# TORO

### OWNER'S OPERATING AND PARTS MANUAL



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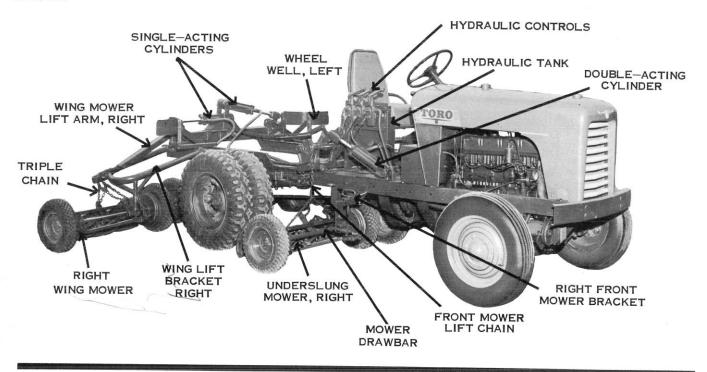
5 UNIT HYDRAULIC PARKMASTER



### 70 The TORO Owner

This Owner Manual has been especially prepared for your information and guidance in the operation and care of your new Toro 5 Unit Hydraulic Parkmaster.

Properly adjusted, operated and maintained, this Toro Parkmaster will respond quickly and easily to every reasonable demand and give years of reliable service. The Toro 5 Unit Hydraulic Parkmaster is manufactured by an organization of mowing machinery specialists for over 40 years. Each unit is carefully inspected and tested before leaving the factory. For best performance study this manual for regular maintenance procedures.



**TORO - 5 UNIT HYDRAULIC PARKMASTER** 

## Warranty

The Manufacturer warrants each new piece of equipment sold to be free of defects in material and workmanship. For ninety (90) days from the purchase date, 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, Minn., to be defective under normal use and service.

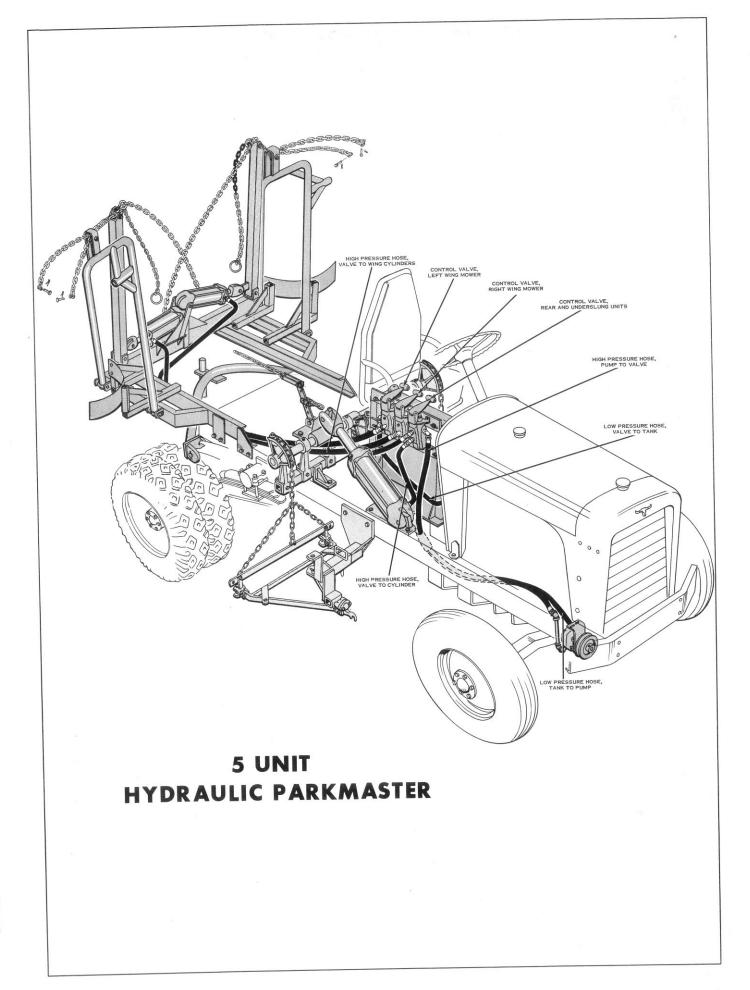
This Warranty does not obligate the Manufacturer to bear the cost of transportation charges in connection with the replacement or repair of defective parts -- nor shall it apply to a machine upon which repairs or alterations have been made, unless authorized by the manufacturer.

This Warranty does not include nor cover standard accessories produced by other manufacturers (such as engines.) 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.

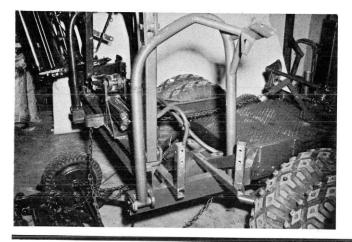
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This Warranty is in lieu of all other warranties expressed or implied.

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#### TORO HYDRAULIC FRAME



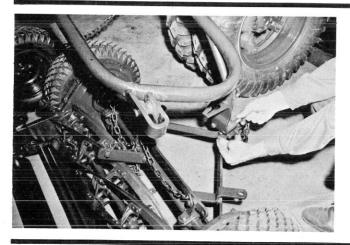
#### BEFORE INSTALLATION OF THE MOWERS

The Toro Hydraulic Frame is delivered ready for installation of the Spartan mower units, with the exception of wheel guard installation and drawbar and lift chain hook-up. All chains, drawbars, arms and other fittings required are shipped separately with the frame. Photo at left shows the right wing mower hoist arm and frame in raised position, as shipped from the factory.



#### 2 INSTALL WHEEL WELLS ON FRAME

Separate wheel wells for the right and left wing mower lift frames to hold the mower wheels in proper position when in raised position are shipped separate from the hydraulic frame. Using the four bolts and nuts provided, install right and left wheel wells on brackets provided on right and left side of the main frame as shown. Then place wing mowers in position under lowered hoist arm and wing frame for mower installation.



#### 3 INSTALL RIGHT AND LEFT WING MOWERS

Position the Spartan mowers under the lowered wing lift brackets as shown. Position the drawbar ball under the frame swivel bracket and fasten the drawbarball to the swivel frame by tightening the ball socket fittings of the wing lift frame over the drawbar ball securely with screws, lock washers, and nuts provided. Nuts should be tight. A Zerk fitting on the forward ball socket at each mower provides for ball swivel lubrication.



#### 4 TO HOOK UP DRAWBAR AND LIFT CHAINS

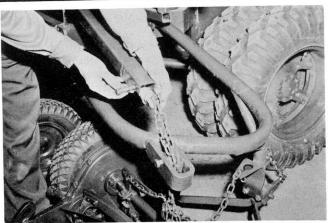
Hook the front mower drawbar chain, which is attached to the drawbar ball fitting, into the hook which is welded into the front of the wing lift swivel bracket. It may be necessary to lift up on the wing lift frame in order to obtain slack necessary to hook up this front drawbar chain.

#### SETTING-UP INSTRUCTIONS-



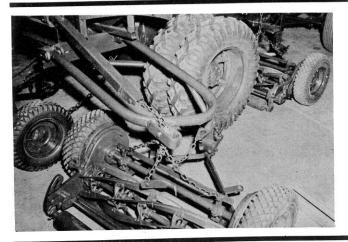
#### 6 HOOK TRIPLE CHAIN TO SWIVEL BRACKET

A triple lift chain is attached to the Spartan mower drawbar at three points. A short length of this chain is provided for hooking up to the wing lift frame swivel bracket as shown. To secure the chain, drop first and second links into the swivel bracket hole, turn the second link, and pull the link back so it fits into the swivel bracket slot.



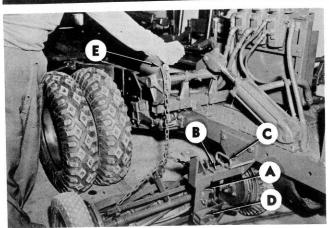
#### 6 FASTEN DRAWBAR CHAIN TO WING LIFT ARM

The triple lift chain is connected to a double lift chain with terminal fitting for fastening to the lift arm of the frame. This double chain should be threaded through the pulley bracket on the outer end of the wing mower lift frame as shown, and fasten into the end of the mower lift arm with screw and elastic stop nut provided as shown. Be sure that chains are not twisted before fastening to the lift arm.



#### PROPERLY INSTALLED WING MOWER UNIT

When properly installed on the frame, the right wing mower should appear as shown at the left. Be sure that ball and socket is secure, that front sway chain is installed from drawbar ball to front of the drawbar bracket, and that short length of triple chain is fastened to the rear of the bracket. Lift chain should be OVER the wing lift frame, through the pulley bracket, and securely fastened to the lift arm. The left rear wing mower is installed in the same manner.



#### 1 TO INSTALL FRONT UNDERSLUNG UNITS

Right and left front underslung mowing units are installed as follows:

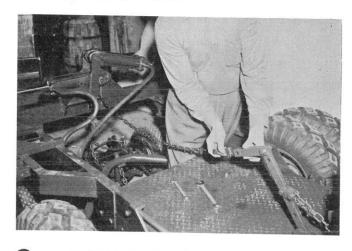
- 1. Insert the front mower bracket (A) into the frame flange (B), and secure by dropping lock pin (C) into holes now aligned through both bracket and flange.
- 2. Fasten the drawbar ball into the ball socket in the same manner as shown for wing mower installation covered in paragraph 3, with spacer shown at (D). Fasten mower lift chain to the top of quadrant as shown at (E).

#### SETTING-UP INSTRUCTIONS -



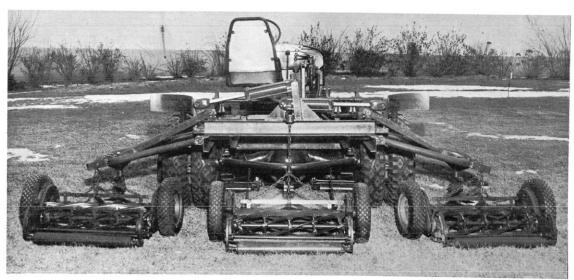
#### TO INSTALL REAR CENTER MOWER UNIT

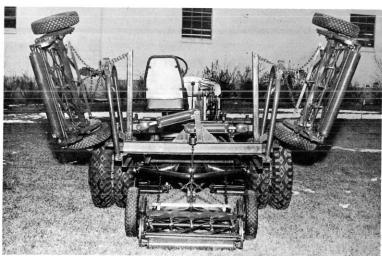
The rear center mower is attached to the swivel bracket on the tractor drawbar in the same manner as the wing mowers and underslung mowers are attached. The front mower drawbar chain and the short length of drawbar triple chain are also hooked up the same as wing and underslung unit. Two sway chains should be connected from the mower drawbar ends to pins welded to the inside of the tractor drawbar as shown above.



#### TO CONNECT CENTER MOWER LIFT CHAIN

After hooking up the center mower unit as previously described in paragraph 9, the mower lift chain is threaded through the rear mower frame pulley bracket, and to the rear center lift arm located directly behind the driver's seat. The lift chain is connected to the hydraulic lift arm by screw and elastic stop nut as shown. Be sure that chains are not twisted before final installation.





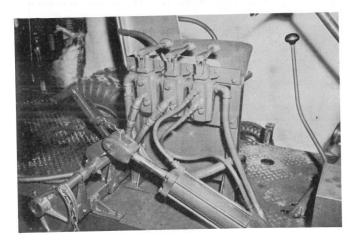
#### O COMPLETE HYDRAULIC FRAME,

#### AND SPARTAN MOWER INSTALLATION

When completely installed on the hydraulic frame, mower units and connecting chains as shown above, when in the lowered (or mowing) position for cutting a full five-unit swath.

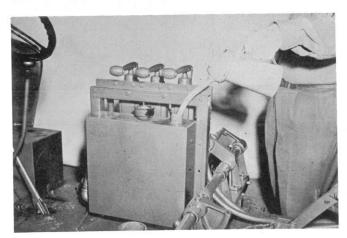
At the left is shown the frame with wing mowers raised, and with rear center and underslung units in position for mowing a three-unit swath. All mowers should be raised for transporting. BE SURE THAT ALL CHAINS ARE PROPERLY CONNECTED, AND NOT TWISTED; AND THAT ALL NUTS, CAPSCREWS AND FITTINGS ARE TIGHT.

#### OPERATING INSTRUCTIONS



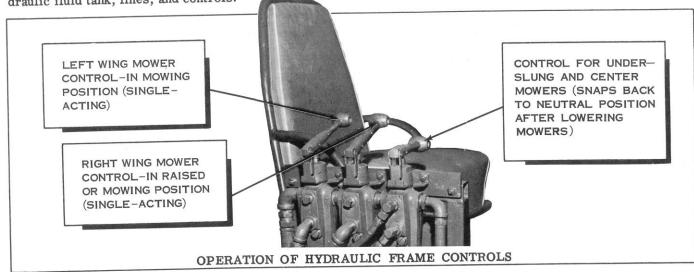
#### HYDRAULIC SYSTEM AND CONTROLS

The hydraulic system includes two single-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 CHAR-LYNN hydraulic pump, hydraulic fluid tank, lines, and controls.



FILLING THE HYDRAULIC SYSTEM

The hydraulic tank from the driver's side, with operator's seat removed, is shown above. Fill the hydraulic tank with a good grade of S.A.E. 30 motor oil, or with hydraulic fluid. For maintenance of the hydraulic pump and valves, refer to the hydraulic pump manual.



#### 1 TO RAISE WING MOWERS FOR TRANSPORT

With the tractor engine running, PRESS DOWN on the left wing mower (rear lever) control until the mower raises and swings into position with the right mower wheel fitting into the tire well of the frame. The lever will snap back into neutral position when the unit is fully raised. Next press DOWN on the right wing mower control (center lever) and release. Lever will snap back to neutral when fully raised.

#### 2 TO RAISE UNDERSLUNG AND CENTER UNITS

PRESS DOWN on the forward lever control and release. Underslung and rear center mowers will raise into position and the control lever will snap back to neutral position. The Hydraulic Frame is now ready for transport.

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

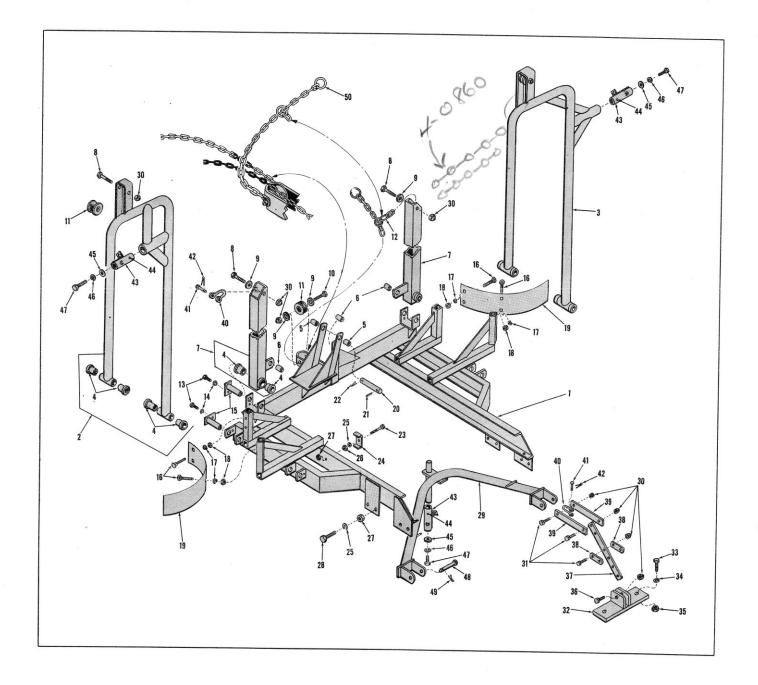
#### 3 TO LOWER WING UNITS FOR MOWING

With all controls in neutral position, LIFT UP on the rear control (left wing mower) and hold until mower touches the ground. A restrictor valve slows mower descent.

LEAVE WING MOWER LEVERS IN "UP" POSITION WHEN MOWING. DO NOT RETURN THEM TO NEUTRAL, AS ROUGH GROUND PRESSURE MAY BREAK ARMS. Lower the right wing mower (center valve control) in the same manner.

#### 4 TO LOWER UNDERSLUNG AND CENTER UNITS

LIFT UP on the forward 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.



#### IMPORTANT ORDERING INSTRUCTIONS

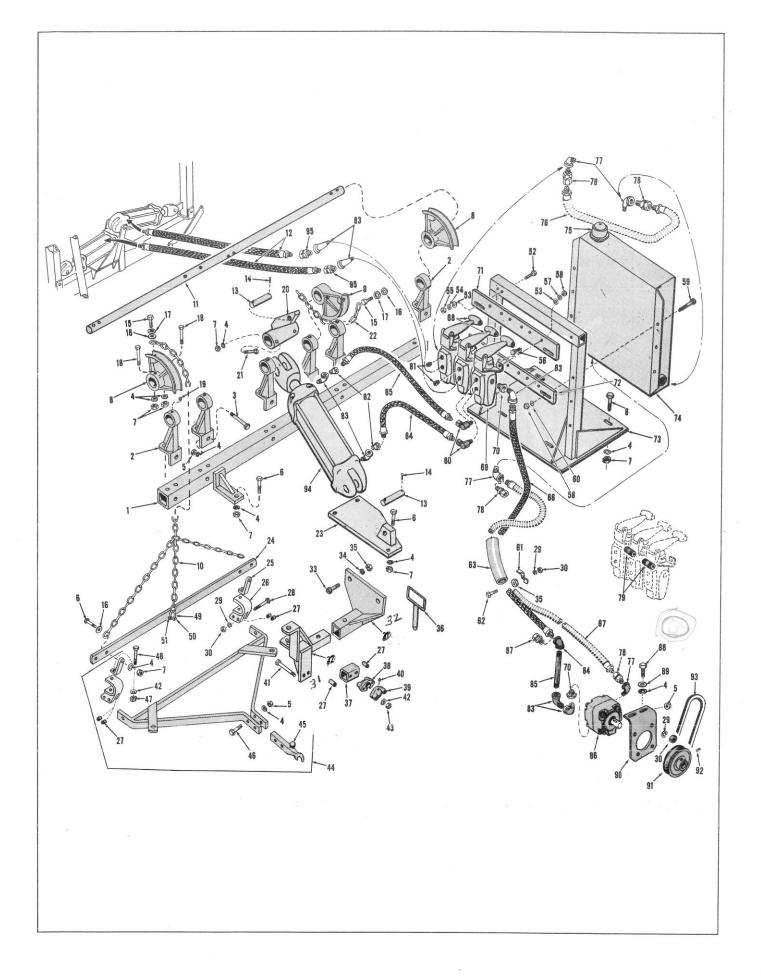
Repair parts are available from your TORO distributor or service dealer.

To insure getting correct parts without delay, please furnish the following information:

- 1. Serial number of your Parkmaster as shown on the name plate.
- 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 and address where parts are to be shipped.
- 5. Do not order by reference number; use part number only.

Ref.	Part No.	Description	No. Used
1	1-4579	Rear Frame	1
2	1-5179	Wing Frame, Right	1
3	1-5189	Wing Frame, Left	1
4	256-10	Bushing	12
5	256-94	Bushing	2
6	PK-9A	Bushing	3
7	1-4569	Arm	2
8	3213-9	Screw, 1/2" N. F. x 3"	4
9	3256-5	Washer, 7/16" Cut	4
10	3213-12	Screw, 1/2" N. F. x 4"	1
11	LM-210A	Sheave	2
12	4-0570	Chain	2
13	321-4	Screw, 1/4" N.C. x 3/4"	4
14	3253-3	Lockwasher, 1/4" Reg.	4
15	4-0190	Pin	4
16	3230-7	Bolt, 5/16"N.C. x2-1/4" Carr	4
17	3253-4	Lockwasher, 5/16" Reg.	4
18	3217-6	Nut, 5/16" N.C. Full	4
19	4-0370	Wheel Well	2
20	4-0570	Pin	1
21	32121-12	Pin	1
22	3272-25	Cotter Pin	1
23	3213-4	Screw, 1/2" N. F. x 1-3/4"	4
24	HL-26	Clamp	5
25	3253-7	Lockwasher, 1/2" Reg.	10

	Ref.	Part No.	Description	No. Used
	26	3219-6	Spacer Nut	3
	27	3219-5	Nut, 1/2" N. F.	10
	28	3213-3	Screw, 1/2" N. F. x 1/2"	10
	29	4-0560	Frame	1
	30	3296-19	Nut, 1/2"N. F. Elastic Stop	9
	31	3213-5	Screw, 1/2" N. F. x 2"	2
	32	4-0260	Bracket	1
	33	323-6	Screw, 3/8" N.C. x 1"	2
	34	3253-21	Lockwasher, 3/8" Reg.	2
	35	3217-7	Nut, 3/8" N.C. Full	2
	36	3213-6	Screw, 1/2" N. F. x 2-1/4"	1
	37	4-0310	Link	1
	38	4-0300	Link, Short	2
	39	4-0290	Link, Long	2
200000000000000000000000000000000000000	40	282-4	Shackle	2
	41	283-6	Yoke Pin	3
	42	3272-10	Cotter Pin	3
	43	F-185	Swivel Bracket	3
	44	302-5	Grease Fitting	3
	45	LU-323	Washer	3
	46	3253-5	Lockwasher, 3/8"	3
	47	3211-4	Screw, 3/8" N. F. x 1"	3
	48	JT-406	Pivot Pin	2
	49	3272-30	Cotter Pin, 1/4" x 1/2"	2
	50	4-2540	Chain Assy.	2
	I	1	1	1

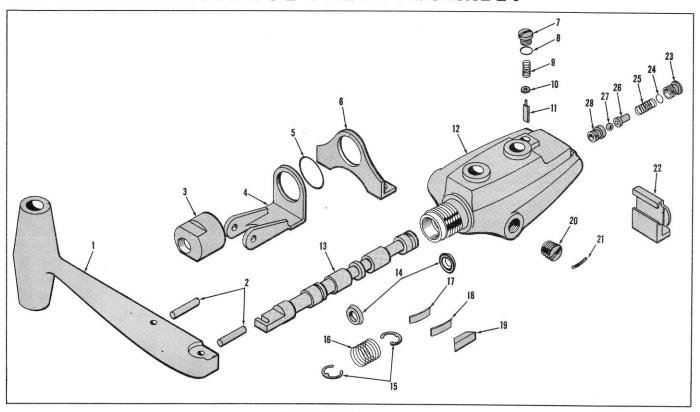


Ref.	Part No.	Description	No. Used
1	TTT 17	Base Mower Lift	1
1	HL-17	Bearing, Lift Shaft	6
2	JT-434 3211-13	Screw, 3/8" x 3" N. F.	6
3	3253-5	Lockwasher, 3/8" Reg.	19
4	3219-3	Nut, 3/8" N. F. Full	10
5		Screw, 3/8" N.C. x 1-1/2"	9
6	323-8 3217-7	Nut, 3/8" N.C. Full	19
7	HL-14	Side Sector	2
8		Center Sector	1
9	HL-13 JT-407A	Lift Chain, Front Mower	2
10	THE STREET STREET	Lift Shaft	1
11	HL-12	Hose Assembly, Valve to	-
12	4-0630		2
10	050 60	Cylinder	2
13	353-60	Pin Cotton Pin	2
14	3272-25	Cotter Pin Screw, 3/8" x 1" N. F.	3
15	3211-4	Screw, 5/6 X 1 N. F.	3
16	3256-4	wasner, 3/6 Cut	3
17	3254-6	Washer, 3/8" Cut Washer, 3/8" Internal Screw, 3/8" N.C. x 2-3/4"	3 2
18	323-13	Screw, 3/8" N.C. X 2-3/4"	6
19	302-4	Grease Fitting	1
20	4-0510	Bracket	1
21	323-12	Screw, 3/8" N.C. x 2-1/2"	1
22	4-0710	Rear Lift Chain	1
23	4-0480	Bracket, Ram	- 2
24	JT-354C	Lift Bail	5 £
25	F-773	Clip	_
26	F-732	Drawbar Clamp	100
27	F-733	Spacer	8 4
28	3213-9	Screw, 1/2" N. F. x 3"	7
29	3253-7	Lockwasher, 1/2" Reg.	7
30	3219-5	Nut, 1/2 N. F. Full	
31	F-778-1	Front Mower Bracket, Right	1
*	F-778-2	Front Mower Bracket, Left	1
32	F-777-1	Flange, Bracket, Right	1
*	F-777-2	Flange, Bracket, Left	1
33	3214-4	Screw, 5/8" N. F. x 1-3/4"	4 4
34	3253-8	Lockwasher, 5/8" Reg.	4
35	3219-6	Nut, 5/8" N. F. Full	2
36	F-216	Lock Pin	2
37	F-230	Spacer, Front Mower	
38	JT-302	Ball Socket	5
39	JT-302T		5
40	302-4	Grease Fitting	5
41	324-17	Screw, 7/16" N.C. x 5"	10
42	3253-6	Lockwasher, 7/16" Reg.	12
43	3217-8	Nut, 7/16" N.C. Full	10
44	FK-20	Draw	50
45	LU-56C	Ball Pivot	
46		Screw, 3/8" N. F. x 1-3/4"	6
47	3219-4	Nut, 7/16" N. F.	2

Ref.	Part No.	Description	No. Used
48	3212-11	Screw, 7/16"N. F. x 2-3/4"	10 4
49	282-4	Shackle	3
50	283-6	Yoke Pin	3
51	3272-10	Cotter Pin	3
52	322-11	Screw, 5/16"N.C. x 2-1/4"	2
53	3256-2	Washer, 1/4" Cut	2
54	3253-4	Lockwasher, 5/16" Reg.	2 2 2
55	3217-6	Nut, 5/16" N.C.	2
56	321-15	Screw, 1/4"N.C. x 2-1/2"	2 2
57	3254-8	Lockwasher, 1/4" Int.	
58	3217-5	Nut, 1/4" N.C. Full	6
59	321-11	Screw, 1/4" N.C. x 2"	2
60	3253-3	Lockwasher, 1/4" Reg.	4
	HL-26	Clamp	5
62	3213-4	Screw, 1/2"N. F. x 1-3/4"	5
63	4-0660	Hose Cover	2
64	HL-38	Hose Assembly, Valve to	1
65	HL-60	Cylinder Hose Assembly, Valve to	1
00	HL-00	Cylinder	1
66	HL-68	Hose Assy., Pump to Valve	1
67	4-0610	Hose Assy., Tank to Pump	1
68	353-61	Valve Control Assembly	2
69	353-57	Valve Control Assembly	1
70	2812-4	Pipe Bushing	2
71	4-0440	Bar, Upper	1
72	4-0430	Bar, Lower	1
73	4-0400	Valve Stand	1
74	353-56	Tank	1
75	353-119	Tank Cap	1
76	4-0620	Hose Assy., Valve to Tank	1
77	2811-8	Street Ell	1
78	353-63	Adapter Union	4
79	289-14	Pipe Nipple	2
80	353-28	Adapter Union	2
81	281-3	Pipe Plug	2
82	2812-3	Pipe Bushing	2
83	2811-9	Street Ell	5
84	2813-8	Elbow, 1/2" 90°	1
85	289-21	Pipe Nipple	1
86	353-55	Pump Assy.	1
87	353-26	Adapter Union	1
88	3211-4	Screw, 3/8" N. F. x 1"	2
89	3256-3	Washer, 3/8" Cut	2
90	4-0600	Bracket, Pump	1
91	KP-5	Pulley	1
92	3246-4	Set Screw	1 1
93	150	Belt Aggembly	1
94		Ram Assembly	2
95	353-62	Restricter Valve	4

<sup>\*</sup>Not Illustrated

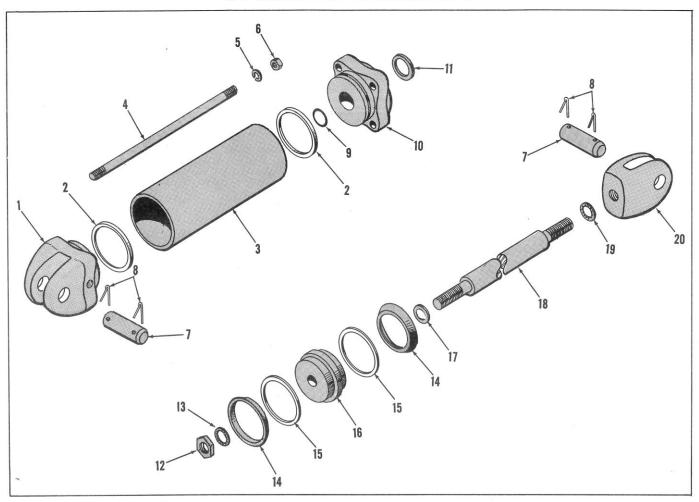
#### **CONTROL VALVE ASSEMBLY**



Ref. No.	Part No.	Description	No. Used
1	353-93	Handle	1
2	32121-33	Pin	2
3	353-91	End Cap	1
4	353-96	Bracket	1
5	237-29	"O" Ring	1
6	353-97	Bracket	1
7	353-114	Cap, Detent	1
8	237-30	"O" Ring	1
9	353-115	Spring	1
10	353-95	Bushing	1
11	353-100	Blade	1
12	353-113	Valve Block	1
13	353-94	Valve Spool	1
14	253-79	Seal	2

Ref. No.	Part No.	Description	No. Used
15	32120-56	Snap Ring	2
16	353-89	Spring	1
17	353-108	Shuttle Spring	1
18	353-99	Shuttle Spring	1
19	353-98	Shuttle	1
20	353-103	Plug	1
21	353-101	Lock Wire	1
22	353-92	End Cap	1
23	353-102	Spring Retainer	1
24	237-28	"O" Ring	1
25	353-88	Spring	1
26	353-111	Ball Retainer	1
27	255-2	Ball	1
28	353-112	Relief Valve Seat	1

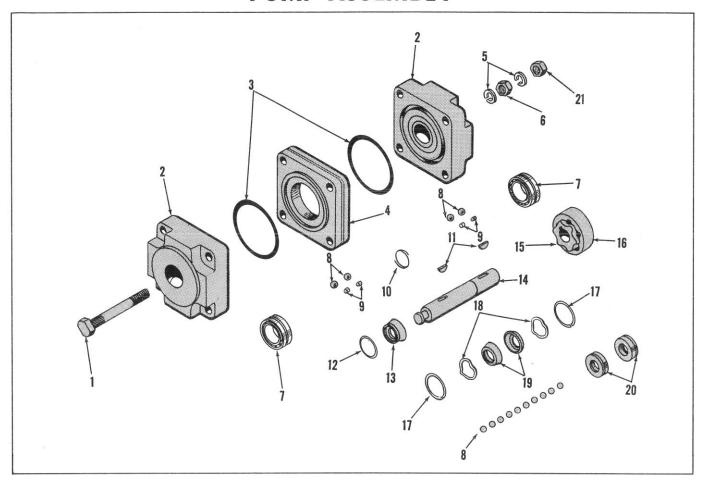
#### CYLINDER ASSEMBLY



Ref. No.	Part No.	Description	No. Used
1	353-72	Clevis End Cap	1
2	353-65	Seal, End Cap	2
3	353-70	Tube	1
4	353-77	Tie Rod	4
5	3254-3	Lockwasher, 7/16" Int.	4
6	3219-4	Nut, 7/16" N. F.	4
7	353-76	Pin	2
8	3272-49	Cotter Pin	4
9	353-64	Seal	1
10	353-73	Top End Cap	1

Ref. No.	Part No.	Description	No. Used
11	353-66	Seal Ring Wiper	1
12	3219-7	Nut, 3/4" N. F.	1
13	3254-7	Lockwasher, 3/4" Int.	1
14	353-68	Block V Seal	2
15	353-69	Backup Washer	2
16	353-74	Piston	1
17	353-67	Fibre Washer	1
18	353-75	Piston Rod	1
19	3254-13	Lockwasher, 7/8" Int.	1
20	353-71	Rod End Clevis	1

#### **PUMP ASSEMBLY**



Ref. No.	Part No.	Description	No. Used
1	353-118	Screw, 1/2" N. F. Knurled	4
2	353-81	Bearing Block	2
3	237-32	"O"-Ring	2
4	353-80	Rotor Block	1
5	3253-7	Lockwasher, 1/2" Reg.	8
6	3219-5	Nut, 1/2" N. F.	4
7	251-130	Bearing	2
8	255-5	Ball	14
9	353-87	Insert	4
10	32120-28	Snap Ring	1
11	3257-5	Key	2

Ref. No.	Part No.	Description	No. Used
12	237-31	"O"-Ring	1
13	353-84	Plug	1
14	353-83	Shaft	1
15	353-78	Rotor	1
16	353-79	Ring	1
17	32120-57	Snap Ring	2
18	353-85	Spring Washer	2
19	353-86	Washer	2
20	353-80	Oil Seal	2
21	3220-5	Nut, 1/2" Jam	4
	20		

# TORO

#### **POWER MOWERS**

Toro power mowers and Power Handle implements are designed and built to give years of precision performance . . . to make them "the best you can buy." And there's over 40 years of manufacturing experience to back them up.

One of Toro's most important objectives — and one which has

helped make Toro the world's largest manufacturer of power mowers — is to provide the customer with complete local service and parts. This Toro has done through an extensive chain of service dealers, factory-trained to give you the most careful, competent care for your Toro work-saver.



