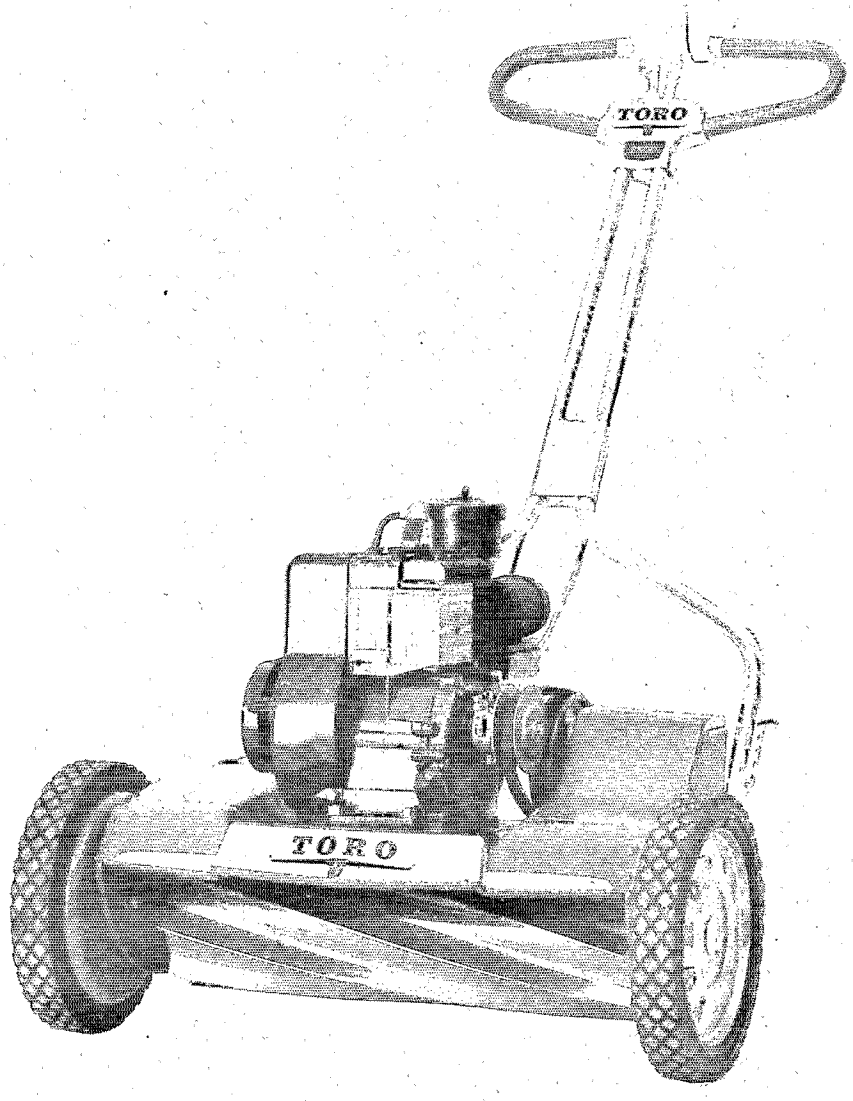
1961?

TORO

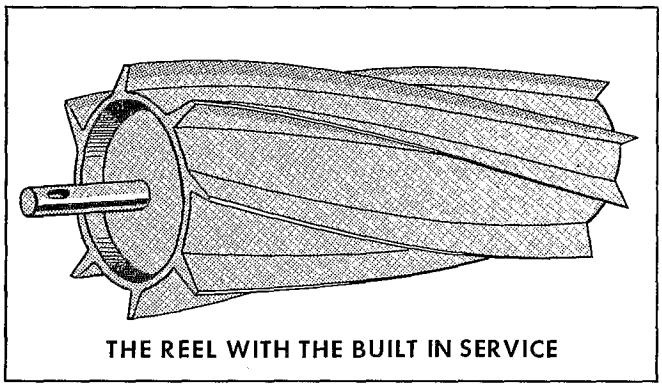
OWNER'S OPERATING AND PARTS MANUAL



TORO—20" SPORTLAWN

SERIAL NOS. 6 BLADE 1003—25000 AND UP
SERIAL NOS. 8 BLADE 1004—25000 AND UP

Price 25 cents



THE REEL WITH THE BUILT IN SERVICE

TO THE TORO OWNER

1. If your reel strikes an object, it will bring itself into alignment after a few minutes of operation.
2. Built-in sharpening compound enables you to sharpen your mower with little effort (see instructions Page 5)
3. This reel is extremely strong, accurate, and symetrical and will give you a fine mowing job consistently.
4. The closed spiral design gives you greater cutting efficiency in higher grass.

SPECIFICATIONS

ENGINE: Briggs and Stratton 6BS
FUEL TANK CAPACITY: 1 quart
CLUTCH: Die cast split pulley type operating both traction and reel drive, mounted on engine shaft.
REEL DRIVE: "A" section V-belt from engine to countershaft, 2.6 P.D. and 5 P.D. pulleys (1.9 : 1 reduction). 1/2" pitch X 3/16" wide guarded roller chain. operating on 10 T. and 23 T. sprockets from countershaft (2.3 : 1 reduction).
REDUCTION, ENGINE TO REEL: 4.4: 1
REEL: 6" dia. with 6 or 8 blades integrally extruded. Cutting edge hardened by Martin Hard Coat Process. Stamped steel end caps pressed into ends of extruded section. 5/8" dia. shaft on double sealed ball bearings.
BED KNIFE & BAR: Replaceable single lipped chrome steel knife riveted to cast iron bed bar with 5/16 x 3/4 steel reinforcing bar and center adjustment, opposed screw adjustment on stainless steel ball pivots.
TRACTION DRIVE: 12 pitch gears, 13 T pinion and 86 T internal spur gear in wheel (6.6: 1 reduction).
REDUCTION, ENGINE TO WHEELS: 29: 1
WHEELS: Die cast aluminum alloy - with oil impregnated bronze bushing.
TIRES: Semi-pneumatic, diamond thread, 1.75 x 10.50
DIFFERENTIAL: Rectangular dogs in ratchet pinion
HEIGHT OF CUT: 1/4 to 2-1/2 by 1/4 increments by combination of wheel and roller adjustment - no tools required for roller adjustment.
WIDTH OF CUT: 20"
CLIP: 6 Blade .83" 8 Blade .62"
GROUND SPEED: 3.9 mph at 3600 engine rpm.
CHASSIS & SIDEPLATES: Formed 12 ga. sideplates connected by two 1" O.D. 14 ga. wall steel tubes, covered with a formed steel platform.
HANDLE: 3/4" O.D. X 16 guage wall welded steel tubing in separate halves. Plastic tubing grip, height adjustable without tools to suit operator.
ROLLER: Three section oil impregnated maple, 2-3/4 dia. on 11/16 dia. 13 ga. wall tubular steel shaft.
DIMENSIONS: Width 27½"
Length 17½" - Without handle at
Height 21" 1" height of cut.
WEIGHT: 94 Pounds

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.

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

TIPS ON LAWN MOWING

How you mow your lawn will greatly influence its health, vigor and appearance. Here are some fundamental suggestions that may help you.

HEIGHT OF CUT: The leaves carry "chlorophyll" which is responsible for the green color of the lawn. The leaves also are the "factory" where the plant manufactures its food. The number and amount of leaves (leaf mass) are a function of the species of type of grass, as well as the height of cut. Creeping or "runner" types of grass (Creeping Bent Grass, Bermuda Grass) will produce sufficient leaf surface at much lower heights of cut than will non-creeping types. Under most conditions, lawns should be clipped at a height of 1 to $1\frac{3}{4}$ inches. Creeping Bent Grass and fine leaved Bermuda Grass make a better lawn when cut at $\frac{1}{2}$ to $\frac{3}{4}$'s of an inch.

FREQUENCY OF CLIP: Frequency of clip may be defined as the number of times a blade passes the bedknife as the mower travels a given distance. In general, the more clips made per foot, the more even and uniform will be the final cut. Because grasses vary widely in their response to clipping frequency, it is important to choose the correct reel for your lawn. Leaf texture (width of leaf), level of maintenance, and height of cut are the primary factors controlling the frequency of clip required for a well groomed appearance.

A.

Your Sportlawn Implement equipped with the revolutionary six blade extruded aluminum reel clips the grass 14.5 times for every foot traveled. This frequency of clip will provide a well groomed appearance to any lawn of medium textured grasses, such as Kentucky bluegrass, fescue, St. Augustine, centipede, zoysia and most bermudas.

B.

Your Sportlawn Implement equipped with the revolutionary eight blade extruded aluminum reel clips the grass 19.5 times for every foot traveled. This high frequency of clip will provide an exceptionally well groomed appearance to any lawn of medium or fine textured grass such as those listed above, plus bentgrass and fine leaved bermuda. The eight bladed unit is always recommended for lawns established to bentgrass and fine leaved bermuda.

CLIPPINGS: When returned to the soil, clippings will provide plant food upon decomposition. They also act as a mulch; hence, retard evaporation. Clippings should be removed if too much leaf surface is being clipped; otherwise they may smother the grass. Removal of clippings is also recommended if the lawn has a tendency to develop "mat".

DIRECTION OF MOWING:

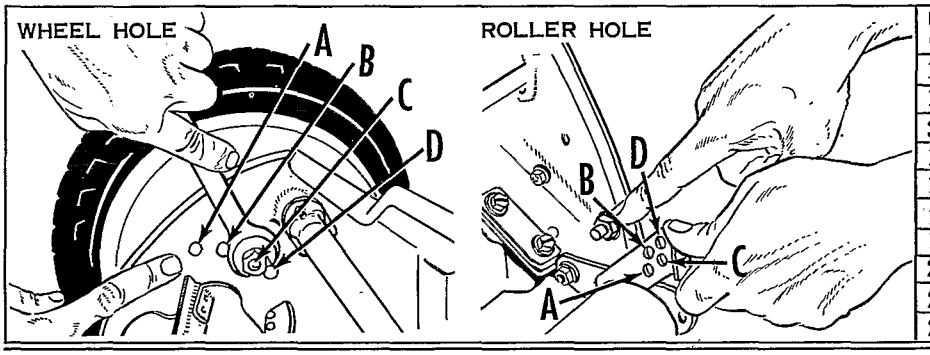
Lawn Areas: cut in different directions at each mowing.

Terraces: cut up and down hill when mowing the crown. Also cut high (1 to $1\frac{3}{4}$ inches) to help avoid erosion and evaporation.

MOWER: To maintain a well-groomed appearance, the lawn must always be cut with a sharp, properly adjusted mower. Dull, improperly adjusted mowers leave the lawn ragged and often the grass will turn gray and brown off on the leaf tips. Keep Your Mower Operating Properly.

20" SPORTLAWN HEIGHT OF CUT

RECOMMENDED WHEEL AND ROLLER POSITIONS



HEIGHT OF CUT	WHEEL HOLE	ROLLER HOLE
1/4"	D	A
1/2"	D	B
3/4"	C	A
1"	C	B
1 1/4"	B	A
1 1/2"	B	B
1 3/4"	B	C
2"	A	B
2 1/4"	A	C
2 1/2"	A	D

INSTRUCTIONS

To assemble the handle on your sportlawn, first join the upper handle section "A" to the lower handle section "B". Then insert screw "C" as shown in Fig. 1 and fasten with lockwasher "D" and nut "E". Next install cover plate "F" over the splice with the flange covering the bolt head. This is best done by placing it on one side of handle and snapping it over the other.

After the handle sections have been joined together, first place a flat washer on the handle studs. "A" (See Fig. 2). Next place handle assembly, flatwasher, lockwasher and nut as shown in Fig. 3. Then tighten nut securely.

The clutch and throttle controls are installed in their proper places. They are assembled at the factory and packed in the carton in this manner for ease of assembly.

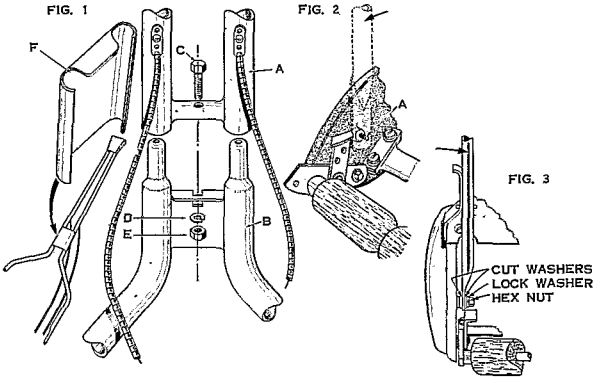


Fig. 4 If it is necessary to adjust the belt tension, loosen the four bolts that hold the engine to the platform, and slide it forward in the slotted holes (see Fig. 4). The belt should not be tightened any more than is necessary to prevent it from slipping when under load. Do not tighten the belt too tight as this will cause undue wear and cause your Sportlawn to creep when the clutch is disengaged. The clutch should be engaged when the belt is being tightened. To engage clutch when engine is not running, we recommend you do the following: First disconnect spark plug lead wire. Then push in clutch control and pull starter. You will hear a definite click when clutch engages. Then you are ready to adjust belt as outlined above.

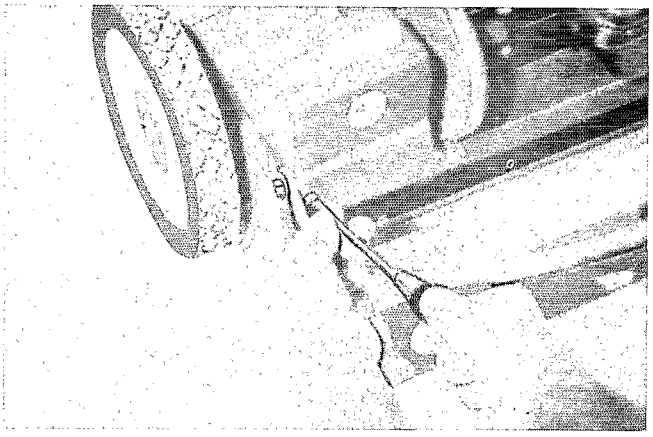


Fig. 5 The chain on the Sportlawn, after a few hours operation may have stretched and become too loose. To tighten it, remove metal housing cover as shown in Fig. 5.

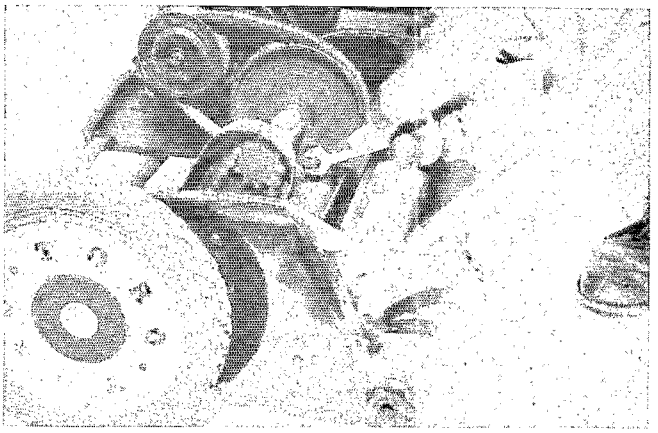


Fig. 6 Then loosen the four bolts that hold the countershaft in position (Fig. 6) and move the countershaft up by putting a broom handle or a similar stick to lift it as shown in Fig. 7.

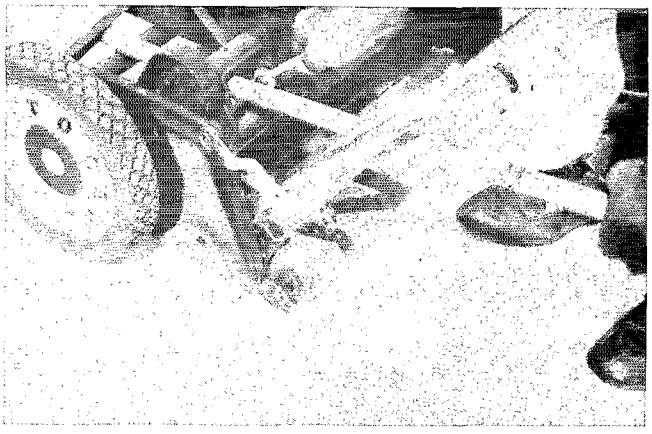


Fig. 7 While holding it up in this position, retighten the four countershaft bolts securely. Be sure you do not get the chain too tight as this will cause excessive wear.

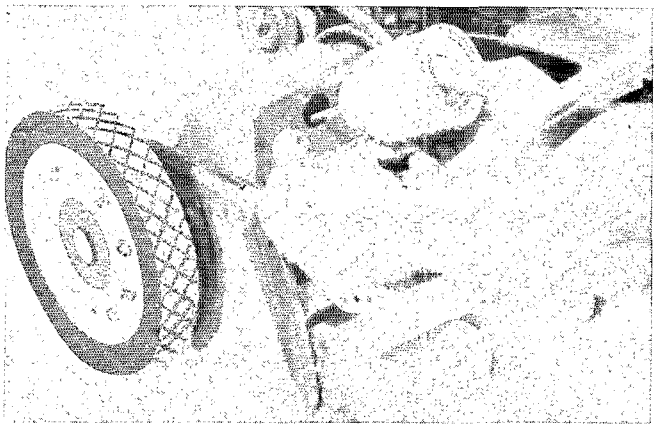


Fig. 8 Note that the countershaft can be lubricated by removing the small chromium plated circular cap so the oil hole in the countershaft can be reached by the oil can spout.

Fig. 9 The height of cut can be adjusted by raising or lowering the rear roller and by changing the positioning of the wheels. See table on various cutting heights on page 3. When changing wheel setting after you have removed the axle nut, do not pull axle bolt all the way out of wheel. Simply bring it back far enough so it can slide into the desired setting.

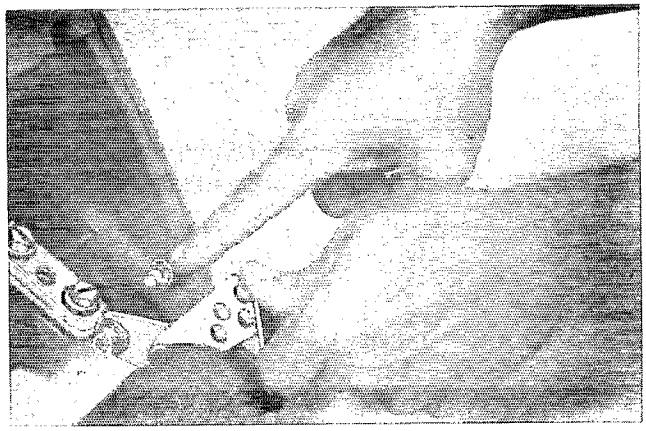


Fig. 10 Be sure the wheel setting and the roller bracket setting are in the relative hole on both sides. Then retighten wheel nuts and set roller bracket in pins on side plate. (See Fig. 10). The cutting height can be determined in inches by measuring the distance between the ground and the cutting edge of the bed knife.

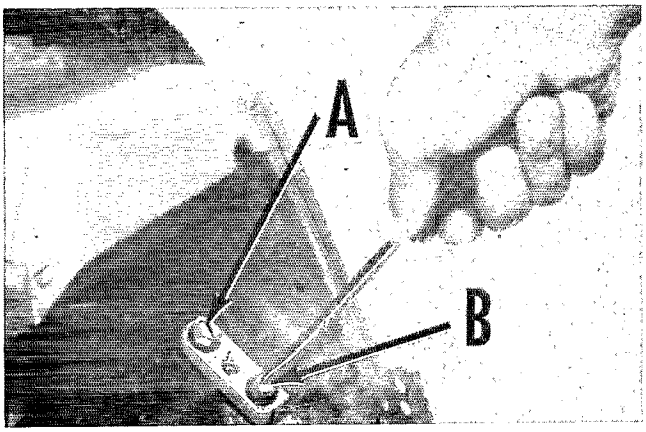


Fig. 11 Adjusting the bed knife is the most important adjustment on your Sportlawn implement. To set the bed knife up against the reel blades, loosen rear adjusting screw "B" (using a screw driver as shown) very slightly about 1/20th of a turn, then tighten front screw "A" in the same manner. Do this at each end of bed knife. Then slowly revolve reel to see if it is adjusted properly. Repeat or reverse above operation until bed knife bears lightly and smoothly against each blade and can cut paper for its full length.

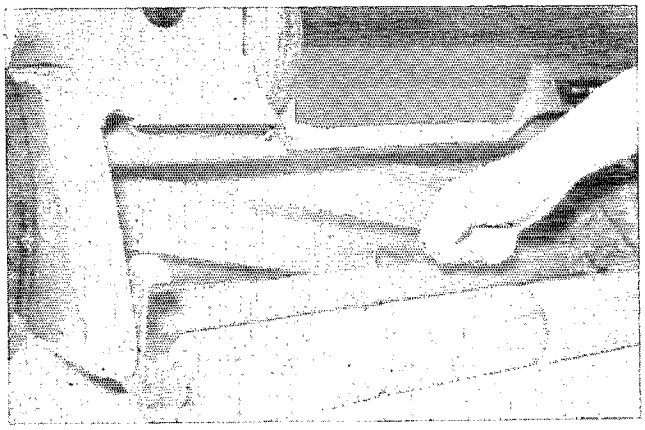


Fig. 12 The purpose of the Allen Set Screw in the center of the knife bar is to raise or lower the center of the knife. Usually no adjustment is necessary. If the mower should leave a streak of uncut grass in the center of the unit, then the Allen Set Screw should be tightened to raise the center of the knife bar. Care should be exercised in making this adjustment. IN NO CASE SHOULD BED KNIFE BEAR HEAVILY AGAINST THE REEL.

SHARPENING INSTRUCTIONS

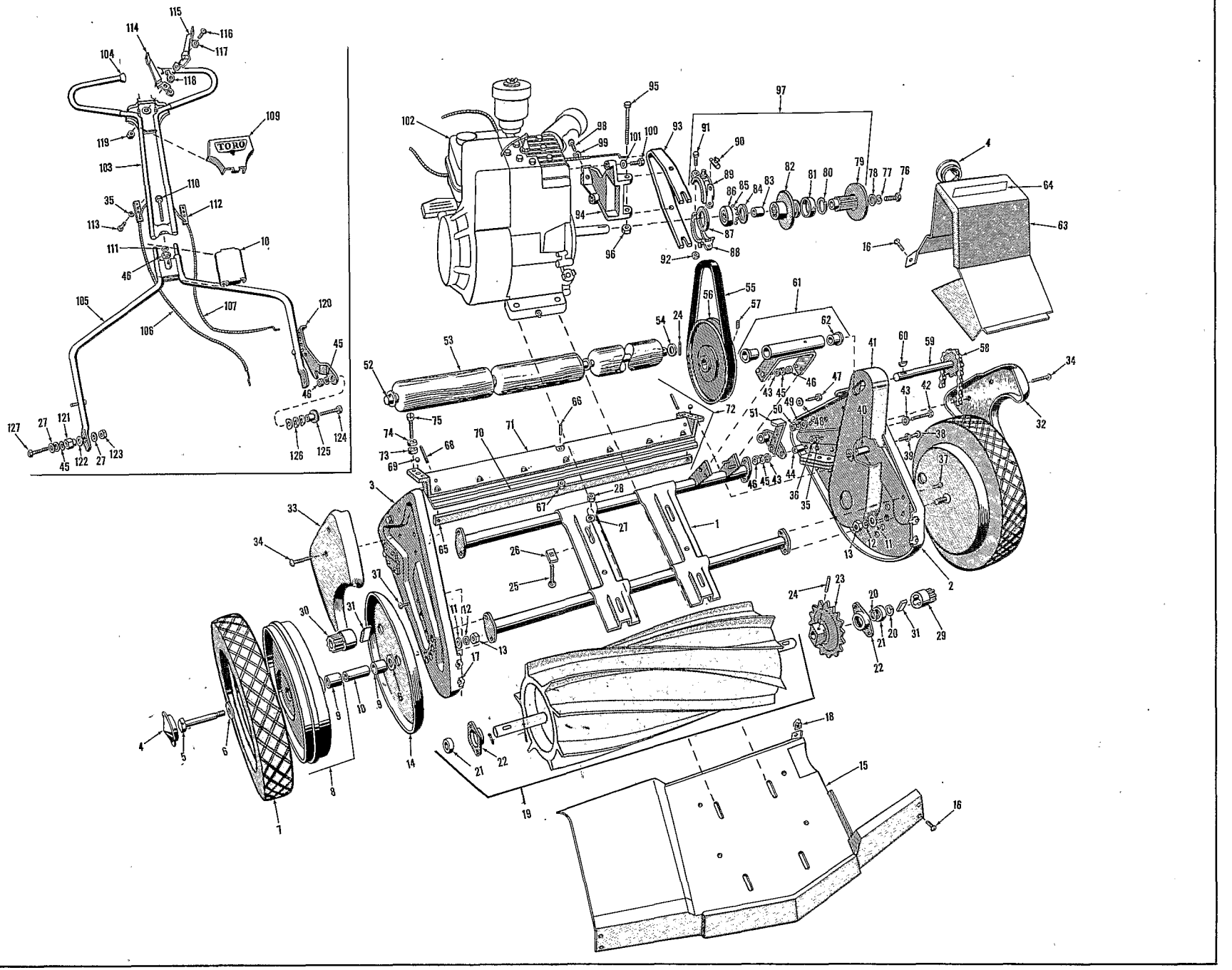
One of the outstanding features of the reel is its built in service. This feature is in the form of a compound which by a special process, is coated on the reel blade edges. Its grinding properties are activated by bringing above-normal pressure to bear against the reel.

Steps for using the sharpening feature:

1. Stop switch on motor is grounded.
2. By following the adjusting instructions in Figure 11, bring slight pressure upon the reel until its entire length has contact with bed knife. When sharpening the pressure is moderately greater, therefore adjust $\frac{1}{8}$ to $\frac{1}{4}$ turns on the adjusting screws.
3. Then start the engine, raise the wheels slightly off the ground, and engage the clutch.
4. If the reel does not spin, or seems to bind excessively - stop the engine and slightly loosen the adjusting screws. Then again start the engine and proceed as in #3.
5. Initially, some noise will occur for about two to three minutes. After the reel speed appears satisfactory (a few seconds), lower the wheels to the ground and begin mowing. This will serve as a lubricant and help reduce the grinding noise.
6. After a few minutes (or when the reel appears to be spinning more freely) disengage the clutch and shut off the engine. Now with paper, test the blades for their full length for cutting.
7. If necessary - repeat the operation until an even cut is obtained across the entire length of the blade.

Note

8. For small bends and knicks it is not always necessary to go through the complete operation of sharpening. Usually these small irregularities will true up by continuing the mowing operation.
9. Wash thoroughly with light hose pressure both reel and bedknife when the sharpening process is finished.


TORO

PARTS LIST

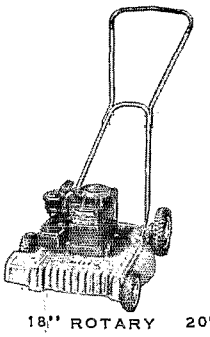
Ref. No.	Part No.	Description	No. Used
1	2-2900	Main Frame	1
2	1-3579	Side Plate, Left	1
3	1-3589	Side Plate, Right	1
4	2410-8	Plug Button	3
5	D-343	Bolt, Wheel Spindle	2
6	D-342	Washer	4
7	PD-440A	Tire	2
8	1-3489	Wheel w/Bushings	2
9	256-32	Bushing	4
10	H-104	Spindle, Wheel	2
11	3256-5	Washer, 7/16" Cut	2
12	3253-6	Lockwasher, 7/16" Reg.	2
13	3220-4	Nut, 7/16" N. F. Jam	2
14	2-3340	Wheel Cover	2
15	2-2990	Platform	1
16	32104-27	Screw, #10 x 5/8"Self Tap	7
17	3290-171	Nut, Special	6
18	3290-172	Nut, Special	1
19	1-4969	Reel Assy. 6 Blade	1
*	1-4979	Reel Assy. 8 Blade	1
20	32120-39	Snap Ring	2
21	251-127	Bearing, Reel	2
22	2-3170	Bearing Holder	2
23	2-3350	Sprocket	1
24	32121-16	Pin	3
25	3230-3	Bolt, 5/16"x 1¼"N.C. Carriage	4
26	2-3560	Engine Mounting Slide	4
27	3256-23	Washer, 5/16" SAE	14
28	3296-31	Locknut	4
29	2-3121	Reel Pinion, Left	1
30	2-3122	Reel Pinion, Right	1
31	H-40	Dog, Ratchet	2
32	2-3331	Side Plate Cover, Left	1
33	2-3332	Side Plate Cover, Right	1
34	32143-6	Screw, 10-24 x 1½" Mach.	4
35	3253-17	Lockwasher, #10 Reg.	6
36	3217-26	Nut, 10-24	4
37	32104-7	Screw	8
38	3258-19	Screw, ¼"-20 x 1¼" Mach.	1
39	3253-3	Lockwasher, ¼" Reg.	1
40	2-3430	Spacer	1
41	2-3410	Chain Guard	1
42	3210-7	Screw, 5/16" N. F. x 1¼"	2
43	3256-23	Washer, 5/16" SAE	8
44	2-3320	Spacer	2
45	3253-4	Lockwasher, 5/16" Reg.	6
46	3219-2	Nut, 5/16" N. F. Full	9
47	2-3580	Stud	2
48	3256-24	Washer, 3/8" SAE	4
49	3253-21	Lockwasher, 3/8" Reg.	2
50	3219-3	Nut, 3/8" N. F.	2
51	2-3271	Adjusting Arm, Left	1
*	2-3272	Adjusting Arm, Right	1
52	2-3260	Shaft, Roller	1
53	2-3250	Roller	3
54	3256-33	Washer	4
55	271-43	Belt	1
56	PD-364	Pulley	1
57	3245-1	Set Screw	1
58	2-3240	Chain	1
*	2710-21	Connecting Link, Chain	1
59	2-3210	Countershaft Assy.	1
60	3257-5	Key	1
61	1-3609	Ctr'shaft Housing w/Bushings	1
62	256-34	Bushing	2
63	2-3030	Cover, Countershaft	1
64	2-3610	Decal	1
65	2-3150	Adjusting Bar	1

Ref. No.	Part No.	Description	No. Used
66	32133-4	Set Screw	1
67	3296-20	Locknut	1
68	32121-12	Pin	2
69	255-6	Ball, ½" Dia.	2
70	2-3160	Bed Knife	1
71	1-3659	Bed Bar Assy. includes Refs. #65, 66, & 67	1
72	1-3619	Bed Knife & Bas Assy.	1
73	D-218	Lower Spherical Washer	4
74	D-219	Upper Spherical Washer	4
75	PD-7	Adjusting Screw	4
76	329-6	Screw, ¼" N. F. x 1"	1
77	3253-3	Lockwasher	1
78	CU-285	Washer	1
79	PH-100	Clutch Body Assy.	1
80	32120-30	Snap Ring	1
81	PH-10	Idler Bushing	1
82	PH-101	Sliding Flange	1
83	PH-103	Inner Ball Race	1
84	PH-12	Check Washer	1
85	255-1	Ball	15
86	PH-8	Outer Ball Race	1
87	PH-11	Thrust Washer	1
88	PH-80	Slip Ring	1
89	PH-7B	Slip Ring	1
90	301-2	Oiler	1
91	3250-4	Screw, 8-32 x 5/8"	2
92	3296-1	Nut, 8-32 Elastic Stop	2
93	2-3540	Shift Fork	1
94	2-3550	Clutch Fork Mounting	1
95	3210-13	Screw, 5/16" N. F. x 3"	1
96	3296-20	Nut, 5/16" N. F. lock	1
97	1-3539	Clutch Assembly	1
98	3251-2	Screw, 10-24 x ½	1
99	3256-14	Washer, #10 SAE	1
100	3258-4	Screw, ¼"-20 x 3/4	2
101	3253-3	Washer, ¼" Reg.	2
102	221-90	Engine, B. & S. 6BS	1
103	1-3649	Upper Handle	1
104	PD-25	Handle Plug	2
105	2-3460	Lower Handle	1
106	2-3510	Throttle Control Assembly	1
107	2-3520	Clutch Control Assembly	1
108	PD-13A	Cover Plate	1
109	PH-40B	Escutcheon Plate	1
110	3210-9	Screw, 5/16" N. F. x 1-3/4"	1
111	3254-2	Lockwasher, 5/16" int. shakeproof	1
112	2-3500	Control Cable Clip	2
113	3251-6	Screw, #10-24 x ¼"	2
114	PH-57A2	Throttle Control Lever	1
115	PH-57A1	Clutch Control Lever	1
116	32122-23	Screw, 10-32 x 3/4	1
117	PH-66	Control Pivot Washer	1
118	PH-52	Friction Washer	1
119	3296-27	Nut, 10-32	1
120	2-3381	Adj. Arm, left	1
*	2-3382	Adj. Arm, Right	1
121	2-3490	Handle Pivot Nut	2
122	3256-25	Washer, 7/16" SAE	2
123	3220-2	Nut, 5/16" N. F. Jam	2
124	3210-4	Screw, 5/16" N. F. x 7/8	2
125	2-3530	Spacer	2
126	3290-213	Spring Washer	6
127	3210-6	Screw, 5/16 N. F. x 1-1/8	2
*	2-3570	Grass Catcher Hook	2
*	329-3	Screw, Grass Catcher Hook	2
*	321-1	Nut, Grass Catcher Hook	2

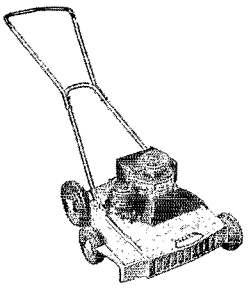
TORO

POWER MOWERS

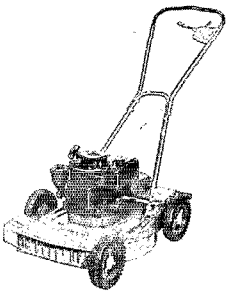
Toro power mowers and Power Handle implements are designed and built to give years of precision performance . . . to make them "the best you can buy." And there's over 40 years of manufacturing experience to back them up.
One of Toro's most important objectives — and one which has helped make Toro the 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.



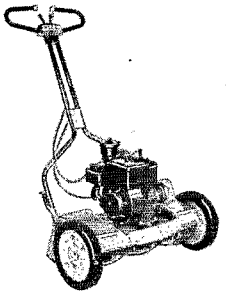
18" ROTARY



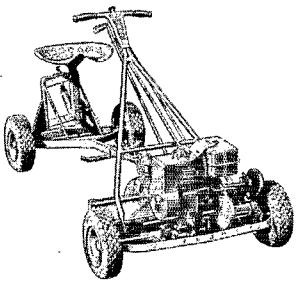
20" HAND PROPELLED ROTARY



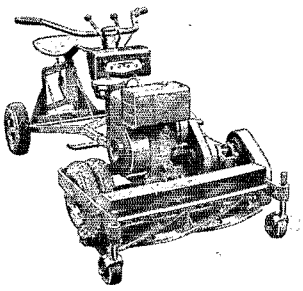
20" SELF-PROPELLED ROTARY



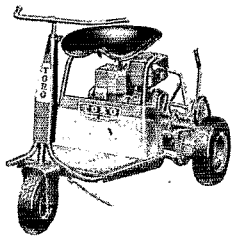
20" SPORTLAWN



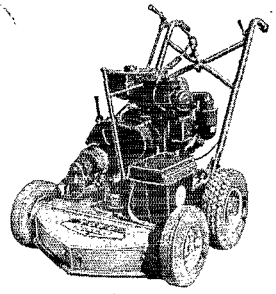
27" STARLAWN



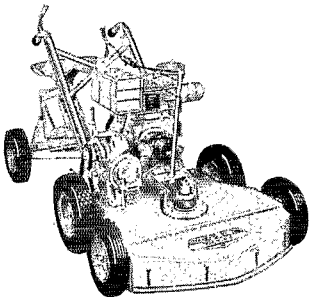
PARK SPECIAL



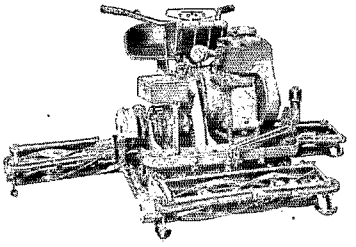
27" PONY



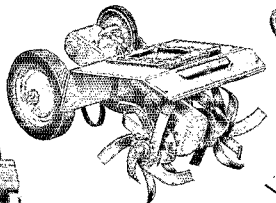
24" SELF-PROPELLED ROTARY



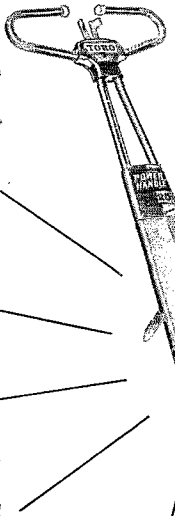
31" GRASSKING

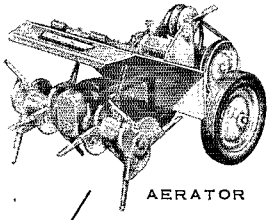


76" PROFESSIONAL

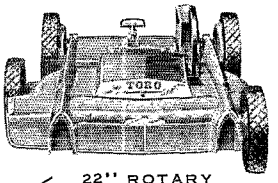


TILLER

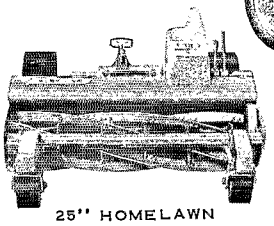




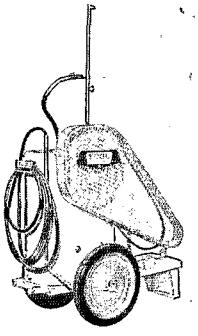
AERATOR



22" ROTARY

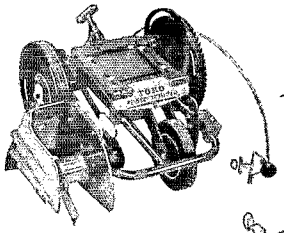


25" HOMELAWN

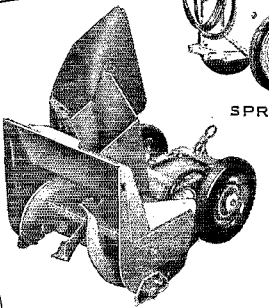


SPRAYER

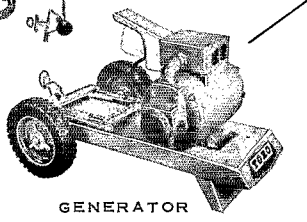
POWER HANDLE



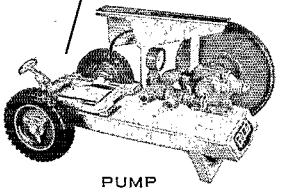
EDGER-TRIMMER



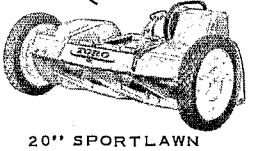
17" SNOWHOUND



GENERATOR



PUMP



20" SPORTLAWN

TORO POWER HANDLE IMPLEMENTS

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