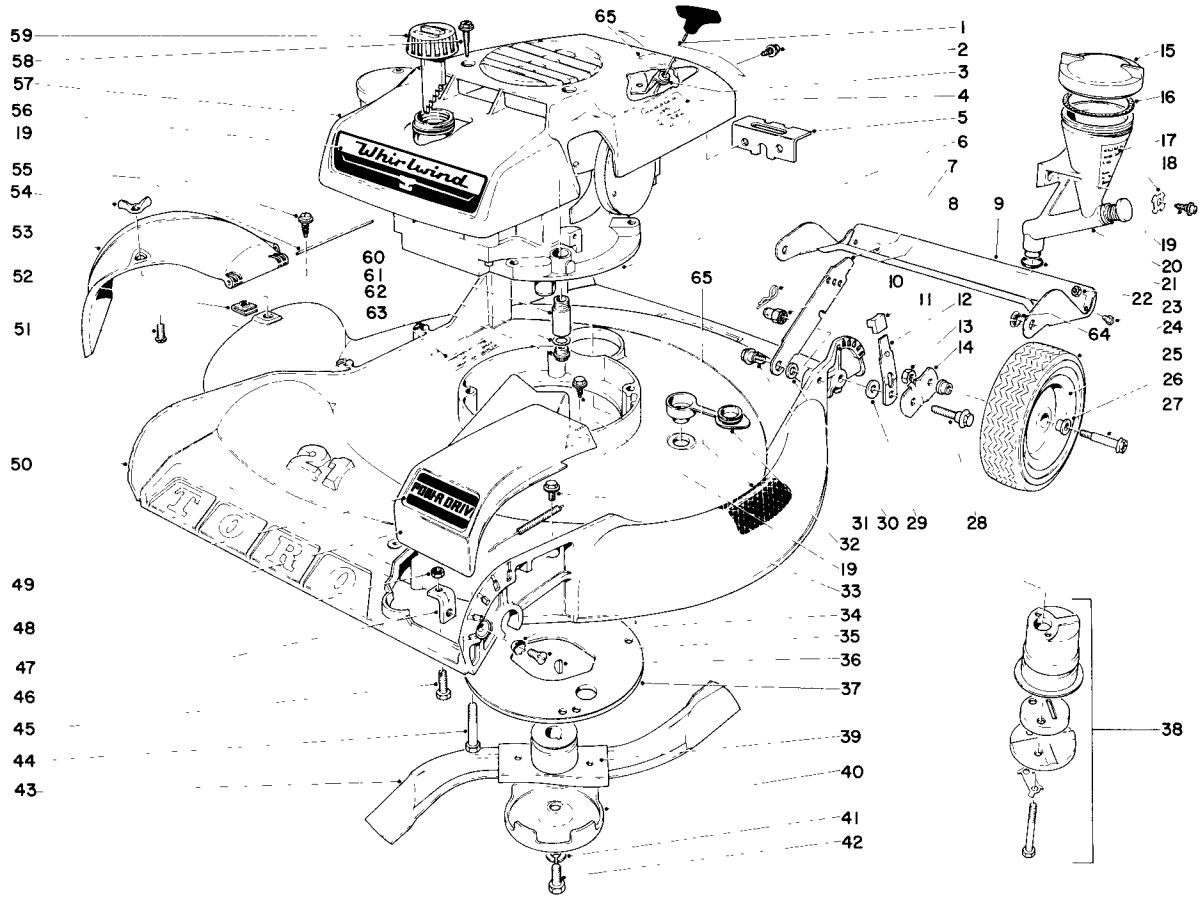
1969

TORO

MODEL NOS. 20223-900001 & UP
17601-900001 & UP

PARTS CATALOG

21" WHIRLWIND S.P. - Fingertip Start



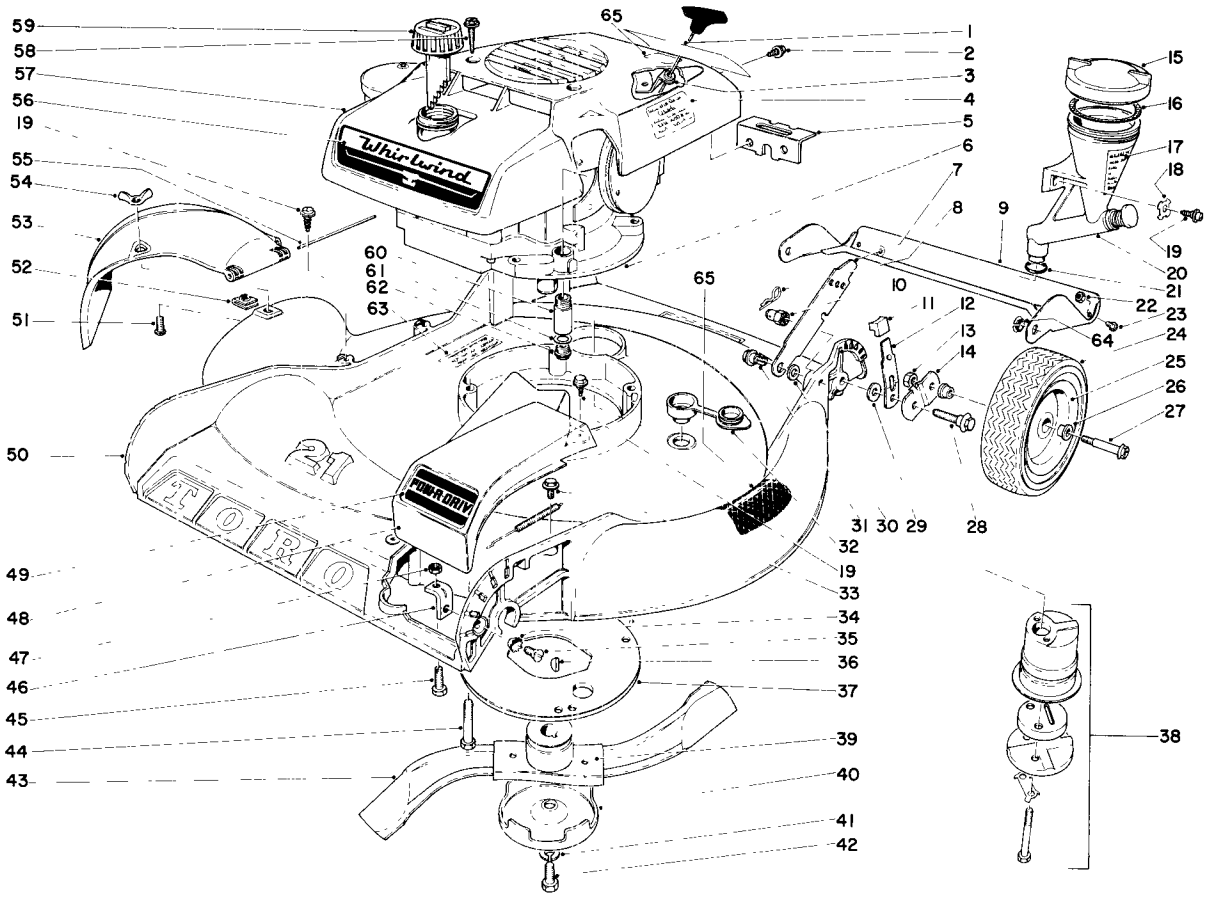
Ref. No.	Part No.	Description	No. Used
1	5-3335	Decal, Maintenance	1
2	32104-75	Screw, Self Tapping	7
3	5-3340	Bracket, Recoil	1
4	5-4706	Decal, Start	1
5	5-3307	Bracket, Rear Shroud	1
6	221-318	Engine	1
7	5-2446	Latch, Handle	2
8	3290-255	Hairpin Cotter	2
9	5-4662	Shield, Rear - Safety	1
10	3-6482	Handle Pivot Nut	2
11	5-0656	Knob, Arm	1
12	5-3357	Spring Arm Assy.	2
13	32146-12	Lock Nut	2
14	5-4471	Pivot Arm	1

Ref. No.	Part No.	Description	No. Used
15	3-8429	Cap, Reservoir (Incl. Ref. No. 16)	1
16	5-1391	"O" Ring	1
17	5-2947	Decal, Reservoir	1
18	3290-261	Pyramidal Washer	2
19	5-2046	Pad	1
20	5-0625	Oil Reservoir Assembly	1
21	237-65	"O" Ring	1
22	3218-1	Nut, Jam	2
23	3258-159	Screw, Nylon	2
24	4-2600	Tire - 8"	2
25	3-7350	Wheel Assy. (Incl. Ref. No. 26)	2
27	5-4503	Bolt, Wheel	2

Continued on next page

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TORO MANUFACTURING CORPORATION
MINNEAPOLIS, MINN. 55420 – U.S.A.

Price 25 cents



Ref. No.	Part No.	Description	No. Used
28	5-3351	Pivot Screw	2
29	5-4460	Washer, Pivot	2
30	3-3287	Spacer, Handle Latch	2
31	5-2490	Screw, Shoulder	2
32	5-0655	Plug, Washout	1
33	32104-82	Screw, Self Tapping	1
34	3255-12	Lockwasher	1
35	32108-20	Screw, Flat Head	1
36	3257-3	Key, Woodruff	1
37	3-7626	Grass Guard	1
38	2-9329	Muffler Assembly	1
39	3-7286	Retainer, Blade	1
40	5-4475	Cup, Anti-Scalp	1
41	3253-22	Lockwasher	1
42	3-5246	Screw, Special	1
43	5-1610	Blade	1
44	32140-49	Sems Screw	3
45	3-7281	Screw	1
46	3-7278	Bracket, Adjustment	1
47	3218-1	Nut	1
48	5-3305	Cover, Belt Drive	1

Ref. No.	Part No.	Description	No. Used
49	5-3303	Decal, Power Drive	1
50	5-3324	Housing	1
51	3290-133	Round Head Screw	1
52	3290-199	Speed Nut	1
53	5-3311	Deflector	1
54	32103-14	Wing Nut	1
55	3-2644	Hinge Pin	1
56	5-3304	Decal, Whirlwind	1
57	5-4705	Shroud	1
58	32104-88	Screw, Self Tapping	2
59	5-3460	Gas Cap Assembly	1
60	3-0761	Oil Drain Extension	1
61	+28833	Gasket, Oil Drain	1
62	+27244	Plug, Oil Drain	1
63	3-7643	Decal - Warning	1
64	256-194	Nyliner	2
*	3-6279	Grass Bag Locking Strap	1
*	81064	Replacement Grass Bags	1
*	5-4472	Pivot Arm, Right Rear	1
*	4-0909	Loose Parts Kit	1
65	5-4752	Decal - Warning	1

* Not Illustrated

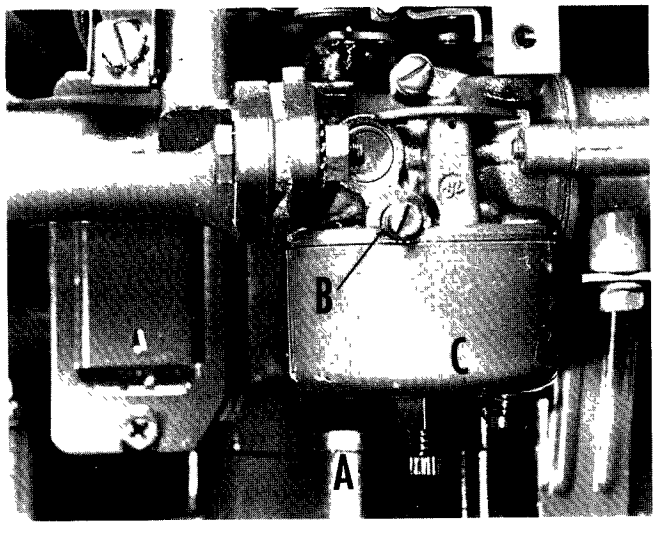
\+ Obtain from your local Lauson Dealer

SPECIFICATIONS

ENGINE: 21" S. P. Fingertip Start LAV35-40455H.
ENGINE SHROUD: Rigid Polyethylene
FUEL TANK CAPACITY: 1 quart
CUTTER BLADE: 21" long, "S" shaped, heat treated.
TRACTION CLUTCH: Hand operated lever and control wire system mounted to escutcheon plate and upper handle which operates spiral jaw clutch in gear case on drive shaft.
FRONT WHEEL TRACTION DRIVE: Special 3L V-belt, with an approximate 10 degree misalignment, running between two pulleys. The steel engine shaft pulley, integral with the blade hub, has a 2.0 eff. P.D.; the powdered iron worm shaft pulley, held with a tolerance ring, has a 2.5 eff. P.D. The engine to gear box reduction is 1.27 : 1.
GEAR CASE: Die cast aluminum case. Hardened and polished 4-thread steel worm supported by ball bearings and bronze bushings (6.25 : 1 reduction). Lubrication requirement: 2 oz. SAE 90 with extreme pressure characteristic.
WHEEL REDUCTION: 14T hardened steel pinion gears on drive shaft supported by double sealed ball bearings to 42T laminated hardened steel external spur gears riveted to wheel (3 : 1 reduction).
REDUCTION, ENGINE TO WHEEL: 23.8 : 1
WHEELS: #18 ga. steel disc with oil impregnated powered metal bushings.
TIRES: Semi-pneumatic 8 x 1.75 Toro tread
HEIGHT OF CUT: 1/2" to 3" by moving wheels, with hand operated levers.
WIDTH OF CUT: 21"
HOUSING: Die cast aluminum alloy, spiral grass chamber, right hand discharge. Symmetrical wheel locations. Hinged chute deflector.
FOLDING HANDLE: 3/4" O.D. x #16 ga. welded steel tubing in separable halves. No tool, positive handle height adjustment. Choice of upright or folded position.
THROTTLE CONTROL: Control wire and casing. Operating lever mounted to escutcheon plate on upper handle. Stop, run, and choke positions.
DIMENSIONS:
Width: 24 1/2"
Length: 32 1/2" w/o handle, wheel at 1" cut
Height: 14 1/2"
WEIGHT: 66 pounds
STANDARD EQUIPMENT:
Grass bag assembly, bagging chute, bag hanger, anti-scalp cup, washout port, "Auto-oiler" † visual oil filler, gas gauge (prismatic), rear safety shield.

† Exclusive mark of Toro Manufacturing Corporation.

CARBURETOR ADJUSTMENTS



Do not make unnecessary adjustments. Factory settings are correct for most applications. If adjustments are needed, proceed as follows. CAUTION: Do not force tighten needle - permanent damage may result.

1. Close power adjusting needle "A" by turning to right (clockwise). Close finger tight only. Forcing will cause damage.
2. Open "A" one turn (counterclockwise).
3. Close idle adjusting needle "B" by turning to right (clockwise). Close finger tight only. Forcing will cause damage.
4. Open "B" five-eighths (5/8) turn counterclockwise.
5. Start engine. Follow starting instructions. (See Owner's Manual).
6. With throttle open (carburetor control at "RUN" or "FAST" position), adjust power adjusting needle "A" one-eighth (1/8) turn at a time, forward or backward until engine runs smoothly. If engine tends to stall under load, enrich mixture slightly (counterclockwise).
7. Hold throttle lever closed or move carburetor control to "IDLE" or "SLOW" position and adjust idle adjusting needle "B" until engine runs smoothly, proceeding as in step 6.
8. Allow several seconds between each adjustment when performing either step 6 or 7 to allow engine to react to new setting.
9. Maximum engine speeds are preset at factory and should not be changed except by a qualified Service Station repairman who has the necessary equipment.

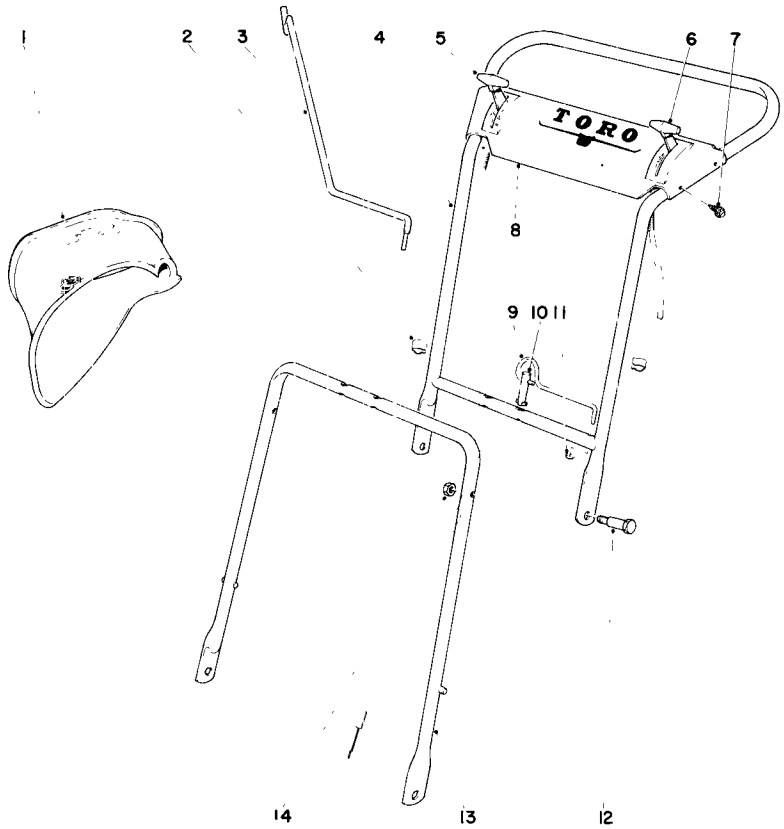
STORAGE INSTRUCTIONS

In event engine is to be stored for any length of time (30 days or more) or at the end of mowing season, prepare as follows:

1. Drain by tipping or by syphon hose, then run engine until remainder is used and tank and carburetor are empty.

z CAUTION: Drain into container outdoors away from fire or flame.

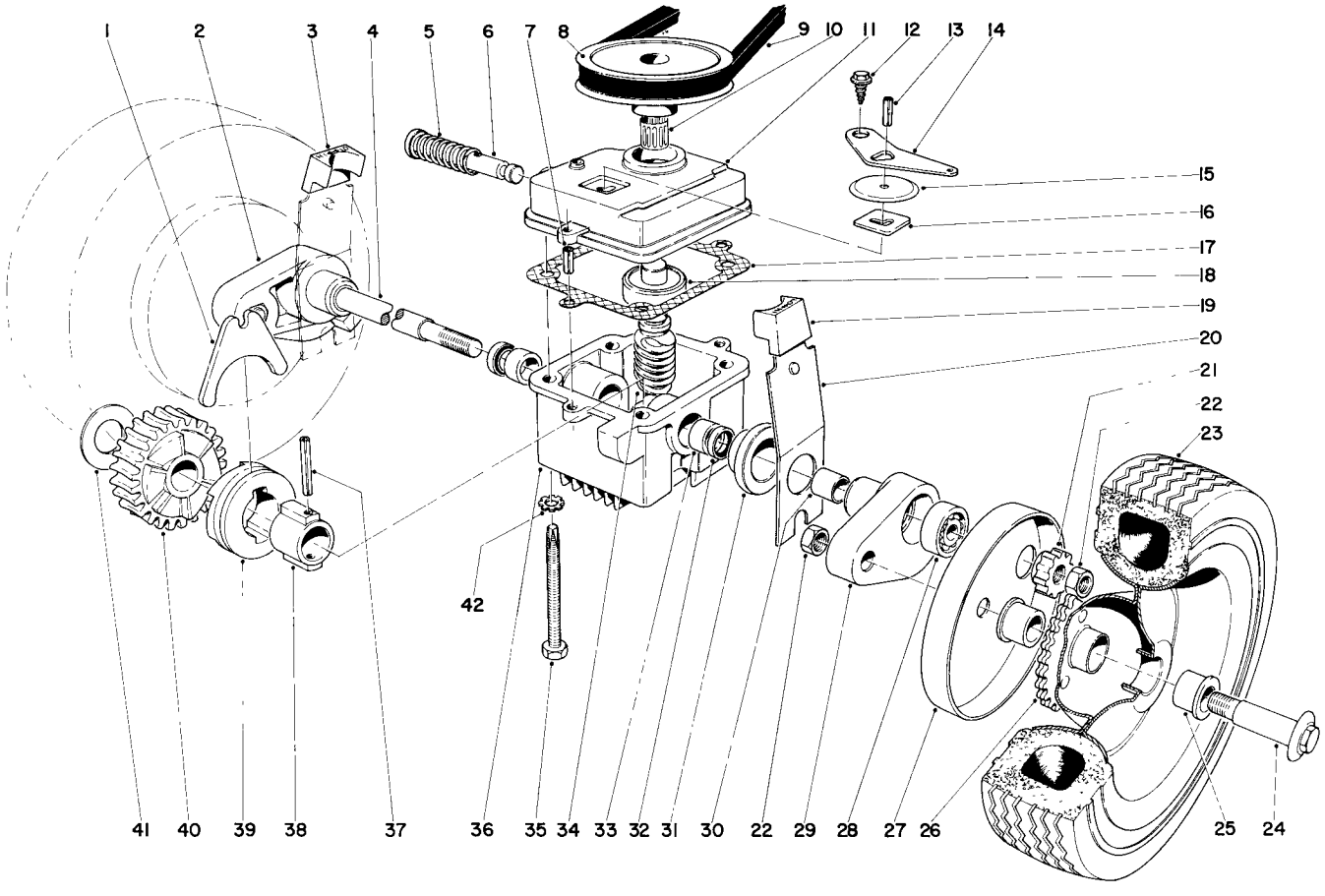
2. Drain carburetor. Float bowl carburetors are drained by pressing upward on "C".
3. Inside protection of engine for storage is performed by removing spark plug and pouring one ounce of S.A.E. 30 oil through spark plug hole into cylinder. Crank engine without starting several times to spread oil over cylinder walls.



FOLDING HANDLE

Ref. No.	Part No.	Description	No. Used
1	5-3442	Bag Attachment	1
2	218-75	Clip	1
3	3-0690	Hanger	1
4	5-4450	Upper Handle	1
5	5-3551	Control, Throttle	1
6	5-3332	Control, Traction	1
7	32104-76	Self Tapping Screw	4

Ref. No.	Part No.	Description	No. Used
8	5-0638	Plate, Escutcheon	1
9	5-4421	Spring, Handle Latch	1
10	5-4422	Pin, Latch	1
11	3290-299	Clip, Push On	1
12	5-4476	Bolt, Shoulder	2
13	5-4424	Handle, Lower	1
14	32146-8	Lock Nut	2

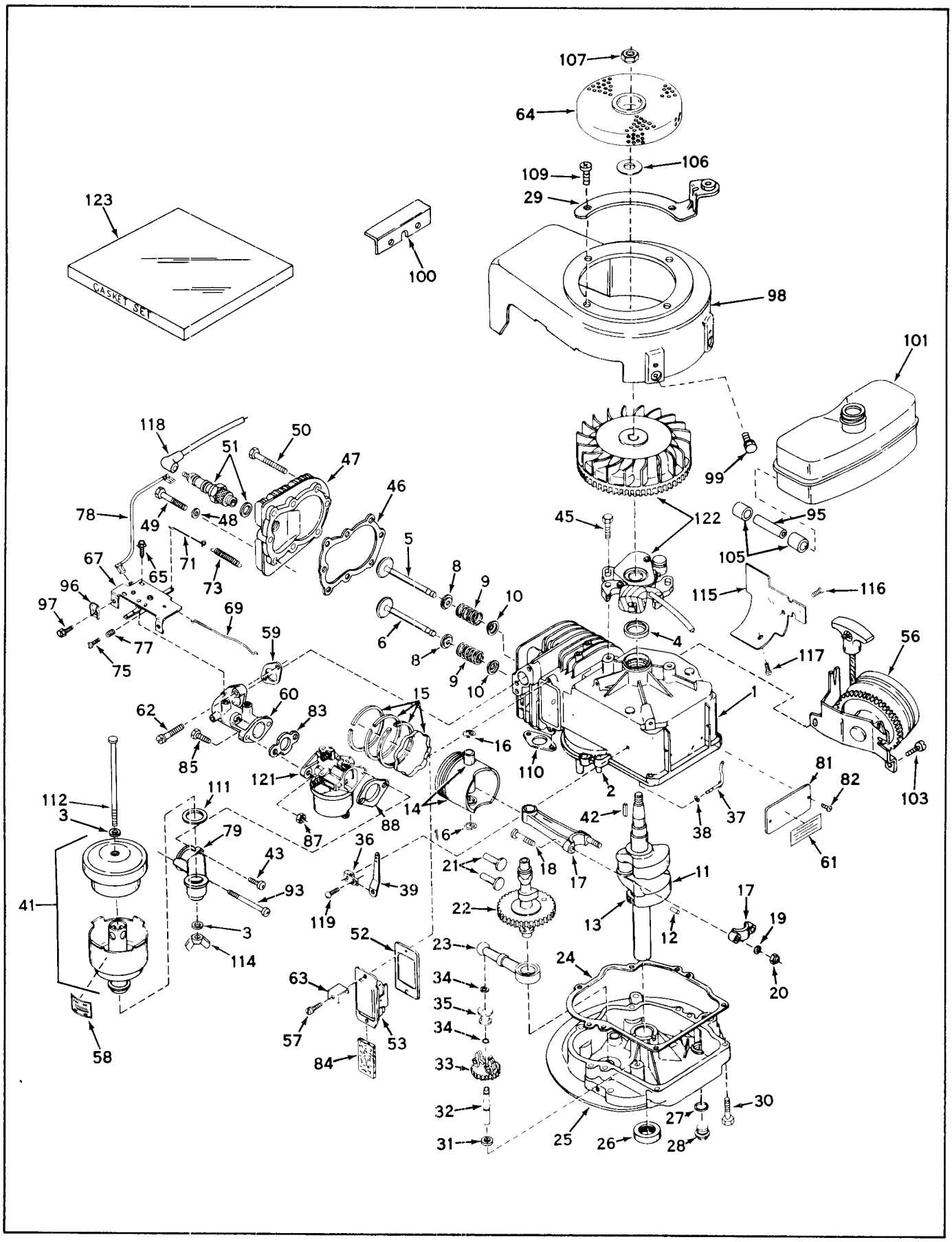


GEAR CASE ASSEMBLY

Ref. No.	Part No.	Description	No. Used
1	5-3247	Shift	1
2	2-6359	Pivot Arm (Incl. Ref. #30)	1
3	5-0656	Knob, Right Front & Left Rear	1
4	3-0720	Drive Shaft	1
5	3-0731	Spring	1
6	5-3248	Shift Rod	1
7	32121-1	Roll Pin	2
8	5-1615	Pulley	1
9	5-4505	Belt	1
10	3290-286	Tolerance Ring	1
11	5-3283	Cover	1
12	32140-64	Self Tapping Screw	1
13	32121-23	Roll Pin	1
14	5-3252	Shift Arm	1
15	3-2615	Dust Cap	1
16	3-0681	Latch Plate	1
17	3-0734	Gasket	1
18	251-144	Bearing	1
19	5-0657	Knob, Left Front & Right Rear	2
20	3-2640	Spring Arm	2
21	3-0738	Gear	2

Ref. No.	Part No.	Description	No. Used
22	32146-12	Stop Nut	4
23	4-2600	Tire	2
24	3-5117	Wheel Bolt	2
25	5-4504	Bushing	4
26	3-7570	Wheel Assembly	2
27	3-5235	Wheel Cover	2
28	251-183	Bearing	2
29	2-6369	Pivot Arm (Incl. Ref. #30)	1
30	256-1	Bushing	2
31	5-0745	End Cap	2
32	253-86	Oil Seal	2
33	256-110	Bushing	2
34	5-1616	Worm Shaft	1
35	32140-63	Sems Screw	4
36	3-1079	Gear Case	1
37	32121-40	Roll Pin	1
38	3-0721	Sleeve	1
39	3-0722	Clutch Jaw	1
40	3-0723	Worm Gear	1
41	3-0724	Washer	1
42	3255-7	S. P. Washer	4
	4-0809	Complete Gear Case Assy.	1

ENGINE MODEL LAV35-40455H

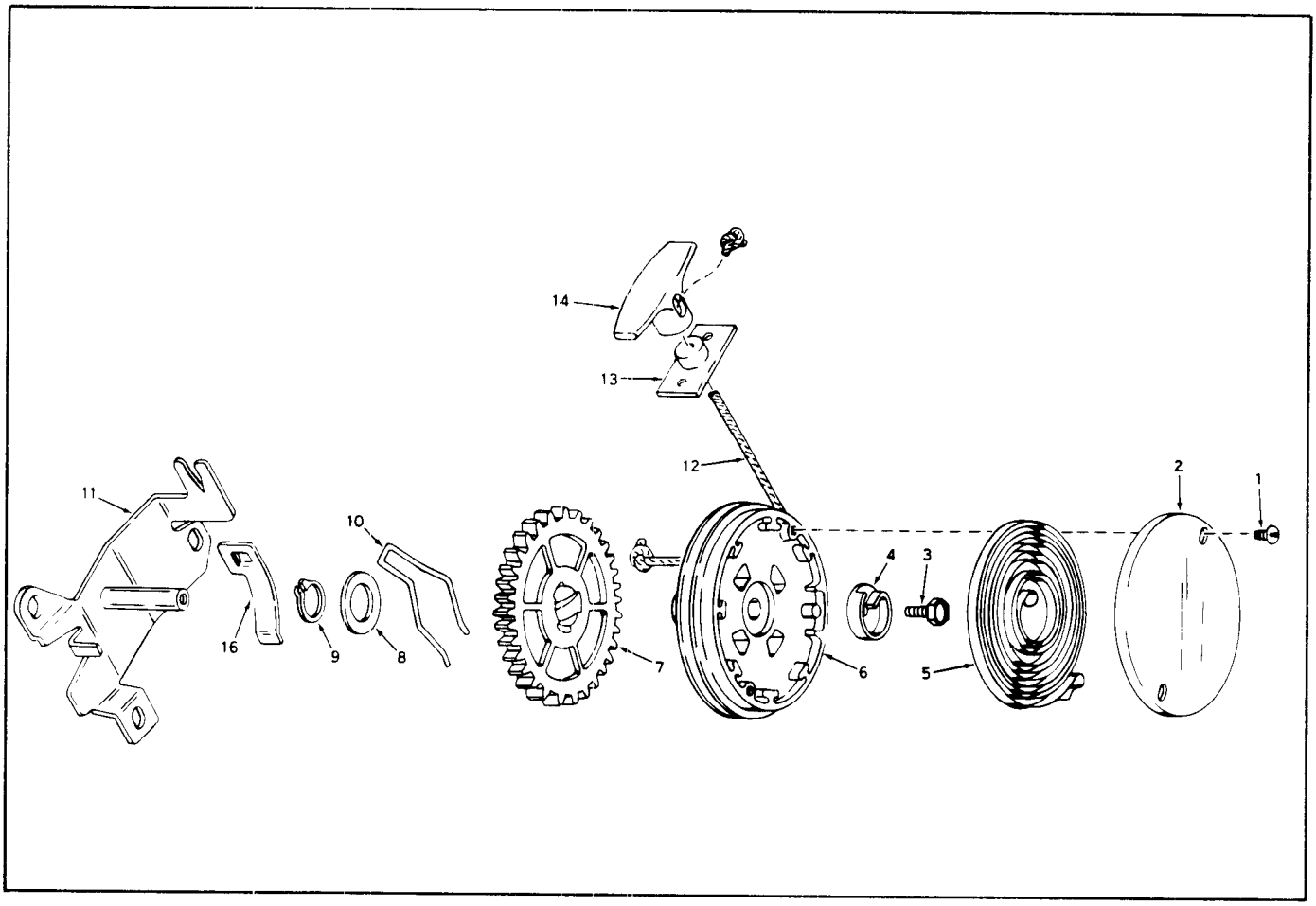


Ref. No.	Part No.	Description	No. Used
1	32616	Cylinder Assy. (Incl. Ref. 2 & 4)	1
2	26727	Pin, Dowel	2
3	27183	Washer, Fiber	2
4	*29183	Seal, Oil	1
5	29314A	Valve, Intake (Standard) (Incl. Ref. 8, 9 & 10)	1
5	29316A	Valve, Intake (1/32" Oversize) (Incl. Ref. 8, 9 & 10)	1
6	29313A	Valve, Exhaust (Standard) (Incl. Ref. 8, 9 & 10)	1
6	29315A	Valve, Exhaust (1/32" Overs.) (Incl. Ref. 8, 9 & 10)	1
8	31671	Cap, Upper Valve Spring	2
9	31672	Spring, Valve	2
10	31673	Cap, Lower Valve Spring	2
11	29223	Crankshaft Assy. (Incl. Ref. 12 & 13) (Model LAV35-40455H)	1
12	29783	Pin, Crankshaft Gear	1
13	27613	Gear, Crankshaft	1
14	31307	Piston & Pin Assy. (Incl. 2 of No. 16) (Standard)	1
14	31308	Piston & Pin Assy. (Incl. 2 of No. 16) (.010 oversize)	1
14	31309	Piston & Pin Assy. (Incl. 2 of No. 16) (.020 oversize)	1
15	28986	Ring Set, Piston (Standard)	1
15	28987	Ring Set, Piston (.010 overs.)	1
15	28988	Ring Set, Piston (.020 overs.)	1
16	20381	Ring, Piston Pin Retaining	2
17	30963B	Rod Assy., Connecting (Incl. Ref. 18, 19 & 20)	1
18	26706	Bolt, Connecting Rod	2
19	20747	Washer, Connecting Rod	2
20	27573	Nut, Lock	2
21	27241	Lifter, Valve	2
22	32260	Camshaft	1
23	29914	Pump Assy., Oil	1
24	*26750A	Gasket, Mounting Flange	1
25	31907	Flange Assy., Mounting (Incl. Ref. 26, 27, 28 & 32)	1
26	*26208	Seal, Oil	1
27	*28833	Gasket, Drain Plug	1
28	27244	Plug, Oil Drain	1
29	**	Bracket Assy., Starter	1
30	650488	Screw, Hex Hd. Cap, Sems	6
31	30590A	Washer, Flat	1
32	30574	Shaft, Mechanical Governor	1
33	30591	Gear Assy., Governor	1
34	29193	Ring, Retaining	2
35	30588A	Spool, Governor	1
36	31335	Clamp, Governor Lever	1
37	30589	Rod, Governor (Incl. Ref. 38)	1
38	28277	Washer, Flat	1
39	31383	Lever, Governor	1
41	31404	Cleaner Assy., Air	1
42	27247	Key, Flywheel	1
43	28597	Screw, Fil. Hd. Sems	1
45	650489	Screw, Hex Hd. Cap, Sems	2
46	*29953B	Gasket, Cylinder Head	1

Ref. No.	Part No.	Description	No. Used
47	30579	Head, Cylinder	1
48	26073	Washer	5
49	6021	Screw, Hex Hd. Cap	5
50	6023	Screw, Hex Hd. Cap	3
51	21943	Plug, Spark (Champion J-8 or equivalent)	1
52	*31619	Gasket, Breather	1
53	31337	Breather Assy. (Incl. Ref. 52 & 84)	1
56	590450A	Starter, Side Mount Rewind	1
57	650128	Screw, Phil. Fil. Hd. Sems	2
58	30002	Decal, Air Cleaner	1
59	*30188	Gasket, Intake Pipe	1
60	31384	Pipe, Intake	1
61	31865	Decal, Name & Instruction	1
62	650176	Screw, Phil. Fil. Hd. Sems	2
63	30593	Clip, Magneto Wire	1
64	32237	Screen, Flywheel	1
65	30200	Screw, Hex Sltd. Hd. Sems S. T.	2
67	31736	Control Assy., Speed	1
69	31385A	Link, Throttle to Governor	1
71	31387A	Link, Governor Spring	1
73	31386	Spring, Governor	1
75	650549	Screw, Fil. Sltd. Hd. Mach.	1
77	31342	Spring, Compression	1
78	31388	Wire, Ground	1
79	31473	Elbow, Air Cleaner	1
81	31345	Plate, Identification	1
82	28670	Screw, Drive	2
83	26756	Gasket, Carburetor	1
84	31410	Element, Breather	1
85	6201	Screw, Hex Hd. Cap	2
87	29752	Nut, Hex Jam	2
88	*27272	Gasket, Cleaner Bracket	1
93	650519	Screw, Fil. Hd. Mach.	1
95	31400	Line, Fuel	1
96	27793	Clip, Conduit	1
97	28942	Screw, Sltd. Hex Hd. Sems	1
98	32369	Housing, Blower	1
99	650561	Screw, Hex. Hd. Cap, Sems	2
100	**	Bracket, Shroud	1
101	32170	Tank, Fuel	1
103	650191	Screw, Fil. Hd. Sems	3
105	29774	Line, Fuel	2
106	650490	Washer, Belleville	1
107	650607	Nut, Flywheel	1
109	29716	Screw, Phil. Fil. Hd. Mach.	2
110	*30081	Gasket, Muffler	1
111	*27165	Gasket, Air Cleaner to Elbow	1
112	650622	Bolt, Air Cleaner	1
114	9577	Nut, Wing	1
115	32407	Extension, Blower Housing	1
116	30688	Screw & Lockwasher Assy.	1
117	650128	Screw & Lockwasher Assy.	1
118	610118	Cover, Spark Plug	1
119	650548	Screw, Hex Sltd. Wshr., Hd.	1
121	631003A	Carburetor	1
122	610793	Magneto	1
123	31409B	Gasket Set (Incl. items marked *)	1

** Order from your Toro Dealer

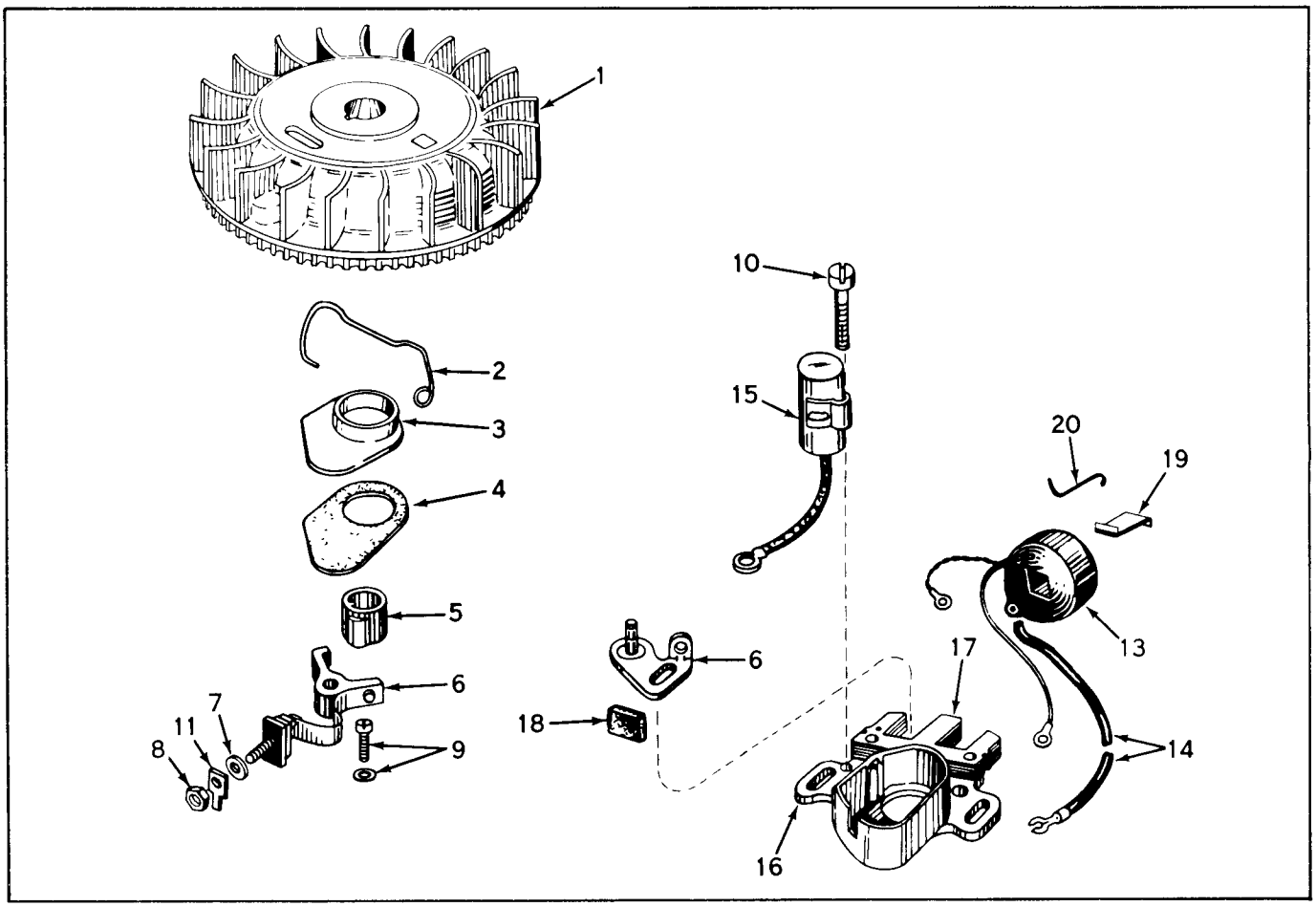
REWIND STARTER NO. 590450A



Ref. No.	Part No.	Description	No. Used
1	590430	Screw, Cover	2
2	590431	Cover, Spring	1
3	29728	Screw, Hub	1
4	590432	Hub, Spring	1
5	590433	Spring, Rewind	1
6	590434	Pulley	1
7	590435	Gear	1
8	590436	Washer	1
9	590437	Ring, Snap	1

Ref. No.	Part No.	Description	No. Used
10	590438	Brake	1
11	590439A	Bracket Assy., Mounting	1
12	590451	Rope, Starter	1
13	590441	Bracket Assy.	1
14	590452	Handle, Starter	1
16	590446	Clip, Rope	1

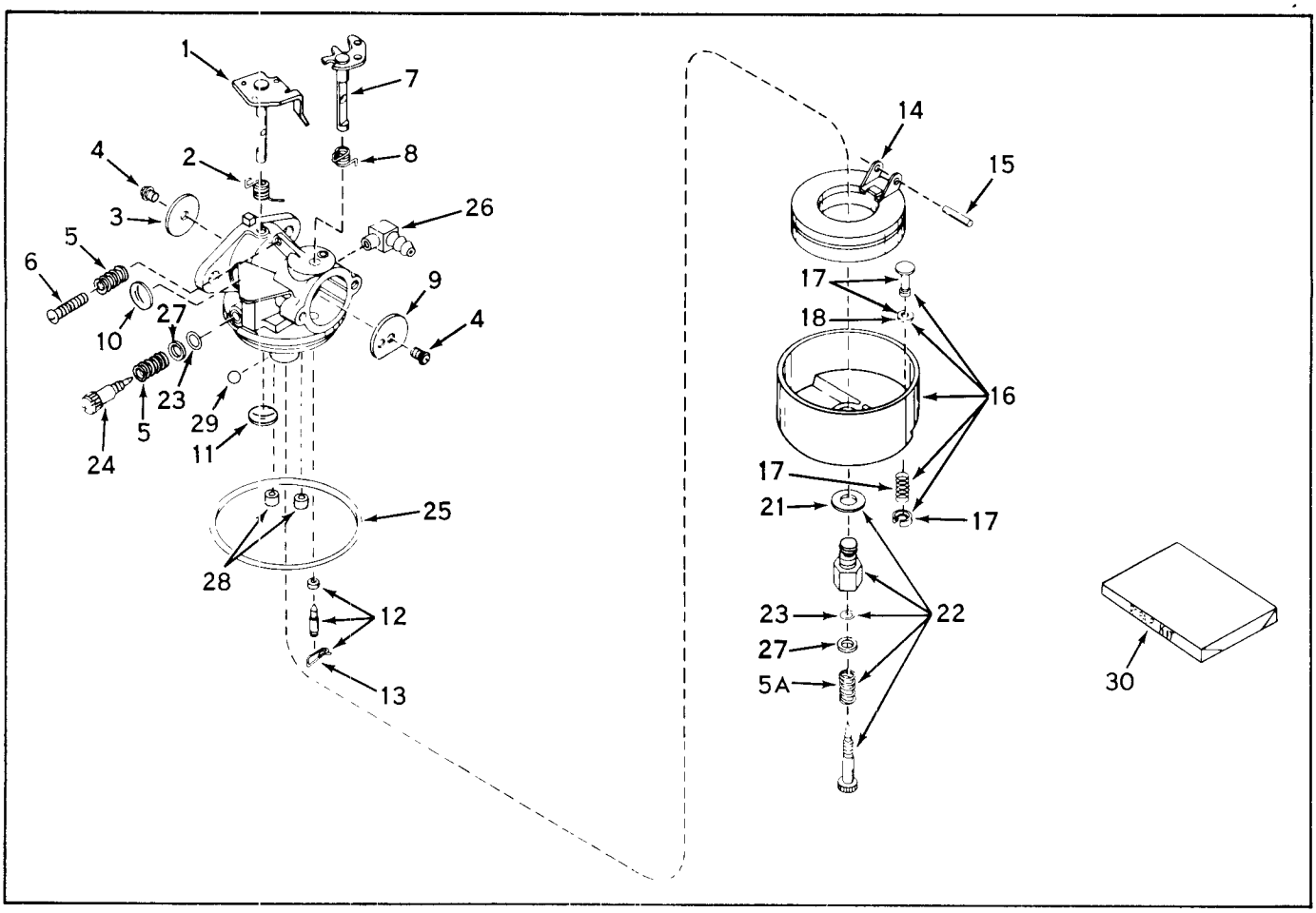
MAGNETO NO. 610793



Ref. No.	Part No.	Description	No. Used
1	610782	Flywheel	1
2	30551	Spring, Breaker Box Dust Cover	1
3	30550	Cover, Breaker Box Dust	1
4	32052	Gasket, Dust Cover	1
5	30552	Cam, Breaker	1
6	30547A	Breaker Assy.	1
7	610385	Washer, Terminal	1
8	610408	Nut, Terminal	1
9	29181	Screw & Washer Assy., Breaker	1
10	610593	Screw, Condenser Fastening	1
11	30843	Tab, Ground Terminal	1

Ref. No.	Part No.	Description	No. Used
13	30560	Coil Assy. (Incl. Ref. 14, 15 & 19)	1
14	30554	Wire, Ignition lead	1
15	30548A	Condenser	1
16	30545	Core & Plate Group	1
17	30561A	Stator Assy. (Incl. Ref. 2, 3, 5 thru 14 & 16 thru 19)	1
18	30549	Felt, Cam Wiper	1
19	29629	Spring, Coil Wedge	1
20	31311	Clip, Coil Locking	1

CARBURETOR NO. 631003A



Ref. No.	Part No.	Description	No. Used
1	630983	Shaft & Lever Assy., Throttle	1
2	631066	Spring, Throttle Return	1
3	631036	Shutter, Throttle	1
4	650506	Screw	2
5	630766	Spring, Idle Regulating Screw	2
5A	630738	Spring, Main Adjustment Screw	1
6	650417	Screw, Idle Regulating	1
7	630973	Shaft & Lever Assy., Choke	1
8	630821	Spring, Choke Return	1
9	631037	Shutter, Choke	1
10	630748	Plug, Welch	1
11	631027	Plug, Welch	1
12	*631021	Inlet Needle, Seat & Clip Assy. (Incl. Ref. 13)	1
13	631022	Clip, Inlet Needle	1
14	631023	Float, Carburetor	1
15	*631024	Shaft, Float	1

Ref. No.	Part No.	Description	No. Used
16	631025	Bowl & Drain Assy., Float (Incl. Ref. 17)	1
17	27136	Plunger Assy., Drain (Incl. Ref. 18)	1
18	27554	Gasket, Drain Plunger	1
21	27110	Gasket, Bowl-to-Body	1
22	*631026	Adjustment Screw Assy., Main (Incl. Ref. 5A, 21, 23 & 27)	1
23	*630740	"O" Ring, Adjustm. Screw	2
24	*631078	Screw, Idle Adjustment	1
25	*631028	Gasket, Bowl-to-Body	1
26	631038	Fitting, Fuel Inlet	1
27	630739	Washer	2
28	630747	Plug, Cup	2
29	631081	Ball, Aluminum	1
30	631029	Repair Kit (Incl. items marked *)	1

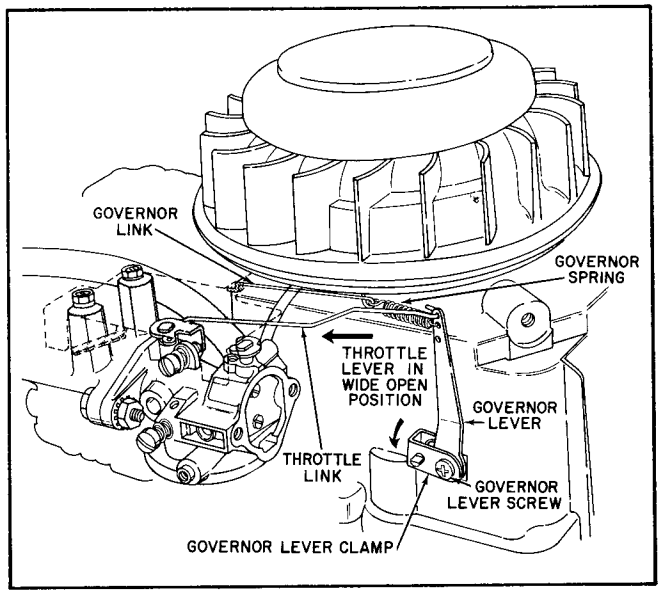
PRODUCT CHANGES

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

IMPORTANT ORDERING INSTRUCTIONS

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

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



MECHANICAL GOVERNOR ADJUSTMENTS

1. Loosen governor lever screw.
2. Hold throttle lever in wide open position.
3. Rotate governor lever clamp as far as possible in direction shown by arrow.
4. Tighten governor lever screw.

MAINTENANCE RECORD

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