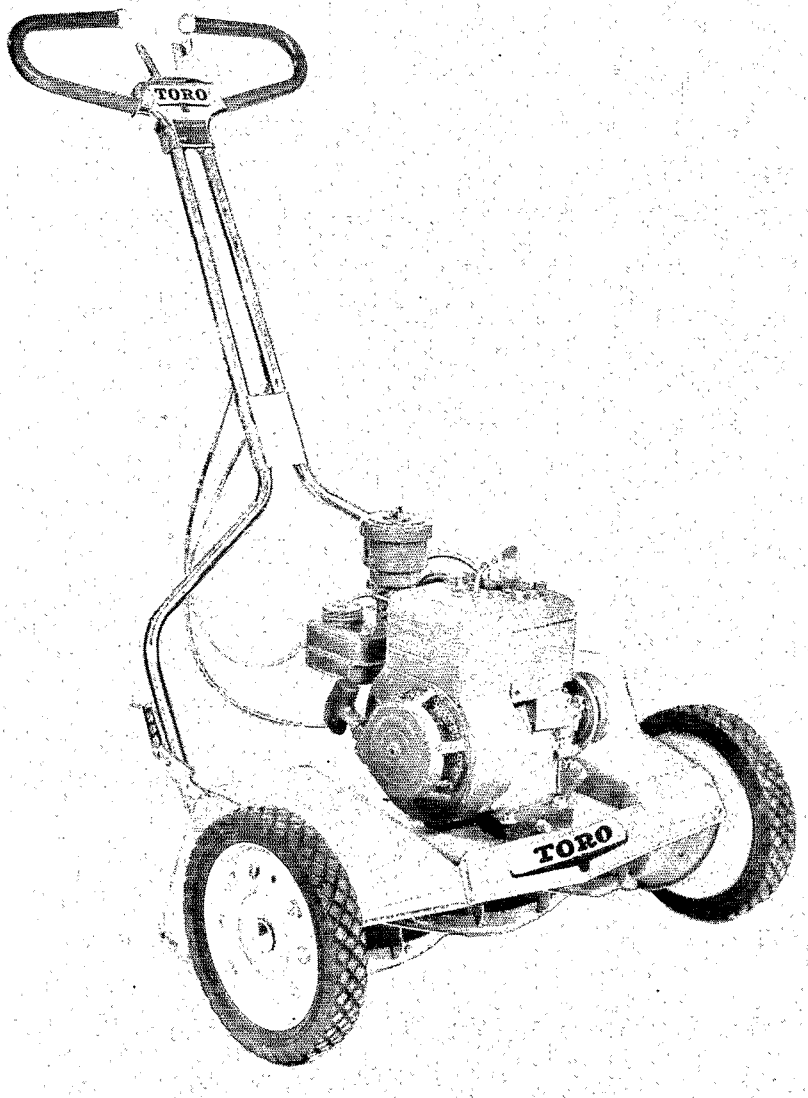
TORO

OWNER'S OPERATING AND PARTS MANUAL

1957

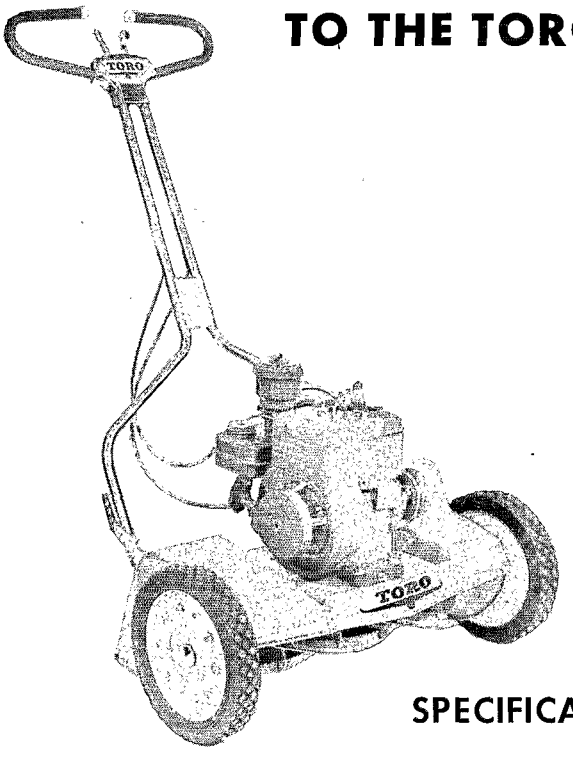


TORO—20" SPORTLAWN

SERIAL NO. 10017—3000 AND 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 20" Sportlawn.

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

TORO MOWERS are manufactured by an organization of mowing machinery specialists with over forty years experience. Each machine is carefully inspected and tested before leaving the factory. For best performance from your Toro Sportlawn, study this manual for regular maintenance procedures.

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 blades riveted to formed steel spiders, 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: .83
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 $27\frac{1}{2}$"
Length $17\frac{1}{2}$" - Without handle at
Height 21" 1" height of cut.
WEIGHT: 94 Pounds

Warranty

Every piece of equipment is in perfect working condition before leaving the factory and will, when properly operated, perform the work for which it has been recommended.

Should any parts, within three months from date of purchase, prove defective, new parts will be furnished, free of charge, f.o.b. factory, if the broken parts are returned to us for inspection.

We reserve the right to make improvements and changes in the machine in this manual without notice.

ORDERING INSTRUCTIONS

To insure getting correct parts without delay, please 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.
6. Repair parts are available from your Toro distributor or dealer.

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OPERATING INSTRUCTIONS

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 MOWING: The frequency of cutting is as important as the height of cut. Lawn grasses should be cut often enough so that never more than $\frac{1}{2}$ inch, preferably $\frac{1}{4}$ inch of leaf surface is removed at any one clipping. If more leaf surface is removed, the plant is "shocked" and will not grow properly until it recovers.

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.

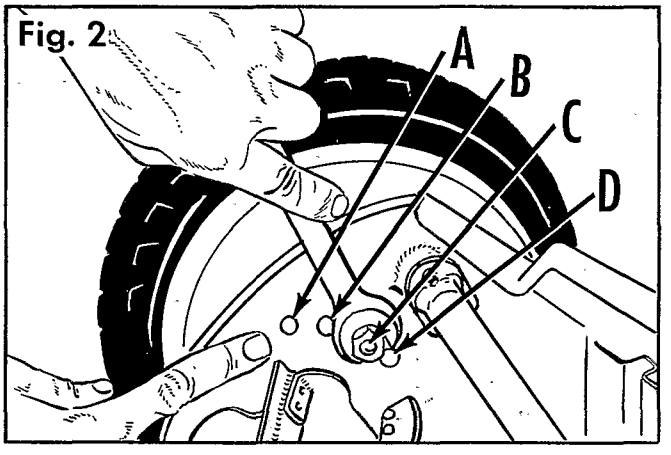
Terraces: cut up and down hill when mowing the crown. Also cut high (1 to $1\frac{3}{4}$ inches) to help avoid erosion and evaporation.

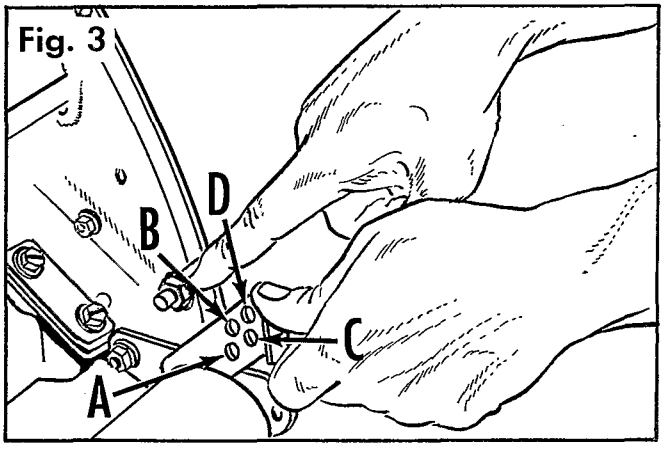
MOWER: To maintain a well-groomed appearance, the lawn must always be cut with a sharp, properly adjusted mower. Dull, improperly adjusted mowers leave the lawn ragged and often the grass will turn gray and brown off on the leaf tips. Keep Your Mower Operating Properly.

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





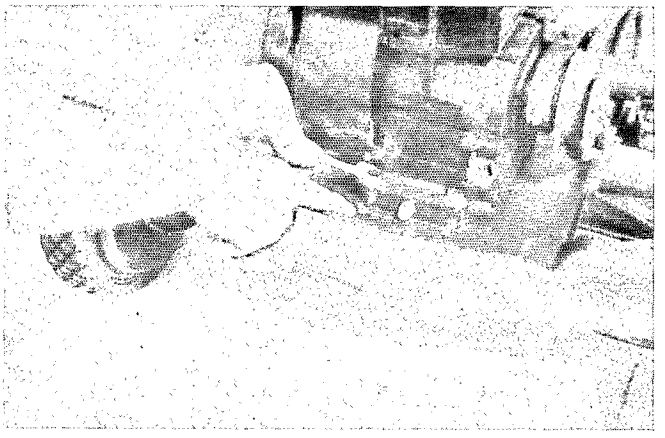


Fig. 4 If it is necessary to adjust the belt tension, loosen the four bolts that hold the engine to the platform, and slide it forward in the slotted holes (see Fig. 4). The belt should not be tightened any more than is necessary to prevent it from slipping when under load. Do not tighten the belt too 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.

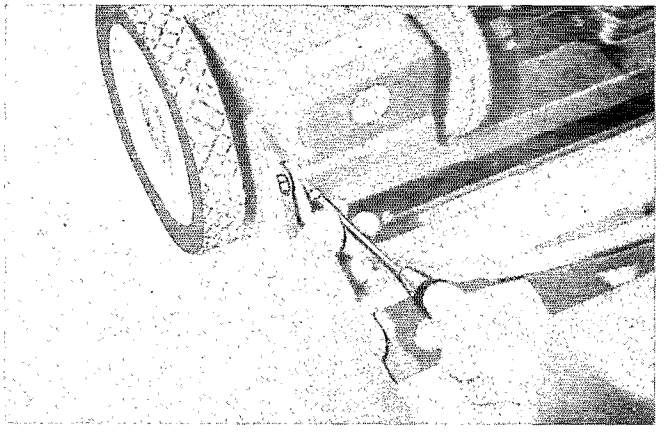


Fig. 5 The chain on the Sportlawn, after a few hours operation may have stretched and become too loose. To tighten it, remove metal housing cover as shown in Fig. 5.

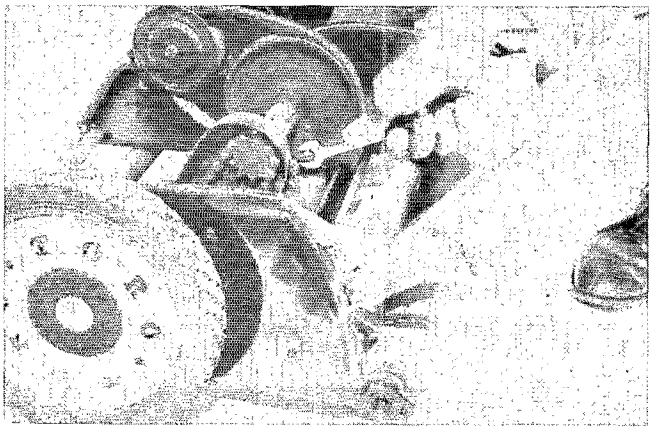


Fig. 6 Then loosen the four bolts that hold the countershaft in position (Fig. 6) and move the countershaft up by putting a broom handle or a similar stick to lift it as shown in Fig. 7.

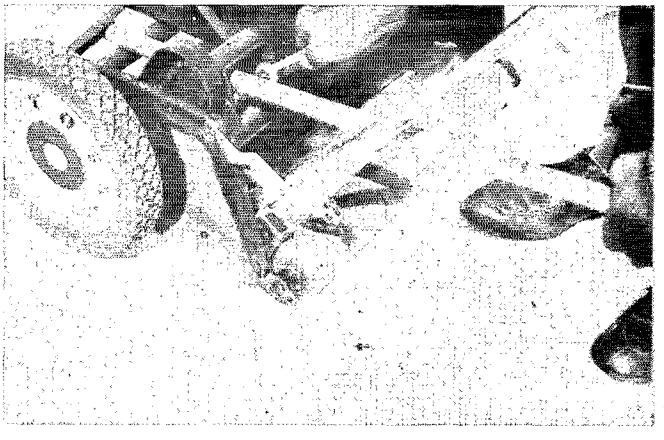


Fig. 7 While holding it up in this position, retighten the four countershaft bolts securely. Be sure you do not get the chain too tight as this will cause excessive wear.

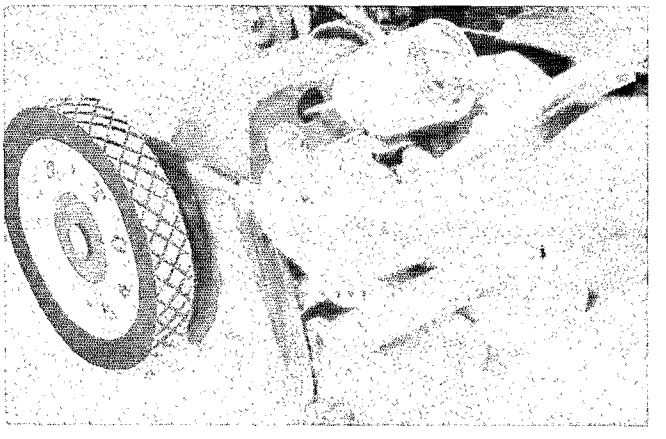


Fig. 8 Note that the countershaft can be lubricated by removing the small chromium plated circular cap so the oil hole in the countershaft can be reached by the oil can spout.

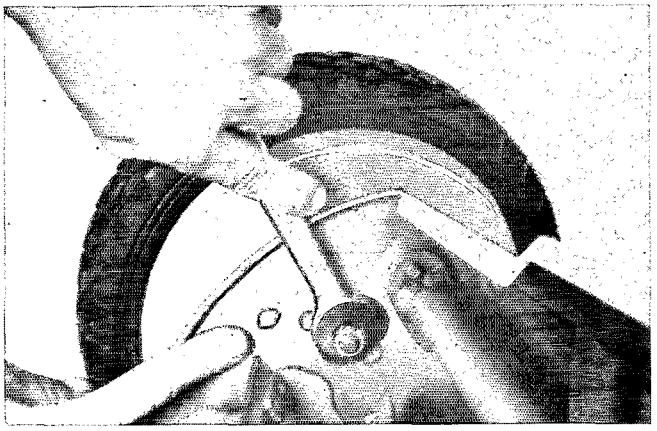


Fig. 9 The height of cut can be adjusted by raising or lowering the rear roller and by changing the positioning of the wheels. See table on various cutting heights on page 3. When changing wheel setting after you have removed the axle nut, do not pull axle bolt all the way out of wheel. Simply bring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

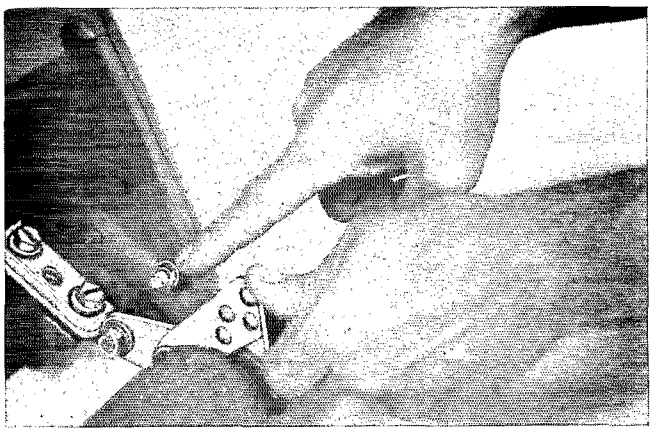


Fig. 10 Be sure the wheel setting and the roller bracket setting are in the relative hole on both sides. Then retighten wheel nuts and set roller bracket in pins on side plate. (See Fig. 10). The cutting height can be determined in inches by measuring the distance between the ground and the cutting edge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

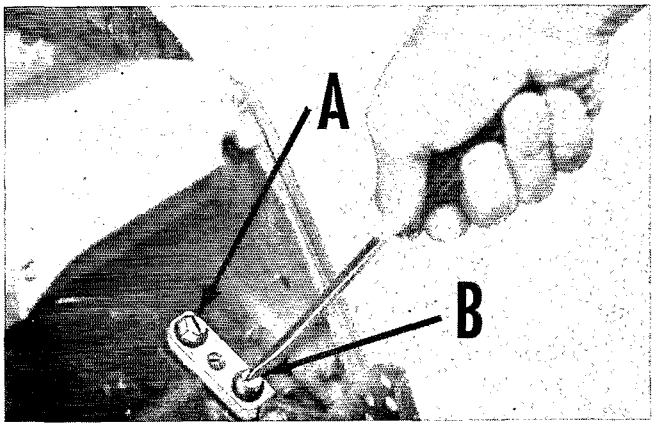


Fig. 11 Adjusting the bed knife is the most important adjustment on your Sportlawn mower. To set the bed knife up against the reel blades, loosen rear adjusting screw "B" (using a screw driver as shown) very slightly about 1/20th of a turn, then tighten front screw "A" in the same manner. Do this at 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.

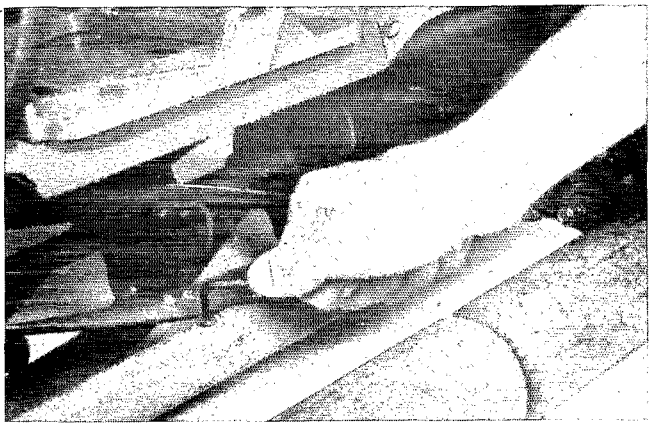


Fig. 12 The purpose of the Allen Set Screw in the center of the knife bar is to raise or lower the center of the knife. Usually no adjustment is necessary. If the mower should leave a streak of uncut grass in the center of the unit, then the Allen Set Screw should be tightened to raise the center of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

Caution !

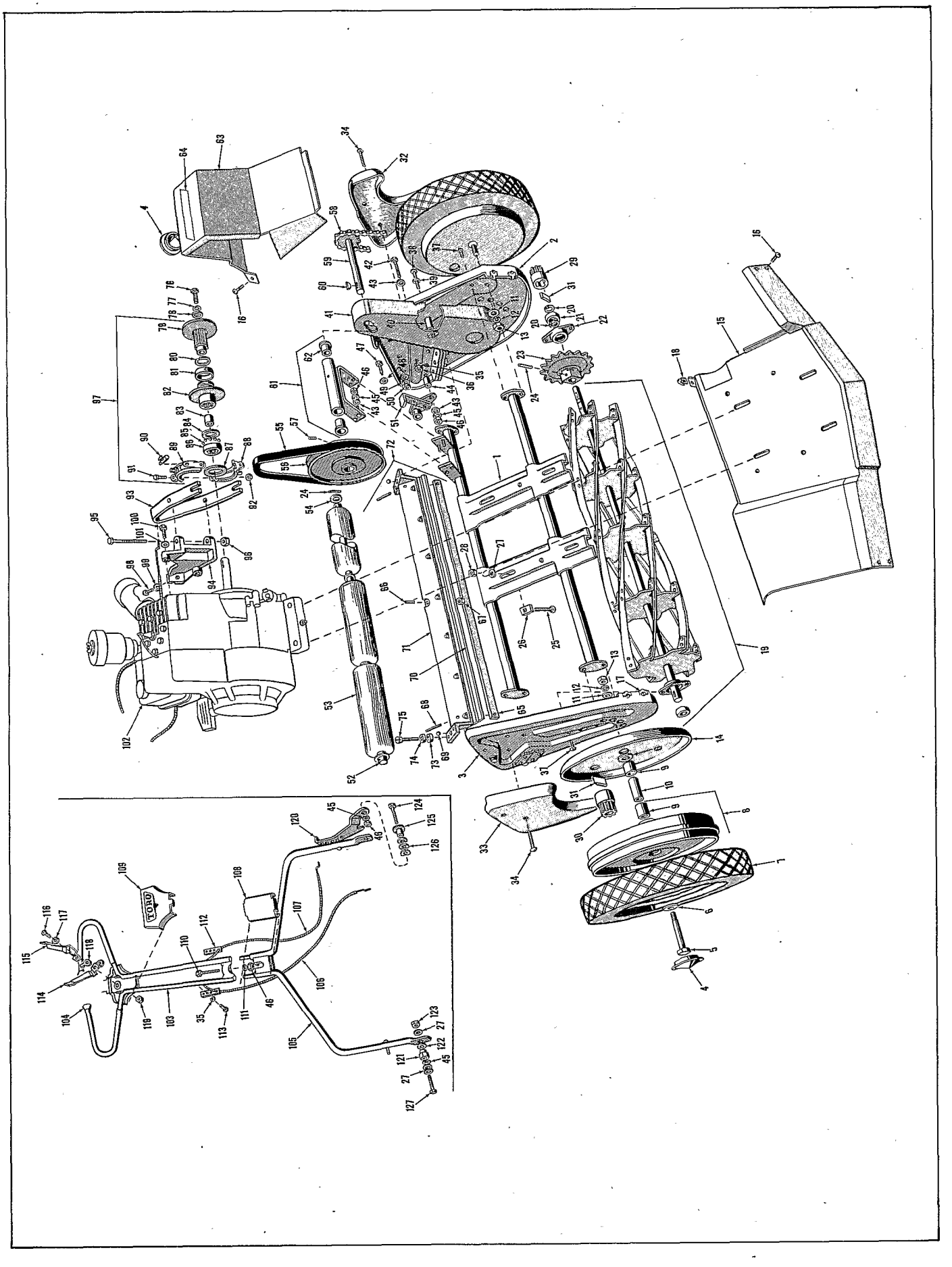
DO NOT REMOVE FOREIGN MATTER FROM CUTTING UNIT WITHOUT FIRST STOPPING THE ENGINE.

SHARPENING INSTRUCTIONS

Raise the wheels off the ground by resting the mower on its rear roller.

Prepare a grinding compound of 1 oz. Silicon carbide (grit #120) and 1 oz. soap powder and water. Turn the reel backwards by rotating the wheel by hand. Apply the compound with a paint brush.

After several minutes of grinding, tighten the bed knife slightly and repeat the grinding operation until you can cut paper with all blades for their full length. Wash off all traces of the grinding compound.


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	1-3519	Reel Assy.	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	Countershaft 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
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 & Bar 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

* Not Illustrated

INSIST ON GENUINE TORO PARTS

FORM NO. 6183-1

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TORO
POWER TOOLS

...the best you can buy!

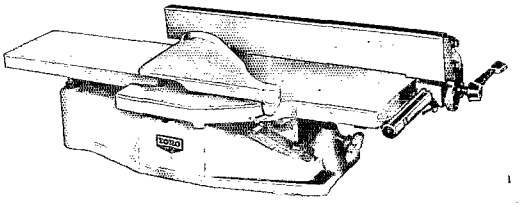
For many years, local service on a national basis has been the chief objective of the Toro organization.

The local Toro Distributor can provide efficient and prompt service backed by genuine Toro repair parts.

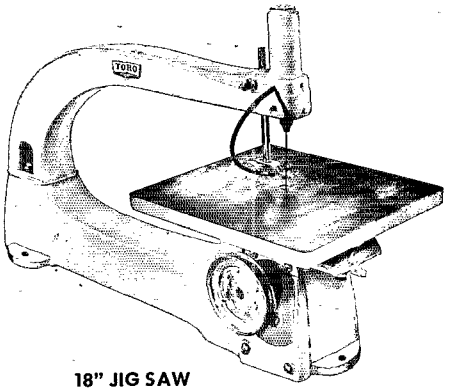
Protect and insure the long efficient life built into a Toro product by using only genuine Toro parts—engineered to fit and wear exactly like the original part.

Your nearby distributor will gladly assist you with mowing problems, give free demonstrations and expert overhaul service.

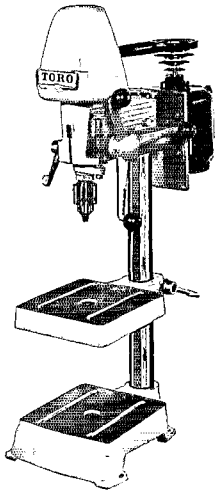
TORO also makes a complete line of stationary Power Tools for the home workshop.



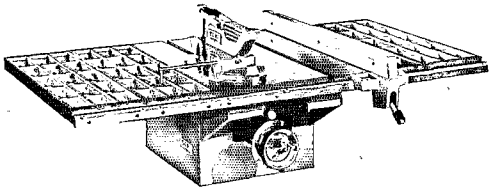
4" and 6" JOINTER PLANER



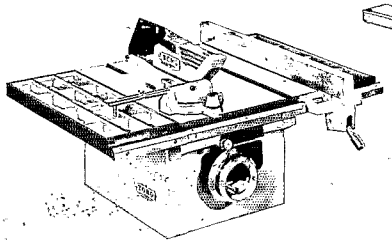
18" JIG SAW



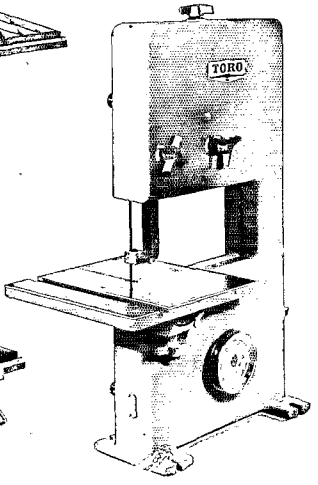
12" DRILL PRESS



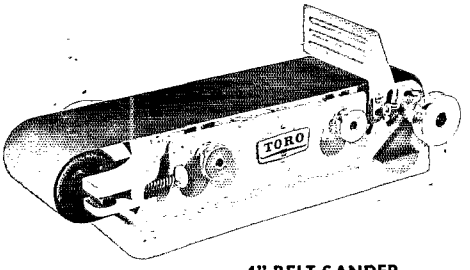
10" DE LUXE TILT ARBOR SAW



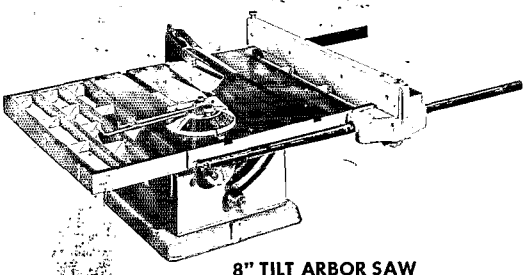
8" DE LUXE TILT ARBOR SAW



10" BAND SAW



4" BELT SANDER



8" TILT ARBOR SAW

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