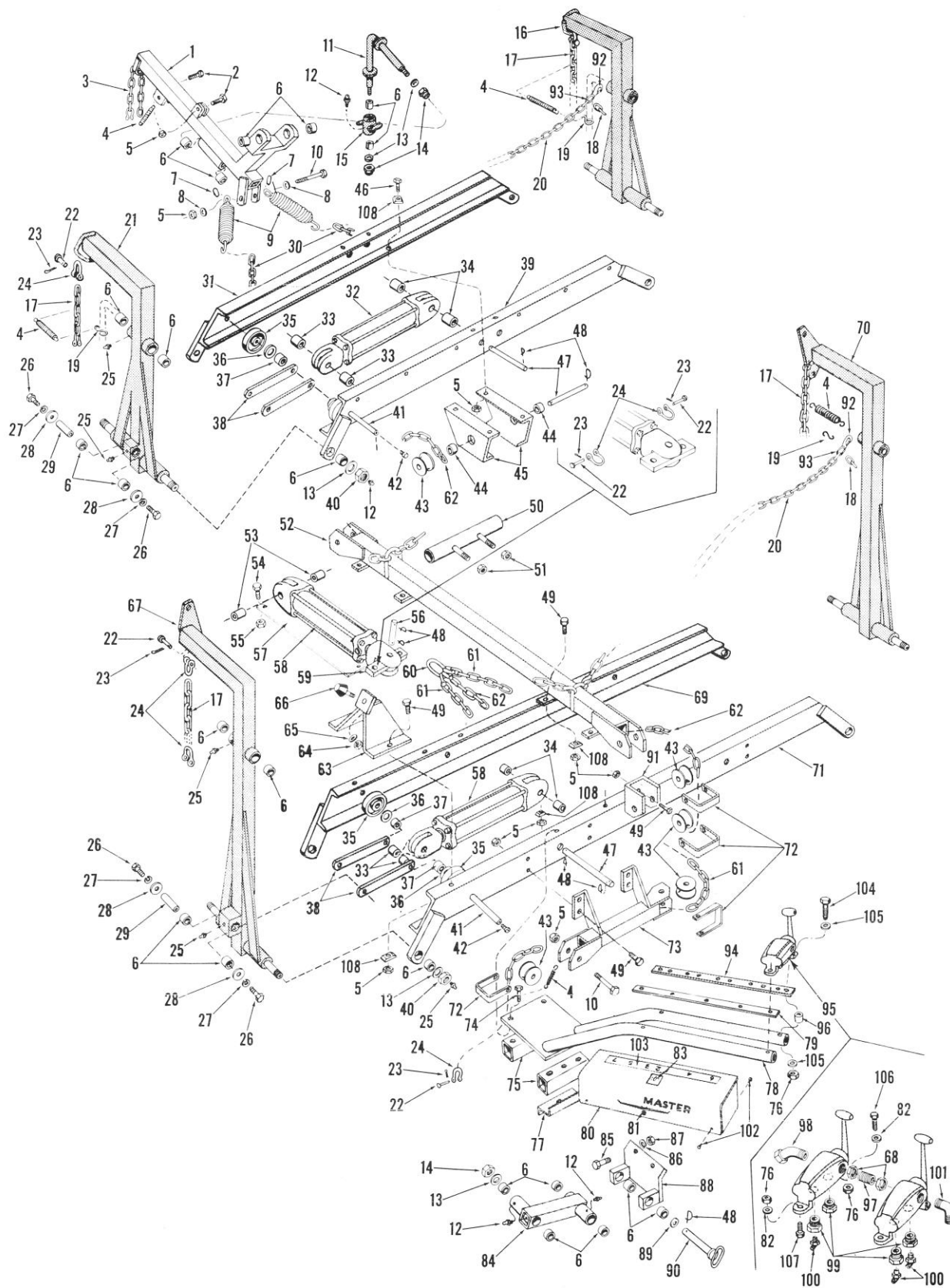
The Toro Hydraulic Parkmaster or Roadmaster is manufactured by an organization of mowing machinery specialists for over 50 years. Each unit is carefully inspected and tested before leaving the factory. For best performance study this manual for regular maintenance procedures.



HYDRAULIC SYSTEM



MAIN FRAME ASSEMBLY **PARKMASTER - ROADMASTER**



MAIN FRAME PARTS LIST

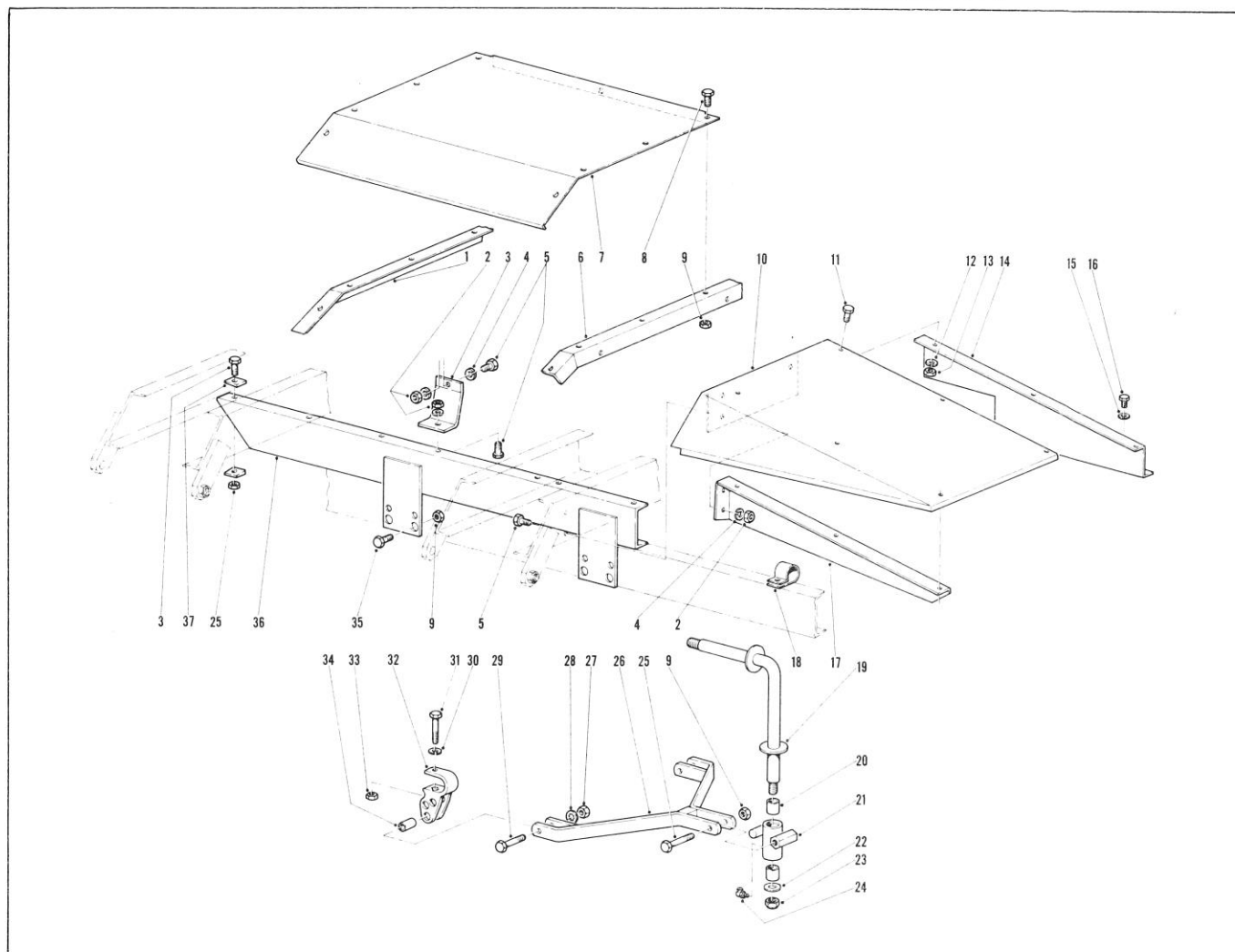
Ref. No.	Part No.	Description	No. Used	
			5 Unit	7 Unit
1	3-0224	Rear Drawbar	1	1
2	3213-6	Screw	2	2
3	3-1364	Chain, 32 links	1	1
4	5-1706	Spring	7	9
5	3296-19	Nut	35	37
6	3-0348	Bushing	28	40
7	2830-8	Link	2	2
8	3256-26	Washer	2	2
9	5-0743	Spring	2	2
10	3213-19	Screw	8	8
11	3-1571	Lift Bail	5	7
*	3-6530	Lift Bail (Roadmaster only)	5	7
12	302-40	Grease Fitting	4	8
13	3-8448	Washer	14	22
14	3296-50	Nut	10	14
15	1-6559	Housing w/Bushings	5	7
16	3-0252	Arm, Short, Left	1	1
17	3-4636	Chain, 6-5/8" long	2	4
18	3-0293	Chain, 2 links	2	4
19	3-2198	Hooks, S	6	10
20	3-1365	Chain, Safety, 15-3/4" less Hooks	2	4
21	3-0251	Arm, Short, Right	1	1
22	283-10	Pin	14	18
23	3272-10	Cotter Pin	14	18
24	282-13	Yoke	14	18
25	302-5	Grease Fitting	5	13
26	3211-4	Screw	4	8
27	3253-5	Lockwasher	4	8
28	5-1720	Washer	4	8
29	3-0128	Shaft	2	4
30	3-0295	Chain, 22 links	2	2
31	3-0124	Rear Cross Channel Rear	1	1
32	5-3495	Cylinder, 10" less Pins	2	2
33	5-3504	Tube Spacers	4	8
34	3-6385	Tube Spacers	4	8
35	243-4	Trolley Wheel	4	8
36	3256-5	Washer	4	8
37	3-0145	Spacer	4	8
38	3-8343	Link	4	8
39	3-0282	Rear Cross Channel, Front	1	1
40	3296-50	Nut	4	8
41	3-0130	Shaft	2	4
42	3290-118	Special Screw	4	8
43	3-2196	Sheave	7	7
44	3-0145	Spacer	2	2
45	3-0146	Channel	2	2
46	3213-4	Screw	4	4
47	3-0144	Shaft	3	5
48	5-3126	Pin, Spring	8	12
49	3213-3	Screw	18	47
50	3-4250	Tube	2	2
51	3296-6	Nut	4	4
52	3-0105	Brace, Channel	1	1
53	3-6386	Spacer	2	2
54	3211-5	Screw	3	3
55	3296-6	Nut	4	4
56	5-3505	Pin	1	1
57	3-0175	Plate	1	1

PARKMASTER - ROADMASTER

Ref. No.	Part No.	Description	No. Used	
			5 Unit	7 Unit
58	5-3496	Cylinder, 12" less Pins	1	3
59	3-0288	Link	1	1
60	3-0326	Ring	1	1
61	3-1366	Chain, Parkmaster	2	2
*	3-4601	Chain, Roadmaster	2	2
62	3-4602	Chain	1	1
63	3-0285	Arm Stop		2
64	3296-5	Nut		2
65	3256-3	Washer		2
66	212-183	Rubber Bumper		2
67	3-6630	Arm, Drawbar Lift Bail		1
68	353-193	Sealing Nut	4	4
69	3-1382	Front Cross Channel, Rear		1
69	3-0142	Front Cross Channel, Rear	1	
70	3-6640	Arm, Drawbar Lift Bail		1
71	5-2251	Front Cross Channel, Front		1
71	3-0141	Front Cross Channel, Front	1	
72	3-0136	Chain Keeper	7	7
73	3-6680	Side Mower Tube, Right	1	1
73	3-6690	Side Mower Tube, Left	1	1
74	3213-10	Screw	3	3
75	3-0166	Spacer Tube	2	2
76	3296-3	Nut	13	15
77	3-0270	Spacer	1	1
78	3-0164	Valve Stand	1	1
79	5-1955	Valve Bracket, Rear	1	1
80	3-0225	Valve Cover	1	1
81	3-0310	Decal, Parkmaster	1	1
*	3-5133	Decal, Roadmaster	1	1
82	3256-2	Washer	13	15
83	3-0302	Decal	1	1
84	5-1996	Arm, Front	2	2
85	3214-3	Screw	4	4
86	3253-8	Lockwasher	4	4
87	3219-6	Nut	4	4
88	5-1998	Bracket w/Bushings	2	2
89	3256-30	Washer	2	2
90	3-0152	Pin	2	2
91	3-0112	Bracket, Sheave	1	1
92	286-3	Snap Hook	4	8
93	286-4	Cold Shut	4	8
94	5-1954	Valve Bracket, Front	1	1
95	3-8457	Control Valve	3	5
96	3-0453	Spacer	4	4
97	289-14	Nipple	2	4
98	353-130	Swivel Adapter	1	1
99	2812-2	Reducer Bushing	6	10
100	353-271	Adapter	6	10
101	304-57	Adapter	1	1
102	32104-29	Screw	3	3
103	3-0301	Decal	1	1
104	329-22	Screw	4	4
105	3256-22	Washer	4	4
106	329-5	Screw	6	8
107	329-13	Screw	3	3
108	3290-216	Bevel Washer	19	23

* Not Illustrated

PARKMASTER DRAWBAR ASSEMBLY



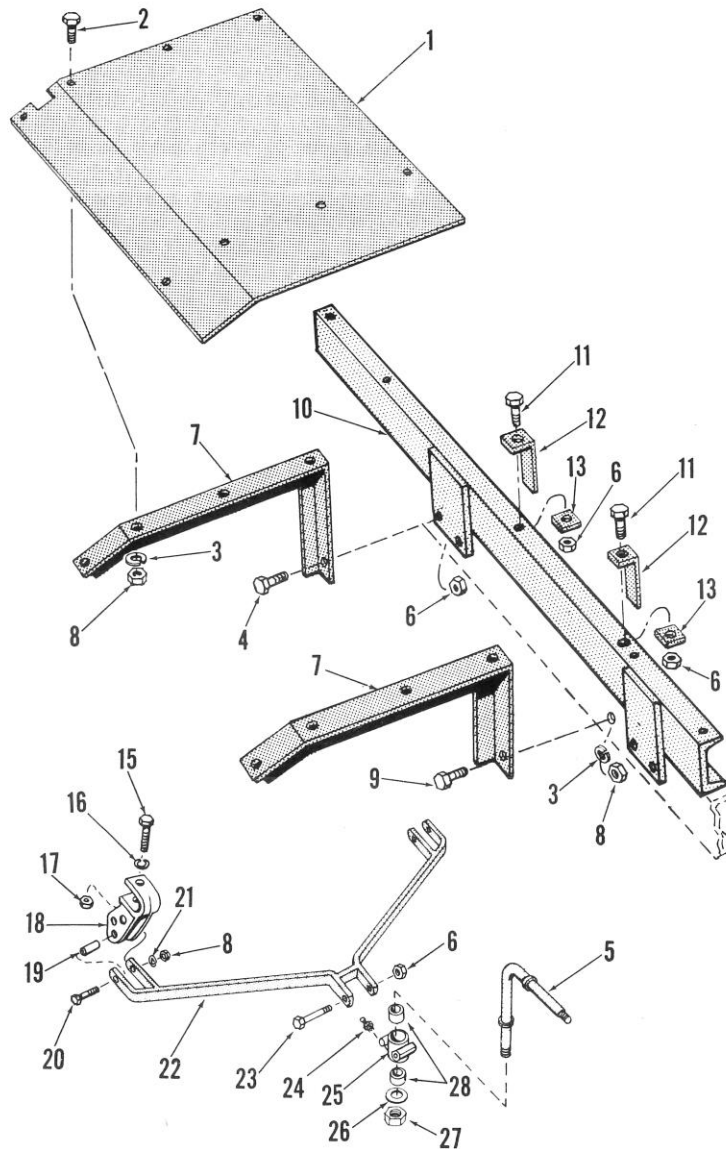
PARTS LIST

Ref. No.	Part No.	Description	No. Used	
			5 Unit	7 Unit
1	3-1363	Support, Rear Mudguard	0	1
2	3217-7	Nut		10
3	5-2491	Support, Bracket		2
4	3253-21	Lockwasher		10
5	323-6	Screw		10
6	3-1362	Support, Front Mudguard	0	1
7	3-1361	Mudguard	0	2
8	3213-3	Screw	4	20
9	3296-19	Nut	23	50
10	5-2266	Fender, R.H.		1
*	5-2265	Fender, L.H.		1
11	322-2	Screw		12
12	3253-4	Lockwasher		12
13	3217-6	Nut		12
14	5-2264	Mount, R.H. Fender		1
*	5-2263	Mount, L.H. Fender		1
15	3256-24	Washer		4
16	32104-6	Screw, Self-Tapping		4
17	5-2262	Brace, Fender		2
18	304-61	Clip	2	2
19	3-6530	Bail, Lift	10	14

Ref. No.	Part No.	Description	No. Used	
			5 Unit	7 Unit
20	3-0348	Bushing	10	14
21	1-6559	Housing w/Bushings		
		Ref. #20	5	7
22	3-8448	Washer	5	7
23	3296-50	Nut	5	7
24	302-40	Fitting, Zerk	5	7
25	3213-12	Screw	5	7
26	3-0248	Drawbar	5	7
27	3219-5	Nut	10	14
28	3254-4	Lockwasher	10	14
29	3213-11	Screw	10	14
30	3253-6	Lockwasher	10	14
31	3212-10	Screw	10	14
32	5-1090	Clamp, Drawbar	10	14
33	3219-4	Nut	10	14
34	5-1091	Spacer	10	14
35	3213-4	Screw	12	12
36	3-4608	Channel, R.H. Side	1	1
*	3-4606	Channel, L.H. Side	1	1
37	3290-216	Nut	10	

* Not Illustrated

ROADMASTER DRAWBAR ASSEMBLY



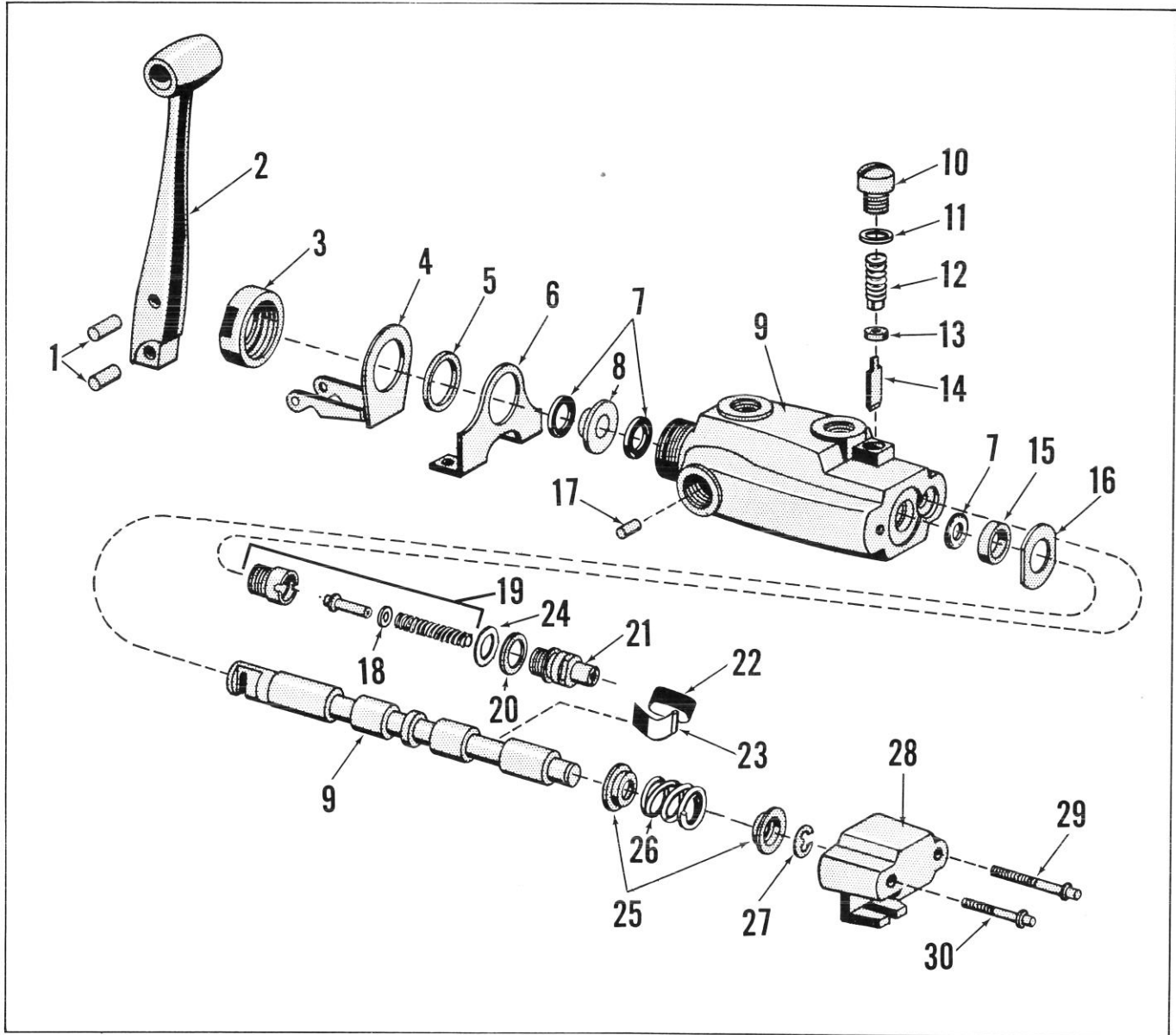
PARTS LIST

Ref. No.	Part No.	Description	No. Used	
			5 Unit	7 Unit
1	3-4596	Mudguard, Right		1
*	3-4597	Mudguard, Left		1
2	3213-15	Screw		16
3	3253-7	Washer, Lock		18
4	3213-4	Screw	8	8
5	3-6530	Lift Bail	5	7
6	3296-19	Nut	15	20
7	3-6520	Mudguard Bracket		4
8	3219-5	Nut	10	32
9	3213-3	Screw		2
10	3-4608	Side Channel, Right	1	1
*	3-4606	Side Channel, Left	1	1
11	3213-2	Screw	2	2
12	3-0236	Hose Clip	2	2
13	3290-216	Washer	2	2

Ref. No.	Part No.	Description	No. Used	
			5 Unit	7 Unit
15	3212-10	Screw	10	14
16	3253-6	Washer	10	14
17	3219-4	Nut	10	14
18	5-1090	Clamp, Drawbar	10	14
19	5-1091	Spacer	10	14
20	3213-11	Screw	10	14
21	3254-4	Lockwasher	10	14
22	3-9280	Drawbar	5	7
23	3213-13	Screw	5	7
24	302-40	Grease Fitting	5	7
25	1-6559	Housing w/Bushings	5	7
26	3-8448	Washer	5	7
27	3296-50	Nut	5	7
28	3-0348	Bushing	10	14

* Not Illustrated

3-8457 CONTROL VALVE ASSEMBLY



PARTS LIST

Ref. No.	Part No.	Description	No. Used
1	32121-31	Pin	2
2	353-93	Handle	1
3	353-202	End Cap, Handle	1
4	353-203	Bracket, Handle	1
5	237-29	Seal, O-Ring	1
6	353-97	Bracket, Mounting	1
7	353-199	Seal, Vee Block	3
8	353-208	Retainer Seal	1
*9	3-8457	Valve Assy., Complete Ref. nos. 1-30	
10	353-114	Cap, Detent	1
11	237-30	Seal, O-Ring	1
12	353-115	Spacer and Spring Assy.	1
13	353-95	Bushing	1
14	353-100	Blade	1
15	353-206	Ring, Back Up	1

Ref. No.	Part No.	Description	No. Used
16	353-205	Washer	1
17	353-198	Plug, Conversion	1
18	353-209	Shim	1
19	353-272	Relief Valve Kit	1
20	237-28	Seal, O-Ring	1
21	353-200	Plug, Relief	1
22	353-98	Shuttle	1
23	353-108	Spring, Shuttle	1
24	353-273	Washer, Back Up	1
25	353-207	Spring Seat	2
26	353-201	Spring, Centering	1
27	32120-23	Ring, Retaining	1
28	353-204	End Cap, Mount End	1
29	3274-9	Screw	1
30	3274-19	Screw	1

* Not sold separately; order complete valve 3-8457

GENERAL INSTRUCTIONS 3-8457 SERIES VALVES

(A) DISASSEMBLY

1. Unscrew end cap No. 3. Remove handle No. 4, remove O-ring No. 5, remove mounting bracket No. 6, slice seal retainer No. 8 from spool and remove seal No. 7 from seal retainer.
2. Unscrew the two cap screws, No. 's 30 and 29, use a 1/4" 12 point cap screw socket. Remove end cap No. 28. Depress centering spring and remove snap ring No. 27 using pliers or small screwdriver. Remove two spring seats No. 25 and centering spring No. 26.
3. Unscrew detent cap No. 10. Remove O-ring No. 11 from cap. Remove spring assembly No. 12. Use a needle nose plier to remove bushing and blade, No. 13 and No. 14.
4. Remove washer No. 16 using knife or small screw driver. Slide spool back out of body away from handle end. This will free the shuttle No. 22 and spring No. 23. Remove seal No. 7 from handle end of body.
5. Unscrew relief valve plug No. 21 from body (caution - Note position of plug before removing). Remove O-ring No. 20 from plug. Tilt body to vertical position to permit the spring No. 19, shim No. 18, retainer and spool to drop out. Use wide screwdriver (5/8") to unscrew seat relief No. 19.
6. Unscrew conversion plug No. 17.

(B) ASSEMBLY

1. Be sure all parts are clean.
2. Install conversion plug No. 17.
3. Place seat relief No. 19 in relief valve opening and tighten securely with wide screwdriver (300 in. lbs.). Install relief valve No. 19, shim No. 18 (see relief valve adjustment C) and spring No. 19. Place O-ring No. 20 in groove in relief valve body until it is in original position (see relief valve adjustment C).
4. Slide valve spool No. 9 into body from end away from handle. Enter spool until only portion from shuttle groove to end of spool is exposed. Be sure spool linkage hole or slot is in correct position.
5. Place shuttle spring No. 23 and shuttle No. 22 in position in valve spool (spring ends to face away from spool center, also shuttle should face toward detent assembly and parallel to it). Push spool into body to point where blade No. 14 may be installed - check through detent opening.

6. Install blade No. 14 in detent opening, use needle nose plier for inserting. Blade must be 90 degrees to spool. Now install bushing No. 13 - be sure it is completely in place over blade shaft. Place spring assembly No. 12 over bushing. Install O-ring No. 11 in groove on detent cap No. 10 and screw into valve body No. 9.
7. Install seals No. 7 on spool. Slide seals into groove using seal installing tool or screwdriver to lead lip of seal into groove (caution - do not damage seals).
8. Place ring No. 15 on spool and slide into position. Place washer No. 16 on spool and push into groove in body. Install spring seat No. 25, spring and spring seat No. 25 on valve spool. Secure with snap ring No. 27.
9. Install mounting bracket No. 6, O-ring No. 5 and handle bracket No. 4. Install seal No. 7 in seal retainer No. 8 (lips to face away from valve). Place retainer over spool and secure with end cap No. 3.

(C) RELIEF VALVE ADJUSTMENT

1. Move spool back to rear position.
2. Slide washer No. 16 away from body and into spring groove of spool. Adjust plug No. 21 in or out to give a new setting. If large change is required, add or subtract shims No. 18 as required.
3. After adjustment is completed, put washer No. 16 and spring assembly back into place and replace end cap No. 28 using screws No. 30 and No. 29.
4. Caution - do not attempt to adjust relief valve without pressure gage.

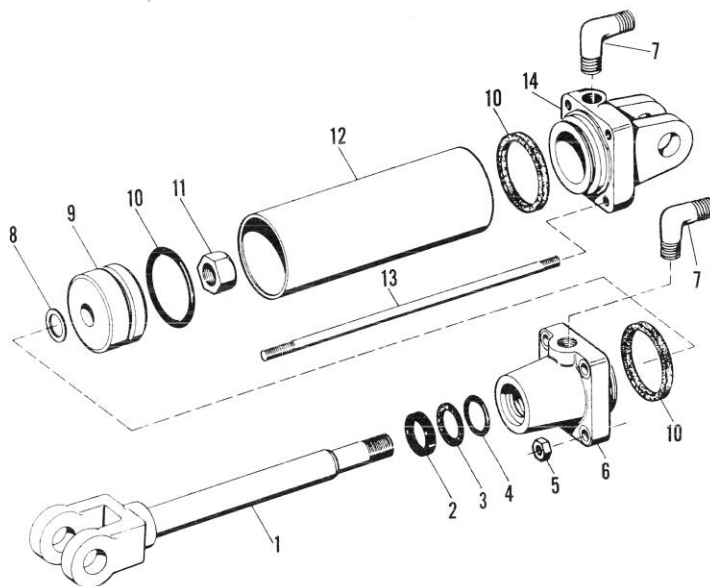
SPECIFICATIONS

Capacity - 2 to 12 G.P.M.
Control - 1) Spring Centering
 2) Detent with pressure centering
 (hold control)
Type System - Double Acting
Safety - Relief valve (800 P.S.I. Max.)

CYLINDER ASSEMBLY

3-6903 - 10" CYLINDER

3-6904 - 12" CYLINDER



Ref. No.	Part No.	Description	No. Used
1	353-291	12" Piston Rod Assy.	1
*	353-290	10" Piston Rod Assy.	1
2	353-256	Rod Wiper	1
3	353-255	Back Up Washer	1
4	353-254	Rod Seal	1
5	3219-4	Hex Nut	4
6	353-289	Gland Head	1
7	353-217	Adapter	2
8	353-296	O-Ring	1

Ref. No.	Part No.	Description	No. Used
9	353-292	Piston	1
10	353-253	Piston Seal	3
11	3219-8	Hex Nut	1
12	353-287	12" Barrel	1
*	353-286	10" Barrel	1
13	353-294	12" Tie Rod	4
*	353-293	10" Tie Rod	4
14	353-288	End Cap	1
		* Not Illustrated	

OPERATING INSTRUCTIONS

HYDRAULIC SYSTEM AND CONTROLS

The hydraulic system includes four double-acting hydraulic cylinders for raising and lowering the wing mowers, and one double-acting cylinder for raising and lowering the underslung side mowers and the rear center mower. Other components of the hydraulic system include hydraulic pump, hydraulic fluid tank, filter, lines and controls.

FILLING THE HYDRAULIC SYSTEM

Fill the oil reservoir, located under the hood with a good grade of S.A.E. 10 such as Mobil oil, Devac 1110 non-detergent motor oil, or with a type A transmission oil.

TO RAISE WING MOWERS FOR TRANSPORT

With the tractor engine running, pull down on wing mower controls (see control panel cover on tractor) until the wing mowers swing into position. The control levers will snap back into neutral position when each unit is fully raised.

TO LOWER WING UNITS FOR MOWING

Remove 4 safety chains from mowers and, with all control levers in neutral position, push down on the wing mower control. Lever will snap back into neutral position when mower is fully lowered.

TO RAISE UNDERSLUNG AND CENTER UNITS

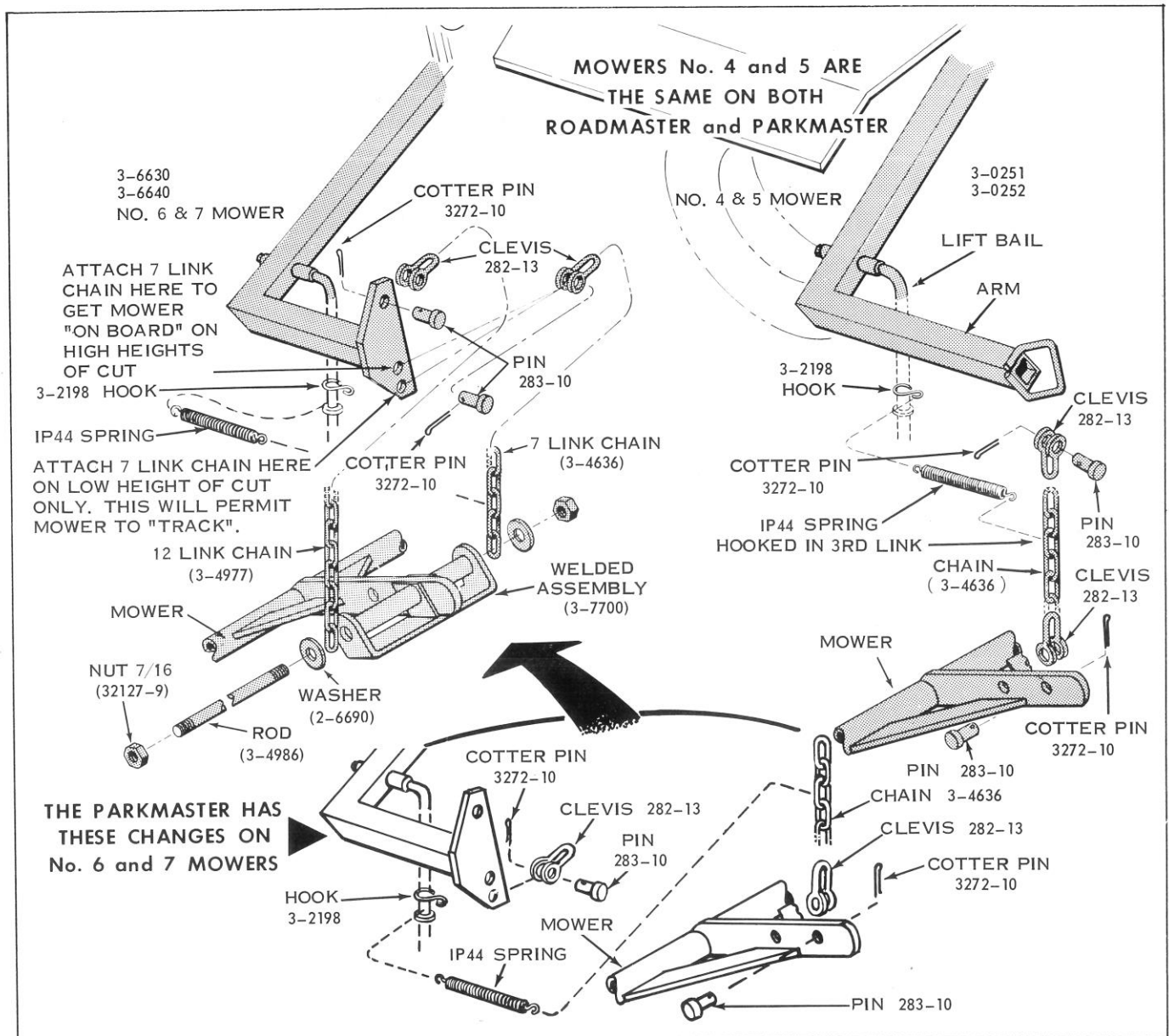
PULL DOWN on the center lever control and release. Underslung and rear center mowers will raise into position and the control lever will snap back to neutral position. Snap 4 safety chains into place and the Hydraulic Frame is now ready for transport.

TO LOWER UNDERSLUNG AND CENTER UNITS

PUSH DOWN on the center control lever to lower the left and right underslung and rear center mowers simultaneously. This lever will snap back to neutral position when mowers are fully lowered and can be left in this position for mowing.

CAUTION: BEFORE RAISING OR LOWERING MOWERS, EACH TIME CHECK TO MAKE SURE THAT NO PERSONS ARE WORKING ON, OR ARE NEAR, THE CUTTING UNITS.

ATTACHING MOWER TO ARMS



IMPORTANT ORDERING INSTRUCTIONS

Repair parts are available from your TORO distributor or service dealer. To insure getting correct parts without delay, please furnish the following information:

1. Serial number of your Parkmaster as stamped on frame.

2. Part number, description and quantity of each part required.

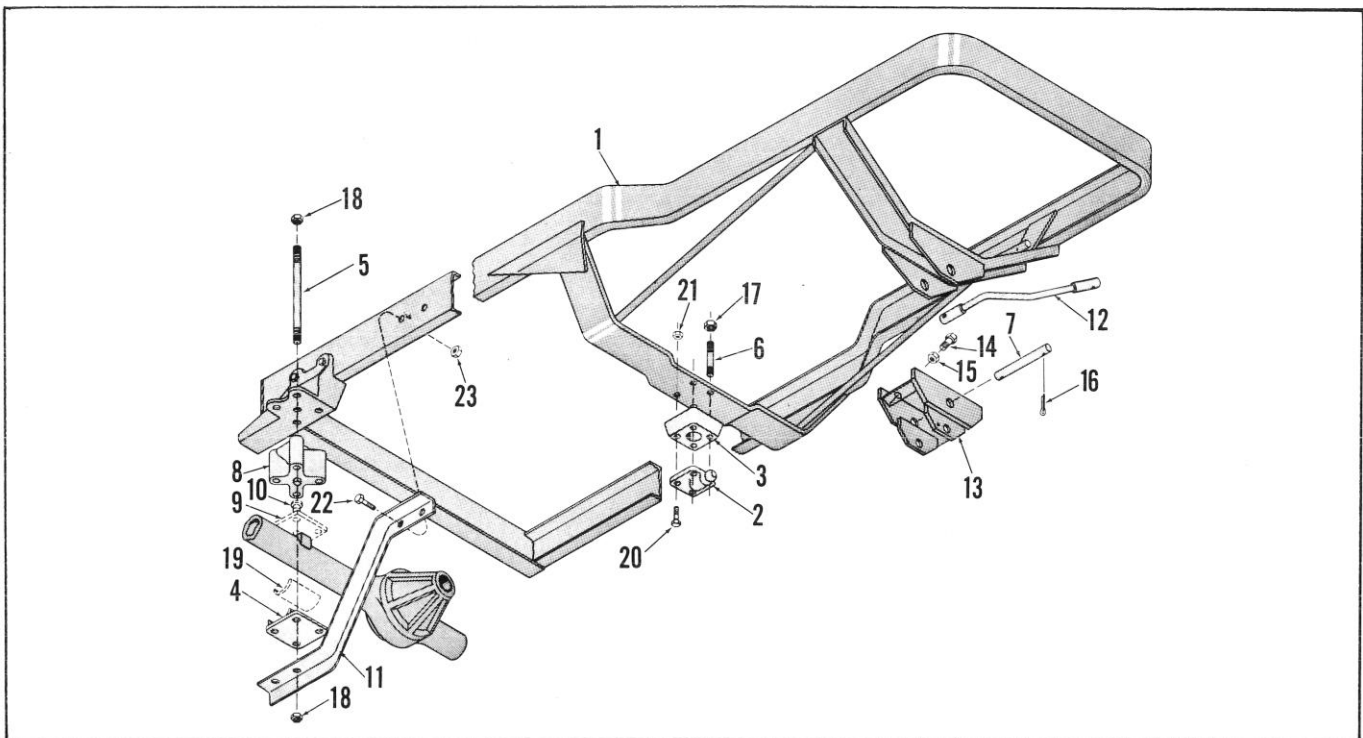
3. State whether parts should be shipped by mail or express. All repair parts are shipped F.O.B. factory.

4. Name & address where parts are to be shipped.

5. Do not order by reference number; use part number.

"In an effort to make improvements available to Toro owners as quickly as possible, minor changes are incorporated in Toro's products from time to time that do not become immediately shown in the Owner's Operating and Parts Manual. If such a change has apparently been made in your unit, which is not reflected in your manual, see your Toro distributor or his authorized Toro service dealer for information and parts numbers."

ROADMASTER TRACTOR FRAME COMPONENTS



Ref. No.	Part No.	Description	No. Used
1	3-3570	Frame W.A.	1
2	3-4000	Ball Pivot W.A.	1
3	3-4603	Spacer	1
4	3-4604	Axle Support - Bottom	2
5	3-4611	Axle Rod	8
6	3-4612	Stud	4
7	3-4652	Top Pin	1
8	3-4653	Axle Support - Top	2
9	3-5018	Spacer	2
10	3-5021	Dowel Pin	2
11	3-6610	Brace W.A., Right Hand	1
*	3-6620	Brace W.A., Left Hand	1

Ref. No.	Part No.	Description	No. Used
12	3-6670	Drag Link Assembly	1
13	3-6700	Front Axle Support W.A.	1
14	3216-1	Capscrew	2
15	3220-7	Jam Nut	2
16	3272-33	Cotter Pin	2
17	3296-19	Lock Nut	4
18	3296-41	Lock Nut	16
19	3-5041	Wrapper Plate	2
20	3213-3	Capscrew	4
21	3253-7	Lockwasher	4
22	3213-4	Capscrew	4
23	3296-19	Nut	4

* Not Illustrated

Warranty

The Manufacturer warrants each new piece of equipment sold to be free of defects in material and workmanship. For one year from the purchase date of consumer line equipment or 45 days if sold for commercial use, Toro Manufacturing Corporation will repair or replace for the original purchaser, free of charge, through any Authorized Service Dealer, any part or parts found at our factory in Minneapolis, Minnesota, to be defective under normal use and service. All institutional equipment is warranted for ninety (90) days from the purchase date.

This Warranty does not obligate the Manufacturer to bear the cost of transportation charges in connection

with the replacement or repair of defective parts - nor shall it apply to a machine upon which repairs or alterations have been made, unless authorized by the manufacturer.

This Warranty does not include nor cover standard accessories produced by other manufacturers. Such accessories have separate warranties by their respective manufacturers . . . and repair or exchange will be made on the basis of such warranties, and the policies authorized by them shall be adhered to.

This Warranty is in lieu of all other warranties expressed or implied.